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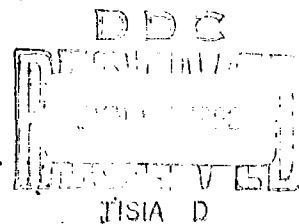
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SCIENTIFIC INFORMATION REPORT
CHINESE SCIENCE
(24)

Prepared by

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SCIENTIFIC INFORMATION REPORT

Chinese Science (24)

This is a serialized report consisting of unevaluated information prepared as abstracts, summaries, and translations from recent publications of the Sino-Soviet Bloc countries. It is issued in seven series. Of these, four, Biology and Medicine, Electronics and Engineering, Chemistry and Metallurgy, and Physics and Mathematics, are issued monthly. The fifth series, Chinese Science, is issued twice monthly; the sixth series, Organization and Administration of Soviet Science, is issued monthly; and the seventh series, Outer Mongolia, is issued sporadically. Individual items are unclassified unless otherwise indicated.

Table of Contents

	<u>Page</u>
Biological and Medical Sciences	1
Earth Sciences	26
Chemistry and Chemical Technology	34
Miscellaneous	49
Biographic Information	53
Supplement -- Prominent Scientists	75

C-O-N-F-I-D-E-N-T-I-A-L

BIOLOGICAL AND MEDICAL SCIENCES

CHINESE MEDICAL ASSOCIATION DISCUSSES FUTURE WORK -- Peiping, Kuang-ming Jih-pao, 17 Mar 63, p 1

Recently, more than 200 executive personnel and scientists in the various medical fields attended a national conference of the Chinese Medical Association in Peiping. At this meeting, medical activities since the 10th Congress of this association in 1956 were summarized, and medical work for the future was also discussed. During these few years, the Chinese Medical Association has accomplished a great amount of work such as raising the political awareness of its members, consolidating the medical work of all medical doctors in western and traditional Chinese medicine, initiating academic movements, starting an academic exchange of foreign medical students, editing and publishing a medical science magazine, providing and publicizing knowledge on health and drugs, and reorganizing and expanding the association. Since 1958, the Chinese Medical Association has sponsored nine national academic conferences to discuss, in particular, parasitic diseases, acute contagious diseases, industrial hygiene, cardiovascular diseases, oncology, surgery, obstetrics and gynecology tuberculosis, and hepatitis. Some provincial and municipal branches of this medical association have also held academic meetings were all useful for exchanging experiences in preventive work, summarizing the results of scientific research and stimulating an academic atmosphere. Furthermore, at all levels of the association there were new developments in the normal academic movements. In Peiping alone, 44 meetings were held in 1962 by various branches of scientific societies of the Chinese Medical Association in which 33 special topics were discussed in depth.

The Chinese Medical Association has been editing and publishing a medical science magazine. After some revision, it is now publishing not only a foreign language publication and the "Chinese and Foreign Medicine" magazine but also other magazines on the subject of internal medicine, surgery, pediatrics, obstetrics, hygiene, stomatology, radiology, pathology, ophthalmology, dermatology, psychoneurosis, and ear, nose, and throat therapy.

In conjunction with the Chinese Medical Association and its affiliated chapters in Shanghai and Canton, radio stations and television stations in China are broadcasting health education programs on a regular schedule. In the Peiping area, more than 200 radio broadcasts and more than 30 television programs were put on the air this year, all of which were received with pleasure by the broad masses of the people.

The Chinese Medical Association also organized a lecture program of medical experts. In 1962, 24 lectures were given in 19 districts. In some of these lectures, demonstrations were also given on the subject of

C-O-N-F-I-D-E-N-T-I-A-L

diagnosis and surgical operations. Many of these lecture programs took the opportunity to invite well-known medical experts who had previously been sent abroad, and are most welcomed by medical service personnel everywhere. In regards to the academic flow of foreign medical knowledge, accomplishments have been made in various aspects of exchanging medical periodicals.

In the matter of reorganizing and expanding the Chinese Medical Association, the preparatory committees have already been set up for a physical therapy society, an acupuncture and moxibustion society and other societies on the provincial level throughout the country (including the autonomous regions).

NATIONAL MEDICAL SCIENCE CONFERENCE CONVENES IN PEIPING -- Peiping, Kuang-ming Jih-pao, 17 Mar 63, p 1

At the National Medical Science Conference in Peiping, it was proposed that the main long-range tasks of Chinese medical research work be as follows: In agricultural industry, resolve the key technological problems of preventing diseases dangerous to the health of the people; protect the health of women and children; strengthen the physical health of the people; cultivate Chinese traditional medicine; accelerate the development of basic sciences; set up medical departments and strengthen departments weak in certain fields; make an effort to learn new medical techniques of the 1960's hasten to organize a comprehensive modern medical science system; quickly establish the rank and file in scientific technology and determine who are "Red and expert" and capable of resolving by themselves China's medical and technological problems, and thus enabling our medical science to approach or attain world standards.

At this meeting, a long-term program was set up for the development of China's medical science and techniques covering those aspects of basic medical science, clinical medicine, traditional Chinese medicine, drought, medical equipment, preventive medicine and so forth. To carry out the important work in medical science research, the conference recognized the need to intensify research work on basic medical theories and to nurture quickly the medical cadres in the field of medical science research.

Close cooperation between western and Chinese medicine and true acceptance and perpetuation of traditional Chinese medicine was advocated at this meeting.

Attending this conference were a large number of medical experts 60 years old or more. Among the most noted medical scientists attending this conference were Chang Yun (5728/9462), a noted anatomist; Ma Wen-chao (7456/2429/2507), well-known histologist and embryologist; Chang Hsi-chun (1728/6932/6874) physiologist; Hou Pao-cheng (0186/1405/3864), pathologist;

C-O-N-F-I-D-E-N-T-I-A-L

Hu Cheng-hsiang (5170/2973/4382), pathologist; Chang Hsiao-Ch'ien (1728/1321/7505), an expert in internal medicine; Huang Chia-ssu (7806/1367/7475), surgeon; Lin Ch'iao-chih (2651/1564/4460), a female obstetrician and gynecologist; Chu Fu-t'ang (6175/4395/2768), pediatrician; Cheng Men-hseuh (4453/7024/7185), a famous doctor of traditional Chinese medicine; Ch'in Po-wei (4440/0130/2670), an old Chinese doctor, Chang Ch'ang-shao (1728/2490/4801), pharmacologist; Huang Ming-lung (7806/7686/7893) an expert in pharmaceutical chemistry, and others.

AN INTERVIEW WITH SEVERAL MEDICAL SPECIALISTS -- Peiping, Kuang-ming Jih-pao, 17 Mar 63, p 2

[Following are excerpts taken from an article by Pei Yueh (2071/2588), a reporter who attended the National Medical Science Conference in Peiping.]

At the National Medical Science Conference, I interviewed several health specialists such as Wang Te-chin (3076/1795/2516), Wu Tse-chung (0702/2344/0022), Yang Ming-ting (2799/6900/7844), epidemiologist Ching Yu-t'u (5592/6276/0956) and others on the problems of preventive health work and preventive medical research.

All these experts and professors spoke of the importance of preventive health work and recalled the accomplishments in preventive health work since the establishment of new China. They asserted that within a very short period they were able to improve the physical health of the people and greatly change the health aspect in the towns and villages by carrying out a vigorous nationwide mass health campaign against spread of the plague, small-pox, cholera, and so forth. Although China has suffered 3 consecutive years of national calamities, there has been no serious epidemic in all the China areas, as the health campaign was resolutely carried on without any letup.

Prof Wang Te-chin of the Institute of Labor Health, Chinese Academy of Medical Sciences, stated that after the liberation many health and preventive medicine organizations were set up in Peiping, Shanghai, Shansi, Wuhan, Harbin and Szechwan. By 1957, graduates from these health organizations were sent out to various areas to work.

Prof Chiang Yu-t'u remarked, "...in comparing the number of diseases that occurred each year, the most numerous are the contagious diseases, which were caused by an unarrested spread of these diseases. Consequently, it can be said that if only preventive measures can be effectively implemented, the number of cases of sickness can be greatly reduced and the epidemic arrested. To protect the health of the people, the Chinese Communist Party and the government has trained, since the liberation, several times the number of doctors in old China, and modernized many hospitals." Several

C-O-N-F-I-D-E-N-T-I-A-L

other professors also talked about the good points of preventive work and related many actual cases. For example, at a certain locality where hook-worm disease (ankylostomiasis) was at one time in an epidemic stage, the health of the inhabitants was seriously affected and agriculture production was greatly disrupted. During these few years, the local authorities were able to combine leadership, expert personnel, and the masses to combat the epidemic, and many cases of this disease were cured, health improved, and agricultural production was able to increase.

Another professor cited a notable example where schistosomiasis was prevalent in a certain water irrigation project area. The original plan was to spend very little money for the purchase of supplies for preventive health work and for preventing sickness; however, as result of insufficient preventive health work many persons came down with sickness and the medical expenses cost ten times more than the amount spent for preventive measures.

Another important aspect in preventive health work is to protect the health of the workers in industry and mining. Prof Wu Tse-chung of the Institute of Labor Protection, China Academy of Medical Sciences, has been resolutely supporting research work in health of workers in industry and mining. He stated that since the development of the nation's construction projects and the establishment one by one of new factories and mining enterprises, it also created some new health problems such as the treatment of refuse, dangerous waste gas fumes and sewage, silicon dust, benzene, lead poisoning, and so forth. Due to the lack of experience and the need to find preventive techniques, we still need to intensify our investigation research to protect the health of the workers. Wu continued by saying that these few years, he had conducted study on the prevention of pulmonary silicosis. He went frequently to various factories and mines to investigate and brought back all kinds of specimens for examination. After obtaining preliminary successes in his tests, he then went to the field to conduct actual tests. After conducting these experimental researches, he finally found a successful means of preventing pulmonary silicosis.

In his research on environmental health for many years, Prof Yang Ming-ting declared, "A room provided with healthful conditions is conducive to curing the sickness of a patient and vice versa, a room with unhealthy conditions would cause a healthy persons to become sick. In villages of South China there are many old style houses in which sunlight and air was inadequate. To safeguard the health of the farmers, one way is to improve the habits of cleanliness and sanitation and the other way is to improve existing conditions. Food and water sanitation is also very important. Along the rivers in South China there are people who have the habit of drinking raw (untreated) water which is very unsanitary. Methods for water purification should be disseminated."

C-O-N-F-I-D-E-N-T-I-A-L

A few professors stressed the importance of research in preventive medicine. One type of research which often requires months and years of investigation and research is the study of the development of an epidemic and all the facts about a sickness. Another type of research is so to exert great efforts in the study of new and unknown diseases. Furthermore, research work must be conducted relentlessly on diseases which have not yet occurred or have already been subjected to control or preventive measures such as plague and cholera. From the viewpoint of prevention, these diseases cannot be neglected.

KWANGTUNG STOMATOLOGY HOSPITAL ESTABLISHED IN CANTON -- Calcutta, Chungkuo Hsin-wen (The China Review), 5 Mar 63, p 1

The first special hospital for the treatment of oral diseases in Kwangtung Province -- the Kwangtung Provincial Stomatology Hospital -- was established for Canton. This hospital is located at the former site of the oralogy department of the Kwangtung Provincial Peoples' Hospital along the Hai-chu Plaza.

This stomatology hospital is comparatively complete in its facilities. Included among its many departments are: outpatient clinic, inpatient wards, oral medicine, surgical operations of the oral cavity and the superior and inferior maxilla (including plastic surgery), orthodontology (including odontoceremotechny and orthodontia). Additional equipment for radiodontia, oral pathology, biochemistry laboratory, blood bank, etc. have also been installed recently. Sick beds for inpatients have also doubled.

The Chinese People's Government looked upon this hospital with great approbation. Besides allocating funds directly for the purchase of therapeutic equipment and for refurbishing the sick rooms and areas outside the dispensary, the government has also supported the training of special medical therapeutic technicians.

At present, the Kwangtung Provincial Stomatology Hospital is able not only to treat general cases of oral infections, including all cases of odontitis, to do work in tooth repairs, false denture, dental orthopedics, tooth extraction, and minor dental surgery, but also is able to undertake successfully more complicated cases of major dental surgery.

At this hospital, by performing rhinoplastic, artificial nose can be "grafted" on a person with a rose cleft. Cases of jaw fractures, perforation of the nasoseptum, harelip, and so forth can all be corrected locally by plastic surgery Ossification of the jaw bones and lockjaw can be treated and restored to normal. Chronic cases of maxillary osteomyelitis and saprogenic osteitis can be handled by ostectomy Large masses of mixed osteoma, osteofibroma, celled tumors and all types of cysts, can also be entirely removed by surgery.

C-O-N-F-I-D-E-N-T-I-A-L

HOW TO USE LIVE POLIO VACCINE -- Peiping, Kuang-ming Jih-pao 14 Mar 63,
p 3

(Editor's Note: After the publication of the article appearing in the 20 February 63 issue of this newspaper entitled "Infantile Paralysis Can Be Prevented," some readers have requested more information on how to take the polio vaccine. The following is a reply from Comrade Su Cheng-ch'in (5685/6134/2953) of the Institute of Medical Biology, Chinese Academy of Medical Sciences.)

Live polio vaccine is a biological product used for the prevention of infantile paralysis. This vaccine has three types: Type I, Type II, and Type III. These types of vaccine were first produced and used in our country in 1960. Now more than 200 million people in all the countries in the world (including Communist China) have taken this type of vaccine, thus proving that it is entirely safe for human beings and that it has brought good results in the work of immunology and antiepidemiology.

Live polio vaccine is taken by children ranging from 6 months to 7 years; however, persons 7 years of age or older and in good health may also take the vaccine when needed. The method of administering the vaccine is to give one type of vaccine at a time, giving three separate doses, at one-month interval, of Type I, Type II, and Type III. On a field trial basis, the vaccine was administered only twice: Type I was given first, and a month later Type II and type III were given together in a single dose; this also gave good results. It is best that a child who has taken the three types of vaccine to take another dose the following year, consisting of a combination of the three types of vaccine. The effectiveness of immunization would last at least 3 to 5 years. The vaccine is administered generally in winter or early spring, or 2 months prior to the polio epidemic season. Experience has shown that if a polio epidemic has started in a certain area, and children in that area who are very susceptible to the disease are given live polio vaccine on a mass basis, the epidemic can be arrested. To prevent the possibility of producing any reaction, a child cannot take these types of vaccine if he or she is suffering from any acute contagious disease, diarrhea, is very weak physically, or is suffering from other serious children's disease. When taking the live polio vaccine, it does not have any effect upon other preventive medicine. However, the vaccine has no therapeutic value if the patient is already suffering from infantile paralysis or has already acquired a hereditary disease.

C-O-N-F-I-D-E-N-T-I-A-L

At the present time, the live polio vaccine which China has produced, comes in two forms, liquid type and the sugar-coated pill. Both of them gave the same good results. However, in comparison with the liquid type, the sugar-coated type is better for storage, shipment, and more convenient for use. For this reason, I am presently summarizing my experiences in the production and use of live polio vaccine in sugar-coated pill form to promote large scale production and wide use of the vaccine.

CHINESE MEDICAL WORKERS AND RESEARCH ORGANS EXPAND -- Calcutta, Chung-kuo Hsin-wen (The China Review), 23 Mar 63, p 1

Recently, the Ministry of Health invited more than 200 specialists in Chinese and western-medicine and pharmacology to attend a convention in Peiping. At this conference, the experience and accomplishments in the field of Chinese medical science work were summed up, the most important tasks of Chinese medical science research work were brought out, and the long-range plan of developing Chinese medical science techniques was formulated. Chairman Mao Tse-tung, Liu Shao-ch'i, Chou En-lai, Chu Teh, Teng Hsiao-t'ing, and other leading Chinese personalities were on hand to greet the entire group of representatives to the convention.

The representatives were exhilarated to hear that China's medical science industries have made remarkable development during recent years. Since 1956, the research organs of the medical science industries in China have increased from 20 odd establishments to more than 100 establishments, and the number of research workers in medical science has increased more than three fold. In the important field of preventive medicine, especially against parasites, communicable diseases, endemic diseases, and occupational diseases, diathesis and so forth, exact investigation and research work has been carried out. Some successful preventive measures have now been discovered. Likewise, rapid development has also been made in the research of materia medica, antibiotics, biotic preparations, blood preparations, and therapeutic equipment.

Among those present at the meeting were: Chang Yun (1728/9389), anatomist; Ma Wen-chao (7456/2429/2507), histologist and embryologist; Chang Hsi-chun (1728/6932/0971), physiologist; Hou Pao-chang (0186/1405/3864), pathologist; Chang Hsiao-ch'ien (1728/1321/7505), physician; Huang Chia-szu (7806/1367/7475), surgeon; Lin Ch'iao-chih (26a1/1564/4460), obstetrician; Chu Fu-t'ang (6175/4395/2768), pediatrician; Cheng Men-hsueh (4453/7024/7185) prominent doctor in traditional Chinese medicine; Chang Chang-shao (1728/2490/4801), pharmacologist; Huang Ming-lung (7806/7686/7893), pharmacochemist; and others.

C-O-N-F-I-D-E-N-T-I-A-L

SHANSI MEDICAL COLLEGE HOSPITAL REORGANIZES KEEPING OF MEDICAL CASE HISTORIES -- Peiping, Kuang-ming Jih-pao, 27 Mar 63, p 2

The First Hospital of Shansi Medical college has just completed the work of systemically categorizing its medical case histories, and lately has put these medical case histories on display. The medical college had first decided to straighten out and combine all medical case history records. This was done by consolidating the regular medical history of each special department and later, by having the medical service personnel study and discuss these case histories. Furthermore, they initiated a system of inspection and supervision, holding critiques and evaluating the medical ability and work style of each doctor by his medical history reports. For example, among 50 case histories investigated by the department of internal medicine, prior to readjusting case histories, many were found to be incomplete; the records were not concise and many of the records were not signed or partly signed; after undergoing readjustments, these medical histories finally complied basically with the general requirements of the medical college.

Simultaneously, while the medical college was putting its medical case histories into order, it was also improving its work of handling medical case histories. A set schedule, the personnel of the medical record room go to the sick wards to collect these case histories and review the records according to a set procedure. In the medical record room there are also index files of all types of sickness and medical techniques, thus greatly benefiting the work of the doctor in summing up experiences and conducting scientific research.

A VISIT TO PEIPING CHINESE MEDICAL COLLEGE -- Peiping, Kuang-ming Jih-pao, 25 Mar 63, p 2

Since 1956, medical colleges of traditional Chinese medicine have been established throughout China for the purpose of perpetuating and developing Chinese medicine and nurturing personnel interested in traditional Chinese medicine. On this account, the Peiping College of Traditional Chinese Medicine has been set up as a new college for promoting high-level traditional Chinese medicine and for the supporting personnel interested in Chinese drugs. At present, this college has already set up two special departments: a department of traditional Chinese medicine, and a department of Chinese drugs. In the field of Chinese medicine, a 6-year course is offered in which is included a systematic study of theories and therapeutic techniques in traditional Chinese medicine. A general knowledge of modern medicine is also required. A course in Chinese drugs requires 4 years in which the main studies deal with theories and well-tested rules, decocting of Chinese medicine, dispensing of Chinese drugs, and so forth, including a course in standard drugs in modern pharmacology.

C-O-N-F-I-D-E-N-T-I-A-L

The Peiping Chinese Medical College has more than 30 teaching and research sections, many of which are staffed with prominent Chinese doctors of traditional medicine. In the process of nurturing young men to become instructors in traditional Chinese medicine, the method of "consolidating the new and the old" was employed, thus forming a close bond between young Chinese doctors and old practitioners and also enabling the former to follow the teachings of the old Chinese doctors. In one way, the young Chinese doctors would help the old doctors to readjust their work and review some of their experiences; and in another way, absorb the many years of experience in clinical therapy from the old doctors and thus raise the level of service incessantly.

ARMY MEDICAL UNIVERSITY GIVES SCHOLASTIC AWARDS -- Shanghai, Chieh-fang Jih-pao, 14 Dec 62, p 2

On 10 December 1962 the Army Medical University [Shanghai] held a really purposely to give essay awards. At this rally, it was announced that 12 essays placed in the first category, 118 in the second category, and 254 in the third category. Fourteen individuals won the collective group award in the first category; 30 individuals won the collective group award in the second category; 40 writers were T'u K'ai-yuan (1458/7030/0337), surgeon; Li Pao-shih (2621/1405/1395), otorhinolaryngologist; Li Cheng-hu (2621/2110/4375), pharmacologist, and a large number of young instructors and medical doctors.

Most of the essays submitted for these awards were submitted between October and the end of 1961. The awards given to these essays reflect the academic standard of the Army Medical University which is being elevated.

SHANGHAI SECOND MEDICAL COLLEGE COORDINATES INSTRUCTION, THERAPY, AND RESEARCH -- Peiping, Kuang-ming Jih-pao, 23 Mar 63, p 1

Since its establishment, the Shanghai Second Medical College has organized 48 teaching and research sections, 3 large affiliated hospitals with a total of 2,150 beds, and 2 research laboratories for the study of high blood pressure and traumatology, under the direction of the Shanghai Municipal Health Bureau.

SINKIANG HEALTH SCHOOL -- Peiping, Kuang-ming Jih-pao, 23 Mar 63, p 2

At the Sinkiang Health School there is a public health class in which are enrolled students of the 5 ethnic nationalities, including the Han, Uighurs, Kazakhs, Kirghiz, and Sibo. They are all studying and helping each other in their work. Their class performance as a whole has been good, and each student progressed remarkably well.

C-O-N-F-I-D-E-N-T-I-A-L

VISIT TO A SHANGHAI WOMEN AND CHILDREN'S HEALTH CENTER -- Peiping, Kuang-ming Jih-pao, 17 Mar 63, p 2

A visit to the International Peace Women and Children's Health Clinic of the Chian Welfare Association revealed that it has grown from a 50-bed clinic to a 200-bed health center to handle maternity cases and women's diseases. During the last 10 years, more than 48,000 babies were born in this clinic. The services rendered by this clinic have greatly expanded; medical personnel often go to the factories, farms and villages, streets and alleys, to carry on their work in Women's and children's health care.

KWANGSI MEDICAL AND HEALTH WORKERS BRING EPIDEMIC UNDER CONTROL -- Peiping, Kuang-ming Jih-pao, 28 Mar 63, p 2

The Pai-se Special District of the Ch'uang Autonomous Region was once known as the "malaria-infested area" of Kwangsi Province. After the liberation, great strides were made in the field of health and medical work, especially in the control of malaria and schistosomiasis. In the Pai-se Special District live the Ch'uang, Han (Chinese), Yao, Miao, Ch'i-lao and Mao-nan nationalities. In the past, many of these people died as a result of malaria and schistosomiasis. After the liberation, the first task of the government was to undertake serious preventive work in malaria. The Central Government and the former Kwangsi Provincial Committee, on several occasions, sent out men to this infected area to conduct malaria survey work, train antimalaria workers and establish a special antimalaria organization called "the Pai-se Special District Malaria Prevention Office." After the establishment of the Kwangsi Chang Autonomous Region in 1958, fundamental success was achieved in the survey and investigation work against malaria. A campaign against malaria was initiated throughout the special district, and at the same time a large group of workers have assumed the active role of becoming basic level antimalaria workers.

Since the last few years, by actually and thoroughly implementing advanced preventive measures in malaria work, the long-standing malaria epidemic was finally controlled. The incidence of malaria in all the districts has dropped to 0.41 percent by 1962.

Feng-ma Tsun of T'ien-yang Hsien, where not one of the 760 inhabitants of the village escaped the serious malaria epidemic in 1936, has greatly lowered its rate of incidence of this disease among the inhabitants.

Outstanding success was also achieved in the work of preventing schistosomiasis. In 1958, schistosomiasis prevention stations were set up in five hsien where this disease was prevalent. Also, survey work

C-O-N-F-I-D-E-N-T-I-A-L

was conducted and free treatments were administered. Simultaneously, a snail eradication drive on a mass scale was started. There few years, after undergoing treatment, schistosomiasis sufferers have been cured sufficiently to regain their health and return to productive work.

Besides employing great efforts in malaria and schistosomiasis prevention, the Pai-se Special District has established health clinics everywhere in the district and also started training classes for medical service cadres to support the medical service personnel of the minority races. After the establishment of the Kwangsi Chuang Autonomous region in 1958, health activities and medical services expanded very rapidly, and now the special district has established a modern general hospital, equipped with an X-ray continued to establish and build up their hsien hospitals, preventive health stations, women's and children's clinics, and health center.

