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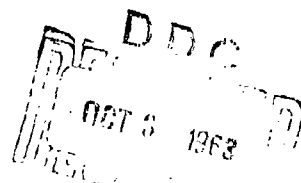


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CONSOLIDATED TRANSLATION SURVEY

Number 68

For August 1963



Prepared by

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CENTRAL INTELLIGENCE AGENCY
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CONSOLIDATED TRANSLATION SURVEY

FOR AUGUST 1963

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CONSOLIDATED TRANSLATION SURVEY

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

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 and data of publication, and publication identification of the completed project are given when available.

Some of the above details may be unavailable on projects listed "in process." New projects in process will be listed only once, their subsequent listing being made when they are reported completed. 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.

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Washington 25, DC

AEC - Atomic Energy Commission (see Department of Commerce)

AERE, Harwell

The Librarian
AERE, Ministry of Supply
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England

AF

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

AGU

American Geophysical Union
1515 Massachusetts Avenue, NW
Washington 5, DC

AID - Aerospace Information Division (see AF)

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

APL - Applied Physics Laboratory (see Navy)

B Coke R.A.

The British Coke Research Association,
Chesterfield, Derbyshire.

BCRA

British Ceramic Research Association
Queen's Road
Penkhull
Stoke-on-Trent, Staffs
England

BISI

British Iron and Steel Institute
4 Grosvenor Gardens
London, SW 1, England

Browne & Shaw

Browne & Shaw Research Corporation
12 Woerd Avenue,
Waltham 54, Massachusetts

BWRA

British Welding Research Association
Abington Hall, Abington
Cambridge, England

CB

Consultants Bureau, Inc.
227 West 17th Street
New York 11, New York

CEGB

Central Electricity Generating Board
Friars House
157-168, Blackfriars Road
London, S.E.1, England

CRL

Central Research Laboratories, Research Division
Broken Hill Proprietary Co, Ltd,
Shortland, 2N, New South Wales
Australia

CS

Chemical Society
Burlington House
London W.1., England

CSIR

Council for Scientific and Industrial Research
The Head
Information Division
PO Box 395
Pretoria, Africa

CSIRO

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

CTT

Columbia Technical Translations
5 Vermont Avenue
White Plains, New York

DDC

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

Dept of Com

Department of Commerce
Office of Technical Services
Washington 25, DC

Dept of Int

Department of Interior
Library
Washington 25, DC

Dept of State

Department of State
Division of Library and Reference Service
132 State Annex 1
Washington, DC

Emmanuel Coll Res Lang Ctr

Emmanuel College
Research Translation Center
The Fenway
Boston, Massachusetts

FTD - Foreign Technology Division (see AF)

GB

Association of Special Libraries and
Information Bureau
3 Belgrave Square
London SW 1, England

Geochem Soc

Prof E. Wm. Heinrich
Mineralogical Laboratory
University of Michigan
Ann Arbor, Michigan

HB

Henry Bratcher Technical Translation
PO Box 157
Altadena, California

HO - Hydrographics Office (see Navy)

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

I.S.I.

Iron and Steel Institute
4 Grosvenor Gardens
SW 1, London

JPRS

Joint Publications Research Service
Building T-30
Ohio Drive & Independence Avenue, SW
Washington 25, D.C.

MU

University of Melbourne, Languages Section,
Faculty of Science, Parkville, N2, Victoria,
Australia

NASA

National Aeronautics and Space Administration
1512 H Street, NW
Washington 25, DC

Navy

Department of Navy
Office of Naval Intelligence
Washington 25, DC

NCB

National Coal Board
2 Grosvenor Place
London, SW 1, England

NIH

National Institutes of Health
Translating Section, Library
Building 10, Room 11N112
Bethesda 14, Maryland

NLL

National Lending Library
for Science and Technology
Boston Spa, Yorkshire, England

NMS - Navy Medical School (see Navy)

NRC/C

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

NZDIA

Department of Internal Affairs
Translation Service
Wellington, New Zealand

ONI - Office of Naval Intelligence (see Navy)

OSA

Optical Society of America
1155 16th Street, NW.
Washington 5, DC

OT

Ministry of Aviation
TIL.1(a),
First Avenue House,
High Holborn,
London, W.C.1., England

OTS

Office of Technical Services
Department of Commerce
Washington 25, DC

(Also available through Department of Commerce
Field Offices)

PANSDOC

PANSDOC 2/141-S,
P.E.C.H. Society,
Karachi-29, Pakistan

Pat Off

Patent Office
Scientific Library
14th and Constitution Avenue, NW
Washington, DC

PERA

The Information Manager
Production Engineering Research Association
Melton Mowbray
Leicestershire, England

PP

Pergamon Press
122 East 55th Street
New York 22, New York

RAE - (see TIL, Ministry of Aviation)

RAND

RAND Corporation
ATTN: Publications Office
1700 Main Street
Santa Monica, California

RAPRA

Rubber and Plastics Research Association of
Great Britain
Shawbur
Shrewsbury, England

All Orders from the American Continents:

Palmerton Publishing Company, Inc.
101 West 31st Street
New York 1, New York

Redstone Arsenal - (see DDC)

RRG

Review of Russian Geology
Box 6665, College Station
Duke University
Durham, North Carolina

RTB

Richard Thomas & Baldwins Ltd.
Economics and Market Research Department
47, Park Street, London, W.1., England

SACSIR - (see CSIR)

SCOW

Steel Company of Wales Ltd.
Abbey WKS., Port Talbot
Glamorgan, S. Wales

Scripta Technica, Inc.

1000 Vermont Avenue, N. W.
Washington 5, D.C.

Tech Info

Technische Informationsbibliothek
Am Welfergarten 1
Hannover, West Germany

TIL - Technical Information Library

Ministry of Aviation
TIL 1(b)
Leysdown Road
Mottingham
London SE9, England

UKAEA

United Kingdom Atomic Energy Authority
Development and Engineering Group
Risley, Warrington, Lancs, England

USDA

Department of Agriculture
Foreign Agricultural Service
Room 5086
14th and Independence Avenue, NW
Washington 25, DC

319th MI Bn - 319th Military Intelligence Battalion (see ACSI)

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

P R O J E C T S R E P O R T E D

F O R A U G U S T 1 9 6 3

USSR

Economic

Problems in the United Electrification of the USSR and Technical Progress in Electrical Construction, by P. S. Neportzhniy.
RUSSIAN, bk, 1960, 45 pp.

*FTD-TT-63-320

Contracts for Research and Design Work, 28 pp.
RUSSIAN, bk, Dogovory na Vypolneniye Nauchno-Issledovatel'skikh i Konstruktorskikh Rabot, Moscow, 1962, pp 7-19, 53-69.

JPRS 20549

Use of Industrial Methods in Assembling Technological Equipment in Cement Plants, by I. T. Chumadin, 205 pp.
RUSSIAN, bk, Industrial'nyye Metody Montazha Tekhnologicheskogo Oborudovaniya Tsementnykh Zavodov, Moscow, 1961, pp 3-151.

JPRS 20316

The Novosibirsk Hydroelectric Power Plant in the Plan for Utilization of the Ob River, by A. V. Yegorev.
RUSSIAN, rpt, Opyt Stroitel'stva Novosibirskogo Gidrouzla, 1962, pp 7-14.

*ACSI I-2992
ID 2240828

Water Supply and Sewerage Reference Book, by N. F. Fedorov.
RUSSIAN, bk, Spravochnik po Vodosnabzheniyu i Kanalizatsii, 1960, pp 7-9, 11, 13, 62, 63, 176, 177, 201, 205-207, 227, 228, 231, 232, 254, 255, 259, 319.

*ACSI I-2995
ID 2240831

Organization of Planning in Construction, by A. F. Milykh, F. N. Mazarov, 13 pp.
RUSSIAN, bk, V Pomoshch' Ekonomistu i Planoviku Planirovaniye Proyektno-Izyskatel'skikh Rabot v Stroitel'stve, Moscow, 1961, pp 3-19.

JPRS 20474

Combating Metal Corrosion in the USSR to Prevent the Path of Corrosion, by I. Litinetskiy, 5 pp.
RUSSIAN, per, Agitator, No 11, 1963, pp 44-46.

JPRS 20395

Basic Problems in the Development of the City of Khabarovsk, by N. Solofnenko.
RUSSIAN, per, Arkhitectura SSSR, No 6, 1961, pp 46, 47.

*ACSI I-3143
ID 2240854

USSR

Economic (Contd)

Planning Major Economic Regions, by M. Cherkasov,
20 pp.
RUSSIAN, per, Arkhitektura SSSR, No 5, 1963,
pp 30-36.

JPRS 20390

Conveyer Assembly of K50 Electric Measuring Sets
Introduced at the Kiev Tochelektropribor Plant,
by A. F. Sinitsyn, 6 pp.
RUSSIAN, per, Avtomatika i Priborostroyeniye, No 2
(14), 1963, pp 90-92.

JPRS 20559

Planning and Technical Progress, by B. Azimov,
5 pp.
RUSSIAN, np, Bakin Rabochiy, 7 Jul 1963,
p 2.

JPRS 20473

The Integrated Plan for the Development of the
Precast Reinforced Concrete Industry in the
RSFSR, by A. G. Burnayev, 8 pp.
RUSSIAN, per, Beton i Zhelezobeton, No 5, 1963,
pp 193-196.

JPRS 20558

Instruments for Measurement, Recording, and
Control of Moisture, by D. N. Oganessian,
8 pp.
RUSSIAN, per, Byul Tekh-Ekon Informatsii, No 2,
1963, pp 45-50.

JPRS 20496

Vacuum Refining of Steel Outside the Furnace,
by F. G. Kostenko, 9 pp.
RUSSIAN, per, Byul Tekh-Ekon Informatsii, No 4,
1963, pp 3-8.

JPRS 20460

Machines and Attachments for Harvesting Grain-
Leguminous Crops, by N. V. Gerasimov, G. T. Myagkov,
et al, 5 pp.
RUSSIAN, per, Byul Tekh-Ekon Informatsii, No 4,
1963, pp 56-65.

JPRS 20594

Selected Articles From the Russian Newspaper
Ekon Gazeta.

9 Feb 1963, p 15.
An Optical-Machine Firm Organized in Leningrad,
5 pp.

JPRS 20510

16 Mar 1963, p 20.
Mechanization of Document Preparation, by
G. Guneyev, 6 pp.

Patent Office

4 May 1963.
Standardized and More Durable Drilling Equipment
Needed for the KMA, by F. Yefimov, 6 pp.

JPRS 20497

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Selected Articles From the Russian Newspaper
Ekon Gazeta. (Contd)

11 May 1963, p 16. More Modern Equipment Introduced at the Azovstal' Plant, by S. Ivanenko, 9 pp.	JPRS 20497
18 May 1963, pp 16, 17. The Chemical Industry of the Moscow Region, by V. Demchenko, 12 pp.	JPRS 20293
25 May 1963. The Financial Plan of an Enterprise of Light Industry, by N. Sychev, 6 pp, (pp 12, 13).	JPRS 20525
Analysis of Shortcomings in the Production and Use of Various Types of Computers, by V. Pronin, 15 pp, (pp 33, 34).	JPRS 20566
Problems in the Mechanization of Statistics and Bookkeeping, 12 pp, (pp 35-37).	JPRS 20449
Training Cadres for Mechanization of Statistics and Computing Jobs, by B. Tikhonov, I. Yermakov, 5 pp, (p 38).	JPRS 20307
Problems in the Organization of Tire-Reconditioning Shops, by Ye. Temchin, 5 pp, (p 41).	JPRS 20312
A Report on Actions Resulting From Business Club Complaints, by V. Yevseyev, A. Gayduk, et al, 9 pp, (pp 45, 46).	JPRS 20312
1 Jun 1963. Waiting Too Long..., by N. Yakovchuk, 5 pp, (p 12).	JPRS 20525
Problems of Ferrous Metallurgy in the Soviet Union, 17 pp, (pp 16-18).	JPRS 20460
Textile Rejects Are an Economic Enemy, 20 pp, (pp 29-32).	JPRS 20632
8 Jun 1963. The Importance of Scrap Metal for the National Economy, by A. Savranchenko, 8 pp, (pp 17, 18).	JPRS 20672
Decree on Shift Operations in the Textile Industry, 5 pp, (p 44).	JPRS 20278

USSR
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Selected Articles From the Russian Newspaper
Ekon Gazeta. (Contd)

15 Jun 1963.

Supply More Electric Power for Novo-Kemerovo
Chemical Enterprises, by P. Styrov, 6 pp,
(p 8).

JPRS 20427

To Please Second-Hand Dealers, by A. Ivanov,
6 pp, (pp 41, 42).

JPRS 20632

16 Jun 1963, p 37.

Behind the Screen of Overstated Prices, by
V. Spirkin, 5 pp.

JPRS 20595

22 Jun 1963.

Cellulose, 7 pp, (p 20).

JPRS 20632

Cellulose Production Still Lagging, 8 pp,
(p 20).

JPRS 20333

Better Deborussian Products Demanded, by
A. Zolon, 5 pp, (p 32).

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The Inadequate Development of the Mirabilite
Sources, by I. Kovalenko, 7 pp, (p 38).

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Important Problems in Chemical Industry, 5 pp,
(p 42).

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Chemical Production Hampered by Poor Supply-
Demand Estimates, 6 pp, (p 42).

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6 Jul 1963.

