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LEGAL QUESTIONS ON THE ORGANIZATION OF SCIENTIFIC WORK IN THE USSR

By F. I. Fed'kin

-USSR-

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INTRODUCTION

1. The Soviet State and the Organization of Scientific Work in the USSR

1. The state and science belong to those social phenomena which now render especially strong influence on the life of people, not only within individual countries, but also in international relations.

Both science and the state exert their ever-increasing influence in the development of a society's productive forces. No one branch of production is conceivable without taking advantage of the achievements of science.

Under the active influence of the state, essential changes have been brought about in the development of the productive forces of all countries including the geographical location of production and the perfection of techniques and technology of production processes.

Science exerts its influence as well on the production relations of people/i.e., the relation people in a society stand to production/. The well-known Marxist position that people enter into production relations independently of their will and that namely these relations to production form that economic basis on which the entire social superstructure is erected, in no way signifies that these relations are formed without the influence of such factors as science and the state.

It is known, for example, how essential was the role of science in that struggle which led the bourgeoisie and all the progressive forces of society against feudalism to victory and the consolidation of new capitalistic orders and ensuing relationships. This brought about scientific discoveries and inventions which rendered lasting influence on the growth of industry, and strengthened the economic power of the bourgeoisie. These same successes of science were used by the progressive forces of society to carry on the struggle with feudal ideology and feudal orders.

Even more powerful was the influence of science in the struggle of the working class in placing themselves at the head of the working masses against the capitalist exploiters for the victory of the socialist system which was carried on and is being carried on now on the basis of the laws of social development discovered by Marxist-Leninist science.

The state as well has had its influence on the development of the relations of production in societies. The state strengthens these relations and defends them

from any encroachments, and under favorable conditions, serves in their further development.

The state and science also make their influence felt in international relations. In many ways the fortunes of peoples at the present time depend on the politics of modern governments, on their desire or lack of desire to make use of the newest achievements of science in the interests of war or in the interests of peace.

In their influence on public life, science and the state are not isolated one from the other, but rather cooperate closely in influencing the productive forces and the productive relations, the economy and international relations, science and the state also influence one another.

The modern state cannot in its activity and organization disregard the activity of science.

In its turn science cannot now develop without help and support from the state. It is known that the activating force for the understanding of the laws of the objective world is before all else the demands of society in the constant perfection of the processes of production. "If in a society," wrote Marx, "technical needs appear, then it moves science forward more than a dozen universities."[1] The development of production, the demands of technical progress not only determine the immediate tasks of science, but also create a material premise for solving these problems[2], and this means the practical application of scientific achievements in the national economy.

However, the development of science depends not only on the rising technical demands of society, but also on the solution of the tasks arising before science, i.e., not solely on those material and scientific preconditions which have already been attained. To a great degree both depend also on the economic structure of the society at a given stage in its development and on the attendant superstructure which includes the state and law.

The importance of the state and law in the development of science can be diverse. The state can assist the development of science, assist in the implementation of its laws in the interests of the society, or on the contrary, hinder the development of science, and impede the society in using the laws of science which have been discovered. The role of the state in the use of the laws of science is determined in the final analysis by the class that holds power in that state and what tasks and functions the state accomplishes.

2. In the countries of modern-day capitalism, the imperialist bourgeoisie employs the state apparatus subordinate to it for the militarization of science and for turning science into a weapon of war.

In its time the bourgeoisie has supported efforts to limit state interference into the realm of science.

Under the contemporary conditions in both theory and practice the idea has begun to prevail of "organized" science and the ever-growing intervention of the state in the realm of science. The reason for this is above all the colossal growth of scientific research in the military field which demands a monetary outlay which even the individual monopolies cannot bear. This is an attempt by the monopolies to transfer these expenditures to the shoulders of the population.

That there is a military orientation to scientific research in the countries of contemporary capitalism is given a rather clear proof in the following figures given by Bernal: each year the Unites States of America, following the will of the capitalist monopolies and other agressive forces that are interested in unleashing war, spends one-tenth of the national income on the hydrogen bomb. For these ends the capitalist monopolies with the assistance of the state create scientific institutions which have as their main goal the finding of means for the mass extermination of people.

It is not accidental, therefore, that there is an ever-growing anxiety among scientists and the entire world community about the outcome of such a direction to human genius.

With every year and with every month the question of ceasing the testing of hydrogen and atomic weapons gains greater significance for world affairs and for the well-being of peoples. The peoples of the entire world demand the cessation of testing now. However, such testing is continuing. This leads not only to the creation of new types of lethal weapons for use in a future war, but constitutes a colossal threat today in the world situation in that the nuclear testing poisons human organisms and threatens the normal development of future generations.

The Soviet state is doing everything possible to agree with the powers which control atomic and hydrogen weapons on an immediate and unconditional cessation of testing. Guided by the hope of making a practical beginning in the general cessation of testing atomic and hydrogen weapons and of taking the first step in the direction of freeing humanity from the threat of a destructive atomic war, the Supreme Soviet of the USSR, on 31 March 1958, accepted the resolution for a unilateral cessation of testing for all types of atomic and hydrogen weapons, and appealed to the other powers to take analogous measures in order to provide for a cessation of testing of atomic and hydrogen weapons for all times.

History shows, however, that the thirst of a handfull of millionaires for fabulous profits has once again shown itself as a force stronger than the interests of the entire world. This force of the capitalists has made the governments and parliaments of the countries which possess atomic and hydrogen weapons continue in the policy of an arms race and to draw their countries into the abyss full of the unspeakable horrors of war.

The increased intervention of the imperialist states into the organization of scientific research finds its proof in that some previously-existing organs of state have assumed definite functions in the direction of scientific work, and also a whole number of governmental organizations have been created which deal exclusively with the questions of the organization of scientific work.

Some leading contemporary scientists in the USA consider the creation and functioning of governmental institutions as nearly the sole ponderable factor for the development of science.

The whole diversified system of state organs serves the bourgeoisie of modern imperialist countries as the weapon with the aid of which they are directing the development of science for the preparation of a new war.

"The explosion of the atomic bomb over Hiroshima demonstrated simultaneously the new and enormous power over the forces of nature, a power which science has given humanity, and the complete criminal inability of the old world to use this power for something besides terror and destruction."[5]

The inability of that world which is founded on private property and exploitation to use the great force of science in the interests of people has long been recognized by the advanced thinkers of humanity.

Thomas More and Campanella, Morelli and the Baboufites, Saint-Simon and the Russian revolutionary democrats dreamed about turning science into a source for the flourishing of material and spiritual forces of the entire society, into an instrument of perpetual progress. But, while advancing the ideas about turning science to the goal of the general well-being of the entire society, the so-called progressive thinkers were not able to define correctly those paths which would lead to the realization of these ideas.

A similar task fell on the shoulders of Marx and Engels.

Only a socialist revolution and the transfer of state leadership of the society into the hands of the working class were able to turn all of the conquests of

science from a bourgeois monopoly and a means of exploitation and violence into a common achievement, into a general well-being of the entire society.

"The victory of the October Revolution has freed science and it has begun to grow and develop as the young shoots of plants grow from the life-giving rain and sunlight. Before science has been the tool of the enslavement of man by man, and it has been turned into a tool of the revolutionary transformation of nature and society in the name of human welfare. The Communist Party has placed science in the service of the highest humanistic ideals and has created all of the conditions for its flourishing and progress."[4]

The Communist Party and the Soviet state under the leadership of V. I. Lenin were the first in history to decide practically those basic questions demanded by life itself on the organization of scientific work in a country where a socialist revolution has conquered.

3. The organization of scientific work from the very first days of the socialist revolution became an integral part of the activity of state organs in accomplishing the basic tasks and functions of the Soviet State.

All of this activity had as its basis the concrete program worked out by V. I. Lenin for turning science into the property of all the workers and for the utilization of the scientific achievements which had been accomplished under the bourgeois society in the interests of socialist construction. The program included: a) the use of scientists trained under capitalism, the creation for them of completely pleasant material conditions and a comradely situation at work; b) the preservation of the net-work of scientific institutions which had been created under capitalism, and outfitting them for new tasks, the development of science and the heightening of science's role in the development of the productive forces of the country; c) the creation of new cadres of a worker-peasant intelligentsia.

The socialist state is that decisive force which uses society for influencing the development of science and its organization, and for using the achievements of science in the interests of all the people.

In bourgeois sociology and science for a good while the myth has been compounded that Marxism considers as ideal that structure in which the state completely subordinates all economic life to itself, and in the question of education aims at the suppression of free expression of the personality, at the education of a scientific generation of a single type that submits and humbles its will to the state. This is exactly what Plato was writing about.

These false and conjectured judgments of the greatest antiquity are presented by today's ideologues of the imperialist reaction as if it were a factual description of things in the countries of the socialist camp.

This willful falsification of the truth is applied to the mutual relations of the socialist state and science.

It is not necessary to say that this hostile propaganda has not influenced foreign scientists. On the contrary, as D. Bernal noted correctly[5], the mistaken opinion that everything accomplished in the Soviet Union including the field of science, is the result of the leading activity of the Soviet State and that the role of the people is brought in as a more or less necessary subordination to orders, is rather widely spread. It is widely spread regardless of the fact that the entire experience of the Soviet Union refutes it.

It is true of course that the socialist state, being the basic tool which assists the working class and all workers of the country of a victorious revolution in deciding the tasks of communist construction, is that decisive force which uses the society for influencing the development of science, its organization and the utilization of its achievements in the interests of all the people.

The Academician I. P. Pavlov, speaking about the relations which have been achieved in the USSR between the state power and science, noted that we find ourselves in the anxiety of wondering it it is proper for us to answer these cares of Soviet power.[6]

The possibility and necessity of state leadership in the science of the USSR flow from the peculiarities and character of the socialist economy, from those principal regular patterns of development which are inherent to all countries following the path to socialism. On these patterns are based the processes of the socialist revolution and socialist construction.

"The general patterns of development are: the leadership by the working class of the working masses; the nucleus of the working class is the Marxist-Leninist Party in carrying out a proletarian revolution in one or another form and the establishment of the dictatorship of the proletariat in one or another form; the union of the working class with the basic mass of peasantry and with other categories of workers; the liquidation of capitalist property and the establishment of public ownership over the basic means of production; the gradual socialist transformation of agriculture; the planned development of the national economy in the direction of building socialism and communism and raising the standard of living for the

workers; the accomplishment of the socialist revolution in the fields of ideology and culture and the creation of a large intelligentsia which is devoted to the working class, to the working people and to the affairs of socialism; the liquidation of national suppression and the establishment of equality and brotherly friendship between peoples; the protection of the conquests of socialism from attempts by the internal and external enemies; the solidarity of the working class of a given country with the working class of other countries--proletarian internationalism."[7]

These patterns of development appear in all of the processes of socialist construction including the activities of the state in the direction of scientific development.

4. The state direction of science in no way means the administration of it, the subordination to the state organs of scientific creativity itself, or the thrusting of one or another idea upon the scientists. This direction consists first of all in its organizational activity.

The socialist state determines the basic tasks of science, points out those scientific problems which demand an immediate solution at one or another stage of socialist construction, and carries out the planning for the development of scientific research work in the country.

The Leninist "Outline of a Plan for Scientific-Technical Work"[8] had basic significance for evolving the basic principles of scientific planning in a socialist society.

On the basis of the Leninist instruction in the struggle with any sort of sceptic, as a result of the great organizational work of the leading Soviet scientists who received every possible assistance and support from the Soviet state and Communist Party, the basic principles of planning for scientific work have been laid down. These principles are: a) the decision of the most important scientific problems through the efforts of the organized state scientific collective bodies; b) the concentration of efforts by all Soviet scientists on the solving of the basic, most important problems, and the struggles with the dissipation of scientific forces; c) a clear division of work between the scientific institutions for a maximum coordination in the general direction of the work; d) the connection and interrelating of planning for a scientific research and the planning of work to be introduced into the national economy; e) the connection and interrelating of planning for scientific research with the planning for preparing the scientific cadres and the strengthening of the material bases of in-

stitutions which are carrying on scientific activities; and, f) the broad participation of the scientists themselves in the solving and drawing up of state plans for scientific research.

The accomplishment of the above principles of planning for scientific work involves the organization of science on new socialist principles, and demands a great deal of organizational work by the state organs and the constant cooperation with the widest circles of scientists.

The basis for all of this activity for the improving of planning of scientific work in the USSR under the contemporary conditions are found in the decisions of the XXth Congress of the CPSU. The Congress has defined not only the general direction of scientific development, but has given the concrete directives for the rectification of insufficiencies in the creation of a system of scientific institutions in the country, and for the wider attraction of the highest institutions of learning by scientific-research work, and the concentration of efforts by all of the Soviet scientists on the solution of the scientific research which is most important for the country.

The enormous advantages which state planning of scientific research affords in the USSR is a factor which cannot help but be recognized by the scientists in capitalist countries.

However, there are some who depict the planning of scientific work in the USSR in an untrue and perverted light; they attempt to lead public opinion astray as regards the actual significance of planning.

Thus, one of the "experts" on the organization of science in the USSR, a certain Vuchinich in a book published recently in the USA on the Academy of Sciences of the USSR, by shuffling the facts, tried to convince the reader that the planning of scientific research work in the USSR "suppresses the instinct of scientists," "puts the scientists at the mercy of those in power," and that planning "does not permit any personal initiative for the scientist in formulating a question which is liable to be researched."

By juggling facts pulled out of various articles in Soviet newspapers and magazines, he makes the "thoughtful" conclusion that there is now going on in the Soviet Union "a march against so-called pure science," "an intentional ignoring of the plans for scientific research by the Soviet scientists," and even a raising of social and economic barriers between the scientists and workers!

He fortells "a dark and unfruitful future for Soviet scientific thought," if the planning of scientific research is preserved.

The fact that Soviet scientists, having mastered the secrets of creating atomic energy, have surpassed the capitalist countries in numerous fields of science, the fact that the Soviet Union was the first to create an ICBM, and successfully launched the first "sputnik" and in doing so added a great and new treasure to the fund of world science--all of these facts in themselves show the real value of these "predictions."

The achievements of Soviet science are not accidental, but are the concrete realization of the advantages of the socialist order, the result of carrying into life the Leninist principles of organizing scientific work on the basis of democracy and socialism; such features of this organization are a collective approach in work and planning in close cooperation with practice.

The socialist state, commanding all of the material sources in the name of the society, allocates the monetary and other material means which are necessary for scientific research, rather than determining the possible scope of scientific-research activity in the country (but to a large measure, the quality of the scientific research itself depends upon the degree to which scientists are provided with the most recent equipment.)

In the Soviet Union there are about 3000 scientific institutions and more than 700 institutions of higher learning in which about 240,000 scientific workers are carrying on work. Since 1954, the first atomic electric station in the world has been at work, and at present work is going on in the construction of new atomic electric stations. We have built the world's most powerful particle accelerator, the synchrophasotron. The creation of all this demanded enormous efforts on behalf of the scientists but as well the significant material assistance which was provided by the Soviet state.

The socialist state is the organizer of the masses, the organizer of those workers which are building socialism.

This aspect of the state's activity is important for the development of science because the future of science in many ways depends upon the attitude towards it among the mass of people and the youth of the nationa.

On the organizational work of the Soviet state has depended and depends now the recruitment into science of the best and most qualified people of the coming generation; the state must use properly the cadres of scientific workers which exist in the given concrete conditions. It must see that the most outstanding scientists are advanced into positions of authority in science.

The socialist state is the chief force that provides for the practical accomplishment of the principles of socialism in the organization and payment of scientists.

The socialist state is not only concerned about the development of scientific-research activity in the state. It is also the decisive lever which provides for the use of the achievements of science in the interests of the entire society.

In this activity the socialist state leans upon the Marxist-Leninist position that there is a unity of science and practice under the conditions of the victory of a socialist revolution. The state relies as well on the conclusion borne out and substantiated by life itself that only on the basis of the most recent achievements of science is it possible to provide further technological progress in all fields of production.

Science is the powerful instrument for the perfecting of socialist production. But science serves in the development and perfecting of science only when its achievements are carried into practice.

"Marxism gains serious import as a theory namely because and only because," said Comrade Mao Tse-tung, "it can direct practical activity. If, in finding a correct theory, one confines oneself to merely empty discussions about it, and holds it under judgment without putting it into practice, then from this theory, no matter how good it may be, there will be no result."[9]

The introduction of science into the national economy, being one of the most important means for technological progress and the further development of all areas of the national economy, has great significance for the development of science itself.

In the process of introducing one or another scientific research, there is the practical testing of the validity of the results which have been achieved.

Taking into account the importance of practice for the development of science, the socialist state brings the workers in all fields of production close to science, gives them the opportunity to experience science and to advance new problems which stem from the demands of production.

An important and integral part of the organizational work of the Soviet state in the realm of scientific development is its activity in strengthening the international contacts of scientists and in providing the conditions under which the Soviet scientists can depend in their research on the data of world science, and in their turn enrich world science by their new achievements.

One of the forms of cooperation of Russian scientists with the scientists of foreign countries had been the participation of foreign scientists in the work of the Russian Academy of Sciences. Their election by the honored members of the Academy had been provided for under the statutes of the Academy /ustavy Akademii/. Many Russian scientists participated as well in the work of foreign Academies whose members often elected them.

These traditional forms of international contacts on the part of leading scientists of the world have been fully supported by the Soviet state.

The Soviet state in every possible way furthers the participation of Soviet scientific institutions in international scientific organizations.

The Soviet state willingly supports other forms of international cooperation between scientists; in particular, they are:

The participation of Soviet scientists in international congresses, conferences, meetings and symposia which are held abroad, and the participation of foreign scientists in the congresses, conferences, meetings and symposia which are held by the Soviet scientific organizations;

The mutual exchange of delegations of scientific workers, the sending of missions by scientific institutions of their workers to other countries, and the visiting of Soviet scientific institutions by foreign scientists;

The achievement of scientific research by Soviet scientists in conjunction with foreign scientists (the research in the Antarctic, the carrying-out of the International Geophysical Year);

The creation of scientific research collectives of Soviet scientific workers in which foreign scientists take part;

The organization of scientific exhibits of Soviet scientific institutions in foreign countries in various fields (the peaceful use of atomic energy, etc.);

Scientific consultations;

The mutual exchange of scientific literature and scientific information generally.

The Soviet state is a member of the Organization of the United Nations on Education, Science and Culture (UNESCO), and partakes in the efforts of this organization to strengthen and expand the international contacts between scientists. The state also supports in every way all of UNESCO's plans which have as their goal, as is written in the statutes of UNESCO, the securing of the achievements of science and technology as the property of

all peoples and which will be used exclusively for peaceful creative ends.

Pursuing numerous activities in the area of strengthening and expanding the international contacts of scientists, the Soviet state has proceeded from the view that the cooperation of scientists from various countries not only enriches world science but assists the scientists of various countries to solve scientific questions more successfully. The state has taken into consideration as well that international cooperation on the part of scientists is an important factor in strengthening the mutual understanding between peoples and a factor for preserving and strengthening peace.

Such are the basic lines of activity of the socialist state in the organization of scientific work and the use of its achievements in the interests of society.

5. All of this activity in a fundamental fashion is connected with all of the functions of the socialist state.

At present the most important functions of the socialist state are the functions of organizing social production and the direction of the economy, economics and culture, the accomplishment of control measures for labor and consumption in the interests of the workers, and lastly the functions of the general education of workers.

In the field of foreign policy the most important functions of the socialist state consist in the close following of the Leninist course of peaceful coexistence between countries with different social and political systems, in the furthering of peace, in strengthening the unbreakable friendship, the brotherly cooperation and mutual assistance between the countries of the peaceful system of socialism, in the organization of the nation's defense from the dangers of external invasions and from the threats of agression on the part of internal imperialistic forces and their agents.[10]

The successful accomplishment by the socialist state of its basic tasks and functions at the present stage depends greatly upon the use of science for solving internal tasks of the socialist country. On the successes of science and the use of its achievements in the interests of the people depends in many ways the solution of the internal political problems.

In its turn the successful development of science and the possibilities themselves of introducing the achievements of science into practice depends on the successful realization by the socialist state of all its tasks and functions.

6. The chief instrument in the hands of the workers in their struggle for an authentic popular science is the socialist state.

But no matter how varied were the activities of the state in a given area, these activities will find success only in the case when the state organs lean upon the activity of the scientists themselves, who are the creators of science; on their collective participation in the matter of direction, on their communist attitude toward the fate of science and on the union of science and democracy.

Voltaire and Diderot dreamed about the union of the crown and the philosophers.

Adam Smith hoped to establish a union of scientists and industrialists.

The Utopian socialists of the West and the great Russian revolutionary democrats and the advanced scientists of all countries showed what an insuperable force would be the union of science with the people, with democracy.

Marxism-Leninism provided the possibility of such a union, and the Communist Party of the Soviet Union with the great Lenin at its head, turned this into an historical fact. But this union of science with democracy in the countries of socialism is not the same union about which thinkers were writing in their works during the pre-Marx period. The democratism of science in these countries is a socialist democratism.

Socialist democratism in the organization of scientific work concerns in the first place the goals of cognition of the laws of science; scientific activity in a socialist society is not for the amusement of a precise mind, but a means for transforming the world, of enlarging the public wealth of the people, the creation of abundance in goods, and the maximum satisfaction of the material and spiritual needs of the entire society.

Socialist democratism in the second place consists in the use of the achievements of science to preserve peace and to avoid war. Lenin saw the key test to democracy in the question of war and peace.

In the third place, it includes the possibility provided in reality by the society and state for every person who is skilled in scientific work to develop his capabilities, to make a contribution to the treasure-house of science in the considered and careful attitude of people toward science and its representatives, in the provision of a true freedom of scientific investigation.

In its activities concerning the organization of scientific work, the Soviet state has felt that the freedom of scientific inquiry, the providing of the scientists

with the right to distribute scientific achievements, the right to teach and to learn, the actual opportunity for the scientists to use all of the instruments of scientific work, the free exchange of scientific information and other evidences of the democratic bases of the organization of science have always had a beneficial influence on the achievements of science. On the other hand the destruction of these democratic principles has always been a brake to scientific work.

The method of administration which involves the minute supervision of the activity of every worker and which negatively influences any area of state direction, is defeating for science.

One could not find a scientist or a public figure who would deny the thesis about the freedom of scientific research as an elementary precondition for the successes of "great science" or who would defend the idea that it was possible and expedient to subordinate the creative activity of a scientist to a complete regimentation no matter on whose behalf.

However, in this world of ours there are different views of this freedom of scientific research, dissimilar presentations of the ways or providing this and the role of the state in this matter.

Many leading scientists at various times and in various nations have fought for the freedom of scientific research, having in mind: a) the liberation of science and the scientist from the economic suppression of feudalism and capitalism which turns the scientists into lackeys; b) the liberation of scientists from the coarse police interference of the powers; c) the liberation of scientific thought from the omnipotence of church oppression which is supported by the state; d) the creation of such conditions for scientific creativity under which the society itself and not the capricious Maecenas and directors gave the necessary material means for the development of science.

These scientists struggled for the sort of freedom of scientific investigation which envisaged the freedom to teach and to learn, under which the achievements of science could not be turned against society, where scientific problems would be decided by the scientists themselves, where scientific disputes and discussions would be a means of seeking the truth and not a form of chastisement of the "unorthodox."

But there exists still another notion about the freedom of science the adherents of which continually return to the question of the irreconcilability of the freedom for science with the interference into the organization of scientific work on the part of the Soviet state and

the Communist Party.

The argument of the adherents of this second "viewpoint," which comes from the United States, consists chiefly of slanderous, anti-Soviet lamentations that the Soviet scientist "has become a victim of political leadership," who has called down upon his head "a malicious system of control," that the scientist in the USSR is deprived of that very thing which is necessary to him--the opportunity for free scientific creativity.

These lamentations designed for uninformed people, cannot help but evoke a feeling of indignation in Soviet readers. They are refuted as well by the foreign scientists and public figures who have had the opportunity to personally acquaint themselves with the conditions of scientific workers in the Soviet Union and other socialist countries.

The freedom of scientific inquiry in the countries of socialism is safeguarded by laws and by ethical standards. The infringement of inquiry evokes not only indignation, but the very concrete measures of social action. In those necessary instances, that is, where such encroachments involve breaches of law, then there are measures of state compulsion. It is impossible to say that the necessity for these and other measures has fallen away. They are necessary at this time for the crossing of cases which are not applicable to a truly socialist freedom of scientific inquiry, such as the application of disciplinary measures for the scientific worker for scientific views which they have defended and which do not coincide with the views of the "administrators from science"; formal-bureaucratic attitudes to petitions and complaints about the breach of their labor, author's or other rights; bureaucratism in the decision of scientific questions; the violation of democratic principles in the direction of scientific institutions.

However, the Soviet state, providing for the economic political and other conditions for the free development of science, decisively repudiates and has repudiated the "freedom" of the workers in science and in the scientific institution from society and from the leadership of the socialist state. In the name of the entire society the Soviet state has shown and continues to show to science and its representatives the definite needs, it directs the efforts of the scientists in the solving of those scientific tasks which provide for the growth of society's material well-being and spiritual culture.

2. The Organization of Scientific Work in the USSR and Soviet Law

1. Actively participating in the organization of scientific research, the socialist state in order to develop science in the desired direction, uses in addition to the means of economic activity and ideological work, the method of legal regulation of those relations which comprise the process of scientific activity. The state uses socialist law in the capacity of one or the other of these forces, without the help of which the state organs in a number of cases could not practically effect the course of scientific work.

Is it possible, however, that there might be any sort of undefined influence of law on science?

The laws of science have an objective character. They express the objective relationships and the regular patterns of development which act independently of the creation of people. The laws of jurisprudence, on the other hand, are created by people, and express the will of the classes which hold political power in their hands. Does it not follow from this that the legal regulations, as they have consequently been produced in life, cannot but effect the laws of science? No, this is not so. Juridical laws cannot alter or change the laws of science, nor in any way directly affect their functioning.

But science is not only scientific laws. It is also the creative activity of people in science in search of the objective world, in the course of which the regular patterns of the world's development are discovered and realized.

Here the legal regulations can and do affect the activity of people, as well as their behavior and the interaction in the process of common scientific activity.

The influence of the entire legal order which is formed within a society and the aggregate of legal regulations created by the state and applied to life is felt upon the behavior of people in the sphere of their scientific activity. Legal regulations which strengthen property rights, which define the degree and form of the populations' participation in the affairs of state, the scope of democratic rights and the freedoms of the citizen--all undoubtedly affect the general atmosphere in which scientific work is formed and carried on.

However, in the legal system of any socialist state, there are regulations which have as their purpose to directly and immediately effect the social relations which concern the sphere of scientific activity and the

application of scientific achievements to life.

In the regulations of law, in one way or the other, are formulated the aims of scientific activity in a given country, and its significance for the society. In these regulations, one finds: 1) official recognition is given to all of the principles on which scientific-research work is organized; 2) the system of scientific institutions is defined which have been created by the state or by public organizations; and, 3) the activity of the organs of state control for the direction of scientific institutions is regulated. Of particular importance are those regulations which deal with the regulation of the legal status of scientific workers: the order of preparation and certification of the scientific cadres, the recruitment for scientific institutions and payment of scientific workers, the protection of the rights of the scientists as authors of published scientific research and of invention which have been applied to production, and the awarding of scientific degrees for outstanding achievements.

The influence of law on the development of science has been recognized to one dlegree or another as well in bourgeois jurisprudence. In the works of Lawrence Stein and Bunge, Ellinek and Korkunov, and Oriu and Shershenevich, we find numerous indications of this. L. I. Petrazhitskiy developed an entire system for the development of Russian legislation; for the realization of this, in the opinion of the author, it was necessary to raise the intensity of scientific activity in the universities and in the Academy of Sciences.

Petrazhitskiy did not over-emphasize the importance of legal regulations for the progress of science. He considered the mood and the inspiration of the scientists themselves as the principle, decisive motive for energetic conduct which was essential in all spheres where the interests of science were concerned.[11] And regardless of the fact that he considered that the flourishing of science depends on that very law which "normalizes scientific pursuits on the degree of success and rationality," and although in his opinion the legal standardization of the life of the universities and Academy of Sciences should be based on the principle of"non-interference," he presents to these institutions and their members the notion to act in accordance with their natural aspirations.[12]

The socialist state could not and does not accept this "principle" as the bases of development of legislation on the organization of scientific work, no more than "non-interference" could provide the tempos of scientific

development necessary for the building of a new society.

The state has made as its rule, in accordance with the wishes of the advanced scientists that 1) there is a means of organizing the strengths of the scientists; 2) there is protection from the unskilled, unqualified interference of bureaucrats into the affairs of science; and, 3) guarantees against the bringing down of the scientists themselves to the level of bureaucrats, driven on in their work by the urgings of the authorities.

2. The positive significance for science of the standards of socialist law which regulate the various aspects of the organization of scientific work, is found first of all in that they express the socialist principles of organization of scientific work and take into account the particular qualities of these relations which concern the process of scientific activity.

All of the basic principles which determine the content of the entire system of law in the socialist countries are decisive for that part of them which regulates the relations in the field of scientific activity.

Depending upon public, socialist property, the Soviet state at each stage in its historic development determines the order of allotment and expenditure of the budget set aside for the pursuit of scientific research and other enterprises connected with the organization of scientific work.

In carrying out the principle of socialis "from each according to his ability, to each according to his work," the state aims at a general development of the capabilities of the members of the society for scientific activity, the use of the best scientific cadres in accordance with their scientific qualifications, experience, and the rational arrangement of the scientific cadres. On this basis develops all of the legislation of the socialist state for the preparation of the scientific cadres and the organization of their work. This same principle is posited as the basis of the legislation on the pay for scientists.

In the laws dealing with the plan for national economic development the Soviet state defines the basic tasks of the plan for a corresponding period and the quotas in the fields of production, growth, capital development in industry, agriculture, transport. Also in the area of commodity circulation development on a national scale, the state establishes the quotas for raising the material and cultural level of the life of the people.

In the plans as well are given those measures for the development of scientific activity and the introduction of the achievements of science into the national economy.

The basic principles of socialist law are expressed and concretized in the contents of the entire system of regulations dealing with the organization of scientific work, be it the activity for creating and completing a network of scientific institutions in the country, the allocation to the scientific institutions of monetary and other material resources, the establishment of responsible directors for the scientific institutions, or the organization for preparing scientific cadres and the legal status of scientific workers as a whole.

In its forms any action of the government is expressed in the completion of acts which have in some instances the character of legal regulations, in others, actions changing laws, and in the third, organizational and technical actions which are not handled by legal regulations.

The importance of law as one of the means of organizing scientific work in a socialist society is not determined solely by the content of the regulations themselves or by their accordance to socialist principles.

Its importance is also determined in that the society and state organize the putting into practice of the rules (regulations) /pravila (normy)/, which concern the relations between people engaged in the process of scientific work.

The importance of law is determined by the provision of those laws and freedoms which are guaranteed to the scientist by Soviet law; that is to say, a strict carrying out of the principle of socialist legality in the organization of scientific work.

3. The Communist Party and the Soviet government have disclosed cases which have occurred of serious breaches of socialist legality; breaches of state discipline by workers in the state apparatus, bureaucratic attitudes toward the complaints of workers about breaches of socialist legality, illegal dismissal of objectionable workers concealed sometimes by fictitious pretexts, illegal expulsion, fines not stipulated by the law and other such infringements. Instances have also been found of accusing people who were in no way guilty.

There have been breaches of socialist legality as well in the relations of the scientific workers: administrative pressure, the limiting of the freedom of scientific criticism, the application of illegal repression for some scientists, and the breach of labor and other laws, etc.

The Communist Party and the Soviet government have initiated and carried out new important measures for the further strengthening of the safeguarding of citizens'

rights, including the rights of scientific workers.

Of the greatest importance in this field were the decisions of the XXth Congress of the CPSU [Communist Party of the Soviet Union], which fully accepted the measures proposed by the Central Committee of the CPSU for the strengthening of Soviet legality, and for the strict observance of the rights of the citizen guaranteed by the Soviet Constitution. The Congress obliged all Party and Soviet organs to vigilantly be on the watch for legality, to decisively and sternly intercept any appearances of illegality, arbitrariness, or breaches of the socialist legal order.

In all of the work for the strengthening of legality and legal order in the country, the Communist Party of the Soviet Union and the Soviet state have proceeded from the view that under the conditions of the completion of the building of socialism and the gradual transition from socialism to communism, the cases of arbitrariness and illegality have become even more untenable, and in particular the encroachments on sacred law and the freedoms of the Soviet citizen. And under the present conditions, socialist legality is one of the most important means for strengthening the power of the Soviet state as the chief instrument in the construction of a communist society and the protection of the country from external invasion.

3. The Leading Role of the Communist Party of the Soviet Union in the Organization of Scientific Work

The Communist Party of the Soviet Union is the great leading and directing force of the Soviet society, the vanguard of the workers in their struggle for the strengthening and development of the socialist structure, the directing nucleus of all workers' organizations, both social as well as state.

V. I. Lenin very strongly emphasized that the denial of the leading role of the party is tantamount to a complete disarmament of the proletariat for the benefit of the bourgeoisie, tantamount namely to that petty-bourgeois dissoluteness, instability and inability to be tenacious, unified, and forcefully active. This will destroy inevitably any proletarian revolutionary movement, if it is given the chance.[13]

The denial of the leading role of the Communist Party in the socialist state is tantamount thus to a negation of the dictatorship of the working class. A weakening of the party leadership would mean the weakening of the socialist state.

Namely for this reason the Communist Party of the Soviet Union and the Marxists of other nations carry on a decisive battle with the revisionist attempts to deny the leadership of the Marxist party of the working class in the socialist states and with the attempts in one way or the other to weaken the party leadership.

The Communist Party directs the development of the Soviet society, defines the goals and tasks of the working class and of all workers in the fight for communism and also the means for the attainment of the desired goals.

The socialist state in all of its activities including the activities in the area of scientific development, acts under the leadership of the Communist Party.

The Communist Party has always advanced the task of scientific proficiency as one of the most important tasks of socialist construction. "The working class," said I. V. Stalin, "cannot become the real master of a country unless it can raise itself from its uncultured state, unless it can create its own intelligentsia, and unless it has scientific proficiency and can run the economy on a scientific basis."[14]

The Communist Party of the Soviet Union:

a) Evolves the ideological bases of science and leads in the struggle with the ideological misinterpretations in science;

b) Defines the basic tasks put before science and scientists at one or another stage in the development of the society; leads in the struggle for a close tie between science and the practice of communist construction;

c) Directs the work in the assignment of scientific cadres, and concerns itself with the preparation of new scientific cadres;

d) Inspects in its leading organs the condition of the individual fields of science, and sometimes of individual scientific institutions, and undertakes measures for the amelioration of their work;

e) Directs the work of the state organs which are carrying out the direction of the scientific institutions;

f) Leads the organizational work in the scientific institutions, in industrial and other enterprises, which provide for the fulfilling of the plans of scientific research and the introduction of scientific achievements into practice;

g) Gives directives on questions of legal regulations in scientific work.

The directing of the activities of the state organs and scientific institutions on the organization of science is carried on by the higher organs of the CPSU and the

Communist parties of the Union Republics, by the "kray" and "oblast," party organizations, and by the town, "rayon" and primary party organizations.

In the decisions of the higher organs of the Communist Party of the Soviet Union and the Party congresses (and of the Central Committee of the Party during the period between the Party congresses) are defined the basic lines of scientific development and the measures which shall provide for its organization.

In these decisions is embodied the collective experience of the entire Party, the collective wisdom of its general staff--the Central Committee--which leans upon the scientific bases of Marxist-Leninist theory.

The collective leadership of the Communist Party guards the organs of state power from fortuitousness and one-sidedness in its work, and from the taking of decisions when the proper conditions have not yet matured for carrying them out.

In inspecting the most important questions of scientific development as a whole or in its individual fields, the Central Committee leans upon Soviet scientists themselves, on the initiative and devotedness to the Party. This initiative finds its organized manifestation and expression particularly in the wide discussions organized by the Central Committee on the questions of science, and at conferences of experts of the national economy and culture where scientists also take part.

At the present moment the decisions of the XXth Party Congress of the CPSU have great importance for the development of science in the USSR.

The XXth Congress of the CPSU issued a directive to develop science in every possible way. Along with the expansion of theoretical research in all fields of knowledge, the Congress called for an increase in the role of scientific institutions in the matter of technical progress and the organization of production, the transforming of the work in scientific-research institutes in the direction of bringing their work closer to the concrete needs of the economy, the concentration of scientific manpower and material resources in the scientific-research institutions on the solution in the first instance of scientific problems which have important significance for the national economy, the quickest completion of scientific research, and the introduction of the results of this work into the national economy, and the widest attraction of institutions of higher learning for the fulfillment of scientific-research work for the national economy[15]

On the bases of these directives of the XXth Congress,

the Central Committee of the Party and the Soviet government have carried out a number of important measures for the most rational placement of a network of scientific institutions, for bringing them close to production, for the amelioration of the preparation and certification of the scientific cadres, and for bettering the organization of control of the scientific institutions as a whole.

The national discussion on the theses of Comrade N. S. Krushchev "On the Further Perfection of the Organization of Control in Industry and Construction," which was carried out in conjunction with the decisions of the February (1957) Plenum of the Central Committee of the CPSU, played a large role in effecting measures for the better organization of scientific work in the country.

In the course of the discussion of the theses dealing with the questions of the direction of industry and construction, all of the existing questions of the organization of scientific work were critically examined, existing deficiencies in this area were brought out, and concrete proposals were made on ways of correcting them.

Taking part in the discussion of questions dealing with the organization of scientific work were thousands of workers from scientific institutions, professors, teachers from institutions of higher learning, engineers, inventors and innovators of production.

These questions were analyzed fully at the plenums of the Central Committees of the Communist parties in the Union Republics, in the "oblast," "kray," town, and "rayon" committees, and at the meetings of the primary party organizations.

The national discussion provided the basis not only for taking action on some of the important questions regarding the organization of scientific work, but as well helped to activate the wide masses of intelligentsia and workers for carrying the decisions into life.

The Party organizations on the "kray" and "oblast'" town and "rayon" level along with the primary party organizations to raise the creative activity of the scientists and to struggle with negative phenomena in the organization of scientific work: an unhealthy attitude toward criticism, the covering up of mistakes and deficiencies in the work of the scientific institutions, the uncovering of careerists who have attached themselves to science and hidden criticism of unworthy work, conceit on the part of individual scientists and other breaches of the bases of Communist ethics.

The Party organization call upon the scientific workers, both the Communists and those who do not belong to the Party, to join in the struggle with these phenomena

chiefly by the means of ideological and political work, and by strengthening the Marxist-Leninist education of the scientific cadres. The Party press is a keen instrument in the struggle with the deficiencies in the organization of Party work.

In carrying out the direction of the development of science and the introduction of its achievements into the national economy, the Party organizations in this work depend upon the trade unions which according to their Statutes "assist in the introduction of advanced techniques and the achievements of science into industry, agriculture and other areas of the national economy," and also "disseminate political and scientific information."

The Leninist Komsomol is also great help to the Party in the solving of tasks for the further development of science.

It gives this help first of all in obliging its members "persistently to master knowledge, culture, science, and technology, connecting each step of their study, training and education with the participation in the building of Communism" (See Statute No. 2); the primary Komsomol organizations are to render assistance to the young men and women in the mastery of knowledge, culture, science and technology (See Statute No. 38.)

A further step of great importance for the bettering of the organization of scientific work on the part of the state in the field of science were the decisions of the XXth Congress of the CPSU and the Central Committee of the Party on overcoming the Stalin cult of personality and its harmful consequences.

The harmful consequences of the Stalin cult of personality were felt in several ways on the organization of scientific work. I. V. Stalin attributed to himself the ability to foresee and decide all questions of science in all of its principle and important areas. The pronouncements of I. V. Stalin on any question of science were accepted as meaning "the final truth" /lit. the truth of the last recourse/.

The spreading of the Stalin cult of personality often led to a perversion of the democratic principles of leadership in scientific work in the functioning of the scientific institutions themselves; it led to the ignoring of collective leadership in the work of scientific institutions and of groups of scientists and the implanting of an administration by mere injunction in the relations of individual scientists and scientific collectives.

Slavish repetition and dogmatism were often the deciding factor which guided the work of entire scien-

tific collectives for long periods of time in so far as the tasks of research themselves were reduced often to the popularizing of the ideas and formulas which Stalin enunciated. It seems that I. V. Stalin was the only one who could advance a theory or come out with something new or original.

However, the spread of the cult of personality in the area of social life could in no way change nor did not change the basic foundations on which Soviet science develops.

The Communist Part of the Soviet Union decisively condemned and consequently has corrected the mistakes which were perpetrated during the peiod of the cult of personality in all areas of life. But the Party had also come out strongly against those who are trying to use these mistakes of the past for a denouncing of the Party leadership.

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The experience in organizing state control of scientific work in the USSR and in other socialist states has great international significance.

The advanced scientists of all countries in the world, be they socialist as well as capitalist, are attracted by the popular /narodnyy/ character of Soviet science, by the fact that it serves the interests of the entire society and that there is an ensuing struggle for using the achievements of science in the interests of peace and democracy.

Many of our friends study closely the paths of development and use for science in the Soviet Union, correctly seeing that such a study will show the possibilities and as well the difficulties of taking science from the hands of the few who can use it effectively in the service of a ruling class and putting science into the hands of the entire people for their general welfare.

A general study and an objective recounting of the experience accumulated by the Soviet Union and other countries in the socialist camp on the organization of state leadership in scientific work is therefore one of the most important tasks of Marxist-Leninist science. It must discuss the role of the state and law as a reliable means of combatting any sort of falsification of the truth which slanders Soviet science and its representatives in the interest of the forces of reaction. We must fight against any attempts to discredit in the eyes of public opinion such basic principles of the organization of scientific work in the socialist society as the planning of scientific

research, the active role of the state in the accomplishment of the designated plans, the directing role of the Communist Party in all of the activities of the society and of the state in the organization of scientific work.

SECTION ONE

THE LEGAL STATUS OF SCIENTIFIC INSTITUTIONS IN THE USSR

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Chapter I.

THE GENERAL CHARACTER OF THE SYSTEM AND THE LEGAL STATUS OF SCIENTIFIC INSTITUTIONS IN THE USSR

1. The Basic Stages of Development of the System of Scientific Institutions in the USSR

1. The activity of the socialist state in the organization of scientific work within the country is most clearly seen in the creation of a rationally laid out system of scientific institutions, the strengthening of the material bases of these institutions and the staffing of them with scientific cadres. The state provides all of the conditions which are necessary for the planned activity of these institutions.

It is just this development and strengthening of the net-work of scientific institutions which has brought about and which is now bringing about the successes in science within the USSR and which gives to science its active role in the lifting of all the fields of the economy and culture.[1]

The Soviet Government took over from the old order a comparatively small number of scientific institutions the Russian Academy of Sciences, the universities and a few other scientific institutions.

The Soviet state turned these scientific institutions from Tsarist times into national property and made them into centers for enlightening the people and for the progressive development of the people.

From these very first days of the October Revolution, the state carried out measures for their strengthening and general development. Along with this the Soviet government began to create new scientific institutions.

During the period of the struggle for the building of socialism in the USSR (1917-1936), the development of the net-work of state scientific institutions in the country proceeded in the following way:

1) The transformation of the Russian Academy of Sciences and its subordinate institutions into scientific institutions of the socialist type; the strengthening and further development of the Academy of Sciences as the highest state scientific center of the country;

2) The gradual strengthening of the universities

and other institutions of higher learning within the country; the creation of the material and other conditions for the development of the Chairs /Kafedra; a university department/ engaged in scientific-research work; the creation along with the VUZ /Institution of Higher Education/, of independent scientific-research organization (institutes, laboratories, departments /otdel/, sectors /sektor/, etc.);

3. The creation and gradual strengthening and development of scientific-research institutions which are established for resolving questions of an ideological nature, for heading the theoretical struggle against bourgeois ideology; included in this is the introduction of a scientific methodology in the scientific-research activity of all scientific institutions; these institutions are also concerned with the preparation of scientific cadres for the Soviet and Party apparatus;

4) The creation and gradual strengthening of the branch scientific-research institutions (institutes, laboratories, design offices, etc.) for serving the needs of the national economy in the fields of industry, transport, agriculture and other fields of the national economy.

In 1929 the principle for the fundamental transformation of scientific institutions of all types was laid down.

Above all this concerned the transformation of the Academy of Sciences of the USSR. The transformation was directed at turning the Academy, both in terms of its structure and in terms of establishing scientific work as its central aim, into a powerful scientific organization which would be connected in the closest way possible with the basic tasks of the stage of socialist construction.[2]

In the branch scientific-research institutes this transformation consisted in bringing their activities closer to the practical tasks of construction and in transmitting to the economic societies the scientific-research institutes which dealt with questions related primarily to a given field of industry.

The year 1929 marked the time when the struggle was begun for a planned development of science in all of the scientific-research institutions in the USSR.

The Communist Academy played an important role in the development of a network of scientific institutions during the period of the struggle for the building of socialism, in their ideological strengthening as well as in the introduction of principles of planning in the construction of the system of scientific institutions and in scientific work as a whole.[2]

With the laying of the bases of socialism in the USSR and the entry of the country into the period of the completion of socialist construction and the gradual transition from socialism to communism, great opportunities have been created for the development and strengthening of the network of scientific-research institutions. In using these opportunities the Soviet state has created a system of scientific institutions which is strong in its productive power and in the availability of qualified research personnel.

2. Involved in scientific-research work within the Soviet Union (according to data as of 1 January 1957) were the following: 2756 scientific institutions[4], including the Academy of Science of the USSR, the Academies of Science of the Union Republics, the branch Academies of Science of the USSR and of the Union Republics, the scientific-research institutes and laboratories of the central institutions of the USSR and the Union Republics, the Soviets for the National Economy /Sovnarkhozy/, and 767 institutions of higher learning.[5]

Employed in the scientific institutions and institutions of higher learning as of 1956 were 239,900 scientific workers, which is 23.5 times the number of scientific workers in Russia of 1914.[6]

Other organizations which have great significance in the scientific life of a socialist society are the scientific societies of workers, various scientific congresses, meetings and conferences which are called not by one but by any number of the many scientific institutions for the discussion and solution of the problems of science in one or another field of knowledge.

Although the network of scientific-research institutions in the Soviet Union was created out of the study of life's needs, its organization requires further perfecting.

The July Plenum of the Central Committee of the CPSU in 1955 and the XXth Party Congress of the CPSU disclosed serious shortcomings in the organization of the network of scientific institutions.

In the summary report to the XXth Congress of the CPSU, N. S. Khrushchev, noting the great and indisputable achievements in Soviet science, also pointed to the lagging behind of individual fields of science in the face of the growing demands of the national economy. Shortcomings in the organization of the network of scientific institutions were given in the report as one of the reasons for this lag. "The network of scientific institutions and experimental stations," said N. S. Khrushchev, "has been

laid out without studying the economic and resource conditions. Many of the scientific-research institutes and institutions of higher learning are located far from their base of production....It is perfectly impossible to have a lack of coordination in the activities of the scientific institutions of the Academy of Science, of the branch scientific-research institutes and of the institutions of higher learning. This lack of coordination and consulation in the work hinders the coordination of scientific forces for solving the most important scientific and technical questions; it perpetuates a harmful parallelism, leads to the dispersal of the productive means, and impedes the introduction of scientific and technical achievements into the national economy."[7]

At the XXth Congress of the CPSu, it was also noted that in our country there is a system of scientific institutions which is made up of nearly 3000 academic and branch institutes, scientific-research laboratories and other scientific institutions, which has not once been investigated as a whole, and which is probably far from the most rational economic and productive system.

The XXth Congress of the CPSU, having designated the paths for further scientific development, recognized the necessity, among other measures, of supervising the work of scientific-research institutes in the direction of bringing their activity closer to the needs of the economy and to the productive base, and of attracting wider support from the institutions of higher learning in fulfilling the scientific-research work for the national economy.[8]

The question of the placement and the principles of organization for the network of scientific institutions was given thorough discussion in connection with the investigation by theSupreme Soviet of the question of the further improvement in the organization of direction in industry and construction.

The national discussion of the theses of N. S. Khrushchev showed that the rapid growth of science and scientific institutions in the country demanded the further perfecting of the forms and methods of leadership in the scientific institutions.

In the course of the discussion, the negative influence of departmental barriers was disclosed which led to a weakening of the ties between scientific institutions, to unhealthy rivalry, the creation of small scientific institutions, and to the dispersal of scientific forces and the increased cost of scientific research.

It was just this departmental approach to the solution of questions on the development of the network of scientific institutions which led to their incorrect place-

ment; i.e., the concentration of the majority of scientific institutions in a few large towns and cut off from the productive base.

The participants in the discussion once again emphasized the correctness of the repeated warnings by the Party and government on the necessity of a significant expansion of the scientific-research activity of the institutions of higher learning and of increasing the specific weight in science of the scientific institutions of the industrial enterprises.

Reliable criticism was given on the shortcomings in the work of scientific institutions and state organs on the coordination of scientific work.

In discussing the questions of organization in the network of scientific institutions, the Soviet scientists, engineers, and production innovators brought out their own concrete proposals on the paths for the most rapid removal of existing shortcomings, but cautioned against the attempt to mechanically transfer to scientific-research work the principle of territorial direction which was possible in industry and construction.

These proposals were taken into consideration by the Supreme Soviet in deciding the fundamental questions for the further improvement of the organization of state direction in industry and construction; included in this was a provision for the better organization of scientific research and the introduction of this research into the national economy. They were given consideration as well in all of the practical work done by the state organs and scientific institutions for the transformation and amelioration of work under the new conditions.

The correcting of shortcomings in the existing system of scientific institutions within the country as a whole is one of the most important tasks before the whole state apparatus.

3. The study of the economic and political aspects is not the sole consideration in the question of the correct organization for the system of scientific institutions; of importance also are the analysis and correct solution to the juridical aspect of this problem. Among the juridical questions which are instrumental in solving the tasks advanced by the XXth Congress are, first, a clarification of the particular features in the legal status of individual types of scientific institutions which, when put together, comprise the entire system, and clarification of the regulatory experience accumulated by the Soviet state in the regulation of its rights and duties, the disclosure of shortcomings and failures in this area. In the second place, there is the clarification of those juridical

means which are the best for providing coordinated work in the entire system of the nation's scientific institutions.

2. The Question of Juridical Personality of the Scientific Institution in Soviet Legal Science

1. The scientific institutions in the USSR are participants in the most varied legal relationships.

For scientific research it is necessary to have scientific instruments (which are sometimes very large and powerful), buildings and structures, a power source and raw materials and much more. Scientific work is impossible without the basic minimum of material means which is different in the various fields of science.

The means which are set aside by the state or public organization, can in this instance create the material base for the development of scientific work only when the scientific institution is empowered by law to use the means for this goal (acquiring scientific apparatus, preparations and raw materials, using existing reagents and other materials for carrying out experiments, inviting the scientific workers for permanent or temporary work and paying out their salaries, etc.) Moreover it is necessary to clearly define the character of the inter-relationships between the scientific institutions and the various state organs, public organizations and citizens who are involved with the fulfillment of scientific work by these scientific institutions.

Thus not only material means are necessary for the scientific institutions in carrying out their normal activities. They need as well definite juridical opportunities, that is, the ability to assume the quality of independent subjects of rights and duties.

In the state acts which define the legal status of many scientific institutions (in the Statues of the Academy of Science, the Regulations for institutes, etc.) one often finds reference that these institutions "enjoy the rights of a juridical person."

The presence of such references obliges us to concern ourselves briefly with this moot question of the meaning of the juridical person according to Soviet law.

A group of Soviet experts in civil law (Professor A. V. Venediktov, Professor S. N. Bratus' and others) have advanced and energentically defended the viewpoint that the juridical person is "the collective of workers which is established under the provisions of a law, an administrative act or a statute, which has an organization for its regulation, and which possesses in one or another law and in one or another measure a separate property and

which enters into civil proceedings in its own name, that is, as an independent (particular) bearer of civil rights and duties."[9]

This viewpoint however has met with equally energetic opposition and criticism from other civil law experts who consider the theory of the juridical person as a collective artificial and without practical significance.[10] In direct opposition to the "theory of the collective" is the concept advanced by some experts in civil law according to which the juridical person is the director of the enterprise.[11]

Since we are not concerned here with this much debated question as a whole, we notice also that in conformity with the scientific institutions which by virtue of law use the rights of juridical persons, the viewpoint of the authors who consider the juridical person the collective workers and employees led by the responsible management, in our view, corresponds more to our reality and gives a clearer perspective of the development of legislation for scientific institutions.

A scientific institution is not only buildings, instruments, scientific apparatus, libraries, archives etc.

A scientific institution is above everything else the people and scientists organized into a scientific collective and united into a unity of purpose and a unity of will and activity.

At the head along with the responsible management (collective or by a single person, elected or appointed) these scientists and other workers organized into collectives accomplish the scientific tasks given to them. In the activity of the collective of scientists in the deciding of scientific tasks and scientific organizational matters, the rights given to the scientific institutions are realized and their obligations are carried out.

Among the experts in civil law there is also a dispute going on on another question which also has direct bearing on the legal status of the scientific institutions.

The plenary powers of the state scientific institutions in the area of civil monetary flow up to now* has been defined by the legislation on the economic operations of the state budgetary organizations.

As for any of the state budgetary organizations, the scientific institutions under law[12] were given the right to perform also those civil-legal transactions which were directly connected with their work or were necessary for the accomplishments of the tasks assigned them.

* grazhdanski oborot; the civil monetary flow, or the specifically non-state monetary circulation/

In analyzing Soviet legislation on the participation of state bugedtary organizations in civil monetary flow, many Soviet experts in civil law have come to the conclusion that these institutions (including as well the scientific-research institutions) are juridical persons.

Such a conclusion, however, does not coincide with the "reigning viewpoint" according to which the budgetary institutions are not independent bearers of rights and duties, but are the representatives of the state and act in the name of the latter.13

Nevertheless it must be admitted that as for the state scientific institutions which have independent budget estimates, the conclusion is more correct than the viewpoint of the authors who see the state budgetary institutions as "representatives of the state."

The state scientific institutions, having an independent budgetary estimate, a directing leadership, and provided with the rights of ordering credits, are in our opinion juridical persons.

Proceeding according to the particular features of the scientific institutions themselves--their goals, forms of work, division of work functions, etc, and also from the particular features of state control over these institutions--the inadmissability of command in science, and the giving to the scientists themselves and their collectives wide rights in carrying out the state functions, the Soviet state has established a number of rules which regulate the origin and activities of the scientific institutions which are essentially diffrent from the analogous rules for the state economic organizations and also for other state institutions which are included in the state budget.

The particular features of the legal status of scientific institutions are determined by various factors: the subordination of the scientific institutions of a given group , the presence in the country of other scientific organizations of the same type which carry on the traditions in the organization of scientific work in one or another field of science, etc. But, it is clear that the chief feature in determing the particular marks of the legal status is the character of the scientific tasks of one or another scientific institutions, and their place in the development of Soviet science as a whole.

According to the character of the basic scientific tasks all of the scientific institutions in the Soviet Union are divided into the following three basic groups: 1) the academies of science comprised of the scientific-research institutes and other scientific institutions; their basic tasks consists in solving the most important theoretical problems, in working out the perspectives for science "of

the future," in the creation ofadefinite scientific "reserve;" the institutions of higher learnings are related to this group; 2) the field scientific-research institutes; their tasks consist in working out the most important problems of technical progress, in the discovery of practical application to life of the general patterns of development discovered by science, in the creation of the scientific prerequisites for a general development of the national economy and culture; 3) the scientific-research laboratories of industrial and other enterprises; the task of these scientific institutions consists in the organization of the practical application of new achievements of science in the national economy, in the practical testing of the importance of new scientific theorums. ...

Taking as a basis the given classification, for a better explanation of the particular features of the legal status of the scientific institutions of the various types, in the subsequent chapters of the present section, we shall investibate the particular features of the legal status of the Academy of Science of the USSR (Ch. 2), the academies of science of the Union Republics (Ch.3), the branch academies of science of the USSR and of the Union Republics (Ch. 4), and the branch scientific-research institutes (Ch. 5).

In this same section we shall investigate the legal forms in the organization of scientific work in the institutions of higher learning (VUZy) (Ch. 6), the legal status of scientific societies (Ch. 7), and the legal questions in the coordination of scientific work within the country (Ch. 8).

Chapter II

THE LEGAL STATUS OF THE ACADEMY OF SCIENCE OF THE USSR

1. The Academy of Science of the USSR is the highest scientific institution of the Soviet Union.

1. The Academy of Science of the USSR is one of the links in the unified system of state scientific institutions within the country. It is made up of a large number of scientific institutions that are working in various fields of knowledge.

The Academy of Science of the USSR is the powerful association of state scientific institutions in all of the key important fields of science.

In developing the Academy of Science as an association of scientific institutions, the Soviet state did not build and develop this institution along the model of the Academies of Science in the bourgeois states of Western Europe. In these countries the Academies as a rule are state scientific societies and do not have under their authority large scientific-research institutions.

The "Western" type of Academy of Science did not suit the needs of the Soviet Union, just as it has not suited the other socialist countries.

The "Western" type of Academy has ceased to satisfy the imperialist bourgeoisie, which, in order to attain its goals in the field of scientific research has begun increasingly to create industrial scientific-research laboratories, institutes and other "non-academic" institutions and their associations. The bourgeoisie has begun to invest significant money and attention in the scientific-research work of the respective faculties of the universities, and to even more take the universities under their control.

The reason for such a "shift" of interest by the bourgeoisie lies above all in the changing needs of capitalist production for science and scientific institutions; it lies also in the effort of the capitalists to solve quickly the "applied" problems and to receive profits. The Academies of the Western world were not set up to solve such tasks. Problems of a general theoretical nature, which are most often the concern of the solitary scientists gathered in the Academy, interested the monopolies only when the results promised profit in the immediate future.

As for the socialist state, the "Western" type of Academy would be unsuitable for it on any grounds. The character of the socialist economy demands a planned

development of science and the introduction of scientific achievements into all areas in the economy. However the planned development of science makes it necessary to concentrate the efforts of all the scientists within the country, and all of the scientific institutions on solving the all-important tasks which confront science. It is clear that the Academies of the "Western" type would be powerless to solve such tasks. Even the old Russian Academy of Science could not do this.

Such tasks could not be shouldered by associations of individual scientists. They can be mastered only by an association which, while uniting the leading scientists in its scientific institutions and setting up a strong network of scientific institutions, is also the general state scientific center within the nation.[1]

The question of the legal status of the Academy of Science of the USSR is, above all, the question of its place among the other scientific institutions in the country; it is also a question of those legal means with the aid of which the Academy/the scientific forces around its institutions. unites

This is a question of the basic tasks of the Academy, the legal status of its personnel, the system of scientific institutions which make up the Academy, and the organization and legal forms of activity by the Academy's control organs.

2. The legal status of the Academy of Science of the USSR is defined by a number of normative acts by the Soviet state. In the area concerning the organization and activities of the Academy of Science and its institutions, and also the legal status of its workers which is not the sole and particular concern of the Academy, its legal status is determined by the general regulations which are established by the laws of the USSR and by the decrees of the Praesidium of the Supreme Soviet and by the resolutions passed by the Council of Ministers of the USSR. However in the area which deals specifically with the Academy, the legal status of the Academy as a whole, its individual institutions and its personnel is determined by the government of the USSR and in the budgetary allotments established by the governments, by the governing organs of the Academy itself.

The basic document which defines the legal status of the Academy is the Statute of the Academy of Science of the USSR, which was passed by the government of the USSR.

The Statute of the Academy of Science of the USSR in its juridical force is in no way different from any other normative act passed by the government (for example, the model charter of an institution of higher learning).

However it would be incorrect not to point out one very essential feature of this act whereby the Statute of the Academy of Science of the USSR is worked out by the Academy itself and upon its presentation, is passed by the government.

Such a proceedure for drafting the Statute and amending it existed in the old, pre-revolutionary Academy. It was completely preserved by the Soviet state.

The Statute of the Academy of Science of the USSR is a document which deals not only with the questions of the organization and activities of the Academy's institutions, but as well expresses some general principles of organization of scientific work within the country. In the Statute appears as well the concern for the development of the precepts of socialist democratism in those very unique relations which are found in the struggle of the Soviet state for the development of science in every way possible and for the use of scientific achievements for the welfare of all the people.

The regulations of the Statute of the Academy of Science of the USSR are not ossified canons which keep their form under all conditions and in any situation. On the contrary they change and are improved along with the development of the Academy. However in these changes the Soviet government has always carefully kept the democratic traditions in its organization and work which existed even before the victory of the October Revolution.

After the victory of the Great October Socialist Revolution there were no immediate fundamental changes in the organization of the Russian Academy of Science.

The Communist Party and the Soviet government, following the instructions of V. I. Lenin, helped the Academy to gradually overcome the traditions which hindered its successful development (the divorce from practice, individualism in the choice of scientific research, etc.), did not try to administer by fiat in the area of science, and assisted the Academy in gradually creating new organizational forms of work which correspond to the timely solving of scientific tasks in the interest of socialist construction.

The drafting of the first Soviet Statute of the Academy of Science continued nearly ten years, during which time the Soviet government and the Communist Party aided the Academy in correctly solving the basic and principle questions of its organization and activity.

On 18 June 1926, the Council of Peoples' Comissars of the USSR passed the first Soviet Statute of the Academy of Science of the USSR (SZ SSSR /Sobraniye Zakonov SSSR, Collection of Laws of the USSR/, 1927, No 35, p. 367), approved after long years of searching and heated debate.

Immediately after the passage of the Statute, it began to evoke criticism both within and without the Academy.

In 1929 the question of changing the organizational forms of work which had been established by the Statute of 1927 and a general review of the Statute was proposed in connection with the new tasks which confronted Soviet science in the year of the great change.

In 1929 the Academician A. Ye. Fersman came out with a large-scale Project for the Reorganization of the Academy of Science. His proposals called forth a wide discussion in the specially created commission, but then on 30 September 1929 were basically approved at the General Meeting of the Academy.

Later they were studied in the work of the commission on drafting a new Statute of the Academy of Science which had been established by the Praesidium of the Committee for the Management of Scientists and Scientific Institutions of the TsIK on 18 February 1930; the Chairman was the Academician V. P. Volgin.

As worked out by the Commission the draft of the Statute was reviewed and approved by the General Meeting of the Academy of Science.

On 30 May 1930, as passed by the General Meeting the draft of the Statute was passed by the regulation of the Praesidium of the TsIK (SZ SSSR, 1930, No 30, p. 335).

The Statute of 1930, as for the Statute of 1927, was in effect for a comparatively short period of time. On 25 April 1934, the General Meeting of the Academy of Science established a commission for the drafting of a new Statute; the Chairman was the Academician G. M. Krzhizhanovskiy.

On 28 November 1935, the Council of Peoples' Comissars passed the new Statute presented by the Academy of Sciences (SZ SSSR, 1935, No 59. p. 484).

The new elements in the Statute of 1935 consisted in the first place in that the Statute provided for the formation in the Academy of Sciences of departments of technical sciences along with the two existing departments; in the second place the new Statute expanded the tasks of the Academy in the field of social sciences; thirdly, the Statute foresaw the possibility of establishing broad contacts with those scientific institutions which were not in the Academy; fourthly, it expanded the tasks of the Academy in preparing the scientific cadres;and fifthly, the new Statute expressed a general orientation toward collective work by scientists.

In the last two decades, there have been essential changes in the entire system of scientific institutions, including the organization and activity of the Academy.

