

UNCLASSIFIED

AD NUMBER
AD444756
NEW LIMITATION CHANGE
TO Approved for public release, distribution unlimited
FROM Distribution authorized to U.S. Gov't. agencies and their contractors; Administrative/Operational Use; Jul 1964. Other requests shall be referred to Central Intelligence Agency, Office of Central Reference, 2430 E. Street, NW, Washington, DC 20505.
AUTHORITY
CIA ltr, 7 Sep 2004

THIS PAGE IS UNCLASSIFIED

444756

DDC

6007

AS

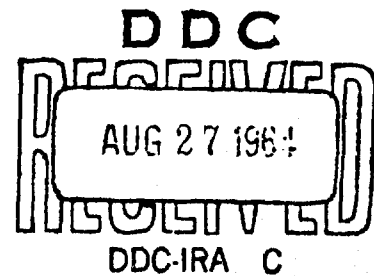
FOR OFFICIAL USE ONLY



CONSOLIDATED TRANSLATION SURVEY

Number 79

For July 1964



Prepared by
OFFICE OF CENTRAL REFERENCE
Foreign Documents Division
CENTRAL INTELLIGENCE AGENCY
2430 E St., N. W., Washington 25, D. C.

FOR OFFICIAL USE ONLY

CONSOLIDATED TRANSLATION SURVEY

FOR JULY 1964

TABLE OF CONTENTS

	<u>Page</u>
Preface	iii
Requests For Copies	iv
USSR	
Economic	1
Political	4
Military	5
Geographic	6
Sociological	6
Biographic	6
Eastern Europe	
Economic	6
Political	12
Military	14
Sociological	14
Western Europe	
Economic	15
Political	15
Military	18
Geographic	18
Sociological	18
Africa	
Economic	19
Political	20
Military	20
Geographic	20
Sociological	20
Middle East	
Economic	22
Political	22

	<u>Page</u>
Far East	
Economic	22
Political	23
Military	24
Geographic	24
Sociological	25
Latin America	
Economic	25
Political	26
Military	26
Sociological	26
World Wide	
Economic	26
Political	26
Scientific	
Aerospace	27
Agriculture	27
Biological & Medical Sciences	28
Chemistry	36
Earth Sciences & Astronomy	37
Electronics	39
Engineering	40
Fuels & Propulsion	44
Materials & Metallurgy	44
Mathematics & Data Processing	50
Nuclear Science & Technology	51
Physics	52
Miscellaneous	57
Information on Cover-To-Cover Translations	58
Index to Authors	144

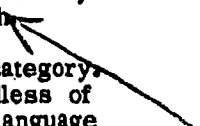
CONSOLIDATED TRANSLATION SURVEY

PREFACE



This survey is prepared monthly by the Foreign Documents Division, Office of Central Reference, CIA, from lists received through the cooperation of US government agencies and includes translations prepared by such agencies, private industry, universities, research institutions, and commercial translation organizations. It is a compilation of foreign documentary projects completed or started during the preceding month.

Translations are listed by area and subject category. Scientific projects are grouped as a section regardless of geographic area. Title in English, author, foreign language title of source of material, date of publication, and publication identification of the completed project are given when available. Tables of contents of journals translated cover-to-cover are reproduced from the current publications.



Projects in process, i.e., not completed as of the date of this survey, are noted with an asterisk (*), and, when available, a project-control or "in-process" number is noted in parentheses following the title. Certain details may be unavailable on such projects. New projects in process are not listed again until they are completed.

An index to authors of items in this issue is provided at the end of the survey.

REQUESTS FOR COPIES

Requests for copies of published projects should be made direct to the designated producing organization.

All requests for items prefixed by "CIA" should be addressed to Office of Central Reference, 2430 E Street, NW, Washington, D.C. 20505

Addresses of producers follow:

ACSI

Department of Army
Assistant Chief of Staff, Intelligence
Intelligence Documents Branch
Washington 25, D.C.

Requests from non-Government sources for
Army documents should be ordered through

Department of Commerce
Office of Technical Services
Washington 25, D.C.

AEC - Atomic Energy Commission (see Department of Commerce)

AF

Department of Air Force
Collection and Dissemination
Assistant Chief of Staff, Intelligence
ATTN: AFCIN 1B3
Washington 25, D.C.

AFCRL Res Lib

Air Force Cambridge Research Laboratories
Research Library
Office of Aerospace Research
United States Air Force
Laurence G. Hanscom Field
Bedford, Massachusetts
ATTN: CRMXLR

AGU

American Geophysical Union
1515 Massachusetts Avenue, NW
Washington, D.C. 20005

HW

General Electric Company
Handord Atomic Products Operation
Richland, Washington
(see AEC)

ID - Intelligence Document (see ACSI)

INSDOC

INSDOC, National Physical Laboratory of India,
Hillside Road
New Delhi-12

ISA

Instrument Society of America
313 Sixth Avenue
Pittsburgh 22, Pennsylvania

JPRS

U.S. Department of Commerce
Office of Technical Services
Joint Publications Research Service
Building Tempo E,
East Adams Drive, 4th & 6th Streets, SW
Washington, D.C. 20443

NASA

National Aeronautics and Space Administration
1512 H Street, NW
Washington, D.C. 20546

Natl Bu Stand

National Bureau of Standards
ATTN: Dr Henry Birnbaum
Room 314, South Building
Washington, D.C.

Navy

Department of Navy
Office of Naval Intelligence
Washington 25, D.C.

NIH

Circulation Unit
Readers Services Section
Library Branch, DRS
National Institutes of Health
Building 10, Room 5N118
Bethesda, Maryland 20014

NLL

National Lending Library
For Science & Technology
Boston Spa, Yorkshire, England

NMS - Navy Medical School (see Navy)

NRC/C

National Research Council, Canada
The Library
Sussex Drive
Ottawa 2, Canada

NRL - Naval Research Laboratories (see Navy)

NZDSIR

Department of Scientific and Industrial Research
Central Library
P.O. Box 8018
Cove Building
Wellington, N. 1, New Zealand

ONI - Office of Naval Intelligence (see Navy)

OSA

Optical Society of America, Incorporated
33 University Road
Cambridge, Massachusetts 02138

OTS

Office of Technical Service
Department of Commerce
Washington 25, D.C.

(Also available through Department of Commerce
Field Offices)

Patent Office

Patent Office
Scientific Library
14th and Constitution Avenue, NW
Washington, D.C.

Plenum Press

Plenum Press, Incorporated
227 West 17th Street
New York, New York 10011

AIP

American Institute of Physics
335 East 45th Street
New York 17, New York

Amer Math Soc

American Mathematical Society
190 Hope Street
Providence 6, Rhode Island

Amer Meteorol Soc

The American Meteorological Society
45 Beacon Street
Boston 8, Massachusetts

ANL - Argonne National Laboratory, Illinois
(see AEC)

APL - Applied Physics Laboratory (see Navy)

BISI

British Iron and Steel Institute
4 Grosvenor Gardens
London, S.W. 1, England

BWRA

British Welding Research Association
Abington Hall, Abington
Cambridge, England

CB

Consultants Bureau, Incorporated
227 West 17th Street
New York 11, New York

CSIRO

Commonwealth Scientific and Industrial Research Organization
314 Albert Street
East Melbourne, C. 2, Victoria
Australia

CSR

The Librarian
Colonial Sugar Refinery, Research Laboratories
P.O. Box 39
Roseville, New South Wales, Australia

CTT

Columbia Technical Translations
5 Vermont Avenue
White Plains, New York 10600

DDC

Defense Documentation Center
TISIA-1
Arlington Hall Station
Arlington 12, Virginia

Dept of Com

Department of Commerce
Office of Technical Services
Washington 25, D.C.

Dept of Interior

Department of Interior
Department Library
Foreign Documentation Section
Washington, D.C. 20240

Emmanuel Coll Res Lang Ctr

Emmanuel College Research
Language Center
The Fenway
Boston, Massachusetts

FTD - Foreign Technology Division (see AF)

GB

Association of Special Libraries and
Information Bureau
3 Belgrave Square
London, S.W. 1, England

HB

Henry Bratcher Technical Translations
P.O. Box 157
Altadena, California 91001

HO - Hydrographics Office (see Navy)

PP

Pergamon Press
122 East 55th Street
New York, New York 10022

PS

Primary Sources
11 Bleecker Street
New York, New York 10012

Redstone Arsenal - (see DDC)

Scripta Technica, Inc

Scripta Technica Incorporated
1000 Vermont Avenue, NW
Washington 5, D.C.

SIAM

Society for Industrial and Applied Mathematics
Box 7541
Philadelphia 1, Pennsylvania

TIL - Technical Information Library

Ministry of Aviation
TIL, 1 (b)
Leysdown Road
Motttingham
London, S.E. 9, England

UCRL - University of California Lawrence Radiation Laboratory;
Livermore, California
(see AEC)

US Army Biological Laboratories - (see OTS)

USRL

Office of Naval Research
U.S. Navy Underwater Sound Reference Lab
P.O. Box 8337
Orlando, Florida 32806

519th MI Bn - 519th Military Intelligence Battalion
(see ACSI)

525th MI Gp - 525th Military Intelligence Group
(see ACSI)

TRANSLATIONS REPORTED

FOR JULY 1964

USSR

Economic

Economics of Machine-Building, Organization and Planning of Enterprises, by P. A. Zhukov. (SF-3260) RUSSIAN, bk, Ekonomika Mashinostroeniya, Organizatsiya i Planirovaniye Predpriyatiy, Moscow, 1963, pp 1-304.
*JPRS

Questions of Statistics of the Prime Cost of Industrial Production, by D. I. Vaynsheker, 18 pp.
RUSSIAN, bk, Voprosy Statistiki Sebestoimosti Promyshlennoy Produktii, Moscow, 1963, pp 1-178.
JPRS 25273

The Application of Diamonds in Technology, by A. M. U'in, 5 pp.
RUSSIAN, per, Automobil Prom, No 12, 1963, pp 30, 31.
JPRS 25044

Repair and Maintenance of RSRSR Highways, by G. A. Sarkis'yants, 6 pp.
RUSSIAN, per, Automobil Dorogi, No 3, 1964, pp 1, 2.
JPRS 25119

New Machines for Laying Road Bases and Surfaces, by A. A. Vasil'yev, 6 pp.
RUSSIAN, per, Automobil Dorogi, No 3, 1964, pp 25-27.
JPRS 24827

Improving the Transportation of Mineral Fertilizers, by A. Yevstratov, A. Kitayev, 7 pp.
RUSSIAN, per, Automobil Transport, No 3, 1964, pp 3-5.
JPRS 25119

Centralized Deliveries of Mineral Fertilizer, by Yu. Tikhonchuk, 7 pp.
RUSSIAN, per, Automobil Transport, No 3, 1964, pp 6, 7.
JPRS 25119

Accounting for the Costs of Equipment Modernization, by V. Ivaishkevich, 9 pp.
RUSSIAN, per, Bukhgalterskiy Uchet, No 5, 1963, pp 7-12.
JPRS 25096

The Chemical Pulp and Paper Industry in 1964 and 1965, 5 pp.
RUSSIAN, per, Bumazhnaya Prom, No 2, 1964, pp 1, 2.
NLL Translation Bulletin
Vol VI, No 6, 1964

Concrete Cross-ties for 1,524 mm Gauge Railroads, 5 pp.
RUSSIAN, per, Bvul Stroitel Tekh, No 4, 1964, pp 17-19.
JPRS 25193

Protein Resources of the Dairy Industry and Their Utilization, by P. D'yachenko.
RUSSIAN, per, Dairy Industry, Vol XVIII, No 1, 1957, p 6.
CSIRO/No 6721

USSR
Economic (Contd)

Miscellaneous Classified Advertisement for the Sale and Exchange of Metal Working Equipment, 13 pp.
RUSSIAN, np, Ekon Gazeta, No 6, 8 Feb 1964.
JPRS 24946

Identical Conditions but Different Returns, by P. Bryukhanov, G. Sorokina, 8 pp.
RUSSIAN, np, Ekon Gazeta, No 10, 7 Mar 1964, pp 4, 5.
JPRS 24819

Material Incentives and the Development of Production, by B. Sukharevskiy, 14 pp.
RUSSIAN, np, Ekon Gazeta, No 11 (136), 14 Mar 1964.
JPRS 24821

Achievements of Power Industry Reviewed and Future Course Described, by P. Neporozhnyi, 6 pp.
RUSSIAN, np, Ekon Gazeta, No 13, 28 Mar 1964, p 5.
JPRS 24812

Zaporozhstal Makeyevskiy Plant, by S. Ivanenko, B. Zolotov, 11 pp.
RUSSIAN, np, Ekon Gazeta, No 14, 4 Apr 1964, pp 6, 7.
JPRS 24703

Future Developments in Air Transport, by N. Aleksandrov, 3 pp.
RUSSIAN, np, Ekon Gazeta, 4 Apr 1964, No 14 (139), pp 38, 39.
JPRS 25119

Dredge Production at the Irkutsk Heavy Machine Building Plant, by N. Baybuzenko, 5 pp.
RUSSIAN, np, Ekon Gazeta, No 14, 4 Apr 1964, p 40.
JPRS 24819

Material Incentives for Workers, by Yu. Nazar'yants, 3 pp.
RUSSIAN, np, Ekon Gazeta, No 14 (140), 11 Apr 1964.
JPRS 24821

Kara-Tau New Base of Fertility of Fields, by M. Dunenkov, 6 pp.
RUSSIAN, np, Ekon Gazeta, No 15, 11 Apr 1964, p 4.
JPRS 25290

Lag in Production of Granulated Fertilizers, by N. Yakovchuk, 6 pp.
RUSSIAN, np, Ekon Gazeta, No 15, 11 Apr 1964, p 4.
JPRS 25290

The Green Light to Double Superphosphate, by A. Taranyuk, 7 pp.
RUSSIAN, np, Ekon Gazeta, No 15, 11 Apr 1964, p 4.
JPRS 25290

New Moscow Volgograd Highway, by A. Gudimov, 6 pp.
RUSSIAN, np, Ekon Gazeta, No 17, 25 Apr 1964, p 7.
JPRS 25119

USSR
Economic (Contd)

A Comparison of Two Cable Manufacturing Plants, 9 pp.
RUSSIAN, np, Ekon Gazeta, No 18, 1 May 1964, p 15.
JPRS 25311

State Arbitration, by S. Lavrukhin, 5 pp.
RUSSIAN, np, Ekon Gazeta, No 20, 16 May 1964, p 38.
JPRS 25432

Subscription Difficulties of Soviet Periodicals, by I. S. Seryakov, 3 pp.
RUSSIAN, np, Ekon Gazeta, No 21, 23 May 1964, p 16.
JPRS 25389

Special Features in the Development of the Industrial Base for Power Industry Construction, by V. Kan, 12 pp.
RUSSIAN, per, Ekon Stroitel, No 1, 1964, pp 18-25.
JPRS 24812

Final Stage of Seven Year Plan Requires Redoubling of Efforts, by P. G. Muratov, 12 pp.
RUSSIAN, per, Elektr i Teplov Tyaga, Vol VIII, No 2 (86), Feb 1964, pp 1-4.
JPRS 25162

The Mainliner VL60K Electric Locomotive With Silicon Rectifiers, by L. N. Kirbyat'yev, V. L. Kirbyat'yev, 11 pp.
RUSSIAN, per, Elektr i Teplov Tyaga, No 2, 1964, pp 26-30.
JPRS 25162

1963 Accomplishments and 1964 Plan of State Committee on Power Engineering and Electrification USSR, by P. P. Konin, 9 pp.
RUSSIAN, per, Elek Stantsi, No 3, 1964, pp 93-95.
JPRS 24812

Economize in Large as Well as Small Things, by D. Malyakov, 11 pp.
RUSSIAN, per, Finansy SSSR, No 7, 1963, pp 18-24.
JPRS 25096

Certain Questions in Financing Soviet Trade, by G. Gofman, V. Shcherbakov, 10 pp.
RUSSIAN, per, Finansy SSSR, No 12, 1963, pp 14-20.
JPRS 25285

Features in Figuring the Working Capital Norms in Serial Production, by M. Solopenko, 5 pp.
RUSSIAN, per, Finansy SSSR, No 12, 1963, pp 44-47.
JPRS 25285

The Planning and Distribution of Sovkhoz Profits, by V. Semenov, 14 pp.
RUSSIAN, per, Finansy SSSR, No 12, 1963, pp 75-81.
JPRS 25285

Meeting the Budget an Important Contribution to Carrying Out the Resolutions of the December Plenum of the Central Committee of the CPSU, by V. Garbuzov, 23 pp.
RUSSIAN, per, Finansy SSSR, No 1, 1964, pp 3-19.
JPRS 25285

For Reducing the Lag in Reaching Planned Capacity a Major Reserve in the National Economy, by M. Novitskiy, 7 pp.
RUSSIAN, per, Finansy SSSR, No 1, 1964, pp 28-32.
JPRS 25285

USSR
Economic (Contd)

Improving the Planning of Costs and Accumulation, by V. Kotov, 9 pp.
RUSSIAN, per, Finansy SSSR, No 1, 1964, pp 43-54.
JPRS 25285

Planning and Incentives for Rapidly Developing the Chemical Capacity, by P. Bunich, 15 pp.
RUSSIAN, per, Finansy SSSR, No 2, 1964, pp 8-18.
JPRS 25285

The State Budgets of the Union Republics for 1964-1965, by N. Garetovskiy, 13 pp.
RUSSIAN, per, Finansy SSSR, No 2, 1964, pp 26-35.
JPRS 25285

Development of Large Scale Chemistry and the Tasks of Financial Organs, 8 pp.
RUSSIAN, per, Finansy SSSR, No 3, 1964, pp 3-7.
JPRS 25192

For Fully Using the Reserves to Successfully Fulfill the RSFSR Budget, by I. Fadeyev, 16 pp.
RUSSIAN, per, Finansy SSSR, No 3, 1964, pp 8-19.
JPRS 25285

The Mining Industry at the Decisive Stage of the Seven-Year Plan, 8 pp.
RUSSIAN, per, Gornyy Zhur, No 1, 1964, pp 3-5.
NLL Translation Bulletin
Vol VI, No 6, 1964

The Development of a City Telephone System, by V. S. Zverev, 11 pp.
RUSSIAN, per, Gorod Khoz Moskvy, No 1, 1964, pp 34-37.
JPRS 25185

The Development of the Civil Air Fleet as a Part of the Soviet Transportation System, by B. Parakhonakiy, 5 pp.
RUSSIAN, per, Grazhdan Aviat, No 2, 1964, pp 14, 15.
JPRS 25119

The Basic Law of Transport, by M. Koshlyak, 10 pp.
RUSSIAN, np, Gudok, 1 Apr 1964, p 3.
JPRS 25162

Gas Turbine Locomotives Needed to Improve Efficiency of Railroads, by G. Gukovskiy, 5 pp.
RUSSIAN, np, Izvestiya, 2 Apr 1964, p 3.
JPRS 25162

Aktiv of Kazakh Railroad Meets to Discuss Problems Involved in Improving Freight Hauls, 9 pp.
RUSSIAN, np, Kazakh Pravda, 19 Mar 1964, p 2.
JPRS 25162

Expansion of the Chemical Industry Discussed, by V. Rybakov, 7 pp.
RUSSIAN, per, Kommunist Uzbek, No 1, 1964, pp 19-24, Art 1.
JPRS 25117

Progress and Shortcomings in the Chemical Industry Discussed, by R. Ivanov, 10 pp.
RUSSIAN, per, Kommunist Uzbek, No 1, 1964, pp 25-32.
JPRS 25117

Chemical Fibers and Their Future, by B. Geller, 8 pp.
RUSSIAN, np, Kommunist Uzbek, No 1, 1964, pp 33-40.
JPRS 25258

USSR
Economic (Contd)

Experimental Tidal Electric Power Station in Arctic is Forerunner of More Powerful Stations, by Lukanin, 15 pp.
RUSSIAN, np, Krasnaya Zvezda, 4 Mar 1964, p 4.
JPRS 24812

The Introduction of Group Technology in the Enterprises of the Leningrad Economic Area, by P. D. Khizhnyak, 5 pp.
RUSSIAN, per, Mashinos, No 1, 1964, pp 9, 10.
JPRS 24819

Enterprises of Moscow Sovnarkhoz Exhibit New Products, by I. Korotikov, 12 pp.
RUSSIAN, per, Mashinos, No 2, 1964, pp 40-43.
JPRS 24819

Advances in Industrial Automation, 10 pp.
RUSSIAN, per, Mekh Automat Proiz, No 3, 1964, pp 1-4.
JPRS 25117

The Most Important Task of All Trade Unions Committees and Economic Leaders, by Ye. S. Danilov, 5 pp.
RUSSIAN, per, Metallurg, No 3, 1964, pp 1, 2.
JPRS 25150

Development of an Egg Substitute From Skim Milk, by S. Shtal'berg.
RUSSIAN, per, Molochnaya Prom, Vol XXIV, No 7, 1963, pp 29, 30.
CSIRO/No 6681

Results of Work in the Milk Industry of the FSFSR in 1963 and Tasks for 1964, by S. Burabash, 10 pp.
RUSSIAN, per, Molochnaya Prom, No 3, 1964, pp 7-12.
JPRS 25310

New Seagoing Self Propelled Crane Ship of the Catamaran Type, by N. Zheltov, 6 pp.
RUSSIAN, per, Morskoy Flot, No 3, 1964, pp 31, 33.
JPRS 25162

Development of the Foreign Trade Connections of the USSR and the Tasks of Maritime Transport, by A. Savelyev, 18 pp.
RUSSIAN, per, Morskoy Flot, No 3, 1964, pp 35-39.
JPRS 25162

Utilization of Reserves in Sea Transport, 9 pp.
RUSSIAN, per, Morskoy Flot, No 4, 1964, pp 1-3.
JPRS 25193

1963 Accomplishments of the Virgin Lands Power System and Unresolved Problems of the Power Enterprises, by V. Levin, I. Zheltukhin, 6 pp.
RUSSIAN, per, Narod Khoz Kazakh, No 2, 1964, pp 22-25.
JPRS 24812

Slow Development of the Kazakhstan Chemical Industry Criticized, by M. Solomentsev, 7 pp.
RUSSIAN, per, Parti Zhizn' Kazakh, No 3, 1964, pp 11-16.
JPRS 25258

Problems in the Development of the Central Asian Chemical Industry, by N. Alisov, F. Grigoryants, 12 pp.
RUSSIAN, per, Plan Khoz, No 2, 1964, pp 43-50.
JPRS 24813

Mathematics in Price Planning, by A. Komin, 12 pp.
RUSSIAN, per, Plan Khoz, No 6, 1964, pp 29-38.
JPRS 25397

USSR
Economic (Contd)

Lutsk Electric Equipment Plant Produces Automation Equipment, by M. Grin, 5 pp.
RUSSIAN, np, Pravda Ukrainy, 13 May 1964, p 2.
JPRS 25311

Problems of the Ukrainian Household Chemicals Industry, by G. Vilesov, M. Apollonskiy, 5 pp.
RUSSIAN, np, Pravda Ukrainy, 20 Mar 1964, p 2.
JPRS 24772

Central Asian Trunline Evaluates 1963 Accomplishments and Plans for 1964, 6 pp.
RUSSIAN, np, Pravda Vostoka, 21 Mar 1964, p 3.
JPRS 25162

Dependence of Sugar Factory Output of Sugar Losses on the Uniformity of Operation, by V. N. Peletminsky.
RUSSIAN, per, Sakharnaya Prom, No 2, 1956.
CSR Co

New Harvesting Technology, by N. Filatov, M. Komarova, 6 pp.
RUSSIAN, per, Sel'skiy Mekh, No 9, 1963, pp 10, 11.
JPRS 24820

Technical Maintenance Station is in Operation, by N. Kulbitskiy, V. Shamray, 5 pp.
RUSSIAN, per, Sel'skiy Mekh, No 9, 1963, pp 12, 13.
JPRS 24820

Problems of Scientific Organization of Labor, 5 pp.
RUSSIAN, per, Sotsial Trud, No 3, 1964, pp 19-22.
JPRS 25310

Research in Problems of Economics and Organization of Labor, by D. Onika, 11 pp.
RUSSIAN, per, Sotsial Trud, No 4, 1964, pp 25-32.
JPRS 24821

An Important Experiment in Making Awards to Workers in Industry, by S. Shkuro, 12 pp.
RUSSIAN, per, Sotsial Trud, No 4, 1964, pp 47-55.
JPRS 24821

Engineer Organizers Are Needed in Production, 9 pp.
RUSSIAN, per, Sotsial Trud, No 4, 1964, pp 127-133.
JPRS 24821

Lack of Coordination in Moldavian Freight Hauls Causes Inefficient Use of Facilities, by P. Kiriysenko, 6 pp.
RUSSIAN, np, Sovet Moldaviya, 1 Mar 1964, p 3.
JPRS 25162

Regulation of Retail Prices is an Urgent Task, by A. Odintsova, 6 pp.
RUSSIAN, np, Sovet Torgovlya, No 4, 1964, pp 4-8.
JPRS 25310

New Levels of Development in the Machine Tool Industry, 5 pp.
RUSSIAN, per, Stanki i Instrument, No 3, 1964, pp 1, 2.
JPRS 25179

Machine Tool Building in the USSR, by P. M. Penkov, 29 pp.
RUSSIAN, per, Stanki i Instrument, No 3, 1964, pp 8-17.
JPRS 25179

USSR
Economic (Contd)

Construction Started on The Siberian Sayano-Shushenskaya Hydroelectric Power Station, 6 pp.
RUSSIAN, np, Stroitel'naya Gazeta, Moscow, 22 Apr 64, p 4.
JPRS 25086

The Passenger Vessel Ivan Franko, by V. P. Gudimovich, 16 pp.
RUSSIAN, per, Sudostroyeniye, No 2, 1964, pp 1-8.
JPRS 25162

Conference on Habitability of Ships, by S. A. Bogatykh, 6 pp.
RUSSIAN, per, Sudostroyeniye, No 2, 1964, pp 80, 81.
JPRS 25162

Conference on Problems in the Strenght of Ships' Hulls, by V. P. Belkin, A. N. Krylov, 5 pp.
RUSSIAN, per, Sudostroyeniye, No 3, 1964, pp 71, 72.
JPRS 25119

On the Application of the International System of Units in the Shipbuilding Industry on the Introduction of the International System Into the USSR, by Ye. M. Aristov, 7 pp.
RUSSIAN, per, Sudostroyeniye, No 3, 1964, pp 72-77.
JPRS 25119

A Tanker With a Deadweight Capacity of 1500 Tons, by V. A. Galitskiy, 8 pp.
RUSSIAN, per, Sudostroyeniye, No 4, 1964, pp 1-4.
JPRS 25119

Specialization of Repair Enterprises, by V. Babuk, L. Fedorovskiy, 6 pp.
RUSSIAN, per, Tekhnika i Sel'skom Khoz, No 2, 1964, pp 60-62.
JPRS 25229

Figures on the Production of Agricultural Machinery, 5 pp.
RUSSIAN, per, Traktory i Sel'skhoz mashiny, No 1, 1964, pp 1, 2.
JPRS 24868

Automotive Plant Bridge in Moscow, by S. Ya. Terekhin, 9 pp.
RUSSIAN, per, Transport Stroitel, No 2, 1963, pp 9-14.
ACSI I-3135-A
ID 2240846

A High Award Imposes a Responsibility, by I. G. Vypov, 5 pp.
RUSSIAN, per, Transport Stroitel, No 2, 1963, pp 29-31.
ACSI I-3135-E
ID 2240846

Start-Up of the Beloyarskaya Aes, 26 April 1964, by A. N. Grigor'yants, 6 pp.
RUSSIAN, np, Trud, Moscow 5 May 64, p 4.
JPRS 25086

High Energy Chemistry, by V. L. Tal'roze, 8 pp.
RUSSIAN, per, Vest Ak Nauk, No 12, 1963, pp 12-15.
NLL Translation Bulletin
Vol VI, No 6, 1964

Development of the National Economy of the USSR During the Past Decade, 15 pp.
RUSSIAN, per, Vest Statistiki, No 4, 1964, pp 84-95.
JPRS 25109

USSR
Economic (Contd)

New UFA-2,8 Universal Planter, by Ye. P. Yatsuk, 6 pp.
RUSSIAN, per, Zemel'deliye, No 5, 1964, pp 75-81.
JPRS 25229

Technical Progress and Labor Productivity, by A. I. Il'in, 15 pp.
RUSSIAN, per, Zheleznodorozhnyy Transport, No 3, 1964, pp 5-12.
JPRS 25119

Electrification a Powerful Factor in Raising Labor Productivity, by I. I. Ivanov, 15 pp.
RUSSIAN, per, Zheleznodorozhnyy Transport, No 3, 1964, pp 12-18.
JPRS 25119

Technical Reconstruction on the Basis of New Equipment and Advanced Technology, by D. M. Kalabukhov, 12 pp.
RUSSIAN, per, Zheleznodorozhnyy Transport, No 3, 1964, pp 31-37.
JPRS 25119

Reserves in the Car Service, by A. V. Utkin, 10 pp.
RUSSIAN, per, Zheleznodorozhnyy Transport, No 3, 1964, pp 37-41.
JPRS 25119

Improvement in Work Organization and Labor Standardization, by Ya. P. Kartsev, 9 pp.
RUSSIAN, per, Zheleznodorozhnyy Transport, No 3, 1964, pp 42-46.
JPRS 25119

A Single System of Planning and Analysis of Labor Productivity for Different Types of Transport, by V. P. Korostelev, 11 pp.
RUSSIAN, per, Zheleznodorozhnyy Transport, No 3, 1964, pp 55-58.
JPRS 25119

Railroad Transport in the USSR During 1963 Technical Economic Review, 12 pp.
RUSSIAN, per, Zheleznodorozhnyy Transport, No 3, 1964, pp 63-66.
JPRS 25119

An Increase in the Traffic and Carrying Capacity of Railroads, 6 pp.
RUSSIAN, per, Zheleznodorozhnyy Transport, No 3, 1964, pp 94, 95.
JPRS 25119

The Alliance of Science and Practice, by V. Zadorozhnyy, 5 pp.
UKRAINIAN, per, Onshestvennoye Pitanie, No 9, 1963, pp 24-26.
JPRS 25096

Political

Construction of Communism in the USSR and the Development of Agriculture; Selected Speeches and Documents, by N. S. Khrushchev. (SF-3227)
RUSSIAN, bk, Stroitel'stvo Kommunistizma v SSSR i Razvitiye Sel'skogo Khozyaystva, Vol VIII, 1964, pp 5-17, 23-44, 44-62, 62-88, 91-103, 105-114, 114-125, 152-159, 236-243, 243-256.
*JPRS

USSR
Political (Contd)

The International Communist Conflict:
Theoretical Analysis of Dictatorship of the
Proletariat, 12 pp.
RUSSIAN, np, Izvestiya, 17 May 1964, pp 3, 4.
JPRS 25141

Izvestiya Scores Chinese Isolationism, 6 pp.
RUSSIAN, np, Izvestiya, 4 Jun 1964, p 4.
JPRS 25355

Lenin on National Self-Determination,
by M. Kharazvan, 6 pp.
RUSSIAN, np, Kommunist, 6 May 1964.
JPRS 25040

The International Communist Conflict CPSU
Kommunist Attacks Chinese Leaders and Policies,
35 pp.
RUSSIAN, per, Kommunist, No 7, May 1964,
pp 25-50.
JPRS 24801

The Trend Toward Labor Unity in Europe,
a Soviet Analysis of Prospects for
Communist Socialist Collaboration, by
A. Chernyayov, 15 pp.
RUSSIAN, per, Kommunist, No 7, May 1964,
pp 107-118.
JPRS 25084

Komsomol Supports CPSU Stand, 15 pp.
RUSSIAN, np, Komsomol'skaya Pravda, 30 May 1964,
p 2.
JPRS 25355

Marxism - Leninism and the Problem of Disarmament,
by Valerian Zorin, 16 pp.
RUSSIAN, per, Mirovaya Ekonomika i Mezhdunarod
Otnosheniya, No 9, 1963, pp 24-34.
ACSI I-4289
ID 2204006564

Pravda Criticizes Chinese Revision of Internal
Policy, 11 pp.
RUSSIAN, np, Pravda, 29 Apr 1964, pp 2, 3.
JPRS 24751

British Communist Accuses Chinese of
Misrepresenting Role of National Independence,
by Palmo Dutt, 6 pp.
RUSSIAN, np, Pravda, 14 May 1964, p 3.
JPRS 25189

Pravda Publishes Resolution of Presidium of Central
Committee of Mexican Communist Party, 9 pp.
RUSSIAN, np, Pravda, 6 Jun 1964, p 3.
JPRS 25355

Military

Incorporation of Programmed Instruction, 6 pp.
RUSSIAN, per, Kommunist Vooruzhennykh Sil,
Vol III, No 18, 1963, pp 51-53.
JPRS 24797

Literature and Political Education,
by A. Zakharov, 6 pp.
RUSSIAN, per, Kommunist Vooruzhennykh Sil,
Vol III, No 18, 1963, pp 59-62.
JPRS 24797

USSR
Military (Contd)

Struggle Between the Old and New in Development
of Military Science, by I. Kuz'min, 12 pp.
RUSSIAN, per, Kommunist Vooruzhennykh Sil,
No 8, Apr 1964, pp 40-45.
JPRS 25143

Revolution in the Development of Aircraft,
by V. Bolotnikov, 5 pp.
RUSSIAN, np, Krasnaya Zvezda, 25 Apr 1964,
p 2.
JPRS 25143

Military Science and Academies,
by P. A. Rotmistrov, 6 pp.
RUSSIAN, np, Krasnaya Zvezda, 26 Apr 1964,
p 2.
JPRS 25143

Rocket Technicians, by N. Mel'nikov, 5 pp.
RUSSIAN, np, Krasnaya Zvezda, 1 May 1964,
p 5.
JPRS 25143

Missiles, Training and Indocrination,
by I. A. Lavrenov, 5 pp.
RUSSIAN, np, Krasnaya Zvezda, 9 May 1964,
p 2.
JPRS 25143

Maintaining Various Types of Troop Security, 12 pp.
RUSSIAN, per, Voyennaya Mysl, No 7, 1957, pp 18-28.
ACSI I-4579-A
ID 2204013864

Antiaircraft Defense of Troops in Modern Operations,
by A. Fedorov, 27 pp.
RUSSIAN, per, Voyennaya Mysl, No 7, 1957, pp 38-50.
ACSI I-4579-C
ID 2204013864

Development of AA Defenses for Troops in the Great
Patriotic War, by M. Tur.
RUSSIAN, per, Voyenno-istoricheskiy Zhur, No 1,
1962, pp 15-24.
ACSI I-2870-A
ID 2237313
519th MI Bn

The Moscow Zone of Defense, by K. Tolgin.
RUSSIAN, per, Voyenno-istoricheskiy Zhur, No 1,
1962, pp 35-46.
ACSI I-2870-B
ID 2237313
519th MI Bn

The Element of Surprise in Forcing Rivers by Large
Armored Units, by E. Fedoseyev.
RUSSIAN, per, Voyenno-istoricheskiy Zhur, No 1,
1962, pp 47-56.
ACSI I-2870-C
ID 2237313
519th MI Bn

Ice Crossing Over Kerch Strait,
by A. Smirnov-Neavitakiy.
RUSSIAN, per, Voyenno-istoricheskiy Zhur, No 1,
1962, pp 57-64.
ACSI I-2870-D
ID 2237313
519th MI Bn

Recollections -- On the Southeastern Approaches to
Leningrad, by K. Meretakov.
RUSSIAN, per, Voyenno-istoricheskiy Zhur, No 1,
1962, pp 65-79.
ACSI I-2870-E
ID 2237313
519th MI Bn

USSR
Military (Contd)

Recollections About a Great Battle, by S. P. Ivanov.
RUSSIAN, per, Voyenno-Istoricheskii Zhur, No 1,
1962, pp 99-105.
ACSI I-2870-F
ID 2237313
519th MI Bn

Military Uses of Plastics, by V. Vorob'yev,
V. Mikul'skiy, 5 pp.
RUSSIAN, per, Voyennyye Znaniya, No 1, 1964, pp 29, 30.
ACSI I-4448
ID 2204009964
525th MI Gp

What a Training Village Should Look Like,
by A. Chebotarev, 5 pp.
RUSSIAN, per, Voyennyye Znaniya, No 2, 1964,
p 21.
JPRS 25176

Group Civil Defense Exercise,
by V. Sovetnikov, V. Yastrembakiy, 6 pp.
RUSSIAN, per, Voyennyye Znaniya, No 4, 1964,
pp 21, 22.
JPRS 25137

Assessing Area Radiation, by A. Durikov, 10 pp.
RUSSIAN, per, Voyennyye Znaniya, No 4, 1964,
pp 26-28.
JPRS 25137

Geographic

General Information About the River Network of
Northern Kazakhstan, by N. A. Kopylova, 15 pp.
RUSSIAN, bk, Spravochnik po Vodnym Resursam SSSR,
Vol XII - Severnyy Kazakhstan, 1963, pp 3-15.
ACSI I-2991
ID 2240827

Sociological

Logical Forms of Crime Classification,
by V. N. Kudryavtsev, 21 pp.
RUSSIAN, bk, Teoreticheskiye Osnovy Kvalifi-
katsii Prestupleniy, Moscow, 1963, pp 139-160.
JPRS 25111

All-Union Conference of Historians, by
Yo. M. Zhukov. (DC-10653)
RUSSIAN, bk, Vsesoyuznoye Soveshchaniye Istorikov,
Moscow, 1964, pp 1-518.
*JPRS

The Reflection Cellule and Reflection as a Property
of All Matter, by V. S. Tyukhtin, 16 pp.
RUSSIAN, per, Voprosy Filosofii, No 2, 1964, pp 25-34.
JPRS 25222

Sociological Research and Criminology, by
B. S. Uteviskiy, 9 pp.
RUSSIAN, per, Voprosy Filosofii, No 2, 1964,
pp 46-51.
JPRS 25222

USSR
Sociological (Contd)

The Philosophical Significance of New Discoveries
in the Field of the Physics and Chemistry of
Living Beings, by V. I. Kremyanskiy, 22 pp.
RUSSIAN, per, Voprosy Filosofii, No 2, 1964,
pp 145-157.
JPRS 25222

Causes of Religious Survival and the Means
for Its Elimination, by Ye. A. Karpovskiy, 16 pp.
RUSSIAN, per, Voprosy Filosofii, No 4, 1964,
pp 145-156.
JPRS 25212

Bring the Theory of Scientific Atheism up to
the Level of Current Requirements, 15 pp.
RUSSIAN, per, Voprosy Filosofii, No 5, 1964,
pp 3-12.
JPRS 25393

Biographic

Zakhar Saulovich Katanai'son, 13 pp.
RUSSIAN, per, Arkhiv Anatom. Gistolog i
Embriolog, Vol XLVI, No 1, 1964, pp 118-122.
JPRS 25077

EASTERN EUROPE

Economic

Monthly Pre-Payment Through Credit -- An
Incentive for Increasing Participation in the
Affairs of the Cooperative, by Jani Boshnjaku,
6 pp.
ALBANIAN, np, Zeri i Popullit, 14 May 1964,
pp 2, 3.
JPRS 25088

High Productivity Squads Need Guidance From
the Party, by Petraq Magjariari, 5 pp.
ALBANIAN, np, Zeri i Popullit, 18 Apr 1964, p 2.
JPRS 24739

Meeting the Demands for Spare Parts,
by Selman Bllaca, 5 pp.
ALBANIAN, np, Zeri i Popullit, 18 Apr 1964, p 3.
JPRS 24739

Conditions for Increasing Production of Lamb
and Beef, by Dhimitor Bogdani, 8 pp.
ALBANIAN, np, Zeri i Popullit, 21 Apr 1964,
pp 2, 3.
JPRS 24739

Socialist Ownership and Its Relation the
Sources for Financing Capital Investments,
by Delcho Sapundzhiev, 14 pp.
BULGARIAN, per, Finansi i Kredit, No 2,
Mar, Apr 1964, pp 39-54.
JPRS 25164

Personal Plots and Individual Loans for
Purchase of Productive Livestock,
by A. Yanev, 9 pp.
BULGARIAN, per, Finansi i Kredit, No 2,
Mar, Apr 1964, pp 29-38.
JPRS 25160

Eastern Europe
Economic (Contd)

Control of Construction Through the Leva,
by Krastyu Danov, 14 pp.
BULGARIAN, per, Finansi i Kredit, No 3,
1964, pp 3-15.
JPRS 25143

The Deficit in Agricultural Insurance and the
Possibilities of Eliminating it, by Dimitur Velchev,
13 pp.
BULGARIAN, per, Finansi i Kredit, No 3,
1964, pp 16-27.
JPRS 25143

Short Term Credit and National Income,
by Dimitur Kasabov, 8 pp.
BULGARIAN, per, Finansi i Kredit, No 3,
1964, pp 34-42.
JPRS 25143

Large Scale Measures for Augmenting Savings
Deposits, by Ivan Byalkov, 5 pp.
BULGARIAN, per, Finansi i Kredit, No 3,
1964, pp 42-46.
JPRS 25143

The Petroleum Processing Plant Near Burgas,
by Doncho Donchev, 5 pp.
BULGARIAN, per, Geografiya, Vol XIII, No 9,
Nov 1963, pp 1-3.
JPRS 24779

The Development of Economic Collaboration
Between the Socialist Nations, by Stefan Sharenkov,
17 pp.
BULGARIAN, per, Ikonomicheska Misul, No 4,
1964, pp 3-17.
JPRS 25419

The Proportion Between Industry and Agriculture
in Bulgaria, by Georgi Tavetkov, 16 pp.
BULGARIAN, per, Ikonomicheska Misul, No 4,
1964, pp 18-31.
JPRS 25416

The Development of National Income in
Bulgaria, by Atanas G. Dimitrov, 7 pp.
BULGARIAN, per, Ikonomicheska Misul, No 4,
1964, pp 86-90.
JPRS 25416

Achievements of CEMA on Its Fifteenth
Anniversary, by Nacho D. Nachev, 9 pp.
BULGARIAN, per, Ikonomicheska Misul, No 4,
1964, pp 99-103.
JPRS 25419

The Formation, Use, and Accounting of the Fund
for the Regulation of Retail Prices,
by Genko Khadzhiyski, 12 pp.
BULGARIAN, per, Izvestiya na Vseshtiya Finansovo-
Stopanski Institut Svishov, Jan, Feb 1964,
pp 53-62.
JPRS 24785

The 1964 Plan for the Chemical Industry, by
Georgi Pavlov, 7 pp.
BULGARIAN, per, Khimiya i Industriya, No 1,
1964, pp 1-3.
JPRS 24713

Soil and Geographic Location as the Bases for
Specialization and Concentration in Agricultural
Production, by Khr. Trashliev, St. Krustanov, 11 pp.
BULGARIAN, per, Kooperativno Zemedelie, No 4,
1964, pp 8-11.
JPRS 24716

Eastern Europe
Economic (Contd)

Increasing the Production of Livestock, by
Zhiivko Stanchev, 6 pp.
BULGARIAN, per, Naruchnik na Agitatora, No 9,
1964, pp 14-23.
JPRS 24712

The Use of New Construction Materials in Bulgaria,
by Stamen Stamenov, 6 pp.
BULGARIAN, per, Naruchnik na Agitatora, No 9,
1964, pp 24-32.
JPRS 24712

The Development of the Energoproekt Electric
Power Design Institute, 1948-1963, by G. Avramov,
A. Strashimirov, 14 pp.
BULGARIAN, per, Sroitelstvo, No 6, 1963, pp 1-5.
JPRS 24713

Labor Productivity, National Income, and
Consumption in Bulgaria in 1964, by Todor Lyubikov,
8 pp.
BULGARIAN, per, Trud i Tseni, Vol VI, No 4,
1964, pp 1-8.
JPRS 25164

The Chief Economist, a New Figure in Plant
Management, by T. Ivanov, St. Andreov, 9 pp.
BULGARIAN, per, Trud i Tseni, Vol VI, No 4,
1964, pp 20-27.
JPRS 25164

Wage Systems in Industry, by Simeon Radev, 12 pp.
BULGARIAN, per, Trud i Tseni, Vol VI, No 4,
1964, pp 28-39.
JPRS 25164

The New Price List for Services to Households,
by Vasil Karpuzov, 5 pp.
BULGARIAN, per, Trud i Tseni, Vol VI, No 4,
1964, pp 69-71.
JPRS 25164

Some Current Questions and Problems in the
Inspection Services, by Rajko Gligorevic, 18 pp.
CROATIAN, per, Uprava, No 11, 12, 1963,
pp 377-388.
JPRS 24823

Opcina Funds for Financing Public Administration
and Social Services in 1964, by Olga Jelen, 8 pp.
CROATIAN, per, Uprava, No 11, 12, 1963,
pp 425-430.
JPRS 24823

The Yugoslav Investment Bank in 1963, 6 pp.
CROATIAN, per, Vosnik Jugoslovenske
Investicione Banko, No 2, 1964, pp 1-4.
JPRS 25125

Transport Aircraft, by Ivo Hlavac, Milan Vylcital.
CZECH, bk, Dopravni Letadla, Nakladatelstvi
Dopravy a Spolu, pp 15-25, 32-69, 133-171, 175-200.
*FTD-11-64-733

Policy on Retail Prices, by Jiri Typolt, 11 pp.
CZECH, per, Nova Mysl, No 5, 1964, pp 581-589.
JPRS 25269

Problems Relating to Interest in the Coordination
of Investments Among Socialist Countries, by
Ladislav Ruamich, 14 pp.
CZECH, per, Politicka Ekonomie, No 2, 1964,
pp 111-118.
JPRS 24724

Eastern Europe
Economic (Contd)

Methods of Investigating the Efficiency of Foreign Trade in Countries of the Socialist Camp, by Zdenek Orlicek, 30 pp.
CZECH, per, Politika Ekonomie, No 2, 1964, pp 155-172.
JPRS 24724

Economic Achievements of Krizanov State Farm in 1963, by Bohuslav Chaloupka, 8 pp.
CZECH, per, Statni Statky, No 4, 1964, pp 52-54.
JPRS 24857

Resolution of the January Plenum of the Central Committee of the KSC Regarding the Role of the People in the Development of Slovakia's Economy, by Michal Sabolcik, 10 pp.
CZECH, per, Zivot Strany, No 5, Mar 1964, pp 264-268.
JPRS 24807

Bentonite in the Building Industry, by J. Endell.
GERMAN, per, Die Bautechnik, Vol XXX, No 3, 1953, pp 71-73.
GB/118/FEU/1362/J

Significance of Clay Slurries in the Building Industry. I. Clay Slurries as a Building Material, by R. Jelinek, H. L. Jessberger.
GERMAN, per, Die Bautechnik, Vol XXXV, No 6, 1958, pp 223-228.
GB/118/FEU/1583/J

Utilization of Foaming as an Analytical and Technical Process in the Sugar Industry, by W. Meyer.
GERMAN, per, Centralblatt fuer die Zuckerindustrie, Vol XLVIII, 1940.
CSR Co

Annual Report for 1963 on the Production of Inland Fisheries in the German Democratic Republic, by H. U. Menzel, 16 pp.
GERMAN, per, Deutsche Fischereizeitung, No 4, Apr 1964, pp 97-106.
JPRS 25098

Tasks of the Textile Industry in Organizing Market Research, by K. H. Selbmann, E. Scholz, 14 pp.
GERMAN, per, Deutsche Textiltechnik, No 5, 1964, pp 229-234.
JPRS 25249

Changes in Raw German Railroad Freight Rates as Part of First Stage of Industrial Price Reform, by Fritz Mardorf, 15 pp.
GERMAN, per, Der Operative Dienst, No 4, 1964, pp 135-139.
JPRS 25067

Problems and Reform Measures in the Polish Economy in 1962, by G. W. Strobel, 22 pp.
GERMAN, per, Osteuropa, No 4, 1964, pp 279-298.
JPRS 24777

Contradictions in East Germany's New Economic System, by Peter Christian Ludz, 12 pp.
GERMAN, per, SBZ Archiv, No 7, Apr 1964, pp 101-104.
JPRS 25067

1963 a Successful Year for East Germany's Ocean Going Shipping, by M. Maass, 11 pp.
GERMAN, per, Seeverkehr, Vol IV, No 4, 1964, pp 207-211.
JPRS 25075

New Construction at East German Shipyards IVth quarter 1963, by G. Seidler, 8 pp.
GERMAN, per, Seeverkehr, Vol IV, No 4, 1964, pp 225-227.
JPRS 25161

Eastern Europe
Economic (Contd)

Tasks, Current Status and Further Development of Standardization in the GDR Chemical Industry, by Deimur Messing, 13 pp.
GERMAN, per, Standardisierung, No 5, 1964, pp 167-172.
JPRS 25247

Technical Outlook in the Wool Pulling Industry, by J. Millet.
GERMAN, per, Tointex, Vol XXVIII, No 5, 1963, pp 349-367.
CSIRO/No 6686

The Tasks of VVB Water Supply and Sewage Treatment, by E. Voigt, 14 pp.
GERMAN, per, Wasserwirtschaft-Wasser Technik, Vol XIV, No 4, 1964, pp 1-97.
JPRS 25008

Schwarze Pumpe Backbone of Modern Gas Production, by Rolf Franke, Norbert Moe, 5 pp.
GERMAN, np, Die Wirtschaft, 13 Apr 1964, p 8.
JPRS 24831

The Work of the CEMA Permanent Commission for Construction, by Gerhard Koesel, 5 pp.
GERMAN, np, Die Wirtschaft, No 18, 4 May 1964, pp 12, 13.
JPRS 24954

Determination of Affinability of Raw Sugar by the Conductimetric Method, by O. Spengler, G. Grunow.
GERMAN, per, Z Verein Deutscher Zuckerindustrie, Vol LXXXI, 1931.
CSR Co

Applications of Radiochemistry in Sugar Research, by H. Horning.
GERMAN, per, Z fuer die Zuckerindustrie, 1957.
CSR Co

Sugar Extraction From Molasses, Based on the Assalini-B-Process in a Semi-Technical Experimental Plant, by H. Schiweck.
GERMAN, per, Z fuer Zuckerindustrie, 1960.
CSR Co

Hungarian National Income and the Living Conditions of the Population. (SF-3244)
HUNGARIAN, bk, Statistikai Idozaki Kozlomenyek - A Nemzeti Jovadelem es a Lakossag Eletkorulmenvel, Vol LVI, 1963, pp 1-101.
*JPRS

Achievements of the State Forestries During the 1962-1963 Fiscal Year, by Emil Sali, 10 pp.
HUNGARIAN, per, Az Erdo, Vol XIII, No 4, 1964, pp 145-150.
JPRS 25284

Regularities of Oil and Gas Occurrences in Hungary, by Laszlo Korossy, 24 pp.
HUNGARIAN, per, Banyaszati Lapok, Vol XCVII, No 2, 1964, pp 155-126.
JPRS 24712

CEMA Relationships in Metallurgy, by Robert Mossoczy, 5 pp.
HUNGARIAN, np, Figyelo, No 16, 15 Apr 1964, p 5.
JPRS 24832

Czechoslovakia and CEMA, 5 pp.
HUNGARIAN, np, Figyelo, Vol VIII, No 16, 15 Apr 1964, p 5.
JPRS 24832

Eastern Europe
Economic (Contd)

The Economic Structure of the Socialist Countries and the Leveling of Their Development Standards, by Tibor Kiss, 23 pp.
HUNGARIAN, per, Kozgazdasagi Szemle, Vol XI, No 4, 1964, pp 397-412.
JPRS 25067

The Grain Problem in the European Countries of the CEMA, by Lukwik Makaruk, 15 pp.
HUNGARIAN, per, Kozgazdasagi Szemle, Vol XI, No 4, 1964, pp 413-422.
JPRS 25074

Some International Monetary Aspects of Investment Cooperation in CEMA Countries, by Kalman Pecsli, 12 pp.
HUNGARIAN, per, Kozgazdasagi Szemle, Vol XI, No 4, 1964, pp 423-430.
JPRS 25074

On Fixing the Domestic Prices of Imported Products, by Andras Brody, 21 pp.
HUNGARIAN, per, Kozgazdasagi Szemle, Vol XI, No 4, 1964, pp 431-443.
JPRS 25067

Foreign Exchange Earnings and Export Planning, by Sebestyen Peter, 9 pp.
HUNGARIAN, per, Kulkereskedelem, No 4, 1964, pp 18-20.
JPRS 25199

The 1963 Method of Computing Production Costs at Production Cooperatives, 20 pp.
HUNGARIAN, per, Mezogazdasagi Ertesito, 19 Mar 1964, pp 146-154.
JPRS 24597

Tasks, Opportunities, and Conditions for Fixing Work Norm, by Endre Mezel, 13 pp.
HUNGARIAN, per, Munkaugyi Szemle, Vol VIII, No 2, 1964, pp 1-5.
JPRS 25247

The Utilization of Fixed Capital, the Work System, and Leisure Time, by Jozsef Tatar, 28 pp.
HUNGARIAN, per, Munkaugyi Szemle, Vol VIII, No 2, 1964, pp 10-16; No 3, Mar 1964, pp 11-15.
JPRS 25247

Labor Turnover and the Manpower Shortage by Mihaly Huvoasvolgyi, 10 pp.
HUNGARIAN, per, Munkaugyi Szemle, Vol VIII, No 3, 1964, pp 4-6.
JPRS 25067

The Chief Tasks Confronting Manpower Management, by Istvan Buda, 14 pp.
HUNGARIAN, per, Munkaugyi Szemle, Vol VIII, No 4, 1964, pp 1-6.
JPRS 25105

Nepszabadsag Interviews Imre Kovacs, Minister of Food Supply About the Supply of Foodstuffs to the Public, by Imre Kovacs, 8 pp.
HUNGARIAN, np, Nepszabadsag, 17 May 1964, p 7.
JPRS 25269

Directive on Turnover Taxes and Price Supplements, 25 pp.
HUNGARIAN, per, Penzugyi Kozlony, No 38, 30 Dec 1963, pp 525-533.
JPRS 24823

Eastern Europe
Economic (Contd)

The Interest Policy and the Capital Use Charge, by Zoltan Filipcszky, 9 pp.
HUNGARIAN, per, Penzugyi Szemle, Vol VIII, No 2, 1964, pp 89-94.
JPRS 25164

The First Experiences of the Computations for the Various Types of Price Systems, by Laszlo Racz, 23 pp.
HUNGARIAN, per, Penzugyi Szemle, Vol VIII, No 2, 1964, pp 107-120.
JPRS 25164

The 1964 National Budget, by Matyas Timar, 12 pp.
HUNGARIAN, per, Penzugyi Szemle, Vol VIII, No 3, 1964, pp 177-185.
JPRS 25125

New Developments in the Fiscal and Accounting Procedures of the Building Industry, by Zoltan Ando, 16 pp.
HUNGARIAN, per, Penzugyi Szemle, Vol VIII, No 3, 1964, pp 186-198.
JPRS 25261

On the Promotion of Provincial Industrial Development and the Alleviation of Budapest's Labor Problems, by Laszlo Galik, 9 pp.
HUNGARIAN, per, Penzugyi Szemle, Vol VIII, No 3, 1964, pp 199-206.
JPRS 25261

The Incentive Effects of Interest in Fiscal Practice, by Geza Hajos, 7 pp.
HUNGARIAN, per, Penzugyi Szemle, Vol VIII, No 3, 1964, pp 215-220.
JPRS 25261

Status and Development of the Aluminum Semi Finished Goods Industry, by Laszlo Orosz, 27 pp.
HUNGARIAN, per, Statistikai Szemle, Vol XLII, No 4, 1964, pp 347-363.
JPRS 25144

Statistics on Ore Mining, by Otto Hecsa, 12 pp.
HUNGARIAN, per, Statistikai Szemle, Vol XLII, No 4, 1964, pp 376-383.
JPRS 25144

Information on the More Important Prices Currently Used in Agriculture, 5 pp.
HUNGARIAN, per, Termeloszovetkezetek Tanacsadaja, Vol XIII, No 20, 13 May 1964, p 17.
JPRS 25270

Prices and Fuel Usable by Agricultural Cooperatives in Their Industrial Activities, 8 pp.
HUNGARIAN, per, Termeloszovetkezetek Mezogazdasag, Vol XIII, No 20, 13 May 1964, pp 18-20.
JPRS 25270

New Ship and Constructional Solutions in the Gdynia Shipyard, by Andrzej Robakiewicz, 8 pp.
POLISH, per, Budownictwo Okretowe, No 4, 1964, pp 120-123.
JPRS 25008

Fishing Vessels for Poland's Small Fishing Ports, by Bohdan Pradzynski, 7 pp.
POLISH, per, Budownictwo Okretowe, No 5, 1964, pp 163-165.
JPRS 25306

Eastern Europe
Economic (Contd)

Prospects for the Expansion of Bierut Metallurgical Plant, by Stanislaw Kawinski, 9 pp.

POLISH, per, Inwestycje i Budownictwo, No 4, 1964, pp 1-4.
JPRS 25161

An Outline of Investment Reserves, by Arkadiusz Wolowczyk, 12 pp.

POLISH, per, Inwestycje i Budownictwo, No 4, 1964, pp 5, 6.
JPRS 25067

Reserves and Possibilities for Growth in the Production of the Machine Industry, by Boleslaw Miszulowicz, 11 pp.

POLISH, per, Mechanik, Vol XXXVII, No 4, 1964, pp 182-184.
JPRS 25144

Motorization Plan for 1964, by Kazimierz Kolyszko, 10 pp.

POLISH, per, Motoryzacja, No 2, 1964, pp 27-30.
JPRS 24784

Which Motor Vehicles Should Be Built, by Mieczyslaw Kras, 5 pp.

POLISH, per, Motoryzacja, No 3, 1964, pp 60-62.
JPRS 25306

Fuel and Electric Power Economy, by Czeslaw Kaczmarzski, 10 pp.

POLISH, per, Nafta, Vol XX, No 2, 1964, pp 51, 52.
JPRS 24713

The Machine Industry and the Export Program, by Julian Gron, 7 pp.

POLISH, per, Nowe Drogi, No 5, 1964, pp 121-126.
JPRS 24832

Certain Structural Changes in the Development of the National Economy, by Jozef Pajotarka, 16 pp.

POLISH, per, Nowe Drogi, No 5, 1964, pp 167-180.
JPRS 24823

Observations on State Farm Problems, by Tadeusz Rychlik, 14 pp.

POLISH, per, Nowe Rolnictwo, No 7, 1-15 Apr 1964, pp 20-25.
JPRS 24809

Polish Exports and CEMA, by Maciej Deniszczuk, 5 pp.

POLISH, np, Polityka, No 19, 9 May 1964, p 4.
JPRS 25074

Livestock Production Outlook and Tasks for 1964, by W. T., Fr.K., 9 pp.

POLISH, per, Przegląd Hodowlany, No 4, 1964, pp 6-8.
JPRS 24792

Railroad Electrification Past and Future, by Wladyslaw Babel, 10 pp.

POLISH, per, Przegląd Kolejowy Elektrotechniczny, No 4, 1964, pp 124-128.
JPRS 24784

Improvement of Average Load Per Railroad Car is the Main Task of the Railroads in 1964, by Kazimierz Błotko, 7 pp.

POLISH, per, Przegląd Kolejowy Przewozowy, No 2, 1964, pp 46-49.
JPRS 24806

Eastern Europe
Economic (Contd)

The Question of Mechanization in the Inorganic Industry, by Jerzy B. Bal, 7 pp.

POLISH, per, Przemysł Chemiczny, Vol XLIII, No 4, 1964, pp 188, 189.
JPRS 24837

The Main Tasks of the Woodworking and Paper Industries in 1964, by Jan Grudzinski, 10 pp.

POLISH, per, Przemysł Drzewny, No 3, 1964, pp 1-4.
JPRS 24779

Trends in Pork Production and Supply in 1964, by Zygmunt Kozlowski, Boleslaw Kowalczyk, 8 pp.

POLISH, per, Rolnictwo, No 7, 1-15 Apr 1964, pp 16-20.
JPRS 24809

The Present Situation and Perspectives for Papilionaceous Crops, by Karol Gawlowski, 10 pp.

POLISH, per, Rolnictwo, No 7, 1-15 Apr 1964, pp 42-44.
JPRS 24809

The Economic Possibilities of Establishing a Regular Polish Line to Canada and the Ports of the Great Lakes, by Henryk Lekston, 8 pp.

POLISH, per, Technika i Gospodarka Morska, No 4, 1964, pp 99-101.
JPRS 25074

Management of the Wage Fund and Its Control, by Stanislaw Michalski, 9 pp.

POLISH, per, Wiadomości Narodowego Banku Polskiego, No 4, 1964, pp 105-108.
JPRS 24785

Discussion of Industrial Production Standards, by Stanislaw Rog, 14 pp.

POLISH, per, Wiadomości Statystyczne, Vol IX, No 2, Mar, Apr 1964, pp 1-6.
JPRS 25219

Conditions for Full Employment Over and Above Investment, by Mieczyslaw Kabał, 11 pp.

POLISH, np, Zycie Gospodarcze, No 15, 12 Apr 1964, pp 1, 8.
JPRS 24777

Coordination of Investments in Fuel and Electric Power Industries, by Włodzimierz Bojarski, 5 pp.

POLISH, np, Zycie Gospodarcze, No 15, 12 Apr 1964, p 6.
JPRS 24779

Realization of Investment in Fuel and Electric Power Industries, by Jerzy Lasocki, 6 pp.

POLISH, np, Zycie Gospodarcze, No 15, 12 Apr 1964, pp 6, 7.
JPRS 24779

Economic Results and Perspectives, 5 pp.

POLISH, np, Zycie Gospodarcze, No 16, 19 Apr 1964, p 3.
JPRS 24785

Incentives and Factory Prizes, by Jozef Trendota, 10 pp.

POLISH, np, Zycie Gospodarcze, No 17, 26 Apr 1964, pp 1, 4, 5.
JPRS 25067

CEMA and the Industrial Specialization of Production, by Tadeusz Madej, 5 pp.

POLISH, np, Zycie Gospodarcze, No 17, 26 Apr 1964, pp 1, 7.
JPRS 25074

Eastern Europe
Economic (Contd)

One Hand Washes the Other,
by Wieslaw Szyndler-Glowacki, 6 pp.
POLISH, np, Zycie Gospodarcze, No 17,
26 Apr 1964, p 4.
JPRS 25067

Economic Results of the First Quarter of 1964,
by J. G., 5 pp.
POLISH, np, Zycie Gospodarcze, No 18,
3 May 1964, pp 1, 2.
JPRS 25067

Observations Concerning Plan for Agricultural
Development of Poland,
by Mieczyslaw Mieszcankowski, 12 pp.
POLISH, np, Zycie Gospodarcze, Vol XIX,
No 19, 10 May 1964, pp 1, 6.
JPRS 24857

Suggestions for Improvements of Solid Fuel
and Electric Power Economy, by
Czeslaw Mojro, 8 pp.
POLISH, np, Zycie Gospodarcze, Vol XIX, No 19,
19 May 1964, p 3.
JPRS 25066

Automation in Industry, by Tadeusz Stasiak,
7 pp.
POLISH, np, Zycie Gospodarcze, Vol XIX, No 20,
17 May 1964, p 3.
JPRS 25144

The Development of the National Economy
Within the 20 Year Period of the People's Poland,
by Stefan Jedrychowski, 36 pp.
POLISH, np, Zycie Gospodarcze, No 21,
24 May 1964, pp 1, 2, 3.
JPRS 25105

A Program for the Improvement of Investment
Activity, by Kazimierz Socomski, 16 pp.
POLISH, np, Zycie Gospodarcze, No 21,
24 May 1964, pp 1, 4, 5.
JPRS 25105

Steps Leading to the Elimination of Grain
Imports, by Stanislaw Gucwa, 9 pp.
POLISH, np, Zycie Gospodarcze, No 22,
31 May 1964, pp 1, 9.
JPRS 25284

Development of Socialist Agriculture the
Road to Welfare of the Peasantry,
by Fl. Balauro, M. Popescu, 23 pp.
RUMANIAN, per, Analele Institutului de
Istorie a Partidului de pe Linga C.C. al P.M.R.,
No 2, Mar, Apr 1964, pp 31-48.
JPRS 25270

Achievements in the Field of Drugs in the
Rumanian People's Republic,
by Gh. Ciogolea, 12 pp.
RUMANIAN, per, Farinacia, Vol XII, No 2,
1964, pp 69-76.
JPRS 25156

Progress in the Field of Synthetic Drugs,
by Al. Mavrodin, F. Cuihan, 8 pp.
RUMANIAN, per, Farinacia, Vol XII, No 2,
1964, pp 77-81.
JPRS 25156

Monetary Fulfillment of the Budget an Important
Task for State Bank Branches, by Gheorghe Capetti,
5 pp.
RUMANIAN, np, Gazeta Finantelor, 11 Mar 1964,
pp 1, 2.
JPRS 25416

Eastern Europe
Economic (Contd)

Fulfillment of the Tasks in the Field of Money
Circulation, by Dumitru Dogaroiu, 5 pp.
RUMANIAN, np, Gazeta Finantelor, Vol XII,
No 561, 15 Apr 1964, pp 1, 2.
JPRS 24785

Results and Prospects in the Woodworking Industry,
by S. Naftali, 13 pp.
RUMANIAN, per, Industria Lemnului, No 2,
1964, pp 41-45.
JPRS 25249

Aspects of the Orientation of Investments in the
Textile Industry, by A. Tailler, 9 pp.
RUMANIAN, per, Industria Textila, No 3, 1964,
pp 126-129.
JPRS 25092

Development and Modernization of Transport,
by D. Simulescu, 16 pp.
RUMANIAN, per, Lupta de Clasa, No 3,
1964, pp 3-15.
JPRS 24831

New Technology -- Decisive Factor for the Growth
of Labor Productivity in Mining, by Petru Vlad, 10 pp.
RUMANIAN, np, Munca, Vol XX, No 5116, 18 Apr 1964,
pp 1, 3.
JPRS 24713

Modern Solutions in the Design and Construction
of Chemical Plants, by E. Bodnar, 7 pp.
RUMANIAN, np, Munca, 31 May 1964, pp 1, 3.
JPRS 25247

New Methods and Processes in Crude Oil
Processing and Their Economic Results,
by T. Hanciulescu, C. Popescu, 14 pp.
RUMANIAN, per, Petrol si Gaz, Vol XV,
No 2, 1964, pp 93-99.
JPRS 25156

The State Budget an Important Means of National
Economic Development, by Mircea Popovici,
14 pp.
RUMANIAN, per, Probleme Economice, Vol XVII,
No 3, 1964, pp 29-39.
JPRS 25067

Aspects of Postwar Foreign Trade,
by I. Lomniti, Al. Puiu, 24 pp.
RUMANIAN, per, Probleme Economice, Vol XVII,
No 3, 1964, pp 88-101.
JPRS 25074

Introduction of New Technology in the Center
of Attention of the Railroad Enterprises,
5 pp.
RUMANIAN, per, Revista Calilor Ferate, Vol XII,
No 4, 1964, pp 177, 178.
JPRS 25210

Traffic Zones of Large Rumanian Rail Centers,
by Ioan Gh. Petrescu, 16 pp.
RUMANIAN, per, Revista Calilor Ferate, Vol XII,
No 4, 1964, pp 208-215.
JPRS 25210

Main Problems of the Development of Irrigation
and Amelioration in CEMA Countries, by
C. Shubladze, 8 pp.
RUMANIAN, per, Revista Internationala Pentru
Agricultura, No 1, 1964, pp 16-20.
JPRS 24715

Review of the Forest Economy of Rumania in 1963 and
Preview of 1964, by Gheorghe Lazar, 6 pp.
RUMANIAN, per, Revista Padurilor, No 1, 1964,
pp 1-4.
JPRS 24716

Eastern Europe
Economic (Contd)

Forest Roads in Support of Good Forest Management, by Cr. Avram, 6 pp.
RUMANIAN, per, Revista Padurilor, No 3, 1964, pp 113-115.
JPRS 24990

Problems of the Statistics of National Wealth, by Ion Capanu, 17 pp.
RUMANIAN, per, Revista de Statistica, No 4, 1964, pp 25-34.
JPRS 25219

Extension of Modern Working Methods to the Valea Jiului Mines, by Ioan Popescu, 5 pp.
RUMANIAN, np, Rominia Libera, Vol XXII, No 6072, 24 Apr 1964, pp 1, 3.
JPRS 24779

Activity of the Party at the Large Construction Sites, by Constantin Dragan, 6 pp.
RUMANIAN, np, Scinteia, 20 Mar 1964, pp 1, 3.
JPRS 25067

Better Utilization of Metals, by Alexandru Moga, 6 pp.
RUMANIAN, np, Scinteia, 8 May 1964, p 2.
JPRS 25262

Present Problems of the Electric Power Systems, by N. Gheorghiu, 5 pp.
RUMANIAN, np, Scinteia, No 6255, 13 May 1964, pp 1, 3.
JPRS 24066

Superior Quality Petroleum Products, by Nicolae Ion, 6 pp.
RUMANIAN, np, Scinteia, 24 May 1964, pp 1, 3.
JPRS 25262

The Standardization Plan for 1963, by E. Badiu, 11 pp.
RUMANIAN, per, Standardizarea, No 3, 1964, pp 113-116.
JPRS 25247

The Electrotechnical Industry During the Years of the People's Regime, by Nicolae Ghita, 8 pp.
RUMANIAN, per, Stinta si Tehnica, Vol XVI, No 4, 1964, pp 2-5.
JPRS 25161

Economic Analysis and the Artisan Cooperatives, by S. Udrea, 7 pp.
RUMANIAN, per, Viata Cooperatist Mestosu-garosti, No 15, 10 Apr 1964, pp 1, 2.
JPRS 24831

Water Management an Important Problem for the National Economy, by Gh. Hossu, 9 pp.
RUMANIAN, per, Viata Economica, Vol II, No 14 (33), 3 Apr 1964, pp 8, 9.
JPRS 24837

Round Table Conference on the Modernization of Machinery and Equipment, 18 pp.
RUMANIAN, per, Viata Economica, Vol II, No 16(35), 17 Apr 1964, pp 8-10.
JPRS 25161

Shortening the Construction Time for New Plants of the Chemical Industry, by Raducanu Clorolu, 9 pp.
RUMANIAN, per, Viata Economica, Vol II, No 17(36), 24 Apr 1964, pp 8, 9.
JPRS 24784

Eastern Europe
Economic (Contd)

Current Development Problems in Community Expenditures Health, Education and Social Welfare and General Expenditures Defense, Administration, Subsidies, etc., by Pajo Ivkovic-Ivankovic, 19 pp.
SERBIAN, per, Ekonomist, No 1, Jan, Mar 1964, pp 20-33.
JPRS 25219

Yugovini! Plastic Factory Under Expansion, 21 pp.
SERBOCROATIAN, per, Kemija u Industriji, No 3, 1964, pp 201, 210.
JPRS 25203

Yugoslav Trade in Chemical Products, by Vasa Jankovic, 7 pp.
SERBOCROATIAN, per, Kemija u Industriji, No 3, 1964, pp 225-227.
JPRS 25203

Transportation Industry or Public Service, by Kresimir Dzeba, 7 pp.
SERBOCROATIAN, per, Nase Teme, Vol VIII, No 3, 1964, pp 278-283.
JPRS 25198

The Formation and Distribution of Personal Incomes, by Albreht Roman, 13 pp.
SERBOCROATIAN, per, Socializam, No 4, 1964, pp 466-478.
JPRS 25067

International Trade Economic Development, by Bora Jevtic, 22 pp.
SERBOCROATIAN, per, Socializam, No 4, 1964, pp 479-502.
JPRS 25174

Agreement on Multilateral Accounts in Transferrable Rubles and on the Organization of the International Bank for Economic Cooperation, 8 pp.
SERBOCROATIAN, per, Spoljnotopoliticka Dokumentacija, No 6, 1963, pp 19-23.
JPRS 24715

The Production of Housing for Sale on the Market, by Branstislav Kratic, 12 pp.
SERBOCROATIAN, per, Tehnika, Vol XVII, No 5, 1964, pp 835-840.
JPRS 25249

Political

Albanians Find Fault With Western Policy From Moscow to Washington: Literary Organ Scores Artistic Revisionism, 5 pp.
ALBANIAN, np, Drita, 29 Mar 1964, p 2.
JPRS 24975

Yugoslav Official Ali Shukriu Scores Albanian Leaders' Dissident Tactics, by Ali Shukriu, 23 pp.
ALBANIAN, np, Rilindja, 5 May 1964, pp 1-3.
JPRS 24996

Criticize French Socialist Foreign Policy Mollet: Visit to Moscow and Belgrade, Defferre to Washington, 8 pp.
ALBANIAN, np, Zeri i Popullit, 25 Apr 1964, p 4.
JPRS 24975

Eastern Europe
Political (Contd)

The People's Councils at the Present Time, by
Luan Omari, 5 pp.
ALBANIAN, np, Zeri i Popullit, 16 May 1964,
p 2.
JPRS 25088

Bulgarian Communists Score Chinese Dogmatism,
by Angelov, 7 pp.
BULGARIAN, np, Rabotnichesko Delo, 6 May 1964,
pp 3, 4.
JPRS 25040

Milan Bulajic on the Chinese Concept of Coexistence,
by Milan Bulajic, 8 pp.
CROATIAN, np, Komunist, 7 May 1964, p 3.
JPRS 25040

Yugoslav Discusses Changing East-West Relations
by Josip Djerdja, 6 pp.
CROATIAN, np, Komunist, 14 May 1964, p 3.
JPRS 25084

Czech Communist Party Continues Its Attack on
Chinese Leaders, by Frantisek Havlicek, 11 pp.
CZECH, per, Nova Mysl, No 5, 1964, pp 530-537.
JPRS 25355

Havlicek Accuses Chinese of Divisive Policy,
by Frantisek Havlicek, 14 pp.
CZECH, np, Rude Pravo, 5 May 1964,
pp 2, 3.
JPRS 24996

Czechs Score Chinese Tactics, by Jan Fojtik, 8 pp.
CZECH, np, Rude Pravo, 24 May 1964, p 3.
JPRS 25316

Resolution of the All State Conference of
Chairmen of Plant Organizations and All Plant
Committees of the Communist Party of Czechoslovakia,
13 pp.
CZECH, np, Rude Pravo, 30 May 1964, p 1.
JPRS 25165

Interview of Secretary of State Otto Winzer
by Mr. Delcour of the Newspaper Le Monde
on 2 March 1964 in Leipzig, 14 pp.
GERMAN, per, Deutsche Aussehenpolitik, Vol V,
No 5, 1964, pp 438-446.
JPRS 25245

East German Official Reaffirms Support of
CPSU, by Arthur Pieck, 5 pp.
GERMAN, np, Fahrt Frei, No 18, 5 May 1964, p 3.
JPRS 24996

East Germans Attack Chinese Leadership, by
Otto Braun, 6 pp.
GERMAN, np, Neues Deutschland, 27 May 1964.
JPRS 25316

East Germany Explains Its Attitude Toward China,
by Hans Kahlmueller, 7 pp.
GERMAN, np, Neues Deutschland, 10 Jun 1964, p 6.
JPRS 25405