The Search for Minerals Must Be Intensified,
by A. Sidorenko, 12 pp, (pp 9, 10).

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Development of Tool Making Industry, 6 pp,
(p 18).

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The Highly Progressive Moscow Combine of
Hard Alloys, by Pavel Il'ich Tabalov, 11 pp,
(pp 33, 34).

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L'vov Meeting on Production Combines, 9 pp,
(pp 35, 36).

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Activities of Speculators, by I. Abashkin,
7 pp, (pp 40, 41).

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13 Jul 1963, pp 47, 48.
Advertisements, 5 pp.

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Developing Norms for Investments in the Construction Materials Industry, by P. Gorbushin, Ya. Rekitar, 13 pp.
RUSSIAN, per, Ekon Stroitel, No 4, 1963, pp 25-33.

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How to Improve the Production Norms in the Consumption of Building Materials, by S. Berezin, 8 pp.
RUSSIAN, per, Ekon Stroitel, No 5, 1963, pp 19-24.

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A New Procedure for Planning, Calculating, and Utilizing the Sinking Fund in Construction, 9 pp.
RUSSIAN, per, Ekon Stroitel, No 5, 1963, pp 64-67.

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From Moscow to the Shores of Lake Baykal - Trans-Siberian Railroad Line Electrified for Extent of 5,470 Kilometers, by Yu. V. Paulov, 14 pp.
RUSSIAN, per, Elektricheskaya i Teplovonnaya Tyaga, No 9, 1961, pp 9-12, 35.

ACSI 1-0407-1
ID 2180108

Use of Expansible Wheel Pairs in International Railroad Transportation, by I. V. Naumov, 6 pp.
RUSSIAN, per, Elektricheskaya i Teplovonnaya Tyaga, No 4, 1963, pp 42-44.

JPRS 20538

Price as an Important weapon in Creating the Communist Economy, by D. Kondrashev, 12 pp.
RUSSIAN, per, Finansy SSSR, No 4, 1963, pp 34-43.

JPRS 20471

Improvements on Moscow Railroad, by L. Karpov, 5 pp.
RUSSIAN, np, Gudok, 14 May 1963, p 3.

JPRS 20838

Selected Articles From the Russian Newspaper Izvestiya.

27 Mar 1963, p 3.
Achievements at Magnitogorsk Metallurgical Combine and Proposal to Set Up Exemplary Automation and Mechanization System, by F. Voronov, G. Andronov, 8 pp.

JPRS 20336

16 May 1963.
Defective Production and Its Consequences on the Economy, 5 pp.

JPRS 20460

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Article: ... Russian News
... (Contd)

Economic

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11 Jun 1963, p. 3.
Chemical Industry on the Forward
March, by N. A. Romanets, 5 pp.

JPRS 20670

11 Jul 1963.

Improvement of ...
... EP.

Characteristics

of the Technical

... A. Romanets,

Stainless Steel

... Chern Metal,

... et al.

per, 12 pp.

HB 5168

3, pp 19

... the Russian Newspaper,

Art.

an ... Drilling Equipment Halts Work

... V. Voronin,

JPRS 20336

11 Apr 1963.

JPRS 20460

Problems of the D. ... Mining and
Metallurgical Combine, by M. Samarin, 5 pp.

JPRS 20605

11 Apr 1963.

Powerful Tool of Culture and Progress, by
G. Shalabayev, 5 pp.

JPRS 20696

20 Jun 1963, p. 3.

The Romantic Trail Blazed by the Arkalyk
Industrialization, by R. ... yarovskiy,
5 pp.

JPRS 20712

11 Jul 1963, p. 2.

Large-Scale Chemical Industry in the Kazakh
SSR, by V. Tret'yak, 5 pp.

Testing and Introduction of ... Plastic Pipe,
by P. V. Vlasov, V. T. Kopylov, 5 pp.

RUSSIAN, per, Khim Mashiny, No 3,
1963, pp 28, 29.

JPRS 20280

New Machines, Equipment, and Instruments, 10 pp.

RUSSIAN, per, Khim Mashiny, No 3, 1963,
pp 45-47.

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Serious Shortcomings in Turkmen Cotton Growing,
by V. Nikolayev, 12 pp.
RUSSIAN, per, Khlopkovodstvo, Vol XIII, No 6,
1963, pp 1-6. JPRS 20320

Leninakan Miniature Electric Motors Plant Takes
Measures to Eliminate the Output of Defective
Products, by K. Akopyan, 6 pp.
RUSSIAN, np, Kommunist, 20 Dec 1962. JPRS 20311

Shortcomings in the Organizational Work of the
Construction Industry, 5 pp.
RUSSIAN, np, Kommunist, 18 Apr 1963, p 2. JPRS 20500

Plastics Production in the Soviet Union on the
Increase, by I. Kryauchynas, 7 pp.
RUSSIAN, per, Kommunist, No 6, 1963, pp 66-69. JPRS 20712

Problems of Full Mechanization and Automation of
Production in Machine Building of the Estonian
Republic, by E. Kull', 9 pp.
RUSSIAN, per, Kommunist Estonii, No 4, 1963,
pp 42-49. JPRS 20395

Dzhetygara Communists Discuss Need for Education
in Labor, by A. Mashin, V. Proletkin, 5 pp.
RUSSIAN, np, Komsomol Pravda, 28 Jun 1963,
p 2. JPRS 20696

Utilization of Volatile Oils of Spice Plants in the
Food Concentrate Industry, by K. A. Slepchikov,
L. I. Kuznetsova.
RUSSIAN, per, Konservnaya i Ovoshchesushil Prom,
No 6, 1963, pp 23, 24. *ACSI I-3213
ID 2244408

Selected Articles From the Russian Newspaper
Leningrad Pravda.

28 Nov 1962, p 3. JPRS 20610
Ten Years of Research on Ultrasonic Flaw-
Detectors, by B. Starov, 6 pp.

11 Apr 1963. JPRS 20540
Electronics Must Be Widely Introduced Into
Industry, by R. Bobovikov, 7 pp.

19 Apr 1963. JPRS 20293
Problems of Plastics Production, by V. Braginskiy,
5 pp.

13 Jun 1963, p 2. JPRS 20728
Two-Shift Operation of Machine Tools, by
S. Forisenkov, 9 pp.

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Problems in Production at the Serpukhov Kondensator Plant, by V. Vlasov, 6 pp.

RUSSIAN, np, Leninskoye Znanya, 5 Dec 1962, p 2.

JPRS 20610

Problems of the Zagorsk Paint and Varnish Plant, by G. Ustinov, 8 pp.

RUSSIAN, np, Leninskoye Znanya, Moscow, 28 Apr 1963.

JPRS 20293

Conference on Machine Building in Moscow Area, 5 pp.

RUSSIAN, np, Leninskoye Znanya, 1963, p 2.

JPRS 20395

Disorders Revealed at the Svetogorsk Sulfite-Cellulose Plant, by V. Barausov, 6 pp.

RUSSIAN, np, Lesnaya Prom', 9 May 1963, p 3.

JPRS 20459

Various New Electrical Machines and Equipment Exhibited at Exhibition of Achievements of National Economy USSR in 1962, by A. F. Berzin, 8 pp.

RUSSIAN, per, Mashinostroitel', No 5, 1963, pp 45-48.

JPRS 20494

Consumer Goods, 10 pp.

RUSSIAN, per, Masloboyno-Zhir Prom, No 3, 1963, pp 2-7.

JPRS 20632

Work Totals of the Fats and Oils Industry in the RSFSR for 1962, by F. M. Minevich, G. I. Yel'nikov, 13 pp.

RUSSIAN, per, Masloboyno-Zhir Prom, No 5, 1963, pp 26-31.

JPRS 20632

The Physiology of Labor and Technical Progress, by V. Yefimov, S. Kosilov, et al, 14 pp.

RUSSIAN, np, Meditsin Gazeta, 14 May 1963, p 3.

JPRS 20596

Development of the Oxygen Convertor Manufacture of Steel, by I. I. Bornatskiy, N. A. Tereshchenko, 8 pp.

RUSSIAN, per, Metallurg, 5 May 1963, pp 1, 2.

JPRS 20533

Use of Stainless Steel Electric Welded Pipes in Place of Seamless Pipes, by V. I. Gapich, G. D. Dupliy, 8 pp.

RUSSIAN, per, Metallurg, 5 May 1963, pp 19-21.

JPRS 20533

USSR
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Formation and Achievements of a Laboratory for Labor Protection and Safety Techniques at the Nizhniy Tagil Metallurgical Combine, by S. V. Bareyev, 5 pp.

RUSSIAN, per, Metallurg, 5 May 1963, p 34.

JPRS 20533

Ukrainian Steel and Iron Ore Production in 1962/1963 and Future Plans, 8 pp.
RUSSIAN, per, Metallurg i Gornorudnaya Prom, No 1, Jan-Feb 1963, pp 3-5.

JPRS 20336

Problems of Automation of Production Using Computer Technique, by L. Andronov, 5 pp.
RUSSIAN, np, Moskov Pravda, 5 Feb 1963, p 2.

JPRS 20531

Improving the Moral and Political Education of the Personnel of the Derbenevskiy Chemical Plant, by A. Kochkurov, 5 pp.
RUSSIAN, np, Moskov Pravda, 2 Jun 1963, p 2.

JPRS 20367

Concerning the State Plan for Scientific-Research Work, by A. Rodin, 5 pp.
RUSSIAN, per, Myasnaya Industriya, No 2, 1963, pp 1-3.

JPRS 20525

Some Comparative Figures on the Work of the Meat Industry in 1962, by K. Kornev, 7 pp.
RUSSIAN, per, Myasnaya Industriya, No 2, 1963, pp 44-47.

JPRS 20525

New Electric Tube-Welding Mill in Chelyabinsk, by V. Selyunin, 8 pp.
RUSSIAN, per, Na Stroikakh Rossii, No 5, 1963, pp 2, 3.

JPRS 20544

Selected Articles From the Russian Periodical Narod Khoz Kazakh.

No 2, 1963, pp 45-48.

JPRS 20500

Ways to Reduce the Cost of Reinforced Concrete, by V. Pletmintsev, 8 pp.

No 5, 1963.

The 1964-1965 Plan and Five-Year Plan for Kazakh Republic, 10 pp, (pp 9-13).

JPRS 20357

Trade Problems in Kazakhstan, by S. Il'in, 6 pp, (pp 67-70).

JPRS 20670

Consumers Cooperatives in Kazakhstan, by M. Morozov, 7 pp, (pp 70-73).

JPRS 20670

USSR
Economic (Contd)

Provide Soviet Central Asia With a Formidable
Construction Industry Base, by Yu. Smykovskaya,
14 pp.
RUSSIAN, per, Narod Khoz Uzbek, No 4, 1963,
pp 55-61.

JPRS 20286

Capital Construction in the Uzbek SSR During 1963,
5 pp.
RUSSIAN, per, Narod Khoz Uzbek, No 4, 1963,
pp 62, 63.

JPRS 20286

The Darbs Plant for Kinescope Reconditioning
Established in Riga, by A. Sokolov, 5 pp.
RUSSIAN, per, Nauka i Tekhnika, No 1, 1963,
p 35.

JPRS 20540

Industrial Development in Eastern Kazakhstan,
by A. Koleyayev, 7 pp.
RUSSIAN, per, Partiynaya Zhizn' Kazakh, No 4,
1963, pp 24-29.

JPRS 20684

How to Specialize Foundries, by M. Litochevskiy,
9 pp.
RUSSIAN, per, Planovoye Khoz, No 6, 1963,
pp 75-81.

JPRS 20491

Reserves for Production Increases in the Textile
Industry, by V. Bocharov, 8 pp.
RUSSIAN, per, Planovoye Khoz, No 7, 1963,
pp 42-47.

JPRS 20670

Selected Articles From the Russian Newspaper
Pravda.

27 Mar 1963, p 2.
Production of Large-Diameter Pipes Launches
at Chelyabinsk Plant, by N. Kartashov,
Ye. Tkachenko, 5 pp.

JPRS 20336

25 Apr 1963.
Construction at the Volgograd Chemical Combine
Is Lagging, by P. Chernushchenko, V. Chernov,
5 pp.

JPRS 20293

9 Jun 1963, p 2.
Specialization -- Its Development and Scope,
by D. Glagolev, 5 pp.

JPRS 20644

25 Jun 1963, p 2.
Capital Construction: An Urgent Problem for the
Chemical Industry, by A. Akul'shin, A. Nizhegorodov,
6 pp.