In 1935 there were 84 scientific institutions in the Academy with 5,402 workers, but today the Academy includes 284 scientific institutions in its composition and employes more the 16,000 scientific workers. Within the Academy of Science and its institutions you can find at work 167 Academicians and 361 Corresponding Members, 1409 Doctors /Ph. D.'s/ and 6,237 Candidates of Science. Among the scientific workers of the Academy, more than 5,000 are members or candidates for the Communist Party. Among these more than 200 are Academicians and Corresponding Members.

The material and technical equipment of the Academy's scientific institutions has been significantly strengthened. The amount of money allocated to the Academy in the state budget has grown 32 times. As a result of this constant assistance from the government the Academy has been equipped with the most recent scientific instruments and apparatus.

Over the course of the years there have been fundamental changes in the tasks that the Academy of Science should carry out as the highest scientific institution in the country. There have been changes also in the area of the organization of international scientific contacts.

Of course all of this could not help but entail significant changes in the scope and organizational framework of the Academy.

At the suggestion of the Academy, in recent years the government of the USSR has passed [illegible] decisions which concern several important aspects of the Academy's life.

Thus there has been an expansion of the rights of the various Departments, by which the immediate direction of all of the scientific institutions within the Department has been given over to the Department itself. The Siberian Department has also been created within the composition of the Academy. The coordination of scientific work within the Academies of Science of the Union Republics has been entrusted to the Academy of Science of the USSR.

In conjunction with the stated changes has arisen the necessity to draw up a new Statute of the Academy which will reflect and strengthen all of the changes in the content and organizational-legal forms of the Academy's activity which have occurred over the years but have not been incorporated into the Statute. And on the basis of the directive of the Communist Party on the means of developing science and using the know-how of the Academy, the new Statute would introduce some changes and more precise definitions in determining the tasks and functions of the Academy in the various fields of its activity; it would clarify the rights and duties of the Academy in the field of planning and coordinating scientific work on an all-union

scale, and define the rights and duties of the members of the Academy of Science of the USSR.

With these considerations in mind, the Praesidium of the Academy of Science on 14 September 1956 approved the regulation entitled "On the Preparation of a New Draft for the Statute of the Academy of Science of the USSR,"[2] and in this regulation ordered the formation of a commission[3] to prepare a draft of the Statute of the Academy of Science of the USSR. The draft would define the purposes, composition and organizational framework for the Academy and its institutions under the new conditions. In particular the draft would provide for:

a) A clearer definition of the purposes and as well the rights and duties of the Academy of Science of the USSR in the planning and organization of scientific work on a national scale.

b) A precise definition of the functions of the Academy of Science of the USSR and its institutions in the area of coordinating scientific work of the scientific-research institutions and of the institutions of higher learning in all of the ministeries and departments; there would be a provision for the establishment of closer forms in the organization of cooperation between the Academy of Science of the USSR and the Academies of Science of the Union Republics;

c) A further expansion of the rights of the departments of the Academy of Science of the USSR and of those institutes and other scientific institutions which compose it; a strengthening of the directing influence of these departments on the work of the scientific institutions in the Affiliates /filialy/ of the Academy of Science of the USSR in the corresponding fields of science;

d) A significant expansion of the rights of the directors of the institutes and the other scientific institutions which are on an equal footing with the institutes in giving them some of the functions which are at present performed by the institutions and departments on an all-Academy level;

e) A clearer definition of the rights and duties of the Academicians, the Corresponding Members and the basic staff of scientists within the Academy;

f) Further simplification in the structure of the Academy's institutions and the organs controlled by them;

g) A statement in the Statute of the experience gained by the Academy of Science in the development of international contacts between scientists; a clearer definition of the rights of the foreign members of the Academy and of the forms for their participation in the work of the Academy's scientific institutions.[4]

The basic ideas which were written into the regulation of the Praesidium of the Academy of Science on 14 September 1956, were expressed and recognized in the draft of the new Statute of the Academy which was approved by the General Meeting on 20 June 1958.5

3. The Academy of Science of the USSR is the state scientific institution which has been entrusted with the responsibility of serving the interests of the Motherland to be in charge of the development of science within the country. This idea was expressed as early 28 January 1724 in the Ukase of the Government Senate on the institution of the Academy and the draft of the Regulation for the institution of the Academy of Science and Art which was approved by Peter I on 22 January 1724.

In these documents the thought is clearly expressed that the Academy is to be the state institution summoned in accordance with the interests of the nation to be in change of the development of science in Russia and of the instruction of the youth in the fundamentals of science.

Peter I founded the Academy as a collection of "the best scientific people" who should: "1) produce and improve science, 2) instruct the young people in these sciences publically and 3) in themselves instruct some few people who would be able to instruct the young people in the first fundamentals of all sciences."

The Academy of Science should also investigate all inventions and "communicate its approbation frankly if the inventions themselves are true or not, if they may have great of little uses and if they have ever existed before or not."

The state character of the Academy was stressed in all of the subsequent statutes as well.

"The Regulation [Reglament] of the Imperial Academy of Science and Art in Saint Petersburg" in the year 1747, considering it essential to have scientists of different specialities within the Academy, linked directly the activity of each academician to the solving of concrete state tasks.

Thus, for the astronomers and geographers the Regulation declares that "the use of them is directly for the end that navigators will be more skilled in the state, and those [the goegraphers] who do not only describe all of the earth authentically, but may sometimes can think up new things," (# 2).

The Regulation even more definitely links the body of academicians itself with the state demands in Paragraph 4, where it states "In the state in which has already been established a kind police, artists, manufacturers, an army, a navy, a foreign commerce, there is the essential need to try to invent the materials, paints and various artifacts; there is need for every sort of machine

for the army and the navy, a fine architecture both civil and military, the skillful pouring of cannons, the cleaning of canals, rivers and communicating channels; the institution of silk and broadcloth factories, agriculture and gardens and other numberless needs which belong to the police. These lists of needs can be carried out when the physical sciences are united with Mathematics."

The Regulation of the Academy of Science as a state scientific institution was fully preserved in the Statutes of 1803 and 1836.

This has been fully preserved after the victory of the October Revolution.

But the Academy of Science is not the usual scientific institution among the many other scientific institutions of the country.

The Academy of Science is the highest national scientific center of the country.

This idea was given expression in the regulation of the TsIK and the SNK /Council of People's Commissars/ of 27 June 1925, which designated the Russia Academy of Science as the highest scientific institution of the Soviet Union, and then later in the Statute of the Academy of Science.

In defining the Academy of Science as the highest scientific institution of the country, the government of the USSR has expressed the views of the advanced scientists of both the past and present. These scientists have proven the necessity of concentrating the efforts of all the scientists of the country on solving the crucial scientific problems confronting the Motherland; tney have also shown that the Academy must be responsible for uniting the scientific forces of the country.

The regulation on the dominant position of the Academy of Science of the USSR among the other scientific institutions of the country in a slightly changed form has been incorporated into present Statute. The Academy of Science of the USSR, states the first paragraph, is the highest scientific institution of the USSR and brings together all of the leading scientists within the country.

The Academy of Science of the USSR has been empowered to direct the activity of all the scientific institutions in the Soviet Union.

"The Academy of Science of the USSR, as the highest scientific center of the country must direct the work of the Academies of Science of the Union Republics, and as well the work of the departmental scientific institutions; it must establish the goals of their work, place scientific problems before them, utilize their forces, invite the representatives of these institutes to Academy's session, and present their reports.

The absence of close ties between the Academy and the departmental institutes works against these institutes and against the Academy itself.

The control of the Academy of Science on the work of those institutions which are not part of the Academy is felt in various forms. To them are referred for example: a) the elucidation of the basic scientific problems which are assigned to all of the scientific institutions of the country; b) the coordination of scientific-research work on some of the most important questions in science; c) the evolving of proposals for the organization of scientific work in the country and the presentation of them for consideration by the government; d) assisting the work of the Academies of Science of the Union Republics, etc.[7]

4. As the highest scientific institution of the country the Academy of Science of the USSR is under the direct authority of the Council of Ministers of the USSR.

Such a situation did not come about at once. After the October Revolution the Academy and until 1925 was under the authority of the state organs of the RSFSR. During this time those matters which concerned the Academy directly, and which required action by the Soviet state, were dealt with by the People's Commissariat of Education of the RSFSR, via the Main Administration of Scientific Institutions (Glavnauka).

The Academy of Science from the first months of Soviet rule forcefully insisted (in defiance of the desires of the Glavnauka) on its right of directly handling the question of scientific development which came up in the Council of People's Commissars /Sovnarkom/.

The President of the Academy of Science, the Academician A. P. Karpinskiy, in his letter to the Sovnarkom of the RSFSR on 3 April 1918, requesting that the government approve quickly the Academy's budget for 1918, that the government assist the Academy in publishing scientific works and in some other immediate problems, asked also in line with this that the government preserve for the Academy the right which it had from its founding of turning in particularly important cases immediately to the highest organ of power, which, as was stated in the letter, can always provide the means for the simultaneous review of the question which concerns all of the interested departments in the interest of necessary speed.[8]

The relation of the Glavnauka to the Academy of Science, as one of its many departmental institutions, led to the persistent requests of the Academy that it be subordinate directly to the government.

Pretending to have an all-encompassing control, both in ideology and science, over all of the work in all of the scientific institutions of the Republic,

including the Academy of Science, the leaders of the Glavnauka at that time demanded from the Academy and "immediate and constant" execution of its orders, and proposed to the Academy of Science that in "its dealings with the Narkoms /People's Commissariats/ and departments to obtain as a preliminary instructions from the Glavnauka,"[9] and "all deals with the institutions of the Union Republics are to be transacted through the Glavnauka,"[10]

In the letters to the Glavnauka and in other documents, both the leaders of the Academy of Science and individual scientists noticed the superficiality of similar pretensions of the Glavnauka, and have stressed the threat which bureaucratism can impose in the decision of questions in scientific work.[11]

As is well known, the Soviet government on the issue of the inter-relations of the Academy of Science with the organs of state control and power, agreed with the Academy of Science, and not with the Glavnauka of the People's Commissariat of Education.

After the Academy of Science was transformed into an all-union scientific institution, it was made directly responsible to the Sovnarkom of the USSR.

From 1930 to 1933 the Academy was under the TsIK of the USSR, which placed it under the authority of the Committee on the Management of Scientists and Scientific Institutions of the TsIk of the USSR.

In 1933, the TsIk of the USSR, in the aim of linking the Academy of Science with the practices of socialist construction and for establishing planned and close cooperation between the Academy of Science and the Narkoms and the State Planning Commission of the Soviet Union, placed the Academy of Science under the Sovnarkom of the USSR, and decreed that the plans for the Academy's work and its Statute would be approved by the Sovnarkom of the USSR (SZ SSSR, 1933, No 73, p. 444).

The inter-relationships of the government and the Academy of Science were not achieved and then let forever fixed. They have undergone changes, and each of these changes has been in the direction of a greater expansion in the rights of the Academy of Science and the organs under it in the deciding of scientific and organizational questions.

Thus, in the Statute of 1935 and subsequent regulations of the government, the Academy of Science was given the right to decide independently some important questions which hitherto had been decided by the Sovnarkom.

Permission by the government is no longer needed for the creation within the Academy of Science of scientific-research institutes, libraries, laboratories, museums and

other scientific institutions. These questions are decided by the Academy independently, and in the matters dealing with the financing of these institutions the Academy works in accordance with the Ministery of Finance of the USSR.

The Academy of Sciences itself passes the regulations dealing with the commissions and councils which have the established by the Academy for coordinating the work which is being conducted by the institutions which are not within the Academy.

The deciding of questions involving the planning of scientific-research work in the institutions of the Academy has been transferred to the directing organs of the Academy with the exception of the plans for the most important scientific-research work which are approved by the government.

It is not longer required that the government of the USSR approve the elections which are conducted by the General Meeting of the Academy of Science for the posts of President of the Academy of Science and other members of the Praesidium of the Academy of Science.

5. The legislation in the countries of People's Democracy also views the Academies of Science as the highest scientific institution.

The rights and duties of the Academies of Science in a number of countries have been more widely defined in comparison with the Academy of Science of the USSR. This is particularly true in relation to the inter-relations between the Academies and the scientific-research institutions of the Ministeries and Departments.

Thus, for example, the Polish Academy has been empowered to coordinate the organs of state power in planning, organizing and coordinating the scientific research which is being carried on in all of the Polish scientific institutions. To these ends, the Polish Academy:

a) develops and presents for the consideration of the Council of Ministers the drafts for plans of scientific research which concern those problems which are most important for the development of the national economy and culture;

b) presents to the government the final drafts for research plans of the scientific institutions in all departments;

c) participates in the supervision of the scientific work in those institutions which do not belong to the Academy of Sciences (Article 6 of the Law of the Polish Academy of Science of 30 October 1951).

The Polish Academy of Science can, in agreement with the proper ministery and upon the instruction of the government, assume a general scientific supervision over all or

any part of the work in a scientific institutions which is not part of the Academy. The Academy is responsible for compiling and presenting to the government reports on the development of Polish science.

The Academy of Science in the Hungarian People's Republic among other tasks given it in the Statute is the responsibility for drawing up the plan for scientific work in which are put forth the tasks which carry out the state interests of the Republic.

According to the Statute of the Academy of the Rumanian People's Republic of 1955, the Academy, aside from its own institutes, may establish institutes in conjunction with the various Departments. The Institutes of the Academy of the Rumanian People's Republic cooperate with the departmental institutes and scientific societies, helping them in their work. The conditions of cooperation are established in special agreements which are concluded between Academy of the Rumanian People's Republic and the respective Departments (Article 47 of the Statute).

A "Commission on the Coordination of all Scientific Activity of the Country" has been created within the Academy of the Rumanian People's Republic (Article 61 of the Statute).

In the Bulgarian Academy of Science as well in 1954, a Council /Soviet/ on the Coordination of Scientific Activity was set up to unite the scientific work of all the scientific institutions in the country such as the institutions of the Academy, the departmental institutes and the Chairs /Kafedra/ of the institutions of higher learning.

2. The Basic Tasks of the Academy of Science of the USSR

1. The place of the Academy of Science of the USSR among the other scientific institutions of the nation, its organizational structure and organs of control, and as well the legal status of the Academy of Science as a whole, are determined first of all by the basic tasks placed before the Academy of Science by the Soviet state which arise out of the needs of the country and the condition of science.

The Soviet state and the leading scientists in the Academy itself have defended the course of formation of the Academy of Science as the central scientific center with its "active" tasks, clearly defined program of work and intensive activity of the member scientific institutions.

The first program document of this sort on these questions was given by the Academy in the very beginning of 1918 in answer to an inquiry by the People's Commissar of Education, A. V. Lunacharskiy. "The Academy believes," states the document, "that a significant part of our tasks is posed by life itself, and the Academy is always ready

upon the demands of life and the state, to assume the responsibility for a concerted scientific and theoretical solution to the individual tasks which are advanced by the needs of state construction. In doing this, the Academy makes itself the center for the organization and recruitments of the nation's scientific forces."[12]

One of the first acts of the Soviet state was the regulation of the Sovnarkom of the RSFSR passed as a result of the discussion of the proposal of the Academy of Science for a survey of the nation's natural resources. The Sovnarkom decreed: "In order to proceed directly in the proposal, it must be recognized principally that there is a necessity for financing the respective work of the Academy; the Academy must be shown that that its particularly important and indispensible task is to find a systematic solution to the problems dealing with a proper distribution in the country of industry and the most rational use of the nation's economic forces."

The instructions of V. I. Lenin on the tie between science and the practice of socialist construction were of great importance for the work of the Academy of Science. These instructions were carried into the Statute of the Academy of Science of 1927. In the Statute it was stated that the Academy of Science has the following tasks:

a) to develop and improve the scientific disciplines which are under its authority, thus enriching them with new discoveries and methods of research;

b) to study the natural productive forces of the country and coordinate their use;

c) to adapt scientific theories and the results of scientific experiments and observations to practical application in industry and the cultural-economic construction of the USSR (#2).

In the Statute it was particularly stressed that the Academy of Science of the USSR conducts scientific field work within the limits of the scientific tasks established by it, taking into consideration in this the needs and desires of the Union Republics (# 3).

Factually, however, the Academy of Science was able to develop more or less widely its work in the direction which provided for a planned service for the tasks of socialist construction, after the complete transformation of the Academy in 1929--130.

2. In the Statute of 1930 it was noted that the Academy of Science works in all fields of theoretical knowledge, abets the development of research thought in every way possible, unites all of the basic disciplines, not only "those which are under the authority of the Academy," as was statedin the Statute of 1927, coordinates the working

out of a single scientific method on the basis of a materialist philosophy which would guide in every way the entire system of scientific knowledge to the satisfaction of the needs of socialist reconstruction and the further growth of a socialist social order" (# 2).

The fulfilling of the first Five-Year Plan caused the steady growth of scientific-research work in the Soviet Union which had successfully guided the reconstruction of the national economy on the basis of the achievements of contemporary science and the most recent technology.

The beginning of the second Five-Year Plan brought before the scientific-research institutions of the USSR and the Union Republics as a whole and also the Academy of Science the task of bringing theoretical thought even closer to the work of socialist construction. There was also the task of a complete liquidation of the separation between theory and practice. This was stated in the regulation of the Praesidium of the TsIk of the USSR on 27 July 1933 in consequence of the reports by the All-Union, All-Ukrainian and Belorussian Academies of Science. The Praesidium of the TsIk of the USSR noted a decisive turn in the work of the Academies toward serving the practical tasks of socialist construction and in particular they noted the reorganization carried out by the Academies of their institutions in the aim of making their work serve the tasks of socialist construction, the introduction of large scientific-technical forces into the Academy, the turning of the old workers of the Academy to active participation in socialist construction, the introduction, as a system, of the work in planning by the Academies for scientific-research activity in conjunction with those organs which are in immediate control of industry and agriculture. This enabled the Academy to concentrate the work of the scientific forces of the Soviet Union on those questions which were the most important for socialist construction. This regulation also facilitated a number of other major achievements of the Academies which immediately enriched the work of the national economy (See CZ SSSR, 1933, No 49, p. 287).

These same goals of a fuller tie between the work of the Academy of Science and the practical work of socialist construction and the further bringing of all the Academy's work closer to the service of socialist construction were produced by the regulation of the TsIk of 14 December 1933, for placing the Academy under the Sovnarkom of the USSR (SZ SSSR, 1933, No 73, p. 444), the regulation of the Sovnarkom of 25 April 1934, on the moving of the Academy to Moscow (SZ SSSR, 1934, No 22, p. 175), and also the Statute of the Academy of Science for 1935.

3. The Statute of 1935 formulated the basic task of the Academy of Science in the following manner: "A general coordination for a complete raising of the theoretical and also the applied sciences in the USSR, and the study and development of the achievements in world scientific thought. As the basis for the work of the Academy of Science is understood the planned use of scientific achievements for guiding the construction of a new, socialist and classless society" (Article 2 of the Statute).

In the aim of fulfilling this basic task, the Academy of Science:

a) concentrates its work on the major leading problems of science in all its fields;

b) studies the natural resources and productive forces of the nation, but also the cultural and economic achievements of humanity and guides their simultaneous and rational use;

c) coordinates raising the qualifications of the scientific cadres;

d) serves the higher government organs as the organization for scientific experts.

These regulations have been fully preserved in meaning up to the present day.

The main task of the Academy, as said the Academician S. I. Vavilov, is to find a solution for the most important broad questions which aid in the solving of allied areas and special fields. "The Academy of Science in its work must avoid two extremes: one the one hand the turning of its institutes into allied organizations, and on the other the separation of theory and practice or flights into the unreal world. The first deviation would mean the actual disappearance of the Academy as a specific scientific organ; the other would be tantamount to rendering the Academy useless for the state."13

The Academician A. N. Nesmeyanov also considers that "the basic task of the Academy must consist in the finding and studying of new phenomena of nature and society, and the establishment and general conclusions of the regularities between these phenomena and the use of them in the interest of socialist society and production."14

In accordance to the basic task of the Academy of Science, the Soviet government has given the Academy the right to use the material means set out in the Academy's regulation, to organiza the state scientific institutions within the Academy and lastly to direct the development of science within the country.

3. The Members of the Academy of Science of the USSR

1. The Academy of Science brings together in its members--the active members and the corresponding members--the most outstanding scientists of the country.

The legal status of the active members and the corresponding-members is not in every way the same. The active members of the Academy of Science have greater rights than do the corresponding members.

The active members of the Academy of Science, in comprising the General Meeting of the Academy, decide all of the most important questions concerning the organization and activity of the Academy of Science and its institutions, the recruitment of personnel, and the inter-relations between the Academy and other scientific institutions within the country and abroad (Regarding the competence of the General Meeting, see #4).

The corresponding members of the Academy of Science also have wide rights. The corresponding members participate in the work of the General Meeting of the Academy with the right of a deliberative vote; they also have the decisive vote in the General Meeting of the department (with the exception of the right of participating in the elections of the active members and the corresponding members). They have the right also of being elected to the directing organs of the Department (# 5), and in the position of a director of the scientific institutions of the Department, have the advantage of occupying the vacant positions in the scientific institutions of the Academy without a competition (Ch. 12, # 1).

Hence, with the exception of their lacking the right of a deciding vote in the General Meeting and the right of a deciding vote in the Departments in the matter of the election of Academy members, the remaining rights of the corresponding members are not significantly different from those of the active members.

The general number of Academy members is determined by the government. This rule has existed in the Academy from the moment of its founding.[15]

However the legal definition of the general number of Academy members is not the sole important factor for the development of science. Of importance also is the distribution of the general membership according to the individual scientific specialities.

In this matter of determining the break-down of specialties, the Statutes of the Academy for 1927, 1930 and 1935 departed from the former traditions of the Academy, for in all of the old Statutes the speciality of the ordinary academicians was exactly set.

The right of setting the membership of the Academy according to its scientific specialties has been turned over by the government to the Academy itself.

In addition to the active members and the corresponding members , the Academy of Science also elects to membership in the Academy foreign members of the Academy in the number established at the General Meeting of the Academy of Science.

2. The members of the Academy of Sience are elected in the manner established by its Staute.

The right for the Academy itself to elect its own members was established for the first time in the Statute of 1803. Before then the academicians were appointed to their positions by the Minister of Education with the approval of the Emperor. In Paragraph 23 of the 1803 Statute passed by Alexander I, it stated, "We give to the Academy the right of electing the academician or adjunct to the position open, being assured that the particular honor of the academicians will prevail in carrying on an election worthy of themselves and of the first scientific society in the Empire. Under equal conditions the Russian scientist is preferable to the foreigner."

However under closer inspection it is evident that the Tsarist government did not rely upon "the particular honor of the academicians."

In an effort to preserve the election in the Academy of candidates loyal to it, the government: first, excluded all of the scientific forces outside of the Academy from participating in the advancement of candidates into the Academy; the right of promotion was restricted to the active members of the Academy. In the second place, the government restricted the freedom of the Academy members in the promotion of candidates, and decreed that any proposal made by the Department on calling a candidate to active membership must first be approved by the President; in the third place the government made the results of the elections of the Academy dependent on the will of the Minister of Education and the government, in as much as the Academy's election, according to the regulations of the Minister of Public Eduction, were approved by the Emperor.

But even this election procedure was rudely violated by the ruling circles in those instances when a real "threat" appeared in the election of scientists to the Academy who did not "entertain the confidence" of the government. This occurred in the advancement of I. I. Mechnikov to the Academy in 1869;[17] and also in the election of D. I. Mendeleyev.[18]

After the October Revolution, essential changes were brought about in the election procedure of the academicians and the corresponding members in the direction of further democratizing the promotion of candidates into the Academy and further expansion of the rights of the Academy in the final decision on the election of new members.

All of these changes have been established and strengthened in the present-day election procedures for electing the members of the Academy; they have been determined by the Statute of the Academy.

For a fuller presentation of the election procedure and the changes which have occurred in it under Soviet rule, we will investigate all of its basic stages, namely:

a) the setting of elections;

b) the promotion of candidates into membership in the Academy;

c) the election in the departments of the Academy of the corresponding members, and the promotion of candidates as active or honorary members of the Academy;

d) the election by the General Meeting of the Academy of the active and honorary members of the Academy and the approval of the corresponding members.

The election of the active members and the corresponding members is called by the President of the Academy of Science: 1)in the instance when one or several members of the Academy should leave it for one or another reason; and 2) in the instance when the government increases the general number of active members and corresponding members and thus opens new vacancies.

In 1919--1920 the Academy of Science passed the resolution where by it was declared that those posts in the Academy which were held by academicians of 70 years of age, would be vacated.

Thus, by the regulation of the General Meeting on 18 January 1919, among the other changes in the election system for the activemembers of the Academy, it was established that "upon reaching the age of 70, the chair held by this academician will be considered vacant; in this however the academician will keep his title and all rights and support which come with the title; he will not have the right to be elected to administrative positions in the Academy with the exception of the position of President and the head of a Laboratory."

"This measure," states the regulation further, "has as its aim, on the one hand, to provide for the introduction into the Academy of new members in a uniform manner, and on the other, to provide the opportunity for the eminent scientist to devote the last years of his life exclusively

to scientific work, and thus to finish the work which he had begun in his younger years."[19]

The consideration for setting an age limit was included and accepted by the General Meeting of 7 February 1920 in the Regulation on the Order of Elections for Active Membership in the Russian Academy of Science.[20]

However this has not been accepted in the subsequent Statutes of the Academy of Science, and thus, in keeping his life long academic title, the active or corresponding member is able to preserve his "academic chair."

All of the vacancies (with information as to the department and specialty) are published by the Academy of Science in the press, including Izvestiya. This measure provides for broad participation by the scientific community in the promotion of candidates to membership in the Academy.

As is known in the pre-Revolutionary Academy the right of promotion of candidates to membership in the Academy was given to not more than three ordinary academicians.

After the October Revolution the Academy of Science, in the already-mentioned decision of 18 January 1919, recognized that for the nomination of persons who might be elected to the Academy, the scientific institutions and Russian scientists which were outside of the Academy should be consulted, including the institutions of higher learning, the scientific institutions, the scientific societies, as well as the noted scientific specialists in the corresponding fields.

This important rule, directed at eliminating the caste-like exclusiveness of the Academy, was incorporated into the Statute of the Academy, and in accordance to which, the right of promotion of candidates to active or corresponding membership is given to: a) the scientific institutions, b) social organizations, and c) individual scientific workers and their groups.

For this appointment of a candidate, a time limit of two months from the day of publication of a vacancy has been established.

The persons and institutions putting up candidates must communicate to the Academy the names of their candidates in writing along with a proper justification.

The names of the candidates sent to the Academy of Science are published in the press.

The list of candidates and testimonials about them from the institutions, organizations and individuals are given directly in the meetings of the respective departments of the Academy of Science, where the elections take

place for the corresponding members, and for the nomination of candidates for active membership in the Academy.

Candidates are elected who have received not less than 2/3 of the total vote.

The elections of the active members of the Academy (from the number of candidates advanced by the departments) and the approval by the elected departments of the corresponding members is carried out at the General Meeting of the Academy of Science.

Only the active members of the Academy have the right to participate in the elections.

A quorom of not less than 2/3 of all the active members of the Academy is necessary for the holding of elections of the active members and for the approval of the corresponding members.

The Statute of 1935 established that the elections should be conducted at one session of the Meeting. In contrast to this, the earlier Statutes of 1927 (Article 18) and 1930 (Article 15) envisaged that at one session there would be the communications on the selection of candidates by the departments for active membership in the Academy and a reading of all the testimonials and conlusions about each candidate and his scientific work; the elections would be at the following session.

Those persons who received a simple majority of votes would be considered elected to active membership.

The election of corresponding members carried out by the departments was approved by a simple majority of votes.

The election of active members and also the corresponding members of the Academy of Science are held by the scientists themselves, that is by the members of the Academy, and do not require subsequent approval. According to the Statute of 1836 the academicians elected by the General Meeting (Conference) were presented by the Minister of Public Education for approval by the Emperor (# 35 of the Statute).

In drafting the first Statute of the Academy, the Glavnauka of the Narkom for Public Education introduced the proposal that the elections carried on by the General Meeting should be approved by the Narkom of Public Education.[21]

The Academy of Science was against such a proposal and insisted that the elections should be approved by the government of the USSR.[22]

The Sovnarkom of the USSR, in investigating the draft for the Statute of the Academy of Science, declined both proposals and decreed that the Academy elections in general required no subsequent approval.

This rule has remained unchanged until today.

This election procedure established in the Academy of Science of the USSR has been accepted basically by the Academies of Science of the Union Republics and by the branch academies of the Ministeries and Departments of the USSR and the Union Republics (See Chs. 3 & 4).

The essential principles of organization and elections have been accpeted also in the Statutes of the Academies of Science of the People's Democracies, although the order of elections in some of the Academies has its own particular features.

3. The Statute of the Academy of Science Determines also the Rights and Duties of the Active Members and the Corresponding Members of the Academy.

As we have already noted above, the definition of the rights and duties of the members of the Academy of Science has always received great attention in the Statutes, beginning with the Regulation of 1747.

Detailed regulation of the members rights and duties has as its chief purpose the establishment of the academicians' duties which had been clearly defined in accordance to the will of the government in the field of the scientists' scientific work.

As for the rights of the members and especially their participation in deciding questions of organization, elections of new members and the ties of the Academy with the scientific community of the nation, the pre-Revolutionary Statutes made any initiative on the part of the academicians dependent upon the prior approval of the President.

The Soviet government started along another path in the realm of the rights and duties of the Academy's members; having preserved all of the former rights of the members, the Soviet state year in and year out expanded the rights of the Academy and of the academicians, it gave them complete freedom in their scientific research in keeping with the interests of the society and state, and did not bind the Academicians and the Academy in their scientific or scientific-organizational activity by the means of cruel earlier established forms of development.

The contents of the rights and duties of the Academy members at present are defined by the Statute and by the decisions of the directing organs of the Academy. And what do these rights and duties consist of?

a) The active members and the corresponding members of the Academy of Science enrich science with new achievements and discoveries both in individual research and in the organization of collective approaches to solving the

leading scientific problems and the scientific leadership in such approaches.

This is the members' main duty.

Scientific-research activity in line with the tasks of the Academy is not only a duty but a right for each member of the Academy of Science.

This right is clearly demonstrated in the activity of the Academy's members who are not on the staffs of the Academy's institutions.

Each member of the Academy, independent of the place of his basic work, has the right and duty to see to it that his scientific activity is directed in accordance with the general tasks of the Academy and its institutions.

b) The active members and the corresponding members of the Academy participate in the work of introducing the achievements of science into the national economy.

c) The active and corresponding members participate in the work of the Academy on the preparation of the scientific cadres.

d) The active and corresponding members participate in the work of the General Meeting of the Academy of Science and of the departments of the Academy.

e) The active and corresponding members carry out the orders of the Academy of Science.

The scope of such orders is very large; it includes participation in the various types of scientific commissions, carrying out the duties as a responsible person in the Academy's institutions, and participation in domestic and international scientific congresses and meetings, etc.

The control over the fulfillment of the members duties is carried out by the Academy itself, that is, by the General Meeting of the Academy, the Praesidium of the Academy and the departments.

The juridical basis which serves as the effective means for such control is the duty envisaged in the Statute whereby every active and corresponding member must present to the Academy a yearly report on his activity. As a matter of fact, however, in the Statute there is no instruction about the concrete, juridical effective means which could be used by the members of the Academy of Science or its directing organs for carrying out the demand for submitting reports.

Neither the Statute of the Academy nor other normative acts give, for example, an answer to the question of the juridical consequences of the failure by a member to present a report on his activity, nor is there an answer to the question of how the Academy should judge a negative evaluation of a report which has been reviewed by the respective committees.

These questions are referred by the Statute as a whole to the Academy itself for decision, not binding it by a predetermined choice of the possible means of action when they are required for individual members of the Academy.

The General Meeting and the Praesidium of the Academy as well as the departments, in exercising control over the fulfillment of duties by the members, themselves determine when the necessity arises the necessary measures.

Only in one case did the 1935 Statute categorically prescribe the measures to be taken by the Academy; this is when the active or corresponding members is to be deprived of his title if his activity is directed to the harm of the USSR (# 24).

The possibility of depriving a member of the Academy of his academic title is not a new measure for the Soviet Academy of Science.

The Statutes of 1803 and 1836 also provided for the expulsion of the academicians from the Academy (See # 71 of the Regulation of 1803 and # 69 of the 1836 Statute). Expulsion is provided for in the statutes of the other Soviet Academies of Science (See Chs. 4 & 5), and of the foreign academies, bourgeois and socialist alike.

In the Statutes of 1803 and 1835, the basis for expulsion was given as "conduct unworthy of the Academy" (# 69).[24]

In accordance with the Law of the Bulgarian Academy of Science of 11 October 1949, the active or corresponding members of the Academy who over a period of three years do not carry on the necessary scientific activity as prescribed by the Law or the regulations of the Academy, with the exception of illness or other valid reasons, are excluded from the Academy upon the proposal of the Administration /Pravleniye/. The proposal is passed by a general majority of the General Meeting of the Academy, with both the active and corresponding members voting.

Article 21 of the Law of the Polish Academy of Science provides that "a member of the Academy may be expelled from the Academy for conduct not worthy of a scientist or directed in any way against the interests of the national state."

In the Rumanian People's Republic, persons may not become members of the Academy whose hostile activity is directed against the interests of the people or in any way constitutes a threat to the Rumanian People's Republic (Article 19 of the Statute).

Those academicians who do not conduct work in the interests of the state and people or who are involved in activity not worthy of the Academy may be expelled from the Hungarian Academy of Science.

In recent years some proposals have been introduced for establishing a wider bases according to which the General Meeting of the Academy of Science of the USSR might expel members from the Academy.

In particular proposals have been introduced for depriving an academician or corresponding member of their title in the case of "unconscientious fulfillment of their duties."

As a means of raising the respondisility of the corresponding members for the work which they have done, a proposal has been introduced which would limit a corresponding member's term to a period of five years. At the expiration of the term, the Meeting of the Department for the review of materials on the work of the corresponding member must pass a decision whether to extend the term for another five years or, in the instance of unsatisfactory work for reasons depending on the corresponding member, to exclude him from the Academy.

The Academician V. P. Volgin has been instrumental in advancing this idea for electing the corresponding members for a limited term, with the option them of re-election.

However, none of these proposals hase as yet been made into laws.

4. The General Meeting of the Academy of Science of the USSR and the Praesidium of the Academy of Science.

The Academy of Science of the USSR, as an association of scientific institutions, can fulfill its tasks only under those conditions when all of its scientific institutions act in agreement with the Academy, and when they unite around one scientific center which guides and directs the activity of the entire group.

In accordance to the idea prescribed in the Statute of the Academy, such an directing center is the General Meeting of the Academy of Science and the Praesidium of the Academy.

In determining the competence and forms of work for these organs which are responsible for the direction of the Academy as a whole, the Statute begins with the general principle that the direction of the Academy of Science and its individual institutions is accomplished by the scientists themselves in the name of the state.

In the Statute of the Academy of Science, those democratic forms of participation by the members in deciding the tasks before the Academy have been preserved and strengthened; these were forms which were found in pre-Revolutionary times. This refers principally to their participation in the discussion and decision of scientific

and scientific-organizational questions in the General Meeting (Conference) of the Academy.

The General Meeting of the Academy of Sciences as an organ of the Academy dates from the time of the Academy's founding.

According to the Regulation of 1747, the Academy meetings were to be held three times a week. In these meetings the Academicians in turn were to read their "inventions." (# 15)

The Regulation (# 29) prescribed the convocation each year of three public meetings (assemblies) of the Academy, at which the academicians, according to the selection by the Academy itself, were to read their scientific works (dissertations).

No book written by an academician could be published until it was read in its entirity at the Meeting before all of the academicians or by those instructed by the President (# 36).

"In the determination of a matter related to science," stated the Regulation, "a plurality of votes must be registered." Any definition or judgment must be taken in the presence of the President. In the absence of the President, his position in scientific matters was to be filled by the senior member at the meeting (# 31).

Lomonosov, conducting a ceaseless battle against oppression of the Academy's Chancellery, considered the decisive means of bettering the Academy's direction was to transfer all of the basic affairs of the Academy to the general meeting of the Academy.

The 1803 Statute in an essential manner expanded the competence of the General Meeting, for now it was given the right to elect the members of the Academy.

These rights were preserved in the 1836 Statute.

The meetings of the Academy were of three sorts: Ceremonial, Extraordinary, and usual.

The ceremonial meetings were held yearly. In the Statute of 1836, the tasks of this meeting were described in the following fashion: "the President, or the Permanent Secretary opens the Meeting with a fine address. Then he gives a report on the works of the Academy over the past year, reads the names of scientists who have received degrees, and presents a condensation of the dissertations which have been presented to and approved by the Academy. He also reads the new tasks proposed by the Academy for the following year and reads the names of the scientists newly accepted into the membership of the Academy, adding to this biographical information on those members who had died during the year" (# 92).

Extraordinary meetings were called only in unavoidable instances where immediate decision was needed.

The usual meetings were called once a week and were given solely to a reading of the discourses of the academicians and adjuncts, but as well for domestic and foreign correspondence, for reviewing works, machines and inventions which had been presented to the Academy for consideration, and for other scientific meetings (# 95).

Affording the Academicians the opportunity of discussing scientific questions at these frequent meetings, the 1836 Statute decreed numerous barriers to the interference by the academicians into the direction of the Academy and into the allocation of the budget (# 97).

The Statutes of the Academy of Science which have been drawn up in Soviet times, could not of course keep those regulations which left the Academy in the hands of the bureaucrats and functionaries.

With the first Soviet Statute for the Academy, the members of the Academy themselves were given the power to decide all of the questions in the life and activity of the Academy. For all of the questions which demanded a decision by the government, a decisive rolewas given to the academicians and is given them today in working out relevant proposals.

The effective Statute today, as we have remarked above, proceeded in the signficiant further dxpansion of the important questions which are referred to the General Meetings, and thus the Statute marks a further step in the development of intra-Academy democracy.

The General Meeting of the Academy of Science is composed of all of the active members of the Academy and is the highest organ of the Academy.

The meetings of the General Meeting are called when the need arises and proceed in the order of sessions.

The right of the deciding vote in the General Meeting of the Academy is given to the active members of the Academy.

The corresponding members and the directors of the individual institutions of the Academy, not being active members, have the use in the General Meeting of the deliberative vote on all questions.

All questions are decided at the General Meetings of the Academy of Science by a simple majority of votes, except for the selection of active members and the approval of the corresponding members and a few other questions where a 2/3 majority is required.

In accordance to the Statute, the General Meeting of the Academy of Science of the USSR:

a) establishes the general lines of scientific work of the Academy and its component parts;

b) decides the basic questions of an organizational nature;

c) hears the reports of the affiliates and the institutions of the Academy, and also of its individual members;

d) discusses questions of a scientific, scientific-technical and scientific-social nature;

e) selects the active members of the Academy and approves the election of corresponding members;

f) selects the Praesidium of the Academy of Science;

g) hears yearly and approves the summary report of the Praesidium of the Academy of Science;

h) selects the directors of the institutes of the Academy, or approves the directors which have been selected by the departments.

The General Meetings of the Academy of Science is not the usual organ of direction for the Academy, but rather it is the organ of collegial discussion and decision for scientific questions.

Under the General Meeting of the Academy there are a few scientific institutions of the Academy, such as the Council for the Study of Productive Forces and the Council for the Coordination of Scientific Work.

The Council for the Study of Productive Forces organizes and directs the study of the natural resources and the productive forces of the country, it coordinates the simultaneous and rational use of these studies in the national economy.

The work on the study of the nation's productive forces has been one of the tasks of the Academy from its inception. However it received its present scope only in the years of Soviet rule on the initiative of V. I. Lenin.

In truth, however, the most prominent Russian scientists before October also sought to place science in the service of the country. Thus, on the initiative of V. I. Vernadskiy during the First World War, the Commission for the Study of Natural Productive Forces (KEPS) was organized. It did a great deal for the use of the natural productive forces in the needs of national defense. This Commission was preserved and continued its work after the victory of the socialist revolution.

The Academicians V. I. Vernadskiy, N. S. Kurnakov, A. Ye. Fersman, F. Yu. Levinson-Lessing and others participated actively in its work.

In 1930, KEPS was transformed into the Council of Productive Forces (SOPS) with a singificantly greater scope and with new rights.[26]

The legal status of the Council for the Study of Productive Forces is defined at present in the Statute of the Academy of Sciences and in the Regulations on the SOPS which was passed by the Praesidium of the Academy.

The Chairman and the members of the SOPS are selected by the General Meeting of the Academy for a term of three years.

The Council for the Study of Productive Forces:

a) draws up, discusses and presents for the approval of the Praesidium of the Academy of Science a summary plan for scientific-research work in the institutions of the Academy of Science in the individual economic regions /rayon/, and also a plan for field work by the Academy in the study of the natural resources and productive forces of the country;

b) in accordance with the assignment of the government and the Praesidium of the Academy of Science, organizes the "rayon"-complex and the complex-subject study of the natural resources and the productive forces of the country;

c) calls, in accordance with Gosplan and together with the departments, rayon conferences for the discussion of the scientific bases for the prospective plan of development for the most important economic rayons. The Council also calls special meetings on the questions involved in mobilizing the natural resources and their rational utilization for the needs of the national economy.

In its work on the study of the natural resources and productive forces within the country, the Council utilizes the forces of the institutes and affiliates of the Academy of Sciences as well as the scientific-research institutions of other systems.

The SOPS is a scientific organ of the Academy of Science and is directly under the Praesidium of the Academy of Science.

For carrying out the assigned tasks, the Praesidium of the Academy allocates to SOPS the necessary funds under the state budget. In addition to this, the Council receives funds which accrue from the permission of the Praesidium of the Academy of Science in accordance to the agreements with other institutions for carrying out scientific research, for holding conferences and meetings, and for preparing scientific works for print.

The Council has the right to open and close current budgetary accounts in the banks and also to disperse funds in an established manner.

The basic tasks of the Council in matters of the coordination of scientific activity are:

a) the coordination in every possible way of the general development in scientific activity carried on in the Academies of Science of the Union Republics and by the affiliates of the Academy of Sciences of the USSR;

b) the organization of the immediate coordination of scientific research in the Academies of Science of the Union Republics, the branch academies, the Academy of Science of the USSR and its affiliates on the problems of science which have all-important theoretical, cultural and economic significance.

The General Meeting of the Academy of Science reviews the questions which are related to the proposed changes of the Academy Statute.

From what has been said above, it is evident that there are a number of crucial questions for the Academy (and for the entire system of scientific institutions in the nation) which have been given by the Soviet government directly to the authority of the collective of the most prominent scientists--the active members of the Academy of Science.

In the period between the sessions of the General Meeting, the Praesidium of the Academy of Science is the highest directing organ of the Academy.

The Praesidium of the Academy is composed of the President, the Vice-President, the Main Scientific Secretary, the Academician-Secretaries of the Departments and the members of the Praesidium.

The President of the Academy of Science and the Vice-President are selected by the General Meetings for a term of five years from among the active members of the Academy.[27]

The Academician-Secretaries of the Departments of the Academy of Science are selected by the respective Departments from the active members of the Academy for a term of three years; they are then approved by the General Meeting.

The Academician-members of the Praesidium direct the individual areas of work on the order of the Praesidium of the Academy, and are selected for a three-year term.

The Praesidium of the Academy of Science is a collegial organ consisting of the leading scientists of the nation who have been elected by the members of the Academy and who carry out the collective leadership of the Academy. The Praesidium has full power to carry out the decisions of the General Meeting.

The President of the Academy has no special rights which might place him over the Praesidium. In particular he does not have the right to prevent the realization of

decisions taken by the Praesidium, nor can he change the regulations of the Praesidium.

The position of the President was quite different in the old, pre-Revolutionary Academy. The President was appointed by the Emperor and was given the power to decide by himself the most important questions relating to the activity of the Academy.

In the Regulation of 1747 the President was given full power "to direct and rule" all of the academicians.

Without the approval of the President it was not possible to publish a single new "invention" of an academician (# 17).

The President was accorded the wide rights at his discretion to alter the prescripts of the Regulation.

The 1803 Statute preserved the wide solitary power of the President, while making his functions somewhat more specific.

According to the 1803 Statute, the President "is the protector of the rights of the Academy and the guardian for the fulfillment of its duties" (# 28).

The President of the Academy of Science:

a) presided over the Academy meetings and over the Control Committee /Komitet pravleniya/ (# 29).

b) presents to the Emperor through the Minister of Public Education his reports on the conditions in the Academy (# 31);

c) reports to the Emperor also through the Minister of Public Education on the members of the Academy who in their important service, knowledge, astuteness and activity have earned distinctions and awards; in a similar manner he presents the basic remarks on those who do not tend to their offices (# 32).

In the instance of a breach of the established order and the internal structure, the President was given the power to restore the same and to punish the guilty, and to take measures in accordance with the laws, the importance of the case and the general circumstances (# 34).

He alone had the right to introduce proposal on the control of the Academy; in his absence he could give this power to the Secretary or to another academician (36).

The President both in the Conference and in the Control Committee had two votes (# 37).

The 1836 Statute preserved all of the powers of the President.

After the Bebruary Revolution of 1917, the President of the General Meeting of the Academy was made into an elective office, and was subject to approval by the government.

This set-up was preserved in the 1927 and 1930 Statutes.

The current Statute does not provide for a subsequent approval of the elections of the President which are carried out by the General Meeting of the Academy.

According to the Statute of the Academy of Science, all of the important questions relating to the life of the Academy are decided not by the President singly, but by the Praesidium acting as a whole. . . . The questions relating to the organization and to the activity of the Academy as a whole and its individual institutions which are under the Praesidium of the Academy are at present are very numerous.

The Præsidium of the Academy of Science; a) calls the sessions of the General Meeting of the Academy; b) provides for the enactment of a set-up for scientific-research and scientific-subsidiary institutions and enterprises which are necessary for the fulfillment of the Academy's tasks, and it approves the regulations regarding these institutions and enterprises; c) it calls scientific congresses, conferences and meetings, organizes research expeditions; d) approves the plans for scientific-research work carried on in the Departments and scientific institutions under the Præsidium, and controls the fulfilling of their plans; e) presents for approval by the General Meeting the yearly reports on the activity of the Academy; f) takes steps to provide for the introduction of scientific discoveries and the results of scientific research into the national economy; f) carries on the scientific contacts between the Academies of Science and the other scientific institutions in the USSR and the Union Republics; g) carries on the scientific contacts between the Academies of Science and other scientific institutions of foreign countries; and h) awards gold medals and honorary prizes for outstanding scientific works, scientific discoveries and inventions.

The Praedisium of the Academy of Science is the main manager of credits for the Academy of Science. It approves the yearly budgetary estimates of the Academy, allots, in accordance with the plan for scientific research, the funds granted by the government to the institutions of the Academy, and controls the equality of monetary disbursements to the institutions of the Academy.

The Praesidium of the Academy is responsible for the maintenance of the Statute by all of the institutions and by the personnel of the Academy.

For deciding these tasks, there is within the Praesidium a group of commissions, councils, committees of scientists, and also some institutes and the necessary staff.

The Praesidium states its decisions dealing with the questions within its competence in the form of regulations and orders /postanovleniye i rasporyazheniye/.

The difference between the regulations and orders consists, in the first place, in the character of the questions which are to be considered (the regulations deal with questions of the organization of scientific work, the activities of the Academy institutions, etc; the orders deal with questions of personnel in the Academy institutions, individual economic questions, etc), and in the second place in the means for passing these acts (the regulations are passed in the session of the Praesidium, while the orders are passed on the instruction of the Praesidium by the President, the Vice-President and the Main Scientific Secretary of the Praesidium in accordance with the division established by the Praesidium of their duties on the direction of individual areas of the Academy's work.

The regulations and orders of the Praesidium are acts of state control for the scientific institutions under the Academy. In the great majority of instances these acts, from the viewpoint of their legal nature, are acts implementing laws, for they passed on the basis or in the fulfillment of already existing legal regulations of the state.

The Praesidium of the Academy of Science also passes such acts which in Soviet legal terminology are referred to as acts of a normative nature or, in other words, to the sources of law.

The regulations dealing with the scientific institutions of the Academy undoubtedly have a normative character; for example, "The Regulation on the Departments of the Academy of Science of the USSR," "The Regulations on the Institute of the Academy of Science of the USSR," and the regulations on the various commissions of scientists.

Also referred to regulations of a normative nature are: the regulations and instructions on the holding of competitions for filling the positions of scientific workers in the Academy, and the process for holding competitions for the gold medals and honorary prizes, etc.

What is the basis of this right of the Praesidium to initiate acts which have a normative force?

In some cases the juridical base for the normative work of the Praesidium is given in the Statute of the Academy of Science; in others in individual regulations of the Council of Ministers of the USSR (as happened in the case of the issuing of the Regulation on the holding of periodic competitions for the replacement of the older scientific workers and several other positions).

The work of the General Meeting and the Praesidium of the Academy sometimes is subject to sharp criticism by the members of the Academy and its leadership in that: 1) the General Meeting of the Academy did not review all of the questions within its authority; 2) the competence of the Praesidium of the Academy has increased greatly and the necessity of deciding many often small administrative and organizational as well as economic questions hinders the Praesidium in its work in dealing with the scientific leadership of the Academy; 3) the concentration in the Praesidium of the "power" to decide some of the scientific and organizational questions restricts initiative and lowers the responsibility of the Departments of the Academy and the scientific-research institutes; 4) the wide competence of the Praesidium in all of the fields of science unavoidably causes the swelling of its apparatus and the transfer the decisions on many important scientific and organizational questions from the collective group of scientists, i.e., the Praesidium, to the chancellery of scientific affairs.

Occasionally the reason for such a situation has been seen in the incompletion of the 1935 Statute of the Academy, or in the failure to observe its demands, or in other factors.

Without a doubt there is some validity to the charge that there is a lack of clarity in the formulation of the Statute as concerns a delimitation of the competence of the Praesidium of the Academy and the General Meeting as well as between the Praesidium and the Departments.

Evidently there was some truth in the charge that the was an occasional lack of strict observance in the demands of the Statute in the usual work of the Praesidium of the Academy and its ataff.28

However the principle and basic reason at present for the difficulties in the organization of the work of the General Meeting and the Praesidium of the Academy does not consist in individual imperfections in the formulation of the Statute which was passed 20 years ago.

The reason is found in the fact that in subsequent years and particularly in the post-war years the many changes and developments could not be provided for under the provisions of the old 1935 Statute. Such important changes would be the growth of the Academy of Science as a whole, the increasing importance of the Academy on all of the nation's scientific life, the new tasks before the Academy in uniting the efforts of the growing network of hundreds of scientific institutions, the increase in the number of scientific-research organizations within the

within the Academy itself and the increase in the number of employees in the Academy, the ever increasing scope of state expenditure on construction and equiping of the Academy's scientific institutions. All of these would require new forms of directing the Academy's work and they could not be foreseen in the 1935 Statute.

In recent years the Praesidium of the Academy of Science has taken a number of important measure in the effort to "adapt" the traditional forms of directing scientific work in the Academy to the new conditions.

In such measures one should include the expansion of the rights of the Departments of the Academy, the change in the character of the work in the affiliates of the Academy, the reorganization of the Praesidium staff and its limitation and other measures.

However after these changes the General Meeting does not review all of the questions under its authority.

It is not the General Meeting but the Departments and the Praesidium of the Academy which set the basic lines of scientific work in the component parts of the Academy. Many of the basic questions dealing with organizational matters are decided not by the General Meeting, but by the Praesidium (for example, the approval of the regulations for the departments, institutes and affiliates of the Academy of Science). The General Meeting discusses a comparatively small number of problems of a scientific and organizational nature.

It is doubtful that it would be possible to find a means for increasing the scientific leadership in the Academy so that the decision of all of the above-mentioned questions will be concentrated in its hands; that is, how to return the General Meeting to its position that it occupied over the last two hundred years. Consequently what can be done as an effective means for increasing the role of the General Meeting as the highest organ of the Academy in the leadership of scientific work in the Academy?

The General Meeting by the force of its legal status in the Academy and in its personnel is empowered to review and discuss the prospects for the development of science generally on a national scale. There is no other scientific collective in the nation which has more suitable opportunities for determining the path of development in science generally, for uniting the efforts of the scientists in various specialties and for deciding the questions which require common action by the representatives of various fields of knowledge; and for discussing the over-all prospects for scientific and technical problems.

In addition to this the General Assembly was not able to discuss the "private" problems in the development of science; the Departments and institutes can do this.

The General Meeting is the final authority in the decision of questions on the use of the Academy's scientific forces, both the members or the Academy and the scientific workers in the institutions who are not members of the Academy. It is the organ which in the final instance decides questions on the selection of new members to the Academy and which determines the procedures for holding the elections.

The General Meeting of the Academy cannot be called very often; its frequent meetings would distract the essential scientific forces from fulfilling their concrete scientific tasks. In line with this it not possible to raise the objection on the order of business which has been established in the General Meeting. However it does not follow that the General Meeting is not in a position to decide carefully and in a business-like manner those questions which are under its authority. What does follow is that there must be a skillful preparation of the questions submitted to discussion by the General Meeting.

The selection of questions for discussion, the preparation of the essential materials by specialists, and the rational use of time at the session itself, all of these "details" will have a decided influence on the work of the General Meeting. It is not accidental that the members of the Academy criticize the Praesidium for shortcomings in the preparation of the sessions of the General Meeting.

A "Regulation of the General Meeting of the Academy of Science" would be very useful for bettering the organization of the work of the sessions. In the Regulation there could be provisions for all of the basic questions which deal with the order of conducting the meeting and the participation of the members of the Academy in its sessions.

Also some questions in the organization of the work of the Praesidium of the Academy require a clearer definition.

As we have already noted, in accordance with the Statute of the Academy the activity of the Praesidium in the area of directing scientific work in the various institutions of the Academy is limited to approving their plans and listening to their reports. In point of fact, however, the Praesidium has been compelled to discuss and pass resolutions on all of the important scientific problems which are under investigation in the Academy insti-

tutions. The Praesidium has also been forced to provide the scientific-organizational and material-technical means for fulfilling the plans for scientific research.

Recently there has been a proposal for changing the competence of the Praesidium in the context of concentrating its efforts exclusively on sciantific and organizational questions, while the financial, economic and other problems should be removed from the authority of the Praesidium and given to another organ subordinate to the Praesidium.

Such proposals, however, have not found much success. The financial and the so-called "economic" matters, in many if not all cases, can be properly decided only in conjunction with the scientific and organizational questions. Thus a transferral of these matters to another organ could only complicate and in any instance prolong the time involved in solving many of the questions which are important for the organization of scientific work.

The means of "liberating" the Praesidium is not to be found in creating additional organs for deciding the financial and other material resources of the Academy, but in a decisive expansion of the rights of the Departments, and in particular the rights of the scientific institutions in deciding these problems.

5. The Departments of the Academy of Science of the USSR

The Academy of Science consists of several Departments. Each department is in itself a sciantific and organizational center which brings into the Academy of Science the scientists of one or several fields of science.

The legal status of the departments of the Academy of Science is defined in the following manner:

a) by a degree of independence within the department for deciding scientific, organizational and other questions, and by the juridical nature of the inter-relationships between the directing organs of the department and the leading organs of the Academy of Science;

b) by the juridical nature of the relations in the department with its own scientific and other institutions;

c) by the scope of the competence and duties of the directing organs of the department in the inter-relationships with those institutions and organizations which are not within the Academy of Science.

It must be remembered, however, that the composition and legal status of the departments of the Academy have changed from time to time. With the years of Soviet rule, the departments and their institutions have grown

along with the Academy; the number and composition of the departments have changed, their importance has grown within the Academy, and their tasks have increased along with their rights.

Let us review briefly the basic changes in the composition and legal status of the departments during the years of Soviet power.

During the drafting of the first Soviet Statute of the Academy of Science, from 1925 to 1927, both within the Academy and without, there developed a stormy debate on the question of the departments of the Academy, and in particular on the question of the independent existence of the Department of the Russian Language and Philogeny.

The new Statute of the Academy, passed by the Sovnarkom on 18 June 1927, provided for two instead of three departments:

1) the Department of Mathematical and Natural Sciences;

2) the Department of Humanitarian Sciences.

In 1935, in accordance with the new Statute, in addition to the two former departments, one more was created, the Department of Technical Sciences.

On 29 September 1938, the General Meeting of the Academy in an effort of bringing the institutes closer to the Praesidium of the Academy and creating purposeful departments which would organize the scientific activity of the institutes, recognized the necessity of creating eight departments instead of the three then-existing ones; they were to be: physico-mathematical sciences, chemical sciences, geological and geographical sciences, biological sciences, technical sciences, history and philosophy, economy and law, literature and language.

The Sovnarkom on 4 October 1938 passed the regulation of the General Meeting for creating the eight Departments of the Academy of Science.

In 1952, the Department of History and Philosophy was transformed into the Departments of Historical Sciences, and the Department of Economics and Law into the Department of Economic, Philosophical and Legal Sciences.

A special status was given to the Siberian Department which was created within the Academy in 1957.

One must add to this that the contemporary Departments of the Academy of Science have changed radically in the number of scientific institutions which form the departments, and even more in their "quality." They have grown in the number of scientists employed, in their technical know-how, and have been empowered now to decide those tasks which had even recently been denied the departments.

The legal status of the Departments is defined by the Statute of the Academy and in particular by the "Regulation on the Departments of the Academy of Science," which was passed on the basis of the Statute by the Praesidium of the Academy of Science.

In these documents are found the basic changes in the legal status of the departments both in terms of their inter-relationships with the directing organs of the Academy on a whole and with the other non-Academy institutions.

After the transformation of the Academy of Science into an all-Union academy, some regulations were passed for the departments.

Until very recently, there has been in effect the Regulation passed by the Praesidium of the Academy on 25 August 1942.[29]

The new, currently effective "Regulation on the Departments of the Academy of Science of the USSR," was passed by the Praesidium of the Academy with the approval of the government on 27 May 1955.[30] This "Regulation" radically altered the legal status of the departments.

The basic orientation of these changes in the legal status of the departments has been in an expansion of their rights, and in strengthening control of the departments over the work of their scientific institutions.

On 7 January 1955, in investigating the question of the means for bettering the structure of the Academy of Science, the Praesidium of the Academy found that the most important shortcoming in the structure of the Academy lay in the weak role of the departments in directing the activities of the scientific institutions. The departments of the Academy, which should have been the leading scientific and organizational centers in the respective fields of science, were not in effective control of their scientific institutions and had very little influence on their work. The existing regulation under which the scientific-research institutes were not under the authority of the departments, but rather, as was stated in the Statute, under the immediate authority of the Praesidium, hindered the improvement of the means for directing the development of science, and perpetuated a parallelism in the work of the Praesidium staff and the departments.[31]

As a means of raising the role of the departments of the Academy in the direction of the scientific institutions, the Praesidium of the Academy recognized the following as necessary:

a) the expansion of the rights of the departments of the Academy in the direction of the development in their respective fields of science, a change in the existing Regulation under which the scientific-research institutes were

were responsible directly to the Praesidium, and decree that the institutes and other scientific institutions under the department should be directly under the department in all of their work;

b) an expansion of the rights of the departments of the Academy in the field of preparing the scientific cadres.

The Bureau of the Departments of the Academy of Science has been made responsible for the approval of gradual students /aspirant/, the guidance of the graduates in their scientific work, the awarding of scholarships, and the investigation and review as well as the acceptance of certification /i.e., the receiving of a degree, attestatsiya/.

In the Regulation of 18 March 1955, "On the Bettering of Direction of the Work in the Affiliates of the Academy of Science,"[32] the Praesidium of the Academy significantly expanded the functions of the departments in the direction of the corresponding (in the field of knowledge) institutions of the affiliates. The Regulation also extended the rights of the affiliates in this area and raised their responsibility for the activity of these institutions.

The expansion of the departments' rights, which was mentioned in these regulations of the Praesidium, was put into effect in the new "Regulation of the Departments of the Academy of Science of the USSR;" included in this was a definition of the departments' tasks.

In accordance with the Regulation of 1955, a Department of the Academy of Science has the following tasks:

a) the exploration and organizational basis for the development of new paths in science; the conduct of research in the institutions of the department on the most important questions of science, in accordance with the plan worked out by the department and passed by the Praesidium of the Academy; the recruitment for carrying out research, of scientists who are united in the departments, and also, when necessary, the recraitment of scientists from scientific institutions which are not within the department;

b) the organization and holding of scientific sessions, meetings and discussions;

c) the coordination of research activity in the Department's institutions, and also, upon the instruction of the Praesidium of the Academy, the coordination of scientific research on the most important questions of science and technology with other institutions which are not within the Department;

d) guiding the introduction of scientific research which has carried out in the institutions of the Department into the national economy and the utilization of the achievements of science in cultural work;

e) the training in the scientific institutions of the department of the scientific cadres;

f) the direction of the scientific research in the affiliates of the Academy of Science in the various specialties of the department;

g) guidance in the strengthening and development of scientific contacts between Soviet and foreign scientists (# 3).

The direction over the department is carried out by the General Meeting of the department, the Bureau of the department, and the Academician-Secretary of the department (# 4).

The various decisions of the departments of the Academy in those questions which are under their jurisdiction, do not require passage by the superior organs of the Academy and are put into effect in a manner and order established by the department.

The General Meeting of the department consists of the academicians and the corresponding members of a given department.

As has been stated before, the departments of the Academy of Science are composed of institutes and other scientific institutions which, in accordance with the new "Regulations," are, in all of their scientific and organizational work, immediately under the department (# 2 of the "Regulation").

The Siberian Department of the Academy of Science in its legal status in most instances does not differ from the other departments. However it has its own particular features which stem from its tasks and which were put into force in the Statute of the Siberian Department which was passed by the General Meeting of the Academy of Science on 2 November 1957.

The basic task of the Siberian Department, as is stated in its Statute, is the development, in every way possible, of theoretical and experimental research in the fields of mathematical, physica-technical, and other natural and humanitarian sciences, in the aim of solving the most important scientific problems and applying them for the most successful development of the productive forces in Siberia and the Far East.

The particular features in the legal status of the Siberian Department which set it apart from the other departments, stem in the main from the fact that this department is a scientific complex which unites those fields of science which are found in the other departments of the Academy divided along the lines of individual fields of knowledge.

The Siberian Department is the scientific and organizational center that brings together the academicians and corresponding members of the Academy of Science who are working in the scientific institutions of Siberia and the Far East.

In addition, academicians and corresponding members of the Academy of Science, who are working in other regions of the Soviet Union, may join the Siberian Department if their activities are connected with the development of the productive forces, the economy and culture of Siberia and the Far East.

The Siberian Department, as do the other departments of the Academy of Science, has within it institutues, affiliates and other scientific institutions of the Academy which, in all of their scientific and organization work are directly under the deparment.

The second particular feature of the Siberian Department concerns its line of authority within the Academy. In distinction to all of the other departments, the Siberian Department of the Academy of Science is under the responsibility of not only the Praesidium of the Academy, but also under the Council of Ministers of the RSFSR. It is financed not from the all-Union budget, but from the budget of the RSFSR. From this also stem its particular features in the planning of its work.

The Siberian Department and its institutions carry on work according to the plan worked out by the Department and passed by the Praesidium of the Academy of Science in agreement with the Council of Ministers of the RSFSR.

The third particular feature consists of several differences in the structure of the directing organs of the Siberia Department. As for the highest organ of the Department, that is, the General Meeting, here there is no essential difference. These differences concern the organ which carries on the direction of the department during the period between the general meetings.

This organ in the Siberian Department is not the Bureau of the Department with the academician-secretary at its head, but the Praesidium of the Department, headed by the Chairman of the Department, who is also the Vice-President of the Academy of Science of the USSR.

6. The Affiliates of the Academy of Science of the USSR

The Academy of Science has within itself a broad network of affiliates /or branches, filial/.

It must be said however, that the term "affiliate" is very conditional, and in no way expresses the juridical nature of that institution which bears this name in the system of the Academy.