At the present time, in all the special districts in the country there are 335 state-operated medical clinics, staffed with 1,900 medical service personnel. In conjunction with the plan of training medical doctors and medical service personnel of the minority races, the Pai-se Special District, in 1958, inaugurated a health school, and last year the first class was graduated; among them were 183 doctors and nurses. They are assigned to the local district to carry out medical service among their own nationalities.

PROMINENT CANTON DOCTORS GO TO VILLAGES TO TEACH -- Calcutta, Chung-kuo Hsien-wen, (The China Review), 27 Mar 63, p 1

Recently a large group of prominent Chinese medical specialists from Canton to the villages to give lectures and pass on their experiences to the local men in the health and medical professions. Among this group were Ch'a Shu-lan (2686/2885/5695), surgeon and director of the Kwangtung Provincial People's Hospital; Chang O (1728/1494), ophthalmologist; Yao Pi-ch'eng (1202/4310/3397), physician and director of the Canton First Municipal Hospital; Li Ying-han (2621/6601/3352), surgeon, and deputy director of the Canton Municipal Worker's Hospital; and other chief physicians and department heads.

CANTON MEDICAL PERSONNEL VISIT RURAL VILLAGES -- Peiping, Jen-min Jih-pao, 18 Apr 63, p 2

Medical personnel of all large hospitals, and students and teachers of all schools for medical technicians in Canton have been visiting rural villages since early spring, to develop mobile medical treatment work and to exterminate all diseases.

C-O-N-F-I-D-E-N-T-I-A-L

A medical treatment team consists of the superintendent of a hospital, doctors in charge of each department in the hospital, and skilled doctors. The teams visit hospitals of special districts and hsien and use these hospitals as bases for consultation of difficult cases, showing new operation techniques, holding symposium on special topics, or reporting on new techniques. They help local medical personnel to raise their standards.

The students and teachers of schools for medical technicians visit rural villages to give people preventive shots for contagious diseases, to motivate the broad mass to develop patriotic sanitation movements and to train basic level sanitation workers of rural villages.

At present some of the hospitals have also established liaison channels with some basic level hospitals to send medical personnel systematically to rural villages for mobile medical treatment work and to give lectures. At the same time they recruit basic level medical personnel for further training and strengthen their technical guidance of the basic level hospitals.

HSIEN HOSPITAL ACTIVELY DEVELOPS MEDICAL SERVICES -- Peiping, Kuang-ming Jih-pao, 27 Mar, p 1

To provide medical services for the 500 million farmers in the entire country, many people's hospitals at the Hsien level are presently serving as the leading centers for the rapid development of medical therapy and the foundation for training medical personnel among the peasantry. At the present time, each of the 2,000 odd hsien in the entire country, excluding the special hsien has established one or two hsien hospitals. Among the larger hospitals 200 to 300 sickbeds are provided; in the smaller hospitals, several tens of sick beds are provided. Many of these hsien hospitals have set up facilities for internal medicine surgery, obstetrics, pediatrics, traditional Chinese medicine, radiology, medical laboratories, and pharmacies and also provide facilities for modern medical therapy and medical diagnoses. These hospitals generally are able to perform major and average abdominal surgery, handle complicated maternity cases, as well as treat illness commonly found among the farmers in the villages with internal medicine. In some comparatively larger hospitals, which are provided with high technical skills, there are departments for the treatment of tuberculosis, the five senses, osteology, stomatology, etc., including major surgical operations of the digestive tract and the urinary system.

Most of the hsien people's hospitals were founded and expanded after the liberation. Since 1958, the facilities and the level of techniques rapidly improved. By the end of 1962, the number of regular sickbeds the hsien hospitals throughout the country was more than double

C-O-N-F-I-D-E-N-T-I-A-L

that of 1957; medical therapeutic personnel have increased approximately 80 percent; and high level medical technicians have doubled in number.... At present, there are hospitals in the 60-odd hsien and hsien-level cities and townships in Kiangsu Province. Prior to 1958, most of these hsien hospitals had only a few departments for internal medicine and surgery. At present, however, most of the hsien hospitals have maternity departments, pediatric departments, traditional Chinese medicine departments, and departments for the treatment of the five senses. Branches of the hsien hospital also include departments of stomatology, tuberculosis, and dermatology. Over 90 percent of the surgical departments in the hsien hospitals of this province have already performed cholecystectomy, gastrectomy, uterectomy, expected a cure for carcinoma of the breast, and a few hsien pulmonectomy. Most of these hospitals are equipped with X-ray machines, electrocardiogram machines, elaborate operation tables, high-pressure sterilizers, complete sets of surgical instruments, and in addition, photoelectric colorimeter, biochemical testing devices, and bacterial culture equipment.

In Shansi Province, there are now more than 100 hsien hospitals. In Chi-shan, Chin-cheng, Li-cheng, Yuan-ping, and Chieh-hsiu hsien, new people's general hospitals, equipped with 80-100 hospital beds.

In the hsien of the border districts in Sinkiang, Inner Mongolia, Kansu, Tsinghai and Ninghsia Autonomous regions, where the minority races are concentrated, hsien hospitals are now being constructed everywhere. In Sinkiang Province, with the exception of two hsien near the autonomous regions which have no hospitals, all the remaining 78 hsien have constructed hsien hospitals. In the Inner Mongolia Autonomous Region, the number of hsien and banner hospitals has increased from 10-odd hospitals in 1947 to more than 70 hospitals at present. Although the level of medical technique in these areas do not come up to the level of rapid development as those in the interior of China and the coastal areas, these hospitals are able to handle the common cases of sickness which require medicinal and surgical attention.

SIAN MEDICAL HOSPITAL SUPPORTS AGRICULTURE -- Peiping, Kuang-ming Jih-pao, 20 Mar 63, p 2

Since 1962 36 medical doctors and 29 highly competent nurses were selected by the affiliated hospital of the Sian Medical College to go to the special districts and hsien such as Pao-chi, Yen-an and Hsien-yang to perform basic therapeutic work as well as increase the number of basic health personnel. In addition, more than 20 health technicians from Shang-lo, I-chan, I-chun, Pao-chi and Wu-chng hsien were selected from their respective town hospitals to go to Sian Medical Hospital to

C-O-N-F-I-D-E-N-T-I-A-L

receive further training. To resolve difficult problems and also to introduce new surgical techniques, as well as initiate local academic activities, this hospital on numerous occasions has sent out professors and assistant professors to Pao-chi, Yen-an and Wu-chang. The department of internal medicine of this hospital also sent doctors to the peasantry for actual training in the field of preventive medicine.

C-O-N-F-I-D-E-N-T-I-A-L

NATIVE CHINESE MEDICINE -- Peiping, Ta Kung Pao, 13 Mar 63, p 2

Radix Angelicae Sinensis is a special Chinese native plant which requires a number of years to cultivate. Roots grown for 2 years are dug for medicinal purposes. Angelicae Sinensis is an important medicine in gynecology and also can be used as a blood harmonizer and blood builder as well as a regulator for menstruation. It is chiefly produced in the Ch'in-ling area of Kansu Province and also in Yunnan, Shensi, Szechwan, and Hupeh provinces. This medicinal plant product is produced in various qualities. Since 1959, Kansu has produced this medicinal product under the name of "Finished Product of Radix Angelicae Sinensis".

This medicinal herb contains a large amount of volatile oils [nbutylidene -- phthalide, $C_{12}H_{12}O_{12}$; n-valerophenon-o-carboxylic acid, $C_{12}H_{14}O_3$, etc.]

MONGOLIAN PHARMACOLOGY TREATISE TRANSLATED -- Peiping, Kuang-ming Jih-pao, 19 Mar 63, p 2

The Mongolian Traditional Medicine Laboratory of the Inner Mongolian Medical College has recently completed the translation of a book, Meng Yao-hsueh (Mongolian Pharmacology); it will be published shortly. This work was translated from a number of books on Mongolian traditional medicine and Mongolian pharmacology. The compilation and translation was done by a group of experienced practitioners of Mongolian traditional medicine.

During the process of translation, the classification of the various animal, vegetable, and mineral drugs was revised and explained; 51 incorrectly-named drugs were relabeled. This treatise includes a formulary and 400-500 illustrations, in addition to the listing of 1,676 drugs of 540 types.

DEAF-MUTES AIDED BY ACUPUNCTURE -- Riga, Sovetskaya Latvija, 14 Feb 63, p 4

The Chinese physician Ho Ming-tieh is successfully applying acupuncture in treating deaf-mutes. Of 246 patients who received treatment, 86 had their hearing and speech faculties completely restored, while 99 had partial restoration. A 9-year old girl, for example, began to speak and hear after 16 treatments. The majority of those cured had lost their hearing and speech as the result of contagious disease. The treatment of adults is less effective.

C-O-N-F-I-D-E-N-T-I-A-L

CHINESE RESEARCH IN RADIATION GENETICS -- Peiping, K'o-hsueh T'ung-pao,
No 3, Mar 63, pp 19-22

[The following is an abstract of an article entitled,
"The State of Research on Radiation Genetics of Macaca
Monkeys," by Chao Shou-yuan (6392/1108/0337) and Chang
Chung-shu (1728/1813/1859), Genetics Research Institute,
Fu-tan University.]

Important research results in the field of radiation genetics of
Macaca monkeys are reviewed under the following sub-headings: dosage-
effect curve, effect of x-radiation on spermatogenesis and the radio-
sensitivity of various types of germ cells, calculation of the human
two-fold dosage [i. e., the dosage of radiation required to double the
natural mutation frequency in man, as defined by the authors], chemo-
prophylaxis, other related areas, and conclusions. The information is
based on 21 references, including six Chinese works and others of Soviet,
Japanese, and US origins.

The Chinese references cited are:

1. T'AN Chia-chen (6151/1367/2823), LIU Tsu-tung (0491/4371/3159),
CHANG Chung-shu, CH'IU Hsin-fang (6726/0207/5364), LEI Chao-tsu (7191/
5128/4371), and HSUEH Ching-lun (5641/0079/0243): Shih-yen Sheng-wu
Hsueh-pao (Acta Biologicae Experimentalis Sinica), Vol 7, No 4, 1962,
pp 386-397
2. CHANG Chung-shu, CHAO Shou-yuan, T'AN Chia-chen, and LIU Tsu-
tung: to be published in Shih-yen Sheng-wu Hsueh-pao, Vol 8, No 2,
1962, gone to press.
3. CHAO Shou-yuan, CHANG Chung-shu, LIU Tsu-tung, and T'AN
Chia-chen: Fu-tan Ta-hsueh Hsueh-pao Tzu-jan K'o-hsueh (Journal of
Fu-tan University -- National Sciences), Vol 7, No 1, 1962, pp 99-112
4. CHAO Shou-yuan, CHANG Chung-shu, T'AN Chia-chen, and LIU Tsu-
tung: Fu-tan Ta-hsueh Hsueh-pao Tzu-jan K'o-hsueh (Journal of Fu-tan
University -- Natural Sciences), Vol 7, No 2, 1962, pp 231-237
5. MA Hsiu-ch'uan (7456/4423/2938) and WANG An-ch'i (3076/1344/3823):
K'o-hsueh Chi-lu (Science Record), Vol 4, No 1, 1960, pp 31-38
6. WANG Hao (3769/3185), WU Ho-ling (0702/7729/7881), CH'EN Hsiu-
lan (7115/4423/5695), CHANG Chung-shu, and TSENG Chung-hsing (2582/0022/
2581): K'o-hsueh Chi-lu (Science Record), Vol 4, No 1, 1960, pp 25-31

C-O-N-F-I-D-E-N-T-I-A-L

As reported, T'AN et al. [1] [superscribed numbers in brackets refer to reference listed above] conducted studies on the dosage-effect curve and found that the chromosomal aberration frequency which was in evidence 10 days after exposure to gamma-radiation (cobalt 60) varied as follows with the dosage delivered: controls, 0.0745%; 5 r, 0.1148%; 10 r, 0.2527%; 25 r, 0.07001%; 50 r, 0.06804%; 100 r, 0.2709%; 150 r, 0.3574%; 200 r, 0.4717%; 300 r, 1.1737%; and 400 r, 1.6262%.

CHANG et al. [2] also investigated the dosage-effect curve. They found that the chromosomal aberration rate in evidence 10 days after exposure to 200 roentgens of X radiation was 7.78% as compared against 13.62% reported in 1962 by scientists in Moscow -- M. A. Arsenva et al., in an article entitled, "Radiation Genetics," which appeared in Sbornik Rabot AN SSR (Collected Works of the Academy of Sciences, USSR), 1962, pp 50-63.

With respect to the effects of X radiation on spermatogenesis and radiosensitivity of germ cells, CHAO Shou-yuan et al. [3] observed changes in the numbers of the various types of germ cells present in the seminiferous tubules of Macaca monkeys on different intervals following testicular exposure to 200 r of X radiation. They found that the germ cell number fell to its lowest point 40 days after exposure and a trend toward restitution appeared on the 50th day. However, the number of spermatozoa was still far from adequate to ensure normal fertility. They also found that the radiosensitivity of germ cells varied inversely with their degrees of cell differentiation. It was concluded from these and other findings that Macaca monkeys have a several months' period of infertility following exposure and the spermatozoa which appear after 50 days are differentiated from new spermatogonia which had not suffered radiation damage. The spermatogenic cycle was determined at approximately 50 days. These conclusions found corroboration in the cytological observations of CHANG Chung-shu et al [2].

In addition to the above-mentioned findings, CHAO et al [3] collected preliminary data from experiments involving testicular irradiation of sexually mature as well as immature monkeys, which data show that the radiosensitivity of various types of germ cells, their susceptibility to radiation damage, and their capacity for restitution all depend on the sites of the related spermatogonia and seminiferous tubules [in the exposed testicles].

MA and WANG [5] investigated the effects of radiation on the blood picture of Macaca monkeys.

C-O-N-F-I-D-E-N-T-I-A-L

The findings of Chinese scientists were not always in agreement with one another or with those of other scientists. For instance, CHAO Shou-yuan et al.^[4], recently investigating the LD₅₀ of radiation for spermatogonia and spermatocytes of Macaca monkeys, found that the radiosensitivity of Macaca germ cells was not much higher than that of mouse germ cells. This new finding calls for a repeat for confirmation, as stated.

Thanks are extended to Profs T'AN Chia-chen and LIU Tsu-tung for reading and correcting the manuscript.

PAPER ON ANTIBIOTIC RESEARCH PUBLISHED -- Peiping, K'o-hsueh T'ung-pao, No 3, Mar 63, p 72

One hundred and sixty of the articles and reports presented to the Second National Conference on Antibiotics held 10-18 November 1961 in Shanghai under the direction of the National Scientific and Technological Commission have been published in K'ang-chun-su Yen-chiu (Antibiotic Research). This work is appearing in four volumes under the editorship of T'ung Ts'un (4547/2625) and Chang Wei-shen (1728/3634/3947) and is published by the Shanghai Science and Technology Press.

Volume 1 is entitled Hsin K'ang-chun-su (New Antibiotics). In this volume, reports are offered on some of the new products isolated from domestic soil such as actinomycin K, vancomycin, griseofulvin, and nystatin; the physicochemical properties and the chemical structures of these are discussed. Among the papers presented in this volume are "Studies on the Isolation and Chemical Structure of Actinomycin K," by Pao Ch'in-chu (0545/3830/3796), Wu Shu-yun (0702/3219/0061), Huang Yung-ch'ang (7806/3057/2490), and Ts'ai Jun-sheng (5591/3387/3932), all of the Institute of Materia Medica, Chinese Academy of Sciences; "Studies on Nonhygroscopic Actinomycins and Antibiotic 508," by Yen Hsun-ch'u (7051/6676/0443) and Liu Su (0491/5126); and "Preliminary Experiments on the Extra-Clinical Uses of the Antiferment Fungus Antibiotic K_{19B}," by Fang Wang (2455/4853) and Sung Ai-lan (1345/1947/5695).

Volume 2, K'ang-chun-su ti Sheng-ch'an Kung-i (Antibiotic Production techniques), includes many papers that discuss key production problems from the theoretical standpoint. Among these are "Genetic Analysis of Reconstituted Aureomycin," by Liu I-p'ing (0491/7328/1456) of the Shanghai Research Academy of Pharmaceutical Industries (Shang-hai I-yao Kung-yeh Yen-chiu Yuan; 0006/3189/6829/5673/1562/2814/4282/4496/7108), Ministry of Chemical Industries; and "Improvements in the Technique for Eliminating the Mycelia Filtering Stage During the Extraction of Streptomycin," by Liu Tun-fu (0491/2415/5397),

C-O-N-F-I-D-E-N-T-I-A-L

Ts'ai Shun-yang (5591/7311/7402), Sun Te-fang (1327/1795/5364), and Chu Shou-i (2612/1343/0001). Some papers dealt with methods of preparing a new penicillin [novocillin?] effective against *Staphylococcus aureus*, which is tolerant of [ordinary] penicillin.

K'ang-chun-su Tsai I-hsueh Shang ti Ying-yung (The Uses of Antibiotics in Medicine), which comprises Volume 3, includes a discussion of toxicity reactions to antibiotics, joint uses of antibiotics, anaphylactic shock, therapeutic and prophylactic uses of antibiotics, the treatment of mycotic diseases, and the alleviating effects of actinomycin K on Hutchinson's disease and other malignant lymph tumors. One of the papers in this volume is entitled "The Use of Antibiotics in Burn Infections and Bacteria Resistance," by Shih Chi-hsiang (0670/3444/3276), Lan Hung-t'ai (5663/7703/3141), and Tung Fang-chung (5516/2455/0022), all of the Kuang-tz'u Hospital of Shanghai Second Medical College.

The fourth and final volume of this work is entitled K'ang-chun-su Tsai Nung Mu Yeh Shang ti Ying-yung (The Uses of Antibiotics in Agriculture and Animal Husbandry). Papers in this volume includes "Studies on the Preservative Effects of Nystatin Upon Mandarin Oranges, Berries, and Fruit Oils," "Increasing the Growth of Piglets and Calves Using Aureomycin and Terramycin," and "Studies on Maintaining Fish Freshness by the use of Antibiotics."

ECOLOGY OF ENCEPHALITIS VECTOR DESCRIBED -- Peiping, Tung-Wu Hsueh-pao [Acta Zoologica Sinica], Vol 14, No 1, Mar 62, pp 37-48

[The following is a summary of an article, "Ecological Studies on Larvae of *Culex tritaeniorhynchus*," by Chang Tun-hou (1728/2415/0624), Biology Teaching and Research Section, Heng-yang Medical College. This paper, received 20 March 1960, was prepared with the aid of Assistant Prof Ch'en Ch'ing-lien (7115/7230/5571) of the Biology Department, Human Teachers College, who participated in the botanical identifications, and Ch'en K'o-hsiang (7115/0344/3276) who helped in the collection of the larvae.]

Culex tritaeniorhynchus is widely distributed in China. It has been found that this mosquito serves as a vector of Japanese B encephalitis both in China and elsewhere. Virus of Japanese B encephalitis has been repeatedly isolated from this mosquito. It has also been demonstrated that this mosquito may be infected by being fed an emulsion of infected mouse brain. Young mice bitten by this mosquito infected with the virus developed symptoms typical on encephalitis.

C-O-N-F-I-D-E-N-T-I-A-L

Ecological studies were carried out on this mosquito in Ch'ang-sha, Hunan Province, May-October 1957. Observations were made of: (1) the length of time from the moment of feeding to the emergence of adults of the next generation under laboratory conditions, (2) the ecology of the larva in its natural habitats, and (3) the seasonal distribution of the mosquito.

For field observation on the ecology of larvae of *Culex tritaeniorhynchus*, 11 types of natural breeding places in a total of 50 localities situated in the suburbs of Ch'ang-sha were selected. They included rice fields, taro fields, lettuce fields, ipomoea fields, lotus-root fields, trapa ponds, drinking wells, washing pits, ponds, ditches, and mountain cave pools. The larvae were found chiefly in water with a muddy bottom, an average of 126.6 larvae per collection. The water column in which the larvae breed varied from 0.1 centimeter to 135.7 centimeters; a depth of 3.31 to 13.4 centimeters, however, yielded the highest larval incidence. The larvae were found mainly in water exposed to the bright sunlight (78.66 percent).

The larvae were most frequently found in association with *Lemna paucicostata* (25.43 percent) and *Spirodela polyrrhiza* (14.85 percent). The larvae occurred most abundantly in water with floating-type plants.

Natural water with oxygen content exceeding 10 parts per million contained few larvae. The larvae were most generally found in water whose pH ranged from 6.5 to 7.2. There appeared to be a direct correlation between the density of the larvae and increasing water temperature.

The highest peak of larval density appeared in the first 10 days of July, with 892 larvae collected, whereas the lowest peak fell in the last 10 days of October with a total collection of only three larvae.

Fields and ponds used for agricultural purposes were found to be favorable habitats for the breeding of these larvae, while the other five types of water sources [see paragraph 3] were not.

C-O-N-F-I-D-E-N-T-I-A-L

EFFECTS OF PARASITES OF MALARIAL MOSQUITO STUDIED -- Peiping, K'un-ch'ung Hsueh-pao (Acta Entomologica Sinica), Vol 11, No 2, Jun 62, pp 135-137

[The following is an abstract of an article, "Ectoparasitic Mites of *Anopheles hyrcanus* var. *sinensis* Wied. and *Musca domestica vicina* Macq. and Their Influence on the Reproduction of the Hosts," by Ch'iu Ming-hua (5941/2494/5478).]

The present paper reports on the ectoparasitic mites of *Anopheles hyrcanus* var. *sinensis* Wied. and *Musca domestica vicina* Macq. observed in Chungking, Szechwan Province. *Arrhenurus madaraszi* Daday is reported in Szechwan for the first time and *Macrocheles muscaedomesticae* Scopoli is a new record in China. Neither were found to be natural enemies of the adult anopheles or *Musca* subspecies here studied.

LITERATURE ON CONTROL OF INSECTS OF MEDICAL IMPORTANCE REVIEWED -- Peiping, K'un-ch'ung Hsueh-pao, Vol 11, No 2, Jun 62, pp 187-206

[Liu Chih-ying (2692/2388/5391) has written an article in the above source reviewing the foreign literature on recent developments in the control of insects of medical importance. The lone Chinese work cited is in connection with insect attractants: Chang Tsung-ping (1728/1350/3521) Chapter 16 (pp 743-756) of K'un-chung Tu-li-hsueh (Insect Toxicology), published in 1959 by the Science Press. With the exception of a single Russian-language citation, the remainder of the 102 bibliographical entries are British and US sources.

As regards biological controls, the author expresses interest in Knipling's theory of the use of insects for their own destruction, sterilization with atomic radiation, chemical sterilants, and genetic sterility through hybridization. Among the subjects discussed under the heading of chemical controls are the residual fumigant technique, the semipermanent insecticidal resins, animal systemic insecticides, and insect attractants.

This survey of the literature was originally read to a joint meeting of the China Entomology Society and the Peking Entomology Society on 27 October 1961.]

C-O-N-F-I-D-E-N-T-I-A-L

MIGRATORY LOCUST BREEDING AREAS CATEGORIZED -- Peiping, K'un-ch'ung
Hsueh-pao (Acta Entomologica Sinica), Vol 11, No 1, Mar 62, p 17-30

[The following is a summary of an article, "The Structure and Transformation of Oriental Locust Breeding Areas," by Ma Shih-chun (7456/0013/7486). According to a footnote, the following article is one part of a research report on the migratory locust breeding areas prepared by the Institute of Entomology, Chinese Academy of Sciences.]

The breeding area of the oriental migratory locust is here considered as a type of natural ecological-geographical unit. The oriental migratory locust is distributed throughout Southeast Asia in such areas as the Indian Peninsula, the Philippine Islands, the Malayan Peninsula, Borneo, and the Celebes. This locust is found in East China in low, level grasslands in the plains and on islands. Its breeding areas or "outbreak centers," are found as far north as the 42d parallel, usually at elevations below 100 meters except that, in mountain valleys and small river valleys, it may approach 400 meters. The most important breeding center of the oriental migratory locust in China is situated north of the Yantze River in the Huang-Huai Plain [i.e., the plain between the Yellow River and the Huai River], where the elevation is mostly less than 50 meters. Other large breeding areas are found as far as the mid and lower reaches of the Yangtze River in the marshy lake shore areas, as well as in the small alluvial plain in the lower reaches of the Hsi Chiang, the Chien Chiang, and the Nan-tu Ho.

Some of the bio-geographical characteristics found by the author to be common to all types of oriental locust breeding areas are as follows:

(1) The topography is comparatively low and marshy, with a slight slope of from 1: 5,000 to 1: 10,000.