The World of the Officials, by Theo Sommer,
8 pp.
GERMAN, np, Die Zeit, 22 May 1964, p 3.
JPRS 25245

Hungarian Accuses Chinese of Racism,
by Jozsef Lukacs, 7 pp.
HUNGARIAN, np, Nepszabadsag, 10 May 1964,
p 5.
JPRS 25141

The Role of the CPSU in the World Communist
Movement, by Laszlo Fencsik, 7 pp.
HUNGARIAN, per, Partelet, No 6, 1964, pp 3-9.
JPRS 25355

Eastern Europe
Political (Contd)

Hungarians Accuse Chinese of Being Trotskyites,
by Istvan Kovacs, 8 pp.
HUNGARIAN, per, Tarsadalmi Szemle, No 5,
1964, pp 83-88.
JPRS 25405

Polish Analysis of the Conflict,
by Witold Leder, 13 pp.
POLISH, per, Nowe Drogi, No 5, 1964, pp 202-211.
JPRS 25405

Eugen Ionescu and the Dilemma of Individualism,
by Vladimir Streinu, 6 pp.
RUMANIAN, np, Gazeta Literara, Vol XI, No 15,
9 Apr 1964, p 8.
JPRS 24849

SED Official Discusses East German Foreign
and Domestic Policy, by Friedrich Ebert, 5 pp.
RUSSIAN, np, Pravda, 8 May 1964, p 3.
JPRS 25040

Foreign Delegates' Speeches: Max Reimann, First
Secretary of the Central Committee of the German
Communist Party, 6 pp.
RUSSIAN, np, Pravda, 20 May 1964, p 2.
JPRS 25381

The Constitution of the Federal People's Republic
of Yugoslavia.
SERBO-CROATIAN, bk, 1960.
Dept of Interior
372fj Yu9c

Democratic Centralism Under New Yugoslav
Conditions, by Mito Hadzi Vasiljev, 11 pp.
SERBO-CROATIAN, np, Komunist, 14 May 1964,
p 3, 4.
JPRS 25073

Present Period Requires Decisive Changes in
Activity of Communists, by Vida Tomasic, 11 pp.
SERBO-CROATIAN, np, Komunist, 21 May 1964,
p 3.
JPRS 25073

Political Work of Communist Activists,
by Stano Kavcic, 5 pp.
SERBO-CROATIAN, np, Komunist, 28 May 1964,
p 8.
JPRS 25245

Basic Law on the Election of Workers'
Councils and Other Administrative Organs
in Working Organizations, 33 pp.
SERBO-CROATIAN, per, Sluzbeni List Social-
isticke Federativne Republike Jugoslavije, No 15,
8 Apr 1964, pp 277-287.
JPRS 24807

Yugoslavs Criticize Chinese, But Do Not Favor
"Excommunication", by Mladon Ivokovic, 5 pp.
SERBO-CROATIAN, np, Vjesnik, 8 May 1964, p 3.
JPRS 25316

Slovak Writer Blasts Chinese, by Dusan Ruppoldt,
7 pp.
SLOVAK, np, Kulturny Zivot, No 21, 16 May 1964,
p 2.
JPRS 25189

Eastern Europe
Military

Reconnaissance, by A. Skrasek, A. Jasek, et al, 178 pp.
CZECH, bk, Průzkum, Prague, 1961, pp 5-231.
ACSI 1-8197
ID 2224738

The 130-mm Model 51 Rocket Projector, 98 pp.
CZECH, rpt, 130-mm Raketomet vz. 51, 1956, pp 3-124,
Encl No 1 to Ru-38-62.
ACSI 1-2848
ID 2219805

Courses and Instructions for Chiefs of Fire
Prevention Brigades, 5 pp.
RUMANIAN, per, Paza Contea Incenditor, Vol XVI,
No 4, 1964, pp 1, 2.
JPRS 25157

Sociological

Albanian Writer Discusses Revisionism in the
Arts, by Razi Brahimi, 6 pp.
ALBANIAN, np, Drita, 12 Apr 1964, p 2.
JPRS 25189

Albanians Blast the Vatican, by Hulusi Hako, 18 pp.
ALBANIAN, per, Rruga e Partise, Vol XI, No 5,
1964, pp 25-37.
JPRS 25209

For Better Scientific Work in the Geology and
Mining Department, by Ziver Meko, Injac Gj. Ndoja,
5 pp.
ALBANIAN, np, Zeri i Popullit, 16 May 1964, p 3.
JPRS 25088

Directive on Employment of Partially Incapa-
citated Persons, 7 pp.
BULGARIAN, per, Durzhaven Vestnik, No 101,
27 Dec 1963, pp 1-3.
JPRS 24786

Directive on Admission of Students to Foreign
Language Courses, by G. Ganov, 6 pp.
BULGARIAN, per, Durzhaven Vestnik, No 26,
31 Mar 1964, pp 1, 2.
JPRS 24765

Directive on Admission to Technical Schools,
by G. Ganov, 9 pp.
BULGARIAN, per, Durzhaven Vestnik, No 27,
3 Apr 1964, pp 1-3.
JPRS 24765

Instructions Governing Application of the
Directive on Employment of Partially In-
capacitated Persons, 5 pp.
BULGARIAN, per, Durzhaven Vestnik, No 29,
10 Apr 1964, pp 1, 2.
JPRS 24808

The Bulgarian Social Insurance Fund,
by Marin Petrov, 15 pp.
BULGARIAN, per, Izvestiya na Visshiya Finansovo-
stopanski Institut Svishtov, No 1, Jan, Feb 1964,
pp 63-77.
JPRS 24829

Shortcomings in School Investment Construction,
by F. Fischer, 6 pp.
CZECH, np, Ucitelske Noviny, Vol XIV, No 12,
13, 25 Mar 1964, p 7.
JPRS 24786

Eastern Europe
Sociological (Contd)

Ready at all Times Visit to a Sachsen Village
School and to the East Berlin Education Ministry,
by Rudolf Walter Leonhardt, 9 pp.
GERMAN, np, Die Zeit, 24 Apr 1964, p 3.
JPRS 24786

Religious Symbols and Humanist Culture,
by Leszek Kolakowski, 14 pp.
POLISH, np, Argumenty, Vol VIII, No 13(303),
29 Mar 1964, pp 6, 7, 9.
JPRS 25073

Changes in Concepts of Morality During the
Past Twenty Years, by Janusz Kuczynski,
Tadeusz Kotarbinski, et al, 12 pp.
POLISH, np, Argumenty, Warsaw, 3 May 1964,
pp 6, 7, 10.
JPRS 25073

Report on a Symposium on Aesthetics and
Problems of Contemporary Art, 7 pp.
RUMANIAN, np, Contemporanul, No 13(911),
27 Mar 64, p 2.
JPRS 25073

The Film and Culture, by Calin Caliman, 6 pp.
RUMANIAN, np, Contemporanul, No 14,
3 Apr 1964, pp 1, 7.
JPRS 24849

Anticipation and Economic Policy, by Mihai Dalea,
7 pp.
RUMANIAN, np, Contemporanul, No 16(914),
17 Apr 64, p 7.
JPRS 25073

Current Concepts in Pharmaceutical
Organization, by V. Ionescu, 12 pp.
RUMANIAN, per, Farmacia, Vol XII, No 2,
1964, pp 89-96.
JPRS 25186

Programmed Self Instruction and the Teaching
Machines, by M. Herivan, 6 pp.
RUMANIAN, np, Gazeta Invatamintului, Vol XV,
No 749, 3 Apr 1964, p 5.
JPRS 24786

Information on the Material on Which Candidates
Taking the Maturity Examinations Will be Tested,
5 pp.
RUMANIAN, np, Gazeta Invatamintului, Vol XV,
No 749, 3 Apr 1964, p 7.
JPRS 24786

The Rumanian Jurists Association and Its Role
in the International Association of Democratic
Jurists, 13 pp.
RUMANIAN, per, Justitia Noua, Vol XX, No 3,
1964, pp 3-13.
JPRS 24808

Characteristics of Present Day Lyric Poetry,
by Savin Bratu, 23 pp.
RUMANIAN, per, Lupta de Clasa, Vol XLIV, No 3,
1964, pp 77-93.
JPRS 25245

Report on the Annual Session of the Management
Council of the Union of Societies of Medical
Sciences, 9 pp.
RUMANIAN, np, Muncitorul Sanitar, Vol XV,
No 12(720), 21 Mar 1964, p 3.
JPRS 25186

Practical Instruction in Production a Means
of Organizing the Educational Process in the
Schools of the General Culture,
by V. Bunesco, V. Visan, 19 pp.
RUMANIAN, per, Revista de Pedagogie,
Vol XIII, No 3, 1964, pp 5-20.
JPRS 25149

The Demands of Contemporary Life and the
Continual Development of the Schools of General
Culture, by T. Truter, D. Gitlan, et al, 12 pp.
RUMANIAN, per, Revista de Pedagogie,
Vol XIII, No 3, 1964, pp 40-48.
JPRS 25149

The Distribution of the Population in Rumania
According to Altitude, by Cl. Giurcaneanu, 19 pp.
RUMANIAN, per, Revista de Statistica, No 3,
1964, pp 35-42.
JPRS 25186

The Best Possible Results Should be Achieved
in Education, by Jean Livescu, 5 pp.
RUMANIAN, np, Scintila, Vol XXXII, No 6211,
29 Mar 1964, pp 1, 2.
JPRS 24786

A Course on the History of Rumanian Literature
During the Period Between the Two World Wars,
by Mircea Zalcu, M. Carticeanu, 10 pp.
RUMANIAN, np, Tribuna, Vol VIII, No 17,
23 Apr 1964, pp 8, 9.
JPRS 25165

A Brief Review of the CLUJ Poets,
by Ion Oarcasu, Istvan Szoca, et al, 14 pp.
RUMANIAN, per, Tribuna, Vol VII, No 19,
7 May 1964, pp 1, 8, 9.
JPRS 25205

Recommendation on Situation and Problems
in Field of Primary Education, 9 pp.
SERBOCROATIAN, per, Sluzbeni List Socialisticke
Federativne Republike Jugoslavije, No 14,
Apr 1964, pp 261-264.
JPRS 24786

The Revised Text of the Regulation on Periodic
Accounting by Economic Organizations, 29 pp.
SERBOCROATIAN, per, Sluzbeni List SFRJ,
Vol XX, No 19, 6 May 1964, pp 374-383.
JPRS 25247

Recommendation to Improve Publishing Activity,
7 pp.
SERBOCROATIAN, per, Sluzbeni List SFRJ,
Vol XX, No 22, 27 May 1964, pp 409-412.
JPRS 25257

Vladimir Minac Answers His Critic-Milan Hamada,
by Vladimir Minac, 23 pp.
SLOVAK, np, Kulturny Zivot, Vol XIX, No 16,
18 Apr 1964, pp 3, 10.
JPRS 25073

Dialogue On New Paths in Literature, 16 pp.
SLOVAK, np, Kulturny Zivot, Vol XIX,
No 16, 18 Apr 64, p 4
JPRS 25073

Smatlak's Letter of Refusal to Write Literary
Criticism 1963, by Stanislav Smatlak, 8 pp.
SLOVAK, per, Mlada Tvorba, No 1, 1964, pp 28-30.
JPRS 25073

Recruitment of Youth for Agriculture,
by Viktor Maar, Pavel Hering, 7 pp.
SLOVAK, np, Ucitelske Noviny, No 11,
19 Mar 1964, p 3.
JPRS 25257

Economic

The Needs of the Labor Union Movement in Spain,
by Ramon Vasquez, 5 pp.
FRENCH, per, L'Internationale, No 22, May 1964,
p 6.
JPRS 25355

French Aid to Underdeveloped Countries
Dropped by One-Sixth in 1963, by Gilbert Mathieu,
6 pp.
FRENCH, np, Le Monde, 10 May 1964,
pp 9, 12.
JPRS 25134

Choice of Road Type on the Basis of Capacity and
Economics, by R. Slettemark.
NORWEGIAN, per, Norsk Vegetidskrift, Vol XXXIX,
No 5, 1963, pp 82-85.
GB/93/RLC 1160

Screening Problems in the Wallboard Industry,
by S. B. Segring.
SWEDISH, per, Svensk Papperstidning, Vol LVI,
No 10, 1953.
CSR Co

Political

Belgian, British, and Japanese Visitors Support
Albanian Views, 6 pp.
ALBANIAN, np, Zori i Popullit, 5 May 1964, p 1, 2.
JPRS 25316

Albanian Party Organ Reports on International
Womens' Conference, 5 pp.
ALBANIAN, np, Zori i Popullit, 14, 21 May
1964, p 4.
JPRS 25189

Danish Communist Party Secretary Norlund
Discusses Conflict Text of 10 May Speech to
Danish Communist Youth, by Ib Norlund, 10 pp.
DANISH, np, Land og Folk, 15, 20 May 1964,
pp 7, 8.
JPRS 25189

Christian Hermann Jensen of Danish Communist
Party Analyzes the Congress, by Christian Hermann
Jensen, 9 pp.
DANISH, np, Land og Folk, 29 May 1964, p 7.
JPRS 25381

Report on Danish Communist Party Cultural
Conference, 42 pp.
DANISH, per, Tiden No 1, 1964, pp 1-39.
JPRS 25084

Criticize Netherlands Communist Party 21st
Congress Statement of Central Committee of
Socialist Workers' Party, 6 pp.
DUTCH, per, De Brug, No 13, 21 Mar 1964,
pp 4, 5.
JPRS 24751

Editorial on French Communist Party Foreign
and Domestic Policies, 6 pp.
FRENCH, per, Cahiers du Communisme, Apr 1964,
pp 3-9.
JPRS 24732

Western Europe
Political (Contd)

Spanish Communist Party Chief Carrillo
Discusses Conditions in Spain, by Santiago Carrillo,
15 pp.
FRENCH, per, Cahiers du Communisme, Apr 1964,
pp 67-81.
JPRS 24732

Text of Thorez Speech to French Communist
Party Central Committee, 25 March,
by Maurice Thorez, 6 pp.
FRENCH, per, Cahiers du Communisme, Apr 1964,
pp 123-126.
JPRS 24732

Guy Besse Discusses Ideological Problems,
by Guy Besse, 16 pp.
FRENCH, per, Cahiers du Communisme, No 5,
1964, pp 138-151.
JPRS 25209

UEC Chief Pierre Kahn Explains UEC Position,
by Pierre Kahn, 13 pp.
FRENCH, per, Clarke, No 55, Mar, Apr 1964,
pp 6-11.
JPRS 25153

Dissident Revolutionary Wing of French
Communist Party States its Case, by Michele Mestre,
5 pp.
FRENCH, per, Le Communiste, Vol X, No 100,
Apr 1964, pp 3, 4.
JPRS 25141

Emphasizes Need for a Communist International,
5 pp.
FRENCH, per, Le Communiste, Vol X, No 100,
Apr 1964, pp 8, 9.
JPRS 25141

Backs Chinese Position Unequivocally, 6 pp.
FRENCH, per, Le Communiste, Vol X,
No 100, Apr 1964, pp 10, 11.
JPRS 25141

Comment on French Communist Party and
Communist Student UEC Congresses, 5 pp.
FRENCH, per, Le Debat Communiste, No 26,
15 Apr 1964, pp 18, 19.
JPRS 24751

French Dissident Communist Organ Answers
Quilliot Articles, by J. Courtois, 7 pp.
FRENCH, per, Le Debat Communiste, No 27, 1964,
pp 2-4.
JPRS 25316

Burnelle Speech on Belgian Political Situation
Charleroi, 1 May, 5 pp.
FRENCH, np, Le Drapeau, 4 May 1964, p 4.
JPRS 25084

Belgian Communist Party Central Committee Meets:
Ernest Burnelle's Report, by Ernest Burnelle, 10 pp.
FRENCH, np, Le Drapeau Rouge, 13 May 1964, p 3.
JPRS 25355

Belgian Communist Party Press Chief Blume
Analyzes Polemic, by Jean Blume, 10 pp.
FRENCH, np, Le Drapeau Rouge, 14 May 1964,
pp 1, 3; 15 May 1964, pp 1, 3; 19 May 1964, p 3.
JPRS 25141

The Creation of the PSIUP, by Rocco Astori, 7 pp.
FRENCH, per, Est et Ouest, No 320, 1-15 May 1964,
pp 26-28.
JPRS 25355

Western Europe
Political (Contd)

What is the Conflict All About? -- A French
Independent Analysis, by Branko Lazitch, 10 pp.
FRENCH, per, Est & Ouest, No 321, 1964,
pp 1-6.
JPRS 25316

Dissident Swiss Communist Party Claims
Independent Stand in Dispute, 5 pp.
FRENCH, per, L'Etincelle, No 5, 1964.
JPRS 25153

Waldeck Rochet's Hour, by Jacques Derogy,
7 pp.
FRENCH, np, L'Express, 21 May 1964, pp 6, 7.
JPRS 25209

Thorez Denies Existence of Anti Semitism
in France and USSR, by Maurice Thorez, 12 pp.
FRENCH, np, France Nouvelle, No 968,
6-12 May 1964, pp 6-8.
JPRS 25084

Socialism and the Democratic Alternative to
De Gaulle an Analysis by French Communist
Jean Elleinstein, by Jean Elleinstein, 8 pp.
FRENCH, np, France Nouvelle, No 969,
13-19 May 1964, pp 4, 5.
JPRS 25141

Statements of Fraternal Party Delegates, 18 pp.
FRENCH, np, France Nouvelle, No 970, 20-26 May
1964, pp 17-19; No 971, 27 May-2 Jun 1964, pp 9, 10.
JPRS 25381

Clarke Editor Hermier Explains Delay to
UEC Leaders, by Guy Hermier, 5 pp.
FRENCH, np, France Nouvelle, No 971,
27 May, 2 Jun 1964, pp 5-7.
JPRS 25153

Santiago Carrillo Speech to Spanish Communist
Party and Spanish Communist Youth,
by Santiago Carrillo, 9 pp.
FRENCH, np, France Nouvelle, No 973,
11-16 Jun 1964, pp 20, 21.
JPRS 25405

French Communist Party Strength an Analysis
by David Ellimer, by David Ellimer, 8 pp.
FRENCH, np, France Observateur, 7 May 1964,
pp 5, 6.
JPRS 25040

Comments and Proposals on the Draft Statutes
Georges Marchais on the Draft Statutes,
by Georges Marchais, 5 pp.
FRENCH, np, L'Humanite, 11 Apr 1964, pp 1, 4.
JPRS 25244

Thorez on Peaceful Transition and Atomic
Weapons Letter to Comrade Zacharis,
by Maurice Thorez, 6 pp.
FRENCH, np, L'Humanite, 24 Apr 1964, pp 1, 4.
JPRS 24732

Waldeck Rochet's Report to the French Communist
Party 17th Congress, 84 pp.
FRENCH, np, L'Humanite, 15 May 1964, pp 5-11.
JPRS 25381

Jeannette Vermeersch's Report in the Name of the
Resolution Committee, 10 pp.
FRENCH, np, L'Humanite, 18 May 1964, p 7.
JPRS 25381

Roger Garaudy's Speech, by Roger Garaudy, 6 pp.
FRENCH, np, L'Humanite, 18 May 1964, p 8.
JPRS 25381

Western Europe
Political (Contd)

Georges Marchais's Report on the New Party Statutes, 45 pp.
FRENCH, np, l'Humanite, 19 May 1964, pp 5-7.
JPRS 25381

Policy Resolution Adopted by the France Communist Party 17th Congress, 22 pp.
FRENCH, np, l'Humanite, 21 May 1964, pp 7, 8.
JPRS 25381

Waldeck Rochet's Address, by Waldeck Rochet, 8 pp.
FRENCH, np, l'Humanite, 8 Jun 1964, p 5.
JPRS 25405

Waldeck Rochet Interview, by Paulette Pellino, 10 pp.
FRENCH, np, l'Humanite Dimanche, 17 May 1964, pp 2, 3.
JPRS 25381

UEC -- Leftist Opposition -- A French Dissident Communist Analysis, 5 pp.
FRENCH, per, La Voie Communiste, No 44, 1964, p 3.
JPRS 25316

Rivier and Eval of Communist Opposition Comment in La Voie Communiste, by Catherine Rivier, 8 pp.
FRENCH, per, La Voie Communiste, No 44, May 1964, pp 8-9.
JPRS 25381

Belgian Dissident Excoriates Khrushchev on 70th Birthday, by Marcel Boulet, 5 pp.
FRENCH, np, La Voix du Peuple, No 17, 24 Apr 1964, p 13.
JPRS 24751

Dissident Theoretician Grippa Speaks on International Communism and Belgian Politics, by Jacques Grippa, 5 pp.
FRENCH, np, La Voix du Peuple, No 19, 8 May 1964, p 5.
JPRS 25102

Belgian Dissidents Criticize Congress Preparations, 27 pp.
FRENCH, np, La Voix du Peuple, No 20, 15 May 1964, pp 3-13.
JPRS 25381

Statements From Three Top Italian Communists: Togliatti Interviewed on PCI Foreign and Domestic Policies, by Palmiro Togliatti, Giorgio Granata, 6 pp.
GERMAN, np, National-Zeitung, 18 Mar 1964, p 3.
JPRS 24732

Edgar Woog's Report to Swiss Communist Party, by Edgar Woog, 7 pp.
GERMAN, np, Vorwaerts, 21 May 1964, p 4.
JPRS 25355

Austrian Communist Party States Its Views, by Franz Muhri, 8 pp.
GERMAN, per, Weg und Ziel, No 3, 1964, pp 139-146.
JPRS 25355

Austrian Communist Party Pre-Congress Discussion, 5 pp.
GERMAN, per, Weg und Ziel, No 5, 1964, pp 273-277.
JPRS 25355

W. Leonhard Discusses Relative Strength of USSR and Chinese Camps, by Wolfgang Leonhard, 6 pp.
GERMAN, np, Die Zeit, No 20, 15 May 1964, p 32.
JPRS 25153

Western Europe
Political (Contd)

Program of the Luxemburg Communist Party, 28 pp.
GERMAN, np, Zeitung vom Lotzeburger Vollek, Apr 1964, pp 1-4.
JPRS 24801

Italian Journalist Reports on Visit to Rumania, by Gianni Finocchiaro, 18 pp.
ITALIAN, np, Avanti, 15 Apr, 21 Apr, 29 Apr; 5 May, 12, 13, May 1964, p 3.
JPRS 25189

De Feo Links Brazil Revolt and Communism, by Italo de Feo, 5 pp.
ITALIAN, per, Corrispondenza Socialista, No 4, 1964, pp 175-177.
JPRS 24996

Right Socialist Says PCI Renovation is Revisionism, by Gastone Duse, 9 pp.
ITALIAN, per, Corrispondenza Socialista, No 4, 1964, pp 178-182.
JPRS 24996

Brunetti Gives Chronology of Dispute, by Mino Brunetti, 6 pp.
ITALIAN, per, Corrispondenza Socialista, No 4, 1964, pp 193-195.
JPRS 24996

Lello Basso on a Single Party for the Working Class in Italy, by Lello Basso, 18 pp.
ITALIAN, per, Critica Marxista, Mar-Apr 1964, pp 119-135.
JPRS 25316

Deutscher Says World Conference Unlikely Because Old Communists Know Dangers of Excommunication, by Isaac Deutscher, 9 pp.
ITALIAN, np, L'Espresso, 26 Apr 1964, pp 8, 9.
JPRS 24751

Text of the Program of the Italian Socialist Party of Proletarian Unity, 27 pp.
ITALIAN, per, Mondo Nuovo, 10 May 1964, pp 1-16.
JPRS 25102

Jean Marie Vincent Writes in PSIUP's Mondo Nuovo, by Jean Marie Vincent, 5 pp.
ITALIAN, per, Mondo Nuovo, 17 May 1964, p 8.
JPRS 25381

Italian Socialist View of the Conflict, by Luciano Vasconi, 13 pp.
ITALIAN, per, Mondo Operato, April 1964, pp 10-16.
JPRS 25316

Togliatti's Report to Central Committee Criticized, by Ugo Duse, 9 pp.
ITALIAN, np, Nuova Unità, May 1964, pp 1, 2.
JPRS 25316

Rift Causes Special Problems for Italian Communist Party Pajetta Answers Il Popolo, by Giancarlo Pajetta, 6 pp.
ITALIAN, np, Rinascita, No 16, 18 Apr 1964, pp 1, 2.
JPRS 24732

Ingrao on the Italian Political Situation and Internal Party Democracy, by Pietro Ingrao, 14 pp.
ITALIAN, np, Rinascita, No 17, 25 Apr 1964, pp 3-5.
JPRS 24751

Togliatti Clarifies Khrushchev Visit to Egypt, by Palmiro Togliatti, 8 pp.
ITALIAN, np, Rinascita, No 21, 23 May 1964, pp 1, 2.
JPRS 25189

Western Europe
Political (Contd)

Ingrao Answers Lombardi on Italian Political Situation, by Pietro Ingrao, 15 pp.
ITALIAN, np, Rinascita, No 21, 23 May 1964, pp 3, 4.
JPRS 25189

The Youth and Political Parties, by Mario Spinella, 6 pp.
ITALIAN, np, Rinascita, No 21, 6 Jun 1964.
JPRS 25209

Longo Reports on Organizational Conference to Italian Communist Party Central Committee, by Luigi Longo, 8 pp.
ITALIAN, np, l'Unita, 24 Apr 1964, p 11.
JPRS 24732

Calamandrei of Italian Communist Party Interviewed on Return From Ceylon Communist Party Congress of 16-19 April, by Calamandrei, 5 pp.
ITALIAN, np, l'Unita, 8 May 1964, p 3.
JPRS 25102

Scoccimarro's Report on Cadres to the PCI Central Control Commission, by Mauro Scoccimarro, 5 pp.
ITALIAN, np, Unita, 21 May 1964, p 2.
JPRS 25189

Pettersen of Norwegian Communist Party Reviews Communist Organization Since Comintern, by Arne Pettersen, 7 pp.
NORWEGIAN, np, Friheten, 15 May 1964, p 12.
JPRS 25141

Pravda Comments on the French 17th Congress Opening, by B. Kotov, 7 pp.
RUSSIAN, np, Pravda, 14 May 1964, p 3.
JPRS 25381

Foreign Delegates' Speeches: M. A. Suslov, Presidium Member and Secretary, CPSU Central Committee, by Mikhail Andreyevich Suslov, 14 pp.
RUSSIAN, np, Pravda, 16 May 1964.
JPRS 25381

Maurice Thorez's Speech, by Maurice Thorez, 11 pp.
RUSSIAN, np, Pravda, 18 May 1964.
JPRS 25381

Text of Kuusinen Speech to February Plenum of CPSU Central Committee, by Otto Vil'gel'movich Kuusinen, 8 pp.
RUSSIAN, np, Pravda, 19 May 1964, p 3.
JPRS 25153

West German Communist Party Chief Reimann Scores Chinese, by Max Reimann, 7 pp.
RUSSIAN, np, Pravda, 20 May 1964, p 2.
JPRS 25153

Longo of Italian Communist Party Defends CPSU Against Chinese Attacks, by Luigi Longo, 6 pp.
RUSSIAN, np, Pravda, 29 May 1964, p 3.
JPRS 25189

Bo Gustafsson Comments on Lotberg Article, by Bo Gustafsson, 6 pp.
SWEDISH, np, Ny Dag, 13 Jun 1964, pp 2, 5.
JPRS 25405

Swedish Editor Interviews Janos Kadar, by Victor Vindo, 9 pp.
SWEDISH, np, Stockholms-Tidningen, 10 Jun 1964, p 22.
JPRS 25405

Western Europe
Military

Regular Food, Alimentation Ordinaires, 143 pp.
FRENCH, rpt, Bulletin Officiel du Ministère de la Guerre et du Ministère de la France d'Outre-mer, No 714-3, 22 Sep 1955, pp 1-251.
ACSI I-1667
ID 2203206

Some Aspects of the Activities of the CEM/ETABC, 11 pp.
FRENCH, rpt, Quelques Aspects de l'Activite du CEM-EtABC Armee Belge, 1963, pp 3-16.
ACSI I-4909
ID 2204022564

Press Information on French Nuclear Developments and Force De Frappe, 11 pp.
FRENCH, nps, Le Figaro, 20 Apr 1964, p 5; 21 Apr 1964, pp 9, 28; Le Monde, 16 Apr 1964, p 1; 21 Apr 1964, p 10.
JPRS 24768

The French Armed Forces of Yesterday and Tomorrow, by Fernand Schneider, 9 pp.
GERMAN, per, Truppenpraxis, No 7, 1963, pp 497-501.
ACSI I-3679
ID 2251727

The Austrian Federal Army, by A. Segur-Cabanac, 13 pp.
GERMAN, per, Truppenpraxis, No 9, 1963, pp 663-669.
ACSI I-3680
ID 2251728

Ideas on Preventive and Active Fire Protection in Industrial Civil Defense, by W. Halpaap, 14 pp.
GERMAN, per, Zivilschutz, Vol XXVIII, No 3, 1964, pp 89-96.
ACSI I-4814
ID 2204018664

Scandinavian Permanent United Nations Force, 11 pp.
NORWEGIAN, rpt, 10 Jan 1964.
OUSARMA, Norway.
ID 2872002364
(DIA)

Organization and Command OM-1, 16 pp.
SPANISH, bk, Organizacion y Mando OM-1, Madrid, 1962, 28 pp, Encl No I to 2889000564, OARMA, Spain.
ACSI I-4562
ID 2889000564

Geographic

Railroads, by Rigmor Skade, 57 pp.
DANISH, bk, Danmark, Vol 1, pp 649-710.
ACSI I-3321-C
ID 2246281

Sociological

French Communists Favor Cooperation, by Gilbert Mury, 28 pp.
FRENCH, per, Cahiers du Communisme, No 5, 1964, pp 114-137.
JPRS 25209

Western Europe
Sociological (Contd)

Jeannette Vermeersch on Patriotism,
by Jeannette Vermeersch, 5 pp.
FRENCH, np, L'Humanite, 8 May 1964, pp 1, 4.
JPRS 25244

Roland Leroy's Speech on Youth, by Roland Leroy,
6 pp.
FRENCH, np, L'Humanite, 16 May 1964, p 8.
JPRS 25381

French CP-UEC Dispute What the Communists
Propose to the Youth, by Roland Leroy, 5 pp.
FRENCH, np, L'Humanite, 31 May 1964, p 3.
JPRS 25209

Rwanda and Burundi in 1962, 21 pp.
FRENCH, np, Textes et Documents, No 151,
8 Jun 1962, pp 1-21.
JPRS 25134

Notes on the Sociological Function of Para-
Religious Forms, by Albert Doutreloux, 10 pp.
FRENCH, per, Zaire, Vol XV, 1961, 45-57.
JPRS 25220

The Intelligentsia and Socialism -- An Austrian
Communist Analysis, by Jiri Hajek, 7 pp.
GERMAN, per, Weg und Ziel, No 5, 1964, pp 297-303.
JPRS 25355

AFRICA

Economic

The Shoe Industry in Tunisia, by Salah al'Ameri,
10 pp.
ARABIC, np, As Sabah, 15-18 Apr 1964, p 6.
JPRS 24975

Rural Economy, by Amadou Karim Gaye, 11 pp.
FRENCH, per, Afrique Magazine, Vol XXIX,
May 1964, pp 37-42.
JPRS 25429

Commerce, Industry and the Crafts in Senegal,
by Daniel Cabou, 12 pp.
FRENCH, per, Afrique Magazine, Vol XXIX,
May 1964, pp 46-50.
JPRS 25429

Senegal's Economy at the Beginning of 1964,
by Henry Charles Gallenca, 7 pp.
FRENCH, per, Afrique Magazine, Vol XXIX,
May 1964, pp 51-53.
JPRS 25429

The Port of Dakar an Instrument at the Service
of the Development of the Nation, by Yoro Sidibe,
15 pp.
FRENCH, per, Afrique Magazine, Vol XXIX,
May 1964, pp 55-64.
JPRS 25429

The Senegal Railroad Administration,
by G. Blancher, 6 pp.
FRENCH, per, Afrique Magazine, Vol XXIX,
May 1964, pp 65-67.
JPRS 25429

Postal Services and Telecommunications, 5 pp.
FRENCH, per, Afrique Magazine, Vol XXIX,
May 1964, pp 89-90.
JPRS 25429

Africa
Economic (Contd)

The Petroleum Refinery of M'Bao, 7 pp.
FRENCH, per, Afrique Magazine, Vol XXIX,
May 1964, pp 101-104.
JPRS 25429

African Economy Money in French Speaking
Africa, 6 pp.
FRENCH, per, L'Afrique dans le Monde, No 5,
1964, pp 25-27.
JPRS 25220

Interim Development Plan of the Congo Braz-
zaville, 32 pp.
FRENCH, per, Congo Brazzaville Information,
2 May 1964, 29 pp.
JPRS 24975

Is an African and Malagasy Common Market
Possible, by Guy Hosmalin, 32 pp.
FRENCH, np, Le Courrier de Madagascar,
21, 22, 27 May 1964; 6, 8, 11, 12 Jun 1964, p 3.
JPRS 25415

Planning is at the Base of Development in the
French Speaking African States, 9 pp.
FRENCH, per, Industries et Travaux d'Outremer,
Vol XII, No 125, Apr 1964, pp 330-332.
JPRS 25256

The Algerian FLN Program, A Revolutionary
Promise, by Gilbert Marquis, 6 pp.
FRENCH, per, L'Internationale, No 22,
May 1964, pp 5a, 5b.
JPRS 25146

Foreign Trade of Morocco in 1963,
15 pp.
FRENCH, per, Note de Documentation, Vol XVII,
No 304, 30 Apr, 17 May 1964, pp 7, 8, 10, 11,
12, 13, 14, 17, 18, 19, 21.
JPRS 25146

Mostaganem Socialist Achievements, Economy
and Tourism, 5 pp.
FRENCH, np, La Republique, 5 May 1964,
p 6.
JPRS 25256

Arzew, the Thriving City, 5 pp.
FRENCH, np, La Republique, 28 May 1964, p 6.
JPRS 25415

Congress of Self Managed Industry at Algiers,
6 pp.
FRENCH, per, Sous le Drapeau du Socialisme,
Apr 1964, pp 1-3.
JPRS 24975

Togolese Ministers Present Plans and Policies,
30 pp.
FRENCH, np, Togo Presse, 27 Apr 1964,
pp 4, 5, 8, 10, 11, 13.
JPRS 24795

Mining Balance Sheet for 1963, 8 pp.
FRENCH, np, La Vie Economique, No 2, 199,
15 May 1964, pp 1, 3.
JPRS 25415

What Must be Done to Make Aid to Developing
Countries Effective and Non Suspect, 5 pp.
FRENCH, np, La Vie Economique, No 2, 201,
29 May 1964, pp 1, 4.
JPRS 25415

Africa
Political

Activities of the National Liberation Front of Angola, 21 pp.
FRENCH, mono, Angola Informations, No 8,
3 May 1964, pp 1-15.
JPRS 25211

Conflicts of Authority in the Clan Society of the Duala of Southern Cameroons, by Manga Bekombo, 12 pp.
FRENCH, per, Cahiers d'Etudes Africaines, Vol IV, No 14, 1963, pp 316-329.
JPRS 25020

Documents Concerning Leftist Opposition in Algeria, by Robert Bonnaud, 30 pp.
FRENCH, per, Cahiers D'Etudes Revolutionnaires, No 1, Nov 1963, pp 6-16.
JPRS 24975

Anti-Communism and the Liberation of Africa, 8 pp.
FRENCH, np, Dipanda, No 28, 9 May 1964, pp 13-15; 20, 16 May 1964, pp 10-12.
JPRS 25220

New Communist Tactics Vis-a-Vis the Single-Party Regimes in Africa, 10 pp.
FRENCH, per, Est et Ouest, No 321, 16-31 May 1964, pp 8-12.
JPRS 25020

The Federal Idea in the Leopoldville Congolese Constitutional Process, by Paul Dabin, 22 pp.
FRENCH, per, Etudes Congolaises, Vol VI, No 4, 1964, pp 37-60.
JPRS 25020

The Caste System in Wolof Society, by Silla Ousmane, 6 pp.
FRENCH, per, France Eurafrrique, Vol XVI, No 148, 1964, pp 38-40.
JPRS 25020

After the Algerian FLN Congress, by Henri Dumoutin, 6 pp.
FRENCH, per, L'Internationale, No 22, May 1964, pp 4a, 4b.
JPRS 25146

Madagascar, Year VII of the Republic, by Philippe Docraone, 14 pp.
FRENCH, np, Le Monde, 20 May 1964, pp 1, 8; 21 May, p 5; 22 May, p 5; 23 May, p 5.
JPRS 25020

What is the Nature of the Algerian Government?, by Gerard Chaliand, 11 pp.
FRENCH, per, Partisans, No 13, 1964, pp 14-22.
JPRS 25020

Where is Algeria Headed, 8 pp.
FRENCH, per, La Voie Communiste, Mar 1964, p 11.
JPRS 24975

The Congolese People on the Road to National Liberation, 5 pp.
FRENCH, np, La Voix du Peuple, 22 May 1964, p 5.
JPRS 24975

Africa
Military

African Armies Should be Free of Foreign Military Officers, by Bakary Traore, 6 pp.
FRENCH, per, Mali Magazine, No 2, Feb, Mar 1964, pp 1-7.
JPRS 25146

A Journey Through Five Wars, by Giorgio Signorini, 78 pp.
ITALIAN, np, Paese Sera, 3 Mar, p 8; 7 Mar, p 7; 10 Mar, p 8; 14 Mar, p 7; 17 Mar, p 8; 19 Mar, p 6; 24 Mar, p 10, 28 Mar, p 7; 2 Apr, p 7; 4 Apr, p 7; 7 Apr, p 8; 16 Apr, p 7.
JPRS 24811

The Role of the Military in the Struggles of the Third World, by Asiaticus, 9 pp.
ITALIAN, np, Rinascita, 23 May 1964, pp 13-15.
JPRS 24975

Geographic

French Somaliland Vis-A-Vis Greater Somalia, by Philippe Docraenc, 8 pp.
FRENCH, np, Le Monde, 21 Apr 1964, pp 1, 6; 22 Apr 1964, p 7.
JPRS 24830

Reflections on Cartography in Geography, by F. Joly, 5 pp.
FRENCH, per, Revue de Geographie du Maroc, Notes Marocaines, No 1, 2, 1962.
ACSI I-3571-B
ID 2250291

Geotechnical Maps, Certain Principles in Their Preparation, by M. Humbert, A. Joannette, 9 pp.
FRENCH, per, Revue de Geographie du Maroc, Notes Marocaines, No 1, 2, 1962.
ACSI I-3571-C
ID 2250291

Types of Vegetation in Morocco, Suggestions for Monoculture and Definitions, by T. Ionosco, Ch. Sauvage, 15 pp.
FRENCH, per, Revue de Geographie du Maroc, Notes Marocaines, No 1, 2, 1962.
ACSI I-3571-D
ID 2250291

Geography and Agrarian Research; Geography and Regional Development, by J. Le Coz, 5 pp.
FRENCH, per, Revue de Geographie du Maroc, Notes Marocaines, No 1, 2, 1962.
ACSI I-3571-F
ID 2250291

Sociological

Social Security Code of the Republic of Mali, 60 pp.
FRENCH, mono, 9 Aug 1962, pp 2-72.
JPRS 25415

Africa
Sociological (Contd)

The Current Legal Status of the Malagasy Woman, 5 pp.
FRENCH, per, l'Afrique Dans le Monde, No 5, 1964, pp 1-34.
JPRS 25220

The Asatoin, and Institution Specializing in the Training of African Technicians, 5 pp.
FRENCH, per, l'Afrique dans le Monde, No 5, 1964, pp 31, 32.
JPRS 25220

The Plan of Social and Economic Development of Senegal, by Habib Thiam, 8 pp.
FRENCH, per, Afrique Magazine, Vol XXIX, May 1964, pp 33-36.
JPRS 25429

Public Health Welfare of the Rural Population, by Dembo Coly, 10 pp.
FRENCH, per, Afrique Magazine, Vol XXIX, May 1964, pp 71-75.
JPRS 25429

Public Education, by Ihra Wane, 6 pp.
FRENCH, per, Afrique Magazine, Vol XXIX, May 1964, pp 78-80.
JPRS 25429

Leadership Training, by Emile Badlane, 8 pp.
FRENCH, per, Afrique Magazine, Vol XXIX, May 1964, pp 81-84.
JPRS 25429

Radio Senegal News and Its Dissemination, 7 pp.
FRENCH, per, Afrique Magazine, Vol XXIX, May 1964, pp 85-87.
JPRS 25429

Information on the Ferishes of the Bassundi Populations Inhabiting the Pangala Subdivision, by L. Kionor, 7 pp.
FRENCH, per, Bulletin de la Societe des Recherches Congolaises, No 1, 1922, pp 21-28.
JPRS 25220

Essential Data on the Religion of the Pygmies, by Paul Schebesta, 8 pp.
FRENCH, per, Congo, Vol XVII, No 3, pp 321-331.
JPRS 25256

The Religion of the Ambundu, a Tribe in Kwango District, by G. Weeks, 7 pp.
FRENCH, per, Congo, Vol XVIII, No 4, 1937, pp 353-361.
JPRS 25256

The Population of Mali, by Bakary Kamian, 14 pp.
FRENCH, per, Connaissance de la Republique du Mali, pp 27-40.
JPRS 24975

The Human Groups, by Bakary Kamian, 10 pp.
FRENCH, per, Connaissance de la Republique du Mali, pp 49-58.
JPRS 24975

Against Carthorism Can Aid to the Third World be Effective, by Gilbert Biardono, 10 pp.
FRENCH, per, Croissance des Jeunes Nations, No 34, Jun 1964, pp 4-8.
JPRS 25256

Parid University Professor Interviewed on New Department of Law and Economics of the African Countries, 5 pp.
FRENCH, per, Croissance des Jeunes Nations, No 34, Jun 1964, pp 34, 35.
JPRS 25256

Africa
Sociological (Contd)

Mali's Touareg Problem Analyzed, by Alassane Ag Baille, 5 pp.
FRENCH, np, L'Essor Hebdomadaire, 11 May 1964, p 6.
JPRS 25220

Activities of the UNECO, 6 pp.
FRENCH, np, L'Etrole du Congo, 5 Jun 1964, p 3; 6, 7 Jun 1964, pp 3, 7.
JPRS 25146

Crisis at Lovanium, by A. R. Ilunga Kabongo, 38 pp.
FRENCH, per, Etudes Congolaises, Vol VI, No 4, 1964, pp 61-98.
JPRS 25146

French Aid to the Third World, by Andre Francois-Poncet, 5 pp.
FRENCH, np, Le Figaro, 2 Jun 1964, pp 1, 28.
JPRS 25146

Decrees, Resolutions, Decisions, and Circulars, 20 pp.
FRENCH, per, Journal Officiel, No 39, pp 549-557.
JPRS 25256

Law Setting up the Niger State Security Court, 10 pp.
FRENCH, per, Journal Officiel de la Republique du Niger, Vol XXX, No 1, 31 Mar 1964, pp 1-3.
JPRS 25256

President Modibo Keita's Speech, by Modibo Keita, 7 pp.
FRENCH, per, Mali Magazine, No 2, Feb, Mar 1964, pp 28-30, 32, 33.
JPRS 25146

A Study of Myths in Africa, by Boubou Hama, 30 pp.
FRENCH, np, Le Niger, Vol VIII, No 21, 4 May 1964, pp 4, 5, 8; No 22, 11 May 1964, pp 4, 7; No 23, 18 May 1964, p 6; No 25, 25 May 1964, p 6.
JPRS 25256

Algerian Schools, 10 pp.
FRENCH, np, Le Peuple, 25-27, 29, 30 May 1964.
JPRS 25415

The Rural Population of the Rif and the Dual Aspect of Urban Communities: Al-Hoceima - Adjir, Nador-Melilla, by L. Gendre, 8 pp.
FRENCH, per, Revue de Geographie du Maroc, Notes Marocaines, No 1, 2, 1962.
ACST 1-3571-II
ID 2250291

Education and Professional Aspirations in Ivory Coast, Mali, Senegal, and Gabon, by Remi Clignot, 21 pp.
FRENCH, per, Tiers-Monde: Problemes des Pays Sous-Developpes, Vol V, No 17, Jan-Mar 1964, pp 61-82.
JPRS 25146

The Cultural Values of the Bushong in the Congo, by J. Vansina, 9 pp.
FRENCH, per, Zaire, Vol VIII, 1954, pp 899-910.
JPRS 25220

MIDDLE EAST

Economic

Armament Plants in Israel, by Nathan Donevitz,
8 pp.
HEBREW, np, Haaletsa, 17 Apr 1964, pp 3-6.
JPRS 24798

Political

Central Committee Statement for 1st of May,
7 pp.
HEBREW, np, Kol Haam, 30 Apr 1964, pp 1, 9.
JPRS 24975

Israeli Communist Party May Day Celebration:
Moshe Sneh Backs CPSU Policy, Criticizes Chinese,
by Moshe Sneh, 27 pp.
HEBREW, np, Kol Haam, 30 Apr 1964, pp 2, 11.
JPRS 24975

Israeli Communists Hail Khrushchev Visit
to Egypt, by Yitshak Ben, 6 pp.
HEBREW, np, Kol Haam, 15 May 1964, pp 2, 3.
JPRS 25153

FAR EAST

Economic

Mainland China's Railroads Timetable, Winter of
1957.
CHINESE, bk, Ch'uan-kuo T'ieh-lu Lu K'o Lich-
ch'e-ti K'o-piao, 1957 - Nien Tung-chi Shih-hsing,
1957.
Dept of Interior
440rt C470

Production Prices Cannot be the Basis of
Socialist Price Formation, by Ho Kuol-lin,
Hsueh Chung-chang, et al, 21 pp.
CHINESE, per, Ching-chi Yen-chiu, No 4,
15 Apr 1964, pp 1-14.
JPRS 25386

On the Cost of Agricultural Products, by Chou Ch'ong,
16 pp.
CHINESE, per, Ching-chi Yen-chiu, No 4,
15 Apr 1964, pp 15-24,
JPRS 25386

On the Problems of the Social Character of
Socialist Economic Results, by Huang Liang-wen,
15 pp.
CHINESE, per, Ching-chi Yen-chiu, No 4,
15 Apr 1964, pp 23-34.
JPRS 25386

Problems on the Relationship of Internal Ratios
of Light Industry, by Jung Wen-tao, 13 pp.
CHINESE, per, Ching-chi Yen-chiu, No 4,
15 Apr 1964, pp 35-42.
JPRS 25386

Summary of the Principal Problems Discussed
in a Symposium on Commercial History,
by Cheng Chi, Han Feng, 8 pp.
CHINESE, per, Ching-chi Yen-chiu, No 4,
15 Apr 1964, pp 70-73.
JPRS 25386

Far East Economic (Contd)

An Attempted Discussion of Steps Toward
Agricultural Mechanization in China,
by T'ao Ting-lai, 21 pp.
CHINESE, per, Hung-ch'i, Peiping, No 7, 8,
20 Apr 1964, pp 50-50.
JPRS 25095

Revival of the Stone Arch Bridge, by
Yuan Ts'ang-i, 6 pp.
CHINESE, per, K'o-hsueh Ta-chung, No 2,
5 Feb 1964, pp 60, 61.
JPRS 25300

Local Labor Power Planning, by Ma Ya-kung, 9 pp.
CHINESE, per, Lao-tung, No 7, 18 Jul 1963, pp 29-33.
JPRS 25453

Labor Quota Standard, by Shen Liang-an, 10 pp.
CHINESE, per, Lao-tung, No 8, 18 Aug 1964, pp 6-11.
JPRS 25453

Further Economy of Labor Power, by Wang K'o,
6 pp.
CHINESE, per, Lao-tung, No 9, 18 Sep 1963, pp 10-13.
JPRS 25453

The Adoption and Implementation of Personnel
Norm by Shanghai's Cotton Spinning and Weaving
Trade, 7 pp.
CHINESE, per, Lao-tung, No 10, 1963, pp 26-28.
JPRS 25071

Improve the Accuracy and Timeliness of Labor Wage
Statistical Material, by Hsu Hsiang-mou, 6 pp.
CHINESE, per, Lao-tung, No 11, 18 Nov 1963, pp 1-4.
JPRS 25383

The Determination and Realization of Local Wage
Plans, by Ma Ya-kung, Liu T'ieh-liang, 7 pp.
CHINESE, per, Lao-tung, No 11, 18 Nov 1963, pp 22-26.
JPRS 25383

A Visit to Shanghai, Peiping and the Horsebridge
Ma-Ch'iao Commune, by Ferdinand Simonett, 9 pp.
WEST GERMAN, np, Der Spiegel, No 21,
20 May 1964, pp 79-81, 83, 84.
JPRS 25190

Journey Without Adventure and Fantasy,
by Ye. Murzayev, 165 pp.
RUSSIAN, bk, Puteshestviya bez Priklucheni
i Fantastiki, Moscow, 1962, pp 1-160.
JPRS 25110

Some Financial Problems in the First
Five Year Plan of the Democratic Republic of
Vietnam, by Ngoc Khue, 19 pp.
RUSSIAN, per, Finansy SSSR, No 3, 1964, pp 73-81.
JPRS 25194

Concerning the Subject of Producing Goods,
the Law of Value and Price Policy, 11 pp.
VIETNAMESE, per, Hoc Tap, No 4, 1964,
pp 50-54.
JPRS 24725

Some Problems Concerning the Price Policy,
by Dang Viet Chau, 27 pp.
VIETNAMESE, per, Hoc Tap, No 4, 1964,
pp 55-64.
JPRS 24725

The Law of Value and the Price Policy in the
North, by Vu Tien Lieu, 14 pp.
VIETNAMESE, per, Hoc Tap, No 4, 1964,
pp 64-71.
JPRS 24725

Goods Production, Value Rule, Prices Relations Among Goods Circulation, Money Circulation, and Prices, by Tran Linh Son, 11 pp.
VIETNAMESE, per, Hoc Tap, No 4, 1964, pp 72-79.
JPRS 24725

Working Program of Union During the Second Quarter of 1964, 12 pp.
VIETNAMESE, np, Lao Dong, 7 Apr 1964, p 2.
JPRS 24726

Improvement of Labor Organization at Nam Dinh Textile Plant, by Pham Dinh Tan, 16 pp.
VIETNAMESE, per, Nghien Cuu Kinh Te, No 20, Apr 1964, pp 35-42.
JPRS 25313

Intensification of Industrial Production for Export, by Tran Ngoc Nam, 11 pp.
VIETNAMESE, per, Nghien Cuu Kinh Te, No 20, Apr 1964, pp 44-49.
JPRS 25313

Agriculture Regionalization in the Provinces, by Doan Dinh Hoc, 16 pp.
VIETNAMESE, per, Nghien Cuu Kinh Te, No 29, Apr 1964, pp 29-34.
JPRS 25313

State Bank to Support Production, by Le thanh Nghi, 5 pp.
VIETNAMESE, np, Nhan Dan, 17 Apr 1964, p 3.
JPRS 24791

Tan Dan Village Hanoi Manages the Market and Reforms the Small Merchant, by Tran Nguyen, 5 pp.
VIETNAMESE, np, Nhan Dan, 20 Apr 1964, p 3.
JPRS 24791

Second Crop Harvest and Good Food Supply, by Tran van Hien, 5 pp.
VIETNAMESE, np, Nhan Dan, 5 May 1964, p 3.
JPRS 25194

Past Achievements and Forthcoming Duties, by Duong Quoc Chinh, 7 pp.
VIETNAMESE, np, Nhan Dan, 15 May 1964, p 2.
JPRS 25154

The Tasks and Guidelines for Animal Husbandry in the 1964-1965 Period, by Nguyen Van Loc, 5 pp.
VIETNAMESE, np, Nhan Dan, 16 May 1964, p 2.
JPRS 25154

The Problem of Food Supply in Thai Binh, by Nguyen Cong Tuan, 6 pp.
VIETNAMESE, np, Nhan Dan, 18 May 1964, p 2.
JPRS 25154

The Organization of Labor in Agricultural Cooperatives, 21 pp.
VIETNAMESE, np, Nhan Dan, 28 May 1964, p 2.
JPRS 25268

Increase Exports, by Ly Ban, 5 pp.
VIETNAMESE, np, Quan Doi Nhan Dan, 14 May 1964, p 1.
JPRS 25268

Begin With the Practical in Ideological Work, 9 pp.
CHINESE, per, Hung Ch'i, Peiping, No 7, 8, 1964, pp 1-7.
JPRS 25095

Appraising and Comparison Constitute the Correct Handling of the Conflict Between the Advanced and the Backward, by Kuo Li-chun, 7 pp.
CHINESE, per, Hung Ch'i, Peiping, No 7, 8, 1964, pp 7-11.
JPRS 25095

Ideological Transformation, by Chang Lin, 5 pp.
CHINESE, per, Hung Ch'i, Peiping, No 7, 8, 1964, pp 12-15.
JPRS 25095

U. S. Imperialists' Absurdities, by Huang Fan-chang, 10 pp.
CHINESE, per, Hung-ch'i, No 7, 8, 20 Apr 1964, pp 27-33.
JPRS 25095

Another Heap of Absurdities of U. S. Imperialists, by Lung Ching, 9 pp.
CHINESE, per, Hung-ch'i, No 7, 8, 20 Apr 1964, p 34-39.
JPRS 25095

An Ideological Trick of Bernstein in His Attack on Marxism, by Ch'ang Kuei, Pao Chun, 8 pp.
CHINESE, per, Hung-ch'i, Peiping, No 7, 8, 20 Apr 1964, pp 40-44.
JPRS 25095

Pro Chinese Members of Danish Communist Party Criticized, by Villy Fuglsang, 5 pp.
DANISH, np, Land og Folk, 4 Jun 1964, p 2.
JPRS 25209

Dissident Organ Scores CPSU Insults, But Has Reservations About Chinese, by Gerard Spitzer, 9 pp.
FRENCH, per, La Voie Communiste, No 44, 1964, pp 6-7.
JPRS 25316

Chinese Racist Policy Attacked, by Janos Hajdu, 6 pp.
HUNGARIAN, np, Nepszabadsag, 14 Jun 1964, pp 4, 5.
JPRS 25405

Chinese Trotskyites Doomed to Failure, by Imre Votava, 5 pp.
HUNGARIAN, np, Nepszabadsag, 21 Jun 1964, p 6.
JPRS 25405

Chinese Violate Proletarian Internationalism, 13 pp.
HUNGARIAN, per, Tarsadalmi Szemle, No 5, 1964, pp 1-13.
JPRS 25405

The National Democratization Movement Liaison Council During the Past Year, 17 pp.
JAPANESE, per, Domel, No 69, Mar 1964, pp 43-51.
JPRS 25392

Short History of the Mongolian People's Revolutionary Party, 1917-1940, 122 pp.
MONGOLIAN, per, Nemyn Am'dral, Sep, Dec 1963, Jan-Mar 1964.
JPRS 25224

Socialist Korea, by F. I. Shabshina, 135 pp.
RUSSIAN, rpt, Sotsialisticheskaya Koreya, 1963, 200 pp.
ACSI 1-4639
ID 2204015264

Far East
Political (Contd)

Chinese Cannot Lock CPSU Out of Africa and Asia,
by V. Matveyev, 6 pp.
RUSSIAN, np, Izvestiya, 7 Jun 1964, p 4.
JPRS 25355

Chinese Marxism is Full of Inconsistencies, 7 pp.
RUSSIAN, np, Pravda, 12 May 1964, p 3.
JPRS 25209

Chinese Interference in Peruvian Communist
Party Affairs Criticized, by Raoul Acosta Salas,
14 pp.
RUSSIAN, np, Pravda, 22 May 1964, p 3.
JPRS 25209

Enthusiastically Move Forward to Reap New
Victories, 21 pp.
VIETNAMESE, per, Hoc Tap, Apr 1964, pp 10-16.
JPRS 24725

Lessons From Cuban Revolution and New
Advances of Latin America Liberation Movements,
by Hong Nam, 24 pp.
VIETNAMESE, per, Hoc Tap, No 4, 1964,
pp 26-34.
JPRS 24725

The Johnson-McNamara Plan to Pacify the
South, by Nguyen Tien, 14 pp.
VIETNAMESE, per, Hoc Tap, No 4, 1964,
pp 35-39.
JPRS 24725

Some Ideas About the Specialized Technical
Leadership Colls, by Tran Quy Hai, 15 pp.
VIETNAMESE, per, Hoc Tap, No 4, 1964,
pp 40-44.
JPRS 24725

Examine Basic Units to Improve Leadership
of Party Committees, by Nguyen Thanh Do,
6 pp.
VIETNAMESE, per, Hoc Tap, No 4, 1964,
pp 44-46.
JPRS 24725

Some Experiences in Basic Political Education
Given to Viet Tri Party Members,
by Dang Kim, 6 pp.
VIETNAMESE, per, Hoc Tap, No 4, 1964,
pp 46-49.
JPRS 24725

Nguyen-Huu-Tho's Memorandum to Preparatory
Conference of Second Afro-Asian Conference,
by Nguyen Huu Tho, 6 pp.
VIETNAMESE, np, Nhan Dan, 17 Apr 1964, p 3.
JPRS 24790

Responsibilities of the Afro-Asian Movement,
by Quoc Nghia, 6 pp.
VIETNAMESE, np, Nhan Dan, 23, 24 Apr 1964,
p 3.
JPRS 24727

Military

The Great Victory of the Anti-US Patriotic Armed
Struggle of the People of South Vietnam,
by Liu K'o-lin, 15 pp.
CHINESE, per, Hung Chi, Peiping, No 7, 8,
1964, pp 1*-26.
JPRS 2505

Far East
Military (Contd)

Royal Thai Navy Monthly Magazine, Navigation
Science, 17 pp. (Condensed)
THAI, per, Navigasastr, Vol III, No 3, 1964, Encl to
USNA, Bangkok, Thailand.
Navy 5895006664
(DIA)

The Strategically Decisive Battle of Dien Bien
Phu, by Hoang Van Thai, 23 pp.
VIETNAMESE, np, Nhan Dan, 5 May 1964,
pp 1, 2.
JPRS 24893

The Role of the Army in the Production of Food,
by Hung Duong, 7 pp.
VIETNAMESE, np, Quan Doi Nhan Dan,
2 Apr 1964, p 4; 4 Apr 1964, p 4.
JPRS 25246

Training Duties in 1964, by Le Trong Tan, 16 pp.
VIETNAMESE, np, Quan Doi Nhan Dan,
7 Apr 1964, pp 1, 2.
JPRS 25246

To Make Correct Decision in Combat,
by Vuong Thua Vu, 5 pp.
VIETNAMESE, np, Quan Doi Nhan Dan,
9 Apr 1964, p 2.
JPRS 25246

Class Education in the Army, 9 pp.
VIETNAMESE, np, Quan Doi Nhan Dan,
9 Apr 1964, p 3.
JPRS 25246

Set High Revolutionary Ardor and Combative
Will to Fulfill All Responsibilities,
by Song Hao, 6 pp.
VIETNAMESE, np, Quan Doi Nhan Dan, 14 Apr 1964,
pp 1, 3.
JPRS 252546

Determination to Fight Determination to
Win, by Le Quang Hoa, 6 pp.
VIETNAMESE, np, Quan Doi Nhan Dan,
21 Apr 1964, pp 1, 3.
JPRS 25195

If You Train Well You Will Fight Well,
by Hoang Van Thai, 6 pp.
VIETNAMESE, np, Quan Doi Nhan Dan, No 1350,
28 Apr 1964, pp 1, 2.
JPRS 25151

The Development of Ideological Education in
Our Navy, by Hoang Tra, 5 pp.
VIETNAMESE, np, Quan Doi Nhan Dan,
30 Apr 1964, p 3.
JPRS 25151

Geographic

Certain Appreciation on the Development of
Production in Mountain Regions,
by Chin Pao-sheng, 6 pp.
CHINESE, per, Min-tua T'uan-chih, No 2, 3,
1964, pp 3, 4, 12.
JPRS 24709

Tundra in the Eastern Tsinghai Plateau,
by Fan Hai-p'eng, 7 pp.
CHINESE, per, Ti-li, No 4, 29 Jul 1963, pp 154-156.
JPRS 24799

Far East
Sociological

Ten Poems by Mao Tse-Tung, by Mao Tse-tung, 5 pp.
CHINESE, per, Hung-ch'i, No 1, 1964.
JPRS 24778

Intermediate Tests in Science and Technology, by Yang Ch'ao-shu, 8 pp.
CHINESE, per, Hung-ch'i, Peiping, No 7-8, 20 Apr 1964, pp 45-49.
JPRS 25095

On the Primacy of the Human Factor, 9 pp.
CHINESE, per, Hung-ch'i, No 10, 23 May 1964, pp 20-26.
JPRS 25140

China Architecture Society 1963 Conference, by P'u Hua, 5 pp.
CHINESE, per, K'o-hs'eh T'ung-pao, No 4, 1964, pp 369, 370.
JPRS 25267

Chinese Penetration in Africa a Close Look at a Chinese Colony Madagascar, 14 pp.
FRENCH, np, La Presse, 30 Apr 1964, p 8; 1 May 1964, p 8; 3 May 1964, p 8; 7 May 1964, p 8.
JPRS 25146

Chinese Actions Weaken World Socialist System, by Csaba Kiss, 7 pp.
HUNGARIAN, per, Tarsadalmi Szemle, Vol XIX, No 6, 1964, pp 1-8.
JPRS 25355

Anti Religious Propaganda, by H. Gaadan, 6 pp.
MONGOLIAN, per, Namyn Am'dral, No 1, 1964, pp 24-28.
JPRS 24884

Discussion on Relations Between Church and State During Past Two Years, 7 pp.
VIETNAMESE, per, Chinh Nghia, 26 Apr, 3 May-10 May 1964.
JPRS 25151

Let Us Build Up Our Determination to Accept the Ideological Stand and Will of the Working Class, 5 pp.
VIETNAMESE, np, Doc-Lap, No 670, 1 May 1964, p 2.
JPRS 25151

Improving the Cultural Activities in Our Capital, by Nguyen Bac, 7 pp.
VIETNAMESE, np, Nhan Dan, 18 May 1964, p 3.
JPRS 25151

Some Views on the One Person Works As Much as Two Emulation Drive, by Nguyen Lam, 12 pp.
VIETNAMESE, np, Nhan Dan, 25 May 1964, p 3.
JPRS 25217

Let Us Make Our Movement Bring About Realistic Results, by Hoang Huu Nhan, 6 pp.
VIETNAMESE, np, Nhan Dan, 26 May 1964, p 3.
JPRS 25217

The Ha-Nhi Tribe and Its Ten Years of Progress, by Ha Bac, 9 pp.
VIETNAMESE, np, Nhan Dan, 27 May 1964, p 2.
JPRS 25217

The Role of the People in the Dien Bien Phu Campaign, by Vu Xuan Chiem, 17 pp.
VIETNAMESE, np, Quan Doi Nhan Dan, 12 May 1964, p 2.
JPRS 25151

Far East
Sociological (Contd)

Achievements of the Institute of Literature in the Last Five Years, by Dang Thai Mai, 16 pp.
VIETNAMESE, per, Tin Tuc Hoat Dong Khoa Hoc, No 57, Mar 1964, pp 1-7.
JPRS 25246

Nationalities Belonging to the Monkhmer Language Family in North Vietnam, by Phan Huu Dat, 9 pp.
VIETNAMESE, per, Tin Tuc Hoat Dong Khoa Hoc, No 57, Mar 1964, pp 24-27.
JPRS 25246

Scientific Activities of the Hanoi School of Pedagogy, 10 pp.
VIETNAMESE, per, Tin Tuc Hoat Dong Khoa Hoc, No 4, 1964, pp 1-5.
JPRS 25237

Activities of All Scientific Organizations, 36 pp.
VIETNAMESE, per, Tin Tuc Hoat Dong Khoa Hoc, No 4, 1964, pp 32-45.
JPRS 25237

Activities of the Institute of Health and Contagious Diseases in 1963, by Phan Hien, 5 pp.
VIETNAMESE, per, Y Hoc Thuc Hanh, No 105, Mar 1964, pp 14-15.
JPRS 25237

Preventive Immunization Calendar in North Vietnam, by Nguyen Trung Thanh, 6 pp.
VIETNAMESE, per, Y Hoc Thuc Hanh, No 105, Mar 1964, pp 24-26.
JPRS 25237

LATIN AMERICA

Economic

Various Items on Cuban Economy and Social Welfare, 40 pp.
SPANISH, per, Bohemia, Vol LVI, No 10, 6 Mar 1964, pp 4-6, 67-73; Vol LVI, No 11, 13 Mar 1964, pp 88, 89, 92; Vol LVI, No 13, 27 Mar 1964, pp 75-79.
JPRS 24770

A Brush-Up on Cuban Brush Industry, by Talia Carol, 6 pp.
SPANISH, per, Bohemia, 1 May, 1964, pp 6, 10.
JPRS 24824

The Water Problem in Havana, by Rene Llinas, 15 pp.
SPANISH, per, Bohemia, 22 May 1964, pp 76-81.
JPRS 25238

Cuba Builds a Dam at Paso Malo, by Norberto Fuentes, 6 pp.
SPANISH, np, Hoy, 24 May 1964, pp 6, 7.
JPRS 25178

Regulations for Emulation, 49 pp.
SPANISH, np, El Mundo, 29 May 1964, pp 8, 9.
JPRS 25278

Guevara Checks on Production in Las Villas, 5 pp.
SPANISH, per, Revolucion, 25 May 1964, pp 1, 4.
JPRS 25157

Cumbre Men's Shoe Factory Still in First Place in Quality Competition, 5 pp.
SPANISH, np, La Tarde, 6 May 1964, p 6.
JPRS 25178

Latin America
Political

Secretary General of Paraguayan Communist Party Blasts Chinese, by Oscar Kreydt, 6 pp.
RUSSIAN, np, Pravda, 9 Jun 1964, p 5.
JPRS 25405

Counterrevolutionaries Criticized, by Dario Carmona, 11 pp.
SPANISH, per, Cuba, No 2, 1964, pp 27-31.
JPRS 25157

The Revolutionary Training Schools in a New Phase, by Lionel Soto, 13 pp.
SPANISH, per, Cuba Socialista, No 2, 1964, pp 62-77.
JPRS 25033

Conservative Press Coverage of Communist Penetration Into Chile, 5 pp.
SPANISH, np, El Diario Ilustrado, 26 Jan 1964, OUSARMA, Santiago, Chile.
ID 2817001564
(DIA)

Military

The Legend Was Born on the 17th, 7 pp.
SPANISH, per, Cuba, No 2, 1964, pp 48-51.
JPRS 25157

Various Items on the Cuban Armed Forces, 30 pp.
SPANISH, per, Verde Olivo, No 51, 22 Dec 1963, pp 3-6; 27, 28, 30, 36, 46, 47, 58, 59, 60; No 52, 29 Dec 1963, pp 6-8; No 57, 16 Feb 1964, pp 10, 11.
JPRS 24770

Party Life in the Camilo Unit, by Joel Villarino, 8 pp.
SPANISH, per, Verde Olivo, 8 Mar 1964, pp 16-18.
JPRS 25157

Military Hospital Carlos J. Finlay, by Carlos Rivero Rivero, 7 pp.
SPANISH, per, Verde Olivo, 12 Apr 1964, pp 40-46.
JPRS 25157

Speech by Commander William Galvez, Chief of Centro Army, 5 pp.
SPANISH, per, Verde Olivo, 12 Apr 1964, pp 52, 53.
JPRS 25157

Sociological

In 1964 More Books Than During the Last Ten Years, by Rogelio Luis Bravet, 5 pp.
SPANISH, per, Revolucion, 4 May 1964, p 8.
JPRS 25157

WORLD WIDE

Economic

PO-I-PO Distorts the Facts, by I. Gavrilov, 5 pp.
RUSSIAN, np, Izvestiya, 21 May 1964, p 2.
JPRS 25177

Political

Dissidents Plead to Avoid Split, 10 pp.
FRENCH, per, Unir Pour Le Socialisme, No 138, May 1964, pp 4-6.
JPRS 25316

Communism and the Conflict of Generations, by Guenter Bartsch, 12 pp.
GERMAN, per, Osteuropa, Vol XIV, No 5, 1964, pp 329-340.
JPRS 25153

Franz Muhri on the International Communist Situation Text of Report to Austrian Communist Party Central Committee, 6 May, 11 pp.
GERMAN, np, Volksstimme, 13 May 1964, pp 5, 6.
JPRS 25084

Gyula Hajdu's Address to the 8th Congress of the International Federation of Democratic Jurists, by Gyula Hajdu, 5 pp.
HUNGARIAN, per, Magyar Jog, Vol II, No 5, 1964, pp 227-229.
JPRS 25405

The Struggle for Marxism-Leninism in the International Communist Movement, by Mario Geymonat, 6 pp.
ITALIAN, np, Nuova Unità, April 1964, p 6.
JPRS 25316

Peaceful Coexistence is Impossible, by Franco Molleso, 9 pp.
ITALIAN, np, Nuova Unità, May 1964, pp 4, 5.
JPRS 25316

Izvestiya Editorial Explains Concept of All National Socialist State, 10 pp.
RUSSIAN, np, Izvestiya, 23 May 1964, p 3; 24 May 1964, p 2.
JPRS 25189

The Policy of Unity Versus the Policy of Dissension, 7 pp.
RUSSIAN, np, Izvestiya, 6 Jun 1964, p 4.
JPRS 25355

Marxism-Leninism International Teaching for Communists in All Countries a Series of Pravda Editorials, 7 pp.
RUSSIAN, np, Pravda, 10 May 1964, p 3.
JPRS 25209

In Reality, They Distort Marxism, 7 pp.
RUSSIAN, np, Pravda, 11 May 1964, p 3.
JPRS 25209

Struggle Against Capitalism Seen Strengthened, by N. Sautov, 5 pp.
RUSSIAN, np, Pravda Vostoka, 9 Jun 1964, p 3.
JPRS 25405

SCIENTIFIC

Aerospace

- Cosmic Research, 295 pp.
 RUSSIAN, bk, Kosmicheskiye Issledovaniya, Vol II, No 2, 1964, pp 3-173. 9693025-V
 FTD-TT-64-547
- Problems of Space Biology, by N. M. Sisakyan, V. I. Yazdovskiy, 555 pp.
 RUSSIAN, bk, Problemy Kosmicheskoy Biologii, Vol III, Moscow, 1964, pp 3-490.
 JPRS 25287
- The Theory of Rocket Engines, by V. Ye. Alemasov, 611 pp.
 RUSSIAN, bk, Teoriya Raketykh Dvigatelyey, Moscow, 1962, pp 1-476. 9693082-V
 FTD-TT-63-454
- Transmission of Information by Extraterrestrial Civilizations, by N. S. Kardashev, 9 pp.
 RUSSIAN, per, Astron Zhur, Vol XLI, No 2, Mar, Apr 1964, pp 282-287.
 JPRS 25307
- Rocket Flight Technology, by E. Sanger.
 GERMAN, bk, Raketenflugtechnik, Munich, Berlin, 1933, 222 pp.
 *NASA TT F-223
- Planetary Gear, by W. Surowiak.
 POLISH, bk, Przekladnie Obiegowe Planetarne, Warszawa, 1959, pp 6-8; 34-45; 456-465.
 *FTD-TT-64-654
- Now Data on "Mars-1", 9 pp.
 RUMANIAN, per, Stinta si Tehnica, No 2, 1963, pp 40-41. 9693006
 FTD-TT-64-237
- The Effect of the Control Mechanisms on Elastic Helicopter Rotor Blades, by A. Marinescu.
 RUMANIAN, per, Studii si Cercetari de Mecanica Aplicata, Vol XIV, No 5, 1963, pp 1073-1087.
 *FTD-TT-64-750

Agriculture

- Utilization of Organic Fossils in Order to Increase the Yield of Agricultural Crops, by D. M. Guseynov, 27 pp.
 RUSSIAN, rpt, 10 Let Akademii Nauk Azerbaydzhanskoy SSR, Nauchnaya Sessiya 23-27 Aprelya 1955, 23-27 Apr 1955, Baku, 1957.
 JPRS 25400
- Scientific Research Works in Fertilizers and Agrochemistry in 1963, by S. I. Vol'kovich, 8 pp.
 RUSSIAN, per, Agrokhiya, No 1, 1964, pp 145-148.
 JPRS 25411
- Discussion of Problems of Irrigation and Land Reclamation at the February Plenum of the Central Committee CPSU, 23 pp.
 RUSSIAN, per, Gidrotekhnika i Meliorat, No 4, 1964, pp 3-21.
 JPRS 25309
- Study of the Immunity of Apples to Scab, by I. I. Belous.
 RUSSIAN, per, Immunitet v Rasteni k Boleznyam i Vreditel'nyam, Vol II, 1958, pp 165-170.
 NRC/Ref: C4544

Scientific Agriculture (Contd)

- Method of Vegetative Half Plants in Selection of Winter Rye, by G. I. Popov.
 RUSSIAN, per, Yest Sel'Skokhoz Nauk Vses Ak Sel'Skokhoz Nauk, Vol VII, No 12, 1962, pp 101-106.
 NRC/Ref: C-4572
- Agrochemical Evaluation of Urea, by D. A. Koren'kov, 7 pp.
 RUSSIAN, per, Zemledeliye, No 10, 1963, pp 30-34.
 JPRS 25253
- Utilization of Trace Elements in Agriculture, by P. I. Anspok, 7 pp.
 RUSSIAN, per, Zemledeliye, No 10, 1963, pp 41-45.
 JPRS 25253
- Time and Methods of Application of Fertilizers on Corn, by M. M. Butaeroga, S. G. Artsukovich, et al, 6 pp.
 RUSSIAN, per, Zemledeliye, No 10, 1963, pp 46-49.
 JPRS 25253
- Possibilities of Increasing the Productivity of the Azerbaijan Zebu, by E. M. Iskenderov.
 RUSSIAN, per, Zhivotnovodstvo, No 7, 1959, pp 77, 78.
 NRC/Ref: C-3470
- Preliminary Inquiry into the Question of Water Conservancy, by Wang Shu-ch'ün, 14 pp.
 CHINESE, per, Ching-chi Yen-chiu, No 1, 17 Jan 1964.
 JPRS 24778
- A Discussion of the Question of Intensified Agriculture in China, by Sha Ting, 9 pp.
 CHINESE, per, Hung-ch'i, No 2, 3, 4 Feb 1964.
 JPRS 24778
- Bring About a New Upsurge in the Water and Soil Conservation Work on the Middle Reaches of the Yellow River, by Chao Ming-fu, 9 pp.
 CHINESE, per, Shui-li yu Tien-li, No 24, 20 Dec 1963.
 JPRS 24778
- Work of the Scientific Institute of Forestry in 1963, by Bela Keresztesi, 22 pp.
 HUNGARIAN, per, Az Erdo, Vol XIII, No 3, 1964, pp 114-125.
 JPRS 25420
- Temporary Permission to Use Various Pesticides in Spray and Powder Form, 5pp.
 HUNGARIAN, per, Mozogazdasagi Ertosito, Vol XV, No 18, 29 Apr 1964, pp 297-299.
 JPRS 25098
- Hauling Capacity of Agriculture, by Agoston Pelva, 17 pp.
 HUNGARIAN, per, Statistikai Szemle, Vol XLII, No 4, 1964, pp 364-375.
 JPRS 25118
- Chemical Fertilizers and Plant Protective Agents, Part I, 16 pp.
 HUNGARIAN, per, Termeloszovetkezetek Tanacsadoja, No 10, 4 Mar 1964, pp 3-6.
 JPRS 25160
- Currently Available Weed Killers, 5 pp.
 HUNGARIAN, per, Termeloszovetkezetek Tanacsadoja, No 12, 18 Mar 1964, pp 5, 6.
 JPRS 25160
- Chemical Fertilizers and Plant Protective Agents, Part II, 9 pp.
 HUNGARIAN, per, Termeloszovetkezetek Tanacsadoja, No 12, 18 Mar 1964, pp 6-8.
 JPRS 25160