In Soviet legislation on the affiliates within one or another organization is understood the part of this organization which carries on its own activities in the name of the whole organization and under its own authority and instruction, but which cannot carry out juridically important actions in its own name.

All of the rights and duties which pertain to the affiliate as a result of its action, pertain as well to the organization as a whole.

The affiliates of the Academy of Science are a different matter. The affiliates of the Academy, as is stated in the Statute of the Academy, are units of scientific-research institutes on location. Both the institutes united within the affiliates and the affiliates themselves possess all of the features of a juridical person.

The affiliates are directed by the Praesidia. The Chairman of the Praesidium of the affiliate is elected by the General Meeting of the Academy of Science, upon the motion of the Praesidium of the Academy, for a term of three years.

Under the Praesidia of the affiliates are the councils of active members of the Academy of Science, the senior scientific workers, the resprsentative of the local state institutions and public organizations and individual prominent local specialists. The composition of the Council is passed by the Praesidium of the Academy of Science.

The Praesidium of the Academy of Science also carries on the general direction of the affiliates.

The necessity for an organization of institutions of the Academy of Science in the field became obvious after the July Plenum of the Central Committee of the VKP (b) in 1928, in whose decisions it was shown that it was necessary to have the closest ties between science, technology and production, to decisively bring scientific work closer to solving the tasks before industry, transport and agriculture as one of the means for catching up to and then surpassing the level of industrial development in the most highly industrialized capitalist nations. These tasks stemmed from the decisions of the XVI Party Congress.33

In aiding the development of the productive forces of individual Republics and "oblasts," the Academy was most successfully able to point the way for the organization of scientific institutions on the territory of a given Republic or "oblast'" and for the training of the scientific cadres from the local populace.

The organization of such scientific institutions, i.e., the affiliates and field bases, was begun in 1932 with the decress of the government of the USSR.

The first institutions of the Academy of Science on location were organized in 1932; they were the Ural and Far-Eastern affiliates and the Kazakh and Tadzhik scientific-research bases. Later on a number of new affiliates and bases were created which were well staffed and equipped.

At present the Academy of Science has 12 affiliates on location.

The affiliates of the Academy of Science played a large part in the development of science in the various Union Republics.

They were (and in the Moldavian SSR are at present) that organizational cell, that state scientific institution around which are grouped the scientific forces of the Republic and which aided in the training of the national cadres of scientists.

The Academies of Science of the Georgian, Uzbek, Ammenian, Azerbaidzhan, Kazakh, Tadzhik and Turkmen Union Republics were created as affiliates, and from the moment of their organization have become important scientific institutions.34

The measures for improving the direction of the affiliates' work, which were put into effect as a result of the regulation by the Praesidium of the Academy of Science on 18 March 1955, No 123, had great importance for the work of the affiliates under the contemporary conditions.

This regulation introducted changes in the previous practices in the following three ways:

1) the liquidation of the current practice of almost total separation between the departments of the Academy and the affiliates, and the delegating of the responsibility to the department for the direction of the scientific activity of the affiliates under them according to the department's field of knowledge.

In particular the departments of the Academy were made responsible for:

the review of the plans for scientific-research and experimental industrial work, and the plans for the introduction of scientific research into production, and the plans for the publishing of scientific works;

the coordination of scientific-research work of the affiliate institutions with the central institutions of the Academy of Science of the USSR and the Academies of the Union Republics;

the approval of changes and specific improvements which have been introduced into the plan of scientific work by the Praesidia of the affiliates, the giving of scientific assistance to the institutions of the affiliates

in the organization of discussions, conferences and assemblies on scientific questions;

the control of the scientific activity in the affiliate institutions as a means of reviewing the yearly scientific reports on finished work; the listening to reports by the leaders of the scientific institutions, the directors of laboratories and others; the sending of departmental representatives for checking the work in the affiliate and the giving of scientific and methodological assistance on location.

The departments of the Academy were also instructed to: for the

decide the questions/summoning of doctral candidates and graduate student in the affiliates to the central scientific institutions of the Academy upon the recommendation of the affiliate Praesidium;

to award scientific titles of the elder scientific worker to the workers in the affiliates on the recommendation of the affiliate Praesidium and with the subsequent approval of the Praesidium of tha Academy of Science of the USSR;

to appoint or remove from office the directing scientific workers of the affiliates upon the recommendation of the affiliate Praesidium (in agreement with the nomenclature of positions approved by the Praesidium of the Academy of Sciences);

to review the recommendations of the affiliate Praesidia on the personnel of the scientific councils in the affiliate institutes which have the right to award scientific degrees and to send them with their conclusions to the Praesidium of tha Academy for approval.

2) Delimitation of the competence for the direction of the affiliates between the departments of the Academy and the Council on the Cooredination of Scientific Activity of the Academy of Science of the Union Republics and the affiliates of the Academy of Science of the USSR.

Among the responsibilities of the Council on Cocordination were included:

a) the working out of recommendations on the development of the affiliates of the Academy of Science of the USSR (the leading scientific aims, the structure, the needs within the scientific cadres, the means for financing it, etc.) and the presentation of these recommendations to the Praesidium of the Academy of Science for approval;

b) the compiling of summary plans on coordinating problems (plans for specific problems, thematic plans, plans for scientific sessions, discussions);

c) the calling of affiliate conferences for a discussion of the questions dealing with the general organization of the affiliate; the organization of reports by the affiliate directors for the sessions of Praesidium of the Academy of Science;

d) the organization of commissions of the Praesidium of the Academy of Science for giving scientific and organizational assistance to the affiliates and for checking their activities on the spot;

e) the drawing up of conclusions according to the summary statements of the affiliates which deal with the basic scientific equipment, additional staff and financing, in accordance with the basic articles of budgetary estimates, for presentation to the Praesidium of the Academy of Science;

f) the control of carrying out the decisions of the Praesidium of the Academy on scientific and organizational questions, and the control of decisions by the Council on Coordination on questions dealing with the coordination of scientific research which is going on in the affiliates.

3) The establishment of the leading lines of scientific activity in every affiliate of the Academy of Science.

Thus, for example, the chief interest in the scientific activity of the Bashkir affiliate of the Academy of Science was the investigation of problems in petroleum chemistry, geology and useful minerals of the Southern Urals (but first of all, petroleum chemistry); The Eastern Siberian affiliate has worked on geology and useful minerals of Eastern Siberia, organic chemistry, etc.

Some affiliates (Sakhalin affiliate, the Arkhangel scientific-research station) were turned into institutes of the Academy of Science.

The Praesidia of the affiliates and the departments were given the responsibility to direct in every way the development of the affiliate scientific institutions in the main concerns of their scientific work so as to turn these institutions into scientific-research institutes.

Speaking on the prospects for the development of the affiliates, the President of the Academy of Science, the Academician A. N. Nesmeyanov, noted even at the annaul meeting in February 1955 that the affiliates, as a complex of institutions aimed at scientific proficiency and the study of local conditions, must exist particularly in those places where there are obvious local conditions either natural or national. Most of these places have been included in the existing network of affiliates, and it is not necessary to create new affiliates.

For participation in scientific work within the Academy on the behalf of all the scientists of the nation, in the form of scientific institutions in many parts of the Soviet Union, "it is corrent in the future to create on the periphery not new affiliates, but individual institutes of the Academy, having in mind the organization of strong, widely-based scientific institutions."35

7. Scientific-Research Institutes of the Academy of Science of the USSR

The Academy of Science, as has been stated above, is not one but a whole system of scientific institutions.

The basic organs in which scientific work is carried out are the scientific-research institutes of the Academy.

The legal status of the institutes of the Academy are defined at present in a number of documents: in the Statute of the Academy of Science; in the "Regulation on the Departments of the Academy of Science," passed by the Praesidium of the Academy on 27 May 1955; and the "Regulation on the Institute of the Academy of Science of the USSR," passed by the Praesidium on 16 June and 16 October 1939.36

The Statute of the Academy in conjunction with that active regulation which deals with the scientific-research institutes calls them the basic organs of scientific-research work of the Academy of Science.

This definition characterizes the Academy of Science as a new type of scientific institution which differs from the Academies of Science of the "Western" form where the academies in general do not have "their own" scientific institutions, but the basic organs of scientific work are meetings of the members of the Academy which go under different names ("Conferences," "Assemblies," etc.).

Being "the basic organs of scientific-research work," the institutes of the Academy of Science decide, in their resepective field of knowledge, all of the tasks given by the Government to the Academy as a whole.

The activities of the institute encompass all of the basic lines of work in the Academy; the carrying out of scientific research; the control over the introduction of scientific achievements into the national economy; the training of the scientific cadres, etc.

The tasks of the institutes of the Academy consist of research on the major and most far-reaching scientific problems, the problems of "great science."

The tasks which confront the Academy as a whole are defined essentially in the legal status of the institutes, in their structural subdivisions, and in their

organs of control, just as in the case of the other non-Academy scientific institutions.

Within the limits of the approved work program and established budgetary estimates, the institutes have full operational and economic independence.

Until recently this independence was very conditional. All of the basic question dealing with the Institute's work, and also many matters of practical organization for carrying out scientific research could not be decided without the consent and sanction of the superior organs, i.e., the Departments of the Academy and the Praesidium of the Academy. Even less independence was given the institutes in the disbursal of material and budgetary resources.

At present the situation has changed radically. The Regulation of the Council of Ministers on 13 November 1957 significantly expanded the rights of the directors of all the scientific-research institutes, including those of the Academy (for a more detailed discussion of this see Chapter 5).

The director of the institute controls it with the rights of one-man management, and is fully reponsible for the work of the institute. Proceeding from these high demands which confront the scientific capabilities of the directors of the leading scientific centers in the various fields of knowledge, the government entrusted to the scientists themselves--to the members of the Academy of Science--the right to decide the question of who among the leading scientist was most qualified to direct a scientific institution as its director.

"The particular feature of the directors of the scientific institutions of the Academy," noted the Academician, A. V. Topchiyev, "consists in that they are obliged to combine administrative and scientific activities, and to be on a level of achievement in the corresponding field of knowledge. The directors of the institutes are obliged personally to lead the planned scientific research, for otherwise they would not have the authority nor the ability to direct properly the activities of the scientific collectives of the Academy.37

In developing initiative among the scientists and in providing proper direction over the scientific work, the correct organization of the work in the scientific councils of the Academy institutes are of great importance.

The Scientific Council of the institute, according to the current "Regulation on the Institute of the Academy of Science of the USSR," is the consultative organ under the director of the institute. (# 16). It consists of the active members and corresponding members of the Academy of

Science and the leading specialists from the corresponding field of science.

The personnel of the Scientific Council is recommended by the director of the institute and approved by the Praesidium of the Academy of Science.

This procedure recently has been criticized by individual scientists who propose that it is necessary to staff it by elections which would produce important specialists, both of theory and practice, in a given field of science and technology. Such a proposal deserves the closest attention.

Such a measure can raise the general level of work in the Scientific Council and bring in new scientific forces.

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Chapter III.

LEGAL STATUS OF THE UNION REPUBLICS

ACADEMIES OF SCIENCES

1. The Union Republic Academy of Sciences--Higher Scientific Institution of the Republic

1. The ANSR (Akademii nauk soyuznykh respublik--Union Republic Academies of Sciences) are large associations of the scientific research institutions included in them: institutes, independent divisions, laboratories and other institutions. According to figures of 1 January 1957, 8,673 scientific workers of various professions[1] were employed by ANSR, including many eminent scientists who had enriched science with discoveries of primary importance. The ANSR exert considerable influence with their activities on the scientific work of the union republics and on the general development of science in the USSR. The legal status of the ANSR and the scientific institutions entering into its composition is determined primarily by the charter of the academy, ratified by the government of the republic.

An ANSR is the higher scientific institution of a republic. The AN is subordinate to the Council of Ministers of the republic, to which it presents an annual report of its activities. From a legal viewpoint, the definition of an ANSR as the higher scientific institution of a republic means 1) its subordination only to the government of the republic. As is well known, the union republics possess several central organs of state administration, which resolve to a greater or lesser degree questions dealing with scientific institutions: the state planning commission, the scientific-technical committee, etc. It is understandable that these organs in that sector dealing with the scientific principles of planning the economy, the incorporation of scientific achievement in production, etc., work in close contact with the ANSR, being supported by it. But none of these has the right to interfere directly in the activities of the AN. 2) The establishment of relations between the AN with the scientific institutions of the union republic in which the AN is situated, within limits determined by the government, as well as a directive influence on the activities of all scientific institutions in the republic, independent on their departmental subordination. 3) Exercise by the ANSR of coordination of the most important scientific research dealing with the development of the economy and the cul-

ture of the republic, carried out by scientific institutions situated within the territory of the republic, including scientific institutions of the USSR and other union republics.

2. The present charters of the ANSR do not give a sufficiently clear-cut definition of the rights and obligations of the AN, proceeding from its status as the higher scientific institution of the republic. In former charters of the AN of the Ukrainian SSR and the AN of the Belorussian SSR, these questions were resolved more completely and in a more definite form. The "Regulations on the All-Ukrainian AN," passed in 1921, determining the relations of the academy with other scientific institutions in the Ukrainian SSR, provided that: 1) all scientific institutions shall make periodic reports on the progress of scientific research work to the proper scientific divisions of the academy; 2) all scientific institutions of the Ukrainian SSR shall be required to report to the suitable scientific divisions of the academy all the most important scientific discoveries and achievements; 3) the academy shall be obligated to aid all scientific institutions in the Ukrainian SSR in their research work; 4) the academy shall hold periodical all-Ukrainian congresses, conferences, and meetings on various scientific questions, with the participation of representatives of scientific institutes, divisions, unions, workshops, etc.; 5) the all-Ukrainian AN, by unifying the scientific-creative work of all organizations and institutions in the Ukrainian SSR, shall gradually prepare materials for elaborating a general plan for the organizational-scientific work of all branches of knowledge (SU Ukrainian SSR, 1921, No. 11, Article 310).

In"code of laws on education in the Ukrainian SSR" (SU Ukrainian SSR, 1922, No. 49, Article 729) the above regulations were affirmed and developed. "The Ukrainian AN," Article 590 stated, "stimulates, directs and coordinates scientific-creative work of all scientific institutions, elicits their scientific achievements, evaluates these and joins them with the progress of world science." Article 593 provided that "all scientific institutions in the Ukrainian SSR are required to inform the suitable divisions of the academy on their most important discoveries and achievements and periodically to report to them on the progress of their scientific work. The academy shall be obligated to aid the scientific institutions of the Ukrainian SSR in their research work." In the AN of the Belorussian SSR all of these questions were resolved by the resolution of the SNK Belorussian SSR of 13 May 1931 "reorganization of the Belorussian AN" (SZ Belorussian SSR, 1931, No. 24, Article 173), subsequently

in the charter of the academy, ratified on 22 August 1933 (SZ Belorussian SSR, 1933, No. 34, Article 235). In the resolution of 13 May 1931 the SNK of the Belorussian SSR, proceeding from the fact that the successful progress of socialist reconstruction of the national economy requires the maximum development and application of science, technology and scientific research for the fulfillment of the concrete tasks of socialist construction, in connection with which the task of the socialist planning of science and scientific research acquires extreme significance, for the purpose of actual regulation of scientific research and the Belorussian SSR, established that the Belorussian AN should be a single scientific republic center in which the general direction of all scientific research in the Belorussian SSR would be concentrated.

The Belorussian AN was given the right of a) planning the work of all scientific research institutions operating on the territory of the Belorussian SSR, independent of the jurisdiction under which these scientific research institutions were placed; b) establishing Marxist methodology in the work of scientific research institutions; c) establishing subject matter, and d) checking systematically the fulfillment by all scientific research institutions of established forms and work methods. All people's commissariats and republic institutions, in the jurisdiction over which scientific research institutions were placed, as well as branches of all-union institutes operating in the Belorussian SSR, were required to present plans at the proper time of the work of the scientific research institutes, stations, etc., to the Presidium of the Belorussian AN. The SNK of the Belorussian SSR established further that scientific research institutes and institutions within the jurisdiction of the people's commissariats, institutions and organizations, shall work on the tasks of these pepole's commissariats, institutions and organizations and under the supervision of the Belorussian AN. The charter of the Belorussian AN of 1933, in accord with the above resolution, stated that "the Belorussian AN is the higher scientific research institution of Belorussian SSR and a united scientific republic center in which the general direction of all scientific research in the Belorussian SSR is concentrated." (Note No. 1). The Belorussian AN, besides other tasks, was delegated the "planning of work and establishing of the subject matter of all scientific research institutions operating on the territory of the Belorussian SSR, independent of the jurisdiction under which they are operating." (No. 2, paragraph g); "systematic supervision

of all scientific research institutions on the territory of the Belorussian SSR in the area of fulfilling established plans and work methods" (No. 2, paragraph d). At present certain union republics (the Kazakh SSR, Kirgiz SSR, Lithuanian SSR, Estonian SSR) have in effect resolutions by the governments of these republics passed in recent years, which determine the rights and obligations of these academies as higher scientific institutions of the republic more completely than in the charters of the republic AN. For example, a resolution by the Council of Ministers of the Kazakh SSR of 8 February 1956 "the formation of a council to study productive forces and coordinate scientific research in the Kazakh SSR" placed all scientific institutions and VUZy in the Kazakh SSR which were carrying out scientific research on the territory of Kazakhstan, independent of their departmental subordination, with the obligation: a) to present for the examination of the council subject plans of their scientific research in the procedure of coordination and mutual agreement; b) to fulfill sections of large-scale and complex problems connected with the study and use of the natural productive forces of the republic according to plans agreed to by the council, with obligatory presentation to the council of reports of the fulfillment of these sections. This resolution, presenting the council with definite rights and placing on all scientific institutions and VUZy (Vysshyye uchebnyye zavedeniya--Higher Educational Institutions) certain obligations in their activities on studying the productive forces of the republic, gives the AN of the Kazakh SSR more definite legal possibilities than the charter gives it for concentrating the efforts of all scientific institutions and scientific workers of the republic on the elaboration of the above scientific problems.

In the Kirgiz SSR analogous rights were presented to the AN by the "Regulations on the Council for Studying Productive Forces and Coordinating Scientific Research in the Kirgiz SSR," ratified by a resolution of the Council of Ministers of the Kirgiz SSR of 24 May 1956. The Council of Ministers of the Lithuanian SSR and the CC of the Communist Party of Lithuania, with a resolution on 21 May 1956, No. 253, "The Formation of a Republic Council for Coordinating Scientific Research Conducted in the Lithuanian SSR," established that agreement with the council on coordinating plans for scientific research projects shall be obligatory for all scientific research institutions and VUZy, independent of their subordination. The council for coordinating scientific activities of scientific research institutions and VUZy shall be formed

according to a resolution by the government of that republic, attached to the AN of the Georgian SSR.[2]

The above resolutions by the governments of union republics give the academies of sciences a legal base for joining the efforts of all scientific institutions and higher institutions of the republic in the area of their research work, and in certain republics (the Lithuanian SSR)--also in the area of implementation(see Chapter 7 for a more detailed account of this). But these governmental enactments were not passed in all republics. In the Belorussian SSR, until recently regulations on a coordination council, ratified by the academy itself, have been in force, and on the strength of this do not have that obligatory nature for ministries and departments which governmental enactments have.

3. In the course of discussing the theses of Khrushchev, many scientists introduced proposals on broadening the front of research by the ANSR, transfer to them of branch institutes and broadening of the rights of the ANSR in the area of coordinating scientific work.[3] In certain republics (Kazakh,Uzbek) proposals were introduced to subordinate all departmental NU (nauchnyye uchrezhdeniya--scientific institutions) to the ANSR.[4] The president of the AN of the Uzbek SSR, Kh. Abdullayev, posed the question of whether it was better to join directly several plant laboratories as an experiment with the AN in order that its institutes, in the person of their best scientists, would direct these laboratories or sectors of their work. "Certain laboratories, as an experiment, could be transferred to the AN. In the final analysis they could be made into branches of the AN and its institutes in production. Other laboratories, even if they remain within the system of ministries and industrial enterprises, will be able to subordinate their work to a single plan and operate under the direct administration of the specialists of the AN and VUZy."[5] The president of the AN of the Belorussian SSR, Kuprevich, proposed that the right of the council for coordinating the activities of the AN be expended as an organ, the decisions of which would be obligatory for all research institutes and VUZy of the republic.[6]

It was also proposed to give the council for coordination the right to ratify in the final form for the SM (Sovet Ministrov--Council of Ministers) yearly (or two-three year) plans of coordinated research in the republic with the right retained by the SM to ratify the five-year problem plans of the AN and coordinated research in the republic.[7] Proposals of an opposite nature appeared, however, in the press. Certain authors, with the same idea

of eliminating dissociation in the work of NU and overcoming bureaucratic obstacles, were convinced of the necessity of transferring functions in coordinating scientific work from the AN to the republic Gosplan and formation in connection with this of councils for coordinating and planning scientific research attached to the Gosplan of the union republic, to replace the council for coordination attached to the AN.[8] Certain proponents of this plan proposed to delegate to these councils for coordination attached to the Gosplan of the union republics: 1) ratification of the plans for all NIU (nauchno-issledovatel'skiye uchrezhdeniya--scientific research institutions), forming part of the AN and primarily elaborating important theoretical problems, as well as institutes in the jurisdiction of the sovnarkhoz; 2) the hearing of reports on plan fulfillment; 3) the posing of the question of the formation in the republic of new scientific institutes and laboratories; 4) the passing of resolutions on the temporary concentration of the scientific forces of the republic for solving particularly urgent problems.[9]

These proposals did not yet receive legislative recognition, although questions dealing with the organization of scientific work in the union republics did not lose their timeliness after the passage by the VS (verkhovnyy sovet-Supreme Soviet) of the USSR of the law on the further improvement of industry. Therefore, it seems expedient to us to examine in greater detail the above considerations, which affect the relations between the republic academies and other NU and republic state organs. One can hardly deny the fact that the reorganization of the administration of industry and construction does not change the status of the ANSR as the highest NU subordinate directly to the government. On the contrary, this reorganization presupposes the strengthening of this role. During the course of the further strengthening of scientific work in the union republics the "integrating" role of the ANSR and their coordinating activities will increase. The present organizational form of resolving questions of coordination--in the form of councils for coordination attached to AN, in which the most prominent and republic scientists and directors of republic organizations take part , having a direct relationship to scientific research--should,in our opinion, receive further development. By means of strengthening and developing this organizational form it would be possible to a) give the councils for coordination attached to the AN greater rights than existing ones, and in particular, give greater juridical definition to their recommendations;

b) include on the councils the chairman of the Gosplan and the chairman of the scientific-technical committee of the union republic, the chairman of the sovnarkhoz and the ministers of education, public health, agriculture, higher education; c) establish a more democratic procedure of nominating candidates for the council for coordination from among workers of NU, who are not included on the academy staffs (for example, by nominating them by scientific councils). The idea of strengthening the integrating role of the ANSR in reference to NU not being a part of it in any form, with consideration of the peculiar features of the union republics, cannot have any practical influence on scientific work if it is not correctly recognized and expressed in legislation. In this role of the academy can be found one of its specific features which determine the place of the academy in the system of NU. But an increase in the role of the republican academy as a coordination center should not be replaced by an inordinate swelling of the academy itself by including in it all or almost all NU of the republic, as well as turning the academy into an administrative organ which supervises the activities of all the republic's NU. In the first place, this decision could have a negative effect on the work of the academy itself, overloading its organs, which are not equipped for these functions, with all types of problems which are secondary for its own scientific activities and, in the second place, just as important, could bind the initiative of the scientists of the "supervised" NU. The charter of the AN of each union republic determines not only the position of the academy among the other NU of the republic, but also its basic tasks, composition, the system of NU forming an organized part of it, and the administrative organs of the academy.

2. Basic Tasks of the Union Republic Academies of Sciences.

The basic tasks of the republic academies are determined in the charters analogous to the tasks formulated in the charter of the AN USSR. The charter of the AN of the Belorussian SSR states as the basic task of the academy the "comprehensive development of science and technology with the purpose of enriching the economy and culture of the USSR with new scientific achievements, aiding the construction of Communist society and strengthening the might of the USSR. The AN of the Belorussian SSR devotes special attention to the study of the geography, natural resources, economy and culture of the Belorussian SSR (No. 2).

Similar paragraphs are to be found in other charters. The charter of each ANSR states further that in the aim of fulfilling its basic task the ANSR: a) shall concentrate its work on the main problems of science in all its branches; b) shall study the natural resources and productive forces, as well as the cultural and economic achievements of the republic and aid in their timely and efficient use; c) shall prepare scientific cadres and aid in raising the qualification level of the republic's scientific workers; d) shall serve the governmental organs of the republic, the production institutions and enterprises of organizations of scientific expert examination.

In this section the charters of the ANSR do not reflect to any degree the specific tasks of the AN of the specific union republic. In the charters of the AN of certain union republics, mention is made of the popularization by the academy of the achievements of Soviet and foreign science among the masses (No. 3 of the charter of the AN of the Latvian SSR). The specific tasks of the ANSR are determined, proceeding from the general tasks of Soviet science and the position of the specific academy within the system of all NU of the country, by the government of the union republic. The AN USSR also exerts a certain influence on the correct determination of the specific tasks of a specific academy, on ascertaining the most important problems of science for the NU of a specific union republic. The republic academies coordinate their scientific activities with the AN USSR. The necessity of this coordination is expressed directly in all the charters of these academies (see for example, No. 6 of the Charter of the AN of the Belorussian SSR; No. 1 of the charter of the AN of the Latvian SSR; No. 7 of the charter of the AN of the Estonian SSR, etc.). One of the organizational forms of coordination is the examination of questions dealing with the condition and direction of the further development of the scientific activities of the republic academies at the joint sessions of the Presidium of the AN USSR and the Presidium of the AN of the specific union republic. Speaking of the development of the ANSR academician Nesmeyanov noted with reason that it should correspond to the nature of the productive forces of each republic. Academies should not be organized to a single plan and copy one another. On the contrary, they should supplement one another in order that a colorful scientific orchestra be the result. Each of them and all of us should not fraction off our forces but unite them.[10]

3. Members of the Union Republic Academies of Sciences

1. Basically similar (both to each other and to the articles of the charters of other AN) are the articles of the charters of the ANSR on academy membership: on honorary and active members of the academy and corresponding members, the procedure of election, rights and obligations, and also on scientific workers of academy institutions. But being basically quite similar, the charters of certain republic academies have peculiar features in defining the legal status of the members of the academy. For example, in the charter of the AN of the Kazakh SSR it states that: "The ANof Kazakh SSR is the highest scientific institution of the Kazakh SSR and unites the most outstanding scientists of the Kazakh SSR and those working beyond its borders, but joined by their scientific activities with the development of science in Kazakhstan" (No. 1). The charter of the AN of the Kazakh SSR states that members of the AN are "outstanding and progressive scientists of Kazakhstan who have enriched science with works of primary scientific significance and aiding socialist construction in the Kazakh SSR" (No. 16), and corresponding members--"outstanding scientists of Kazakhstan who are furthering social construction in the Kazakh SSR" (No. 17). The charter of the AN of the Kazakh SSR states further that active members and corresponding members are deprived on a resolution by the general assembly of their titles if their activities are directed toward harming the USSR, and also in case "their activities are diverted from the system of scientific research of the AN of the Kazakh SSR" (No. 27). The above paragraphs of the charter indicate that a direct connection with the activities of the institutions of the academy, as well as constant participation in their practical activities are essential conditions for being elected member of the AN of the Kazakh SSR and retaining membership.

The charters of other republic academies also make demands on the members of the academy in reference to their participation in the development of the national economy and the culture of the republic, although these demands are formulated in various manners. The charter of the AN of the Kirgiz SSR states that the academy "unites the most outstanding scientists both of the Kirgiz SSR and those working beyond its borders, but joined in their scientific activities with the development of science in the Kirgiz SSR" (No. 1). Analogous instructions are contained in the charters of the AN of the Tadzhik SSR (No. 1) and the Turkmen SSR (Paragraph 1). The charter of the AN of the Azerbay dzhan SSR states that the academy

unites the most outstanding scientists both of the Azerbay dzhan SSR and those working beyond its borders, but aiding by their scientific activities the development of science in Azerbay dzhan (Paragraph 1). Similar regulations are contained in the charters of the AN of the Armenian SSR, the Estonian SSR, and the Lithuanian SSR. However, differing from the AN of the Kazakh SSR, the charters of the AN of the other union republics do not contain clauses calling for the deprivation of titles of the members of the AN in cases whereby their activities are divorced from the system of scientific research institutions of the specific union republic. The inclusion in the charters of the republic academies of clauses calling for the discharge of academicians and corresponding members who have broken ties with the academy, in our opinion, results from the policy of the union republics and the government of the USSR of appointing highly qualified scientific cadres in the union republics.

Recently this policy was expressed in the resolutions by the union republic governments, on the recommendation of the SN USSR, on the introduction into the charters of the AN of amendments providing that established compensation for the titles of academician and corresponding member of a union republic is paid only to those who work in the AN or in some other scientific institution of the republic (see, for example, paragraph 27 of the Charter of the AN of the Belorussian SSR). It would be, however, incorrect to settle a question as to whether a certain academician or corresponding member is connected with his academy, depending on his place of residence, as well as on whether he is paid monetary compensation for the rank or not. Ties with the academy and its scientific research are maintained successfully by academicians who do not reside permanently on the territory of the republic. Such examples can be given in each republic, and an active part in scientific research of the NI of the union republics is and has been taken previously by scientists, independent of whether they are paid monetary compensation for the rank of member of the academy, if they are worthy of it. But there is no doubt that if an active member or a corresponding member of a republic academy, living on the territory of another union republic, has broken all connections with the scientific life of the republic, the measures provided by the charter of the AN of the Kazakh SSR seem to be fully justified in other republics. The procedure of electing honorary academicians, academicians and corresponding members of the ANSR is basically identical in all academies. However, there are some variations. In several academies

(Belorussian SSR, Latvian, Estonian, Kazakh SSR) candidates are elected by secret ballots with a two-thirds majority vote, while in other academies (Ukrainian SSR) these elections take place by open ballot with a simple majority. Elections of academicians by the general assemblies in all academies take place by secret ballot. However, in certain academies (the Lithuanian and Tadzhik SSR) a two-thirds majority is required while in others (Ukrainian, Belorussian, Kirgiz, Latvian, Estonian SSR) require a simple majority. In some academies two-thirds of the votes of the list composition of the members of the branch academy are taken, or correspondingly--by the AN as a whole--while in others, for example, the AN of the Belorussian SSR--of the number of the academy members participating in the voting. These peculiar features are established by the governments of the union republics taking the concrete conditions of the development of the academy into consideration.

Of the features affecting the members of the academy, we shall also mention the variations in determining the grounds for which members of the academies can be deprived of their rank. The majority of ANSR charters contain paragraphs which state that academicians, honorary academicians and corresponding members shall be deprived of their rank on a resolution by the general assembly, if their activities are harmful for the USSR. In certain academies, as has been mentioned, grounds for deprivation of the title of academician and corresponding member are the divorce of their activities from the system of scientific research of the specific academy (Kazakh SSR, paragraph 27). The charters of certain AN do not state the grounds for which members of the academy may be deprived of their rank. "Active members and corresponding members of the AN shall be deprived of their rank on a resolution by the general assembly" (Kirgiz SSR, paragraph 27). The question of the responsibility of members of the ANSR has been raised many times by the academicians themselves in elaborating draft charters. In drawing up the draft charter for the AN of the Armenian SSR the following proposal was introduced: "In case any active member or corresponding member consistently fails to carry out his obligations and does not produce serious scientific results, the general assembly of the AN shall examine the question of drumming him out of the ranks of members and corresponding members and shall pass a resolution on this by a secret ballot, and a two-thirds vote of active members shall be sufficient to remove a member from the academy. This paragraph does not pertain to active members and corres-

ponding members who have reached 60 years of age." The same draft charter stated that a move to remove a member from the academy could be introduced by the Presidium of the AN of the Armenian SSR (paragraph 58).

The charter of the AN of the Lithuanian SSR contains a paragraph which gives the Presidium of the AN the right in cases whereby the Presidium is of the opinion that a certain academician or corresponding member is carrying out his obligations in an unsatisfactory manner to place the matter of his work for the examination of the general assembly of the academy (paragraph 53). It is true that the charter does not indicate possible sanctions which could ensue in cases whereby the general assembly recognizes the work of the academician or corresponding member to be unsatisfactory. A portion of this paragraph (passed by the general assembly of the AN of the Lithuanian SSR) which provided that the general assembly of the academy had the power to warn an active member or corresponding member, and after this warning if his work did not improve--to throw him out of the academy--was not introduced into the text of the charter as ratified by the government. However, this does not indicate that the general assembly of the AN of the Lithuanian SSR does not have the right to examine the question of depriving any member of the academy of his rank. If it were justified to come to such a conclusion, it would be necessary to recognize that persons who conduct activities directed against the Soviet union could not be deprived of their academic ranks since the charter of the AN of the Lithuanian SSR does not contain any clauses dealing with the grounds according to which a member of the academy can be thrown out of the academy. In our opinion, these matters can be examined by the general assembly in each case, taking into consideration specific circumstances, but in cases whereby the general assembly decides to throw out any member of the academy, the sanction of the government is necessary.

4. The System of Scientific Institutions of the Union Republic Academies of Sciences

1. The system of scientific institutions of the republic academies is quite similar to the system of the institutions of the all-union academy. It is comprised of scientific research institutes, divisions and sectors museums and laboratories, workshops, commissions, bases, expeditions and other NU. Scientific research institutes and other NU which are engaged in elaborating similar branches of science are united into departments of the academies. The number of departments and their composi-

tion is determined by the government of the union republics, based on the tasks faced by the academy of the republic. The AN of the Belorussian SSR has three departments: 1) social sciences; 2) biological sciences; and 3) physical-mathematical and technical sciences (Paragraph 7 of the charter). The AN of the Kazakh SSR consists of four departments: 1) department of mineral resources (geological-geographical department, technical and chemical sciences); 2) department of physical-mathematicl science; 3) department of biological and medical sciences and 4) department of social sciences (paragraph 5 of the Charter). The Estonian AN has four departments: 1) physical-mathematical and technical sciences; 2) biological and agricultural sciences; 3) medical sciences; 4) social sciences (paragraph 5 of the charter). The departments conduct their operations on the basis of regulations ratified by the Presidium of the specific AN.[11] Recently the press has contained statements that the existence of departments is not justified in all cases. In conformity with certain ANSR, these opinions seem to us to merit study and discussion. In each republican AN the basic organs of scientific research are its institutes. The institutes form part of the various departments of the academy, but in all their activities they are under the jurisdiction of the Presidium of the AN. Regulations dealing with the institutes are also ratified by the Presidium.[12]

Some academies possess branch ANs of the union republic (Ukrainian, Kazakh, Azerbaydzhan SSR). In order to organize the study of natural resources and productive forces of a republic, councils for the study of productive forces have been set up in the republic academies. The chairmen and members of these councils are elected by the general assembly. At present, in view of the transition to territorial administration of industry and construction, the role of the councils in studying productive forces in the republic academies has grown considerably. In certain union republics (Kazakh, Kirgiz) the councils for the study of productive forces are also organs for coordinating scientific work in the republic. Regulations on certain scientific institutions attached to the academy and its organs are ratified by the government of the union republics (see "Regulations on the council for studying productive forces attached to the AN of the Kazakh SSR," ratified by resolution of the SN of the Kazakh SSR on 8 February 1956).

The organs of administration of the republic academies as the AN USSR are the general assemblies of the ANSR and the Presidium of the AN. The charters of several re-

public AN provide that the general assembly shall consist of honorary academicians, academicians and corresponding members (paragraph 28 of the charter of the AN of the Belorussian SSR, paragraph 8 of the charter of the AN of the Lithuanian SSR). The right of deciding vote is enjoyed only by honorary and active members of the academy. In other academies the general assembly consists only of honorary and active members. In the departments of the ANSR, the directive organs are the following: the assembly of the department, the bureau of the department and the academician-secretary of the department. The AN of the Kazakh SSR, in accordance with its charter (paragraph 38) as well as the AN of the Georgian and Azerbaydzhan SSR, has as head of the department bureau not an academician-secretary, but an academician-chairman of the department.

Chapter IV.

LEGAL STATUS OF USSR BRANCH ACADEMIES OF SCIENCES AND UNION REPUBLIC ACADEMIES OF SCIENCES

1. Academies of Sciences of the USSR Ministries and Departments

1. At present the Soviet Union possesses four USSR ministries and department academies of sciences: the all-union academy of agriculture sciences Imeni V. I. Lenin, the USSR academy of medical sciences, the USSR academy of construction and architecture and the USSR academy of arts. Each of these AN is the highest scientific institution of the country in its specific field of science. In addition, there are branch AN of ministries and departments of union republics, which are the highest scientific institutions of the corresponding fields of science on the union republic level. Each branch academy of sciences is an association of scientific research institutes which make up the academy and are subordinate to it. Each academy consists of the members of the academy which are elected by the academy itself. The members of the academy resolve all questions of the organization of scientific work and other questions dealing with the operations of the academy. Each academy is a juridical person in property relations with other scientific and economic organizations. This "common feature" brings the branch academies, from a legal standpoint, close to each other as well as to the AN USSR. But there are also features unique to each academy and determing the nature of their scientific tasks. We shall examine briefly the peculiarities of the legal status of each academy.

2. The all-union academy of agricultural sciences Imeni V. I. Lenin (AAAS) was formed in 1929. In a resolution by the SNK of the USSR, "the organization of the AAAS" on 25 June 1929, it was stated that the academy shall be organized on the basis of applying all theoretical and practical work to the development and socialist reconstruction of the economy of the USSR. The academy was organized as an association of scientific research institutes so that all operational scientific research would be carried out by the institutes (SZ USSR, 1929, No. 42, Article 375). During the course of the first five years the academy formed a system of NIU, encompassing for the first time all the most important branches of agriculture, and sev-

eral large-scale projects were carried out. However, on the whole, as was noted in the resolution by the SNK of the USSR "the work of the AAAS" of 16 July 1934, the academy had not carried out the tasks placed before it and had consistently lagged behind in its work from the demands made on it by socialist agriculture. The basic causes for the unsatisfactory work of the academy were stated by the SNK to be the following: a) incorrect organization of the academy itself, mechanically uniting a mass of separate NIU and transformation of its Presidium into an administrative apparatus of the USSR NK of agriculture; b) narrow specialization in scientific work, the formation of a large number of unnecessary institutions, often for the purpose of studying individual chance problems, a fact which inevitably led to the fractioning of scientific cadres and funds; c) completely insufficient scientific compilation of the mass experience of the leading state farms, machine-tractor stations and collective farms.

In view of this the SNK of the USSR resolved: 1) to reorganize the AAAS on the following bases: a) the academy shall be the highest scientific institution for agriculture in the USSR; it shall consist of elected active members (academicians), honorary members and corresponding members; b) the sessions of the academy shall be held regularly to discuss important problems of agricultural science, expert examination of the most important plans of the NK's of the republics, krays and oblasts in the area of developing the productive forces of agriculture; c) at the head of the academy shall be the president of the academy, carrying out tasks assigned to him with the aid of two deputies--first and second vice-president and scientific secretary; the president, vice-presidents and scientific secretary shall be approved by the SNK of the USSR on the representation of the USSR NK of agriculture and NK of grain and livestock state farms; d) branches of the academy shall be abolished (SZ USSR, 1934, No. 37, Article 296). These regulations were developed further and specified in the Charter of the AAAS ratified by the SNK on the same day (SZ USSR, 1934, No. 37, Article 298). The charter specified the basic tasks of the academy as the highest scientific institution for agriculture in the USSR, delegating to it the following: a) the development and implementation of plant and livestock resources of the USSR and the studies of the conditions for introducing new types of plants into agricultural use; b) the scientific elaboration of the basic problems of socialist agriculture; plant culture, selection and seed farming, livestock raising, mechanization, electrification and chemicalization of agriculture, irrigation and melioration, agri-

cultural economics, as well as calculation of soil resources and their productive characteristics; c) scientific compilation of the experience of leading state farms, machine-tractor stations, and collective farms, as well as the application of world-wide experience in the field of agriculture in the interests of developing the agriculture of the USSR; d) comprehensive scientific aid to the large-scale development of agricultural laboratories, experimental fields and farms on collective farms, machine-tractor stations and state farms; scientific expert examination on problems of agriculture based on the tasks presented by the government of the USSR, as well as the people's commissariat of agriculture of the USSR and the people's commissar of grain and livestock state farms; f) the training of high qualification cadres for scientific research in the area of agriculture (paragraph 2).

The charter mentions specially that the academy shall establish and support scientific ties with the AN USSR, the ANSR, scientific institutions and societies both in the USSR and abroad (paragraph 3). One of the forms of these ties with the AN USSR was the rule contained in the charter according to which "members of the AN USSR of the agricultural sciences, on the strength of this rank, shall be at the same time active members of the Academy of Agricultural Sciences Imeni V. I. Lenin" (paragraph 12). The charter of 1934 also stipulated in detail the subordination of the academy. The charter contained the statement that the academy was attached to the NK of agriculture. However, on the strength of the charter many questions were to be resolved directly by the government. These included the following: a) ratification of the list of scientific research institutes forming an organic part of the academy (paragraph 4); b) ratification of the academy work plans, on the representation of the people's commissar of agriculture and the people's commissar of grain and livestock state farms (paragraph 5); c) ratification of the president, vice-presidents and scientific secretary of the academy, at the representation of the same people's commissars (paragraph 25). The academy was given the right to make its representations directly to the SNK of the USSR and deal with all government organs of the USSR of the union republics on questions of its activities (paragraph 7). Certain features which are peculiar, compared with the charter of the AN USSR, are contained in the charter of the AAAS in the section dealing with the composition of the academy. The academy consisted, in accordance with the charter of 1934, of active members, honorary members and corresponding members. The charter stipulated the election of honored and deserving practical workers in the field of

agriculture, alongside permanent scientists, to membership as active members of the academy (paragraph 12) as well as corresponding members (paragraph 15). Citizens of the USSR as well as foreigners (paragraphs 14 and 15) could be elected to honorary membership of the academy as well as corresponding membership, while only Soviet citizens could be elected to active membership (paragraph 12). The charter provided that the procedure of nominating candidates for active membership and corresponding membership of the academy, as well as preliminary examination of the candidacies and the elections themselves, shall be determined by a special regulation ratified by the USSR people's commissar of agriculture and the people's commissar of grain and livestock state farms (paragraph 18) on the representation of the president of the academy. Active members of the academy were given the following obligation by the charter: "To carry out work in their specialty on the instructions of the president of the academy and the general assembly of academicians, as well as to be present at general assemblies of academicians and at sessions of the corresponding sections" (paragraph 13). Honorary members and corresponding members participated in the general assembly with a consultative voice (paragraph 19).

The charter contained several substantial peculiar features in the section stipulating the direction of the academy. Among these features it is necessary to mention first of all the extremely broad scope of authorities of the president of the academy. The charter delegated the president with direction of all the operations of the academy with the scientific research institutes forming an organic part of the academy, and in particular: a) convocation of the session as a general assembly of academicians and chairmanship at these sessions; convocation of meetings and conferences for discussion of basic scientific, methodological and organizational problems of agriculture; organization of permanent and temporary commissions for various problems of a complex and special nature; b) ratification of programs and methodological directives of placing scientific research in the institutes of the academy; c) ratification of plans and reports by scientific research institutes of the academy, on the representations of the sections of the academy; d) elaboration of work plans and estimates of the academy; e) appointment and discharge of directors of the academy's scientific research institutes; f) drawing up of annual reports on the scientific work of the academy, together with the scientific research institutes forming an organic part of it; g) organization of the publication and printing of scientific works by the academy (paragraph 26).

The 1934 charter did not provide the formation of an academy Presidium in the AAAS. All problems requiring collegiate discussion and solution by the scientist-members of the academy had to be introduced directly into the general assembly of the academy. The president of the academy carried out the tasks placed before him with the aid of his two deputies; the first vice-president, second vice-president and scientific secretary of the academy. The 1934 charter continued in effect until 1956 without any sutstantial changes. On 10 April 1956 the CC of the Party passed a resolution "measures for improving the work of the AAAS" which outlihed several substantial changes in the organization and activities of the AAAS, having as a goal an improvement in the work of the academy, an increase in its role in the leadership of the development of agricultural sciences in the country and the unification of the forces of scientific workers for the successful carrying out of the tasks placed before agriculture. The resolutions stressed that the AAAS was not strictly the highest scientific institution for agriculture in the USSR, but the highest administrative scientific-methodological center in the field of agricultural science. The AAAS was given by this resolution the job of coordinating scientific research on agriculture being carried out in the country by all scientific research institutes and experimental stations, and general methodical direction of all scientific research in the area of agriculture being carried out in the country. In order to realize the scope and significance of this function of the academy, it is necessary to realize that by the end of 1957 there were 771 scientific research institutions in the Soviet union serving agriculture (branch and zone institutes, 95 oblast state stations, 325 experimental stations) as well as 99 agricultural colleges which were carrying out important scientific research projects in the field of the agricultural sciences.[1]

The CC of the Party also considered it necessary to form a Presidium for the AAAS with the following members: president, three vice-presidents, academician-secretary of the Presidium and seven Presidium members, including academicians-secretaries of the departments. The following departments were formed in the academy: a) agriculture, b) stock-raising, c) mechanization and electrification of agriculture, d) forestry and conservation, e) economics and organization of agricultural production. The total number of members of the academy was specified at 75 active members and 75 corresponding members.[2] The legal status of scientific institutions forming an organic

part of the AAAS is defined by the charter of the academy, regulations on the corresponding scientific institutions, ratified by the academy itself.

3. The USSR academy of medical sciences (AMS) was formed on a resolution by the SNK of the USSR on 30 June 1944. The charter of the academy was ratified by a resolution of the SNK of the USSR on 30 June 1944. The USSR AMS is the highest scientific institution in the field of medicine in the USSR (paragraph 1). The basic tasks of the academy, according to its charter, are the following: (paragraph 2): a) the scientific elaboration of the basic problems of the theory and practice of medicine; b) the scientific approval of the most important discoveries and inventions in the field of medicine; c) the training of highly skilled scientific workers in the field of the medical and biological sciences. The USSR AMS consists of three departments: 1) the department of medical-biological sciences; 2) department of clinical medicine; 3) department of hygiene, microbiology and epidemiology. The activities of the departments are determined by regulations pertaining to them, ratified by the Presidium of the AMS (paragraph 4). The Presidium of the AMS, on 12 May 1945, ratified the "regulations on the departments of the AMS" which were common for all departments and not for each department separately as stipulated in the charter. The charter of the AMS determining the composition of the academy, as well as the procedure of electing active members, honorary members and corresponding members, basically contains regulations analogous to those of the charter of the AN USSR. However, in several respects they differ. The charter contains important instructions to the effect that the active members of the academy "shall carry out scientific work in the institutions which form an organic part of the academy, in accordance with the plan of the latter, and in institutions not forming an organic part of the academy--according to individual plan approved by the Presidia of the academy" (item b, paragraph 8). There is an analogous instruction in respect to corresponding members (item b, paragraph 10). The work plans for the academy are approved annually by the general assembly of the academy (paragraph 3, item b). The charter further stipulates that "active members and corresponding members of the AMS of the USSR, employed in institutions not forming an organic part of the academy, in case of need can be given funds and workers by the academy, in correspondence with the individual scientific work plans approved by the Presidium of the Academy (paragraph 11). There are also certain peculiar features in the resolution

of questions dealing with the organization of the direction of the academy. The charter states, for example, "for all members of the Presidium, work in the latter is for them the basic job, besides which they may hold another office only with the consent of the Presidium of the academy" (paragraph 28). The obligations of the Presidium of the academy include "appointment and discharge of directors of scientific research institutes of the academy with the subsequent ratification of the general assembly of the academy" (item g, paragraph 30).

As in other Soviet AN, the basic organs of scientific research of the AMS of the USSR are its research institutes. In accordance with the charter, regulations on the scientific-research institute are ratified by the Presidium of the academy. Substantial changes in the legal status of the AMS of the USSR and in its administrative organs were introduced by order of the USSR ministry of public health, "delimitation of functions between the Presidium of the AMS of the USSR and the learned scientific council of the USSR ministry of public health." Formerly many institutions engaged in planning and coordinating scientific research: the USSR AMS, learned councils of the USSR ministry of public health, and ministries of public health of the union republics; individual main administrations of public health ministries, although this led to a fractioning and duplication in subject matter, a thinning out of forces and funds. In accordance with the promulgation of the above order, the planning and coordination of the study of the most important problems of medical science were delegated to the AMS and its Presidium. This change, expressed in the charter of the academy, endows the Presidium of the AMS with purely administrative functions in the area of planning scientific research and extends its direction to many scientific institutions and VUZy which do not form part of the academy. This is one of the main features of the legal status of the Presidium of the USSR AMS. At the XXIth Session of the USSR AMS (April 1957) proposals were made to change the very structure of the academy. In discussing the report of the Presidium, several persons present at the session expressed doubt as to the expediency of maintaining a bureau of departments. Active member of the academy Davydovskiy had the following to say: "The main principle of the organization of science in our country is the principle of problems. The center of attention of the academy should be occupied by problems and not individual disciplines. Since there is no problem which is concerned completely with only one profile, the so-called departmental

principle cannot be viewed as something basic and expedient in the structure of the academy."[3] The general assembly of the academy did not pass a resolution for the immediate reorganization of the entire structure of the academy. However, the question of the role of the departments and their administrative organs throughout the system of academy institutions has not been removed from the agenda and, in our opinion requires supplementary study for the purpose of eliminating present unique "bureaucratic" obstacles which separate the scientific institutions of the various departments.

4. The USSR academy of construction and architecture (ACA) was formed on a resolution of the CC of the Party and the SN of the USSR on 23 August 1955, "measures for further industrialization, improvement of quality and decrease in cost of construction." The academy is attached to the state committee on construction matters of the USSR SN. In connection with the formation of the academy, the USSR academy of architecture[4] was abolished with the same resolution. All institutions of the USSR academy of architecture were transferred to the USSR ACA. The CC of the Party and the SM of the USSR delegated the ASA the elaboration of the most important scientific problems in the field of construction, architecture, the use of construction materials and construction economy; scientific research and experimental projects on standardization of buildings and structures and unification of building products and implements; coordination of scientific work carried out by scientific organizations and technical VUZy working in the area of construction and architecture; information on Soviet and foreign experiments in construction and training of scientific cadres of high qualification.[5]

The charter of the USSR ACA, on the basis of the resolution by the SN USSR, was ratified by an order of the USSR state construction committee on 15 August 1956. This charter defines the ASA of the USSR as the highest scientific institution in the field of construction and architecture in the USSR. Proceeding from the tasks placed on the academy as the highest scientific institution in the field of construction and architecture in the country, the charter places in the jurisdiction of the academy, elaboration of proposals on the development of construction technology and architecture in the USSR, as well as the elaboration according to tasks given by the USSR state construction committee, of plans of the annual and future development of the most important scientific research and experimental projects and plans for the incorporation of the achievements of science and technology in construction (item a, paragraph 3). This determination of functions of

the academy as the highest scientific institution in its field is one of the unique features of the charter of the ACA, differentiating it from the charters of other ANs. The charter of the academy has certain other unique features, which proceed from this role of the academy as the highest scientific institution. According to the charter, the Presidium of the academy has a council for coordination of scientific activities in the field of construction and architecture, with extremely broad authority. This council, as the charter states, "on the instructions of the Presidium of the academy coordinates and corrects the work of scientific research institutions and technical VUZy on questions dealing with scientific research in the field of construction and architecture, independent of their departmental subordination, places before them the main scientific problems and examines the plans of scientific research projects, finished projects as well as measures for incorporating the results of scientific research into construction and planning practice." (paragraph 5). No other AN or organs attached to it has such broad authorities in relation to scientific institutions not forming part of it. As in other academies, the highest administrative organ of the academy is the general assembly of active and honorary members of the academy (paragraph 6). The charter states further that "the general assembly directs all scientific activities of the academy, examines the plans for research projects" (paragraph 6), by means of which the "operational" nature of this organ is stressed, its responsibility not only for the general planning of scientific work in the institutions of the academy but for the specific results. During the period between the sessions of the general assembly all of the activities of the academy are administered by the Presidium of the academy, which is elected by the general assembly (paragraph 9). The competence of the general assembly of the Presidium of the academy is determined in the charter approximately the same as in the charters of other soviet academies. However, in defining the competence of the Presidium of the academy, the charter does not express with sufficient definition the principle of responsibility of the Presidium before the general assembly as the highest organ of the academy. For example, the charter contains no "generally accepted" paragraph such as in other charters dealing with the obligations of the Presidium to report to the general assembly on its most important resolutions. The Presidium of the academy possesses certain authorities in conducting elections to academy membership, which are not enjoyed by the Presidia

of other academies. In accordance with the charter, it examines the lists of candidates for occupying vacant positions of active members and corresponding members of the academy, as well as candidates for honorary members of the academy, and reports its recommendations to the general assembly (paragraph 35).

The unique features of the charter of the ACA of the USSR consist also in the fact that in this academy the principle has been established of appointing heads of branch academies and directors of scientific research institutes of the academy (paragraph 11 V, and paragraph 22) by the Presidium of the academy without subsequent ratification by the general assembly of the academy. Finally, one of the main features of the charter is the determination of the member composition of the academy, the procedure of election as well as rights and obligations. The USSR ACA according to paragraph 1 of its charter joins prominent scientists in the field of the construction and architectural sciences, as well ass outstanding builders, architects and technologists of the construction material industry. The members of the academy--active members, honorary members and corresponding members--are elected by the general assembly of the academy (paragraph 6). "Progressive foreign specialists in the field of construction and architecture, who have enriched construction and architecture with works and discoveries of a particularly outstanding significane" (paragraph 30) can be elected as members of the academy. The right to bring a candidacy before the academy is given, according to the charter, not only to scientific institutions, public organizations and scientific workers, but to ministries and departments as well as individual specialists in the field of construction and architecture (paragraph 33). In the section "rights and obligations of active members and corresponding members of the academy" the obligation of all active members and corresponding members to carry out their work according to the annual plans for scientific work of the institutions of the academy is stressed, and for persons who do not work in these institutions, according to individual plans approved by the Presidium of the academy. Annual reports by all active members and corresponding members, independent of the major place of employment, must be examined and approved by the Presidium of the academy (paragraph 24).

Members of the academy have the obligation to lend direct scientific-technical aid in incorporating into construction practice the results of the scientific research projects of the academy (paragraph 26). The ACA

carries out its tasks primarily through the system of their scientific institutes. In view of the change in the organization of the administration of construction and the transition to the territorial principle, the USSR ACA and the state committee on construction of the USSR SM have outlined and are implementing certain basic changes in the distribution of the system of scientific institutions and their more efficient organization. These measures include the following: a) relocation of certain central institutions to the eastern regions of the country; b) organization in the eastern regions of the country of new complex scientific institutions--branches of the academy; c) a more clear-cut delimitation of the sphere of activities of the academy's scientific institutions and the functions of the scientific research institutes, planning organizations and design bureaus in the jurisdiction of the sovnarkhozes; concentration of the efforts of the academy's scientific institutions on the elaboration of important future problems which have a decisive significance for improving the operations of the entire construction industry.6

5. The USSR academy of arts (AA) was formed as a result of the transformation of All-Russian Academy of Arts to an all-union academy. This transformation took place due to a resolution of the USSR SN of 5 August 1927 (SP USSR, 1947, No. 6, Article 114). The present charter of the academy was ratified by the USSR SN on 29 September 1947. In accordance with the present charter, the AA is the highest scientific institution, uniting the most eminent workers in the field of the graphic arts (paragraph 1). The academy also trains highly skilled artists. The basic scientific tasks of the academy are the following: Elaboration of problems dealing with the theory, the history of art, and art criticism, the struggle against formalism, naturalism and other manifestations of modern bourgeois decadent art, with the absence of ideology and apoliticality in art, with pseudo-scientific idealistic theories in the field of esthetics, the training of scientific workers in the field of the graphic arts (paragraph 2). According to the charter, the AA consists of active members (academicians), honorary members, corresponding members, scientific workers, instructors and other specialists working in the institutions of the academy (paragraph 4). Artists and scientists of the USSR as well as from other countries can be elected to honorary membership in the academy (paragraph 8). Honorary members of the academy participate in the general assembly of the academy with the same rights as active members (paragraph 19).

The charter of the AA of 1947 provides a procedure of examining candidates for active and corresponding members of the academy, nominated by artists and scientific institutions, public organizations, individual artists, scientific workers in groups, which differs somewhat from the AN USSR. As is well known, candidacies for the AN USSR are examined by the departments, that is, by the scientific public itself, after which candidacies are introduced for the examination of the general assembly. In the AA all materials on candidates are examined by the Presidium of the academy, on the representation of which the director of the department to which the academy is subordinate approves the list of candidates designated for election (paragraph 14). One cannot say that this procedure of preliminary examination and ratification of candidacies nominated by the public is more democratic in comparison with the procedure used in the other academies. On the contrary, it leads or at least could lead to a nullification of the right given to scientific institutions and artists collectives and scientists to nominate candidates for the academy. A unique feature of the structure of the academy, proceeding from its tasks, is the presence of schools alongside the scientific research institutions, which are under the jurisdiction, as other institutions, of the Presidium of the academy. As for the administrative organs of the academy, the charter of the AA has established a basic system of organs which is analogous to the other academies, and, primarily, to the AN USSR. As in other academies, the highest organ of the academy is the general assembly of active and honorary members of the academy, and during the period between sessions--the Presidium of the academy, which is elected by the general assembly and contains the president of the academy, vice-presidents, scientific secretary and members of the Presidium. The competence of these organs is roughly analogous to the competence of the parallel organs of other academies of sciences.

2. Academies of Sciences of Union Republic Ministries and Departments

1. In certain union republics there are also branch academies of sciences, under the jurisdiction of various ministries. In the RFSFR there is an academy of pedagogical sciences and an academy of communal economy, in the Ukrainian SSR--an academy of agricultural sciences and an academy of construction and architecture, in Belorussia, Kazakhstan, Uzbekistan and Georgia--academies of agricultural sciences.

The RSFSR Academy of Pedagogical Sciences (APS) was organized in 1943 on a resolution by the SNK of the RSFSR, 6 October 1943, (SP RSFSR, 1944, No. 1, Article 2), ratified by the SNK of the USSR.[7] The first charter of the RSFSR APS was ratified by the government of the RSFSR on 14 February 1944 (SP RSFSR, 1944, No. 5, Article 30). On 6 December 1947, the RSFSR SM ratified a new charter of the APS, still operating at present, with certain amendments (SP RSFSR, 1948, No. 2, Article 14). In accordance with the charter, the APS of the RSFSR is the highest scientific institution, uniting the most outstanding scientists in the field of the pedagogical sciences (paragraph 1). The work plans of the academy are ratified by the SM of the RSFSR on the representation of the RSFSR minister of education. The academy consists of active members, honorary members, corresponding members and the basic staff of scientific workers employed in the institutions of the academy. Scientists who have enriched pedagogy with works of major scientific significance in aiding the development of popular education can be elected to active membership. Major scientists in the field of the pedagogical sciences and outstanding educators of the USSR can be elected to corresponding membership. Active members and corresponding members are elected only from among Soviet citizens. Both scientists of the USSR as well as from foreign countries, who have enriched pedagogical science with works of particular scientific significance, can be elected to honorary membership of the APS. Candidates for active, honorary and corresponding membership are nominated and recommended by scientific institutions, VUZy, public organizations, individual scientists and groups of scientists. The names of the nominees are published in the press. The list of candidates, drawn up by the Presidium of the APS, and comments on them by institutions and persons, with the exception of the Presidium, are announced at the general assembly of the APS, after which the election of candidates for active membership and corresponding membership takes place, by secret ballot, and those persons who receive no less than two-thirds of the total number of votes cast are elected. The system of institutions of the APS includes the following: scientific research institutes, laboratories and certain other scientific institutions, operating on the basis of regulations regarding them, ratified by the Presidium of the academy.[8]

The RSFSR academy of communal economy (ACE) is under the direct jurisdiction of the SM of the republic. In accordance with the regulations ratified by the govern-

ment of the RSFSR (SU RSFSR, 1931, No. 54, Article 42), the academy carries out scientific research elaboration and solution of problems of communal economy and housing; socialist reconstruction of existing city housing developments, factory-plant, state farm and collective farm settlements, as well as the construction of new cities; measures in the area of urban economy, furthering the reorganization of the way of life of workers on socialist principles; socialist relocation as well as the planning of territory designated for new settlements and the replanning of existing populated areas; efficient planning and equipment of apartment houses and structures for communal services; measures for efficiency and cost decrease in the construction of apartment houses and communal structures; efficient use of the housing fund and communal enterprises, as well as other problems.

The academy also trains the administrative cadres for workers of housing and communal economy. The head of the academy is the director appointed by the government of the RSFSR from among the members of the collegium of the people's commissariat of communal economy. The council of the academy is under the chairmanship of the director of the academy. The council has the following tasks: a) coordination of scientific research work with departments, institutions and organizations, the activities of which affect the work of the academy; b) examination of the work plan of the academy, reports on its activities and presentation of these reports for the examination of the government of the RSFSR; c) discussion of scientific problems brought up by the academy as well as by other organizations, as well as discussion of methods of scientific research work by the academy. The academy includes scientific research institutes and other scientific institutions operating on the basis of regulations dealing with them, ratified by the director of the academy. The basic feature of the ACE which differentiates it from other academies, both republic and all-union, consists in the fact that it has no particular membership.

2. The union republic academies of agricultural sciences were formed in 1957 in the Ukrainian, Belorussian, Kazakh, Uzbek and Georgian SSRs. The basic tasks of each of these academies, as is stated in the resolutions of the SNs of the republics on their formation (for example, SZ Belorussian SSR, 1957, No. 1, Article 10), consists in raising the level of administration of scientific research in the area of agriculture, raising the theoretical level of research, improving training of cadres and acquisition of knowledge and practical skills in handling large-scale agricultural production, as well as assuring the full use

of scientific and pedagogical cadres in carrying out tasks faced by agricultural science. The unity of tasks placed before the academies also causes the presence of many common features in their legal status. All academies are attached to the republic ministries of agriculture. Each of them consists of active members, corresponding members and honorary members, elected by the academy itself (with the exception of the initial staff of academicians and corresponding members, appointed by the government of the republic). All academies have under their jurisdiction NIU, transferred to them from the jurisdiction of republic and all-union organizations. However, each academy also has its own peculiar features, proceeding from the specific conditions of the development of agriculture in the republic. The Ukrainian SSR academy of agricultural sciences is the highest scientific methodological center in the republic in the field of agricultural science. It has the following functions: direction of the scientific research work of all scientific research institutes in the republic, oblast state agricultural experimental stations of other scientific institutions of the Ukrainian SSR; propaganda and incorporation in production of achievements of science; regular direction of scientific research of the agricultural VUZy of the republic. The main peculiar feature of the organization of the Ukrainian SSR academy of agricultural sciences is the joining of scientific research and educational functions.[9]

It possesses, besides scientific research institutes and other scientific institutions, the Academic Agricultural Academy. This aids in unifying the efforts of the faculty and scientific workers both for solving specifically scientific as well as scientific-educational problems in the field of agriculture. In the Belorussian, Kazakh, Uzbek and Georgian academies of agricultural sciences there are no VUZy attached. But, as the Ukrainian academy, they carry out regular direction of the scientific work of all agricultural VUZy within the republic. The specific character of the academies is shown most clearly in the composition of their divisions. In the Ukrainian SSR academy of agricultural sciences there are five divisions: 1) agriculture, 2) livestock raising, 3) mechanization and electrification of agriculture, 14) forestry, water technology and melioration, 5) the economics and organization of agricultural production. In the Kazakh academy there are the same divisions as in the Ukrainian academy, with the exception of the division of forestry, water technology and melioration, of which there is no need in Kazakhstan. In the Georgian academy there are four divisions: 1) agricul-

ture, 2) perennial plantings, 3) stockraising and veterinary science, 4) mechanization and electrification of agriculture, hydraulic engineering and land reclamation. In the Uzbek academy there are five divisions: 1) cotton farming and agriculture; 2) irrigation and forest reclamation; 3) stockraising and silk production; 4) mechanization and electrification of agriculture; 5) economics and organization of agricultural production. The tasks of the academies and their organizational forms have certain other peculiar features, which proceed from the specific conditions of the development of the economy and culture of the republics.