JPRS 20333

USSR
Economic (Contd)

Selected Articles From the Russian Newspaper Pravda. (Contd)

28 Jun 1963, p 2. The Leningradskiy Sovmarkhoz is Neglecting Development of the Raw Materials Base for Synthetics, by V. Zhyanko, V. Zelenin, 5 pp.	JPRS 20432
9 Jul 1963, p 1. Development of the Chemical Industry Requires Special Controls, by V. Khor'kov, 7 pp.	JPRS 20712
2 Aug 1963, p 1. High Pledges of Agricultural Workers, 5 pp.	JPRS 20526
A History of Confusion in Arranging the Recon- struction of the Odessa Paint and Varnish Plant, by Ts. Levitin, 5 pp. RUSSIAN, np, <u>Pravda Ukrainy</u> , 22 Feb 1963, p 2.	JPRS 20459
Achievements and Shortcomings at Lisichansk Chemical Combine, by A. Shcherbakov, A. Zubko, et al, 7 pp. RUSSIAN, np, <u>Pravda Ukrainy</u> , 2 Apr 1963.	JPRS 20410
Criticism of Agricultural Machinery Production in the Ukraine, 6 pp. RUSSIAN, np, <u>Pravda Ukrainy</u> , 25 May 1963.	JPRS 20384
Teaching the Building Trades, 6 pp. RUSSIAN, per, <u>Professional'-no-Tekhnicheskoye Obrazovaniye</u> , No 3, 1963, pp 1, 2.	JPRS 20278
Training of Chemical Workers, by V. Krevnevich, L. Podvoyskiy, 7 pp. RUSSIAN, per, <u>Professional'-no-Tekhnicheskoye Obrazovaniye</u> , No 3, 1963, pp 3-5.	JPRS 20278
Armenian Industry Promises Progress in the Fifth Year of the Seven-Year Plan, 7 pp. RUSSIAN, per, <u>Prom' Armenii</u> , No 4, 1963, p 5-9.	JPRS 20359
The Synthesis of Butyraldehyde in a Fluidized Bed of Catalyst, by A. Sarkisyan, N. Galustyan, et al, 7 pp. RUSSIAN, per, <u>Prom Armenii</u> , No 4, 1963, pp 37-41.	JPRS 20432
Enamel Conductor With Increased Heat Stability, by G. Arzumanyan, 5 pp. RUSSIAN, per, <u>Prom Armenii</u> , No 4, 1963, pp 54-56.	JPRS 20383

USSR
Economic (Contd)

- Specifications of Industrial Flaw-Detectors in Series Production at the Kishinev Elektrotech-Pribor Plant, 5 pp.
RUSSIAN, per, Prom Energet, No 3, 1963, p 63. JPRS 20496
- Standardization of Prefabricated Steel Structural Components, by A. F. Gay, 9 pp.
RUSSIAN, per, Prom Stroitel'stvo, No 3, 1963, pp 16-19. JPRS 20286
- The Tire-Repair Industry in the Ukraine, by D. Savich, 5 pp.
RUSSIAN, np, Rabochaya Gazeta, 7 Jun 1963, p 2. JPRS 20427
- A Discussion of Problems in the Plastics Processing Industry, by V. Khazanchuk, V. Trushchitsyn, et al, 5 pp.
RUSSIAN, np, Rabochaya Gazeta, 13 Jun 1963, p 2. JPRS 20432
- Discussion Concerning Poor-Quality Radio Receivers, by V. Denisevich, 5 pp.
RUSSIAN, per, Radio, No 3, 1963, pp 4, 5. JPRS 20338
- Start-3 Television Set, by L. Troitskiy, 5 pp.
RUSSIAN, per, Radio, No 6, 1963, pp 35-38. JPRS 20700
- Plans for Volga River Navigation in the Fifth Year of Seven-Year Plan, by K. Korotkov, 8 pp.
RUSSIAN, per, Rechnoy Transport, No 4, 1963, pp 4, 5. JPRS 20538
- Coordination of Operation of Different Types of Transport Required, by V. Merkulov, 11 pp.
RUSSIAN, per, Rechnoy Transport, No 4, 1963, pp 8-10. JPRS 20538
- A New Equipment for Testing Fish Cans for Leaks, by L. M. Kazakov.
RUSSIAN, per, Rybnoye Khoz, Vol XXXVII, No 1, 1961, pp 39-43. Tech Info
- Construction Extends to the Transpolar Tundra, by Vladimir But, Boris Semenov, 12 pp.
RUSSIAN, per, Smena, No 11, Jul 1963, pp 10-12. JPRS 20686
- Electrification as a Means for Raising Labor Productivity, by I. Kodua, 10 pp.
RUSSIAN, per, Sotsialit Trud, No 5, 1963, pp 22-28. JPRS 20278

USSR
Economic (Contd)

Improvement of Job and Wage Rates, by Yu. Smirnov,
13 pp.
RUSSIAN, per, Sotsialist Trud, No 5, 1963,
pp 51-59.

JPRS 20278

Labor Organization in Machine Tool Plants, by
V. Bitunov, 8 pp.
RUSSIAN, per, Sotsialit Trud, No 5, 1963,
pp 60-64.

JPRS 20278

Ideological Work at the Estonian Eesti Kabel'
Cable Plant, by D. Severov, 6 pp.
RUSSIAN, np, Sovet Estoniya, 7 Jul 1963,
p 2.

JPRS 20674

Personnel and Production Policies at the Frunze
Control and Measuring Instruments Plant, by
V. Dmitriyev, 12 pp.
RUSSIAN, np, Sovet Kirgiziya, 29 Nov 1962,
p 2.

JPRS 20610

Poor Exchange of Technical Information Between
Plants Cited, by Sh. Marmer, 6 pp.
RUSSIAN, np, Sovet Latviya, 28 Nov 1962, p 2.

JPRS 20610

Advertisement -- Help Wanted, 5 pp.
RUSSIAN, np, Sovet Latviya, 12 Jun 1963, p 4.

JPRS 20644

Increase the Reliability and Durability of
Latvian Telephone Equipment and Instruments, by
L. Lubotskiy, 5 pp.
RUSSIAN, np, Sovet Latviya, 30 Jun 1963, p 3.

JPRS 20674

Vil'nyus Electric Welding Equipment Plant Makes
Great Strides Forward, by Ye. Shestov, 5 pp.
RUSSIAN, np, Sovet Litva, 7 May 1963.

JPRS 20305

Efficiency of Machine Building Plants, 5 pp.
RUSSIAN, np, Sovet Moldaviya, 31 May 1963,
p 3.

JPRS 20467

Vesomerpribor Plant in Kishinev Sacrifices
Performance to Boost Production Figures, by
D. Ivanov, 5 pp.
RUSSIAN, np, Sovet Moldaviya, 2 Jun 1963,
p 3.

JPRS 20305

USSR
Economic (Contd)

- Plan Fulfillment at Important Moldavian Projects,
6 pp.
RUSSIAN, np, Sovet Moldaviya, 13 Jul 1963. JPRS 20582
- How the Trade Union Organizations Can Contribute
to the Accelerated Growth of the Chemical Industry,
5 pp.
RUSSIAN, per, Sovet Profsoyuzy, No 9, May 1963,
pp 1, 2. JPRS 20312
- Delays in Introducing New Synthetic Slag Method
at Zlatoust and Chelyabinsk Metallurgical Plants,
6 pp.
RUSSIAN, np, Sovet Rossiya, 15 May 1963. JPRS 20336
- Mismanagement at the Cheboksary Electrical
Actuating Mechanisms Plant, 8 pp.
RUSSIAN, np, Sovet Rossiya, 2 Jul 1963,
pp 2, 3. JPRS 20674
- Improvement of Trade Practices, by V. Andreyev,
Yu. Niskovskikh, 6 pp.
RUSSIAN, np, Sovet Torgovlya, 29 Jun 1963. JPRS 20670
- Improvement of Rural Trade, 8 pp.
RUSSIAN, np, Sovet Torgovlya, No 6, 1963,
pp 1-5. JPRS 20670
- Improve Production of Refrigerators and Other
Electrical Appliances, by Ye. Shumilova, 11 pp.
RUSSIAN, np, Sovet Torgovlya, No 6, 1963,
pp 18-21. JPRS 20690
- Exploit the Potential for Expanding the Production
of Staple Glass Fiber, by M. I. Berezhkovskaya,
6 pp.
RUSSIAN, per, Steklo i Keramika, No 4, 1963,
pp 1-4. JPRS 20286
- Selected Articles From the Russian Newspaper
Stroitel'naya Gazeta.
- 1 Mar 1963, p 2. JPRS 20500
A New Index of Production Developed, by
L. Ditman, V. Uspenskiy, et al, 6 pp.
- 15 Mar 1963, p 2. JPRS 20500
Some Explanations for the Shortage of Wall
Materials, by S. Yapifanovskiy, 6 pp.
- 29 Mar 1963, p 2. JPRS 20500
Ways of Preparing Arbolit: Its Uses in Con-
struction, by G. Ratner, 5 pp.

USSR
Economic (Contd)

Selected Articles From the Russian Newspaper
Stroitel'naya Gazeta. (Contd)

- 12 Apr 1963. JPRS 20500
Advantages of Cementless Concrete for Overcoming
Shortage of Wall Materials, by A. Mityukov, 6 pp.
- 8 May 1963. JPRS 20286
Problems of the Lightweight Concrete Aggregates
Industry, by V. Ovsyankin, 5 pp.
- 29 May 1963, p 2. JPRS 20558
Capital Investments in the Cement Industry,
January to April 1963, 5 pp.
- 31 May 1963, p 2. JPRS 20558
The Benefits of Polymers, by I. Yershov, 5 pp.
- 9 Jun 1963, p 3. JPRS 20414
Building Chemical Enterprises in Bashkiriya,
by Z. Nuriyev, 7 pp.
- 30 Jun 1963, p 2. JPRS 20544
Construction and Assembly of the Largest in the
Country Oxygen Converter Shop at Nizhniy Tagil
Metallurgical Combine Imeni Lenin, by
M. Dunenkov, 5 pp.
- New Effective Materials -- The Sitalis, by
I. I. Kitaygorodskiy, 5 pp.
RUSSIAN, per, Stroitel Materialy, No 5, 1963,
pp 1, 2. JPRS 20558
- The Application of Radioactive Isotopes in Construc-
tion and in the Industry of Construction Materials,
by V. I. Postnikov, 9 pp.
RUSSIAN, per, Stroitel'nyye i Dorozhnyye Mash, No 4,
1963, pp 22-24. JPRS 20500
- The Tanker Lugansk, by A. P. Dorokhov, 11 pp.
RUSSIAN, per, Sudostroyeniye, Vol XXIX, No 4,
1963, pp 1-6. JPRS 20538
- The Sound-Insulating Capability of Ship Hull
Structures, by I. I. Bogolepov, 10 pp.
RUSSIAN, per, Sudostroyeniye, Vol XXIX, No 4,
1963, pp 6-9. JPRS 20319
- Conference on Welding of Metal in Shipboard Machine
Building, by Z. B. Dreyzenshtok, 5 pp.
RUSSIAN, per, Sudostroyeniye, Vol XXIX, No 4,
1963, pp 72-74. JPRS 20538

USSR

Economic (Contd)

Large-Scale Chemical Industry and the Western Urals,
by P. Malyshkov, 12 pp.

RUSSIAN, per, Sverdlovsk, No 2, 1963, pp 145-150.

JPRS 20404

Development of Families of Wheel and Crawler Tractors
on a Basis of MTZ-50 Tractor, by V. V. Voytikov, 6 pp.
RUSSIAN, per, Traktory i Sel'khoz mashiny, No 6, 1963,
pp 1-5.

JPRS 20587

Improvement of Quality is the Most Important
Problem of the Tractor Builders, by V. A. Semenov,
5 pp.

RUSSIAN, per, Traktory i Sel'khoz mashiny, No 6,
1963, pp 42-44.

JPRS 20587

Selected Articles From the Russian Periodical
Transportnoye Stroitel'stvo.

No 2, 1963.

A. Automotive Plant Bridge in Moscow, by
S. Ya. Terekhin, (pp 9-14).

*ACSI I-3135
ID 2240846

B. Preparation of Composite Road Units at the
Construction Site, by L. F. Korzun, N. F. Ustinov,
(pp 15, 16).

C. Driving Tunnels for the October Station, by
N. F. Karasev, (pp 19-21).

D. Erecting Forms Using Assembly-Disassembly
Sheathing, by A. N. Chupin, (pp 22, 23).

E. A High Award Imposes a Responsibility, by
I. G. Vypov, (pp 29-31).

No 4, 1963.

B. Laying a Railroad Using Reinforced Concrete
Ties, by G. I. Novozhilov, (pp 5-9).

*ACSI I-3240
ID 2244417

C. Installation of Switches Using Two Blocks,
by A. G. Gorn, Yu. Ya. Slutskiy, (pp 9-11).

D. Mockup Diagrams for Control of Posts in
Electrical Centralization, by V. Petukhov,
(pp 11-13).

E. Assembly of Bridge Span Sections Across the
Southern Bug River, by Kareli, Sarychev,
(pp 13-18).

F. Underwater Concreting Practices in the
Construction of a Ferry Crossing, by A. S. Zubarev,
A. I. Tsapkin, (pp 22-24).

USSR
Economic (Contd)

Selected Articles From the Russian Periodical
Transportnoye Stroitel'stvo. (Contd)

No 4, 1963.

G. The GEPK-130-17.5 Swinging, Cantilever Rail-
road Crane, by Shklovskiy, Cherkasov, et al,
(pp 34-36).

*ACSI I-3240
ID 2244417

H. Trip Meter for Loaded Dump Trucks, by
V. A. Loginov, (pp 37, 38).

I. The Sp Clearance, (p 38).

J. Continuous Action Tie-Tamping Machines, by
P. M. Tsigel'nyy, G. T. Samorukova, (pp 68-70).

Ways to Reduce the Manufacturing Cost of Cement,
7 pp.

RUSSIAN, per, Tsement, No 2, 1963, pp 1, 2.

JPRS 20500

The Tashkent Interrepublic Isotop Office Supplies
Isotopes and Radioactive Devices, by N. Nazarov,
5 pp.

RUSSIAN, np, Turkmen Iskra, 5 Feb 1963, p 2.