Scientific
Agriculture (Contd)

- Uncultivated Species of the Genus *Archis*. Observations on Specimens in the Cytology Section Collection, by C. Conagin. ITALIAN, per, *Brasilia*, Vol XXI, No 21, 1962, pp 341-374. CSIRO/No 6700
- Effects of Herbicides on the Germination of Seeds, by T. Nakayama. JAPANESE, per, *Nogyo Oyobi Engei*, Vol XXXVI, 1961, pp 485-488. NRC/Ref: C-4570
- Studies on the Gas Metabolism of Crops. 5. The CO₂ Gas Analyser Utilizing Infra-Red Absorption, and Some Sample Measurements, by Y. Togari, et al. JAPANESE, per, *Proceedings of the Crop Science Society*, Vol XXIV, No 4, 1956, pp 254-259. CSIRO/No 6699
- Goals of the Institute of Forest Research, by D. Ivanescu, 5 pp. RUMANIAN, per, *Muncitorul Forestier*, 25 Mar 1964, pp 1, 4. JPRS 25420
- State Farms. The Vanguard of Socialist Agriculture, by Bucur Schiopu, 14 pp. RUMANIAN, per, *Probleme Economice*, Vol XVII, No 3, 1964, pp 18-28. JPRS 25098
- "Cristobalino", a New Technique for Hastening the Germination of Certain Seeds, by V. Manuel Patino. SPANISH, per, *Agricultura Tropical Bogota*, Vol IV, 1958, pp 587-589. GB/224/Q.F. 3547
- New Methods of Preserving Perishable Foods and Their Application to Our Environment, by Werther Nogueira, 6 pp. SPANISH, per, *Revista de Ingenieria*, No 649, 650, Dec 1962, pp 72-75. ACSI 1-3302 ID 2244438

Biological & Medical Sciences

- Antibacterial Immunity and Radiorobustance, by N. N. Klemarskaya, N. V. Rayova, 151 pp. RUSSIAN, bk, *Antibakterial'nyy Immunitet i Radiorezistentnost*, 1963, pp 1-118. 9693048-V FTD-TT-63-933
- The Biochemistry of Alpine Climates, by Vladimir Samsonovich Asatiani, 36 pp. RUSSIAN, pamphlet, *Chelovek v Gorakh*, Moscow, 1964, pp 1-37. JPRS 25014
- Prophylactic and Protective Measures in Working With Thorium, by N. Yu. Tarasenko, 29 pp. RUSSIAN, bk, *Gigiyena Truda pri Rabote s Toriyem*, Moscow, 1963, pp 57-83, 88. JPRS 25122
- Practical Medicine in the USSR, 104 pp. RUSSIAN, bk, *Kalendar' Vrach na 1964 god*, Moscow, 1963, pp 138-146, 147-154, 155-165, 166-186, 334-346, 442-453, 461-472, 473-491, 530-545. JPRS 25226

Scientific
Biological and Medical Sciences (Contd)

- Certain Problems in the Influence of Ionizing Radiation on the Nervous System, by M. N. Livanov, 329 pp. RUSSIAN, bk, *Nekotoryye Problemy Deystviya Ioniziruyushchey Radiatsii na Nervnuyu Sistemu*, Moscow, 1962, pp 5-196. 9693089-V FTD-TT-63-582
- The Contamination of Vegetation by Sr-90 and Cs-137 in 1961, by V. P. Shvedov, S. P. Rosyanov, et al. RUSSIAN, rpt, *O Zagryaznenii Rastitel'nosti Strontiem-90 i Tseziem-137 v 1961g*, Moscow, 1963, 7 pp. *AEC
- An Outline of the Clinical Physiology of the Circulation, by V. V. Parin, F. Z. Meyerson, 519 pp. RUSSIAN, bk, *Ocherki Klinicheskoy Fiziologii Krovotokrascheniya*, Moscow, 1960, 427 pp. NASA TT F-173
- Comparative Determination of Primary Production in Fish Ponds in Larvia by the Oxygen and Radiocarbon Methods, by N. Khmelova. RUSSIAN, bk, *Pervichnaya Produktiya Morey i Vnutrennikh Vod*, 1961, pp 209-213. CSIRO/No 6775
- Methods of Estimating Chlorophyll Content of Phytoplankton and Some Results of Their Application, by G. Vinberg, et al. RUSSIAN, bk, *Pervichnaya Produktiya Morey i Vnutrennikh Vod*, 1961, pp 231-240. CSIRO/No 6771
- Chlorophyll Content in the Plankton of Lakes of Various Types, by I. Zakharenkov. RUSSIAN, bk, *Pervichnaya Produktiya Morey i Vnutrennikh Vod*, 1961, pp 241, 242. CSIRO/No 6773
- Application of the Chlorophyll Method to the Study of the Primary Production of Dystrophic Lakes, by M. Ivanova. RUSSIAN, bk, *Pervichnaya Produktiya Morey i Vnutrennikh Vod*, 1961, pp 243-248. CSIRO/No 6772
- Intensity of Photosynthesis of Algae and the Method of Estimating It From the Chlorophyll Content, by V. Kutyurin, M. Ulubokova. RUSSIAN, bk, *Pervichnaya Produktiya Morey i Vnutrennikh Vod*, 1961, pp 249-255. CSIRO/No 6768
- Methods of Luminescent Analysis in the Study of Problems of Primary Production, by S. Goryunova. RUSSIAN, bk, *Pervichnaya Produktiya Morey i Vnutrennikh Vod*, 1961, pp 256-261. CSIRO/No 6769
- Seasonal Changes in the Total Number of Bacteria and Their Generation Time in Lakes of Various Types, by B. Chochuga. RUSSIAN, bk, *Pervichnaya Produktiya Morey i Vnutrennikh Vod*, 1961, pp 262-265. CSIRO/No 6774
- Chlorophyll Content and Primary Production in the Raigorod Lakes of Various Types, by B. Chochuga. RUSSIAN, bk, *Pervichnaya Produktiya Morey i Vnutrennikh Vod*, 1961, pp 266-269. CSIRO/No 6770
- First Group Flight Into Outer Space 11-15 August 1962, by N. M. Sisakyan, V. I. Yazdovskiy, 170 pp. RUSSIAN, bk, *Pervyy Gruppovoy Kosmicheskoy Polet*, Moscow, 1964, pp 1-136. JPRS 25272
- Studies in Color Vision, by Ye. B. Rubkin, Ye. G. Sokolova, 30 pp. RUSSIAN, bk, *Tsvet Vokrug Nas*, Moscow, 1964, pp 1-32. JPRS 25184

- The Problem of Energy Metabolism in a Green Plant, by B. A. Rubin, 24 pp.
RUSSIAN, per, Agrobiologiya, No 6 (144), Nov, Dec 1963, pp 903-919.
JPRS 25079
- Certain Peculiarities of the Adaptation Process to Streptomycin in Various Strains of *Pasteurella Pestis* on Nutrient Media, 9 pp.
RUSSIAN, per, Antibiotiki, Vol VIII, No 5, 1963, pp 444-449. 9222786
US Army Biol Lab
Tr No 980
- Influence of Gravitational Overloads on the Arterial System of the Extremal Nerves, by V. A. Orellin, 7 pp.
RUSSIAN, per, Arkhiv Anatom. Gistolog i Embriolog, Vol XLVI, No 4, 1964, pp 87-92.
JPRS 25275
- Localization of Adenosine Triphosphatase Activity in the Structural Elements of Bacteriophage T2, by A. S. Tikhonenko, 8 pp.
RUSSIAN, per, Biokhimiya, Vol XXVIII, No 2, 1963, pp 340-344.
NIH 4-27-64
- Distribution of Alien Fungi in Connection With the Introduction of Higher Plants, 29 pp.
RUSSIAN, per, Botan Zhur, Vol XLVIII, No 1, 1963, pp 16-34. 9222785
US Army Biol Lab
Tr No 979
- Deep Hypothermia as a Method of Prolonging Periods of Clinical Death, by V. A. Negovskiy, 8 pp.
RUSSIAN, per, Byull Eksp. Biol i Medit, Vol LVI, No 11, 1963, pp 39-42.
NIH 5-9-64
- Distribution of the Reserves of Game Waterfowl in the USSR at the Present Time and in Recent Past, by Yu. A. Isakov, 14 pp.
RUSSIAN, per, Byul Moskov Obshch Ispy Priorody Otd. Biol, Vol LXIX, No 1, 1964, pp 41-50.
JPRS 25123
- Effect of X-Rays on the Early Period of Embryogeny, by V. I. Khoisina, 6 pp.
RUSSIAN, per, Dok Ak Nauk SSSR, Vol CX, No 1, 1956, pp 57-60.
NIH 4-29-64
- Certain Pentavalent Chromium Complexes as Investigated by Means of Electron-Spin Resonance, by N. S. Garif'yanov, 6 pp.
RUSSIAN, per, Dok Ak Nauk SSSR, Vol CLV, No 2, 1964, pp 385-388.
JPRS 25281
- Peculiarities of the Course of Radiation Sickness in Mice Subjected to Treatment With Marrow and by Immunization, by O. P. Lebedeva, N. A. Maksimovich, 7 pp.
RUSSIAN, per, Dok Ak Nauk SSSR, Vol CLV, No 2, 1964, pp 454-456.
JPRS 25277
- The Stability of Functionally Heterogeneous Portions of DNA to Ionizing Radiations, by G. Ye. Fradkin, 7 pp.
RUSSIAN, per, Dok Ak Nauk SSSR, Vol CLV, No 2, 1964, pp 457-460.
JPRS 25282
- Self-Regulation of the Functions at the Aging of the Organism, by V. V. Frolikis, 12 pp.
RUSSIAN, per, Fiz Zhur SSSR imeni I. M. Sechenova, Vol XLIX, No 10, 1963, pp 1221-1229.
NIH 4-40-64

- Significance of the Concepts of Two-Phase Toxicity and Thermodynamic Activity in Toxicology, by N. V. Lazarev, V. A. Filov, 9 pp.
RUSSIAN, per, Gig Truda i Professional Zabol, No 4, 1964, pp 19-24.
JPRS 25116
- Investigations of the Effect of Vanadium Trioxide Dust on the Organism, by I. V. Roshchin, A. V. Il'inskaya, et al, 9 pp.
RUSSIAN, per, Gig Truda i Professional Zabol, Vol VIII, No 4, 1964, pp 25-29.
JPRS 25115
- Toxic Properties of Germanium Tetrachloride, by I. N. Kal'sada, 8 pp.
RUSSIAN, per, Gig Truda i Professional Zabol, Vol VIII, No 4, 1964, pp 57-60.
JPRS 25116
- Toxicology of Amines of the Higher Aliphatic Series 16-20 Carbon Atoms, by N. G. Demeshkevich, 5 pp.
RUSSIAN, per, Gig Truda i Professional Zabol, Vol VIII, No 4, 1964, pp 60-62.
JPRS 25116
- Prospects and Problems Confronting the Medical Industry in the Light of the Decisions of the December 1963 Plenum of the Central Committee of the CPSU, 7 pp.
RUSSIAN, per, Medit Prom, Vol XVIII, No 3, 1964, pp 3-7.
JPRS 25170
- Scientific Cooperation Between the Institute and Plants of the Pharmacotechnochemical Industry, by M. A. Portnov, S. Ordzhonikidze, 5 pp.
RUSSIAN, per, Medit Prom SSSR, Vol XVIII, No 3, 1964, pp 24-26.
JPRS 25170
- Effect of Gamma-Neutron Irradiation on the Eyes With Doses Approaching the Permissible Limit, by Ye. N. L'vovskaya, Ye. S. Kotova.
RUSSIAN, per, Medit Radiolog, Vol IX, No 3, 1964, pp 52-56.
*FTD-TT-64-746
- Dose Characteristics and Nature of Injuries in Mice Gamma-Irradiated at a Dose of 48 KR/MIN, by L. B. Koznova.
RUSSIAN, per, Medit Radiolog, Vol IX, No 3, 1964, pp 56-61.
*FTD-TT-64-746
- Leucocyte Histochemical Changes in Experimental Radiation Sickness, by V. A. Almazov, T. L. Rogova, et al.
RUSSIAN, per, Medit Radiolog, Vol IX, No 3, 1964, pp 61-66.
*FTD-TT-64-746
- The Protizoidal Effect of Certain Molds, by B. S. Drabkin, A. Z. Ioffe, 7 pp.
RUSSIAN, per, Mikrobiologiya, Vol XXI, No 6, 1952, pp 700-704.
JPRS 25182
- Chlorophyll Content of Plankton in the Aegean, Ionian and Adriatic Seas, by L. Sushchenya.
RUSSIAN, per, Okeanologiya, 1961, pp 1039-1045.
CSIRO/No 6767
- The Effect of Stress on the Radiosensitivity of Rats and the Effectiveness of the Radio-protective Action of Mercamine, by P. D. Gorizontov, I. A. Rudakov, 10 pp.
RUSSIAN, per, Patolog Fiziol i Eksp. Terapiya, Vol VIII, No 2, Mar, Apr 1964, pp 17-22.
JPRS 25130

Scientific
Biological and Medical Sciences (Contd)

The Interrelationship Between Plasma Loss, Hemoconcentration, Changes in the Circulating Blood Volume and Blood Pressure in Thermal Burns, by N. I. Kochetygov, 8 pp.
RUSSIAN, per, Patolog Fiziol i Eksper Terapiya, Vol VIII, No 2, Mar, Apr 1964, pp 26-30.
JPRS 25131

The Problem of the Change of the Interstitial Water Balance in Dogs After a Lethal Thermal Burn, by V. B. Troitskiy, N. A. Gorbunova, 7 pp.
RUSSIAN, per, Patolog Fiziol i Eksper Terapiya, Vol VIII, No 2, Mar, Apr 1964, pp 30-34.
JPRS 25133

The Specificity of Autoantibodies in Burn Sickness, by V. N. Kazakova, 7 pp.
RUSSIAN, per, Patolog Fiziol i Eksper Terapiya, Vol VIII, No 2, Mar, Apr 1964, pp 34-38.
JPRS 25132

Study of the Functional Condition of the Kidneys and Toxic Properties of the Sera of Animals After Repeated Thermal Trauma, by R. V. Nedoshivina, I. K. Koryakina, 5 pp.
RUSSIAN, per, Patolog Fiziol i Eksper Terapiya, Vol VIII, No 2, Mar, Apr 1964, pp 79-81.
JPRS 25127

A Protein-Like Polymer, by V. G. Debabov, V. A. Shilov, 6 pp.
RUSSIAN, per, Priroda, No 10, 1963, pp 32-35.
ACSI 1-4447
ID 2204010064
525th MI Gp

Arterial Transfusion of Blood Prepared Without a Stabilizer in Clinical Death Caused by Loss of Blood, by Ye. S. Zolotokrylina, Ye. A. Nosova, 9 pp.
RUSSIAN, per, Problemy Gematol i Perellivan Krovi, Vol IX, No 4, 1964, pp 31-37.
JPRS 25377

Tactics of the Transfusion Treatment of Burn Shock, by R. I. Murazyan, L. I. Gorasimova, 8 pp.
RUSSIAN, per, Problemy Gematol i Perellivan Krovi, Vol IX, No 4, 1964, pp 37-42.
JPRS 25377

The Effect of Hibernation Upon the Antibiotic Action of Certain Molds of the General Cladosporium, Alternaria, Fusarium, Mucor, Thamnidium and Aspergillus, by A. Z. Ioffe, 15 pp.
RUSSIAN, per, Trud Ak Nauk Litovskoy SSR, No 3, 1956, pp 85-95.
JPRS 25182

The Effect of the Surrounding Environment of the Antibiotic Properties of Certain Fungi of the Genus Penicillium, by A. Z. Ioffe, 18 pp.
RUSSIAN, per, Trud Ak Nauk Litovskoy SSR, No 4, 1956, pp 101-113.
JPRS 25182

The Effect of Extracts From Toxic Overwintered Fungi on Paramoecia Paramoecium Caudatum, by B. S. Drabkin, A. Z. Ioffe, 10 pp.
RUSSIAN, per, Trud Chkalov Medinst, 1950, pp 91-98.
JPRS 25182

The Influence of Fusarium Fungi on Millet Oil, by L. Ye. Olifson, B. S. Drabkin, et al, 7 pp.
RUSSIAN, per, Trud Chkalov Medinst, 1950, pp 103-107.
JPRS 25182

The Antibiotic Effect of Molds of the Genera Fusarium and Penicillium on the Tuberculosis Bacillus, by A. Ioffe, 7 pp.
RUSSIAN, per, Trud Inst Eksper Medit Ak Nauk Litovskoy SSR, Vol III, 1955, pp 61-67.
JPRS 25182

Scientific
Biological and Medical Sciences (Contd)

The Antibiotic Effect of Molds of the Genera Fusarium and Penicillium on Certain Microbes of the Enteric Group in Vitro, by A. Ioffe, N. Yeshmantayte, et al, 9 pp.
RUSSIAN, per, Trud Inst Eksper Medit Ak Nauk Litovskoy SSR, Vol III, 1955, pp 67-72.
JPRS 25182

Antibiotic Action of Certain Mold Fungi on Agents Causing Intestinal Infection in Vivo, by A. Z. Ioffe, N. Tesmantaitre, 7 pp.
LITHUANIAN, per, Trud Inst Eksper Medit Ak Nauk Litovskoy SSR, Vol IV-V, 1958, pp 177-181.
JPRS 25182

Transactions of the Tomsk Scientific Research Institute of Vaccines and Serums, 407 pp.
RUSSIAN, per, Trudy Tomskiy Nauchno-Issledovatel'skiy Inst Vaktsin i Syvorotok Minis Zdravook SSSR, Vol XI, 1960, pp 1-327. 9693084
FTD-TT-63-1082

The Problem of Autoregulation in Cytology Reporative Power of the Cells, by V. Ya. Alekandrov, 24 pp.
RUSSIAN, per, Tsitologiya, Vol VI, No 2, 1964, pp 133-151.
JPRS 25424

Cytochemical Study of Potassium and Organic Compounds of Phosphorus and Iron in Trypanosoma Cruzi, by G. I. Roskin, S. M. Kolomina, 12 pp.
RUSSIAN, per, Tsitologiya, Vol VI, No 2, 1964, pp 175-182.
JPRS 25424

Somatic Chromosomes of the Steppe Lemming, by Ye. Ye. Pogoyants, A. F. Zakharov, et al, 11 pp.
RUSSIAN, per, Tsitologiya, Vol VI, No 2, 1964, pp 183-192.
JPRS 25424

The Free Amino Acid Content of the Cerebral Hemispheres, by N. S. Nilova, 11 pp.
RUSSIAN, per, Ukrain Biokim Zhur, Vol XXXV, No 2, 1963, pp 220-226.
NIH 5-4-64

A Chemical Method for Determining the Toxicity of Millet Overwintered Under Snow, by L. Ye. Olifson, A. Z. Ioffe, et al, 6 pp.
RUSSIAN, per, Vest Chkalov Otdel Vses Khim Obshch im. D. M. Mendeloyeva, No 3, 1949, pp 133-136.
JPRS 25182

The Alteration of Certain Chemical Constants of Millet Oil Under the Influence of Fungi Present on the Grain, by L. Ye. Olifson, A. Z. Ioffe, 7 pp.
RUSSIAN, per, Vest Chkalov Otdel Vses Khim Obshch im. D. M. Mendeloyeva, No 5, 1954, pp 61-65.
JPRS 25182

Clinical Aspects and Medical Treatment of Coccidioidomycosis, 7 pp.
RUSSIAN, per, Vest Dermatologii i Venerologii, Vol XXXVI, No 3, 1962, pp 74-77. 9222787
US Army Biol Lab
Tr No 982

Changes in Human Morphological Arterioleplasty With a Lavan Prosthesis, by A. A. Kurygin, S. P. Fedorov, et al, 12 pp.
RUSSIAN, per, Vest Khirurgii, Vol XCII, No 3, 1964, pp 96-102.
JPRS 25271

The Effect of Light on Growth and Photosynthesis of Chlorella, by A. M. Stepanova, 27 pp.
RUSSIAN, per, Vest Lening Univ, No 21, 1963, pp 72-85. 9653049
FTD-TT-64-246

- Influence of Number of Feedings on Digestive Processes and Metabolism in Pigs, by P. D. Pshorichnly.
RUSSIAN, per, Vest Sel'skokhoz Nauk Vses Ak Sel'skokhoz Nauk, Vol III, 1958, pp 96-101.
NRC/Ref: C4573.
- Effect of Cortisone and Acth on the Catecholamine Content and Metabolism in the Heart and Adrenal Glands of Rats, by E. P. Vereshchakova, 7 pp.
RUSSIAN, per, Voprosy Endokrinolog i Gormonoterap, Vol X, No 3, May, Jun 1964, pp 62-65.
JPRS 25279
- Certain Reaction of the Organism to the Action of Ultrasound on the Skin, by M. M. Smyk, 8 pp.
RUSSIAN, per, Voprosy Kurort Fiz i Lech Fiz Kul'tury, Vol XXIX, No 2, Mar, Apr 1964, pp 144-148.
JPRS 25121
- Use of the UHF Therapy in Acute Nephritis, by L. I. Fisher, 8 pp.
RUSSIAN, per, Voprosy Kurort Fiz i Lech Fiz Kul'tury, Vol XXIX, No 2, Mar, Apr 1964, pp 149-154.
JPRS 25121
- First All Russian Congress of Health Resort Specialists and Physiotherapists, by I. Ye. Varin, 14 pp.
RUSSIAN, per, Voprosy Kurort Fiz i Lech Fiz Kul'tury, Vol XXIX, No 2, Mar, 1964, pp 183-190.
JPRS 25121
- Tumor Strains Maintained at the Institute of Experimental and Clinical Oncology of the U.S.S.R. Academy of Medical Sciences, by Ye. Ye. Pogostants, 27 pp.
RUSSIAN, per, Voprosy Onkologii, Vol IX, No 8, 1963, pp 103-116.
NIH 4-42-64
- On the Carcinogenic Action of Some Medical Substances, by L. S. Salyamon, 5 pp.
RUSSIAN, per, Voprosy Onkologii, Vol IX, No 11, 1963, pp 22-25.
NIH 5-20-64
- Classification of Tumors of the Upper Respiratory Organs, 7 pp.
RUSSIAN, per, Voprosy Onkolog, Vol X, No 1, 1964, pp 115-118.
JPRS 25175
- Study of Antigenic Structure of Human Tumors Report III. Comparative Analysis of Cancerous Stomach Tissue, by L. A. Lyudogovskaya, V. S. Tsvetkov, et al, 8 pp.
RUSSIAN, per, Voprosy Onkologii, Vol X, No 3, 1964, pp 18-22.
JPRS 25180
- The Effect of Ribonucleic Acid on Tumor Cell Growth, by V. A. Artamonova, T. I. Tikhonenko, et al, 8 pp.
RUSSIAN, per, Voprosy Onkolog, Vol X, No 3, 1964, pp 22-26.
JPRS 25180
- Bolip, A Protein Product of Institute of Nutrition of the Academy of Sciences USSR, by A. Pokrovskiy, G. S. Korobkina, et al, 15 pp.
RUSSIAN, per, Voprosy Pitaniya, Vol XXIII, No 2, Mar, Apr 1964, pp 21-30.
JPRS 25421
- Some Data on Effect of Cobalt and Tungsten Enriched Vegetables Upon the Animal Organism, by I. M. Seidov, 7 pp.
RUSSIAN, per, Voprosy Pitaniya, Vol XXIII, No 2, Mar, Apr 1964, pp 73-76.
JPRS 25421

- Toxicologic Criteria for Establishing the Degree of Safety of Permissible Residual Quantities of Pesticides and Study of Their Content of Nutrition Products, by A. I. Shtenberg, 8 pp.
RUSSIAN, per, Voprosy Pitaniya, Vol XXIII, No 2, Mar, Apr 1964, pp 90-93.
JPRS 25421
- Neuropsychology in Local Diagnostics of Brain Injuries, by A. R. Luriya, 16 pp.
RUSSIAN, per, Voprosy Psikh, Vol X, No 2, 1964, pp 3-15.
JPRS 25295
- Conditions of the Effectiveness of Estimation Action on Personality, by R. Kh. Shakurov, 12 pp.
RUSSIAN, per, Voprosy Psikh, Vol X, No 2, 1964, pp 40-48.
JPRS 25295
- The Problem of Hypnopedia, by V. N. Kulikov, 14 pp.
RUSSIAN, per, Voprosy Psikh, Vol X, No 2, 1964, pp 87-97.
JPRS 25295
- Detection of the Virus of Lymphocytic Choriomeningitis by Means of the Indirect Method of Fluorescing Antibodies, by P. I. Remezov, 6 pp.
RUSSIAN, per, Voprosy Psikh i Nevropatologii, No 7, 1961, pp 113-120.
NIH 5-11-64
- L-Transformation of Viruses and Rickettsias in Tissue Culture. Report I. L-Transformation of the Psittacosis Virus, by V. Ya. Podolian, 7 pp.
RUSSIAN, per, Voprosy Virusologii, No 1, 1963, pp 24-27.
NIH 4-32-64
- Antibodies Against SV40 in Monkeys of Various Species, by M. Ya. Chumakova, 7 pp.
RUSSIAN, per, Voprosy Virusologii, Vol IV, 1963, pp 452-456.
NIH 5-34-64
- Demonstration of Antibody to Simian Virus SV40 in Human Sera. Serological Evidence of Infection From Monkeys and Kidney Cultures, by M. Ya. Chumakova, 6 pp.
RUSSIAN, per, Voprosy Virusologii, Vol IV, 1963, pp 457-460.
NIH 5-30-64
- Certain Problems of Clinical Vitaminology, by E. F. Shamrai, Yu. V. Klumlevskiy, 13 pp.
RUSSIAN, per, Vrachebnoye Delo, No 2, 1964, pp 3-8.
NLJ. Translation Bulletin
Vol VI, No 6, 1964
- Differentiation of the Microbes of Plague and Pseudotuberculosis of Rodents, 6 pp.
RUSSIAN, per, Zhur Mikrobiol, Epidemiol i Immunobiol, No 5, 1963, pp 23-26. 9222782
US Army Biol Lab
Tr No 950
- Bacteriological Diagnosis of Anthrax, 8 pp.
RUSSIAN, per, Zhur Mikrobiol, Epidemiol i Immunobiol, No 5, 1963, pp 107-112. 9222784
US Army Biol Lab
Tr No 975
- A Comparative Study of Lyophilized Typhoid Vaccines Obtained by Various Methods, by N. K. Mesarsky, 8 pp.
RUSSIAN, per, Zhur Mikrobiol Epidemiol i Immunobiol, No 8, 1963, pp 24-29.
NIH 5-33-64
- Problems of Immunology at the Fourteenth Congress of Microbiologists, Epidemiologists and Specialists on Infectious Diseases, 5 pp.
RUSSIAN, per, Zhur Mikrobiolog, Epidemiolog i Immunobiolog, No 3, 1964, pp 3-6.
JPRS 25297

Current Data on the Formation of Protective Antibodies, Its Regulation and Nonspecific Stimulation of It, by P. F. Zdrodovskiy, 17 pp.
RUSSIAN, per, Zhur Mikrobiolog, Epidemiolog i Immunobiolog, No 5, 1964, pp 6-14.
JPRS 25297

Study of the Pathogenesis of Experimental Tularemia, by Ye. V. Ananov, 6 pp.
RUSSIAN, per, Zhur Mikrobiolog, Epidemiolog i Immunobiolog, No 5, 1964, pp 24-28.
JPRS 25297

Blood Sucking Ticks Reservoirs of the Q Fever Pathogen in Various Landscape Zones of the USSR, by Z. M. Zhmayeva, P. A. Petrishcheva, et al, 10 pp.
RUSSIAN, per, Zhur Mikrobiolog, Epidemiolog i Immunobiolog, No 5, 1964, pp 28-33.
JPRS 25297

The Invasiveness of Avirulent Cultures of the Plague Pathogen, by M. M. Faybich, 7 pp.
RUSSIAN, per, Zhur Mikrobiolog, Epidemiolog i Immunobiolog, No 5, 1964, pp 36-41.
JPRS 25297

Combination of Immunization With Plague Vaccine With the Administration of Streptomycin, by D. T. Khoklov, 9 pp.
RUSSIAN, per, Zhur Mikrobiolog, Epidemiolog i Immunobiolog, No 5, 1964, pp 41-45.
JPRS 25297

Landscape Epidemiological Characteristics of a Natural Focus of Tularemia in Zapadnoye Poles'ye in USSR, by V. I. Adamovich, 8 pp.
RUSSIAN, per, Zhur Mikrobiolog, Epidemiolog i Immunobiolog, No 5, 1964, pp 45-50.
JPRS 25297

Use of the Antibody Naturalization Test for Retrospective Diagnosis of a Tularemia Epizootic, by D. T. Shiryayev, S. A. Tokarev, et al, 5 pp.
RUSSIAN, per, Zhur Mikrobiolog, Epidemiolog i Immunobiolog, No 5, 1964, pp 54-57.
JPRS 25297

The Problem of the Distribution of Antrax in Stavropol'skiy Kray, by V. Ya. Sklyarov.
RUSSIAN, per, Zhur Mikrobiolog, Epidemiolog i Immunobiolog, No 5, 1964, pp 138-141.
JPRS 25297

Amyotrophic Lateral Sclerosis, by T. L. Bunina, 12 pp.
RUSSIAN, per, Zhur Nevropatol i Psikhiat, Vol LX, No 9, 1960, pp 1096-1100.
JPRS 25378

Experience in the Diagnosis of Nerve Diseases by Means of a Ural-2 Digital Computer, by V. I. Shtabrov, Yu. A. Ostroumov, RUSSIAN, per, Zhur Nevropatol i Psikh iment S. S. Korsakova, Vol LXIV, No 4, 1964, pp 515-519.
JPRS 25329

Spatial Distribution of Sources of Rhythmical Activity in the Cerebral Cortices of Man and Animals, by K. K. Monakhov, L. V. Tishankova, 10 pp.
RUSSIAN, per, Zhur Nevropatol i Psikh iment S. S. Korsakov, Vol LXIV, No 4, 1964, pp 520-526.
JPRS 25329

Changes of the Skin Action Currents in Organic Central Nervous System Diseases, by V. V. Delaryu, 6 pp.
RUSSIAN, per, Zhur Nevropatol i Psikh iment S. S. Korsakov, Vol LXIV, No 4, 1964, pp 552-554.
JPRS 25329

The Effect of Serum of the Schizophrenic Patient on the Cerebral Electrical Activity of Experimental Animals, by A. V. Nemtsov, V. A. Fayvishevskiy, 10 pp.
RUSSIAN, per, Zhur Nevropatol i Psikh iment S. S. Korsakov, Vol LXIV, No 4, 1964, pp 559-566.
JPRS 25329

Comparative Electroencephalographic Characteristics of Different Clinical Groups of Schizophrenic Patients, by I. M. Feygenberg, 12 pp.
RUSSIAN, per, Zhur Nevropatol i Psikh iment S. S. Korsakov, Vol LXIV, No 4, 1964, pp 567-574.
JPRS 25329

The Reactivity of Some Components of the Endocrine System in Schizophrenia With Different Forms of Courses, by E. I. Minsker, 5 pp.
RUSSIAN, per, Zhur Nevropatol i Psikh iment S. S. Korsakov, Vol LXIV, No 4, 1964, pp 575-578.
JPRS 25329

Blood Pressure and Arterial Oscillometric Indices in Patients With Schizophrenia and Their Dynamics During Thorazine Treatment, by F. G. Zubarev, 9 pp.
RUSSIAN, per, Zhur Nevropatol i Psikh iment S. S. Korsakov, Vol LXIV, No 4, 1964, pp 579-586.
JPRS 25329

Features of the Natural Sleep of Premature Children in the Early Period of Postnatal Life, According to the Data of Electroencephalographic Investigation, by R. I. Polikanina, 15 pp.
RUSSIAN, per, Zhur Vyshey Nervnoy Deyatel'nosti iment L. P. Pavlova, Vol XIII, No 1, 1963, pp 62-72.
NII 5-29-64

New Data of Various Pathways of the Adaptations of Animals to the Changes of Their Environment, by S. S. Shvarts, V. N. Bol'shakov, et al, 7 pp.
RUSSIAN, per, Zool Zhur, Vol XLIII, No 4, 1964, pp 483-487.
JPRS 25428

Effect of Chemical Treatment From Airplanes on the Soil Invertebrate Fauna in Coniferous Forests, by Yu. B. Byzova, 25 pp.
RUSSIAN, per, Zool Zhur, Vol XLIII, No 4, 1964, pp 488-502.
JPRS 25428

Study of Cladocera Populations Using the Method of Semi Isolation in a Body of Water, by K. A. Voskresenskiy, L. I. Lebedeva, 11 pp.
RUSSIAN, per, Zool Zhur, Vol XLIII, No 4, 1964, pp 518-524.
JPRS 25428

Investigation of the Chemoreception in Insects and Ticks the Peculiarities of the Functioning of Chemoreceptors in Hyalomma Asiaticum P. Sch. et E. Sch. Under the Action of Repellents, by Ye. Kh. Zolotarev, Yu. A. Yelizarov, 17 pp.
RUSSIAN, per, Zool Zhur, Vol XLIII, No 4, 1964, pp 549-559.
JPRS 25428

The Problem of Immunization Against Trachoma, by Chang Hsiao-lou, Chin Hsiu-ying, 33 pp.
CHINESE, per, Chung-hua I-Hsueh Tsa-chih, Vol XLIX, No 12, 1963, pp 751-758.
JPRS 25283

Scientific
Biological and Medical Sciences (Contd)

- Advances in the Chemopharmacodynamics of Antihypertensive Drugs Acting on the Sympathetic Nerve Endings, by Pai Tung-lu, 21 pp.
CHINESE, per, K'o-shueh T'ung-pao, No 3, 1964, pp 208-217.
JPRS 24862
- Applications of Helium in Biology, by Shen Chi-ch'ün, 12 pp.
CHINESE, per, K'o-hsueh T'ung-pao, No 4, 1964, pp 316-323.
JPRS 25267
- The Fuel Energy Balance Extraction and Production, by Hau Shou-po, 18 pp.
CHINESE, per, K'o-hsueh T'ung-pao, No 4, 1964, pp 324-333.
JPRS 25267
- Metabolism of RNA in the Silk Gland Tissue of the Castor Silk Worm, by Lu Chia-hung, Ku Chien-jen, et al, 17 pp.
CHINESE, per, K'o-hsueh T'ung-pao, No 4, 1964, pp 340-342.
JPRS 25267
- Emotional Life of a Newborn Infant, by M. Damborska, 7 pp.
CZECH, per, Československá Pediatrie, Vol XVI, No 10, 1961, pp 935-938.
NIH 4-7-64
- Congenital Heart Defect, 40 pp.
DUTCH, per, Nederlandsch Tijdschrift voor Geneeskunde, Vol XCIV, 1950, pp 2704-2713.
Navy Tr 3844/NMS 885
- Monitoring of Radioactivity in Milk at Ispra Results Obtained in the Period 1960-1962, by M. de Bortoli, P. Caglione, et al, 39 pp.
FRENCH, rpt, 1963. 9222647
AEC-NP-Tr-1142
- Recent Advances in the Experimental Hepatoma of Rats, by Eliane LeBreton, 38 pp.
FRENCH, bk, Cancer Primitif du Foie et des Voies Biliaires, Masson et Cie, Paris, 1958, pp 62-98.
NIH 5-24-64
- Urinary Excretion of Stable Iodine, by F. Casson, P. Caronza, et al.
FRENCH, per, Acta Isotopica, Vol II, 1963, pp 391-400.
*AEC
- Specificity of the Anti-RNA Antibodies, by E. Barbu, 20 pp.
FRENCH, per, Annales de l'Institut Pasteur, Vol CV, No 5, 1963, pp 849-865.
NIH 4-25-64
- Radiochromatographic Study of the Stages of the Iodization of Tyrosine and Histidine, by J. Roche, 10 pp.
FRENCH, per, Biochimica et Biophysica Acta, Vol VII, 1951, pp 439-445.
NIH 5-16-64
- The Physiology of a Behavior, the Glucide Appetite and its Neuroendocrine Regulation in the Rodents, by A. Soulaire, 39 pp.
FRENCH, per, Bulletin Biologique, Vol LXXXI, No 3, 4, 1947, pp 274-284, 297-304, 412-422.
NIH 5-32-64
- A Rank Order Test for Trend in a Set of Correlated Means, by A. Lubin, 18 pp.
FRENCH, per, Bulletin Centre d'Etudes et Recherches Psychotechnique, Vol X, No 4, 1961, pp 433-444.
NIH 4-36-64

Scientific
Biological and Medical Sciences (Contd)

- Can Congenital Malformations Be Prevented?, by Paul De Bellefeuille, 10 pp.
FRENCH, per, Canadian Medical Association Journal, Vol LXXXIX, 1963, pp 933-936.
NIH 5-28-64
- Inheritance of Dementia of Advanced Age, by J. Constantinidis, 48 pp.
FRENCH, per, L'Encephale, Vol LI, No 4, 1962, pp 301-344.
NIH 5-7-64
- Some Dynamic Aspects of the Thyroid Function Studied by the Isotopic Equilibrium Method, by Cl. Simon, 18 pp.
FRENCH, per, International Journal of Applied Radiation and Isotopes, Vol VIII, 1960, pp 35-45.
NIH 4-38-64
- The Nephritic Colic in the Cardiac. An Emergency the Embolism of the Renal Artery, by J. Cukier, 13 pp.
FRENCH, per, Journal d'Urologie et de Nephrologie, Vol LXIX, No 4, 5, 1963, pp 223-233.
NIH 4-4-64
- Seven Years of Experimental and Clinical Experience With Tetra Acetate Ethylene Diamine, EDTA in the Treatment of Roots, by B. Nygaard Ostby, 11 pp.
FRENCH, per, Revue Française d'Odonto-Stomatologie, Vol IX, No 4, 1962, pp 527-532.
Navy Tr 3847/NMS 888
- Immunoelectrophoretic Analysis of the Virus of Myxomatosis and of Fibromatosis, by M. T. Fayet, 11 pp.
FRENCH, per, Revue d'Immunologie, Vol XXVII, No 1, 2, 1963, pp 87-96.
NIH 5-6-64
- Leucoses and Gm and Inv Gamma Globulin Groups, by C. Ropartz, 5 pp.
FRENCH, per, Vox Sanguinis, Vol VIII, 1963, pp 627-631.
NIH 4-33-64
- A Simplification of the Serological Arizona Diagnosis, by F. Kauffmann, 6 pp.
GERMAN, per, Acta Pathologica et Microbiol Scandinavica, Vol LIV, 1962, pp 473-478.
NIH 5-8-64
- The Action of Glycosides in Cardiac Insufficiency Due to Increased Loads, by M. Kaltenbach, 21 pp.
GERMAN, per, Archiv fuer Kreislauforschung, Vol XXXIV, No 4, 1961, pp 287-303.
NIH 4-15-64
- Experimental Studies on the Biology of Mosquitoes, by Otto Hecht, 23 pp.
GERMAN, per, Archiv fuer Schiffs- und Tropenhygiene, Vol XXXVII, 1933, pp 256-271.
NIH 5-8-64
- The 2-Alkyl-3-Imino-Phenanthrotriazines -- A New Group of Active Tuberculostatic, by W. H. Wagner, 15 pp.
GERMAN, per, Arzneimittel-Forschung, Vol XIII, 1963, pp 3-7.
NIH 4-39-64
- Chemotherapeutic Experiments With Hepatoma by D. Schmalz, 5 pp.
GERMAN, per, Arzneimittelforschung, Vol XIII, No 5, 1963, pp 370-371.
NIH 4-18-64
- Autoradiographic Studies on the Synthesis of DNA in Experimental Carcinogenesis Provoked by Diethyl Nitrosamine in the Parenchymal Liver Cells of the Rat, by J. Cote, 26 pp.
GERMAN, per, Beitrag Patholog Anatomie, Vol CXXVII, No 3, 1962, pp 450-473.
NIH 4-20-64

Scientific
Biological and Medical Sciences (Contd)

On the Sense of Smell of Lice, by W. Pick, 8 pp.
GERMAN, per, Dermatologische Wochenschrift,
Vol LXXXIII, 1926, pp 1020-1025.
NIH 4-23-64

Electro-Fishery, by C. O. Kreutzer.
GERMAN, per, Elektrotechnische Zeit, Vol VI, No 5,
1954, pp 176-179.
NZDSIR/Ref: No 972

Intermolecular Interactions in Muscular Protein
and Their Importance for the Water-Binding Capacity
of Meat, by R. Hamm.
GERMAN, per, Die Fleischwirtschaft, Vol XIV,
No 10, 1962, pp 958-963.
CSIRO/No 6510

Determination of Connective Tissues by Hydroxy
Proline Method, and Determination of Thickening
Agents, by R. Grau, et al.
GERMAN, per, Fleischwirtschaft, Vol XV, No 4,
1963, pp 295-297.
CSIRO/No 6614

Report on a Helminth Parasite in the Vitreous
of the Human Eye, by Berthold Maag, 8 pp.
GERMAN, per, Klinische Monatsblätter fuer
Augenheilkunde, Vol CXXXIII, No 5, 1958,
pp 713-718.
NIH 5-17-64

Determination of Nitrate in Plant Substances, by
R. Balks, I. Reekers.
GERMAN, per, Landwirtschaftliche Forschung,
Vol VI, 1954, pp 121-126.
CSIRO/No 6569

A Contribution to the Treatment of Fat Embolism,
by T. Orłowski, J. Tomsa, 9 pp.
GERMAN, per, Medizinische Monatsschrift,
Vol XVII, 1963, pp 583-585.
Navy Tr 3845/NMS 886

Investigations on the Epizootiology and Diagnosis of
Parainfluenza-3 Viral Infection of Cattle, by
K. Bogel, 19 pp.
GERMAN, per, Monatshfte fuer Tierheilkunde,
Vol XIV, No 3, 1962, pp 77-90.
NIH 4-5-64

Carcinogenic Substances in Water, by
J. Bornoff, 11 pp.
GERMAN, per, Munchener Medizinische
Wochenschrift, Vol CV, No 24, 1963,
pp 1237-1242.
NIH 5-12-64

Investigation of the Effects of Methyl Cellulose
and Carboxymethyl Cellulose in the Gastro-
Intestinal Tract, by W. Kern.
GERMAN, per, Pharmazeutische Industrie,
Vol XXI, No 2, 1959, pp 45-50.
GB/39/HQ 1273

Histopathology of Poliomyelitis Anterior Subacuta,
by N. W. Konowalow, L. M. Popowa, et al, 24 pp.
GERMAN, per, Psychiatrie, Neurologie und
Medizinische Psychologie, Vol XV, No 6, 7,
pp 215-226.
JPRS 25388

Chemotherapy of Tuberculosis. Clinical Testing
and Combinations, 5 pp.
GERMAN, per, Selecta, Vol V, No 50, 1963,
pp 1598-1599.
NIH 4-11-64

Scientific
Biological and Medical Sciences (Contd)

Herpes Zoster After Roentgentherapy, by
Johannes Kohler, 10 pp.
GERMAN, per, Strahlentherapie, Vol CXV, 1960,
pp 587-594.
ACSI 1-4580-A
ID 2204013564

Herpes Zoster After Roentgentherapy,
by W. Rube, 8 pp.
GERMAN, per, Strahlentherapie, Vol XCVI, 1955,
pp 297-304.
ACSI 1-4580-B
ID 2204013564

Structure of the Tangential Fibrous Layer of the
Articular Cartilage in the Scapular Glenoid Cavity
as an Insubstantiated Strain Field. Ninth Paper on
the Functional Anatomy and Causal Morphology of
the Supporting Apparatus, by F. Pauwels, 73 pp.
GERMAN, per, Z fuer Anat und Entwicklungsgesch,
Vol CXXI, 1959, pp 188-240.
NIH 5-14-64

Aldosterone Production of the Adrenals in
Experimental Renal Hypertonia, by P. Weisz,
5 pp.
GERMAN, per, Z fuer die Gesamte Innere
Medizin und ihre Grenzgebiete, Vol XV, No 5,
1960, pp 271-273.
NIH 4-16-64

On Clinican Aspects and Hemodynamics of the
Idiopathic Hypertrophic Subaortic Stenosis, by
F. Loogen, 11 pp.
GERMAN, per, Z fuer Kreislaufforschung, Vol LII,
No 10, 1963, pp 961-969.
NIH 4-22-64

Embolism in the Renal Artery, Report on One
Operated Case and on Experimental Studies Regarding
the Length of Time the Renal Blood Supply Can be
Cut Off Without Depriving the Kidney of Its
Functional Capacity, by A. Westerborn, 32 pp.
GERMAN, per, Z fuer Urologie Chirurgie, Vol XXXI,
1937, pp 687-708.
NIH 4-1-64

Pathogenesis, Physiopathology and Therapy of
the Ischemic Syndrome of Volkmann, by
G. Finoschl, 40 pp.
GERMAN, per, Z Unfallmed Berufskr, Vol LXV,
1963, pp 33-57.
Navy Tr 3841/NMS 882

A Resistance Test With Detergents for the
Characterization of Viruses, by K. Bogel, 6 pp.
GERMAN, per, Zentralblatt fuer Bakteriologie,
Parasitenkunde, Infektionskrankheiten und
Hygiene, Vol CLXXXVI, No 1, 1962, pp 134-138.
NIH 4-28-64

On the Extraction of Fetal Bovine Serum and
Its Use in Virology, by Hartwich Kohler, 3 pp.
GERMAN, per, Zentralblatt fuer Bakteriologie
Parasitenkunde Infektionskrankheiten und
Hygiene, Vol CLXXXVIII, No 3, 1963, pp 403-407.
NIH 5-18-64

Demonstration and Purification of a Soluble Antigen
From Tissue Infected With the Virus of Newcastle
Disease, by Rudolf Rott, 13 pp.
GERMAN, per, Zentralblatt fuer Veterinarmedizin,
Vol X, No 1, 1963, pp 57-66.
NIH 4-3-64

The Effect of Alloxan-Induced Diabetes on the
Taking Root of Experimental Tumor Transplants, by
P. P. Tinozzi, 12 pp.
ITALIAN, per, Archivio De Vecchi L'Anatomia
Patologia, Vol XXXVII, No 1, 1962, pp 1-11.
NIH 4-26-64

- Investigations of Lactobacilli Responsible for Greenish Discolouration of Sausages, by G. Giolitti, S. D'Aubert.
ITALIAN, per, Archivio Veterinario Italiano, Vol XIV, No 1, 1963, pp 81-89.
CSIRO/No 6491
- Milk Changes Following Infections of the Udder, by G. Mantovani.
ITALIAN, per, Atti della Società Italiana della Scienza Veterinaria Rimini Ravenna, Vol XI, 1957, pp 171-177.
NZDSIR/Ref: No 974
- On the Importance of Selective Medium With Thallium Crystal Violet Acetate for the Streptococci Isolation, by Ezio Sisti, 6 pp.
ITALIAN, per, Bollettino Chimica Farmaceutica, Vol XCIV, No 8, 1955, pp 303-306.
Navy Tr 3846/NMS 887
- Ethnobotanical Panorama of Amazonia, by A. Scarpa, 8 pp.
ITALIAN, per, Minerva Farmaceutica, Vol X, 1962, pp 235-238.
NIH 5-10-64
- Lung Carcinogenesis From Isonicotinic Hydrazide in Male Mice of the BALB/c, by R. Ribacchi, 11 pp.
ITALIAN, per, Forurgia, Vol XXIII, No 2, 1963, pp 103-114.
NIH 5-22-64
- Contribution to the Study of the Histological Changes of the Cutis-Mucosa Tract Through Action of Radiations, by G. Porro, 17 pp.
ITALIAN, per, Radioterapia, Vol XIII, No 4, 1958, pp 251-270.
NIH 4-10-64
- Current Trends in Antitumor Chemotherapy, by A. DeBarbieri, 13 pp.
ITALIAN, per, Terapia, Vol XLVIII, No 361, 1963, pp 83-93.
NIH 4-24-64
- Experimental Studies on the Antitumor Activity of the New Antibiotic Daunomycin, by A. Di Marco, 14 pp.
ITALIAN, per, Tumori, Vol XLIX, No 3, 1963, pp 203-217.
NIH 5-31-64
- Researches on the Activity of Daunomycin on Normal and Neoplastic Cells Grown in Vitro, by Aurelio Di Marco, 16 pp.
ITALIAN, per, Tumori, Vol XLIX, No 4, 1963, pp 235-251.
NIH 5-26-64
- On the Development of the Neuromasts of the Carp, *Cyprinus Carpio*, by M. Sato.
JAPANESE, per, Japan Fisheries Journal, Vol IX, 1955, pp 105-111.
INSDOC/Ref: T. 3780. PP. 7
- Experimental Studies on Amyloidosis Induced by Schistosomum Infection, by K. Ichikawa, 17 pp.
JAPANESE, per, Keto Isaku, Vol XXXIV, 1957, pp 345-352.
NIH 4-17-64
- Antibiotic Antitumor Agents Secreted by Actinomyces, by A. Z. Ioffe, G. A. Mishkinite, 14 pp.
LITHUANIAN, per, Trud Inst Eksper Medit Ak Nauk Litovskoy SSR, Vol IV-V, 1958, pp 193-205.
JPRS 25182
- Effect of the Erythrocyte Count on the Erythrocyte Sedimentation Reaction, by Zenona Zygiort, 8 pp.
POLISH, per, Acta Physiologica Polonica, Vol XII, 1961, pp 267-273.
NIH 5-21-64

- Correlation of the Erythrocyte Sedimentation Rate to the Erythrocyte Surface Charge, by Zenona Zygiort, 7 pp.
POLISH, per, Acta Physiologica Polonica, Vol XII, 1961, pp 275-279.
NIH 5-19-64
- Studies on Different Hemoglobin Types in Animals, by Z. Ewy, 10 pp.
POLISH, per, Acta Physiologica Polonica, Vol XII, 1961, pp 441-449.
NIH 5-27-64
- Higher Education in the Field of Health in the Rumanian People's Republic, by Janos Kovacsics, 25 pp.
RUMANIAN, per, Felsoktatasi Szemle, Vol XIII, No 3, 1964, pp 166-181.
JPRS 25402
- Electroencephalographic Correlations Within an Operational Definition of Somnambulism Hypnosis, by Maria Borlone, 11 pp.
SPANISH, rpt, Acta Hipnologica Latinoamericana, 1960, pp 9-19.
NIH 4-6-64
- Studies on the Human Trypanosomes Classified as T. Rangeli With Special Reference to Its Development in Rhodnius Prolixus and to Its Comparison With T. Ariani, by Hernando Groot, 18 pp.
SPANISH, per, Anales de la Sociedad de Biologia, Vol VI, No 3, 1954, pp 109-126.
NIH 4-35-64
- Two Cases of Serious Alveolar Reabsorption in Infancy, by Rosa Luscm, 35 pp.
SPANISH, per, Revista Odontologica, Vol XXXIII, No 3, 1945, pp 87-105.
NIH 4-9-64
- Resistance to Ectoparasites in Some Breeds of Cattle, by G. Ulloa, 11 pp.
SPANISH, per, Turrialba, Vol VII, No 1, 2, 1957, pp 8-12.
NIH 5-1-64
- Health and Sick Care in the Armed Forces in 1960, by Carl Eric Groth, 41 pp.
SWEDISH, rpt, Halso och Sjukvard vid Forsvarst ar 1960, Stockholm, 1961, pp 1-43, Encl to R-21-62, USARMA, Sweden.
ACSI 1-4466
ID 2193685
- Age-Determined Characteristics of the Regulation of Trophism in the Skeletal Muscle, by V. V. Frolikis, 9 pp.
UKRAINIAN, per, Viz Zhur, Vol IX, No 5, 1963, pp 596-600.
NIH 5-2-64
- Anti-Ray Effect of Gallates Conditions of Irradiation With 1000 Roentgens, by V. A. Baraboy, O. O. Bogomolova, 7 pp.
UKRAINIAN, per, Viz Zhur Ak Nauk Ukrayins RSR, Vol X, No 1, 1964, pp 89-93.
JPRS 25274
- Observations in 120 Cases of Typhoid in Hanoi, by Pham Quang Thanh, 5 pp.
VIETNAMESE, per, Y Hoc Thuc Hanh, No 105, Mar 1964, pp 26-28.
JPRS 25237
- The Prevention of Typhoid at Hai Duong, by Phan Van Doan, 5 pp.
VIETNAMESE, per, Y Hoc Thuc Hanh, No 105, Mar 1964, pp 28-31.
JPRS 25237

Scientific
Chemistry

- The Glassy State, by L. V. Yegorov, 86 pp.
RUSSIAN, bk, Fifth All Union Conference on the
Glassy State, Moscow-Leningrad, 1964, pp 1-94.
JPRS 25294
- Radiation Biochemistry, by A. M. Kuzin, 377 pp.
RUSSIAN, bk, Radiatsionnaya Biokhimiya, Moscow,
1962, pp 1-310. 9693047-V
FTD-TT-63-661
- Steady-State Performance of Gas Distributors in
Apparatus With a Fluidized Bed, by B. Ustinov,
A. Planovskiy.
RUSSIAN, per, Chemical Industry USSR, No 11,
1962, pp 851-854.
CSIRO/No 6673
- On the Mechanism and Limits of Spontaneous Chain
Ignition of Hydrogen With Oxygen in Shock Waves,
by V. V. Voevodskiy, 7 pp.
RUSSIAN, per, Dok Ak Nauk SSSR, Vol CLIV, No 6,
1964, pp 1425-1428.
JPRS 25103
- Mechanism of Interaction Cyclohexane With
the Surface of a Metallic Catalyst,
by A. A. Balandin, B. S. Gudkov, 5 pp.
RUSSIAN, per, Dok Ak Nauk SSSR, Vol CLV,
No 3, 1964, pp 626-628.
JPRS 25115
- Chemical Bond Estimation From Superfine
Structure of Electronic Paramagnetic Resonance
Spectra of Manganese, by L. V. Bershov,
A. S. Marfunin, 7 pp.
RUSSIAN, per, Dok Ak Nauk SSSR, Vol CLV,
No 3, 1964, pp 632-636.
JPRS 25115
- Properties of the Double Layer and Electrostatic
Adsorption of Ions, by V. G. Levich,
V. A. Kir'yanov, et al, 7 pp.
RUSSIAN, per, Dok Ak Nauk SSSR, Vol CLV,
No 3, 1964, pp 662-665.
JPRS 25115
- Geochemical Ecology, by V. V. Koval'skiy, 19 pp.
RUSSIAN, per, Priroda, No 3, 1964, pp 44-51.
JPRS 24978
- Heats of Solution Interaction of $\text{La}(\text{ClO}_4)_3$ With
Perchloric and the Hydrohalogenic Acids, by
V. A. Latsheva, H. I. Kozachenko.
RUSSIAN, per, Vestnik Leningrad Univ, No 22, 1963,
pp 135-139.
*AEC
- Synthesis, Polymerization and Copolymerization
of Polyorganosiloxanes Containing Methacrylate
Groups, by I. A. Alodseyeva, et al.
RUSSIAN, per, Vysok Soedin, Vol VI, No 2, 1964,
pp 263-268.
*Rodstone Arsenal
- Removal of CO From Hydrogen and Hydrogen-
Nitrogen Mixtures in the Synthesis of Ammonia, by
N. P. Yushkovskiy.
RUSSIAN, per, Zhur Khim Prom, No 5, 1934,
pp 18-24.
GB/39/HO 1908
- Lanthanum, Samarium, and Europium Orthotantalates,
by Ye. I. Krylov, M. M. Pinayeva-Strolina, 9 pp.
RUSSIAN, per, Zhur Neorgan Khim, Vol VIII, No 10,
1963, pp 2254-2257. 9693018
FTD-TT-64-221
- Research in the Field of the Chemical Sciences,
by Kole Popa, 5 pp.
ALBANIAN, np, Zeri i Popullit, 30 Apr 1964,
p 3.
JPRS 24856

Scientific
Chemistry (Contd)

- Separation and Infra-Red Identification of
P-xylene, by Ling Yu-ch'en, T'ang Ming-tao,
et al, 5 pp.
CHINESE, per, Hua-hsueh T'ung-pao, No 2, 1964,
pp 52, 53.
JPRS 25070
- Rapid Microdetermination of Nitrogen in
Organic Compounds Sleeve Tube Firing
Method, by Liu Ch'eng-wen, Chou Pi-cheng 9 pp.
CHINESE, per, Hua-hsueh T'ung-pao, No 3,
1964, pp 58, 59, 62.
JPRS 25191
- The Antihypertensive Function of β - N -
(2,2,6,6-Tetramethyl Piperidine) Imide Sulfuric
Salt (BD-31), by Pui Tung-lu, Ch'en Wei-chou,
et al, 6 pp.
CHINESE, per, K'o-hsueh T'ung-pao, No 3,
1964, pp 239-241.
JPRS 24862
- Stability Constants Through Light Density
Measurements of the Bond Competition Method,
by Han Wei-p'ing, 12 pp.
CHINESE, per, K'o-hsueh T'ung-pao, No 3,
1964, pp 243-245.
JPRS 24862
- A New Catalyst of 1,4 Polymerization of a -
Butadiene: Ziegler Type Catalyst of Butyllithium
and Titanium Tetrahalogens, by Hsieh Hung-ch'uan,
Ch'iu Chien-kuo, et al, 8 pp.
CHINESE, per, K'o-hsueh T'ung-pao, No 3,
1964, pp 246-248.
JPRS 24862
- The Growth of Silicon Carbide by Gas
Cracking, by Kuo Chu-k'un, 9 pp.
CHINESE, per, K'o-hsueh T'ung-pao, No 3,
1964, pp 266-269.
JPRS 24862
- Some Structural Modifications of Fluorite-Type
Phases in Systems Based on Zirconium or
Hafnium Oxide, by Jean LeFevre.
FRENCH, per, Annales de Chimie, No 8, 1963,
pp 117-149.
*AEC
- Study on the Hydration of Proteins by the Thermo-
gravimetric Method, by Clement Duval,
Ladislav Robert.
FRENCH, per, Comptes Rendus, Vol CCXXXVIII,
1954, pp 282-284.
*Rodstone Arsenal
- New Form of Available Chlorine: Solid High Test
Calcium Hypochlorite, by J. H. Frydlander.
FRENCH, per, Revue des Produits Chimiques,
Vol XXXVIII, 1935, pp 705-710.
GB/39/HO 1903
- Lubricating Oil Compositions Containing Alkenyl
Succinimides of Tetraethylene Pentamine, 19 pp.
FRENCH, Patent No 1,265,086.
Patent Office
- Equilibrium Forms and Growth Forms of Crystals,
by B. Honigsmann, 135 pp.
GERMAN, bk, Fortschritte der Physikalischen Chemie,
Vol III, 1958.
ACSI 1-4836
ID 2204020464
- The Explosibility of Fused Ammonium Nitrate,
by Rudolf Kaiser.
GERMAN, per, Angewandte Chemie, Vol XLVIII,
No 9, 1935, pp 149, 150.
Dept of Interior
TN7 E57 No 777

Scientific
Chemistry (Contd)

- A New Process for the Rapid Determination of the Oxygen Content of Steels, by P. Holler.
GERMAN, per, Archiv fuer Eisenhüttenwesen, Vol XXXIV, No 6, 1963, pp 425-434.
BISI 3391
- Plastic-Coated Packaging Paper and Packaging Material Combinations, by H. Berger.
GERMAN, per, Chemie-Ingenieur-Technik, Vol XXXI, No 10, 1959, pp 642-645.
GB/39/PL 7923
- Thin-Layer Ionophoresis and Thin-Layer Ionophoresis-Chromatography, by C. G. Honegger, 9 pp.
GERMAN, per, Helvetica Chimica Acta, Vol XLIV, 1961, pp 173-179. 9222681
AEC-SC-T-64-49
- Non-Dispersive X-Ray Spectrometry. Applications to Elementary Chemical Analysis, by G. Selbel, 29 pp.
GERMAN, per, International Journal of Applied Radiation and Isotopes, Vol XV, Jan 1964, pp 25-41. 9222669
AEC-HW-Tr-70
- Contribution to the Determination of Silicic Acid in Fluorine Silicates, by F. Thomas
GERMAN, per, Silikatechnik, Vol X, No 3, 1959, pp 129, 130.
GB/139/311
- The Dry Neutralization of Iron Sulfate Heptahydrate, by M. Haucko.
GERMAN, per, Stahl und Eisen, Vol LXXXIII, No 14, 1963, pp 859-864.
IIB 6211
- The Testing of Ferroalloys and Deoxidizers. Contributions to Metallurgical Chemistry, by J. Bruch.
GERMAN, per, Stahl und Eisen, Vol LXXXIV, No 1, 1964, pp 38-42.
IIB 6213
- Contribution to the Knowledge of Silicic Acid Esters Stable in Water, by A. Weiss, et al.
GERMAN, per, Z fuer Anorganische und Allgemeine Chemie, Vol CCCII, 1961, pp 151-179.
CSIRO/No 6607
- Hydrazine-Kaolinite, by A. Weiss, et al.
GERMAN, per, Z fuer Anorganische und Allgemeine Chemie, Vol CCCXX, No 1, 4, 1963, pp 183-204.
CSIRO/No 6716
- Phase Growth Controlled by Diffusion, by H. L. Frisch.
GERMAN, per, Z fuer Elektrochemie, Vol LVI, No 4, 1952, pp 324-326.
BISI 3638
- Oxidation of Trichlorethylene, by E. Erdmann.
GERMAN, per, Z fuer Praktische Chemie, Vol LXXXV, 1912, pp 78-89.
GB/39/HO 1904
- Process for the Preparation of Tetrahydrofuran Polymerization Products, by A. G. Bayer, 9 pp.
GERMAN, Patent No 914,438 (2nd add. to 941,478). Patent Office
- Corrosion Research.
HUNGARIAN, per, Korrozios Fizyolo. Muszaki Dokumentacios Fordito Iroda, Vol III, No 7, 1963, pp 125-139.
*FTD-TT-64-730
- Study on the Preparation of Certain Boric Esters, by G. F. Noncetti, G. Nardini, et al.
ITALIAN, per, La Chimica e L'Industria, Vol XLVI, No 3, 1964, pp 252-257.
*Dept of Interior

Scientific
Chemistry (Contd)

- Chemistry and Technology of Explosives, by T. Urbanski.
POLISH, bk, Chemia i Technologia Materialow Wybuchowych, Vol III, 1954.
*FTD-TT-64-772
- Past Achievements and Future Work of the Chemistry Branch, by Hoang Huu Binh, 7 pp.
VIETNAMESE, per, Tin Tuc Hoai Dong Khoa Hoc, 19 Apr 1964, pp 9-12.
JPRS 25237
- Earth Sciences & Astronomy
- Meteorological Satellites, by K. Ya. Kondrat'yev, RUSSIAN, bk, 288 pp.
NASA (OTS)
- Indirect Methods for the Separation and Analysis of Water Masses, by V. T. Timofeyev, V. V. Panov, RUSSIAN, bk, Gidrometeorologicheskoye Izdatel'stvo, Leningrad, 1962.
*Navy/HO Tr 229
- Regularities in the Distribution of Mineral Deposits of Magmatic Origin on the Territory of Mongolia, by N. A. Marinov, 26 pp.
RUSSIAN, bk, Materialy po Geologii Mongol'skoy Narodnoy Respubliki, Moscow, 1963.
JPRS 25187
- Meteorological Satellites, by K. Yu. Kondrat'yev, 288 pp.
RUSSIAN, bk, Meteorologicheskoye Spisniki, Leningrad, 1963, 311 pp. 9221379-V
NASA TT F-177
- Problems of the Motion of Large Meteoritic Bodies in the Atmosphere, by V. A. Bronshten, RUSSIAN, bk, Problemy Dvizheniya v Atmosfere Krupnykh Meteoritnykh Tel, Moscow, 1963, 124 pp.
*NASA TT F-247
- Correlation of Steps of a Visual Brightness Scale of Lunar Objects With Absolute Values of the Brightness Coefficient, by N. Sytinskaya, RUSSIAN, per, Astron Tsirkulyar, No 114, 1953, pp 11-12.
*Redstone Arsenal
- The Absolute Brightness Values of the Lunar Edge at Various Phases, by N. S. Orlova, RUSSIAN, per, Astron Tsirkulyar, No 192, 1958, pp 20-21.
*Redstone Arsenal
- The Color Excess of Six Lunar Craters From Electrophotometric Observations, by K. I. Kozlova, Yu. V. Glagolevskiy, RUSSIAN, per, Astron Tsirkulyar, No 198, 1958, pp 1-2.
*Redstone Arsenal
- On the Spectral-Polarization Characteristics of the Lunar Surfaces, by V. G. Toffel, RUSSIAN, per, Astron Tsirkulyar, No 205, 1959, pp 7-8.
*Redstone Arsenal
- Test of a Petrographic Investigation of the Lunar Surface by Means of Joint Use of Photometric and Colorimetric Observations, by V. V. Sharonov, RUSSIAN, per, Astron Zhur SSSR, Vol XXXI, No 5, 1954, pp 442-452.
*Redstone Arsenal

Scientific
Earth Sciences & Astronomy (Contd)

The Nature of Gravitation, by V. V. Radziyevskiy,
I. I. Kagal'nikova, 25 pp.
RUSSIAN, per, Byull Vses Astronomo-Geodezicheskogo
Obshch, No 26, 1960, pp 3-14. 9693079
PTD-TT-64-323

Observations of the Partial Lunar Eclipse of
March 24, 1959, by M. A. Milkhikoy.
RUSSIAN, per, Byull Vses Astronomo-Geodezicheskoye
Obshchestvo, No 27(34), 1960, pp 32-36.
*Redstone Arsenal

Notes on the Hydrology of the Red Sea, by
A. M. Muromtsev.
RUSSIAN, per, Dok Ak Nauk SSSR, Vol CXXXIV,
No 6, 1960, pp 1443-1446.
*Navy/HO Tr 226

A Theoretical Model of Weather Forecasting,
by G. I. Marchuk, 7 pp.
RUSSIAN, per, Dok Ak Nauk SSSR, Vol CLV,
No 5, 11 Apr 1964, pp 1062-1065.
JPRS 25398

Laboratory and Field Research into the Piezo-
electric Effect of Nepheline Containing Rocks,
by O. Yu. Schmidt, A. V. Shubnikov, 6 pp.
RUSSIAN, per, Dok Ak Nauk SSSR, Vol CLV,
No 6, 1964, pp 1314-1316.
JPRS 25126

Intrusive Complexes of the Kurayskaya Ore Zone
Gornyy Altay, by V. A. Skuridin, 22 pp.
RUSSIAN, per, Geolog i Geofiz, No 2, 1964,
pp 48-62.
JPRS 25406

Stages of Hydrothermal Mineralization and Genesis
of Molybdenum and Tungsten Deposits in the
Dzhida Ore Zone, by G. I. Tugovik, 19 pp.
RUSSIAN, per, Geolog i Geofiz, No 2, 1964,
pp 93-104.
JPRS 25406

Use of Equidistance Curves of Remote Stations
in the Graphic Determination of the Hypocenter
of an Earthquake, by R. Z. Tarakanov, 9 pp.
RUSSIAN, per, Geolog i Geofiz, No 2, 1964,
pp 125-129.
JPRS 25406

Methods of Cloud Dissipation Over Large Areas,
by V. I. Deltsev, I. S. Pavlova, et al, 16 pp.
RUSSIAN, per, Iz Ak Nauk SSSR, Seriya Geofiz,
No 9, 1963, pp 1410-1416. 9222731
Emmanuel College Res Lang Ctr
E-T-R-64-17

A Spectral Concept of Wind Wave Energy, by
I. S. Brovikov.
RUSSIAN, per, Met i Gid, No 7, 1961, pp 16-21.
*Navy/HO 228

Measurement of Small Values of Radioactivity
on Expeditions, by K. A. Kotlyarov,
L. M. Khitrov, 15 pp.
RUSSIAN, per, Okeanologiya, Vol IV No 2,
1964, pp 213-222.
JPRS 25168

Natural Radioactivity of Ocean Water,
by N. I. Popov, 14 pp.
RUSSIAN, per, Okeanologiya, Vol IV, No 2,
1964, pp 223-231.
JPRS 25168

Scientific
Earth Sciences & Astronomy (Contd)

Certain Biochemical Aspects of a Comparative
Study of the Black Sea, Sea of Azov and Caspian
Sea, by Z. A. Vinogradova, 19 pp.
RUSSIAN, per, Okeanologiya, Vol IV, No 2,
1964, pp 232-242.
JPRS 25168

The Problem of Selecting the Type of Oceanographic
Vessel, by I. A. Stoyenov, 15 pp.
RUSSIAN, per, Okeanologiya, Vol IV, No 2,
1964, pp 342-348.
JPRS 25168

The Problem of the Methods for Microbiological
Work at Sea in Light of Present Day Problems
in Marine Microbiological Work,
by Yu. I. Sorokin, 11 pp.
RUSSIAN, per, Okeanologiya, Vol IV, No 2,
1964, pp 349-353.
JPRS 25168

The Use of Penetrating Cosmic Radiation for Deter-
mination of Mean Rock-Density Values, by
V. M. Bondarenko, A. G. Tarkhov, 8 pp.
RUSSIAN, per, Razvedka i Okhrana Nedr, No 4,
1964, pp 30-34.
JPRS 25104

Results of Magnetotelluric Investigations in Georgia,
by M. N. Bordinchieskiy, G. A. Chernyavskiy, 8 pp.
RUSSIAN, per, Razvedka i Okhrana Nedr, No 4, 1964,
pp 35-39.
JPRS 25089

Determination of the Polarization of the Lunar
Aureole, by Yu. N. Lipskiy.
RUSSIAN, per, Trudy Gosudarst Astron Inst,
Soobshcheniya, No 80, 1951, pp 3-17.
*Redstone Arsenal

Orientation of Artificial Earth Satellites,
by Yo. F. Fatkhullin.
RUSSIAN, per, Trudy Inst Druzhby Narodov imeni
Perlas Lumumbi, Vol I, 1963, pp 71-86.
*PTD-TT-64-756

Proceedings of the All-Union Scientific Meteorological
Conference, Volume I, by M. I. Budyko, 267 pp.
RUSSIAN, per, Trudy Vses Nauch Meteorol
Soveshchaniya, 1962. 9222788-V
NASA TT F-168

Colorimetric Studies of the Moon. Part I,
by V. V. Sharonov.
RUSSIAN, per, Vest Leningrad Univ, Seriya
Mat Mekh i Astron, Vol X, No 11, 1955, pp 113-120.
*Redstone Arsenal

Colorimetric Studies of the Moon. Part II.
Visual Colorimetry of the Integral Moonlight,
by V. V. Sharonov.
RUSSIAN, per, Vest Leningrad Univ, Seriya
Mat Mekh i Astron, Vol XI, No 1, 1956, pp 155-167.
*Redstone Arsenal

Comparison of the Law of Reflection of Light for
the Moon and for Certain Differences in Rock
Formation, by N. S. Orlova.
RUSSIAN, per, Vest Leningrad Univ, Seriya
Mat Mekh i Astron, No 1, 1957, pp 152-159.
*Redstone Arsenal

Scientific
Electronics (Contd)

Use of an Electronic Balance in Casting, by R. Schmit.

FRENCH, per, Centre de Documentation Siderurgique Circulaires d'Informations Technique, No 4, 1964, pp 1045-1057.

*BISI 3794

Use of Synthetic Resins in the Construction of Measuring Transformers, by L. Luyten.

FRENCH, per, Electrotech Menifflours-Bul, Vol LVII, No 10, pp 715-727.

INSDOC/Ref: T 4002, PP. 10

Use of Commutation Magnetic Cores in Digital Logical Modul, by D. Franc, 14 pp.

FRENCH, per, L'Onde Electrique, Vol XLII, No 430, Jan 1963, pp 59-67.

ACSI 1-4453

ID 2204009764

Magnetic Control Device With Permanent Magnets, by M. C. de Benetot, 15 pp.

FRENCH, Patent No 1,202,165.
Patent Office

Development and International Status of the Basic Quantities and Units of Lighting, by Leopold Fink, 15 pp.

GERMAN, per, Archiv fuer Technisches Messen, No 266, 1958, pp 49-52.

Natl Bu of Standards

The Design of Electroacoustic Transducers by the Use of Analog, Purely Electrical Networks, by E. Martin, 21 pp.

GERMAN, per, Frequenz, Vol XVI, 1962, pp 208-215.
Navy Tr 3836/USRL 38

On the Simulation of Differential Equations on the Electronic Analog Computer, by H. Rudolph.

GERMAN, per, Messen-Steuern-Regeln, Vol VI, No 12, 1963, pp 498-501.

*BISI 3784

Statistical Analysis Using Electronic Analog Computers, by A. Sydow, H. Dittmann.

GERMAN, per, Messen-Steuern-Regeln, Vol VI, No 12, 1963, pp 501-504.

*BISI 3785

Representation of Logical Relationships by Means of Light-Sensitive Devices, by U. Rosler.

GERMAN, per, Messen-Steuern-Regeln, Vol VI, No 12, 1963, pp 508-511.

*BISI 3786

New Testing Methods for High-Duty Circuit-Breakers, by G. Kummrow, E. Pflaum.

GERMAN, per, Siemens Z. Vol XXXVI, 1962, pp 802-804.
GB/125/IB 2105

Color Television System Vectorscope, 11 pp.

GERMAN, Patent No 1,113,711.
Patent Office

Receiver for Single and Multichannel Radio or Television Broadcasts, 11 pp.

GERMAN, Patent No 1,132,609.
Patent Office

Stereophonic Broadcast Adapter for Radio Receivers, 14 pp.

GERMAN, Patent No 1,151,556.
Patent Office

Scientific
Electronics (Contd)

Research in Radiation-Chemical Thermal Decomposition of Hydrocarbons Taking Place Under the

Influence of Electricfield, by G. Foldiák, Z. Paál.

HUNGARIAN, per, Magyar Kemikusok Lapja, Vol XVIII, 1963, pp 573-577.

*Dept of Interior

The Photoelectric Colorimeter for Light Sources, by T. Azuma, H. Ishizaki, et al, 10 pp.

JAPANESE, per, Toshiba Review, Vol XIII, No 7, 1958, pp 665-668.