Chapter V.

LEGAL STATUS OF BRANCH SCIENTIFIC RESEARCH INSTITUTES

L. System of Branch Scientific Research Institutes

1. The Soviet state, during the first years of the Revolution, began to organize, parallel with the academyes of sciences and its institutions, branch scientific research institutes, not forming an organic part of the academy of sciences. The number of these institutes increased constantly as the country made the transition to peaceful economic development. The material-technical base for the institutes became stronger, and the number of scientific workers employed in them increased. As a result of the measures taken by the Party and the Soviet government, an extensive system of branch scientific research institutes and laboratories has been formed both in the capital as well as on the local level in the Soviet Union. These are engaged in working in the various fields of science and are for the purpose of incorporating scientific achievements in industry, construction, transport, agriculture, medicine and other branches of the economy and culture. In the preceding chapter it was stated that the activities of the branch scientific research institutions in the area of the construction sciences are unified and coordinated by the USSR ACA, and the activities of scientific institutions in the field of agriculture--by the AAAS, and in the field of the medical sciences--by the USSR AMS. The system of NIU of industry developed in a different manner, for there were no scientific institutions created which would unify and coordinate all scientific research activities in the field of the technical sciences. There is also no organ of state administration which would be delegated such tasks.

2. The development of scientific institutions of industry in the USSR was determined primarily by the growth of industry itself and was directly dependent on the specific tasks of the industrialization of the country and its technical progress, which were handled and are handled by Soviet society at specific stages of history. Up to 1929 the basic industrial scientific research institutions were in the jurisdiction of the Higher Economic Council. A resolution of the CC of the Party on 5 December 1929 "reorganization of the administration of industry" in order to bring the activities of scientific research institutes closer to the practical tasks of production, recognized it as essential to transfer scientific research institutes

dealing with problems having a bearing predominantly to a specific branch of industry, directly to societies of the Higher Economic Council.[1]

After the 1932 transformation of the USSR higher economic council into the all-union people's commissariat of heavy industry, removal from its jurisdiction of light industry and the lumber industry (SZ USSR, 1932, No. 1, Article 4), the development of the system of scientific research institutes for industry and their operative direction were transferred to suitable people's commissariats (ministries). Along with the division of the people's commissariats, a unique specialization of scientific research institutes on the departmental principle took place, that is, depending on the branch of industry under the jurisdiction of a specific NK (ministry). Placing the development of the system of scientific institutions directly on the central organs of state administration which were carrying out the direction of various branches of industry, justified itself through many decades. However, during the course of the development of the various systems of industrial management, as well as that of the scientific institutions serving its needs, certain negative features of the "bureacratic" organization of institutes and laboratories began to be manifested. During the national discussion of the theses of Khrushchev, the existing system of branch scientific research institutions in industry caused serious criticism by many persons in the scientific community, engineering-technical workers and production innovators.

How are the basic critical remarks to be summarized? 1) Division of all scientific research institutes by departments leads to a "fractioning" of science, hinders the growth of powerful scientific institutions, both in respect to equipment and cadres; 2) the attempts on the part of each ministry and department to create their own private scientific institutions for the scientific servicing of their own branches of industry led to the rise of "parallel" institutions which duplicated each other, both in the heart of the country and along the periphery, hindered the formation of complex scientific institutions; 3) the bureaucratic break-down of scientific institutions of industry did not further an efficient territorial allocation of the system of scientific institutions, and due to the gravitation of the various institutes toward the administrative centers, led to an excessive concentration in a few cities and a break-away from the production base; 4) the distribution of scientific institutions among many departments hinders the concentration of the efforts of

scientists on basic scientific problems which are of the greatest future importance for industry. During the discussion of the theses of Khrushchev, many specific proposals were made for a more efficient organization of the system of scientific research institutions of industry. "Scientific research institutes," academician P. A. Rebinder wrote, "should gravitate not toward ministries, central administrations or trusts, but to the industrial bases, should serve not ministries but serve industry and construction directly! Each large economic rayon should possess scientific centers with their own creative individuality."[2]

As for measures which could effect a practical solution to relocation of scientific institutions toward their productive bases and a more efficient organization of the system of scientific institutions of industry, proposals were introduced to effect a considerable strengthening of the local branches of central scientific institutions. In order to speed up the formation of scientific institutions in the economic rayons, corresponding member of the AN USSR A. I. Tselikov proposed that all large scientific research institutes in Moscow, Leningrad and Kiev should be obligated to organize bases immediately of their institutes in economic rayons, predominantly eastern ones, and transfer to these bases a portion of their scientific workers, laboratory equipment and subject matter, in order that these bases might develop into leading institutes, and those institutes remaining in Moscow and Leningrad would be reorganized into their bases.[3]

There were many proposals to join small scientific research institutions to VUZy or industrial enterprises.[4] Approving the idea expressed in the theses of Khrushchev of bringing scientific institutions of industry and construction closer to their production bases and transferring them to the jurisdiction of the sovnarkhozes of the economic rayons, many scientists, as well as engineering-technical workers, expressed the opinion that it was essential, in carrying out the reorganization of the administration of industry and the liquidation of ministries, to preserve and strengthen leading main scientific research institutions of industry, placing them directly within the jurisdiction of the central organs of the USSR.[5]

In the opinion of some of the authors of these proposals, subordination of specialized branches of scientific research institutes to corresponding administrations of the sovnarkhozes of economic administrative rayons would inevitably lead to a limitation in the activities of these organizations to problems of interest chiefly to the enterprises of that rayon and to a weakening of the technological

retooling of the branch as a whole. In particular, such a transfer would hinder the work of these institutes in testing new machinery, equipment and technological processes at enterprises forming a part of other economic rayons, as well as the elaboration of measures for incorporating the results of completed scientific research and design projects, sometimes affecting a large number of economic rayons and several branches of industry. The fear was also expressed that the transfer of central scientific research institutes to the jurisdiction of sovnarkhozes might lead to a lowering of the level of scientific work. "It would be a great mistake to underestimate the significance of central institutes and the usefulness of their concentration in a few large industrial centers of the country. Significant technological break-throughs take place chiefly thanks to the mutual fertility of various scientific progressions and particularly thanks to application of the most recent successes of natural science in the field of technology. Direct ties and constant contact between the scientists of various specialties located in one area are today an essential condition for technological progress. If we do not have a sufficient number of well-developed central scientific institutes, such a situation could arise whereby it would be difficult for the numerous institutes and laboratories to operate. Their work would be poorly coordinated, the flow of new technical ideas would dry up, as well as that of radically new proposals, and it would be difficult to effect illumination of technological processes by the light of theoretical analysis."[6]

The same fears relative to a possible "fractioning" of the organization of scientific research for the needs of technical progress after large industrial unions of the ministerial type would cease to exist, and the rayon ones would be on a smaller scale, were also expressed by academician P. L, Kapitsa, who made several proposals with the aim of preserving the advantages of centralized administration in solving new technical problems and incorporating them.[7] The idea of main institutes as centers of planning and coordination of scientific work in the various branches was expressed in a printed speech by academician A. V. Topchiyev and USSR AN corresponding member V. A. Kirillin.[8] Taking into consideration the numerous requests by Soviet scientists and engineering-technical workers, the USSR Supreme Soviet and Soviet government, in reorganizing the administration of industry and construction, maintained large main scientific research institutes of industry in the direct jurisdiction of the central institutions of the USSR: scientific institutions under the juris-

diction of abolished ministries were transferred to the Gosplan and other central institutions of the USSR, with delegation to these institutes of regular direction of similar institutes, branches and divisions of institutes transferred to the union republic SMs.

Thus, at present, industrial scientific research institutions are under the jurisdiction of certain central institutions of the USSR (Gosplan, ministries), sovnarkhozes of administrative and economic rayons as well as certain large industrial enterprises. The legal status of industrial scientific research institutions under the jurisdiction of central institutions is similar in many respects to the status of scientific research institutes of other central institutions. The common features of the legal status of the central branch scientific research institutes are the following: a) the procedure of resolving questions pertaining to their organization; b) the nature of the relations between these institutes and organs of state administration under whose jurisdiction they have been placed; c) their functions in coordinating the activities of other scientific institutions of the same branch of the economy and culture; d) the scope of their rights as juridical persons; e) the scope of the rights of the directors (heads) of the institutes; f) the legal forms of participation by the scientists in the affairs of the institute. Variations in the legal status of institutes have to do with certain "details," determined by the specific nature of the scientific tasks or specific nature of that branch of the economy in which the achievements of the specific scientific institution are used chiefly. There are also unique features of legal status proceeding from the subordination of scientific research institutes and, primarily, the subordination of these institutes to organs of state administration of the USSR or union republics. Both general features, common to all or to many scientific research institutes, and features which only certain of them possess, are determined primarily by the charters of the institutes. During the first years of Soviet authority the above questions were resolved in the charters or in regulations on each scientific research institute. Subsequently parallel with these individual charters, model charters or regulations began to be ratified, which were extended to all institutes of a specific department or branch of science. The model regulations and charters resolved the basic questions dealing with the scientific research institutes of the RSFSR NK of education, the scientific-technical administration of the higher economic council and other councils. Some time ago attempts were made to elaborate a single document for scientific research institutes--regulations on scientific

research institutes--which would be ratified by the government and extend equally to all of the country's scientific research institutes without exception.[9]

These attempts were not crowned by ratification of the document. It seems to us that there are good reasons for this. The basic questions dealing with the organiz - tion, their internal structure and legal status are determined primarily by their scientific tasks, their position in the system of scientific research institutions in the country. Some tasks are decided by scientific research institutes of the AN USSR and other Soviet academies of sciences, while others--by branch institutes of ministries and departments. But the diversification of scientific tasks does not exhaust the reasons for rejecting the idea of a single regulation for all institutes. These reasons must include measures taken by the Soviet government and the Party, including the extension of the rights of the union republics. In the light of these measures it is difficult, for example, to prove the necessity of transferring to the USSR SM the functions of ratifying model regulations on scientific research institutes of union republic academies of sciences, which are being carried out now by the Presidia of these academies. The extension of the rights of the directors of NIU, effected on the basis of the instructions of the XXth Congress of the CPSU and resolutions by the USSR SM, we take as a recognition of the infeasibility of passing a single set of regulations by the government of the USSR, which would regulate all the basic organizational and legal questions of all scientific research institutes without exception, and the necessity to resolve only those questions which cannot be, according to the constitution, resolved independently by the ministries and other organs of administration of the USSR and the union republics. For the above reasons it seems fully justified to maintain practice which has grown up during the past decades, according to which model charters of scientific research institutes of the AN were ratified by directive organs of the suitable academies, and branch institutes--by the heads of the corresponding ministries, sovnarkhozes and other departments. As for individual charters, the very procedure for passing and approving them could be, in our opinion, established in model charters, and should not in all cases correspond to the procedure of ratifying model charters. For example, it seems to us that in respect to if not all, then many institutes and departments, the right to ratify an individual charter, drawn up by the scientific collective of this institute and approved by its director, could be presented to

the head of the proper main administration, and in the AN--to the bureau of the proper department.

Such a procedure would make these individual charters more specific, aiding in organizing the work of the collective. It would hardly be an exaggeration if we, on the basis of observations in certain institutes, were to say that the heads of the institutes do not consider the charters of the institutes directed by them to be "working" documents, and sometimes they do not even have the slightest suspicion as to their very existence. In their present form they perhaps do not deserve any other attitude, for they do not resolve the vitally important question of work organization in the scientific institutions. In cases whereby all questions of work organization which are specific for the institute (definition of its goals and tasks, forms of ties with other scientific institutions, structure, features of the labor regulations, etc.) were resolved in its charter, drawn up with the participation of the scientific community and organizations interested in the work of this institute, this document might have great significance for the improvement of scientific work. We shall now pause to disduss certain general questions dealing with the legal status of scientific research institutes, about which we have mentioned: the procedure of organizing them, rights and obligations of institutes as juridical persons, and rights of institute directors and certain other questions.

2. Procedure of Organizing Branch Scientific Research Institutes

1. During the first years of Soviet authority branch institutes were usually organized by resolutions of the government. In 1929, this right, in respect to scientific research institutes attached to the USSR NKs, was given to the NKs, which resolved questions dealing with the organization of new scientific research institutes in coordination with the NK of finances, Gosplan and the USSR NK of worker-peasant inspection. (SZ USSR, 1929, No. 52, Article 482). However, during the course of the last two decades, questions dealing with the organization of new scientific research institutes have usually been resolved by the government. On 4 May 1955 the USSR SM delegated the USSR ministers the right to form, reorganize and abolish scientific research institutes of union subordination, with the consent in each case of the USSR ministry of finances. With such a procedure there was always the possibility to form scientific institutions to carry out tasks which could

be resolved most successfully by existing scientific research institutions. The ministry of finances and other organs, with which the ministry was to agree on the question of the organization of the new institute, and sometimes this "interested" ministry itself, cannot know with sufficient concreteness how important the formation of a new institute is for the carrying out of scientific tasks placed before the planned institute, and they do not know whether these tasks can be carried out with greater effectiveness and less labor and cash expenditure by institutes of other departments, chairs of VUZy, etc. In the union republics, by a resolution of the USSR SM of 29 August 1957, the right to establish the procedure of the formation, reorganization and abolishment of enterprises, organizations, institutions and schools of ministries and departments of republics and executive committees of local soviets of worker's deputies, was delegated to the republic government (SP USSR, 1957, No. 10, Article 105).

2. With the tremendous growth of the number of scientific institutions as well as the number of organs of administration possessing scientific research institutes, more definite "guarantees" are es ential, which would eliminate the possibility of the formation of small scientific research institutes which would duplicate the work of already existing scientific institutions. In this respect the practice developed in the people's democracies is of some interest, where several scientific research institutes of ministries and departments have been set up in a manner which differs from the Soviet organizational procedure. In the Polish people's republic it has been established that scientific research institutes can be formed or removed from the jurisdiction of the state administration of the SM on the representation of the minister in the competence of whom the specific branch of the economy lies.[10]

Regulations on departmental scientific research institutes, ratified by the council of ministers of the people's republic of Bulgaria on 24 June 1953, No. 940, established that scientific research institutes shall be organized by a decision of the SM at the request of the department where they shall be formed, and such a request must be agreed to by the Bulgarian AN.[11] In the Czechslovak republic scientific research institutes can be formed by ministers and directors of central organs with the consent of the government, which is given after hearing the comments of the state planning committee, the ministry of finances, the Czechslovak AN and those central organs, the competence of which affects the activities

of the institute.[12] Under Soviet conditions, as a supplement to existing rules, in our opinion it would be expedient to consider the opinion of the council for coordination of scientific activities attached to the USSR AN in decisions taken by the ministries and departments on questions dealing with the organization of the system of scientific institutions.

3. Legal Questions Dealing with the Organization of Institute Management

1. Regulations of Soviet law determine not only the system of branch scientific organizations and the procedure of their organization. In addition they regulate the organization of the administration of the institute; they determine the scope of the rights of the director (head) of the institute, the legal bases for relationships which form between the director and other organs participating to one degree or another in the administration of the institute (scientific council, directors of the various structural subdivisions) and other questions. All of these questions, as has been mentioned above, are not resolved in the same manner for all of the country's scientific research institutes. But there are certain features common for all in institute administration. Determining the scope of rights of scientific research institutes, their charters (regulations) usually contain instructions that the "institutes shall enjoy the rights of a juridical person and within the limits of the ratified work program and established estimate, possess full operative and economic independence." Such instructions are contained in the charters of both branch and academy institutes. We spoke to some extent of this "full operative and economic independence" of institutes in connection with the characteristics of the legal status of academy institutes (see chapter II): in many respects, effecting both independence in resolving questions of the institutes' scientific work content, as well as the control of funds and equipment allocated to the institutes, it was extremely arbitrary. This also determines certain limitations in the rights of the directors of scientific institutes.

2. The director of an institute is a responsible representative of the state, managing the institute on the principle of single leadership. He is appointed (this is one of the differences in the organization of the administration of branch institutes from academy institutes, where the directors are elected by the members of the academy) by the organ of state administration to

which the institute is subordinate. The rights and obligations of the director are determined by resolutions of the government of the USSR and the governments of the union republics as well as by orders and instructions of the ministries and departments under whose jurisdiction the institutes lie; including model and individual charters (regulations) of the institutes. At present the rights of the directors of scientific research institutes to resolve questions of planning, capital construction and allocation of funds and materials earmarked for the institute have broadened considerably. In a resolution of 10 November 1957 "extension of the rights of directors of scientific research and planning institutes" (SP USSR, 1957, No. 15, Article 143) the USSR SN, in order to increase the responsibility of institute directors in carrying out scientific research project plans as well as in eliminating superfluous centralization in resolving economic questions and securing greater independence in institute management, presented the directors of institutes with several rights enjoyed by the directors of enterprises. For example, the directors of institutes financed by the state budgets were given the right to introduce changes into construction title lists, with a corresponding redistribution of funds for various installations, to approve lower-limit construction title lists within the limits of the fund allocation to the institute for these purposes, to obtain construction materials produced by enterprises of local and cooperative industry, and to resolve certain other economic questions.

Directors of institutes using cost acounting were given, besides the above, the right to approve the institute plan for all qualitative and quantitative indices on the basis of the year's plan (with quarterly break-down), ratified by the higher organization, to ratify yearly, quarterly, and monthly plans of capital repairs, buildings, structures and equipment within the limits of the funds allocated for capital repairs, to assign capital repairs to organizations on contract, and, in connection with this, limits for numbers of workers and total wages with subsequent communication on this to the higher organization. The idea expressed in the resolution by the government of increasing the responsibility and insuring greater independence to the directors of institutes as well as eliminating superfluous centralization in the management of institutes is the basic and directive idea not only in respect to resolving economic questions. It is also the guideline for the entire organization of institute administration. It is therefore natural that it finds its

legal expression in regulatory enactments by ministries, committees and other departments, as well as in enactments by the directive organs of ANs, regulating the rights and obligations of institute directors as a whole.

3. The director manages the institute on the principle of single person leadership. But, as in the administration of industrial enterprises and other organizations, this principle is confined in the institutes with the collegiate principle in actual work with the participation of a large number of scientists in management. The forms of this participation have changed; for example, at one time the directors of scientific research institutes "divided" their rights with the institute board (institutes of the Glavnauka of the NK of education), the collegium (institutes of the scientific-technical administration of the higher economic council), the Presidium of the institute (institutes attached to NKs and central institutes of the Ukrainian SSR). The councils or Plena of the institutes included all scientific workers, while many questions dealing with the organization of scientific work in the institute came within the competence of the councils. At present the institutes possess neither collegia, Presidia, nor Plena, all questions examined by these organs are either now within the competence of the director (administrative-economic and financial questions) or within the competence of the council of the institute as a consultative organ of the director and the director of the institute, who ratifies the decisions of the council (plans and reports of the institute), approval for publication of scientific works, or, finally, within the competence of the institute council alone (examination of questions dealing with the conferring of academic degrees).

The institute council includes the director of the institute (chairman of the council) deputy director for scientific work, heads of the basic structure of subdivisions of the institute (departments, sectors, laboratories), top specialists, scientists and practical workers as well as members of institute public organizations. The staff of the scientific council is ratified by the ministry or department under whose jurisdiction the institute falls, and in cases whereby the council is given the right to accept dissertations for defense, it is ratified by the USSR ministry of higher education. The institute council discusses the institute's scientific research project plans, publishing plans, as well as the result of fulfillment of the most important scientific research projects and questions dealing with the incorporation of completed projects in the national economy; there

is discussion of questions dealing with the training, increase in qualification and certification of scientific cadres, as well as other questions. Studying the present organization of institute management, one must note that, besides the director and the council, the institutes possess an institution not stipulated by charters and regulations, the so-called directorate consisting of the institute director, his deputy, heads of sectors, departments, laboratories and representatives of public organizations. Differing from the former collegia, boards, institute Presidia, the competence and work forms of which were strictly regulated [1] the activities of the directorate are not governed by any regulatory enactments. As a result of this directorates often examine questions which by their nature require broad discussion in council, and sometimes they pass resolutions on questions which should be handled by the the director, on the basis of 1-man management.

In many measures for the further improvement of institute management, the necessity has fully ripened for the regulating of the activities of these institutions, as well as the creation of a clear-cut legal basis for their existence. The basic idea of such activity regulating of the "directorate" should, in our opinion, consist in determining its rights, in the first place, as organs carrying out exclusively consultative functions with the director, and, in the second place, as organs which are auxiliary in respect to the council. Under such conditions the name "directorate", since it does not accurately reflect reality, should be changed, and the organ should be called, for example, "council bureau" of the institute or be called by some other name

4. The correct resolution of the question dealing with the institute's inner structure, the composition of its structural sub-divisions (departments, sectors, groups, etc.) is of great significance in the organization of institute management. At present, as a rule the structure of each institute is determined rather rigidly by its charter, resolutions of higher organizations, staff lists, and other enactments providing for the existence of permanent subdivisions in the institute. For the time being it is an extremely difficult matter to change the quantity and composition of these subdivisions, and even more to form within the institute new and temporary formations for the resolution of important, concretely outlined tasks by clearly stated dead-lines. At the same time, the need for the organization of such subdivisions arises quite often.

The presentation to institutes of the right to also

form subdivisions with extension to their heads of those rights which are enjoyed by the heads of permanent departments, sectors, etc., in our opinion, would speed up the solution of important scientific problems. This proposal also pertains to the organization of branch institutes. Several industrial ministries are right now developing a system of plant laboratories and are forming in their production rayons branch scientific research institutes in order to develop eventually large scientific research centers. The formation of branch scientific institutions directly at industrial enterprises makes it possible not only to attract plant specialists-engineers, technologists, designers to research activity, but to conduct experimental work and study latest experiments on a broader scale and more deeply. In this work many new legal questions arise which require study and legislation. The formation of branch institutes for the resolution of specific scientific tasks and within specific periods of time is one of these new problems.

CHAPTER VI.

LEGAL FORMS OF ORGANIZATION OF SCIENTIFIC WORK IN HIGHER EDUCATIONAL INSTITUTIONS

1. Basic Tasks of Scientific Research Work in Higher Educational Institutions

1. Scientific research work in the USSR is carried out by, alongside the academies of science and branch scientific research institutions, about 800 higher educational institutions now in the USSR and the Union Republics, where more than one-half of the scientific workers are conducting the work. Scientific research in the higher educational institutions is broadening the front of scientific research in the country, training new scientific cadres and constantly improving those cadres which already exist, and is an essential condition for the successful training of highly qualified specialists for the national economy in the VUZy (vysshiye uchebnyye zavedeniya--higher educational institutions) /singular is VUZ/. The connection between scientific research work and technological activities was always one of the distinguishing features of the world's best universities. This connection, thanks to the efforts of outstanding Russian scientists, became a tradition in many universities and other educational institutions in Russia, finding its expression to one degree or another in pre-revolutionary legislation on public education and, in particular, in university charters.[1]

"Before the revolution," said Academician S. I. Vavilov, "a considerable portion of the research work, which in many cases was excellent, was done in universities and other higher educational institutions, that is, both the education of youth and research work were interconnected organically and inseparably. In many cases a university had on its staff excellent professors-research workers, and the students were transformed from pupils to scientists in one succession. This old tradition produced Newton, Lomonosov and Lobachevskiy, and it is doubtless that this was a living source of an inexhaustible and continuously developing science."[2]

The intensive growth of branch scientific research institutes and laboratories after the October Revolution caused a certain portion of scientific forces to be drawn from universities into these institutions. The rapid growth of the faculties of existing and newly created VUZy, due to a lack of professors and instructors, led to

a situation whereby the efforts of the VUZy were mainly concentrated on pedagogical work. This all led to a decrease in the activities of the VUZy in scientific work and even to the spread of an erroneous view according to which professors and instructors in VUZy should not engage in scientific research work and might limit themselves to educational-pedagogical activities. The Soviet government and the CC (Central Committee) of the Party censured this erroneous view. In the resolution of 23 June 1936 "On the Work of VUZy and on the Management of Universities" (SZ of the USSR 1936, No. 34, Article 308), it was stressed that "without scientific research work the VUZy cannot train specialists at the level of contemporary science and the training of scientific-teaching cadres is unthinkable, as well as increasing their qualifications." This thesis is a directive one in resolving all legal questions of the organization of scientific research work in the VUZy of the Soviet Union. The basic documents determining the organizational and legal bases of scientific activity in the VUZy are the following: a) VUZ Model Charter, ratified by a resolution of the SNK (Sovet Narodnykh Komissarov--Council of People's Commissars) of the USSR of 25 September 1938 (SP USSR 1938, No. 41); b) regulations on the scientific research activities of VUZy, ratified by a resolution of the SNK of the USSR on 18 February 1944 (SP of the USSR 1944, No. 4, Article 31), with amendments resulting from the resolution of the Council of Ministers of the USSR of 12 April 1956; c) resolution by the Council of Ministers of the USSR of 12 April 1956 "measures for improving the scientific research work of VUZy";3 d) orders and instructions by the Ministry of Higher Education of the USSR on questions of the organization of scientific work in VUZy.

These governmental acts determine the basic tasks of scientific research activity in the VUZy, and in addition determine the rights and obligations of the VUZy as a whole and the sub-divisions making up this whole (chairs, laboratories, independent institutes), as well as the faculty in the field of scientific work.

2. The basic tasks of the scientific research activities of VUZy are the following: a) scientific research work which furthers the development of the national economy, the strengthening of the country's defense and the continued progress of science and culture in the Soviet Union; b) raising the scientific qualifications of professor-instructor cadres and training of the faculty in the

sciences; c) the practical familiarity of students with the posing and solution of scientific and technical problems and the drawing of the most talented of them toward carrying out scientific research.

For the successful implementation of these tasks, VUZy, in correspondence with the requirements of the law, undertake theoretical and experimental research of a general scientific nature. They solve scientific-technical problems significant for the national economy. They carry out scientific research work at the request of ministries, departments, economic organizations and other institutions and lend them scientific-technical aid. They assemble text books and monographs which reflect the contemporary state of science and technology. They carry out research work of an educational-methodological nature. They popularize the achievements of science and technology. All of these activities of VUZy have made a significant contribution and are making such a contribution to the development of Soviet science. However, the scope and tendency of scientific work, its quality and concrete use for the country do not yet satisfy the continually growing tasks which the Communist Party and the Soviet government have placed before science. The documents of the XXth Party Congress relate the insufficient activity of the majority of VUZy as one of the greatest defects in the organization of scientific work in the Soviet Union. They are also treated in the above-mentioned resolution by the government of 12 April 1956.

The CPSU and the Soviet government have taken measures designed to increase the role of VUZy in the development of sciences, a broader use of them for solving the problems of technological progress, as well as improving coordination of the scientific work of the VUZy with other scientific institutions in the country. The material base of the VUZy has been expanded. All of the conditions for carrying out large scale scientific research and incorporating completed work into practice have been created for their scientific collectives. Certain obsolete organizational forms, which were used for conducting the scientific activities of VUZy, have been changed, their rights in resolving the basic questions of the organization of scientific work, including in the field of planning scientific work, have been broadened. Until recent years the planning of scientific work of VUZy has shown a definite tendency toward centralization. The ministries and departments with jurisdiction over VUZy were to approve the summary plans of scientific research work for the VUZy. The Ministry of Higher Education was also to examine these summary plans from the viewpoint of

their mutual coordination of the plans of other scientific institutions and the correct use of scientific cadres. During the year, the director of a VUZ could accept new research projects for economic organizations only with the permission of the proper ministry. A resolution of the Council of Ministers of the USSR of 12 April 1956 introduced considerable changes in the system of planning scientific work in the VUZy. Beginning with 1956, the USSR Ministry of Higher Education and other ministries and departments having jurisdiction over VUZy have been ratifying not the summary plans of scientific work which span the entire subject matter handled by the VUZy, but the plans of the most important scientific research and experimental-design work, as well as plans for introducing into the national economy scientific work which has been completed by VUZy subordinate to them. The scientific research plan for the chairs is approved by the VUZ director (rector). Substantial changes have been introduced also in the system of organizing scientific work of the departments and the independent scientific subdivisions of the VUZy. The necessary conditions have been created for the participation of the most talented students in the scientific research work of the VUZy.

2. Rights and Obligations of the Chairs in the Field of Scientific Research Work

1. The chair of a VUZ is the basic educational organization of the VUZ, directly carrying out educational-methodological and scientific research work for one discipline or for several closely connected disciplines. The question of the rights and obligations of the chairs and the professors and instructors connected with them was resolved long ago both from a legal and moral point of view. Each professor, reader, assistant and instructor, according to Article 19 of the VUZ Model Charter, is obligated to carry out all types of educational and scientific research work in correspondence with his position and curriculum, spending an average of six hours per day on this work.

Now everyone recognizes that "a professor is carrying out his duty correctly not when he reads many lectures but when he instills in his audience scientific truths and methods. He is an influential harbinger in word and deed, and has the necessary convincingness and clarity and expressiveness, which come only when the professor himself is active in his science, participates in its contemporary development not only as a judge but as a doer, and this is possible only if he has sufficient time for his own personal

scientific projects."[4]

However, the facts speak of a certain unsatisfactoryness in the organization of scientific work in the VUZy, on the poor participation by professors and instructors in the development of important research projects. One of the reasons for this situation, in our opinion, is the fact that carrying out any important scientific work by a professor or instructor, according to the curriculum of a VUZ, creating several "difficulties" for the author in case the results of the work are not completely successful or the dead-line is not met, brings for him no material and other advantages in comparison with instructors who limit their scientific curriculum to the compilation of scientific-methodological documentation or the direction of one section or another of a course given by the VUZ. Faculty salaries at present time have no relation to the volume and quality of scientific research work done by the faculty. As for copyright regulations, they place the authors of important scientific research projects which are carried out according to plan in a considerably worse position than authors of text-books which are produced according to university plan. Many VUZ leaders are correct in bringing up the question of changing this abnormal situation.[5]

It seems to us that another reason is the fact that the advantages of the new system with planning and organizing scientific work in VUZ departments, set up by the government and Ministry of Higher Education, have not yet had time to manifest themselves fully up to the present. This is perhaps the basic reason. The presently established system of determining scientific-methodological and scientific research activities of the departments makes it possible to use the labor of each scientist more effectively and economically, with consideration of his individual creative "individual approach" in solving the most important scientific problems. The USSR Council of Ministers introduced a new principle of calculating faculties beginning with the 1956-57 academic year, proceeding from the average number of students per instructor. With the aim of a rational use of faculty time for participation in the solving of urgent scientific problems, as well as for writing new text-books, VUZ departments are planning the work schedule for each professor and instructor for the entire year. The annual individual plan is the basic document which determines the labor organization of the professors and instructors. The plan determines what work will be undertaken by the professor, reader, assistant during the current academic year in the process of teaching, in scientific research, in resolving

scientific-methodological questions, in propagandizing scientific-technical knowledge, and in the preparation of text-books, syllabi and visual aids. The USSR Council of Ministers delegated the director (rector) of a VUZ the right to determine the scope of work of each professor, reader and assistant. The Ministry, other than this, does not determine any standards for educational assignments. This question is resolved by each VUZ independently. The right possessed by the directors of VUZy make it possible to determine the scope of various types of work carried out by each scientific worker of the VUZ, concretely and individually. The head of the department, faculty, or VUZ, proceeding from the tasks of scientific research and scientific-methodological work, may determine which types of work will bring the most benefit from which instructor. In determining individual work plans for professors or instructors, the department head should consider the nature of the work, its volume and significance. This particularly bears on scientific research work of great theoretical significance. Individual plans for professors and instructors form the basis of the departmental work plan[illegible], the faculty plan[illegible] and that of the VUZ as a whole. However, these plans, if they are prepared correctly, are not a mechanical unification of individual plans of professors and instructors. They reflect the scientific tasks placed before the collectives of the VUZ and include the most important scientific research and scientific-methodological work. Thus, the last word in determining the general direction of the scientific work of a department, faculty or VUZ as a whole belongs to the scientific collectives of the VUZy. Basing themselves on these collectives, the directors of the VUZ as well as the ministries (departments) plan[illegible] the most important scientific research and direct all scientific research work by the VUZ. A resolution by the USSR Council of Ministers of 12 April 1956 established several other regulations, the implementation of which has had a positive effect of increasing the level of scientific research work by VUZ departments. These include the following: a) prohibition to the faculty of VUZy to hold more than one position in the VUZy. The right to make exceptions to this rule in respect to other schools is possessed only by the heads of ministries and departments and only for those members of the faculty who possess scientific titles or degrees, and only in such a case as the necessity to hold more than one position is caused by the interests of improving the process of teaching. b) the rights of directors (rectors) of VUZy to allow the faculty to hold down two positions in enter-

prises, branch scientific research institutions, design bureaus, experimental stations, clinics, technical administrations, and other institutions. c) encouragement to prominent specialists working in industry, agriculture, transport, in scientific research institutes and other institutions and organizations to take an additional position in the VUZy. d) the right of the Ministry of Higher Education of the USSR, the ministers and heads of other ministries and departments with VUZy subordinate to them, to establish the duration of scientific missions of the faculty of VUZy for carrying out and incorporating in production scientific research and experimental-design work for a period of up to three months with no loss of salary from the basic place of employement and the payment of a per diem during the scientific mission.

3. The Legal Status of Scientific Research Institutes and Laboratories of VUZy

1. Carrying out scientific research by the faculty of VUZ departments alongside their scientific-pedagogical work is not the only possible form of resolving the scientific tasks of the VUZy. Another form is the execution of scientific research by scientific research institutes, independent scientific research laboratories, scientific research sectors and other subdivisions, the basic task of which, in differentiation from the VUZ departments, is limited to scientific work. The possibility of organizing scientific research institutes within the VUZy was first provided by the Regulations on VUZy of 1922. It is also provided by present legislation. Presently VUZy possess sub-divisions engaged exclusively in scientific work which differ in their legal status: a) scientific research institutes in laboratories which are financed by the state budget of the ministry and department to which the VUZ is subordinate. These are carrying out scientific research projects according to a plan approved by the VUZ director, and in cases of necessity--by the ministry or department. The consent of the USSR Ministry of Finance is required for the organization of this type of institution. b) scientific research laboratories at VUZy, organized by ministries and departments for working on experimental-design projects, and urgent scientific research projects with the resources of the VUZy. In order to organize these laboratories the Council of Ministers allowed the ministries and departments to assign the necessary funds, equipment, material and instruments necessary for conducting these scientific research and

experimental-design projects to the VUZy, as well as to carry out necessary construction in the laboratories with their resources and funds. The scientific research laboratories formed by ministries and departments work according to subject matter in coordination with these ministries and departments. For strengthening scientific research by VUZ departments the Council of Ministers allowed ministries and departments with the consent of the USSR Ministry of Finance and Ministry of Higher Education, to turn over to the suitable VUZy individual scientific research institutions, the independent existence of which is not essential. c) scientific research laboratories which are financed by so-called"special funds" that is, funds received from industrial and other organizations on contract for carrying out specific scientific research. In this case the laboratory can be organized only with the consent of the USSR Ministry of Finance. Certain limitations are established here not only in organizing the laboratories, but in planning the volume of work. These limitations are established by the USSR Ministry of Finance, which regulates the expenditures of the customer-enterprise, and the Ministry of Higher Education in determining labor limits. In the opinion of many scientists, revocation of these "double limitations" which are affecting the scientific projects of VUZy on industrial tasks (economic contract projects) would expand scientific research by VUZy.[6]

Academician P. L. Kapits, on discussing the theses by N. S. Krushchev, proposed the formation of temporary scientific-technical organizations for working chiefly on complex problems. Without discussing the proposals of academician P. L. Kapits in detail, we shall mention that under the conditions of increasing scientific activities of VUZy, such a form of solving important, complex scientific and scientific-technical problems by VUZy is the most effective and practical solution possible. If, as P. L. Kapits said, in organizing this type of institution it would be necessary to overcome a certain conservatism (we might add that this is a fear that these institutions would not operate along the correct lines after the solution of that task for which the institutions were created) on the part of scientific workers, these "fears" disappear here in solving important scientific problems by VUZy. Any specific scientific problem is presented directly by industry or by directive organs to a specific large VUZ. The executive staff of a VUZ, on the basis of a broad discussion of a question with the scientists, resolves the question of the organization of a scientific research subdivision for the period of the solution of this problem: an institute, laboratory or sector. The persons

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working on this project are transferred to this institution for the period of the project, after which they return to their "permanent" work. In financing scientific research from special funds and independent labor limits for this "temporary" institution, a certain portion of the scientific-auxiliary personnel is brought in from the outside for temporary assignment. Naturally a more detailed regulation of the activities of these institutions is necessary here. But upon approving the very principle of the organization of these scientific organizations, such regulations could be worked out and implemented without particular difficulty.

CHAPTER VII

LEGAL STATUS OF SCIENTIFIC SOCIETIES

1. General Nature of the System and Legal Status of Scientific Societies in the USSR

1. In the Soviet Union scientific tasks are carried out not only by state scientific institutions but by various voluntary public organizations of scientists--scientific societies. In Russia scientific societies began to appear in the nineteenth century.[1] They developed mainly in the universities in the second half of this century. The University Regulations of 1863 furnished sufficient legal possibilities for this: No. 119 of the Regulations gave universities the right, with the permission of the Ministry of Public Education, to form scientific societies. During the 50 years preceding the First World War, thousands of scientific societies were developed in Russia. At the moment of the October Revolution there were more than 1000 of these societies in Petrograd alone.[2]

Scientific societies in Russia carried out much work which was useful to science. The country's greatest scientists participated in these activities: D. I. Mendeleyev, and A. M. Butlerov, I. P. Pavlov and A. P. Karpinskiy, K. A. Timiryazev, I. I. Sechenov and many others. Scientific conferences held by the scientists of naturalist societies gained world wide fame.[3] As a result of the broad distribution of scientific societies, their legal status and activities began to attract the attention of Russian jurists. P. Ye. Andreyevskiy, in his course, "Police Law", published in 1876, went into detail on the legal status of scientific societies, compared them with academies of science, and this comparison led him to a conclusion that they possessed great competence and independence in their work. Andreyevskiy then stated that the government should present large-scale aid to scientific societies.[4]

2. After the October Revolution many societies ceased to exist, and the activities of those which continued operating dropped off considerably. The reason for this was the predominance in the directive organs of many societies of that portion of the scientific intelligentsia which was making no attempt to cooperate with Soviet authority on the one hand, and, on the other hand, the societies were clearly not attracting the major attention of state organs and the Soviet public. Many of these societies continued to function according to the old regu-

lations ratified by the Tsarist government.[5] It was only by 1929-1930 that a serious reformation of societies began, and their activities started to coincide with the tasks of socialist construction. An important role in this was played by All-Union Association of Workers of Science and Technology for Assisting Socialist Construction.[6] A major role in attracting scientific societies toward the solution of tasks of socialist construction was also played by the Communist Academy. Scientific societies began to spring up in conjunction with the Comacademy itself, unifying the workers of the ideological front.[7]

3. The basic legislative acts determining the system of organization of scientific societies are the following: the resolution by the TsIK (Tsentral'nyy ispolnitel'ny komitet--Central Executive Committee) and SNK of the USSR "on founding and liquidating all-union societies and unions which do not pursue the goal of extracting a profit" of 6 January 1930 (SZ of the USSR, 1930, No. 7, Article 76) and the Regulations on voluntary societies and unions, passed by the legislative organs of the Union Republics. In the RSFSR such "regulations" were ratified by a resolution of the All-Union TsIK and the SNK on 10 July 1932 (SZ of the RSFSR, 1932, No. 74, Article 331). In these acts, in that section which has a bearing on scientific societies, only those questions are regulated which in one way or another affect their mutual relations with state organs and as participants of legal relationships with other organizations and institutions in general, and they do not at all deal with questions of their internal organization and methods of operations for attaining the goals placed before them.

What of the basic regulations and their content of the above-mentioned legislative acts? The Resolution of the All-Union TsIK and the SNK of the USSR of 6 January 1930 stipulates that: 1. Charters of societies extending their activities throughout the territory of the USSR shall be ratified according to a system determined by the legislation of that Union Republic on the territory of which the board of administration of the society is located. 2. Ratified charters of societies must be registered according to the legislation of that Union Republic. 3. In case of violations by the society of legislation of the USSR or the Union Republic, proper organs of the Union Republics may close down operations of the society on the territory of that republic. This type of resolution extends throughout the territory of the USSR. Republic legislation (see, for example, Regulations on Voluntary Societies and their unions, ratified by the All-Union TsIK and SNK on 10 July 1932): In the first

place, shall determine as the general task of all societies and unions in general their active participation in socialist construction and aid in strengthening the country's defense; in the second place, shall provide the right for societies which have similar tasks to form unions of societies; in the third place, shall provide the right of societies and their unions to publish their works and found laboratories, experimental stations, exhibits, etc., which are necessary for the practical implementation of their tasks; in the fourth place, shall establish a division of societies, depending on the area of their activities, into All-Union, Republic, kray, oblast, city, rayon and rural. For each of these types it shall determine their organization, the ratification of charters and registration; fifth, it determines the scope of questions which must be provided in the charters (tasks of societies, the method of their implementation and the field of activities; the method of accepting and releasing members, their rights and obligations; the organs of administration and their location; sources of funds; designation of the people's commissariat or institution which is exercising supervision over the work of the societies), and certain other questions; sixth, shall give all societies and their unions the right of a juridical person, commencing from the day the charter is ratified; seventh, shall exercise supervision over the activities of societies and unions through the organs which ratify their charters, giving them the right, in case of violation by the society or union, of legislation or the general policies of Soviet authority, to undertake the necessary measures, even to the liquidation of the society or union. The growth of the number of scientific societies and organizational administration taking place in the thirties, raised their significance so much that the 1936 Constitution of the USSR affirmed the right of workers to unite in scientific societies as one of the basic rights of citizens (Article 126). These regulations in the constitution give a legal basis for broad creative initiative and independent activities by scientists.

4. At present there are several thousand scientific societies in the Soviet Union, differing in their goals, profile, territorial spheres and other indications. Alongside general characteristics, common to all or at least to many scientific societies, each society has its unique features in its organization and legal forms of activity. Three basic groups can be distinguished among all scientific societies: a) scientific societies which unite scientists who are working on scientific problems in a specific field of knowledge and organized knowledge accord-

ing to these fields. These societies are as a rule in close conjunction with academies of science and certain branch scientific research institutes, as well as VUZy. b) Scientific-technical societies which unite not only scientific workers but engineers-practical workers, engaged in similar branches of the national economy. These societies are usually organized according to branches of economy and in an organization respect are connected not with state scientific institutions and VUZy but with trade unions. c) Societies for the dissemination of political and scientific knowledge; All-Union and Union Republic. These societies unite the cream of the Soviet intelligentsia without differentiation of scientific specialization or branch of economy and culture in which the prospective member works. These societies are formed according to a territorial principle. The Soviet public devotes constant attention to the work of the societies, lends them aid, notes their successes and criticizes their defects. Under modern conditions, when the significance of science is growing more and more in the solution of the problems of Communist construction and the struggle for peace, the public is making ever higher demands on scientific societies, and those are completely justified. Many of these demands were voiced in discussing the theses of N. S. Krushchev.[8]

In critical remarks and proposals by the public for the improvement of the work of scientific societies, the necessity is often noted of the further improvement of the organizational and legal forms of organization in the activities of scientific societies and their adaptation to the new conditions.

2. Scientific Societies With Academies of Sciences, Branch Institutes and VUZy

1. Societies which unite the scientists of allied specializations exist at present with the USSR Academy of Sciences, branch academies, ministries and departments, academies of sciences of Union Republics, several large branch institutes and VUZy. In a legal respect the status of these societies is generally similar. The legal status of the societies attached to the USSR Academy of Science will basically characterize the other societies of this group. Having in mind ease of exposition, we shall go into detail on the documents stipulating the legal status of scientific societies attached to the USSR Academy of Sciences.

2. The USSR Academy of Science presently has fourteen scientific societies. The majority of them were organized

long ago. But they were not organizationally connected with the Academy. The beginnings of such a connection were laid by a resolution of the Presidium of the Supreme Soviet of the USSR of 16 April 1938, in correspondence with which the General Assembly of the USSR Academy of Sciences accepted several scientific societies into the system of the Academy.9 With the acceptance of several scientific societies into the composition of the Academy of Sciences, permanent scientific ties, as well as legal and juridical relationships developed between the administrative organs and scientific institutions of the Academy and the societies. The USSR Academy of Sciences, in the person of its administrative organs, began to ratify the charters of the scientific societies which were going into its composition. At first the charters of each society were ratified. Then a Model Charter of a scientific society attached to the Academy of Sciences was worked out and accepted, in correspondence with which the charters of each society were ratified.10

The charter of a scientific society is ratified by the Presidium of the USSR Academy of Sciences, at the request of the society. All amendments to the charter of the society are discussed by its highest organ--the Congress. A charter ratified in this manner is a normative act with all properties characteristic to such an act. What gives a charter the nature of a normative act and distinguishes it from the acts of application of law as concrete decrees? The force of a normative act for charters of scientific societies is given by the government of the USSR, with the consent of which the Presidium of the USSR Academy of Sciences ratifies charters. The Presidium of the Academy of Sciences exerts influence also on the resolution of questions on the organization of new societies attached to the USSR Academy of Sciences, since representation on these questions is brought by it directly. The final resolution of these questions is within the competence of the government. It has the right to decide questions of reorganization and even liquidation of the scientific society.11

For a certain length of time (from 1951 to 1955) the Presidium of the USSR Academy of Sciences had attached to it the Council of Scientific Societies, which had the tasks of coordinating and aiding the work of the societies, as well as the organization of mutual exchange of information. Subsequently this council was disbanded and its functions were transferred to suitable departments. Carrying out definite functions in administering scientific societies, previously within the competence of organs of state administration, the Presidium of the Academy of

Sciences does not at all bind the organization in activities of societies with petty regimentation. Both the Model Charter and the individual charters of scientific societies attached to the Academy resolve only a minimum of organizational questions, connected with making it possible for the societies to pursue successfully the goals before them.

3. The basic goals and tasks of scientific societies attached to the Academy, as they are determined by the Model and individual charters, are the following: a) every kind of assistance to the development of Soviet science and drawing of scientists and practical workers to the solution of theoretical and practical problems of the construction of Communism in the USSR and the strengthening of the country's defensive capacity; b) ideological education as members of the Society in the spirit of Marxist-Leninist concepts; the conduct of broad scientific-atheist propaganda, struggle with religious conceptions and other superstitious views; c) aid to members of the Society in increasing their qualifications and aid in the realization of their scientific projects, inventions and efficiency proposals; d) struggle against pseudo-scientific theories and remnants of bourgeois ideology in scientific work; e) struggle for priority by the scientists of our country in scientific discoveries and in solving important problems of science, research and the popularization of the history of Soviet science; f) scientific and methodological aid in teaching science in universities and high schools; g) popularization and propaganda of knowledge and the latest scientific and technical achievements in the Society's field; h) participation in carrying out measures for cultural ties with the peoples of other countries and participation in the struggle for peace; i) aid in projects to systematize and unify scientific terminology in the science in question.

In correspondence with their tasks scientific societies resolve questions of their structure (organize sections of the Society, form various commissions, sections and brigades for working on various problems) and forms of work (the organization of scientific research projects with the resources of the Society, consultations, expert examinations, reports, lectures, and discussions by the members of the Society, the organization of conferences, Congresses and meetings, the publication of works by the Society, aid in the organization of exhibits, consulting rooms, museums, expeditions, aid to members of the Society in publishing their works and implementing their scientific projects and inventions in production; criticism and discussion of scientific literature and text-books

in the corresponding branches of science, etc.). Scientific societies work out and introduce for the examination of the Presidium of the USSR AN (Akademiya nauk--Academy of Sciences) proposals on scientific and scientific-organizational questions, present eminent scientific papers for consideration for gold medals and awarding of prizes by the USSR AN, the effectuation of scientific ties with scientific societies and institutions of the USSR and with foreign scientific societies and institutions.

4. Each scientific society shall consist of honorary members, active members, member-collectives and youth section members. Honorary members of the Society, in accordance with the charter, can be eminent scientists, researchers and civic leaders, both citizens of the USSR and citizens of other countries, the activities of whom further the progress of mankind and the works of which are an eminent contribution to science. Honorary members of the Society are elected at All-Union Congresses and possess equal rights with active members. Active members of a society are scientific workers and specialists-practical workers, as well as other persons doing scientific work or aiding the work of the Society with their activities. Acceptance of a new active member takes place at general meetings of Society branches. Member-collectives of a society can be other scientific societies, scientific research institutes, VUZy, technical VUZy, technical schools, high schools planetariums, ministries, central boards, enterprises and other economic, government and public organizations which aid the development of the activities of the society. The acceptance of collectives into society membership is made by the councils of the society branches and the central council of the Society. Persons between the ages of 14 and 18 who take active interest in the sciences represented by the Society and the work of the Society can be members of the youth section. Membership in the youth section of a society is handled by the Presidium of the branch council on the recommendation of the institution or two members of the Society.

5. The Congress is the highest organ of the All-Union Society. The Congress of the Society determines the regular tasks and aims of the Society, examines and approves reports and accounts by the Central Council, Central Auditing Commission and other organs of the society, hears and discusses scientific papers and communications and resolves other questions within the scope of activities of the Society. During the period between Congresses the activities of the Society are directed by the Central Council of the Society, elected by the Congress. In order

to conduct current operations the Central Council of the Society elects a Presidium consisting of a president, a vice-president, scientific secretary and presidium members. The Presidium directs all scientific, organizational and financial-economic activities of the society, its branches and auxiliary organs; it handles the property and funds of the central organs of the society, opens and closes out accounts in credit institutions, carries out acts of all types in the name of the Society, concludes contracts, assumes obligations relating to the activities of the Society, arranges for the publication of periodical and non-periodical literature according to the established method and carries out other measures in accordance with the charter of the society. In order to organize local activities the Central Council of the Society, with the cooperation of directive local organs, forms society branches in the Union and autonomous republics, krays, oblasts and cities of the USSR. The scientific societies attached to the USSR AN and their branches (Republic, kray, oblast, okrug and city) are juridical persons. The funds of the society consist of a) initiation fees and membership fees of the society, b) state subsidies, c) income from publishing activities, d) other income.

6. General direction of the activities of scientific societies attached to the AN of the USSR is effected by the corresponding branches of the AN of the USSR. This regulation is contained both in the Model Charter and in the charter of each society. Doubtless general leadership, according to its very nature, should consist in and actually affect the organization of the joint activities of institutions of the USSR AN and scientific societies, and aid societies in carrying out their scientific tasks. Unfortunately this side of the question is not clearly expressed in the society charters ratified by the Presidium of the AN of the USSR. In these documents there is more emphasis on the feature of administrative subordination, which is not fully characteristic for mutual relations between a state scientific institution and a voluntary public organization, than scientific collaboration. The charter notes, for example, that the branch shall acquaint itself with all the activities of the society by examining the work of the society and its organizations, listen to reports by the Presidium of the Central Council of the Society at sessions of the branch office, and shall give instructions to the society which are binding. It can introduce proposals to discuss the reports of the society at the sessions of the Presidium of the AN of the USSR. As we see, the idea of "accountability" of the society to the branch in all of its activities has been

incorporated, and those forms have been concretely described into which this idea is incorporated. The charters even provide a paragraph according to which if the scientific society is dissolved the property and funds of the society revert to the branch. However, the charter does not contain more or less clear-cut instructions on the nature and forms of scientific direction effected by the branches, as well as the form of aid rendered to scientific societies. Experience under new conditions will doubtlessly suggest necessary amendments to the charter in this section.

3. Scientific-Technical Societies

1. Scientific engineer-technical societies unite hundreds of thousands of Soviet engineers, technicians, scientific workers, agricultural specialists, and front-line workers--innovators of production. Their basic tasks, as they are defined in the presently valid Charter of scientific-technical societies,[12] consist in developing the creative initiative of the members of the society in working out problems of new technology, discovery and use of the reserves for increasing labor productivity; organizing broad technical propaganda and exchange of scientific and production-technologocal information, aiding the incorporation of modern technology and achievements of science in production, aiding members of the society in increasing their scientific-technical level, achieving an increase in technical knowledge and production qualification of workers. Scientific-technical societies consist of active members, who are accepted by the primary organizations of the society at the personal request of persons wishing to become members of the society, and so-called juridical members (ministries, departments and their organizations, enterprises, planning organization, scientific research institutes, VUZy, technical schools), accepted by the central board of the society. The rights and obligations of active members of the society are determined by the charter. The rights and obligations of juridical members are determined by agreement between the board of the society and the organization entering the society as a juridical member. Scientific-technical societies organize sections for individual specialties, foreign commissions and committees for resolving various scientific-technical organizational questions, conduct competition for the best scientific-technical work, improve inventive proposals, aid the members of the society in increasing their ideological-political level, conduct scientific-technical conferences, meetings and discus-

sions on the most important problems of technology and the economics of production, and on the basis of the decisions of these conferences and meetings, introduce proposals to the management of enterprises and institutions, as well as ministries and departments. The basis of a scientific-technical society are its primary organizations at enterprises, institutions and other organizations. In the Republics, krays, oblasts, corresponding Republics, kray and oblast society boards are formed. The highest administrative organ of each society is its All-Union Conference, held at least once every three years. During the period between conferences the leadership of he activities of the society is handled by its central board, elected by the Conference for a period of three years. The Central Board elects a Presidium of the society to direct the daily operations of the society.

2. Scientific-technical societies work under the leadership of trade union organs. The operations of the Central Board of the society are directed by the Central Committee of the corresponding branch trade union. An All-Union Council of Scientific-Technical Societies was formed in connection with the VTsSPS (Vsesoyuznyy tsentral'nyy sovet profsoyuzov--All Union Central Trade Union Council) in order to direct the activities of scientific-technical societies. The system of organizing the former, its relations with the administrative organs of the VTsSPS and the Central Boards of the societies are determined by the Regulations on the All-Union Council of Scientific-Technical Societies, ratified by the Presidium of the VTsSPS on 23 September 1955.[13] The transfer of the general leadership of scientific-technical societies to trade unions took place comparatively recently--in 1954-1955--and was one of the measures taken to reorganize scientific societies according to branches of production.[14] In discussing the theses of N. S. Khrushchev, certain scientists criticized the work of the trade unions due to the weak leadership of societies and noted that the transferral of the leadership of the societies to the trade unions had led to a noticeable weakening of the work of the scientific-technical societies.[15] They proposed the organization of scientific-technical societies in economic rayons according to branches of industry, without ties with trade union organizations. Each society should, in their opinion, have an All-Union center, and all of them together should have a union on a national scale. This proposal was not accepted by the administrative organs. However, the critical comments of the public on improving the leadership by trade union organs of the operations of

scientific societies are being taken into consideration by the trade union organs in their work.

4. Societies for the Dissemination of Political and Scientific Knowledge

1. Scientific societies also include societies for the dissemination of political and scientific knowledge: an All-Union society and Union Republic societies. An All-Union society for disseminating political and scientific knowledge was formed in 1947 at the initiative of several prominent scientists and civic leaders. Its charter was ratified by the USSR Council of Ministers on 29 September 1947.16 Societies for the dissemination of political and scientific knowledge were formed in the Union Republics in the same manner. The All-Union society is a voluntary public political-educational organization. Its purpose is the dissemination of political and scientific knowledge among the public. In order to achieve these goals the society organizes public lectures, scientific reports, the demonstration of scientific experiments, exhibits, museums, participates in producing scientific and popular-scientific films and their broad dissemination, publishes magazines and scientific-popular literature. The society for the dissemination of political and scientific knowledge consists of a) honorary members who are elected by the Congress of the society members, b) active members who are accepted to membership on written request, c) active member-collectives, d) candidates for membership. Active members are individuals and collectives, as well as members-candidates of republic societies, who are active members and member -candidates of the All-Union Society. The society has sections according to the various branches of knowledge, formed of the members of the society. The administrative organs of the All-Union Society are the conference of society members, the board of the society which is elected by the conference for a term of two years, and the Presidium of the board, which is elected by the board. The All-Union Society, in the person of its organs, exercises leadership over the activities of the republic societies, and ratifies the charters of the republic societies, which are accepted by the corresponding congresses (No. 28 of the Charter), and ratifies regulations on branches and authorized republic societies (No. 30).

The resolutions of the congresses of the All-Union Society and its board are obligatory for the republic societies (No. 31 of the Charter). The All-Union

Society is thus endowed with rights to pass decisions within limits designated by the Charter, which are akin to statutory acts according to their juridical nature. The material base for the carrying out by the society of its tasks, is furnished by the funds which consist of a) initiation fees and membership fees of active members and candidates for membership, b) income from entrance fees to public lectures, reports and certain other cultural-educational measures, c) income from publishing activities, and d) assignment of funds by public organizations, institutions and individuals who are interested in the development of the activities of the society. Control over all funds possessed by the society, in accordance with the Charter, is within the competence of the Presidium of the society board. The All-Union Society enjoys the right of a juridical person. From the above we see that in this case the Soviet government has created all political and juridical conditions for the development of the creative independent activities of the Soviet intelligentsia in disseminating the achievements of science, freeing the initiative of the societies of petty regimentation of the forms of their activities, and allowing the societies to handle their affairs independently. This situation is identical for the activities of the republic societies.

CHAPTER VIII.

LEGAL PROBLEMS IN SCIENTIFIC WORK COORDINATION IN THE USSR

1. Content and Legal Forms of Coordination Work of Scientific Institutions in the USSR

1. Scientific institutions, irregardless of the various scientific tasks, legal status, forms of work, form as a whole a system of institutions which are united with a single goal: that of developing advanced Soviet science in the interests of constructing the Communist society, going all-out to aid the society and the state in making use of the achievements of science for the benefit of the entire nation. Developing a network of scientific institutions throughout the country, forming new scientific institutions in the Capital and at the local level, the Soviet government is doing everything so that this growth in the number of scientific institutions will not lead to a fractioning of science, its tasks and results, nor to an atomization of scientific forces, but toward the unification of the forces of scientists in order to solve the most important theoretical problems, the greatest practical tasks of the development of the national economy of the USSR, and, primarily, the development of productive forces. This also determines the necessity to coordinate the activities of all state scientific institutions. The possibilities of coordinating scientific work in a socialist society are literaly limitless, for coordination of scientific work has as its basis the planned development of the socialist economy. This is one of the decisive advantages of the development of science in the countries of the socialist camp. Coordination allows the efforts of the great scientific collectives to be unified for the solution of important scientific problems, for the place of each scientific institution in the solution of these tasks to be determined in a clear-cut manner for each concrete-historical period and to make use of the labor of scientists in as efficient a manner as possible. The problem of coordinating the activities of scientific institutions on new, socialist bases, which differ sharply from the relations of competition and rivalry in capitalist countries, is a new problem which arose directly after the Great October Socialist Revolution. However, this problem in its entire scope arose a little later, when a broad network of scientific institutions was created in the country and the conditions were formed for the transition

to state planning of scientific research on a broad scale. Beginning with the thirties, when, simultaneously with the development of state scientific plans, measures for coordinating the work of scientific institutions began to be developed, (including primarily coordination between the plans themselves and elimination of parallelism in the work of scientific institutions), much positive experience was gained in the matter of coordination, and great practical results were achieved.

This positive experience is contained both in the content of coordination work and its organizational and legal forms. Coordination is an important means (method), with the aid of which a close connection is assured as well as mutual aid in the conduct of scientific research: a) between a definite group of scientific institutions, independent of the subject matter of the research being conducted by them (for example, between the AN of the USSR and the ANs of the union republics; b) between scientific organizations located on the territory of one union republic, administrative economic rayon, kray, oblast, city, independent of their departmental subordination (for example, between academies of science of union republics on the one hand and other scientific institutions and VUZy located on the territory of the same republic, or between branches of the AN of the USSR located on the territory of the economic rayon and other scientific institutions of the same rayon); c) between scientific institutions of a single branch of science, independent of their departmental subordination and territorial situation (for example, agricultural sciences, construction sciences, medical sciences); d) between scientists engaged in working out specific important scientific problems, including complex problems. But unification of efforts and mutual aid is assured not only and not chiefly by coordination. This unification is assured primarily with the aid of state plans for the development of the national economy, the operative administration of scientific institutions, etc. In this case just what is the specific character of coordination of scientific work in a socialist society? It seems that it will be easier to answer this question after we have examined this actual work which is being conducted in this field between the various links of the unified system of scientific institutions and those organizational and legal forms in which they are conducted.

2. Coordination of the activities of the AN of the USSR and the union republic academies of science is effected on the direct instructions of the government of

the USSR and in forms established by the academies themselves. In order to fulfill these tasks the AN of the USSR has a council for coordinating scientific activities of the union republic academies of science. At present the council for coordination also concentrates the direction of coordinating scientific work of the branch academies of science of the USSR. The basic tasks of the council for coordination, in accordance with the regulations on this which were ratified by the XIVth Session of the council for coordination of 10-12 February 1955, are: a) all-out aid in the general development of scientific activities of the union republic academies of science and branches of the USSR AN; b) the organization of permanent coordination of scientific research by the union republic academies of science, branch academies, USSR AN and its branches on problems of science which have a primary theoretical-cultural and economic importance. The Council for Coordination includes the president of the USSR AN (chairman of the Council), the vice-president of the USSR AN (first deputy chairman of the Council), deputy chairman of the Council (regular employees, appointed by the Council), presidents of the union republic academies of science, academician-secretaries of the AN of the USSR departments, the president of the All-Union Academy of Agricultural Sciences Imeni V. I. Lenin, president of the USSR Academy of Medical Sciences and the chairmen of the Presidia of the AN of the USSR branches.

The basic organizational form of work of the Council for Coordination are the sessions of the council, held in accordance with the Regulations at least once a year.[1] In the interim between the sessions of the council direction of the coordination work is handled by the Presidium of the council, formed of the chairman of the council, his vice-chairman and scientific secretary. In carrying out the tasks assigned to it by the regulations, the Council for Coordination undertakes extremely varied activities. In accordance with the Regulations the Council: a) examines questions and works out recommendations on the development of union republic academies of science; b) organizes scientific aid to the union republic academies of science in conducting scientific research, in incorporating new methods of research and aids in the establishment of the necessary scientific ties between scientific institutions and scientists; c) examines proposals by academies of science on problems brought up for permanent coordination, and establishes a list of coordinated problems; d) determines, on the presentations of the AN of the USSR, the leading scientificinstitutions for assuming scientific leadership

in the coordination of research; e) organizes the examination of the tendencies of research, plans and results of scientific projects on the most important problems by scientific institutions, which are effecting coordination between the projects; f) ratifies plans for coordination measures and aids in their implementation; g) generalizes and disseminates the experience of the most effective forms of coordination work; h) organizes scientific information on coordination problems; i) takes necessary measures for incorporating the results of scientific research which have great significance for the country's economy; j) ascertains scientific projects which are of union significance and aids in their publication. In 1956, for the first time in the practice of the operations of the Council on Coordination, jointly with the State Planning Commission of the USSR and republic organizations, a five year plan for the capital construction of laboratory buildings and experimental bases of the academies of science was drawn up. During the sixth five year plan it is planned to construct buildings for 122 scientific institutions in the academies of science of the union republics, including institutes of nuclear physics in the academies of science of the Georgian and Uzbek SSRs. [2] Computer centers will be set up in several academies.