(2) The main diurnal temperature exceeds 25 degrees centigrade for more than 35 days per year; the average diurnal maximum exceeds 30 degrees centigrade during the summer. During the winter, there are less than 15 days at temperatures below -10 degrees centigrade. There is a great deal of variation in the rainfall and evaporation rate.

(3) The hydrography of these regions, in general, show fairly high subsurface water tables that show definite seasonal variations, usually 0.5-1.0 meters during dry springs.

(4) The soils in these areas are usually sedimentary clays, alluvial earth, and fine sand; they are rich in humus.

(5) The vegetation in oriental migratory locust breeding areas is generally characterized by mesophyte and semihydrophyte plants of the family Gramineae. Typically, the following species are found to be well-developed, though few in number: *Phragmites communis* Trin., *Echinochloa colona* (L.) Bers., *Polygonum amphibium* L., *Artemisia* spp., and *Calysdegia hederacea* Wall.

The four main types of oriental locust breeding areas are lake-shore, sea coast, river flooded, and inland plain flooded areas. One or more of these types of areas are shown in four regions of China: the Hung-tse Lake breeding area [in western Kiangsu Province], the Po Hai Gulf breeding area [at the Hopeh-Shantung Border], the K'ai-feng area [Honan Province], and the Chu-yeh Hsien area [Shangtung Province].

Each type of area, in addition to homologous elements, contains one or more heteromorphical substructures. These substructures may undergo transformation, even to the point of altering the type of locust breeding area. Each of the four types of areas possess its own form of development and displays a characteristic ecological pattern. Since there are homologous factors throughout the four areas, variation in one principal topographic factor, such as the alteration of a large river course, has a basic effect on all of the factors, at early stages of development.

Under natural conditions, the expansion and contraction of the locust areas go on intermittently. Partial stages have also occurred in both the course of development or during the disappearance; such partial phenomena seem to correspond to a relatively static period in the progression and may also display a certain natural sequence. Locust breeding areas are obliterated either by the influence of natural factors or by artificial operations. The degree of obliteration depends upon the nature of the environmental factor eliminated. If the factor is of only secondary or tertiary importance, the elimination of the area will be only temporary in nature unless the cumulative effects of changes in secondary and tertiary factors is such as to cause an alteration in a primary factor, in which case permanent transformation can be achieved.

C-O-N-F-I-D-E-N-T-I-A-L

BIRD REGIONS OF HAINAN ISLAND DELINEATED -- Canton, Yang-ch'eng Wan-pao,
4 Jan 63, p 1

Prof Chou Yu-yuan (0719/1342/0997), of the Biology Department, Chung-shan University, has recently published the results of his research in a book entitled Hai-nan Tao Niao-lei Ch'u-hsi Ho Ch'u-hua Wen-t'i (Bird Regions in Hainan and Their Delineation). Professor Chou identifies four areas as follows:

- (1) The Northern Region: Typical families includes the Cuculidae (cuckoos), the Hirundinidae (swallows), and the Strigidae (owls).
- (2) The Southeastern Coastal Region: Typical families includes the Ardeidae (herons and egrets), the Rallidae (rails), the Alcedisidae (kingfishers), and the Turdidae (thrushes).
- (3) The Southwestern Coastal Region: Representatives include the family Motacillidae (wagtails) and the subfamily Tringinae (snipes).
- (4) The Central Region: Insectivores are common, including the Psitacidae (parrots) and the Columidae (pigeons).

Professor Chou points out that there are over 300 species and sub-species of birds on Hainan, belonging to 56 families and 21 orders. The bird regions of Hainan are very similar to those of the Luichow (Lei-chow) Peninsula and correspond in several respects to those of southern Yunnan and western Kwangsi provinces.

WORK ON ICTHYOLOGY PUBLISHED -- Peiping, K'o-hsueh T'ung-pao, No 3,
Mar 63, p 72

The Science Press has published a work, Nan-yang Yu-lei Chih (Catalogue of the South Seas), prepared under the general editorship of the Institute of Oceanography, Chinese Academy of Sciences, with the assistance of the Institute of Zoology, also of the Chinese Academy of Sciences, and the Shanghai Aquatic Products College. This book provides a detailed description of the morphological characteristics and the geographical distribution of the species of fish found in the South Seas, together with a discussion of their movements and economic values; this work is illustrated. The material gathered in this book shows that a close relationship exists between the types and movements of fish in the South Seas and those in the Indian Ocean and Australian seas. With some exceptions, there are no great quantities of economic fish in this area.

C-O-N-F-I-D-E-N-T-I-A-L

The research reported in this book was begun in 1954, after the institutes of Zoology and Oceanography had completed their survey of the fish species of the Yellow Sea. Eight hundred and sixty species were found among the over 30,000 specimens collected. Among those engaged in the preparation of this work were Chu Yuan-ting (2612/0337/7844), Chang Ch'un-lin (1728/2504/7207), and Ch'eng Ch'ing-t'ai (2052/1987/3141).

TABANID FLIES OF YANGTZE VALLEY SURVEYED -- Peiping, Tung-wu Hsueh-pao, Vol 14, No 1, Mar 62, pp 119-129

[The following is an abstract of an article, "Tabanid Flies of the Yangtze River Valley," by Liu Wei-te (0491/4850/1795), Shanghai Institute of Applied Entomology, Chinese Academy of Sciences. This paper was received for publication 28 March 1960.]

This paper presents a description of the 28 species of Tabanid flies collected in the Yangtze River Valley; three are described as new species: *Tabanus tienmuensis*, *Tabanus lushanensis*, and *Tabanus hongchowensis*.

EARTH SCIENCES

CHINESE ANALYZE STRUCTURE OF RARE-EARTH MINERALS -- Peiping, Scientia Sinica, Vol 12, No 2, Feb 63, pp 237-243

[The following is a full translation of the Russian-language article, "Dimorph and Isomorph in the System $CeNbTiO_6$ - $YNbTiO_6$ ", written by Chang P'ei-shan (1728/1014/0810) of the Institute of Geology, Chinese Academy of Sciences. The article was received for publication on 18 May 1962. Numbers in brackets refer to article's appended bibliography.]

In mineralogy, the term dimorph describes minerals of similar composition with two types of crystalline structure. The so-called isomorph infers that among those minerals which are isostructural and closely related in composition, there occurs a mixing of their composition in any ratio, and compound crystals are formed. Our work is based on complete isomorphs and dimorphs observed in the study of such minerals as eschynite, niobium-eschynite [1,2], yttrium eschynite [3], priorite, blomstrandinite, as well as euxenite, polycrase, sinisite [4], lindokite [5,6], and others which represent the titano-niobium rare earths and which relate to rhombic syngony with the AB_2X_6 type molecular formula.

The fact that eschynite and priorite are isostructural has already been confirmed by X-ray structural analyses [7,8]. But whereas the cerium group of rare earths differs sharply from the yttrium group in geochemical properties, and the minerals found in nature are rich in their chemical composition in either the cerium or the yttrium group of rare earths, the former is represented by the eschynite $CeNbTiO_6$, the latter by priorite $YNbTiO_6$. Only recently have these eschynites been discovered which contain the cerium, as well as the yttrium, groups of rare earth elements [9,3]. This clearly indicates that the isomorphous series of cerium minerals with intermediate composition between the end members $CeNbTiO_6$ and $YNbTiO_6$ are also found in nature. That is, compound crystals exist in the $CeNbTiO_6$ - $YNbTiO_6$ system. X-ray spectral analyses also confirm the presence of infinite "diadochy" between the cerium and yttrium groups of rare earths in these series of minerals [10].

A vast amount of diadochy is also observed in this series between niobium and titanium with hexacoordination [1]. A diagram showing the composition of the minerals (Figure 1) was composed in this regard.

The hypothesis based on the diagram is that niobium, titanium, elements of the cerium and yttrium rare earth groups comprise the major components of rare-earth titanium-niobium minerals with AB_2X_6 types molecular formula. In these minerals, the oxides of these four elements amount to 80 percent or more.

Besides the minerals in the eschynite-priorite series, the diagram also shows euxenite, polycrase, and others which belong to the titanium-niobium rare earths. The diagram distinctly shows that euxenite YNbTiO_6 also has the same composition as priorite. Crystallographic data and X-ray structural analysis [11,7,2] confirm that these two minerals appear in dimorphous form. In other words, euxenite has the space group $D_{2h}^{14} = P_{can}$.

The diagram also clearly evidences that polycrase resembles euxenite in its chemical composition. However, polycrase is rich in titanium, and euxenite in niobium. These two minerals differ only in their content of niobium and titanium, and not in their crystalline structure [13,12].

As shown above, YNbTiO_6 appears in the form of two modifications, namely, priorite and euxenite. From this, it follows that CaNbTiO_6 also has two modifications. To date, one of these is known in the form of eschynite. The other yet remains unknown.

In order to solve this problem, the author of this paper used the X-ray powder method (analyst was Wang Kuang-hsin) to study eschynite, sinisite, and euxenite, subjected to heat. (Note: These minerals have been subjected to chemical analysis and diagnosis of their physical properties. Therefore, we shall not pause here for a detailed study of their mineralogy. It is evident from Table 1 that the Debye-crystallogram for eschynite is the same under any temperatures for heating the samples. The Debye-crystallograms for sinisite and euxenite have either an eschynite or euxenite phase, depending on the conditions for heating the samples. As is known, certain researchers [14,15] previously thought that sinisite belongs to the eschynite group. In its chemical composition, sinisite may be considered the uranium-rich analogue of eschynite.

It should be noted that eschynite, niobian-eschynite, sinisite, euxenite, and polycrase, subjected to calcination for 6-7 hours in a muffle furnace in the atmosphere of the air, were studied by the author, using the Debye method. Two diffraction pictures were revealed in the Debye crystallogram of these minerals. Sinisite, euxenite, and polycrase have the euxenite phase (Figure 2). In contrast, eschynite and niobian-eschynite have the eschynite phase. It is evident that after measuring the Debye crystallograms of the sinisite under study, there was discovered intensification of the $1/n$ size for sinisite and polycrase, according to Aleksandrov [13] --(Table 2). This leads to the conclusion that, under these conditions, sinisite is isostructural with euxenite. We shall therefore call such a sinisite a β -sinisite.

Results of the X-ray study of β -sinisite are set forth in Table 2. It was completed by Wang Kuang-hsin, using the Debye method. Specifications of exposure: nonfiltered Fe-irradiation; $D = 57.3$ mm; $d = 0.5$ mm; stress = 35 KV; $I = 20$ mA; exposure time = 2 hours.

Parameters of the unit cell of β -sinisite, computed by the Debye crystallogram for polycrase with index lines by Aleksandrov [13] are also set forth in Table 2. The parameter a_0 was computed by the magnitude d of lines 200, 400; b_0 was computed along the lines 060, 240, 330, c_0 along 002, 032, 004. Parameters of the polycrase unit cell by Aleksandrov were introduced for comparison in this same table.

It is clear from Table 1 that the chief components of sinisite and eschynite are the same. Thus, undoubtedly, the dimorph CeNbTiO_6 is an eschynite and a β -sinisite.

Data of the X-ray spectral analyses of euxenite [10] point to certain contents of the cerium group of rare earths. The presence of the yttrium rare earth group in sinisite also proves the possibility of the formation of compound crystals between the β -sinisite CeNbTiO_6 and euxenite YNbTiO_6 .

From what has been stated, it is clear that it is possible to form a combination with the two types of structures in the CeNbTiO_6 - YNbTiO_6 system. One of these is by minerals of the eschynite-priorite series, while the other is the β -sinisite-euxenite. Each of these two series has minerals with intermediate composition between the end members (CeNbTiO_6 and YNbTiO_6). Namely, it is possible to form isomorphs and compound crystals with isostructure (Figure 1, Table 3).

After calcination at high temperatures, priorite and blomstrandinite are converted separately into euxenite [7] and polycrase [13]. It is clear from the above that sinisite, after calcination, is converted into β -sinisite in the form of the euxenite phase (Table 1). Thus, there is basis for assuming that under the definite conditions of calcination of the specimens, it is possible to convert eschynite into β -eschynite, having a euxenite phase. And it will still be possible in the future to find eschynite in nature, having the crystalline form of euxenite.

According to the oxide content of niobium and titanium in the chemical composition of the minerals, these two series of minerals may be divided into certain chemical mineral equivalents which are shown in Table 3. It is evident from this that titanium-eschynite and niobium-priorite, which belong to the eschynite-priorite series [1], have not hitherto been discovered in nature. Further, no mineral which corresponds to β -sinisite in crystalline form is yet known in nature. As for lindokite [5,6], much remains that is not clear, and further detailed investigation is required.

On the basis of isomorphous substitution of the chemical elements in the aforementioned two series of minerals, the presence of chemical mineral analogues, rich in tantalum, thorium, uranium, and iron is possible.

The ascertainment of what geological conditions contribute to forming the corresponding minerals is a future problem in the study of these two series of minerals, i.e., solution of the problem of their origin.

In conclusion, the author deems it his duty to express his deep acknowledgements to Prof Huo Tso-ling, under whose guidance this paper was written. The author expresses sincere acknowledgements to Prof Kuo Ch'eng-chi for reviewing the manuscript and for valuable advice.

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CHINESE STUDY NEW MINERAL BAFERTISITE -- Peiping, Scientia Sinica, Vol 12, No 2, Feb 63, pp 278-280

[The following is a full translation of the Russian-language article, "Determination of the Crystal Structure of Bafertisite -- A New Mineral Discovered in China," written by P'eng Chih-chung (1756/1807/1813) and Sehn Chin-ch'uan (3088/0093/1557) of Peiping Geological College. The article was received for publication on 12 December 1962. No bibliography was appended.]

Bafertisite was discovered by Ye. I. Semenov and Chang P'ei-shan (1728/1014/0810) in 1959. This mineral was taken from one of high-temperature hydrothermal deposits. According to their determination, its composition is $\text{BaFe}_2\text{TiSi}_2\text{O}_9$ (this formula does not indicate the Cl and the chemically-combined water which are present in insignificant amounts).

N. G. Pinevich made an X-ray analysis of bafertisite and related it to rhombic syngony. Parameters of its rhombic unit cell are:

$$a_0 = 7.55 \pm 0.01 \quad b_0 = 10.98 \pm 0.02 \quad c_0 = 5.36\text{\AA} \pm 0.01$$

But Ye. I. Semenov and others relate bafertisite to monoclinic syngony, according to its optical properties.

Specific gravity of bafertisite is 4.25 - 3.96.

In order to determine the structure of bafertisite, we selected a crystal in the size of $0.02 \times 0.06 \times 0.1 \text{ mm}^3$. (The grains of its crystal are defective, for the most part. It is difficult to find a complete crystal for X-ray photography.) The Laue class of its crystal, established by X-ray oscillation and equi-incline X-ray goniometric measurements, is C_{2h} . Parameters of the monoclinic unit cell are:

$$a_0 = 10.98 \pm 0.02 \quad b_0 = 6.80 \pm 0.01$$

$$c_0 = 5.36\text{\AA} \pm 0.01 \quad \beta = 94^\circ$$

The theoretic specific gravity $d = 4.27$, calculated by new determined parameters of the unit cell and the corrected crystallochemical formula, has very good coincidence with the actual measurements.

Indexing of the equi-incline X-ray goniometric measurements denotes that the diffraction symbol for bafertisite is $2/m P2_1/-$. That is, the possible space group is $C_{2h}^2 = P2_1/m$ or $C_2^1 = P2_1$.

The unit cell contains two "molecules" ($n = 1.992 \approx 2$) corresponding to the chemical formula.

The Patterson functions $P(uv)$ and $P(uw)$ were calculated to determine the arrangement of cations in the unit cell. In order to explain $P(uv)$ and $P(uw)$, we adopted the piling method proposed by M. J. Buerger and B. K. Weinstein. A rational preliminary structure was established through crystallochemistry, with the symmetry $C_{2h}^2 = P2_1/m$. The unit cell contains $2 \{ Ba(Fe^{++}, Fe^{+++}, Mg)(Fe^{++}, Mn) Ti [Si_2 O_7] O(OH, O)(OH, Cl) \}$ (of chemical analysis by M. Ye. Kazakov. This preliminary structure was verified upon computing the function of electron density distribution $\rho(zy)$ and $\rho(xz)$).

Coordinates of the atoms, as computed along $\rho(xy)$ and $\rho(xz)$ are set forth in the following table.

There are 26 parameters which determine the coordinates of the atoms. (A poor exposure was obtained because of the defective crystal. It contains heavy Ba atoms. Thus, the coordinates of the oxygen atoms were not very accurately determined. We are making further corrections for the parameters of the coordinates).

The structure of bafertisite is shown in Figures 1 and 2. It is noted from these figures that the silicon-oxygen radicals of bafertisite are related to a double tetrahedron $[Si_2 O_7]^{6-}$. The Fe-O coordination octahedra along (100) are connected in a layer, where the coordination octahedra Fe_T govern the distribution of $[Si_2 O_7]^{6-}$.

The structural determination of bafertisite gives the key to the study of the crystallochemical properties of Fe^{++} . The Soviet scientist N. V. Belov divided the cations in silicates into two groups. The first comprises the small cations, like Al^{+++} , Ti^{++++} , Mg^{++} , Fe , etc. The rib length for coordination octahedra of these cations is $2.6 - 2.8 \text{ \AA}$. It is commensurate with the length of the $[SiO_4]$ rib ($2.55 - 2.7 \text{ \AA}$). Consequently, $[SiO_4]$ is a basic part in combining with the small cations of the silicon-oxygen radicals. N. V. Belov relates this group to his first group in the crystallochemistry of silicates. The large cations, like Ca and Na, belong to the other group. The rib length of the coordination octahedron of such cations is approximately $3.8 \text{ \AA}$. Thus the basic composite unit of silicon-oxygen radicals, bonded with these coordination

octahedra, is larger than $[\text{Si}_2\text{O}_7]$ (because the rib length of the trigonal prisms, comprised of six vertices of $[\text{Si}_2\text{O}_7]$ is $4.2\text{\AA}$). This group of silicates differs from the first in crystallochemical development. Consequently, N. V. Belov relates it to the second group of silicate crystallochemistry.

It was confirmed that Fe^{++} plays the role of a small cation among the earlier determined structures of silicates (as, for example, pyroxene, amphibole, ilvaite, etc.). Fe_I exists as a general small cation, while Fe_X obviously plays the role of a large cation. The long rib of the Fe_X -O coordination octahedron is commensurate with the long rib of the trigonal prisms, built from $[\text{Si}_2\text{O}_7]$. The role of Fe_I corresponds to that of Na in seidozerite. It is clear that Fe^{++} in composition plays the role of a small cation (in such case, it belongs to the first group), as well as a large cation (in the second group). This dual role in Fe^{++} depends on the size of the coordination octahedron Fe^{++} -O. In our work, the long rib of the coordination octahedra was determined at $3.65 - 3.7\text{\AA}$, i.e., they are very near to $3.8\text{\AA}$. According to known data, the coordination octahedron Fe^{++} -O has a long rib between $2.8 - 3.8$. This explains the dual role of Fe^{++} , which appears as a large, as well as a small, cation. An important test for the chemical formula of bafertisite was made with the aid of structural analysis. The complete crystallochemical formula of bafertisite was already made above. Its simple crystallochemical formula is: $\text{BaFeFeTi}[\text{Si}_2\text{O}_7]\text{O}(\text{OH})_2$.

In comparing with the experimental formula $\text{BaFe}_2\text{TiSi}_2\text{O}_9$, obtained by chemical analysis, we established that the number of anions in this simple formula is greater than one, since this formula enables us to understand the isomorphic substitution of anions and cations in bafertisite.

Proceeding from the determined structure, we may assume the isomorphic substitution occurring in the composition of bafertisite, that Fe_I^{++} is substituted mainly by trivalent iron, while $\text{Nb}^{5+} \rightarrow \text{Ti}^{4+}$. But all these substitutions are accompanied by $\text{O} \rightarrow (\text{OH})$. Mn^{++} basically replaces Fe_X^{++} . This enables Fe_X to play the role of a large cation, because the role of the large cation Mn^{++} has already been established in the structural analysis of rodonite. In the combination of the added anions with cations, it may be assumed that Cl^- principally replaces $(\text{OH})_I$. Thus, around each Cl^- anion, there also surround four Ba, as in baotite.

In its crystallochemical properties, bafertisite must relate to an insular structure of crystallochemical types of silicates, i.e., it is in the same group with seidozerite and rosenbuschite.

C-O-N-F-I-D-E-N-T-I-A-L

Our work considered what constitutes imperfection in the crystal structure of bafertisite. In equi-incline X-ray goniometric measurements, we detected continuous lines for a number of reciprocal lattices $h20$, $h40$, $h02$, $h04$, etc., which are connected through the disintegration of diffraction spots. This, evidently, is in connection with the incorrect packing (mistake) of crystals along (100). We shall investigate this further.

The results cited above indicate that the structural type of bafertisite has already been established, and its composition and properties have been ascertained.

CH'ANG-CH'UN GEOLOGY COLLEGE CELEBRATES TENTH ANNIVERSARY -- Peiping, Chung-kuo Ti-chih (Chinese Geology), No 11, Nov 62, p 31

Ch'ang-ch'un Geology College held its decennial celebration 3-13 October 1962. At the conference held during the festivities, Prof Yu Chien-chang (0205/1696/4545) presented a paper, "System Deliniation and Comparison in Feng-ning [Hsien]"; Prof Tung Shen-pao (5516/3947/5508) presented a paper, "The Dispute Over the Problem of Granite Formation and the Present Trend in Research."

During the last 10 years, Ch'ang-ch'un Geology College has trained 6,428 geological personnel, developed new geological instruments, and prepared geologic and geotectonic maps of Northeast China.

CHEMISTRY AND CHEMICAL TECHNOLOGY

FIRST CHINESE CONFERENCE ON PHYSICAL CHEMISTRY AND METALLURGY HELD --
Peiping, K'o-hsueh T'ung-pao, No 2, Feb 63, pp 67-69

China's first national report conference on physical chemistry metallurgy met in Shanghai 7-13 December 1962 at the direction of the Chinese Academy of Sciences and the Chinese Society of Metals. Sixty-five of the 69 papers received by the conference were read and discussed.

Ts'ai Tao-chiang (5591/1418/3068), Chungking University, presented a report, "Oxidation Roasting of Titanomagnetite and Its Influence Upon the Reduction Properties of the Ore." Mo P'ei-ken (5459/1014/2704), of the Institute of Metallurgy, Chinese Academy of Sciences, explained the effect of titanium content upon the smelting of titanomagnetite in blast furnaces in his paper "Titanium Slag Concentration and Mineral Composition." P'eng Jui-wu (1756/3843/0124) calculated the parameters of titanium activity by measurements of titanium and carbon solubility in his paper "The Solubility of Titanium and Carbon in Iron-Titanium-Carbon and Iron-Silicon-Titanium-Carbon Systems."

Ch'en Chia-yung (7115/1367/6978) and Hsia Kuang-hsiang (1115/0342/4382), of the Institute of Chemical Engineering and Metallurgy, Chinese Academy of Sciences, proposed in their paper, "The Dynamics of the Reaction of Cupric Oxide With Sulfur Dioxide and Oxygen," that the reaction is controllable through diffusion. Appropriate temperature conditions were suggested in the paper "The Two-Stage Sulfate Roasting of Copper-Cobalt Ore," by Wang Yung-lu (3769/3057/4389) of the K'un-ming Institute of Precious Metals, Chinese Academy of Sciences.

Hsia Kuang-hsiang presented another paper, entitled "The Dynamics of the Ammonium Leaching of Nickel Metals." Liu Ch'un-t'eng (0491/4783/7720), of K'un-ming Engineering College, argues that improved results can be obtained by direct smelting of nickel silicate ores; his paper is entitled "Oxidation Equilibrium of Ni-Fe-Pb Systems and Lloy Distortion."

Tu T'ing (2629/2732), of the Pao-t'ou Steel Company, reported on "The Physical-Chemical Effects of Rare-Earth Metals on Industrial Ferrites." Li Ching-yuan (2621/7234/1254), Institute of Metallurgy, Chinese Academy of Sciences, reported on several methods of examining and testing rare-earth metal inclusions.

C-O-N-F-I-D-E-N-T-I-A-L

Wei Shou-k'un (7614/1108/1507), of Peiping Iron and Steel College, presented two papers: "The Physical Chemistry of the Oxidation of the Elements in Iron Solutions During Dephosphorization" and "The Effects of Iron Oxides in Slag Upon Desulfurization." In these papers, Wei presented a theoretical analysis of the oxidation process as regards these elements and derived a formula for the calculation of the sulfur distribution ratio.