Natl Bu of Standards

Adaptive Optimization of Dynamic Systems With a Human Operator, by R. Kulikowski.

POLISH, per, Archiwum Automatyki i Telemekhaniki, Vol VII, No 2, 1963, pp 135-158.

*FTD-TT-64-678

Sets of Curves for the Identification of Simple Control Components on the Basis of Their

Frequency Characteristics, by W. Findelsohn.

POLISH, per, Archiwum Automatyki i Telemekhaniki, Vol VII, No 2, 1963, pp 223-229.

*FTD-TT-64-678

An Extension of the Ideal Observer Criterion, by J. Kulikowski, 8 pp.

POLISH, per, Arch Elektroniki, Vol X, No 3, 1961, pp 723-727. 9222735

Emmanuel Coll Res Lang Ctr
E-T-P-64-3

A New Type of Equipment for Measuring the Temperature Coefficient of Capacitors, by A. Smolarski.

POLISH, per, Prace Instytut Tolt-i-Radiotech, Vol V(4), 1961, pp 85-90.

*ARC

On the Optimum Filters for Detection of Coherent Signals in Correlated Noise, by J. Kroszczynski.

POLISH, per, Przemyslowy Instytut Telekomunikacji, Vol XIII, No 9, 1963, pp 1-7.

*FTD-TT-64-745

Adjustable-Hiase Range Finder, by F. W. Breithaupt, 5 pp.

SWISS, Patent No 300,354.
Patent Office

Engineering

Basic Laws of the Distribution of Materials in the Blast Furnace Throat, by N. N. Baharykin.

RUSSIAN, bk, Moscow, 1963, pp 84-102.
BISI 3757

On the Nature of the Relationship Between Volume and Pressure of Blast Supplied to a Blast Furnace,

by B. K. Cruzinov, B. S. Flalkov.

RUSSIAN, bk, Moscow, 1963, pp 103-111.
BISI 3757

The Residence Time of Gases in a Furnace From Experimental Data, by I. A. Kopyrin, M. Ya. Ostroukhov.

RUSSIAN, bk, Moscow, 1963, pp 127-145.
BISI 3757

On Some Methods of Controlling Blast Furnace Process and Its Automation, by B. M. Zherabin.

RUSSIAN, bk, Moscow, 1963, pp 296-303.
BISI 3757

Scientific
Earth Sciences & Astronomy (Cont'd)

A Numerical Experiment of the Problem of the Development of Convection Clouds, by Chou Hsiao-p'ing, Li Hsing-sheng, et al, 7 pp. CHINESE, per, K'o-hsueh T'ung-pao, No 3, 1964, pp 263-265. JPRS 24862

Scintillations Observed on the Sun at a Wavelength of 3 CM, and a Theoretical Interpretation, by J. Arsac, 6 pp. FRENCH, rpt, Observatoire de Paris Section d'Astrophysique, Mondon, Seine-et-Oise. 9222736 Emmanuel Coll Res Lang Ctr E-T-F-63-8

Geochemistry of Radioactive Elements in the Ocean and the Dating of Ocean Sediments, by Edgard E. Piccolotto, 18 pp. FRENCH, per, Ciel et Terre, Vol LXXVI, No 3, 4, 1960, Navy Tr 3832/ONI 995

Measurements of the Earth's Surface Temperature From Aircraft, by Dieter Lorenz, 28 pp. GERMAN, per, Bericht Universitätsinstitut für Meteorol und Geophys, 1 Jul 1963. 9222734 Emmanuel Coll Res Lang Ctr E-T-G-63-34

The Bottom Water and the Vortical Circulation of the Mediterranean Sea. Second Contribution to the Mediterranean Circulation Problem, by Georg Wust. GERMAN, per, Deutsche Hydrographische Zeitschrift, Vol XIV, No 3, 1961, pp 81-92. *Navy/HO Tr 227

The Dependence of Apparent Resistivity on the Probe Spacing by the Four-Point Method, by K. Doppermann. GERMAN, per, Geophysical Prospecting, Vol II, No 4, pp 262-273. Dept of Interior ACS E57 No 88

Transparency of the Sea and Visibility From High Altitudes, by Giovanni Platania. ITALIAN, per, Trasparenza del Mare e Visibilità de Alta Quota, Vol VIII, pp 132-136. Dept of Interior GCI E57 No 49

Electronics

Aircraft Electrical Generators, by A. I. Bertinov, 691 pp. RUSSIAN, bk, Aviatsionnyye Elektricheskiye Generatory, Moscow, 1959, pp 1-593. 9693053-V FTD-TT-63-209

Verification of Some Questions Related to D-C Power Transmission Using the "Conductor-Ground" System on the Kashira-Moscow Experimental Transmission Lines, by S. A. Bazhenov. RUSSIAN, per, Elektricheskiye Stantsii, No 9, 1959, pp 54-59. Dept of Interior ACS E57 No 79

Measurement of Power and Energy of the Electric Arc, by I. B. Bolotin. RUSSIAN, per, Elektricheskiye, No 9, 1962, pp 78-82. GB/125/1B 2108

Scientific
Electronics (Cont'd)

Single-Band SHF Modulator as the Local Oscillator in a EPR Spectrometer, by M. A. Ruban, 11 pp. RUSSIAN, per, Pribery i Tekh Eksper, No 4, 1963, pp 103-106. 9693086 FTD-TT-64-317

About One Mechanism of Generating Plasma Oscillations in a Semiconductor, by V. L. Bonch-Bruyevich, Yu. V. Gulyayev, 15 pp. RUSSIAN, per, Radio i Elek, Vol VIII, No 7, 1963, pp 1179-1186. 9693077 FTD-TT-64-292

Propagation of Electromagnetic Energy in a Circular Wave Guide Filled by a Gas-Discharge Plasma With Variable Parameters With Respect to the Cross Section, by V. M. Ginzburg, 11 pp. RUSSIAN, per, Radio i Elek, Vol VIII, No 7, 1963, pp 1269-1274. 9693077 FTD-TT-64-292

Radar Search Problems, by I. N. Kuznetsov. RUSSIAN, per, Radiotekhnika i Elektronika, Vol IX, No 2, 1964, pp 187-200. *Navy/APL J383

Arrangement for Controlling Frequency Characteristic of Electroacoustical Transducers, by Rudolf Goriko, 6 pp. AUSTRIAN, Patent No 164,714. Patent Office

Course of Electrical Discharges in Closed, Gas-Filled Cavities of an Oil Impregnated Paper Dielectric, by J. Schmidt. CZECH, per, Elektrotechnický Obzor, Vol LII, No 1, 1963, pp 8-13. *AEC

Inception Voltages of Sliding Discharges With Circular Electrodes, by A. Veverka, F. Wohlmut. CZECH, per, Elektrotechnický Obzor, Vol LII, No 6, 1963, pp 284-287. *AEC

Signal Training of Today and Tomorrow, 16 pp. FINNISH, per, Viestimies, No 12, 1963, OUSARMA, Helsinki, Finland. ID 2831006064 (DIA)

Report on the Research Program of the SODETEP, 14 pp. FRENCH, rpt, Rapport sur le Programme de Recherches de Société de Développement des Techniques de Pluie Provoquée, No 241, Nov 1963, pp 1-15. ACSIT-4540 ID 2204011964

Toward a More Precise Measurement of Radar Echo Amplitudes, 7 pp. FRENCH, rpt, Vers Une Mesure Plus Précise des Amplitudes d'Echos-Radar, No 242, Nov 1963, pp 1-7. ACSIT-4541 ID 2204012064

Mechanism of Breakdown in a Vacuum, by C. Germain, F. Rohrbach, 13 pp. FRENCH, rpt, VI EME Conference Internationale sur les Phenomenes D'Ionisation dans les Gaz-Paris, 9-13 Jul 1963. 9222677 AEC-Tr-6341

Scientific
Engineering (Contd)

Dynamics of the Airplane, by V. P. Vetchinkin, 579 pp.
RUSSIAN, bk, Dinamika Samoleta, Moscow, 1956, pp 5-422. 9693080-V
FTD-TT-63-727

Controllable Pitch Propellers and Ship Design, by P. V. Orekhov, V. S. Murugov, 77 pp.
RUSSIAN, bk, Grebnye Vinty Reguliruyemogo Shaga i ikh Sovmestnaya Rabota s Silovymi Ustanovkami, Moscow, 1963, pp 3-47; 157-159; 180-185.
JPRS 25147

Structural Damping in Permanent Joints, by N. G. Kalinin, Yu. A. Lebedev, 191 pp.
RUSSIAN, bk, Konstruktivnoye Dampirovaniye v Nepodviznykh Soyedineniyakh, 1960, pp 3-169. 9693051-V
FTD-TT-63-755

Caterpillar Track Cranes. Hoisting, Hauling, and Special Machinery for Construction and Installation Work, by I. I. Kozlovskiy, M. D. Tishnyakov, 183 pp.
RUSSIAN, bk, Kranv Nagusenichnom Khodu. Pod'zemno-Transportnyye i Spetsial'nyye Mashiny Dlya Stroitel'nykh i Montazhnykh Rabot, No 2, 1963, pp 1-138. 9693039-V
FTD-TT-64-150

A Vacuum Rolling Mill, by V. M. Amonenko, A. S. Tron'.
RUSSIAN, rpt, Proceedings of Third Conference on the Use of Vacuum in Metallurgy, 1963, pp 202-206. BISI 3744

Comparison of Formulas for Lift Used by the American and German Schools.
RUSSIAN, bk, Teoreticheskaya i Prikladnaya Mekhanika, Sbornik Statey, Moscow, Vol II, 1962, pp 100, 101.
*FTD-TT-64-777

The Theory of a Parachute-Braking Device, by A. I. Nekrasov.
RUSSIAN, bk, Teoreticheskaya i Prikladnaya Mekhanika, Sbornik Statey, Moscow, Vol II, 1962, pp 611-622.
*FTD-TT-64-777

Theory of Vibrations, by I. M. Babakov, 731 pp.
RUSSIAN, bk, Teoriya Kolobaniy, Moscow, 1958, pp 3-628. 9693030-V
FTD-TT-63-728

Problems of General Electric Instrument Construction, 331 pp.
RUSSIAN, bk, Voprosy Obshchego Elektronpriborostroeniya, 1960, pp 3-264. 9693033-V
FTD-TT-63-756

The Mechanism and Kinetics of the Disintegration of Wustite, Part III, by O. K. Shabalina, G. I. Chuforov.
RUSSIAN, per, Fiz Metal i Metalloy, Vol XV, No 5, 1963, pp 690-696.
*BISI 3788

Measurement of Rear Surface Pressure in Free Flight, by G. I. Mishin.
RUSSIAN, per, Iz Ak Nauk SSSR, Mekh i Mash, No 6, 1963, pp 116-118.
*Redstone Arsenal

Scientific
Engineering (Contd)

The Synthesis of Digital Computer Control Units, by N. G. Bruyevich.
RUSSIAN, per, Iz Ak Nauk SSSR Orden Tekh Nauk Energetika i Avtomatika, No 4, 1961, pp 93-106.
*FTD-TT-64-785

Variable Time-Interval Generator, by A. L. Gurevich, L. A. Rusinov.
RUSSIAN, per, Iz Vysshikh Ucheb Zaved Priborostroeniye, Vol VI, No 3, 1963, pp 45-54.
*FTD-TT-64-787

Temperature Stresses in a Thick-Walled Cylinder With Longitudinal Variation of the Modulus of Elasticity, by Yu. M. Shevchenko.
RUSSIAN, per, Prik Mekh, Vol IV, 1958, pp 401-410.
TIL/T. 5391

Study of Contact Heat Exchange Between Engine Parts, by I. T. Shveta, et al.
RUSSIAN, per, Trudy Inst Teploenergetika, No 12, 1955, pp 21-53.
*Redstone Arsenal

Heat Calculations for Refined Sugar Vacuum Pans, by V. D. Popov.
RUSSIAN, per, Trudy Kiev Tekh Inst Pishchevoy Prom, Vol XIII, 1953, pp 137-146.
CSR Co

Coefficient of Heat Transfer During Boiling of Sugar Solution on Horizontal Surfaces, by V. D. Popov.
RUSSIAN, per, Trudy Kiev Inst Pishchevoy Prom, Vol XV, 1955, pp 191-196.
CSR Co

Diagrams for Calculations of Masscuite Vacuum Pans, by V. D. Popov.
RUSSIAN, per, Trudy Kiev Inst Pishchevoy Prom, Vol XVI, 1956, pp 55-62.
CSR Co

Improving the Resistance to Wear of Planting Blades, by A. V. Alekseyov.
RUSSIAN, per, Woodworking Industry USSR, Vol VI, No 7, 1957, pp 13-16.
CSIRO/No 6671

Oxidation of Iron and Steel at High Temperatures, by N. P. Zhuk, B. V. Linchevskiy.
RUSSIAN, per, Zhur Fiz Khim, Vol XXVIII, No 3, 1954, pp 440-452.
*BISI 3789

Device for Automatic Regulation of the Depth Level of the Working Elements of Tilling Implements, by M. A. Mitin, 6 pp.
RUSSIAN, Patent No 116,384.
Patent Office

The First Annual Meeting of China Surveying and Mapping Association on Professional Engineering Surveying, by Ts'ao Ting-k'uei, 6 pp.
CHINESE, per, K'o-hsueh T'ung-pao, No 3, 1964, pp 276, 277.
JPRS 24862

Device for Precision Measurement or for Precision Setting, by O. T. Aktiebolag, 27 pp.
FINNISH, Patent No 25,785.
Patent Office

Scientific
Engineering (Contd)

Design Problems of Liquid Metal Installations Pipelines, Exchangers, Steam Generators, by P. Poudroux, 18 pp.
FRENCH, rpt, Colloquium of the European Society of Atomic Energy on Liquid Metals, 30 Sep-1 Oct 1963, 9222625
AEC-Tr-6352

Representative Curves of the Laws of Longitudinal and Transverse Shock on a Prismatic Bar, by Saint-Venant, M. Flamant.
FRENCH, per, Journal de l'Ecole Polytechnique, Vol LIX, 1889, pp 97-128.
*Redstone Arsenal

New Control Equipment for Arc Furnaces, Parts I, II, III, by A. Wavre.
FRENCH, per, Journal du Four Electrique et des Industries Electrochimiques, 1964, pp 19-22, 51-57.
BISI 3741

Trial of Prototypes of De-Dusting Plant in the French power Stations, by J. Patigny.
FRENCH, per, Revue Generale de Thermique, Vol XI, No 5, 1963, pp 583-608.
BISI 3567

Automation of the Blast Furnace, by P. Dancoisne.
FRENCH, per, Revue de Metallurgie, Vol LX, No 3, 1963, pp 215-236.
BISI 3649

Principles of Vacuum Degassing of Steel by Cycling, by H. Maas.
FRENCH, per, Revue de Metallurgie, Vol LX, No 5, 1963, pp 421-425.
*BISI 3792

The Bauschinger Effect in Compressive Working, by J. Guyot.
FRENCH, per, Revue de Metallurgie, Vol LX, No 10, 1963, pp 859-861.
BISI 3711

Operational Control of Sinter-Fed Blast Furnaces, Parts I, II, by C. Staib.
FRENCH, per, Revue de Metallurgie, Vol LXI, No 1, 1964, pp 1-26.
BISI 3706

Continuous Casting of Sheets for Car Manufacture in France, by M. Misson, J. Pomey.
FRENCH, per, Revue de Metallurgie, No 3, 1964, pp 303-309.
*BISI 3800

The Martensite Transformation, by A. Luths.
FRENCH, per, Revue Universelle des Mines, Vol XIX, No 7, 1963, pp 289-303.
BISI 3591

Study of Scale in Soaking Pits, by E. Kasantsev, F. Lorang.
FRENCH, per, Revue Universelle Mines, Vol XX, No 2, 1964, pp 41-58.
*BISI 3787

Automatic and Continuous Checking on the Humidity on the Sinter Mass, by I. Harveng.
FRENCH, per, Revue Universelle Mines de la Metallurgie, Vol CVII, No 2, 1964, pp 27-33.
BISI 3661

Scientific
Engineering (Contd)

Continuous Evaporator Operable at Atmospheric Pressure, Under Pressure or in a Vacuum, and Various Applications of the Said Apparatus, by Joseph-Francois-Philippe Rosello, Paul Rechner, 10 pp.
FRENCH, Patent No 978,977.
Patent Office

Improvements in Nut Locks, by Paul-Yves Le Mee, 8 pp.
FRENCH, Patent No 1,033,447.
Patent Office

Reeling Device for Electric Cords or Cables, by Jean-Pierre Fuchs, 7 pp.
FRENCH, Patent No 1,140,801.
Patent Office

Determination of Quality Characteristics for VTOL Power Plants - A Contribution to Project Research, by Lutz von Bonin, 46 pp.
GERMAN, rpt, Bericht aus dem Institut fuer Strahl-antriebe der Deutschen Forschungsanstalt fuer Luft - Raumfahrt e. V., Braunschweig, 56 pp.
ACSI I-4449-A
ID 2204009464

The Influence of Various Power Plants Upon the Operation Periods of Fast VTOL Aircraft, 15 pp.
GERMAN, rpt, Bericht aus dem Institut fuer Strahl-antriebe der Deutschen Forschungsanstalt fuer Luft - Raumfahrt e. V., Braunschweig, 17 pp.
ACSI I-4449-B
ID 2204009464

VTOL Power Plants, by K. Grassmann, 34 pp.
GERMAN, rpt, VTOL-Triebwerksanlagen, 17 Jul 1963, 53 pp.
ACSI I-4450
ID 2204009564

Determination of the Framework Plate System by Means of the Difference Method, by Ferdinand Lederer.
GERMAN, per, Acta Technica Gray, No 4, 1963, pp 312-344.
*Redstone Arsenal

The Costs Matrix of the Power Supply to a Steelworks, Part II, by R. Graef.
GERMAN, per, Archiv fuer Eisenhuettenwesen, Vol XXXIV, No 4, 1963, pp 307-316.
BISI 3615

The Anelastic Elongation of High-Strength Steel Wire at Room Temperature, by M. Aepfelbacher.
GERMAN, per, Archiv fuer Eisenhuettenwesen, Vol XXXIV, No 10, 1963, pp 733-744.
BISI 3702

Testing of Refractory Materials at High Temperatures Under Load, by U. Ehrcke, H. E. Schwieto.
GERMAN, per, Archiv fuer Eisenhuettenwesen, Vol XXXIV, No 10, 1963, pp 795-811.
BISI 3600

Changes in Structures During Rolling and Heat Treatment of Silicon Steel Sheets for the Production of Goss-Or Cubic Structures, by K. Detert.
GERMAN, per, Archiv fuer Eisenhuettenwesen, Vol XXXV, No 1, 1964, pp 75-83.
BISI 3601

Scientific
Engineering (Contd)

On the Partition of Sulphur and Manganese Between Pig Iron Melts and Blast Furnace Slags, Part I, Sulphur, by W. Oelsen, O. Oelsen.
GERMAN, per, Archiv fuer Eisenhüttenwesen, Vol XXXV, No 5, 1964, pp 381-388.
*BISI 3799

The Welding of Modern High Tensile Steels, by B. Kjelberg.
GERMAN, per, Berg- und Huttenmannische Monatshefte, Vol CIX, No 1, 1964, pp 13-25.
BISI 3664

The Use of Weighing and Recording Equipment in Rolling Mills, by H. Weinberg.
GERMAN, per, Bleeh, Vol X, No 7, 1963, pp 433-442.
BISI 3693

Blasting With Water Stemming, by F. Reuters.
GERMAN, per, Bohren-Sprengen-Raumen, No 5, 1961, pp 108-110.
Dept of Interior
TN7 E57 No 771

Investigation of Descaling Equipment on a Multi-Stage Hot Forming Press, by H. Buhler, J. Schack.
GERMAN, per, Draht, Vol XV, No 2, 1964, pp 51-56.
*BISI 3791

Pipeline Transport of Pulverized Coal by a Carrier Gas and Its Effect of Furnace Control, by A. Schneider.
GERMAN, per, Energie, Vol XII, No 9, 1960, pp 378-388.
Dept of Interior
TN7 E57 No 773

Theoretical Observations on the Effect of Coking Time on Heat Consumption for Underfiring Coke Ovens Heated With Blast Furnace Gas, by A. Steding.
GERMAN, per, Gluckauf, Vol XCVIII, 1962, pp 1048-1056.
*BISI 3775

Croop in Concrete, by N. J. Heijlt.
GERMAN, per, De Ingenieur, No 5, 1963, pp 1-10.
GB/10/3376

The Statistical Fundamentals of Irreversible Thermodynamics, by Hans Ziegler, 53 pp.
GERMAN, per, Ingenieur Archiv, Vol XXXI, No 5, 1962, pp 317-342. 9692913
DDC RSIC-187

Tandem Cascade in a Single Stage Axialflow Blower, by H. Linnemann.
GERMAN, per, Konstruktion Vol XVI, No 4, 1964, pp 128-135.
*Redstone Arsenal

The Universal Building Block System for Pneumatic Controls, by H. Toepfer, D. Schurepol, et al.
GERMAN, per, Maschinen-Steuerung-Rapport, Vol VII, No 2, 1964, pp 63-72.
*FTD-TT-64-723

Nuts, Bolts and Bolted Connections, by G. Gimbel, O. Furst.
GERMAN, per, Metallwirtschaft, Vol XXII, No 9-10, 1943, pp 135-140.
*Redstone Arsenal

Scientific
Engineering (Contd)

Scribing Tools, by F. Beblu.
GERMAN, per, Nachrichten aus dem Karten und Vermessungswesen, Vol XXI, 1962, pp 26-46.
CSIRO/No 6796

Increasing Open Hearth Furnace Output by Oxygen Injection, by G. Violli.
GERMAN, per, Radex Rundschau, No 1, Feb 1964, pp 3-19.
BISI 3737

Calculation of Cooling Time of Rolled Products on Cooling Beds, by W. Krause.
GERMAN, per, Stahl und Eisen, Vol LXXXII, 1963, pp 602-604.
BISI 3692

Release of Stripper Cranes by Ingto Mould Travelling Cranes, by H. Flessner.
GERMAN, per, Stahl und Eisen, Vol LXXXIV, 1964, pp 190-192.
*BISI 3783

Blast Furnace Cooling as a Task for the Water Supply Service of an Iron and Steel Plant, by M. Zur.
GERMAN, per, Stahl und Eisen, Vol LXXXIV, 1964, pp 460-469.
*BISI 3778

Forging Press of the Two Column Type, by H. Winkler, H. Aabrand.
GERMAN, per, Stahl und Eisen, Vol LXXXIV, 1964, pp 520-528.
*BISI 3795

Forging Press of the Cast Steel Frame Type, by H. J. Pahnke, F. Foeg.
GERMAN, per, Stahl und Eisen, Vol LXXXIV, 1964, pp 528-536.
*BISI 3796

Significance of the Principles of Modern Rolling Technology of Mill Drives, by H. G. Muller.
GERMAN, per, Stahl und Eisen, Vol LXXXIV, 1964, pp 660-667.
*BISI 3797

Present State of Weighing Technique in Blast Furnace Practice, by G. Wiethoff.
GERMAN, per, Stahl und Eisen, Vol LXXXIV, 1964, pp 685-692.
*BISI 3774

Thermodynamic Principles of Coke Oven Practice, by A. Steding.
GERMAN, per, Technische Mitteilungen, 1958, pp 95-106.
*BISI 3776

Tests on the Distribution of Stress in Notched Tensile Bars, by E. Preuss.
GERMAN, per, Verein Deutscher Ingenieure Zeitschrift, Vol LVII, No 17, 1913, pp 664-663.
*Redstone Arsenal

The Method of Measuring Surface Tensions on Structural Members by Means of Photoelastic Layers Without Using a Model, by Georg Oppel.
GERMAN, per, Verein Deutscher Ingenieure Zeitschrift, Vol LXXXI, No 27, 1937, pp 803-804.
*Redstone Arsenal

Heat Balance of Coke Ovens, by D. Dioszeghy.
HUNGARIAN, per, Kohászati Lapok, Vol XIV, 1959, pp 448-453.
*BISI 3777

Scientific
Engineering (Contd)

Operation of the Ternal Continuous Casting Plant,
by M. Signora, R. Cardano.
ITALIAN, per, Rivista di Ingegneria, No 7, 1962,
pp 721-733.
*ISI 3685

New Ship Construction Techniques, by Gino Galuppini,
6 pp.
ITALIAN, per, Rivista Marittima, No 2, 1964,
Encl to USNA, Rome, Italy.
Navy 5850013764
(DIA)

Ski Pole Disk Made of Rubber or Other Similar
Material, Force-Fitted on the Pole, Containing
Embedded Reinforcement, and Method of Producing
Said Disk, by Vitale Bramani, 6 pp.
ITALIAN, Patent No 428,289.
Patent Office

Vending Machine for Dispensing Loose Cigarettes
in Desired Quantity by Closing and Opening Electric
Circuits Actuating Electromagnets, by Primo Mauri,
Franco Capelli, 5 pp.
ITALIAN, Patent No 482,999.
Patent Office

Oxidation Mechanisms of Metals at High
Temperatures, by S. Mrowec.
POLISH, per, Archiwum Hutnicze, Vol VII,
No 3, 1962, pp 251-264.
*ISI 3790

Optimum Conditions for Rocket Thrust Orientation,
by P. Bradeanu, I. Pavalodu.
RUMANIAN, per, Studi si Cercetari de Mecanica
Aplicata, Vol XIV, No 4, 1963, pp 805-816.
*FTD-TT-64-615

A Buckling Problem on the Spherical Shell,
by Robert Zoolly.
SWISS, rpt, Zurich, 1915.
*Redstone Arsenal

Results of Investigation of Conductive Heat Exchange
Between Plain Metallic Surfaces, by V. S. Miller.
UKRAINIAN, per, Ak Nauk Ukrayinskoy RSR, Kiev
Inst Teploenergetiki, Zhurnal Prats, No 20, 1960,
pp 44-53.
*Redstone Arsenal

Fuels & Propulsion

Solid Rocket Propellants, by D. Jaukovic.
CROATION, per, Vojnotehnicki Glasnik, No 8,
1963, pp 581-590.
*FTD-TT-64-744

Materials & Metallurgy

Handbooks of High Temperature Materials, by
G. V. Sansonov.
RUSSIAN, bk, 418 pp.
Plenum Press

Scientific
Materials & Metallurgy (Contd)

Automation of Continuous Furnaces,
by S. A. Malyy, 37 pp.
RUSSIAN, bk, Avtomatizatsiya Metodicheskikh,
Moscow, 1962, pp 48-64, 72-76, 85-87;
90-92; 96-100.
JPRS 25288

Investigation of the Influence of Low-Temperature
Thermomechanical Treatment on the Properties
of Steels, by V. D. Sadovskiy, L. V. Smirnov, et al.
RUSSIAN, bk, Issledovaniya po Vysokoprochnym Splavam
i Nitridnym Kristallam, 1963, pp 54-60.
*FTD-TT-64-767

Influence of Austenite Deformation on the Properties
of Steel Following Quenching, by L. I. Kogan,
V. I. Sarraf, et al.
RUSSIAN, bk, Issledovaniya po Vysokoprochnym Splavam
i Nitridnym Kristallam, 1963, pp 98-107.
*FTD-TT-64-767

Thermomechanical Treatment of Titanium Alloys,
by A. P. Gulyayev, A. S. Shigarev.
RUSSIAN, bk, Issledovaniya po Vysokoprochnym Splavam
i Nitridnym Kristallam, 1963, pp 142-147.
*FTD-TT-64-767

Application of Ceramic Coatings by Electrophoresis,
by A. P. Obukhov, L. I. Chudinova, et al, 6 pp.
RUSSIAN, bk, Issledovaniya po Zharoprochnym
Splavam Tom V, Moscow, 1959, pp 303-307.
JPRS 24845

Study of the Distribution of the Isotopes of Cerium
Ruthenium, Zirconium and Niobium in Samples of
Radioactive Fallout, by V. P. Shvedov, L. I. Gedeonov,
et al.
RUSSIAN, rpt, Izucheniye Raspredeleyeniya Izotopov Tseriya,
Rutoniya, Tsirkoniya i Niobiya v Protsessakh Razlozheniya
Mineral'nykh Kislotami Prob Radioaktivnykh
Vypadeniy i Atmosfernykh Osadkov, Moscow, 1963,
45 pp.
*AEC

Processing High-Temperature Magnesium Alloys,
by M. Ye. Drita, 54 pp.
RUSSIAN, bk, Magnitovyye Splavy dlya Raboty pri
Povyshennykh Temperaturakh, 1964.
JPRS 25069

Dislocation Theories of Fatigue Cracks Formation,
by I. A. Odint, V. S. Ivanova, 18 pp.
RUSSIAN, bk, Prochnost' Metallov pri Peremennykh
Nagruzkakh, Moscow, 1963, pp 3-13.
JPRS 25124

The Change of Dislocation Structure of Metals
During Cyclical Stress, by V. S. Ivanova, 15 pp.
RUSSIAN, bk, Prochnost' Metallov pri Peremennykh
Nagruzkakh, Moscow, 1963, pp 14-22.
JPRS 25124

High Strength, Precipitation Hardening, Low
Magnetic Fe-Cr-Ni Alloys, by E. I. Belikova,
O. I. Putintseva, 18 pp.
RUSSIAN, bk, Spetsial'nyye Stali i Splavy,
No 35, 1963, pp 11-23.
JPRS 25163

Investigation of Steels for Gas Turbine Parts,
by Yu. V. Laryshov, 19 pp.
RUSSIAN, bk, Spetsial'nyye Stali i Splavy,
No 35, 1963, pp 31-45.
JPRS 25163

Effect of Molybdenum on the Properties of
Austenitic Cr-Ni-Cu Steels, by Ye. V. Zotova,
12 pp.
RUSSIAN, bk, Spetsial'nyye Stali i Splavy,
No 35, 1963, pp 69-77.
JPRS 25163

Sr-90 in the Water of the River Don Basin,
by V. B. Stradomskiy.
RUSSIAN, rpt, Strontsi-90 v Vode Basseina r. Don,
Moscow, 1963, 5 pp.
*AEC

Techniques of Irradiating Materials in a Reactor,
by N. F. Pravdyuk, N. S. Panasyuk, et al.
RUSSIAN, rpt, Tekhnika Oblucheniya Materialov v
Reaktore, Moscow, 1962, 57 pp.
*AEC

Influence of the Type and Polarity of the Current
on Metallurgical Processes During Electro Slag
Welding, by D. A. Dudko, T. N. Rublevskiy.
RUSSIAN, per, Avtom Svarka, No 3, 1958,
pp 69-78.
*BISI 3780

Changes in Slag Composition During a Process
of Electro Slag Welding, by D. A. Dudko,
T. N. Rublevskiy.
RUSSIAN, per, Avtom Svarka, No 6, 1958,
pp 51-55.
*BISI 3779

Materials, Technology and Production Economy
Welding of Austenitic Heat Resisting Steels and
Alloys Used in Building Gas Turbines,
by B. I. Medovar, 15 pp.
RUSSIAN, per, Energomashinostroeniye,
No 3, Mar 1964, pp 23-30.
JPRS 25100

Colorimetric Determination of Rhenium in the
Presence of Molybdenum, by V. M. Tarayan,
L. G. Mushegyan.
RUSSIAN, per, Iz Ak Nauk Armvanskoy SSR,
KhimNauk, No 6, 1958, pp 397-408.
GB/4/T/1570

Effect of Heat Treatment on the Cold Brittleness of
Low-Carbon Steel, by K. F. Starodubov, Yu. Z. Borkovskiy.
RUSSIAN, per, Iz Vysshikh Ucheb Zaved Chernaya
Metallurgiya, No 1, 1961, pp 166-170.
GB/82/4653

On the Best Way of Calculating the Heat Absorption
by the Open-Hearth Bath, by V. Yu. Kaganov, et al.
RUSSIAN, per, Iz Vysshikh Ucheb Zaved. Chern Met,
No 1, 1963, pp 194-200.
HB 6208

On the Problem of the Nature on Hardening of
Austenitic Steels, by V. I. Grogorkin.
RUSSIAN, per, Iz Vysshikh Ucheb Zaved. Chern
Metall, No 2, 1963, pp 93-103.
*FTD-TI-64-705

The Behavior of Rare-Earth Metals in Liquid
Steel, by A. P. Gulyayov, et al.
RUSSIAN, per, Iz Vysshikh Ucheb Zaved. Chern Met,
No 1, 1964, pp 56-61.
HB 6228

Development of the Basic Oxygen Process, by
V. I. Baptizmanskiy.
RUSSIAN, per, Iz Vysshikh Ucheb Zaved. Chern
Met, No 2, 1964, pp 49-55.
HB 6217

Some Features of the Crystallization of Steel in
Horizontal Continuous Casting, by O. A. Shatagin.
RUSSIAN, per, Iz Vysshikh Ucheb Zaved. Chern
Met, No 2, 1964, pp 58-63.
HB 6216

Kinetics Underlying the Supervision and Automatic
Control of the Process of Carbon Elimination Dur-
ing Oxygen Blowing of Liquid Steel, by N. N. Drozdov,
et al.
RUSSIAN, per, Iz Vysshikh Ucheb Zaved. Chern Met,
No 3, 1964, pp 16-22.
HB 6231

Effect of Basicity of Open-Hearth Slag on Its Tendency
to Foaming, by Yu. M. Nechkin, et al.
RUSSIAN, per, Iz Vysshikh Ucheb Zaved. Chern Met,
No 3, 1964, pp 53-56.
HB 6233

Investigation of the Incubation Period of the Fatigue
of Metals, by A. V. Gur'yev.
RUSSIAN, per, Iz Vysshikh Ucheb Zaved
Fiz, No 6, 1960, pp 170, 171.
GB/82/4657

The Metallurgy of Welding Cast Iron When Using
Natural Gas, by P. I. Gavrilov.
RUSSIAN, per, Iz Vysshikh Ucheb Zaved. Mash, No 12,
1963, pp 193-202.
HB 6251

Could the Ancient Metallurgists Smelt Aluminium
Bronze?, by M. Akopova, et al.
RUSSIAN, per, Kratkiye Soobshcheniya Instituta
Arkheologii. Ak Nauk SSSR, No 93, 1963,
pp 114, 115.
CSIRO/No 6691

Problems in the Manufacture of an Ethylsilicate
Covering for Investment Casting, by Z. K. Anchecva,
M. H. Yefimov, 15 pp.
RUSSIAN, per, Litovnoe Proizv, No 1, 1964, pp 2-5.
JPRS 25135

Investigation of Some Casting Alloys for
High Precision Parts, by M. L. Khenkin,
N. K. Levina, et al, 17 pp.
RUSSIAN, per, Litovnoe Proizvod, No 3, 1964,
pp 27-31.
JPRS 25391

New Technology in Investment Casting,
by A. S. Lakeyev, 6 pp.
RUSSIAN, per, Mashinost, No 6, Nov, Dec 1963,
pp 37-40.
JPRS 25172

Electron Beam Welding in Industry,
by N. N. Leont'yev, O. K. Nazarenko, 8 pp.
RUSSIAN, per, Mashinost, No 6, Nov, Dec 1963,
pp 48-52.
JPRS 25171

Temperature Measurement of the Metal Bath
in 50-Ton Basic Oxygen Furnaces by Means of
Zirconium-Boride-Sheathed Thermocouples, by
S. M. Serdyuk, et al.
RUSSIAN, per, Poroshkovaya Metallurgiya, Vol IV,
No 1, 1964, pp 91-95.
HB 6264

Study of the Quality of Continuously Cast Transformer
Steel, by N. M. Lopatyskiy, et al.
RUSSIAN, per, Stal, Vol XVIII, No 5, 1958,
pp 417-425.
GB/95/4300

Certain Features of the Electron Spectrum of Superconductors, by I. B. Borovskiy, 13 pp.
RUSSIAN, per, Trudy Inst Metall imeni A. A. Baykova, Vypusk 6, Metallurg, Metallov, Fiz-Khim Metody Issle, No 6, 1960, pp 41-48.
JPRS 25289

X-Ray Spectra of the Superconducting Compound CuS, by I. B. Borovskiy, I. A. Ovsyannikov, 7 pp.
RUSSIAN, per, Trudy Inst Metall imeni A. A. Baykova, Vypusk 6, Metallurg, Metallov, Fiz-Khim Metody Issle, No 6, 1960, pp 49-53.
JPRS 25289

Diffusion of Silicon and Titanium in Niobium, by P. M. Arzhanyy, R. M. Volkova.
RUSSIAN, per, Trudy Inst Metallurg imeni A. A. Baykova, Ak Nauk SSSR, No 11, 1962, pp 3-19.
*FTD-TT-64-710

High-Strength Steel, by D. A. Prokoshkin.
RUSSIAN, per, Trudy Inst Metall Metallurg, Metallo, Fiz-Khim Metody Issledovaniya, No 13, 1963, pp 108-121.
*FTD-TT-64-679

Some Problems of Low-Carbon Steel Strengthening Due to Alloying, by M. S. Mikhalev, I. N. Bogachev.
RUSSIAN, per, Trudy Ural'skogo N.-I. In-Ta Chern Metallov, No 1, 1961, pp 143-159.
*FTD-TT-64-763

Assessment of the Texture of Transformer Steels, by Ya. V. Grechyni, et al.
RUSSIAN, per, Zavod Lab, Vol XXX, No 3, 1964, pp 305-306.
HB 6271

The Influence of Organic Substances on the Hygroscopic Properties of Ammonium Nitrate, by E. V. Khamskiy.
RUSSIAN, per, Zhur Prikl Khim, Vol XXXVI, No 12, 1963, pp 2620-2625.
Dept of Interior
TN7 E37 No 781

Polyvinyl Alcohol as a Polarographic Maximum Suppressor, by Teng Chia-chih, Ch'ou Wen-shu, 8 pp.
CHINESE, per, Hua-hsueh T'ung-pao, No 2, 1964, pp 53-55.
JPRS 25070

Paper Electrochromatography of Selenium and Tellurium, by Tso Tsung-chih, I Jui-shih, et al, 7 pp.
CHINESE, per, Hua-hsueh T'ung-pao, No 2, 1964, pp 55, 56.
JPRS 25070

Gas Chromatographic Analysis of Tetrachloro-Alkane, by Chang Jen-en, 12 pp.
CHINESE, per, Hua-hsueh T'ung-pao, No 3, 1964, pp 55-58.
JPRS 25191

The Heterocyclic Compounds of Iodine: Iodine Positive Ion in Pyridine for Carbon Double Bond, by Huang Wen-k'uei, Chang Chen-chieh, 6 pp.
CHINESE, per, K'o-hsueh T'ung-pao, No 3, 1964, pp 237-239.
JPRS 24862

Polarograph Studies of Thallium Ions and Sulfur Substituted Vitriol Bond, by Chang Cheng-pin, Liu Lien-sheng, 7 pp.
CHINESE, per, K'o-hsueh T'ung-pao, No 3, 1964, pp 250-252.
JPRS 24862

The Calamine of the Oxidization Zone of a Certain Lead-Zinc Bed in Northeast China, by Yang Min-chih, T'ao K'o-chieh, 8 pp.
CHINESE, per, K'o-hsueh T'ung-pao, No 3, 1964, pp 256-258.
JPRS 24862

The Interaction of Norepinephrine and Chlorpromazine, by Hsia Ping-nan, Chou Wen-cheng, et al, 5 pp.
CHINESE, per, K'o-hsueh T'ung-pao, No 4, 1964, pp 344, 345.
JPRS 25267

Single-Stage (Direct) Production of Silico-Chromium, Comment on S. Bulkova's Paper, by M. Cervinka.
CZECH, per, Hutník, Vol XIII, No 6, 1963, pp 302-303.
HB 6095

Cells for the Examination of Irradiated Plutonium Fuel Elements, by A. Valentin.
FRENCH, rpt, Cellules pour l'Examen d'Elements Combustibles au Plutonium Irradies, 1963.
*AEC

Influence of Cold Work Induced Defects Upon Irradiation Growth of α Uranium, by Y. Quere, C. Weinberg.
FRENCH, rpt, Colloque de Metallurgie, 1962.
*AEC

Lessons on Curvilinear Coordinates and Their Diverse Applications, by Gabriel Lame.
FRENCH, bk, Lecons sur les Coordonnees Curvilignes et Leurs Diverses Applications.
Dept of Interior
QA409 L2

Should the Reactivity of Coko Be Measured?, by C. G. Thibaut.
FRENCH, per, Association Technique de la Siderurgie Francaise, Commission des Ingenieurs des Hauts Fourneaux, 1963.
Dept of Interior
TN7 U52 No 2109

Action of Metals on Nitrates of Ammonium and of Hydrazine and on Sodium Sulfate, by M. O. Charmandarian.
FRENCH, per, Bulletin de la Societe Chimique de France, 1952, pp 975, 976.
Dept of Interior
TN7 E57 No 778

Applications of Ceramics in the Field of the Nuclear Industry, by J. Kiston.
FRENCH, per, Bulletin Societe Francaise de Ceramique, No 59, Apr, Jun 1963, pp 25-45.
*AEC

Observations on the Effect of an Electrical Current on Segregation, by Remi Tougas, Andre Hone, 5 pp.
FRENCH, per, Canadian Metallurgical Quarterly, Vol II, No 3, Jul-Sep 1963, pp 281-287. 9222633
AEC-Tr-6366

Stress Corrosion Cracking of Mild Steels and Weakly Alloyed Steels, by E. Herzog.
FRENCH, per, Corrosion et Anticorrosion, Vol II, 1954, pp 3-13.
*AEC

Scientific
Materials & Metallurgy (Contd)

Stress Corrosion Cracking of Mild Steels and Weakly Alloyed Steels, Part II. Grain Structure, by E. Herzog.
FRENCH, per, Corrosion et Anticorrosion, Vol II, 1954, pp 9-99.
*AEC

Stress Corrosion Cracking of Mild Steels and Weakly Alloyed Steels, Part II. Rupture by Cracking in Nitrates; Influence of Thermal Treatment, by E. Herzog.
FRENCH, per, Corrosion et Anticorrosion, Vol II, 1954, pp 57-68.
*AEC

On the Application of Faradays Law to the Study of Anodic Dissolution of Metals, by M. Froment.
FRENCH, per, Corrosion-Anticorrosion, Vol VII, No 4, 1959, pp 134-145.
*BISI 3782

Rance Tidal Power Structures - Marine Corrosion Study, by S. Licheron.
FRENCH, per, Houille Blanche, Vol XVIII, No 4, 1963, pp 393-402.
GB/10/3386

Rance Tidal Power Structure - Cathodic Protection From Marine Corrosion, by R. Legrand.
FRENCH, per, Houille Blanche, Vol XVIII, No 4, 1963, pp 403-406.
GB/10/3387

Super-Contraction of Silk in Lithium Bromide Solutions, by M. Leveau.
FRENCH, per, L'Institut Textile de France No 102, 1962, pp 871-884.
CSIRO/No 6554

Evaluation of the Volume of a Fission Spike in Uranium, by Y. Quere, F. Nakacho.
FRENCH, per, Journal of Nuclear Materials, Vol II, 1959, pp 203-229.
*AEC

Collecting of Helium in Frits of Beryllium Oxide Irradiated by Neutrons, by H. Salosse, R. Caillat, et al.
FRENCH, per, Journal of Nuclear Materials, Vol VIII, No 2, 1963, pp 268-270.
*AEC

Study by Electron Microscope of Structural Flaws in Irradiated Fritted Beryllium Oxide, by A. Bisson.
FRENCH, per, Journal of Nuclear Materials, Vol X, No 4, 1963, pp 321-328.
*ARC

Experimental Study of Austenite Formation in High-Nickel Steels, by P. Legendre, X. Wache.
FRENCH, per, Les Memoires Scientifiques de la Revue de Metallurgie, Vol LXI, No 1, 1964, pp 33-42.
BISI 3728

Problems of Accuracy in Sampling Lorraine Iron Ores, by R. Goloubinow.
FRENCH, per, Revue de l'Industrie Minerale, Vol XLIV, No 12, 1962, pp 869-884.
BISI 3642

Quality Control in a Metallurgical Works, by P. Mathieu, B. Seruzier.
FRENCH, per, Revue de Metallurgie, Vol LX, No 9, 1963, pp 763-773.
BISI 3662

Scientific
Materials & Metallurgy (Contd)

Discussion of Anisotropy of Values for Strength of Steel as Function of Plastic Deformation Conditions, by R. Zojá, M. Ferrero.
FRENCH, per, Revue de Metallurgie, Vol LX, No 10, 1963, pp 863-868.
BISI 3714

On the Spontaneous Decomposition of Fused Ammonium Nitrates, by Heinrich Tramm.
GERMAN, per, Angewandte Chemie, Vol XLVII, 1934, pp 782, 783.
Dept of Interior
TN7 E57 No 780

Studies on the Nitrogen Absorption by Liquid Iron Alloys at Pressures up to Four Atms, by H. Schenck, M. G. Froberg, et al.
GERMAN, per, Archiv fuer Eisenhüttenwesen, Vol XXXIII, No 9, 1962, pp 593-600.
HB 5751

Effect of Milling Time on Chemical and Physical Properties of Various Metal Powders, by G. Naeser, W. Scholz, et al.
GERMAN, per, Archiv fuer Eisenhüttenwesen, Vol XXXIII, No 11, 1963, pp 871-878.
HB 6200

Visual Demonstration of Magnetic Domain Structures in Textured Silica Steel, by D. Ganz.
GERMAN, per, Archiv fuer Eisenhüttenwesen, Vol XXXV, No 4, 1964, pp 371-372.
*BISI 3756

Considerations of the Influence of the Vibration Data Upon the Screening Operation, by F. Stoff.
GERMAN, per, Aufbereitungstechnik, No 11, 1963, pp 462-466.
BISI 3715

Deep-Drawability and Spot Weldability of Cold-Rolled Galvanized Sheets With Reference to Their Corrosion Behaviour, by K. H. Kloos.
GERMAN, per, Bänder Bloche Rohre, No 4, 1963, pp 165-173.
BISI 3616

The Casting Electron-Probe Microanalyzer and Its Use in Special Steel Production, by K. Swoboda, R. Bloch, et al.
GERMAN, per, Berg und Hüttenmännische Monatshefte, Vol CVIII, No 11, 1963, pp 391-401.
HB 6235

Development of the Common Borer, *Hylotrupes bajulus* L., in Roof Frames of Different Age, by A. Korting.
GERMAN, per, Berichte aus der Bauforschung, No 26, 1962, pp 9-15.
CSIRO/No 6676

Study of the Duration of the Protecting Effect of Chemical Preservatives Against the Common Borer, *Hylotrupes bajulus* L., by A. Korting.
GERMAN, per, Berichte aus der Bauforschung, No 26, 1962, pp 31-39.
CSIRO/No 6675

Testing of Chemical Preservative Treatments of Structural Timber in the Fungus-Cellar Test, by M. Gersonde.
GERMAN, per, Berichte aus der Bauforschung, No 26, 1962, pp 55-65.
CSIRO/No 6674

Rolling Experiences: Problems in the Hot Sheet Rolling Mill, by A. Klement.
GERMAN, per, Blech, Vol X, No 10, 1963, pp 739-741.
BISI 3648

The Distribution of Stress in Electrical Resistance Welding Alloys in Thin Sheets, by Franz Bollenrath. GERMAN, per, Deutsche Versuchsanstalt fuer Luftfahrt Jahrbuch, Jan 1937, pp 303-307.
*Redstone Arsenal

Comparison of Long-Term Behaviour of Stainless and High Temperature Steels at Temperatures Above 500°C, by R. Oppenheim, G. Lennartz. GERMAN, per, DEW-Technische Berichte, Vol IV, No 1, 1964, pp 1-8.
BISI 3686

The Effect of Various Inoculants on the Mechanical Properties of Cast Iron, by K. Wagner. GERMAN, per, Die Giesserei, Vol LI, No 5, 1964, pp 117-123.
HB 6225

Effect of Mechanical Vibrations on the Crystallization and Properties of Cast Alloys. Part I, by W. Patterson, H. Brand. GERMAN, per, Giesserei, Technisch-Wissenschaftliche Beihfte, Vol XV, No 3, 1963, pp 137-147.
HB 6091

Steel Castings in Shipbuilding, by H. L. Roos. GERMAN, per, Hansa, Vol C, No 751.
GB/17/1630

Hardboard as a Constructional Material - a Visco-Elastic Body, by S. A. Lundgren. GERMAN, per, Holz als Roh- und Werkstoff, 1957.
CSR Co

Hygroscopical Properties of Fibreboard, by S. A. Lundgren. GERMAN, per, Holz als Roh- und Werkstoff, 1958.
CSR Co

Studies on Thickness Variation of Hardboard, by V. B. Kumar. GERMAN, per, Holz als Roh- und Werkstoff, 1958.
CSR Co

Microstructure of Novopan-Particle Boards, by H. H. Bosshard. GERMAN, per, Holz als Roh- und Werkstoff, 1958.
CSR Co

The Manufacture of ³⁵S Labelled Sodium Thiosulphate and Potassium Thiocyanate, by M. Kucharski, R. Plojowski, 5 pp. GERMAN, per, Kernenergie, Vol VI, No 11, 1963, pp 649, 650. 9222675
AEC-NP-Tr-1125

The Production of Raw Steel From Fine Ore in the Liquid Phase, by R. Rummel. GERMAN, per, Kleppz Kachberichte, Vol LXX, No 4, 1962, pp 133-138.
BISI 3545

Chemical Tests on Bleached Tops, by K. Ziegler, H. Zahn. GERMAN, per, Melliand Textilberichte, Vol XL, No 1, 1959, pp 97-99.
CSIRO/No 6704

On the Appearance of Plate-Like Segregation Zones in Metal Alloys, by U. Heubner. GERMAN, per, Metallwissenschaft und Technik, Vol XVI, No 4, 1962, pp 403-407.
BISI 3698

Suitability of Bamboo Pulp for the Production of Viscose Rayon, by L. Thorla. GERMAN, per, Melliand Textilberichte, Vol XXXII, 1951, pp 282, 283.
INSDOC/Ref: T. 3900, PP. 7

Experiments on the Enrichment of Liquid and Solid Ferrochromium With Nitrogen, by H. J. Eckstein, S. Bohmer. GERMAN, per, Neue Huette, Vol VIII, No 11, 1963, pp 656-660.
HB 6219

Effect of Copper on the Performance of Bearings of Sintered Iron-Graphite Powders, by A. Domsa. GERMAN, per, Neue Huette, Vol IX, No 3, 1964, pp 186-188.
HB 6242

Use of Protective Gas in the Steel and Further-Treatment Industry, by J. Wunning. GERMAN, per, Neue Huette, No 5, 1964, pp 291-297.
*BISI 3801

Experimental Plastic Houses. I, by E. K. H. Wulkan. GERMAN, per, Plastica, Vol XVI, No 7, 1963, pp 326-333.
GB/39/PL/TR 8134

Determination of Tantalum in Steel and Ferro-Alloys by Activation Analysis, by H. Marchart, F. Hecht. GERMAN, per, Radex Rundschau, No 1, 1964, pp 55-70.
BISI 3739

Contribution to the Metallurgy of Electroslag Welding, by F. Erdmann-Jesnitzner, G. Kammlor. GERMAN, per, Schweisstechnik, No 8, 1958, pp 88-92.
*BISI 3793

The Effect of Soda Treatment of Pig Iron on the Nitrogen Content of Basic Bessemer Steel, by P. Haastert, E. Kohler. GERMAN, per, Stahl und Eisen, Vol LXXXIII, 1963, pp 979-986.
BISI 3381

Experience of Supplementary Oil Heating in Blast Furnace Stoves, by W. Keller, W. Risse. GERMAN, per, Stahl und Eisen, Vol LXXXIII, 1963, pp 1426-1432.
BISI 3650

Contribution to the Metallurgy of Top-Blowing Oxygen With Pulverized Lime on Pig Iron Rich in Phosphorus, by W. A. Fischer, H. J. Flöschner. GERMAN, per, Stahl und Eisen, Vol LXXXIV, 1964, pp 117-137.
BISI 3653

The Raising of Blast-Furnace Output by Sizing the Sinter, by B. Gerstenberg, G. Schwabe. GERMAN, per, Stahl und Eisen, Vol LXXXIV, 1964, pp 361-364.
BISI 3717B

Sinter Production and Properties, by A. C. Meyer. GERMAN, per, Stahl und Eisen, Vol LXXXIV, 1964, pp 479-482.
BISI 3717A

Comparison of Various Methods of Measuring of the Thickness of Zinc Coatings, the Iron-Zinc Alloy Layer and the Pure Zinc Layer, by F. Stricker. GERMAN, per, Stahl und Eisen, Vol LXXXIV, 1964, pp 722-728.
*BISI 3798

Flow Under the Area of Impingement of an Unrestrained Gas Jet Striking the Surface of a Liquid at Right Angles, by J. Maatsch. GERMAN, per, Technische Mitteilungen Krupp, Forschungsberichte, Vol XXI, No 5, 1963, pp 1-4.
BISI 3696

Scientific
Materials & Metallurgy (Contd)

Effect of Sulphuric Acid on Textile Fibres, by R. Haller.
GERMAN, per, Textil-Rundschau, Vol XI, No 2, 1947, pp 39-44.
GB/167/3021

The Corrosion Resistance in Sulphuric Acid of Austenitic Nickel-Chromium Steels Containing Molybdenum and Copper, by I. Class, H. Grafen.
GERMAN, per, Werkstoffe und Korrosion, Vol XV, No 1, 1964, pp 79-84.
*BISI 3773

Electromicroscopic Examination of Al-Cu-Alloys, by M. Heimendahl.
GERMAN, per, Z fuer Metallkunde, Vol LIII, No 5, 1962, pp 275-283.
GB/10/3316

Electromicroscopic Examination of Al-Cu-Alloys, by M. Heimendahl.
GERMAN, per, Z fuer Metallkunde, Vol LIV, No 7, 1963, pp 385-392.
GB/10/3391

Assessment and Distribution of Delta Ferrite in Two-Phase Austenitic Stainless Steels, by P. Ravizza.
ITALIAN, per, Metallurgia Italiana, Vol LV, No 12, 1963, pp 635-640.
HB 6214

Inorganic Chemistry. Corium-Manganese Alloys, by Aldo Iandelli, 5 pp.
ITALIAN, per, Rendiconti Accademia Nazionale de Lincei, Vol XIII, Ser 8, 1952, pp 265-268. 9222671
AEC-Tr-6387

Precipitation of Lead and Cadmium Sulfides With Thioacetamide From Homogeneous Solution, by Washizuka Shigenari.
JAPANESE, per, Bunsoki Kagaku, Vol X, 1961, pp 580-590.
*AEC

Determination of Iron and Vanadium in Titanium Metal, by K. Tetsu.
JAPANESE, per, Japan Analyst, Vol III, 1954, pp 329, 330.
GB/48/562

Effect of Heat Treatment on Mechanical Properties of M252, by Taro Hasegawa, 14 pp.
JAPANESE, per, Tetsu to Hagane, Vol XLV, 1959, pp 32-37.
JPRS 25078

Continuous Determination of the Oxygen Dissolved in Molten Steel by E.M.F and Its Practical Application, by M. Ohtani, K. Sanbongi.
JAPANESE, per, Tetsu to Hagane, Vol XLIX, No 1, 1963, pp 22-29.
BISI 3670

Aluminum Deoxidation and Nonmetallic Inclusions in Steel, by I. Uchiyama.
JAPANESE, per, Tetsu to Hagane, Vol XLIX, No 3, 1963, pp 431-433.
HB 6258

Nonmetallic Inclusions in the Iron-Chromium-Oxygen System, by K. Segawa, et al.
JAPANESE, per, Tetsu to Hagane, Vol XLIX, No 3, 1963, pp 433-435.
HB 6259

Scientific
Materials & Metallurgy (Contd)

Nonmetallic Inclusions in Steel From Refractories and Deoxidizers, by S. Mackawa, et al.
JAPANESE, per, Tetsu to Hagane, Vol XLIX, No 3, 1963, pp 435-438.
HB 6260

Macroscopic Inclusions Caused by Atmospheric Oxidation, by K. Senda.
JAPANESE, per, Tetsu to Hagane, Vol XLIX, No 3, 1963, pp 438-439.
HB 6262

On the Direct Extrusion of Stainless Steels Produced by the Consumable-Electrode Vacuum-Arc Melting Process, by A. Suzuki, et al.
JAPANESE, per, Tetsu to Hagane, Vol XLIX, No 3, 1963, pp 468-469.
HB 5971

Steam Turbine Steels Produced by Consumable-Electrode Arc Melting, by A. Suzuki, et al.
JAPANESE, per, Tetsu to Hagane, Vol XLIX, No 3, 1963, pp 469-471.
HB 5972

Relationship Between Deoxidation and Nonmetallic Inclusions in the Melting of Stainless Steel, by R. Ichiyasu.
JAPANESE, per, Tetsu to Hagane, Vol XLIX, No 3, 1963, pp 620-623.
HB 5976

Effect of Some Operational Conditions on Skin Blowholes in Killed-Steel Ingots, by M. Yamamoto, et al.
JAPANESE, per, Tetsu to Hagane, Vol XLIX, No 10, 1963, pp 1419-1421.
HB 6135

On Nonmetallic Inclusions in Capped Steel Ingots, by K. Morinaga, et al.
JAPANESE, per, Tetsu to Hagane, Vol XLIX, No 10, 1963, pp 1423-1425.
HB 6137

The Effect of Hydrostatic Pressure on the Plastic Properties of Metals, by T. Polczynski.
POLISH, per, Archiwum Hutnictwa, Vol VII, No 1, 1962, pp 3-13.
*BISI 3781

Surface Properties of Metal and Slag in Steelmaking Processes, by T. Mazanek.
POLISH, per, Archiwum Hutnictwa, Vol VII, No 2, 1963, pp 119-140.
BISI 3617

The Economics of Continuous Casting, by E. Balan, A. Popescu.
RUMANIAN, per, Metallurgia si Constructia de Masini, Vol XV, No 12, 1963, pp 700-705.
IID 6207

Thermomechanical Treatment of Steel While Subject to Torsional Deformation, by V. I. Polymurskiy, G. V. Karpenko.
UKRAINIAN, per, Donovid Ak Nauk Ukrainy, No 12, 1963, pp 1600-1602.
HB 6295

Integral Equations of Macroscopic Electrodynamics and the Ozeen-Ewald Extinction Conditions, by N. A. Khuzhnyak.
RUSSIAN, bk, Integral'nye Uravneniya Makroskopicheskoi Elektrodinamiki i Usloviya Pogasheniya Ozeena-Eval'da, Vol II.
*AEC

The Book of the Future, 17 pp.
RUSSIAN, bk, Kniga, No 9, pp 371-386.
JPRS 25191

Compilation of a Plan for Forming Trains on Electronic Digital Computers, by G. A. Kutokova, L. K. Markov, 13 pp.
RUSSIAN, bk, Sostavleniye Plana Formirovaniya Poyezdov na Tsifrovyykh Vychislitel'nykh Mashinakh, 1963, pp 3-13.
JPRS 25021

Statistical Study of a Japanese Mathematical Text, by S. M. Shevenko, 51 pp.
RUSSIAN, bk, Statisticheskoye Issledovaniye Yaponskogo Matematicheskogo Teksta, Moscow, 1963, pp 1-55.
JPRS 25412

Basic Operating Principles of Punch Card Computers, by I. S. Yevdokimov, G. P. Yevstingmeyev, et al, 10 pp.
RUSSIAN, bk, Tsifrovyye Vychislitel'nyye Mashiny, 3d Ed., 1961, pp 133-141.
ACSI 1-3538-A
ID 2250282

Computer Engineering as Applied to Statistical Investigations and Computation of Automatic Control Systems, by V. V. Solodovnikov, Yu. S. Matveyev, et al, 163 pp.
RUSSIAN, bk, Vychislitel'naya Tekhnika v Primenenii dlya Statisticheskikh Issledovaniy i Raschetov Sistem Avtomaticheskogo Upravleniya, Moscow, 1963, 163 pp.
ACSI 1-4633
ID 220401564

Spherical Functions on Symmetric Riemannian Spaces, by I. M. Gol'fand 6 pp.
RUSSIAN, per, Dok Ak Nauk SSSR, Novaya Seriya, Vol LXX, 1950, pp 5-8.
Amer Math Soc

Algebraic Curves over Fields With Differentiation, by Ju. I. Manin, 20 pp.
RUSSIAN, per, Iz Ak Nauk SSSR Ser Matemat, Vol XXII, 1958, pp 737-756.
Amer Math Soc

A New Method in Probability Number Theory, by Ye. V. Novoselov, 86 pp.
RUSSIAN, per, Iz Ak Nauk SSSR, Seriya Matemat, Vol XXVI, No 2, 1964, pp 307-364.
JPRS 25099

Solution of a Second-Order Hyperbolic Differential Equation by Reducing it to a System of Integral Equations, by T. V. Chekmarev.
RUSSIAN, per, Iz Vysshikh Ucheb Zaved Matemat, No 5, 1963, pp 146-152.
Navy Tr 3837/APL T1026

A Partial Differential-Functional Equation, by V. P. Petukhov.
RUSSIAN, per, Iz Vysshikh Ucheb Zaved Matemat, No 1, 1964, pp 96-99.
*Navy/APL J382

Generalizations of Schur's Theorem Concerning a Class of Algebraic Functions, by V. A. Kurbatov, 12 pp.
RUSSIAN, per, Mathemat Sbornik, Novaya Seriya, Vol XXI, No 63, 1947, pp 133-140.
Amer Math Soc

On Properties of Differentiable Mappings of Regions of Euclidean Spaces, by L. D. Kudrjavcev, 24 pp.
RUSSIAN, per, Matemat Sbornik, Novaya Seriya, Vol XXXII, No 74, 1953, pp 493-514.
Amer Math Soc

On Equations of Prime Degree, by V. A. Kurbatov, 28 pp.
RUSSIAN, per, Mathemat Sbornik Novaya Seriya, Vol XLIII, No 85, 1957, pp 349-366.
Amer Math Soc

All Large Numbers are Sums of a Prime and Two Squares (A Problem of Hardy and Littlewood), by Ju. V. Linnik, 40 pp.
RUSSIAN, per, Matemat Sbornik, Novaya Seriya, Vol LII, No 94, 1960, pp 661-700.
Amer Math Soc

Linear Dependence of Conjugate Elements, by V. A. Kurbatov, 8 pp.
RUSSIAN, per, Mathemat Sbornik Novaya Seriya, Vol LI, No 94, 1960, pp 701-708.
Amer Math Soc

All Large Numbers are Sums of a Prime and Two Squares (A Problem of Hardy and Littlewood) II, by Ju. V. Linnik, 44 pp.
RUSSIAN, per, Matemat Sbornik, Novaya Seriya, Vol LIII, No 95, 1961, pp 3-38.
Amer Math Soc

Regular Unions and Special Subdirect Sums in Categories, by M. S. Calenko, 22 pp.
RUSSIAN, per, Mathemat Sbornik, Novaya Seriya, Vol LVII, No 99, 1962, pp 75-94.
Amer Math Soc

The First Boundary-Value Problem for One Class of Hypoelliptic Equations, by V. P. Mikhailov.
RUSSIAN, per, Matemat Sbornik, Vol LXIII, No 2, 1964, pp 238-264.
*Navy/APL J380

Application of a Binary-Decimal Code in Digital Reading a Code-Pulse Telemetry System, by N. I. Kalatozishvili, K. N. Slovinakiy, 7 pp.
RUSSIAN, per, Priborostroyeniye, No 9, 1963, pp 18-19. 9693088
FTD-TT-64-302

Principal Homogeneous Spaces Defined Over a Function Field, by I. R. Safarevic, 30 pp.
RUSSIAN, per, Trudy Matemat Inst Steklov, Vol LXIV, 1961, pp 316-346.
Amer Math Soc

The Impossibility of Some Inequalities Between Functional Norms, by K. K. Golovkin.
RUSSIAN, per, Trudy Matemat Inst imeni V. A. Steklova, Vol LXX, 1964, pp 5-25.
*Navy/APL J384

Approximation of Functions in Arbitrary Norms, by K. K. Golovkin.
RUSSIAN, per, Trudy Matemat Inst imeni V. A. Steklova, Vol LXX, 1964, pp 26-37.
*Navy/APL J385

Geometry of Homogeneous Spaces, Representations of Groups in Homogeneous Spaces and Related Questions of Integral Geometry, I, by I. M. Gol'fand, M. I. Grayev, 78 pp.
RUSSIAN, per, Trudy Moskov Matemat Obshc, Vol VIII, 1959, pp 321-390.
Amer Math Soc

Scientific
Mathematics & Data Processing (Contd)

Solution of Problems of Linear Algebra by the Method of Continued Fractions, by L. A. Ljusternik, 8 pp.
RUSSIAN, per, Trudy Seminara po Funktsional Anal, No 2, 1956, pp 85-90.
Amer Math Soc

Agrou-Theoretic Method of Differential Geometric Investigation, by G. F. Laptev, 14 pp.
RUSSIAN, per, Trudy Vses Matemat Soveshch, 1958, pp 409-418.
Amer Math Soc

Segments in a Dedekind Lattice, by M. S. Gelfand, 6 pp.
RUSSIAN, per, Uchenyye Zapiski Moskov Gosudar Pedagogich Inst, Vol LXXI, 1953, pp 199-204.
Amer Math Soc

On the Continuity of Structural Functions, by A. A. Markov, 9 pp.
RUSSIAN, per, Uspekhi Matemat Nauk, Vol IX, No 3, 1961, pp 226-230. 9693087
FTD-TT-64-475

Riemannian Spaces Having Their Curvature Bounded Below by a Positive Number, by V. A. Toponogov, 46 pp.
RUSSIAN, per, Uspekhi Matemat Nauk, Vol XIV, No 1 (85), 1959, pp 87-130.
Amer Math Soc

On Rings Satisfying the Minimal Condition for Subrings, by V. I. Sneydmjullor, 6 pp.
RUSSIAN, per, Uspekhi Matemat Nauk. Novaya Seriya, No 1, (97), pp 179-183.
Amer Math Soc

A Solvable But Nonnilpotent Alternative Ring, by G. V. Dorofeyov, 6 pp.
RUSSIAN, per, Uspekhi Matemat Nauk. Novaya Seriya, Vol XV, No 3(93), 1960, pp 147-150.
Amer Math Soc

A Factorization Problem in Normed Rings, Functions of Isometric and Symmetrical Operators and Singular Integral Equations, by I. Ta Gokhberg.
RUSSIAN, per, Uspekhi Matemat Nauk, Vol XIX, No 1, 1964, pp 71-124.
*Navy/APL J381

Formulas of the Shortwave Asymptotic in a Problem of Diffraction by Convex Bodies, by V. S. Buslaev, 34 pp.
RUSSIAN, per, Vest Leningrad Univ, No 13, 1962, pp 5-21. 9222732
Emmanuel Coll Res Lang Ctr
E-T-R-63-6

Solution of Algebraic Equation by the Method of N. I. Lobachevskiy, by N. P. Aslikhov, 12 pp.
RUSSIAN, per, Vest Moskov Univ, No 3, 1962, pp 24-33.
ACSI I-4194
ID 2204004964

On the Imbedding Problem in Spaces of Paths, by Ku Chao-hao, 12 pp.
CHINESE, per, Acta Mathematic Sinica, Vol V, 1955, pp 369-379.
Amer Math Soc

A Note on Some Properties of the Number-Theoretic Functions $\phi(n)$, $\sigma(n)$, and $d(n)$, by Wang Yuan, 14 pp.
CHINESE, per, Acta Mathematic Sinica, Vol VIII, 1958, pp I-II.
Amer Math Soc

Scientific
Mathematics & Data Processing (Contd)

Embedding of Finsler Manifolds in a Minkowski Space, by Ku Chao-hao, 6 pp.
CHINESE, per, Acta Mathematic Sinica, Vol VIII, 1958, pp 272-275.
Amer Math Soc

Data Processing Systems and Automation Merchant Ships by H. Schwimann, 25 pp.
FRENCH, per, La Revue Maritime, No 205, Jan 1964, pp 92-106.
Navy Tr 3834/ONI 994

Data Processing by Means of Computers and Utilisation of the Results in Regulating Loops, by E. Krochmann.
GERMAN, per, Regelungstechnik, Vol IX, No 4, 1961, pp 138-143.
GB/85/2806611

The Rumanian School of Mathematics, by Miron Nicolescu, 5 pp.
RUMANIAN, np, România Libera, 17 May 1964, pp 1, 2.
JPRS 25136

Nuclear Science & Technology

Calculation of Thermal Stresses in Nuclear Reactors, by I. I. Gol'denblat, N. A. Nikolaenko.
RUSSIAN, bk, 78 pp.
Consultants Bureau

Calculation of Phase Relationships in the Cyclotron, by G. N. Vyalov, 7 pp.
RUSSIAN, rpt, Joint Institute for Nuclear Research, 1963. 9222683
AEC-NP-Tr-1133

Handbook for the Calculation of Reactor Protections, 167 pp.
FRENCH, bk, 1963. 9222666
AEC-Tr-6349

Theory of Annular Electromagnetic Pumps and Comparison With Experiments, by B. Schwab, 63 pp.
FRENCH, rpt, Colloquium of the European Society of Atomic Energy on Liquid Metals, 30 Sep-2 Oct 1963. 9222672
AEC-Tr-6383

Determination of the Form of Very Short Luminous Pulses. Application to Scintillation Phenomena, by Yves Koechlin, 94 pp.
FRENCH, rpt, Determination de la forme des impulsions lumineuses tres breves. Application aux phenomenes de scintillation, 1962, pp 1-78. 9222682
AEC-SC-1-64-48

The Existence of the Uranyl Ion, by G. Duval, 15 pp.
FRENCH, rpt, Proceedings of the Symposium on Analytical Chemistry, 9-12 Apr 1962, 1963, pp 388-393. 7222674
AEC-NP-Tr-1126

Production of UO₂ Crystals by Electrolysis of Fused Chlorides at 450-550°C, by G. Chauvin, H. Coriou, 28 pp.
FRENCH, rpt, Production de Cristaux de UO₂ par Electrolyse de Chlorures Fondus a 450-550°C, Jul 1963. 9222668
AEC-HW-Tr-71

Transitory World-Wide Perturbations of the Earth's Magnetic Field Observed in France at the Time of the Space Nuclear Explosion of July 9, 1962, by J. Roquet, R. Schlich.
FRENCH, per, Comptes Rendus, Vol CCLV, 1962, pp 549-551.
*Navy/APL J399

Quasi-Simultaneous Reception in France, at Kerguelen and in Terre Adelle, of the Perturbation of the Earth's Magnetic Field Caused by the Space Nuclear Explosion of July 9, 1962, by J. Roquet, R. Schlich.
FRENCH, per, Comptes Rendus, Vol CCLV, 1962, pp 1225-1227.
*Navy/APL J400

Nuclear Evaporation, by U. Facchini, 25 pp.
FRENCH, per, Energie Nucleaire, Vol IX, 1962, pp 581-594. 9222679
AEC-UCRL-Tr-1049(L)

Design Forms of Reactor Containments, by W. Ulrich.
GERMAN, per, Die Atomwirtschaft, Jul, Aug 1963, pp 418-423.
*AEC

Internal Stresses in the Manufacture of Nuclear Reactor Pressure Vessels, by Ivan Kupka, et al.
GERMAN, per, Jaderna Energie, Vol IX, No 5, 1963, pp 146-155.
*AEC

Design Problems of Containment Vessels for Nuclear Power Reactors, by Th. Jaeger.
GERMAN, per, Kerntechnik, Vol IV, No 11, 1962, pp 492-498.
*AEC

Technology of Concrete Shielding, by F. Bromer, 9 pp.
GERMAN, per, Kerntechnik, Vol V, 1963, pp 293-295.
9222654
AEC-ORNL-Tr-28

Reactor Containment Vessels - Design and Protective Action, by T. Sanders.
GERMAN, per, Technische Überwachung, Vol IV, No 10, 1963, pp 357-363.
*AEC

Safety Provisions in Nuclear Test Reactor Plants, by Walter Stuermer.
GERMAN, per, Technische Überwachung, Vol IV, No 10, 1963, pp 364-369.
*AEC

Scattering of Gamma-Ray I Scattered Gamma-Rays in the Labyrinth of Shielded Cobalt-60 Irradiation Facilities, by Takishi Kamishih, 32 pp.
JAPANESE, per, Nagoya Kogyo Gijutsu Shikensho Hokoku, Vol X, 1961, pp 626-635. 9222678
AEC-Tr-6386

Thermal Properties and Heating and Cooling Durability of Reactor Shielding Concrete, by J. Hosoi, K. Chujo, et al.
JAPANESE, per, Nippon Genshiryoku-Gakkaishi, Vol I, No 5, 1959, pp 308-318.
*AEC

Distribution of Gamma Radiation From ⁶⁰Co Source in Water, by K. Ishimatsu.
JAPANESE, per, Nippon Genshiryoku-Gakkaishi, Vol IV, No 3, 1962, pp 175-179.
*AEC

Aerodynamics of Rarefied Gases, Parts I and II, by S. V. Vallander.
RUSSIAN, bk, Aerodinamika Razrezhennykh Gazov, Sbornik I, 1963, 267 pp.
*PTD-TT-64-735

Accumulation of Radioactive Strontium by Fresh Water Plants, by V. B. Chumichev.
RUSSIAN, rpt, Akkumulatsiya Radioaktivnogo Strontiia Presnovodnymi Rasteniyami, Moscow, 1963, 7 pp.
*AEC

Effect of Radiation on Ion Structures, by B. V. Budylin, A. A. Vorob'yev, 163 pp.
RUSSIAN, bk, Deystviye Izlucheniya na Ionnyye Struktury, 1963, 166 pp.
ACSI I-4318
ID 2204006664

Plasma Diagnostics, by A. F. Alyab'ev.
RUSSIAN, bk, Diagnostika Plazmy. Sbornik Statei, Moscow, 1963, 299 pp.
*AEC

Plasma Physics and Problems of Controlled Thermonuclear Fusion.
RUSSIAN, rpt, Fizika Plazmy i Problemy Upravlyаемого Termoyadernogo Sinteza. Doklady Vtoroi Konferentsii po Fizike Plazmy i Probleme Upravlyаемого Termoyadernogo Sinteza, 14-19 Novabrya 1960, Kiev, 1963, 344 pp.
*AEC

Investigation of the Energy Spectra of a Conical Electrode Plasma Source, by A. A. Kalmykov, V. I. Tereshin, et al.
RUSSIAN, rpt, Issledovanie Energeticheskikh Spektrov Konicheskogo Elektrodnogo Istochnika Plazmy, 1963.
*AEC

Investigation of Plasma Sources by Means of a Time-of Flight Mass Spectrometer, by A. A. Kalmykov, A. D. Timofeyev, et al.
RUSSIAN, rpt, Issledovanie Plazmennogo Istochnika s Pomoshch'yu Proletnogo Massa-Spektrometra, 1963.
*AEC

Investigations of Resonance Excitation and Cherenkov Damping of High Frequency Plasma Oscillations, by N. I. Nazarov, A. I. Ermakov, et al.
RUSSIAN, bk, Issledovanie Rezonansnogo Vozbuzhdeniya i Cherenkovskogo Zatukhaniya Vysokochastotnykh Kolebaniy Plazmy, 1963.
*AEC