3. The juridical basis for the activities of the union republic academies of science in coordinating the scientific work of all scientific institutions and VUZy of the republic, independent of their departmental subordination, are the resolutions of the governments of the corresponding republics, accepted by them in the manner established by the laws of the USSR and the union republic. The charters of the union republic academies of science and the resolutions of the academy councils on the coordination of scientific activities (See Section 3) stipulate, in broad outlines, the competence of the academies of sciences in a given field and, partially, the forms of this work. However, under present conditions, proposals are brought forth for the introduction of greater clarity in the nature of relations in the coordination of scientific work between the union republic academies of science on the one hand, and, on the other hand, other scientific institutions not forming part of the republic academies, as well as VUZy. The activities of the union republic academies of sciences in coordinating scientific work are presently summarized, basically, in the following: 1) drawing up summary plans of the most important research carried out in the republic; 2) ascertation during the process of drawing up a summary plan of problems, the solution of which demands the participa-

tion not only of one, but of two or more scientific institutions and VUZy; appointment of a main scientific institution or VUZ for this problem, and sometimes (the Belorussian SSR) a personal director of the problem; 3) mutual information on the course of the scientific research being carried out in correspondence to the plans. In recent years the practice of coordination work of academies of sciences of the union republics has been severely criticized both by the academies themselves as well as by other scientific institutions of the republics. Criticism is brought forth predominantly against the "passive" nature of the coordination, the legally crumbling foundation of the summary plans drawn up for the most important scientific research in the republics, the lack of any serious guarantees of solving complex coordination problems by all scientific institutions. Taking experience amassed into consideration, certain prominent scientists from the union republics are proposing that the union republic academies of sciences should actually, and not only due to their charter, become higher scientific institutions of the republic, delegating them the necessary authorities for this purpose (See Section 3).

4. The significance of coordination of the work of scientific institutions according to territory (in particular, joined in one way or other with the development of a rayon's productive forces) will doubtlessly grow in view of the transition to the territorial principle of administrating industry and construction. Expansion and improvement are demanded by the practice of the councils for coordination attached to the branches of the USSR AN.3 Coordination work in any one field of science is regulated in greater detail in respect to the agricultural, construction and medical sciences; functions for coordination have been delegated by the government of the USSR corresponding to the All-Union Academy of Agricultural Sciences Imeni Lenin, the USSR Academy of Construction and Architecture and the USSR Academy of Medical Sciences (See Section 4).

5. An important step on the road to more effectiveness of coordinating scientific work was the transition to the unification of the forces of entire scientific collectives and individual scientists, employed in various scientific institutions, for the solution of important scientific problems. As is well known, coordination work boils down chiefly to the following in its first stages: a) to mutual information on completed scientific research, and b) toward eliminating parallelism in the work of scientific institutions. Quite recently

Presidium of the AN of the USSR on 23 May 1953, a commission on semi-conductors attached to the Presidium of the AN of the USSR ratified by a resolution by the Presidium of the AN of the USSR on 2 April 1954, and other commissions. The basic task of these commissions are the unification, coordination and aid to research in the corresponding field of science, being conducted within the system of the USSR AN, in the union republic academies of sciences, in the scientific research institutions of ministries and in VUZy.[6]

How are these tasks being resolved by the coordination commissions and in what practical forms? Naturally there can be no single pattern for the operations of these commissions. But nevertheless certain general operational principles have been formed for all commissions. Let us use as illustration the experience of the Commission for Combatting Silicosis,[7] formed in the USSR AN in correspondence with a resolution by the USSR Council of Ministers on 13 August 1946 "On Measures for Preventing Silicosis Among the Workers of the Mining Industry, Working Underground." This commission includes scientists-mining specialists, specialists of medicine, chemistry, as well as representatives of industry: ferrous and non-ferrous metallurgy, the gold extraction industry, the mining and chemical raw materials industry. The first stage of the work of the commission was the drawing up of summary plans for scientific work in the problem of combatting silicosis in underground mining operations. The commission later made a transition from these "passive" summary plans, which in themselves were quite valuable since they made it possible to form a judgment on the scope and depth of the scientific treatment of the various sides of the general problem, aided in avoiding parallelism in work and organizing a suitable exchange of information, to the planned distribution of subject material among scientific institutions and then a development of the methodology of research. The form of operations of the coordination commissions are their plenary sessions, as well as the examination of certain scientific-organizational questions at the sessions of the commission bureau. The coordination commissions present their proposals for measures requiring the decision of the USSR AN or other scientific institutions or departments for the examination of the Presidium of the USSR AN. An important form of resolving the most important purely scientific questions are the scientific conferences called by the commissions for concrete questions concerning the problem. These conferences, more than any other form, aid in establishing direct

work in coordinating scientific work of the USSR AN and the union republic academies of science, led, for example, to filtration, criticism, coordination and reduction to a certain unity of proposals by laboratories, institutes and other scientific institutions at the local level. Other academies were in an analogous position. This passive nature of coordination work was, for a long time, one of its basic defects,[4] because in such a situation there was not enough unification of efforts by scientists toward solving the new problems arising before science. Unfortunately this defect had not been eliminated. The idea of coordination of scientific work being merely the elimination of parallelism in scientific work, review of the subject matter of scientific research, observation only to see, as professor N. Dilektorskiy expressed it, "... that no one treads on anyone else's toes" has not been eliminated everywhere.[5]

Life itself has dictated the necessity of organizing scientific research according to plans based on carefully worked out directives, providing for a distribution of research among all scientific institutions of the country, irregardless of their departmental subordination, and each scientific institution would engage in whatever project is necessary for solving the basic task placed before science as a whole at the given stage of its development, on a unified plan of operations with a single goal for each large-scale scientific problem. Such a coordination of scientific research plans was an important step forward for all coordination work. But coordination developed not only toward a more well thought-out and improved planning of scientific research by scientific institutions. Life dictates more persistently than ever the necessity of a joint solution of the most important theoretical problems included in the coordination plan, and the participation in this plan of the scientific forces of several of the country's scientific institutions. Coordination of scientific work began to be conducted not only "in general" among separate scientific institutions or for branches of science as a whole, but according to individual problems. The USSR AN, on instructions by the government of the USSR, is exercising coordination of scientific research on certain important problems of modern science. In order to fulfill these tasks, the directive organs of the AN of the USSR have scientific commissions for appropriate problems of science and technology. At present, for example, there is a commission for problems of subterranean fuel gasification attached to the Presidium of the AN of the USSR, the composition of which was ratified by a resolution of the

scientific contact between the leading participants in the execution of the problem which, according to academician A. N. Nesmeyanov, is the most expedient one.[8]

Coordination conferences became the basic form of coordination. This endowed the work with a concrete and business-like nature. Coordination conferences listened to and discussed, in the first place, scientific reports, and in the second place, reports by the directors of coordination commissions on the summary coordination plan of research for the specific problem. These reports were to analyze the state of the research, ascertain weak points or blank spots, eliminate unwanted duplication, indicate out-dated subject matter and incorrect methodological or systematic approaches to the work, and, most important, indicate practical methods of contact and coordination.

5. In the coordination work of scientific institutions, both from the viewpoint of its essence and the development of organizational and legal forms, much experience was gained. However, there is much to be done in this field. Much requires basic improvement. The July Plenum of the CC of the Party in 1955 noted that "the scientific research institutions of the USSR AN and the branch institutes are conducting work in a disunited manner, as a consequence of which their subject matter is duplicated quite often. The great collective of scientific cadres of the VUZy is not being attracted much toward solving problems in the field of the development of technology."[9] The documents of the XXth Congress of the CPSU speak of a liquidation of dissociation in the work of scientific institutions, which is unthinkable under the conditions of the socialist structure and of the all-out development of science in all its fields.

6. The coordination of the activities of scientific institutions is an irreplaceable means of liquidating this dissociation and uniting the efforts of scientists. Coordination cannot be replaced by the efforts of a centralized basis in administrating scientific institutions, that is, the establishment of new lines of "subordination" in scientific work. It also cannot be replaced by the sometimes proposed change in the practice of planning scientific work in the sense that in the planning process itself certain lines of co-subordination of scientific institutions to one another would be determined, depending on their role in science. Coordination has as its basis the planned commencement of scientific activity. But it does not boil down to planning. Its basis is the creative cooperation of scientific

collectives and individual scientists, truly socialist mutual aid, mutual information on achievements and failures in work, on scientific methods and ways of investigative thought, on the most efficient methods of putting scientific results into practice. This is the concrete expression and manifestation of the socialist nature of the relationships between scientists in the process of their creative activities. The specific features of coordination consist in the fact that (this is also an answer to the question placed before us at the beginning of the chapter) governed by the tasks and purposes of science as a whole and of a specific scientific collective, scientists of various departmental subordination institutions and sometimes with varying specialties, unite their efforts and in this increase the potential of enriching each other with scientific ideas, unite with the workers of industry and other branches of the economy and culture and in this assure a closer cooperation between science and production.

2. Questions of Organizing State Leadership of the Coordination of Scientific Work in the USSR

At present the USSR has several organs of state administration which have the tasks of coordinating the activities of scientific institutions in specific areas of scientific work and implementing the achievements of science in the economy. Such tasks are carried out by the Council of Ministers Committees (Scientific and Technical Committee, State Construction Committee, Physical Culture and Sports Committee, etc.), individual ministries (Ministry of Public Health, Ministry of Agriculture). Extremely important tasks in the field of coordinating scientific work have been assigned to the USSR AN. Its role in this is determined by the general tasks of the Academy as well as its place in the system of the country's scientific institutions. The AN of the USSR, under the conditions of the constant process of specialization in the fields of science, the constant differentiation between scientific disciplines, which lead to a situation whereby it becomes more and more difficult for scientists to understand each other, should furnish reverse, synthesizing tendencies.[10]

But it is a well known fact that the AN is not fulfilling this synthesizing role. The question of coordinating the work of branch scientific research institutes, VUZy and institutions of the AN of the USSR is particularly acute now. As is well known, the AN of the USSR coordinates to a certain degree work with branch

scientific institutions and VUZy only for a very limited scope of problems, in particular, problems for which coordination commissions have been formed in conjunction with the Presidium of the AN of the USSR or its divisions. For many fields of knowledge, the AN of the USSR, conducting coordination with union republic academies of science, does not encompass with this activity branch scientific institutions and VUZy. The example of this "limited coordination" which is closest to the author is coordination in the field of legal science. Is this situation correct? It seems to us that it is not. The AN of the USSR cannot refuse to coordinate the scientific work among other scientific institutions and VUZy on subject matter worked out in its institutes along any lines at all, including the motive that "the lack of special instructions by the government" provide an excuse. And yet this "motive" is sometimes used by certain workers of academic institutions in order to justify the practice which has developed. Such a refusal is tantamount to an evasion by the Academy of its role as higher scientific institution. The actual reason for this situation consists for the time being in the poor initiative on the part of academic scientific institutes in coordination work. (At any rate, the reason for the above example in the field of legal science is chiefly this one). Consequently, in order to increase sharply the coordination work in the system of the Academy it is necessary first of all to undertake measures which would raise the level of activity of its scientific institutes. In discussing the theses of N. S. Khrushchev several scientists made proposals for a more or less radical change in the organizational forms of directing coordination work. Yu. Maksarev proposed that the Engineering-Technical Committee be transformed into an organ which would take charge of the development of scientific research work, determine the direction of the most important scientific research and coordinate the work of the scientific research institutes of industry, the AN and technical VUZy. In correspondence with this it was proposed to establish the coordination of scientific research and experimental-design projects as one of the basic tasks of the Committee. These projects are being carried out by scientific institutions of industry, the AN and VUZy on the most important problems of All-Union significance.[11] Academician D. I. Shcherbakov[12] spoke out for the formation of one or several coordination centers.

Academician E. Andronikashvili of the Georgian SSR AN maintains that the necessary forms for coordination have not yet been found. In his opinion, "coordination should be exercised on a large scale. We must refrain

from petty tutelage. Coordination should apply not only to individual subjects but entire "scientific strata," the development of which requires the reorganization of scientific work methods. The coordinating organ should become a consultative organ attached to the USSR Council of Ministers, making the final decision under these conditions as to the amount of capital investment, the creation of new types of equipment, the assignment of additional human reserves, etc."[13] All of these speeches display a trace of a narrow-minded concept of coordination as a constituent part of administrating scientific institutions and of administrative activity. Naturally the organs of state administration must do certain work in this field. But their activities consist in actual fact only in creating the conditions for genuine cooperation by the scientific institutions themselves, but it did not claim and does not claim to replace the coordination work of the scientists themselves. Under new conditions there is a greater necessity than ever to strengthen and improve the forms of coordination activity. An increase in the role of scientific collectives of leading scientific institutions--be they institutions of the AN of the USSR or other academies, central (chief) branch institutes of industry or VUZy--and extending the rights of the directors and scientists of the councils of institutes in resolving questions of coordination in combination with certain measures for improving the activities of central organs of state administration in the field of planning scientific work, and organizing administration by them, are a practical task ready for immediate solution.

SECTION TWO

LEGAL STATUS OF SCIENTIFIC WORKERS IN THE USSR.

Chapter IX.

GENERAL NATURE OF THE LEGAL STATUS OF SCIENTIFIC WORKERS IN THE USSR

1. Conception of the Scientific Worker

1. Scientific research activity in the Soviet union is carried out by a great army of scientific workers: in 1956 there were more than 240,000 persons engaged in scientific work.[1] After the victory of the Socialist Revolution, Soviet authority was to solve the economic, political, military, cultural and other tasks placed before it with the aid of specialists of the old school, for without them it was impossible to implement contemporary achievements of science and technology, and without implementing these achievements, as V. I. Lenin stated many times, the worker class would not be able to defend the socialist conquests of the workers and embark on socialist construction. It was no easy matter to attract old regime scientists to socialist construction. There occurred a rather sharp differentiation among scientists after the victory of the October Revolution. Certain of them emigrated; others, using the model expression by G. M. Krzhizhanovskiy, manifested a "unique intelligentsia anarchism: they said I and the state are diametrically opposite to each other."[2] A third group was in the front ranks of the struggle for the victory of socialism. And there were certain ones who actively fought against Soviet authority. What were the reasons for the fact that a considerable portion of the scientific workers during the first years of Soviet authority were in the ranks of opponents of the Revolution? The main reason, as academician V. P. Volsin noted, consisted in the fact that the uppercrust of the bourgeois intelligentsia, closely connected with the capitalists and landowners which had been driven out by the Revolution, and who were fighting with Soviet authority for their very lives, attracted almost the entire intelligentsia, including scientific workers, the basic mass of whom consisted of persons of petty bourgeois intelligentsia extraction.[3]

The solution of the task of using old regime specialists was hindered not only by the conduct of the scientific specialists themselves but the incorrect re-

lation to them by a certain part of Party and Soviet workers. The Communist Party, following a course outlined by Lenin, wrote in its program accepted by the VIIIth Party Congress in March 1919 that "the task of developing productive forces requires immediate, broad and comprehensive use of scientific specialists and technologists left to us by capitalism, in spite of the fact that in the majority of cases they are inevitably saturated with bourgeois concepts and habits."[4] Breaking the organized sabotage of the ruling clique of specialists, the Communist Party, in close union with professional groups, conducted through the organs of the Soviet state a policy of decisive suppression of all counter-revolutionary evil impulses from inimical elements. In addition, the Party fought against those who denied the necessity of the worker class learning from the old regime specialists. The Party program also outlined certain practical steps which would make it possible to attract specialists to socialist construction. They foresaw the necessity of maintaining for a certain period a higher grade of remuneration for specialists, in order that they would work no worse, but better than previously, and for this purpose a system of premiums for the most successful and well-organized work was maintained. Together with these measures of economic influence, the program decisively emphasized the necessity of "placing the bourgeois specialists in a situation of comradely common labor, shoulder to shoulder with the mass of workers, led by conscious Communists, and furthering the mutual understanding and rapprochement between physical and intellectual workers, who had been torn asunder by capitalism."[5] The IXth Party Congress, in the resolution "on the daily tasks of economic construction," recognized it as absolutely necessary to use all capable specialists for the various branches of economy in the organization of production. Maintaining in force the necessity of further control and stern measures against all counter-revolutionary elements, at the same time the Congress reminded all Party members in a most categorical form of the task of the ideological drawing in of specialists into the sphere of the productive interests of the Soviet Republic and imposed on Party workers the obligation to strive to establish an atmosphere of comradely collaboration between workers and technical specialists.[6]

As a result of the successful implementation of this policy the TsIK of the USSR, in a resolution of 20 October 1927 on the report by A. V. Lunacharskiy on the results of cultural construction in the USSR for the past ten years, was able to write: "The revolution was

able to draw in the country's scientific forces to extensive work, which was expressed not only in the significant rise in the level of scientific creation, exceeding the pre-revolutionary level, but in the fact that science is joined now more than ever with the concrete requirements of life and socialist construction in the USSR." (SZ of the USSR, 1927, No. 61, Article 615). An important means of carrying out the task brought forth by Lenin was development in the training of new cadres, essential for scientific research, from among workers and peasants. Implementing the Leninist program of drawing specialists of the old school to the side of the worker class and training intellectual workers from bench workers and peasants, the Soviet people, under the leadership of the Communist Party, created its own new intelligentsia, joined with every fibre to the worker class and the peasantry.[7] This new, socialist intelligentsia includes the Soviet scientists, who as the entire Soviet intelligentsia, have loyally served and are serving their people.[8]

2. The Soviet scientist is an active builder of the new life. He, as the worker and peasant, is the master of his country, his state, his science. This is no priest of science far removed from life, as satyrized by Swift in the immortal Gulliver's Travels. This is no votary of "gastronomic" science, far up in the clouds created by idle speculation. This is not the "working force" of the capitalist entrepreneur, upon whom, using the expression of Paul de Cruie, a false civilization looks as a master on a clever lackey. Soviet society stints neither money nor effort in the name of science. It is filling the ranks of scientists with its best representatives, gives the scientist everything necessary for creative labor, creates and incorporates juridical standards testifying to the great attention and care on the part of the society and state to science, and aiding its constant development. Scientific workers, on a par with all workers, are awarded orders and medals of the USSR for merits before society and the state. A scientist, who due to his particularly eminent inventive activities in the field of scientific discoveries and technical inventions displayed special merits before the state, aided in the rise of the national economy, culture, science, growth in power and glory of the USSR is presented the title of Hero of Socialist Labor, which is the highest degree of distinction in the field of economic and cultural construction.[9] Legislation of the union republics, for particularly valuable papers in the field of science and technology, for particularly important discoveries and inventions for socialist construction and for eminent scientific-practical

or scientific-popularizing activities, has established the awarding of the honorary titles of "Honored Scientist" and "Honored Scientist and Technologist" of the union republic.[10] Among other forms of praising the creative successes of scientists in the USSR, use is also made of the awarding of gold medals and premiums by scientific institutions, these being instituted by the government, or with its permission, by scientific institutions of the USSR and union republics in the honor of eminent merits by the country's leading scientists.[11]

For the most outstanding work in the field of science and technology, every year on the anniversary of the birth of V. I. Lenin, the Lenin Prize Committee in the field of science and technology attached to the USSR Council of Ministers awards Lenin prizes. In bestowing unlimited possibilities on the scientists, society and the state make definite demands on these scientists. Soviet society is vitally interested in the fortunes of science, honors those who move it forward, censures and rejects those who stand in its way.[12] The Soviet public is also interested in legislation on scientific workers, noting its strong points, which require further development, and certain outmoded points and omissions. The basic attention of the public in evaluating legislation on scientific workers is attracted by the question as to what role one law or another plays in the development of creative activities of scientists, how legislation correctly expresses the principles of socialism and democracy in the organization of the labor of the scientist and helps them be implemented. It is naturally impossible to over-emphasize the significance of legislation on the legal status of scientific workers for developing science. Law, as Marx said, is the application of an equal criterion to unequal persons. But in order to evaluate concrete scientific achievements by various scientists or the results of the activities ofscientists during a specific period of time, it is difficult and sometimes impossible to apply an equal criterion. This difficulty affects the basic and main point in the activities of the scientist -- his scientific creation.

Nevertheless one must not underestimate the role of legislation on the legal status of scientific workers. The attraction to science of new and young forces and the quality of their scientific training, the correct recommendation of scientific cadres and make-up of scientific institutions depend much on the resolution of legal problems. The level of scientific criticism depends to a considerable extent on the nature of legal regulations

guaranteeing the right of the scientist, on the degree of steadfastness in implementing them, as a result of which the assurance of each scientific worker is created in the reality of the norms themselves. The distribution of scientific forces among various organs and institutions of economic and cultural construction depends to a certain degree on legislation, as well as distribution between the center and the "periphery."

3. In order to have a correct concept of the peculiarities in which the principles of Socialism are revealed in their concrete relationships developing in the process of creative labor by more than 200,000 Soviet scientists, it is necessary first of all to ascertain who are affected by these peculiarities, who is included in the category "scientific workers" according to Soviet legislation. There was no single concept of scientific worker in the legislation of the USSR and the union republics. The definition of scientific worker was given in many normative documents, mostly connected with the operations of VUZy. In the Regulations on the scientific workers of VUZy, ratified by a decree of the SNK of the RSFSR of 21 January 1924 (SU RSFSR, 1924, No. 7, Article 44), it stated that scientific workers of VUZy, according to these regulations, were the following: a) all persons engaged in scientific-education service in VUZy, according to the established order; b) all persons who, at the time of promulgation of these regulations, are professors, instructors and scientific workers of VUZy. According to the regulations scientific workers of VUZy could be "all persons possessing sufficient scientific training, which is determined independent of the presence of Russian or foreign diplomas, scientific degrees or titles on the basis of their own work, as well as the reports of proper institutions and individual specialists."

The Regulations on scientific workers of VUZy and scientific research institutions of the Belorussian SSR, ratified by the SNK of the BSSR on 3 August 1932 (SZ BSSR, 1932, No. 51, Article 233), indicated that "scientific workers of VUZy and scientific research institutions are persons conducting scientific or instruction work in these VUZy institutions." Similar definitions were contained in the normative acts of the governmental organs of other republics. However, we cannot say that this formulation provided an exhaustive definition of that group of workers which is to be understood under the term "scientific worker." There is no such "exhaustive" answer in juridical literature. In the pamphlet "Legal Status of Scientific Workers" published in 1928, university

lecturer I. I. Ananov wrote that "a scientific workers is a person who is conducting independent scientific research or scientific instruction work and registered properly as such."[13] In order to determine the legal status of scientific workers in general the question is important as to whether the scientific research activities of the scientist in a state scientific institution is government service and whether this scientist is a government employee. In recent years Soviet jurists have been avoiding a direct answer to this question in the literature. But the authors of scientific articles and text-books on administrative law nevertheless give several principles and definitions which allow one to make the conclusion that scientific research work in a state scientific institution is government service, and the scientist is a government employee. Professor I. I. Yeutikhiyev considers that "government employees are persons engaged in intellectual or office work, employed in state institutions or enterprises, in relation to which legislation establishes definite conditions of work and security."[14]

This definition leaves no doubt that, for example, a scientific worker of any institution of the USSR AN is a government employee just like a typist in this institution. Further, among the rights of certain categories of government employees Professor Yeutikhiyev recalls the right for academic pensions, indicates the "prescribed procedure" of appointing and discharging scientific workers, the peculiar features of the conditions and procedure of government service and acquiring the title of "Honored Scientist", the awarding of premiums for eminent achievements in the field of science and the celebrating of anniversaries of eminent scientists, and the measure of encouraging government employees.[15] It seems that everything has been stated sufficiently clearly: The scientific research activities of a scientist in a state scientific institution is government service, and the scientist is a government employee.[16] This conclusion is also supported by Professor A. Ye. Pasherstnik.[17] In the administrative law text book in the chapter "Soviet Government Service," written by Professor S. S. Studenikin, formulations and definitions are given which sometimes cast doubt on the possibility of making such a categorical conclusion on scientific workers as government employees, and of their scientific research activities as government service. Professor S. S. Studenikin did not consider, for example, to be a government employee, any worker engaged in "intellectual or office work, employed in any state institution," but only "a person occupying a permanant or temporary position in the state apparatus

by election or appointment and receiving remuneration for his labor."[18] It is apparent from the subsequent exposition that institutions carrying out scientific research activities are not considered by the author to be part of the state apparatus and, consequently, do not make a blanket inclusion of all scientific workers in the ranks of government employees.

The classification of Soviet government employees furnished by S. S. Studenikin also confirms this conclusion. The author divides government employees into the following groups: a) auxiliary personnel, that is, government employees carrying out various material-technical operations, engendering no new legal consequences (preparation of materials, their formulation, etc.). b) functionaries, that is, government employees who in addition to material-technical operations are authorized to carry out legal actions and conclude administrative acts, economic transactions, etc. c) representatives of authority, that is, those functionaries who, in addition to that indicated in paragraph b) have the right to resolve independently questions within their jurisdiction and can independently, within the limits of the rights granted them, carry out measures of coercion in cases of necessity.

It follows from these definitions that neither a "rank and file" chief scientific worker of any scientific research institute nor "rank and file" professor of a VUZ fall within any of these categories. They are not persons who are carrying out merely "preparation and formulation" of any materials: to summarize the role of scientists to this would mean to distort the actual state of affairs. Only a few scientific workers have the right to carry out administrative or economic acts, let alone apply measures of state coercion. Professor S. S. Studenikin does not note any features of appointing and discharging scientific workers as features of government service. All of this furnishes a basis to come to the conclusion that Professor S. S. Studenikin does not consider scientific workers to be government employees, nor their scientific research to be government service. However, the author himself does not formulate this in so many words as Professor I. I. Yeutikhiyev, who comes to a completely opposite conclusion. In addition, the same chapter of the text-book contains assertions which are similar to those written by I. I. Yeutikhiyev. Studenikin notes that measures of encouraging government employees are the honorary title "Honored Scientist" and the awarding of prizes for outstanding work in the field of science. The lack of a general and unified definition of the concept of scientific worker in legislation sometimes engenders extremely

undesirable consequences. The staff of scientific institutions includes: a) workers who are independently carrying out scientific research, including scientific-auxiliary, and b) persons who are not engaged in scientific work (office, bookkeeping, etc.). At the same time as in industry, in the work plans for scientific institutions, in particular the AN USSR, in recent years there has been no specific and central category of employees, although there was a category called "administrative-executive personnel" which included top scientists who were occupying administrative post, and typists. All of this created not only an incorrect reflection of the true state of affairs in report materials, but led to certain difficulties in practical work in improving state direction of scientific institutions (curtailment and improvement in the structure of the apparatus, etc.). The drawing of clear-cut borderlines between the concepts "employee /sluzhashchiy/" and "scientific worker" has both a practical and juridical basis. Including scientists in the category of employees, we at the same time recognize that this category of workers does not participate in the creation of material goods, from which several conclusions can be drawn. Carrying out measures to change the relationship in worker composition, increasing the number of workers engaged in material production and cutting down the apparatus of government, the socialist state should also make cut-backs in scientific workers. It is perfectly obvious that both the premise and the conclusions are incorrect. The final result is that the concept "scientific worker" must be defined both in science and in legislation. It seems to us that it is time to establish in legislative procedure that scientific workers are those persons who possess the necessary qualifications for the carrying out of scientific research (independently or under the direction of other scientific workers) and carrying out this work in scientific research institutions and VUZy, as well as in design bureaus and laboratories of ministries and departments. Scientific workers should also include workers possessing the necessary qualifications for scientific work, from industrial, agricultural and other enterprises and institutions, which combine practical work with scientific research.

2. Basic Features of the Legal Status of Scientific Workers in the USSR

1. The legal status of persons possessing the necessary qualifications for scientific research and carrying out this work in state scientific research institutions,

VUZy, as well as in industrial, agricultural enterprises and institutions, has several features which distinguish it, in a legal sense, from several other categories of workers, including office personnel and engineer-technical workers. These features deal with the procedure of establishing the presence of suitable qualifications (academic degrees and academic titles), training for scientific activities (post-graduate work), rights and obligations of a scientific worker as a party to labor law relations, as well as legal relations according to copyright and patent laws, etc. They are established by regulations forming part of various branches of Soviet socialist law: administrative, labor, civil and others. In recent years Soviet law has noted a tendency to negate certain specific legal forms of the organization of scientific creation in comparison with the workers and office personnel of state and public enterprises, institutions and organizations. How correctly do these tendencies reflect the requirements of our times? At first glance it might seem that this is correct. It might even seem that such a tendency signifies the liquidation of certain "old", "shop" privileges of scientists and corresponds to the spirit of the democratization of science under the conditions of socialism. But this conclusion can be maintained for a more or less extended period only in case a person who is faced with this question for some reason or other does not desire to penetrate into its substance, but prefers to limit himself to a superficial acquaintance with the facts. A more detailed examination of Soviet legislation and its application leads to the directly opposite conclusion, to the conclusion of the necessity of maintaining and defining in a more clear-cut manner in legislation of the socialist state the peculiar features of the legal status of the scientist, emanating from the specific differences between scientific creation and other types of activities by workers. The features of the legal status of scientists is not a result of their arbitrary establishment by directive organs. Every society had and has such peculiar features. In a socialist society an objective premise for the existence of peculiar features of the legal status of scientists is the very class structure of the society, the composition of which maintains a particular social stratum--the intelligentsia--the presence of certain differences between physical and intellectual labor, while the labor of the scientist is a special profession, a particular, specific type of activity. But the existence of peculiar features in the legal status of scientific workers in the USSR does not at all signify a placing of scientists into a

special caste, which in its interests and way of life is diametrically opposed to the worker class, the peasantry and other strata of the intelligentsia.

Soviet society and state establish the peculiar features of the legal status of scientific workers, proceeding from general, socialist principles of Soviet law, proceeding from that obvious fact that the Soviet intelligentsia is a part of a unified, morally and politically, Soviet people, that Soviet scientists do not and cannot have interests which differ from the interests of the nation. One of the peculiar features of the legal status of scientific workers in the USSR at present consists in the fact that the content of their competence and responsibilities in many legal relationships into which they enter depends on the existence or absence of an academic degree or academic rank. In many cases the presence of an academic degree or title is one of the necessary conditions for the very rise of a legal relationship.

Chapter X.

ACADEMIC DEGREES AND TITLES

1. Survey of the History of Legislation on Academic Degrees and Titles

1. The awarding of academic degrees and titles is not an innovation established by Soviet authority. As is well known, in the countries of Western Europe, academic degrees and titles for pedagogical personnel of universities began to be awarded several centuries ago. In Russia the first professors were members of the Russian Academy of Sciences, when the titles of academician and professor were actually synonyms. At the end of the eighteenth century academic degrees were introduced. At first this right was bestowed only on Moscow University, and later to all universities. The university charters of 1804 provided for the awarding of degrees of candidate, master and doctor. The degree of candidate was awarded to persons who had completed the university and had passed a special examination consisting of the written solution of given problems and oral answers to questions on the basic and allied fields of science. The degree of master and doctor was awarded to persons who had passed examinations and who had read public lectures after these examinations (master's candidates--one, doctor's candidates --three in a row) on a subject designated by the university, and who defended a dissertation in public session of the Council. On 20 January 1819 the first Regulations on receiving academic degrees were ratified. The degree of active student /deystvitel'nyy student/ was also introduced. This degree was awarded to everyone successfully completing the curriculum of his faculty and receiving a certificate. In 1820 it was established that the positions of professor and junior scientific assistant in the universities could be occupied by persons with a doctorate or master's degree. The Regulations on academic degrees, ratified on 12 April 1837 (two-Collection of Laws, No. 10, page 188) established that the decisions of the universities to award academic degrees must be ratified--for the degree of candidate, by the trustee of the academic district, and for the master's and doctor's degrees, by the Minister of Public Education. This rule was maintained in the Regulations on academic degrees ratified on 6 April 1844. The Charter of 1863 established the right of universities to decide independently on the awarding of academic degrees. Soon after the new university Charter, on 12 January 1864,

the Minister of Public Education ratified the new Regulations on examinations for academic degrees.

In accordance with the rules established by this Regulation, in order to receive the rank of Active Student, marks of satisfactory were required for all the subjects of the examination, and for the academic degree of candidate--extremely satisfactory for the major subjects and satisfactory for the remaining subjects. A person designated as deserving due to his marks for the degree of candidate was required no later than six months after the examination to present a dissertation on one of the major subjects of the faculty, which was examined, on the instructions of the Dean, according to the topic, by the professor or the lecturer occupying the chair, and subsequently, if the dissertation was announced as satisfactory on the written analysis of the instructor, the candidate for the degree was asked to appear before the commission for oral explanations of the dissertation's content. Students completing their studies with top marks and worthy of medals or the honor roll due to their written solution of the problems, received the degree of candidate without presentation of a dissertation. In order to receive the master's degree examinations were established for a certain number of major and minor subjects of the faculty or department. The candidate for the master's degree was required, upon passing his examinations, to present a dissertation on a subject approved by him and by the faculty. The dissertation, which was to designate its main theses, was examined on instructions of the Dean, by all the members of the faculty separately, and the written critique was presented by the professor or lecturer occupying the chair to the subject of which the dissertation referred. No more than six months were allotted for examination and analysis. If the dissertation was announced as satisfactory, the faculty allowed the candidate to defend it publicly, and "upon creditable execution of this condition" made representations to the Council to approve the master's degree. A master seeking the doctor's degree was not required to take another examination, but he was required to present a dissertation which was to consist of independent research in some scientific problem. The doctorate dissertation was examined using the same procedure as the master's. If the dissertation was recognized as satisfactory, the faculty would allow the master to defend it publicly.[1] On the day of the defense the Dean of the faculty would make a public announcement. The faculty would appoint no less than two official opponents for each dissertation. However, all persons present could participate in the dispute. The decision of

the faculty to award the degrees of master and doctor was introduced by the Dean of the faculty for the approval of the university Council. In accordance with the Charter of the Imperial Russian Universities of 1884, all faculties with the exception of the medical faculty awarded two academic degrees--the master's degree and the doctorate. The faculty of medicine awarded one academic degree--that of doctor. Oral examinations in the faculty and public defense of the dissertation approved by the faculty were required of the master's candidate, or, in the faculty of medicine, of the doctorate candidate. Only public defense of the disseration approved by the faculty was required for candidates for the doctor's degree in other faculties. Persons making an academic name for themselves by their scholarly activities could, with the approval of the Ministry of Public Education, be awarded the degree of doctor without examinations or dissertation, on the petition of the proper faculty before the university Council, if there was at least a two-thirds affirmative vote of those persons participating the Council resolution. Examinations for academic degrees would take place in the presence of the full faculty assembly. The Minister of Public Education, if he considered it necessary, could appoint persons to be present during these examinations who possessed academic degrees in the branches of science in which the examinations were given. Detailed rules for examinations for academic degrees were determined by the Ministry of Public Education. To judge the procedure of awarding academic degrees in Russia before the October Revolution only according to charters, regulations and instructions would be, of course, extremely naive. In order to judge this procedure correctly, evaluations by contemporaries are of some value and interest. The procedure of awarding academic degrees on the basis of the Regulations of 1864 was subjected to sharp criticism by Professor G. F. Shershenevich at the end of the last century.[2] In the opinion of Professor G. F. Shershenevich, the procedure of awarding academic degrees in Russia did not guarantee the public and the state of sufficient scientific forces which would be capable of assuming the responsibility of the higher scientific education of youth. G. F. Shershenevich considered that in resolving the question of awarding an academic degree, the chief attention should be paid to the book itself and not to the oral debate. Only the book itself serves as testimony to the capability of the author of solving scientific problems, exposes his factual and literary preparation and promises in the person of the author a well qualified leader of youth in

studying science"[3] and comes to the conclusion that "the dispute should be recognized as a superfluous and harmful procedure."[4] In the dispute many basic questions of the subject matter and the strongest arguments of the author on its root questions are not examined, for if the opponents would not be in agreement with the basic views, a dispute would hardly take place; recognizing the paper as satisfactory, the opponents raised their objections on comparatively petty questions. The dispute itself, from its external aspect, does not create the necessary conditions for fruitful scientific discussion. "On the one hand," G. F. Shershenevich writes, "you see an agitated and confused debater, gathering his thoughts with difficulty, and on the other hand--opponents who at best are bored with the responsibility to publicly repeat that which has already been said by them in the faculty, and at worst presenting themselves with the task of showing off to the audience their brilliant wit at the expense of the defenseless debater. The significance of the debate for the two sides is not equal: in case of failure one side is risking everything and the other side is risking nothing except a hurt ego. . . in such a situation the oral debate does not satisfy the conditions of equality between debating sides, which is the essential condition for a debate . . ."[5]

Professor Shershenevich considers inconclusive the arguments of the persons in favor of debate that the debate is the only guarantee of the genuineness of the dissertation, that is, the identify of the author of the paper and the candidate for the degree;[6] for a "bold" person, the debate naturally does not shut out the possibility of acquiring a degree thanks to someone else's work. He is also not in agreement with those persons who consider the debate the requirement of publicity in examining a question of social significance, for indeed publicity assures only the presence of a more or less numerous audience. As for specialists, who are spread throughout Russian, the motives causing the faculty to approve or reject a dissertation remain unknown. In the opinion of Shershenevich, debates which bring no benefit to the purposes of science and which are only a difficult trial for the incipient scientist and a free spectacle for the audience, can be no guarantee of a correct evaluation of the scholarly qualities of the dissertation. But faculty examination does not give any guarantee, for the question of scientific value of a dissertation is resolved in a majority of cases by an individual reviewer selected by the faculty under the cover of collective bases. And in any single evaluation of a dissertation it

is impossible to expect that degree of objectivity which is essential in such a case: personal likes or dislikes, egotism, rivalry for position, flattery, adherence to a single or different scientific camp, etc.--all of this means an influence on the outcome of the decision. "But," Professor Shershenevich notes further, "there is no common criterion of scientific value of a paper, a single touchstone of scientific exactingness. A dissertation which will not be accepted in one faculty will have an easy time in another one. On the other hand, a dissertation which is approved in one faculty would cause indignation in literary criticism and an ironic attitude on the part of other faculties. If, although this is doubtful, the receipt of an academic degree depended entirely on one person, a specialist in the faculty, we could always expect chance to play a part in the success of a dissertation. Therefore, the public cannot be sure in all cases whereby persons are awarded academic degrees, that the accepted dissertation is actually a valuable contribution to science, and that a dissertation which has failed is a worthless project. If this assurance is lacking, the public can have no confidence in the procedure of acquiring academic degrees.[7]

In order to eliminate personal influence and chance in the evaluation of a dissertation, Shershenevich proposed the necessity of subjecting all dissertations in the same field to identical criteria--to examination by as large a number of specialists as possible, and, in his opinion, this would be assured by examining a dissertation not in one but in all (or at any rate in many) faculties and a decision of awarding or not awarding a degree according to the total number of opinions voiced, by some central institution, for example, the Ministry of Public Education. Professor Shershenevich criticized the procedure of awarding academic degrees in Russia from the standpoint of a bourgeois member of the intelligentsia, striving to improve this procedure and make it a more effective guarantee that academic degrees would be awarded only to those in whom society (that is, capitalists and landowners) would have full confidence. The Great October Socialist Revolution subjected this procedure to different "criticism." According to a decree of 1 October 1918 "On Certain Changes in the Composition and Structure of State Scientific Institutions and VUZy of the Russian Republic" in the RSFSR the academic degrees of doctor, master and junior scientific assistant, as well as all rights and advantages connected with them were abolished. All persons famous for their works or having proved themselves by

their scientific-pedadogical activities could be elected to the chairs of the VUZy (SU of the RSFSR, 1918, No. 72, Article 789). The rank of professor was granted to those scientific workers who were conducting independent pedagogical work in the VUZy. The first statute of a Soviet university--"Regulations on VUZy in the RSFSR"--ratified by the SNKof the RSFSR on 2 September 1921 (SU RSFSR, 1921, No. 65, Article 486), divided the scientific-instructor cadres of the VUZy into three categories: professors, instructors and scientific workers. The regulations did not bind the appointment of professorial and instructor positions in the VUZy with the presence of an academic degree or title. Academic degrees for scientific-pedagogical workers in the USSR were established by a resolution by the TsIK of the USSR "Curricula in Universities and Technical Schools," passed on 19 September 1932 (SZ USSR, 1932, No. 68, Article 409). "The introduction of academic degrees was caused by the necessity of attracting specialists of high scientific qualifications to scientific-pedagogical activities in VUZy, specialists who would be capable of carrying out pedagogical and creative scientific work, which would have a tremendous significance for increasing the level of the entire universities' operations; in addition, the presence of previously proved and established qualifications in the form of an academic degree considerably eased the selection of higher qualification cadres."[8]

This same resolution provided that the academic titles of assistant, lecturer and professor, previously acquired according to the position held, were to be acquired in correspondence with actual qualifications, determined primarily by scientific papers. These regulations were included in the model university charter, ratified by the Presidium of the TsIK of the USSR on 17 October 1933. On 13 January 1934 the SNK of the USSR passed a resolution "Academic Degrees and Titles" (SZ of the USSR, 1934, No. 3, Article 30). It specified that category of persons with the right to compete for academic degrees and titles, the procedure of their awarding, and the organs which were entrusted with this responsibility. Several legal regulations which covered the individual facets of the awarding of academic degrees and titles were established by the Instructions of the Committee on Higher Technical Education attached to the TsIK of the USSR, "the procedure of applying the resolution of the SNK of the USSR of 13 January 1934 on academic degrees and titles" (SZ USSR, 1934, No. 34, Article 270). These acts provided that all workers, both citizens of the USSR and foreigners, could acquire academic degrees and titles es-

tablished by law, under the condition of the observance of the requirements provided for in the resolution of the SNK of the USSR on 13 January 1934, and the instructions for its application. The degrees of candidate and doctor are usually awarded on the basis of dissertation defense. Differing from the procedure used at present, defense of dissertations for the academic degree of doctor of sciences could be undertaken not only by persons with the degree of candidate of sciences but persons who were noted for their scientific papers, discoveries and inventions (#4 of the instructions).

Both published and unpublished papers were accepted as dissertations (#5). The awarding of academic degrees was made by the organs of the USSR "Higher Certifying Commission of the Committee on Higher Technical Education Attached to the TsIk of the USSR" as well as by the organs of state administration of the union republics (qualification commissions of people's commissariats of education and public health of the union republics). The right of awarding academic degrees was also bestowed on the leading scientific institutions of the USSR (AN USSR, the Comacademy, the All-Union Academy of Agricultural Sciences Imeni V. I. Lenin, the All-Union Institute of Experimental Medicine) and of the union republics (the union republic academies of sciences). The government strictly determined those branches of scientific knowledge where academic degrees could be awarded by each of the above enumerated state organs and scientific institutions. The law provided also for the awarding of the academic degree of doctor without defense of dissertation to persons noted for their outstanding scientific papers, discoveries and inventions having special significance for socialist construction. The question of awarding a doctorate degree in these cases would be decided both on the initiative of the council of the VUZ or scientific research institution as well as on the petition of the interested party or representations by institutions or public organizations (#17). In respect to academic titles, the following rule was established: an academic rank given a specific person for his position in a specific VUZ or institution would be maintained by transferring from one VUZ to another as well as in transferring from one scientific institution to another. In case of work stoppage in the VUZ or scientific research institution, the academic rank would be maintained for five years from the moment work stopped, and after this period lapsed it could be acquired once again according to the general procedure (#22).

2. At present the basic enactments regulating the procedure of awarding academic degrees and titles are the following: the resolution by the SNK of the USSR "Academic Degrees and Titles" of 20 March 1937 (SZ USSR, 1937, #21, Article 83) and of 26 April 1938 (SP USSR, 1938, #21, Article 134), the resolution by the CC of the Party and by the Council of Ministers of the USSR of 20 August 1956, "Measures for Improving the Training and Certification of Scientific and Pedagogical Cadres"[9] and "Instructions on the Procedure of Awarding Academic Degrees and Titles," ratified by the Chairman of the Higher Certifying Commission on 4 April 1957.[10] In accordance with these enactments, scientific workers receive the following academic degrees: candidate of sciences, doctor of sciences, and the following academic titles: in VUZy--assistant, lecturer /dotsent/, professor; in scientific research institutions--junior scientific worker, senior scientific worker, professor. In the resolution by the SNK of the USSR on 20 March 1937, it was stipulated that academic degrees were to be awarded to scientific workers "depending on their qualifications in the field of definite scientific discipline--on scope of knowledge, degree of independence of scientific work and its significance" and academic titles--"independence on the scientific-pedagogical or scientific research project being carried out." The awarding of academic degrees and titles has as its goal the encouragement of scientific work and an increase in the qualification of scientific and scientific-pedagogical cadres. We shall examine as completely as possible the procedure of awarding degrees, as established and applied throughout almost two decades, expressing state recognition of the qualifications of a scientific worker and academic titles determining the nature of the activity undertaken by the scientific worker. We shall see how this procedure served and is serving the attainment of this goal. We shall begin with the awarding of academic degrees.

2. Academic Degrees

1. The academic degree of candidate or doctor of sciences as has been noted above is awarded independent of the qualifications of the scientific workers in the field of a specific scientific discipline. The academic degree expresses not the qualification "in general," but the qualification in a specific field of science.[11] The degree of candidate of sciences is awarded to persons who have completed post-graduate studies or have passed can-

didate examinations in their specialties, approved by the Ministry of Public Education of the USSR and having publicly defended their candidates dissertation on a subject corresponding to the specialty of the candidate. A candidate of sciences dissertation must 1. contain new scientific and practical conclusions and recommendations, 2. reveal the candidate's abilities for independent scientific research, as well as his profound theoretical knowledge in the field of his discipline and special knowledge on the problems of the dissertation (paragraph 16 of the Instructions of the All-Union Academy of 4 April 1957). The degree of candidate of sciences is awarded by the Councils of VUZy and scientific research institutes, who are given this right by the government of the USSR. No institutions besides VUZy and scientific institutions have the right to confer the degree of candidate of sciences.[12] A decision by the Councils to confer the academic degree of candidate of sciences is final. Examination of the correctness of the decisions of the Councils of VUZy on conferring candidate of sciences degrees is carried out by the Higher Certifying Commission, which inspects all candidates dissertations according to inspection procedure and has the right if necessary to rescind the decision of the councils to confer a degree of candidate of sciences.[13] The degree of doctor of sciences is conferred on people who possess the academic degree of candidate of sciences or the academic rank of professor and have publicly defended their doctoral dissertation. The dissertation for the degree of doctor of sciences must be an independent research paper containing theoretical conclusions and solutions of scientific problems presenting a significant contribution to science and practice (paragraph 16 of the Instructions of the VAK* of 4 April 1957). A high quality published university text-book which presents independent scientific or scientific-methodological work by the candidate can be used as the dissertation. The degree of doctor of sciences is conferred by the Higher Certifying Commission on the petition of the Council of the VUZ or scientific research institution on the basis of the successful defense of the dissertation.[14] As a special exception, the degree of doctor of sciences can be conferred without defense of dissertation to persons who are noted because of outstanding scientific papers, discoveries or inventions. The AN USSR has the right to confer the academic degree of doctor honoris causa to particularly eminent Soviet and foreign scientists. Persons elected active members of the AN USSR are conferred the degree of doctor of the suitable science from the

*(Vysshaya attestatsionnaya kommissiya -- Higher Certifying Commission)

moment of their election. In May 1940 the Presidium of the Academy of Sciences of the Ukranian SSR introduced a proposal to the SNK of the USSR on changing the formulation of the resolution of the SNK of the USSR of 20 March 1937, "Academic Degrees and Titles" in such a manner that the degree of doctor of sciences would be conferred from the moment of election, also to persons elected into active membership of the Academies of Sciences of the union republics.[15]

The VKVSh* attached to the SNK of the USSR, approved this petition in June of the same year, both for the Ukranian SSR Academy of Sciences and the Belorussian SSR Academy of Sciences. The AN USSR[16] shared in the opinion of the AN of the Ukranian SSR and the VKVSh, but this question received no positive resolution. Soviet legal regulations established a strict procedure of organizing the defense of dissertations. The basic idea in this procedure consists in the question of the merits and defects of the investigation presented for an academic degree being resolved by the scientists themselves on the basis of a broad exchange of opinions and development of free scientific criticism. At present dissertations are examined only by the Councils of VUZy and scientific research institutions. This is an extremely important, basic regulation. Not one state organ has the right to confer any academic degree without the consent of the college of scientists authorized for that. The above general rule has an important and basic significance, for questions as to the awarding of academic degrees are examined in public sessions of the councils of the corresponding VUZy and scientific institutions, where each person is guaranteed the right of participation in free discussion. The official opponent has a special status in examining dissertations and in the organization of their creative discussion. Official opponents are appointed by the director of the VUZ or scientific institution which is examining the dissertation. No less than two (including one doctor of sciences or professor) opponents are designated for candidate dissertations and for doctoral dissertations--no less than three (including at least two doctors of sciences of that field).[17] The official opponents are conferred broad rights, in the exercise of which they influence both the course and direction of the discussion of the scientific problems examined in the dissertation, as well as the resolution of the question of the evaluation of the dissertation. The official opponents personally participate in the session of the council and begin the debates in the session with their statements. Considering the significance of the statements by

*(Vsesoyuznyy komitet po delam vysshey shkoly -- All-union Committee for Higher Education)

the official opponents, the law requires that these statements contain a detailed analysis of the dissertation under examination with an indication of its defects and merits, as well as valid conclusions on the correspondence of the dissertation with established requirements. Speaking of the awarding of academic degrees on the basis of dissertation defense, we should mention that in order to acquaint the scientific community with the contents of dissertations, an All-Union Dissertation Fund was created in the USSR State Library Imeni V. I. Lenin. This fund receives all doctoral dissertations examined by the VAK, with the exception of dissertations on the medical and pharmaceutical sciences. Dissertations on the medical sciences, both doctoral and candidate dissertations, are kept in the State Central Medical Library of the USSR Ministry of Public Health. There is no doubt that the establishment of academic degrees of candidate of sciences and doctor of sciences furthered the improvement of scientific work and the increase in qualification of scientific and scientific-pedagogical cadres. From the moment of the introduction of academic degrees in our country, more than 9000 doctoral and about 80,000 candidate dissertations have been defended. Many research papers presented as doctoral and candidate dissertations have been valuable contributions to science.[18]

However, among the dissertations which have been defended there have been many which have had no influence whatsoever on the development of science. One of the reasons for this is doubtless the fact that the majority of dissertations were written as the final stage of preparations for post-graduate work for the doctorate, and all the defects of the organization of this preparation influenced the level of these papers. A major reason for the fact that dissertations have not had a noticeable effect on the development of science is the fact that legislation which has been in effect until quite recently on the procedure of conferring academic degrees and titles completely consistently conveyed the idea of the dissertation as a concrete and greater or lesser contribution to science with theoretical and practical significance. It is well known that the procedure of conferring academic degrees which has been in effect until recently, stimulating the extremely effective development of research for which scientific workers could be and were conferred degrees of candidate or doctor of sciences, did not create interest on the part of candidates for solving new unstudied problems which are so important for science and practice. In accordance with paragraph 3 of the Resolution

of the SNK of the USSR of 20 March 1937 "Academic Degrees and Titles," a dissertation for the degree of candidate of sciences should reveal the general theoretical knowledge of the candidate in the field of his discipline. It is no secret that many, even experienced, scientific workers, choosing the subject matter of their dissertations, avoided as "risky" such subjects of research which would have as their aim the achievement of definite scientific results which would be valuable for practice, and preferred subjects which allowed the board to "discover" the theoretical and special knowledge and abilities for independent scientific research, as well as to achieve the academic degree, independent of the significance of the conclusions of the dissertation for Communistic construction in practice. A resolution of the CC of the CPSU Party and the USSR Council of Ministers of 20 August 1956 introduced substantial changes into the nature of requirements placed before candidate and doctoral dissertations. A candidate's dissertation should not contain "the attainment of a new scientific result" in general (as stipulated in paragraph 13 of the Instructions on the Procedure of Applying the Resolutions of the SNK of the USSR of 20 March 1937, and 26 April 1938, "Academic Degrees and Titles,") but new scientific conclusions and recommendations. It is not simply the "resolution and theoretical conclusions of scientific problems or scientifically based presentation of new problems presenting significant scientific interest" (as stated in paragraph 4 of the Resolution of the SNK of the USSR of 20 March 1937), but the "theoretical conclusions and solution of new scientific problems presenting a significant contribution to science and practice" which is demanded by the resolution of the CC of the CPSU and the Council of Ministers of Doctoral Dissertations. This document indicates that the basic purpose of conferring academic degrees and titles consists not only in increasing the qualifications of scientific and scientific-pedagogical cadres and stimulating scientific work in general, but in encouraging new, original scientific research, having great significance for science and Communistic construction in practice in the USSR, as well as the participation of scientific workers in incorporating the achievements of science into the national economy. Unfortunately, such a conclusion was not formulated directly in the "Instructions" of the VAK of 4 April 1957.

Any encouraged striving, both morally and materially, of a scientific worker to write and defend a dissertation for the candidate or doctoral degree, for many years has frequently diverted scientists from the solution

of vitally important problems of science and technology only because these subjects, from the viewpoint of rules in effect and practice formed on this basis, cannot be presented as dissertation subjects. The defects of current practices thus consisted not only in the weak influence of dissertations on the general development of science but in the fact that they sometimes hindered a timely and rapid solution to present-day scientific problems and, at any rate, were a certain hindrance toward attracting scientific workers who were engaged in preparing their dissertation subjects to working on such problems. Unfortunately, this question has not received its resolution in the sense that the development of dissertations under any conditions would not be an end in itself, but would be always a constituent part of planned scientific research, according to correct procedures, of the scientific institution or VUZ. A positive solution to this problem is particularly essential in respect to doctoral dissertations. The basic step in this direction has been taken: by a resolution by the USSR Council of Ministers and CC of the Party of 20 August 1956, the doctoral candidate period was abolished and it was established that "an increase in qualification of scientific workers and preparation for doctoral dissertation should be the result of the active participation in scientific research in scientific institutions, VUZy, in industrial and agricultural enterprises." But this basic thesis needs to be further developed, in our opinion, and this should be the abolishment of doctoral dissertations specially written for receiving the degree of doctor of sciences, and this practice should be replaced by conferring the degree of doctor of sciences to scientific workers who have written scientific papers which testify to their high qualification on the basis of the conclusions of these papers, made by the most competent collectives of scientists-specialists in the specific field of knowledge. A transition to this practice would exclude the possibility of splitting up scientific problems into "dissertation" and "non-dissertation", would free scientists from the necessity in solving certain scientific problems to consider that extremely rich scope of considerations connected with receiving the doctoral degree, and would transform the academic degree of doctor into a factor which would aid in raising the qualities of scientific research carried out by a scientist in accordance with the plan. In our opinion it would be expedient to change also the procedure of conferring the degree of candidate of sciences to workers of enterprises and organizations combining pro-

ductive work with scientific research. However, we cannot agree with the proposal to confer degrees and titles to creative workers of plants for the building of new, perfected, original machinery, incorporated in serious production without examinations and without defense of dissertations. In practice this would lead to a situation whereby every inventor would be almost automatically "put on the list" of candidates of sciences, independent of his general scientific qualifications. But it would perhaps be fully justified to confer an academic degree in certain sciences to persons who have fulfilled the established candidate minimum and who have demonstrated their capabilities for scientific activity by the creation of inventions, which in the opinion of the Council of the corresponding scientific research institution, could bee equated with dissertations. In the first place, such a resolution to the question would attract a broader range of inventors to the work of scientific research institutions, and in the second place, it would create a new stimulus for the inventors ithemselves. The organization of defense of dissertations in science councils also requires further improvements. Present defects in this matter lead to rather frequent errors in evaluating papers, and sometimes transfer defense into an empty and onerous formality.[19]

In the letter and spirit of our legislation, defense of the dissertation is a creative discussion and a scientific debate. However, are the juridical, and even more important, factual premises being assured, which are essential for the success of this form of scientific life? If this is a discussion, a debate, what is its purpose? To reveal a truth which is new for science or to ascertain the qualities of the candidate? Our legislation stresses more the second than the first of these two tasks. But if the purpose of the discussion is to ascertain the qualities of the candidate, the degree of his scientific knowledge and training for independent scientific activities, can it be that a form which developed in the middle ages is the most effective one under modern conditions, when the process of differentiation and specialization in the sciences has proceeded to such a degree that even scientists working in one department or sector are not always capable of being "judges" for problems which are new to science, solved by their comrades. Members of the council from other chairs or sectors are even less qualified to be judges. What significance, let us say, for the resolution of the question concerning the scholarly merits of a doctoral dissertation in physics has a familiarization with it made by the professor of the chair of civil law, for

example, of Moscow or Leningrad University. Proposals by scientists on expediency in VUZy are not chance ones. The Councils of these VUZy are of necessity composed of members of the various scientific specialities, and these proposals are to transfer the defense of dissertations to Councils of individual faculties of VUZy which are more alike in composition, on the necessity of an extremely strict selection and clear-cut designation "according to speciality" of the learned councils which have the right to accept the defense of doctoral dissertations.[20] We might add that such learned councils, more than has been done to the present, could be formed of learned councils of laboratories, sectors, chairs and design bureaus. Raising the responsibilities of the chairs, sectors, or departments in examining dissertations, granting them broad rights in this matter, as well as a significant increase in the responsibility of the official opponents for opinions,[21] would doubtlessly aid in improving the examination of dissertations by councils of scientific institutions and VUZy. In our opinion, it is not so much a matter of partial improvement of a quantitative nature as of altering the very principles of evaluating papers, particularly doctoral theses. The critical remarks by Professor Shershenevich in reference to conferring academic degrees in Russia have maintained a significance for us not only as an evaluation of the laws in force by a "public professor." Naturally at that time the goals of conferring academic degrees were different, as well as the conditions under which defense of dissertations took place, and the candidates were different as well as those from whom the decision depended. His criticism also contains certain things which hold true for the present day. There is also a viewpoint according to which it was proposed, besides the defense of dissertations in its present forms, to establish periodic "affirmation" of degrees by each candidate and doctor of sciences. Such an affirmation could be, for example, election by competition to instructing posts every five years. Proposals were also made for introducing special recertifying of candidates and doctors of sciences and depriving those persons of degrees who had not furnished valuable solutions and research during the past three to five years. The introduction of such measures would lead to a further bureaucratization of the matter of conferring academic degrees and would have no positive results for science. The necessity of "affirming one's degree" could prod certain scientists to solve "spectaculars" and, on the other hand, it would create "disadvantageous"

conditions for scientists who were solving truly new, long-term problems demanding great time and serious risk. In addition, the acceptance of this proposal would cause the entire mechanism of our scientific and other institutions and instances to go into operations every five years (more accurately, cause them to work continuously) in order to verify created and not yet created scientific works with one single goal: to decide to what extent a given scientist has confirmed or not confirmed his degree.

3. Academic Rank

1. Academic titles are conferred on scientific workers depending on the scientific-pedagogical (assistant, lecturer, professor) or scientific research (junior scientific worker, senior scientific worker, professor) work carried out by them. The rank of assistant in VUZy and that of junior scientific worker in scientific research institutions are conferred on persons who have completed their higher education, possessing sufficient qualification for instruction or scientific research and carrying out work under the direction of a professor or lecturer (senior scientific worker). This rank is conferred by order of the director of the VUZ or scientific institution based on a resolution of the Council at the representation of the head of the chair (department, laboratory). The rank of professor, lecturer and senior scientific worker is conferred by the Higher Certifying Commission at the representation of the Councils of VUZy and scientific research institutes.[22]

For the institutions of the USSR AN the union republic AN and the Academy of Medical Sciences the rank of senior scientific worker is conferred by the Presidium of the suitable AN at the representation of the Council of the scientific research institution. Substantial changes have been introduced into the previously used procedure of conferring academic rank by the VAK, by a resolution of the CC of the Party and the USSR Council of Ministers of 20 August 1956 and the instructions of the VAK published in a form based on this resolution on 4 April 1957. In accord with regulations in effect previously to the publication of these enactments, the rank of lecturer and senior scientific worker were conferred on persons possessing the academic degree of candidate of sciences and carrying out suitable instruction and scientific research in VUZy or scientific research institutions under the direction of a professor. The rank of professor was conferred on persons possessing the

academic degree of doctor and carrying out basic instruction or directing research in VUZy or scientific research institutions. These regulations did not define any requirements in respect to the quality of the work of the candidates for academic titles. The very criteria which differentiated the work of an assistant, lecturer, and professor in a VUZ, a junior and senior scientific worker in a scientific research institution were quite vague. There were differentiations made primarily along the lines of worker coordination (assistant--lecturer--professor). Secondly, the differentiation is made along lines of coordination of the work itself (basic or directive, carried out by a professor, and other--not basic nor directive, carried out by assistants and lecturers). But neither criterion could give qualitative differentiation of the work itself and are far from reflecting actuality. The qualitative differences in the activities of a scientific worker cannot be understandably defined by an administrative coordination of workers. In the activities of scientific institutions there are many times when lecturers are conducting independent work, are not "under the direction of professors," and to some extent direct the activities of the latter. In VUZy this lack of definition is corrected by various types of instructions regulating the organization of the education process.

As for scientific institutions, there the criteria which are placed as a basis of differentiation between junior and senior scientific workers, scientific workers without degree, and scientific workers possessing an academic degree, scientific workers possessing the degree of candidate of sciences and degree of doctor of sciences according to the content of the scientific work which is to be carried out by them, are not defined at all. This lack of definition was one of the reasons for the defects in the practice of conferring academic titles. The CC of the Party and the Council of Ministers, in a Resolution of 20 August 1956, obliged the councils of VUZy and scientific research institutes, in approving scientific titles, to consider first of all the quality of the pedagogical and scientific research work by persons presented for approval of scientific titles, to pay attention to the results of their scientific research finding application in the national economy. In correspondence with this resolution of the CC of the Party and the Soviet government, the VAK instructions of 4 April 1957 established several new regulations with the purpose of assuring collectives of scientists, represented by the councils of VUZy and scientific research institutions, expert commissions and the VAK, the opportunity to base their decisions on the question of

conferring titles on data bearing on the quality of scientific and scientific-pedagogical work by the candidate. The Instructions included obligatory conditions which had to be met by the person presented for the academic rank of lecturer, senior scientific worker and professor: a) the presence of written scientific papers or inventions, including those completed and published after defense of a dissertation; b) election by competition for a staff appointment; c) successful fulfillment of this position of at least one year (No. 32-35). All of these new requirements, binding the conferral of academic titles to certain "formal" indices of the quality of work of the candidate, the right to resolve questions on this quality are delegated to the scientists collectives themselves. This idea also has a bearing on the opportunity to receive the academic rank of professor or lecturer by highly qualified specialists with a long term of service in industry, transport or agriculture, or in the field of the arts, drawn to pedagogical work at the university level, preserved in the Instructions of 1957. In this case the conferring of a title can take place only for persons who have been selected for a staff position of professor or lecturer in competition after their semester of successful pedagogical activities. A further broadening of the rights of scientific collectives in resolving the questions of conferring academic degrees and titles expresses the policy of the Soviet government, expressed in all fields of legislation on the legal status of scientists, for the strengthening of socialist democratism in the organization of scientific work.

Chapter XI.