Wu Ch'ao-wan (0702/6389/8001), of the Research Academy of Iron and Steel (Kang-t'ieh Yen-chiu Yuan; 6921/6993/4282/4496/7108), reported the results of his studies on the deoxygenation and decarbonization and the carbon-oxygen reaction during ferrite fusion under near-vacuum conditions. In his paper "The Dynamics of High-Pressure Leaching of Pyrite Crystals," Ch'en Chia-yung used the trace-atom method to determine the mechanism of $\alpha\text{-Fe}_2\text{O}_3$ formation; Ch'en prepared yet another paper, "Studies on the Formation of Nickel Powder Using Hydrogen Reduction Under High Pressures."

In the field of semiconductor alloy research, Chao P'eng-nien (6392/1756/1628), Institute of Metallurgy, Chinese Academy of Sciences, studied the thermodynamic properties of gallium-antimony alloys by using the hydrogen carrier-gas method to measure the liquification vapor pressure.

Many of the papers of the conference were devoted to the solution of production problems: Ch'i Li-k'uan (2058/4539/1401) explained in his paper that the interaction between sodium hydroxide solutions and $2\text{CaO} \cdot \text{SiO}_2$ was unavoidable; his conclusions are relevant to raising the aluminum oxide melting rate. T'an Ch'ing-lin (6223/1987/7792), K'un-ming Institute of Precious Metals, Chinese Academy of Sciences, reported on "Tin-Rich Ferric Slags." Other papers were as follows: "The Volatility of Stannous Oxide in $\text{SnO} \cdot \text{SiO}_2$ Systems," by Li Chen-chia (2621/2182/1367), K'un-ming Engineering College; "The Activity of Two Constituents of Liquid $\text{CaO} \cdot \text{Al}_2\text{O}_3$ Slag," by Tsou Yuan-hsi (6760/0337/8697), Institute of Metallurgy, Chinese Academy of Sciences; "Equilibrium Between $\text{HF} \cdot \text{H}_2\text{O}$ Vapor and $\text{CaO} \cdot \text{CaF}_2$, $\text{CaO} \cdot \text{SiO}_2$ - CaF_2 Melts," by Hsu Yuan-sen (1776/0537/2773); "The Rate of Reaction Between Fluorine Slags and Water Vapor," by Chou Hsin-hsiang (0719/3512/4382); and "Some Problem in the Electrolysis of the Fluorine Salts of Rare-Earth Elements," by Yang Ch'ien-chih (2799/0241/1007).

Other papers presented at this conference reflected more theoretical approaches to metallurgy. Ch'en Hsin-min (7115/2450/3046) employed thermodynamic data in the calculations reported in his paper, "Equilibrium Constituents of the Vapor of Roasted Sulfur Compounds Under Differing Temperatures." "The Influence of Temperature on the Sintering Process," by Huang P'ei-yun (7806/1014/0061), includes a description of

C-O-N-F-I-D-E-N-T-I-A-L

the author's derivation of the linear relationship between the natural logarithm of density variation during the sintering process and the reciprocal of the temperature.

Three papers using similar approaches were read by Ch'en Nien-i (7115/1819/6318). In "Electrostatic Statistical Theory of Fused Salt Solutions," Ch'en derives approximate formulations describing several types of thermodynamic data. His paper on "Dissociation of Metals in Fused Salts" includes a derivation of experimental rules of low-valence chemical compound formation. Finally, the relationship between the dissociation of fused salts in metals and the metals' surface tension is included in the paper "Studies of Dissociation of Fused Salts in Liquified Metals."

Despite the above achievements, several areas of research have been inadequately dealt with: high temperature chemistry, vacuum metallurgy, the metallurgy of super-pure metals, etc. Work on dynamic aspects is comparatively rare, especially the study of the structure of melts, statistical, chemistry and high temperature chemistry.

The conference established an editorial board and decided to collect and publish the papers presented at this conference -- Liu Hsiang-sheng (0491/5046/5116).

CHINESE ACADEMY OF SCIENCES HOLDS CONFERENCE ON MACROMOLECULAR CHEMISTRY -- Peiping, Hua-hsueh T'ung-pao, No 1, Jan 63, p 63

The Chinese Academy of Sciences convened the Fourth Conference on Macromolecules in Ch'eng-tu 1-7 November 1962 under the joint sponsorship of the Southwest Branch of the Chinese Academy of Sciences and the Institute of Chemistry, Chinese Academy of Sciences. Ninety-three official delegates participated in the conference; taking observers into account, over 200 persons from 42 organizations participated.

The specific purpose of the conference was to exchange research results in the field of basic macromolecular theory. Of the over 170 papers received by the conference, six comprehensive reports were read to the conference as a whole and 90 papers were read to sections of the conference. Three of the comprehensive reports and three of the articles are being printed in booklet form.

C-O-N-F-I-D-E-N-T-I-A-L

The conference was opened by Liu-Fu (0491/0479), President of the Southwest Branch, Chinese Academy of Sciences. The comprehensive reports "Statistical Theory For Dissociation Reactions," in addition to summarizing three types of theoretical treatment of macromolecular dissociation that appear in the literature, furthermore introduces the author's own new method of treating dissociation reactions. His method consists basically of treating mathematically individual dissociation reactions, and then applying statistical methods to the dissociation of the arbitrarily distributed nth macromolecular association reaction. The other five comprehensive reports were as follows: "Some Theoretical Problems In The Processing and Shaping of Thermoplastics," "On Some Problems Of The Binding Tension Of Binders," "The Dynamics Of Macromolecular Solid State Reactions," "Equivalent Polymer Mechanisms," and "Recent Studies on Phenolic Resins".

Reports given to the sections fell into 15 categories: free radical polymerization, ionic polymerization, directed polymerization, branch polymerization, condensation reactions, border condensation, organo-silicone polymerizing reactions and high polymers, elementary high polymers, anion exchange resins, radiation effects, macromolecular solutions and high polymer properties, rubbers, binders, aging, and others.

The reports given reflected the progress that has been made in China since the first conference on macromolecules held by the Chinese Academy of Sciences in 1954. The second conference was held in 1959, the third in 1961.

New advances have been made in the study of ionic polymerization at such units as Peking University, Kirin University, and Chekiang University; for example, the report entitled "Studies on Anion Polymerization Of Ethylene Monomers -- Alkali Metal Ketones as Catalysts in Styrene Polymerization" presents the results obtained in the directed polymerization of styrene. Many new explanations were proposed for the branch copolymerization of fibers, natural rubbers, and methacrylates. Theoretical results with practical applications were offered on the aging and reinforcing of rubbers by the Peking Research Academy of Chemical Engineering (Pei-ching Hua-kung Yen-chiu Yuan; 0554/0079/0553/1562/4282/4496/7108), the Rubber Design Academy (Hsiang-chiao She-chi Yuan; 2895/5231/6080/6060/7108), and the South China Chemical Engineering College.

The paper "A Critique of Dynamic Equations for Polyester Reactions" concluded, on the basis of Born equations and experimental results illuminating the variation in the dielectric constant in the polyesterification reaction, that the two-stage semiregular explanation proposed for the dynamics of the polyester reaction by T'any Ao-ch'ing (0781/2407/1987) ought to be taken into consideration. This report was followed by a long and vigorous debate on the part of the audience. New results were also presented on the photoemissive properties of solutions of mixtures.

The Institute of Applied Chemistry, Chinese Academy of Sciences, presented six papers at the conference on polybutadiene research; these concern the effectiveness of various catalysts in the production of polybutadiene and the effects of several additives. The Institute of Chemistry of the Chinese Academy of Sciences and the Mukden Research Academy of Chemical Engineering (Shen-yang Hua-kung Yen-chiu Yuan; 3088/7122/0593/1562/4282/4496/7108), as well as other units, have been active in research on polyesters and polyamides, particularly as regards the influences of catalysts and emulsifiers. Comparatively extensive research on systematic theories of organo-silicone high polymers, ion-exchange resins, and radiation effects have been conducted by the Chinese Academy of Sciences, higher schools, and industrial research institutes.

Fairly extensive work is also being done on sources of radiation energy, ultracentrifuges, and infrared spectra. A symposium was also held at the conference to discuss problems of macromolecular terminology and materials. The Macromolecular Section of the Chemistry Division of the National Scientific and Technological Commission also submitted a draft program for basic theoretical research in macromolecular chemistry during the conference. (FOR OFFICIAL USE ONLY)

LITERATURE ON ISOTOPES IN MACROMOLECULAR CHEMISTRY REVIEWED -- Peiping, Hua-hsueh T'ung-pao, No 1, Jan 63, pp 1-7

[The following is a descriptive abstract of an article, "Tracerisms and Macromolecular Chemistry," by Hu Wen-wei (5170/2429/3304).]

This article reviews the literature on the applications of atomic energy to macromolecular chemistry with particular attention to the use of radioactive isotopes as tracer atoms for analytical purposes. The literature surveyed consists of 70 English-language articles, 18 in Russian, 6 in German, one in Japanese, and 2 in Chinese. One of the latter is a translation from the Russian, by Yang Ch'eng-chung (2799/2110/1350) et al., of a work by S. E. Drelser, 240 pages in length and entitled, in Chinese, T'ung-wei-su Hua-hsueh (Isotope Chemistry). The other Chinese citation is of an article in Hua-hsueh T'ung-pao, No 3, 1959, page 6, by T'an Li-jui (6009/4539/4213), Hu Wen-wei (5170/2429/3304), et al.

The topics discussed in this survey article include isotopes in use, monomer and polymer tracers, instrumentation, initiator tracers, tracer solvents, and test agents. Areas in which the author feels the literature shows a need for further research include absorption and free absorption, isotope exchange, isotope effectiveness, and the distribution of tracer materials in polymers. (FOR OFFICIAL USE ONLY)

CHEMICAL CONSTITUENTS OF CHINESE PLANT DESCRIBED -- Pieping, Hua-hsueh Hsueh-pao, Vol 28, No 2, Apr 62, pp 89-95

[The following is a translation of Chinese-language abstract appearing in an article, "Research on the Chemical Constituents of Huang-teng, *Fibrauria tinctoria* Lour.," by Chu Jen-hung (2612/0117/1347) and Fang Sheng-ting (2455/5110/7844), both of the Institute of Materia Medica, Chinese Academy of Sciences, and Ch'en Jui-ch'un (7115/6904/5028), of Shanghai First Medical College. According to a footnote, this article was received for publication on 17 January 1961.]

Two new alkaloids have been isolated from the Chinese plant Huang-teng (7806/5671), *Fibrauria tinctoria* Lour. In addition to palinatine, four crystalline substances were obtained. One of these, provisionally called fibranine, is an alkaloid soluble in water with a molecular formula of $C_{25}H_{29}O_7N$. A hydrochloride crystalline salt was obtained, $C_{25}H_{29}O_7N \cdot HCl \cdot H_2O$, which melts at 196-198 degrees, $[\alpha]_D^{15} + 273.3$ degrees (one percent solution of C_2H_5OH). The hydroiodide ($C_{25}H_{29}O_7NHI$), which melts at 217-218 degrees, was also obtained. Upon reduction, the fibranine formed colorless crystals melting at 184-186 degrees.

A crystalline hydrobromide, $C_{18}H_{19}O_8NHBr$, melting at 202-203 degrees, was also obtained.

One of the two neutral substances obtained was a lactone, provisionally named fibrilactone; the molecular formula $C_{27}H_{19}O_9$ and it melts at 278 degrees, $[\alpha]_D^{15} + 36.60$ (one percent concentration of C_2H_5OH). Its oxine derivative, $C_{27}H_{28}O_8NOH$, has also been obtained; it melts at 254-256 degrees.

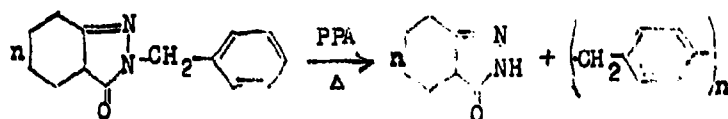
The other neutral substance is a steroid with a molecular formula of $C_{27}H_{45}OH$ that melts at 136-137 degrees, $[\alpha]_D^{15} + 24.51$ degrees ($CHCl_3$ concentration of one percent). The following derivatives were prepared: the acetate $C_{27}H_{45}O(CH_3CO)$, melting point 127-128 degrees; the benzoate $C_{27}H_{45}O(C_6H_5CO)$, melting point 139-140 degrees; and digitonide with a melting point of 226-228 degrees. (FOR OFFICIAL USE ONLY)

C-O-N-F-I-D-E-N-T-I-A-L

NEW KIND OF DEGENERATION-POLYMERIZATION REACTION DISCOVERED -- Feiping, K'ö-hsueh T'ung-Pao, No 3, Mar 63, pp 50-51

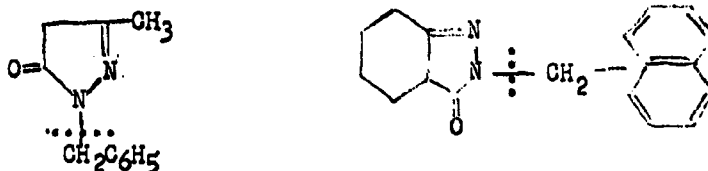
[The following is a summary of an article, "A New Kind of Degeneration and Polymerization Reaction -- 'The Cracking-Polymerizing Reaction'," by Sun Yu-shan (1327/3768/0810) and Liu Hua-chi (0491/5478/7535), both of the Chemistry Department, Szechwan University. The authors acknowledge the assistance of Hsieh Hui (6200/5610) in work done on this type of reaction since the following article was given as a report to the July 1962 meeting of the Szechwan Chemistry and Chemical Engineering Society and the November 1962 Chinese Academy of Sciences' conference on macromolecular chemistry.]

The authors discovered that when 1-benzyl-3,4-cyclotetramethylene pyrazolone-5 was heated to about 150 degrees in the presence of polyphosphoric acid, both a degenerative and a polymerized product were formed as follows:



The structures of these products were verified by comparing their physical and chemical parameters, including infrared absorption spectra, with those of the same products prepared by other methods.

Recently, the authors have discovered that two other chemical compounds undergo similar "cracking-polymerizing reactions":



C-O-N-F-I-D-E-N-T-I-A-L

PRELIMINARY ANALYSIS OF CHINESE HERB PRESENTED -- Peiping, Hua-hsueh Hsueh-pao, Vol 28, No 2, Apr 62, pp 96-99

[The following is a translation of a Chinese-language abstract appearing in an article, "A Study of the Chemical Structure of Ya-tan-tzu-tai," by Liang Hsiao-t'ien (2733/2556/1131), Huang Liang (7806/6852), Shao Kuo-hsien (6730/0948/6343), and Wu Yuan-liu (0702/0337/9497), all of the Institute of Materia Medica, Chinese Academy Medical Sciences. According to a footnote, this paper was received for publication 14 April 1961.]

The molecular formula of Ya-tan-tzu-tai (7693/9116/1311/3927 + 1707), *Brucea javanica* (L.) Merr., was preliminarily established as $C_{20}H_{22}O_9$. It is a glycoside with one double bond, 3 methyl groups, one lactone ring, and a $OC_6H_{11}O_5$ group. (FOR OFFICIAL USE ONLY)

ORGANIC CHEMISTRY RESEARCH CONDUCTED AT LANCHOW UNIVERSITY -- Peiping, Kuang-ming Jih-pao, 4 Feb 63, p 2

Research personnel of the Organic Chemistry Teaching and Research Section Chemistry Department, Lanchow University, have brought many research projects to a successful conclusion in the past year. Ten papers presented by instructors in this teaching and research section have been printed, an additional eight research reports have been presented. In addition, 43 types of organic chemical products have been obtained. These include organic semiconducting materials, agrochemicals, artificial fiber bases, element materials, ion-exchange resins, and new hetro-cyclic iodo-compounds.

These results were of great significance in the field of theoretical chemistry. For example, three papers were presented bearing on the problem of free radical reactions. Mandragorine was prepared in crude form in 1959; it proved to have high toxicity with regard to insects. The Kansu Provincial Scientific [and Technological] Committee lent its support in this research and the purity of the mandragorine is now being improved. Clinical tests on "64-hetrocycliciodide", carried out by the Kansu Provincial Research Institute of Medical Sciences, have demonstrated that this drug has definite hypertensive effect. In addition, this teaching and research section has prepared 23 varieties of acylsemicarbazone thiocarbamide compounds. The Shanghai Central Tubercular Disease Prevention Station was invited to test these compounds. Physiological examination has been made of seven; these show differing degrees of antitubercular effectiveness.

C-O-N-F-I-D-E-N-T-I-A-L

The training of young instructors has been emphasized in the fields of plant resource chemistry, theoretical organic chemistry, macromolecular chemistry, petroleum chemistry, and organic analysis.

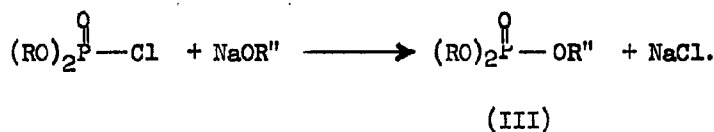
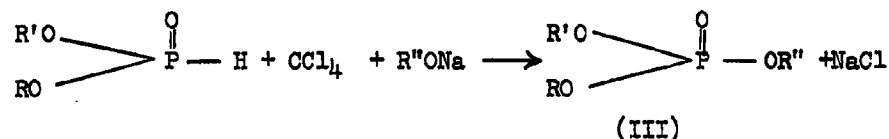
Results by instructors are being examined more strictly. For example: Ch'en Yao-tsu (7115/5069/4371) reviewed the data in 82 pieces of literature in the initial draft of his first paper but was lacking data for the 1958-1961. Revising his paper under the direction of Wang Pao-jen (3769/5508/0088), an additional 78 pieces of material were collected. Another example of the rigor used in examining results is that of Huang Wen-k'uei (7806/2429/7608). Huang obtained results in his work on "64-hetrocyclic iodide" in 1957 and has been examining the effectiveness of this drug as a hypertensive since that time.

Huang and Ch'en are both middle-aged instructors in this teaching and research section. Other personnel include Professors Liu Yu-ch'eng (0491/2589/2052) and Chu Tzu-ch'ing (2612/1311/3237) and young instructor Pao Ch'i-shen (7637/0796/3947).

REPORTS PREPARATION OF ORGANOPHOSPHORUS COMPOUNDS -- Peiping Hua-hsueh Hsueh-pao, Vol 27, No 2, Nov 61, pp 160-162

[The following is an abstract of a paper, "The Reaction of Sodium Alcoholate With Dialkylphosphites and Carbon Tetrachloride and the Reaction Products of Trialkyl-ortho-phosphoric Acid Mixed Esters," by T'ung Tseng-shou (4547/2582/1108), whose affiliation is not given but who has been identified with the People's Liberation Army Academy of Medical Sciences, Shanghai.]

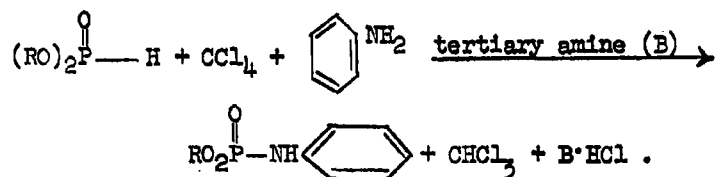
The preparation of mixed esters of trialkyl-ortho-phosphoric acid (III) by the following reaction is presented:



C-O-N-F-I-D-E-N-T-I-A-L

A report is given on the analysis of two of the mixed esters thus obtained, namely, diethyl-ortho-butyl-ortho-phosphoric acid ester (yield 51.92 experimental to 52.36 theoretical) and di-ortho-butylethyl-ortho-phosphoric acid ester (yield 59.41 experimental to 60.03 theoretical).

The author cites two previous works published in the Hua-hsueh Hsueh-pao of 1957 and 1958, respectively, in which he reported the preparation of phosphoryl phenylamine esters by the following reaction:



He states that he subsequently continued to study the influence of the basicity of tertiary amines used as auxiliary bases in the reaction and found that, as a rule, the fatty tertiary amines with higher alkalinity helped the reaction in a noticeable way whereas weakly basic aromatic tertiary amines such as N-xylydine, pyridine, and alpha-picoline did not. One exception was the aromatic tertiary amine, 1,3,5-trimethyl pyridine. However, its effect was much slower than that of the fatty tertiary amines. (CONFIDENTIAL)

AGROCHEMICAL ANTIBIOTIC DEVELOPED THROUGH COORDINATED RESEARCH -- Peiping, Kuang-ming Jih Pao, 19 Mar 63, p 1

The agrochemical antibiotic "401" was produced by the joint research efforts of the Institute of Organic Chemistry, Chinese Academy of Sciences; the Plant Physiology Teaching and Research Section, Botany Department, Fu-tan University; the Shanghai Auxilliary Compounds Plant (Shang-hai Chu-chi Ch'ang; 0006/3189/0504/0495/0617); and the Shanghai Agrochemical Plant. "401" protects cotton sprouts from disease and prevents the rotting of fresh sweet potatoes. Empirical tests have shown it to be an effective and economical agent convenient to use; it is comparatively safe for plants, animals, and men.

"401" was originally developed by the Institute of Organic Chemistry. Tests were then run on this product by the Plant Physiology Teaching and Research Section of Fu-tan University. Small-scale trial production was undertaken by the Shanghai Auxiliary Compounds Plant; they found that one of the raw materials used by the Institute of Organic Chemistry was in short supply. After a period of research they found that they were able to use a similar product as a substitute raw material. The next year, 1962, the Shanghai Agrochemical Plant began medium-scale production.

At present, research is being pursued in Shanghai on several new agrochemicals but the progress is very slow because the units involved have not demonstrated the same degree of cooperation exemplified in the above development of "401."

CONFUSION NOTED IN COMPLEX TITRATION TERMINOLOGY -- Peiping, Hua-hsueh T'ung-pao, No 7, Jul 62, pp 62-63

Although Chinese chemists have done a good deal of work in the field of complex titration, the bulk of the current literature continues to be made up of material translated from foreign-language sources; the translation of some of the terminology is in a state of confusion, causing problems for those engaged in the dissemination of the knowledge in this field, particularly for those workers not acquainted with the foreign language involved.

The primary cause for this confusion is the nonuniform usage of these terms in foreign languages; other causes include the noninclusion of these terms in recent Chinese dictionaries, inattention on the part of translators, and even mistranslations. The confusion has persisted despite the publication of Ying-han Hua-hsueh Hua-kung Tz'u-hui (English-Chinese Chemistry and Chemical Engineering Dictionary) in December 1961 by the Terminology Office, Translation and Publication Committee, Chinese Academy of Sciences. -- Wang Tzu-yun (3769/1311/0061)

TEACHING METHODS IMPROVED IN CHEMISTRY DEPARTMENT, CHENGCHOW UNIVERSITY --
Peiping, Kuang-ming Jih-pao, 14 Feb 63, p 2

In order to improve the quality of instruction, the various teaching and research sections of the Chemistry Department, Chengchow University, have set up a card index file for laboratory classes; this program was initiated in the spring of 1962. On these cards is recorded the method of solution of problems encountered in laboratory classes. Among the units participating is the Organic Chemistry Teaching and Research Section. The results to date have proved gratifying.

CATALYSIS OF HYDROCARBON INVERSION STUDIED -- Peiping, K'o-hsueh T'ung-pao, No 2, Feb 63, pp 54-56

[The following is an abstract of an article, "Studies on the Dual Nature of Electronic-Acidic Catalysts (I) The Physical-Chemical Properties and Reactivity of Si-Al-Co-Mo," by Hsiao Kuang-yen (5135/0342/8827) and Liu Ch'un-yang (0491/2504/7122).]

In this paper, the authors examine the surface activity of silicon-aluminum-cobalt-molybdenum alloys (SACM) containing different percentages of aluminum. This type of dual catalyst is characterized by its electronic reactivity in such processes as hydrogenation and dehydrogenation on the one hand, and by its acidic reactivity in such processes as isomerization and cracking, on the other; these electronic-acidic catalysts are of great importance in the inversion of hydrocarbons.

In this paper, various chemical and physical parameters are plotted against the aluminum content of the catalyst: surface pH, surface area per unit weight, and pyridine chemical absorptive power; such hydrogenation cracking capabilities as cyclobutane dehydrogenation rate, inversion rate, and oil production rate; and such catalytic cracking capabilities as isopropyl benzene cracking vapor content, inversion rate, and $C_3 + C_4$ vapor content. The practical application of the data shown in these plots are discussed.