Investigation of the Ru-103 and Ru-106 Content of Fission Products by Beta-Gamma Coincidences, by Z. G. Gritchenko.
RUSSIAN, rpt, Issledovanie Sostava Ruteniya-103 i Ruteniya-106 v Smesti Produktov Deleniya Metodom Beta-Gamma-Sovpadeni Stoinitsyatsionnykh Spektrometrov, Moscow, 1963, 20 pp.
*AEC

Proceedings of the Physics Institute Named for P. N. Lebedeva, Volume 14, 1962. Studies in Nuclear Physics.
RUSSIAN, bk, Issledovaniya po Yadernoi Fizike, Moscow, 1962, 309 pp.
*AEC

Theory of Particle and Wave Interactions With Nonequilibrium Plasma, by I. A. Akhiezer, Yu. L. Bolotin.
RUSSIAN, bk, K Teorii Vzaemodeistviya Chastits i Voln s Neravnovesnoi Plazmoy, 1963.
*AEC

Collective Processes and Shock Waves in Rarefied Plasma, by R. Z. Sagdeyev.
RUSSIAN, rpt, Kollektivnye Protsessy i Ydarnye Volny v Razrazhennom Plazme, 1963, 52 pp.
*AEC

Cosmic Rays, by S. N. Vernov, L. I. Dorman, 390 pp.
RUSSIAN, bk, Kosmicheskiye Luchi. IGY Program, Section VII, No 4, Moscow, 1961, 257 pp. 9222791-V
NASA TT F-127

Direct Measurement of the Interphase Surface Energy on the Crystal-Fusion Boundary, by F. K. Gorakhiy, 5 pp.
RUSSIAN, rpt, Kristallizatsiya i Fazovyye Perekhody, 1962, pp 58-61. 9693075
FTD-TT-64-161

Laminar Boundary Layer, by L. G. Loytsyanskiy, 567 pp.
RUSSIAN, bk, Laminarnyy Pogranichnyy Sloy, Moscow, 1962, pp 1-479. 9693083-V
FTD-TT-63-749

Some Regularities in the Change of Fundamental Mechanical Properties of Construction Materials Under Neutron Radiation, by N. F. Pravdyuk, A. D. Amayev.
RUSSIAN, rpt, Nekotoryye Zakonomernosti v Izmenenii Osnovnykh Mekhanicheskikh Svoystv Konstruktsionnykh Materialov pri Neitronnom Oblucheni, Moscow, 1962, 39 pp.
*AEC

On Cherenkov Absorption of Whistlers in Inhomogeneous Plasma Cylinders, by V. V. Dolgor'atov, et al.
RUSSIAN, bk, O Cherenkovskom Pozloshchenii Sviatov v Neodnorodnom Plazmennom Tsilindre, 1963.
*AEC

Radioactive Fallout in the Vicinity of Simeiz in 1960-1961, by L. I. Belyayev, L. I. Gedeonov, et al.
RUSSIAN, rpt, Radioaktivnoye Vypadeniya Bliz Simenza v 1960-1961g, Moscow, 1963, 7 pp.
*AEC

A Radiochemical Method for the Sr-90 Content of Fresh Water Reservoirs, by G. A. Sereda, Ta. I. Bobovinkova.
RUSSIAN, rpt, Radiokhimicheskaya Metodika Massovogo Kontrolya Soderzhaniya Strontsiya-90 v Prosnnykh Vodostokakh, Moscow, 1963, 12 pp.
*AEC

A Comparative Analysis of Distribution of Ozone and Certain Radioactive Isotopes, by I. L. Karol'.
RUSSIAN, rpt, Sravnitel'nyi Analiz Nablyudaemykh Planetarnykh Raspredeleleni Soderzhaniya Ozona i Nekotorykh Radioaktivnykh Izotopov v Atmosfere, Moscow, 1963, 27 pp.
*AEC

Singularities of Biological Action and Obe of High-Energy Protons, by Yu. G. Grigor'ev, N. G. Daronskaya, et al.
RUSSIAN, rpt, Symposium on Biological Effects on Neutron Irradiation, 7-11 Oct 1963, 10 pp.
*AEC

Measurement of Neutron Tissue Doses Behind Reactor Shielding, by I. B. Keirim-Markus, V. T. Korneyev, et al.
RUSSIAN, rpt, Symposium on Biological Effects of Neutron Irradiation, 7-11 Oct 1963, 16 pp.
*AEC

Theory of Anisotropic Shells, by S. A. Ambartsumyan, 395 pp.
RUSSIAN, bk, Teoriya Anizotropnykh Obolochek, Moscow, 1961, 384 pp. 9221380-V
NASA TT F-118

Mixing of Gases Moving in a Cylindrical Pipe, by B. V. Kantorovich, 8 pp.
RUSSIAN, rpt, Tempo-i Massoperenosa pri Khimicheskikh Prevrashcheniyakh, Part II, 1962, pp 243-248.
ACSI I-4897
ID 2204022364

Thermal Dissociation of Ammonium Polyuranate ADU, by H. Landsperky, I. Imrisova, et al, 17 pp.
RUSSIAN, rpt, Termicheskaya Dissotsiatsiya Polurana Ammoniya ADU. 9222634
AEC-Tr-6377

Thermodynamic Properties of Individual Substances; Vol I: Calculation of Thermodynamic Properties.
RUSSIAN, bk, Termodinamicheskiye Svoystva Individualnykh Veshchestv: Spravochnik V Dvukh Tomakh. Tom I: Vychisleniye Termodinamicheskikh Svoystv, 2nd Ed., Moscow, 1962, Tables in Chpts 8-II, 25; Chapter 20, pp 606-636.
*FTD-TT-64-765

Cyclotron Instability of Anisotropic Plasma, by V. I. Pistunovich.
RUSSIAN, bk, Tsiklotronnaya Neustoiichivost' Anizotropnoi Plazmy, Moscow, 97 pp.
*AEC

Post-Buckling Behavior of Cylindrical Shells, Part III, Torsion, by A. V. Pogorlov, 94 pp.
RUSSIAN, bk, Tsilindricheskkiye Obolochki pri Zakriticheskikh Deformatsiyakh. Chast III. Krucheniye, Khar'kov, 1962, 72 pp. 922312-V
NASA TT F-196

Vapor Pressure of Nitrogen and Hydrogen at High Pressures, by E. S. Borovik, C. F. Grishin, et al.
RUSSIAN, rpt, Uprugost' Parov Azota i Vodoroda pri Nizkikh Davleniyakh, 1959.
*AEC

The Effect of Neutron Radiation on Internal Friction, by S. T. Konobeyevskiy, N. F. Pravdyuk, et al.
RUSSIAN, rpt, Vlieniye Neitronnogo Oblucheniya na Vnutrenneye Treniye, Moscow, 1962, 37 pp.
*AEC

Interactions of High-Density Plasma With Three Dimensional Periodic Magnetic Field, by A. A. Kalmykov, V. I. Tereshin.
RUSSIAN, rpt, Vzaimodelstviye Plazmennyykh Sguskov Bol'shoi Plotnosti s Prostranstvenno-Periodicheskimi Magnitnym Polem, 1963.
*AEC

Phenomena of Radiation Relaxation of Elastic Stresses in Materials, by K. P. Dubrovin, L. D. Pantoleycov, et al.
RUSSIAN, rpt, Yavleniya Radiatsionnoy Relaksatsii Uprugikh Napryazheniy v Materialakh, 1962, 22 pp.
*AEC

Lifetime of First Excitation State From Observations of Doppler-Effects and Gamma-Ray Aberrations, by V. S. Shipin,
RUSSIAN, per, Iz Ak Nauk SSSR, Vol XVII, 1954, pp 65-75.
*AFCL Res Lib

Scientific
Physics (Contd)

Some Problems in the Motion and Stability of a Spherical Gyroscope, by V. V. Krementulo, 12 pp. RUSSIAN, per, Iz Ak Nauk SSSR, Otdel Tekh Nauk, Mekh i Mash, No 2, 1963, pp 120-125. 9693000
*FTD-TT-64-414

Influence of Centrifugal Moments of Inertia of the Inner Gimbal of a Cardan Suspension on Gyroscope Stability, by I. N. Slitsayn, 6 pp. RUSSIAN, per, Iz Ak Nauk SSSR, Otdel Tekh Nauk, Mekh i Mash, No 2, 1963, pp 133-135. 9693000
*FTD-TT-64-414

Some General Problems in Correlation Analysis of Mechanism Precision, by V. I. Sergeyev, 10 pp. RUSSIAN, per, Iz Ak Nauk SSSR, Otdel Tekh Nauk, Mekh i Mash, No 3, 1963, pp 149-152. 9693016
*FTD-TT-64-415

On the Precision of Recording Pulsed Accelerations, by M. I. Subbotin, 6 pp. RUSSIAN, per, Iz Ak Nauk SSSR, Otdel Tekh Nauk, Mekh i Mash, No 3, 1963, pp 153-155. 9693016
*FTD-TT-64-415

On the Prospect of Using the Mossbauer Effect in Automatic Control, by N. M. Shumilovskiy, L. V. Mel'tser. RUSSIAN, per, Iz Ak Nauk SSSR Otdel Tekh Nauk, Tekhnicheskaya Kibernetika, No 6, 1963, pp 111-120. *FTD-TT-64-784

Heat Conductivity of a Layer Formed by Rough Protrusions, by V. M. Kapinos, O. T. Iichonko. RUSSIAN, per, Iz Vyssh Ucheb Zaved, Energetika, No 9, 1958, pp 77-89.
*Redstone Arsenal

Motion of a Solid Particle in a Gas Flow, by A. A. Gurvits. RUSSIAN, per, Iz Vyssh Ucheb Zaved, Energetika, No 8, 1963, pp 60-69.
*FTD-TT-64-712

Variation of Dielectric Losses in Crystallizing Polymers Under the Action of Ionizing Radiation, by N. I. Ol'shanskaya. RUSSIAN, per, Iz Vysshikh Ucheb Zaved Fizika, No 5, 1962, pp 21-30.
Dept of Interior
ACS E47 No 122

Approximate Estimation of the Forming Energy of Thin-Walled Components, by M. A. Anuchin, L. P. Orlenko, 15 pp. RUSSIAN, per, Iz Vyssh Ucheb Zaved Mash, No 12, 1962, pp 158-167. 9693076
*FTD-TT-64-249

Solubilization of Motor Oil Contaminants With Metal Sulfonates, by S. E. Krein, A. B. Vipper, 10 pp. RUSSIAN, per, Khimiya i Tekh Topliv i Masel, Vol VIII, No 11, 1963, pp 52-57.
Navy Tr 3839/NRL 971

One-Dimension Soil Motion in Spherical Cylindrical and Plane Waves, by A. Ya. Sagamonvan. RUSSIAN, per, Nauch Dokl Vys Shkoly Fiz Mat Nauki, No 3, 1958, pp 131-137.
*FTD-TT-64-754

Propagation of Small Amplitude Waves in Solids, by A. Ya. Sagamonvan. RUSSIAN, per, Nauch Dokl Vys Shkoly Fiz Mat Nauki, No 3, 1958, pp 138-142.
*FTD-TT-64-754

Scientific
Physics (Contd)

Pyrometric Investigations of the State of Air Nitrogen and Argon Behind a Shock Wave, by F. S. Faizullov. RUSSIAN, per, Trudy Fiz Inst Ak Nauk SSSR, Vol XVIII, 1962, pp 105-116.
GB/10/3379

Pyrometric Investigation of the State of a Gas Behind a Reflected Shock Wave, by E. M. Kudryavtsev. RUSSIAN, per, Trudy Fiz Inst Ak Nauk SSSR, Vol XVIII, 1962, pp 159-200.
GB/10/3380

Bipolar Flow in a Particular Magnetic Field, by V. N. Danilov. RUSSIAN, per, Trudy Fiziko-Tekhnicheskii Institut, No 10, 1962, pp 67-79.
*FTD-TT-64-619

Localized Modes of Vibrations in Ionic Crystals With an Isotopic Defect, by G. S. Zavit, N. N. Kristoffel, 15 pp. RUSSIAN, per, Trudy Inst Fiz i Astron Ak Nauk Estonskoy SSR, No 23, 1963, pp 3-17.
Navy Tr 3838/NRL 970

Frequency Dependence of a Nuclear Paramagnetic Maser on Its Parameters, by A. I. Zhernovoy, G. D. Laryshev, 8 pp. RUSSIAN, per, Trudy Inst Yadernoy Fiz Ak Nauk Kaz SSR, Vol V, 1962, pp 111-116. 9222832
Navy/APL TG 230-T401

Magnetic Record-Read Channel Evaluation, by Ya. A. Khetagurov, 9 pp. RUSSIAN, per, Vychislitel'naya Tekhnika, (Moskov Inzhenerno-Fiz Inst, No 2, 1961, pp 3-7. 9693050
*FTD-TT-64-235

Theoretical Determination of the Isotope Shift in the Spectrum of the Carbon Atom, by A. P. Yutsis, A. S. Nakonechnyy, 8 pp. RUSSIAN, per, Zhur Eksper i Teoret Fiz, Vol XXV, No 6 (12), 1953, pp 653-687. 9692791
Amer Meteorol Soc
T-R-406

Oscillations in the Radiation From a Laser, by A. M. Ratner. RUSSIAN, per, Zhur Eksper i Teoret Fiz, Vol XLV, No 6, 1963, pp 1908-1918.
*Navy/APL J397

Optoacoustic Maser Effect, by V. R. Nagibarov, U. Kh. Kopvillem. RUSSIAN, per, Zhur Eksper i Teoret Fiz, Vol XLV, No 1, 1963, pp 2006-2008.
*Navy/APL J393

Mode Excitation and Explanation of the Divergence of Radiation From a Ruby Laser, by A. M. Leontovich, A. P. Veduta. RUSSIAN, per, Zhur Eksper i Teoret Fiz, Vol XLVI, No 1, 1964, pp 71-79.
*Navy/APL J389

Paramagnetic Resonance of Free Gold and Silver Atoms Trapped in Various Media at the Temperatures of Liquid Nitrogen, by R. A. Zhitnikov, N. V. Kolesnikov. RUSSIAN, per, Zhur Eksper i Teoret Fiz, Vol XLVI, No 1, 1964, pp 89-98.
*Navy/APL J398

Scientific
Physics (Contd)

Some Results of an Experimental Investigation of the Effect of a Magnetic Field on the Radiation Spectrum of a Ruby Laser, by A. M. Kubarev, V. I. Piskarev.
RUSSIAN, per, Zhur Eksper i Teoret Fiz, Vol XLVI, No 2, 1964, pp 508-510.
*Navy/APL J391

On the Mechanism of Operation of a Combinational Laser, by V. T. Platonenko, R. V. Khokhlov.
RUSSIAN, per, Zhur Eksper i Teoret Fiz, Vol XLVI, No 2, 1964, pp 555-559.
*Navy/APL J392

Investigation of the Energy Distribution of Nickel Atoms During Cathode Sputtering of Nickel by Mercury Ions, by M. B. Ben'yaminovich, V. I. Veksler, 13 pp.
RUSSIAN, per, Zhur Tekh Fiz, Vol XXXIV, No 2, 1964, 9693002
FTD-TT-64-380

Probe Characteristics Obtainable Using Different Probe Types in the Plasma of a Gas Discharge in Mercury and Cesium Vapors, by N. I. Ionov, A. Ya. Tontogodo, 12 pp.
RUSSIAN, per, Zhur Tekh Fiz, Vol XXXIV, No 2, 1964, 9693002
FTD-TT-64-380

The Effect of the Arrangement Between Stimuli and Responses on the Rate of Information Transfer, by Hsu Lien-lun, Uang Te-chuang, et al, 5 pp.
CHINESE, per, K'io-hsueh T'ung-pao, No 3, 1964, pp 253, 254.
JPRS 24862

Limitations of Structure and Wave Pattern of Resonant Cavity of Light Frequency, by Wang Chih-chiang, 6 pp.
CHINESE, per, K'io-hsueh T'ung-pao, No 3, 1964, pp 269-271.
JPRS 24862

The Relationships of Energy, Utility and Motion of Moisture Content in Unsaturated Soil, by Pang Cheng-san, 17 pp.
CHINESE, per, K'io-hsueh T'ung-pao, No 4, 1964, pp 306-315.
JPRS 25267

Coherece Properties of Electromagnetic Radiation, by Chih-Chiang Wang.
CHINESE, per, Wu-Li Hsueh-Pao, Vol XIX, No 5, 1963, pp 320-335.
*FTD-TT-64-708

Analysis of Fundamental and Subharmonic Pumping in Parametric Amplifiers, by Kuang-ming Shen, T'ion-ming Kao, et al.
CHINESE, per, Wu-Li Hsueh-Pao, Vol XIX, No 6, 1963, pp 384-397.
*FTD-TT-64-769

The Kinetics of Oxidation by a Liquid Solution of Unirradiated and Irradiated Nuclear Graphites, by M. Oberlin, 26 pp.
FRENCH, rpt, 9222623
AEC-GA-Tr-5174

Contribution to the Study of the Vertical Molten Zone Process, by Michel Lenzi.
FRENCH, rpt, Contribution a l'Etude du Procédé de la Zone Fondue Verticale, 1963, 63 pp.
*AEC

Scientific
Physics (Contd)

Corrosion of Metallic Materials by Uranium Hexafluoride at High Temperatures, by G. Langlois.
FRENCH, rpt, Corrosion de Matériaux Métalliques par l'Hexafluorure d'Uranium à Haute Température, 1963, 117 pp.
*AEC

Utilization of Hot-Pressed Beryllium Oxide Bricks as Neutron Reflectors, by R. Beauge, J. Elston, et al.
FRENCH, rpt, New Nuclear Materials Including Non-Metallic Fuels, Vol II, 1963, 13 pp.
*AEC

The Behavior of Various Industrial Qualities of Vitreous Silica Under Neutron Irradiation, by J. Elston, C. Gewiss.
FRENCH, rpt, New Nuclear Materials Including Non-Metallic Fuels, Vol II, 1963, pp 201-227.
*AEC

Uranium Prospection Using Radon, by J. Pradel, F. Billard, et al.
FRENCH, rpt, La Prospection de l'Uranium par le Radon, 1963, 20 pp.
*AEC

High-Temperature Calorimetry, by Michèle Dupre, Jean Elston, et al.
FRENCH, per, Comptes Rendus, Vol CCLVI, 1963, pp 90-92.
*AEC

Thermodynamics -- Measurement of the Wigner Energy of BeO, by Andre Roux, Marc Richard, et al.
FRENCH, per, Comptes Rendus, Vol CCLVIII, 6 Jan 1964, pp 101, 102.
*AEC

Control of Water Radioactivity. Problems Posed by Measurement and Use of the Results, by A. Grauby, P. Raimbault.
FRENCH, per, L'Eau, Vol L, No 3, 1963, pp 307-313.
*AEC

Colored Stratifications, by Andre Marcelin, 33 pp.
FRENCH, per, Journal de Chimie et de Physique, Vol XXVIII, 1931, pp 605-621. 9222737
Emmanuel Coll Ros Lang Ctr
E-T-F-63-7

Application of Nuclear Magnetic Resonance to the Study of the Water of Constitution of Silica Gels, by Jacques Fraissard, et al.
FRENCH, per, Journal de Chimie Physique, 1963, pp 676-683.
*AEC

Some Applications of Photoelasticity, by A. Kammerer.
FRENCH, per, Mémoires de la Société des Ingénieurs Civils de France, Vol XCVIII, No 1/3, 1945, pp 65-77.
*Redstone Arsenal

Measurement of the Absorbed Dose in Irradiated Patients by Means of Thermoluminescence Dosimeters, by A. Morczek, K. Neumeister, et al, 9 pp.
FRENCH, per, Radiobiologie et Radiothérapie, Vol IV, No 4, 1963, pp 491-498. 9222660
AEC-ANL-Tr-1

Simultaneous Dosimetry by Means of Thermoluminescence Studies on the Suitability of This Method For Medical Dosimetry, by G. Rauh, F. Struss, 12 pp.
FRENCH, per, Radiobiologie et Radiothérapie, Vol IV, No 4, 1963, pp 499-508. 9222659
AEC-ANL-Tr-2

Scientific
Physics (Contd)

Photoelasticity: Purely Optical Method for Determining Deformation in Thickness of Models With Practically No Restrictions on Parallelism of Surfaces, by V. Tesar, 10 pp.
FRENCH, per, Revue d'Optique Theorique et Instrumentale, No 3, 1932, pp 97-104. 9592996
DDC RSIC-186

Cinematographic Analysis of the Fracture Phenomenon, by Hubert Schardin.
GERMAN, rpt, Proceedings of the Symposium Zerkleinern, Symposium on Size Reduction, 10-13 Apr 1962, pp 31-48.
*Navy/NRL

On the Theory and Investigation of the Equation of State, by H. Happel.
GERMAN, per, Annalen der Physik, Vol XXI, No 12, 1906, pp 342-359.
INSDOC/Ref: T. 3813 PP. 18

Electric Properties of Dilute Alloys of Mixed Crystals. Part I. Gold Alloys, by J. O. Linde.
GERMAN, per, Annalen der Physik, Vol X, No 5, 1931, pp 52-70.
*Navy/NRL

Electrical Properties of Dilute Alloys of Mixed Crystals. Part II. Resistance of Silver Alloys, by J. O. Linde.
GERMAN, per, Annalen der Physik, Vol XIV, No 5, 1932, pp 853-866.
*Navy/NRL

The Double Refraction of Rubber in the Undeformed and Deformed State, by M. Krogger.
GERMAN, per, Kolloid Z, Vol XLV, 1928, pp 52-56.
*Redstone Arsenal

Decoupling Bridges for In-Parallel Connection of Transmitters in the Short and Ultra-Short Wavelengths Region, by Buschbeck, W. Burkhardtmaier, 20 pp.
GERMAN, per, Nachrichtentechnische Zeitschrift, Vol XV, No 4, 1962, pp 181-189.
Navy Tr 3840/NRL 980

Remarks on the Thermoforce and Resistance, by L. Nordheim, G. J. Gorter.
GERMAN, per, Physica, Vol II, 1935, pp 383-390.
*Navy/NRL

A New Dust Measuring Apparatus for Evaluation of Aerosol Filters, by Fritz Bangert, 10 pp.
GERMAN, per, Staub, Vol XXII, 1962, pp 105-108.
9222680
ABC-UCRL-Tr-1046

The Propagation of Longitudinal Waves in Plane Discs With a Circular Hole, by Alexander Kromm, 23 pp.
GERMAN, per, Z fur Angewandte Math und Mech, Vol XXVIII, No 4, 1948, pp 104-114.
9222738
Emmanuel Coll Res Lang Ctr
E-T-G-63-30

The Propagation of Elastic Waves in Plane Discs With a Circular Hole, by Alexander Kromm, 17 pp.
GERMAN, per, Z fur Angewandte Math und Mech, Vol XXVIII, no 10, 1948, pp 297-303. 9222739
Emmanuel Coll Res Lang Ctr
E-T-G-63-31

Movement of Domain Boundaries in Thin Ni-Fe-Layers, by Simon Middelhoek.
GERMAN, per, Z fuer Angewandte Physik, Vol XIV, No 4, 1962, pp 191-193.
*Redstone Arsenal

Scientific
Physics (Contd)

Thermal Properties of Gaseous, Liquid and Solid Carbon Dioxide, by R. Plank, J. Kuprianoff.
GERMAN, per, Z fur Technische Physik, No 3, 1929, pp 93.
CSR Co

Dependence of the Velocity of Sublimation of Dry Ice on the Specific Gravity, by L. Riedel.
GERMAN, per, Z. Verein Deutscher Ingenieure, Vol LXXXII, 1938.
CSR Co

Photo-Elasticity of Polymers. I, by Ziro Tuzi, Kozo Kawata.
JAPANESE, per, Journal of Applied Physics, Vol XXIII, No 9, 1954, pp 387-394.
*Redstone Arsenal

Fundamental Studies on the Ion Exchange Separation of Isotopes, by Hidetake Kakihana, Kozo Gonda, et al.
JAPANESE, per, Nippon Genshiryoku Gakkaishi, Vol V, No 12, 1963, pp 990-993.
*AEC

Labyrinth Planning Method for a Passage of a Hot Cell. II. Experimental Study of Pocket Effects of Labyrinth for Protection of Gamma Rays, by Masahisa Sakuda.
JAPANESE, per, Nippon Kenchiku Gakkai, Vol LXXXVIII, Aug 1963, pp 22-26.
*AEC

Crystal Structure and Physical Properties of CdSe, by Aoki Masaharu, Shoji Tanaka.
JAPANESE, per, Oyo Butsuri, Vol XXIV, 1955, pp 113-117; Vol XVIII, 1949, p 352.
*AEC

Development of Glass Color Filters and Their New Classification, by T. Azuma, L. Mori, et al, 6 pp.
JAPANESE, per, Toshiba Review, Vol XIII, No 7, 1958, pp 688-691.
Natl Bu of Standards

Free Vibration of Systems of One Degree of Freedom With Non-Linear Elastic, by S. Ziomba.
POLISH, per, Archiwum Mechaniki Stosowanej, No 10, 1959, pp 163-193.
*FTD-TT-64-771

Stability of Long Orthotropic Rib-Reinforced Long Cylindrical Shell, by T. Galkiewicz.
POLISH, per, Politechnika Lodz Zeszyty Naukowe, Mechanika, No 51, 1963, pp 21-32.
*FTD-TT-64-747

Vibrations and Aero-Elastic Stability of Cylindrical Heterogeneous Structures in a Compressible Fluid Flow, by L. Liviu.
RUMANIAN, per, Revue de Mechnique Appliquee, Vol VIII, No 2, 1963, pp 251-276.
*FTD-TT-64-748

20-Ton Motor Cross-Country Automotive Crane, by Nils Wenker, 11 pp.
SWEDISH, per, Tidskrift i Fortifikation, No 3, 1963, pp 59-71.
ACSI 1-4527
ID 2204011464

Effect of the Operating Conditions of a MM-1000 Oil Diffusion Pump on the Composition of the Decomposition Products of D-1A Oil, by G. T. Nikolayev, B. A. Sharevskir.
UKRAINIAN, per, Ukrain Fiz Zhur, Vol VI, No 5, 1961, pp 697-701.
*AEC

Basic Technical Characteristics of the Tokomak III
Experimental Installation, by M. A. Gashev,
T. Tuzmov, et al.
RUSSIAN, rpt, Osnovnye Tekhnicheskie Zharakteristiki
Eksperimental'noi Termoyadernoi Ustanovki
Tokomak-III, Leningrad, 1963, 19 pp.
*AEC

The Synthesis of Optimal Linear System,
by T. G. Babunashvili, 7 pp.
RUSSIAN, per, Dok Ak Nauk SSSR, Vol CLV,
No 2, 1964, pp 295-298.
JPRS 25291

On the Synthesis of Logical Nets in Incomplete
and Nondegenerate Bases, by E. I. Nechiporuk,
5 pp.
RUSSIAN, per, Dok Ak Nauk SSSR, Vol CLV,
No 2, 1964, pp 299-301.
JPRS 25291

The Development of Speech and Environmental
Orientation in Three Year Old Children,
by G. Lyamina, 14 pp.
RUSSIAN, per, Doshkol'noye Vospitaniya, Vol
XXXVI, No 7, 1963, pp 29-36.
JPRS 24903

Instilling Love for Work in Young Children,
by A. Yershova, 5 pp.
RUSSIAN, per, Doshkol'noye Vospitaniya,
Vol XXXVI, No 7, 1963, pp 41-43.
JPRS 24903

Teaching Woodworking to Kindergarten Pupils,
by V. Tamm, 8 pp.
RUSSIAN, per, Doshkol'noye Vospitaniya,
Vol XXVIII, No 7, 1963, pp 43-48.
JPRS 24903

Public Councils Soviets on Science,
by A. Udachin, 5 pp.
RUSSIAN, np, Moskovskaya Pravda, 8 May 1964,
p 2.
JPRS 25410

The Academy of Sciences, Ukrainian SSR Announces
Candidates for Membership, 15 pp.
RUSSIAN, np, Pravda Ukrainy, 6 May 1964,
p 3; 7 May 1964, pp 3, 4.
JPRS 25427

Use of Silver Ions for the Sterilisation and Preserva-
tion of Fresh Water in Ships, by I. I. Mamotenko.
RUSSIAN, per, Sudostroeniye, Vol XXIX, No 3, 1963.
GB/17/1626

For Close Unity of the Scientific Forces of the
Country, by M. V. Keldysh, 10 pp.
RUSSIAN, per, Vest Ak Nauk SSSR, No 3, 1964,
pp 5-12.
JPRS 25417

The Most Important Achievements in the Field of
the Natural and Social Sciences in 1963,
by N. M. Sisakyan, 98 pp.
RUSSIAN, per, Vest Ak Nauk SSSR, No 3, 1964,
pp 13-90.
JPRS 25417

The Study of Inclinations and the Their Develop-
ment in the Process of Instruction in School,
by I. A. Nevskiy, 14 pp.
RUSSIAN, per, Voprosy Psikh, Vol X, No 2,
1964, pp 57-65.
JPRS 25295

Review of Works Published in the Slovak
Journal Psychological Research,
by V. Ye. Bushurova, 8 pp.
RUSSIAN, per, Voprosy Psikh, Vol X, No 2,
pp 181-185.
JPRS 25295

The Second Meeting of Representatives and
the Annual Meeting of the Chinese Physical
Society, by Tung Sheng, 6 pp.
CHINESE, per, K'ao-hsueh T'ung-pao, No 10,
1963.
JPRS 24778

Law on Narcotic Drugs, 12 pp.
CROATIAN, per, Sluzbeni List SFRJ, 29 Apr 1964,
pp 349-354.
JPRS 25401

Lateral Blade Screwdriver, by A. J. Francois Barilli,
6 pp.
*KENCH, Patent No 1,275,411.
Patent Office

Feed Device and Stretching Frame for Sewing Articles
of Large Surface on Multinneedle Sewing Machines, by
Emil Stutzacker, 6 pp.
GERMAN, Patent No 1,101,115.
Patent Office

Awards of the Hungarian Academy of Sciences,
7 pp.
HUNGARIAN, per, Akademiai Kozlony, No 7,
May 1964, pp 62-64.
JPRS 25431

An Example of Materials Control in Steel Plants,
by Ts. Kai, et al.
JAPANESE, per, Tetsu to Hagane, Vol XLVIII, No 11,
1962, pp 1321-1322.
HB 6165

Scientific Conferences on Automatic Teaching,
5 pp.
UKRAINIAN, per, Avtomat, Vol VIII, No 4,
1964, pp 85-87.
JPRS 25286

INFORMATION RECEIVED DURING JULY

ON COVER-TO-COVER TRANSLATIONS

Acta Mathematica Sinica, Vol XIV, No 1, 1964.	Amer Math Soc Vol IV, No 1
Akusticheskii Zhurnal, Vol IX, No 4, 1963.	Amer Inst of Phys Sov Phys-Acoustics Vol IX, No 4
Atomnaya Energiya, Vol XV, No 2, 1963.	CB
Avtomaticeskaya Svarka, No 2, 1964.	BWRA
** Bilten Instituta za Nuklearne Nauke Boris Kidric, Vol XIV, No 3, 1963.	AEC-Tr-5737/3
** Bilten Instituta za Nuklearne Nauke Boris Kidric, Vol XIV, No 4, 1963.	AEC-Tr-5737/4
Byulleten Eksperimental'noi Biologii i Meditsiny, Vol LV, No 3, 1963.	CB
Doklady Akademii Nauk SSSR, Physics Section, Vol CLIII, No 4-6, 1963.	Amer Inst of Phys Sov Phys-Dok Vol VIII, No 12
Fizika Tverdogo Tela, Vol V, No 12, 1963.	Amer Inst of Phys Sov Phys-Solid State Vol V, No 12
Geokhimiya, No 10, 11, 1963.	Scripta Technica
Izmeritel'naya Tekhnika, No 12, 1963.	Instr Soc of Amer
Izvestiya Akademii Nauk SSSR, Otdelenie Tekhnicheskikh Nauk, Tekhnicheskaya Kibernetika, No 2, 1964.	JPRS 25169
Izvestiya Akademii Nauk SSSR, Seriya Fizicheskaya, Vol XXVII, No 5, 1963.	CTT
Izvestiya Akademii Nauk SSSR, Seriya Geofizicheskaya, No 9, 1963.	Amer Geophys Union
Izvestiya Akademii Nauk SSSR, Seriya Geofizicheskaya, No 2, 1964.	Amer Geophys Union
Izvestiya Akademii Nauk SSSR, Seriya Khimicheskaya, No 7, 1963.	CB
Izvestiya Vysshikh Uchebnykh Zavedeniy, Radiofizika, Vol VII, No 1, 1964.	JPRS 25168

Izvestiya Vysshikh Uchebnykh Zavedeniy, Radiotekhnika, No 1, 1964.	JPRS 25138
Izvestiya Vysshikh Uchebnykh Zavedeniy, Radiotekhnika, Vol VII, No 2, 1964.	*JPRS
Kolloidnyi Zhurnal, Vol XXV, No 5, 1963.	CB
Ogneupory, No 11, 12, 1963.	CB
Optika i Spektroskopiya, Vol XVI, No 3, 1964.	Optical Soc of Amer
Pribory i Tekhnika Eksperimenta, No 6, 1963.	Instr Soc of Amer
Prikladnaya Matematika i Mekhanika, Vol XXV, No 1, 3-5, 1961.	Pergamon Press
Radiobiologiya, Vol IV, No 2, 3, 1964.	*AEC
Radiokhimiya, Vol IV, No 5, 1962.	CB
Teoriya Veroyatnostei i yeye Primeneniya, Vol VIII, No 3, 1963.	SIAM
Tsvetnye Metally, Vol II, No 1, 2, 11, 1961.	Primary Sources
Tsvetnye Metally, Vol III, No 3, 1962.	Primary Sources
Tsvetnye Metally, Vol IV, No 1, 3, 1963.	Primary Sources
Uspekhi Fizicheskikh Nauk, Vol LXXXI, No 3, 4, 1963.	Amer Inst of Phys Sov Phys-Uspekhi Vol VI, No 6
Vestnik Akademii Meditsinskikh Nauk SSSR, Vol XIX, No 4, 1964.	JPRS 25208
Vestnik Akademii Meditsinskikh Nauk SSSR, Vol XIX, No 5, 1964.	JPRS 25241
Voprosy Kosmogonii, Vol III, 1954.	JPRS 25359
Zavodskaya Laboratoriya, Vol XXIX, No 11, 1963.	Instr Soc of Amer
Zavodskaya Laboratoriya, Vol XXIX, No 12, 1963.	Instr Soc of Amer
Zhurnal Eksperimental'noi i Teoreticheskoi Fiziki, Vol XLV, No 6, 1963.	Amer Inst of Phys Sov Phys-JETP Vol XVIII, No 5
Zhurnal Obshchei Khimii, Vol XXXIII, No 8, 1963.	CB
Zhurnal Prikladnoi Khimii, Vol XXXVI, No 4, 5, 1963.	CB

Zhurnal Tekhnicheskoi Fiziki, Vol XXXIII, No 12,
1963.

Amer Inst of Phys
Sov Phys Tekh Phys
Vol VIII, No 12

* In Process

** Table of contents not available

Tables of contents follow for the above cover-to-cover translations

CHINESE MATHEMATICS

数 学 学 报

ACTA MATHEMATICA SINICA

TABLE OF CONTENTS

(Vol. 4, No. 1, 1964—Chinese original Vol. 14, No. 1, 1964)

	Chinese page	Page
D. 曼日隆 L. E. 克里沃申 D. Mangeron and L. E. Krivošeĭn <i>Some problems concerning the structure of integro-differential equations</i> (1)	(1)	1
李明忠 Li Ming-zhong* (Li Ming-chung) <i>An existence theorem and a representation formula for generalized solutions of second-order elliptic differential equations</i> (7)	(7)	8
李 忠 聞國椿 Li Zhong and Wen Guo-chun (Li Chung and Wen Kuo-ch'un) <i>On the Cauchy formula for elliptic systems of linear partial differential equations of the first order</i> (23)	(23)	25
姜礼尚 Jiang Li-shang (Chiang Li-shang) <i>The two-phase Stefan problem. II</i> (33)	(33)	36
孙顺华 Sun Shun-hua (Sun Shun-hua) <i>The equations of the closed trajectories in rotated vector fields</i> (50)	(50)	54
容尔謙 Yong Er-qian (Yung Erh-ch'ien) <i>On the sewing theorem</i> (58)	(58)	63
白正国 Bai Zheng-guo (Pai Cheng-kuo) <i>On Riemannian spaces which admit independent concircular transformations</i> (62)	(62)	67
陈重穆 Chen Zhong-mu (Ch'en Chung-mu) <i>An extension of Burnside's theorem</i> (75)	(75)	81
王光寅 陈敦栋 梅多文 Wang Guang-yin, Chen Dun-dong and Mei Duo-wen (Wang Kuang-yin, Ch'en Tun-tung and Mei To-wen) <i>On a Monge-Ampère equation of parabolic type</i> (78)	(78)	85
陈翰麟 Chen Han-lin (Ch'en Han-lin) <i>Quasiconformal mappings in n-dimensional space</i> (93)	(93)	101
沈熹昌 Shen Xie-chang (Shen Hsieh-ch'ang) <i>Completeness of the sequence of functions $f(\lambda_n z)$</i> (103)	(103)	112
邓耀华 罗定军 Deng Yao-hua and Luo Ding-jun (Teng Yao-hua and Luo Ting-chün) <i>A qualitative study of the integral curves of the differential equation $\frac{dy}{dx} = \frac{q_{00} + q_{10}x + q_{01}y + q_{20}x^2 + q_{11}xy + q_{02}y^2}{p_{00} + p_{10}x + p_{01}y + p_{20}x^2 + p_{11}xy + p_{02}y^2}$. III The number of limit cycles of equations of type I</i> (119)	(119)	129

Available From American Mathematical Society
Vol IV, No 1

(Continued)

CONTENTS (Contd)

	Chinese page	Page
张炳根 / Zhang Bing-gen (Chang Ping-ken) <i>Boundedness of solutions of ordinary differential equations of the second order</i>	(128)	139
张上泰 Zhang Shang-tai (Chang Shang-T'ai) <i>On several results for certain non-linear operators</i>	(137)	149
万哲先 李根道 Wan Zhe-xian and Li Gen-dao (Wan Che-hsien and Li Ken-tao) <i>The two theorems of Schur on commutative matrices</i>	(143)	156
苏步青 Su Buchin <i>On certain couples of closed Laplace sequences of period four in ordinary space</i> *	(151)	165
徐利治 Xu Li-zhe (Hsü Li-che) <i>Correction and remark on the paper "Several iterative processes with relatively high rate of convergence"</i>	(175)	194
许宝騄 Xu Bao-lu (Hsü Pao-lu) <i>An association scheme $M_3(6)$ which is not an L_3-scheme</i>	(177)	197

Available From American Mathematical Society

Vol IV, No 1

Soviet Physics ACOUSTICS

A Translation of "Akusticheskii Zhurnal"

(Russian Original Vol. 9, No. 4, pp. 405-506, October-December, 1963)

Vol. 9, No. 4, pp. 331-422

April-June, 1964

CONTENTS

	PAGE	RUSS. PAGE
Dark Conductivity of AgBr Crystals in an Ultrasonic Field. <u>Yu. V. Bobrov</u> (E)	331	405
Wave Transmission through Assorted Plate Joints. <u>S. V. Budrin and A. S. Nikiforov</u> . . . (T)	333	408
Properties of Magnetostrictive Ferrites at High Temperatures. <u>L. I. Ganeva</u> and <u>I. P. Golyamina</u> (E)	337	413
Cylindrical Focusing Systems with a Nonuniform Amplitude Distribution. <u>I. N. Kanevskii and L. D. Rozenberg</u> (T/E)	341	418
Effect of Radiated Power on the Degree and Efficiency of Ultrasonic Degassing of Liquids. <u>O. A. Kapustina</u> (E)	346	424
Hypersound and the Scattering of Slow Neutrons in Liquids. <u>L. V. Kacharskaya</u> , <u>L. I. Komarov</u> , and <u>I. Z. Fisher</u> (T)	349	427
Cavitation Phenomena during the Operation of an Acoustic Hydrodynamic Radiator. <u>L. B. Kotlyarskii</u> , <u>B. G. Novitskii</u> , and <u>B. M. Fridman</u> (E/T)	354	434
Spatial Correlation of Fields Emitted by Random Sources on a Plane. <u>B. F. Kur'yanov</u> (T)	360	441
Operation of a Damped Piezoelectric Transducer Containing a Number of Intermediate Layers. <u>L. G. Merkulov and L. M. Yablonik</u> (T)	365	449
Absorption of Ultrasonic Waves in Thiokols. <u>I. G. Mikhailov</u> , <u>L. I. Savina</u> , <u>V. A. Solov'ev</u> , and <u>M. N. Syrova</u> (E)	373	460
Probability Distribution of Sea Reverberation Levels. <u>V. V. Ol'shevskii</u> (T/E)	378	466
Diffraction Structure of the Image of a Point Produced by an Acoustic Lens. <u>B. D. Tartakovskii</u> (E/T)	383	473
BRIEF COMMUNICATIONS		
Softening of the Photosensitive Layer in the Direct Method of Visualization. <u>M. E. Arkhangel'skii</u> (E)	388	481
Investigation of the Absorption Coefficient and Propagation Velocity of Ultrasonic Waves in Water-Formic Acid Mixtures. <u>B. A. Belinskii</u> , <u>V. F. Nozdrev</u> , and <u>P. K. Khabibullaev</u> (E/T)	389	482
Dislocation Relaxation in NaCl Crystals. <u>E. K. Guseva</u> , <u>E. R. Dynshits</u> , and <u>L. G. Merkulov</u> (E/T)	391	484
Investigation of Double Wall Soundproofing with Independent Edge Support for the Two Walls. <u>V. I. Zaborov and L. N. Klyachko</u> (E/T)	392	486
Reflection of Sound from a Moving Elastic Rod. <u>L. M. Lyamshev</u> (T)	394	488

Available From American Institute of Physics
Soviet Physics - Acoustics
Vol IX, No 4

(continued)

CONTENTS (continued)

	PAGE	RUSS. PAGE
The Self-Centering Tendency of Aerosol Particles in an Acoustic Field. <u>E. P. Mednikov</u> (T)	396	490
Dynamic Characteristics of Soundproofing and Vibration Insulating Materials. <u>G. S. Rosin</u> (E)	398	492
 CHRONICLES		
I. G. Leizer (in Honor of His Sixtieth Birthday)	400	495
V. M. Fridman (in Honor of His Fiftieth Birthday)	400	496
All-Union Conference on the Methodology of Ultrasonic Interferometry. <u>B. Kudryavtsev</u>	401	496
 BIBLIOGRAPHY		
<u>Ultrasonic Cutting</u> , by L. D. Rozenberg, V. F. Kazantsev, L. O. Makarov, and D. F. Yakunovich. Reviewed by <u>I. Teumin</u> (R)	403	498
<u>Cutting Highly Intractable Materials with Ultrasonic and Sonic Vibrations</u> , by A. I. Markov. Reviewed by <u>I. Teumin</u> (R)	403	498
 INDEXES TO VOLUME 9, 1963		
Subject Index	409	
Author Index	416	

Available From American Institute of Physics
Soviet Physics - Acoustics
Vol IX, No 4

SOVIET ATOMIC ENERGY

A translation of *ATOMNAYA ÉNERGIYA*
A publication of the Academy of Sciences of the USSR

© 1964 CONSULTANTS BUREAU ENTERPRISES, INC.
227 West 17th Street, New York 11, N. Y.

Vol. 15, No. 2

(Russian Original Dated 1963)

May, 1964

CONTENTS

	P A G E	
	ENG.	RUSS.
The Theory of Heterogeneous Reactors with Slugs of Finite Radius—A. D. Galanin and B. P. Kochurov	791	107
The Dynamics of Nuclear Power Stations—P. A. Gavrilov and B. N. Seliverstov	802	115
Capture Cross Sections in Construction Materials for Neutrons with Energies up to 50 keV —S. P. Kapchigashev and Yu. P. Popov	808	120
Activation of Various Materials Irradiated by 660 MeV Protons—M. M. Komochkov	815	126
The Chemical Stability and Crystallizability of a Glass Mass as Affected by Composition and Method of Preparation—Yu. N. Golobanov, N. E. Brezhneva, S. N. Oziraner, A. A. Eremin, and V. L. Zotov	820	130
Extraction of Tetravalent Cerium by Organic Solvents—V. I. Levin, G. V. Korpusov, N. M. Man'ko, E. N. Patrusheva, N. P. Prokhorova, and G. F. Platnov	828	138
Calculating the Yield of Photoneutrons from Mixtures of SiO_2 with Small Amounts of Beryllium, Water, Lithium, Carbon, Uranium, and Thorium—A. M. Pargal, A. D. Suvorov, V. A. Shkoda-Ul'yanov, and L. A. Shabalina	836	146
The Radiation Doses Absorbed by the Personnel of the Nuclear Power Plant of the Atomic Icebreaker "Lenin"—V. K. Kovalenko, V. F. Kozlov, Yu. V. Sivintsev, and Yu. I. Smirnov	842	152
LETTERS TO THE EDITOR		
The Optical Theorem and the Energy Spectrum—S. A. Kholin	846	156
Delayed Neutrons from Pu^{239} —B. P. Maksyumenko	848	157
Delayed Neutrons in the Photofission of U^{235} —K. A. Petrzhak, M. Ya. Konrat'ko, O. P. Nikotin, and V. F. Teplykh	849	157
The Periods of Spontaneous Fission of Pu^{240} and Pu^{242} —L. Z. Malkin, I. D. Alkhazov, A. S. Krivokhatskii, and K. A. Petrzhak	851	158
Nomograms for the Design of Water Shielding Against Neutrons from (α, n) Sources —E. A. Kramer-Ageev and V. P. Mashkovich	853	160
A Study of the Distribution of Aluminum Hydroxide between Water and Saturated Steam —M. A. Styrikovich, O. I. Martynova, K. A. Katkovskaya, I. Ya. Dubrovskii, and É. I. Mingulina	855	161

Available From Consultants Bureau

(continued)

CONTENTS (continued)

	P A G E	
	ENG.	RUSS.
The Density Variation in a Volumetrically Heated Boiling Liquid during a Power Pulse —V. K. Zavoiskii	859	164
Flow Controller with Flow Passages Shaped as a Long Slit—P. P. Ionaitis.	862	166
The Stability of Fluoride Complexes of Tetravalent Uranium—V. M. Vdovenko and G. A. Romanov	865	168
The Effect of Internal Irradiation on the Decrement of Attenuation in Zirconium —P. L. Gruzin and A. N. Semenikhin	867	169
NEWS OF SCIENCE AND TECHNOLOGY		
Cern Conference on High Energy Particle Physics and on the Structure of the Nucleus —G. A. Leksin and O. V. Lozhkin	870	172
Antimatter and Cosmology—N. V.	873	174
Symposium on Processing and Burial of High-Level Wastes—B. S. Kolychev	874	175
[Startup of Windscale Power Station		178]
Symposium on Radioisotope Tracer Applications in Hydrology—V. K.	878	180

Available From Consultants Bureau

AVTOMATICHESKAYA SVARKA
No 2, 1964

C O N T E N T S

	Page Numbers
SCIENTIFIC AND TECHNICAL	
A method of investigating the processes of melting and transfer of electrode metal during welding. I. K. Pokhodnya	1 (1)*
Calculation of the thermal processes taking place during welding using current at radio-frequencies. Yu. N. Skachko	9 (11)
Effects of certain elements included in weld metals on their mechanical properties. S. A. Ostrovskaya	17 (19)
The effects of certain hardening and stabilising elements on the microstructures and properties of welds in high-chromium high temperature steels. N. I. Kakhovskii and A. M. Ponizovtsev	20 (23)
Distribution of elements in the α - and γ -phases in chromium-nickel austenitic-ferritic steels. M. Vykitskii, F. Kralik and G. Tuma	27 (30)
The chemical composition of the δ -phase in deposited 1Kh25N13 metal and the rate at which it forms. N. Ya. Karasik and N. E. Shlepyanova	35 (38)
Low-alloy converter steel containing niobium for welded structures. N. I. Sandler, Sh. R. Dobruskina, S. T. Zaikov, E. N. Feidman, A. E. Asnis and A. N. Nazarenko	40 (43)
Research into the welding of medium-alloy steels using cored electrode wire with internal shielding. Yu. N. Gotal'skii and A. K. Tsykulenko	45 (49)
The electroslag welding of VT6 alloy forgings. V. P. Didkovskii, V. F. Grabin and S. M. Gurevich	49 (54)
Welding current pulses measured and recorded using plane shunting coils. I. V. Pentegov	53 (59)
The electroslag welding of 50-140 mm thick 16GS(3N) low-alloy steel. S. V. Yunger and G. N. Gerkunenko	61 (67)
The behaviour of droplets and of the molten metal pool surface in electroslag remelting. V. V. Panin, O. B. Borovskii, I. S. Ivakhenko and S. A. Iodkovskii	67 (72)
Available From British Welding Research Association	(Continued)

AVTOMATICHESKAYA SVARKA
No 2, 1964

CONTENTS (Contd)	Page Numbers
INDUSTRIAL	
The CO ₂ welding of sheet metal structures. T. G. Kvirikadze and S. I. Dzhaneladze	70 (75)
Methods of producing cylindrical electroslog welded components with accurate dimensions. I. I. Sushchuk-Slyusarenko, V. M. Khrundzhe and S. Ya. Shekhter	72 (77)
The properties of the metal deposited on steel with electrodes made of different grades of bronze. G. A. Shadrin, F. D. Kashchenko and A. L. Garyaev	75 (81)
The CO ₂ hardfacing of vehicle and tractor components. V. A. Shevanov	80 (86)
The GSGM-500 generator for power supply for automatic twin-arc CO ₂ welding. I. I. Karosas, K. Ya. Sinderovskas and A. V. Pachukas	84 (90)
SCIENTIFIC AND TECHNICAL INFORMATION	
The A-875 portable flux apparatus. A. I. Chvertko and S. S. Savenko	87 (93)
Vacuum chambers for inspecting welded joints for leaks. A. A. Trushchenko and V. F. Patrukhin	88 (94)
NEWS	
The All-Union Conference on the cold welding of metals. P. I. Gurskii	89 (95)
The 70th birthday of K. K. Khrenov	90 (96)
Available From British Welding Research Association	

BULLETIN OF EXPERIMENTAL BIOLOGY AND MEDICINE

A translation of **BYULLETEN' ÉKSPERIMENTAL'NOI
BIOLOGII I MEDITSINY**

A publication of the Academy of Medical Sciences of the USSR

© 1964 CONSULTANTS BUREAU ENTERPRISES, INC.,
227 West 17th Street, New York 11, N. Y.

Vol. 55, No. 3, pp. 235-358

Russian Original 1963

June, 1964

CONTENTS

	P A G E	
	ENG.	RUSS.
PHYSIOLOGY		
Varieties of Tonic Muscle Fibers in the Oculomotor Apparatus of the Rabbit—D. P. Matyushkin. . .	235	3
The Effect of Disturbance of Acetylcholine Metabolism on Cathode Threshold Parabiosis Curves and on the Functional Stability of the Nerve Trunk—V. I. Alatyrev and L. N. Zefirov. . . .	239	6
The Electrophysiological Analysis of the Phenomena of Optimum and Possimum in the Neuromuscular Apparatus at an Early Age—T. A. Adzhimolaev	243	11
Localization of Functions in the Cerebral Cortex of the Rat, Report 1, Conditioned Reflex Activity in the Rat after Extirpation of the Temporal Cortex—Dang-Thu	248	15
The Effect of the Adrenocorticotrophic Hormone on the State of the Skin Receptors—L. V. Turbina .	254	21
PATHOLOGICAL PHYSIOLOGY AND GENERAL PATHOLOGY		
The Effect of Asphyxia on the Electrocortical Effects of Acetylcholine—E. A. Markova.	260	27
Changes in the Oxygen Tension in the Cerebral Cortex and Mechanisms of Development of Oxygen Lack in the Brain in Association with Open Pneumothorax and Lung Injury —I. D. Kudrin.	262	29
Changes in the Functional Properties and Structure of the Peripheral Nervous System of the Small Intestine Infected Locally with Mycobacterium Tuberculosis—I. E. Gaber and E. Ya. Gilinskiĭ.	266	33
The Effect of the Normal and Pathologically Changed Spleen on the Clotting System of the Blood —L. I. Geller	270	38
BIOCHEMISTRY AND BIOPHYSICS		
Activity of Some Serum Enzymes in Experimental Renal Ischemia—Yu. V. Ansholevich and M. Ya. Melzobs.	274	42
Tissue Respiration and Adenosinetriphosphatase Activity in Dogs in Deep Hypothermia —E. P. Stepanyan, R. V. Merkur'eva, and E. L. Geselevich	277	45
The Antiheparin Activity of Hemolyzed Human Red Cells—B. I. Kuznik	280	48
PHARMACOLOGY		
Analysis of the Action of Strophanthin-Like Glucosides on the Collateral Circulation in the Myocardium—V. V. Gatsura and L. A. Bandurina.	284	52
Available From Consultants Bureau		(continued)

CONTENTS (continued)

	P A G E ENG. RUSS.
A Study of the Role of Various Divisions of the Central Nervous System in the Mechanism of the Convulsive Action of Metrazol—R. Yu. Il'yuchenok and R. U. Ostrovskaya	288 55
Analysis of the Depressant Action of D,L- and D-Cycloserine on the Central Nervous System—N. M. Smol'nikova	293 60
MICROBIOLOGY AND IMMUNITY	
The Submicroscopic Structure of <i>Pasteurella pestis</i> EV—B. A. Mishchenko and S. I. Kharlampovich	296 63
Detection of the Capsular Antigen of <i>Pasteurella pestis</i> in a Dialyzate—M. I. Levi	299 65
Specific and Nonspecific Biochemical Phases of Immunogenesis—M. I. Ravich-Shcherbo and L. G. Prokopenko	303 69
Incomplete Antibodies Against Sheep's Red Cells in Human Serum—N. I. Kuznetsova	307 73
ONCOLOGY	
Antigenic Simplification of Human Stomach Tissues in Carcinoma—G. I. Avdeev and I. S. Bashkaev	311 77
A Comparative Study of the Antigenic Structure of Tumor Tissue and Homologous Normal Tissue. Report 4. Immunological Characteristics of the Antigen—Antibody Complex—M. S. Lomakin and E. V. Sokolova	313 79
The Effect of Parasympatheticotropic Drugs on the Phagocytic Power of the Leukocytes in Cancer Patients (Preliminary Communication)—N. V. Puchkov and P. P. Firsova	318 85
EXPERIMENTAL BIOLOGY	
Regeneration and Compensatory Hypertrophy of the Lungs in Tadpoles—L. D. Liozner, A. G. Babaeva, L. K. Romanova, and G. V. Kharlova	320 87
Cultivation of Cells in Vitro as Isolated Colonies—A. F. Zakharov, E. P. Ugryumov, and I. I. Podoplelov	324 91
A Cytological Analysis of the Testicular Tissue of the Monkey Grown in Vitro as a Trypsinized Monolayer Culture—L. B. Tsypkin	329 96
The Effect of Desoxyribonucleoproteins of the Regenerating Rabbit's Liver on the Regeneration of Mouse Liver—I. N. Yashina	333 101
Binuclear Cells and Proliferative Processes in the Intact and Regenerating Liver of Rats—Z. A. Ryabinina	337 105
The Effect of Pain Stimulation on the Mitotic Activity of the Epithelium of the Small Intestine in Hypophysectomized Rats—S. S. Raitsina	341 109
MORPHOLOGY AND PATHOMORPHOLOGY	
Association Fibers of Cortical Representation Zones 1 and 2 of the Splanchnic Nerve in the Cat—V. Yu. Ermolaeva	345 114
The Pathogenesis of Neurodystrophy (Experimental Model of Parodontosis)—É. D. Bromberg and O. A. Serdyukova	348 117
METHODS	
An Operation on Dogs for Obtaining Pure Pancreatic Juice in Long Experiments—L. S. Fomina	352 122
ANNIVERSARIES	
Vasilii Vasil'evich Parin (on His 60th Birthday)	355 125
Available From Consultants Bureau	

Soviet Physics DOKLADY

A Translation of the Physics Sections of the Proceedings of the USSR Academy of Sciences

(Russian Original Vol. 153, Nos. 4-6, December, 1963)

Vol. 8, No. 12, pp. 1139-1312

June, 1964

CONTENTS

	PAGE	RUSS. ISSUE	RUSS. PAGE
CRYSTALLOGRAPHY			
The Crystal Structure of Hodgkinsonite. <u>L. P. Solov'eva and N. V. Belov</u> (E/T)	1139	4	835
Phase Transitions in Zinc and Manganese Fluorides at High Pressures and Temperatures. <u>S. S. Kabalkina and S. V. Popova</u> (E)	1141	6	1310
Electron-Diffraction Study of the Crystal Structure of BiFeO_3 . <u>Yu. Ya. Tomashpol'skii, Yu. N. Venevtsev, and G. S. Zhdanov</u> (T)	1144	6	1313
CYBERNETICS AND CONTROL THEORY			
Synthesis of a Class of Automatic Control Systems with Random Forces. <u>G. A. Agasandyan</u> (T)	1146	4	768
Problems of Optimal Controlling of Drawing from Molten Metal. <u>A. G. Butkovskii, A. Ya. Lerner, S. A. Malyi.</u> (T)	1149	4	772
Some Peculiarities in the Motion of Variable-Structure Automatic Control Systems with Discontinuous Switching Functions. <u>S. V. Emel'yanov, N. E. Kostyleva.</u> . (T)	1152	4	776
Algorithm for Solving Server Queue Problems by Monte Carlo Methods. <u>I. Fidrikh</u> (T)	1155	4	779
Design Principles for Variable-Structure Combined Automatic Control Systems. <u>B. N. Petrov, S. V. Emel'yanov</u> (T)	1158	5	1020
Choice of Synthesis Criteria for Variable-Structure Combined Servomechanisms. <u>B. N. Petrov, S. V. Emel'yanov, E. B. Dudin</u> (T)	1161	6	1280
HYDROMECHANICS			
A Proof of the Instability of a Certain Type of Flow of a Viscous Incompressible Liquid. <u>A. L. Krylov</u> (T)	1164	4	787
Ship Waves in a Viscous Liquid. <u>L. V. Cherkasov</u> (T)	1166	6	1288
MATHEMATICAL PHYSICS			
Modified and Unmodified Formulations of the Problem of a Nonlinear, Many-Particle, Bose-Einstein System. <u>B. B. Tolmachev.</u> (T)	1168	4	794
Canonical-Transformation Method for the Investigation of the State of Overhauser Spin-Density Waves. <u>Yan Shi</u> (T)	1171	4	798
Existence and Uniqueness of the Solution in Some Nonlinear Problems of the Theory of Nuclear Reactors. <u>O. B. Moskalev, V. A. Chuyanov</u> (T)	1173	5	1030.
Extension to the Three-Dimensional Case of a Method of Solving Fundamental Two-Dimensional Problems of Potential and Elasticity Theory. <u>P. I. Perlin</u> . . (T)	1175	5	1033

Available From American Institute of Physics
Soviet Physics - Doklady
Vol VIII, No 12

(Continued)

CONTENTS (continued)

	PAGE	RUSS. ISSUE	RUSS. PAGE
MECHANICS			
On the Nature of the Contact Between the Free Surface of a Liquid and the Solid			
Boundary in the Problem of Wedge Penetration, <u>Z. N. Dobrovolskaya</u> (T)	1179	4	783
Nonlinear Theory of the Generation of Turbulence, <u>E. M. Khazen</u> (T)	1182	6	1284
PHYSICS			
Example of the Structure of a Magnetic Field with Disintegrating Magnetic			
Surfaces, <u>N. M. Zueva, M. S. Mikhailova, and A. I. Morozov</u> (T)	1185	4	801
On the Calculation of the Spectroscopic Masses of Hydrogen and Deuterium.			
<u>V. P. Morozov</u>	1188	4	804
Low-Temperature Breakdown in p-Type Germanium Subject to Uniaxial			
Compression, <u>B. M. Vul and I. V. Kucherenko</u> (E/T)	1191	5	1037
The Photoelectret State in Monocrystals of CdS, <u>P. S. Nesterenko</u> (E)	1194	5	1040
On One Model of a Superconductor with Pairs in the p-State, <u>A. V. Svidzinski</u> . . . (T)	1197	5	1044
Hydromagnetic Stability of Rotating Plasma, <u>L. S. Solov'ev</u> (T)	1200	5	1048
On Polarization and Spin Effects in the Theory of Synchrotron Radiation.			
<u>A. A. Sokolov and I. M. Ternov</u> (T)	1203	5	1052
Interpretation of the Spectral Composition of Light Scattered by Fluctuations			
of Anisotropy in Liquids, <u>V. S. Starunov</u> (T/E)	1205	5	1055
Hypothesis of the Trajectory of a Quantum Particle, <u>S. M. Feinberg</u> (T)	1209	5	1058
Determination of the Optical Anisotropy of Macromolecules, <u>E. V. Frisman,</u>			
<u>A. K. Dadivanyan, and G. A. Dyuzhev</u> (E/T)	1213	5	1082
Transferability of the Potential-Energy Coefficients for Polyatomic Molecules.			
<u>D. S. Bystrov</u> (T)	1215	6	1281
Acoustic Ion Oscillations Excited by an Electron Current, <u>V. I. Petviashvili</u> (T)	1218	6	1295
Second Series of Ground-Level Experiments with Weightless Fluids.			
<u>V. V. Shuleikin</u> (E)	1221	6	1299
TECHNICAL PHYSICS			
Reorientation of the Lattice of the Martensite Phase during Transformation.			
<u>V. A. Lobodyuk and L. G. Khandros</u> (E/T)	1224	4	807
Some Data on the Formation of the Weld Seam in Electron-Beam Welding.			
<u>V. E. Lokshin and L. G. Puzrin</u> (E)	1227	4	810
Martensitic Phase with a Multilayer Structure, <u>L. I. Lysak and B. I. Nikol'n</u> (E)	1229	4	812
Equations for the Two-Dimensional Stressed State in Oriented Glass-Fiber Plastics.			
<u>A. L. Rabinovich</u> (T)	1233	4	816
Modes of Vibration of a Slide Dependent on Contact Rigidity and Their Effects			
on Friction, <u>D. M. Tolstol</u> (E/T)	1237	4	820
Aspects of the Plastic Deformation of Crystals with Covalent Bonds.			
<u>V. I. Trefilov and Yu. V. Mil'man</u> (E/T)	1240	4	824
Rheological Behavior of Cement-Water Suspensions under Conditions of Vibration.			
<u>N. B. Ur'ev and N. V. Mikhailov</u> (E)	1243	4	828
Conditions under Which Pitting Occurs during Friction, <u>B. P. Mitrofanov</u> (E)	1246	5	1085
THEORY OF ELASTICITY			
On the Oscillations of Elastic Rods, <u>I. M. Rapoport</u> (T)	1248	4	790
Compression of Bands of Plastic Material with Rigid Rough Plates Which Can Be			
Strengthened, <u>V. V. Dudukalenko, D. D. Ivlev</u> (T)	1252	5	1024
Basic Equations in the Theory of Elastic Shells, <u>I. M. Rapoport</u> (T)	1255	5	1027

Available From American Institute of Physics
Soviet Physics - Doklady
Vol VIII, No 12

(Continued)

CONTENTS (continued)

	PAGE	RUSS. ISSUE	RUSS. PAGE
BIOPHYSICS			
A Comparative Investigation of the Radiosensitivity of Different Strains of <i>Drosophila melanogaster</i> . <u>I. E. Vorobtsova</u>	1261	4	943
Relationship Between the Very Weak Chemiluminescence and the Heat-Resistance of Plant Organisms. <u>R. A. Gasanov, T. G. Mamedov, and B. N. Tarusov</u>	1265	4	947
Effect of Injection of Bone-Marrow Cells on Morphological Signs of Experimental Influenza in Irradiated Animals. <u>N. A. Maksimovich and O. P. Lebedeva</u> . . .	1268	4	950
Postirradiation Recovery of Yeast Cells Irradiated in Aerobic and Anaerobic Conditions. <u>V. S. Barsukov, O. V. Malinovskii, and N. M. Mityushova</u>	1272	5	1199
Two Thresholds of Fusion of Light Stimuli in the Human Visual Analyzer. <u>M. I. Venslauskas, A. M. Gutman</u>	1274	5	1202

Available From American Institute of Physics
Soviet Physics - Doklady
Vol VIII, No 12

Soviet Physics SOLID STATE

A Translation of the Journal "Fizika Tverdogo Tela"

(Russian Original Vol. 5, No. 12, pp. 3357-3621, December, 1963)

Vol. 5, No. 12, pp. 2463-2710

June, 1964

CONTENTS

	PAGE	RUSS. PAGE
Thermal Conductivity of AgSbTe_2 , <u>E. D. Nensberg and E. L. Shtrum</u> (E)	2463	3357
Energy Dependence of the Absorption Spectrum in the Vicinity of the Intrinsic Absorption Band in Heavily Doped Germanium and Silicon, <u>G. B. Dubrovskii</u> , . . (T)	2467	3361
Photoelectret and Cathodoelectret States in $\text{Ti}_2\text{Se} \cdot \text{As}_2\text{Se}_3$ Layers, <u>V. M. Lyubin</u> and <u>V. I. Fomina</u> , ... (E)	2472	3367
g-Factors of Ions in the S-State in Crystals, <u>A. M. Leushin</u> , ... (T)	2477	3373
Infrared Absorption in Highly Doped Germanium, <u>L. V. Keldysh and G. P. Proshko</u> , (E/ T)	2481	3378
Dielectric Properties of Strontium-Bismuth Titanates, <u>S. V. Bogdanov</u> , ... (T)	2489	3390
Indirect Exchange Interaction Through Current Carriers in Semiconductors, <u>B. V. Karpenko and A. A. Berdyshev</u> , ... (T)	2494	3397
Optical Absorption and Electrical Properties of n-Type $\alpha\text{-SiC}$, <u>G. N. Violina</u> , <u>Yeh Liang-hsiu, and G. F. Kholuyanov</u> (E/ T)	2500	3406
Densities of Anomonia and Methane in the Solid State, <u>V. G. Manzhelti</u> and <u>A. M. Tolkachev</u> (E)	2506	3413
A Fast Recombination Mechanism at the Surface of CdS Single Crystals, <u>V. E. Lashkarev, G. I. Golynaya, and M. K. Sheinkman</u> , ... (E)	2511	3420
Anisotropy of the Sputtering Ratio and of the Ion Electron Emission Coefficient in Single Crystals, <u>E. S. Mashkova, V. A. Molchanov, and D. D. Odintsov</u> , . . . (E/ T)	2516	3426
Ferroelectric Properties of Thiourea Under High Pressures, <u>G. G. Leonidova</u> (E)	2519	3430
Electric Properties of Monocrystalline and Polycrystalline Layers of Lead Sulfide, <u>R. Ya. Berlaga, I. V. Vinokurov, and P. P. Konorov</u> (E/ T)	2523	3435
Effect of Long-Range Forces on Fluctuations and the Scattering of Waves in Crystals, <u>M. A. Krivoglaz</u> (T)	2526	3439
Molecular Network and the Orientational Processes in Amorphous Polystyrene, <u>N. I. Shishkin, M. F. Milagin, and A. D. Gabaraeva</u> , ... (E)	2535	3453
Semiconducting Barium and Strontium Titanates with Positive Temperature Coefficients of Resistivity, <u>G. N. Tekster-Proskuryakova and I. T. Sheftel</u> , . . . (E)	2542	3463
Electron Drag and Thermal Diffusion in Metals, <u>V. B. Fiks</u> , ... (T)	2549	3473
Photoconductivity Spectrum of Semiconductors for the Case of Additive Absorption, <u>R. A. Titov</u> , ... (T)	2553	3480
X-Ray Determination of the Magnetostriction Constants of Iron-Cobalt Ferrites, <u>B. Ya. Pinei and N. M. Gumen</u> (E)	2557	3485

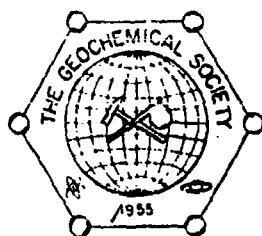
(continued)

Available From American Institute of Physics
Soviet Physics - Solid State
Vol V, No 12

CONTENTS (continued)

	PAGE	RUSS. PAGE
Defects Emerging During Coalescence of Twin Layers in a Polysynthetic Twin. <u>R. I. Garber and E. I. Stepina</u> (E)	2560	3489
Electrical Conductivity of Ferrous Oxide at High Temperatures. <u>S. M. Ariya</u> <u>and B. Ya. Brach</u> (E)	2565	3496
Effective Ionic Charges in Cubic Ionic Crystals. <u>V. V. Mitskevich</u> (T)	2568	3500
Changes in the Electric and Photoelectric Properties of Gallium Arsenide Caused by Irradiation with Electrons of Energy ~ 1 MeV. <u>N. A. Vitovskii, T. V. Mashovets,</u> <u>S. M. Ryvkin, and R. Yu. Khansevarov</u> (E)	2575	3510
Effect of Thermal Treatment and Plastic Deformation on Dielectric Losses in $KCl \cdot CaCl_2$ Crystals. <u>A. S. Bogdanovich, Yu. A. Sikorskii, and P. A. Yurachkovskii</u> (E)	2586	3524
Photoionization in the Fundamental Absorption Region in Cadmium Selenide. <u>V. K. Adamchuk and R. Ya. Berlaga</u> (E)	2590	3529
Melting of Small Lead Crystals. <u>Yu. I. Petrov</u> (E/ T)	2593	3533
Photoelectret Effect in Silicon. <u>Yu. L. Ivanov and S. M. Ryvkin</u> (E)	2599	3541
Adsorption of Barium on a Polycrystalline Gold Substrate. <u>R. L. Nemchenok,</u> <u>A. R. Shul'man, and V. S. Grishin</u> (E)	2602	3545
Effect of Anisotropy on the Properties of Superconductors. <u>B. T. Geilikman</u> <u>and V. Z. Kresin</u> (T)	2605	3549
High-Voltage Photo-emf in Sb_2S_3 Films. <u>I. A. Karpovich and M. V. Shilova</u> (E/ T)	2612	3560
Method for Determining Localized Inhomogeneities of an Electric Field at Atomic Sites in Metals from Nuclear Magnetic Resonance Data. <u>Yu. S. Stark</u> <u>and N. B. Shparo</u> (T)	2618	3569
Dependence of the Electrical Resistivity of Graphite on the Magnetic Field. <u>Yu. A. Pospelov and V. V. Kechin</u> (T)	2622	3574
An Investigation of Self-Diffusion in the Surface Layer of Gold by the "Mass-Transfer" Method and with the Aid of a Radioactive Isotope. <u>Ya. E. Geguzin, G. N. Kovalev,</u> <u>and N. N. Ovcharenko</u> (E)	2627	3580
Splitting of the Paramagnetic Resonance Lines of Cr^{3+} Ions in Ruby in an External Electric Field. <u>A. I. Rimus and A. A. Manenkov</u> (E)	2634	3590
Intensity of Allowed and Forbidden Electron Paramagnetic Resonance Lines of Mn^{2+} in $SrCl_2$. <u>G. L. Bir and L. S. Sochava</u> (E/ T)	2637	3594
BRIEF COMMUNICATIONS		
Magnetic and Electrical Properties of Ferroelectric Yttrium and Ytterbium Manganates. <u>V. A. Bokov, G. A. Smolenskii, S. A. Kizhaev, and I. E. Myl'nikova</u> (E)	2646	3607
Anomalous Dependence of the Intensity of Absorption on the Thickness of $CuCl$ Single Crystals. <u>M. S. Brodin and A. S. Krochuk</u> (E/ T)	2647	3609
Diffusion of Gallium in Inhomogeneous Silicon. <u>B. I. Boltaks and T. D. Dzhaferov</u> . . . (E/ T)	2649	3611
Thermal Conductivity of Selenium. <u>G. B. Abdullaev, G. M. Aliev, and Kh. G. Barkinkhoev</u> . (E)	2651	3614
Properties of Cadmium Antimonide Doped with Gold. <u>I. M. Pilat and L. I. Ananychuk</u> . . . (E)	2653	3616
Long-Wavelength Edge of the Photoeffect and Recombination Radiation of $GaAs$ p-n Junctions. <u>A. A. Gutkin, M. M. Kozlov, D. N. Nasledov, and V. E. Sedov</u> (E)	2654	3617
Optical Absorption Edge of GaS and $GaSe$ Single Crystals. <u>F. I. Ismailov, E. S. Guseinova,</u> <u>and G. A. Akhundov</u> (E)	2656	3620
INDEXES TO VOLUME 5		
Author Index	2661	
Subject Index	2683	

Available From American Institute of Physics
Soviet Physics - Solid State
Vol V, No 12



GEOCHEMISTRY

GEOKHIMIYA

No. 10

1963

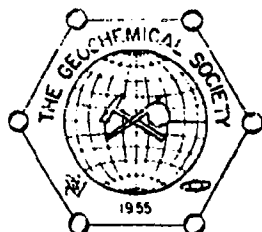
CONTENTS

Vinogradov, A. P., K. P. Floronskii and V. F. Volynets. Ammonia in meteorites and igneous rocks	905
Kadik, A. A. and N. I. Khitarov. Conditions of thermodynamic equilibria in water-silicate melt systems.	917
Sardarov, S. S. Preservation of radiogenic argon in glauconites	937
Kuznetsova, N. P. Geochemistry of pyrolic compounds in the organic matter of sedimentary rocks, petroleum, and solid bitumens.	945
Gerasimovskii, V. I. and A. M. Tuzova. Geochemistry of phosphorus in nepheline syenites.	955
Pachadzhyanov, D. N. Geochemistry of niobium and tantalum in cl.	963
Shishkin, N. N., V. A. Mikhailova and N. M. Mikhailova. Oxidation of cobalt, nickel, and iron arsenides and sulfarsenides, and of some mixtures of these minerals.	977
Tolstoi, M. I. and I. M. Ostafichuk. Some regularities of the distribution of the elements in rocks and their geochemical significance.	986

BRIEF COMMUNICATIONS

Khitarov, N. I., E. B. Lebedev and A. A. Kadik. Solubility of water in granitic melt at pressures up to 7000 atmospheres.	992
Popova, S. V., N. R. Serebryanaya and S. S. Kabalkina. Decomposition of cuprous oxide at high pressures and temperatures	996
Tokhtuyev, G. V. and T. A. Frantsuzova. Gases in metamorphic rocks and ores of Krivoi Rog	998
Fominykh, V. G. Distribution of titanium in the Kachkanar titanomagnetite deposit.	1002
Kosterin, A. V., I. D. Shevaleyovskii, E. K. Rybalova and K. P. Tolok. Zr/Hf ratio in zircons from some igneous rocks of northern Kazakhstan.	1007

Available From Scripta Technica



GEOCHEMISTRY

GEOKHIMIYA

No. 11

1963

CONTENTS

Vinogradov, A. P., A. L. Devirts, N. G. Markova, and N. A. Khotinskii. The Late Glacial—Postglacial boundary according to radio-carbon dates and the data of pollen analysis	1009
Shteinberg, D. S. and I. A. Malakhov. Distribution of nickel in ultramafic rocks of the Urals	1020
Abramovich, I. I., E. B. Vysokoostrovskaya, and E. F. Dorofeyeva. The manganese-iron ratio in igneous rocks	1034
Vinokurov, V. M., M. M. Zaripov, Yu. E. Pol'skii, V. G. Stepanov, G. K. Chirkin, and L. Ya. Shekun. Electron paramagnetic resonance determination of trace amounts of Eu^{2+} , Gd^{3+} , and Nb^{4+} , and their isomorphism in fluorite and zircon	1041
Leonova, L. L. and Yu. A. Balashov. Distribution of uranium, thorium, and the rare earths in the granitoids of the Susunmyr Batholith (Central Tien-Shan)	1047
Ivanov, V. V., D. A. Rodionov, and Yu. A. Tarkhov. Character of the distribution and the average content of indium in some minerals from deposits of various genetic types	1056
Sorykh, V. I. Distribution of copper in genetically related series of granitoids	1068
Yofimov, A. A., and L. P. Ivanova. Behavior of chromium, nickel, and cobalt during the formation of the Kytlym platiniferous massif	1076
Genkin, A. D., R. L. Tolshova and O. A. Alekseyeva. Nickel content in the essential minerals of the mineralized gabbro-diorite of the Noril'sk Deposit	1086
Yovseyeva, L. S. and N. P. Fomina. Oxidation-reduction properties of sedimentary uranium-bearing rocks	1093
BRIEF COMMUNICATIONS	
Borshchevskii, Yu. A. and S. L. Borisova. Retention of radiogenic argon by sylvite	1099
Goldberg, I. S. Color of fluorite from the Takob Deposit	1103
Smirnov, B. V. Trace elements in the ores and rocks of the Lovikhinskii mineralized area (Middle Urals)	1107
Shcherbina, V. V. K. A. Nonadkevich (Memorial)	1110

Available From Scripta Technica

Measurement Techniques

*A translation of Izmeritel'naya Tekhnika, a publication of the
Academy of Sciences of the USSR*

(Russian Original Dated December, 1963)

1963, No. 12, pp. 983-1094

June, 1964

CONTENTS

	PAGE	RUSS. PAGE
Basic Metrological Problems in Physicochemical Measurements. D. K. Kollerov.	983	1
Practical Application of the Autocollimation Method for Measuring Small Angles and Angular Deviations. G. I. Strakun.	988	5
Measurements of Long Lengths under Workshop Conditions. V. A. Truten' and R. V. Falaleeva	990	7
Measuring the Linearity of Long Guides by Means of Autocollimators. E. I. Finkel'shtein	993	9
Wide-Range Inductive Instrument for Measuring Dimensions. E. I. Mar'yasin	997	13
Device for Setting Axle Pivots. E. M. Evich	999	14
Centricity Testing with UIM-21 Microscope. K. V. Kershakov	999	14
Koller Keys. N. V. Sergeev	1000	14
Rational Method for Lubricating Block Gauges. V. N. Artamonov	1000	15
MEASUREMENTS OF MASS		
Methods for Reducing the Dynamic Error of Strain-Gauge Scales. L. Ya. Nagornyi. V. I. Pechuk, V. Yu. Skripchuk, and V. P. Topolev	1001	15
MECHANICAL MEASUREMENTS		
Double-Liquid Micromanometer for Measuring Small Pressure Differences in Rarefied Gases. V. A. Sukhnev, L. A. Zhukova, A. É. Ioffe, and N. A. Kolokolova	1003	17
Taking into Account the Evacuating Effect of Mercury Vapor in Calibrating Electrical- Discharge Manometers by Means of a Mercury Compression Manometer. A. V. Eryukhin	1006	20
Three-Component Milling-Machine Dynamometer with Resistance-Wire Strain Gauges. S. S. Kupidonov	1007	21
THERMOTECNICAL MEASUREMENTS		
Basic Metrological Problems in Temperature Measurements. I. I. Kirenkov	1009	22
ELECTRICAL MEASUREMENTS		
Effect of the Voltage Waveform on the Readings of an Infrasonic Voltmeter which Measures Mean Values. G. L. Grin	1014	26
Electrodynamic Detector of Amplitude-Modulated Signals. P. I. Dekhtyarenko	1017	28
Electrodynamic Capacitive Modulator of Weak Direct Currents. V. I. Pankratov and I. T. Prilipko	1020	30
Electronic Phase Meter with an Extended Frequency Range. G. S. K.	1023	32
Testing Frequency Meters by Means of an Electronic Digital Frequency Meter. V. Ya. Volodarskii	1024	33
Peculiarities in Using Thermal Comparators at Infrasonic Frequencies. O. N. Gravin	1025	34
Theoretical Computation of Readings in Rectifying Electrical Measuring Instruments. G. P. Abramovich	1030	37
HIGH AND ULTRAHIGH FREQUENCY MEASUREMENTS		
Quartz-Crystal Narrow-Band Frequency Meter. S. M. Okhotina	1032	38
Available From Instrument Society of America		(Continued)

CONTENTS (continued)

	PAGE	RUSS. PAGE
PHYSICOCHEMICAL MEASUREMENTS		
Simple Method for Computing Corrections for the Expansion of Gas Mixtures. D. K. Kollerov	1037	42
Fluid Feeder for Obtaining Small Calibrated Gas Flows. V. V. Grigor'yants and M. E. Zhabotinskii	1040	44
INSPECTION OF MEASURES AND INSTRUMENTS		
Evaluating the Condition of the Measuring Equipment in Use. V. V. Petropavlovskii	1042	45
REVIEWS AND REPORTS		
Methods and Means for Precision Measurements of Small Time Intervals. E. M. Vinnikov and D. P. Markovskii	1046	49
INFORMATION		
Measuring Instruments and Equipment at the Japanese Exhibition in Moscow. G. I. Kononenko	1051	53
State Committee of Standards, Measures and Measuring Instruments of the USSR	1054	56
New Instructions for Testing Measures and Measuring Instruments.	1056	57
Author Index, 1963	1059	
Tables of Contents, 1963	1068	
Available From Instrument Society of America		

TECHNICAL CYBERNETICS

No 2, 1964

[Following is the translation of the Russian-language publication Izvestiya Akademii Nauk SSSR, OTN, Tekhnicheskaya Kibernetika (News of the Academy of Sciences USSR, Department of Technical Sciences, Technical Cybernetics) Moscow, No 2, March-April 1964, pp 1-192.]