LEGAL REGULATING OF SCIENTIFIC CADRE TRAINING

1. The tasks standing before Soviet science, the Communist Party and the Soviet state require constant renewal of the scientific forces in the country, both according to total number of workers and level of scientific qualifications. The leadership of the training of new scientific cadres is one of the most important facets of state activity in organizing scientific work in the country. The Socialist state: a) plans the training of scientific workers and measures for increasing their scientific qualifications, finances this training and assures various forms of material assistance in this; b) determines the procedure and forms of training scientific cadres and increasing their qualifications; c) assures, by means of a system of state scientific institutions, the training of scientific cadres in the procedures and forms established by the state; d) distributes the scientific cadres among scientific and other institutions and organizations. The organizational training of scientific cadres began with the first years of Soviet authority. But it received its full development later, during the years of the struggle for industrialization of the country and the collectivization of agriculture. The task presented by the XIVth Party Conference "in a comparatively minimal historical period of time to catch up with and later to exceed the level of industrial development of the leading capitalist countries" demanded the introduction of measures designed for assuring an all-out introduction into production of the highest attainments both of Soviet and foreign science technology, the establishment of close ties between science, technology ahd production, a decisive approach of scientific work to the solution of tasks faced by industry, transport and agriculture. One of these measures was the expansion of the training of specialists, including the training of scientific workers. In the Resolution "Improving the Training of New Specialists," passed by the Plenum of the CC of the Party on 12 July 1928, the training of new specialists was announced to be an extremely important task of the Party.[1]

In order to increase the attention of Party and Soviet organs to the matter of selecting and training scientific cadres in general, and in particular, creating the conditions assuring the training of Communist-scientific workers of high scientific qualifications, the CC in a Resolution of 26 June 1929, "Party Scientific Cadres," along with other measures, recognized it to be essential

to work out regulations in legislation which would be identical for all VUZy, technical VUZy and scientific research institutions, on the procedure of selecting and training beginning scientific workers, post-graduate students, probationers, etc. The CC of the Party delegated a special commission to work out a plan for training scientific workers in the USSR in the basic fields of knowledge, in accord with the five year plan for the development of the national economy and the cultural construction of the USSR and, on the basis of the general plan, to work out a plan for directing Communists toward scientific work in the various branches of scientific knowledge.[2] As a result of the constant concern and leadership of the CC of the Party and the Soviet government, the country began to train many thousands of young scientific workers, and a system of training scientific cadres developed which assures a more rapid movement of society in all branches of science and technology than under the conditions of capitalism.[3] The regulations of Soviet law actively serve the cause of training scientific cadres. In the USSR much positive experience has been gained in the legal regulation of certain facets of this matter, also used by other Socialist countries.

2. The basic form of training scientific cadres has since the thirties been post-graduate work in scientific research institutions and VUZy. At present there are several types of post-graduate work in the USSR: a) so-called normal graduate work /ochnaya aspirantura/, that is, graduate work done by persons leaving their jobs in industrial and other enterprises and institutions during the period of post-graduate work; b) post-graduate work by correspondence; c) post-graduate work with a shortened term of training (one year), undertaken by VUZ instructors. In the organization of all types of post-graduate work the regulations of Soviet law have always had and have at present great significance, by which the following are defined: a) the competence of organs of state administration of scientific institutions and VUZy on directing post-graduate work; b) rules for acceptance for graduate work; c) terms of graduate training, forms of study by the graduate students, their rights and obligations. The basic normative enactments which resolve the above questions are the following: the resolution of the CC of the Party of 20 August 1956 "measures for improving the training and certification of scientific and pedagogical cadres,"[4] "Regulations on Graduate Work in VUZy and Scientific Institutions," ratified at the instructions of the USSR Council of Ministers by an order of the Ministry of Higher Education of the USSR, No. 636, of 10 June 1957.[5]

Let us see how the basic legal questions of training scientific cadres by graduate work are resolved by present regulations.

2. The delimitation of the competence of organs of state administration and scientific institutions in the field of directing graduate work. The leadership in training scientific cadres in the USSR is carried out by the following: a) scientific institutions, and b) organs of state administration: ministries, sovnarkhozy and other departments. The "instructions" of 1957 made considerable changes in the former procedure of delimiting the competence of scientific institutions and VUZy on the one hand, and organs of state administration on the other, in the field of directing graduate work. The basic responsibility for recruiting graduate students, organizing their work, checking the fulfillment of the individual curricula of graduate students and other obligations are borne by scientific institutions and VUZy. Consequently all rights in this field should belong to their directors. This idea found its incorporation in the instructions on graduate work of 1957. The directors of scientific research institutions and VUZy were given many rights formerly possessed by ministries and departments, as well as The Ministry of Higher Education. They include the following: enrollment of graduate students (No. 7), approval of scientific instructors (No. 15), approval of the certification of graduate students and removal of graduate students who have not shown the ability to carry out scientific research, which has not been completed during the period of time established by the curriculum without valid reasons (No. 17).

Broadening the rights of the directors, the instructions of 1957 emphasized an increase in the role and responsibility of the scientific collectives directed by them in the training of scientific cadres: councils of the VUZy, scientific research institutes, chairs, sectors, laboratories. Of the organs of state administration, graduate work instruction is carried out by the following: a) ministries, sovnarkhozy and other departments having within their jurisdiction scientific institutions of VUZy, engaging in the training of scientific cadres by means of graduate work, and b) ministries and departments delegated with authorities to direct graduate work in other scientific institutions or VUZy not directly subordinate to them. The leadership and responsibility for training scientific-pedagogical and scientific cadres by means of graduate work is borne by the ministries, sovnarkhozes and other departments which possess VUZy or scientific research institutions conducting graduate work. The following are within the compe-

tence of these ministries and departments: a) introduction for ratification by the USSR Ministry of Higher Education of proposals on instituting or eliminating graduate study by a person at VUZy and NIU (nauchno-issledovatel'skiye uchrezhdeniya--scientific research institutions) of the Ministry (department) (No. 3); b) development and introduction for the approval of the USSR Ministry of Higher Education of plans for post-graduate studentships for subordinate VUZy and scientific research institutes (No. 3); c) the establishment of a procedure of directing persons who have finished a post-graduate course (having been removed from production) to a job, in subordinate VUZy or NIU (No. 28).

Many functions in the field of directing the training of scientific cadres have been delegated to the USSR Ministry of Higher Education. These include the following: 1) establishment and liquidation of graduate studentships in VUZy and NIU of ministries, sovnarkhozy and other departments (No. 3). 2) examination and approval of summary annual plans for accepting post-graduate students for all VUZy and NIU of ministries, sovnarkhozy and other departments (No. 3). 3) approval of the rules for accepting for post-graduate work in VUZy and NIU of ministries and departments (No. 13). 4) approval of the list of foreign languages in which entrance examinations are to be conducted for those beginning post-graduate study (No. 6). In respect to NIU of the USSR AN and the union republic academies of sciences, certain functions analogous to the functions of the USSR Ministry of Higher Education (No. 313 of the Instructions) are carried out by the Presidium of the USSR AN. The question of the competence of the organs of state administration for directing graduate studies has a third facet, consisting in the delimitation of the scope of rights and obligations of the state organs of the USSR and the union republics in this area. An extension of the rights of republic organizations had also taken place in this area, as well as in the resolution of all questions concerning the direction of economic and cultural construction. According to the Instructions of 1950 the republic organizations could not come to a final resolution of questions dealing with the graduate students trained in subordinate scientific institutions and VUZy in fields serving the branches of industry and culture of the republic, nor could they settle questions as to the composition of the scientific instructors of these graduate students. These questions having a bearing on post-graduate work in the academy of the union republic were settled by the Presidium of the AN USSR, and in respect to NIU of Ministries and departments of the republic and VUZy (including

republic)--by the USSR Ministry of Higher Education.[6]

Practice has demonstrated the expediency of such a centralization in the settling of certain questions of directing graduate studies. In respect to the NIU of the union republic academies of sciences, this procedure was changed in the beginning of 1955. The Presidium of the AN USSR, in a resolution of 7 January 1955, transferred all its rights in the area of directing graduate study in the union republic academies of sciences to the Presidia of the academies of sciences of these republics. The 1957 Instructions on graduate study affirmed these changes. However, not all questions in this direction could be considered resolved completely. In particular, supplementary examination was required by the question on expanding the rights of the union republics and in respect to graduate studies at other NIU and VUZy of the union republics.

3. The regulations of Soviet law create all necessary juridical opportunities for selecting the most capable young specialists to undertake graduate work. In 1957 Instructions on graduate study, confirming experience gained earlier and having proven itself, in addition, established certain new rules affecting both the requirements made on candidates for graduate degrees as well as the procedure of making application and accepting for graduate work. As for regulating the requirements for the candidates for graduate work, they deal with citizenship, age, education, experience and the forms of ascertaining the candidates' capability for scientific activities. According to present regulations citizens of the USSR are accepted for graduate work. This, however, does not close the doors of the Soviet universities and scientific institutions on training the citizens of other countries for scientific careers. As the experience of past years has shown, foreign citizens have been accepted and are being broadly accepted for Soviet graduate work, particularly citizens of other Socialist countries. The procedure of acceptance and training of these graduate students is determined by special agreements. In 1957 Instructions determine the approximate age for persons who are taking graduate work: no older than 35 in graduate work with a leave from production and no older than 45 for the one year graduate work period and graduate work without leaving production. The possession of higher education in the selected scientific specialty is a general requirement for all candidates for graduate work. The instructions do not furnish the possibility of any exceptions from the rules on age and education. The rules

on the possession of experience in practical work are formulated somewhat differently. The 1950 "Instructions," as a general rule, established that persons would be accepted for graduate work "possessing scientific experience, pedagogical or production experience in their specialty." (No. 26). This formulation was incomplete in many respects. On the one hand it made it possible (or at least did not exclude it), without determining the length of work, to allow persons with a minimum period of work to undertake graduate work, and on the other hand, it excluded the possibility of accepting for graduate work persons, the lengthy experience of whom did not fall within the concept of scientific, pedagogical or production work (for example, work in the apparatus of state). The new instructions corrected both of these defects, establishing that: 1) persons could be accepted for graduate work who had had work experience of no less than two years; 2) this experience could be in any practical work in the selected scientific specialization. In addition to the above accurate definitions, the 1957 Instructions introduced a supplementary condition: in calculating the established two year period, only work subsequent to the completion of the VUZ is included. Inclusion of this limitation into the Instructions goes further than the Resolution by the CC of the Party and the Council of Ministers in 1956. The Resolution states: "Persons will be accepted for graduate work who have practical work experience of at least two years in their chosen scientific specialty and who have shown the ability for scientific work" (No. 1, paragraph a). This contains no instructions as to when the candidate for graduate studies should have amassed his practical work experience: before entering the VUZ, during study in the VUZ (if he was a correspondence student) or after the completion of the VUZ. The Instructions stated that persons would be accepted for graduate study having ". . . practical work experience of no less than two years after the completion of the VUZ in their chosen scientific specialty . . ." With such a wording, the following persons would not be accepted for graduate work earlier than two years after completing the VUZ: a) persons who had entered VUZy as full time students with production experience in their chosen scientific specialty; b) specialists who have much practical work experience and who have completed the VUZ as a correspondence student, but who wish to do full time graduate work; c) specialists with much work experience who have completed their university education as correspondence students and who wish to do correspondence graduate work.

These limitations (particularly in respect to the

graduates of correspondence VUZy) seem to us to be unjustified, for in creating a two year break between the completion of the VUZ and beginning of graduate study, they artificially make it difficult for experienced cadres to undertake graduate study. At any rate this is not justified for example, for cases of acceptance of graduate study in the legal sciences of court and procurator's office workers, as well as workers from the apparatus of government. Establishing more clear-cut requirements for persons undertaking graduate work in respect to length of practical work experience, the 1957 Instructions preserved, however, as an exception to the general rule, the previously provided possibility to accept a candidate for graduate study directly after the completion of the VUZ on the resolution of the council of the VUZ. However, this possibility is now provided, not for all, but only for certain specialties (mathematics, theoretical physics, etc.), the list of which is established by the Ministry of Higher Education with the agreement of the AN USSR (No. 6). The Resolution of the CC and the Party in the USSR Council of Ministers of 20 August 1956 and the 1957 Regulations made the rule obligatory on all, according to which each person beginning graduate studies must present a published scientific work or invention and, in their absence, a scientific report (paper) in his chosen field. Acquaintance with these materials, in combination with examinations taken by all persons embarking on graduate studies (in their special field, history of the Party, foreign language), makes it possible to choose the most capable candidates for graduate studies. Extremely important and basically new is the rule established by the 1957 "Regulations" according to which the graduate student may be enrolled only with the consent of the scientist who is instructing the candidate. This regulation eliminates past practice of enrolling persons for graduate studies without the knowledge of their future scientific instructors (and sometimes the departments in which they are enrolled). Providing the scientists themselves with the final word in enrolling graduate students the Soviet state made it possible for better planning in selecting the most talented students for scientific work even during their university studies.

4. The Soviet legal regulations also provide for the assignment of funds necessary for the organization of training of scientific cadres by graduate work. The Soviet state: a) provides all persons admitted to examinations for full-time and correspondence graduate work, 30 calendar days vacation with pay from the place of work in order to study for and take the examinations; b) assures all graduate

students of a state stipend. Persons beginning graduate work from practical work with a length of service of no less than two years and receiving wages which are higher than the stipend, receive a stipend equal to the basic wages, but no greater than 1000 rubles a month; c) graduate students are given scientific instructors from among the most qualified scientists; d) makes it possible for graduate students to make use of equipment, laboratories, consulting rooms, libraries; e) sends graduate students on scientific missions both within the country and abroad; f) gives graduate students an annual sum of money equal to the monthly stipend for purchasing scientific literature; g) for graduate students studying and working in production at the same time, upon successful work in completing the individual curriculum, it provides an annual supplementary vacation from the job with pay for 30 calendar days in order to take candidate examinations and carry out work for the dissertation.

5. Providing graduate students with material and legal opportunities for successful work, the state considers it a basic and main obligation of the graduate student to acquire a deep mastery of his chosen field, a mastery of the methods of conducting scientific research and educational-methodological work. During the period of graduate study (up to three years for a full-time student and up to four years for a correspondence student) the graduate student is required 1) to pass examinations within the scope of the candidate minimum; 2) to carry out scientific work within the period established within the individual curriculum; 3) to report the results of the scientific work at the council of the VUZ or NIU or scientific conference and present these results to be published in the press (No. 19). According to the present procedure the graduate student is not required as previously to defend his candidate's dissertation within a three year period (four for graduate students who are also in production). This, however, does not mean a lessening of the requirements placed on graduate students. On the contrary these requirements increase constantly. Primarily the requirements for the dissertations have increased as well as for their theoretical level and practical value, about which we have spoken in the previous chapter. In the Resolutions of the CC of the Party, the speeches of eminent Soviet scientists, workers of industry, agriculture and culture, as well as in the Soviet press, the serious defects in the training of new scientific cadres have been noted many times, and the legal regulations for these activities have been criticized. But present defects

and sometimes distortions, meeting sharp censure by the Party and state, cannot lead to a conclusion of the inexpediency of the further preservation of graduate study and the planning of the training of scientific cadres in general, as has been done by certain comrades. Without planned leadership of this extremely important state matter socialist society could not assure itself of a regulated replenishment of scientific cadres both for the country as a whole and in particular for new branches of science.

5. Another form of training scientific and scientific-pedagogical cadres is the one year term of graduate study at VUZ for VUZ instructors. The one year term of graduate study is undertaken by VUZ instructors who have a length of service of scientific or pedagogical work, who have had all candidate's examinations, have carried out scientific research on a selected study on a scope sufficient for preparation and defense of a dissertation, on the basis of this work, for a candidate for the academic degree of candidate of sciences, during the one year term of graduate study, and having published articles or monographs on this subject. Instructors enrolled for a one year graduate study course maintain their basic salary. Persons enrolled for the one year graduate study program, after the study has been completed, return to their former place of work and occupy their former position.

6. Finally there is one additional and also extremely important form of training scientific and scientific pedagogical cadres, and this is the carrying out of scientific research other than in graduate studies by workers of scientific institutions, instructors in VUZy, workers at industrial and other enterprises and organizations. It would seem that this was one of the most "disorganized" forms of training. If the matter is examined on its merits it becomes clear that also here we have a planned, organized influence and aid by the scientific institution and VUZ, and these are considerable, and the effect of these dissertations is considerably greater. At present, on the Resolution of the CC of the Party and the USSR Council of Ministers of 20 August 1956, for persons who are successfully combining production or pedagogical work with scientific work, it has been established, on the recommendation of scientific-technical councils of ministries and departments as well as councils of VUZy and NIU, that there should be leaves of absence of up to three months for completing the candidate's dissertation and up to six months for completing the doctoral dissertation. These leaves are granted with retention of pay from

the place of employment. Until the end of 1956 there was one additional form of training scientific cadres in the USSR, the doctoral graduate studentship. In setting this up in 1947 it was intended that the organization of this studentship would further the scientific progress of young Soviet scientists and would supply VUZy, scientific research institutions and enterprises with highly skilled scientific cadres. The AN USSR organized the training of scientific cadres by channeling young scientists working in VUZy, scientific research institutes and enterprises to begin these doctoral studentships. The procedure of channeling scientific workers to this studentship by the AN USSR was determined by special "Regulations," ratified by the same Resolution of the government of the USSR. On 20 August 1956 the Central Committee of the Party and the Council of Ministers abolished this system as not meeting the modern tasks of training higher qualification scientific cadres.

Chapter XII.

PECULIARITIES OF THE LEGAL STATUS OF SCIENTIFIC WORKERS AS PARTICIPANTS OF LEGAL RELATIONSHIPS IN SOVIET LABOR, COPYRIGHT AND PATENT LAW

1. Peculiarities of the Beginning, Changes and Termination of Labor Law Relations between Scientific Workers and Scientific Institutions

1. From the first days of the Revolution the Soviet state, in regulating the labor of scientific workers, has strictly incorporated the principles of socialism and, expressing these principles, the norms of socialist labor law which are common to all workers. Alongside this, certain peculiarities of the legal regulation of the labor of scientists were established. The policy of the Communist Party in respect to the intelligentsia and specialists, the basis of which was laid by the program and resolutions of the Party, directed at incorporating it, lies at the basis of these peculiarities. They refer to, for example: a) the beginnings, changes and termination of labor law relations between scientific workers and scientific institutions; b) the organization and discipline of the labor of scientific workers; c) remuneration for the labor of scientific workers; d) retirement benefits for scientific workers and several other legal institutions. The existence of these peculiarities is recognized by all, but specialists in labor law almost ignore the characteristics of these peculiar features in their works.[1]

2. The procedure of the rise and termination of labor law relations between scientific workers and scientific institutions in their basic states does not differ substantially from the procedure of the beginnings, changes and termination of labor law relations arising between bench and office workers and state and public enterprises and organizations. However, this procedure has its peculiar features, which deal with the beginnings of labor law relations of scientific workers, their changes and termination. The main peculiarity of the beginnings of labor law relations is the broad practice of conducting competitions for positions of scientific workers and in general for persons conducting scientific research. The procedure of conducting competition for the position of scientific worker is regulated in detail by statute. For a more complete picture of the general principles and the major differences in the conduct of competitions in scientific

institutions and universities, we shall deal with the procedure of this competition: a) in VUZy, and b) in scientific research institutes. In VUZy competition for teaching posts was conducted even before the October Revolution.[2] By a decree of the SNK "Certain changes in the composition and structure of state scientific institutions and VUZy of the RSFSR" (SU RSFSR, 1918, No. 72, Article 789) the cooptation of professors by a narrow circle of "their own people"--the council of the faculty or university--by means of "secret" ballots, without having to answer to anyone, was abolished. The decree introduced the filling of professorial and instructor posts of VUZy by means of an All Russian competition which was held publicly. The practice of filling positions by competition was preserved and developed in many government and departmental enactments which were subsequently passed. Up to 1953 vacant positions of heads of chairs, professors, and lecturers were filled by competition. Since 1953, on a resolution of the USSR Council of Ministers periodic (every 5 years) competitions for filling the positions of chair heads, professors, lecturers, instructors and assistants have been introduced in the VUZy. The procedure of holding the competitions for filling these positions is determined by special instructions ratified by the USSR Ministry of Higher Education, with the agreement of the All-Union Central Council of Trade Unions of 17 July 1957.[3] In scientific research institutes the filling of positions by competition began to be broadly applied comparatively recently, after the Second World War. At first competitions for filling positions were introduced by departmental enactment and affected only the filling of vacant posts. An order of the USSR People's Commissariat of Public Health of 15 March 1946 established that the positions of directors of laboratories, sections, departments and sectors, as well as the positions of senior scientific workers of scientific research institutes are occupied by competition, with discussion of the candidacy at the institute council; the selected candidates are presented for approval of the USSR People's Commissariat of Public Health or the People's Commissariats of Public Health of the union republics, according to competence.[4]

The resolution of the Presidium of the AN USSR of 10 April 1947, "the training, placement and use of scientific cadres of the AN USSR," established that "in the future vacant positions of senior scientific workers of the AN USSR will be occupied by competition." The selection of senior scientific workers from those

persons presenting documents for the competition was effected, in accordance with that Resolution, by the director of the institute, who presented his decision for the final approval of the bureau of the branch in question. The decision of the branch bureau was reached by secret ballot. The filling of vacant posts of senior scientific worker by academicians and corresponding members was effected without competition.[5] Subsequently the Presidium of the AN USSR passed several new resolutions dealing with competition for filling posts of scientific workers. A Resolution of the Presidium of 24 November 1949[6] and of 17 October 1952[7] established the selection of candidates for positions by the councils of the scientific institutions and not by their directors, and those persons were determined who would have the right to participate in the competitions, and the procedure of the competitions was established. In a resolution of 23 December 1955 the Presidium of the AN USSR established periodic competitions in the scientific institutions of the AN USSR for filling posts of branch heads, heads of sectors, laboratories and senior scientific workers, indicating that academicians and corresponding members of the AN USSR shall be approved for the above positions without competition, and periodic competitions for these positions which are filled by academicians and corresponding members shall not be announced."[8]

The procedure of holding these periodic competitions, as all other questions, was determined by the "Regulations on Competitions for Filling the Posts of Heads of Laboratories, Branches, Sectors and Senior Scientific Workers in the Scientific Institutions of the AN USSR," ratified by the Presidium of the AN USSR on 29 June 1956, and "Instructions on the Procedure on Holding Competitions for Filling the Positions of Heads of Branches, Sectors, Laboratories and Senior Scientific Workers in the Scientific Institutions of the AN USSR," ratified by the same Resolution of the Presidium. The new content of the "Regulations" and "Instructions" ratified on 29 June 1956, consisted primarily in establishing the procedure of holding periodic competitions for these positions. Beginning with 1957 on a Resolution of the USSR Council of Ministers of 15 August 1956, filling the posts by competition of heads of laboratories, scientific divisions and sectors as well as senior scientific workers was established for all scientific research institutes and laboratories of the AN USSR, branch academies, union republic academies of sciences, and ministries and departments. A resolution of the Council of Ministers of 15 August 1956

provided the holding of competitions for vacant posts, as well as competitions (once every five years) for positions which are occupied. On the basis of the resolution of the government of 15 August 1956, the Presidium of the AN USSR, in agreement with the All-Union Central Council of Trade Unions and with those ministries and departments affected, on 22 February 1957, ratified the new instructions "The Procedure of Filling Posts of Heads of Laboratories, Scientific Divisions, Sectors, and Senior Scientific Workers of Scientific Research Institutes and Laboratories."9

These instructions, in accordance with the resolution of the Council of Ministers, are valid for all scientific research institutes both of the AN USSR and of other departments. Thus at present competitive filling of positions of heads of chairs, professors, lecturers and instructors and assistants in VUZy, as well as the positions of heads of laboratories, scientific divisions, sectors and senior scientific workers in scientific research institutes and laboratories have been established.10 & 11 The procedure for holding competitions in VUZy and scientific institutions is basically identical. In reviewing the procedure for conducting competitions for filling posts in scientific institutions we should pause on certain differences in the procedure of holding competitions in scientific institutions and VUZy which presently exist. It is even more essential to examine these differences, for there are no bases in our opinion for maintaining certain of them. The entire procedure of holding competitions is subordinate to the goal of selecting the most qualified cadres for working in scientific research institutes and laboratories.12 This aim is served by regulations which: 1) determine the requirements on the candidates for filling any post by competition; 2) assure a broad public nature of the competitions; 3) prevent the last word in selecting candidates for posts to the scientific collectives, in the person of the learned councils of the various scientific institutions; 4) establish the correct combination of single person leadership and the collegiate principle in resolving questions dealing with the selection of scientific worker cadres; 5) maintain the rights and interests of scientific workers from all violations. We shall pause to discuss these regulations in greater detail.

1. Requirements for candidates to fill posts by competition are determined, taking into account the nature of the work of the given scientific institution

or VUZ. In the "Instructions" of the Presidium of the AN USSR of 22 February 1957, the following is stated: "The following persons can participate in competitions for filling the posts of heads of laboratories, divisions, sectors and senior scientific workers: a) in the institutions of the AN USSR, the academies of sciences of the union republics--persons having the academic degree of doctor of sciences or candidate of sciences. If in the institutions of the AN USSR a candidate of sciences is selected for the post of senior scientific worker, and he has no academic title of senior scientific workers, the scientific council should simultaneously examine the question of conferring upon him this academic rank. The person in question shall occupy the position only after he has been given the academic rank of senior scientific worker by the Presidium of the AN USSR; b) in academies, scientific research institutes and laboratories of ministries and departments--persons who have the academic degree of doctor or candidate of sciences, as well as highly qualified specialists with higher education, great productive experience and who have displayed a capability for scientific work."

2. The broad public nature of the competitions is assured by the establishment of the obligation on the part of the head of the scientific institution and VUZ to publish announcements of the competition in the central, republic and oblast newspapers, scientific-production journals or special bulletins, one or two months before the competition. This goal is also pursued by the rule according to which a list of participants in the competition is transmitted to members of the scientific council and is displayed in the scientific institution or VUZ ten days before the session of the scientific council. Public examination of the question of filling posts in competition by the scientific council is of great significance; the scientific council hears motivated conclusions on each candidacy separately, which is reported by the competition commission. The council also discusses the conclusion of the competition commission, and during this discussion not only members of the scientific council, but other workers, including persons who have applied to participate in the competition have the right to participate. The introduction of competitions has a great influence not only on its participants but on the entire collective of scientific workers, chiefly due to the public nature of the discussion of the merits and shortcomings of each candidate and the correct and objective evaluation of these merits and shortcomings.

3. The present procedure of holding competitions gives the last word in the selection of a candidate to the collective of the most authoritative workers in the scientific institution--the scientific council. The scientific council exerts influence on the competition in the following manner: a) it selects by secret ballot two or four scientific workers to form a competition commission; b) by secret ballot it selects from the participants of the competition a candidate for the post: that candidate is elected who has received the greatest number of votes, but this must be more than half the votes of those members of the scientific council present. In case no one candidate receives the necessary quantity of votes, the competition is considered not to have taken place. The decision of the scientific council is final if no less than two-thirds of the council have participated in the voting; c) the question of filling a post by competition is examined for a second time in case the head of the scientific institution or VUZ is not in agreement with the decision taken by the council. A second decision by the scientific council to select the same candidate for the post is final, if more than one-half of the votes of a list composition of the members of the scientific council have been cast for him. The scientific council examines in the same procedure the question of competition for a second time also on the request of the union organization of the scientific institution, if it believes that in holding the periodic competition the rights of the worker occupying the post for the filling of which the competition has been held have been violated.

3. The granting of broad rights to the scientific councils does not abolish the principle of single person leadership by the heads of scientific institutions and does not remove from them the responsibility for the selection of scientific cadres. The presently valid "Inspections" establish that the decisions to hold competitions are made by the head of the scientific institution. He also appoints the chairman of the competition commission. The competition commission presents the head of the institution with its motivated findings in written form for each candidacy separately. The head of the scientific institution approves himself or presents for the approval of the above organization those persons selected through the competition. In case the head of the scientific institution is not in agreement with the decision of the council for the selection of any candidate by competition, he shall submit his request to the higher organization. It is therefore impossible to agree with the opinion of those

authors who summarize the role of heads of scientific institutions and VUZy in conducting competitions merely to the execution of the decision of the scientific council.[13]

4. In order to obtain the basic goal of the competition a strict observance of the principles of socialist legality and the comprehensive preservation of the rights of scientific workers are of extremely important and sometimes decisive significance. This particularly holds true for the conduct of periodic competitions for positions which are already occupied. The instructions presently in force have established several important guarantees of the rights of scientific workers in holding periodic competitions: the right to give the necessary information to the competition commission and the scientific council as well as the right to keep the position in case the competition is considered not to have taken place; the right to appeal the decision of the scientific council before the head of the scientific institution, or to a higher organization, as well as to the union organization of that scientific institution; the right to be transferred to a lower vacant position. However, all of these guarantees can have significance in practice only in case the scientific council, management or public organization of the scientific institution strictly adhere to the letter of the law on the purposes for holding competitions, if their work fully excludes all facts, which unfortunately sometimes can be met, of an unprincipled approach to the resolution of scientific-organizational questions. Academician A. Ye. Fersman noted that "Mastery of science and a scientific problem is the result of a struggle, a struggle with one's own doubts and searches, a struggle with criticism and lack of confidence by others, a struggle with the sluggishness of tradition, a struggle for something new, which has never been said and never been done by anyone. The deeper a scientific achievement, the greater is the struggle for it."[14]

Unfortunately cases occur whereby lack of confidence and criticism to a scientific worker who is trying to achieve something new which has never been done by anybody are manifested in forms which hinder the opportunity of the worker to continue his work. Facts have been given in the press whereby in certain VUZy and scientific institutions, as a result of the unprincipled approach to the matter by the members of the council in holding competitions, coarse violations of the rights of scientific workers were allowed, whereby the competition itself was used as a means to deal with objectionable workers.[15] The moral responsibility of each member of the scientific council has grown now to the highest degree,

for the scientific council in essence has also become a unique scientific collegium, which is authorized to resolve possible conflicts in holding competitions. As has been stated, upon lack of agreement of the administration with the decision of the scientific council or upon decision of the union organization that a violation has been made of the rights of scientific workers in holding a competition, the scientific council examines a competition for a second time, and its decision is final. If we were to add that a decree by the Presidium of the USSR Supreme Soviet of 31 January 1957 abolished the judicial procedure of examining cases dealing with the restoration of scientific and pedagogical workers elected by competition, it would become clear to what an extent the rights of scientific councils have grown and how great must be the moral responsibility of each scientist who is entrusted with resolving matters dealing with the selection of scientific cadres. For the correct application of the established procedure for holding competitions and the achievement of that goal for which they were introduced, the correct understanding in the science of law and correct decision in practice of certain questions which have not yet been completely clarified, and which have arisen in connection with the holding of periodic competitions, are of great significance. Let us discuss one of them. Does the introduction of periodic examinations for the posts of senior scientific workers and heads of laboratories, divisions and sectors in scientific institutions indicate the establishment of a new principle, on which labor law relations are constructed for people occupying these positions, with corresponding scientific institutions or VUZy, in short the principle of work not by labor contract, as was previously done, but by elections? Neither in the resolution of the Presidium of the AN USSR of 29 June 1956, nor in the Resolution by the USSR Council of Ministers of 15 August 1956, nor in the "Instructions" of 22 February 1957 was a clear-cut answer to this question given. It is partially resolved by an interpretation by the USSR Council of Ministers State Committee of 11 July 1957, which indicated that in the labor booklets of scientific and pedagogical workers of NIU and VUZy, not elected by competition for the post previously occupied by them and who have been discharged from their work in connection with this, the following entry is made: "Discharged in connection with the lapse of the competition work." But this interpretation in our opinion does not answer the question completely. At any rate, it does not free this extremely important question

from the necessity of juridical analysis. Let us pause first of all on the peculiar features of labor law relations between workers, which have arisen due to the act of their election to posts already occupied (people's judges, election workers of the Soviets, etc.). This question in Soviet writings has received most complete illumination by Professor A. Ye. Pasherstnik in his book Pravo na trud (right to work). The author sees as one of the basic differences between work by election and work by labor contract the fact that in the initiation of labor law relations direct legal significance is possessed by the particular act of a non-contract character--the act of election.[16] As one of the peculiar features of labor law relations which arise on the basis of elections Professor A. Ye. Pasherstnik indicates the limitation of these relations by a definite period. Labor law relations which have arisen due to the act of election, can be terminated as a rule only on the decision of the organ which has elected the given person to the elected post. A worker occupying an elected post cannot consider himself discharged until a decision has been made by the proper organ. The administration of the institution or organization also cannot discharge this worker without the approval of the organ which has elected him, even if there are bases sufficient to discharge him in acoordance with the law. "For elected workers," Professor A. Ye. Pasherstnik continues, "bases for terminating labor law relations not used for other workers can be applied: a) anticipatory recall of electors; b) failure to elect for a new term. In this the electors are not bound by conditions established by legislation and other regulatory acts for terminating labor law relations which have arisen from other grounds."[17]

Thus, in the opinion of Professor A. Ye. Pasherstnik, the basis for the beginning of labor law relations in work by election is not a labor contract but the act of electing to the position. The grounds for terminating these legal relations is not the unilateral expression of the will of the worker or the administration of the organ where he works, but the decision of the electors. The organ which has selected a worker for an elected post is not bound by the regulations of labor legislation in deciding the question of the anticipatory recall of a worker or his discharge due to lapsing of the election term. In order to resolve the question of discharging an elected worker on the decision of the organ which has elected him, the question as to who shall replace the worker discharged from the position has no legal significance. Limitation of term is one of the definite indications of a legal

relation by election in Soviet society; but this indication is not the one which differentiates this type of labor law relations from other types. To what degree are all of these peculiar features of the legal status of elected positions characteristic for scientific work? Is scientific work by election? In our opinion it is not. Other views on the subject have been expressed in literature on this topic. V. N. Smirnov, in the article already mentioned, came to the conclusion that "the introduction of obligatory periodical competitions for filling instructorial posts establishes a unique form of labor contract for the faculty of VUZy. This contract is concluded for a five year period."[18] Candidates of legal sciences A. A. Abramova and Ye. I. Voylenko, in an article entitled "Legal Problems in the Competitive Selection of Cadres" come out against this view of the problem. "However, it is impossible to consider," they write, "that the introduction of obligatory periodic competitions for filling posts establishes a unique form of temporary labor contract. As is well known, a fixed-term labor contract assumes the conclusion of a contract for a specified period of time, the lapse of which serves as a basis for the termination of labor law relations on the initiative of either of the parties without further grounds. The lapse of the five year period of holding a staff position in a VUZ or NIU is not in and of itself for the parties the basis for dissolving the labor contract. Consequently, in such cases the main indication of a fixed period labor contract disappears. In addition, present legislation does not provide for the conclusion of five year labor contracts with instructors in VUZy or scientific workers. Periodical competitions do not transform the labor law relations of instructors and scientific workers into fixed term ones, for they introduce only a new basis for dissolving the labor contract (lack of service by competition). It is impossible to recognize as a fixed-term labor contract the retention (invitation) of the worker for one year in view of the fact that the competition has been recognized not to have taken place. These workers have a right to participate in the new competition, and the termination of labor law relations with them will be caused not by the lapse of the year term, but as a result of the participation in the competition or lack of participation in the competition."[19]

This rebuttal seems to us to be poorly grounded. But the important thing is not only a matter of these, more accurately--not only a matter of purely legal motives. If we proceed from the premise that all posts are filled

by election (competition) and for a stipulated term (five years), the legal side of the question becomes quite clear and well defined: after the period of election lapses the post is announced to be vacant and a competition is held to fill it, in which the person who has occupied the post previously can participate. This person continues to carry out his duties until the results of the competition are announced and ratified. In case he is not elected to the position he presently holds, he is discharged after the term of election lapses. In this procedure he is discharged also in case he decides not to participate in the competition. However, the question arises as to where this "simplicity" of legal construction will lead? Does it serve that purpose which was brought out in the resolution by the government in establishing periodic competitions, particularly in relation to workers in scientific research institutes and laboratories? Will it aid in attracting the most talented young people to scientific work? The above proposed construction is fully suitable for filling posts of heads of laboratories, divisions and sectors. Here it fully reflects the idea of the democratization of the administration of scientific institutions and their subdivision, and if handled correctly, can be only of use. As for senior scientific workers, this structure seems unacceptable to us. Declaring all senior scientific workers in the country to be workers who are occupying their positions for a specific period (five years) after the lapse of which each position of scientific worker, independent of the quality of his work, is announced to be vacant, and in this manner each senior scientific worker , including those who have attained considerable success in science, each five years must consider himself discharged from his job, does not proceed from the nature or peculiar features of scientific work, which requires constancy, stability, nor does it proceed from present labor legislation. Scientific activity cannot be viewed by workers as a temporary matter, carried out by election for a specific term. Science, as has been repeated many times by Academician Pavlov, demands from a man his entire life. Taking into consideration the necessity of a careful approach to the resolution of questions dealing with the labor of scientists, Soviet legislation both as in respect to other workers, has not foreseen the possibility for the administration of scientific institutions to discharge scientific workers from their jobs in cases whereby they are coping with the work assigned. The introduction of periodic competitions for the posts of senior scientific workers should not shake

this basic principle. Another peculiar feature of the labor law relations deals with junior scientific workers and consists in the carrying out of periodic certification every five years. Certification, like competitions, was originally established either by the scientific institutions themselves or by the ministries and departments.[20]

A resolution of 15 August 1956 by the Council of Ministers established period (once each five years) certifications of junior scientific workers and senior engineers in all scientific research institutes and laboratories. The idea of the certifications consists in the presentation of the opportunity to the scientists themselves to make a final judgment on the qualification of junior scientific workers and to aid the directors of scientific institutions in the correct resolution of the question of the further use of each worker. In accordance with the instuctions "Attestation of Junior Scientific Workers and Senior Engineers of Scientific Research Institutes and Laboratories," ratified by a Resolution by the Presidium of the AN USSR of 22 February 1957 in accordance with the Resolution by the USSR Council of Ministers of 15 August 1956[21], workers in scientific research institutes and laboratories [illegible] positions of junior scientific workers and senior engineers for a period of more than one year must be certified. Certification is conducted periodically every five years. The same "Instructions" established that the following persons may occupy the post of junior scientific worker: a) in the scientific institutions of the AN USSR and the union republic academies of sciences--those persons who have the academic degree of candidate of sciences or higher education and the academic rank of junior scientific workers; b) in NIU of ministries and departments--persons who have the academic degree of candidate of sciences or higher education and a term of service of from two to three years. Positions of senior engineers in NIU can be held by persons with higher education and term of engineering service of from two to three years. In order to conduct certification of junior scientific workers and senior engineers, the head of the scientific institution appoints a certification commission under his chairmanship or under the leadership of his assistant. The commission includes the head of the division, sector and laboratory in which the worker to be certified is employed, qualified specialists in the suitable field of science and representatives of public organizations (Party and trade union). The certification commission examines the materials of certification, talks with the worker being certified, and

by means of an open vote with a simple majority, makes a separate decision for each candidacy. The verdict of the certification commission should contain an evaluation of the work of the junior scientific worker and senior engineer and a recommendation on his further employment. On the basis of the verdict of the certification commission the head of the scientific institution issues an order containing the results of the certification, and this is displayed in the institution for the information of all workers. At the discretion of the head of the scientific institution or on the instructions of the higher organization, the results of the certification may be examined by the scientific council of the institution. Junior scientific workers or senior engineers who are declared, as a result of the certification, not suitable for the position occupied by them are shifted on the proposal of the head of the scientific institution, in case of their consent and the availability of vacant positions, to lower positions or are discharged from their position on the basis of present legislation. By introducing certification, the government of the USSR does not deprive junior scientific workers of the guarantee of their labor rights as established by law. On the contrary this creates conditions for a more correct evaluation of their qualification.

2. Peculiar Features of the Legal Status of Scientific Workers as Participants of Legal Relations in Copyright Law

1. Scientists working in scientific research institutes, laboratories, VUZy, design bureaus and other scientific institutions, in the process of their creative activities not only research and solve scientific problems but create scientific works. The creation of a scientific work is, according to law, the basis for rise of author's rights on the part of the scientist-author of the scientific work. A law presently in effect--"bases of copyright law," ratified by a Resolution of the TsIK and SNK of the USSR on 16 May 1928 (SZ USSR 1928, No. 27, Article 245)--the protection of author's rights is provided for scientific works produced on the territory of the USSR as well as those on the territory of the USSR in the form of manuscripts, drafts, or other forms. Copyrights are recognized both for the scientific worker who is the author of the scientific work as well as to those to whom his rights pertain, independent of their citizenship. The basic rights of the scientific worker-

author of a scientific work, or the author of any other literary work, are the following: a) right to authorship, that is, the right to call himself the author of the given work as well as to require other persons or organizations, upon using or distributing the work, to indicate him as the author; b) right of inviolability of the work, that is, the right possessed only by the author to decide on additions, cuts and all changes in the work itself, its title and author's name; c) right to publish the work, that is, the exclusive right of the author to decide whether his work is completed and suitable for publication and whether it should be published; d) right to receive royalties for the use of the work.[22]

The enumerated basic rights, in the spirit of the law of 16 May 1928, are identical both for authors of scientific works and authors of other works. The law has in addition not established differentiations in the nature and content of the rights of authors of scientific works, independent of whether or not the authors of these works are employees of scientific institutions. However, subsequent application of the "Basis of Copyright," and later, government enactments, certain exceptions were established from this general principle for the authors of scientific works, who have carried them out in the procedure of projects undertaken in conformance with the obligations of the labor contract. These peculiar features, which affect the tremendous army of authors of scientific workers, both in number and in scientific weight, remain unregulated in legislation for many respects, as Professor V. I. Serebrovskiy has rightly stressed.[23] They have also not yet received an exhaustive analysis in legal literature.[24] In addition, the literature sometimes expresses views and proposals which, in our opinion, do not proceed from the peculiar features of the organization of scientific work in a socialist society.

2. The peculiar features of the legal status of scientific workers as participants of legal relations in copyright law affect basically the content of their author's rights. However, the literature contains ideas on certain other problems and, in particular, on the subjects of copyright law for scientific works created in the procedure of carrying out the tasks of scientific institutions. The subject of copyright law for a scientific work is a person who has created this work, its author. As Professor V. I. Serebrovskiy notes, "although a staff member of a scientific institution has carried out work on the basis of a labor contract, he nevertheless is the subject of copyright law in respect to the work produced, and not the corresponding institutions."[25] V. I. Serebrovskiy

speaks even more categorically on this: "A scientific worker, from the moment a work is created by him, expressed in any objective form, must be recognized as the subject of cppyright law, even if the work has been carried out by him as a duty connected with his job, during work hours, independent of whether this work has received the approval of the corresponding organization."[26]

In Soviet legal literature there is a generally accepted opinion that in cases whereby the author of a literary work (including scientific) is simultaneously the the employee of an institutional enterprise (including a scientific worker), receives a guaranteed wage and is bound to it by labor discipline relations, it is necessary to distinguish the labor law relations of such an author as an employee of the given institution with this institution and copyright law relations forming between a worker of the given institution as the author of a scientific work with the publishing house or other organizations.[27] Until recently the opinion was also generally accepted that so-called personal author's rights (the right to authorship, the right of inviolability of the work and the right to publish it) of a scientific worker who has created a scientific work within the procedure of carrying out his obligations according to labor contract, should be defended on general grounds with other authors.[28] However, in recent years opinions have been voiced more and more often in the direction of limiting the rights of authors who are scientific workers, and who have created their works in accordance with plan approved for them by the organization or institution in which they work. V. I. Koretskiy writes that "the question of the rights of a scientific worker to authorship, even in respect to a planned scientific work written by him or to co-authorship if the work was created collectively, do not cause any doubt" in his mind. "However," in V. I. Koretskiy's opinion, ""there is not sufficient basis in this case to recognize personal rights of a scientific worker for the decision of questions dealing with the publication of a work or to its inviolability." V. I. Koretskiy considers that under present conditions "it is not possible to hand over to the scientific workers the resolution of the questions both of the readiness of the work to be published and on introduction of changes into it, or its use for creating other work." V. I. Koretskiy proposes to submit these questions for resolution to "the heads of the scientific institution," maintaining for the author "only the right to appeal decisions by the administration to the higher institution as well as to remove his name from the work

which has been completed."[29]

The copyright limitations proposed by V. I. Koretskiy for scientists seem unacceptable to us. No one besides the scientist-author himself is in a better position to decide to what degree his work has matured for publication. To summarize the right of the scientist who has created a scientific work of publication of this work to a right to appeal or remove his name from his work would mean simply to destroy one of the important bases of copyright law and to legalize arbitrariness which, unfortunately, is still permitted sometimes in respect to scientific works by individual workers of scientific institutions and publishing houses.

3. In the thirties legal literature and judicial practice presented a view according to which the author of a work created in the course of carrying out professional duties should not receive royalties. But this view at that time did not affect author remuneration for scientific works produced by workers of scientific institutions. Later, during the Second World War, certain departmental enactments caused this view to extend to scientific works. The Presidium of the AN USSR in an order of 24 April 1942, "payment of editors and authors royalties for magazines of the AN" established that "an author's royalty shall be paid in such a case whereby works are produced in excess of the basic plan and not during regular work hours."[30] In 1949 a general, obligatory rule was established for all publishing houses, scientific institutions and scientific workers, according to which the payment of royalties was forbidden to persons who had produced published works according to the plans of scientific institutions or VUZy within the scope of regular duties (order of the USSR Council of Ministers of 17 December 1949). Interpreting this general rule in application to the institutions of the AN, the Presidium of the AN USSR, in decrees of 24 December 1949 and 10 March 1950, established that the following are not subject to royalties: a) manuscripts connected with the subject matter of institutes, produced by workers while carrying out the plan of their scientific research, or individual instructions; b) doctoral and candidate dissertations produced during the period of post-graduate studentship or doctorate studentship, as well as scientific works produced in a planned procedure, subsequently defended as doctoral dissertations; c) works published in series of scientific works by the institutes of the AN; d) theses, papers and other publications. Five years later a decree by the USSR Council of Ministers, on 21 July 1954, made an exception

from the general rule on prohibiting royalties for works produced according to the plans of scientific institutions and VUZy; it was permitted to pay royalties for VUZ textbooks, written in performance of regular duties.[31]

Under the influence of changes established in the practice of paying royalties, legal literature not only demonstrates energetically the thesis of the lack of the right for author remuneration for a scientific worker upon publication of a scientific work produced by him, but attempts to form a well-founded conclusion that "the principle of socialism--labor remuneration in accord with its quality and quantity--is realized more fully and correctly in wages than in author's royalties."[32] It seems to us that both this conclusion, signifying basically the elimination of an author's rights under socialism, is incorrect as well as the practical conclusions proceeding from it. Legislation on copyright law in the USSR and the union republics should receive several major changes. However, these changes in the section affecting author's rights of scientific workers should, we believe, set about to assure a more effective defense of their rights, and not their liquidation and limitation. Preservation and legislative affirmation of the present status, under which all material interest of the author in his published scientific work is eliminated, in our opinion would not be the best solution to the problem. It is no coincidence that, wishing to supply VUZy with textbooks in a short period of time, the government rescinded the limitations introduced in 1949. The question of Professor Serebrovskiy seems quite logical where he says: "If it is possible to pay authors upon the publication of textbooks and popular-scientific literature, why should authors' royalties not be paid for other types of scientific work, some of which are more time-consuming?"[33] Answering this question in the spirit that authors' royalties should be paid for published monograph research projects, Serebrovskiy writes further: "This naturally should not mean payments equal to those established for the publication of works written not in the performance of professional duties; in this case it would be possible to establish a certain percentage of usual authors' royalties."[34] New legislation on copyright law cannot ignore the economic side of the question: the use of the factor of personal material interest for the creation and distribution of scientific works of high level. It should lead to a strengthening and not to the elimination of also the so-called "non-property" authors' rights, should create new guarantees against arbitrary treatment meted out sometimes to

authors and sometimes to their works.

3. Peculiar Features of the Legal Status of Scientific Workers as Authors of Scientific Discoveries and Inventions

1. Scientific workers can appear as and do as not only parties to legal relations arising from the fact of creation by them of scientific works and regulated by copyright law regulations. Scientific workers can also possess certain rights and obligations in legal relations arising as a result of scientific discoveries and inventions created by them. These relations are regulated by patent law regulations. The basic government acts determining the rights and obligations of inventors are the "Regulations on Inventions and Technical Improvements," ratified by the SNK of the USSR of 5 March 1941 (SP USSR, 1941, No. 9, Article 150) and "Instructions on Payments for Inventions, Technical Improvements and Efficiency Proposals," ratified by the SNK of the USSR on 27 November 1942 (SP USSR, 1942, No. 10, Article 178). The "Regulations" guaranteed to the inventor: a) the right of authorship to an invention (No. 37 and 38) and proceeding from it: the right of primary publication (No. 12), the right to recognize priority (No. 26), the right to receive author's testification (Nos. 1 to 9), the right of author's name (No. 3); b) the right to incorporate the invention (Nos. 19 and 20) and the allied right to official recognition of the acceptance of a proposal for use (No. 38 of the "Instructions") and the right to make entries in the labor booklet on all inventions (No. 71 of the "Regulations"); c) the right to personal benefits and advantages; d) the right to payment, the size of which is determined in accordance with the technical significance of the invention and the savings resulting from its incorporation.35

In content the rights of the author of a scientific work and the author of an invention are similar in many respects. But there are certain differences. For example, an inventor has no right to demand the "inviolability" of his invention, as the author of a scientific work can do. The principles of determining author payment for the publication of scientific works and the incorporation of inventions are different. Soviet legislation does not establish any limitations of the right to receive payment for inventors who have made these inventions in the course of their duties according to labor contracts. Legislation on inventions subsequently voices

the principle: "Payment for an invention is made independent of the position held by the author" (No. 18 of the Instructions). Thus a scientific worker of any scientific institution who creates an invention in the process of carrying out his duties, according to the law has the right to receive established payment, above and beyond wages received by him.[36]

2. Present legislation provides for the possibility of recognizing authorship of invention and issuing author certificates not only to individual persons or groups of persons (co-authors), but to enterprises, offices, laboratories and institutes. This type of certification, in accordance with the law, must be issued "for inventions which are the result of collective experiment and practice and not the personal initiative of individual inventors or groups of inventors." Here we come upon such a formulation of the law which, in case it were followed strictly in practice, would lead simply to the elimination of authorship rights to persons engaged in socialist economy to the inventions produced by them, and subsequently to the liquidation of patent law as a whole.

3. For scientific institutions and scientific worker-inventors under contemporary conditions, the right of the inventor to participate in its incorporation has acquired great significance. Present regulations do not determine all the rights of the inventor and obligations of the organization which conducts the development and testing of the invention. Instructions present in the "Regulations" on the procedure of remunerating labor for the time of participation in the operations connected with developing and testing the invention are interpreted in Soviet legal literature in the sense that the very right of the author of the invention to participate in the development and incorporation of his proposal is a conditional one, for the existence of this right depends exclusively on whether the organization conducting the development and testing wishes to invite the inventor to participate in it. "The existence of the right of the author to participate in the development&incorporation of his proposal," N. A. Raygorodskiy writes, commenting on No. 20 of the "Regulations," "is placing dependence on a condition, on an invitation to him submitted by the organization which is conducting or will conduct development or testing." He considers that the right of the inventor to participate in the incorporation of his invention has and should maintain its conditional character even in such a case whereby the author is an employee in the same organization which is conducting

development and testing of the invention, and in this case the "participation of the inventor in the development depends exclusively on this organization whereby right develops."[37] He considers that in the future it would hardly be correct to establish the right of an inventor to participate in the realization of his invention, as certain persons have proposed. In the opinion of Raygorodskiy, even in future legislation on inventions "it is sufficient to limit rights to the existing right of the enterprise to use the inventor in case of necessity for realization of the invention, and the obligation of the inventor to aid in the realization of his invention." Without discussing here the question of the rights of inventors in general, we shall note that subsequent incorporation of the viewpoint defended by Raygorodskiy on this question and its affirmation in further legislation would not aid in activating the operations of scientific workers-inventors in the incorporation of their inventions in the national economy. Raygorodskiy's interpretation of present law also seems rather arbitrary to us. The "Regulations" of 1941 as a whole and Section 20 of these Regulations, in our opinion, do not imply, for example, that for a staff worker of a scientific research institution, having the right to participate in the development and incorporation of his invention, carried out by the same institute, this right can arise exclusively due to the "invitation" to participate in this matter issued by the administration of the institute.

It is difficult to imagine the motives by which the rights of a scientist-inventor who is on the staff of an NIU to participate in the incorporation of the invention by this institution could be placed in dependence on any conditions at all, including the desire of the administration of the scientific institution. A unique "opposite" to the opinion of Raygorodskiy was given by a group of scientists and engineers proposing "the obligatory invitation to the author of an invention to participate in the development, testing, incorporation and dissemination of his invention, assuring the organic participation of the inventor in all stages of the making of the invention."[38] The authors of this proposal consider it necessary also to give the inventor the right and to place on him the obligation "to complete his invention" and to indicate that "this inventor's right can be taken away from him only by a court decision indicating his lack of ability to carry out the work."[39] They did not reveal just what should comprise the right of the inventor or his obligation "to complete his invention." We can only assume that this right and obligation

should consist in the direction of all operations in incorporating the invention. Only in such a case would the indication as to the conditions under which this right "could be taken away" from the inventor make any sense. It seems to us the passing of such a proposal would create onlysupplementary causes for red-tape in the incorporation of an invention, which under any circumstances are a type of bureaucratic element. The acceptance of such a proposal could justify delays in conducting work in incorporating inventions, for the obligatory, both for the organization and the author, participation "in all stages of the making of the invention," as a rule, could be connected with an extended period of carrying out this work. Future legislation in the section under study should not only make a more clear-cut formulation of the rights of an inventor but should expand them considerably. For example, it would be expedient: a) to give a right to the scientist-author of an invention to participate in any stage of the process of incorporating his invention in cases whereby he, the author, considers this necessary; b) in a more clear-cut manner than was done in the "Regulations" of 1941, to define the rights and obligations of scientific institutions in which inventions have been created, in cases whereby the invention is put into practical use by other organizations; c) to define the obligations of the organizations putting inventions to practical use, in respect to the authors of these inventions and the scientific institutions where they were completed. A problem which is particularly complex for Soviet legislation is the establishment and application of legal regulations which would defend the rights of scientists as authors of scientific discoveries. This problem has also been faced by bourgeois states. As is well known, the old principle of bourgeois legislation, according to which a scientific discovery should not possess any legal safeguards if it is not expressed in an invention or a form of a literary work,[40] began to be subjected to doubts and criticism as early as the second half of the nineteenth century. In the twenties of our century this criticism found its expression in many draft laws and drafts of international conventions.[41]

In the USSR proposals for legislative consolidation and safeguarding of the rights of authors of scientific discoveries began to be discussed more or less on a broad scale in the thirties. Certain proposals on this question were published in the press. The question of safeguarding the rights of authors of scientific discoveries once again began to be discussed in the press after re-

initiation in 1946 of the work of the USSR Council of Ministers committee on inventions and discoveries. At present certain forms of safeguards of the rights of other scientific discoveries have been established by new Regulations on the USSR Council of Ministers committee on inventions and discoveries, as well as enactments issued by this committee. However, the question of safeguarding the rights of authors of scientific discoveries awaits supplementary resolution.

SECTION THREE

LEGAL PROBLEMS OF THE ORGANIZATION OF STATE DIRECTION OF SCIENTIFIC INSTITUTIONS IN THE USSR

Chapter XIII.

ORGANIZATION OF THE ADMINISTRATION OF SCIENTIFIC INSTITUTIONS DURING THE PERIOD OF THE STRUGGLE FOR THE VICTORY OF SOCIALISM

1. Organization of State Administration of Scientific Institutions Before the Founding of the USSR

1. During the period from the October Revolution to the founding of the USSR the competence of the organs of state authority and state administration of the Soviet republics in the field under discussion was determined entirely by the legislation of these republics. The basic concern for scientists and scientific institutions was taken by the governments of the republics--the SNKs. The SNK of the RSFSR: a) resolved basic questions joined with the reformation of scientific institutions of the former Russian Empire into scientific institutions of a socialist type, undertook measures to safeguard and hinder a possible destruction of objects of scientific value and for their correct use; b) solved problems of the creation of new scientific institutions, undertook measures to staff them with scientific cadres; c) issued enactments determining the legal status of scientific workers: the procedure of their hiring, discipline and labor remuneration, author's rights for scientific workers, old-age pensions, housing rights and perquisites, etc; d) cared for the creation of the necessary conditions for scientific work by outstanding scientists, (for example, academician Pavlov and his colleagues, see Resolution of the SNK RSFSR of 24 January 1921--SU RSFSR, 1921 No. 10, Article 67); e) formed state organs to direct scientific institutions and directed the activities of these institutions; f) undertook measures to expand international ties between Soviet scientists and scientists from other countries. Important [illegible] for directing scientific institutions were dele-

gated to and carried out by the republic people's commissariat of education.[1]

Subordinate to this commissariat were the Russian AN, along with its institutions, independent physics-mathematics, natural science and pedagogical scientific institutions, as well as NIU in the field of the humanities and the applied sciences, research institutes attached to VUZy. A list of scientific institutions subordinate to this commissariat was ratified by the SNK of the RSFSR. In order to administer the scientific institutions subordinate to the People's Commissariat of Education, the Main Administration of Scientific Institutions (Glavnauka) was formed within the commissariat on the decision of the government. As an apparatus with the aid of which the collegium of the Commissariat of Education and the people's commissar carried out the tasks assigned to them, Glavnauka played a definite positive part in solving the problems of organization of scientific institutions in the republic, development by the commissariat of proposals for the examination of the government, etc. The work of Glavnauka showed, however, a tendency to assume command over science and scientists, toward bureaucratic meddling in the scientific activities of the institutions subordinate to the people's commissariat of education. This was manifested particularly sharply in the relations between Glavnauka and the AN in 1923-1924. The Soviet government and Lenin personally, from the first years of Soviet authority, showed particular concern for joining science with production, for making use of scientific achievements for the needs of reestablishing the national economy and, on the other hand, for presenting science with the necessary production base. These tasks were delegated chiefly to the RSFSR Higher Economic Council and the scientific-technical division which was created in connection with it by a degree of the SNK of the RSFSR on 16 August 1918. The formation of this organ had as its purpose the centralization of all scientific-technical experiments in the country, a joining of science and technology with production, the distribution of the special tasks of Soviet authority, proceeding from the requirements of the national economy, and supervision over the fulfillment of these tasks, between scientific and technical institutions, societies, laboratories, institutes, experimental stations, etc. (See SU RSFSR, 1918, No. 61, Article 671). V. I. Lenin attributed great significance to the work of the scientific-technical division of the Higher Economic Council. When this provision passed by several scientific and technical discoveries, Lenin wrote

angrily: "It seems they have fallen asleep completely. We must either wake them up or get rid of these loafers and establish exactly who is going to take care of informing us of European and American technology--in a timely manner, practically, not bureaucratically. In particular, Moscow should have one each of all the most important types of new machinery, in order to learn and teach."[2] The planned direction of the development of the system of scientific institutions, the unification and coordination of scientific research for all departments, the development of future plans of scientific research was to be carried out by the State General Planning Commission attached to the labor and defense council, formed for the development of one single state economic plan on the basis of the electrification plan approved by the VIIIth Congress of Soviets and for the general supervision over the carrying out of this plan. The State General Planning Commission of the RSFSR, in accordance with the regulations on it, ratified by the SNK of the RSFSR on 22 February 1921, had the task of "working out measures on a national scale for developing knowledge and the organization of research essential for implementing the plan of state economy as well as the use and training of necessary personnel." (SU RSFSR, 1921, No. 17, Article 106). A definite role in the organization and development of scientific research was played by the special temporary committee of science attached to the SNK of the RSFSR. This committee was established by a resolution of the SNK of the RSFSR of 20 June 1922 for ascertaining all scientific and material requirements of scientific institutions and for taking all necessary measures for satisfying these needs. (SU RSFSR, 1922, No. 42, Article 493). The committee was set up under the chairmanship of the deputy chairman of the SNK and consisted of members of the people's commissariat of education, the people's commissariat of finances, foreign trade, the higher economic council, and the people's commissariat of communications of members of the collegia of these commissariats and three representatives of science, designated by the SNK. This committee existed for a little more than two years: from 20 June 1922 until 18 July 1924, when the special temporary committee of sciences, having fulfilled its purpose, was abolished. (SU RSFSR, 1924, No. 77, Article 776).

During its existence the special temporary committee of science examined several important problems of general significance for the development of scientific research in the Republic: on the procedure of gold fund expenditures for the needs of science, on scientific

missions abroad for scientists, on organizing scientific research expeditions, on conducting the two hundredth anniversary jubilee of the AN, etc. The committee did not examine problems dealing with individual scientists and schools, emphasizing its resolution on this question that such matters should be handled in the same procedure as existed before the committee was formed.[3] Speaking of the competence and legal forms of the work of republic state organs in directing the work of scientific institutions during the period before the formation of the USSR, one should lay particular stress on the fact that many extremely important problems dealing with the development of science and state direction of scientific institutions during this period by the republic governments were introduced for discussion by the legislative organs of these republics: congresses of the Soviets, sessions of TsIKs and Presidiums of TsIKs. This practice was maintained after the formation of the USSR.

2. Division of Competence of the USSR and the Union Republics in the Field of Administering Scientific Instituions According to the 1924 USSR Constitution

1. With the formation of the USSR, the direction of scientific institutions in the country began to be taken over by all-union organs, alongside of state organs of union republics. The legal basis for the division of competence between all-union and republic organs in the area of directing scientific institutions was the USSR constitution. In the constitution of the USSR of 1924 and in the union republics which were published in correspondence with it, there were no direct instructions on this question.[4] However, an analysis of the articles of the constitution determining the scope of the sovereign rights of the USSR and the union republics furnishes a basis to make the necessary conclusions as to the bases of this division. The following were within the competence of the USSR, in the person of its higher organs of state authority and state administration: a) the establishment of the basic principles and general plan of development of scientific institutions in the country; this right of the USSR proceeded from the rights of the USSR to establish bases and a general plan for the entire national economy, a constituent part of which was and is a development of science; and also from the right to ratify a single state USSR budget; b) the direction of scientific institutions, subordinate directly to the TsIK of the USSR; to the government of the USSR; to the people's commissariats and other departments of the USSR; c) the

establishment of legislative bases on the labor of workers in scientific institutions of the USSR and union republics; d) legislation on copyright and patent law; e) the establishment of general principles for the activities of scientific institutions in the area of mass education. Beyond these limits, each union republic exercised leadership over the activities of its scientific institutions independently.