[The following is an abstract of Part II of the above article; It is subtitled "II. Surface Area Reduction in the Preparation Process," by the same authors, with the assistance of T'ang Jui-lin (0781/3843/7792) and Ch'eng Sen (4453/2773).]

In this paper the circumstances surrounding a decrease in surface area during the preparation of the catalysts described in Part I are presented, together with the causes for this phenomena and its prevention. The decline in surface area is also discussed for the following catalysts: silicon-aluminum-molybdenum sulfate, silicon-aluminum-tungsten-nickel sulfate, and silicon-aluminum-tungsten-molybdenum-nickel sulfate.

C-O-N-F-I-D-E-N-T-I-A-L

DETERMINATION OF CARBON AND HYDROGEN IN ORGANIC COMPOUNDS IMPROVED --
Peiping, Hua-hsueh Hsueh-pao, Vol 28, No 2, Apr 62, pp 75-79

[The following is a translation of a Chinese-language abstract appearing in an article, "An Improved Method for the Rapid Micro-Determination of Carbon and Hydrogen in Organic Compounds," by Chang Yu-chih (1728/4245/0037), Huang Hui-chu (7806/1979/3796), and Chang Jen-pin (1728/0088/2430), all of the Institute of Materia Medica, Chinese Academy of Sciences. According to a footnote, this article was received for publication 8 April 1960.]

The amounts of carbon and hydrogen present in micro-quantities of organic compounds were determined by a method combining Korbl's method, i.e., using silver permanganate pyrolysis products as catalytic oxidants, and [M. O. Korshun's] rapid vacuum-tube method (pyrolysis using a set of vacuum tubes.) The analysis takes 20-25 minutes; the errors are less than 0.3 percent. (FOR OFFICIAL USE ONLY)

BOOK ON HYDROCARBONS PUBLISHED -- Peiping, Kuang-ming Jih-pao,
1 Mar 63, p 2

The Chinese edition of a book, T'an-ching Hua-ho-wu ti Fei-tien ho Pao-ho Cheng-ch'i-ya (The Boiling Point and Saturation Vapor Pressure of Hydrocarbon Compounds), has recently been published by the Science Press. The book was coauthored by Ch'eng K'uang-yueh (4453/0342/6885), a lecturer at Szechwan University, and [M.Kh.] Karapetyants [Moscow Institute of Chemical Technology Imeni D.I. Mendeleev]. In this book the authors describe the methods of determining the boiling points and saturation vapor pressures of various hydrocarbons. The book is divided into three sections; the first is a survey of the literature, the second introduces the methods of calculation proposed by various outstanding workers in the field, and the third section describes the use of these methods.

SCANDIUM AND THORIUM DETERMINED USING QUINALDINIC ACID -- Peiping,
Hua-hsueh Hsueh-pao, Vol 28, No 2, Apr 62, pp 100-107

[The following is a translation of a Chinese-language abstract appearing in an article, "The Separation and Determination of Scandium and Thorium II. Quinaldinic Acid as a Reagent," by Liang Shu-ch'uan (2733/2885/2938) and Hung Shui-chieh (3163/3055/4105), both of the Institute of Chemistry, Chinese Academy of Sciences. A footnote indicates that this item was received for publication 5 September 1961.]

This paper describes conditions suitable for the precipitation of scandium using quinaldinic acid. It was found that scandium precipitated quantitatively in the pH range of 4.8-7.0; a molar ratio of scandium to the precipitating agent of 1:2.9 was sufficient to cause quantitative precipitation; even ratios as large as 1:43 did no harm. This paper includes a discussion of the effects of anions, metallic salts, and the heavy rare earth elements. [on the separation] The pyrolytic curves of both thorium and scandium salts with quinaldinic acid is presented; the two curves prove to be very similar. The scandium [quinaldinate] salt curve had two plateaus: 90-150 and 670-1,005 degrees centigrade (the highest temperature used in the experiment). These plateaus correspond respectively to the formation of the nonaqueous salt and scandium oxide. The two plateaus on the thorium [quinaldinate] salt curve (120-150 and 680-960 degrees centigrade [the highest temperature used]) respectively correspond to [the formation of the] nonaqueous salt and thorium oxide.

The paper also describes the method devised for the separation and determination of scandium and thorium. The thorium is precipitated twice using quinaldinic acid at a pH of 3.4; the scandium is precipitated while maintaining a pH of 7.0. The weight ratios of scandium oxide to thorium oxide from 1:1 to 1:6.6 were tested; the absolute error ranged from -0.6 to + 0.7 milligrams of thorium oxide and between - 0.5 to + 0.4 milligrams of scandium oxide. (FOR OFFICIAL USE ONLY)

SURFACE PROPERTY VARIATION OF HIGH-ALUMINUM ALUMINUM SILICATES -- Peiping, K'o-hsueh T'ung-pao, No 3, Mar 63, pp 65-67

[The following is an abstract of an article, "Studies of High-Aluminum Aluminum Silicate Combined-Gels (II) Surface Property Variation During the Preparation Process," by Liu Ch'un-yang (0491/2504/7122) and Hsiao Kuang-yen (5135/0342/8827).]

This paper describes variations in physicochemical surface properties, including the cracking activity, of samples of high-aluminum aluminum silicates (Al_2O_3 21.6 percent by weight) representing different stages in its preparation by the combined-gel method. This method of preparation was described by Liu Ch'un-yang et al. in Part I of this article, appearing in Chung-kuo K'o-hsueh Yuan Shih-yu Yen-chiu So Yen-chiu Pao-kao, 1960 (1960 Research Reports of the Institute of Petroleum, Chinese Academy of Sciences). It was found that the activity, selectivity, and stability of the high-aluminum aluminum silicates were all high.

The same methods were used for studying surface property variation during preparation of low-aluminum aluminum silicates (Al_2O_3 12.4 percent by weight); these are also described. Similar variation trends were noted for these samples.

POLYACRYLONITRILE CATALYSIS STUDIED -- Peiping, K'o-hsueh T'ung-pao, No 1, Jan 63, pp 57-58

[The following is an abstract of an article, "The Catalytic Properties of Heat-Treated Polyacrylonitrile III. Dissociation of Isopropyl Alcohol," by Cheng Te-shui (6774/1795/3055) and Jen Hsin-min (0117/2450/3046), both of the Institute of Chemistry, Chinese Academy of Sciences. The participation of Kuo Lin-p'eng (6753/2651/7720) in the experimental work is acknowledged.]

In this paper, the authors conduct preliminary investigations of the catalytic properties of polyacrylonitriles (PAN) that has been subjected to various heat-treatment conditions upon the dissociation of isopropyl alcohol. The various heat treatments used on the PAN are described as are the yields obtained by the use of the resultant catalysts. The results obtained are compared with the catalytic properties of various heat-treated sucrose carbons and acid-treated electrode graphite.

C-O-N-F-I-D-E-N-T-I-A-L

EFFECTS OF CATALYST ACIDITY UPON DEHYDROGENATION REACTION STUDIED --
Peiping, K'o-hsueh T'ung-pao, No 1, Jan 63, pp 59-60

[The following is an abstract of an article, "Students on the Preparation of Dehydrogenated Cyclic Catalysts I. The Effects of Platinum-Aluminum and Molybdenum-Aluminum Catalyst Acidity Upon the Orthoheptane Dehydrogenation Cyclic Reaction," by Wang Tsung-yueh (3769/1350/6141) and Kuo Hsieh-hsien (6753/3610/6343).]

The authors discovered that the orthoheptane dehydrogenation cyclic activity of the platinum-aluminum catalyst could be raised by increasing the proportions of hydrofluoric acid and potassium oxide. On the basis of this knowledge, the authors systematically varied the acidity of the aluminum oxide and noted its influence upon the catalyst. The result of this experiment is here presented.

On the basis of these results, the authors present a schematic representation of the effect of the acidic structure of the aluminum oxide and the hydrofluoric acid and potassium contents upon the acidity. In order to effect a comparison, the influence of the hydrofluoric acid and potassium contents upon the molybdenum catalyst is also presented.

The work is said to be a preliminary presentation of the effects of catalyst acidity upon the orthoheptane dehydrogenation cyclic reaction without, however, being able to explain the regularity of the variations involved.

MISCELLANEOUS

YUNNAN UNIVERSITY CELEBRATES 40TH ANNIVERSARY -- Peiping, Kuang-ming Jih-pao, 23 Apr 63, p 2

More than 4,000 professors, students, guests, and graduates of Yunnan University joined in the celebration of the 40th anniversary of the school on 20 April 1963.

Liu P'i-yun (0491/2126/7189), deputy governor of Yunnan Province and standing member of Yunnan Provincial CCP Committee, representing the Yunnan Provincial Committee and Yunnan People's Council congratulated the more than 3,000 professors and students of the University. Liu pointed out that Yunnan University has become a comprehensive university and is responsible for the difficult but glorious task of modernizing agriculture, industry, scientific techniques, and national defense.

C-O-N-F-I-D-E-N-T-I-A-L

President Kao Chih-kuo (7559/3112/0948) of the university and first secretary of the Yunnan University CCP Committee reported that since liberation 13 years ago, the university has graduated three times as many students as during the first 27 years after its founding, and the present student body is 9 times the number of students in 1949. More than 50 percent of the students are majoring in industry and agriculture. Students of minority races compose about 12 percent of the entire student body. The number of professors is 3 times the number of professors in 1949. Tung Tse (5516/3419), the first president of the university, and Prof Fang Kuo-yu (2455/0948/3842) who has been teaching history for more than 27 years, also spoke.

During the academic report, 28 treatises by young and old professors, the result of many years of research were mentioned. In biology, Prof Chu Yen-ch'eng (2612/1750/0015) presented "The Preliminary Investigation Research on Forest Plants of Ha-pa-hsueh Mountain" and Prof Ch'u Chung-hsiang (2575/0112/3276) presented "Outlook on Research in Plant Community Localization"; in physics, Prof CHANG Yung-li (1728/3057/4539), who for many years did research in the theory of elementary particles, presented his paper, "Concerning the Sa-li-ya-k'o [possibly transliteration of a name] Effect", and he also made known some of his new ways of looking at matters.

CHINESE MEDICAL TEAM VISITS ALGERIA -- Peiping, Kuang-ming Jih-pao,
18 Apr 63 p 3

A Chinese medical team left for Algeria on the evening of 16 April at the request of the Ministry of Health of the Algerian Government. This team consists of 13 persons, three of them already in Algeria.

Dr. Ch'ia-mai-le [Tsamali?] representing the Algerian Ministry of Health, was at the airport to welcome the medical team. Also there was Hsi I, an attache of the Chinese Embassy in Algeria.

Dr. Ch'ia-mai-le pointed out in his welcoming speech that the arrival of the Chinese medical team again demonstrates the friendship between the two nations. He was sure that the medical team will be successful in its work in Algeria and will make great contributions toward Algeria's public health work.

T'an T'ai-chieh, head of the Chinese medical team, answered by saying that the fighting friendship between the Chinese people and the Algerian people will be further strengthened and developed under the banner of anti-imperialism. The Chinese medical team was sent to Algeria by the Chinese government to manifest the concern of the Chinese people toward the Algerian people.

C-O-N-F-I-D-E-N-T-I-A-L

MEDICAL DELEGATION LEAVES DJAKARTA TO RETURN HOME -- Peiping, Jen-min Jih-pao, 21 Mar 63, p 4

Chinese medical experts, including Prof Wu Chieh-ping (0702/7132/1627), left Djakarta by plane on 19 March to return home. They made up the Chinese health delegation which was invited to Indonesia for a tour. Tsu I-t'ien (1508/4135/3944) head of this delegation, had already departed for China 4 days ago. Among the dignitaries who went to the airport to see them off were: Arudji Kartawinata, leader of the Indonesian Parliament; Suharto, Indonesian Minister of Commerce and Chief of the Indonesian Reception Committee; Satrio, Minister of Health; and Achmadi, Minister for Cooperatives.

Suharto, said that a year ago Chinese medical specialists came to Indonesia purposely to diagnose and treat the illness of President Sukarno and that the results achieved were very satisfactory. This return visit of the Chinese medical specialists was made specially to re-examine the health of President Sukarno. The findings revealed that his health is now very good. He added that other leaders of the Indonesian Government have also received treatment with satisfactory results.

JAPANESE PHARMACOLOGISTS SPEAK IN CHINA -- Peiping, Yao-shueh Hsueh-pao, Vol 10, No 1, Jan 63, p 64

Two visiting Japanese pharmacologists spoke to a meeting of the China Pharmaceutical Society on 26 November 1962 in Peiping. Prof Takemoto Tsunematsu, a pharmacologist from Tohoku University, spoke on Japanese research in the field of naturally-occurring organic chemical compounds. Takahashi [Shintaro?] (7559/2890/4176/1132/2597), an assistant professor of pharmacology at Osaka University, reported on the present status Japanese research on traditional herbs. (FOR OFFICIAL USE ONLY)

VIETNAMESE VISITOR ARRIVES IN PEIPING -- Peiping, Jen-min Jih-pao, 28 Apr 63, p 4

At the invitation of China Scientific and Technical Association, Le Khac, vice-chairman of the State Science Commission, representing the Vietnam Association for Promotion of Science and Technology, arrived in Peiping by train on 26 April 1963 for a friendly visit.

C-O-N-F-I-D-E-N-T-I-A-L

POLISH SCIENTIFIC AND TECHNICAL DELEGATION ARRIVES IN PEIPING -- Peiping, Jen-min Jih-pao, 28 Apr 63, p 4

A Polish scientific and technical delegation, headed by Ludwik Salamon, chairman of the Polish Section of the Joint Sino-Polish Scientific and Technological Cooperation Standing Committee and Vice-Minister of the Ministry of Mining and Power, flew to Peiping on 26 April 1963 to attend the tenth session of the Committee.

KOREAN SCIENTISTS VISIT CHINA -- Peiping, Kuang-ming Jih-pao, 23 Apr 63, p 3

At the invitation of the Chinese Scientific and Technical Association, KIM Sok-hyong (6855/6932/0077), head of the Institute of History of the Korean Academy of Sciences, and a representative of the Korean Democratic Scientists League, arrived in Peiping on the afternoon of 22 April. Present to welcome him were WANG Shun-t'ung (3769/7311/2717), secretary of the Secretariat of the Chinese Scientific and Technical Association, and CHANG Chen-ch'iu (1728/7201/3808).

C-O-N-F-I-D-E-N-T-I-A-L

BIOGRAPHIC INFORMATION

[The following biographic information on selected Chinese Communist scientific and technical personal was taken from the sources cited in parentheses]

CHANG Ch'i-ts'eng (1728/0120/2582)

WANG Kuang-ch'in (3769/1684/2953)

Both of the Forestry Department, Honan Agricultural College; co-authors of an article, "Plant Succession in Dune Areas Along the Rivers of Eastern Honan and Their Sand-Fixing Afforestation." (Peiping, Lin-yeh K'o-hsueh [scientia silvae], No 2, Apr 62, pp 141-148)

CHANG Ch'un-lin (1728/2504/7207), Institute of Zoology, Chinese Academy of Sciences; author of an article, "A List of Fishes and a New Record From Hsi-shuang Pan-na, Yunnan Province." (Peiping, Tung-su Hsueh-pao, Vol 14, No 1, Mar 62, pp 95-98)

CHANG Shih-mei (4545/1102/5019), Kiangsi Agricultural College

TING Tao-mo (0002/6670/2875), Kiangsi Institute of Forestry and Land Reclamation

Coauthors of an article, "What Are the Principal Factors Affecting the Growth of the Pinus massoniana Caterpillar?" (Peiping, Lin-yeh K'o-hsueh, No 2, Apr 62, pp 178-180)

CHANG Wen-ch'ing (1728/2429/1987)

CHANG Shou-huai (1728/1108/2849)

Both of the Institute of Lumber Industry, Chinese Academy of Forestry Sciences; coauthors of an article, "Experiments on the Nail-Holding Strength of 15 Types of Domestically Produced Lumber." (Peiping, Lin-yeh K'o-hsueh, No 1, Jan 63, p 86) (FOR OFFICIAL USE ONLY)

C-O-N-F-I-D-E-N-T-I-A-L

CHANG Yao-ts'eng, Moscow Architectural Institute; author of dissertation for the scientific degree of Candidate of Architecture, "New Types of Housing With Complete and Partial Services for the Public (based on the experience of the USSR and the CFR)," in Russian. (Moscow, Vechernyaya Moskva, 2 Apr 63, p 4)

CHANG Yu-shuang, Moscow Geological Prospecting Institute imeni S. Ordzhonikidze; author of dissertation for the scientific degree of Candidate of Geological-Mineralogical Sciences, "Carbon-Petrographic Investigation During Geological Prospecting Operations (Modeled on the Prospecting of Coal in the Balakhonskiy Series in the Kuznetsk Basin)," in Russian. (Moscow, Vechernyaya Moskva, 25 Mar 63, p 4)

CHAO K'ien-t'ang (6392/5146/1016), Biology Department, Inner Mongolia University; author of an article, "The Biology of the Procavia gutturosa and the Way To Hunt It." (Peiping, Tung-wu-hsueh T'ung-pao, No 1, Jan 63, pp 19-20)

CHAO Tse-san, Moscow State University; author of dissertation for the scientific degree of Candidate of Geological-Mineralogical Sciences, "Electric Charges On the Surface of Mineral Particles and Their Effect On the Formation of Bonds In Dispersed Soils," in Russian. (Moscow, Vechernyaya Moskva, 20 Mar 63, p 4)

CH'EN Ch'ang-hao (7115/2490/3185)

HSIEH Tsu-ying (6200/4371/5391)

Protection Laboratory, Institute of Forestry, Chinese Academy of Forestry Sciences; coauthors of an article, "Initial Studies on the Sze-mao and Yunman Pine Caterpillars." (Peiping, Lin-yeh K'o-shueh, No 2, Apr 62, pp 117-130)

CH'EN Chia-pao (7115/0857/1405), Institute of Lumber Industry, Chinese Academy of Forestry Sciences; author of an article, "Onvestigations of the Torsional Strengths of Woods." (Peiping, Lin-yeh K'o-shueh, No 4, Oct 62, pp 303-307)

C-O-N-F-I-D-E-N-T-I-A-L

CH'EN Ta-yuan (7115/1129/0337), Institute of Zoology, Chinese Academy of Sciences; author of an article, "A Preliminary Report on the Effect of Mantle Tissue Extract of *Lamprotula leai* on Healing Experimental Wounds in Mice." (Peiping, Tung-wu Hsueh-pao, Vol 14, No 1, Mar 62, pp 9-16)

CHEN T'ien-lin (7115/1131/3866), Nanking Forestry College; author of an article, "On the Living Habits and Prevention of the *Camptoloma interiorata* Walker." (Peiping, Lin-yeh K'o-hsueh, No 1, Jan 63, pp 74-76) (FOR OFFICIAL USE ONLY)

CH'EN T'ing-wei (7115/1694/0251), Institute of Soils and Fertilizers, Chinese Academy of Agricultural Sciences; article on improving the fertility of the soil by planting legumes. (Peiping, K'o-hsueh Ta-chung, No 3, Mar 63, pp 4-5)

CH'ENG Chi-yun (4453/6487/0061)

KUO Shan-chi (6753/0810/1015)

Both of Shantung Agriculture College; coauthors of an article, "Some Problems in the Growth of Pines in the Kunlun Mountains." (Peiping, Lin-yeh K'o-hsueh, No 1, Jan 62, pp 92-95)

CH'ENG Chun-ch'ing (2052/0193/0615)

LI Yuan-che (2621/3293/0772)

SUN Ch'eng-chih (1327/2052/1807)

All of the Material Properties Laboratory, Institute of Lumber Industry, Chinese Academy of Forestry Sciences; coauthors of an article, "Comparative Experiments on the Properties of Natural Versus Artificial Stands of *Larix gmelini* var. *koreana* Nakai." (Peiping, Lin-yeh K'o-hsueh, No 1, Jan 62, p 18-27)

CH'ENG Chun-ch'ing (2052/0193/0615)

YANG Chia-chu (2799/1367/7467)

Both of the Material Properties Laboratory, Institute of Lumber Industry, Chinese Academy of Forestry Sciences; coauthors of an article, "Distinguishing Characteristics in the Coarse Structure of Dicotyledonous Woods." (Peiping, Lin-yeh K'o-hsueh, No 1, Jan 62, pp 35-44)

C-O-N-F-I-D-E-N-T-I-A-L

CHENG Kuo-chang (6774/0948/4545), Institute of Zoology, Chinese Academy of Sciences; author of an article, "On the Forms of the Intramural Ganglia of the Mammals." (Peiping, Tung-wu Hsueh-pao, Vol 14, No 1, Mar 62, pp 17-20)

CHENG Wan-chun (6774/8001/6874), Chinese Academy of Forestry Sciences

CHANG Shao-yao (4545/4801/1031), Hangchow Botanical Gardens

HUNG T'ao (3163/3447), Nanking Forestry College

CHU Cheng-te (2612/2398/1795), Nanking Forestry College

CHAO Ch'i-seng (6392/1142/0300), Nanking Forestry College

All are coauthors of an article, "New Species and Name Changes for Chinese Economic Trees." (Peiping, Lin-yeh K'o-hsueh, No 1, Jan 63, pp 1-14) (FOR OFFICIAL USE ONLY)

CH'I Ch'ang-shun (2058/7022/7311), Institute of Forest and Soils, Chinese Academy of Sciences; author of an article, "Preliminary Research on Types of Rough and Smooth Bark of the Red Pine." The article was read and commented on prior to publication by Prof Wang Chan (3769/2069) and by Huang Hui-i (7806/2585/0001), respectively. (Peiping, Lin-yeh K'o-hsueh, No 1, Jan 62, pp 11-17)

CHIA Ch'eng-chang (6328/2052/4545), Institute of Forestry, Chinese Academy of Forestry Sciences; author of an article, "The Use of P³² to Examine the Distribution of Phosphorus in Pinus tabulaeformis Carr." (Peiping, Lin-yeh K'o-hsueh, No 4, Oct 62, pp 310-312)

CHIANG Ting-sheng (5592/1353/3932), Northwest Institute of Biology and Soils (Hsi-pei Sheng-wu T'u-jang Yen-chiu So; 6007/0554/3932/3670/0960/1099/4282/5596/2076), Chinese Academy of Sciences; author of an article, "A Discussion of the Problem of Width of Horizontal Terraced Fields in Loess Plateaus." (Peiping, T'u-jang T'ung-pao, No 5, Oct 62, pp 53-57) (FOR OFFICIAL USE ONLY)

CH'IAO Ts'eng-chien (0829/2582/7002), Biology Department, Peking Teachers University; author of an article, "The Accomplishments of Modern Biology in the Progress of Plant Taxonomy." (Peiping, Sheng-wu-hsueh T'ung-pao, No 1, Jan 63, pp 9-14) (FOR OFFICIAL USE ONLY)

C-O-N-F-I-D-E-N-T-I-A-L

CH'IN K'uo-fa, Moscow Higher Technical Institute; author of dissertation defended in 1962 and approved by the Higher Certifying Commission for the scientific degree of Candidate of Technical Sciences, "Experimental-Theoretical Investigation of Turbulent Flow Structure in a Cyclone Chamber," in Russian. (Moscow, Teploenergetika, No 4, Apr 63, p 94)

CH'IN Shu-mei (4440/4790/5019)

Ch'IN Tsai-hsien (4440/0961/6343)

Both of the Biology Department, Anhwei University; coauthors of an article, "The Structure of the Liver in the Embryonic Development of the Peking Duck." (Peiping, Tung-wu Hsueh-pao, Vol 13, No 1-4, Dec 61, pp 20-32)

CHOU Ch'i-chang, Moscow Architectural Institute; author of dissertation for the degree of Candidate of Architecture, "Investigation of Experiments in the Designing of Textile Combines," in Russian. (Moscow, Vechernyaya Moskva, 9 Apr 63, p 4)

CHOU Hsueh-kuang (0719/1331/0342) Nankai University; author of articles, "The Operations of Homotopy Groups and Homotopy Type," and "Cohomology Operations and Homotopy Type," in English; received for publication 8 Dec 62. (Peiping, Scientia Sinica, Vol 12, No 4 Apr 63, pp 613-614 and 614-615, respectively)

CHOU Jun-p'ieh, Institute of Organoelemental Compounds, Academy of Sciences USSR; author of dissertation for the scientific degree of Candidate of Chemical Sciences, "Obtaining Polymers From Unsaturated Alkylaromatic Hydrocarbons," in Russian. (Moscow, Vechernyaya Moskva, 26 Mar 63, p 4)