<u>Table of Contents</u>	<u>Source</u>	<u>Report</u>
1. <u>Operations on Units in Complex Systems</u> , N.P. Buslenko, O.M. Yurkevich, (Moscow)	3	1
2. <u>Mathematical Simulation of Operation of a Section Mill</u> , V.V. Kobozov, A.I. Nazarenko, (Elektrostal')	12	16
3. <u>On the Feasibility of the Manufacture of Objects by a Set of Machines</u> , L.I. Feygin, (Moscow)	24	36
4. <u>An Algorithm for Recognition of Objects with Many Parameters and Its Applications</u> , V.L. Brailovskiy, (Moscow)	30	45
5. <u>Experiments in Visual Shape Recognition by a Digital Computer</u> , Yu. G. Grigor'yan, (Yerevan)	40	64
6. <u>Some Problems in the Theory of Shape Identification</u> , I. Ya. Levin, (Leningrad)	50	78
7. <u>An Analog to the Method of Louriier for Analysis of Stability of Non-Linear Pulse Automatic Control Systems</u> , G.G. Bakhimov, (Moscow)	56	87
8. <u>On the Synthesis of Control which is Optimum with Respect to Rapid Action</u> , L. Ye. Kanarev, (Leningrad)	65	100
9. <u>Generalization of the Problem of Synthesis of a Multichannel Discrete- Continuous Filter</u> , V. Ya. Katkovnik, (Leningrad)	75	115
10. <u>The Passage of Random Signals through a Linear Dynamic System with Distributed Parameters</u> , A.G. Senin, (Novosibirsk)	81	124

Available From JPRS 25169

(Continued)

IZVESTIYA AKADEMII NAUK SSSR,
OTN, TEKHNIChESKAYA KIBERNETIKA
No 2, 1964

<u>Table of Contents (cont.)</u>	<u>Source</u>	<u>Report</u>
11. <u>Transformation of a Discrete System of Random Signals Given by a Canonical Expansion.</u> G.P. Molotkov, (Moscow)	87	131
12. <u>The Algorithm of the Problem of Definition of Optimal Parameters of Control Systems by the Gradient Method.</u> Yu. Kuznetsov, R.P. Sen'chenko, V.I. Chernetskiy, (Leningrad)	93	140
13. <u>Some Topological Procedures for the Investigation of Linear Structures.</u> Yu. F. Maksimenko, (Moscow)	102	153
14. <u>Concerning the Degree of Stability of Non-Linear Systems in a Sliding Condition.</u> Ye. I. Gerashchenko, (Sverdlovsk)	114	172
15. <u>On the Method of Stabilization of a Control System with Limited Permissible Values of the Regulator Parameters.</u> V.M. Badkov, Ye. A. Marasnin, (Sverdlovsk)	121	184
16. <u>Switching Conditions in Combined Tracking Systems of Variable Structure.</u> Ye. B. Dudin, (Moscow)	129	198
17. <u>On Stability of Motion of a Class of Automatic Control Systems with Variable Structure.</u> S.V. Yemel'yanov, V.I. Utkin, (Moscow)	140	213
18. <u>A Self-Tuning System with a Model II.</u> I.N. Kritova, V. Yu. Rutkovskiy, (Moscow)	145	216
19. <u>On the Design of Automatic Control Systems Containing Non-Stationary Links.</u> G.I. Vanyurikhin, (Leningrad)	153	232
20. <u>On Errors in Inertial Navigation Systems.</u> V.D. Andreyev, (Moscow)	159	242
21. <u>A New Mechanical Power Amplifier.</u> A. Ye. Kobrinskiy, A.I. Korendyasev, (Moscow)	175	266
22. <u>Supplement to the Article by V.P. Perov "Optimal Distribution of Energy for Multiple Examination of a Given Region".</u> I.N. Kuznetsov, (Moscow)	182	278
23. <u>On The Book of V.P. Seleznev "Navigational Instruments"</u>	184	280
24. <u>Symposium on Bionics in the USA</u>	188	287

Available From JPRS 25169

Bulletin of the Academy of Sciences of the USSR - Physical Series
Vol. 27, No. 5 - May 1963

TABLE OF CONTENTS

	Page	Orig. Trans.
Transactions of the Eleventh Conference on Luminescence (Molecular Luminescence) (Continued from No. 4; to be continued in No. 6)		
Association of rhodamine 6G molecules in binary solvents - V.G.Bocharov & L.V.Levshin	590	591
Exciton luminescence of molecular crystals - V.L.Broude, E.F. Sheka & M.T.Shpak	596	597
Fluorescence and phosphorescence spectra of α - and β -methyl- naphthalenes in normal and isoparaffinic solvents at 77°K - V.L.Levshin & Kh.I.Mamedov	606	607
Nonstationary emission by a lasing plane-parallel slab - A.M.Samson & V.A.Savva	609	611
Calculation of the effect of multiple absorption and emission processes on polarization of luminescence - K.S.Adzerikho	613	615
Modes of internal deactivation of excited aromatic molecules in vitreous solutions - V.L.Ermolaev	617	619
Quantitative investigation of the temperature dependence of the absorption and fluorescence spectra of complex molecules - I.V.Pitarskaya & N.G.Rakhshiev	622	624
Absorption and fluorescence of vinylanthracenes and change of their molecular configuration due to excitation - A.S. Chorkasov & K.G.Voldaikina	628	630
Investigation of photoexcited triplet states of polyatomic molecules by observation of EPR and phosphorescence - A.K. Piskunov, R.N.Nurmukhametov, D.N.Shigorin, V.I.Muromtsev & G.A.Ozerova	634	636
Effect of temperature on the probability for transition of molecules to the phosphorescent state - A.V.Aristov & B.Ya. Sveshnikov	638	639
Concerning the temperature dependence of the phosphorescence yield of organic phosphors - V.A.Pilipovich & N.I.Tursunov	641	642
Growth of the phosphorescence of organic luminophors - M.D. Khalupovskii	644	645
Phosphorescence of carbazole and phenanthrene at liquid oxygen temperature - B.A.Pyatnitskii & A.I.Vlasenko	647	648
Temperature dependence and nature of the electronic absorption spectra of uranyl compounds - L.V.Volod'ko, A.N.Sevchenko & D.S.Umreiko	651	651
Electronic-vibrational processes and polarized luminescence of mercury-like centers in cubic crystals - S.G.Zazubovich, N.E. Lushchik & Ch.B.Lushchik	656	655
Luminescence of halide solutions of arsenic, gallium and selenium - M.U.Belyi & I.Ya.Kushnirenko	661	660
Spectral characteristics of luminescent electrolyte solutions - M.U.Belyi & B.A.Okhrimenko	666	664
Luminescence of platinocyanic compounds - A.M.Tkachuk	670	668
Radiative quenching of photoluminescence in PbI ₂ crystals - I.S. Gorban' & V.M.Kosarev	675	673
Available From Columbia Technical Translations		(Continued)

IZVESTIYA AKADEMII NAUK SSSR

SERIYA FIZICHESKAYA

Vol XXVII, No 5, 1963

CONTENTS (Contd)

Luminescence of sodium nitrite at low temperatures - A.R. Yatsenko & Yu.A.Kulyupin	679	677
Luminescence spectra of some polyphenyls and diphenylpolyenes - T.N.Bolotnikova & G.V.Gobov	683	681
Luminescence spectra of solutions of indigo and some of its derivatives at 77°K - R.N.Nurmukhametov, D.N.Shigorin & Yu.I.Kozlov	686	685
Spectra of frozen solutions of two impurities between which excitation energy transfer may occur - V.K.Dobrokhotova, V.A.Kul'chitskii & Yu.V.Naboikin	690	689
Luminescence spectra of perylene and diisobutyl ester of 3,9-perylenedicarboxylic acid at 20.4°K - M.M.Val'dman & G.D.Sheremet'ev	693	692
Concerning the nature of the fine structure of the quasiline spectra of aromatic hydrocarbons in frozen paraffin solutions - G.V.Svishchev	696	695
Energy migration and transfer in two-component mixtures - V.S.Rubanov	700	698
Fluorescence spectra and efficiencies of some coumarin derivatives - P.I.Petrovich & N.A.Borisevich	703	701

Available From Columbia Technical Translations

CONTENTS

	Page	
	English	Russian
PHYSICS OF THE SOLID EARTH		
I. S. BERZON, L. I. RATNIKOVA AND M. I. RATS-KHIZGIYA, A Study of Converted Reflected Waves in Media with Weak Velocity Differentiation	789	1293-1306
E. I. GAL'PERIN (HALPERIN) AND A. V. FROLOVA, Study of Seismic Waves by a Combination of Vertical and Horizontal Profiling	798	1307-1323
V. I. MESHBEI AND I. M. MUZYKA, The Use of Directed Sources for the Isolation of Converted Sliding-Diffracted-Head $S_{12}P_{21}$ Waves and Sliding-Diffracted $S_{12}P_1$ Waves	808	1324-1339
E. F. SAVARENSKII, S. A. FEDOROV AND B. V. GOCICHAISHVILI, The Determination of the Actual Motion of the Ground and Its Spectrum from a Seismogram . .	818	1340-1347
K. N. EGOROV, Methods of Determining the Absolute Value of Gravity by Interference Measurements of a Free-Fall Length	823	1348-1356
E. M. LIN'LOV, A Long-Period Magnetron Seismograph	829	1357-1360
V. F. BONCHKOVSKI, A Specific Case of Connection between the Variations of Tilts and Linear Deformations and the Distribution of Atmospheric Pressure . .	832	1361-1368
YU. B. SHAUB (SCHAUB), The Determination of the Distribution of Specific Electrical Conductivity in a Horizontally Layered Medium by Aerial Electric Induction Exploration	837	1369-1376
YU. V. KHOMENYUK, Integral Characteristics of Transient Processes in Electric Exploration	842	1377-1380
V. D. STADUKHIN, The Determination of the Magnetic Susceptibility of Rocks and Ores by Measurement of the Magnetic Field Intensity in Artificially Magnetized Bore-Holes for the Purpose of Location and Evaluation of Iron-Ore Deposits . .	845	1381-1385
SCIENTIFIC REPORTS		
V. P. KUZNETSOV, SH. S. RAGIMOV AND S. M. ALIEVA, The Mashtagi-Nardaran Earthquakes of 17 December 1961	848	1386-1388
SH. S. RAGIMOV, R. D. DZHAFAROV, Z. A. BAGIROVA, I. F. MAMEDOV, S. S. AGA-ZADE, E. R. ALIEVA, A. M. ALIEVA AND V. B. ALIMAMEDOVA, The Caspian Earthquake of 18 December 1961	850	1389-1391
V. P. KUZNETSOV, SH. S. RAGIMOV, R. D. DZHAFAROV, A. M. ALIEV, Z. A. BAGIROVA, S. S. AGA-ZADE, I. F. MAMEDOV, S. M. ALIEVA, A. S. KULIEV, E. M. DEMIKHOVSKAYA, O. S. SUBASHIEVA, A. B. AGALAROVA, SH. A. SHAKHMALIEVA, G. I. MIRZOEVA AND V. A. KASPAROV, The Caspian Earthquake of 27 January 1963	852	1392-1393
V. M. ARKHANGEL'SKAYA, Chronicle: Session of the Council on Seismology, Academy of Sciences, USSR, in Frunze	854	1394-1398
PHYSICS OF THE SEA AND OF THE ATMOSPHERE		
V. A. KHALKECHEV AND L. N. GUTMAN, The Motion of Cold Air Masses Along Mountain Ranges	858	1399-1409
B. I. BELYAEV, I. S. PAVLOVA AND V. M. RYABOV, On the Technique of Cloud Dispersal Over Large Areas	864	1410-1416
E. R. FAINBERG (FEINBERG), Solution of the Problem Regarding the Influence of Hills on the Steady Motion of Cold Air	868	1417-1422
I. P. SMIRNOV, Forecast of the Circulation Index by Means of Momentum Transport for the Barotropic Model of the Atmosphere	871	1423-1426
KH. N. ZEITUNYAN, The Nonlinear Problem of Cloud Formation Behind an Obstacle	874	1427-1437
A. M. GOLOVIN, On the Spectrum of Coagulating Cloud Droplets. II	880	1438-1447
V. I. SKATSKI, An Airborne Water-Content Meter for Clouds with Sufficient Liquid to Form Droplets	885	1448-1456
SCIENTIFIC REPORTS		
A. I. ERSIKOVICH, Electron with Energy Higher than 1600 Kev in Radiation Zones of the Earth	891	1457-1461
A. M. KUZNETSOV AND V. A. KUZNETSOV, Symmetrical Forms of Pebbles Due to Natural Abrasion	894	1462-1467

Available From American Geophysical Union

CONTENTS

	Page	
	English	Russian
PHYSICS OF THE SOLID EARTH		
V. V. ÉZ, Tectonic Conditions for the Occurrence of Violent Earthquakes in the Czechoslovak Carpathians	87	161-173
N. I. KHALEVIN, The Physical Properties of Rocks and Formations of the Krasnoural'sk Intersection of the N. Tagil Synclinorium of the Urals	95	174-183
A. S. ALEKSEEV, I. S. VOL'VOVSKII, N. I. ERMILOVA, P. V. KRAUKLIS, AND V. Z. RYABOI, The Physical Nature of Various Waves Recorded in Deep Seismic Sounding	103	184-195
A. V. CHERKUNOV AND G. M. PUSTOVALOVA, Use of Subcritical Reflections in Deep Seismic Sounding on the Southern Slope of the Ukrainian Shield	110	196-205
E. I. PARKHOMENKO AND CHZHAO TSZE-SAN' (CHAO CHIEN-SAN), A Study of the Influence of Moisture on the Magnitude of the Seismo-electric Effect in Sedimentary Rocks by a Laboratory Method	115	206-212
V. N. STRAKHOV, The Problem of Obtaining the Best Numerical Method for the Transformation of Potential Fields. IV	119	213-227
G. YA. GOLIZDRA, The Derivation of Numerical Methods for the Analytic Continuation of Two-Dimensional Potential Fields Using LaGrange Interpolation	126	228-235
Scientific Reports		
L. M. AL'PIN, On a Solution of the Fundamental Problem of Resistivity Logging	131	236-238
L. L. KHUDZINSKI, The "ShPSS" Wide-Band Seismic Station	133	239-246
D. G. LEVCHENKO AND A. F. KOTYUK, Induction Pickups of Prescribed Dimensions for Measuring Weak Audio-Frequency Magnetic Fields: The Coil of the Induction Pickup II	139	247-253
K. B. KARANDEEV, D. S. DAEV, E. V. PAS'KO AND G. A. SHTAM-BERGER (STAMBERGER), Design Principles for Apparatus for Geophysical Prospecting by Alternating-Current Methods	144	254-259
ANONYMOUS, N. A. Linden	149	260
CHRONICLE		
I. P. KOSMINSKAYA, Questions of the Study of the Earth's Crust at the 13th Assembly of the IUGG	150	261-263
PHYSICS OF THE SEA AND OF THE ATMOSPHERE		
V. V. SHULEIKIN, The Transport of Heat by Currents in the Closed Cycle of the North Atlantic	153	264-278
K. S. SHIFRIN AND G. L. SHUBOVA, The Statistical Characteristics of the Vertical Transparency of the Atmosphere	161	279-284
S. A. MASHKOVICH, An Objective Analysis of Aerological Observations and the Requirements for the Distribution of a Network of Stations	165	285-292
B. N. TRUBNIKOV, An Investigation of Air Flow over Mountainous Regions with Thermally Inhomogeneous Surfaces	170	293-301
Scientific Reports		
R. L. KAGAN, On the Calculation of Instrument Inertia During Meteorological Measurements	175	302-308
O. I. MAMAEV, A Simplified Relationship between Density, Temperature and Salinity of Sea Water	180	309-311

Available From American Geophysical Union

BULLETIN OF THE ACADEMY OF SCIENCES, USSR DIVISION OF CHEMICAL SCIENCE

(IZVESTIYA AKADEMII NAUK SSSR
SERIYA KHIMICHESKAYA)

A translation of the Academy of Sciences of the USSR

© 1964 CONSULTANTS BUREAU ENTERPRISES, INC.
227 West 17th Street, New York 11, N. Y.

Number 7

July, 1963

CONTENTS

	P A G E	E N G . R U S S .
INORGANIC AND ANALYTICAL CHEMISTRY		
A Study of the $\text{CePO}_4\text{-H}_3\text{PO}_4\text{-H}_2\text{O}$ System at 25° - A. I. Ul'yanov and T. I. Kazakova	1063	1157
PHYSICAL CHEMISTRY		
Vapor Adsorption on Nonporous Adsorbent Models with Physically Modified Surfaces. Communication 2. Low Temperature Adsorption of Nitrogen on Carbon Black with Preadsorbed Benzene and Methyl Alcohol - A. I. Sarakhov, M. M. Dubinin, and Yu. F. Berezhkina	1069	1165
Reaction Rate and Molecular Weight of Product as a Function of Monomer Concentration in Propylene Polymerization on the $\text{VCl}_3\text{-Al (i-Bu)}_3$ System - L. A. Novokshonova, V. I. Tsvetkova, and N. M. Chirkov	1077	1176
Surface Catalytic Hydrogen Evolution in Polarography of Nonbuffer Pyridine Solutions - L. D. Klyukina and S. G. Mairanovskii	1083	1183
The Passivation of Indium in Aqueous Solutions - T. I. Popova and N. A. Simonova	1086	1187
Calculation of the Relationship Between the Stationary Concentrations of R and RO_2 Radicals and the Concentration of Oxygen in the Oxidation Reactions of Hydrocarbons - R. F. Vasil'ev	1090	1191
The Reactions of Nitrogen Atoms, Paper 1. Some Properties of Nitrogen Atoms and the Rate Constants for the Recombination of the Atoms in the Bulk and on Different Surfaces - L. I. Avramenko and V. M. Krasnen'kov	1095	1196
The Dehydrogenation and Hydrogenolysis of Cyclohexane on a Ruthenium-Silica Catalyst - F. B. Goncim, A. A. Balandin, and T. A. Slovokhotova	1101	1203
The Catalytic Dehydrogenation of Isomeric Isopentenes. Part 2. The Dehydrogenation of 2-Methylbutene-1 and of 3-Methylbutene-1 - A. P. Shcheglova, O. K. Dogdonova, and A. A. Balandin	1107	1210

Available From Consultants Bureau

(continued)

CONTENTS (continued)

	P A G E	ENG. RUSS.
The Catalytic Dehydrogenation of Isomeric Isopentenes, Part 3. The Catalytic Conversions of Isopentenes in Relation to Their Structure —O. K. Bogdanova, A. P. Shcheglova, and A. A. Balandin	1111	1215
The Infrared Spectra of Rare Earth Element Oxide Orthosilicates —A. N. Lazarev, T. F. Tenisheva, I. A. Bondar', and N. A. Toropov	1115	1220
ORGANIC AND BIOLOGICAL CHEMISTRY		
Lower Dialkylphosphinous Acids (Secondary Phosphine Oxides) and Some of Their Properties —M. I. Kabachnik and E. N. Tsvetkov	1120	1227
Organoboron Compounds, Communication 118. Ethanediboronic Acids and Some of Their Derivatives —B. M. Mikhailov and P. M. Aronovich	1125	1233
Synthesis of $\Delta^{(9),14}$-Bisdehydro-D-Homoestrone —V. E. Limanov, S. N. Ananchenko, and I. V. Torgov	1130	1239
Monosaccharides, Communication 5. Behavior of Some Monosaccharide Derivatives in Reaction with Triphenyl Phosphite Methiodide —N. K. Kochetkov and A. I. Usov	1134	1243
Stereochemistry of Cyclic Compounds, Communication 55. Structural Orientation in the Diene Condensation of 1-Vinylcyclohexene with trans-1-Nitropropene —G. M. Segal', L. P. Rybkina, and V. F. Kucherov	1142	1253
Unsaturated Acids and Macrocyclic Lactones, Communication 10. Synthesis of the Lactone of 3-Hydroxy-2,4,6-Trimethylheptanedioic Acid —L. D. Bergel'son and S. G. Batrakov	1147	1259
Synthesis of Polyesters and Polyester-Amides of Cyclotetrameric Structure —K. A. Andrianov and V. N. Emel'yanov	1154	1267
Synthesis and Properties of Vinyltropylium Perchlorate —G. A. Gladkovskii, S. S. Skorokhodov, S. G. Slyvina, and A. S. Khachaturov	1158	1273
Alkylation of Phenols with Bifunctional Compounds, Communication 8. Catalytic Alkylation of m- and p-Cresols with 1,3-Propanediols —E. A. Viktorova, N. I. Shuikin, and S. E. Popova	1162	1277
Alkylation of Phenols with Bifunctional Compounds, Communication 9. Alkylation of m- and p-Cresols with Conjugated Diene Hydrocarbons in Presence of Ethyl Hydrogen Sulfate —E. A. Viktorova, N. I. Shuikin, and E. A. Karakhanov	1165	1281
Dehydrocyclization of 2-Amylnaphthalenes in Presence of an Alumina-Chromium Oxide Catalyst and of Platinized Charcoal —N. I. Shuikin, Yang Ai-hsi, and L. A. Erivanskaya	1168	1284
New Method for the Synthesis of Macrocyclic Compounds, Communication 2. Acyloin Condensation of Dicarboxylic Esters of the Thiophene Series —S. Z. Taits and Ya. L. Gol'dfarb	1173	1289
New Method for the Synthesis of Macrocyclic Compounds, Communication 3. Intramolecular Alkylation of 2-(Ethoxycarbonylacetyl)-5-(ω-Iodoalkyl) Thiophenes —Ya. L. Gol'dfarb, S. Z. Taits, and V. N. Bulgakova	1181	1299
Liquid-Phase Hydrogenation of Dienic Hydrocarbons over a Platinum Catalyst —L. Kh. Freidlin and E. F. Litvin	1188	1307
Reaction of Aliphatic and Aromatic Nitriles with t-Butyl Peroxide —V. A. Vasnev, S. L. Sosin, and V. V. Korshak	1192	1312
Decomposition of t-Butyl Peroxide, and Reactions of the Resulting Radicals in the Synthesis of Polydiphenylmethane —D. G. Val'kovskii, S. L. Sosin, and V. V. Korshak	1198	1319

Available From Consultants Bureau

(Continued)

CONTENTS (continued)

P A G E
ENG. | RUSS.

BRIEF COMMUNICATIONS

Synthesis of γ -Mercuridinitrohydrocarbons - V. A. Tartakovskii, I. A. Savost'yanova, B. G. Gribov, and S. S. Novikov	1204	1328
Addition of the Mercury Salt of 1,1,3,3-Tetranitrobutane to Ethylene - V. A. Tartakovskii, I. A. Savost'yanova, and S. S. Novikov	1206	1330
Influence of Oxygen-Containing Additives on the Mechanism of the Reaction of Benzylmercury Chloride with Bromine in Carbon Tetrachloride - I. P. Beletskaya, T. A. Azizyan, and O. A. Reutov	1208	1332
Tetramethyldi-n-Propyldisilylamine and n-Propyldimethylsilanol - A. K. Gorban'	1209	1333
Preparation of Cyclopentadienylmetals via Cyclopentadienylthallium - A. N. Nesmeyanov, R. B. Materikova, and N. S. Kochetkova	1211	1334
Some Anomalies in the Vibrational Spectra of α , β -Unsaturated Ketones - E. V. Sobolev and V. T. Aleksanyan	1213	1336
Study of the Mechanism of the Para and Ortho Rearrangements of Substituted Azoxy Compounds - M. M. Shernyakin, Ts. E. Agadzhanian, V. I. Maimind, and R. V. Kudryavtsev	1216	1339
Benzaldehyde Di(Ethoxyethyl) Acetal and Its Reaction with Vinyl-Ethyl Ether - L. S. Povarov and B. M. Mikhailov	1219	1342
Synthesis of Polyesters and Polyethers with Acetylenic Bonds in the Chain - A. M. Sladkov, V. V. Korshak, and A. G. Makhsumov	1220	1343
Chain Transfer Constants in Telomerization of Ethylene with Carbon Tetrachloride - Sh. A. Karapetyan, B. A. Englin, and R. Kh. Freidlina	1223	1346
Derivatives of Manganese Pentacarbonyl - A. N. Nesmeyanov, K. N. Anisimov, and N. E. Kolobova	1225	1348
LETTERS TO THE EDITOR		
Polymeric Semiquinonic Polyradicals with High Stability - A. A. Berlin, B. I. Liogon'kii, A. V. Ragimov, and V. A. Vonsyatskii	1228	1351
Reaction of γ -Ethoxyacetals with Aromatic Amines - L. S. Povarov and B. M. Mikhailov	1229	1352
Coupled Electrochemical Splitting-off of Halogens - L. G. Feoktistov, A. P. Tomilov, and M. M. Gol'din	1230	1352

Available From Consultants Bureau

Izvestiya VUZov: RADIOPHYSICS

- USSR -

No 1, 1964

Following is a translation of the Russian-language journal Izvestiya Vysshikh Uchebnykh Zavedeniy: Radiofizika (News of Higher Educational Institutions: Radiophysics), Vol VII, No 1, January-February 1964, pp 1-166

(Note: Illustrations and author's English summary are given at the end of each article. Original source page numbers are given in the left-hand margin of translation.)

TABLE OF CONTENTS

	<u>Page</u>
Karlov, I. V. and Manenkov, A.A. Quantum Paramagnetic Amplifiers	<u>1</u>
Kislyakov, A.G. and Plechkov, V.M. Precision Measurement of the Radio Emission from the Moon and the Sun in the 4mm Wavelength Band	64
Salomonovich, I. Ye. Concerning the Detection of Water in the Atmosphere of Venus	73
Biragov, S.B. Complex Dielectric Constant of a Magnetoactive Plasma at Low Frequencies	86
Zheleznyakov, V.V. Gyroresonant Radiation and Absorption in an Equilibrium Magnetoactive Plasma	98
Krasovitskiy, V.D. and Stepanov, K.N. Passage of Ion Beams Through a Plasma	122
Available From JPRS 25168	(Continued)

CONTENTS (contd)

	<u>Page</u>
Daneliya, I.A. and Tsintsadze, N.L. On the Theory of Interaction of Waves in a Plasma	138
Bass, F.G. and Fuks, I.M. Allowance for Shadows in the Scattering of Waves by a Statistically Uneven Surface	147
Lugovoy, V.N. Fluctuations in Periodically Nonstationary Systems	165
Kondrat'yev, I.G. and Miller, M.A. Two Dimensional Electromagnetic Fields Guided by Plasma Layers. I	181
Dudnik, R.A. Contribution to the Theory of Type M Tube With Transverse Interaction	198
Nechayev, V. Ye. Contribution to the Analysis of Processes in a Multicavity Magnetron	215
Peskov, R.A. Approximate Determination of Periodic Motions in a System of Automatic Phase Control of Frequency	236
Zakrevskiy, A.D. Reduction in the Number of Trials When Solving Some Problems of the Synthesis of Discrete Automata	244

BRIEF COMMUNICATIONS AND LETTERS TO THE EDITOR

Kuzovlev, V.V. and Stankevich, K.S. Effective Height of Absorption of Radio Waves of the Centimeter Band in Atmospheric Oxygen and Water Vapor	257
Kondrat'yev, I.G. and Miller, M.A. Field Structure Inside a Plasma Layer with Zero Permittivity	260
Levin, M. L. Radiation of Longitudinal Waves in Media with Weak Spatial Dispersions	266
Kontorovich, V.M. and Chernyak, G. Ye. Line Strength in Magnetic-Dipole Transition in the Hyperfine Structure of the Atom	269
Zolin, V.F. Concerning Protective Coatings for Cells with Alkali Element Vapors	274
Letter to the Editor	275

INFORMATION

Geomagnetism and Aeronomy, v. 3. No. 5, 1963	277
--	-----

Available From JPRS 25168

Izvestiya VUZov: RADIO ENGINEERING

- USSR -

No 1, 1964

Following is a translation of the Russian-language journal Izvestiya Vysshikh Uchebnykh Zavedeniy: Radiotekhnika (News of Higher Educational Institutions: Radio Engineering), Vol VII, No 1, January-February, 1964, Kiev, pp 1-128.

(Note: Illustrations are given at the end of each article. Original source page numbers are given in the left-hand margin of translation.)

TABLE OF CONTENTS

	<u>Page</u>
Petrenko, A.I. Electron-Beam Converters for Functions of Two Variables	1
Lebedev, V.I. Transistorized Current Stabilizers	16
Barvinskiy, L.L. Justification for Subdividing Complicated Radio Apparatus into Blocks with Controllable Operating Ability	30
Trikov, Yu. S. Memory Unit with Time Compression of the Signal	39
Markov, G.T. and Panchenko, B.A. Tensor Green's Function of Rectangular Waveguides and Cavities	50
Glebovich, G.V. Transients in Distributed Systems During the Transmission and Shaping of Nanosecond Pulses	62
Trokhimenko, Ya. K. and Isakov, V.L. Operation of Traveling Wave Tubes in the Second Pass Band of a Diaphragmed Waveguide	77
Available From JPRS 25138	(Continued)

CONTENTS (Contd)

	<u>Page</u>
Rapoport, G.N. and Chayka, V.Ye Behavior of Traveling Wave Tube Near the Pass Band Boundary	90
D'yachenko, B.M. and Gladyshev, A.N. Parametric Amplifier with Low Frequency Pumping Using Semiconductor Diodes	98
Stetsenko, O.A. Nonstationary Process in Waveguide Resonators with Moving Wall	110
Vollerner, N.F., Kriksunov, V.G. and Tereshchuk, R.M. Concerning Certain Errors of Spectrum Analyzers with Preliminary Magnetic Recording	124
Fedorov, N.N. Incidence of Plane Waves on the Interface Between Vacuum and an Inhomogeneous Absorbing Medium	131
Gerustovskiy, P.A. Probability Density at the Output of a Multiplier in Correlation Reception	139

BRIEF COMMUNICATIONS

Skabovskiy, N.S. Sensitivity of Circuit for the Direct Detection of Amplitude Fluctuations of Microwave Generators	149
Kanter, B.Z. Variable Waveguide Attenuator for High Power Level	152
Malanov, V.V. Theory of Frequency Spectra and Demodulation of Pulses with Push-Pull Duration Modulation of the First Kind	155
Pevzner, F.A. Automatic Phase Control System with Dividing Capacitor in the Feedback Loop	162
Talanina, N.V. Settling of the Oscillation Phase at the Output of a Tuned Amplifier Following Switching of Input Signals	168
Kuznetsov, F.K. Concerning the Determination of Some Transistor Parameters	177
Kopilovich, L. Ye. Passage of a Random Process Through an Inertialess Logarithmic Device	183
Kulikov, Ye. I. Accuracy of Measurement of Radio Signal Parameters by Observing the Instant when the Output Signal of an Optimal Receiver Passes Through a Specified Level	191
Boldyrev, N.M. Amplitude Limiter Using a Tank Circuit With Controlled Attenuation	199

Available From JPRS 25138

(Continued)

IZVESTIYA VYSSHIKH UCHEBNYKH
ZAVEDENIY, RADIOTEKHNIKA
Vol VII, No 1, 1964

CONTENTS (Contd)

Page

COMMENTS AND BIBLIOGRAPHY

Pedotov, Ya. A. "Principles of Physics of Semiconductor Devices"	207
(Published by Soviet Radio, 1963)	

CHRONICLE

Republic Exhibition of Teaching Machines	210
Available From JPRS 25138	

COLLOID JOURNAL

of the USSR

A translation of KOLLOIDNYI ZHURNAL

a publication of the Academy of Sciences of the USSR

© 1964

CONSULTANTS BUREAU ENTERPRISES, INC.
227 West 17th Street, New York 11, N. Y.

Volume 25, Number 5

September-October, 1963

CONTENTS

	PAGE	RUSS. PAGE
Thermal Aging of Polyester Coatings—Z. P. Grozinskaya, A. T. Sanzharovskii, and P. I. Zubov	421	505
Cinematographic Studies of Expansion of Water Containing Volcanic Glass (Perlite) —M. P. Volarovich, A. I. Polinkovskaya, and I. N. Yavits	426	512
Dielectric Properties of Unfilled Vulcanizates of Various Structures—B. A. Dogadkin, V. E. Gul', B. N. Anfimov, and G. A. Lushcheikin	430	515
Electric Diffusion Theory of the Dorn Effect 2. Effect of Surface Diffusion and Electric Conductivity on the Electric Field at $Pe \ll 1$ —S. S. Dukhin	434	520
Electric Diffusion Theory of the Dorn Effect 3. Method of Calculating the Long-Range Electric Field at Large Peclet Numbers —S. S. Dukhin	438	524
Effect of Heating Time on the Deformation Characteristics of Polymer Films —P. I. Zubov, Z. P. Grozinskaya, and A. T. Sanzharovskii	445	533
The Adsorption of Benzene and n-Hexane from the Mixed Vapors by Silica Gel —A. V. Kiselev and L. F. Pavlova	448	537
Isotherms and Differential Heats of Adsorption of n-Hexane, Benzene, and Carbon Tetrachloride Vapors on Polytetrafluoroethylene (Teflon)—A. V. Kiselev and M. V. Serdobov	453	543
Effect of Inorganic Salts on the Potential of the Anthracite Electrode and the Stability of Anthracite and Coal Suspensions in Connection with "Salt Flotation" —V. I. Klassen and Ya. T. Lyaskovskii	457	549
Effect of Surface Active Agents on the Strength of Disperse Structures in Concentrated Nonaqueous Suspensions—V. V. Konstantinova, G. V. Belugina, S. G. Zakieva, and P. A. Rebinder	462	555
Effect of Gypsum on the Hydration Process and Hydration Hardening of Calcium Oxide —S. I. Kontorovich, E. E. Segalova, and P. A. Rebinder	467	561

Available From Consultants Bureau

(Continued)

CONTENTS (continued)

	PAGE	RUSS PAGE
Adsorption of Dyes by Synthetic Zeolites—S. A. Levina, L. N. Malashevich, and N. F. Ermolenko	472	567
The Effect of Alkali Tannides on Aqueous Clay Suspensions—A. K. Miskarli and V. Ya. Zemlyanskaya	476	572
Some Data on the Adsorptive Properties of Starch—V. I. Nazarov and T. I. Sukhorukova	481	578
Colloid Chemical Properties and Detergent Action of Solutions of Sulfonol NP and its Analogues—S. A. Nikitina and V. A. Spiridonova	484	581
Sorption and Desorption of Water Vapor by Wheat Gliadin—V. V. Ponomarev and T. I. Karetina	489	587
The Extraction of Manganese Dioxide from its Hydrosols with the Aid of Gelatin Foams—V. V. Pushkarev and E. A. Budenkov	491	589
The Effect of Temperature on the Rate of Emulsion Extraction of Colloids —L. D. Skrylev and S. G. Mokrushin	494	593
Foaming in Non-Aqueous Media. 1. The Selection of Foaming Agents for Plasticizers —O. G. Tarakanov and E. G. Eremina	496	596
Structural, Mechanical and other Properties of Cement Paste during Transition from the Viscoplastic to the Resilient-Brittle State—V. B. Chernogorenko and I. G. Grankovskii . .	500	600
The Kinetics of the Thinning and Rupture of Thin Liquid Films—A. Sheludko, D. Ekserova, and D. Platikanov	505	606
Structural and Mechanical Properties of the Adsorption Layers of some Surface Active Compounds at the Interfacial Boundary of their Aqueous Solutions with Air and Styrene—L. A. Shits and A. A. Trapeznikov	510	613
Periodic Deposition of Corrosion Products in the Breakdown of Concrete—M. M. Erkenov, . . .	517	621
LETTERS TO THE EDITORS		
The Polymorphism of Films of Benzene on Mercury—Z. M. Zorin	519	624
The Behavior in Stretch of Vulcanizates of Natural Rubber with p-Tert-Butyldimethylol- phenol—V. A. Shershnev, L. V. Ginzburg, and B. A. Dogadkin	521	626
Discussion of the Paper by A. I. Rusanov: On Two Adsorptions Theorems, Kolloidn ZH. 24, 309 (1962)—L. de Witt	523	628

Available From Consultants Bureau

REFRACTORIES

A translation of OGNEUPORY

Published by
the Board of Governors of Acta Metallurgica.
Distributed by Consultants Bureau

CONSULTANTS BUREAU ENTERPRISES, INC.
227 West 17th Street, New York 11, N. Y.

Numbers 11-12

November-December, 1963

CONTENTS

	P	A	G	E
	ENG.		RUSS.	
<u>NUMBER 11, 1963</u>				
Meeting the Plenum of the Central Committee of the CPSU.	523		481	
Yamsk Dolomite Combine Is 50 Years Old. <u>L. N. Reznikov</u>	526		485	
PRODUCTION				
Highly Refractory Cements VT'sZ. <u>V. A. Butenko, I. E. Dudavskii, M. I. Kolesnik,</u> <u>and I. N. Sokolov</u>	528		486	
Forsterite Refractories from Shorzhinsk Dunites. <u>T. A. Aleksandrova, O. V. Novikov,</u> <u>G. A. Piloyan, Kh. D. Gevorkyan, and I. V. Babyshev</u>	534		493	
MECHANIZATION AND AUTOMATION OF PRODUCTION				
Photoelectronic Automatic Scales. <u>G. I. Sapunov, V. V. Semik, and L. F. Royak</u>	536		495	
RAW MATERIALS				
Dolomites from Kara-Baursk Sources. <u>G. Z. Dolgina and E. P. Markevich</u>	539		498	
REFRACTORIES IN SERVICE				
Service of Forsterite Lightweight in the Linings of Kiln Cars. <u>V. D. Tsigler, S. B. Vinokur,</u> <u>and N. S. Mitrokhina</u>	545		504	
Laboratory Investigations and Testing of Refractories in an Electric Furnace. <u>K. V. Koval'skaya, N. S. Manuilova, and L. I. Murzova</u>	540		508	
RESEARCH WORK				
Influence of Porosity and Structure of Corundum Refractories on Their Thermal Conductivity. <u>I. G. Duderov and D. N. Poluboyarinov</u>	558		518	
Determining the Fusing Points of Fettling and Ramming Mixes for the Hearth of the Basic Open-Hearth Furnace. <u>A. L. Klein and V. G. Tsikarev</u>	565		525	
BIBLIOGRAPHY				
On the Book "Silicon Carbide Refractories" by I. S. Kainarskii and E. V. Degtyareva. Reviewed by <u>P. S. Mamykin</u>	568		528	

Available From Consultants Bureau

(Continued)

CONTENTS (continued)

NUMBER 12, 1963	PAGE	RUSS. PAGE
How to Use All Production Reserves.	572	529
Refractory Producers and Chemistry. <u>Z. B. Pasternak and V. N. Pirogova.</u>	576	535
In the State Committee for Ferrous and Nonferrous Metallurgy, Gosplan SSSR. <u>V. I. Brysov</u>	577	536
PRODUCTION		
Stoppers and Nozzles from Urals Raw Materials. <u>I. Sh. Shvartsman, Z. I. Mikhaleva, V. S. Turchaninov, Kh. M. Papakin, I. D. Kovalenko, D. I. Yuzvuk, and V. V. Saparov.</u>	579	538
Project Decisions on the Manufacture of Lightweight Fireclay Goods with Combustible Additions. <u>V. I. Simkin</u>	584	543
Production of Stopper Tubes by Semidry Pressing. <u>N. A. Sidorenko.</u>	586	546
MECHANIZATION AND AUTOMATION OF PRODUCTION		
Automating Grinding in Ball Mills. <u>Z. V. Uteush, P. I. Korik, D. S. Emel'yanov, and E. V. Uteush.</u>	588	547
REFRACTORIES IN SERVICE		
Stabilized Magnesite-Dolomite Brick in the Lining of Converters. <u>G. Z. Dolgina and E. P. Markevich.</u>	593	553
RESEARCH WORK		
Foamed Carborundum and Its Properties. <u>I. Ya. Guzman and V. S. Morozova.</u>	597	558
Kinetics of the Reaction of Oxides of Magnesium, Silicon and Aluminum with Melts in the Ternary System $\text{CaO-SiO}_2\text{-Al}_2\text{O}_3$. <u>P. M. Shurygin and B. N. Boronkov</u>	599	561
The Nature of the Destruction of Grains of Chrome-Spinel in the Slag Belt of Electric Arc Furnaces. <u>M. N. Kaibicheva</u>	604	565
EXCHANGE OF EXPERIENCE		
Use of Gas-Generator Tar. <u>T. I. Vas'kovskii and E. I. Burnina.</u>	608	569
Rapid Compleximetric Method for the Separate Determination of Fe_2O_3 and Al_2O_3 in Refractory Materials. <u>R. S. Mil'shenko and G. E. Karas'.</u>	608	570

Available From Consultants Bureau

CONTENTS

Coherent Excitation of States by Electron Impact	E. G. Aleksandrov	209 (377)
Semiempirical Calculation of Oscillator Strengths for Lithium, Rubidium, and Cesium Atoms	E. M. Anderson and V. A. Zilitis	211 (382)
Oscillator Strengths of Si I and Ge I Lines	I-Yu. Yu. Slavenas	214 (380)
The Effect of the Emission of Radiation on Deviation from Thermodynamic Equilibrium	L. M. Biberman and K. N. Ulyanov	216 (394)
The Production of Electronic Band Spectra by the Exploding Wire Method	V. A. Loginov	220 (402)
Absorption Spectrum of Oxygen at Pressures from 2 to 35 Atm in the Region from 12,600 to 3600 Å	V. I. Dianov-Klokov	224 (409)
Experimental Investigation of the Connection between the Raman Spectra and the Electronic Absorption Spectra of Certain Compounds. II. Frequency Dependence of Scattering Intensity within an Absorption Band	M. Ya. Tsenter and Ya. S. Bobovich	228 (417)
Quantitative Measurements on the Raman Spectra of Powdered Substances	Ya. S. Bobovich and Ya. A. Eidus	232 (424)
Infrared Absorption Band Shapes and the Rotational Motion of Molecules in Liquids. Methyl Halides and Deuteromethyl Halides	M. O. Bulanin and M. V. Tonkov	234 (429)
An Investigation of Intermolecular Interaction in Solutions Using Raman Line Contours	N. I. Rezaev and K. Shechepanyak	238 (436)
Long-Wavelength Infrared Absorption Spectra of Carboxylic Acids	A. E. Stanevich	243 (446)
Zeeman Effect of the Principal Emission Line in a $\text{CaF}_2\text{-Tm}^{3+}$ Crystal	B. P. Zakharchenya, V. P. Makarov, A. V. Varfolomeyev, and A. Ya. Ryskin	248 (455)
An Analysis of the Shape of Electron Paramagnetic Resonance Signals from Samples Containing Randomly Oriented Paramagnetic Centers	V. S. Korolkov and A. K. Potapovich	251 (461)
Electric and Magnetic Properties of Donor-Acceptor Crystals. I. Complexes of Strong Donors and Acceptors	V. A. Benderskii, I. B. Shevchenko, and L. A. Blyumenfeld	254 (467)
Kinetics of the Photochemical Conversion of F Centers into M Centers in KCl Crystals	N. P. Kalabakhov and P. K. Gorbenko	258 (475)
Temperature Dependence of the Reflection Spectra of Zinc Sulfide Single Crystals of Various Structural Forms	K. V. Shalimova and N. K. Morozova	261 (480)
Optical Properties of Liquid Mercury and Gallium in the Visible and Near Infrared Regions of the Spectrum	L. G. Lelyuk, I. N. Shklyarevskii, and R. G. Yarovaya	263 (484)
The Role of Holes in the Electroluminescence Kinetics of ZnS-Cu, Al, Cl Phosphors	E. E. Bukke, L. A. Vinokurov, and M. V. Fok	266 (491)
Investigation of the Luminous Efficiency of Electroluminescent Capacitors	F. M. Pekerman and L. N. Petoshina	269 (496)
On the Resolving Power of Spectroscopic Instruments. I. Statement of the Problem and the Criterion of Resolution	V. P. Kozlov	271 (501)
Signal-to-Noise Ratio in Spectra Obtained by the Method of Fourier Spectroscopy	P. F. Parshin	275 (507)
On the Self-Excitation of a Plane-Parallel Layer with Total Reflection	N. S. Petrov, A. M. Goncharenko, and B. A. Sotskii	277 (513)
Multilayer Dielectric Antireflection Coatings	E. A. Lupashko and I. N. Shklyarevskii	279 (517)
Radiation of a PRK-4 Lamp in the Far-Infrared Region	O. K. Filippov and V. N. Pivovarov	282 (522)

Available From Optical Society of America

(Continued)

CONTENTS (Contd)

DISCUSSIONS

On the Paper "On the Occurrence of Brewster and Superposition Fringes" by N. A. Vlasenko, V. K. Miloslavskii, and I. N. Shklyarevskii	V. P. Koronkevich and G. A. Lenkova	284 (526)
More on the Occurrence of Brewster and Superposition Fringes	V. K. Miloslavskii and I. N. Shklyarevskii	285 (528)

SHORT COMMUNICATIONS

Effect of Light Scattered by an SF-4 Spectrometer on Optical Density Measurements in the Short Wavelength Ultraviolet Region	I. N. Ermolenko and M. Z. Gavrilov	286 (530)
Calculation of the Kinetics of the Rise and Fall of Orientation Dichroism in Viscous Solutions	O. V. Stolbova	288 (532)
Theory of Luminescence Modulation Arising from Interference of Coherently Excited Non-Degenerate States	E. B. Aleksandrov and V. P. Kozlov	289 (533)
Study of the Luminescence Spectra and Generation of Various CaF_2 Crystals with U^{3+} Impurity Ions	P. A. Bazhulin, V. I. Malyshev, A. S. Markin, A. V. Rakov, and Kh. S. Bagdasarov	291 (536)
Luminescence of Trivalent Samarium in NaCl and KCl Crystals	B. S. Skorobogatov, S. A. Sazonova, A. V. Doigopolova, and L. V. Kovaleva	292 (538)
Low-Frequency Absorption Spectra of Some Ferroelectrics	T. P. Myasnikova and I. M. Arefev	293 (540)
On the Electronic Absorption Spectrum of the NF_2 Radical	L. A. Kuznetsova, Yu. Ya. Kuzyakov, and V. M. Tatevskii	295 (542)
Distribution of the Spin Density of the Unpaired Electron in the Macroradical Formed in γ -Irradiated Polystyrene	E. V. Suntsov and M. P. Votnov	296 (543)
Peculiarities of the Emission Spectra of Organic Molecules under High-Power Excitation	Yu. V. Naboikin, L. A. Ogurtsova, and K. T. Pechin	298 (545)
Triplet-Triplet Energy Transfer between Similar Molecules in Solid Solutions at 90°K	V. L. Ermolaev	299 (548)

Available From **Optical Society of America**

Instruments and Experimental Techniques

*A translation of Priory i Tekhnika Eksperimenta, a publication of the
Academy of Sciences of the USSR*

(Russian Original Dated November-December, 1963)

1963, No. 6, pp. 1001-1242

June, 1964

CONTENTS

	PAGE	RUSS. PAGE
Corona Counters for Slow Neutrons (Reviews). <u>Yu. M. Tolchenov and V. G. Chaikovskii</u> . . .	1001	5
A Comparison of Certain Spectral Characteristics of Low-Pressure Mercury Lamps. <u>V. L. Tyulin and V. M. Tatevskii</u>	1008	12
Use of a Fine $(CH_3)_n$ Film as an Internal Target in the Synchrophasotron for the Investigation of Elastic $p-p$ Scattering. <u>V. A. Nikitin, A. A. Nomofilov, V. A. Sviridov,</u> <u>L. N. Strunov, and M. G. Shafranov</u>	1014	18
A Scintillation γ -Ray Spectrometer with Fast Neutron Discrimination. <u>V. N. Bochkarev</u> <u>and V. V. Nefedov</u>	1018	23
A Cerenkov Spectrometer for Measuring the Energy of γ -Quanta. <u>M. N. Khachatryan</u> <u>and V. S. Pantuev</u>	1025	29
Calibration of Multi-Angular Magnetic Analyzers--Multispectrographs. <u>V. F. Litvin</u> <u>and K. L. Zherebtova</u>	1029	33
Wide-Focus Magnetic Beta-Spectrograph. <u>V. Z. Gol'dberg and V. P. Rudakov</u>	1033	36
Neutron-Tube Ion Source with Controllable Ion Current. <u>E. P. Gel'</u>	1035	38
Recovery Time of Wilson Cloud Chambers. <u>Yu. S. Ivanov and V. M. Fedorov</u>	1039	42
150-Liter Wilson Cloud Chamber. <u>V. M. Fedorov</u>	1042	44
Investigation of Ion Drift in a Wilson Cloud Chamber by Means of Spark Discharge Chambers. <u>Yu. A. Eremenko, Yu. T. Lukin, A. M. Machekhin and M. I. Pak</u>	1044	46
Semiautomatic Machine for Processing of Stereophotos from Bubble Chambers. <u>L. M. Barkov, K. N. Mukhin, V. A. Suetin, and R. S. Shlyapnikov</u>	1046	48
Investigation of the Characteristics of Argon-Filled Spark Chambers. <u>M. I. Pak,</u> <u>Yu. A. Eremenko, Yu. T. Lukin, and A. Kh. Tsol</u>	1051	52
Measurement of the Mass Distribution of Heavy Fragments by Means of a Pulse Amplitude Ratio Analyzer. <u>T. A. Mostovaya, V. I. Mostovoi, A. A. Ososnikov,</u> <u>and A. P. Tsitovich</u>	1054	55
Determination of the Scattering Constant K_s in Nikfi-R Emulsions by Measuring the Angular Dispersion of 0-BeV Proton Beams. <u>D. Bozoki and E. Gombosi</u>	1060	61
Multitrack Magnetic-Tape Recording for Pulse-Height and Time Analysis. <u>G. P. Zhukov, G. L. Zabyakin, and V. D. Shibaev</u>	1066	66
Distinctive Features of Pulsed Operation of Multichannel Recording Equipment with Buffer Storage. <u>G. L. Zabyakin and G. A. Ososkov</u>	1074	73
An Electromechanical Harmonic Analyzer. <u>A. T. Vasilenko and Yu. N. Denisov</u>	1079	78
An Electronic Master Timer. <u>E. L. Artamonov and S. N. Diligenski</u>	1084	82
Narrow-Band Recording Equipment for the 5 to 5000 cps Frequency Band. <u>V. L. Dianov-Klokov, L. A. Palitsyna, and A. D. Stakhovskii</u>	1091	88
A Generator of Steep 150 kV-Amplitude Pulses. <u>G. A. Vorob'ev, G. A. Mesyats,</u> <u>N. S. Rudenko, and V. A. Smimov</u>	1095	93

Available From Instrument Society of America

(Continued)

CONTENTS (continued)

	PAGE	RUSS. PAGE
Voltage-Multiplication of Steep Pulses. <u>G. A. Mesyats</u>	1097	95
A Transient-Response Meter for the Study of Fast Physical Processes. <u>O. S. Kolotov and V. A. Pogozhev</u>	1101	98
An Amplitude-Time Convertor with Logarithmic Scale. <u>E. O. Agasyan</u>	1105	103
A UHF Sampling Oscilloscope. <u>E. B. Volodin and V. N. Nikiforov</u>	1108	106
A Low Input Impedance Current Integrator. <u>Yu. A. Blyumkina and N. N. Semenova</u>	1114	112
Precision Voltage and Current Regulators Using Transistors. <u>G. N. Muskhelishvili</u> <u>and V. R. Mikirtumov</u>	1117	116
An 8 mm Waveband Spectrometer for Investigating the Spectra and Spin-Lattice Relaxation of Paramagnetic Materials. <u>N. A. Amenitskii, L. S. Komlenko, and A. L. Smirnov</u>	1120	119
Dismountable Model of a Camera Tube. <u>Yu. V. Chentsov</u>	1123	122
A Pulse Operated X-Ray Tube Working on an Applied Voltage of 17-20 kV. <u>L. A. Lukatskaya and V. Ya. Tarasova</u>	1128	124
Application of Omegatrons to Analysis of Residual Gases at Low Pressures. <u>Z. M. Turovtseva and L. D. Shevalevskii</u>	1130	128
Investigation of the Composition of Residual Gases Over Titanium-Plated Walls. <u>G. V. Mikhailova and Yu. A. Kulakov</u>	1136	134
Vacuum Gate Valves. <u>N. I. Sokolov, N. N. Khaldin, D. V. Zevyakin, and V. A. Kircev</u>	1140	137
A High-Vacuum Unit for Oil-Free Operation with a Magnetic Discharge Pump. <u>E. M. Rudnitskii and G. S. Selyakh</u>	1144	141
A Compact Titanium Vacuum Pump. <u>V. P. Ponomarev</u>	1147	143
Photoelectric Method of Scanning the Doppler Shift of Spectral Lines. <u>E. M. Drobyshevskii</u>	1149	145
Improvement of the Electric and Light Parameters of High-Voltage Hydrogen Lamps. <u>F. I. Vilesov, M. E. Akopyan, and V. L. Kleimenov</u>	1154	150
A Photo-Electric Method for Measuring the Degree of Polarization of Luminescence. <u>V. N. Vishnevskii and A. N. Shitstyi</u>	1158	154
Mirror-Type Vessel for Investigating the Raman Spectra of Gaseous Substances. <u>V. L. Tyulin and V. M. Tatevskii</u>	1160	158
A Simple Method for Measuring Tunnel Diode Parameters. <u>Yu. L. Vorontsov and</u> <u>L. V. Polyakov</u>	1163	159
A Device for Measuring the Hall EMP with Direct Determination of Charge-Carrier Sign. <u>V. I. Kandalov and Yu. E. Pol'skii</u>	1166	162
Growing Metallic Monocrystals in Optically Polished Molds. <u>Yu. V. Sharvin and</u> <u>V. F. Gantmakher</u>	1169	165
Dependence of the Proton Range on Energy in Nikfi-Ya2 Emulsions. <u>L. Hauser</u>	1172	168
Preparation of Thin Titanium-Deuterium and Titanium-Tritium Targets. <u>A. M. Morozov and A. I. Shal'nikov</u>	1174	169
A Transformer-Switch Device for Recording Pulses from Geiger Counters. <u>V. S. Golub, P. T. Levkovskii, and P. D. Pavlenko</u>	1176	171
A Wide-Band Transistor Pulse Generator. <u>E. A. Iukin and R. I. Shitikov</u>	1178	173
Sensitive Threshold Device. <u>V. A. Fedorov, G. G. Doroshenko, and L. V. Filyushkin</u>	1180	175
A Phase Detector Based on NMR for Stabilizing the Field of an Electromagnet. <u>V. M. Denyak and L. L. Siderenko</u>	1181	176
A Low-Noise Preamplifier for Spectrometers Using Semiconductor Particle Detectors. <u>L. D. Soshin and P. N. Tolkach</u>	1183	177
Production of High Temperatures in an EPR Cavity. <u>A. M. Chaikin</u>	1185	178
Reconstruction of an Isotope Mass Spectrometer for Chemical Investigations. <u>Yu. Ya. Efremov, T. A. Bikbulatov, and B. Ya. Teitelbaum</u>	1187	180

Available From Instrument Society of America

(Continued)

CONTENTS (continued)

	PAGE	RUSS. PAGE
Measurement of Vacuum by Means of Radioactive Specimens. <u>V. S. Kirsanov</u>	1189	182
Polarization Selectivity of Cesium-Oxide Photocathodes. <u>V. P. Zrelov</u>	1191	183
Measurement of the Photoluminescence Attenuation Time by Means of an Electronic Shutter. <u>V. L. Gribkov</u>	1192	184
A Low-Temperature Cavity for EPR Investigator at 3.2 cm Wavelength. <u>A. L. bel'dyukovich</u>	1194	186
A Miniature Refrigerating Machine. <u>A. G. Nadol'nikov, V. G. Fastovskii,</u> <u>and Yu. V. Petrovskii</u>	1197	188
Window for Optical Investigations Under High Pressures. <u>G. P. Shakhovskii and</u> <u>N. A. Tikhomirova</u>	1200	191
Gas Pendulum. <u>P. F. Shakurov</u>	1201	192
Type IShT-1 Set for Measuring the Noise Figure of Transistors at Audio Frequencies	1203	194
Type G5-16 Nanosecond Pulse Generator	1204	195
Type OKV-4 Diode Compensating Voltmeter	1205	195
Type VEU-OT-8M Secondary Electron Multiplier	1206	196
Author Index, 1963	1209	
Tables of Contents, 1963	1223	

Available From Instrument Society of America

APPLIED MATHEMATICS AND MECHANICS PRIKLADNAIA MATEMATIKA I MEKHANIKA

VOLUME 25

1961

NUMBER 1

CONTENTS

V. I. KIRGETOV: On the theory of an absolutely elastic impact on material systems.....	1
V. V. RUMIANTSEV: On the stability of motion of gyrostats.....	9
S. K. PERSIDSKII: On the second method of Liapunov.....	20
M. G. KREIN and G. Ia. LIUBARSKII: On the theory of transmission bands of periodic waveguides.....	29
V. M. BABICH: Fundamental solutions of the dynamical equations of elasticity for nonhomogeneous media.....	49
G. I. BARENBLATT and G. P. CHIREPANOV: On the equilibrium and propagation of cracks in an anisotropic medium.....	61
S. G. LEKHNITSII: On the torsion of an anisotropic rod by forces distributed over its lateral surface.....	75
V. VILARION and C. STANESCU: An investigation of the quasi-invariants of the static-geometric analogy for thin elastic shells.....	93
G. Ia. POPOV: On a method of solution of the axisymmetric contact problem of the theory of elasticity.....	105
S. S. GRIGORIAN and F. L. CHERNOUS'KO: One-dimensional quasi-statical motions of soil.....	119
G. G. CHERNYI: Integral methods for the calculation of gas flows with strong shock waves.....	138
V. V. GOGOSOV: Resolution of an arbitrary discontinuity in magnetohydrodynamics.....	148
A. G. KULIKOVSKII and G. A. LIUNIMOV: On the structure of an inclined magnetohydrodynamic shock wave.....	171
M. N. KOVAN: On magnetohydrodynamic flows of mixed type.....	180
V. N. ARKHUTOV: Plane-parallel flow of a compressible fluid in the wake behind a body.....	189
S. A. BOSTANDZHIAN: Homogeneous helical motion in a cone.....	193
N. V. KURDIUMOVA: On the solution of plane irrotational hydrodynamic problems for doubly-connected regions.....	202
N. N. KOCHINA: Thermodynamic functions for some particular forms of the expression for internal energy of an ideal, compressible medium.....	207
CHEN CHZEN-CHEN: The effect of dynamic fluid pressure on a dam during earthquakes.....	211
V. V. BOLOTIN: The natural oscillations of a rectangular elastic parallelepiped.....	220
Ia. S. UFLIAND: On torsional vibrations of half-space.....	228
L. M. KACHANOV: On the solution of problems of non-stationary creep.....	234
N. A. ROSTOVTSIEV: An integral equation encountered in the problem of a rigid foundation bearing on nonhomogeneous soil.....	238
V. L. DOBROVOL'SKII: Plane plastic strain problems for anisotropic materials.....	247
I. I. BLEKHMAN and G. Ia. DEMANELIDZE: On the stability of vibrationally linearized nonlinear systems.....	255
Contents of next issue.....	261
Transliteration table.....	263

Available From Pergamon Press

CONTENTS

N. A. Fufaev: Chaplygin's equations and the theorem of the additional multiplier in the case of quasicordinates	577
G. K. Pozharitskii: Extension of the principle of Gauss to systems with dry (Coulomb) friction	586
V. I. Kingetov: Analytical method of mechanics in the theory of a perfectly elastic impact of material systems	608
CHEZHAN SY-IN: On the theory of optimum control	617
N. S. KRASOVSKII and E. A. LIDSKII: Analytical design of controllers in stochastic systems with velocity-limited controlling action	627
F. M. KIRILLOVA: Contribution to the problem on the analytical construction of regulators	644
Ja. N. ROITENBERG: On some indirect methods of obtaining information on the position of a controlled system in the phase space	654
A. A. SVESHNIKOV: The investigation of the behavior of linear dynamical systems under the action of nonlinear functions of random processes	681
O. S. RYZHOV and Ju. D. SHMYGLEVSKII: On a certain property of supersonic gas flows	673
V. V. GOGOSOV: Interactions of magnetohydrodynamic waves	678
V. B. BARANOV and G. A. LIUBIMOV: On the form of the generalized Ohm's law in a completely ionized gas	694
I. B. CHEKMAREV: The steady flow of a weakly ionized gas between parallel plates assuming anisotropic conductivity	701
B. M. BULAKH: On some properties of supersonic gas flow	708
Z. N. DOBROVOL'SKAIA: Penetration of a wedge into compressible half-space	718
G. A. SKURIDIN: An approximate theory for the head wave generated by a cylindrical inclusion in a homogeneous elastic medium	726
L. M. KACHANOV: On the kinetics of crack growth	739
A. A. IL'USHIN: On the postulate of plasticity	746
V. D. BONDAR': On tensorial characteristics of finite deformations of a continuous medium	753
V. M. DAREVSKII: On basic relations in the theory of thin shells	768
T. T. KHACHATURIAN: The fundamental equations of the general theory of thin elastic shells in terms of stresses	791
I. I. VOROVICH: Some representations in general form of solutions to the equations of the theory of shallow shells	801
V. V. SOKOLOVSKII: Expansion of a circular opening in a rigid-plastic plate	809
G. I. BYKOVTSV: On the velocity field formed by a flat die pressing on a plastic half-space	816
V. P. KARLIKOV and V. P. KOROSFINIKOV: Disturbances in an electromagnetic field caused by shock waves under the influence of a sudden increase in conductivity	819
Ja. S. UFLIAND: Rotation of a conducting fluid in an annular clearance under the influence of a transverse magnetic field	824
I. B. MEDUKHOVSKII: On the aerodynamics of fin-stabilized axisymmetric bodies at angle of attack	831
S. A. BOSTANDZHIAN: Homogeneous spiral motion between two coaxial cones	840
E. N. TOKAR': Certain properties of a gyrocompass with a seventeen-hour period	846
V. A. TABUEVA: On circular motions of the Foucault pendulum	854
V. V. KREMENTULU: Application of the second method of Liapunov in the investigation of the steady motion of a gyroscope when elastic properties of the rotor axis are taken into account	859
A. B. SAVVIN: On second-order differential equations whose solutions are bounded by a given quantity	866
S. S. GABRIAN: A proof of Galerkin's method for equations with a retarding argument	873
L. F. RAKHMATULLINA: On the problem of stability of the solution of the nonlinear heat-conduction equation	880
Contents of next issue	884
Transliteration table	886

Available From Pergamon Press

APPLIED MATHEMATICS AND MECHANICS
PRIKLADNAIA MATEMATIKA I MEKhanika

VOLUME 25

1 9 6 1

NUMBER 4

CONTENTS

Anastoli Isakovich Lur'e—On his sixtieth birthday.....	887
V. V. SYCHEV: On hypersonic flows of viscous heat-conducting gases.....	898
G. A. LIUBIMOV: On the form of Ohm's law in magnetohydrodynamics.....	913
S. A. REZIER: Some magnetohydrodynamic problems in longitudinal flow over a porous cylindrical surface.....	930
G. E. SAMOILOVICH: The flow about an aerodynamic cascade of thin oscillating sections.....	940
B. A. KOSTANDIAN: The influence of oscillations of the free surface of a liquid on the stability of rotational motion of a spinning top containing the liquid.....	963
G. K. POZHARITSKII: On asymptotic stability of equilibria and stationary motions of mechanical systems with partial dissipation.....	979
V. A. TROITSKII: The Mayer-Bolza problem of the calculus of variations and the theory of optimum systems.....	994
A. I. KLIMUSHCHEV and N. N. KRASOVSKII: Uniform asymptotic stability of systems of differential equations with a small parameter in the derivative terms.....	1011
Ia. N. KOITENBERG: Theory of systems with alternation.....	1026
B. P. DEMIDOVICH: Forced oscillations of a quasilinear system in the presence of a rapidly changing external force.....	1044
CHEN' CHZEN-CHEN: On the hydrodynamic pressure on a dam caused by its aperiodic or impulsive vibrations and vertical vibrations of the earth surface.....	1060
A. L. GOL'DENVEIZER: Asymptotic properties of eigenvalues in problems of the theory of thin elastic shells.....	1077
K. K. LIVANOV: Axisymmetric vibrations of simply supported cylindrical shells.....	1095
S. A. AMBARTSUMIAN and V. Ts. GNUNI: On the dynamic stability of nonlinearly-elastic three-layered plates.....	1102
M. E. EGLIT: On the determination of the elastic potential from experiments.....	1109
G. I. BARENBLATT and G. P. CHEREPANOV: On the finiteness of stresses at the [loading] edge of an arbitrary crack.....	1112
S. A. SHESTERIKOV: Buckling in the presence of creep.....	1116
A. M. FIRVERDIAN: One method of evaluating approximate solutions of the equation of non-stationary filtration of liquids and gases.....	1120
K. N. STEPANOV and V. V. KHOMENIUK: Remarks on the energy principle in magnetohydrodynamics.....	1128
V. N. KRASIL'NIKOV: On the solution of some boundary-contact problems of linear hydrodynamics.....	1134
A. F. KHRUSTALEV: On the steady-state problem of thermal conduction in a solid cylinder.....	1142
P. I. TRAI: Diffraction of plane sound waves (long) at a toroid.....	1146
A. A. BOGOLAVLENSKII: Cyclic displacements for the generalized area integral.....	1152
V. V. RUMIANTSEV: On the stability of motion of certain types of gyrostats.....	1158
Iu. M. FILIMONOV: On the stability of solutions of third-order differential equations.....	1170
N. P. KUPTSOV: On a sufficient condition for the stability of the trivial solution of a system of two linear differential equations.....	1181
K. G. VALKEV: On the stability of the solutions of a system of two first-order linear differential equations with periodic coefficients for the resonance case.....	1187
B. D. ANNIN: Asymptotic expansion of an exponential function of fractional order.....	1192
M. I. FEIGIN: On the evaluation of optimal parameters of a dry-friction damper.....	1196
Contents of next issue.....	1201
Transliteration table.....	1203

Available From Pergamon Press

APPLIED MATHEMATICS AND MECHANICS PRIKLADNAIA MATEMATIKA I MEKHANIKA

VOLUME 25

1961

NUMBER 5

CONTENTS

V. N. KOSHLIAKOV: On the reduction of the equation of motion of a gyrohorizoncompass.....	1205
N. N. KRASOVSKII: On mean-square optimum stabilization at damped random perturbations.....	1212
E. A. BARBASHIN: Programmed control of systems with random parameters.....	1228
Z. A. LIDSKII: On the stabilization of stochastic systems.....	1237
E. G. AL'BREKHT: On the optimal stabilization of nonlinear systems.....	1254
I. B. CHEKMAREV AND IA. S. UFLIAND: On some possibilities of accelerating electrically conducting fluids with the use of crossed magnetic fields.....	1267
G. S. SAMOILOVICH: Nonstationary rotational flow over a cascade of thin oscillating aerofoils.....	1276
IU. K. BRATUKHIN: On the evaluation of the critical Reynolds number for the flow of a fluid between two rotating spherical surfaces.....	1286
S. S. GRIGORIAN AND F. L. CHEKNOUS'KO: The piston problem for the equations of soil dynamics.....	1300
V. A. SVEKLO: On the solution of dynamic problems in the plane theory of elasticity for anisotropic media.....	1324
D. D. IVLEV: Mathematical description of the behavior of an elastic isotropic solid by means of a piecewise linear potential.....	1340
O. D. GRIGOR'EV: On the plane deformation of a rigid-plastic body.....	1352
A. IA. ALEKSANDROV: Solution of axisymmetric problems for the theory of elasticity with the aid of relations between axisymmetric and plane states of stress.....	1361
L. A. ROZIN: Method of resolution in the theory of shells.....	1376
I. G. TEREGULOV: The circular elastic plate under an axisymmetrical transverse load.....	1386
V. V. SOKOLOVSKII: Some remarks on the linearization of the equations of plasticity.....	1393
IU. K. ZHBANOV: A horizontal gyrocompass on vibrating elastic foundation.....	1397
A. M. FEDORCHENKO: On a dynamical method for increasing stability of a rapidly rotating symmetrical gyroscope.....	1406
V. N. DROFA: On the permanent axes of motion for a heavy gyrostet near an immovable point.....	1411
CHZHAN SY-IN: On sufficient conditions for an optimum.....	1420
L. S. GNOENSKII: On a method of optimization of servo-systems.....	1424
A. P. PROSKURIakov: Periodic solutions of quasilinear autonomous systems with one degree of freedom in the form of infinite series with fractional powers of the parameter.....	1433
V. A. TABUEVA: Conditions for the existence of a periodic solution of a third-order differential equation.....	1445
G. N. PUCHENKIN: On a problem of the theory of nonlinear oscillations.....	1449
A. B. VATAZHIN: The solution of several boundary problems in magnetohydrodynamics.....	1453
Contents of next issue.....	1460
Transliteration table.....	1462