2. The question of the division of competence of the USSR and union republics in the area of directing scientific work was an object of sharp discussion soon after the formation of the USSR and the acceptance of the 1924 USSR constitution. The occasion for these discussions was a proposal to form, instead of the temporary committee of science attached to the SNK of the RSFSR, a permanent committee of science attached to the SNK of the USSR. This question first arose in the SNK of the USSR at the beginning of 1924. Having heard a special report on this question, the SNK resolved to ask for a conclusion by the committee of science of the RSFSR.[5]

The special temporary committee of science attached to the SNK of the RSFSR, examining on 12 July 1924 the question of whether to put the committee of science under the SNK of the USSR or the SNK of the RSFSR, resolved: a) to consider the temporary committee of science to have fulfilled its purpose and be subject to abolishment; b) to consider essential the existence of an organ for discussing all-union questions affecting scientific enterprises, and an organization of corresponding all-union conferences and for the unification of a representation of scientific institutions abroad and at foreign congresses, conferences, international scientific societies, etc.; c) to discuss the question of the composition and competence of this organ in a commission created by the same resolution.[6] The grounds laid out for this proposal were submitted by academician Steklov in a letter to the USSR SNK. A directly opposite viewpoint was formulated at the Third Conference of the main administrations of scientific institutions of the people's commissariat of education of the union republics (January 1925). At this conference, among other problems, the following were examined: a) on an all-union committee of science, art and preservation of monuments of antiquity and nature, and b) on the principles of organizing scientific institutions of a union nature, and the following resolutions were passed: 1) to acknowledge that the general direction of all scientific research in the USSR should be concentrated exclusively in the people's commissariat of education of the union republics; 2) insti-

tutions of an all-union nature occurring on the territory of the individual republics should be, as affects the direction of scientific research, subordinate to the people's commissariats of education of these republics." The theses proposed by the Ukrainian SSR Glavnauka and ratified by the conference, "on principles of organization of scientific institutions of union nature" developed and consolidated an already frankly expressed striving by the authors of these documents toward a complete elimination of all-union state organs, including the higher organs of state authority, from direction of the development of science in the country, for the creation of a unique "monopoly" by the union republics in the direction of all organs, including scientific institutions subordinate to all-union organs.[7] At this conference it was acknowledged as necessary for the all-union central organs, for example, the SNK and TsIK of the USSR not to form organs for the administration and direction of scientific research institutions. The planning organ of all-union nature should have been, in the opinion of the conference, the Glavnauka organ of the union republics for matters concerning science, art, museum construction and the preservation of monuments of nature and antiquity. The question of forming an all-union government organ (commissariat or committee) arose again and again in working out drafts for the charter of the AN USSR, in the press in discussing the new USSR draft constitution and in the proposals of various scientists. Proposals to form a special organ in the form of a "all-union scientific committee' or the AN USSR reformed into such an organ, or, finally a people's commissariat of science and art were expressed during the national discussion of the new draft constitution for the USSR in 1936.[8]

However, not one of these proposals was accepted. In cases whereby proposals were introduced to form a special governmental organ of a committee or ministry, objections arose against them stating that the creation of such an organ would cause a superfluous, bureaucratic instance between scientific institutions and the government and even between scientific institutions and ministries.[9] In cases whereby proposals were introduced to assign any responsibilities in the area, for example, of planning the most important scientific research to the AN the opinion was very strongly represented which stated that such a function would lead to overdevelopment of the academy and transformation of it from a large scientific center to an office on scientific affairs. Proposals to organize a state governmental organ--a committee or people's commissariat of science, have not

received in past years the support of directive organs. However, in this little triumph can be seen for the viewpoint of those persons who counted on the concentration of the direction of scientific leadership exclusively in republic organizations. Rejecting the idea of the organization of a national governmental organ which would deal specially with the administration of scientific institutions on an all-union scale, the Soviet government delegated these functions to all-union organs administering the corresponding branches of economy and culture, and, as we shall see below, gradually broadened their competence. It was not the creation of an all-union administrative center which was as set apart from science as it was from the direction of production and cultural activities, and it was not the transformation of the AN USSR into such a center, but the close ties between the direction of the organization of scientific work with the administration of the economy and culture, not the refusal to direct scientific activities on a national scale but the strengthening and improvement of this direction--these were the characteristic features of the organization of national direction of scientific institutions during the period of the struggle for the victory of socialism.

3. State Organs of the USSR Administering Scientific Institutions During the Period Between the Formation of the USSR Until the Promulgation of the 1936 USSR Constitution

1. During the period between the formation of the USSR and the promulgation of the 1936 USSR Constitution the general direction and bases for planning the development of scientific research on a national scale were determined on the basis of resolutions by the congresses of Soviets and the TsIK of the USSR by the SNK. Certain problems of a legislative nature as well as problems of administering scientific institutions directly subordinate to the TsIK were solved by the TsIK of the USSR and its Presidium, and sometimes jointly with the TsIK and the SNK of the USSR. The TsIK of the USSR examined at its sessions the results of the development of science, determining the measures and methods for the further joining of science with practice in socialist construction. The TsIK of the USSR also carried out leadership over a broad system of scientific institutions and educational institutions attached to the TsIK.[9] A committee for the management of educational and scientific institutions of the TsIK of the USSR was formed for directing the activities of these institutions. This committee was

attached to the Presidium of the TsIK of the USSR, was responsible to it, and answerable to it. The committee had: a) general direction and control over all facets of the activities of scientific institutions and educational institutions attached to the TsIK of the USSR; b) ratification of plans of scientific, educational and literature publishing activities of these institutions; c) the appointment of the administration of these institutions with presentation in certain cases for approval by the Presidum of the TsIK of the USSR; d) preliminary examination of conditions, estimates and staffs of these institutions. The committee had the right to designate institutions subordinate to it to work on problems of a scientific and applied nature, both on instructions by the Presidium of the TsIK of the USSR and on its own initiative.[10] The TsIK of the USSR ratified the charters of the country's largest scientific institutions, including the AN USSR.[11] The Presidium of the TsIK of the USSR heard reports by the AN USSR and the union republic academies of sciences, as well as those of other scientific institutions and undertook measures for the further raising of the level of their scientific research, the joining of science with practice, the strengthening of the planned bases in the operations of scientific institutions, improvement of management of scientific institutions by the organs of state administration.[12] The TsIK of the USSR and the Presidium of the TsIK solved certain basic problems dealing with the legal status of scientific workers.

2. The SNK of the USSR examined and solved general problems dealing with the direction of the work of scientific institutions, its planning, the formation and development of the material-technical base of the scientific institutions, their participation in the carrying out of socialist construction plans. With the transition of the country to the implementation of the industrialization of the country, the tasks of the scientific institutions in the solution of the problems of developing domestic industry grew to a considerable degree. Having these new tasks in mind, the SNK of the USSR, on 7 August 1928, passed a special resolution "Organization of Scientific Research for the Needs of Industry" (SZ USSR, 1928 No. 54, Article 485). In this Resolution, passed according to the report of the people's commissariat of worker-peasant inspection of the USSR on examining the scientific-technical administration of the higher economic council of the USSR and scientific research institutions subordinate to it, the SNK outlined the incorporation of several important measures determining the direction of

scientific research in the country and expressing the principles of its organization. In many of its sections this resolution has not lost its significance even up to the present. Many important general problems of the development of science were examined by the SNK in view of new tasks in the area of agricultural production, arising on the basis of the collectivization of agriculture. Particular significance in this plan was possessed by the already mentioned resolutions of the government on the organization and activities of the all-union academy of agricultural sciences Imeni V. I. Lenin. The SNK of the USSR organized through its enactments NIU of all-union significance and established the procedure of organization of scientific research institutes attached to the USSR people's commissariats. The SNK of the USSR ratified the charters of the all-union scientific institutions: the AN USSR, the all-union academy of agricultural sciences Imeni V. I. Lenin, the academy of medical sciences, etc. The SNK of the USSR issued enactments on the legal status of scientific workers by means of which it regulated the wages of workers and scientific institutions, determined the removal from the Code of labor laws dealing with the hiring and firing of scientific workers, established in accord with the resolution of the TsIK of the USSR academic degrees and titles, and the procedure of conferring them; established prizes for achievement in science. Speaking of the competence of the SNK in directing scientific institutions, it is necessary to note its gradual expansion: a) by means of new problems coming within the competence of the SNK, dictated by experience; b) due to certain matters coming within the competence of the government which formerly were within the competence of the TsIK of the USSR and the Presidium of the TsIK of the USSR; c) due to problems previously handled by the SNKs of the union republics and local Soviets; d) due to problems formerly handled by the people's commissariats and other departments of the USSR and union republics. In the organization of leadership of scientific research, the SNK based itself primarily on the state planning commission of the USSR and the USSR higher economic council. The state planning commission of the USSR was entrusted with the "unification and coordination of the most important work in the various departments on the standardization of industrial production and on regulating activities of all organs dealing with research on productive forces in the union republic, as well as the organization of research essential for developing and incorporating the all-union economic plan."[13]

The higher economic council of the USSR, in accord-

ance with regulations on it, ratified on 12 November 1923, was entrusted with the "organization, on the basis of special regulations, of scientific institutes and institutions for studying various problems of the industrial economy and the direction of these institutions." The higher economic council included a scientific-technical division. The scientific-technical division of the higher economic council, according to the regulations of 12 November 1923, had the following duties: a) direction of existing scientific-technical auxiliary institutions in industry and the organization of new ones; b) the conduct of scientific-technical expert examinations on all problems of the national economy; c) the organization, with the participation of the proper organs, of scientific-technical institutions at large plants, factories, other industrial installations and agricultural units; d) the organization of the familiarization of enterprises and institutions subordinate to the higher economic council of the USSR with foreign technology, the results of scientific research, the exchange of literature with foreign scientific and technical institutions and societies; e) the incorporation, by means of the Main Economic Administration of the Higher Economic Council or other suitable institutions, under the control of the scientific-technical division and on experimental-plant scale, of new types of production, prepared preliminarily by laboratory research; f) the publication of scientific-technical literature; g) the receipt and distribution among scientific and scientific-technical institutions of essential instruments, preparations, etc., as well as aid in the production of these (SU RSFSR, 1923, No.s 109, 110, Article 1039). Along with the growth of the number of scientific institutions and expansion of the activities of the government of the USSR in the area of direction of scientific institutions attached to the USSR SNK, several committees and commissions were formed which aided the government in this. For the purpose of improving the material-daily work conditions for a scientist and aid in the development of scientific research in thr USSR, the SNK of the USSR, with a resolution of 3 May 1931, reorganized the Central Commission for Improving Conditions for Scientists attached to the SNK of the RSFSR into the Commission for Aid to Scientists Attached to the SNK of the USSR. This Commission was entrusted with: a) aid to workers of science and technology in their scientific research (the publication of scientific works, subscription to foreign literature and textbooks, scientific missions, etc.); b) aid in improving the material situation of scientists (medical and recreation facilities aid, improvement of living conditions and housing, social security for scien-

tists advanced in years, etc.); c) the drawing of scientists, independent of their permanent work in any institution, toward the development and solution of individual important problems of socialist construction (SZ USSR, 1931, No. 26, page 212). Tremendous influence on the work of scientific institutions was brought to bear by the Committee on Higher Technical Education attached to the TsIK of the USSR.[14] The influence of this committee was particularly strong in view of its broad powers in the area of conferring academic degrees and titles, including the right to issue instructions on applying government resolutions on academic degrees and titles (See Chapter X for more detail on this).

3. The people's commissariats and other departments of the USSR extended the direction of scientific institutions primarily to the scientific institutions subordinate to them. We have already mentioned the great tasks in directing the development of science and the application of the achievements of science for the needs of industry, placed upon the USSR Higher Economic Council and the scientific-technical administration formed within it. With the provision of the higher economic council the functions of directing scientific research institutes were transferred to corresponding industrial people's commissariats. In the area of agriculture the direction of the activities of scientific institutions was carried out by the USSR people's commissariat of agriculture both directly and through the commissariats of agriculture of the union republics. Other union-republic people's commissariats were in an analogous position; the USSR people's commissariat of health, the people's commissariat of justice, etc.

4. State Organs of the Union Republics, Administering Scientific Institutions During the Period BEtween the Formation of the USSR until the Promulgation of the 1936 USSR Constitution

1. After the formation of the USSR the competence of the union republics in directing scientific institutions was not eliminated. The organs of state authority of the union republics, as before the formation of the USSR, continued to solve the most important problems of the organization of scientific work in the republics. Problems of scientific work were examined at the congresses of Soviets and sessions of the TsIKs of the union republics. The governments of the union republics devoted great attention to them. Work in directing scientific institutions, carried out by republic people's com-

missariats and, primarily, the people's commissariat of education, became more and more complicated. Certain important functions in the area of directing scientific institutions and union republics were placed within the competence of state scientific councils of people's commissariats of the union republics, formed in the thirties in all republics. The following functions were included within the competence of the state's scientific councils: a) establishment of general scientific research plans for VUZy; establishment of basic scientific-educational demands in the area of recruiting graduate students for VUZy and approving the bases of the curricula and programs for training scientific workers; c) final approval of professors of VUZy; d) exercise of regular supervision over educational and scientific research work in professional-technical schools (Regulations on the State Scientific Council of the RSFSR People's Commissariat of Education, ratified by a Resolution of the TsIK and SNK of the RSFSR, 30 January 1931--SU RSFSR, 1931 No. 9, page 108; see also the Resolution of the SNK of the USSR of 26 July 1930 "Program-Methodical Direction of Professional-Technical Schools" (SZ USSR, 1930, No. 38, page 412). The following also were within the competence of the state scientific council attached to the people's commissariat of education of the Georgian SSR, in accordance with the regulations on it: a) the organization of the solution of educational-instructive and scientific research problems of the socialist construction in Soviet Georgia; b) development of regulations on scientific positions in VUZy and scientific research institutes and exact determination of requirements placed upon these positions; c) selection and ratification of scientific workers for the post of professor and lecturer (in VUZy,) scientific instructor and senior scientific worker (in scientific research institutes and scientific institutions), as well as review of the present composition with right of removal, as well as increase and decrease of nomenclature (SZ Georgian SSR, 1932, No. 22, page 211). Resolutions by state scientific councils on matters under their competence were obligatory for all educational institutions within the territory of the republic, independent of the departmental subordination of these educational institutions, as well as for all people's commissariats, economic unions and other institutions, within the control of which the educational institutes were operating. The organization of scientific institutes and institutions for the study of various problems of industrial economy of the union republics and the direction of these institutions, as well as certain other problems of organizing scientific work, were, as before the formation

of the USSR, within the competence of the higher economic council .[15] In the Uzbek SSR, for directing existing scientific institutions and the formation of new ones, a special science committee was formed. In accordance to a resolution of the SNK of the Uzbek SSR of 16 December 1933 the science committee concentrated the entire planning of science, insuring participation of the Uzbek SSR state planning commission committee and its divisions. The science committee was delegated to coordinate the plans for scientific research of the Central Asiatic and republic scientific institutions, as well as VUZy and technical VUZy, in the section dealing with this work; to organize in the committee scientific expert examination of the most important works of the scientific research institutions, as well as their printed work,[16] (SU Uzbek SSR, 1933, No. 37, Page 390). The republic organs as well as the all-union organs saw in the development of scientific research and the strengthening of scientific institutions the path for the development of industry, agriculture and other branches of the economy and the culture of the country. Special attention in this period was devoted by the organs of state authority to the study of the natural production forces of the republics, as well as the use of the achievements of science for a step-up in Socialist production. The resolution made on the report dealing with the conditions and perspectives for the development of and the imminent tasks of industry in the Belorussian SSR, passed on 12 April 1927 by the VIIIth All-Belorussian Congress of Soviets, recognized as essential in the further development of industry to increase scientific research studies of the country's natural resources and to discover useful minerals, allocating the necessary funds for this purpose (SU Belorussian SSR, 1927, No. 49, Page 265). The SNK of the RSFSR, in a resolution passed on 20 January 1927 based on the report by the RSFSR people's commissariat of education "the status and tasks of the NIU of the RSFSR people's commissariat of education (SU RSFSR 1927, No. 9, page 68), recognized that the vast tasks assigned by Soviet authority in the area of the national economy require for their fulfillment the necessary posing, planning and solution of scientific research problems, and that in the sphere of these tasks scientific institutions acquire particular significance.

Noting the great significance of the scientific research of the institutions of the people's commissariat of education for organizing mass education, raising the cultural-economic level of the minority nationalities, the SNK of the RSFSR recognized that a strengthening and [illegible]g of scientific research should be a constituent

part of the plan for industrializing the country and developing the national economy. The SNK saw as correct the general line of activities of the NIU, which had the task, besides that of solving theoretical problems, of satisfying the needs and requirements of the developing national economy and socialist construction as a whole. We should note that in solving problems of scientific research in studying productive forces and, in particular, on the procedure of organizing scientific expeditions with this purpose, the republic organs, as the bearers of the sovereign rights of the republics, establish requirements which were equally obligatory for all scientific institutions carrying out such work, be they institutions of the republic, other republics or all-union organizations. It was established in the RSFSR that all departments possessing scientific institutions and organizations engaged in studying the productive forces of the RSFSR, as well as non-subordinate institutions (all-union AN, etc) should present each year to the RSFSR state planning commission, in conformity with the date set for presenting economic plans and estimates, their plans for studying the productive forces of the RSFSR, as well as summaries of the results of studies of these forces carried out by institutions subordinate to them. All work on studying productive forces locally, no matter who might conduct it, is carried out with obligatory preliminary notification of local planning organs on the proposed work and with the obligatory presentation to them of a brief report on its fulfillment.17

Analogous rules were established in the other republics.[18] Such enactments by the union republics fully corresponded to the line followed in this question by the government of the USSR.[19] In accordance with the general line of the Communist Party and the government of the USSR the republic organs undertook several measures to improve the planning of scientific research in scientific institutions of the republics, the maximum coordination between the scientific research projects of the institutions subordinate to the various people's commissariat on the one hand, with the needs of the national economy--on the other hand, for the rapid use of scientific achievements in practical application for increasing the country's productive forces. Examination of many resolutions of republic organs: congresses of Soviets, TsIK of union republics and TsIK Presidia, SNKs and people's commissariats--shows that these problems comprise the main content and the basic goal of state direction of scientific institutions. This goal determined both the content of the daily concrete measures and decrees on developing

scientific research and the nature of the regulatory enactments passed in the republics, with the aid of which a legal regulation was established for the activities of scientific institutions and scientific workers, and the activities of the republic state organs were regulated in the direction of scientific institutions. As for the scientific institutions, the regulative activities of the republic organs in this area consisted chiefly in establishing a procedure for forming scientific institutions, approving and changing the charters of new and existing scientific institutions (for example, the republic academies of sciences--in the Ukranian SSR and Belorussian SSR). The regulatory enactments governing the activities of scientific institutions of a republic were issued not only by the legislative organs and governments of the republics. They were passed also by separate people's commissariats. The RSFSR people's commissariat of education on 22 January 1925 passed extremely important regulations for the organization of scientific work in scientific research institutes and institute associations, determining their goals, procedural organizations, internal regulations and other questions (see Yezhenedel'nik Narkomprosa [people's commissariat of education weekly], 1925, No. 22, page 36). Resolutions by the governments of the union republics provided preparations (and corresponding instructions were given) also for other regulatory enactments extremely important for the correct organization of scientific work. The RSFSR SNK, in its resolution of 20 January 1927, instructed the RSFSR people's commissariat of education to prepare jointly with the proper departments for presentation for ratification by the RSFSR SNK draft regulations determining the scope and correct limitation of tasks and work for scientific research institutions, on the one hand--of the people's commissariat of education, and on the other hand--of the remaining people's commissariats. By means of this resolution the people's commissariat of education was instructed, jointly with those departments affected, to work out suitable instructions for carrying out maximum coordination of scientific research by institutions subordinate to the various people's commissariats, to be presented with the conclusions of the state planning commission for the ratification of the RSFSR SNK, by the following: 1) calling of periodic interdepartmental scientific organizational conferences, and, in cases of necessity, joint representation of people's commissariats in the corresponding collegia, councils and conferences; 2) joint examination of production work plans, estimates

and reports of scientific institutions fulfilling similar tasks; 3) periodic calling of special conferences and congresses of representatives of scientific institutions and RSFSR scientists, working in one specific field of knowledge; 4) organization of associations of republic scientific institutions working on similar problems.

On 4 April 1927 the people's commissariat of education, the people's commissariat of health, the people's commissariat of agriculture and the higher economic council of the RSFSR ratified the regulations "Coordination of the Work of VUZy with Scientific Research Institutes not Subordinate to the People's Commissariat of Education," which established that a) research work by scientific workers, graduate students and VUZ students could be partially or completely carried out in a scientific research institute which has established ties with that VUZ, and the work of scientific workers of the institute--in the educational-auxiliary institution of the VUZ; the work organization conditions in both cases shall be determined by special agreement; b) professors and instructors of the VUZ,as well as graduate students and undergraduates carrying out highly skilled work, shall have the right to present reports on their scientific work at sessions of the institute council, with which relations have been joined with the VUZ, as well as to participate at all sessions organized by the institute or its divisions for hearing scientific reports; c) scientific workers of the research institute shall have the right to announce special courses, seminars, as well as lab courses in the VUZ which is connected with the institute, with the consent of the dean's office of the faculty in question (Yezhenedel'nik NKP RSFSR [RSFSR people's commissariat of education weekly] 22 April 1927, No. 16, page 23).

The standards creating activities of republic organizations in regulating the rights of scientific workers in reference to labor, copyright and other laws developed intensively. The enactments regulating the rights and obligations of scientific workers included primarily the regulations on scientific workers passed in the union republics: in the RSFSR--"Regulations on Scientific Workers of VUZy," ratified by the SNK on 21 January 1924 (SU RSFSR, 1924, No. 7, Article 44); in the Belorussian SSR--"Regulations on Scientific Workers of VUZy and NIU," passed by the SNK on 3 August 1932 (SZ Belorussian SSR, 1932, No. 51, Article 233), in the Georgian SSR; resolution by the SNK on 4 July 1932: nomenclature of scientific workers and procedure of filling scientific positions: (SZ Georgian SSR, 1932, No. 20, Article 176). In the Ukraine the

all-Ukrainian TsIK ratified (and later introduced amendments) the code of laws on popular education, in which many extremely important legal problems dealing with scientific research were regulated (SU Ukranian SSR, 1922, No. 49, Article 729). In all-union republics, for the encouragement of particularly valuable works in the field of science and technology, republic honorary titles were established: "Honored Scientist" or "Honored Scientist and Technologist." Substantial changes have taken place in all the standards creating activities of the republican organs during the period under question (1922-1936). According to the Constitution of the USSR, legislation in the union republics was to correspond to the laws of the USSR. Many enactments were published on the direct instructions of all-union state organs: the USSR TsIK and Presidia of the USSR TsIK, the USSR SNK. For example, in executing the resolution of the USSR SNK of 13 January 1934 "Academic Degrees and Titles" substantial amendments were introduced into the legislation of all-union republics: in the Ukranian republic--in the code of laws on popular education (CZ Ukranian SSR, 1934, No. 14, Article 115), in the other republics--in regulatory enactments passed by the SNKs of the republics. The union republics, in the standards creating work of their organs, considered also the experience of state direction of scientific institutions by all-union state organs, particularly in drawing up the charters of the scientific institutions of union republics (for example, the academies of sciences of the union republics). In delimiting the competence of the USSR of the union republics in directing scientific institutions during the period between the formation of the USSR until the promulgation of the 1936 USSR Constitution, the tendency can be noted toward a greater extension of rights of the all-union organs in this area, including problems which had formerly been handled independently by republic organizations. This tendency continued after the promulgation in 1936 of the new USSR Constitution.

Chapter XIV.

ORGANIZING THE ADMINISTRATION OF SCIENTIFIC INSTITUTIONS DURING THE PERIOD OF THE COMPLETION OF THE BUILDING OF SOCIALISM AND THE GRADUAL TRANSITION TO COMMUNISM

1. Division of Competence of the USSR and the Union Republics in the Area of Administering Scientific Institutions According to the 1936 USSR Constitution

1. The new Constitution of the USSR did not introduce any basic changes in the determination of the competence of all-union and republic organs in the area of the organization of science. After the promulgation of the Constitution, the former practice of centralized solution of most of the problems of organizing the system of scientific institutions, the legal status of scientific workers and other important problems was preserved. The union republics retained comparatively few matters which they handled independently. The situation has changed drastically in recent years, particularly after the XX^th Party Congress in view of the general measures taken to increase the role of the union republics in the direction of economic and cultural construction. In accordance with the resolution of the XX^th Party Congress, the republics have been handed over thousands of industrial enterprises and organizations which formerly had been directly subordinate to the union ministries. This extension of the rights of the union republics makes possible a subsequent implementation of the Leninist national policy in economic and cultural construction, a comprehensive consideration of national peuliarities and local resources of each republic and will aid in the further strengthening of the economies of the union republics and strengthening the friendship between peoples of the Soviet union. Steadfastly extending the rights of the union republics in the direction of economic and cultural construction, the Party and government, on the basis of the resolutions of the XX^th Party Congress, are carrying out measures to extend the rights of the union republics also in the field of directing scientific institutions. This extension of rights of the republics is going basically in the following directions: a) transference to the union republics of scientific institutions previously within the competence of the ministries and departments of the USSR; b) presentation to the union republics of the opportunity to exert directive influence on work planning and

all practical activities by scientific institutions transferred from the competence of the ministries and departments of the USSR to the competence of the sovnarkhozes of the administrative economic rayons; c) freeing of the republic organs from the "supervision" of all-union central state institutions in solving concrete problems of administering scientific institutions in the republic; d) extension of the rights of the union republics in the area of legislation on organizing scientific work in the country, including problems of organizing the administration of scientific institutions.

The basis for increasing the role of the union republics in the organization of scientific research are those changes in the direction of scientific research institutions which serve industry and construction, which were carried out in view of the measures for further improvement of the organization of administration in industry and construction. The resolutions of the February Plenum of the CC of the Party, the nationwide discussion of the theses of the report given by Khrushchev, brought forth many replies and proposals on problems connected with increasing the role of the union republics in the direction of scientific work. Taking these proposals into consideration, the Supreme Soviet of the USSR passed suitable resolutions on these problems. The transfer of hundreds of large scientific institutions previously subordinate to the industrial and construction ministries into the competence of the sovnarkhozes of the economic rayons, gives the republics previously unheard of opportunities and, in addition, unprecedented responsibilities for the fate of Soviet science.

2. This extension of the rights of the union republics in the area of directing scientific work and changes in the organization of administering scientific institutions of industry and construction does not at all signify a weakening of the national direction of the activities of scientific organizations and the concentration in this direction exclusively in the union republics or conferring complete "independence" to the sovnarkhozes of the economic rayons. The reminder contained in the theses of Krushchev concerning the danger of localist tendencies and strivings for a unique "autarchy" is of great significance for preventing this type of distortion in the administration of scientific institutions. Carrying out measures to extend the rights of the republic organizations in the area of directing scientific institutions is not a goal in itself. It is important, but not the only means of improving the direction of the development of science in the country and the incorporation

of the achievements of science into the national economy. Another extremely vital measure is a timely solution to the problems of planning scientific work and coordinating the efforts of scientific workers in scientific institutions on the most important scientific problems on the organization of direction over this on a national scale. Many prominent Soviet scientists, in their articles in the press during the nationwide discussion of the theses of Khrushchev and in other documents, criticized such defects and omissions in the organization of scientific work as: a) the lack of a single national plan for the most important scientific research in the country; b) the lack of proper coordination of work and clear-cut differentiation between scientific institutions in working on the most important scientific and scientific-technical projects in the country, as well as the parallelism of scientific research caused by this; c) the continuing fractioning of forces among secondary subjects sometimes taken on as projects for reasons connected with purely subjective intentions; d) the lack of a clear-cut differentiation in the competence of state organs in the area of planning scientific work. Some scientists claim that these defects are caused by the fact that the USSR has no national organ which would have as its special goal a real and not merely paper planning of the most important scientific research, sufficiently authoritative to outline the basic direction of the scientific work plans, with the aid of scientists, for a more or less considerable period of time. It is therefore natural that the question of organizing national direction of scientific institutions and incorporating the achievements of science into the national economy has attracted so much attention in the discussion of the theses by Khrushchev.

2. State Organs of the USSR Administering Scientific Institutions

1. According to the 1936 USSR Constitution, the general problems of the organization of scientific research for the USSR as a whole are solved by the Supreme Soviet of the USSR and the Presidium of the Supreme Soviet, the USSR Council of Ministers and those committees and commissions attached to it, the ministries and other organs of state administration. The USSR Supreme Soviet, the highest organ of state power in the Soviet union, exercises in the area of direction of scientific institutions all rights inherent to the USSR, if they are not assigned by the constitution to the competence of organs accountable to the Supreme Soviet; the Presidium

of the USSR Supreme Soviet, the USSR Council of Ministers, and the USSR ministries. In this respect the scope of competence of the Supreme Soviet is not different in any way from its competence in any other area of state direction. The Supreme Soviet of the USSR examined problems dealing with the development of science in connection with general measures taken for the development of the economy and culture, as well as measures for improving the organization of state administration. For example, at the VIIth Session, fourth convocation, in discussing the problem of the further improvement of the organization of the administration of industry and construction (1957), introduced by the Party CC and the Council of Ministers this was the case. These problems were examined and solved in discussing the plans for the development of the national economy of the USSR. Such questions are examined and resolved by the Supreme Soviet in its annual discussion of the state budget of the USSR and reports on its execution as well as in examining the proposals of the government for the creation of new or the reorganization of present organs of state administration: ministries, committees, etc. Deputies of the Supreme Soviet of the USSR, in discussing the above questions, often address statements to individual ministries and departments which have made serious errors in the direction of scientific institutions, criticized separate scientific institutions who have carried out their tasks poorly, introduced proposals on the introduction of amendments into present legislation on scientific workers and organization of scientific research in the country. This type of rebuke and proposal, on a resolution by the Supreme Soviet, is transferred for the examination of the government of the USSR and taken into consideration by the government in working out suitable proposals for the Supreme Soviet or in its practical executive activities.

The Presidium of the USSR Supreme Soviet, between 1938 and 1956, issued a comparatively small number of enactments dealing specifically with the organization of scientific work in the country. The decrees of the Presidium of the Supreme Soviet of the USSR on these questions dealt chiefly with the following: a) the establishment of encouragements for scientific workers (awarding workers of science medals and decorations, establishing the title of "Stalin Prize Laureate" etc.) and b) organization of new and reorganization of existing organs of state administration, which to one degree or another exercise leadership over scientific work (establishment of committees and commissions attached to the Council of Ministers, the reorganization of ministries). The Pre-

sidium of the Supreme Soviet of the USSR issued no enactments determining the legal status of scientific institutions and scientific workers. This type of question as well as others dealing with the direction of the development of science are resolved by the government of the USSR.

The USSR Council of Ministers exercises leadership over the activities of all scientific institutions in the state. This direction, in respect to certain scientific institutions (AN of the USSR) is exercised directly by the Council of Ministers. In respect to others (scientific research institutes and VUZy of ministries and departments of the USSR)--through corresponding ministries and departments; in respect to others (scientific institutions of union republics)--through the union republic councils of ministers. In what does the direction by the USSR Council of Ministers consist and how is it manifested, in respect to the activities of scientific institutions at the present time? The USSR Council of Ministers, in correspondence with the rights bestowed upon it by the Constitution of the USSR: a) unifies and directs the work of all-union and union-republic ministries of the USSR and other subordinate institutions within their competence; forms in case of necessity special committees and administrations attached to the Council of Ministers, delegating them tasks in the area of administering scientific institutions; b) carries out measures for conducting scientific research which assures the fulfillment of the country's economic plan; directs the planning of scientific research on a nationwide scale and its financing, in accordance with funds allocated by the state budget; c) directly governs the activities of scientific institutions attached to the USSR Council of Ministers (AN USSR).

Carrying out general direction over the activities of the country's scientific institutions, the USSR Council of Ministers, on the basis of and in execution of present laws, issues resolutions and decrees and verifies their execution. Resolutions and decrees by the USSR Council of Ministers are made for the following: a) for general questions dealing with the development of science and the incorporation of the achievements of science into practice (including questions dealing with the legal status of scientific workers, discipline and labor remuneration for scientific workers, copyright and patent law, training of scientific cadres and other questions dealing with the legal status of scientific workers in the USSR); b) the development of various branches of science (agricultural science, pedagogical science, etc.); c) improvement of the work by individual scientific institu-

tions and the organization of new scientific institutions, including questions dealing with the legal status of these institutions,(for example, ratification of their charters); d) questions connected with the activities of individual eminent scientists (creating for them the necessary conditions for scientific work, organization of the development of the scientific heritage, the perpetuation of memory, etc.). For certain problems dealing with the development which are extremely important for the country as a whole, the USSR Coucil of Ministers passes resolutions jointly with the CC of the Party (for example, the resolution of the CC of the Party of the USSR Council of Ministers of 14 February 1956 "Measures for Improving the Work of Scientific Research Institutions in Agriculture.")

The resolutions and decrees of the USSR Council of Ministers, according to their legal nature, sometimes are of the nature of concrete decrees passed on the basis of laws (enactments of application of law), in other cases--established general standards and are common to a category of enactments which in Soviet legal literature are called sources of law. It would be senseless to attempt a mechanical break-down of all governmental enactments into "normative" enactments and enactments of application of law. However, it would be incorrect on this basis to refuse to make a distributive analysis of the general regulations established by the government of the USSR on questions of interest for us and those concrete decrees which have a bearing only on a specific case and are not of the nature of general regulations. As an example of resolutions of the USSR Council of Ministers which established general regulations, it is possible to list the following: a) regulations on state committees of the Council of Ministers and USSR ministries, determining the sphere of competence of these organs in administering scientific institutions; b) the charter of the USSR Academy of Sciences and the charters of the branch academies (the agricultural science academy, the USSR academy of medical sciences) and resolutions introducing amendments to these charters; c) resolutions on labor remuneration and old-age security for scientific workers, copyright and patent law; d) resolutions dealing with academic degrees and titles, on the procedure of conferring them; e) regulations on graduate studentships in VUZy and NIU.

An example of resolutions by the government of the USSR which by their legal nature are enactments of application of law, can be the resolution of the SNK of the USSR 10 October 1939 "The Scientific Legacy of Professor N. Ye. Zhukovskiy," by means of which the

government of the USSR, taking into consideration the particular significance of his scientific works, officially recognized them as state property and placed the responsibility for the preservation, development and publication of the scientific legacy of Professor Zhukovskiy to the central aero-hydrodynamic institute (SZ USSR, 1939, No. 54, Article 502). From the above it is obvious what a broad scope of questions dealing with the administration of scientific institutions is examined and resolved directly by the government of the USSR. The elaboration and introduction of suitable proposals to the government of the USSR are carried out chiefly, (but not exclusively) by state committees and commissions of the USSR Council of Ministers, ministries and departments as well as union republic Council of Ministers.

Certain important questions on the organization of scientific work in the USSR are introduced to the government by public organizations: the CC of the Party, trade unions, scientific institutions (primarily the An USSR), as well as by individual scientists. Extremely broad authorities in administering separate facets of the activities of scientific institutions were granted by the government to the state committees and commissions of the USSR Council of Ministers as well as to certain USSR ministries and departments. The practice consolidated by 1957 was such that almost each USSR ministry or department had "its own" scientific institutions: scientific research institutes, laboratories, etc. The administration of ministries and departments encompassed all the basic facets of the operations of a scientific institution, partially bound the initiative of the scientific institutions themselves--their directors, scientific councils and scientific collectives as a whole. The ministries and departments, in accordance with regulations on them, elaborated plans for scientific research and experiments as well as plans for incorporating advanced technology, directed scientific research, inventions and the incorporation of the achievements of advanced science and technology into production. Carrying out the administration of such a complex "economic unit" the ministries and departments depend on them in all their practical work for further expansion of industry, technological progress and improvement in production organization. A resolution of 4 May 1955 by the USSR Council of Ministers gave the ministers the right to form, reorganize and liquidate scientific research institutes, in each case with the agreement of the USSR Minister of Finances. The legal form of carrying out the administration of activities of scientific institutions by the

ministries are the orders and instructions issued by the ministries, as established by Article 73 of the Constitution of the USSR, within the limits of the competence of the various ministries, on the basis of and in execution of present laws, as well as resolutions and decrees by the USSR Council of Ministers. Orders and instructions by ministers on questions of organization and the activities of scientific institutions are basically concrete orders directed at the carrying out of laws and resolutions of the government. However, there are among them such which establish new law standards. These include, for example, orders and instructions by ministers, which: a) ratify the model charters of subordinate scientific institutions (or model regulations on them); b) establish the procedure of elaborating and approving plans of scientific research work in the corresponding scientific institutions; c) determine the procedure of accepting the completed elaboration of scientific research projects.

With the reformation of the administration of industry and construction, the majority of scientific institutions of abolished ministries and departments have become subordinate to the union republic Council of Ministers. But the reformation of the administration of industry and construction according to the territorial principle did not at all signify and does not signify the elimination of all union ministries and departments from the administration of the organization of scientific work. These functions have been fully preserved for all known industrial ministries. But they are also carried out by all-union industrial ministries which have been preserved, with changed functions, as well as by committees attachedto the USSR Council of Ministers (USSR state construction committee, scientific-technical committee, USSR state planning commission, etc.) in respect to the leading, "head" scientific research institutions subordinate to them. Direction of scientific institutions is carried out and was carried out not only by the ministry and department to which the scientific institutions are subordinate. These functions are also carried out by certain other ministries: the USSR Ministry of Finances, the USSR Ministry of Higher Education, the USSR Council of Ministers committees. With the passage of the law "further improvement in the organization of the administration of industry and construction" the role of the USSR state planning commission grew in the direction of scientific work. This augmentation in the role of the USSR state planning commission consists in the first place in the fact that the most important measures taken for the development of scien

and technology should be provided in the unified plan for the development of the national economy drawn up by the planning commissioh and, in the second place--in the subordination to the proper divisions of the planning commission of several main scientific research institutes of industry.[2] Functions which are important for the country and which have a great significance for the development of science have been delegated to the USSR Council of Ministers scientific-technical committee, which was formed in accordance with the same law. The scientific world reacted favorably to the idea of forming an organ such as that suggested in the theses of Khrushchev.[3] In the statements of many Soviet scientists in reference to the theses concrete proposals were given on the role of this organ in the direction of scientific institutions, the principles of staffing, the forms of work, the scope of rights and other questions.[4]

In the law "Further Improvements in the Organization of the Administration of Industry and Construction," passed by the Supreme Soviet of the USSR at its VIIth Session of 10 May 1957, the basic ideas contained in the theses of Khrushchev on problems of organizing direction on a national scale of scientific work for the needs of industry and construction find expression. The USSR Council of Ministers state scientific-technical committee, formed by the same law, had the task of studying the achievements of domestic and foreign science and technology as well as the latest experiments in production, the broad propagandizing of these achievements, the publishing of scientific-technical literature and control over the development and incorporation of new technology in the national economy. The chairman of the committee, in accordance with the law, is a member of the USSR Council of Ministers. The USSR Council of Ministers scientific-technical committee, as is evident from the above, is not an organ formed to administer all branches of science. It also does not have the task of administering the organization of scientific work in the field of the technical sciences as a whole. As we have seen, its tasks are more narrow and clear of purpose. General problems of the organization of scientific work in the country, as previously, will be handled directly by the USSR Council of Ministers. In this matter, great aid to the government will be lent, besides by the scientific-technical committee, by the USSR state planning commission, which is the scientific planning-economic organ of the country's national economy and is required by law to carry out a comprehensive study of the requirements of the national economy and elaboration of present and future plans for the development of the national economy with

consideration of the achievements of science and technology. In solving the problems connected with a further improvement in the organization of scientific institutions and the organization of scientific work as a whole, the role of the AN USSR will doubtlessly increase, just as the branch academy of sciences and the all-union scientific centers, uniting the country's most outstanding scientists.

3. State Organs of the Union Republics Which Administer Scientific Institutions

The rights of the union republics in the area of direction and administration of scientific institutions and organizations are exercised, in accordance with the 1936 USSR Constitution and the new constitutions of the union republics, by the Supreme Soviet of the Republic and the Presidium of the Supreme Soviet of the republic, the republic Council of Ministers and its committees and commissions, ministries and departments of the republic, local Soviets of workers deputies, and their executive committees. As the USSR Supreme Soviet, the Supreme Soviets of the union republics examine questions dealing with state direction of scientific institutions of the republics, as a rule, in discussing state plans for the development of the national economy and the republic's state budget. Exceptions are found in a few cases of examining these questions in connection with the examination of the status of popular education at sessions of the supreme soviets. As for the activities of the Presidia of the union republic Supreme Sovietsin the area of administering scientific institutions, these activities for the time being are limited to conferring honorary titles of Honored Scientist and Honored Scientist and Technologist. All the basic problems of organizing scientific research in the republic (within the limits of those rights which have been preserved by the union republics) are handled by the Council of Ministers of the union republics. The Council of Ministers of the union republic resolves all basic questions dealing with the development of scientific institutions of republic subordination and, in addition, undertakes measures of coordination and mutual agreement of the plans of all scientific institutions and VUZy which are undertaking scientific research work on the territory of the union republic, independent of their departmental subordination. Important questions of state direction of scientific institutions in the union republics are examined and are resolved by state planning committees and scientific-technical committees of the Councils of Ministers of the union republics.

The state planning commissions of the union republics, as scientific planning-economic organs of the republics, examine all questions pertaining to the planning of the development of the system of scientific institutions and most scientific research in the republic, as well as measures designed to make use of the achievements of science in the national economy. Naturally, the state planning commission and its organs depend in this on the most advanced scientific forces of the republic. The state scientific-technical committees were formed in all-union republics in correspondence to the laws passed by the republic Supreme Soviet on the further improvement of the organization of the administration of industry and construction, toward the middle of 1957. The basic task of these committees was formulated in republic legislation in the same manner as it was determined in all-union legislation in conformity with the USSR scientific-technical committee. The rights and obligations of the state scientific-technical committees are defined in detail by corresponding regulations ratified by the union republic councils of ministers. For example, the regulations on the state scientific-technical committee of the Estonian SSR Council of Ministers, ratified by a decree of the Estonian SSR Council of Ministers 17 June 1957 (Vedomosti ESSR [Estonian SSR News], 1957, No. 12), stipulates the following tasks for the state scientific-technical committee in the area of organizing scientific research: a) the study of the newest achievements of science and technology; b) presentation to the republic state planning commission and sovnarkhoz of the Estonian SSR recommendations for the elaboration of the basic direction of development of scientific research and experimental work; c) coordination of vital scientific research and supervision of the scientific research activities of institutes; d) supervision over the elaboration and incorporation in the national economy of scientific-technical achievements and inventions; e) the organization of a broad system of scientific-technical information and propaganda of the newest achievements of domestic and foreign science and technology, coordination of the activities of the organs of scientific-technical information of enterprises and institutes of the republic; f) timely preparation of a draft plan for foreign trips for republic specialists and presentation for ratification by the Estonian SSR Council of Ministers.

The state scientific-technical committee of the Estonian SSR Council of Ministers has the right a) to hear reports by scientific research organizations and questions of

the development and implementation of new technology at its sections; b) to call special scientific-technical meetings on individual technical problems and questions; c) to participate in the established procedure in international and all-union organizations, meetings, conferences on questions of science and technology; d) to ask scientists to work temporarily on the committee for the elaboration and examination in committee of individual scientific-technical problems; e) to issue pamphlets, magazines and technical-economic bulletins. In all this work the state scientific-technical committees are supported by scientific research organizations, laboratories, VUZy and scientific-technical societies. The competence of the ministries and departments of the union republics possessing scientific research institutions or VUZy (the ministries of public health, education, communal economy, etc.) has been expanded. The directors of the ministries and departments have been given the right to resolve independently questions of administering subordinate scientific institutions, which formerly required either the approval of the council of ministers of the republic or that of the all-union administrative organs (organization of republic scientific institutions, extension of their material base, etc.). However, in many cases the competence of these ministries and departments has remained within "old" framework which has retained its basic limitations. For example, it is known that with the publication of the resolution of the SNK of the USSR "academic degrees and titles" of March 20, 1937, the union republics lost the right to make a final decision on questions dealing with the conferring of the degree of doctor of sciences and the academic titles of lecturer and professor. This right was transferred completely to the Higher Certifying Commission attached to the USSR ministry of higher education. At present the preservation of these limitations of rights of the union republics is hardly justified. Each union republic, in accord with the constitution, carries out through its organs of state authority and state administration direction over the activities of the scientific institutions of the republic. The union republics organize a network of their scientific institutions, headed by republic academies, determine the procedure of electing the active members of their academies, confer honorary titles of "Honored Scientist" and "Honored Scientist and Technician" to outstanding scientists and carry out other functions in this area. Parallel with this, the union republics and their state organs cannot resolve independently the question of conferring the rank of lecturer to a teacher in a pedagogical institute. It seems [illegible] that it is high time to give the state organs of the

union republics the right to make an independent decision as to the conferring of academic degrees and titles for branches of science which are serving the branches of the national economy, the administration of which is within the exclusive control of the union republics, for example, the pedagogical sciences, with the preservation of the general direction in the hands of all-union organs.

The sovnarkhozy of the economic administrative rayons occupy a special place in the organization of the national administration of scientific institutions. The activities of the sovnarkhozes, which are the basic organizational form of national administration of industry and construction, are directed toward the development of the productive forces of the rayons and toward a fuller use of the production reserves. NIU transferred to the competence of the sovnarkhozes aid in carrying out these tasks. Carrying out the directions of these institutions, the sovnarkhozy in accordance with the regulations [illegible] ratified by the USSR Council of Ministers on 26 September 1957 (SP USSR, 1957, No. 12, Article 121): a) elaborates future and current plans for scientific research and the incorporation of new technology and presents them under the established procedure to the union republic Council of Ministers (No. 15); b) directs the selection and placement of scientific workers in the enterprises and organizations subordinate to it (No. 35); c) determines in the procedure established by law decisions of capital construction, material-technical supply and the financing of NIU, as well as matters of labor and wages; d) ratifies regulations on NIU subordinate to the sovnarkhozy (No. 138). Transferral of a large number of NIU to the sovnarkhozes raised the level of responsibility of the governments of the unions and autonomous republics, as well as kray, oblast and city (cities of republic subordination) soviets of workers' deputies for the work of these institutions and in addition made it possible for them to exert a more concrete influence on the their work. The regulations on the sovnarkhoz state that the sovnarkhoz shall report to the council of ministers of the autonomous SSR, the executive committee of the kray, oblast or city (cities of republic subordination) soviet of workers' deputies on the economic activities of the enterprises and organizations subordinate to the sovnarkhoz (No. 7). There are no direct instructions dealing with the obligation of the sovnarkhoz to report to the government of the autonomous republic or executive committee of the soviet of workers' deputies on the scientific research activities of the subordinate scientific institutions, institutes, laboratories, etc. However, it is clear from the general tone of the established mutual relationships between the sovnarkhozes and the republic, kray, oblast

and city organs of state administration that there are no exceptions in this area. The sovnarkhozes are also given the obligation by the regulations to coordinate with the council of ministers of the autonomous SSR, the executive committee of the corresponding soviet of workers' deputies work in the complex development of the economy of the economic rayon, the use of its raw materials and energy base as well as in the organization of other essential ties between the enterprises and organizations of the sovnarkhoz and the enterprises and organizations of union, republic and local subordination (No. 7). These instructions also extend to coordination of work and organization of other essential ties betwen NIU of the sovnarkhoz and scientific institutions of union and local subordination, with the purpose of securing more successful scientific research, connected with the development of the productive forces and a more complete use of production reserves.

The question of the legal forms of this coordination has not been regulated yet in detail in legislation. For this it is necessary to absorb certain experience, based on the incorporation of the basic principles of the transition itself to the administration of industry and construction on the territorial principle. At present it seems to us that there is certain experience already gained in this matter, and the necessity to resolve certain extremely important practical questions of coordination of work done by scientific institutions engaged in researching the problems of the development of the forces of production of the same economic rayon, is becoming more and more evident. Speaking of the management which is being exercised by the sovnarkhozes over the NIU under their jurisdiction, it is necessary to keep in mind that all of these activities by the sovnarkhozes are being carried out with the support of the scientists themselves, their participation both in the administration of these institutions as members of the sovnarkhozes, members of consultative organs of technical-economic councils formed with the sovnarkhozes, as well as members of scientific-technical committees attached to the sovnarkhoz, on the decision of the government of the union republic in cases of need. The large-scale drawing of scientists toward participation in directive work of the sovnarkhozes assures not only a more correct determination of the scientific tasks of the institutions within the jurisdiction of the sovnarkhozes but more effective measures in incorporating the achievements of science in the national economy.

Chapter XV.

PROBLEMS OF THE FURTHER DEVELOPMENT OF REGULATOR ACTIVITIES OF THE SOVIET STATE IN THE AREA OF ORGANIZING SCIENTIFIC WORK

1. Relationship of Laws and Sub-legislation Enactments in the Resolution of Questions Dealing With the Organization of Scientific Work in the USSR

1. In the preceding chapters reference was made several times to the various enactments by soviet state organs, which determined the definite rules (regulations) to be applied obligatorily in relations which form in the area of organizing scientific work. Among the numerous enactments determining the juridical bases of the organization of scientific work are laws, decrees, resolutions, and government directives, orders and instructions of ministries and department heads, resolutions and orders by local soviets and their executive committees, as well as resolutions by the directive organs of Soviet academy of sciences; AN USSR, the union republic Academies of sciences, branch academies of sciences. Soviet law forms the basis for all of these enactments. Lenin said that law is "the expression of the will of the classes which were victorious and which hold state power in their hands."[1] Soviet laws are the expression of the will of the worker class, which carried out the October Revolution and is exercising the functions of government. They also express the will of the working peasantry and the entire Soviet nation. The content of the laws is determined in the final analysis by the conditions of the material life of the society, the concrete historical conditions of the development of the state, the relations between the class forces in the country. But the development of legislation is also influenced by national and historical traditions which have developed in the country, the growth of the level of culture and the political activeness of the citizens, the correct understanding of the organs which are carrying out the legislative activities of the processes which are taking place in the society and in international relations, as well as other factors. In the Soviet Union a determining significance for the development of legislation is possessed by the socialist system of economy, the moral and political unity of the people, and the high degree of citizen consciousness. The socialist social and governmental structure which has been victorious in our country, as well as the other factors indicated above, exert a deciding influence on the development of Soviet legislation

in correspondence to the interests of social development as a result of the leadership of the Party and the incorporation of the truly democratic principles of the legislative activities of the Soviet state, affirmed and developed in the 1936 USSR Constitution. The experience in legislation of the higher organs of state authority of the USSR and the union republics, gained during more than 20 years of the USSR constitution being in force, testifies to the fact that Soviet legislation during these years was a powerful level for the organization and mobilization of the masses for the struggle to carry out the tasks of Communist construction and defense of the country from domestic and foreign enemies, and that it correctly reflected the interests of the people.

Soviet law is the mobilizing and creating force also in the organization of scientific work. With the aid of regulations directly established in the laws of the USSR and the union republics, the goals and principles of the organization of scientific work established and an extremely broad scope of relations forming within this area is regulated. These include, for example: a) relations between various organs of state authority and state administration, forming in the process of the exercise of state direction of scientific institutions; b) relationships between organs of state administration on the one hand and scientific institutions on the other, forming in the area of planning the activities of scientific institutions, assigning to them funds and materials and the assigning of personnel, the incorporation of the achievements of science in the national economy, etc.; c) labor relations between scientific workers and state and public scientific institutions; d) relations between scientific workers and various state organizations and institutions, arising due to the authorship of scientists of scientific discoveries, inventions, literary works and many other relations connected with scientific research. But the significance of the laws of the USSR and the union republics is not limited only by the fact that certain problems of the organization of scientific work are solved directly by them. It consists also of the fact that the laws determine the basic direction of the activities of the organs of state authority and state administration in the area of organizing scientific work, including the content of their regulatory enactments. Soviet legislation has not yet furnished an exhaustive determination of the scope of relationships which must have a legal regulation in legislative enactments and in enactments issued within the procedure of the administrative activities of the organs of state administration.

Soviet legal science has not given a sufficiently complete answer to this question. In the meantime the elaboration of the basic legal questions of the organization of scientific work in legal theory and the creation of a regular system of enactment in which, proceeding from the tasks of science under modern conditions, these questions would receive an exhaustive resolution, are extremely significant. The following are primarily necessary for the creation of such a regular system: a) the establishment of the correct relationship between laws and sub-legislative enactments in the resolution of legal questions of the organization of scientific work; b) a clear-cut delimitation of the correlation of all-union and republic legislation in this area, and c) a determination of logical limits of "interference" of law in matters of science, the correct correlation between juridical and ethical relations in this sphere of public life. There can hardly be any doubts that the social relations which form in the sphere of scientific activity and the incorporation of scientific achievements in the national economy require the unremitting attention of the higher organs of authority and state administration of the USSR and the union republics, including the higher people's representative organs. The necessity for such attention proceeds from the significance which is possessed by science and its application in the country's public life, in the development of its productive forces, in the defense of the USSR and the struggle for peace, in the education and development of man himself, from those principles of organizing scientific work which have been formed in Soviet society. During the first 10 years of Soviet authority the higher organs of state authority of the USSR and the republics examined and resolved legal questions dealing with the organization of scientific work, parallel with other matters. The congresses of the soviets of the USSR and the union republics, sessions of the TsIK of the USSR and the TsIk of the republics, the Presidium of the TsIk of the USSR and the Presidia of the TsIk of the republics, in their resolutions which have the force of law, pointed out the general direction of the development of science and the ways of using its achievement in the interests of socialist construction and resolved many concrete legal questions of the practical organization of scientific work.

Among the enactments passed in legislative procedure, which resolved legal questions dealing with the organization of scientific work, preceding chapters have named a) resolutions by the USSR Congresses of soviets and the organization of the study of productive forces; b) regulations on the organs of state administration,

determining the competence of these organs in the area of organizing scientific work; c) charters of scientific institutions and VUZy--model and individual; d) laws on the legal status of scientific workers. Now, on the basis of a broader elective system established by the 1936 USSR constitution, hundreds and thousands of leading Soviet scientists are elected to the representative organs of the people. Deputies of the USSR Supreme Soviet--VIIth Convocation--included, for example, AN USSR president, academician Nesmeyanov, vice-presidents--academicians Bardin and Lavrent'yev, academicians Arbuzov, Kostenko, Kurchatov, Lysenko, Tupolev, president of the all union academy of agricultural sciences Imeni V. I. Lenin--Lobanov, president of the USSR academy of medical sciences, Bakulev, president of the RSFSR academy of pedagogical sciences Kairov, president of the union republic academies of sciences, Palladin (Ukranian SSR) Kuprevich, (Belorussian SSR), Abdullayev (Uzbek FSR) Satpayev (Kazakh SSR), Muskhelishvili (Georgian SSR), Matulis, (Lithuanian SSR), Peyve (Latvian SSR), Umarov (Tadzhik SSR), Ambartsumyan (Armenian SSR), and many other outstanding scientists-academicians of republic and branch academies, university spokesman, scientific workers engaged in the various branches of the national economy and culture. Hundreds of scientists were elected deputies of the Supreme Soviet of union and autonomous republics. Deputy-scientists, as all other elected representatives of the people are delegated authority to resolve all national questions, including questions dealing with the development of science. Conditions have been formed in the country for the free initiative of scientists in the posing and discussion of all questions dealing with the organization of science, in order to ascertain old, unused reserves in this area for eliminating all obstacles in the path of the development of science.

However, these new opportunities for the broad participation of scientists in the discussion and elaboration of legal questions, which require resolution according to legislative procedure, were not always used to their fullest extent. Recently the legal questions of the organization of scientific work are attracting more and more attention on the part of legislative organs. A fine example of these is the discussion and passage by the USSR Supreme Soviet and the Supreme Soviets of the union republics of laws dealing with the further improvement of the organization of the administration of industry and construction, in which certain basic questions of the organization of the direction of scientific institutions were

resolved. The examination by the USSR of the Supreme Soviet and the Supreme Soviets of the republics of the general basic questions dealing with the organization of scientific work and their resolution in legislative procedure, as well as the creative participation of deputies in their discussion is an extremely important factor in improving scientific research on a national scale, as well as in eliminating serious defects in this area. Legal regulation of scientific activities requires comprehensive calculation both of general national tasks in connection with which the social functions of science must be correctly determined, and the peculiar features of scientific creation, without an extremely concrete picture of which it is impossible to determine correctly the framework and direction of the legal regulation of social relationships forming in this area. Legislation on the organization of scientific work is influenced by the economic principles of socialism, the policies of the Communist Party and the Soviet government as well as the specific features of scientific creation, having been formed and incorporated in a practical manner. As in any other area, Soviet legislative organs, resolving the questions of organizing scientific work, take into consideration conditions and factors which objectively demand not any others but these specific legal forms of organization, these and not any other juridical regulations and institutions. It is understandable that the collegiate examination of these questions by legislative organs gives greater guarantees of the comprehensive calculation of these conditions and factors. During such discussion, scientist-deputies, being active participants in the legislative process of the country as a whole, have the possibility of forming a more clear-cut picture of the general tasks and functions of science at any stage of the development of Soviet society and of which forms of organizing scientific creation assure the best resolution of these general tasks. Deputies who are not professional scientists can also judge more competently the use of the achievements of science for carrying out the tasks and functions of the state, as well as the measures and forms of social and state support of science and scientists, without which modern science cannot develop. Thus, the discussion and resolution of the questions of the organization of scientific work in legislative procedure allows a) the goal placed before science to be determined more fully, b) the most effective economic, political-juridical means for attaining this goal to be determined and c) the specific features of scientific activities in resolving questions on the limits of legislative regulations

of these activities to be constantly considered, as well as the correct combination of the interests of society and the state to be assured together with the personal interests of the scientists.

Legislation on the organization of science as any other area of legislation, always has its past and future, its obsolete, which has ceased to conform to new conditions and its new forms which are just being born. The necessity to replace obsolete regulations which have ceased to serve the interest of science with new, improved regulations is noticed and experienced at an earlier date and more deeply by the scientists. This is why the participation of scientists in legislation is a constant and systematic matter, not a chance and one-time occurrence.

2. Measures taken by the Party and the Soviet government for the further development of Soviet democratism in the work of the state apparatus and in strengthening the principles of collective leadership, manifested in the extension of the activities of legislative organs, should, in our opinion, lead to a more extensive and systematic discussion of the question of organizing scientific work by legislative organs. For example, in our opinion it would be timely to elaborate and pass by the USSR Supreme Soviet an all-union law on the basic principles of organizing scientific research in the USSR. The basic principles could define clearly the competence of the USSR state organs and those of the union republics in directing scientific institutions (including the procedure of ratifying their charters), basic questions that the organization of scientific institutions could be resolved, the bases of the relations between scientific institutions could be determined, as well as with industrial and other enterprises and organizations joined in work dealing with carrying out scientific research and in incorporating the achievements of science into production, as well as other questions. The law on the basic principles of organizing scientific work in the USSR could form the juridical basis for the legislative work of all other state organs in this area. At present it is necessary for the higher organs of state authority to examine [illegible] the legal status of scientific workers in the USSR, their obligations and rights, the specific features of the legal regulation of labor and other relations of scientific workers with the organizations and institutions where they work. The necessity for a more clear-cut definition than has existed up to the present of the legal status of workers in science, of more complete legal regulation of scientific research and the participation of scientists in the incorporation of the achievements of science in the national economy pro-

ceeds directly from the directives of the XXth Party Congress on the development of science. At present these tasks are being resolved with the aid of labor law regulations (scientific worker remuneration, appointment of scientific workers to corresponding positions in scientific institutions, etc.) administrative law (conferring of academic degrees and titles, training of scientific cadres, awarding of prizes to scientists, etc.) civil law (preservation of the rights of scientists who are the authors of scientific works, scientific discoveries and inventions, etc.). Present regulations of Soviet law which determine the legal status of scientific workers in the USSR and regulate various facets of their labor, property and other relations with state and other organizations, as has been stated in detail, are established by government and departmental enactments, passed at various times and under various historical circumstances. Certain of them have become obsolete and no longer reflect the basic tasks of the legal regulation of scientific work at the present time and are being justly criticized by the Soviet public. The government of the USSR has passed several important resolutions which have as their purpose the correction of individual defects in Soviet legislation in this area. But in correcting individual defects new bases for lack of agreement can arise between various legislative enactments. The defects in legislation on scientific workers can be overcome more successfully by examining and resolving questions of the legal status of scientific workers as a whole at one time: on academic degrees and titles, on rights and obligations of scientific workers in labor relations, as well as legal relations proceeding from authorship of inventions, discoveries of scientific works, on the basic forms of training scientific cadres and increasing their qualifications, etc. Experience gathered forms a basis for introducing more definite principles on stability in the resolution of these questions. For these reasons it would be expedient to resolve the basic questions dealing with the legal status of scientists in regulations ratified by the Presidium of the Supreme Soviet of the USSR. Proposals to issue an all-union law on the basic principles of the organization of scientific work and a decree on the legal status of scientific workers cannot, naturally, be examined isolated from the general measures codifying legislation in the country. How should these acts be coordinated with other all-union laws, the publication of which is provided by the Constitution, for example, the principles of labor legislation and the principles of civil legislation? Certain authors introduced the proposal, which in our opinion is quite logical, to elaborate "basic principles of USSR administrative

law."[2]

How should legislation on the organization of scientific work be coordinated with these "principles"? Each of the above legislative enactments could define in general form the features of labor, civil-legal or administrative-legal relations, forming in the area of organizing scientific work, in order that these features could be brought out as fully as possible in legislation devoted especially to this subject. We should make special mention of a possible delimitation of the basic principles of the organization of scientific work in the USSR and the basic principles of education, the issue of which is provided by the USSR Constitution. Basic principles in the area of education, as a single legislative enactment, doubtlessly would generalize existing experience in legislation by the Soviet state in this area and, in particular, would reflect practice gained in the organization of scientific research as well as the training of scientific cadres and their certification in VUZy. They would also doubtlessly formulate the scientific bases for the organization of popular education in the country. But this act cannot encompass the entire organization of scientific work in the country which, besides VUZy, is being carried out by about 3000 state scientific institutions which have their own tasks, differing basically from the goals of education, organized on principles other than those of the organs of education and requiring their own special legal regulations. These considerations do not exclude, however, the resolution of questions on basic principles of education in the organization of scientific work in one all-union enactment, for example, "law on the basic principles of education and the organization of scientific work in the USSR." But, taking into consideration the specific features of organizing education and scientific work, it would be preferable to issue two independent all-union laws on these questions. Promulgation of a law on "basic principles of the organization of scientific work in the USSR" and "regulations on scientific workers in the USSR" would not eliminate the possibility of the government, ministries and other organs issuing regulatory enactments. On the basis of such laws it would be possible to develop more successfully the entire activities of the organs of Soviet state administration in forming new legal regulations and applying law in accordance with the principles indicated in law and decree. At present many possibilities exist not only for the correct resolution of the question of the coordination of legislative enactments and sub-legislative enactments issued by the organs of state administration, but for the

resolution of the question as to which sub-legislative enactments would be the most expedient to regulate the various facets of the organization of scientific work. Many prominent scientists are proposing to promulgate governmental and departmental enactments which would establish the procedure for new relations in the field of organizing scientific work, taking shape along with the further development of its forms and methods.

3. Expansion of the activities of the legislative organs of the USSR and the union republics in examining questions of the organization of scientific research in the country and the application of the achievements of science in the national economy would require more active participation by scientists in present commissions of the chambers of the Supreme Soviet of the USSR and the commissions of the Supreme Soviets of the republics: the budget commission, the foreign affairs commission, etc. But it would probably also require the formation of new commissions which would have as their purpose the preparation of proposals and findings on draft laws, in whole or in part devoted to the organization of scientific work. The formation of such commissions would doubtlessly lead to a broader participation in legislation, not only of scientist-deputies, but of the scientific world in general.

2. Coordinating All-Union and Republic Legislation on Organizing Scientific Work

The resolution of 30 May 1956 "transferring the enterprises of several branches of the national economy to the jurisdiction of the union republics and organizational measures connected with this" by the CC of the Party and the USSR Council of Ministers instructed the union republic councils of ministers to present proposals to the USSR Council of Ministers on the further expansion of the scope of problems dealing with economic and cultural construction which were to be handled by the union republics council of ministers.3 This instruction, in conformity with the question of the expansion of the rights of the union republics in the area of organizing scientific work, preserves its significance at the present time, for this question was resolved conclusively neither in the resolution of 30 May 1956 nor in subsequent enactments. It has an even greater significance, for it affirms an important principle, according to which concern over the correct delimitation of the competence of the USSR and the union republics is a matter not only of all-union but republic organizations. The resolution of the CC of the Party and the USSR Council of Ministers speaks

to examine instructions on the establishment of basic principles in the area of education as instructions having a bearing on questions dealing with the organization of scientific work, for in the composition of these "basic principles" questions of scientific research by VUZy doubtlessly come up, as well as those of training and certifying scientific cadres and certain others. But it is not this paragraph of the Constitution (Paragraph T of Article 14) which is the basis for the legislative activities of the Supreme Soviet of the USSR in questions of organizing scientific work. Such a basis is furnished by the entire scope of the sovereign rights of the USSR.