CHOU Yin (0791/8337), Institute of Lumber Industry (Mu-ts'ai Kung-yeh Yen-chiu So; 2606/2088/1562/2814/4282/4496/2076), Chinese Academy of Forestry Sciences; author of an article, "A Preliminary Study of the Anatomical Structure of Chinese Larches and Grouping of the Different Species." (Peiping, Lin-yeh K'o-hsueh, No 2, Apr 62, pp 97-116)

C-O-N-F-I-D-E-N-T-I-A-L

CHU Hui-fang (2612/1920/2455)

LI Hsin-shih (2621/2450/2514)

Both of the Institute of Lumber Industry, Chinese Academy of Forestry Sciences; coauthors of an article, "A Study of Fiber Dimensions and Chemical Composition of Some Fast-Growing Tree Species." (Peiping, Lin-yeh K'o-hsueh, No 4, Oct 62, pp 255-267)

CHU Kuo-hua, Moscow Institute of Chemical Machine Building; author of dissertation for the scientific degree of Candidate of Technical Sciences, "Investigation of Hermetic Conditions in Elastic Conic Sealing of High-Pressure Apparatus," in Russian. (Moscow, Vechernyaya Moskva, 9 Apr 63, p 4)

CHUNG Chia-jung, Moscow State University; author of dissertation for the scientific degree of Candidate of Geological-Mineralogical Sciences, "Features of the Distribution and Form of Selenium Found in Low-Temperature Antimony-Mercury Deposits in Southern Fergana," in Russian. (Moscow, Vechernyaya Moskva, 26 Mar 63, p 4)

FAN Chung-min (5400/1813/3047), Forestry Department, Mukden Agricultural College; author of an article, "The Dangers of Holotrichia sauteri Moser in Young Forests and Preventive Measures." (Peiping, Lin-yeh K'o-hsueh, No 2, Apr 62, pp 165-167)

FAN Chung-min (5400/1813/3047), Forestry Department, Mukden Agricultural College; author of an article, "Preliminary Observations on Cinara pinea Mordviko." (Peiping, Lin-yeh K'o-hsueh, No 4, Oct 62, pp 312-313)

FAN Wei-t'ang, Moscow Institute of Radioelectronics and Mining Electromechanics; author of dissertation for the scientific degree of Candidate of Technical Sciences, "Investigation of the Stability of Principal Levels and the Interaction of the Massif and the Supports," in Russian. (Moscow, Vechernyaya Moskva, 2 Apr 63, p 4)

C-O-N-F-I-D-E-N-T-I-A-L

FANG Tsung-hsi (2455/1350/3556), Shantung Oceanography College; author of an article, "Human Genetics." (Peiping, Tung-wu-hsueh T'ung-pao, No 1, Jan 63, pp 25-28) (FOR OFFICIAL USE ONLY)

FENG Chi-L (7458/1569/4539), Institute of Plant Physiology, Chinese Academy of Sciences; author of an article, "Recent Progress in Chemical Phytocides." (Peiping, Sheng-wu-hsueh T'ung-pao [Biology Bulletin], No 1, Jan 63, pp 1-8) (FOR OFFICIAL USE ONLY)

HAN Hsi-i, Moscow State University; author of dissertation for the scientific degree of Candidate of Chemical Sciences, "Spectrophotometric Investigation of Niobium and Tantalum Groups With Certain Dyes Containing Azo-Group," in Russian. (Moscow, Vechernyaya Moskva, 1 Apr 63, p 4)

HAN Hsi-lai (7281/3588/5490), assistant professor, Soil and Agrochemistry Department, Peking Agricultural University; author of an article, "1059, an Internal Absorption Insecticide." (Peiping, K'o-hsueh Ta-chung, No 3, Mar 63, pp 4-5)

HSIA Tao-hsing (1115/6670/5887), Mathematical Department, Fudan University; author of article, "Measures on a Functional Space," in English; first published in Chinese in Acta Scientiarum Naturalium, Universitatis Fudan, Number 7, 1962. (Peiping, Scientia Sinica, Vol 12, No 4, Apr 63, pp 479-494)

HSIA Wei-sheng (1115/0251/3932), Geology and Geography Department, Lanchow University; author of an article commenting upon the work "Directions and Prospects in the Development of Soil Geography." (Peiping, T'u-jang T'ung-pao, No 5, Oct 62, pp 64-65) (FOR OFFICIAL USE ONLY)

HSIA Wu-p'ing (1115/2976/1627), Institute of Zoology, Chinese Academy of Sciences; author of an article, "On the Population and Home Range of the Greater Wood Mouse." (Peiping, Tung-wu Hsueh-pao, Vol 13, No 1-4, Dec 61, pp 171-182)

HSIAO Kang-jou (5618/0474/2677), Institute of Forestry, Chinese Academy of Forestry Sciences; author of an article, "A Synopsis of Chinese Sawflies of the Subfamily Cephalciinae (Hymenoptera, Pamphiliidae)." (Peiping, Lin-yeh K'o-hsueh, No 1, Jan 63, pp 15-28) (FOR OFFICIAL USE ONLY)

C-O-N-F-I-D-E-N-T-I-A-L

HSIEH Shu-chen, Moscow Agricultural Academy imeni K. A. Timiryazev; author of dissertation for the scientific degree of Candidate of Agricultural Sciences, "Chinese-Type Cucumbers as Initial Material for Selection in Open-Soil Conditions of Non-Chernozem Zones in the USSR," in Russian. (Moscow, Vechernyaya Moskva, 3 Apr 63, p 4)

HSU Le-t'ien, Institute of Cardiovascular Surgery, Academy of Medical Sciences USSR; coauthor with M. V. Murav'yev and L. F. Chuyeva of article, "On the Symptom of Arterial Blood Pressure Difference in Arms and Legs of Patients With Patent Ductus Arteriosus," in Russian; received for publication 16 October 1961. (Moscow, Kardiologiya, Vol 3, No 2, Mar-Apr 63, pp 51-55)

HSU Pin (5171/1755)

LIU Ming-chang (0491/2494/4545)

SHEN Mei-ling (3088/5019/3781)

Ch'EN Jui-t'ing (7115/3843/1250)

WANG Tao-yuan (3769/6670/5373)

All affiliated with Institute of Materia Medica, Chinese Academy of Sciences, Shanghai; coauthors of article, "Studies of the Mechanism of Antitumor Action of Actinomycin K," in English; first published in Chinese in Acta Physiologica Sinica, Volume 24, Number 3 and 4, 1961, 1961, pages 246-253, and Acta Biochimica et Biophysica Sinica, Vol 2, Number 3, 1962, pages 218-255. (Peiping, Scientia Sinica, Vol 12, No 4, Apr 63, pp 535-544)

HSU Tao-i, Moscow State University; author of dissertation for the scientific degree of Candidate of Geological-Mineralogical Sciences, "Early Paleogene Ostracoda in the Central Part of North Caucasus," in Russian. (Moscow, Vechernyaya Moskva, 20 Mar 63, p 4)

HSU T'ien-sen (1776/1131/2773), Bamboo Experimental Station, Chinese Academy of Forestry Sciences

SUN Yung-ch'un (1327/3057/2504), Kiangsu Provincial Institute of Forestry Sciences

Both are coauthors of an article, "Studies on the Control of *Atrachea vulgaris* Butler." (Peiping, Lin-yeh K'o-hsueh, No 4, Oct 62, pp 283-291)

C-O-N-F-I-D-E-N-T-I-A-L

HU Lien-chieh, coauthor with Ye. B. Trostyanskaya, Ye. S. Venkova, L. F. Martynkina, and L. V. Aristovskaya of article, "Application of Phosphorus-Content Resin in the Manufacture of Glass-Textolite and Foam-Plastics," in Russian. (Moscow, Plasticheskiye Massy, No 4, Apr 63, pp 16-18)

HUANG Hsi-pai (7806/1585/0960 + 6296)

LI Chung-cheng (2621/1813/2973)

Both of the Afforestation Department, Nanking Forestry College; co-authors of an article, "The Problem of High Polymer Sugars During Timber Hydrolysis." (Peiping, Lin-yeh K'o-hsueh, No 1, Jan 62, pp 91-92)

JEN Lang (0117/2597); author of an article describing the use, function, and types of antennas at a simplified level. (Peiping, Wu-li T'ung-pao, No 1, Jan 60, pp 18-21)

KAN Chang-ch'uan, Institute of Mathematics, Academy of Sciences USSR; author of dissertation for the scientific degree of Candidate of Physico-mathematical Sciences, "Certain Problems of Stochastic Differential Equations of Higher Orders," in Russian. (Kiev, Pravda Ukrainy, 30 Mar 63, p 4)

KAO Shang-wu (7559/1424/2976), Institute of Forestry, Chinese Academy of Forestry Sciences; author of an article, "A Preliminary Survey of the Deserts and Sandy Deserts of Sinkiang." (Peiping, Lin-yeh K'o-hsueh, No 1, Jan 63, pp 56-67) (FOR OFFICIAL USE ONLY)

KAO Shang-yin (7559/1424/5593); author of a monograph, Tien-tzu Hsien-wei-ching Hsia ti Ping-tu (Viruses Under Electron Microscopes), published by the Science Press. (Peiping, Tung-wu-hsueh T'ung-pao, No 1, Jan 63, p 45) (FOR OFFICIAL USE ONLY)

KUAN Ch'iao, Moscow Higher Technical Institute imeni N. E. Bauman; author of dissertation for the scientific degree of Candidate of Technical Sciences, "Residual Stress, Deformation, and Durability of Laminated Elements of Welded Structures From Titanium Alloys," in Russian. (Moscow, Vechernyaya Moskva, 21 Mar 63, p 4)

C-O-N-F-I-D-E-N-T-I-A-L

- KUAN Chun-wei (7070/0689/5588), Peking Forestry College; author of an article, "Investigations of the Types of Soil and Water Conserving Forests in the Hilly Loess Areas of Kansu Province." (Peiping, Lin-yeh K'o-hsueh, No 4, Oct 62, pp 268-282)
- KUNG Shu-mo (7895/2885/2375), research worker, Purple Mountain Observatory, Chinese Academy of Sciences, "The Age and Life Expectancy of the Sun," (Peiping, K'o-hsueh Ta-chung, No 3, Mar 63, pp 16-17)
- KUO Chen-ch'uan (6753/2182/3123), Biology Department, Peking University; author of an article, "On the Generic Name Chemospirura." (Peiping, Tung-wu Hsueh-pao, Vol 13, No 1-4, Dec 61, p 122)
- KUC Mu-sun (6753/1970/1327), Institute of Chemical Metallurgy, Chinese Academy of Sciences; author of article, "Generalized Fluidization: 1. Steady-State Motion," in English; received for publication 2 Feb 62. (Peiping, Scientia Sinica, Vol 12, No 4, Apr 63, pp 587-612)
- LANG Chang-hsin, Moscow Institute of Petrochemical and Gas Industries, author of dissertation for the scientific degree of Candidate of Technical Sciences, "Investigation of Nonstationary Filtration of Gas in Conformity With Problems Which Arise in Working Gas Deposits and the Creation of Artificial Gasometers," in Russian. (Moscow, Vechernyaya Moskva, 22 Mar 63, p 4)
- LI Cheng-li (2621/2973/6849), Biology Department, Peking University
- CHINTzu-chen (7246/4793/7201), Institute of Lumber Industry, Chinese Academy of Agricultural Sciences
- Coauthors of an article, "Measurement of the Fibers From 12 Varieties of Chinese Bamboos." (Peiping, Lin-yeh K'o-hsueh, No 1, Jan 62, pp 67-72)
- LI Ch'ih-fa, Moscow Institute of Fine Chemical Technology imeni M. V. Lomonosov; author of dissertation for the scientific degree of Candidate of Chemical Sciences, "Physico chemical Bases for Treatment of Stannic Concentrates by the Chloric Method," in Russian. (Moscow, Vechernyaya Moskva, 22 Mar 63, p 4)

C-O-N-F-I-D-E-N-T-I-A-L

LI Shih-lin, Institute of Mathematics, Academy of Sciences USSR; author of dissertation for the scientific degree of Candidate of Physico-mathematical Sciences, "Asymptotic Investigation of Certain Statistical Criteria," in Russian. (Kiev, Pravda Ukrainy, 30 Mar 63, p 4)

LI Ts'ai-hsiu, Moscow Power Engineering Institute; author of dissertation defended and approved by the Higher Certifying Commission for the scientific degree of Candidate of Technical Sciences, "Effect of Turbulence and Non uniformity of Inflow on the Characteristics of Turbine Grids," in Russian. (Moscow, Teploenergetika, No 4, Apr 63, p 94)

LI Tso-lin (2621/0155/2651), Engineering Physics Department, Tsinghua University; author of an article describing the discovery and some properties of niobium. (Peiping, K'o-hsueh Ta-chung, No 3, Mar 63, pp 24-25)

LI Yu, Institute of Virusology imeni D. I. Ivanovskiy, Academy of Medical Sciences USSR; coauthor with O. P. Peterson of article, "Homologous Interference Between Active and Inactivated Vaccinia Virus on Chick Embryo Chorioallantoic Membrane," in Russian; received for publication 26 March 1962. (Moscow, Voprosy Virusologii, No 2, Mar-Apr 63, pp 159-163)

LI Yuan-che (2621/3293/0772)

LI Hsien-tse (2621/0341/3419)

Both of the Institute of Lumber Industry, Chinese Academy of Forestry Sciences; coauthors of an article, "The Measurement of the Sonic Properties of Various Woods." (Peiping, Lin-yeh K'o-hsueh, No 1, Jan 62, pp 59-66)

LIIN Ch'ang-shan (2651/2490/0810)

TS'AI Hsiao-ming (5591/2556/2494)

Both of the Biology Department, Peking University; coauthors of an article on the migration of the marching caterpillar. (Peiping, K'o-hsueh Ta-chung, No 3, Mar 63, pp 1-3)

C-O-N-F-I-D-E-N-T-I-A-L

LIN Kuang-hua (2651/0342/5478)

LEI Yung (7191/3279)

Both of the Biology Department, Kiangsi University; coauthors of an article, "Using of Microquantities of Elements To Affect the Growth of Young Angora Rabbits." (Peiping, Tung-wu-hsueh T'ung-pao, No 1, Jan 63, pp 21-24) (FOR OFFICIAL USE ONLY)

LIU Lien-chu (0491/6647/3796)

T'UNG Yun-shan (0104/0336/1472)

Both of the Parasitology Teaching and Research Section, Seventh Military Medical University; author of an article, "A Morphological Description of the Female Flea Echinophaga ochotona Li." The article's manuscript was read by Prof Li Kuei-chen (2621/6311/4176). (Peiping, Tung-wu Hsueh-pao, Vol 14, No 1, Mar 62, pp 141-144)

LIU T'eng-hui (0491/7506/6540), South China Agriculture College; author of an article, "Problems in the Utilization of Lateritic Slopes." (Peiping, T'u-jang T'ung-pao, No 5, Oct 62, pp 43-47) (FOR OFFICIAL USE ONLY)

LIU Yueh-ying (0491/2588/5391), Institute of Zoology, Chinese Academy of Sciences; author of an article, "On the Fresh Water Gastropods of Pai-yang-tien [lake in hopeh Province]." (Peiping, Tung-wu Hsueh-pao, Vol 13, No 1-4, Dec 61, pp 123-134)

LU Chung-shu (0712/1813/1859)

LIANG Hou-kuo (2733/0624/2654)

Both affiliated with Department of Biology, Lanchow University; coauthors of article, "Induced Respiration in Melon Fruits," in English; received for publication 18 Jan 63. (Peiping, Scientia Sinica, Vol 12, No 4, Apr 63, pp 616-617)

LU Pao-wei (0712/0202/4850); author of an article discussing, in popular terms, the propagation of waves by antennas. (Peiping, Wu-li T'ung-pao, No 1, Jan 60, pp 21-22)

C-O-N-F-I-D-E-N-T-I-A-L

MA Jung-chih (7456/3310/0037), director, Institute of Soils, Chinese Academy of Sciences; author of an article, "Rational Use of the Soil." (Peiping, K'o-hsueh Ta-chung, No 3, Mar 63, pp 1-2)

NI Chao-ai, Institute of Geochemistry and Analytical Chemistry imeni V. I. Vernadskiy; author of dissertation for the scientific degree of Candidate of Chemical Sciences, "Extraction-Photometric Methods for Determining Rare-Earth Elements," in Russian. (Moscow, Vecherryaya Moskva, 19 Mar 63, p 4)

NI Che-ming (0242/0772/2494)

LIANG Shu-ch'uan (2733/2885/2772)

Both affiliated with Institute of Chemistry, Chinese Academy of Sciences, Peiping; coauthors of article, "The Solvent Extraction and Spectrophotometric Determination of Titanium By Means of N-Benzoyl-N-phenylhydroxylamine," in English; received for publication 16 Jan 63. (Peiping, Scientia Sinica, Vol 12, No 4, Apr 63, pp 615-616)

P'AN Ch'eng-tung (3382/2110/3159) Shantung University; author of article, "On Dirichlet's L-Functions," in English; received for publication 8 Dec 62. (Peiping, Scientia Sinica, Vol 12, No 4, Apr 63, p 615)

P'EI Pao-hua (5952/0202/5478), Park and Forest School, Hopeh Agricultural University; author of an article, "Research on the Laws of Annual Growth and Development of Populus tormentosa Carr." (Peiping, Lin-yeh K'o-hsueh, No 4, Oct 62, pp 292-298)

P'ENG Tsu-hou (1756/4371/0624), Shensi Branch, Chinese Academy of Agricultural Sciences; author of an article, "The Loess Mud of An-K'ang Special District, Shensi Province." (Peiping, T'u-jiang T'ung-pao, No 5, Oct 62, pp 30-36) (FOR OFFICIAL USE ONLY)

PING Chih (4426.1807)

P'AN Hsing-kuang (3382/2402/0342)

Both of the Institute of Zoology, Chinese Academy of Sciences; co-authors of an article, "On the Hydrostatic Mechanism of the Carp." (Peiping, Tung-wu Hsueh-pao, Vol 13, No 1-4, Dec 61, pp 33-52)

C-O-N-F-I-D-E-N-T-I-A-L

SHANG Erh-ch'ang (1424/1422/2490), Institute of Electronics, Chinese Academy of Sciences; author of article, "On the Antiwaveguide Propagation in a Nonhomogenous Layer," in English; first published in Chinese in *Acta Physica Sinica*, Vol 17, No 4, 1961, pp 180-190. (Peiping, *Scientia Sinica*, Vol 12, No 4, Apr 63, pp 521-533)

SHAO P'in-hsi, Moscow State University; author of dissertation for the scientific degree of Candidate of Chemical Sciences, "Study of the Behavior of Niobium and Tantalum in Organic Acid Solutions," in Russian. (Moscow, *Vechernyaya Moskva*, 8 Apr 63, p 4)

SHEN Chia-jui (3088/0857/3843)

TAI Ai-yun (2071/1947/7189)

Both of the Institute of Zoology, Chinese Academy of Sciences; authors of an article, "The Copepoda of Wu-li Lake, Wu-hsi, Kiangsu Province I. Calanoida." (Peiping, *Tung-wu Hsueh-pao*, Vol 14, No 1, Mar 62, pp 99-118)

SHEN Chia-jui (3088/0857/3843)

TAI Ai-yun (2071/1947/0061)

Both of the Institute of Zoology, Chinese Academy of Sciences; co-authors of an article, "The Plankton Crustaceans in the Shui-feng Reservoir on the Yalu River." (Peiping, *Tung-wu Hsueh-pao*, Vol 13, No 1-4, Dec 61, pp 135-153)

SHIH Chi-yen (0670/3444/1750), Peking Forestry College; author of an article, "An Examination of Some of the Problems of Movable Hack Lever Winch Stability." (Peiping, *Lin-yeh K'o-hsueh*, No 1, Jan 63, pp 29-40) (FOR OFFICIAL USE ONLY)

SHEN Shen-chiung (3088/0810/3518)

HUNG Meng-min (3162/1322/3046)

CH'EN Hui-chu (7115/5610/3796)

C-O-N-F-I-D-E-N-T-I-A-L

K'UNG Ch'iu-t'ung (1313/4428/2717), Technical Assistant

All Affiliated with Laboratory of Microbiology, Institute of Plant Physiology, Chinese Academy of Sciences, Shanghai; coauthors of article, "Conversion of Alanine Dehydrogenase to Glutamic Dehydrogenase by Nitrous Acid-Induced Mutation in *Bacillus Subtilis*: 1. Similarities of the Two Enzymes in Some Properties," and 2. "The Inductive Formation of Alanine Dehydrogenase in Glutamic Dehydrogenase-Positive Mutants," in English; received for publication 16 Jan 63. (Peiping, *Scientia Sinica*, Vol 12, No 4, Apr 63, pp 545-556 and 557-564, respectively)

SHEN Wen-mei, Institute of Experimental Medicine, Academy of Medical Sciences, USSR; author of article, "Oxidizing Phosphorylation and Optic Density of Mitochondria in Normal and Regenerating Liver of Rat, Given Whole Body X-Irradiation," in Russian; received for publication 28 Sep 62. (Moscow, *Akademiya Nauk SSSR, Radiobiologiya*, Vol 3, No 2, Mar-Apr 63, pp 159-167)

SU Tsung-sung (4725/1350/1529), deputy director, Institute of Irrigation, Chinese Academy of Agricultural Sciences; author of an article, "What Causes Soil Salination?" (Peiping, *Kio-hsueh Ta-chung*, No 3, Mar 63, pp 8-10)

SUN Ch'eng-chih (1327/2052/1807)

LI Nung (2621/4487)

Both of the Institute of Lumber Industry, Chinese Academy of Forestry Sciences; coauthors of an article, "Determination of Moisture Content and Weight of Wood in Green Condition From Some Important Species in Yunnan and Hainan Forest Areas." (Peiping, *Lin-yeh K'o-hsueh*, No 4, Oct 62, pp 307-310)

SUNG Ta-hsiang (1345/1129/4382), Institute of Zoology, Chinese Academy of Sciences; author of an article, "Preliminary Studies on the Culture of *Daphnia magna* Straus." (Peiping, *Tung-wu Hsueh-pao*, Vol 14, No 1, Mar 62, pp 49-62)

T' IEN Ching-ming (3944/2529/2494)

WANG Ch'i-jui (3769/0796/4213)

C-O-N-F-I-D-E-N-T-I-A-L

HUA Wang-k'un (5478/4853/0981)

All of the Forest Management Research Office (Sen-lin Ching-ying Yen-chiu Shih; 2773/2651/4842/3602/4282/4496/1358), Institute of Forestry, Chinese Academy of Forestry Sciences; coauthors of an article, "Studies on the Compilation of Log Volume Tables." (Peiping, Lin-yeh K'o-hsueh, No 2, Apr 62, pp 155-162)

T' IEN Po 93944/3134), Institute of Microbiology, Chinese Academy of Sciences; author of an article, "Regression in the Irish Potato and Its Prevention." (Peiping, Sheng-wu-hsueh T'ung-pao, No 1, Jan 63, pp 17-18) (FOR OFFICIAL USE ONLY)

T' IEN Po (3944/3134)

T'ANG P'ei-sung (2382/0160/2646)

Both affiliated with Institute of Microbiology and Institute of Botany, Chinese Academy of Sciences; coauthors of article, "Oxidative Metabolism of Glucose in Leaf Tissues Infected With Tobacco Mosaic Virus," in English; received for publication 3 Dec 62. (Peiping, Scientia Sinica, Vol 12, No 4, Apr 63, pp 565-573)

TING Chan-ao (0002/0594/7663), Mechanics Teaching and Research Section, Tsinghua University; author of article, "Autos With 'Leaping' Wheels -- A Scientific Hypothesis." (Peiping, K'o-hsueh Ta-chung, No 3, Mar 63, pp 28-29)

TS'AI Chen-yu, Moscow Architectural Institute; author of dissertation for the scientific degree of Candidate of Architecture, "New Types of Public Buildings for Complex Construction in Small Districts," in Russian. (Moscow, Vechernyaya Moskva, 9 Apr 63, p 4)

Ts'AI Tao-chi (5591/6670/1015), Institute of Soils, Chinese Academy of Sciences; author of an article describing the beneficial aspects of a kind of duckweed grown in South China. (Peiping, K'o-hsueh Ta-chung, No 3, Mar 63, pp 26-27)

TSENG Chao-shun (2582/2507/7311)

WANG Ju-yung (3769/3067/2606 + 0276)