JPRS 20531

Manometer Plant Must Specialize in Electronic
Instruments Manufacture, by N. Proshchina,
G. Kuznetsov, et al, 6 pp.

RUSSIAN, np, Vechernyaya Moskva, 4 Dec 1962,
p 2.

JPRS 20610

Automatic Fast Acting Circuit Breaker AB-2/4,
by A. Ye. Glagovskiy, 7 pp.

RUSSIAN, per, Vest Elektromyshlennosti,
No 6, 1963, pp 37-40.

JPRS 20383

Prospects for Welding Development in the USSR,
by G. A. Nikolayev, 9 pp.

RUSSIAN, per, Vest Mashinostroy, No 5, 1963,
pp 3-8.

JPRS 20422

Selected Articles From the Russian Periodical
Vest Statistiki.

No 5, 1963.

Methodological Problems of the Interbranch
Report Balance, by M. Eydel'man, 15 pp,
(pp 15-26).

JPRS 20307

Statistics on Amusements and Culture, 9 pp,
(pp 89-95).

USSR
Economic (Contd)

Selected Articles From the Russian Periodical
Vest Statistiki. (Contd)

No 6, 1963.

JPRS 20721

Inter-Branch Balances and Improvement of
Economic Analysis, by Yu. Leybkind,
Yu. Shvyrkov, 10 pp.

Basic Questions on Comparison of the Economic
Indicators of the USSR and the Capitalist
Countries, by A. I. Yezhov, 5 pp.

Comments on Reports, 16 pp.

Selected Articles From the Russian Periodical
Voprosy Ekon.

No 5, 1963.

The Chemization of Production and Progressive
Structural Shifts in Industry, by
L. Kochetkov, V. Rebrov, et al, 18 pp,
(pp 3-14).

JPRS 20414

Material Incentives to Workers to Raise Product
Quality, by D. Meyerzon, 12 pp, (pp 42-49).

JPRS 20278

Some Problems in Setting Up Interbranch
Balances in Physical Terms, by N. Kovalov,
13 pp, (pp 76-87).

JPRS 20307

Use of Mathematics and Computers in Economic
Research and Planning, 12 pp, (pp 108-113).

JPRS 20390

Activities of Institute of Economics of Academy
of Sciences USSR, by K. Plotnikov, N. Kozel'skiy,
10 pp, (pp 156-160).

JPRS 20390

Equipment, Synthetic Materials, and Advanced
Know-how, by M. K. Nadtocheyeva, 10 pp.
RUSSIAN, per, Vystavka Dostizheniy Narodnogo
Khozyaystva SSR, Informat Byull, No 4, 1963,
pp 3-7.

JPRS 20404

New BelAZ-540 and BelAZ-548 Dump Trucks, by
Z. Sirotkin, 8 pp.
RUSSIAN, per, Za Rulem, No 5, 1963, pp 12-14.

JPRS 20493

Problems Involved in Design and Manufacture of
Instruments in the USSR, by G. Simonyan, 7 pp.
RUSSIAN, np, Zarya Vostoka, 28 Nov 1962, p 2.

JPRS 20610

USSR
Economic (Contd)

Selected Articles From the Russian Periodical
Zheleznod Transport.

No 3, 1963.

JPRS 20538

Raising the Efficiency of New Forms of
Traction, by N. A. Drozdov, 11 pp, (pp 3-7).

Railroad Transport in the USSR in 1962 a
Technical Economic Review, 13 pp, (pp 55-58).

No 4, 1963.

JPRS 20538

Tasks for Further Reducing Transportation
Costs, by I. V. Ivliyev, 12 pp, (pp 15-20).

Clearance Distances for Structures on Feeder
Lines and Intra-Industrial Railroads, by
B. K. Kozlovskiy, 5 pp, (pp 86, 87).

No 5, 1963.

*ACSI I-2994

ID 2240830

A. Concerning Some Important Unresolved Problems
of Electrification of Railways, by
L. I. Okhoshin, (pp 35-39).

B. Intermediate Rail Fastenings and Improving
the Upper Road Structure, by D. G. Eradze,
(pp 45-49).

C. Factors Delaying Mass Production of Isothermic
Railways Cars With Refrigeration, by V. V. Supin,
(pp 51-53).

D. Some of the Immediate Problems in the Improve-
ment of Locomotives, by S. S. Ushakov,
(pp 54-57).

E. Carrying Capacity of Railway Cars in the
Future, by L. A. Shadur, V. V. Lukin,
(pp 57-61).

F. New Method of Work of Sections With Dispatcher
Centralization, by N. G. Kosorotov, (pp 72-74).

Expansion of the Variety and Improvement of
Construction Materials - the Most Important
Task in Chemical Machine Construction, by
G. V. Uvarov, I. I. Salamatov, 7 pp.
RUSSIAN, per, Zhur Vses Obshch imeni D. I. Mendeleva,
Vol VIII, No 3, 1963, pp 242-244.

JPRS 20681

USSR

Economic (Contd)

Selected Articles From the Ukrainian Periodical
Khim Prom, No 2, 1963.

Expansion of Ukrainian Chemical Industry,
7 pp, (pp 3-5).

JPRS 20637

Equipment for the Continuous Polymerization
of Polyisoprene Synthetic Rubbers, by
D. D. Ryabinin, A. P. Polyv'yanyy, 8 pp,
(pp 56-59).

JPRS 20642

Increased Sulfuric Acid Production in
Ukraine, by R. G. Pushkar, L. G. Chernega,
6 pp, (pp 70-72).

JPRS 20637

Donets Soda and Ferrite Furnaces Now Burning
Gas, by A. S. Shestakov, Ye. N. Ovsyannikov,
5 pp, (pp 76, 77).

JPRS 20637

The Chemization of Daily Life, by V. Kalechyts',
6 pp.
UKRAINIAN, np, Radyans'ka Ukraina, 23 Mar 1963,
p 2.

JPRS 20562

Expedite the Construction of Chemical Enter-
prises, by L. Pasechnyuk, M. Borisov, 6 pp.
UKRAINIAN, np, Radyans'ka Ukraina, 14 May 1963,
p 1.

JPRS 20562

Political

The Russian Soviet Federate Socialist Republic
Economic-Geographic Characteristics, by
Kutaf'yev, Schastnev, et al.
RUSSIAN, bk, Rossiyskaya Sovetskaya Federativnaya
Sotsialisticheskaya Respublika Ekonomiko-
Geograficheskaya Kharakteristika, pp 696, 697,
700-703, 712-729, 734-739, 745, 746, 754-758,
760-773.

*ACSI I-2990
ID 2240826

Laying Ideological Groundwork for Shift From
Socialist Concept of Property to Communist,
by G. A. Aleshina, 6 pp.
RUSSIAN, per, Filosof Nauk, Vol VI, No 3, 1963,
pp 123-126.

JPRS 20591

USSR
Political (Contd)

Selected Articles From the Russian Periodical
Kommunist.

No 6, 1963.

JPRS 19200

Soviet Position on Leninism and Coexistence;
the Banner of the Age, 15 pp, (pp 11-19).

Soviet Position on Leninism and Coexistence;
the CPSU is Following the Course Charted by
Lenin, by V. Snastin, 24 pp, (pp 34-37).

Soviet Position on Leninism and Coexistence;
The Growth of World Socialism and Social
Progress, by N. Inozemtsev, 19 pp, (pp 62-72).

No 10, 1963.

JPRS 20447

The Ideological Front, 15 pp, (pp 3-14).

Toward a Correct Interpretation of the History
of the Communist Party of the Western Ukraine,
14 pp, (pp 37-47).

The Civic Mission of the Artist, by
Ye. Vuchetich, 6 pp, (pp 57-61).

Soviet Interest in Latin America Continues:
Codovilla Reports on the Argentine Communist
Party, by V. Codovilla, 9 pp, (pp 96-102).

The Building of Communism in the USSR: The
Party in the Period of Extensive Building of
Communism, by S. Titarenko, 13 pp.
RUSSIAN, per, Kommunist Ve ruzhennykh Sil,
No 12, 1963, pp 7-16.

JPRS 20453

CPSU Organ Calls for Constant Sharpening of
Ideological Weapons, 10 pp.
RUSSIAN, per, Partiynaya Zhizn', No 13, 1963,
pp 5-11.

JPRS 20659

The Cultural Debate in the USSR -- CPSU Central
Committee Plenum Discusses Ideological, CPSU
Organ Says Communist and Bourgeois Ideology Are
Irreconcilable, 12 pp.
RUSSIAN, per, Politich Samoobraz, No 5, 1963,
pp 3-11.

JPRS 20387

USSR
Political (Contd)

Selected Articles From the Russian Newspaper
Pravda.

10 Jul 1963, p 2. The Building of Communism in the USSR: The Triumph of Lenin's Ideas on the Socialist State -- First Soviet Constitution Adopted 45 Years Ago, by B. Bayanov, M. Pankratova, 6 pp.	JPRS 20453
15 Jul 1963, pp 3, 4. The International Communist Conflict: Tikhonov, Korneychuk, and Zhukov Stress Need for Peaceful Coexistence, by Nikolay Tikhonov, 10 pp.	JPRS 20453
29 Jul 1963, p 1. An Event of Major International Importance, 5 pp.	JPRS 20429
5 Aug 1963, p 1. For the Triumph of Lenin's Principles of Peaceful Coexistence, 5 pp.	JPRS 20539
7 Aug 1963, pp 4, 5. Powerful Bulwark of the Movement Against Colonialism, 10 pp.	JPRS 20657
8 Aug 1963, p 1. The Policy of Peaceful Coexistence is Winning, 5 pp.	JPRS 20603
Khrushchev's Public Response to President's American University Speech, 8 pp. DUTCH, per, <u>Information Bulletin</u> , No 68(1518), 17 Jun 1963, <u>Encl No 1 to Desp A-831</u> , AmEmbassy, the Hague	Dept of State
Khrushchev and the Yellow Peril, by K. S. Karol, 7 pp. FRENCH, np, <u>L'Express</u> , 4 Jul 1963, pp 10, 11.	JPRS 20548
The Soviet Central Committee and Mao Tse-tung's Bombshell, by Francois Fejto, 10 pp. FRENCH, np, <u>Lumiere</u> , 5 Jul 1963.	JPRS 20418
The Soviet Union and the Right of Self-Determination, 5 pp. GERMAN, np, <u>Kieler Nachrichten</u> , 19 Jun 1963.	JPRS 20541

USSR

Political (Contd)

Khrushchev and Ideological Coexistence, by
Italo De Feo, 5 pp.
ITALIAN, per, Corrispondenza Socialista, No 6,
1963, pp 313, 314.

JPRS 20418

The Twenty-Five Anathemas Against Khrushchev,
by Sarmatius, 8 pp.
ITALIAN, np, L'Espresso, 7 Jul 1963, p 9.

JPRS 20548

After the Moscow-Peking Schism, by Isaac Deutscher,
14 pp.
ITALIAN, np, L'Espresso, 4 Aug 1963, pp 6, 7.

JPRS 20744

Pravda and Izvestia on the Liberation Movements,
by Lisa Foa, 5 pp.
ITALIAN, per, Rinascita, 1963, pp 10, 11.

JPRS 20744

The Yevtushenkologists, by Vittorio Strada,
8 pp.
ITALIAN, np, Rinascita, 15 Jun 1963, pp 23, 24.

JPRS 20658

Military

War Economy of the USSR, by G. S. Kravchenko,
340 pp.
RUSSIAN, bk, Voyennaya Ekonomika SSSR 1941-1945,
Moscow, 1963, pp 1-398.

JPRS 20701

Military Radio Communications, by I. T. Peresypkin,
29 pp.
RUSSIAN, bk, Voyennaya Radiosvyaz', 1962,
pp 3-299, Encl to IR 2901008663.

ACSI I-2790
ID 2237537
319th MI Bn

The Soviet Sakhalin and Kuriles' Operations, by
V. N. Bagrov, 77 pp.
RUSSIAN, rpt, Yuzhno-Sakhalinskaya i Kuril'shaya
Operatsii, Aug 1945, Encl to RV 1034-59.

ACSI I-3053
ID 2122955

Party Organizations of the Army and Fleet, by
A. Knotochkin, 7 pp.
RUSSIAN, per, Kommunist Vooruzhennykh Sil,
No 7, 1963, pp 39-44.

ACSI I-2860
ID 2257298

The Rocket Carriers Are Leaving for the Ocean,
5 pp.
RUSSIAN, np, Krasnaya Zvezda, 25 Nov 1962,
p 4.

Navy Tr 3412
ONI 946

USSR

Military (Contd)

Targets in the Ocean, by E. Mamayev.
RUSSIAN, np, Krasnaya Zvezda, 4 Apr 1963.

Navy Tr 3496
APL 789

Rocket Carriers, by P. Khokhlov, 7 pp.
RUSSIAN, per, Kryl'ya Rodiny, No 1, 1963.

Browne & Shaw

The Trespasser Won't Get Past.
RUSSIAN, per, Starshina-Serzhant, No 5, 1963,
pp 22-24.

*ACSI I-3195-A
ID 2244402
319th MI Bn

These Aren't Idle Questions.
RUSSIAN, per, Starshina-Serzhant, No 5, 1963,
p 33.

*ACSI I-3195-B
ID 2244402
319th MI Bn

The Role of Military Councils of Fronts and
Armies in Directing the Military Operations of
Partisans During the Great Patriotic War,
by M. Rudakov, 12 pp.
RUSSIAN, per, Voyenno-Istoricheskiy Zhur,
No 7, 1962, pp 1-14.