Available From Pergamon Press

SOVIET RADIOCHEMISTRY

A translation of RADIOKHIMIYA

a publication of the Academy of Sciences of the USSR

1964 CONSULTANTS BUREAU ENTERPRISES, INC.
227 West 17th Street, New York 11, N. Y.

Volume 4, Number 5

September-October, 1962

CONTENTS

	P A G E	
	ENG.	RUSS.
Coprecipitation of Cerium with K_2SO_4 Crystals. II. Recrystallization of K_2SO_4 Precipitates, S. G. Babayan, I. V. Melikhov, and M. S. Merkulova	459	521
Adsorption of Pu(IV) on Polished Platinum. A. G. Samartseva	463	526
Adsorption of Some Organic Dyes from Aqueous Solutions by $BaSO_4$ Precipitates of High Radioactivity. V. V. Gromov and Vikt. I. Spitsyn	467	532
Carrying out Extraction Processes by the Chromatographic Method. B. K. Preobrazhenskii and G. S. Katykhin	471	536
Extraction of Radioactive Ruthenium with Sodium Piperidinedithiocarbamate. K. V. Astakhov, S. V. Mikhaleva, and V. I. Teslin	475	540
The Effect of the Nature of the Diluents on the Extraction of Uranyl Nitrate with Tributyl Phosphate. M. F. Pushlenkov, E. V. Komarov, and O. N. Shuvalov	479	543
The Mechanism of Extraction Processes. IV. Solvation and Hydration of Uranyl Nitrate in Benzene Solutions of Ethers. R. N. Maslova and V. V. Fomin	485	550
Effect of Temperature on the State of Uranyl in Nitric Acid Solutions. B. G. Pozharskii	493	561
Complex Formation of Americium with Neutral Organophosphorus Compounds. I. V. I. Zemlyanukhin, G. P. Savoskina, and M. F. Pushlenkov.	501	570
Activation Analysis of Silicon Dioxide. A. I. Kalinin, R. A. Kuznetsov, and V. V. Moiseev. . .	505	575
Use of α -Radiation for Determining Some Elements in Solutions and the Solid Phase of a Suspension. I. N. Plaksin, M. A. Belyakov, V. L. Rentyrgin, and L. P. Starchik	510	581
Determination of the Partial Yields of Isobars with A-139 in the Fission of Uranium with 14 MeV Neutrons. A. N. Apollonova, I. T. Krisyuk, and V. N. Ushatskii	515	587
Effect of Temperature on Extraction with Tributyl Phosphate. A. M. Rozen, L. P. Khorkhorina, S. M. Karpacheva, and G. D. Agashkina	518	591
Use of Chlorophosphonazo III for Photometric Determination of Pentavalent Actinide Elements. I. Determination of Neptunium. É. G. Chudinov and G. N. Yakovlev.	526	601
Use of Chlorophosphonazo III for the Photometric Determination of Pentavalent Actinide Elements. II. Determination of Protactinium. É. G. Chudinov and G. N. Yakovlev . . .	530	605
BRIEF COMMUNICATIONS		
Determination of the Crystallization Coefficient of SrF_2 in the CaF_2 -NaF System. K. G. Mvakishev and V. R. Klokman	532	607
Available From Consultants Bureau	(Continued)	

CONTENTS (continued)

	P A G E	
	ENG.	RUSS.
The Formation of a Second Organic Phase in the Extraction of Uranyl Nitrate with Solutions of Trioctylamine and Carbon Tetrachloride. V. M. Vdovenko, T. V. Kovaleva, and M. A. Ryazanov.	534	609
Extraction of Hydrofluoric Acid and Uranyl Fluoride by Tri-n-Nonylamine in Benzene. V. M. Vdovenko, M. P. Koval'skaya, and E. A. Smirnova.	535	610
Exchange of $C_2O_4^{2-}$ Ions in Oxalate Complexes of Uranium (IV) and Uranyl. A. A. Grinberg, D. N. Bykhovskii, and I. K. Petrova.	537	611
Reaction of Bromine-82 Recoil Atoms with Acetic Acid Preparation of CH_3Br and $CH_3BrCOOH$ Labeled with Br^{82} . An. N. Nesmeyanov and E. S. Filatov.	539	613
Reaction of Tritium Recoil Atoms with Benzoic Acid and Lithium Benzoate. V. V. Pozdeev, An. N. Nesmeyanov, and B. G. Dzantiev.	540	615
Study of the Reactions of Tritium Recoil Atoms in the System Cyclohexane-Benzene. E. N. Avdonina.	542	617
Preparation of Thin Uniform Layers of Plutonium. P. M. Aron and L. Z. Malkin.	544	619
α -Decay of Pu^{241} . B. S. Dzhelepov, R. B. Ivanov, A. S. Krivokhatskii, and V. G. Nedovesov.	545	619
Analytical Method of Isolating Pa^{233} by Extraction with Methyl Isobutyl Ketone. L. E. Starik, A. N. Elizarova, L. L. Il'menkova, V. N. Shchebetkovskii, M. N. Chubarov, and V. V. Smimov.	546	620
Method of Fast Separation of Radioactive Isotopes of Alkali Metals on Zirconium Molybdate S. S. Rodin and A. K. Lavrukina.	548	623

Available From Consultants Bureau

CONTENTS

On the problem of the equivalence of probability measures corresponding to stationary gaussian processes.....	Yu. A. ROZANOV	223
On discrete service systems.....	A. A. BOROVKOV	232
On the detection of disorder in a manufacturing process. I. ...	A. N. SHIRYAEV	247
Inference in stochastic processes. I.....	M. M. RAO	266

SHORT COMMUNICATIONS

On the Glivenko-Cantelli theorem.....	V. V. SAZONOV	262
On conditions for the perpendicularity of gaussian measures corresponding to two stochastic processes.....	V. G. ALEKSEEV	286
On the theory of differential equations with random coefficients G. YA. LYUBARSKII and Yu. L. ROBOTNIKOV		290
Continuous planning of regression experiments. II.....	S. N. SOKOLOV	298
Axiomatic definition of the value of a matrix game.....	E. I. VILKAS	304
Service systems in heavy traffic.....	E. G. SAMANDAROV	307
Theory of domain estimation of statistical parameters.....	OLAF BUNKE	309
On the regularity of spectral densities.....	PETER D. LAX	319
A refinement of the limit theorem for the superposition of independent renewal processes.....	P. FRANKEN	321
The strong Markov property of multiplicative functionals.....	P. A. MEYER	328

Available From Society for Industrial and Applied
 Mathematics

For an Acceleration of Technical Progress in Industry, Ed...	1	(1)
On High-Speed Flotation and Improving the Operation of Flotation Machines.....	4	(5)
The Question of Flotation Machine Construction, by B. G. Krangachev.....	4	(5)
Prospects of High-Speed Flotation in Processing Zyryanovsk Sulfide Ores, by V. K. Glazunova, A. K. Gruzdeva and N. B. Karataev.....	6	(7)
Tests on the "Sikhali" Flotation Machine at the Kirovgrad Plant, by L. D. Kulikov and N. K. Khomullo.....	12	(12)
On Directions in the Radical Improvement of Flotation Ma- chine Design Based on the Theory of Pulp Aeration and Bubble Mineralization, by V. I. Klassen.....	15	(15)
Xanthogenate Adsorption Along the Three-Phase Wetting Perimeter, by S. I. Krokhin.....	20	(19)
Present State of Lead Refining and Means of its Development, by M. P. Smirnov.....	28	(27)
Investigating the FluoSolid Sulfating Roasting of the Cobalt- Containing Mattes of Nickel and Copper Plants, by Siao Chi-Tsain and V. I. Smirnov.....	37	(35)
Directions for Improving the Pyrometallurgical Extraction of Cobalt from Sulfides of Copper-Nickel Concentrates, by V. K. Piotrovskii and F. E. Lomagin.....	41	(39)
Consumable Electrode Suspension Systems, by B. V. Parfano- vich, I. I. Gnedin and D. I. Erofeev.....	50	(48)
Using Hydrocyclones in Combination with Thickeners to Sepa- rate Solids when Leaching Alumina-Bearing Sinter, by A. S. German-Galkina, T. M. Zlokazova, V. P. Mel'nikova and V. V. Sidorenko.....	54	(52)
Methods of Producing High Purity Selenium, by N.B. Plotnova	57	(55)
The Uses of Rare Elements, by K. F. Klubnichkin.....	63	(60)
Purifying Industrial Sewage Waters of Nickel Salts, by P.S. Antipova, A.I. Rybnikova and L.V. Milovanov.....	69	(66)
Determining Contact Surface Forms when Pressing with a Plas- tic Filler, by I. L. Perlman and Yu. P. Glebov.....	74	(72)
The Use of Vibration in the Continuous Casting of Non-Fer- rous Metals and Alloys, by G.F. Balandin and Yu.F.Yakovlev	78	(75)
Deformation of Semimanufactured Articles Made of Magnesium Alloy MA10, by I. M. Mikheyev and E. M. Smirnova.....	82	(79)
Using the Leningrad Mining Institute Method to Extract Se- lenium from the Slimes of an Experimental-Industrial Unit, by V.P. Glukhov, T.G. Sitnikova and I.A. Fedotov.....	86	(83)
Irregular Deformation of Profile Tubes when Cold Rolling, by Yu. F. Shevakin and A. M. Rytikov.....	87	(84)
Fourth Plenum of the Central Board NTO Non-Ferrous Metal- lurgy, by V. A. Frolov.....	89	(86)
New Technical Literature.....	93	(89)
Methods of Beneficiating Diamonds, by M. Ya. Kolomeiskaya...	98	(92)
Preliminary Report on Grinding Tests in a Vertical Labora- tory Westerlund Mill, by K. A. Abdeyev.....	101	(94)

Available From Primary Sources

On Using Intraproduction Reserves to Accelerate a Rise in Capacity and an Increase in the Production of Non-Ferrous and Rare Metals, Editorial.....	1	(1)
Operating Experience and Technical Achievements of a Molybdenum Plant, by V. K. Apollonov.....	4	(5)
Operating Experience of Tailing Disposal at the Mirgalimsai Concentrator, by M. I. Ioffe.....	9	(10)
The Operation of Tailing Reservoirs on Mountain Rivers, by I. I. Mechitov.....	15	(16)
On Using a Single Method to Calculate Commodity Extraction when Processing Minerals, by V. A. Skorov.....	18	(19)
The Problem of Preparing and Analyzing the Metal Balances of Ore Dressing Plants, by V. I. Demidov.....	24	(25)
A Method of Determining Ore Dressing Extraction Indices, by Ya. A. Rubinchik.....	26	(26)
The Effect of Overblowing when Shaft Furnace Smelting Oxidized Nickel Ores and Lead Agglomerate, by I.D. Reznik.....	30	(30)
Selecting a Rational Method of Purifying Zinc Electrolyte of Cobalt, by F. I. Barotitskaya and Yu. S. Press.....	39	(38)
Purifying Waste Water of Fluorides, by Yu. Yu. Lur'ye, P. S. Antipova and A. N. Belevtsev.....	45	(43)
Crude Purification of Solutions of Arsenic Using Sulfur Dioxide, by D. B. Buzur-Ool.....	49	(47)
Automating the Electrical System of Cottrell Filters, by I. Sh. Plotinskii.....	52	(50)
Automatic Registration and Signalling of Anode Effects, by E. S. Torosyan.....	54	(53)
A Method of Decomposing the Alkali-Calcium Deposits Obtained when Treating Nephelines Hydrochemically, by M. G. Manvelyan, A. G. Sayadran, A. A. Abramyan, Dzh. A. Mikaelyan and E. E. Kapyantsyan.....	57	(56)
Obtaining High-Grade Alumina (Brands GO and GOO) in Treating Nephelines, by Kh. Shvartsman and N. S. Volkova.....	63	(61)
The Process of Producing the Bimetal "Aluminum Antifritational Alloys-Steel," by A. D. Kuritsyna, F. V. Korolev, K. N. Korsunskaya and N. M. Rudnitskii.....	68	(66)
Means of Improving the Thermoelectric Properties of the Semiconducting Zinc-Antimony Alloys, by D. I. Lainer and L. M. Golubtsova.....	71	(69)
Titanium Welded Pumps, by G. M. Itel'son.....	77	(74)
Nikolai Nikiforovich Murach.....	82	(79)
Continuous Two-Stage Purification of Zinc Sulfate Solutions of Impurities, by N. A. Popov.....	83	(81)
The Broad Introduction of Compensating Units to Practice, by R. I. Shindel'man.....	85	(83)
The Meeting of the Ore Dressing Section of the Scientific Council of IGD AN SSSR in Balkhash, by I. N. Plaksin.....	86	(84)
New Technical Literature.....	89	(86)
Storing Ore Dressing Plant Tailings, by L. Ya. Shubov.....	94	(89)
Electrolytic Refinement of Lead in a Sulfamic Electrolyte, by A. C. Penko.....	100	(93)
Producing Semimanufactured Products from High-Purity Chrome, by G. N. Krucher.....	101	(94)

Available From Primary Sources

Non-Ferrous Metallurgy at the XXIIInd Congress of the CPSU, by I. Strigin.....	1	(1)
Selection of an Effective Flow Sheet for the Complex Use of Copper and Copper-Zinc Pyrites, by A. K. Shakhnazarov.....	10	(11)
Rate of Water and Solids Passage into Flotation Froth Products, by A. K. Livshits and R. M. Bezrodnaya.....	14	(15)
Influence of Temperature on the Adsorption of Tridecylamine on Smithsonite and Other Minerals, by S. I. Mitrofanov and V. G. Kushnikova.....	17	(17)
Interaction of Xanthogenate Type Collectors on Sulfide Mineral Surfaces, by A. A. Golikov.....	19	(19)
Recovery of Bichromate-Ions from Aqueous Solutions by Means of Anionites, by Yu. Yu. Lur'e and P. S. Antipova.....	25	(25)
Sulfatization of Metallurgical Dusts in an Oxygen-Enriched Air Atmosphere, by L. S. Gotskin and V. P. Savraev.....	27	(26)
Pilot Tests on Different Methods of Purifying Zinc Electrolyte of Cobalt, by Yu. S. Press and Z. I. Matveeva.....	31	(29)
Influence of pH and Copper Content of Nickel Electrolyte on Iron Precipitation and Hydroxide Filtration Rates, by B. V. Lipin.....	37	(36)
Contamination of the Air Medium by Aerosol of Solutions in the Course of Metallurgical Processes and Means for its Prevention, by M. M. Tuchenko and P. V. Sidiyakov.....	40	(39)
Sorption and Extraction Methods of Separating Aluminum and Gallium, by B. N. Laskorin and A. I. Yuzhin.....	45	(44)
Absorption of Hydrogen by Sponge Titanium in the Hydrometallurgical Treatment of Products in Thermic and Electrolytic Metal Production, by L. V. Biryukova and S. V. Aleksandrovskii.....	49	(48)
Production of High-Purity Tellurium, by V. I. Davydov, B. V. Teplyakov and G. K. Romanov.....	53	(52)
New Sources of Rhenium Production, by V. V. Rodzaevskii and A. I. Lazarev.....	56	(55)
An Investigation of the Deformation of the Titanium-Steel Bimetal on Rolling, by I. M. Pavlov and V. N. Brinza.....	60	(59)
A Comparison of the Mechanical Properties and Surface Qualities of Rolled and Drawn Copper Sections, by L. S. Vatrushin.....	66	(64)
Experimental Determination of Shifts in a Self-Adjusting Mandrel, by V. Ya. Shapiro.....	72	(70)
Automatic Gripping of Pins Employing Remote Control, by V. N. Ryaguzov.....	80	(78)
From the Operating Practice of the Levikhinsky Cementation Plant, by B. N. Ranskii and V. A. Artemov.....	83	(81)
Letters to the Editor.....	85	(82)
A Conference on the Prospects of Using the Alkaline Products Obtained in the Production of Alumina from Nepheline Rocks	86	(83)
Review of "Alumina Production," by A. I. Layner.....	88	(85)
New Technical Literature.....	90	(86)
The El Salvador Concentrating Plant, by L. Ya. Shubov.....	96	(90)

Available From Primary Sources

Prospects for the Expansion of the Technological Use of Electric Power in the Non-Ferrous Metallurgical Industry, by M. M. Lakernik.....	1	(1)
The Development of Non-Ferrous Metallurgy in the Uzbek SSR, by A. Lomov.....	7	(7)
The Depressive Action of Cyanide and Zinc Vitriol in the Selective Flotation Cycle for Bulk Concentrates, by D. A. Bolkov and B. N. Ranskii.....	11	(11)
Flotation of the Zinc Ores from the Sibai Site, by E. I. Petrov and V. A. Novoselov.....	16	(15)
Selecting a Cation Collector for the Flotation of Oxidized Zinc Minerals, by A. A. Abramov.....	19	(18)
Semi-Industrial Tests on the Use of Agglomeration Roasting with Down Blasts for Copper Charges, by I. M. Tsygoda, V.N. Kazakov, Yu. I. Sorogin and V. F. Korneev.....	23	(23)
30 Years Operation of the Kirovgrad Copper Combine's Reverberatory Furnace, by V. A. Artemov.....	31	(31)
A Study of the Cementation Process for Copper from Nickel Electrolyte with Various Nickel Powder Consumption Ratios, by B. V. Lipin.....	34	(34)
Extraction Method for Refining Nickel Electrolyte of Impurities, by I.B. Milovanova, S.E. Kreimer and V.N. Rozov.....	38	(38)
A High-Speed Scrubber for Removing Chlorine from Gases, by G.M. Ginodman, D.S. Glikin and I.L. Feisakhov.....	43	(42)
The Influence of Elastic Ultrasonic Vibrations on Reductions in the Rate of Scale Formation, by A. I. Zhevnovaty, V. N. Volkov and I. Z. Pevzner.....	49	(48)
A Method of Continuously Measuring and Recording Counter Electromotive Force Magnitudes, by A. L. Sobolev.....	54	(53)
The Technology of Producing Aluminum Nitride and Possibilities for its Industrial Application, by G. V. Samsonov and T. V. Dubovik.....	57	(56)
Zone Melting of Acid Tungstates, by P.I. Fedorov and M. F. Mokhosoev.....	63	(61)
Continuous Casting of Bronze on a Horizontal UNIIM Machine, by V. T. Sladkoshteev, M. A. Kuritskii, O. A. Shatagin and M. A. Vartazarov.....	68	(67)
Using Generator and Natural Gases for the Non-Oxidizing Heating of Non-Ferrous Metals, by A. K. Chertavskikh and I. V. Naumkina.....	75	(74)
Processing Sulfide Gold-Containing and Lead Concentrates by Electric Smelting, by I. I. Kershanskii.....	79	(79)
Increasing the Completeness and Complexity of Ore Utilization at the Kirovgrad Ore Dressing Plant, by L. D. Kulikov.....	82	(82)
Letters to the Editor.....	86	(85)
International System of Units.....	90	(88)
A Conference on Combatting Corrosion in Aggressive Mediums, by M. Rozov.....	94	(91)
Recent Achievements in the Production of Tubes, Rods and Shapes Made From Non-Ferrous Metals, by V. V. Zholobov.....	95	(92)
The Molybdenum Industry of Capitalist Countries in 1958-1959, by B. S. Rozov.....	97	(93)

Available From Primary Sources

CONCENTRATING ON THE STRUGGLE FOR TECHNICAL PROGRESS.....	1	(1)
A. A. Golikov and F. I. Nagirnyak CONDITIONS FOR THE EFFICIENT DE- PRESSIVE ACTION OF CYANIDE IN THE SELECTIVE FLOTATION OF SULFIDE MINERALS.....	5	(5)
L. G. Podkosoy INTENSIFICATION OF THE PROCESS OF ELECTRICAL SEPARA- TION FOR FINE-GRAINED RARE METAL CONCENTRATES.....	11	(11)
L. M. Leonov, I. V. Savin, D. I. Lutokhin and V. I. Smirnov SOME EXPERIENCE IN THE TREATMENT OF RAW HIGH-ZINC CHARGES.....	16	(16)
N. N. Myller and L. I. Sotnikova INFLUENCE OF THE ADDITION OF SUR- FACE ACTIVE SUBSTANCES ON THE STRUCTURE OF CATHODIC COPPER.....	21	(21)
I. T. Iordanov, M. Z. Popov, V. D. Karoleva and Ya. Kh. Yanchev TREATING WAEIZ-OXIDES AT A NON-FERROUS METALS COMBINE IN PLOVDIV (PEOPLE'S REPUBLIC OF BULGARIA).....	23	(23)
A. I. Okunev, L. S. Shugol', F. I. Nagirnyak, S. E. Fridman and E. S. Gagarin COLLECTIVE-SELECTIVE MAGNETIC SEPARATION OF ZINC PLANT CLINKER.....	31	(30)
V. Z. Lysenko and Yu. S. Shashurin ROASTING MERCURY ORES IN A FLUI- DIZED BED.....	36	(36)
M. M. Dvorkind STUDY OF A REVERBATORY FURNACE ROOF, BUILT OF UN- BURNED MAGNESITE-CHROMITE REFRACTORIES.....	39	(39)
O. I. Arakelyan and E. F. Klyuchnikova AN EXAMINATION OF SODIUM AND POTASSIUM HYDROALUMINATES FORMED IN PRECIPITATES OF ALUMINA PRODUC- TION.....	44	(43)
A. I. Zhenovaty AGITATION METHOD OF LEACHING ALUMINA-CONTAINING SIN- TER WITH THE USE OF HYDROCYCLONES AS BASIC APPARATUS FOR SEPARATING PULP.....	51	(50)
K. Ya. Shapiro, Yu. M. Glebov, B. M. Tarakanov, V. V. Kulakova and Kh. Kapkaeva PRODUCTION OF AMMONIUM PARATUNGSTATE FROM AUTOCLAVE SOLUTIONS BY A NONACIDIC METHOD.....	54	(54)
S. I. Chizhev METAL PRESSURE ON THE ROLLS IN ROLLING STEEL-MZH-2 ALLOY, STEEL-LZH90-2 BRASS AND STEEL-BROZH4-2 BRONZE BIMETALS.....	58	(58)
V. A. Lyuboshkin, F. V. Korolev and K. N. Korsunskaya INFLUENCE OF DEOXIDIZING AGENTS ON THE MECHANICAL PROPERTIES OF LEAD GERMAN SILVER.....	61	(61)
I. N. Goncharov, Yu. G. Dorofeev and N. T. Zherditskii HOT BRIQUET- TING OF COPPER-BASE ALLOY CHIPS, USING A HAMMER.....	65	(66)
A. G. Lopatin A STUDY OF SILVER COMPOUNDS CONTAINED IN MALKAIN DEPOSIT ORES.....	71	(73)
N. V. Matveenko EXPERIENCE GAINED IN INCREASING THE CRUSHING RATE IN THE CONE CRUSHER.....	73	(75)
R. V. Pigulovich A PORTABLE INSTALLATION FOR CHARGING RODS TO MILLS. B. N. Goldreer NEW DESIGNS FOR INDIVIDUAL UNITS IN A 75-TON DRAWING MILL.....	75	(76)
	76	(77)
THEMATIC PLAN FOR THE JOURNAL, "TSVETNYE METALLY" FOR 1963-1964.....	78	(80)
S. I. Pol'kin, I. P. Saksanganskaya and P. I. Andreev SOME SPECIFIC FEATURES CONNECTED WITH THE PRIMARY CONCENTRATION OF PLACER DEPOSITS CONTAINING ZIRCONIUM AND TITANIUM.....	81	(82)
L. P. Zhorova and G. V. Kurganov HEAT RESISTANCE OF NIOBIUM AND ITS ALLOYS.....	87	(87)
NEW TECHNICAL LITERATURE.....	95	(94)

Available From Primary Sources

THE COMPLETE AND EARLY UTILIZATION OF PLANNED CAPACITIES - A MOST IM- PORTANT PROBLEM.....	1	(1)
<u>M. A. Eigeles</u> THE MECHANICS OF FLOTATION ADHESION.....	4	(5)
<u>A. I. Golenzik</u> RESULTS OF THERMODYNAMIC EVALUATION AND EXPERIMENTAL VERIFICATION OF THE PROCESS OF SELECTIVE SULFATIZATION FOR COPPER- ZINC INTERMEDIATE PRODUCTS, OBTAINED IN THE PROCESS OF FINISHING PLANT CONCENTRATES.....	10	(10)
<u>V. V. Klyachin</u> MINERAL GRAIN SEPARATION IN A CLASSIFYING HYDROCYCLONE.....	15	(14)
<u>A. P. Konchakov</u> SOME PROBLEMS CONNECTED WITH THE PRODUCTION OF COPPER FROM COPPER-NICKEL RAW MATERIAL.....	19	(18)
<u>I. D. Reznik, S. E. Lyumkis and V. F. Tumasov</u> A STUDY OF THE CHARAC- TER OF FLOW OF SIAG MELTS WITH THE USE OF INDICATORS.....	22	(21)
<u>E. P. Tyuftin</u> GRAPHO-ANALYTICAL CALCULATIONS FOR MULTISTAGE COUNTER- FLOW WASHING OF SOLUBLE SUBSTANCES FROM SOLID SEDIMENTS.....	27	(26)
<u>P. S. Saakyan</u> A DETERMINATION OF THE INDICES FOR THE PROCESS OF ELEC- TROLYTIC PRODUCTION OF ALUMINUM BY THE COMPOSITION OF ANODE GASES....	33	(32)
<u>A. A. Kostynkov</u> RELATIONSHIP OF THE CURRENT EFFICIENCY IN ELECTROLY- TIC PRODUCTION OF ALUMINUM TO THE COMPOSITION OF ANODIC GASES.....	38	(37)
<u>A. B. Rozenblit</u> AUTOMATIC CONTROL OF EVAPORATORS FOR ALUMINATE SOLU- TION IN ALUMINA PRODUCTION.....	45	(43)
<u>I. I. Kershanskii and L. I. Zelenskaya</u> THE HIGH RHENIUM EXTRACTION OBTAINED WITH ELECTROCHEMICAL PROCESSING OF UNROASTED COPPER CON- CENTRATES.....	51	(50)
<u>I. G. Kirpa, N. P. Kolesnikov, V. A. Pankin and Yu. A. Shishkin</u> STUDY OF ENERGY AND FORCE FACTORS IN ROLLING ALUMINUM-COPPER-ALUMINUM BI- METALLIC SHEET.....	61	(60)
<u>V. M. Zharov and I. M. Pavlov</u> CONSTRUCTION OF DIAGRAMS FOR TRUE NORMAL STRESSES IN TENSION USING INTERPOLATION AND EXTRAPOLATION.....	67	(66)
<u>M. Yu. Brovinski</u> USING THE CHARACTERISTICS METHOD TO CALCULATE ENERGY AND FORCE PARAMETERS IN ROLLING.....	70	(69)
<u>R. A. Ul'yanov, N. D. Tarasov and S. F. Kovtun</u> VACUUM CLADDING OF REFRACTORY METALS.....	75	(74)
<u>L. I. Gabriellova and A. K. Livshits</u> THE USE OF NEW AND EFFICIENT FLOCCULANTS FOR THICKENING IN ACID AND MINERALIZED SOLUTIONS.....	78	(77)
<u>P. V. Molitvin</u> INFLUENCE OF WASTE WATERS FROM THE "YUZHURALNIKEL'" COMBINE AND THE NON-FERROUS METALS TREATMENT PLANT ON CONTAMINATION OF THE URALS RIVER.....	80	(79)
<u>A. M. Orlov, V. F. Borbat and M. B. Ferberg</u> REDUCING SELENIUM FROM SELENIUM-CONTAINING SODA SOLUTIONS USING HYDROGEN UNDER PRESSURE....	83	(81)
<u>V. P. Glukhov, T. G. Sitnikova and M. B. Ferberg</u> SELENIUM EXTRACTION FROM GRANULATED COPPER SLIME IN INDUSTRIAL ROASTING FURNACES.....	86	(83)
<u>S. A. Gintsberg and B. Ya. Kazovskaya</u> CORROSION OF MOLYBDENUM IN A MOIST ATMOSPHERE.....	88	(84)
<u>I. F. Barvshnikov</u> A CONFERENCE ON DREDGE CONSTRUCTION.....	91	(87)
<u>A. F. Nikiforov</u> PREPARING AND ELECTROCHEMICALLY PROCESSING CHLORIDE SALT SOLUTIONS OF HEAVY METALS.....	94	(89)
READERS DISCUSS THE WORK OF THE JOURNAL, "TSVETNYE METALLY".....	95	(90)
NEW TECHNICAL LITERATURE.....	99	(93)

Available From Primary Sources

SOVIET PHYSICS USPEKHI

MAY-JUNE 1964

CONTENTS

	Page	Russian Reference
Probe Methods in Plasma Research.		
. Yu. M. Kagan and V. I. Perel'	767	81, 409
Gas Filled Cerenkov Counters		
. A. S. Vovenko, B. A. Kulakov, M. F. Likhachev, Yu. A. Matulenko, I. A. Savin, and V. S. Stavinskiĭ	794	81, 453
Fifth All-union Conference on the Theory of Semiconductors		
. K. B. Tolpygo and I. B. Levinson	825	81, 557
Fifth Inter-departmental Conference on Atmospheric Optics and Actinometry		
. G. Rozenberg	834	81, 566
Radio Emission and Nature of the Moon		
. V. D. Krotikov and V. S. Troitskiĭ	841	81, 589
Semiconductor Detectors of Nuclear Radiation.		
. E. L. Stolyarova	872	81, 641
Photoionization of Gases and Vapors by Vacuum Ultraviolet Radiation		
. F. I. Vilesov	888	81, 669
What is Verified by Measurements of the Gravitational Frequency Shift?		
. V. L. Ginzburg	930	81, 739
<u>Methodological Notes</u>		
Demonstration of the Role of the Axis of "Free Rotation" of a Body		
. S. P. Strelkov	933	81, 763
Four Lecture Demonstrations for Courses on the Theory of Oscillations and Radio Engineering		
. I. N. Kaptsov	933	81, 763
Some Physics Demonstrations		
. B. Sh. Perkal'skis	939	81, 771
Lecture Demonstrations with Centimeter Waves		
. B. Sh. Perkal'skis and V. L. Larin	940	81, 773
A Liquid-filled Pendulum for Demonstration of the Diurnal Rotation of the Earth.		
. V. Ya. Gavrik	941	81, 774
<u>Personalia</u>		
In Memory of Lev Vladimirovich Mysovskiĭ (On the seventy-fifth anniversary of his birth)		
. M. G. Meshcheryakov and N. A. Perfilov	945	81, 575
Moiseĭ Izrael'evich Korsunskiĭ (On the occasion of his sixtieth birthday)		
. Ya. E. Genkin	947	81, 779
Subject Index	949	
Author Index	951	

Available From American Institute of Physics
Soviet Physics - Uspekhi
Vol VI, No 6

Vestnik OF USSR ACADEMY OF MEDICAL SCIENCES

Vol XIX, No 4, 1964

[Following is a complete translation of the Russian-language medical journal Vestnik Akademii Meditsinskikh Nauk USSR (Herald of the Academy of Medical Sciences USSR), Vol XIX, No 4, Moscow, 1964, pp 3-104.]

TABLE OF CONTENTS

	<u>Page</u>
Introductory Address of N.N. Blokhin, President of the Academy of Medical Sciences USSR.	1
Blokhin, N.N., Report of the Work of the Presidium of the Academy of Medical Sciences USSR for 1960-1963.	5
Muzykantov, V.A., Discussion of the Summary Report of the Presidium at the 19th Session of the General Meeting of the Academy of Medical Sciences USSR	34
Mardashev, S.R., Natural Polymers, Their Biological and Medical Significance.	48
Zakusov, V.V., Pharmacology and Chemistry	68
Vishnevskiy, A.A., Polymers in Surgery.	82
Letavet, A.A., Chemization of National Economy and the Tasks of Hygiene.	91
Filatov, A.N., Role of Chemistry in the Solution of Hematological Problems.	101
Available From JPRS 25208	(Continued)

CONTENTS (Contd)

Gauze, G.F., Chemical Synthesis and Biosynthesis in the Search for New Antibiotics.	116
Pokrovskiy, A.A., Some Problems Concerning the Science of Nutrition in the Light of the Decisions of the CC CPSU December Plenum on the Development of Large Scale Chemical Industry	126
Gusenkov, P.V., Prospects of Development of the Chemico-Pharmaceutical Industry in the USSR	138
Mazurov, V.I., Discussion of Reports of the Scientific Part of the 19th Session of the General Meeting of the Academy of Medical Sciences USSR Devoted to Problems of Chemistry in Medicine	151
Ivanova, M.A., Current Events	167

Available From JPRS 25208

Vestnik OF USSR ACADEMY OF MEDICAL SCIENCES

Vol XIX, No 5, 1964

[Following is a complete translation of the Russian-language medical journal Vestnik Akademii Meditsinskikh Nauk SSSR (Herald of the Academy of Medical Sciences USSR), Vol XIX, No 5, Moscow, 1964, pages 3-96.]

Table of Contents

A. A. Pokrovskiy. The Problem of Determining Man's Need for Food Substances	1
G. M. Geller. Problems of Planning the Proper Diet for the Population	15
G. K. Shlygin. Basic Features of Enzyme Processes in the Intestine	27
V. V. Yefremov. Human Vitamin Requirements and Indices for Studying It.	45
Yu. K. Polteva. Some Problems of Current Importance in the Nutrition of Children.	60
G. S. Korobkina. Scientific Substantiation of Methods of Processing Food Products for Patients with Diseases of the Gastrointestinal Tract and for Young Children	66
A. I. Shtenberg and A. D. Ignat'yev. Current Problems of Hygiene in Connection with the Presence of Extraneous Substances in Foodstuffs	75
I. M. Neyman. The Possible Carcinogenic Properties of Admixtures in Foodstuffs and the Principles of Determining Them	85
A. A. Pokrovskiy, Ye. A. Beyul and V. A. Oleneva. Dietitic Principles in the Treatment of Obesity.	93

Available From JPRS 25241

(Continued)

CONTENTS (Contd)

E. G. Paramonova. Dietary Therapy of Coronary Arteriosclerosis	103
---	-----

Review of the Literature

Ye. M. Maslenikova. Characteristics of Vitamin Metabolism in the Aging Organism	114
--	-----

International Scientific Life

V. L. Vanevskiy and V. A. Kovanev. Report on the International Anesthesiology Symposium	127
Congresses and Conferences	138
V. V. Rozenblat, A. T. Vorob'yev and V. M. Forshtadt. Second Symposium on Radio Telemetering in Physiology and Medicine	144

Available From JPRS 25241

PROBLEMS OF COSMOGONY

Volume III

- USSR -

Following is the complete translation of a Russian-language collection of articles entitled Voprosy kosmogonii (Problems of Cosmogony), Volume III, published by the Academy of Sciences USSR, Moscow, 1954, pages 1-363, and signed to the press on 5 May 1954. The names of the authors accompany each section or individual article.

TABLE OF CONTENTS

	<u>Page</u>
In Furtherance of Militant Soviet Cosmogony.	1
ARTICLES	
Internal Structure of Hydrogen Planets	8
Cosmogony of the Planetary System and Evolution of the Sun	18
Calculation of the Trajectory of Capture in the Plane Problem of Three Bodies of Equal Mass.	33
Coplanarity of the Orbits of Multiple Stars.	69
Magnetic Fields in the Interstellar Space.	98
The Bilateral Interaction of Stars with Diffuse Matter and Its Significance in the Cosmogenic Process.	108

Available From JPRS 25359

(Continued)

VOPROSY KOSMOGONII

Vol III, 1954

CONTENTS (Contd)

Chapter I. The Interaction of Stars with Diffuse Matter.	114
Chapter II. Hot Giants and Their Clusters. . . .	145
Chapter III. The Outbursts of Stars.	166
Chapter IV. The Nature of the Novas and Their Place in the Stellar System	236

REVIEWS

Critical Review of Cosmogonic Theories Prevalent in Western Europe and America	279
Chapter I. Stellar Cosmogony	283
Chapter II. The Origin of the Solar System . . .	336

REPORTS

P. P. Parenago and A. G. Masovich, Study of the Mass- Luminosity-Radius Correlation.	374
P. P. Parenago, Investigation of the Spatial Velocities of the Stars.	377
P. P. Parenago, The Gravitational Potential of the Galaxy	381
L. H. Aller, Turbulence in the Interstellar Medium . .	383
D. Bates and L. Spitzer, The Density of Molecules in Interstellar Space	385
L. Spitzer and M. Savedoff, The Temperature of Interstellar Matter.	387
W. A. Hiltner, On Polarization of Radiation by Interstellar Medium.	389
L. Davis and J. Greenstein, The Origin of Interstellar Polarization	391
H. W. Babcock, Stellar Magnetic Fields	393
F. Zwicky, Luminous Intergalactic Matter	395

Available From JPRS 25359

(Continued)

VOPROSY KOSMOGONII

Vol III, 1954

CONTENTS (Contd)

CHRONICLE

First Plenary Assembly of the Commission on Cosmogony.	399
Enlarged Session Devoted to the Earth's Inner Structure of the Scientific Council of the Geophysical Institute.	406
Third Conference on Problems of Cosmogony.	412
Conference on Physics of Nebulas and Interstellar Medium	427

Available From JPRS 25359

Industrial Laboratory

*A translation of Zavodskaya Laboratoriya, a publication of the
State Scientific-Technical Committee of the
Council of Ministers of the USSR*

(Russian Original Dated November, 1963)

Vol. 29, No. 11, pp. 1415-1574

April, 1964

CONTENTS

	PAGE	RUSS. PAGE
Methods of Concentration in Analytical Chemistry. <u>P. N. Palei, D. I. Ryabchikov, Yu. M. Dedkov, and Yu. A. Zolotov</u>	1415	1279
METHODS OF CHEMICAL ANALYSIS		
The Development of Ion Exchange Methods in the Analytical Chemistry of Metals (Review). <u>S. M. Chernobrov</u>	1417	1281
Pulse Polarography at Solid Electrodes. <u>Yu. S. Lyalikov, L. G. Madan, and V. I. Bodyu</u> . . .	1427	1289
The Phase Method of Polarography. <u>G. V. Tsvet and L. S. Zaretskii</u>	1430	1291
The Electrochemical Determination of Molybdenum by Means of the Catalytic Reaction of Iodide Oxidation by Hydrogen Peroxide. <u>R. K. Sharipov and O. A. Songina</u>	1433	1293
A Radiometric Method for the Determination of Iron in Sulfide Ore Concentrates and Agglomerates. <u>V. I. Ivanov and P. D. Korzh</u>	1436	1296
The Quantitative Determination of Fluorine in Fluorine-Containing Organic Materials. <u>L. M. Dubnikov and I. A. Kalyagin</u>	1439	1298
The Analysis of Methylalyl Chloride by Gas-Liquid Chromatography. <u>L. I. Virin, L. M. Bushinskaya, and R. V. Dzhagatspanyan</u>	1442	1301
The Chromatographic Determination of Carbon Monoxide and Oxygen in the Products of Combustion of Fuels. <u>A. D. Likhachev</u>	1444	1302
Determination of the Ion Exchange Capacity of Ionites by Means of a High-Frequency Titrimeter. <u>A. B. Davankov and I. Santo</u>	1447	1304
The Determination of Iron by Extraction with 2-Ethylhexylphosphoric Acids (Exchange of Experience). <u>Yu. B. Kletenik and I. A. Bykhovskaya</u>	1449	1306
The Potentiometric Determination of Silver in Photographic Materials. <u>M. V. Zhdanova</u> . . .	1450	1307
The Spectrophotometric Determination of Picric Acid and Dinitrophenols as Microconstituents. <u>G. I. Romantsova</u>	1451	1307
The Use of 2-Thiobarbituric and Barbituric Acids for Photometric Control of Autooxidation Processes. <u>M. S. Drozdov and V. P. Krylov</u>	1452	1307
The Quantitative Determination of Epinephrine. <u>V. M. Nikitin and V. M. Skachkov</u> . . .	1453	1308
METHODS OF SPECTRAL ANALYSIS		
Application of Nuclear Quadrupole Resonance in Physicochemical Analysis. <u>V. S. Grechishkin, I. A. Kyuntsef, and G. A. Seifer</u>	1454	1310
Electron Spin Resonance in a Ceramic Based on Al_2O_3 . <u>A. A. Vashman</u>	1469	1315
The Spectral Analysis of Lubricants and Fuels (Review). <u>E. V. Il'ina</u>	1471	1317
The Spectral Determination of Carbon in Steels after Cementation. <u>T. T. Stefanenko</u>	1468	1321
The Effect of Nitric Acid on the Results of the Spectral Analysis of Solutions. <u>Kh. I. Zil'bershtein and O. N. Nikitina</u>	1470	1323

Available From Instrument Society of America

(Continued)

CONTENTS (continued)

	PAGE	RUSS. PAGE
PHYSICAL METHODS OF INVESTIGATION		
Noncontact Measurement of Resistivity in Semiconductors. <u>M. I. Iglitsyn, A. M. Pashaev, V. G. Shunyarev, and V. V. Voronkov</u>	1472	1324
Non-Probe Method of Measuring the Resistivity for High Alloy Semiconductors. <u>V. I. Fistul' and O. B. Orzhevskii</u>	1475	1327
Use of Light Pipes in Photoelectric Measurements of Semiconductors. <u>A. A. Meier</u>	1478	1329
Detection of Dislocation in Silicon Monocrystals with Low Dislocation Density. <u>B. M. Turovskii and L. V. Lainer</u>	1480	1331
Optical Determination of the Orientation of Germanium Crystals. <u>S. V. Tsvinskii and A. V. Stepanov</u>	1483	1333
Method of Investigating the Photoelectric Properties of Semiconductors. <u>A. P. Galushka, P. G. Litovchenko, and V. I. Ust'yanov</u>	1486	1335
Determination of Yield-Point Shear Stress with a Conical Plastometer of Improved Sensitivity. <u>G. I. Fuks and N. I. Mikolaeva</u>	1490	1339
Study of Corrosion Processes in Passivating Metals by Means of Anode Polarization. <u>M. B. Cherkez and V. P. Ordin</u>	1492	1341
MECHANICAL METHODS OF TESTING		
Service Life of Materials Working with Stress Relaxation. <u>L. P. Nikitina</u>	1495	1344
The Method of Testing for Stress Relaxation. <u>L. P. Nikitina</u>	1500	1348
Testing for Stress Relaxation at High Stress Levels. <u>L. B. Getsov</u>	1505	1352
The Determination of Stress Relaxation Characteristics of Compression Springs by Testing a Single Spring. <u>N. D. Morozov and V. Z. Tseitlin</u>	1507	1354
On the Processing of the Results of Stress Relaxation Tests on Metals. <u>A. M. Borzdyka</u>	1511	1357
On Methods of Fatigue Testing at High Temperatures. <u>S. V. Serensen and L. A. Kozlov</u>	1514	1359
EQUIPMENT AND TECHNIQUE OF LABORATORY WORK		
Machines for High-Temperature Fatigue Testing in Variable Bending. <u>L. A. Kozlov</u>	1520	1366
An Automatic Device for Measuring Stress Relaxation in Compression Springs. <u>A. M. Trus'</u>	1527	1372
Device for Measuring Stress Relaxation in Fibers. <u>V. V. Gureev and Yu. M. Malinskii</u>	1529	1373
Adapter for Determining the Strength of Pasted Joints. <u>V. P. Dyatlova, M. P. Pomanskaya, and R. I. Akidina</u>	1531	1375
Spectrometer for Investigating Electron Paramagnetic Resonance in Solids at Low Temperatures. <u>A. A. Bugai and M. A. Ruban</u>	1532	1376
Use of the IKS-12 Spectrometer for the Investigation of Gas Spectra. <u>A. P. Filippov</u>	1536	1379
Determination of Alternating-Current Arc Operating Conditions for the Solution of Certain Analytical Problems. <u>V. P. Borzov</u>	1537	1380
Bent Crystals with Two Curvature Radii of the Reflecting Planes. <u>P. A. Bezirganyan, Z. F. Zazyan, and V. I. Avundzhyan</u>	1540	1382
Adapter to the GUR-3 X-Ray Goniometer for Operation with a Two-Crystal Spectrometer. <u>V. T. Tsygan, V. G. Fomin, and M. A. Gurevich</u>	1542	1383
Specimen Holder for Kros X-Ray Chambers. <u>O. I. Rybailo and G. P. Kushta</u>	1544	1385
Adapter for the Deformation of Specimens in the UEMB-100 Electron Microscope. <u>L. G. Orlov</u>	1546	1386
Apparatus for Structure Determination of Porous Materials by Forcing in of Mercury. <u>M. G. Faganer</u>	1547	1387
Accessory Device to the EPP-09 Potentiometer for Recording of Changes in EMF and Electric Conductivity. <u>B. A. Lopatin</u>	1549	1388
High-Voltage Three-Chamber Electrodialyzer Based on the Countercurrent Flow Principle. <u>V. A. Pehelin and L. M. Gubernicva</u>	1551	1390

Available From Instrument Society of America

(Continued)

CONTENTS (continued)

	PAGE	RUSS. PAGE
Spectrofluorometer for the Visible Region of the Spectrum (Exchange of Experiences). <u>A. A. Nevinskii and B. G. Belen'kii.</u>	1553	1391
Device for Introducing Samples of Viscous Polymer Solutions into a Chromatograph (Exchange of Experience). <u>V. M. Chesunov.</u>	1554	1392
ORGANIZATION AND EXPERIENCE OF LABORATORY WORK		
The Experience Gained in Using the DFS-10 Photoelectric Device at the Dnepropetsstal' Plant. <u>E. I. Goreva, S. I. Kulik, and T. M. Leuta.</u>	1555	1393
Application of the FES-1 Photoelectric Stylometer at the Chelyabinsk Metallurgical Plant. <u>G. A. Subbotina and I. P. Manzhosov.</u>	1558	1395
INFORMATION		
Apparatus for Measuring the Electrophysical Properties of Semiconducting Materials. <u>Yu. A. Kontsevoi, V. D. Kudin, A. D. Gerasimov, E. I. Asvadurova, A. I. Tatarenkov,</u> <u>and V. F. Kudryavtseva.</u>	1560	1397
Conference on Methods of Concentrating Elements in Analytical Chemistry. <u>Yu. M. Dedkov.</u> . . .	1563	1399
The Urals Conference on Spectroscopy. <u>S. G. Bogomolov, R. I. Gudkina,</u> <u>and A. B. Shaeovich</u>	1566	1400
A New Reagent for Beryllium.	1566	1401
REVIEWS AND BIBLIOGRAPHY		
Physical Chemistry, by <u>A. A. Zhukovitskii and L. A. Shvartsman</u> (A Textbook for Metallurgical Colleges). <u>R. N. Rubinshtein.</u>	1567	1402
Technical Analysis in Metallurgy (A Handbook for Laboratory Assistants). <u>P. Ya. Yakovlev and E. F. Yakovleva.</u>	1568	1402
Publication of Patent Literature	1570	1404

Available From Instrument Society of America

Industrial Laboratory

*A translation of Zavodskaya Laboratoriya, a publication of the
State Scientific-Technical Committee of the
Council of Ministers of the USSR
(Russian Original Dated December, 1963)*

Vol. 29, No. 12, pp. 1575-1748

June, 1964

CONTENTS

	PAGE	RUSS. PAGE
METHODS OF CHEMICAL ANALYSIS		
Extraction-Photometric Methods of Analysis Using Basic Dyes (Review). <u>I. A. Blyum</u> and <u>N. N. Pavlova</u>	1575	1407
Determination of Tellurium in Arsenic by the Fluorescent Method. <u>V. M. Vladimirova</u> , <u>N. K. Davidovich</u> , <u>G. I. Kuchmistaya</u> , and <u>L. S. Kazumova</u>	1587	1419
Extractive-Complexometric Determination of Cobalt in Alloys Based on Iron, Copper, and Nickel. <u>V. P. Zhivopistsev</u> and <u>E. A. Selezneva</u>	1589	1421
Amperometric Determination of Manganese, Chromium, and Vanadium in Alloy Steels. <u>A. I. Filenko</u>	1591	1423
Determination of Oxygen, Hydrogen, and Nitrogen in Tungsten, Niobium, and Tantalum. <u>Yu. A. Klyachko</u> , <u>T. A. Izmanova</u> , and <u>E. M. Chistyakova</u>	1593	1425
Use of an Alkaline Oxidant for the Dissolution of Niobium, Tantalum, and their Alloys to Determine their Nitrogen Contents. <u>B. Ya. Kaplan</u> and <u>G. N. Revyakina</u>	1595	1427
A Conductimetric Method for the Analysis of Solutions of Ammonium Phosphates and Ammonium Sulfates. <u>R. I. Kudryashova</u> , <u>G. D. Kharlampovich</u> , and <u>V. F. Degtyareva</u>	1598	1429
Analysis of Mixtures of Some Halogen Compounds. <u>A. I. Orochko</u> and <u>P. A. Éplik</u>	1598	1431
Determination of Microgram Quantities of Iodine. <u>E. I. Savichev</u> , <u>I. G. Vasil'eva</u> , and <u>E. I. Golovin</u>	1600	1433
Polarographic Determination of Chlorine Derivatives of Methane. <u>K. G. Berezina</u> , <u>L. K. Kutalina</u> , and <u>V. V. Katsion</u>	1601	1434
Potentiometric Determination of Hydrazides of Dicarboxylic Acids by Potassium Iodate. <u>A. P. Grekov</u> , <u>S. A. Sukhorukova</u> , and <u>K. A. Korney</u>	1603	1436
Determination of Small Concentrations of Tertiary Amines in Solutions. <u>É. Sh. Ioffe</u> and <u>A. M. Ivanova</u>	1604	1437
Analysis of Elementary Iodine to find the Content of Cyanide Impurities. <u>A. N. Aleksceva</u> and <u>A. I. Sakharova</u>	1604	1437
A Rapid Method for the Determination of β -Phenylethyl Alcohol in Commercial β -Phenylethyl Alcohol Raw Material. <u>N. V. Moiseeva</u> and <u>M. N. Merzlikina</u>	1605	1437
METHODS OF SPECTRAL ANALYSIS		
Methods for Obtaining the Infrared Spectra of Fibrous Materials (Review). <u>R. G. Zhabankov</u>	1606	1438
Analysis of Mixtures of Acids and Anhydrides by Means of their Raman Spectra <u>D. P. Mironov</u> and <u>V. V. Zharkov</u>	1609	1441
A Spectral Method for Investigating the Migration of Impurities in Oxide Cathodes of Electron Tubes. <u>G. I. Vidro</u> and <u>N. V. Maslennikova</u>	1611	1443
Construction of Calibration Curves for Reabsorption Lines. <u>A. K. Tumanov</u>	1613	1445

Available From Instrument Society of America

(Continued)

CONTENTS (continued)

	PAGE	RUSS. PAGE
Special Features of the Entry of Material from the Electrode Surface in Microspectral Analysis. <u>V. F. Yankevich and I. V. Bezruchko</u>	1615	1447
Determination of the Isotopic Composition of Lithium by the Atomic Absorption Method. <u>A. N. Zaidel' and E. P. Korennoi</u>	1617	1449
A Spectrochemical Method for Determining Boron in Silicon Dioxide. <u>M. P. Semov</u>	1618	1450
Spectral Determination of Silicon, Manganese, and Phosphorus in Gray Cast Iron. <u>V. I. Matavina</u>	1620	1451
Spectral Determination of Silicon in Pig Iron. <u>V. T. Lyakishev, G. P. Platonova, and A. A. Sinitsyn</u>	1620	1452
PHYSICAL METHODS OF INVESTIGATION		
The Choice of Magnetic Characteristics for Testing Ferromagnetic Materials and Electromagnetic Devices.	1622	1453
Tests of Electrotechnical Steel. <u>N. A. Grekov, V. D. Durnev, and A. M. Shkatova</u>	1622	1453
Determination of the Thickness of Electrotechnical Steel. <u>V. D. Durnev and E. M. Zabelina</u>	1623	1455
Summary of the Discussion of the Magnetic Characteristics of Ferromagnetic Materials.	1624	1456
Determination of the Depth of the Active Quenched Layer and the Amount of Residual Austenite in the Surface Layer of Rollers used in Cold Rolling. <u>M. N. Mikheev, V. M. Morozova, G. V. Surin, and V. S. Bochenkov</u>	1627	1459
Application of the Differential Magnetic Method to the Investigation of Steel at Subcritical Temperatures. <u>K. K. Kozlov</u>	1629	1461
Detection of the α -Phase in Austenitic Steel by the Oscillographic Method. <u>L. A. Krasil'nikov and V. A. Chertousov</u>	1631	1463
Automatic X-Ray Quality Control of Spot Welds in Duralumin Alloys. <u>R. M. Dombrugov, L. S. Fel'dman, and A. P. Zozulya-Churus</u>	1632	1464
The Use of Quantitative Metallography Methods in Mineralogical Analysis. <u>T. M. Pereskokova</u>	1636	1468
Utilization of Photoelectric Phenomena in the Electrolysis of Molten Salts. <u>S. M. Sutovskii</u>	1640	1472
Use of the Mass Spectrometer for Determining the Amount of Hydrogen in Metals. <u>A. I. Vygodskii, V. G. Nesterenko, and D. G. Sherman</u>	1642	1474
MECHANICAL METHODS OF TESTING		
A Method for the Investigation of Cyclic Strain Diagrams Obtained at Constant High Temperatures. <u>A. P. Gusenkov and R. M. Shneiderovich</u>	1644	1476
Determination of True Ultimate Strength and Uniform Strain. <u>M. I. Prudnikov</u>	1648	1480
Construction of True Stress Curves Taken from the Measurement of the Cross Section of Flat Specimens. <u>I. P. Obozov</u>	1651	1483
A Method for Measuring the Hardness of Specimens with a Rough Surface. <u>M. S. Drozd and A. V. Drozdov</u>	1654	1485
A Method for Taking into Account Plastic Strain in Determining Rockwell Hardness. <u>K. M. Pogodina-Alekseeva</u>	1657	1488
On the Fatigue Testing of 3-mm Diameter Specimens. <u>V. N. Gulyaev</u>	1658	1490
LABORATORY APPARATUS AND TECHNIQUE		
Apparatus for Determining Deformation and Stress by Means of Optically Sensitive Coatings. <u>P. T. Bogdyl' and N. I. Prigorovskii</u>	1661	1492
Apparatus for Measuring $\tan \delta$ and ϵ' as Functions of Temperature for Polar Polymers. <u>D. A. Dmitrochenko, A. M. Lobanov, and V. A. Shevelev</u>	1664	1495
Calibration of Chromatographic Instruments with Thermochemical Detectors. <u>A. M. Levit</u>	1667	1497

Available From Instrument Society of America

(Continued)

CONTENTS (continued)

	PAGE	RUSS. PAGE
Semiautomatic Relaxation Meter. O. S. Reutov and A. B. Gugnnyak	1670	1500
Device for Testing Tubular Pressure-Gauge Springs for Creep. L. M. Butkevich, F. Ya. Gorbachev, M. P. Gridnev, M. B. Makogon, and G. K. Pyatnichuk	1671	1500
Automatic Cut-Out Switch for Multipoint Fatigue Machines. T. K. Marinets and V. M. Nikitin	1672	1501
Modernization of the UKIT-3000 Fatigue-Testing Machine. A. A. Gudkov	1672	1501
Reverser for Tensile Tests of Metals. V. D. Yaroshevich	1673	1502
Device for Determining the Dynamic Properties of Immersion Thermocouples. L. I. Levi, É. A. Chernin, and A. I. Degal'tsev	1674	1502
Automatic Control of Temperature Conditions in High-Frequency Devices. L. I. Levi, V. D. Pozdnev, and Yu. D. Pozdnev	1675	1503
Device for the Zone Melting of Substances with Low Surface Tension without the Use of Crucibles. A. I. Shilkin and A. A. Kuliev	1676	1504
Device for Multiple Stretching of Rubbers. I. T. Gridunov, S. I. Strizhenov, S. F. Pryakhina, and A. A. Sokolovskii	1677	1505
Device for Zone Melting. G. I. Abakumov and É. E. Konovalov	1679	1506
Adapter for Programmed Temperature Control. V. K. Koshelev	1680	1507
Narrow-Slit Collimator for the X-Ray Structural Analysis of Powders Under Small Angles R. G. Grebenshchikov and V. A. Frank-Kamenetskii	1681	1508
 REVIEWS AND BIBLIOGRAPHY		
Chemical Analysis of Industrial Sewage. Yu. Yu. Lur'e and A. I. Rybnikova	1683	1509
Notice to Directors of Metallography and Material Strength Laboratories of Plants, and Educational and Scientific Research Institutes.	1684	ins. rear cov.
KRFS-2 Short-Wave X-Ray Fluorescent Spectrometer.	1685	} outside
DRUS-3 Long-Wave X-Ray Universal Spectrometer.	1685	} rear cover
Author Index, Volume 20, Numbers 1-12	1689	
Tables of Contents, Volume 20, Numbers 1-12	1712	

Available From Instrument Society of America

CONTENTS

	Page	Russian Reference
Cross Section for Gamma-ray Absorption by Carbon in the Giant Resonance Region. (E)	1159	45, 1693
..... N. A. Burgov, G. V. Danilyan, B. S. Dolbilkin, L. E. Lazareva, and F. A. Nikolaev		
Properties of Magnetoplasma Waves in Bismuth Single Crystals. (T/E).	1167	45, 1704
..... M. S. Khaikin, L. A. Fal'kovskii, V. S. Edel'man, and R. T. Mina		
Polarization of Cosmic Ray μ^+ Mesons. (E).	1176	45, 1717
..... T. L. Asatiani, V. M. Krishchyan, and R. O. Sharkhatunyan		
Collective Effects in the Cs^{131} Nucleus. (E)	1178	45, 1720
..... G. A. Vartapetyan, A. G. Khudaverdyan, and T. A. Garibyan		
Elastic Scattering of 3.4-4.2 MeV Protons by Ni^{62} and Ni^{64} Isotopes. (E).	1183	45, 1727
..... V. Ya. Golovnya, A. P. Klyucharev, and B. A. Shlyayev		
Proton Capture Reaction on the Atomic Nuclei Na^{23} , Mg^{26} , Al^{27} and P^{31} . (E).	1186	45, 1731
..... I. Berkes, I. Dézsi, L. Keszthelyi, and I. Fodor		
Measurement of the Mass Difference of Charged and Neutral Pions. (E)	1190	45, 1737
..... V. I. Petrukhin and Yu. D. Prokoshkin		
Investigation of Neutron Resonances in Rh^{103} . (E)	1194	45, 1743
..... Wang Nai-Yon, I. Vizi, V. N. Efimov, E. N. Kurzhavina, Kim H. San, A. B. Popov, L. B. Pikol'nor, M. I. Pshutla, T. Stadnikov, Ch'eng Ling-Yen, E. I. Sharapov, I. I. Shelontsev, N. Yu. Shirikova, and Yu. S. Yuzvitskii		
Asymmetry of Double Scattering of Neutrons on Helium. (E)	1202	45, 1754
..... P. S. Ot-Stavrov, G. N. Lovchikova, and V. I. Popov		
Excitation of Balmer Hydrogen Lines Upon Passage of H^+ , H_2^+ , and H_3^+ Through Helium and Neon. (E)	1205	45, 1759
..... S. V. Bobashev, E. P. Andreev, and V. A. Ankudinov		
Maser with Two Resonators in Series. (E/T).	1211	45, 1768
..... N. G. Basov, A. N. Oraevskii, G. M. Strukhovskii, and V. M. Tataronkov		
Lifetime of the 4^+ (2310 keV) Level in Ti^{48} . (E).	1218	45, 1778
..... A. F. Akkerman, V. L. Kochetkov, V. N. Chekanov, V. V. Suvorov, and A. K. Shol'ts		
Short Range Products from Nuclear Disintegrations Induced by Protons with Energies Between 2 and 9 GeV. (E)	1222	45, 1784
..... P. A. Gorichev, O. V. Lozhkin, and N. A. Perfilov		
Fragment Production from the Interaction of 7.3-BeV π Mesons with Emulsion Nuclei. (E)	1228	45, 1793
..... Yu. F. Gagarin and N. S. Ivanova		
Measurement of the Total Muon Capture Probability in Ho^3 . (E)	1235	45, 1803
..... O. A. Zaifidoroga, M. M. Kulyukin, B. Pontecorvo, R. M. Sulyaev, I. V. Falomkin, A. I. Filippov, V. M. Tsypko-Sitnikov, and Yu. A. Sheherbakov		
Total Cross Section for the Interaction Between Neutrons and Protons at 5.5 GeV. (E).	1239	45, 1808
..... M. N. Khachatryan and V. S. Pantuev		
New Data on Alpha Decay of Americium Isotopes. (E).	1241	45, 1811
..... S. A. Baranov, V. M. Kulakov, and V. M. Shatinskii		
On Hyperfine Interaction in Ra (VI). (E)	1246	45, 1819
..... N. S. Garif'yanov		
Scattering of Protons with Energies Below 5 MeV on Ne^{20} . (E)	1248	45, 1822
..... H. Hulubei, J. Francez, N. Martalogu, N. Seintet, M. Ivascu, A. Berinde, and I. Nenmu		
Development of Turbulence in the Presence of a Heat Flow in Helium II within a Capillary and the Critical Velocity Problem. (E/T).	1251	45, 1827
..... V. K. Tkachenko		
Spectra of Charged Mesons Emitted at 90° in np Collisions Involving 600 MeV Neutrons. (E)	1257	45, 1835
..... K. O. Oganosyan and V. A. Yarcha		
A Study of Superconducting Tin by the Tunnel Effect. (E).	1260	45, 1839
..... N. V. Zavaritskii		
Spectroscopic Investigation of Turbulence Heating of a Plasma. (E)	1263	45, 1850
..... S. P. Zagorodnikov, G. E. Smolkin, and G. V. Sholin		
Intensities of Gamma Transitions to the Ground Rotational Band in Neutron Resonances of the $\text{Ga}^{156}(n, \gamma)\text{Ga}^{156}$ Reaction. (E).	1274	45, 1858
..... L. S. Danelyan, B. V. Efimov, S. K. Solnikov, and V. Kakhramanov-Dzhuzatov		
Altitude Variation of Vertical Extensive Air Showers in the Upper Part of the Atmosphere. (E)	1279	45, 1865
..... R. A. Antonov, Yu. A. Smorodin, and Z. I. Tul'mova		
Determination of the Ratio of the Probabilities for Electron Capture and Positron Decay of Sb^{115} with the Aid of a Scintillation Gamma Spectrometer. (E)	1286	45, 1875
..... N. A. Vartanov		
Evidence for the $\omega \rightarrow \pi^0 + \gamma$ Decay. (E/T).	1289	45, 1879
..... V. V. Barmin, A. G. Dolgolenko, Yu. S. Krestnikov, A. G. Meshkovskii, Yu. P. Nikitin, and V. A. Shebanov		
Equilibrium Shape of a Nucleus According to the Drop Model with Variable Surface Tension. (T).	1298	45, 1891
..... V. M. Strutinskii		
Stability of Equilibrium States of the Nucleus in the Drop Model. (T).	1305	45, 1900
..... V. M. Strutinskii		

Available From American Institute of Physics
 Soviet Physics - JETP
 Vol. XVIII, No. 5,

(Continued)

	Page	Russian Reference
Oscillations in the Radiation from a Laser. (T) A. M. Ratner	1311	45, 1908
Composition of Nuclear-Active Component of Cosmic Rays in the Atmosphere. (T) N. L. Grigorov	1318	45, 1919
The Doubly Logarithmic Approximation in Quantum Electrodynamics. (T) G. A. Milekhin and E. S. Fradkin	1323	45, 1926
Electron Scattering by Light Nuclei in the Unified Model. (T/E) B. I. Tishchenko	1332	45, 1940
On Inelastic Processes Due to Various Types of Moving Poles. (T) I. M. Dromin and D. S. Chornavskii	1334	45, 1943
Compound-elastic Scattering in Elastic Scattering of 5.45 MeV Protons on Nickel Isotopes. (T) G. F. Timoshevskii, R. A. Vanetsian, A. P. Klyucharev, and E. D. Fedchenko	1340	45, 1951
Decays of the Hypernucleus Σp . (T) V. A. Filimonov	1342	45, 1954
The Magnetic Properties of Superconductors with $I \neq 0$ Pairing. Theory of the Knight Shift. (T) I. A. Privorotskii	1346	45, 1961
Lateral Distribution of Nuclear-active Particles in Extensive Air Showers. (T) E. V. Godalin	1351	45, 1967
Semi-Empirical Method of Calculating the Cross Section for Elastic Scattering of Slow Electrons by Atoms. (T) L. M. Biberman and G. E. Norman	1353	45, 1970
Resonance Properties of Inhomogeneous Plasma Structures. (T) V. B. Gil'denburg	1359	45, 1978
pp-Scattering Phase Shifts at 435 MeV. (T/E) L. S. Azhgirei	1365	45, 1988
Critical Current and Critical Magnetic Field in Hard Superconductors. (T) V. V. Shmidt	1368	45, 1992
The Opto-acoustic Maser Effect. (T) V. R. Nagibarov and U. Kh. Kopvillem	1377	45, 2006
$K_{\beta 1}$ Decay. (T) V. A. Kolkunov and I. V. Lyagin	1379	45, 2009
On a Certain Model for Calculation of the Effective Cross Sections for Excitation of Atoms. (T) I. Vainshtein, L. Preanyakov, and I. Sobol'man	1383	45, 2015
Quantum Oscillations at High Temperatures. (T) M. Ya. Azbel	1388	45, 2022
Field Theory with Nonlocal Interaction. III. Diagram Technique. (T) D. A. Kirzhnits	1390	45, 2024
The Conductivity of Strongly Compressed Matter. (T) A. A. Abrikosov	1399	45, 2038
Longitudinal Polarization of Electrons in Allowed Beta Transitions. (T) A. M. Mukhamodzhinov	1405	45, 2048
Post-newtonian Equations of Motion and the Harmonicity Conditions in the Theory of Gravitation. (T) H. Wojewoda	1408	45, 2051
Singularity of Thermodynamic Quantities at a First Order Phase Transition Point. (T) A. F. Andreev	1415	45, 2064

LETTERS TO THE EDITOR

New Short-lived Isomers of Ruthenium and Tellurium. (E) A. G. Domin and I. M. Rozman	1417	45, 2067
Layered and Filamentlike Structure of Superconducting Nb-Zr and Nb-Ti Alloys. (E) B. G. Lazarov, V. K. Khorenko, L. A. Kornienko, A. I. Krivko, A. A. Matsakova, and O. N. Ovcharenko	1417	45, 2068
Band-structure Effect on the Angular Correlation of Annihilation Radiation in Yttrium. (E) V. L. Sedov	1419	45, 2070
Formation of Fast Residual Nuclei. (E) V. I. Bogatin, O. V. Lozhkin, and Yu. P. Yakovlev	1420	45, 2072
Phase Transitions in Tellurium at High Pressures. (E) S. S. Kabaikina, I. F. Vereshchagin, and B. M. Shulenin	1422	45, 2073
Anisotropy of the Energy Gap in Superconducting Tin. (E) A. G. Shepolev	1423	45, 2076
"Air" Spark Chambers for the Registration of Particle Showers. (E) M. I. Dalon and L. F. Klimanova	1425	45, 2078
A 4 mm Fabry-Perot Maser. (E) A. F. Krupnov and V. A. Skvortsov	1426	45, 2080
Search for the Decay $\omega \rightarrow \rho^+ + \rho^-$. (E) V. V. Barmin, A. G. Dolgolenko, Yu. S. Krosnikov, A. G. Moshkovskii, and V. A. Shabanov	1427	45, 2082

Available From American Institute of Physics
Soviet Physics - JETP
Vol XVIII, No 5

JOURNAL OF GENERAL CHEMISTRY OF THE USSR

A translation of **ZHURNAL OBSHCHEI KHIMII**

A publication of the Academy of Sciences of the USSR

1964 CONSULTANTS BUREAU ENTERPRISES, INC.
227 West 17th Street, New York 11, N. Y.

Volume 33, Number 8

August, 1963

CONTENTS

	P	A	G	E
	ENG.		RUSS.	
Characteristics of the Layer-Separation Field of Ternary Systems of the Transitional Type. III - R. V. Mertsln, V. V. Tarasov, and N. I. Nikurashina	2375		2435	
Characteristics of the Layer-Separation Field of Ternary Systems of the Transitional Type. IV - R. V. Mertsln and N. I. Nikurashina	2380		2440	
Reactions of Aliphatic Diazo Compounds with Unsaturated Compounds, XXIII, Reaction of Ethyl Diazoacetate with Diphenylacetylene - I. A. D'yakonov and M. I. Komendantov	2387		2448	
Organic Insectofungicides, LXX, Thione-Thiol Isomerization of Some Phosphorothioic and Phosphorodithioic Esters in Their Reaction with Amines - N. N. Mel'nikov, B. A. Khaskin, and K. D. Shvetsova-Shilovskaya	2394		2456	
Compounds Containing a Three-Membered Epoxide Ring, Preparation of N-Unsubstituted Hydroxypyrazolidinones - V. F. Martynov and I. B. Belov	2399		2461	
β -Hydroxy and β -Halo Carbonyl Compounds, III, Preparation and Investigation of Some β -Halo Carbonyl Compounds - Analogs of Neopentyl Bromide - T. I. Temnikova and N. A. Oshueva	2402		2464	
Condensation of 2'-Hydroxyacetophenone with Diethyl Oxalate - V. A. Zagorevskii and D. A. Zykov	2407		2469	
1-Buten-3-Yne Homologs, XI, Dehydration of the Acetylene Alcohols; 2,6-Dimethyl-4- Heptyn-3-OL, 2,6,6-Trimethyl-4-Heptyn-3-OL, and 3-Ethyl-6,6-Dimethyl-4-Heptyn- 3-OL - I. A. Favorskaya and A. A. Gavrilovskaya	2410		2472	
Benzodiazines, IV, Structure and Hydrolysis of Azidotetrazoquinazoline - I. N. Goncharova and I. Ya. Postovskii	2413		2475	
Aminoacyl Derivatives of Nucleosides, VI, Synthesis and Properties of Aminoacyl Derivatives of Deoxyribonucleosides - N. I. Sokolova, V. A. Bakanova, Z. A. Shabarova, and M. A. Prokof'ev	2418		2480	
Potential Antimetabolites, VI, Synthesis of 3-(4-Hydroxy-2-Pyrimidinyl)Alanine - Yu. P. Shvachkin, L. A. Synsova, and M. P. Filatova	2425		2487	

Available From Consultants Bureau

(Continued)

CONTENTS (continued)

	P A G E	EN6. RUSS.
Synthesis and Reactions of Substituted Vinyl Ethers. XIII. Stereochemistry of the Addition of Thiols to 3,3-Dimethyl-1-butyne - E. P. Gracheva, V. I. Laba, N. K. Kul'bovskaia, and M. F. Shostakovskii.	2431	2493
Synthesis and Reactions of Substituted Vinyl Ethers. XIV. Synthesis of Alkyl 1-t-Butylvinyl Sulfides and Some of Their Properties - E. P. Gracheva, V. I. Laba, and M. F. Shostakovskii	2439	2501
Diene-Condensation and Addition Reactions of 1,3-Butadienylphosphonic and 1,3-Butadienylphosphonothioic Esters - A. N. Pudovik, I. V. Konovalova, and E. A. Ishmaeva	2446	2509
Coumarans: Their Synthesis and Spectrographic Investigation. I - E. D. Laskina, T. A. Rudol'fi, and V. N. Belov.	2450	2513
Mass Spectra and the Structure of Organic Compounds. VIII. Mass Spectra of Some Allene Hydrocarbons Containing t-Butyl Groups - A. A. Polyakova, R. A. Khmel'nitskii, and A. A. Petrov	2455	2518
Investigations in the Pyran Series: Its Analogs and Related Compounds. III. 4-Alkyl-4-amino-1-methylpiperidines - V. A. Zagorevskii and K. I. Lopatina	2461	2525
Synthesis of Diethyl 4-Aryl-2-butenylmalonates and 6-Aryl-4-hexenoic Acids from Arylchlorobutenes and Sodiummalonic Ester - M. M. Yukhomenko, N. I. Ganushchak, and A. V. Dombrovskii	2464	2528
Syntheses Based on Diene Condensation. I. 1-Methyl-4-arylanthraquinones - N. I. Ganushchak, A. V. Dombrovskii, and O. A. Vislobitskaya.	2468	2532
Stereochemistry of Acetylene Synthesis. II. Absorption Spectra and Steric Structures of the Geometric Isomers of 4-Acetyl-1,3-dimethyl-4-piperidinol - V. B. Belyanin, B. V. Unkovskii, and I. A. Mokhir	2471	2534
Stereochemistry of Acetylene Synthesis. III. Steric Structures of the Geometric Isomers of 4-Ethynyl-1,2,6-trimethyl-4-piperidinol and Its Derivatives - B. V. Unkovskii, V. B. Belyanin, I. A. Mokhir, and E. M. Urinovich.	2476	2540
Dihydrofurans. XI. 3,3-Dimethyl-1-(1-propynyl)-1-phthalanol - T. G. Melent'eva, L. A. Pavlova, and E. D. Venus-Danilova	2482	2548
Lipids. XX. Synthesis of Lauric Acid - G. G. Zapesochaya, I. K. Sarycheva, and N. A. Preobrazhenskii	2486	2552
Addition of Benzonitrile N-Oxide to Unsaturated Compounds. IV. Condensation of Benzonitrile N-Oxide to 1,3-Enyne Compounds - V. N. Chistokletov, A. T. Troshchenko, and A. A. Petrov	2489	2555
Reactions of Sodium Diethyl Phosphorothioate with Compounds of the Allyl Halide Type - A. N. Pudovik, R. I. Tarasova, and R. A. Bulgakova.	2493	2560
Spectra and Halochromism of Nitro Methoxy and Dinitro Derivatives of Thiophene Analogs of Chalcone - V. M. Nikitchenko, S. V. Tsukerman, and V. F. Lavrushin	2497	2563
Synthesis of Unsaturated Acyl Derivatives of Hydroxamic Acids - O. M. Sleptsova, K. I. Grobova, and M. M. Koton.	2502	2568
Reaction of Tetrahydrofuran with Acetyl Chloride in Presence of Zinc Bromo Enol Acetates - V. A. Barkhash, G. P. Smirnova, and I. V. Machinskaya	2504	2570
Substituted Pyridines. Synthesis of 4-Aryl(aryl)-2,5-dimethylpyridines - N. S. Prostakov, L. A. Galvoronskaya, N. M. Mikhailova, and L. M. Kirillova	2507	2573
Synthesis of ω -(p-Nitrobenzoyl)-2-acetoselenophene - Yu. K. Yur'ev, N. N. Magdesieva, and V. V. Titov.	2510	2577
The Chemistry of Selenophene. XLVII. Synthesis and Alkylation of β -Diketones of the Selenophene Series - Yu. K. Yur'ev, N. N. Magdesieva, and V. P. Brysova	2511	2578
Synthesis of Some α,β -Unsubstituted Aromatic Ketones and Their Vinylogs - V. F. Lavrushin and V. P. Dzyuba.	2515	2581