C-O-N-F-I-D-E-N-T-I-A-L

MA Ch'ing-lu (7456/1987/7498)

LIU T'ung-sheng (0491/0681/3932)

All of the Institute of Forestry and Soils, Chinese Academy of Sciences; coauthors of an article, "Characteristics of the Micro-regional Distribution of Su-ta Salty Soil in the Northeast." Liu Hsien-shu (0491/7359/6615), Liu Ho-t'ing (0491/6320/1694), and Kuo Ming-jen (6753/2494/0088) also participated in the work reported in this paper. (Peiping, Tzu-jang T'ung-pao [Soil Bulletin], No 5, Oct 62, pp 1-11) (FOR OFFICIAL USE ONLY)

TSENG Ch'ing-hua, Moscow Agricultural Academy; author of dissertation for the scientific degree of Candidate of Technical Sciences, "Formation of Channels at the Bend in a Stream," in Russian. (Moscow, Vechernyaya Moskva, 28 Mar 63, p 4)

TSENG Te-ch'ao (2582/1795/6389), Peking Agricultural Mechanization College; author of an article, "Analysis of the Turning and Pulverizing Processes of Plow Bottom Surfaces on Sandy Loam Soils." (Peiping, Nung-yeh Chi-hsieh Hsueh-pao [Acta Agromechanica Sinica], No 1, Jul 62, pp 37-60)

TS'UI Hsiu-wen, Moscow Institute of Chemical Technology imeni D. I. Mendeleev; author of dissertation for the scientific degree of Candidate of Technical Sciences, "Investigation of the Effect of Adding Iron Ores to Coal Charges in the Coking Process," in Russian. (Moscow, Vechernyaya Moskva, 25 Mar 63, p 4)

TS'UI Hsiu-wen, Moscow Institute of Chemical Technology; coauthor with K. I. Syskov of article, "On the Replacement of OS-Grade Coal in Coking Furnaces by Iron-Ore Concentrates," in Russian. (Moscow, Koks i Khimiya, No 4, Apr 63, pp 8-10)

TS'OU K'uo-en, Leningrad Polytechnical Institute, author of dissertation defended in 1962 and approved by the Higher Certifying Commission for the scientific degree of Candidate of Technical Sciences, "Heat Exchange in Turbulent Flow of Fluid," in Russian. (Moscow, Teploenergetika, No 4, Apr 63, p 93)

C-O-N-F-I-D-E-N-T-I-A-L

TUAN Suan-mou, Institute of Virology, Academy of Medical Sciences USSR; author of article, "Optimal pH and Temperature Conditions for Hemagglutination Test With Japanese Encephalitis Virus Cultivated in Tissue Cultures," in Russian; received for publication 6 April 1962. (Moscow, Voprosy Virusologii, No 2, Mar-Apr 63, pp 176-179)

TUNG Chin-chu (5516/6855/2691), Science Press, Peiping; author of article "Structure of the Separatrix-Cycles of the System $\frac{dx}{dt} = \sum_{i=1}^n a_{ik} x^i y^k$, $\frac{dy}{dt} = \sum_{i=1}^n b_{ik} x^i y^k$ " in English; first published in Chinese in Acta Mathematica Sinica, Vol ume 12, Number 3, 1962, pp 251-257. (Peiping, Scientia Sinica, Vol 12, No 4, Apr 63, pp 475-478)

WAN Wen-jui, Chair of Radiochemistry, Moscow State University; coauthor with B. V. Kharasev, V. B. Luk'yanov, and Yu. A. Priselkov of article, "4- π Counter for Measuring the Absolute Activity of Beta-Emitting Preparations," in Russian; received for publication 28 Jun 61. (Moscow, Vestnik Moskovskogo Universiteta, Seriya 2, Khimiya, No 2, Mar-Apr 63, pp 24-27)

WANG Chi-chun (3769/0679/8823)

Yueh Shu-ch'in (1471/2885/0530)

Both affiliated with Academy of Geological Sciences, Ministry of Geology, Communist China; coauthors of article, "Biogenic Pyrite and Siegenite From Szechwan," in English; received for publication 14 Jan 63. (Peiping, Scientia, Vol 12, No 4, Apr 63, pp 617-620)

WANG Fu-jen, Moscow Agricultural Academy imeni K. A. Timiryazev; author of dissertation for the scientific degree of Candidate of Technical Sciences, "Determination of the Critical Point in the Deterioration of Basic Parts of Tractor Motors Through Speed Tests," in Russian. (Moscow, Vechernyaya Moskva, 29 Mar 63, p 4)

WANG Keng-nan (3769/5087/0589), Biology Department, Nanking University; author of an article, "Notes on the Ecology and Life History of the Parasitic Copepoda Argulus From Chinese Fresh Water Fishes." (Peiping, Tung-wu Hsueh-pao, Vol 13, No 1-4, Dec 61, pp 154-170)

C-O-N-F-I-D-E-N-T-I-A-L

WANG Keng-nan (3769/5087/0589), Biology Department, Nanking University; author of an article, "Two New Species of Parasitic Copepods From Mugil sp." (Peiping, Tung-wu Hsueh-pao, Vol 13, No 1-4, Dec 61, pp 1-10)

WANG Kuang-ch'in (3769/1684/2953), Honan Agricultural College; author of an article, "Some Problems of the Eastern Honan Experimental Shelter Belts and Suggestions for Their Rectification." (Peiping, Lin-yeh K'o-hsueh, No 4, Oct 62, pp 316-320)

WANG K'un-jen (3076/1024/0088), Biology Department, Peking Teachers University; author of an article, "The Physiological Capabilities of the Liver." (Peiping, Tung-wu-hsueh T'ung-pao, No 1, Jan 63, pp 34-38) (FOR OFFICIAL USE ONLY)

WANG Kuo-hsiang, Laboratory of Pathologic Physiology and Experimental Therapy, Institute of Cardiovascular Surgery, Academy of Medical Sciences USSR; coauthor with Yu. S. Chechulin of article, "Cardiac Artery Catheterization in Chronic Experimentation on Dogs," in Russian. (Moscow-Leningrad, Fiziologicheskii Zhurnal SSSR, Vol 49, No 4, Apr 63, pp 510-512)

WANG Tzu-ch'un (3076/1311/2504), Chinese Natural History Research Office (Chung-kuo Tzu-jan K'o-hsueh-shih Yen-chiu Shih; 0022/0948/5261/3544/4430/1331/0670/4382/4496/1358), Chinese Academy of Sciences; author of an item commenting on an earlier article on Chinese paleozoology. (Peiping, Tung-wu-hsueh T'ung-pao, No 1, Jan 63, p 28) (FOR OFFICIAL USE ONLY)

WU Chen-chung (0702/2182/0022), Fukien Forestry College; author of an article, "Microclimatological Observations in Experimental Areas of Improvement-Felling in China-Fir Stands." (Peiping, Lin-yeh K'o-hsueh, No 4, Oct 62, pp 298-303)

WU Ch'un-k'uei (0124/2504/7608), Kwangsi Chuang Autonomous Region Institute of Forestry; author of an article, "Experiments in Fall and Spring Afforestation of Pinus massoniana." (Peiping, Lin-yeh K'o-hsueh, No 2, Apr 62, pp 163-164)

WU Jung (0702/5816), Biology Department, Fu-tan University; author of an article, "Studies on the Effects of Brain Hormone on Pupation in Philosamia cyathia Ricini." (Peiping, Tung-wu Hsueh-pao [Acta Zoologica Sinica], Vol 14, No 1, Mar 62, pp 1-8)

C-O-N-F-I-D-E-N-T-I-A-L

WU Mei-yen, Moscow Textile Institute; coauthor with Z. A. Rogovin, M. A. Tyuganova, T. Ya. Zharova, and Ye. L. Gefter of article, "Synthesis of New Cellulose and Other Polysaccharide Derivatives. 25. Effect of the Composition of Phosphororganic Cellulose Derivatives on the Fire-Resistance of Cellulose Materials," in Russian; received for publication 13 September 1961. (Moscow, Vysokomlekulyarnyye Soyedineniya, Vol 5, No 4, Apr 63, pp 506-511)

WU Shu-ch'ing (0702/3219/0615)

Yin Wen-chen (1438/2429/4176)

Both of the Institute of Zoology, Chinese Academy of Sciences; co-authors of an article, "A New Species of Lung Nematode Belonging to the Genus Bicaulus." (Peiping, Tung-wu Hsueh-pao, Vol 13, No 1-4, Dec 61, pp 16-20)

WU Tsu-ch'ien, Moscow Higher Technical Institute ineni N. E. Bauman; author of dissertation for the scientific degree of Candidate of Technical Sciences, "Investigation of the Effectiveness of Thermal Treatment For the Purpose of Increasing the Brittleness Strength of Welded Structures," in Russian. (Moscow, Vechernyaya Moskva, 21 Mar 63, p 4)

Yang Fu-hsi (2799/1788/2569), Nanking Medical College but conducting research at the Parasitology Teaching and Research Section, Chungshan Medical College under the direction of Prof Ch'en Hsin-t'ao (7115/1800/7113) and with the assistance of Prof Hsu Ping-k'un (1776/4426/6924); author of an article, "Studies on Strigeid Trematodes From Birds II. On a New Genus and Three New Species of Strigeidae." (Peiping, Tung-wu Hsueh-pao, Vol 14, No 1, Mar 62, pp 130-140)

YANG Han-hsi (2799/0698/3556)

CH'EN Chung-chen (7115/6945/6966)

CHANG Shu-jung (1728/3219/2837), all of the Institute of Lumber Industry, Chinese Academy of Forestry Sciences

LI Ch'ang-hus (2621/7022/5478), Institute of Forestry and Soils, Chinese Academy of Sciences

Coauthors of an article, "Research on Patterns and Culturing Techniques for Fast-Growing High-Yield Pine." (Peiping, Lin-yeh K'o-hsueh, No 1, Jan 62, pp 1-10)

C-O-N-F-I-D-E-N-T-I-A-L

YANG Shih, Physico-Technical Laboratory, Academy of Sciences Armenian SSR; author of article, "On the Spectrum of Spin Waves," in Russian. (Yerevan, Doklady Akademii Nauk, Armyanskoy SSR, Vol 36, No 3, 27 Mar 63, pp 163-167)

YANG Wen-chih, Chair of Physics and Melioration of Soils, Moscow State University; author of article, "The Evaporating Power of Soils of the Light-Chestnut Complex," in Russian; received for publication 10 Jan 63. (Moscow, Vestnik Moskovskogo Universiteta, Seriya 6, Biologiya, Pochvovedeniye, No 2, Mar-Apr 63, pp 53-66)

Yeh Hsi-jan (5509/3588/3544), deceased

CHANG Chieh (1728/3381)

WANG Tsung-i (3769/1350/4400)

SHEN Hsiao-chou (3088/1321/1352)

LIN Yung-lieh (2651/3057/3525)

All of the Tsinghai Work Station, Institute of Zoology, Chinese Academy of Sciences; coauthors of an article, "Fauna of the Hunsui River Valley, Tsinghai Province." (Peiping, Tung-wu Hsueh-pao, Vol, 14, No 1, Mar 62, pp 64-73)

YEN Ching-lai, Moscow Institute of Petrochemical and Gas Industries; author of dissertation for the scientific degree of Candidate of Technical Sciences, "Effect of the Degree of Dispersion of the Two-Phase System on the Law of Filtration," in Russian. (Moscow, Vechernyaya Moskva, 22 Mar 63, p 4)

YIN Hang-hsin (1438/5887/0207), Special Economic Forest Laboratory, Kiangsi Provincial Institute of Forestry; author of an article, "On Pruning Rape." (Peiping, Lin-yeh K'o-hsueh, No 2, Apr 62, pp 167-168)

YIN Wen-chen (1438/2429/4176), Institute of Zoology, Chinese Academy of Sciences; author of an article, "A New Species of the Genus Ash-worthius From the Stomach of Lepus mandshuricus Radde." (Peiping, Tung-wu Hsueh-pao, Vol 13, No 1-4, Dec 61, pp 11-15)

C-O-N-F-I-D-E-N-T-I-A-L

YU Hai-liang (1429/3189/6852)

WU Tzu-ho (0124/1311/0735)

Both of the Rape Experimental Station, Institute of Forestry, Chinese Academy of Forestry Sciences; coauthors of an article, "The Formation of Dehiscent Rape and Its Prevention." (Peiping, Lin-yeh K'o-hsueh, No 1, Jan 63, pp 81-85) (FOR OFFICIAL USE ONLY)

YUAN Chia-ming (5913/1367/6900), Institute of Forestry, Szechwan Branch of the Chinese Academy of Sciences; author of an article, "On the Long-Term Pattern of Destruction of the Pinus masonniana Caterpillar." (Peiping, Lin-yeh K'o-hsueh, No 1, Jan 63, pp 87-89) (FOR OFFICIAL USE ONLY)

YUAN Ta-hung (5913/1129/1347)

WANG Shao-kuang (3769/4801/6855 + 0342)

Both of Tsinghua University; coauthors of an article, "A Remote Automatic Control System for Tractors." (Peiping, Hung-yeh Chi-hsieh Hsueh-pao, No 1, Jul 62, pp 77-86)

YUNG Su-k'ien Shakhtersk, Salakhin; author of article, "Exercises To Facilitate Comprehension of Mathematical Concepts," in Russian. (Moscow, Matematika V Shkole, No 2, Mar-Apr 63, pp 49-50)

C-O-N-F-I-D-E-N-T-I-A-L

SUPPLEMENT -- STATUS AND ACTIVITIES OF PROMINENT
SCIENTISTS IN COMMUNIST CHINA

This section presents information on the status and activities of scientists referred to in the Chinese Communist press as "prominent" up to 31 March 1963. Sources are given in parentheses following each item. The following abbreviations have been devised for the sources must frequently used: Kuang-ming -- Peiping, Kung-ming Jih-pao; Jen-min -- Peiping, Jen-min Jih-pao; and Chung-hsin -- Canton, Chung-kuo Hsin-wen.

Medical Sciences

CHANG Ch'ang-shao (1728/2590/4801)

Pharmacologist, participated in the National Conference of Medical Workers held in Peiping from 22 February to 10 March (Jen-min, 17 Mar 63, p 1)

Chief of the compiling staff for abook, Yao-li-shueh Chin-ch an (Advances in Pharmacology), published in 1962 by the Shanghai Scientific and Technical Publishers (Jen-min, 18 Mar 63, p 4)

CHUANG Chun (1728.6874)

Chairman, board of directors, Chinese Society of Anatomy (Kuang-ming, 6 Sep 62)

Specialist in anatomy, attended a New Year's party for more than 300 medical and health workers in Peiping (Kuang-ming, 2 Feb 63, p 1)

Participated in a National Conference of Medical Workers held in Peiping from 22 February to 10 March (Jen-min, 17 Mar 63, p 1)

CHANG Hsi-chun (1728/6932/6874)

Physiologist, attended a New Year's party for more than 300 medical and health workers in Peiping (Kuang-ming, 2 Feb 63, p 1)

Participated in the National Conference of Medical Workers held in Peiping from 22 February to 10 March (Jen-min, 17 Mar 63, p 1)

C-O-N-F-I-D-E-N-T-I-A-L

CHANG Hsiao-ch'ien (1728/1321/7505)

Doctor of internal medicine, attended a New Year's party for more than 300 medical and health workers in Peiping (Kuang-ming, 2 Feb 63, p 1)

Served as a member of the funeral committee for Jan Hsueh-feng (0373/7185/1496) (Jen-min, 1 Feb 63, p 4)

Participated in the National Conference of Medical Workers held in Peiping from 22 February to 10 March (Jen-min, 17 Mar 63, p 1)

CH'ENG Men-hsueh (4453/7024/7185)

Doctor of traditional Chinese medicine, attended a reception given by Chou En-lai prior to a Scientific and Technical Conference in Shanghai (Kuang-ming, 31 Jan 63, p 1)

Participated in the National Conference of Medical Workers held in Peiping from 22 February to 10 March (Jen-min, 17 Mar 63, p 1)

CH'IN Po-wei (4440.0130/2607)

Doctor of traditional Chinese medicine, attended a New Year's party for more than 300 medical and health workers in Peiping (Kuang-ming, 2 Feb 63, p 1)

Participated in the National Conference of Medical Workers held in Peiping from 22 February to 10 March (Jen-min, 17 Mar 63, p 1)

CHU Fu-t'ang (6175/4395/2768)

Pediatrician, attended a New Year's party for more than 300 medical and health workers in Peiping (Kuang-ming, 2 Feb 63, p 1)

Participated in the National Conference of Medical Workers held in Peiping from 22 February to 10 March (Jen-min, 17 Mar 63, p 1)

HOU Pao-chang (0186/1405/3864)

Pathologist, attended a New Year's party for more than 300 medical and health workers in Peiping (Kuang-ming, 2 Feb 63, p 1)

Participated in the National Conference of Medical Workers held in Peiping from 22 February to 10 March (Jen-min, 17 Mar 63, p 1)

C-O-N-F-I-D-E-N-T-I-A-L

HSU Chi-han (1776/1323/0698)

Doctor of traditional Chinese medicine, attended a New Year's party for more than 300 medical and health workers in Peiping (Kuang-ming, 2 Feb 63, p 1)

HSU Ying-k'uei (6079/5391/7608)

Neurologist, attended a New Year's party for more than 300 medical and health workers in Peiping (Kuang-ming, 2 Feb 63, p 1)

HU Cheng-hsiang (5170/2973/4382)

Pathologist, participated in the National Conference of Medical Workers held in Peiping from 22 February to 10 March (Jen-min, 17 Mar 63, p 1)

HU C'uan-k'uei (5170/0278/2247)

Dermatologist, attended a New Year's party for more than 300 medical and health workers in Peiping (Kuang-ming, 2 Feb 63, p 1)

HUANG Chia-ssu (7806/1367/7475)

Chest surgeon, attended a reception for more than 100 prominent scientists held by Liu Shao-ch'i (Kuang-ming, 28 Jan 63, p 2)

Attended a New Year's party for more than 300 medical and health workers in Peiping (Kuang-ming, 2 Feb 63, p 1)

Served as a member of the funeral committee for Jan Hsueh-feng (0373/7185/1496) (Jen-min, 1 Feb 63, p 4)

Participated in the National Conference of Medical Workers held in Peiping from 22 February to 10 March (Jen-min, 17 Mar 63, p 1)

KAO L-sheng (7559/1837/3932)

Member of the Institute of Materia Medica, Chinese Academy of Sciences, Shanghai. Coauthor of an article, "Tumor Chemotherapy" (Peiping, Scientia Sinica, Vol 12, No 1, Jan 63, pp 49-71)

C-O-N-F-I-D-E-N-T-I-A-L

LIN Ch'iao-chih (2651/1564/4460)

Obstetrician, participated in the National Conference of Medical Workers held in Peiping from 22 February to 10 March (Jen-min, 17 Mar 63, p 1)

MA Wen-chao (7456/2429/2507)

Histoembryologist, participated in the National Conference of Medical Workers held in Peiping from 22 February to 10 March (Jen-min, 17 Mar 63, p 1)

NI Pao-ch'in (0242/5508/2504)

Plastic surgeon, vice-president of the Shanghai Second Medical College. Husband of Obstetrician Wang Shu-chen (3769/3219/6297). Between 1919 and 1926, studied medicine at the University of Chicago and Johns Hopkins. (Chung-hsin, 9 Feb 63, p 10)

P'U Fu-chou (5543/6534/0719)

Doctor of traditional Chinese medicine, attended a reception for more than 100 prominent scientists held by Liu Shao-ch'i, (Kuang-ming, 28 Jan 63, p 2)

Attended a New Year's party for more than 300 medical and health workers in Peiping (Kuang-ming, 2 Feb 63, p 1)

Served as a member of the funeral committee for Jan Hsueh-feng (0373/7185/1496) (Jen-min, 1 Feb 63, p 4)

SHEN K'o-fei (3088/0344/7236)

Surgeon, attended a reception given by Chou En'lai prior to a Scientific and Technical Conference in Shanghai. (Kuang-ming, 31 Jan 63, p 1)

WU Ying-k'ai (0702/5391/1956)

Surgeon, attended a New Year's party for more than 300 medical and health workers in Peiping (Kuang-ming, 2 Feb 63, p 1)

Biological and Agricultural Sciences

CHANG Chao-ch'ien (1728/5128/7505)

Botanist, participated in the National Agricultural Scientific Work Conference that opened in Peiping on 8 February (Kuang-ming, 9 Feb 63, p 1)

CHANG Hsiang-t'ung (1728/7440/2717)

Biologist, attended a reception given by Chou En'lai prior to a Scientific and Technical Conference in Shanghai (Kuang-ming, 31 Jan 63, p 1)

CHAO Hung-chang (6392/3163/3864)

Wheat specialist, participated in the National Agricultural Scientific Work Conference that opened in Peiping on 8 February (Kuang-ming, 9 Feb 63, p 1)

CH'EN Hua-kuei (7115/5478/4097)

Pedologist and Microbiologist, participated in the National Agricultural Scientific Work Conference that opened in Peiping on 8 February (Kuang-ming, 9 Feb 63, p 1)

CH'ENG Shao-hui (4453/4801/6616)

Veterinarian, participated in the National Agricultural Scientific Work Conference that opened in Peiping on 8 February (Kuang-ming, 9 Feb 63, p 1)

CHENG Wan-chun (6774/5502/6674)

Forestry specialist, participated in the National Agricultural Scientific Work Conference that opened in Peiping on 8 February (Kuang-ming, 9 Feb 63, p 1)

C-O-N-F-I-D-E-N-T-I-A-L

CH'IN Jen-ch'ang (4440/0088/2490)

Specialist in botanical classification, member of the committee of the Department of Biology, Chinese Academy of Sciences. He directs the studies of graduate student Chang Chih-yu (1728/5347/3768) (f) Kuang-ming, 29 Jan 63, p 2)

CHIN Shan-pao (6855/0810/1405)

Wheat Expert, attended a reception for more than 100 prominent scientists held by Liu Shao-ch'i (Kuang-ming, 28 Jan 63, p 2)

Participated in the National Agricultural Scientific Work Conference that opened in Peiping on 8 February (Kuang-ming, 9 Feb 63, p 1)

Chairman, Board of Directors, Chinese Society of Crop Production (Kuang-ming, 3 Jan 62)

Author of Chung-kuo Hsiao-mai Tsai-p'ei Hsueh [Chinese Wheat Cultivation] (Peiping, K'o-hsueh T'ung-pao, Mar 62)

Deputy Director, Chinese Academy of Agricultural Sciences (Kuang-ming, 15 Mar 63, p 2)

CHOU Ming-tsang (0719/2494/3647)

Entomologist, participated in the National Agricultural Scientific Work Conference that opened in Peiping on 8 February (Kuang-ming, 9 Feb 63, p 1)

CHU Chi-fan (2612/3444/0416)

Forestry specialist, participated in the National Agricultural Scientific Work Conference that opened in Peiping on 8 February (Kuang-ming, 9 Feb 63, p 1)

CHU Hung-fu (2612/1738/1788)

Entomologist, participated in the National Agricultural Scientific Work Conference that opened in Peiping on 8 February (Kuang-ming, 9 Feb 63, p 1)

C-O-N-F-I-D-E-N-T-I-A-L

CHU Ming-k'ai (2612/2494/0418) (f)

Deputy Director, Institute of Olericulture, Chinese Academy of [Agricultural] Sciences, (Jen-min, 5 Mar 63, p 2)

CHU Shu-p'ing (2619/2885/1456)

Aquatic products specialist, participated in the National Agricultural Scientific Work Conference that opened in Peiping on 8 February (Kuang-ming, 9 Feb 63, p 1)

CHUANG Hsiao-hui (5445/1321/1920)

Member of the Institute of Experimental Biology, Chinese Academy of Sciences, coauthor, with Wang Ya-hui (3769/0068/6540) and Ts'eng Mi-pai (2502/1736/4101), of an article, "The Inductive Effect of Tadpole Extract" (Peiping, T'ung-pao, No 2, Feb 63, pp 36-37)

FENG Te-p'ei (7458/1795/1014)

Biologist, attended a reception given by Chou En-lai prior to a Scientific and Technical Conference in Shanghai (Kuang-ming, 31 Jan 63, p 1)

HSIUNG I (3574/3015)

Pedologist, participated in the National Agricultural Scientific Work Conference that opened in Peiping on 8 February (Kuang-ming, 9 Feb 63, p 1)

HU Ching-liang (5170/4544/5328)

Cotton specialist, participated in the National Agricultural Scientific Work Conference that opened in Peiping on 8 February (Kuang-ming, 9 Feb 63, p 1)