ACSI I-2859
ID 2237297

Soviet Civil Defense - An Orientation.
SWEDISH, per, Aktuellt om Civilforsvar, No 9,
31 May 1963, pp 1-8.

*ACSI I-3114
ID 2240839

Geographic

Barguzin Valley, by B. R. Buyantuyev.
RUSSIAN, bk, Barguzinskaya Dolina, 1959,
pp 3-56.

*ACSI I-3134
ID 2240845

Rivers, by N. A. Kopylova.
RUSSIAN, bk, Spravochnik po Vodnym Resursam SSSR,
Vol XIII, 1933, pp 3-15.

*ACSI I-2991
ID 2240827

Moscow, Capital of the USSR, by D. Dyagilev.
RUSSIAN, bk, Stolitsa SSSR, 1962, pp 1-320.

Dept of Interior
320.46edc D98m

Types of Terrain and Natural Zoning of the
Buryat ASSR, by Preobrazhenskiy, Fadeyeva, et al.
RUSSIAN, bk, Tipy Mestnosti i Prorodnoye Rayon-
irovaniye Buryatskoy ASSR, 1959, pp 6-39, 49-82,
111-139.

*ACSI I-2993
ID 2240829

Along the Rivers of the Central Sikhote-Alin',
by N. G. Vasil'yev.
RUSSIAN, per, Priroda, No 12, 1962, pp 59-64.

*ACSI I-3136
ID 2240847

Development and Distribution of Sugar Industry
in the Ukrainian SSR, by V. M. Lips'kiy. (DC-8822)
UKRAINIAN, booklet, Rozvitok i Pozmishchennyya
Tsukrovogo Virobnitstva Ukrainskoi SSR, Kiev, 1962,
pp 1-123.

*JPRS

USSR
Sociological

Talks on Religion, by B. I. Katagoshchin, 5 pp.
RUSSIAN, per, Nachal'naya Shkola, No 2, 1963,
pp 52-54.

JPRS 20515

Selected Articles From the Russian Periodical
Nauka i Religiya.

No 5, 1963.
Journalists Discuss Problems of Atheism, 10 pp,
(pp 3-7).

JPRS 20515

The Mennonites, by P. Yevin, 7 pp, (pp 25-28).

Religious Activity in Georgia, Notes of Our
Correspondent, by E. Bartoshevich, 5 pp,
(pp 71-73).

No 6, 1963, pp 66-69.
Soviet Criticism of Baptist Religious Teachings,
by Yu. Krasovskiy, 5 pp.

JPRS 20736

Certain Problems of Atheistic Propaganda, by
P. Kolonitskiy, 13 pp.
RUSSIAN, per, Politicheskoye Samoobrazovaniye,
No 4, 1963, pp 84-93.

JPRS 20515

The Church in Crisis, by V. Khoperskiy, 5 pp.
BELORUSSIAN, np, Sovet Belorussiya, 16 Apr 1963, p 3.

JPRS 20515

Biographic

Apollinary Semenovitch Bondartsev, by N. A. Cheremisinov,
9 pp.
RUSSIAN, per, Botanich Zhur, Vol XLVII, No 12,
1962, pp 1850-1855.

JPRS 20435

Vera Alekseyevna Poddubnaya-Armol'di, Celebration
of Her Sixtieth Birthday and the Thirty-Fifth
Year of Her Scientific Work, by K. I. Meyer,
12 pp.
RUSSIAN, per, Byull Moskov Obshch Ispytate
Prirody, No 1, 1963, pp 147-152.

JPRS 20435

Vadim Vasil'yevich Sokolovskiy, 9 pp.
RUSSIAN, per, Inzhen Zhur, Vol II, No 4, 1962,
pp 203-208.

JPRS 20435

Anatoliy Vasil'yevich Nikolayev, 60th Birthday,
6 pp.
RUSSIAN, per, Iz Sibirskogo Otdel Ak Nauk SSSR,
No 11, 1962, pp 157-159.

JPRS 20435

EASTERN EUROPE

Economic

Tobacco Production in 1963, by Marin Vachkov, 23 pp.
BULGARIAN, per, Bulgarski Tyutyun, No 6, 1963,
pp 3-11.

JPRS 20593

Decree on Domestic Trade Reorganization, 26 pp.
BULGARIAN, per, Durzhaven Vestnik, No 57,
Jul 1963, pp 1-4.

JPRS 20631

Some Data on the Traycho Kostov Thermoelectric
Station in Sofia, by Spas Stoichkov, 16 pp.
BULGARIAN, per, Elektroenergiya, No 4, 1963,
pp 2-9.

JPRS 20636

The Planning and Regulation of Monetary Circulation
by the Bulgarian National Bank, by Kiril Nestorov,
9 pp.
BULGARIAN, per, Finansi i Kredit, No 4, May 1963,
pp 13-20.

JPRS 20308

The Prices of Agricultural Products, by
Lalyu Radulov, 22 pp.
BULGARIAN, per, Ikonomicheska Misul, No 5, 1963,
pp 44-55.

JPRS 20377

Underground Water Sources for Drinking and
Industrial Purposes, by Khristo N. Rusev,
Nikolay Nenkov, 8 pp.
BULGARIAN, per, Khidrotekhnika i Melioratsii,
No 5, 1963, pp 140-142, 157.

JPRS 20340

Food Industry Problems, by Zapryan Stoyanov,
11 pp.
BULGARIAN, per, Khranitelna Promishlenost, Vol XII,
No 4, 5, 1963, pp 3-5.

JPRS 20695

Selected Articles From the Bulgarian Periodical
Novo Vreme.

No 5, 1963.
Current Transportation Problems, by
Pencho Kubadinski, 20 pp, (pp 12-19).

JPRS 20482

Improving the Material Interests in Industrial
Enterprises, by Evgeni Mateev, 21 pp, (pp 74-89).

JPRS 20671

No 6, 1963.
The Relationship Between Intensive and
Extensive Expanded Reproduction in the Cooperative
Farms (TKZS's), by Stefan Stoilov, 32 pp, (pp 53-56).

JPRS 20406

Growth in Labor Productivity on the Cooperative
Farms, by Vasil Mishev, 19 pp, (pp 67-75).

Eastern Europe
Economic (Contd)

The New Electric Locomotives for Bulgarian Railroads,
by Mircho D. Ignatov, 7 pp.
BULGARIAN, per, Tekhnika, No 4, 1963, pp 27-29. JPRS 20356

Expanding Economic Relations Between Bulgaria and
the USSR, by Dimiter Diancov, 7 pp.
BULGARIAN, per, Vunshna Turgoviya, Vol XI, No 6,
1963, pp 7-10. JPRS 20565

Bulgarian Products on Exhibit at Moscow,
15 August-10 September 1963, by Ivan Diancov,
7 pp.
BULGARIAN, per, Vunshna Turgoviya, Vol XI, No 6,
1963, pp 12-14. JPRS 20565

Selected Articles From the Croatian Periodical
Finansije, No 1, 2, 1963. JPRS 20476

Some Characteristics of the Basic Proportions
of the Federal Social Plan for 1963, by
Vuko Medenica, 27 pp, (pp 13-33).

Credit Policy Measures in 1963, by Moric Elazar,
17 pp, (pp 33-46).

Monetary and Credit Movements in 1962, by
Aleksandar Puljevic, 18 pp, (pp 46-61).

Price Movements in 1962, by Peter Krasulja,
M. Draskovic, 9 pp, (pp 74-80).

Taxing of Temporary Receipts of Citizens, by
Milovan Mihailovic, 11 pp, (pp 81-89).

How to Follow the Trends of Productivity, Economization,
Profitability, and Other Economization Profitability,
and Other Economic Indicators in Industrial
Enterprises, by Serif Saracevic, 16 pp.
CROATIAN, per, Narodna Uprava, No 4, 5, 1963,
pp 145-153. JPRS 20577

Investments Under the Seven-Year Plan, by
Stevan Blagojevic, 5 pp.
CROATIAN, np, Privredni Pregled, No 2217, 11 May 1963,
pp 1, 4. JPRS 20331

Production and Trade in Electrical Industry, by
Br. Ljubojevic, R. Pajkic, 6 pp.
CROATIAN, np, Privredni Pregled, Vol XIII, No 2229,
1963, p 6. JPRS 20643

Eastern Europe
Economic (Contd)

- For Improved Communications Activity, by
Miloslav Laipert, 9 pp.
CZECH, per, Ceskoslovenske Spoje, Vol VIII,
No 3, 1963, pp 2-4. JPRS 20668
- Czechoslovak Communications in 1962, by
Jan Murtiner, 11 pp.
CZECH, per, Ceskoslovenske Spoje, Vol VIII,
No 3, 1963, pp 24-27. JPRS 20668
- Principal Directions of Railroad Development
up to 1970, 11 pp.
CZECH, np, Doprava, No 3, 1963, pp 161-165.
- International Socialist Division of Labor
and Financial Foreign Exchange Relationships.
by Leopold Ler, 18 pp.
CZECH, per, Finance a Uver, No 2, 1963,
pp 81-90. JPRS 20514
- On the Problems of Determining State Budget
Allocations to National Committee Budgets,
by Arnost Konecny, 19 pp.
CZECH, per, Finance a Uver, No 2, 1963,
pp 90-101. JPRS 20514
- Problems of the Analysis and Reduction of JZD
Production Costs, by Vladimir Styblo, 17 pp
CZECH, per, Finance a Uver, No 2, 1963, pp 101, 102. JPRS 20514
- Problems of Concentration of Mining Work,
by Jaromir Simik, 9 pp.
CZECH, per, Hospodarske Noviny, 28 Jun 1963, p 3. JPRS 20636
- Effectiveness of Investments in the CEMA
Countries, by Ladislav Rasmich, Ladislav Riha,
13 pp.
CZECH, per, Nova Mysl, No 6, 1963, pp 651-659. JPRS 20671
- Activities of Postrelmov State Farm in 1963,
9 pp.
CZECH, per, Statni Statky, Vol VI, No 2, 1963,
pp 18, 19. JPRS 20711
- Achievements of State Farms in 1962, by
Jiri Ajchler, 18 pp.
CZECH, per, Statni Statky, Vol VI, No 6, 1963,
pp 82, 83. JPRS 20377
- Organization of Grain Harvest in South Moravian
Kraj, 5 pp.
CZECH, per, Statni Statky, Vol VI, No 6, 1963,
pp 90, 91. JPRS 20377

Eastern Europe
Economic (Contd)

- New Technology Requires New Norms, 9 pp.
GERMAN, per, Arbeit und Arbeitsrecht, No 11,
1963, pp 246-249. JPRS 20514
- Lower Wages for Substandard Work, by Heinz Dohnel,
9 pp.
GERMAN, per, Arbeit und Arbeitsrecht, No 13, 1963,
pp 299-302. JPRS 20514
- Industrial Development of the CEMA Countries in
1962, by G. Huber, P. Sydow, 7 pp.
GERMAN, per, Aussenhandel und Innerdeutsche Handel,
No 6, 1963, pp 29-32. JPRS 20514
- Ten Years of State Trade Relations Between East
Germany and the United Arab Republic, 7 pp.
GERMAN, per, Aussenhandel und Innerdeutsche Handel,
No 6, 1963, pp 38-41. JPRS 20513
- The Most Urgent Tasks in the Construction Materials
Industry, 6 pp.
GERMAN, per, Baustoffindustrie, No 5, 1963, pp 144, 145. JPRS 20482
- The 50-Cycle Experimental Locomotives of the Lew,
15 pp.
GERMAN, per, Deutsche Eisenbahntechnik, Vol XI,
No 5, 1963, pp 195-202. JPRS 20363
- Selected Articles From the German Periodical
Deutsche Finanzwirtschaft.
- No 10, 1963. JPRS 20308
Equipment Credits, a New Form of Financing and
Control of Planned Investments, by Huth, Reuschel,
et al, 8 pp, (pp 6-9).
- No 11, 1963. JPRS 20408
Theses Concerning the Role of Credits and That
of the State Bank, 7 pp, (pp G1-G3).
- No 12, 1963.
New Problems of Budget Balancing, by Erwin Rohde,
6 pp, (pp S2, S3). JPRS 20408
- Financing of International Research Tasks Under
CEMA, by Gerhard Schilling, 5 pp, (pp 5, 6). JPRS 20396
- New Television Studio Equipment, by F. W. Paeuser,
W. Schwarzinger, 6 pp.
GERMAN, per, Die Deutsche Post, Vol VIII, No 4,
1963, pp 118-120. JPRS 20624