The constitutions of all-union republics stipulate particularly the rights of the union republics in the person of their organs of state authority and state administration, to direct scientific organizations and institutions of the specific republic and to administer scientific organizations and institutions of all republic status (see Article 19, paragraph TS of the RSFSR Constitution and corresponding articles of the constitutions of the other union republics). In the constitutions of the union republics, as has been mentioned, there are more general indications pointing to the fact that republic legislation is within the competence of the union republics. The legislative authorities of the republics in the area of organizing scientific work do not proceed merely from these instructions. They proceed from their sovereign rights as a whole, the rights to ratify economic plans and the state budget of the republic, to administer industrial, agricultural and other enterprises and organizations of republic subordination and several other rights in administrating economic and cultural construction. From the above we can come to the conclusion that with the expansion of the competence of the union republics in directing economic and cultural construction, the legislative authorities also are expanding in this area, but this naturally does not eliminate the necessity of USSR legislation in questions of organizing scientific work.

3. The Place of Legal Standards which Regulate the Organization of Scientific Work in the System of Soviet Socialist Law

1. Questions of the organization of scientific work which require legal regulation are resolved in the USSR with the aid of regulations entering not only in one but in various areas of Soviet socialist law; state, administrative, civil, labor and others. The regulations of Soviet state law affirm the basic principles of the organi-

of the further expansion of the scope of problems of economic and cultural construction handled by the governments of the union republics. This expansion, in the spirit of the resolution of 30 May 1956, should take place with the transfer to the union republics of rights now enjoyed by the government and USSR ministries.

Does this mean that the CC of the Party and the USSR Council of Ministers are eliminating the necessity of expanding the competence of legislative organs of the republics in this area at the expense of matters now handled by all -union organs as well as by the governments of union republics? Naturally not. This is why the question of a more correct delimitation of the scope of social relations in the area of organizing scientific work, which must receive legal regulation in legislation of the USSR and the union republics, requires a particularly urgent nature. The question or coordinating all-union and republic legislation on the organization of scientific work cannot be correctly resolved without considering the following: a) the delimitation of the competence of the USSR of the union republics in the area of organizing scientific work as a whole, and b) the coordination of all-union and republic legislation in general as established by the USSR Constitution and the constitutions of the union republics. As has already been stated, the direction of any area of economic and cultural construction by the USSR or a union republic is manifested in various forms, in - cluding the promulgation of legislative enactments. The right of the union republics to promulgate legislative enactments on the organization of science proceeds from the rights affirmed by the Soviet constitution to direct corresponding branches of the economy and culture. The scope of the legislative authorities of the union republics is determined by the scope of its rights as a whole, and, consequently, is limited only within that framework established by Article 14 of the Constitution of the USSR. Such legislative activity is an expression and manifestation of the sovereign rights of the republic, it cannot exceed the limits of these rights, nor can it be limited to a greater extent than has been determined by the Constitution. This position is used in this work to examine the question on the delimitation of the competence of the USSR and union republics in the area of organizing scientific work. On what constitutional principles are the legislative authorities of the USSR and the union republics constructed in the field of organizing scientific work? In the Constitution of the USSR, as has been mentioned, there are no special instructions on all-union legislation in this area. It is true that it is possible

zation of scientific work, determine the competence of the USSR and the union republics, and establish the scope of rights and obligations of the organs of state authority and state administration in the area of organizing scientific work. With the aid of regulations forming a part of Soviet administrative law, legal questions are resolved on the organization and activities of the organs of state administration which are directing scientific institutions, the procedure of organizing state scientific institutions is determined, as well as the subject matter, the structure and composition of each of them, as well as the authorities and obligations of the scientific workers while serving the state and many other questions. Regulations of Soviet civil law determine the scope of authorities and obligations of scientific institutions as juridical persons in various property relationships as well as the peculiar features of the legal status of scientists as authors of scientific discoveries, inventions and scientific works. Soviet labor law regulates the authorities and obligations of scientific workers and scientific institutions as participants in labor law relations with consideration of the peculiar features of the work of scientific workers. It is obvious from the above that regulations of Soviet socialist law which govern the organization of scientific work do not comprise a single, special branch of Soviet law. Forming part of other branches, which in their entirety form the system of Soviet socialist law, these regulations within the branches do not receive, as has taken place in certain other cases[4] isolation in the form of their specific constituent parts.

Is this break-up of legal regulations in the organization of scientific work in the USSR justified? To what extent does this situation correspond to the principle of building a legal system according to the subject of legal regulations accepted in Soviet legal science? Do not the social relations formed in the process of organizing scientific work comprise a special subject of legal regulation which requires the setting apart of legal standards which regulate these relations, into a special branch of Soviet law? Do these relations not form a subject for an independent scientific discipline in Soviet jurisprudence? Many of the specific relations which are born in the process of the organizational activities of the state in this area bear the nature of legal relations and have their subject, their participants, and their rights and obligations inherent to them. These relations, as has been mentioned, are regulated by standards having a bearing not on one but several branches of Soviet law. The study of these relations, the elucidation of the general tendencies of their

general development comprise the task of Soviet legal science as a whole. At the same time in works which are devoted to the general problems of building a system of socialist law as a whole, as well as in works on the system of individual branches of Soviet law, including administrative law, such simple mention of the place of legal standards regulating the organization of scientific work in this system is very rare. Under such conditions blank spots in the scientific elaboration of individual legal phenomena which are important in application are unavoidable, and these cause serious defects in promulgating various regulatory enactments. The isolation in Soviet jurisprudence of an independent scientific discipline which has as its subject the entire complex of relations forming in the area of organizing scientific work would have a great significance for legal science and would doubtlessly aid in the further improvement of Soviet legislation in this area.

CONCLUSIONS

Advanced Soviet science is a worthy offspring of Socialism. Its achievements are the direct results of implementing the Leninist principles of the organization of scientific work on the bases of democracy and socialism. This is why the study and generalization of the experience in organizing scientific work as gathered in the USSR both from the point of view of its content and from its legal forms is of great theoretical and practical significance. One cannot say that the generalization of the experience of organizing scientific work in the USSR as well as the role of the Soviet state and the Communist Party in this do not attract the attention of Soviet researchers. In recent years this problem has been devoted considerably greater attention than previously. Many works have been written and published on the role of science in the life of society, and articles on these problems are being published in periodicals. The general and primary principles determining the completely new possibilities and paths of the influence of the Soviet socialist state on the development of science and the limitless use of the laws of science in the interests of society have begun to be expounded in detail in works dedicated to elucidating the role of the Socialist state as the main tool of constructing Socialism and Communism, and in particular, the exposure of its economic-organizational and cultural-educational functions. Many dissertations on the social sciences are devoted to questions dealing with the organizational work of the Party and the Soviet government in the area of the development of science at various stages of Socialist construction and the incorporation of the achievements of science in the national economy. Nevertheless, a comprehensive generalization of experience gained, research on the practical paths and means of organizing science as well as elucidation of the rule of the Socialist state and law in this area still lie ahead. Among scientific workers-jurists the opinion often is expressed that legal questions dealing with the organization of scientific work and the activities of state organs in this area form something like a subject of exclusive competence for the science of administrative law.

One should not deny that in order to present the science of administrative law and its representatives demands to elaborate legal questions of the organization of scientific law, there are serious flaws. Examining

the general principles in the system of Soviet state administration, studies on Soviet civil service, bases of administering industry, transport, agriculture and other branches of the economy and culture, the science of Soviet administrative law includes many legal questions dealing with the organization of scientific work. However, as we have seen, the scope of relations forming in the area of organizing scientific work, which are subjected to legal regulation to a greater or lesser degree, cannot be summarized in the category of relations regulated only by standards of administrative law. These relations are regulated also by standards of state, civil, labor and other branches of law and, on the strength of this, cannot be comprehensively studied within the framework of any one branch of Soviet jurisprudence. This means that only the unified efforts of the workers of various branches of legal science can resolve the task of the scientific elaboration of all legal questions dealing with the organization of scientific work in Soviet society. In writing this work, the author was far from making an attempt to exhaust all the basic questions of the legal regulations of the activities of scientific institutions, scientific workers and organs of state administration in this area. In this work, of all the legal questions dealing with the organization of scientific work in the USSR, only certain ones were examined which are the most timely in view of the tasks presented by the XXth Party Congress. The author hopes that the readers will aid the further elaboration of this extremely important subject by their criticism and advice.

FOOTNOTES

INTRODUCTION

1 K. Marx and F. Engels, Izbrannyye proizvedeniya /Selected Works/, Vol II, p. 184.

2 S. G. Strumilin, "Science and the Development of Productive Forces," Voprosy filosofii /Questions of Philosophy/, 1954, No 3, p. 46.

3 J. D. Bernal, Nauka i obshchestvo /Science and Society/, Foreign Languages Publishing House, 1953, p. 38.

4 From a letter by the scientists of the Academy of Science of the USSR to the Central Committee of the CPSU, delivered at a session of the Academy of Science of the USSR in celebration of the 40th Anniversary of the Great October Socialist Revolution, Pravda, 2 November, 1957.

5 J. D. Bernal, Nauka v istorii obshchestva /Science in the History of Society/, Moscow, 1956, p. 637.

6 I. P. Pavlov, Polnoye sobr. soch. /Complete Collected Works/, Vol I, 1940, p. 30.

7 From a Declaration of the Conference of Representatives of Communist and Workers Parties from Socialist Countries, which met in Moscow, 14--16 November 1957, Pravda, 22 November 1957.

8 V. I. Lenin, Soch. /Works/, Vol 27, pp. 288-289.

9 Mao Tse-tung, Soch. /Works/, Vol I, pp. 520-521.

10 N. S. Khrushchev, 40 let Velikoy Oktyabr'skoy sotsialisticheskoy revolyutsii /40 Years of the Great October Socialist Revolution/, Gospolitizdat, 1957, pp. 54-55.

11 L. I. Petrazhitskiy, Universitet i nauka /The University and Science/, Vol II, St. Petersburg, 1907, p. 571.

12 ibid., p. 322.

13 V. I. Lenin, Soch., Vol 31, p. 26.

14 I. V. Stalin, Soch. /Works/, Vol II, p. 76.

15 Rezolyutsii XX s"yezda Kommunisticheskoy partii Sovetskogo Soyuza /Resolutions of the XXth Congress of the Communist Party of the Soviet Union/, Gospolitizdat, 1956, pp. 83-84.

Chapter I

1 For information on the development of this network of scientific institutions in the USSR, see A. V. Topchiyev, Stroitel'stvo kommunizma i nauka /Science and the Construction of Communism/, Publishing House of the Academy of Science of the USSR, 1957; M. P. Kim, 40 let sovetskoy kul'tury /Forty Years of Soviet Culture/, Gospolitizdat, 1957, pp. 87-95, 212-213, 227-247.

2 V. P. Volgin, "The Academy of Science of the USSR at a New Stage," Vestnik AN SSSR /The Herald of the Academy of Science of the USSR/, 1935, No 4, p. 3.

3 The Communist Academy was established in the spring of 1918 under the name of "The Socialist Academy of Social Sciences." The idea for the formation of this Academy was supported by V. I. Lenin.

V. I. Lenin took part in the discussion of the draft for the Statute of the Academy, and gave a number of instructions which had great significance for the organization of scientific work as a whole. The first Statute (Regulations of the Socialist Academy of Social Sciences) was passed by the Decree of the VTsIK /All-Union Central Executive Committee/ on 25 June (12 July) 1918 (SU RSFSR /Collection of Laws of the RSFSR/, 1918, No 49, p. 573.)

The XIIth Part Congress (17--25 April 1923) in the resolution "On Questions of Propaganda, the Press and Agitation," realizing the necessity of an organized assault on the influence chiefly among the youth in schools of bourgeois and revisionist professors, advanced the aim of reviving the work of scientific communist thought; the Congress made the Socialist Academy the center of this work and expanded the scope of its activities beyond the limits of the social sciences.

After the XIIth Congress, there was a significant expansion and strengthening of the activities of the Comacademy /the above-mentioned Communist Academy/ (as the Socialist Academy was called from 1923 on). The Comacademy increasingly became one of the largest scientific institutions of the country and the center of the scientific-

research institutions grouped around it.

The growth in the institutions of the Comacademy and its new tasks brought out the necessity of changing the old organizational and legal forms of its work which had been established in the Statute.

Such changes were foreseen in the new Statute ("The Regulations") of the Communist Academy, which was accepted by the Plenum of the Comacademy on 15 June 1926 and passed by the Praesidium of the TsIK /Central Executive Committee/ of the USSR on 26 November 1926 (SZ SSSR /Collection of Laws of the USSR/, 1927, No 3, p. 34.)

The Communist Academy, as is stated in the "Regulations" is the highest all-union educational institution, which has as its goal the study and solving of questions in social and natural sciences and in addition the questions of socialist construction on the basis of Marxism-Leninism.

The Communist Academy had the right to establish (with the subsequent approval of the Praesidium of the TsIk of the USSR) research institutes, sections /sektsiya/, and other subsidiary institutions and organizations. The Communist Academy and its institutions underwent a number of periodic changes. It occupied a leading position in the system of Marxist-Leninist scientific-research institutions.

In 1936, the Council of Peoples' Comissars and the Central Committee of the VKP (b) /All-Union Communist Party (Bolsheviks)/, recognized that the existence of two parallel academies--the Academy of Science of the USSR and the Communist Academy--was unsuitable, and in the aim of forming one state scientific center of scientific activity, recognized as desirable the liquidation of the Comacademy and the transferral of it and its institutions and basic workers to the Academy of Science of the USSR (Izvestiya, 8 February 1936).

4 Dostizheniya Sovetskoy vlasti za 40 let v tsifrakh /The Achievements of Soviet Power over the Last 40 Years in Figures/, Gospolitizdat, 1957, p. 284.

5 ibid., p. 278.

6 ibid., p. 284.

7 N. S. Khrushchev, Otchetnyy doklad Tsentral'nogo Komiteta Kommunisticheskoy partii Sovietskogo Soyuza XX s"yezda partii /Summary Report of the Central Committee of the CPSU at the XXth Party Congress/, Gospolitizdat, 1956, pp. 99-100.

8 Rezolyutsii XX s"yezda KPSS, Gospolitizdat, 1956, pp. 83-84.

9 A. V. Venediktov, Pravo gosudarstvennoy sotsialisticheskoy sobstvennosti /The Law of State Socialist Property/, Moscow, 1948, p. 657.

10 "A Review of the Discussion on the State Juridical Person," Sovetskoye gosudarstvo i pravo /Soviet State and Law/, 1954, No 8, pp. 109-119.

11 ibid., p. 117.

12 See the Decree of the VTsIk and the SNK /Council of Peoples' Commissars/ of the RSFSR of 27 September 1926, "On the Economic Operations of Institutions Included in the State Budget," (SU RSFSR, 1926, No 64, p. 499); the instructions of the NKF /People's Commissariat of Finance/ and the NKYu /People's Commissariat of Justice/ of the RSFSR of 10 January 1927 on the application of the Decree of the VTsIK and SNK RSFSR of 27 September 1926 (BFKhZ /Large Folio of Economic Laws/, 1927, No 8).

13 See S. N. Bratus', Yuridicheskiy litsa v sovetskom grazhdanskom prave /The Juridical Persons in Soviet Civil Law/, Juridical Publishing House, 1947, pp. 157-158; 195-211; by the same author, Sub"yekty grazhdanskogo prava /The Subjects of Civil Law/, Moscow, 1950, pp. 246-254; Grazhdanskoye pravo /Civil Law/, Vol II, State Juridical Publishing House, 1950, pp. 165-166; A. V. Venediktov, Pravo gosudarstvennoy. . . ., p. 817.

The adherents of this view consider as a juridical person not all of the state budgetary institutions, but only those which have an independent budgetary estimate and whose managers have independent control over the securing of credits.

Chapter II

1 For a discussion of the development of the Academy of Science during the years of Soviet power, see A. V. Topchiyev, Stroitel'stvo kommunisma i nauka, pp. 3-21; G. A. Knyazev, A. V. Kol'tsov, Kratkiy ocherk istorii Akademii nauk SSSR /A Brief Outline of the History of the Academy of Science of the USSR/, Moscow-Leningrad, 1957, pp. 65-158.

2 Vestnik Akademii Nauk SSSR /Herald of the Academy of Science of the USSR/, 1956, No 11, p. 105.

3 Composing this Commission were the academicians: A. V. Topchiyev (Chairman), V. A. Ambartsumyan, A. A. Blagonravov, V. V. Vinogradov, V. P. Volgin, M. V. Keldysh, G. M. Krzhizhanovskiy, A. L. Kursanov, M. A. Lavrent'yev. I. G. Petrovskiy, V. A. Engel'gardt; the corresponding members: N. M. Sisakyan, P. Ye. Orlovskiy, the candidates of science, A. P. Khmel'nitskiy, G. A. Knyazev, and G. I. Fed'kin.

4 Vestnik Akademii nauk SSSR, 1956, No 11 p. 105.

5. Arkhiv AN SSSR /Archives of the Academy of Science of the USSR/, Moscow Department, Fund 650, Inventory 1, No 16.

6 "Basic Goals of Scientific Activity of the Academy of Science of the USSR for the Year 1954," a report of the Main Scientific Secretary of the Praesidium of the Academy of Science of the USSR, the Academician A. V. Topchiyev, in Vestnik Akademii Nauk SSSR, 1955, No 3, pp. 35-36.

7 J. Bernal is inaccurate in asserting that "via its institutes and by the means of directives which it can give to the universities on the pursuit of scientific-research work, the Academy of Science carries out the general planning of scientific work in conjunction with the economic plans as a whole (J. Bernal, Nauka v istorii obshchestva, Moscow, 1956, p. 678). The Academy of Science does not have the function of the general planning of all scientific work within the country.

8. See the Appendix to the Protocol of the General Meeting of the Academy of Science of 18/5 May 1918, in Paragraph 112 (Arkhiv AN SSSR, Fund 1, Inv. 1-a, No 153).

9 See the copy of a letter of the Glavnauka of 27 November 1923, No 9666, Arkhiv AN SSSR, Fund 162, Inv. 3, No 3, page 39.

10 See Arkhiv AN SSSR, Fund 162, Inv. 3, No 3, p. 57.

11 See the letter from the Permanent Secretary of the Academy of Science to the Glavnauka of 13 December 1923, No 2547, in which is expressed the principle disagreement of the Academy with the view of the Glavnauka on the question of its mutual relations with the Academy of Science, Arkhiv AN SSSR, Fund 162, Inv. 3, No 3, pp. 51-53.

12 See Protokoly zasedaniy Obshchego sobraniya Rossiyskoy Akademii nauk, 1918 /The Transcript of the Meeting of the General Meeting of the Russian Academy of Sciences, 1918/, and the "Appendix to the Transcript of the Meeting of the Extraordinary General Meeting of 20 February 1918," p. 32.

13 S. I. Vavilov, "Basic Scientific Problems of the Academy of Science of the USSR in the Next Five-Year Plan," Vestnik Akademii nauk SSSR, 1946, Nos 8-9, pp. 8-9.

14 See "The Speech of A. N. Nesmeyanov at the XXth Party Congress," Pravda, 18 February 1956.

15 The general number of ordinary academicians has been established thus: in the Statute of 1747, 10; in the 1803 Statute, 18; in the Statute of 1836, 21; in the "Regulation of the Department of the Russian Language and Linguistics" of 1841 (in addition to the 21), 16. In the Statute of 1927, 70 active members of the Academy were provided for.

In the regulation of 4 October 1938, the Sovnarkom of the USSR increased the number of active members to 130, and the corresponding members to 330. After the next elections of June 1958, the membership of the Academy grew to 167 academicians and 361 corresponding members. See Izvestiya, 21 June 1958.

16 As a result of the elections of June 1958, 30 new foreign members entered the Academy of Science; they were: in the department of physico-mathematical sciences: Jannes Allfven (Sweden), Eduardo Amaldi (Italy), John Desmond Bernal (England), Louis de Broil (France), Gustav Herz (East Germany), Seydzi Kaya (Japan), Georgiy Nadzhakov (Bulgaria), Louis Neiel (France), Cecil Frank Powell (England), Karl Sigban (Sweden).

In the department of chemical sciences: Lainus Pauling (USA), Leopold Ruujichka (Switzerland), Pavle Savich (Yugoslavia), Edgar Stacey (Canada), Akhmed Riad Turki (UAR), Marx Fulmer (GDR), Sir Syrill Norman Hinshelwood (England), Franticek Sorm (Czechoslovakia).

In the department of geological-geographical sciences: Suu-Kuang Li (Chinese People's Republic).

In the department of biological sciences: Jenone Marcelle Back (Belgium), Detlev Wolf Bronk (USA) Jan Dembrovskiy (Poland), Linderstrem-Lang (Denmark), Wilder Graves Penfield (Canada), Istvan Rusnjak (Hungary), Trayan Sevulescu (Rumania).

In the department of historical sciences: Bianci Ranucio Bandinelli (Italy), Mo-je Kuo (Chinese People's Republic), Nam Un Pek (Korean People's Democratic Republic).

In the department of economic, philosophical and legal sciences: Tadzeus Kotarbinski (Poland), Prasanta Chandra Mahalanobis (India).

In the department of literature and language: Mardam Bey Khalil (UAR).

See Izvestiya, 21 June 1958.

17 See the "Letter of I. M. Sechenov to I. I. Mechnikov of 16 September 1869," in Bor'ba za nauka v Tsarskoy Rossii /The Struggle for Science in Tsarist Russia/, Sotsekgiz, 1931, pp. 53-54.

18 O. Pisarzhevskiy, Dmitriy Ivanovich Mendeleyev, Moscow, 1951, Ch. XX "Will Russia Elect D. Mendeleyev to the Academy of Science," pp. 336-351.

19 Arkhiv AN SSSR, Fund 1, Inv. 1-a, No 166.

20 See the "Appendix to the Transcript of the Second Session of the General Meeting of the Russian Academy of Science of 7 February 1920" (Paragraph 47), Arkhiv AN SSSR, Fund 1, Inv. 1-a, No 167.

21 See "The Draft of the Statute of the Russian Academy of Science," as worked out by Glavnauka, in Arkhiv AN SSSR, Fund IV, Inv. 4-a, No 41.

22 See the "Transcript of the Extraordinary General Meeting of 15 November 1923" in Arkhiv AN SSSR, Fund 1, Inv. 1-a, No 172; also the text of the previous draft of the Statute approved by the General Meeting on 7 December 1923, in Arkhiv AN SSSR, Fund IV, Inv. 4-a, No 41.

23 Thus the Statute of the Academy of the Rumanian People's Republic gives the initiative for the nomination of candidates for the Academy to the departments, the affiliates and bases of the Academy of the Rumanian People's Republic, to the scientific-research institutes, to the scientific and cultural institutions and to the institutions of higher learning. The presentations on the candidates are supervised by the departments. On the basis of the department reports, the Praesidium passes on the proposed candidates and draws up a report on each candidate which is then considered at the session of the General Meeting of the Academy.

The election of the members of the Academy (including the corresponding members) is conducted by the General Meeting of the Academy (Article 12 of the Statute).

In the Academy of Science of the Bulgarian People's Republic all of the current proposals for candidacy as an active member of the Academy and as corresponding members are supervised by the responsible departments. The departments make the decision on these questions by a simple majority of votes on the basis of a report by two rapporteurs. In the voting both the active members and the corresponding members participate. The election of the active members and the corresponding members takes place at the General Meeting. In the elections of the active members only the academicians participate in the voting, but in the the election for the corresponding members, the corresponding members also participate (Article 14 of the Law of the Bulgarian Academy of Science of 11 October 1949). In Czechoslovakia the election of the Academy members is carried out by the General Meeting of the Academy, and is approved by the government (# 18 of the Law on the Czechoslovakian Academy of Science of 19 October 1952).

24 In the Statute of the London Royal Society, the basis for expulsion from the Society is found in a) the conscious and systematic violation of the Society's rules, a failure to fulfill the Statute or the regulations of the Society's Council; b) an insult which publically refers to the Society in an oral, written or printed form; c) Commiting deliberately an evil intent or any dishonest act which would cause a material or other damage or insult to the Society (# 27).

In the National Academy of the United States, the membership in the Academy, upon the decision of the Executive Session of the Academy, is lost by those persons who made known their intent to leave the Academy and also those who have not paid their membership dues for four years.

25 Arkhiv Akademii nauk SSSR, Moscow department, Fund 2, Inv. 25, No 6, p. 95.

26 For a brief account of the activity of SOPS, see the article of the Corr. Member of the Academy of Science of the USSR, L. Pustovalov, "In the Advice of Il'ich," in Promyshlenno-ekonomicheskaya gazeta /Industrial Economic Newspaper/, 17 April 1957.

27 The right to choose the President was recognized for the Academy of Science even in the "Regulations"

passed by Peter I. However after the death of Peter I, this part of the "Regulations" was not only not observed, but generally hidden from the members of the Academy. The Presidents of the Academy of Science were appointed by the imperial decree. Soon bureaucrats were appointed to this post who had no scientific knowledge (such as Count K. G. Razumovskiy who occupied the post of President from 1745 to 1798). Count D. A. Tolstoy, appointed President in 1882, combined the duties of the President with the position of Minister of Internal Affairs and the gendarmerie.

After the February Revolution, the Commission on the Review of the Statute of the Academy of Science, under the chairmanship of the Academician A. P. Karpinskiy, on 16 March 1917, passed the decision for the establishment of the elective post of the President (Transcript of the commission is found in Arkhiv Akademii nauk SSSR, Section IV, Inv. 4-a, No 41). This proposal was passed by the Provisional Government.

On 15 May 1917 the Russian Academy of Science elected for the first time in its history the President of the Academy at its General Meeting. The Academician Aleksandr Petrovich Karpinskiy was elected to this post, and he headed the Academy until 1936.

28 In regard to this, it was very clearly stated for example in the regulation of the Praesidium of the Academy itself on 7 January 1955 No 1; see Arkhiv AN SSSR, Moscow Department, Fund 2, Inv. 6, No 183, pp. 4-14.

29 ibid., Moscow Department, Fund 2, Inv. 6, No 33, pp. 8, 50-53.

30 ibid., No 193, pp. 6-16.

31 For this see the introduction of the President of the Academy of Science, the Academician A. N. Nesmeyanov, at the yearly meeting of the Academy of Science, on 2 February 1955, in Vestnik Akademii nauk SSSR, 1955, No 3, pp. 16-17; also Academician A. V. Topchiyev, "The Basic Tasks of Scientific Work in the Academy of Science for the Year 1954," ibid., pp. 37-38.

32 Arkhiv AN SSSR, Moscow Department, Fund 2, Inv. 6, No 187, pp. 6-10.

33 KPSS v rezolyutsiyakh [The CPSU in Resolutions], Part II, 7th Edition, p. 398.

34 I. P. Bardin, "The Affiliates of the Academy of Science in the Service of the National Economy," Vestnik Akademii nauk SSSR, 1952, No 11, pp. 65-81.

35 Ibid., 1955, No 3, p. 17.

36 Arkhiv AN SSSR, Moscow Department, Fund 2, Inv. 6, No 18, pp. 155, 197-205, No 19, pp. 125, 133-135.

37 "The Basic Goals of Scientific Work of the Academy of Science for the Year 1954, the Report of the Main Scientific Secretary of the Praesidium of the Academy of Science, the Academician A. V. Topchiyev," Vestnik Akademii nauk SSSR, 1955, No 3, p. 34.

Chapter III

1. See Dostizheniya Sov..., op. cit. page 286.

2 For the tasks, competence and organizational forms of the work of the Council, see the article by Academician N. Muskhelishvili, "Daily Problems in Coordinating Scientific Work", Zarya Vostoka (Dawn of the East), 6 June 1957.

3 See Professor M. Kas'yan, "Bring Science Closer to Production", Kommunist (Yerevan), 7 April 1957.

4 See Kazakhstanskaya Pravda, 12 April 1957, Pravda Vostoka (Eastern Pravda), 16 April 1957.

5 See Kh. Abdulayev, "Resolution of the February Plenum of the CC of the Party and the Tasks of Science in Uzbekistan", Pravda Vostoka, 29 March 1957.

6 See V. Kuprevich, "Scientific Forces -- to the Solution of the most Important Economic Problems", Pravda, 6 May 1957.

7 V. Ryanzhin, "Improve Planning of Scientific Research", Sovetskaya Estoniya, 9 April 1957.

8 See G. Demirchoglyan, "Improve Planning and Coordination of Scientific Research", Kommunist (Yerevan), 30 April 1957; Professor G. Dzhimsheleishvili and Prof. D. Diskreli, "Bring Science Closer to Production", Zarya Vostoka (Tbilisi), 7 April 1957.

9 See G. Demirchoglyan, op. cit.

10 See Introductory Word by A. N. Nesmeyanov at the 10th session of the Council for Coordination on 6 December 1951, Vestnik AN SSSR (Journal of the USSR Academy of Sciences), 1952, No 1, page 15.

11 See, for an example, Resolution on the Latvian SSR Branch of the AN, Izvestiya AN LSSR (Latvian SSSR News), Riga, 1948, No 4.

12 See, for example, Resolution on the Latvian SSR AN institute, Izvestiya AN LSSR, 1947, No 5, pages 171-174.

Chapter IV

1 P. P. Lobanov, "Science Serving Socialist Agriculture", Sel'skoye khozyaystvo (Agriculture), 2 November 1957.

2 See Spravochnik partiynogo rabotnika (Party Worker's Manual), Gospolitizdat, 1957, pages 17-318.

3 Meditsinskiy rabotnik (Medical Worker), 19 April 1957.

4 The USSR Academy of Architecture was founded on 1 January 1934. The Charter of the Academy of Architecture was ratified on 31 August 1939 (SP USSR, 1939, No 51, Art. 427). For defects in the work of the former USSR Academy of Architecture see the resolution of the CC of the Party and the USSR Council of Ministers of 4 JNovember 1955 "Eliminating Excesses in Planning and Construction", in the collection Postanovleniya TsK KPSS i SM SSSR po voprosam promyshlennosti i stroitel'stva (Resolutions by the CC of the Party and the USSR Council of Ministers on Problems of Industry and Construction), Gospolitizdat, 1956, page 141.

5 See Paragraph 42 of the resolution of the CC of the Party and the USSR Council of Ministers of 23 August 1955 "Measures for Further Industrialization, Improvement of Quality and Price Decrease in Construction", in the Collection Postanovleniya TsK ..., op. cit., 1955, page 124.

6 See the article by the President of the Academy of Construction and Architecture, N. Bekhtin, "Bring Construction and Architectural Science Closer to Practice", Izvestiya, 27 April 1957.

7 For the organization and activities of the RSFSR

Academy of Pedagogical Sciences see Ye. N. Medynskiy, Narodnoye obrazovaniye v SSSR (Education in the USSR), Moscow, 1952, pages 212-217.

8 See, for example, the resolution on the institution of the RSFSR Academy of Pedagogical Sciences, ratified by the Presidium of the RSFSR Academy on 4 February 1948, and the resolution for the Academy's museum for popular education, ratified on 16 October 1950.

9 See P. A. Vlasyuk, "Ukrainian Agricultural Academy", Sel'skoye khozyaystvo, 11 January 1957.

Chapter V

1 See Direktivy KPSS i Sovetskogo pravitel'stva po khozyaystvennym voprosam (Directives of the CPSU and the Soviet Government on Economic Problems), Vol 1, Gospolitizdat, 1957, page 130.

2 P. Rebinder, "The Danger of Bureaucracy", Literaturnaya Gazeta, 13 April 1957.

3 See A. Tselikov, "Design Bureaus and Scientific Institutes", Pravda, 15 April 1957.

4 Such proposals were brought forth by academicians of the Latvian AN Valeskalı, Kalnin' and Plaudo, Pravda, 5 May 1957.

5 See, for example, articles: A. Blagonravov, V. Kikushin, B. Stechkin, A. Tselikov, B. Semkov -- "Organize Scientific Research in a New Way", Izvestiya, 20 March 1957; Vladzeyevskiy, I. Yegorenkov, Ye. Unksov -- "Overcome bureaucratic Obstacles in the Development of Science", Pravda, 6 April 1957; A. Trofimuk, S. Lisichkin, A. Asan-Nuri, S. Maksimov -- "Direction of scientific Institutions of Industry", Pravda, 8 April 1957; A. Demyanovich -- "My Addition", Pravda, 14 April 1957; Ya. Osad -- "Directing Scientific Institutions of Industry", Pravda, 26 April 1957; K. Rogozhin and B. Vermel' -- Promyshlenno-ekonomicheskaya gazeta (Industrial-economic Journal), 5 May 1957.

6 See I. Bardin, "Clear-cut Organization of Scientific Research", Pravda, 28 April 1957.

7 See P. L. Kapitsa, "Some Problems in Organizing Scientific Work", Pravda, 4 May 1957.

8 See A. Topchiyev, V. Kirillin, "Planning and Coordination of Scientific Research", Pravda, 7 May 1957.

9 By a resolution of the USSR Council of Ministers on 9 August 1955 "Broadening the Rights of the Directors of Enterprises", these regulations were sent for elaboration to a special commission. See the collection Postanovleniya TsK ..., op. cit., 1955, page 98.

10 See "Law on the formation of scientific research institutes for the needs of the economy" in the form given in Article 74 of the "Law on higher education and scientific workers" of 15 December 1951. See Konstitutsiya i osnovnyye zakonodatel'nyye akty PNR (Constitution and Basic Legislative Enactments of the Polish People's Republic), Moscow, 1953, page 172.

11 Izvestiya Prezidiuma Narodnogo Sobraniya (News of the Presidium of the People's Assembly), 7 July 1953, No 54.

12 See the Law of 23 March 1955 "The organization and liquidation of scientific research institutes for technical development and scientific and experimental laboratories and offices" Zbirka zakonu , 1955, No 7, page 14.

13 See, for example, "Model regulations on NI institutes under the jurisdiction of the RSFSR NK of Education", ratified by the collegium of the NKP on 28 February 1929, Yezhenedel'nik narodnogo komissariata po prosveshcheniyu RSFSR (Weekly of the NK of Education of the RSFSR), 1929, Nos 24-25, Article 584); "Model regulations in NI institutes of the Scientific-technical administration of the Higher Economic Council of the USSR" (Sbornik postanovleniy i prikazov po promyshlennosti /Collection of Resolutions and Orders on Industry/, Issue 8, 1928/29, No 374); "Model regulations on the NI institute attatched to the NKs or central adinstitutions of the Ukrainian SSR", ratified by the Ukrainian SSR SNK on 22 December 1930 (SZ Ukrainian SSR, 1930, No 28, pArticle 261).

Chapter VI

1 The first university charter was the Charter of the Moscow University (12 January 1755). On 5 November 1804 the Charters of the Moscow, Kazan' and Khar'kov universities were ratified (PSZ No 21498, 21499, 21500). On 26 July 1835 the "General charter of the imperial Russian universities" was ratified (2 PSZ No 8337). On 18 June 1863 the new "General charter of the imperial Russian universities" was ratif-

ied (2 PSZ No 39752), including the Saint Petersburg, Moscow, Khar'kov, Kazan', Novorossiysk (Odessa) and Saint Vladimir (Kiev). On 23 August 1884 the last pre-revolutionary "General charter of universities" was ratified (For a detailed comparative analysis of all university charters see P. Ferlyudin, Istoricheskiy obzor mer po vysshemu obrazovaniyu v Rossii (Historical Survey of Measures on Higher Education in Russia), Edition I, Saratov, 1894, chapters 2-6).

2 S. I. Vavilov, "Some Problems of the Development of Soviet Science", Vestnik vysshey shkoly (College Herald), 1947, No 2, page 5.

3 See Vysshaya shkola. Osnovnyye postanovleniya, prikazy i instruktsii (The University. Basic Resolutions, Orders and Instructions), Moscow, 1957, pages 215-219.

4 D. I. Mendeleyev, Soch. (Works), Vol XXIII, page 352.

5 See A. K. Birulya, "Broaden the Rights of the Director", Vestnik vysshey shkoly, 1956, No 2, page 4.

6 See V. Treyer, "Bureaucratic Obstacles -- A Brake in the Path of the Development of Science", Sovetskaya Belorussiya, 3 April 1957; N. M. Zhavoronkov, "Reforming the University", Pravda, 25 April 1957.

Chapter VII

1 The Oldest of the societies now within the system of the AN are the All-Union Mineralogical Society (1819), the All-Union Geographical Society (1845), the All-Union Entomological Society (1859), the All-Union Chemical Society imeni D. I. Mendeleyev (1868).

2 For a list of the scientific societies in Petrograd see the collection Nauka v Rossii. Spravochnyy yezhegodnik. Dannyye k 1 yanvarya 1918, vyp. I. Petrograd (Science in Russia. Information Annual. Information to 1 January 1918. Edition I. Petrograd), 1920, pages 91-117.

3 The first scientific congress in Russia was the congress of natural scientists in Kiev in 1861.

4 See P. Ye. Andreyevskiy, Politseyskoye pravo (Police Law), Vol II, St. Petersburg, 1876, pages 127-131.

5 The charters of scientific societies up to the

October Revolution, as the proposals on their formation, were ratified by the emperor on the representation of the Minister of Education. In certain cases these proposals were made by other ministers. On 29 April and 3 May 1866 the Committee of Ministers examined a memorandum of the Minister of Foreign Affairs on the formation of the Russian Historical Society. On 29 April 1866 the emperor ratified the resolution of the committee((see Sbornik postan..., op. cit., Vol IV, 1865-1870, St. P, 1871, pages 300-302), ibid, Charter of the society (pages 304-312).

6 This was organized in 1928 on the initiative of a group of leading scientists headed by Academician Bakh. On 17 October 1927, on the initiative of the group, the "Declaration" of the organization of the Association was published. On 13 February 1928 the SNK ratified the draft charter of the Association. On 25-26 April 1928 the First All-Union Conference of the Association took place. The presidium was made up of Academician Bakh, Vyshinskiy, Shmidt, Vol'fson and others ("Materials on the Formation of the Association (VARNITSO)", see VARNITSO Byulleten', 1928, Nos 1 and 2).

7 Attached to the Comacademy were, for example, the "Society of Militant Materialist-Dialecticians" (For its charter see Vestnik Komakademii (Comacademy Herald), 1930, Book 39, pages 96-100) and others.

8 See, for example, the article by M. Kostenko, V. Smirnov and P. Kamnev, "Work of the scientific-technical Societies -- on a New Level", Pravda, 12 April, 1957; the article by Ya. Sorin "Against Underestimating Scientific-technical Societies", Promyshlenno-ekonomicheskaya gazeta, 14 April 1957; the article by V. Matveyev "Develop the scientific-technical Creation of the Workers of Production", Sovetskaya Estoniya, 21 April 1957.

9 See Arkhiv AN SSSR, op. cit. Moscow Branch, Folio 2, List 1-a, 1938, No 40, Sheet 3; Folio 2, List 7 No 8, Sheet 5.

10 See "Model charter of scientific societies attached to the AN USSR" was first ratified by a resolution of the Presidium of the AN USSR on 22 April 1941 on the basis of the decision of the SNK USSR (See Arkhiv AN SSSR, op. cit., f. 2 l. 1-a, 1940, s. 67 and 72-79). On 30 December 1955 the Presidium of the AN USSR ratified the new "Model charter of voluntary scientific societies attached to the AN USSR", in accordance with which the charters of all

societies were reviewed and ratified. See Arkhiv --, op. cit. f. 2 1. 6, No 208, s. 22-41.

11 The present Model Charter states: "The liquidation of a society or its reorganization can take place a) on the instructions of the government; b) on a resolution of the Presidium of the AN USSR; c) on a resolution of the All-union Congress of the Society, passed by a secret vote of at least 2/3 of the delegates at the congress."

12 See Byulleten' VTsSPS (Bulletin of the All-Union Central Council of Trade Unions), 1955, No 9, pages 3-6.

13 ibid. No 18, pages 5-6.

14 In 1954-55 21 mass engineer-technical societies were organized: mining, ferrous metallurgy, non-ferrous metallurgy, petroleum, power engineering, machine construction, shipbuilding, instrument construction, light industry, food industry, chemical industry, building materials industry, timber industry, paper and pulp industry, agriculture and forestry, sanitary technology and communal economy, water transport, milling and grain elevators, radio and communications, railroad transport (See Byulleten' VTsSPS, 1955, No 3, pages 8-9.

15 See the article by Academician M. Kostenko, et al. op, cit.

16 See Charter of the All-Union Society for the Dissemination of Political and Scientific Knowledge, AN USSR Publishing House, 1947.

Chapter VIII

1 During the existance of the Council there were 16 sessions of the Council on Coordination.

2 See "In the Council on Coordination of the Scientific Activities of the ANSR and Branches", Vestnik Akademii nauk SSSR, 1957, No 2, page 92.

3 For the experience of the coordination work of the East Siberian branch of the AN USSR, see the article by P. Silinskiy "For Close Ties Between Scientific Research and Everyday Life", Vostochno-Sibirskaya pravda (East Siberian Pravda), 10 April 1957.

4 See A. N. Nesmeyanov, "Introductory Word of Academician Nesmeyanov at the 10th Session of the Council for Coordination on 6 December 1951", Vestnik AN SSSR, 1952, No 1, pages 13-15.

5 See N. Dilektorskiy, "New Paths are Opening up in the Development of Science", Sovetskaya Estoniya, 10 April 1957.

6 See, for an example, the Regulations on the commission on semiconductors attached to the Presidium of the AN USSR, ratified by a resolution of the Presidium of the AN USSR on 2 April 1954, No 139. See Arkhiv AN SSSR, op. cit. f 2, l 6, No 169, s 20-21.

7 See Academician A. A. Skochinskiy and Cand. Tech. Sci. L. I. Baron, "Some Problems of the Activities of academic scientific-coordination commissions ("From the experience of the Work of the Commission for Combatting Silicosis of the AN USSR"), Vestnik AN SSSR, 1949, No 3, pages 51-56.

8 See ibid., 1957, No 2, page 40.

9 Postanovleniya iyul'skogo Plenuma TsK KPSS 1955 goda (Resolutions of the July Plenum of the CC of the CPSU in 1955), Gospolitizdat, 1955, page 8.

10 See S. I. Vavilov, "Introductory Word at the Annual Meeting of the AN USSR on 2 February 1946", Vestnik AN SSSR, 1946, No 3, pages 12-13.

11 See Yu. Maksarev, "Technical Progress and Changes in the Management of Industry", Pravda, 11 April 1957.

12 See D. I. Shcherbakov, "Scientific Centers are Essential in the East", Komsomol'skaya pravda, 10 April 1957.

13 E. Andronikashvili, "Speed the Development of Science on the Local Level", Izvestiya, 5 May 1957.

Chapter IX

1 See Dostizheniya Sov..., op. cit., 1957, page 284.

2 See G. M. Krzhizhanovskiy, "Science and Socialism", Izvestiya AN SSSR, Social Sciences Division, 1937, No 5, pages 1020-1021.

3 V. P. Volgin, "Soviet Authority and Scientific Workers for 16 Years", Nauchnyy rabotnik (Scientific Worker), 1927, No 11, pages 18-23.

4 KPSS v rezolyutsiyakh... (The CPSU in Resolutions), 7th printing, Part I, page 423.

5 ibid.

6 ibid.

7. See I. V. Stalin, Voprosy leninizma (Problems of Leninism), 11th printing, page 550, 646-649.

8 See S. Kaftanov, Sovetskaya intelligentsiya verno sluzhit svoyey rodine (The Soviet Intelligentsia Loyally Serves its Country), Gospolitizdat, 1945; A. V. Topchiyev, Stroitel'stvo kommunizma i nauka (Science and the Building of Communism), Moscow, 1957, page 16.

9 See Regulations on the title Hero of Socialist Labor, ratified by Order of the Presidium of the Supreme Soviet of the USSR on 27 December 1938, Vedomosti Verkhovnogo Soveta SSSR (USSR Supreme Soviet News), 1938, No 23.

10 See, for an example, the Regulations on honorary titles of the RSFSR, ratified by order of the Presidium of the USSR Supreme Soviet on 11 January 1940, Izvestiya, 18 January 1940.

11 At present the AN USSR awards gold medals imeni Vavilov, Dokuchayev, Karpinskiy, Lomonosov, Mechnikov, Pavlov, Popov, Tsiolkovskiy. It also awards the following prizes: for the physical-mathematical sciences -- prizes imeni Bredikhin, Lobachevskiy, Lomonosov, Fedorov, Chebyshiv; for chemistry -- Butlerov, Zelinskiy, Kurnakov, Mendeleyev, Lebedev, Khlopin; for geology - geography -- Vernadskiy, Gubkin, Karpinskiy, Obruchev, Savarenskiy, Fersman; for biology -- Bakh, Vil'yams, Dokuchayev, Kovalevskiy, Komarov, Mechnikov, Pavlov, Sechenov, Timiryazev; for the technical sciences -- Anosov, Polzunov, Chaplygin, Yablochkov; for history -- Miklukho-Maklay; for literature and linguistics -- Belinskiy; for the social sciences -- Chernyshevskiy (See Vestnik AN SSSR, 1956, No 10, pages 88-89). The procedure of awarding gold medals and prizes by the AN has been established by special "Regulations", ratified by the Presidium of the AN USSR on 30 October 1956, Vestnik AN SSSR, 1957, No 1, pages 96-97.

12 This growing interest in the development of science is to be seen in Soviet literature, for example, the novels by L. M. Leonov, Russkiy les (Russian Forest) and D. P. Granin, Iskateli (The Seekers), etc.

13 I. N. Ananov, Pravovoye polozheniye nauchnykh rabotnikov (The Legal Status of Scientific Workers), 1928, page 6.

14 I. I. Yevtikhiyev, V. A. Vlasov, Administrativnoye pravo SSSR (USSR Administrative Law), Yurizdat, 1946, pages 47-48.

15 ibid. pages 54, 55, 63-64.

16 In order to avoid misunderstandings, we shall stipulate that here and elsewhere in this work we mean a scientist who does not occupy an administrative post.

17 See A. Ye. Pasherstnik, "The Question of Soviet Civil Service", Voprosy sov. administr. prava (Problems of Soviet Administrative Law), Moscow, 1949, pages 121-122.

18 Sovetskoye administrativnoye pravo (Soviet Administrative Law), Gosyurizdat, 1950, page 126.

Chapter X

1 Speaking of the public defense of the dissertation in Russian universities, we should mention that the tsarist government, frightened by the revolution of 1848-49 in Europe, began a rigid "regulating" of the persons present during the sessions of the council during examination of dissertations.

2 Prof. G. F. Shershenevich, The O poryadke priobreteniya uchenykh stepeney (The Procedure of Obtaining Academic Degrees), Kazan', 1897.

3 G. F. Shershenevich, Ukaz. soch. (Index of Works), page 11.

4 ibid.

5 ibid. pages 13-14.

6 This idea is also expressed in the law on the debates fot the degree of MD (See Svod zakonov (Collection of Laws), Vol XIII, Medical Charter, Article 596, supplem-

ent to Article 19).

7 G. F. Shershenevich, Ukaz. soch., op. cit., pages 23-24.

8 A. Ya. Sinetskiy, Professorsko-prepodavatel'skiye kadry vysshey shkoly SSSR (University faculty Personnel in the USSR), Moscow, 1950, page 82.

9 See Vysshaya shkola. ..., op. cit., pages 284-287.

10 ibid. pages 622-628.

11 At present academic degrees are conferred for the following branches of science: a) the physical-mathematical sciences; b) chemistry; c) the biological sciences; d) geology and mineralogy; e) the technical sciences; f) the agricultural sciences; g) the historical sciences; h) the economic sciences; i) the philosophical sciences; j) the philological sciences; k) the geographical sciences; l) the legal sciences; m) the pedagogical sciences; n) medicine; o) the pharmaceutical sciences; p) the veterinary sciences; q) art science; r) architecture.

12 Prior to the publication of the resolution of the SNK USSR of 20 March 1937 (since 13 January 1934) the degree of candidate of sciences, besides in VUZY and scientific institutions, was given by 1) qualified commissions of NKs and departments of the USSR and the union republics; 2) by the Presidium of the AN USSR and the presidium of the ANSR; 3) the VAK.

13 See the Regulations on the VAK on awarding academic degrees and titles attached to the USSR Ministry of Higher Education, ratified by resolution of the CC of the CPSU and the USSR Council of Ministers on 20 August 1956, Vysshaya shkola ..., op. cit. pages 326-8.

14 Prior to 20 March 1947 the degree of doctor of sciences, besides the VAK, was ratified by the qualification commissions of the Nks of education and the NKs of health of the union republics with the sanction of the people's commissars, as well as by the Presidium of the AN USSR and the presidia of the ANSR.

15 Conferring upon active members of the ANSR, as well as active members of the Agricultural Academy the degree of doctor from the moment of election was provided for in #14 of the resolution of the SNK of the USSR on 13 Jan-

uary 1934 on academic degrees and titles, SZ USSR, 1934, No 3, Article 30.

16 See Arkhiv AN SSSR, op. cit., f 2, 1 I-a, No 281, s 1-5.

17 In the Polish People's Republic it has been established that alongside opponents approved by the scientific council of the institute where the defense is to take place, opponents can be chosen: for the candidate's dissertation -- by the Central Qualification Commission, as a rule from the workers of another scientific institution or VUZ; for the doctorate -- by the CQC and the Polish AN, where the approved dissertations are to be sent at least six weeks prior to the defense, together with remarks by the opponents appointed by the institute. The opponents appointed in this procedure enjoy the same rights and have the same obligations as the opponents approved by the scientific council of the institute.

18 V. Kirillin, "Training Scientific Cadres", Pravda, 29 August 1956.

19 See M. N. Tikhomirov, "Young Scientists and Research", Vestnik vysshey shkoly, 1956, No 7, page 15.

20 See B. V. Nekrasov, "Conferring the degree - the Recognition of Scientific Qualification", remarks by the chairman of the expert commission, Vestnik vysh .. , op. cit., 1956, No 11, page 11.

21 Many examples have appeared in the press of the refusal of scientists to participate in the discussion of dissertations on Vital Topics; see, for an example, the article by L. Kurin "Why do the Opponents Remain Silent?", Literaturnaya gazeta, 30 July 1955.

22 Formerly the rank of professor was conferred by the state scientific councils of the union republics (up to 13 January 1934) and the qualification commissions of the NK of education and the NK of health of the union republics with the sanction of the people's commissars (from 13 January 1934 until 20 March 1937).

Chapter XI

1 See KPSS v rezolyutsiyakh..., op. cit. 7th printing, Part 2, pages 398, 400.

2 See Direktivy VKP(b) po voprosam prosveshcheniya (Directives of the Party on Problems of Education), page 312.

3 See Obrashcheniye TsK KP ko vsem izbiratelyam (Appeal of the CC of the Party to all Voters), Gospolitizdat, 1958, page 12.

4 See Vysshaya shkola...., op. cit., pages 284-286.

5 ibid. pages 617-621.

With the exception of the Ukrainian SSR, where certain functions of the USSR Ministry of Higher Education have been transfered to the Ukrainian SSR Ministry of Higher Education.

Chapter XII

1 In textbooks on labor law for law schools, published at various times, for example, Sovetskoye trudovoye pravo (Soviet Labor Law), edited by N. G. Aleksandrov and D. M. Genkin, Moscow, 1946; N. G. Aleksandrov, Sovetskoye trudovoye pravo, Moscow, 1954, does not mention these features.

2 See University Charter of 1804, Par. 60; 1835, Par. 77, 78, 80.

3 See Byulleten' MVO SSSR, op. cit. 1957, No 15.

4 See Spravochnik meditsinskogo rabotnika po voprosam truda i zarabotnoy platy (Medical'sWorker's Manual for Labor and Wages), Moscow, 1949, pages 209-210.

5 See Arkhiv ..., op. cit., f 2, l 6, No 61, s 25, 48-94.

6 ibid., No 78, s 11, 19-21.

7 ibid., No 142, s 24-28.

8 ibid., No 207, s 20.

9 See O konkursakh i attestatsii nauchnykh sotrudnikov NII i laboratoriy (Competitions and Certification of Scientific Workers of Scientific Research Institutes and Laboratories), Moscow, 1957, pages 7-12.

10 Young specialists sent with the established procedure to work in a VUZ are appointed as instructors and assistants without competition (Art. 6 of the Instructions). In pedagogical and teachers' institutes competitions are held only for vacant positions.

11 In NI institutes and laboratories in the Far North and other remote localities, appointment takes place without competition. The list of institutes and laboratories is ratified by the administration of the department or ministry (Art. I of the Instructions of the Presidium of the AN USSR of 22 February 1957).

12 In the Instructions of the Presidium of the AN USSR of 22 February 1957 this goal is defined somewhat differently. It states that the purpose of competition (election) selection of cadres is the concept of the responsibility of the faculty of VUZy for the quality of their work, for increasing skills, advancing young pedagogical cadres, attracting top workers from NIU to scientific-educational work, as well as from industry and other branches of the economy and culture.

13 See V. N. Smirnov, "Some Moot Points of Soviet Labor Law in Filling Faculty Positions by Competition", Vestnik LU (Leningrad University Herald), Social Sciences Series, 1954, No 9, page 105.

14 A. Ye. Fersman, "Basic Problems in the Organization of Scientific Work", Vestnik AN SSSR, 1936, No 10, page 41.

15 See the editorial "Principle in Scientific Work", Partiynaya zhizn' (Party Life), 1956, No 9, pages 27-35.

16 See A. Ye. Pasherstnik, Pravo na trud (Right to Work), Moscow, 1951, page 225.

17 ibid., 225-226.

18 Smirnov, V. N., op. cit., page 104.

19 Sovetskoye gosudarstvo i pravo (Soviet State and Law), 1957, No 1, page 75-76.

20 See, for example, the Regulations on the Certification of junior scientific workers of NU of the AN USSR, ratified by the Presidium of the AN USSR on 29 July 1956.

21 See O konkursakh ..., op. cit., pages 13-15.

22 For the basic rights of authors of works of literature, science and art see M. V. Gordon, Sovetskoye avtorskoye pravo (Soviet Copyright Law), 1955, Chapter VI; V. I. Serebrovskiy, Avtorskoye pravo i nasledovaniye "Copyright Law and Inheritance", Sovetskoye gos..., op. cit. 1955, No 6, page 40; V. I. Serebrovskiy, Voprosy sovetskogo avtorskogo prava (Problems of Soviet Copyright Law), 1956, Chapter IV; B. S. Antimonov, Ye. A. Fleyshits, Avtorskoye pravo (Copyright Law), Gosyurizdat, 1957, pChapter II.

23 See Serebrovskiy, Voprosy..., op. cit., page 78.

24 One cannnot say that these problems do not attract the attention of Soviet jurists. In many works published in recent years the legal status of scientific workers as authors of scientific works produced while on the job has been examined. These include the monographs: M. V. Gordon, Sov. avtorskoye pravo (Soviet Copyright Law), Moscow, 1955; Serebrovskiy, ibid; and several articles by V. I. Koretskiy in Uch. zap. Tad. gos. un. (Scientific Notes of the Tadzhik State University). However, many of the problems have been posed but not solved.

25 Serebrovskiy, ibid., page 20

26 ibid., page 79.

27 See N. G. Aleksandrov, Trudovoye pravootnosheniye (Labor Law Relations), 1948, page 155; Pasherstnik, Prav. vop. voznagr. za trud rab. i sluzh. (Legal Problems in Labor Remuneration of Bench and Office Workers), Moscow, 1948, pages 142-149; B. Martynov, "Basic Problems of Copyright Law", Sovetskoye gos..., op. cit., 1941, No 4, page 37.

28 See Sovetskoye grazhdanskoye pravo (Soviet Civil Law), Vol II, under the editorship of Prof. S. N. Bratus', Gosyurizdat, 1951, pages 348-350; Aleksandrov, ibid., page 269.

29 All statements cited here by Koretskiy were taken from his article "Reviewing Copyright Legislation", Uch. zap. op. cit., Vol XI. Works of the Law Faculty, 4th printing, Stalinabad, 1956, page 92.

30 See Stenographic report No 14 of the session of the Presidium of the AN USSR of 24 April 1942, Par. 11, Arkhiv..., op. cit., f 2, l 6-a, No 35, s 22.

31 See Byulleten' Min ..., op. cit., 1954, No 9.

32 Koretskiy, op. cit., page 80.

33 Serebrovskiy, Voprosy..., op. cit., page 154.

34 ibid.

35. For the content of inventor's rights see N. A. Raygorodskiy, "Role of Patent Law in the USSR in the Development of Advanced Soviet Technology", Sov. gos. ..., op. cit., 1953, No 6, page 74.

36 The question of payment for technical improvements is resolved in another manner in Soviet legislation. According to the present Instructions (Par. 19), payment to workers of NI institutes for technical improvemtnss depends on several factors: a) is or is not the technical improvement "directly affecting the sector or work of the author"; b) if it is, the suggestion is of an "original nature" and an "element of technical creation". For criticism of this section see N. A. Raygorodskiy, "Necessary Changes in the Legal Regulation of Payment for Inventive Suggestions", Sov. gos., op. cit., 1955, No 7, pages 55-56; his Izob. pravo SSSR (USSR Patent Law), 1949, pages 216-218.

37 Raygorodskiy, Izob. ..., page 192.

38 Lange, Mukhachev, Omel'chenko, Bushnevskiy, Tyaralov, "Some Subjects of USSR Patent Law", Sov. gos..., op. cit., 1955, No 3, page 70.

39 ibid.

40 This [illegible] was expressed in Russian legislation by the following formula, contained in the section "Privileges for new inventions and discoveries" of the 1864 Decree on Industry: "Privileges are not granted for scientific discoveries and abstract theories" (SZ of the Russian Empire, Vol XI, Part 2, Art. 1984).

41 See Raygorodskiy, Imperializm i uchenyye (Imperialism and Scientists), 1934; Martynov, "Patent Law in the USSR", Uch. tr. VIYuN (Scientific Works of the All-union Institute of Legal Sciences), No IX, 1947; S. N. Landkof, "History of Soviet Patent Law", Yur. sb. KGU im. T. G. Shevchenko (Legal Collection of the Kiev State University imeni T. G. Shevchenko), 1948. See also the report by Prof.

Torben Lund, "International Protection of the Results of Scientific Work at the 4th General Assembly of the World Federation of Scientific Workers", Byul. VFNR (Bulletin of the WFSW), 1955, No 5, pages 288-295.

Chapter XIII

1 The Regulations on the NK of Education were ratified by the RSFSR SNK on 15 February 1921 (SU RSFSR, 1921 No 12, Article 78).

2 Leninskiy sbornik (Lenin Collection) VIII, pages 38-39.

3 See the copy of the stenographic report of the session of the Special Temporary Committee attached to the STO on 7 July 1922, No 1, Arkhiv ..., op. cit., f 162, l 3, No 70, s 39.

4 There are no such direct instructions in the present USSR constitution. In the nationwide discussion of the 1936 draft constitution Academician N. Nikol'skiy introduced a proposal to include in Article 14 of the Constitution a special paragraph which would stipulate direction by the USSR of scientific and artist institutions in the Union. This proposal, however, did not enter legislation. See Vsenar. obsuzhd. proyekta Kon. SSSR (Nationwide Discussion of the USSR Draft Constitution), Partizdat, 1936, page 63.

5 See Arkhiv ..., op. cit., f 162, l 3, No 70, s 70.

6 ibid, s 73.

7 ibid., l 1926, No 1, s 10-11 and 15-17.

8 See Vsenar..., op. cit., pages 113-116.

9 Attached to the TsIK of the USSR were the following: a) the Comacademy; b) The K. Marx and F. Engel's Institute; c) the USSR Museum of the Revolution; d) USSR Scientific Association of Oriental Studies; e) USSR Nationalities Central Publishing House; f) Oriental Institute; g) Leningrad Oriental Institute; h) Communist University imeni Ya. M. Sverdlov; i) Communist University of the Workers of the East imeni I. V. Stalin; j) Central Asian State University in Tashkent; k) Central Asian Communist University in Tashkent. A resolution of the USSR TsIK on 26

March 1930 joined to these institutions the USSR AN, subsequently transfered to the jurisdiction (by resolution of the TsIK USSR of 14 December 1933) of the USSR SNK.

10 See "Regulations on the USSR TsIK Committee for Managing Scientific and Educational Institutions", ratified by the USSR TsIK on 30 April 1927 (SZ, 1927, No 34, Article 355).

11 The new charter of the AN USSR was ratified by resolution of the TsIK of the USSR on 26 March 1930.

12 See, for example, the resolution by the USSR TsIK Presidium of 27 July 1933, passed on reports by the All-union, All-Ukrainian and Belorussian ANs (SZ USSR, 1933, No 49, Article 287).

13 See Resolution on the USSR Gosplan, ratified on 21 August 1923, "Sovnarkhozy and planning organs in the center of the country and locally", (1917-1922), Gospolitizdat, 1957, page 151.

14 This committee was formed in 1934.

15 See the Resolution on the Higher Economic Council of the RSFSR, ratified by the SNK of the RSFSR on 19 January 1924, Sovnarkhozy i planovyye organy ..., op. cit., pages 160-167.

16 Subsequently, in 1938, the tasks of the committee were changed.

17 See the resolution of the RSFSR SNK of 20 January 1927 on the report by the NK of Education of the RSFSR "The Condition and Tasks of NIU of the RSFSR NK of Education" (SU RSFSR 1927, No 9, Article 68) and the resolution of the RSFSR SNK of 4 June 1927 "Procedure of the planning of scientific research for studying productive forces and the procedure of publishing works with a significance for economic development, not published as a result of financial difficulties" (SU RSFSR 1927, No 56, Article 391).

18 See, for example, the resolution of the Turkmen SSR SNK "Obligatory registration of all NI and Exploration Expeditions" of 23 April 1934, Sb. vazhn. post. prav. Turk. SSR za 1934 (Collection of the Most Important Resolutions of the Government of the Turkmen SSR for 1934), Ashkhabad, 1935, page 121.

19 The Labor and Defense Council, by a resolution of 12 July 1929, proposed that the institutions of the USSR carrying out scientific research on the natural productive forces of the USSR present annual and future plans for these studies in the respective union republics to the Gosplans of the union republics (with distribution according to rayons) and summaries of the results of these studies (SZ USSR, 1929, No 47, Article 419).

Chapter XIV

1 See the speeches of deputies Ambartsymyan and Babayev at the second session of the USSR Supreme Soviet -- fourth convocation -- stenographic report, pages 309-311 and 90.

2 See Khrushchev, "The Rurther Improvement of the Organization of the Administration of Industry and Construction", Report at the VII session of the USSR Supreme Soviet, Gozpolitizdat, 1957, page 42.

3 In the theses this organ was to be called the engineering-technical committee.

4 See M. Lavrent'yev, S. Khristianovich, "Important Conditions for the Development of Science", Pravda, 2 August 1957; P. L. Kapitsa, "Some Problems in the Organization of Scientific Work", Pravda, 4 May 1957; L. Sedov, "Cadres are the Important Thing", Literaturnaya gazeta, 13 April 1957; Ya. Sorina, "Against Underestimating Scientific Societies", Promyshlenno-ekonomicheskaya gazeta, 5 May 1957; See Ratenberg, "The Functions of the Engineering Committee", Prom..., ibid., 14 April 1957; A. Topchiyev, V. Kirillin, "Planning and Coordination of Scientific Research", Pravda, 7 May 1957.

Chapter XV

1 Lenin, Soch., op. cit., Vol 13, page 298.

2 See G. I. Petrov, Sushchnost' administrativnogo prava (The Essence of Administrative Law), Essay on the dissertation for the degree of DDL, Leningrad, 1957, pages 26-27.

3 See Pravda, 3 June 1956

4 For example, copyright or patent law in civil law.

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