LI Ch'ing-ta (2621/1987/6671)

Pedologist, participated in the National Agricultureal Scientific Work Conference that opened in Peiping on 8 February (Kuang-ming, 9 Feb 63, p 1)

C-O-N-F-I-D-E-N-T-I-A-L

LIN Jung (2651/6954)

Botanist, Participated in the National Agricultural Scientific Work Conference that opened in Peiping on 8 February (Kuang-ming, 9 Feb 63, p 1)

LIU Shen-o (0491/1957/6948)

Forestry specialist, participated in the National Agricultural Scientific Work Conference that opened in Peiping on 8 February (Kuang-ming, 9 Feb 63, p 1)

LO Ch'ing-sheng (5012/3237/3932)

Veterinarian, participated in the National Agricultural Scientific Work Conference that opened in Peiping 8 February (Kuang-ming, 9 Feb 63, p 1)

Studied Veterinary Medicine in the U.S., returned to China in 1923. Presently Vice-president of Nanking Agricultural College and a delegate to the Kiangsu Provincial People's Congress. (Chung-hsin, 19 Feb 63, p 5)

LOU Ch'eng-hou (1236/2052/0683)

Plant physiologist, participated in the National Agricultural Scientific Work Conference that opened in Peiping on 8 February (Kuang-ming, 9 Feb 63, p 1)

MA Jung-chih (7456/3310/0037)

Pedologist, participated in the National Agricultural Scientific Work Conference that opened in Peiping on 8 February (Kuang-ming, 9 Feb 63, p 1)

Director, Institute of Soils, Chinese Academy of Sciences. Investigated the distribution of soils in the Northeast and presented a report on soils and their utilization to the Institute of Forestry (Kuang-ming 7 Jul 63)

C-O-N-F-I-D-E-N-T-I-A-L

MA Shih-chun (7456/0013/7486)

Author of an article, "The Structure and Transformation of the Oriental Locust Breeding Areas" (Peiping, K'un-ch'ung Hsueh-pao [Acta Entomologica Sinica], Vol 11, No 1, 1962)

SHEN Ch'i-i (3088/0366/4135)

Plant pathologist, participated in the National Agricultural Scientific Work Conference that opened in Peiping on 8 February (Kuang-ming, 9 Feb 63, p 1)

TAI Fang-lan (2071/5364/3482)

Microbiologist, participated in the National Agricultural Scientific Work Conference that opened in Peiping on 8 February (Kuang-ming, 9 Feb 63, p 1)

TAI Hung (2071/1738)

Pedologist, attended a reception given by Chou En-lai prior to a Scientific and Technical Conference in Shanghai (Kuang-ming, 31 Jan 63, p 1)

T'ANG I-jen (3282/6654/0086)

Animal husbandry specialist, participated in the National Agricultural Scientific Work Conference that opened in Peiping on 8 February (Kuang-ming, 9 Feb 63, p 1)

T'ANG P'ei-sung (3282/0160/2646)

Deputy Director, Institute of Botany, Chinese Academy of Sciences, delivered a report on the problem of increasing unit area production from the standpoint of the efficiency of light utilization by plants at a conference held by the Institute of Aquatic Biology, Chinese Academy of Sciences (Kuang-ming, 20 Mar 63, p 1)

TENG Shu-ch'un (6772/0647/5028)

Microbiologist, participated in the National Agricultural Scientific Work Conference that opened in Peiping on 8 February (Kuang-ming, 9 Feb 63, p 1)

C-O-N-F-I-D-E-N-T-I-A-L

TING Ying (0002/4481)

Expert on paddy rice, attended a reception for more than 100 prominent scientists held by Liu Shao-ch'i (Kuang-ming, 28 Jan 63, p 2)

Participated in the National Agricultural Scientific Work Conference that opened in Peiping on 8 February (Kuang-ming, 9 Feb 63, p 1)

Director, Chinese Academy of Agricultural Sciences (Kuang-ming, 10 Feb 63, p 1)

Presided at a discussion in Canton, by more than 20 specialists, professors, and research personnel, on 1962 research into the characteristic reactions of various kinds of rice to light and heat conditions. (Jen-min, 12 Feb 63, p 2)

Is presently carrying on large-scale research in the ecology of paddy rice, and is planning the establishment of a national laboratory of paddy rice ecology (Chung-hsin, 27 Feb 63, p 6)

TS'AI Hsu (5591/2485)

College professor and expert on wheat, participated in discussions between agriculture specialists and labor models in Peiping, stressed the need for a good wheat harvest in 1963 (Kuang-ming, 7 Jan 63, p 1)

Participated in the National Agricultural Scientific Work Conference that opened in Peiping on 8 February (Kuang-ming, 9 Feb 63, p 1)

Supported the improvement of agriculture in the suburban areas of Peiping, cooperated with cadres and old peasants in a study of drought conditions there (Jen-min, 19 Feb 63, p 2)

Professor, Peking Agricultural University, author of "How the Peiping Area Can Obtain an Increased Wheat Harvest This Year" (Peiping, Ta Kung Pao, 1 Mar 63, p 2)

TS'AI Pang-hua (5591/6721/5478)

Entomologist, participated in the National Agricultural Scientific Work Conference that opened in Peiping on 8 February (Kuang-ming, 9 Feb 63, p 1)

C-O-N-F-I-D-E-N-T-I-A-L

TSENG Ch'eng-k'uei (2582/0701/1145)

Marine Biologist, has been instrumental in developing the cultivation of seaweed in China. (Kuang-ming, 15 Mar 63, p 2)

WANG Shou (3769/4849)

Soybean specialist, President of Shansi Agricultural College, presented two papers to the 1962 annual conference of the Shansi Province Society of Agriculture and Horticulture although he was hospitalized at the time (Peiping, Chin-jih Hsin-wen, 7 Jan 63, p 9)

Former Director, Institute of Crop Breeding and Cultivation (Kuang-ming, 21 Apr 62)

His teaching assistant at Shansi Agricultural College is Liang T'ai-k'ang (2733/1132/1660) (Kuang-ming, 18 Jul 62)

WU Hsien-wen (0124/3759/2429)

Ichthyologist, Participated in the National Agricultural Scientific Work Conference that opened in Peiping on 8 February (Kuang-ming, 9 Feb 63, p 1)

Deputy Director, Institute of Hydrobiology, Chinese Academy of Sciences. With assistance of graduate students, wrote Chung-kuo Ching-chi Tung-wu Chih--Tan-shui Yu-lei [China's Economic Animals--Fresh-water Fish] (Kuang-ming, 5 Oct 62)

YIN Hung-chang (3009/1347/4545)

Plant physiologist, participated in the National Agricultural Scientific Work Conference that opened in Peiping on 8 February (Kuang-ming, 9 Feb 63, p 1)

Author of an article, "Plant Physiology and Agricultural Production" (Jen-min, 2 Feb 63, p 5)

Author of an article, "Study CHU Hsi (2612/3156) [the late director, Institute of Experimental Biology]" (Peiping, K'o-hsueh T'ung-pao, No 1, Jan 63, pp 49-52)

C-O-N-F-I-D-E-N-T-I-A-L

YU Ch'i-pao (0205/0796/5508)

Deputy Director, Shensi Branch of the Academy of Agricultural Sciences, cotton specialist. He has studied the techniques of raising cotton in dry areas for 10 years, and has written several articles on the subject (Kuang-ming, 2 Feb 63, p 2)

Participated in the national Agricultural Scientific Work Conference that opened in Peiping on 8 February (Kuang-ming, 9 Feb 63, p 1)

Carried on long-term experiments and observations in cooperation with instructors of Northwest Agricultural College to determine the suitability of the Wei-pai Plateau [North of the Wei Ho] to raising cotton (Kuang-ming, 17 Feb 63, p 1)

Chemistry

CHAO Ch'eng-hsia (6392/2110/2538)

Pharmaceutical chemist, was instrumental in determining the chemical structure of dl-Tetrahydropalamatine [an alkaloid found in some Chinese medicinal herbs] (Sanghai, Shang-hai Shih K'o-hsuen Chi-shu Lun-wen Hsuan-chi [a selection of Shanghai Scientific and Technical Papers], Vol 6, 1960, p 285 [For Official Use Only])

HUANG Ming-lung (7806/7686/7893)

Chemist, attended a reception given by Chou En-lai prior to a Scientific and Technical Conference in Shanghai (Kuang-ming, 31 Jan 63, p 1)

Pharmaceutical chemist, participated in the National Conference of Medical Workers held in Peiping from 22 February to 10 March (Jen-min, 17 Mar 63, p 1)

TS'AO T'ien-ch'in (2580/1131/2953)

Member of the Institute of Biochemistry, Chinese Academy of Sciences, Shanghai. Coauthor, with Lu Tzu-hsien (7627/1311/6343), of an article, "Linear Polymerization of the S-Sulphonate of the B-Chain of Insulin" (Peiping, Scientia Sinica, Vol 12, No 1, Jan 63, pp 83-100)

C-O-N-F-I-D-E-N-T-I-A-L

YANG Shih-hsien (2799/4258/0341)

Chemist, President of Nankai University. Since beginning research in insecticides in 1956, his school has developed more than 10 kinds, and intends to have the best of these in production within a relatively short period of time. He is presently advising three graduate students, and plans to add one or two more. (Calcutta, Chung-kuo Hsin-wen, 22 Mar 63, p 1)

Participated in the National Agricultural Scientific Work Conference that opened in Peiping on 8 February (Kuang-ming, 9 Feb 63, p 1)

Mathematics

CHIANG Tse-han (3068/3419/3211)

Author of an article, "Concerning the Singular Points of a Plane Vector Field at Infinity" (Peiping, Shu-hsueh Chin-chan, Vol 5, No 2, 1962, pp 171-175)

HSIUNG Ch'ing-lai (3574/1987/0171)

Mathematician, at more than 70 years of age, can no longer write with his right hand. Although he knows French, German, and English, he has recently been studying Russian and can already read it, although his pronunciation is not accurate. (Jen-min, 25 Mar 63, p 2)

HUA Lo-keng (5450/5012/1649)

Mathematician, attended a reception for more than 100 prominent scientists held by Liu Shao-ch'ei (Kung-ming, 28 Jan 63, p 2)

Delivered a lecture at a program for popularization of scientific knowledge in Peiping (Kuang-ming, 24 Feb 63, p 2)

Coauthor, with Wang Yuan (3769/0337), of a book, Chi-fen-te Chin-ssu Chi-suan (Integral Approximate Calculation) Peiping, K'o-hsueh T'ung-pao, No 2, Feb 63, p 46)

SU Pu-ch'ing (5685/2975/7230)

Mathematician, attended a reception given by Chou En-lai prior to a Scientific and Technical Conference in Shanghai (Kuang-ming, 31 Jan 63, p 1)

C-O-N-F-I-D-E-N-T-I-A-L

Vice-chairman, Shanghai Scientific and Technical Association, arranged accommodations for visiting member of the British Royal Society and cryogenics specialist Mendelson [?] (Shanghai, Chieh-fang Jih-pao, 26 Sep 62, p 2)

CHAO Chiu-chang (6392/0046/4545)

Delivered a lecture at a program for the popularization of scientific knowledge in Peiping (Kuang-ming, 24 Feb 63, p 2)

CH'LEN San-ch'iang (6929/0005/1730)

Atomic physicist, attended a reception for more than 100 prominent scientists held by Shao-ch'i (Kuang-ming, 28 Jan 63, p 2)

Delivered a lecture at a program for popularization of scientific knowledge in Peiping. (Kuang-ming, 24 Feb 63, p 2)

CHOU P'ei-yuan (0719/1014/3293)

Was present when President of the Chinese Academy of Sciences, Kuo Mo-jo received visiting Indonesian University Professor Ts'eng Chu-sen (2582/3796/2773) (Peiping, Chin-jih Hsin-wen, 16 Feb 63, p 3)

Delivered a lecture at a program for popularization of scientific knowledge in Peiping (Kuang-ming, 24 Feb 63, p 2)

Member of the Secretariat, Chinese Scientific and Technical Association, led a three-man delegation to the 18th session of the Executive Bureau, World Federation of Scientific Workers, held in Geneva on 23-24 February (Jen-min, 4 Mar 63, p 6)

CHOU T'ung-ch'ing (0719/0681/1987)

Coauthor of Shou-k'ung Jo-ho Fan-ying (Controlled Thermonuclear Reaction) published by Shanghai Scientific and Technical Publishers (Peiping, K'o-hsueh T'ung-pao, No 1, Jan 63, p 69)

Professor, Fudan University, Chairman of the Board of Directors of the Shanghai Physical Society, was at the railway station to see off visiting member of the Royal Society and cryogenics specialist Mendelson (Shanghai, Chieh-fang Jih-pao, 26 Sep 62, p 2)

C-O-N-F-I-D-E-N-T-I-A-L

CHU Wu-hua (2612/3670/5478)

Physicist, attended a reception given by Chou En-lai prior to a Scientific and Technical Conference in Shanghai (Kuang-ming, 31 Jan 63, p 1)

WU Yu-hsun (0702/2598/6064)

Physicist, attended a reception for more than 100 prominent scientists held by Liu Shao-ch'i (Kuang-ming, 28 Jan 63, p 2)

YEN Chi-tz-u (0917/3444/1964)

Delivered a lecture at a program for popularization of scientific knowledge in Peiping (Kuang-ming, 24 Feb 63, p 2)

Engineering and Metallurgy

CHANG Kuang-tou (1728/0342/2435)

Water conservancy specialist, participated in the National Agricultural Scientific Work Conference that opened in Peiping on 8 February (Kuang-ming, 9 Feb 63, p 1)

CHANG Tzu-lin (1728/1311/2651)

Water Conservancy Specialist, participated in the National Agricultural Scientific Work Conference that opened in Peiping on 8 February (Kuang-ming, 9 Feb 63, p 1)

CH'ENG Hsiao-kang (4453/1321/0474)

Specialist in Engineering Technology, attended a reception given by Chou En-lai prior to a Scientific and Technical Conference in Shanghai (Kuang-ming, 31 Jan 63, p 1)

CH'LEN Hsueh-sen (6929/1331/2773)

Specialist in Mechanics, attended a reception for more than 100 prominent scientists held by Liu Shao-ch'i (Kuang-ming, 28 Jan 63, p 2)

C-O-N-F-I-D-E-N-T-I-A-L

CHOU Chih-hung (0719/1807/1347)

Metallurgist, attended a reception given by Chou En-lai prior to a Scientific and Technical Conference in Shanghai (Kuang-ming, 31 Jan 63, p 1)

CHOU Jen (0719/0088)

Metallurgist, attended a reception given by Chou En-lai prior to a Scientific and Technical Conference in Shanghai (Kuang-ming, 31 Jan 63, p 1)

LI Ken-t'ung (262105327/0681)

Specialist in engineering technology, attended a reception given by Chou En-lai prior to a Scientific and Technical Conference in Shanghai (Kuang-ming, 31 Jan 63, p 1)

LIU Hsien-chou (0491/0103/3166)

Machinery specialist, first vice-president of Tsinghua University, elected chairman of the Board of Directors of the Chinese Society of Agricultural Machinery at its founding conference. (Kuang-ming, 6 Mar 63, p 2)

MENG Ch'ing-yuan (1322/1987/0337)

Specialist in Engineering technology, attended a reception given by Chou En-lai prior to a Scientific and Technical Conference in Shanghai (Kuang-ming, 31 Jan 63, p 1)

SU Tsung-sung (4725/1350/1529)

Water conservancy specialist, participated in the National Agricultural Scientific Work Conference that opened in Peiping on 8 February (Kuang-ming, 9 Feb 63, p 1)

T'AO Ting-lai (7118/7844/0171)

Agricultural machinery specialist, participated in the National Agricultural Scientific Work Conference that opened in Peiping on 8 February (Kuang-ming, 9 Feb 63, p 1)

C-O-N-F-I-D-E-N-T-I-A-L

Deputy Director, Chinese Academy of Agricultural Mechanization, assisted Peiping Agricultural Machinery departments in analyzing the conditions in the suburban areas (Kuang-ming, 19 Feb 63, p 1)

Miscellaneous Fields

CHANG Yu-che (1728/6877/0772)

Director, Purple Mountain Observatory, specializes in research on planetoids. He is currently working as assistant, Chang Chia-hsiang (1728/1367/4382) (Hanoi, Bao Tan Viet Hoa, 15 Jan 63, p 4)

CHU K'o-chen (4555/0668/2823)

Geographer, attended a reception for more than 100 prominent scientists held by Liu Shao-ch'i (Kuang-ming, 28 Jan 63, p 2)

Geographer-meterologist, participated in the National Agricultural Work Conference that opened in Peiping on 8 February (Kuang-ming, 9 Feb 63, p 1)

LI Ssu-kuang (2621/0934/0342)

Chairman, Chinese Scientific and Technological Association (Chung-hsin, 14 Aug 62)

Chairman, board of directors, Geological Society of China, delivered a report to the 34th annual conference of that organization on "Glacial Sediment and Glacial Brick of the Quaternary Period on the Northwest Border of the North China Plain" (Chung-hsin, 7 Jan 63, p 10)

Vice-chairman of the National Committee, People's Political Consultative Conference, attended a reception held by the Burmese charge d'affaires in Peiping to celebrate the 15th anniversary of Burmese independence (Jen-min, 5 Jan 63, p 1)

Was among the responsible persons from related fields attending the National Agricultural Scientific Work Conference that opened in Peiping on 8 February (Kuang-ming, 9 Feb 63, p 1)

Attended a party celebrating the 13th anniversary of the Sino-Soviet Friendship Treaty (Kuang-ming, 14 Feb 63, p 1)

C-O-N-F-I-D-E-N-T-I-A-L

Attended a party given by the Pakistani Ambassador in celebration of Pakistan's National Day. (Kuang-ming, 24 Mar 63, p 1)

WU Ju-k'ang (0702/3067/1660)

Vice-chairman, board of directors, Chinese Society of Anatomy (Kuang-ming, 6 Sep 62)

Author of a book, Chu-yuang Hsia-ho-ku Ya-ch'ih Hua-shih (Fossils of the Teeth and Lower Jaw of Gigantopithecus) (Peiping, Shen-wu-hsueh T'ung-pao, No 1, Jan-Feb 63, pp 54-55) [For Official Use Only]

YIN Tsan-hsun (1438/6363/0534)

Was dismissed from his position as vice-president, Peking Geology College, by a State Council action of 23 February (Jen-min, 1 Mar 63, p 4)

Wrote the introduction for a book, Ch-uan-kuo K'o-ssu-t'e Yen-chiu Hui-i Lun-wen Hsuan-chi (Selected Papers from the National Research Conference on Karst) (Peiping, K'o-hsueh T'ung-pao, No 1, Jan 63, pp 72-73)

* * *

Washington, DC 20505

7 September 2004

Ms. Roberta Schoen
Deputy Director for Operations
Defense Technical Information Center
7725 John J. Kingman Road
Suite 0944
Ft. Belvoir, VA 22060

Dear Ms. Schoen:

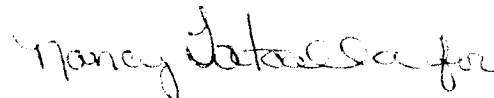
In February of this year, DTIC provided the CIA Declassification Center with a referral list of CIA documents held in the DTIC library. This referral was a follow on to the list of National Intelligence Surveys provided earlier in the year.

We have completed a declassification review of the "Non-NIS" referral list and include the results of that review as Enclosure 1. Of the 220 documents identified in our declassification database, only three are classified. These three are in the Release in Part category and may be released to the public once specified portions of the documents are removed. Sanitization instructions for these documents are included with Enclosure 1.

In addition to the documents addressed in Enclosure 1, 14 other documents were unable to be identified. DTIC then provided the CDC with hard copies of these documents in April 2004 for declassification review. The results of this review are provided as Enclosure 2.

We at CIA greatly appreciate your cooperation in this matter. Should you have any questions concerning this letter and for coordination of any further developments, please contact Donald Black of this office at (703) 613-1415.

Sincerely,



Sergio N. Alcivar
Chief, CIA Declassification Center,
Declassification Review and Referral
Branch

Enclosures:

1. Declassification Review of CIA Documents at DTIC (with sanitization instructions for 3 documents)
2. Declassification Status of CIA Documents (hard copy) Referred by DTIC (with review processing sheets for each document)



Processing of OGA-Held CIA Documents

The following CIA documents located at DTIC were reviewed
by CIA and declassification guidance has been provided.

OGA Doc ID	Job Num	Box	Fldr	Doc	Doc ID	Document Title	Pub Date	Pages	Decision	Proc Date
AD0335308	78-03117A	194	1	23	4363	Scientific Information Report Chemistry And Metallurgy (26)	3/7/1963	71	Approved For Release	3/25/2004
AD0335625	78-03117A	197	1	3	4460	Scientific Information Report Chemistry And Metallurgy (27)	4/4/1963	51	Approved For Release	3/25/2004
AD0336825	78-03117A	199	1	26	4562	Scientific Information Report Chemistry And Metallurgy (28)	5/9/1963	70	Approved For Release	3/25/2004
AD0332150	78-03117A	183	1	5	3916	Scientific Information Report Chinese Science (11)	10/4/1962	52	Approved For Release	3/29/2004
AD0332434	78-03117A	183	1	40	3951	Scientific Information Report Chinese Science (12)	10/19/1962	59	Approved For Release	3/29/2004
AD0332795	78-03117A	184	1	37	3988	Scientific Information Report Chinese Science (13)	11/5/1962	48	Approved For Release	3/29/2004
AD0333069	78-03117A	186	1	7	4028	Scientific Information Report Chinese Science (14)	11/16/1962	30	Approved For Release	3/29/2004
AD0333148	78-03117A	187	1	19	4078	Scientific Information Report Chinese Science (15)	11/29/1962	44	Approved For Release	3/29/2004
AD0333835	78-03117A	189	1	6	4144	Scientific Information Report Chinese Science (16)	12/21/1962	65	Approved For Release	3/29/2004
AD0334108	78-03117A	190	1	2	4179	Scientific Information Report Chinese Science (17)	1/10/1963	56	Approved For Release	3/29/2004
AD0334105	78-03117A	191	1	12	4230	Scientific Information Report Chinese Science (18)	1/18/1963	25	Approved For Release	3/29/2004
AD0334378	78-03117A	192	1	21	4277	Scientific Information Report Chinese Science (19)	2/1/1963	27	Approved For Release	3/29/2004
AD0334433	78-03117A	193	1	22	4322	Scientific Information Report Chinese Science (20)	2/15/1963	28	Approved For Release	3/29/2004
AD0335021	78-03117A	194	1	37	4377	Scientific Information Report Chinese Science (21)	3/8/1963	59	Approved For Release	3/29/2004
AD0335847	78-03117A	198	1	33	4526	Scientific Information Report Chinese Science (22)	4/18/1963	61	Approved For Release	3/29/2004
AD0336327	78-03117A	200	1	3	4578	Scientific Information Report Chinese Science (23)	5/2/1963	68	Approved For Release	3/29/2004
AD0337167	78-03117A	201	1	26	4643	Scientific Information Report Chinese Science (24)	5/23/1963	95	Approved For Release	3/29/2004
AD0337777	78-03117A	202	1	27	4687	Scientific Information Report Chinese Science (25)	6/6/1963	52	Approved For Release	3/29/2004
AD0338474	78-03117A	203	1	27	4727	Scientific Information Report Chinese Science (26)	6/20/1963	83	Approved For Release	3/29/2004
AD0338687	78-03117A	204	1	32	4772	Scientific Information Report Chinese Science (27)	7/5/1963	80	Approved For Release	3/29/2004
AD0339386	78-03117A	206	1	4	4820	Scientific Information Report Chinese Science (28)	7/17/1963	32	Approved For Release	3/29/2004
AD0339147	78-03117A	207	1	11	4862	Scientific Information Report Chinese Science (29)	7/30/1963	48	Approved For Release	3/29/2004
AD0340927	78-03117A	208	1	35	4924	Scientific Information Report Chinese Science (30)	8/21/1963	53	Approved For Release	3/29/2004
AD0341855	78-03117A	209	1	43	4974	Scientific Information Report Chinese Science (31)	9/5/1963	46	Approved For Release	3/29/2004
AD0342464	78-03117A	210	1	38	5013	Scientific Information Report Chinese Science (32)	9/16/1963	43	Approved For Release	3/29/2004
AD0342608	78-03117A	211	1	36	5054	Scientific Information Report Chinese Science (33)	9/27/1963	41	Approved For Release	3/29/2004