**Eastern Europe
Economic (Contd)**

**Selected Articles From the German Periodical
Einheit.**

- No 5, 1963.
Some Questions Concerning the Further Development
of the Socialist Price System, by Willy Rumpf,
18 pp, (pp 44-58). JPRS 20408
- The Principle of Democratic Centralism in the
East Germany Economy, by Karl'heinz Jonuscheit,
14 pp, (pp 59-68). JPRS 20408
- The Economic Position of Water Management in
East Germany, by Erwin Gromeyer, 16 pp, (pp 85-92). JPRS 20482
- No 6, 1963, pp 72-83. JPRS 20554
Improvement of Central Planning Through
Development of the Material Balancing System,
by Hans Fulle, 17 pp.
- 100-MW Block Unit for Medium-Load Power Plants,
10 pp.
GERMAN, per, Energietechnik, No 9, 1963,
pp 397-401. JPRS 20643
- New Bonus Time Wage Agreement for Seventy-Seven
East German Railroad Stations, by Manfred Maeder,
Werner Herrmann, 11 pp.
GERMAN, np, Fahrt Frei, 11 Jun 1963, p 5. JPRS 20624
- The German Bank of Issue Supports Operational
Quarterly Planning, by Gottfried Kloss, 5 pp.
GERMAN, per, Der Handel, No 6, 1963, pp 275, 276. JPRS 20671
- Stable Consumer Supply Must Be Safeguarded, by
Curt-Heinz Merkel, 11 pp.
GERMAN, np, Handelswoche, 2 Jul 1963, pp 9, 10. JPRS 20624
- Scientifically Founded Central State Planning
in the New Economic System of Planning and
Directing the Economy, 5 pp.
GERMAN, np, Neues Deutschland, 16 Jul 1963. JPRS 20463
- Principles and Characteristics of the New
Economic System of Planning and Directing the
Economy, 7 pp.
GERMAN, np, Neues Deutschland, 16 Jul 1963. JPRS 20463
- The New Railroad Ferry Warnemuende, by
Alfons Reink, 22 pp.
GERMAN, per, Der Operative Dienst, No 5, 1963,
pp 150-153, No 6, 1963, pp 206-208. JPRS 20458

**Eastern Europe
Economic (Contd)**

Uniform Bloc Railroad Passenger Rates, by
Richard Lieske, Rudolf Ludwig, 13 pp.
GERMAN, per, Der Operative Dienst, No 5, 1963,
pp 158-160. JPRS 20458

Legal Problems of Joint Enterprises of Socialist
States, by H. Spiller, 6 pp.
GERMAN, per, Recht im Aussenhandel, No 6, 1963,
pp 1-3. JPRS 20577

Taxation of Artisan Producer Cooperatives, by
Franz Buss, 13 pp.
WEST GERMAN, per, SBZ Archiv, Vol XIV, No 9, 1963,
pp 131-135. JPRS 20554

The MS Buna Newly Acquired by the VEB German
Maritime Shipping Company of Rostock, by
H. L. Preussner, 10 pp.
GERMAN, per, Schiffbautechnik, Vol XIII, No 6,
1963, pp 283-286. JPRS 20695

**Selected Articles From the German Periodical
Seeverkehr.**

No 5, 1963.
Shipbuilding Must Also Apply Highest Scientific-
Technical Level, by A. Jaekel, 7 pp, (pp 3, 4). JPRS 20413

Information on the Motor Tanker Buna, by
W. Kolbe, 5 pp, (pp 8, 9). JPRS 20631

Legal Provisos for Coastal Fishing and
Coastal Shipment of Cargo in East Germany, by
J. Haalck, 8 pp, (pp 44-46). JPRS 20631

Information on East German Ports, 9 pp, (pp 50-). JPRS 20631

No 6, 1963, pp 23-25.
Damages to Ships in 1962, by E. Timm, 8 pp. JPRS 20482

1963 Tasks in the Field of Material Statistics,
by Friedmar Ramdohr, 7 pp.
GERMAN, per, Statistische Praxis, No 5, 1963,
pp 115, 116, 130. JPRS 20514

International Socialist Cooperation in the Field of
Water Conservation, by Heinz Wegener, 5 pp.
GERMAN, per, Wasserwirtschaft-Wassertechnik, No 3,
1963, pp 107, 108. JPRS 20513

Investments in the East German Chemical Industry, 6 pp.
WEST GERMAN, per, Wochenbericht, No 25, 1963,
pp 115, 116. JPRS 20363

Eastern Europe
Economic (Contd)

Evaluation of the Bulk Purchasing Program and Problems of Its Further Development, by Miklos Szongoth, 21 pp.
HUNGARIAN, per, Elelmozesi Ipar, Vol XII, No 6, 1963, pp 185-192.

JPRS 20715

Problems of the Training and Supply of Agricultural Specialists, by Gyorgy Fekete, 18 pp.
HUNGARIAN, per, Kozgazdasagi Szemle, Vol X, No 6, 1963, pp 662-677.

JPRS 20715

Results of the Second Large-Scale Test of the Varga Process, by Jozsef Karolyi, Andras Zalai, et al, 12 pp.
HUNGARIAN, per, Magyar Kemikusok Lapja, Vol XVIII, No 5, 1963, pp 212-217.

JPRS 20413

Ancillary Investment in Calculating Investment Profitability, by Sandor Kopatsy, 5 pp.
HUNGARIAN, per, Penzugy es Szamvitel, Vol VII, No 4, 1963, pp 125-127.

JPRS 20331

Development of the Producers' Price Level, by Jozsef Barna, 6 pp.
HUNGARIAN, per, Penzugy es Szamvitel, Vol VII, No 4, 1963, pp 140, 141.

JPRS 20331

Data on Housing Units Constructed in 1960-1961, by Barnabas Barta, 31 pp.
HUNGARIAN, per, Statizttikai Szemle, No 6, 1963, pp 594-609.

JPRS 20482

The 1963 Innovation Plan of the Ministry of Agriculture, 5 pp.
HUNGARIAN, per, Ujitok Lapja, Vol XV, No 10, May 1963, pp 23, 24.

JPRS 20715

First Group of Passenger River Boats, by Jerzy Stanislawski.
POLISH, per, Budowietwo Okretowe, Vol V, No 7, 1960, pp 196-199.

*ACSI I-3194
ID 2244401
519th MI Bn

150 Horsepower River Tug Bolen, by Tadeusz Buczkowski.
POLISH, per, Budowietwo Okretowe, Vol V, No 9, 1960, pp 268, 269.

*ACSI I-3193
ID 2244400
519th MI Bn

The Investment Coefficient and Economic Growth, by Bronislaw Minc, 16 pp.
POLISH, per, Ekonomista, No 3, 1963, pp 493-505.

JPRS 20671

Eastern Europe
Economic (Contd)

Power Industry in Poland in 1962 and 1963, 6 pp.
POLISH, per, Energetyka, No 5, 1963, pp 133-135. AF 1878010963

Financing Current Assets in Socialist Countries,
by Bronislaw Blass, 16 pp.
POLISH, per, Finanse, No 6, 1963, pp 1-12. JPRS 20514

Sewage Problems in Lodz, Poland, by Jan Budaszewski,
8 pp.
POLISH, per, Gaz Woda i Technika Sanitarna, No 4, 5,
1963, pp 151-153. JPRS 20340

Transportation on the Oder River, by
Wlodzimierz Koszarski.
POLISH, per, Geografia w Szkole, No 1, Jan-Feb 1958,
pp 47-49. *ACSI I-3192
ID 2244399
519th MI Bn

Water Cadaster and Records of Riparian Rights as
the Basis for Water Distribution, by Jozef Zejmo,
10 pp.
POLISH, per, Gospodarka Wodna, No 4, 1963,
pp 131-133. JPRS 20340

A Formula for the Management of Socialist
Domestic Trade, by Aleksy Wakar, 42 pp.
POLISH, per, Handel Wewnetrzny, Vol IX, No 2,
1963, pp 3-14; No 3, 1963, pp 3-21. JPRS 20529

Export of Textile Machines, by Stanislaw Gruzewski,
5 pp.
POLISH, per, Handel Zagraniczny, No 5, 1963,
pp 174-176. JPRS 20513

Grain Problems and the Feed Deficit, by
Wladyslaw Misiura, 10 pp.
POLISH, per, Nowe Drogi, Vol XVII, No 5, 1963,
pp 26-32. JPRS 20324

Prospects of Agricultural Education, by
Michal Godlewski, 13 pp.
POLISH, per, Nowe Drogi, Vol XVII, No 5, 1963,
pp 33-42. JPRS 20324

Problems of Fuel and Electric Power Economy,
by Edward Karelus, 17 pp.
POLISH, per, Nowe Drogi, Vol XVII, No 6,
1963, pp 23-37. JPRS 20346

Eastern Europe
Economic (Contd)

Need for Coordination and a Plan of Development
in the Mechanization of Agriculture, by
Franciszek Wojciechowski, 13 pp.
POLISH, per, Nowe Rolnictwo, No 12, Jun 1963,
pp 9-11.

JPRS 20711

Difficulties With Milk, by Bogdan Szmalc, 16 pp.
POLISH, per, Nowe Rolnictwo, No 12, Jun 1963,
pp 22-24.

JPRS 20711

Organization and Method of Combating the Most
Important Potato Diseases and Pests, by Jan Ksiazek,
14 pp.
POLISH, per, Nowe Rolnictwo, No 12, Jun 1963,
pp 37-40.

JPRS 20711

Selected Articles From the Polish Periodical
Przegląd Drobnej Wytworczosci.

No 1, 1963.
Tasks and Problems of Small-Scale Production
in 1963, by Wlodzimerz Lechowica, 12 pp, (pp 1-5).

JPRS 20331

Proper Wood Economy, by Marian Beuermann, 6 pp,
(pp 11, 12).

No 3, 1963, pp 1-3.
Material Supplies For Small Scale Production
in 1963, by Michal Grynberg, 6 pp.

JPRS 20340

No 5, 1963, pp 6. 7.
Consumer Services in Poland, by
Stanislaw Wielonski, 7 pp.

JPRS 20340

Organization of Offices of Development and Technical
Progress in the East German Ministry of Transportation,
by Tadeusz Godula, 12 pp.
POLISH, per, Przegląd Kolejowy Mechaniczny, No 6,
1963, pp 183-.

JPRS 20668

Condition and Form of Durable Resources in State
Forest Enterprises, by Kazimierz Krych, 17 pp.
POLISH, per, Sylvan, Vol CVII, No 2, 1963,
pp 29-40.

JPRS 20406

Cooperation of Maritime Transportation With Foreign
Trade, 8 pp.
POLISH, per, Technika i Gospodarka Morska, No 5,
1963, pp 129-131.

JPRS 20340

Eastern Europe
Economic (Contd)

Some Problems in the Organization of the Operations
of the State Statistical Agencies, by Marian Klimczyk,
8 pp.

POLISH, per, Wiadomosci Statystyczne, No 2,
Mar-Apr 1963, pp 28-30.

JPRS 20671

Decrees and Instructions Dealing With the
Elimination of Water Contamination and the
Organization of the State Water Inspectorate, 15 pp.
RUMANIAN, per, Colectia de Hotariri si Dispozitii
Ala Consiliului de Ministri al Republicii Populare
Romine, Vol XII, No 18, 1963, pp 259, 279.

JPRS 20443

Raising the Qualitative Level of Production and
Reducing Spoilage in the Machine Building
Industry, by V. Diaconu, 10 pp.
RUMANIAN, per, Finante si Credit, No 5, 1963,
pp 26-36.

JPRS 20363

Electrification of Rumania as an Important Condition
for Socialist Industrialization, by Bujor Almasan,
20 pp.

RUMANIAN, per, Lupta de Clasa, No 5, 1963, pp 3-14.

JPRS 20346

Aspects of Industrial Production Concentration
and Combination, by Al. Puiu, St. Ungureanu,
16 pp.
RUMANIAN, per, Probleme Economice, Vol XVI, No 5,
1963, pp 16-28.

JPRS 20443

Increase in Productive Capacities Through
Development of Industrial Enterprises, by
E. V. Topala, 13 pp.
RUMANIAN, per, Probleme Economice, Vol XVI, No 5,
1963, pp 29-39.

JPRS 20443

Internal Reserves for Production Increases in
Light Industry, by St. Stefanescu, A. Catulescu,
17 pp.
RUMANIAN, per, Probleme Economice, Vol XVI, No 5,
1963, pp 40-53.

JPRS 20419

The O60-DA, A Symbol of the Technical Reequipping
of Our Railroads, 6 pp.
RUMANIAN, per, Revista Cailor Ferate, No 5, 1963,
pp 249, 250.

JPRS 20482

Plastic Materials in the Economy, 7 pp.
RUMANIAN, np, Rominia Libera, 26 May 1963, p 3.

JPRS 20636

Eastern Europe
Economic (Contd)

- Granting of Credits by the Yugoslav Agricultural Bank for Agricultural Investments From the General Investment Fund in 1963, by Tihomir Milenkovic, 20 pp.
SERBOCROATIAN, per, Glasnik, No 5, 1963, pp 32-37. JPRS 20593
- Supervision by State Organs Over Societies of Transportation Enterprises, by Milorad Korac, 22 pp.
SERBOCROATIAN, per, Narodna Uprava, No 4, 5, 1963, pp 187-191. JPRS 20530
- The Housing Policy and the Yugoslav Social and Economic System, by Sreten Bjelcic, 48 pp.
SERBOCROATIAN, per, Nasa Stvarnost, No 6, 1963, pp 659-678. JPRS 20695
- Selected Articles From the Serbocroatian Periodical Poljoprivreda i Zadrugarstvo, Vol X, No 5, 1963. JPRS 20341
- The Reasons for Losses on the State Farms, by Zak Finci, 14 pp, (pp 3-8).
- The Effect of Certain Action on State Farm Operations, by S. Baljovic, Momcilo Savcic, 30 pp, (pp 9-16).
- Some Problems of the Consumption of Mineral Fertilizers, by Savka Paris, 25 pp, (30-40).
- Broader Training for Agricultural Producers, by Ceda Nesic, 14 pp, (pp 45-50).
- Some Problems in Housing Construction and Maintenance of Apartment Buildings, by Noma Markovic, 78 pp.
SERBOCROATIAN, per, Socijalna Politika, No 4, 1963, pp 347-371. JPRS 20530
- The Yugoslav Textile Industry, by Aleksandar Mavrencic, 31 pp.
SERBOCROATIAN, per, Tehnika, No 7, 1963, pp 1321-1326. JPRS 20668
- Potentialities of Synthetic Fibers in the Textile Industry, by Branko Vesovic, 29 pp.
SERBOCROATIAN, per, Tehnika, No 7, 1963, pp 1326-1331. JPRS 20624
- The Development of the Yugoslav Textile Industry, by Veroslava Djordjevic, 25 pp.
SERBOCROATIAN, per, Tehnika, No 7, 1963, pp 1332-1336A. JPRS 20624

Eastern Europe
Political

Regulation Governing the Party and State Control Committee, 8 pp.