Available From Consultants Bureau

(Continued)

	P A G E ENG.	R U S S.
Investigation of Pyrazoles. XXXVII. Chromatographic Separation of the Aminopyrazoles - I. I. Grandberg, S. V. Tabak, G. K. Faizova, and A. N. Kost.	2519	2585
Investigation of Pyrazoles. XXXVIII. Isopyrazole-Pyrazole Rearrangement - I. I. Grandberg, A. P. Krasnoshchek, A. N. Kost, and G. K. Faizova	2521	2586
Investigation of Pyrazoles. XXXIX. Structure and Tautomerism of Hydroxypyrazoles - V. G. Vinokurov, V. S. Troitskaya, I. I. Grandberg, and Yu. A. Pentin	2531	2597
Acylation of Aromatic Compounds. VII. Benzoylation, Caprylylation, and Acetylation of 2-Methoxynaphthalene - I. N. Zemzina and I. P. Tsukervanic.	2539	2605
Structure of Some Organotin Salts of Carboxylic Acids - N. A. Slovokhotova, N. A. Faizi, N. N. Zemlyanskii, E. M. Panov, and K. A. Kocheshkov.	2544	2610
Oxides of Some Higher Alkylideneacetones - I. G. Tishchenko, O. N. Bubel', and I. P. Zyat'kov	2547	2613
Investigation in the Field of Monoorganosilanes. III. Syntheses Based on Monoorganosilanes - V. A. Prokhorova and V. O. Reikhsfel'd	2551	2617
The Disintegration of Esters of Silicic Acid under the Action of an Electron Beam - I. L. Agafonov and N. V. Larin.	2560	2626
Transalkylation of Bis- and Tris-(β -Cyanooethyl)-Phosphines - E. V. Kuznetsov, T. V. Sorokina, and R. K. Valetdinov.	2564	2631
Reaction of Glycidyl Ethers of Phenols with Organochlorosilanes - K. A. Andrianov, G. A. Kurakov, and L. M. Khananashvili.	2567	2634
Synthesis of Mixed Silazanes with Unsaturated Radicals on the Silicon Atom - D. Ya. Zhinkin, N. V. Markova, and M. V. Sobolevskii	2571	2638
Catalytic Synthesis of Aldehydes and Ketones. VIII. Synthesis of Methyl Ethyl, Methyl Propyl and Methyl Phenyl Ketones - I. P. Yakovlev	2573	2640
Nucleophilic Substitution in the Aromatic Series. III. Kinetics and Mechanism of the Reaction of 1,2,4,5-Tetrachlorobenzene with Sodium Ethylate in Anhydrous Alcohol - S. M. Shein and V. A. Ignatov	2578	2645
The Color of p-Dialkylaminobenzylidene Derivatives of 1-Phenyl-3-Methyl-5- Pyrazolone - N. F. Turitsyna and V. S. Il'inskaya	2582	2650
Synthesis of Some Substituted p-Dialkylaminobenzaldehydes - N. F. Turitsyna and V. S. Il'inskaya	2588	2656
Ultraviolet and Infrared Spectra of Diesters of Acylthioamidophosphoric and Acylamido- phosphoric Acids and Their Derivatives - V. A. Shokol, G. I. Derkach, and A. A. Kisilenko	2592	2660
Nucleophilic Substitution in the Aromatic Series. IV. Kinetics and Mechanism of the Reaction of 1,2,4,5-Tetrachlorobenzene with Sodium Alcoholates in Alcohol Medium - S. M. Shein and V. A. Ignatov.	2598	2667
Condensed Heterocycles. III. Condensation of 3-Amino-1,2,4-Triazole with Some β -Ketocarboxylic Esters - Ya. A. Levin, N. A. Gul'kina, and V. A. Kukhtin	2603	2673
Condensed Heterocycles. IV. Condensation of 3-Amino-1,2,4-Triazoles with Diaceto- and Dipropionitriles - Ya. A. Levin and V. A. Kukhtin	2608	2678
Synthesis and Study of Derivatives of Carbothiophenylamide Phenylthiocarbohydrazide. II. Reaction of Derivatives of Carbothiophenylamide Phenylthiocarbohydrazide with Methylating Agents and Alkali - R. G. Dubenko and P. S. Pel'kis	2612	2682
1-Azabicycles. I. Hydroxymethylation of Compounds in the 1,2-Dihydrodipyrrole Series - A. A. Ponomarev, I. M. Skvortsov, and A. A. Khorkin.	2617	2687
Nucleophilic Substitution in the Aromatic Series. V. Kinetics of the Reaction of 1,2,4,5-Tetrachlorobenzene with Sodium Alcoholates in Aqueous Alcohol Medium - S. M. Shein and V. A. Ignatov.	2620	2690

Available From Consultants Bureau

(Continued)

CONTENTS (continued)

	P A G E ENG.	R U S S.
Synthesis of Aliphatic Amino Acids from Thiophene Derivatives. VII. Preparation of Some Higher α -Amino Acids from 2-Phenyl-4-(Thenylidene)-5-Oxazolones - B. P. Fabrichnyi, É. A. Krasnyanskaya, I. F. Shalavina, and Ya. L. Gol'dfarb	2627	2697
Stereochemical Investigations. XVI. Optically Active β -(3-Indolyl)isopropylamine - V. M. Potapov, A. P. Terent'ev, M. N. Preobrazhenskaya, and N. N. Suvorov	2632	2702
Isotopic Exchange of Hydrogen in Methyl Derivatives of Nitrogen Heterocycles and Their N-Oxides. I. α -Picoline, Quinaldine, and Their N-Oxides - N. N. Zatssepina, I. F. Tupitsyn, and L. S. Éfros	2636	2705
Derivatives of Benzo(c,d)Indoline. IX. 1-Amino-6-Bromo- and 1-Phenylamino-6-Bromobenzo(c,d)Indolin-2-Ones - N. S. Dokunikhin and G. I. Bystritskii	2642	2712
Derivatives of Benzo(c,d)Indoline. X. 1-Amino- and 1-Arylamino-6-Bromobenzo(c,d)Indolin-2-Thiones - N. S. Dokunikhin and G. I. Bystritskii	2644	2714
Investigations in the Pyridylthiazolylmethane Series. III. Synthesis and Properties of 3-Pyridyl-2'-Thiazolylcarbinols - V. G. Ermolaeva and M. N. Shchukina	2646	2716
Analog of Syntomycin Containing Trifluoromercapto and Trifluoromethylsulfonyl Groups - L. M. Yagupol'skii, G. O. Vishnevskaya, and M. I. Kaganovskaya	2650	2721
Esters of α -Metalated Carboxylic Acids. Preparation of Esters of Trialkylstannyl- and Trialkylgermanylacetic Acids from Esters of Mercuribisacetic Acid - N. F. Lutsenko, Yu. I. Baukov, and B. N. Khatapov	2653	2724
Anthraquinone Derivatives. II. Mercuration and Catalytic Sulfonation of Anthraquinone - N. S. Dokunikhin and L. A. Gaeva	2656	2727
Sesquiterpene Lactones of White and Austrian Wormwoods (<i>Artemisia leucodes</i> Schrenk and <i>A. austriaca</i> Jacq.) - K. S. Rybalko	2663	2734
The Chemical Structure of Morison's Mountain Parsley (<i>Pucedanum morisonii</i> Bess.) - G. K. Nikonov and A. A. Ivashenko	2668	2740
Lactones of the Fruit of Chimgan Angelica (<i>Archangelica tschimganica</i>) - G. K. Nikonov, R. K. Veremel, and V. B. Kuvaev	2672	2744
Esters of Citric and Malic Acids - N. I. Salit and A. S. Sadykov	2674	2746
Investigations in the Field of Terpenophenols. XII. Condensation of Camphene and Norbornene with p-Cresol and Transformations of the Reaction Products - L. A. Kheifits, I. M. Shulov, and V. N. Belov	2677	2748
Investigations in the Field of Terpenophenols. XIII. Study of Products of Condensation of Dihydrodicyclopentadiene with Phenol - L. A. Kheifits and S. I. Virezub	2680	2751
Reactions of Nucleophilic Reagents with Esters of Vinylphosphinic and Acetoxyvinylphosphinic Acids - A. N. Pudovik and R. G. Kuzovleva	2684	2755
The Chemistry of Polymyxin M. VII. Synthesis of Peptides of L- α,γ -Diaminobutyric Acid - N. V. Fedoseeva, T. R. Telesnina, and A. B. Silaev	2689	2760
Reactions of Biphenylmercury with Toluene - G. A. Razuvaev, G. G. Petukhov, L. F. Kudryavtsev, and M. A. Shubenko	2692	2764
Reaction of the Acid Sulfate of β -Hydroxypropionamide with Alcohols - E. N. Zil'berman and A. A. Michurin	2694	2766
Studies in the Field of Acyl Peroxides. II. Synthesis and Properties of Unsymmetrical Diacyl Peroxides of the Aliphatic Series with Nonbranched Chains - Yu. A. Ol'dekop, A. N. Sevchenko, I. P. Zyar'kov, and A. P. El'nitskii	2699	2771
New Formazans of D-Galactose - M. N. Malev	2703	2775
2-Mercaptothiazole in the Mannich Reaction - M. O. Kolosova and V. I. Stavrovskaya	2706	2778
Alkylation of Amines. III. Alkylation of p-Toluidine by Isopropyl Alcohol - S. I. Burmistrov and N. V. Ponomarev	2712	2785

Available From Consultants Bureau

(Continued)

ZHURNAL OBSHCHEI KHIMII
Vol XXXIII, No 8, 1963
CONTENTS (continued)

	P A G E	
	ENG.	RUSS.
LETTERS TO THE EDITOR		
The Structure of Isomers of 1,3,5-Tris(3,3-Trifluoropropyl)-1,3,5-Trimethylcyclo- trisiloxane - L. L. Burshtein, Yu. A. Yuzhelevskii, É. V. Kogan, and A. L. Klebanskii . .	2716	2789
A New Inorganic Heterocycle - Trisildiazoxane - K. A. Andrianov, Ionel Khaiduk, and L. M. Khananashvili	2717	2790
Preparation of Acetylene Tin Hydrocarbons by Direct Replacement of Acetylene Hydrogen by a Residue Containing Tin - V. S. Zavgorodnii and A. A. Petrov.	2718	2791
The Synthesis of Enyne Hydrocarbons Starting from Acetylene β -Glycols - T. A. Favorskaya and Yu. M. Portnyagin	2719	2792
The Synthesis of 2-Nitro-4-Methoxyphenylalanine (Methyl Ether of 2-Nitrotyrosine) - I. Kostov and I. Ambrush	2720	2792
The Selective Protection of Amino Groups in 1,5-Diaminotetrahydronaphthalene - Z. Dumitresku and I. Ambrush	2721	2793
Aminonitrile Splitting of Quaternary Aldehyde-Hydrazone Salts - B. V. Ioffe, Z. I. Sergeeva, and K. M. Dervinskaite.	2722	2794
Low Temperature Diene Synthesis - I. A. Favorskaya and E. M. Auvinen	2723	2795
The Pressure of Saturated Samarium Vapor - O. G. Polyachenok and G. I. Novikov.	2724	2796
The Investigation of Rare Earth Element Dichlorides - O. G. Polyachenok and G. I. Novikov	2725	2797

Available From Consultants Bureau

JOURNAL OF APPLIED CHEMISTRY OF THE USSR

A translation of (ZHURNAL PRIKLADNOI KHIMII)
a publication of the Academy of Sciences of the USSR

1964 CONSULTANTS BUREAU ENTERPRISES, INC.
227 West 17th Street, New York 11, N. Y.

Volume 36, Number 4

April, 1963

CONTENTS

	P A G E	
	ENG.	RUSS.
An Investigation of Acoustic Coagulation of an Aerosol — M. L. Varlamov and K. K. Belenavichyus	673	697
Removal of Heavy Metals from Uranium on Active Carbon — Ts'eng Hsien-fu, I. A. Kuzin, and V. P. Taushkanov	679	703
Behavior of Sodium-Calcium Aluminates During Hydrochemical Treatment — A. I. Ivanov, K. G. Gvozdeva, and S. I. Kuznetsov	683	707
An Investigation of the Structure of Strontium Silicate Glasses from Their Infrared Absorption Spectra — Yu. G. Shteinberg and O. N. Setkina	688	712
Reaction of Calcium Germanates with Water at Room Temperature — N. A. Toropov and A. K. Shrivinskaya	693	717
An Investigation of the Properties of Sinters in the System Zinc Oxide — Zirconium Dioxide — Miloslav Bartushka and N. A. Batrakov	699	724
The Effect of Steam and Iron Compounds on the Activity of Vanadium Catalyst in a Suspended Bed — I. P. Mukhlenov, R. S. Ivanova, and V. E. Soroko	703	730
The Degree of Poisoning of Vanadium Catalyst by Arsenic Trioxide in a Suspended Bed — R. S. Ivanova and I. P. Mukhlenov	709	737
Separation of Thorium and Uranium (VI) on KU-2 Resin — A. I. Zhukov, E. I. Kazantsev, and A. V. Yakovlev	715	743
The Thermodynamics of Acetone Evaporation at Different Temperatures — V. V. Sokolov, I. P. Zhilina, and K. P. Mishchenko	721	750
Methanol Synthesis in a Suspended Catalyst Bed — V. M. Pomerantsev, I. P. Mukhlenov, and D. G. Traher	724	754
The Sorption Properties of Technical Lignins — G. P. Grigor'ev, T. M. Vasil'eva, L. V. Sayafova, and Yu. I. Chernousov	733	764
The Thermodynamic Efficiency of Multicomponent Rectification — V. M. Platonov, Ya. D. Monko, and B. G. Bergo	737	768
Calculation of Hydraulic Resistances During Bubbling — I. P. Levsh and O. B. Erofeeva . . .	747	779

Available From Consultants Bureau

(Continued)

CONTENTS (continued)

	P ENG.	A 	G RUSS.
Incorrectness of the Assumption that the Resistances Are Additive in Processes of Successive Mass Transfer — A. A. Abramzon and M. V. Ostrovskii	755		789
The Absence of Additivity of the Resistances to Mass Transfer in Heterogeneous Processes Under Turbulent Mixing Conditions — A. A. Abramzon and M. V. Ostrovskii	759		793
The Influence of the Choice of Halogen on the Chromizing of Iron — V. K. Titov and E. F. Makarov	766		800
The Conditions of the Joint Electrodeposition of Metals with the Formation of an Alloy — B. I. Skirstymonskaya	772		807
The Retardation of the Corrosion of Steel in Water by the Addition of Salts of Mono- and Dibasic Organic Acids — N. K. Shmeleva and V. P. Barannik	778		813
The Diffusion Mobility of Iron in a Protective Coating on Niobium and Molybdenum — A. I. Borisenko, V. I. Arsen'ev, and N. I. Antonova	783		818
An Approach to the Search for Chemical Means of Protecting Useful Plants — L. M. Kogan	788		824
Sesquiterpenes of the Essential Oil in the Fruit of <i>Libanotis transcaucasica</i> Schischk. Grown in Different Regions of the USSR — G. V. Pigulevskii and A. V. Borovkov	794		831
The Influence of Swelling in Water and Acetic Acid on the Internal Surface and Capillary Structure of Native and Mercerized Cotton Cellulose — N. I. Klenkova	799		836
The Problem of the Connection Between the Structure of Anthraquinonoid Vat Dyes and Their Photoactivity — V. A. Titkov and T. A. Kolokolovskaya	805		843
Catalytic Alkylation of Aniline with Ethanol — M. A. Popov and N. S. Lobanova	816		856
The Optimum Temperature for the Oxidation of Cyclohexanol with Nitric Acid — I. Ya. Lubyantskii	819		860
The Thermal Stability of $\alpha, \alpha, \alpha, \omega$ -Tetrachloroalkanes — Sh. A. Karapetyan	824		865
Study of the Inhibition of Oxidation of Octene-2 by Molecular Oxygen in the Presence of 2,6-Di-tert-butyl-4-butylphenol (Ionol) — S. A. Subbotin, S. K. Zylova, and B. V. Smolyarov	828		870
The Effect of Conversion Products of 2,6-Di-tert-butyl-4-methylphenol (Ionol) on the Oxidation of Octene-2 — S. A. Subbotin, S. K. Zylova, and B. V. Smolyarov	833		875
The Conversions of m-Cresol, Benzyl Alcohol, Cyclohexanol, and Octanol-2 During High Temperature Hydrogenation — V. A. Zakharenko and A. V. Lozovoi	838		881
Preparation of Vinyl Acetate from Dilute Acetylene — A. D. Kokurin, V. D. Obrezkov, and N. S. Andreev	842		886
Functional Reactions of Polymethylenepolycyclohexanone — M. N. Tifichenko and T. M. Domanyuk	846		890
Extraction of Hemicelluloses from Holocelluloses of Deciduous Wood — Sh. Karachoni	851		895
The Synthesis of Butyn-2-diol-1,4 from Formalin and Acetylene at Atmospheric Pressure — A. N. Shapovalova	859		904
BRIEF COMMUNICATIONS			
A Study of the Effect of Acidity of the Medium on the Content of Niobium, Tantalum, and Titanium in Solution in the Conditions for their Chemical Analysis — E. S. Bruile and N. S. Dombrovskaya	864		910
A Study of the Phase State of Modified Silver — M. Ya. Kushnerev and Yu. N. Stepanov	866		912
The Effect of γ -Irradiation from Co^{60} on the Ion-Exchange Properties of Oxidized Coal — I. A. Kuzin, A. M. Semushin, and V. P. Tauskanov	869		914
A Study of the Electrical Conductivity of Molten Salts in the Systems CdBr_2 — KBr and CdBr_2 — NaBr — O. F. Moiseva	872		917

Available From Consultants Bureau

(Contd)

CONTENTS (continued)

	P A G E	E N G. R U S S.
Surface Treatment of Titanium before Chrome Plating — F. K. Andryushchenko and I. E. Vlasenko	875	921
The Hatta-Pozin Equation for the Rate of Absorption Accompanied by a Fast Chemical Reaction — E. Ruckenstein	878	923
Sesquiterpenes of Essential Oil of Fruits of <u>Libanotis transcaucasica</u> Schischk. Growing in the Stavropol Area — G. V. Pigulevskii and A. V. Borovkov	880	926
Sesquiterpenes of Essential Oil of Fruits of <u>Libanotis transcaucasica</u> Schischk. (Golubozerskii Form, Introduced) — G. V. Pigulevskii and A. V. Borovkov	884	929
Preparation of 2-Mercaptothiazole — M. O. Kolosova	886	931
Fifth All-Union Seminar of the D. I. Mendeleev All-Union Chemical Society on Applied Electrochemistry — V. V. Stender	887	932
Valerii Aleksandrovich Gemiltan — A. I. Atroshchenko	889	933
BIBLIOGRAPHY		
R. Barta. "Chemistry and Technology of Cement" — P. P. Budnikov	891	935

Available From Consultants Bureau

JOURNAL OF APPLIED CHEMISTRY

OF THE USSR

A translation of (ZHURNAL PRIKLADNOI KHIMII)

a publication of the Academy of Sciences of the USSR

© 1964 CONSULTANTS BUREAU ENTERPRISES, INC.
227 West 17th Street, New York 11, N. Y.

Volume 36, Number 5

May, 1963

CONTENTS

	P A G E	
	ENG.	RUSS.
A Study of the Mineral Components of Oxidized Vanadium Slag - S. A. Amirova, V. V. Pechkovskii, G. E. Tyuleneva, B. N. Varskol, and T. V. Zhebeleva	895	937
The Decolorizing and Regenerative Properties of Clay-Hydroxide Adsorbents - V. S. Kornarov and N. F. Ermolenko	900	941
A Study of the Kinetics of Condensation of Magnesium Vapor and the Calculation for a Condenser with Changing Temperature - I. V. Frishberg and A. S. Mikulinskii	907	949
A Study of the Synthesis of Calcium Hypophosphite Solutions - I. V. Strezhnev, E. M. Morgunova, and E. I. Gabova	911	953
The Reaction of Titanium Tetrachloride with Various Ti-Containing and Other Materials in the Presence of Solid Alkali Metal Chlorides - V. G. Goplenko	919	963
An Investigation of the System $\text{Na}_2\text{O}-\text{P}_2\text{O}_5-\text{V}_2\text{O}_5$ in the Vitreous State - K. F. Azarov and V. V. Balandina	924	969
The Sorption Capacity of Chlorophenoxyacetic Acids, Their Salts and Phenol by Ionites - I. K. Taitovich and V. I. Cherkashin	928	973
An Investigation of the Viscosity of Glasses of the Selenium-Arsenic System - S. V. Nemilov and G. T. Petrovskii	932	977
Quantitative Determination of Magnetite by the Gravimetric Magnetic Method - K. N. Potemkin and S. K. Grebnev	936	981
The Solubility of C_8 Hydrocarbons in Polar Substances and Their Mixtures - G. V. Burova, V. B. Kogan, and M. S. Nemtsov	942	988
Kinetics of a Dimerization Reaction of Cyanamide in an Aqueous Solution Flowing through a Heated Tube - N. A. Gol'dberg and V. G. Golov	948	994
The Coefficient of Mass or Heat Transfer during Turbulent Movement - E. Ruckenstein	954	1000
An Investigation of the Kinetics of Mass-Exchange in Liquid-Liquid Systems - M. Kh. Kishinevskii and T. S. Komienko	962	1008
The Separation of Mixtures of Tetrachloroalkanes by the Extraction Method - Sh. A. Karapetyan and L. M. Shulov	968	1016

Available From Consultants Bureau

(Continued)

CONTENTS (continued)

	P A G E	
	ENG.	RUSS.
Calculation of the Charge Parameters of Adsorption Apparatuses with a Moving Layer of Sorbent - D. P. Timofeev.	973	1021
Efficiency of Partitioning Suspended Bed Apparatuses with Respect to Particle Mixing - A. B. Bullov and I. Ya. Tyuryaev.	980	1028
Experiments on the Electrodeposition of Manganese from Chloride Solution. - V. V. Stender and Yu. M. Loshkarev.	984	1033
Electrochemical Preparation of Dispersed Binary Alloys of Palladium and Metals of the VIII and IB Groups - I. P. Tverdokhil, Zh. L. Vert, R. A. Karpova, I. A. Mosevich and A. I. Stetsenko.	991	1040
Hydrogen Embrittlement of Armco Iron during Chrome Plating - V. P. Alikin.	996	1045
The Theory of Electrolysis by a Pulsating Current - V. V. Romanov.	1001	1050
An Investigation of the Causes of Formation of Zinc Sponge during Electrolysis of Zincate Solutions - V. V. Romanov.	1007	1057
A Study of the Effect of Minor Additives on the Kinetics of Mullite Formation at High Temperatures - P. P. Budnikov, T. N. Keshishyan, and A. V. Volkova.	1013	1064
On the Lignin Obtained from the Wood of Siberian Spruce by Bjorkman's Method - V. M. Reznikov and G. D. Ponurov.	1017	1068
Preparation and Acetylation of Low-Substitution Hydroxyethylcellulose - E. L. Akim and N. I. Nikitin.	1023	1075
Hydrolysis of Polyvinylacetate - A. E. Akopyan and R. Kh. Bostandzhyan.	1033	1085
Synergism in the Stabilization of Polyvinylchloride - E. V. Popova, A. A. Berlin, and D. M. Yanovskii.	1038	1091
Fractional Precipitation of the Precipitate from Nitric Acid Extraction of Kara-Tau Phosphorites - N. G. Abdullina, R. Kh. Sulmanova, L. I. Rutkovskaya, and S. A. Vodilova.	1043	1096
On the Mechanism of Ester Formation during Oxidation of Paraffinic Hydrocarbons - B. G. Freidin.	1047	1101
The Condensation of Alkyl Aryl Ketones with Formaldehyde - V. P. Kravets and G. I. Chervenyuk.	1052	1106
Investigation of the Terpene Fraction of the Ester Oil of the Three-Leaf Licorice - M. I. Goryaev and R. A. Yurina.	1057	1112
Contribution to the Problem of the Connection between the Structure of Anthraquinone Vat Dyes and Their Photoactivity - V. A. Titkov and I. D. Pleinev.	1061	1116
The Formation of Nitrogen-Containing Compounds in Water Containing Dissolved Gases under the Influence of Ionizing Radiation - M. T. Dmitriev.	1067	1123
BRIEF COMMUNICATIONS		
Obtaining Cobalt Concentrate from Cobalt Xanthate Cakes - K. M. Litvin-Makysuta, N. S. Krysenko, and K. N. Gostishchev.	1078	1135
Solvation in Liquid Glasses - M. A. Matveev and A. I. Rabukhin.	1080	1136
An Investigation of the Preparation Conditions and Some Properties of Barium Disilicide - V. S. Neshpor and V. L. Yupko.	1083	1139
The Technology of Aluminum Nitride Manufacture - V. S. Polishchuk.	1086	1142
An Investigation of Liquid-Vapor Equilibrium in the System $\text{HNO}_3\text{-HCl-H}_2\text{O}$ at Boiling Point under Atmospheric Pressure - B. Ya. Zil'berman, A. G. Ivanova, and M. F. Pushlenkov.	1088	1143
An Investigation of Non-Catalytic Oxidation of Ethane - S. M. Samoilov, I. L. Kotlyarevskii, and V. N. Andrievskii.	1091	1146
Formation of Pimaric Acid from <i>Pinus silvestris</i> L. Colophony - J. Kutan.	1095	1149
Determination of the Amount of Soluble Polysaccharides in Hydrolyzates - E. F. Likhonos and I. I. Korol'kov.	1098	1152

Available From Consultants Bureau

(Continued)

CONTENTS (continued)

	P ENG.	A 	G RUSS.
Acenaphthoylacrylic Acids and Their Derivatives - A. E. Kretov and E. Z. Sterina	1101		1154
Synthesis of Furan-2-Carboxylic Acid - S. N. Korshunov and L. I. Vereshchagin	1105		1157
Comments on I. M. Artyukhov's Paper on "The Simulation of Reaction Apparatuses in the Heterogeneous Conversion of Hydrocarbons" - I. S. Pavlushenko	1106		1158
 BIBLIOGRAPHY			
Phosphorus and Its Compounds. Vol. 2. Technology, Biological Functions and Applications. Ed. by J. R. Van Wazer - I. Ya. Volkind	1112		1165
Froth Scrubbers, Heat Exchangers, and Absorbers by M. E. Pozin, I. P. Mukhlenov, and É. Ya. Tarat - B. A. Chertkov	1115		1167

Available From Consultants Bureau

Soviet Physics TECHNICAL PHYSICS

A Translation of the "Zhurnal Tekhnicheskoi Fiziki"

(Russian Original Vol. 33, No. 12, pp. 1405-1482, December, 1963)

Vol. 8, No. 12, pp. 1045-1126

June, 1964

CONTENTS

	PAGE	RUSS. PAGE
Modern Methods of Obtaining Ultrahigh Vacuum. <u>E. M. Reikhrudel'</u> and <u>G. V. Smirnitckaya</u> (R)	1045	1405
Diffusion Decay of a Plasma in a Magnetic Field Including Nonlinear Effects. <u>G. A. Grinberg</u> (T)	1063	1430
Selection and Primary Focussing of Ions from a Multiply-Charged Ion Source. <u>F. I. Mineev</u> and <u>O. F. Kovpik</u> (E)	1072	1444
Design of a Buncher for a Travelling Wave Linear Electron Accelerator in Accordance with a Given Bunching Law. <u>G. I. Zhileiko</u> (T)	1076	1449
Intensity of Diffraction Reflections from a Sample with Axial Texture. <u>A. S. Kagan</u> (T/E)	1081	1456
BRIEF COMMUNICATIONS		
Oxygen Gas Analyzers Using the Variation of Thermal Conductivity of Oxygen in a Magnetic Field. <u>I. L. Gorelik</u> (E)	1084	1459
Electrical Breakdown in Cesium Vapor. <u>M. A. Lebedev</u> and <u>Yu. K. Gut'kov</u> (E)	1086	1162
Measurement of Velocity and Electrical Conductivity of an Ionized Gas Stream. <u>I. P. Poberezhskii</u> (T/E)	1088	1464
Measurement of the Electrical Conductivity of Gas Jets <u>I. P. Poberezhskii</u> (T)	1092	1469
Surface Ionization of Cesium in Diffusion of Cesium Vapor Through Porous Nickel. <u>S. Ya. Lebedev</u> and <u>Yu. Ya. Stavitskii</u> (E)	1094	1473
Adsorption Energy of Cesium Ions on a Metal Surface. <u>S. Ya. Lebedev</u> and <u>Yu. Ya. Stavitskii</u> (E)	1096	1474
Useful Feature of Plasma Heating in Toroidal Systems. <u>G. V. Skorniyakov</u> (T)	1098	1477
Stability of a Toroidal Magnetic Field. <u>G. V. Skorniyakov</u> (T)	1099	1478
INDEXES TO VOLUME 8		
Author Index	1105	
Subject Index	1114	

Available From American Institute of Physics
Soviet Physics - Technical Physics.
Vol VIII, No 12

INDEX TO AUTHORS

This index does not include authors listed in the cover-to-cover tables of contents.

- A -

Adamovich, V. L.	32
Aepfelbacher, M.	42
Akhiezer, I. A.	52
Akopova, M.	45
Aktiebolag, O. T.	41
al'Ameri, Salah	19
Aledseyeva, I. A.	36
Aleksandrov, N.	1
Aleksandrov, V. Ya.	30
Alekseyev, A. V.	41
Alemasov, V. Ye.	27
Alisov, N.	3
Almazov, V. A.	29
Alyab'ev, A. F.	52
Amayev, A. D.	53
Ambartsumyan, S. A.	53
Amoneknko, V. M.	41
Ananov, Ye. V.	32
Ancheyeva, Z. K.	45
Ando, Zoltan	9
Andreev, St.	7
Angelov	13
Anspok, P. I.	27
Anuchin, M. A.	54
Apollonskiy, M.	3
Aristov, Ye. M.	4
Arsac, J.	39
Artamonova, V. A.	31
Artsukevich, S. G.	27
Arzhanyy, P. M.	46
Asatiani, Vladimir Samsonovich	28
Asbrand, H.	43
Asiaticus	20
Aslikhov, N. P.	51
Astori, Rocco	16
Avram, Cr.	12
Avramov, G.	7
Azuma, T.	40, 56

- B -

Babakov, I. M.	41
Babarykin, N. N.	40
Babiel, Wladyslaw	10
Babuk, V.	4

Babunashvili, T. G.	57
Badiane, Emile	21
Badiu, E.	12
Baille, Alassane Ag	21
Bal, Jerzy E.	10
Balan, E.	49
Balandin, A. A.	36
Balaure, Fl.	11
Balks, R.	34
Bangert, Fritz	56
Baptizmanskiy, V. I.	45
Barabash, S.	3
Baraboy, V. A.	35
Barbu, E.	33
Barilli, A. J. Francois	57
Bartsch, Guenter	26
Basso, Lelio	17
Baybuzenko, N.	1
Bayer, A. G.	37
Bazhenov, S. A.	39
Beauge, R.	55
Beblo, F.	43
Bekombo, Manga	20
Beliaev, V. I.	38
Belikova, E. I.	44
Belkin, V. P.	4
Belous, I. I.	27
Belyayov, L. I.	53
Ben, Yitshak	22
Ben'yaminovich, M. B.	55
Berdicheskiy, M. N.	38
Berger, H.	37
Bershov, L. V.	36
Bertinov, A. I.	39
Besse, Guy	16
Billard, F.	55
Bisson, A.	47
Blancher, G.	19
Blardone, Gilbert	21
Bllica, Selman	6
Blösch, R.	47
Blotko, Kazimierz	10
Blume, Jean	16
Bobovinkova, Ts. I.	53
Bodnar, E.	11
Bogachev, I. N.	46
Bogatykh, S. A.	4
Bogdani, Dhimiter	6
Bogel, K.	34

Bogomolets', O. O.	35
Bohmer, S.	48
Bojarski, Wlodzimierz	10
Bollenrath, Franz	48
Bolotin, I. B.	39
Bolotin, Yu. L.	52
Bolotnikov, V.	5
Bol'shakov, V. N.	32
Bonch-Bruyevich, V. L.	39
Bondarenko, V. M.	38
Bonnaud, Robert	20
Borkovskiy, Yu. Z.	45
Borlone, Maria	35
Borneff, J.	34
Borovik, E. S.	53
Borovskiy, I. B.	46
Boshnjaku, Jani	6
Bosshard, H. H.	48
Boulet, Marcel	17
Bradeanu, P.	44
Brahimi, Razi	14
Bramani, Vitale	44
Brand, H.	48
Bratu, Savin	14
Braun, Otto	13
Bravet, Rogelio Luis	26
Breithaupt, F. W.	40
Bremer, F.	52
Brody, Andras	9
Bronshten, V. A.	37
Brovikov, I. S.	38
Bruch, J.	37
Brunetti, Mino	17
Bruyevich, N. G.	41
Bryukhanov, P.	1
Buda, Istvan	9
Budyko, M. I.	38
Budylin, B. V.	52
Buhler, H.	43
Bulajio, Milan	13
Bunescu, V.	15
Bunich, P.	2
Bunina, T. L.	32
Burkhardtmaier, W.	56
Burnelle, Ernest	16
Buschbeck	56
Bushurova, V. Ye.	57
Buslaev, V. S.	51
Butseroga, M. M.	27
Byalkov, Ivan	7
Byzova, Yu. B.	32

- C -

Cabou, Daniel	19
Caillat, R.	47
Calamandrei	18
Calenko, M. S.	50
Caliman, Calin	14
Capanu, Ion	12
Capelli, Franco	44
Capetti, Gheorghe	11
Cardano, R.	44
Carenza, P.	33
Carmona, Dario	26
Carol, Talia	25
Carrillo, Santiago	16
Carticeanu, M.	15
Casson, F.	33
Cervinka, M.	46
Chaliand, Gerard	20
Chaloupka, Bohuslav	8
Chang, Chen-chieh	46
Chang, Cheng-pin	46
Chang, Hsiao-lou	32
Chang, Jen-en	46
Ch'ang, Kuei	23
Chang, Lin	23
Chao, Ming-fu	27
Charmandarian, M. O.	46
Chauvin, G.	51
Chebotarev, A.	6
Chechuga, B.	28
Chekmarev, T. V.	50
Ch'en, Wei-chou	36
Ch'en, Wen-shu	46
Cheng, Chi	22
Chernyavskiy, G. A.	38
Chernyayev, A.	5
Chin, Chien-kuo	36
Chin, Hsiu-ying	32
Chin, Pao-sheng	24
Chou, Ch'eng	22
Chou, Hsiao-p'ing	39
Chou, Pi-cheng	36
Chou, Wen-cheng	46
Chudinova, L. I.	44
Chuforov, G. I.	41
Chujo, K.	52
Chumakova, M. Ya.	31
Chumichev, V. B.	52
Ciogolea, Gh.	11
Cioroiu, Raducanu	12

Class, I.	49
Clignet, Remi	21
Coly, Dembo	21
Conagin, C.	28
Constantinidis, J.	33
Coriou, H.	51
Cote, J.	33
Courtois, J.	16
Cuiban, F.	11
Cukier, J.	33

- D -

Dabin, Paul	20
Dalea, Mihai	14
Damborska, M.	33
Dancoisne, P.	42
Dang, Kim	24
Dang, Thai Mai	25
Dang, Viet Chau	22
Danilov, V. N.	54
Danilov, Ye. S.	3
Danov, Krustyu	7
Darenskaya, N. G.	53
D'Aubert, S.	35
Debabov, V. G.	30
DeBarbieri, A.	35
De Bellefeuille, Paul	33
de Bennetot, M. C.	40
de Bortoli, M.	33
Decraene, Philippe	20
de Feo, Italo	17
Delaryu, V. V.	32
Demashkevich, N. G.	29
Deniszczyk, Maciej	10
Deppermann, K.	39
Derogy, Jacques	16
Detert, K.	42
Deutscher, Isaac	17
Di Marco, A.	35
Di Marco, Aurelio	35
Dimitrov, Atanas G.	7
Dioszeghy, D.	43
Dittmann, H.	40
Djerdja, Josip	13
Doan, Dinh Hoe	23
Dogaroiu, Dumitru	11
Dolgor'alov, V. V.	53
Domsa, A.	48
Donchev, Doncho	7
Donevitz, Nathan	22
Dorman, L. I.	53
Dorofeyev, G. V.	51

Doutreloux, Albert	19
Drabkin, B. S.	29, 30
Dragan, Constantin	12
Drits, M. Ye.	44
Drozdov, N. N.	45
Dubrovin, K. P.	53
Dudko, D. A.	45
Dumoulin, Henri	20
Dunenkov, M.	1
Duong, Quoc Chinh	23
Dupre, Michele	55
Durikov, A.	6
Duse, Gastone	17
Duse, Ugo	17
Dutt, Palme	5
Duval, C.	51
Duval, Clement	36
D'yachenko, P.	1
Dzeba, Kresimir	12

- E -

Ebert, Friedrich	13
Eckstein, H. J.	48
Ehrcke, U.	42
Elleinstein, Jean	16
Ellimer, David	16
Elston, J.	46, 55
Elston, Jean	55
Endell, J.	8
Erdmann, E.	37
Erdmann-Jesnitzer, F.	48
Ermakov, A. I.	52
Ewy, Z.	35

- F -

Facchini, U.	52
Fadeyev, I.	2
Faizullov, F. S.	54
Fan, Hsi-p'eng	24
Fang, Cheng-san	55
Fatkhullin, Ye. F.	38
Faybich, M. M.	32
Fayet, M. T.	33
Fayvishevskiy, V. A.	32
Fedorov, A.	5
Fedorov, S. P.	30
Fedorovskiy, L.	4
Fedoseyev, E.	5
Feeg, F.	43
Fencsik, Laszlo	13
Ferrero, M.	47

Feygenberg, I. M.	32
Fialkov, B. S.	40
Filatov, N.	3
Filipszky, Zoltan	9
Filov, V. A.	29
Findeisen, W.	40
Fineschi, G.	34
Fink, Leopold	40
Finocchiario, Gianni	17
Fischer, F.	14
Fischer, W. A.	48
Fisher, L. I.	31
Flamant, M.	42
Fleischer, H. J.	48
Flessner, H.	43
Fojtik, Jan	13
Foldiak, G.	40
Fradkin, G. Ye.	29
Fraissard, Jacques	55
Franc, D.	40
Francois-Poncet, Andre	21
Franke, Rolf	8
Frisch, H. L.	37
Frohberg, M. G.	47
Frol'kis, V. V.	29, 35
Froment, M.	47
Frydlander, J. H.	36
Fuchs, Jean-Pierre	42
Fuentes, Norberto	25
Fuglsang, Villy	23
Furst, O.	43

- G -

Gandan, H.	25
Gaglione, P.	33
Galik, Laszlo	9
Galitskiy, V. A.	4
Galkiewicz, T.	56
Gallenca, Henry	
Charles	19
Galuppini, Gino	44
Ganev, G.	14
Ganz, D.	47
Garaudy, Roger	16
Garbuzov, V.	2
Garetovskiy, N.	2
Garif'yanov, N. S.	29
Gashev, M. A.	57
Gavrilov, I.	26
Gavrilov, P. I.	45
Gawlowski, Karol	10
Gaye, Amadou Karim	19
Gedeonov, L. I.	44, 53

Gel'fand, I. M.	50
Gel'fand, M. S.	51
Geller, B.	2
Gendre, L.	21
Gerasimova, L. I.	30
Germain, C.	39
Gersonde, M.	47
Gerstenberg, B.	48
Gewiss, C.	55
Geymonat, Mario	26
Gheorghiu, N.	12
Ghita, Nicolae	12
Gimbel, G.	43
Ginzburg, W. M.	39
Giolitti, G.	35
Gitlan, D.	15
Giurcaneanu, Cl.	15
Glagolevskiy, Yu. V.	37
Gligorevic, Rajko	7
Gofman, G.	2
Gokhberg, I. Ts.	51
Gol'denblat, I. I.	51
Goloubinow, R.	47
Golovkin, K. K.	50
Gonda, Kozo	56
Gorbunova, N. A.	30
Gorike, Rudolf	39
Gorizontov, P. D.	29
Gorskiy, F. K.	53
Gorter, C. J.	56
Goryunova, S.	28
Graef, R.	42
Grafon, H.	49
Granata, Giorgio	17
Grasmann, K.	42
Grau, R.	34
Grauby, A.	55
Grayev, M. I.	50
Grechnyi, Ya. V.	46
Gron, Julian	10
Grigor'ev, Yu. G.	53
Grigor'yants, A. N.	4
Grigoryants, F.	3
Grin, M.	3
Grippa, Jacques	17
Grishin, C. F.	53
Gritchenco, Z. G.	52
Grogorkin, V. I.	45
Groot, Hernando	35
Groth, Carl Eric	35
Grudzinski, Jan	10
Grunow, G.	8
Gruzinov, B. K.	40

Gucwa, Stanislaw	11
Gudimov, A.	1
Gudimovich, V. P.	4
Gudkov, B. S.	36
Gukovskiy, G.	2
Gulyayev, A. P.	44, 45
Gulyayev, Yu. V.	39
Gurevich, A. L.	41
Gurvits, A. A.	54
Gur'yev, A. V.	45
Guseynov, D. M.	27
Gustafsson, Bo	18
Guyet, J.	42

- H -

Ha, Bac	25
Haastert, P.	48
Hajdu, Gyula	26
Hajdu, Janos	23
Hajek, Jiri	19
Hajos, Geza	9
Hako, Hulusi	14
Haller, R.	49
Halpaap, W.	18
Hama, Roubou	21
Hamm, R.	34
Han, Feng	22
Han, Wei-p'ing	36
Hanciulescu, T.	11
Happel, H.	56
Harveng, I.	42
Haucke, M.	37
Havlicek, Frantisek	13
Hecht, F.	48
Hecht, Otto	33
Heijt, N. J.	43
Heimendahl, M.	49
Hering, Pavel	15
Herivan, M.	14
Hermier, Guy	16
Herzog, E.	46, 47
Heubner, U.	48
Heysa, Otto	9
Hlavac, Ivo	7
Ho, Kuei-lin	22
Hoang, Huu Binh	37
Hoang, Huu Nhan	25
Hoang, Tra	24
Hoang, Van Thai	24
Holler, P.	37
Hone, Andro	46
Honegger, C. G.	37
Hong, Nam	24

Honigmann, B.	36
Horning, H.	8
Hosmalin, Guy	19
Hosoi, J.	52
Hossu, Gh.	12
Hsia, Ping-nan	46
Hsieh, Hung-ch'uan	36
Hsu, Hsiang-mou	22
Hsu, Lien-lun	55
Hsu, Shou-po	33
Hsueh, Chung-chang	22
Huang, Fan-chang	23
Huang, Liang-wen	22
Huang, Wen-k'uei	46
Humbert, M.	20
Hung, Duong	24
Huvosvolgyi, Mihaly	9

- I -

I, Jui-shih	46
Iandelli, Aldo	49
Ichikawa, K.	35
Ichiyasu, R.	49
Iichenko, O. T.	54
Il'in, A. I.	4
Il'in, A. M.	1
Il'nitskaya, A. V.	29
Ilunga Kabongo, A. R.	21
Imrisova, I.	53
Ingrao, Pietro	17, 18
Ioffe, A.	30
Ioffe, A. Z.	29, 30,
	35
Ion, Nicolae	12
Ionesco, T.	20
Ionescu, V.	14
Ionov, N. I.	55
Isakov, Yu. A.	29
Isekendorov, E. M.	27
Ishimatsu, K.	52
Ishizaki, H.	40
Iusem, Rosa	35
Ivanenko, S.	1
Ivanescu, D.	28
Ivanov, I. I.	4
Ivanov, R.	2
Ivanov, S. P.	6
Ivanov, T.	7
Ivanova, M.	28
Ivanova, V. S.	44
Ivashkevich, V.	1
Ivekovic, Mladen	13
Ivkovic-Ivandekic, Pajo	12

- J -

Jaeger, Th.	52
Jankovic, D.	44
Jankovic, Vasa	12
Jasek, A.	14
Jeannette, A.	20
Jedrychowski, Stefan	11
Jelen, Olga	7
Jelinek, R.	8
Jensen, Christian Hermann	15
Jessberger, H. L.	8
Jevtic, Bora	12
Joffe, A. Z.	30
Joly, F.	20
Jung, Wen-tso	22

- K -

Kabaj, Mieczyslaw	10
Kaczmarzski, Czeslaw	10
Kagal'nikova, I. I.	38
Kaganov, V. Yu.	45
Kahmueller, Hans	13
Kahn, Pierre	16
Kai, Ts.	57
Kaiser, Rudolf	36
Kakihana, Hidetake	56
Kalabukhov, D. M.	4
Kalatozishvili, N. I.	50
Kalinin, N. G.	41
Kalmykov, A. A.	52, 53
Kal'sada, I. N.	29
Kaltenbach, M.	33
Kamian, Bakary	21
Kaminishi, Takishi	52
Kammerer, A.	55
Kammler, G.	48
Kan, V.	2
Kantorovich, B. V.	53
Kao, T'ien-ming	55
Kapinos, V. M.	54
Kardeshev, N. S.	27
Karol', I. L.	53
Karpenko, G. V.	49
Karpovskiy, Ye. A.	6
Karpuzov, Vasil	7
Kartsev, Ya. P.	4
Kasabov, Dimitur	7
Kasantsev, E.	42
Kauffmann, F.	33
Kavcic, Stane	13
Kawata, Kozo	56

Kawinski, Stanislaw	10
Kazakova, V. N.	30
Keirim-Markus, I. B.	53
Keita, Modibo	21
Keldysh, M. V.	57
Keller, W.	48
Keresztesi, Bela	27
Kern, W.	34
Khadzhiyski, Genko	7
Khamskiy, E. V.	46
Kharazyan, M.	5
Kheisina, V. I.	29
Khenkin, M. L.	45
Khetagurov, Ya. A.	54
Khitrov, L. M.	38
Khizhnyak, P. D.	3
Khmelevskiy, Yu. V.	31
Khmelova, N.	28
Khokhlov, R. V.	55
Khoklov, D. T.	32
Khrushchev, N. S.	4
Khuzhnyak, N. A.	50
Kiener, L.	21
Kirbyat'yev, L. N.	2
Kirbyat'yev, V. L.	2
Kiriyenko, P.	3
Kir'yanov, V. A.	36
Kiss, Csaba	25
Kiss, Tibor	9
Kitayev, A.	1
Kjellberg, B.	43
Klement, A.	47
Klemparskaya, N. N.	28
Kloos, K. H.	47
Kochetygov, N. I.	30
Koehlin, Yves	51
Kogan, L. I.	44
Kohler, E.	48
Kohler, Hartwich	34
Kohler, Johannes	34
Kolakowski, Leszek	14
Kolesnikov, N. V.	54
Kolomina, S. M.	30
Kolyszko, Kazimierz	10
Komarova, M.	3
Komin, A.	3
Kondrat'yev, K. Ya.	37
Konin, F. P.	2
Konobeyevskiy, S. T.	53
Konowalow, N. W.	34
Kopvillem, U. Kh.	54
Kopylova, N. A.	6
Kopyrin, I. A.	40
Koren'kov, D. A.	27

Korneyev, V. T.	53
Korobkina, G. S.	31
Korossy, Laszlo	8
Korostelev, V. P.	4
Korotikov, I.	3
Korting, A.	47
Koryakina, I. K.	30
Kosel, Gerhard	8
Koshlyak, M.	2
Kotarbinski, Tadeusz	14
Kotlyarov, K. A.	38
Kotov, B.	18
Kotov, V.	2
Kotova, Ye. S.	29
Kovacs, Imere	9
Kovacs, Istvan	13
Kovacsics, Janos	35
Koval'skiy, V. V.	36
Kowalczyk, Boleslaw	10
Kozachenko, H. I.	36
Kozlova, K. I.	37
Kozlovskiy, L. I.	41
Kozlowski, Zygmunt	10
Koznova, L. B.	29
Kras, Mieczyslaw	10
Krause, W.	43
Krein, S. E.	54
Krementulo, V. V.	54
Kremyanskiy, V. I.	6
Kreutzer, C. O.	34
Kreydt, Oscar	26
Kristoffel, N. N.	54
Krochmann, E.	51
Kroger, M.	56
Kromm, Alexander	56
Kroszczynski, J.	40
Krstic, Branislav	12
Krustanov, Sl.	7
Krylov, A. N.	4
Krylov, Ye. I.	36
Ku, Chao-hao	51
Ku, Chien-jen	33
Kubarev, A. M.	55
Kucharski, M.	48
Kuczynski, Janusz	14
Kudrjavcev, L. D.	50
Kudryavtsev, E. M.	54
Kudryavtsev, V. N.	6, 54
Kulikov, V. N.	31
Kulikowski, J.	40
Kulikowski, R.	40
Kultihitskiy, N.	3
Kumar, V. B.	48
Kummerow, G.	40

Kuo, Chu-k'un	36
Kuo, Li-chun	23
Kupka, Ivan	52
Kuprianoff, J.	56
Kurbatov, V. A.	50
Kurygin, A. A.	30
Kutokova, G. A.	50
Kutyurin, V.	28
Kuusinen, Otto	
Vil'gel'movich	18
Kuzin, A. M.	36
Kuz'min, I.	5
Kuznetsov, I. N.	39

- L -

Lakeyev, A. S.	45
Lame, Gabriel	46
Landspersky', H.	53
Langlois, G.	55
Laptev, G. F.	51
Lasocki, Jerzy	10
Latyshev, G. D.	54
Latysheva, V. A.	36
Latyshov, Yu. V.	44
Lavrenov, I. A.	5
Lavrukhin, S.	2
Lazar, Gheorghe	11
Lazarev, N. V.	29
Lazitch, Branko	16
Le, Quang Hoa	24
Le, Thanh Nghi	23
Le, Trong Tan	24
Lebedev, Yu. A.	41
Lebedeva, L. I.	32
Lebedva, O. P.	29
LeBreton, Eliane	33
Le Cor, J.	20
Leder, Witold	13
Loderer, Ferdinand	42
LeFevre, Jean	36
Legendre, P.	47
Legend, R.	47
Lokston, Henryk	10
Lo Meo, Paul-Yves	42
Lomnij, I.	11
Lonnartz, G.	48
Lenzi, Michel	55
Leonhard, Wolfgang	17
Leonhardt,	
Rudolf Walter	14
Leontovich, A. M.	54
Leont'yev, N. N.	45
Leroy, Roland	19
Levonu, M.	47
Levich, V. G.	36
Levin, V.	3
Levina, N. K.	45
Li, Hsing-sheng	39
Licheron, S.	47
Lincevskiy, B. V.	41
Linde, J. O.	56
Ling, Yu-ch'on	36
Linnemann, H.	43
Linnik, Ju. V.	50
Lipskiy, Yu. N.	38
Liu, Ch'eng-wen	36
Liu, K'o-lin	24

Liu, Lien-sheng	46
Liu, T'ieh-liang	22
Livanov, M. N.	28
Livescu, Jean	15
Liviu, L.	56
Ljusternik, L. A.	51
Llinas, Rene	25
Lobachevskiy, N. I.	51
Longo, Luigi	18
Loogen, F.	34
Lopatyshkin, N. M.	45
Lorang, F.	42
Lorenz, Dieter	39
Loytsyanskiy, L. G.	53
Lu, Chia-hung	33
Lubin, A.	33
Ludz, Peter Christian	8
Lukanin	3
Lukaos, Jozsef	13
Lundgren, S. A.	48
Lung, Ching	23
Luriya, A. R.	31
Lutts, A.	42
Luyten, L.	40
L'vovskaya, Ye. N.	29
Ly, Ban	23
Lyamina, G.	57
Lyubikov, Todor	7
Lyudogovskaya, L. A.	31

- M -

Ma, Ya-kung	22
Maag, Borthold	34
Maar, Viktor	15
Maas, H.	42
Maass, N.	8
Maatsch, J.	48
Madoj, Tadeusz	10
Maekawa, S.	49
Magjistari, Petraq	6
Makaruk, Lukwik	9
Maksimovich, N. A.	29
Malyakov, D.	2
Malyy, S. A.	44
Namotenko, I. I.	57
Manin, Ju. I.	50
Mantovani, G.	35
Mao, Tse-tung	25
Marcelin, Andre	55
Marchais, Georges	16
Marchart, H.	48
Marchuk, G. I.	38

Mardorf, Fritz	8	Mrowec, S.	44
Marfunin, A. S.	36	Muhri, Franz	17
Marinescu, A.	27	Muller, H. G.	43
Marinov, N. A.	37	Muratov, P. G.	2
Markov, A. A.	51	Murazyan, R. I.	30
Markov, L. K.	50	Murontsev, A. M.	38
Marquis, Gilbert	19	Murugov, V. S.	41
Martin, E.	40	Mury, Gilbert	18
Masaharu, Aoki	56	Murzayev, Ye.	22
Nathieu, Gilbert	15	Mushegyan, L. G.	45
Mathieu, P.	47		
Matveyev, V.	24		
Matveyev, Yu. S.	50	- N -	
Mauri, Primo	44		
Mavrodin, Al.	11	Nachev, Nacho D.	7
Mazanek, T.	49	Naeser, G.	47
Medovar, B. I.	45	Naftali, S.	11
Mejro, Czeslaw	11	Nagibarov, V. R.	54
Meko, Ziver	14	Nakacho, F.	47
Mel'nikov, N.	5	Nakayama, T.	28
Mel'ttser, I. V.	54	Nakonechnyy, A. S.	54
Menzel, H. U.	8	Nardini, G.	37
Meretskov, K.	5	Nazarenko, O. K.	45
Mesarsky, N. K.	31	Nazarov, N. I.	52
Messing, Delmut	8	Nazarov'yants, Yu.	1
Mestre, Micholo	16	Ndojaj, Gj.	14
Meyer, A. G.	48	Nechiporuk, E. I.	57
Meyer, W.	8	Nechkin, Yu. M.	45
Meyerson, F. Z.	28	Nedoshivina, R. V.	30
Nezoi, Endre	9	Negovskiy, V. A.	29
Michalski, Stanislaw	10	Nekrasov, A. I.	41
Middelhook, Simon	56	Nemtsov, A. V.	32
Mieszczankowski,		Nencetti, G. F.	37
Mieczyslaw	11	Neporozhniy, P.	1
Mikhailov, V. P.	50	Newmeister, K.	55
Mikhalev, H. S.	46	Nevskiy, I. A.	57
Mikul'skiy, V.	6	Ngoc, Khue	22
Milkhikyer, M. A.	38	Nguyen, Bac	25
Miller, V. S.	44	Nguyen, Cong Tuan	23
Millot, J.	8	Nguyen, Huu Tho	24
Minac, Vladimir	15	Nguyen, Lam	25
Minsker, E. I.	32	Nguyen, Thanh Do	24
Mishin, G. I.	41	Nguyen, Tien	24
Mishkinite, G. A.	35	Nguyen, Trung Thanh	25
Misson, H.	42	Nguyen, Van Loc	23
Miszulowicz, Boleslaw	10	Nicolescu, Miron	51
Mitin, M. A.	41	Nikolaenko, N. A.	51
Moe, Norbert	8	Nikolayev, G. T.	56
Moga, Alexandru	12	Nilova, N. S.	30
Molfese, Franco	26	Nogueira, Werther	28
Monakhov, K. K.	32	Nordheim, L.	56
Morczech, A.	55	Norlund, Ib.	15
Mori, L.	56	Nosova, Ye. A.	30
Morinaga, K.	49	Novitskiy, M.	2
Mossoczy, Robert	8	Novoselov, Ye. V.	50

- O -

Oarcasu, Ion	15
Oberlin, M.	55
Obukhov, A. P.	44
Oding, I. A.	44
Odintsova, A.	3
Oelsen, O.	43
Oelsen, W.	43
Ohtani, M.	49
Olifson, L. Ye.	30
Ol'shanskaya, N. I.	54
Omari, Luan	13
Onika, D.	3
Oppel, Georg	43
Oppenheim, R.	48
Ordzhonikidze, S.	29
Orekhov, P. V.	41
Orlenko, L. P.	54
Orlicek, Zdonek	8
Orlova, N. S.	37, 38
Orlowski, T.	34
Orosz, Laszlo	9
Ostby, B. Nygaard	33
Ostroukhov, N. Ya.	40
Ostromov, Yu. A.	32
Otollin, V. A.	29
Ousmane, Silla	20
Ovsyannikov, I. A.	46

- P -

Paal, Z.	40
Pahnke, H. J.	43
Pai, Tung-lu	33, 76
Pajestka, Jozef	10
Pajotta, Giancarlo	17
Panasyuk, N. S.	45
Panov, V. V.	37
Panteleyev, L. D.	53
Pao, Chun	23
Parakhonskiy, B.	2
Parin, V. V.	28
Patary, J.	42
Patino, V. Manuel	28
Patterson, W.	48
Pauwels, F.	34
Pavalciu, I.	44
Pavlov, Georgi	7
Pavlova, I. S.	38
Pecsi, Kalman	9
Pelczynski, T.	49
Peletminsky, V. N.	3
Pellino, Paulette	17

Pelva, Agoston	27
Penkov, P. M.	3
Peter, Sehestyen	9
Petrescu, Ioan Gh.	11
Petrishcheva, P. A.	32
Petrov, Marin	14
Pettersen, Arne	18
Petukhov, V. P.	50
Pflaum, E.	40
Pham, Dinh Tan	23
Pham, Quang Thanh	35
Phan, Hien	25
Phan, Huu Dat	25
Phan, Van Doan	35
Picciotto, Edgard E.	39
Pick, W.	34
Pieck, Arthur	13
Pinayeva-Strelina, M. M.	36
Piskarov, V. I.	55
Pistunovich, V. I.	53
Plank, R.	56
Planovskiy, A.	36
Platanina, Giovanni	39
Platonenko, V. T.	55
Plojowski, R.	48
Podolian, V. Ya.	31
Pogorelov, A. V.	53
Pogosiants, Ye. Ye.	31
Pogosyants, Ye. Ye.	30
Pokrovskiy, A.	31
Polhuurs'kiy, V. I.	49
Polikanina, R. I.	32
Pomoy, J.	42
Popa, Kolo	36
Popescu, A.	49
Popescu, C.	11
Popescu, Ioan	12
Popescu, M.	11
Popov, G. I.	27
Popov, N. I.	38
Popov, V. D.	41
Popovici, Mircea	11
Popowa, L. M.	34
Porro, G.	35
Portnov, N. A.	29
Poudroux, P.	42
Pradel, J.	55
Pradzynski, Bohdan	9
Pravdyuk, N. F.	45, 53
Preuss, E.	43
Prokoshkin, D. A.	46
Pshenichniy, P. D.	31
Ph, Hua	25
Puiu, Al.	11
Putimtseva, O. I.	44

- Q -

Quere, Y.	46, 47
Quoc, Nghia	24

- R -

Racz, Laszlo	9
Radev, Simeon	7
Radziyevskiy, V. V.	38
Raimbault, P.	55
Ratner, A. M.	54
Rauh, G.	55
Ravizza, P.	49
Rayeva, N. V.	28
Rechner, Paul	42
Reckers, I.	34
Reimann, Max	18
Remezov, P. I.	31
Reuters, F.	43
Ribacchi, R.	35
Richard, Marc	55
Riedel, L.	56
Risse, W.	48
River, Carlos Rivero	26
Rivier, Catherine	17
Robakiewicz, Andrzej	9
Robert, Ladislav	36
Roche, J.	33
Rochet, Waldeck	17
Roes, H. L.	48
Rog, Stanislaw	10
Rogova, T. L.	29
Rohrbach, F.	39
Roman, Albrecht	12
Ropartz, C.	33
Roquet, J.	52
Rosello, Joseph- Francois-Phillippe	42
Roshchin, I. V.	29
Roskin, G. I.	30
Rosler, U.	40
Rosyanov, S. P.	28
Rotmistrov, P. A.	5
Rott, Rudolf	34
Roux, Andre	55
Ruban, M. A.	39
Rube, W.	34
Rubin, B. A.	29
Rubkin, Ye. B.	28
Rublevskiy, T. N.	45
Rudakov, I. A.	29
Rudolph, H.	40
Rummel, R.	48

Ruppeltd, Dusan	13
Rusinov, L. A.	41
Rusmich, Ladislav	7
Rybakov, V.	2
Rychlik, Tadeusz	10

- S -

Sabolcik, Michal	8
Sadovskiy, V. D.	44
Safarevic, I. R.	50
Sagamonvan, A. Ya.	54
Sagdeyev, R. Z.	53
Saint-Venant	42
Sakuda, Mashahisa	56
Salas, Raoul Acosta	24
Salesse, H.	47
Sali, Emil	8
Salyamon, L. S.	31
Sanbongi, K.	49
Sanders, T.	52
Sanger, E.	27
Sansonov, G. V.	44
Sapundzhiev, Delcho	6
Sarkis'yants, G. A.	1
Sarrak, V. I.	44
Sato, M.	35
Sautov, N.	26
Sauvage, Ch.	20
Savol'yev, A.	3
Scarpa, A.	35
Schack, J.	43
Schardin, Hubert	56
Schebesta, Paul	21
Schenck, H.	47
Schiopu, Bucur	28
Schiweck, H.	8
Schlich, R.	52
Schmahl, D.	33
Schmidt, J.	39
Schmit, R.	40
Schneider, A.	43
Schneider, Fernand	18
Scholz, E.	8
Scholz, W.	47
Schropel, D.	43
Schwab, B.	51
Schwabe, G.	48
Schwiete, H. E.	42
Schwimmann, H.	51
Seccimarro, Mauro	18
Secomski, Kazimier	11
Segawa, K.	49
Segring, S. B.	15

Segur-Cabanac, A.	18	Skado, Rigmor	18
Seibel, G.	37	Sklyarov, V. Ya.	32
Seidler, G.	8	Skrasek, A.	14
Seidov, I. M.	31	Skuridin, V. A.	38
Selbmann, K. H.	8	Slettemark, R.	15
Semenov, V.	2	Slovinskiy, K. N.	50
Senda, K.	49	Smatlak, Stanislav	15
Serdyuk, S. M.	45	Smirnov, L. V.	44
Sereda, G. A.	53	Smirnov-Nesvitskiy, A.	5
Sergeyov, V. I.	54	Smolarski, A.	40
Seruzier, B.	47	Smyk, M. M.	31
Seryakov, I. S.	2	Sne, Moshe	22
Sha, Ting	27	Sneydmjuller, V. I.	51
Shabalina, O. K.	41	Sokolova, Ye. G.	28
Shabshina, F. I.	23	Solodovnikov, V. V.	50
Shakurov, R. Kh.	31	Solomentsev, M.	3
Shamrai, E. F.	31	Solopenko, M.	2
Shamray, V.	3	Sommer, Theo.	13
Sharenkov, Stefan	7	Song, Hao	24
Sharevskir, B. A.	56	Sorokin, Yu. I.	38
Sharonov, V. V.	37, 38	Sorokina, G.	1
Shatagin, O. A.	45	Soto, Lionel	26
Shcherbakov, V.	2	Soulairac, A.	33
Shen, Chi-ch'un	33	Sovetnikov, V.	6
Shon, Kuang-ming	55	Spengler, O.	8
Shen, Liang-an	22	Spinella, Mario	18
Shevchenko, Yu. M.	41	Spitzer, Gerard	23
Shevenko, S. M.	50	Staib, C.	42
Shibnev, V. A.	30	Stamenov, Stamen	7
Shigarev, A. S.	44	Stanchev, Zhivko	7
Shigenari, Washizuka	49	Starodubov, K. P.	45
Shiryayev, D. T.	32	Stasiak, Tadeusz	11
Shkuro, S.	3	Steding, A.	43
Shmidt, O. Yu.	38	Stepanova, A. M.	30
Shpinel, V. S.	53	Stoff, P.	47
Shtabtsov, V. I.	32	Stoyenov, I. A.	38
Shtal'berg, S.	3	Stradomskiy, V. B.	45
Shtenberg, A. I.	31	Strashimirov, A.	7
Shubladze, C.	11	Streinu, Vladimir	13
Shubnikov, A. V.	38	Stricker, F.	48
Shukriu, Ali	12	Strobel, G. W.	8
Shumilovskiy, N. M.	54	Struss, F.	55
Shvarts, S. S.	32	Stuerner, Walter	52
Shvedov, V. P.	28, 44	Stutznacker, Emil	57
Shvets, I. T.	41	Subbotin, M. I.	54
Sidihe, Yoro	19	Sukharevskiy, B.	1
Signora, M.	44	Surowink, W.	27
Signorini, Giorgio	20	Sushchenya, L.	29
Simon, Cl.	33	Suslov,	
Simoneit, Ferdinand	22	Mikhail Andreyevich	18
Simulescu, D.	11	Suzuki, A.	49
Sinitsyn, I. N.	54	Swoboda, K.	47
Sisakyan, N. M.	27, 28,	Sydow, A.	40
	57	Sytinskaya, N.	37
Sisti, Ezio	35	Szocs, Istvan	15
		Szyndler-Glowacki,	
		Wieslaw	11

- T -

Tailler, A.	11
Tal'roze, V. L.	4
Tamm, V.	57
Tanaka, Shoji	56
Tang, Ming-tao	36
T'ao, K'o-chieh	46
T'ao, Ting-lai	22
Tarakanov, R. Z.	38
Taranyuk, A.	1
Tarassenko, N. Yu.	28
Tarayan, V. M.	45
Tarkhov, A. G.	38
Taro, Hasegawa	49
Tatar, Jozsef	9
Tejfel, V. G.	37
Telugin, K.	5
Teng, Chia-c'hi	46
Terekhin, S. Ya.	4
Tereshin, V. I.	52, 53
Tesar, V.	56
Tesmantaité, N.	30
Tetsu, K.	49
Thiam, Habib	21
Thibaut, C. G.	46
Thomas, F.	37
Thorez, Maurice	16, 18
Thoria, L.	48
Tikhonchuk, Yu.	1
Tikhonenko, A. S.	29
Tikhonenko, T. I.	31
Timar, Matyas	9
Timofeyev, A. D.	52
Timofeyev, V. T.	37
Tinozzi, F. P.	34
Tishankova, L. V.	32
Toepfer, H.	43
Togari, Y.	28
Togliatti, Palmiro	17
Tokarev, S. A.	32
Tomsa, J.	34
Tomsic, Vida	13
Tontegode, A. Ya.	55
Toponogov, V. A.	51
Tougas, Remi	46
Tramm, Heinrich	47
Tran, Linh Son	23
Tran, Ngoc Nam	23
Tran, Nguyen	23
Tran, Quy Hai	24
Tran, Van Hien	23
Traore, Bakary	20
Trashliev, Khr.	7
Trendota, Jozef	10

Troitskiy, V. B.	30
Tron, A. S.	41
Truter, T.	15
Ts'ao, Ting-k'uei	41
Tso, Tsung-c'hi	46
Tsvetkov, Georgi	7
Tsvetkov, V. S.	31
Tugovik, G. I.	38
Tung, Sheng	57
Tur, M.	5
Tushnyakov, M. D.	41
Tusnov, T.	57
Tuzi, Ziro	56
Typolt, Jiri	7
Tyukhtin, V. S.	6

- U -

Uang, To-chuang	55
Uchiyama, I.	49
Udachin, A.	57
Udren, S.	12
Ulloa, G.	35
Ullrich, W.	52
Ulubekova, M.	28
Urbanski, T.	37
Ustinov, B.	36
Utevskiy, B. S.	6
Utkin, A. V.	4

- V -

Valentin, A.	46
Vallander, S. V.	52
Vansina, H. J.	21
Varin, I. Yo.	31
Vasconi, Luciano	17
Vasiljev, Mito Hadzi	13
Vasil'yev, A. A.	1
Vasquez, Ramon	15
Vaynsheker, D. I.	1
Voduta, A. P.	54
Vokslor, V. I.	55
Volchev, Dimitur	7
Vereshchakova, E. P.	31
Vermeersch, Joannette	19
Vernov, S. N.	53
Vertos, Imre	23
Vetchinkin, V. P.	41
Voverka, A.	39
Vilarino, Joel	26
Vilesov, G.	3
Vinberg, G.	28

Vincent, Jean Marie	17
Vinde, Victor	18
Violi, G.	43
Vinogradova, Z. A.	38
Vipper, A. B.	54
Visan, V.	15
Vlad, Petru	11
Voigt, E.	8
Vol'fkovich, S. I.	27
Volkova, R. M.	46
von Bonin, Lutz	42
Vorob'yev, A. A.	52
Vorob'yev, V.	6
Voskresenskiy, K. A.	32
Voyevodskiy, V. V.	36
Vu, Tion Lieu	22
Vu, Xuan Chiem	25
Vuong, Thua Vu	24
Vyalov, G. N.	51
Vyletal, Milan	7
Vypov, I. G.	4

- W -

Wache, X.	47
Wagner, K.	48
Wagner, W. H.	33
Wano, Ibra	21
Wang, Chih-chiang	55
Wang, K'o	22
Wang, Shu-ch'un	27
Wavre, A.	42
Weeks, G.	21
Weinberg, C.	46
Weinberg, H.	43
Weiss, A.	37
Weisz, P.	34
Wenker, Nils	56
Westerborn, A.	34
Wiethoff, G.	43
Winkler, H.	43
Wohlmuth, F.	39
Wolowczyk, Arkadiusz	10
Woog, Edgar	17
Wulkan, B.K.H.	48
Wunning, J.	48
Wust, Georg	39

- Y -

Yakovchuk, N.	1
Yamamoto, M.	49
Yanev, A.	6
Yang, Ch'ao-shu	25
Yang, Min-chih	46
Yastrembskiy, V.	6
Yatsuk, Ye. P.	4
Yazdovskiy, V. I.	27, 28
Yefimov, M. H.	45
Yegorov, L. V.	35
Yelizarov, Yu. A.	32
Yershova, A.	57
Yeshmantayte, N.	30
Yevdokimov, I. S.	50
Yevstingneyev, G. P.	50
Yevstratov, A.	1
Yuan, Ts'ang-i	22
Yuan, Wang	51
Yushkovish, N. F.	36
Yutsis, A. P.	54

- Z -

Zaciu, Mircea	15
Zadorozhnyy, V.	4
Zahn, H.	48
Zakharenkov, I.	28
Zukharov, A.	5
Zukharov, A. P.	30
Zavt, G. S.	54
Zdrodovskiy, P. F.	32
Zhaltov, N.	3
Zheltukhin, I.	3
Zherchin, H. M.	40
Zhernovoy, A. I.	54
Zhitnikov, R. A.	54
Zhmayaova, Z. M.	32
Zhuk, N. P.	41
Zhukov, P. A.	1
Zhukov, Ye. H.	6
Ziegler, Hans	43
Ziegler, K.	48
Ziomba, S.	56
Zorilly, Robert	44
Zoja, R.	47

Zolotarev, Ye. Kh.	32
Zolotokrylina, Ye. S.	30
Zolotov, B.	1
Zorin, Valerian	5
Zotova, Ye. V.	45
Zubarev, F. G.	32
Zur, M.	43
Zverov, V. S.	2
Zygiert, Zenona	35

* * *

UNCLASSIFIED
Central Intelligence Agency



Washington, D.C. 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,

A handwritten signature in cursive script, reading "Sergio N. Alcivar".

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)

UNCLASSIFIED



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
AD0834364	78-03109A	52	1	6	62	Consolidated Translation Survey For February 1963	2/1/1963	232	Approved For Release	3/25/2004
AD0402915	78-03109A	52	1	7	63	Consolidated Translation Survey For March 1963	3/1/1963	314	Approved For Release	3/25/2004
AD0405169	78-03109A	52	1	8	64	Consolidated Translation Survey For April 1963	4/1/1963	278	Approved For Release	3/25/2004
AD0409473	78-03109A	52	1	9	65	Consolidated Translation Survey For May 1963	5/1/1963	358	Approved For Release	3/25/2004
AD0413153	78-03109A	53	1	1	66	Consolidated Translation Survey For June 1963	6/1/1963	361	Approved For Release	3/25/2004
AD0414818	78-03109A	53	1	2	67	Consolidated Translation Survey For July 1963	7/1/1963	249	Approved For Release	3/25/2004
AD0418328	78-03109A	53	1	3	68	Consolidated Translation Survey For August 1963	8/1/1963	324	Approved For Release	3/25/2004
AD0834365	78-03109A	53	1	4	69	Consolidated Translation Survey For September 1963	9/1/1963	193	Approved For Release	3/25/2004
AD0423936	78-03109A	53	1	5	70	Consolidated Translation Survey For October 1963	10/1/1963	232	Approved For Release	3/25/2004
AD0426736	78-03109A	53	1	6	71	Consolidated Translation Survey For November 1963	11/1/1963	298	Approved For Release	3/25/2004
AD0428566	78-03109A	53	1	7	72	Consolidated Translation Survey For December 1963	12/1/1963	298	Approved For Release	3/25/2004
AD0431011	78-03109A	53	1	8	73	Consolidated Translation Survey For January 1964	1/1/1964	273	Approved For Release	3/25/2004
AD0433215	78-03109A	53	1	9	74	Consolidated Translation Survey For February 1964	2/1/1964	200	Approved For Release	3/25/2004
AD0437984	78-03109A	54	1	1	75	Consolidated Translation Survey For March 1964	3/1/1964	305	Approved For Release	3/25/2004
AD0440831	78-03109A	54	1	2	76	Consolidated Translation Survey For April 1964	4/1/1964	155	Approved For Release	3/25/2004
AD0442174	78-03109A	54	1	3	77	Consolidated Translation Survey For May 1964	5/1/1964	249	Approved For Release	3/25/2004
AD0443106	78-03109A	54	1	4	78	Consolidated Translation Survey For June 1964	6/1/1964	191	Approved For Release	3/25/2004
AD0444756	78-03109A	54	1	5	79	Consolidated Translation Survey For July 1964	7/1/1964	169	Approved For Release	3/25/2004
AD0447557	78-03109A	54	1	6	80	Consolidated Translation Survey For August 1964	8/1/1964	153	Approved For Release	3/25/2004
AD0450482	78-03109A	54	1	7	81	Consolidated Translation Survey For September 1964	9/1/1964	141	Approved For Release	3/25/2004
AD0451428	78-03109A	54	1	8	82	Consolidated Translation Survey For October 1964	10/1/1964	149	Approved For Release	3/25/2004
AD0453181	78-03109A	54	1	9	83	Consolidated Translation Survey For November 1964	11/1/1964	157	Approved For Release	3/25/2004
AD0455133	78-03109A	54	1	10	84	Consolidated Translation Survey For December 1964	12/1/1964	121	Approved For Release	3/25/2004
AD0456859	78-03109A	54	1	11	85	Consolidated Translation Survey For January 1965	1/1/1965	179	Approved For Release	3/25/2004
AD0458780	78-03109A	54	1	12	86	Consolidated Translation Survey For February 1965	2/1/1965	161	Approved For Release	3/25/2004
AD0461501	78-03109A	55	1	1	87	Consolidated Translation Survey For March 1965	3/1/1965	301	Approved For Release	3/25/2004