BULGARIAN, per, Durzheven Vestnik, No 51, 1963, pp 1-3.

JPRS 20746

Great Literature and High Communist Ideological Content, by Kamen Kalchev, 9 pp.

BULGARIAN, np, Literaturen Front, No 20, 16 May 1963, p 2.

JPRS 20452

Bulgarian Cultural Offensive on a Broad Front, by Petur Pondev, 6 pp.

BULGARIAN, np, Literaturen Front, No 23, Jun 1963, pp 1, 2.

JPRS 20374

Symptoms of Change in Contemporary Yugoslav Literature, by Gancho Savov, 16 pp.

BULGARIAN, per, Literaturna Misul, No 3, 1963, pp 105-116.

JPRS 20452

Abstractionism is Suicide in Art, by Tudor Pavlov, 8 pp.

BULGARIAN, np, Narodna Kultura, No 23, 8 Jun 1963, pp 1, 4.

JPRS 20746

Selected Articles From the Bulgarian Periodical Novo Vreme,

No 4, 1963, pp 37-52.

Contemporaneity, Innovation, and Multififormity in the Fine Arts, by Atanas Bozhkov, 15 pp.

JPRS 20374

No 5, 1963, pp 31-42.

The Social Significance of Personal Property, by Pavel Pisarev, 16 pp.

JPRS 20452

No 6, 1963.

For More Effective Party and State Management in the National Economy, 10 pp, (pp 3-12).

JPRS 20746

Party Leadership in Ideological Work, by Vasil Ivanov, 12 pp, (pp 13-24).

Basic Problems in Bulgarian Musical Art, by Venelin Krustev, 14 pp, (pp 25-34).

Party Work With Engineering and Technical Personnel, by Khristo Dakov, 12 pp, (pp 98-105).

The Position and Role of the Party Cabinet, by Ivan Kirilov, 6 pp, (pp 106-108).

Eastern Europe
Political (Contd)

Selected Articles From the Bulgarian Periodical
Partien Zhivot.

JPRS 20746

No 6, 1963.

Problems of Party Leadership in Literature and
Art, by Aleksandur Dunchev, 9 pp, (pp 3-10).

Marxism -- The Scientific Theory of the Workers'
Class, by Tsvetan Tsanev, 9 pp, (pp 11-18).

No 7, 1963.

The Concept of Social Principles, by Angel Todorov,
16 pp, (pp 10-22).

Current Problems in Cooperative Democracy, by
Minko Georgiev, 7 pp, (pp 23-28).

No 9, 1963.

Some Problems of the Structure and Operations of
the Party Apparatus, by Toil Khristov, 7 pp, (pp 3-9).

Further Promotion and Development of Collectivity
in the Party, by Kiril Ivanov, 8 pp, (pp 15-22).

The International Communist Conflict: Wolfgang Leonhard:
A Box on the Ear for Schoolboy Khrushchev, by
Wolfgang Leonhard, 6 pp.

GERMAN, np, Arbeiter-Zeitung, 4 Jul 1963, p 3.

JPRS 20477

Order of the National Defense Council of the German
Democratic Republic on Banning Access to Certain Areas,
8 pp.

GERMAN, per, Gesetzblatt der Deutschen Demokratischen
Republik, Part II, No 7, 22 Jun 1963, pp 93-96.

JPRS 20318

Uneasiness in Poland Over Khrushchev and Ulbricht,
6 pp.

GERMAN, np, Neue Zuercher Zeitung, No 183, 6 Jul 1963,
p 2.

JPRS 20548

Belgrade's Position on the Eve of the Moscow Summit, by
Gianni Finocchiaro, 5 pp.

ITALIAN, np, Avanti, 3 Jul 1963, p 2.

JPRS 20453

Eastern Europe
Political (Contd)

Proportions in the Humanities, by Henryk Jablonski,
9 pp.
POLISH, per, Nowe Drogi, No 7, 1963, pp 3-11. JPRS 20452

On Sociology Critically, by Andrzej Werblan,
15 pp.
POLISH, per, Nowe Drogi, No 7, 1963, pp 12-24. JPRS 20452

Viata Romineasca and Its Contribution to the
Development of Literature and Literary Criticism,
by C. Dragoescu, V. Ripeanu, 14 pp.
RUMANIAN, per, Lupta de Clasa, No 5, 1963,
pp 55-64. JPRS 20746

Renegade Tito Again Spews Venom of Revisionism,
15 pp.
VIETNAMESE, per, Hoc Tap, No 7, 1963. JPRS 20364

Military

Method for War Preparation of Soldiers, by
F. Rantisek Janda.
CZECH, bk, Naspin Metodiky Bojove Pripravy
Vojsk, 1960, pp 5-209. *ACSI I-3299
ID 2245179

The 130-mm Model 51 Rocket Projector.
CZECH, rpt, 130-mm Raketomet vz.51, 1956
pp 3-124, Enc1 No 1 to Ru-28-62. *ACSI I-2848
ID 2219805

Military Applications of Cybernetics, by
Heinz Raulien, 162 pp.
GERMAN, bk, 1963, pp 5-247. JPRS 20343

Problems of Astronautics in Poland, by
Stanislaw Borowik, 5 pp.
POLISH, per, Skrzydlatą Polska, No 26, 1963,
p 9. JPRS 20651

Proposed Disciplinary Code for the Armed Forces
of the Polish People's Republic, 23 pp.
POLISH, np, Zolnierz Wolnosci, 18 Jul 1963, pp 2-31. JPRS 20651

How Missiles Can Be Intercepted and Destroyed in
Flight, by D. St. Andreescu, 8 pp.
RUMANIAN, per, Viata Militara, No 6, 1962, p 31.
9685045 FTD-TT-63-337

Eastern Europe

Geographic

Geomorphological Studies of the Danubian Hilly Plane Between the Vidbol and Ogosta Rivers, by K. Mishev. BULGARIAN, bk, Izvestiya na Geografiskiia Institut, Vol IV, 1959, pp 27-76.

*ACSI I-3138
ID 2240849

Notes on the Geomorphology of the Rumanian Black Sea Coast, by Yon Rudulesku. BULGARIAN, bk, Izvestiya na Geografiskiia Institut, Vol V, 1961, pp 27-33.

*ACSI I-3137
ID 2240848

Sociological

Telephone Directory. BULGARIAN, rpt, Ukazatel na Telefonnite Abonati, Sofiya, 1961, pp 1-140.

*ACSI I-2985
ID 2240823

Bulgarian Hospital Construction, by Todor Todorov, 9 pp. BULGARIAN, per, Arkhitektura, No 3, 1963, pp 4-9.

JPRS 20488

Joint Ministry of National Education and Komsomol Central Committee Regulations on Pioneer and Secondary School Camps, by M. Chernev, Al. Lilov, 14 pp. BULGARIAN, per, Durzhaven Vestnik, No 55, Jul 1963, pp 1-5.

JPRS 20706

The Development of State Social Insurance in Bulgaria, 6 pp. BULGARIAN, per, Naruchnik na Agitatora, No 17, 1963, pp 15-24.

JPRS 20412

Problems of Pensioning Farmers and Cooperative Farm Members, by Pavel Bankov, 6 pp. BULGARIAN, per, Otchestnost i Kontrol v Selskoto Stopanstvo, No 4, 1963, pp 157-161.

JPRS 20412

Protect Public Property From Violations of the Law and Waste, by Dano Petrinski, 9 pp. BULGARIAN, per, Partien Zhivot, No 6, 1963, pp 19-25.

JPRS 20412

Health Insurance of Agricultural Workers, by N. Dilber, 10 pp. CROATIAN, per, Nova Administracija, No 3, 4, 1963, pp 249-255.

JPRS 20366

Law on Organization and Work of the Federal Executive Council, by A. Jovanovic, 6 pp. CROATIAN, per, Nova Administracija, No 3, 4, 1963, pp 263-266.

JPRS 20366

Eastern Europe
Sociological (Contd)

- Law on Professional Title and Academic Degrees, by
M. Filipovic, 11 pp.
CROATIAN, per, Nove Administracija, No 3, 4, 1963,
pp 266-274. JPRS 20366
- Role and Importance of Courts of Honor,
by Dusan Dejanovic, 6 pp.
CROATIAN, per, Nova Trgovina, No 5, 1963, pp 226-228. JPRS 20407
- Regulations on Obtaining Health-Insurance Benefits
Abroad, 29 pp.
CROATIAN, per, Sluzbeni List SFRJ, No 24, 1963,
pp 496-505; 515, 516. JPRS 20560
- Selected Articles From the Croatian Periodical
Socijalna Politika, No 4, 1963. JPRS 20706
- Health Insurance of Agricultural Workers, by
Gojko Vujnovic, 21 pp, (pp 372-388).
- Labor Law Regulation of Cottage Labor, by
Ljubomir Bozinovic, 9 pp, (pp 389-395).
- Welfare Organs and Social Work Centers, by
Radivoje Popovic, 9 pp, (pp 396-401).
- Vagrancy, Idleness and Begging in Serbia, by
Aleksandar A. Miljkovic, 7 pp, (pp 402-407).
- Social Security System and Benefits in the Soviet
Zone -- A Comprehensive Report, by Karl Hauck, 5 pp.
WEST GERMAN, per, SBZ Archiv, Vol XXXI, No 7, 1963,
pp 99, 100. JPRS 20488
- Language Study Aid, by Hermann Debbrecht, 6 pp.
GERMAN, Patent No 848,277. Patent Office
- Material Aids for the Program of Regional Pedagogical
Conferences, by Jan Kulpa, Tadeusz Nowacki, 23 pp.
POLISH, per, Glos Nauczycielski, No 15, 1963, pp 1-15. JPRS 20407
- Technical Education in Czechoslovakia, by Ricardo Ferre,
6 pp.
SPANISH, np, El Dia, Vol II, No 362, 27 Jun 1963, p 4. JPRS 20412

WESTERN EUROPE

Economic

- Finnish Oil Refining, 14 pp.
FINNISH, per, Teknillinen Aikakauslehti, No 5, 1963. ID 2831011463
- Design and Manufacture of a Titanium Pump, by
J. Sarrau, 19 pp.
FRENCH, per, Vide, Vol XVII, 1962, pp 267-272. AEC-NP-Tr-1010
- Development Problems in France: The Contrast Between
North and South, by H. E. T. Lyon, 7 pp.
GERMAN, np, Neue Zuercher Zeitung, 21 Jul 1963, pp 3, 4. JPRS 20691
- Inflatable Rubber Cushions Stop Damage to Goods Shipped
by Rail.
SWEDISH, per, Industriell Teknik, No 5, 1963, pp 91, 92. *ACSI I-3116
ID 2240841

Political

- The International Communist Conflict: Interviewed
Danish Communists Back USSR, 8 pp.
DANISH, np, Information, 10 Jul 1963, p 3. JPRS 20477
- The Cultural Debate in the USSR: A Danish Communist
View of Soviet Culture, by Niels Lergaard, 5 pp.
DANISH, np, Land og Folk, 26 Jun 1963, pp 9, 10. JPRS 20329
- The International Communist Conflict: Danish Socialist
People's Party Condemns Chinese Position, by Junius,
6 pp.
DANISH, np, SF, Vol V, No 28, 19 Jul 1963, pp 4, 5. JPRS 20659
- Finland and Peaceful Coexistence, by Kalevi Dilpi, 10 pp.
FINNISH, np, Kansan Uutiset, No 191, 192, 18, 19 Jul 1963,
p 4. JPRS 20659
- Finnish Communists Discuss Democracy, Marxism and
Sociology, and Individual Freedom: Finnish Communist
Party Statement on the Preservation and Expansion of
Democracy, 12 pp.
FINNISH, per, Kommunisti, Vol XIX, No 6, 1963, pp 212-219. JPRS 20453
- Finnish Communists Discuss Democracy, Marxism and
Sociology, and Individual Freedom: Marxism and
Sociology, by Tuure Lehen, 7 pp.
FINNISH, per, Kommunisti, Vol XIX, No 6, 1963, pp 221-225. JPRS 20453

Western Europe
Political (Contd)

Finnish Communists Discuss Democracy, Marxism and Sociology, and Individual Freedom: The Communist Concept of Individual Freedom, by Eduard Rosental, 5 pp.

FINNISH, per, Kommunisti, Vol XIX, No 6, 1963, pp 230-233.

JPRS 20453

The French Communist Party and the International Communist Developments, A Study on Unity in the International Communist Movement, by Pierre Villon, 35 pp.

FRENCH, per, Cahiers du Communisme, No 6, 1963, pp 85-108. JPRS 20606

French Dissident Communists State Their Views. Are You a Revisionist?, by Jacques Bret, 9 pp.

FRENCH, per, Le Debat Communiste, No 16, 15 Jun 1963, pp 4-7.

JPRS 20606

The French Communist Party and Possibilities For French Leftist Unity: Lazitch Derides Lenin's Concept of Party Plurality Cited by Thorez, by Branko Lazitch, 7 pp.

FRENCH, per, Est & Ouest, No 302, 16-30 Jun 1963, pp 1-4.

JPRS 20606

Dissidence in the Belgian Communist Party (PCB): Dissident Faction is Being Organized in the PCB, by Nicolas Lang, 13 pp.

FRENCH, per, Est & Ouest, No 302, 1963, pp 4-7.

JPRS 20548

Selected Articles From the French Newspaper France Nouvelle.

No 924, 3-9 Jul 1963, pp 18-20.

JPRS 20606

The French Communist Party and the International Communist Movement: Excerpts From Thorez's 23 June Speech at Moyeuve-Grande, by Maurice Thorez, 7 pp.

No 925, 26 Jun 1963, p 3.

JPRS 20606

The French Communist Party and Possibilities for French Leftist Unity: Billoux Calls for Leftist Unity Against de Gaulle, by Francois Billoux, 5 pp.

No 925, 10-16 Jul 1963, pp 4, 5;

JPRS 20606

No 927, 24-30 Jul 1963, pp 4, 5.

The French Communist Party and Possibilities for French Leftist Unity: Waldeck Rochet on Communist-Socialist Unity of Action, by Waldeck Rochet, 14 pp.

No 925, 10-16 Jul 1963, pp 6, 7.

JPRS 20606

The French Communist Party and the International Communist Movement: Central Committee Secretariat Statement on Peaceful Coexistence, 7 pp.

Western Europe
Political (Contd)

The International Communist Conflict: Waldeck Rochet on International Communist Unity, by Waldeck Rochet, 7 pp.

FRENCH, np, L'Humanite, 5 Jul 1963, p 3.

JPRS 20453

Zurich Daily Sees Communists Reviving Front Tactic in Western Europe, 5 pp.

GERMAN, np, Neue Zuercher Zeitung, No 160, 13 Jun 1963, p 2.

JPRS 20044

The Trend to the Left in Europe -- An Austrian Communist Analysis, 7 pp.

GERMAN, per, Weg und Ziel, No 6, 1963, pp 369-372.

JPRS 20548

Dissidence in the Belgian Communist Party (PCB): The Communists in Belgium, by Franz Marek, 6 pp.

GERMAN, per, Weg und Ziel, No 6, 1963, pp 399-401.

JPRS 20548

Austrian Communist Editor Discusses Art and Socialism by Franz Marek, 8 pp.

GERMAN, per, Weg und Ziel, No 6, 1963, pp 413-415.

JPRS 20548

Wolfgang Leonhard Reviews Ulbricht's Status in the Communist Movement, by Wolfgang Leonhard, 15 pp.

GERMAN, np, Die Zeit, No 26, 28 Jun 1963, p 3.

JPRS 20329

The International Communist Conflict: Wolfgang Leonhard Discusses 14 June Letter From the Chinese Communist Party to the CPSU, by Wolfgang Leonhard, 9 pp.

GERMAN, np, Die Zeit, Vol XVIII, No 27, 1963, p 6.

JPRS 20387

The Italian Communist Party and the 28 April Elections: Pieraccini Says PSI Faces Political Clarification and Rebirth, by Giovanni Pieraccini, 6 pp.

ITALIAN, np, Avanti, 19 Jun 1963, p 1.

JPRS 20548

The Italian Communist Party and the 28 April Elections: Avanti Tells Il Popolo That PSI Is Not Responsible for Center-Left Crises, by Giovanni Pieraccini, 5 pp.

ITALIAN, np, Avanti, 20 Jun 1963, p 1.

JPRS 20548

Italian Communist Party Postelection Activities: Socialist Sees Possible Development of Chinese Faction in the PCI, by Giuseppe Tamburrano, 7 pp.

ITALIAN, np, Avanti, 10 Jul 1963, p 3.

JPRS 20477

Western Europe
Political (Contd)

Italian Party Leaders and Journalists Debate
Question of Sino-Soviet Dispute, 12 pp.
ITALIAN, np, L'Espresso, 21 Jul 1963, p 6, 7. JPRS 20744

The Italian Communist Party and the 28 April Elections:
Leftist Socialist Libertini Says PSI is Declining, by
Lucio Libertini, 5 pp.
ITALIAN, per, Mondo Nuovo, No 13, 1963, pp 1, 2. JPRS 20548

The International Communist Conflict: Italian
Left-Wing Socialists Analyze the Dispute, 8 pp.
ITALIAN, per, Mondo Nuovo, No 13, 1963, p 7. JPRS 20329

Selected Articles From the Italian Periodical
Rinascita.

15 Jun 1963, pp 11, 12. JPRS 20606
The French Communist Party and Possibilities for
French Leftist Unity: Italian Communist Weekly
Discusses French Socialist Party (SFIO) Congress,
by Giorgio Signorini, 6 pp.

22 Jun 1963.
Italian Communist Party Postelection Activities:
PCI Plans National Conference on Organization, by
Giorgio Amendola, 9 pp, (pp 5, 6). JPRS 20477

The Cultural Debate in the USSR -- CPSU Central
Committee Plenum Discusses Ideology: Italy: Peace-
ful Coexistence and the Ideological Struggle, by
Luciano Gruppi, 6 pp, (p 24). JPRS 20387

12 Jul 1963, pp 9, 10. JPRS 20477
The International Communist Conflict: Giuseppe
Boffa Analyzes the Dispute for Italian Readers, by
Giuseppe Boffa, 12 pp.

20 Jul 1963, pp 3, 4. JPRS 20659
Italian Communist Party Looks to the Future:
Longo Discusses Tasks of Forthcoming PCI National
Conference on Organization, by Luigi Longo, 9 pp.

Western Europe
Political (Contd)

Selected Articles From the Italian Newspaper
L'Unita.

21 Jun 1963, p 10. Italian Communist Party Postelection Activities: PCI Central Committee Issues Postelection Policy Statement, 7 pp.	JPRS 20477
4 Jul 1963, p 13. Dissidence in the Belgian Communist Party (PCB): Debate in the PCB on Reform and Coexistence, 5 pp.	JPRS 20548
16 Jul 1963, pp 1, 10. The Italian Communist Party and the International Communist Movement: Luigi Longo Speaks in Milan on International Labor Unity, 6 pp.	JPRS 20658
Anna Louise Strong Writes on the Great Communist Debate, by Ana Louise, 5 pp. PORTUGUESE, np, <u>A Classe Operaria</u> , 15-30 Jun 1963, p 4.	JPRS 20659

Military

Orientation on Civil Defense, DANISH, rpt, <u>Orientering om Civilforsvaret</u> , 1961, pp 3-47.	*ACSI I-3236 ID 2244415
Use of Missiles for Free-Flight Vibration Tests, by R. Dat. FRENCH, rpt, <u>Advisory Group for Aeron. Research and Development</u> , No 381, p 22.	Navy Tr 3498 APL 792
The Hoverer - A Revolution at Sea? SWEDISH, per, <u>Officerforbundsbladet</u> , No 4, 1963, pp 89, 90.	*ACSI I-3115 ID 2240840

Western Europe
Geographic

Selected Articles From the Danish Report
Danmark.

Vol V, 1961.

A. Town of Thisted, (pp 477, 479, 485, 487, 488).

*ACSI I-3211
ID 2244406

B. Town of Nykobing, (pp 493-495, 501, 503, 504, 506).

Vol VI, 1961.

A. Town of Hjorring, (pp 47, 49, 56).

*ACSI I-3210
ID 2244405

B. Town of Frederikshavn, (pp 79, 81, 86, 89, 90).

C. Town of Skagen, (pp 98, 100, 106).

D. Town of Bronderslev, (pp 116, 120).

Bench Mark List I of the Second Levelling of Finland,
by Erkki Kaariainen.

FINNISH, per, Suomen Geodeetisen Laitoksen Julkaisuja,
No 57, 1963, pp 26-164.

*ACSI I-3149
ID 2240857

Po Navigation. Changes, Characteristics, Developments,
Prospects.

ITALIAN, rpt, Navigazione Padana. Vicende Ruolo, Sviluppo,
Prospettive, Sep 1958, pp 19-189.

*ACSI I-2996
ID 2240832

AFRICA

Economic

Problems Facing the Moroccan Labor Movement in Its
Historic Missions, by 'Abd Al-'Aziz Bilal, 20 pp.

ARABIC, per, Al-Mabadi', Vol III, No 4, 5, 1963, pp 7-27.

JPRS 20664

Problems of Transport Services for the Central and
South African Mining Industry Basins, by Yu. G. Lipets,
22 pp.

RUSSIAN, bk, Ekonomicheskiye Svyazi i Transport,
Voprosy Geografii -- Sbornik Shest'desyat Pervvy,
Moscow, 1963, pp 201-221.

JPRS 20236

Africa
Political

Algeria: The Neo-Colonialist Danger, 14 pp.
FRENCH, per, Le Debat Communiste, No 16, 15 Jun 1963,
pp 8-12.

JPRS 20417

Secretariat of Fourth International Issue Statement
of New Phase of Algerian Revolution, 6 pp.
FRENCH, per, L'Internationals, No 137, 1963, pp 4, 5.

JPRS 19777

Organization of National Office for Agrarian Reform
in Algeria, 5 pp.
FRENCH, per, Journal Officiel de la Republique
Algerienne, Vol II, No 47, 1963, pp 707, 708.

JPRS 20436

Sociological

Information on Higher Education in Tunisia, 10 pp.
FRENCH, np, L'Action, 11, 12 Jun 1963, p 3;
13 Jun 1963, p 4.

JPRS 20417

MIDDLE EAST

Economic

Manpower Problems of Israeli Police, by Zeev Shif,
10 pp.
HEBREW, np, Haarets, 1963, 14 Jul, p 5; 15 Jul, p 5;
16 Jul, p 4.

JPRS 20694

What Did Saphir's Men Say to the New Economic Policy?
5 pp.
HEBREW, np, Kol Haam, 3 Jul 1963, p 2.

JPRS 20556

Implement Agricultural Council Resolutions, by
Eliezer Feiner, 6 pp.
HEBREW, np, Kol Haam, 5 Jul 1963, p 2.

JPRS 20556

Stability of... High Prices, by Eliyahu Druqman,
6 pp.
HEBREW, np, Kol Haam, 12 Jul 1963, p 2, 7.

JPRS 20572

The National Water Carrier, 9 pp.
HEBREW, per, Skira Hadashot, No 5, 1962, Encl No 1 to
Desp A-850, AmEmbassy, Tel Aviv.

Dept of State

Middle East
Political

Selected Articles From the Hebrew Newspaper
Kol Haam.

7 Jun 1963, p 4. Israeli Communist Cultural Leaders Meet: Discuss Content, Form, and Ideology in the Arts and Literature, 5 pp.	JPRS 20329
11 Jun 1963, p 2. Plot to Disallow Cost-of-Living Bonus, by Pinhas Tobin, 5 pp.	JPRS 20391
14 Jun 1963, p 2. Israeli Communist Party Secretary Discusses Soviet Proposal for Atom-Free Mediterranean, by Esther Vilenska, 5 pp.	JPRS 20329
21 Jun 1963, pp 4, 5; 28 Jun 1963, p 5. Israeli Communist Cultural Leaders Meet: Art Critic Speaks on Unity of Form and Content and Socialist Realism, by G. Adam, 15 pp.	JPRS 20329
23 Jun 1963, p 2. Radio-Israel Should be Independent of Premier's Office, 7 pp.	JPRS 20391
26 Jun 1963, pp 1, 4. Eshkol Government Continuing the Ben-Gurion Line Will Make Israel's Situation More Grave, 8 pp.	JPRS 20391
27 Jun 1963, p 2. Thofiq Tuvi's Speech at Knesset Debate on Draft of Planning and Construction Law, by Thofiz Tuvi, 6 pp.	JPRS 20391
28 Jun 1963, p 2. The New Government, by Mordekhai Kaspi, 7 pp.	JPRS 20391
7 Jul 1963, pp 1, 4. Easing of Military Government Will Not Satisfy Public, by Sh. Miquis, 5 pp.	JPRS 20572
8 Jul 1963, pp 2, 3. Israeli Women Sure of Victory of Peace, by Shlomo Rabinovich, 5 pp.	JPRS 20572
Israeli Socialist Explains Why USSR Opposes Baath Party But Tolerates Nasser, by Dov Appel, 5 pp. HEBREW, np, <u>Lamerhav</u> , 10 May 1963, p 3.	JPRS 20329

Middle East
Sociological

Vacations: Relaxation?, by Yankov Zilber, 6 pp.
HEBREW, np, Kol Haam, 5 Jul 1963, p 2.

JPRS 20556

Living Conditions at the Immigrant Camp of Mansi,
by Hans Lavrekht, 5 pp.
HEBREW, np, Kol Haam, 9 Jul 1963, p 2.

JPRS 20572

Biographic

Questions of the Hour, by Shmuel Mikunis, 7 pp.
HEBREW, np, Kol Haam, 5 Jul 1963, pp 2, 7.

JPRS 20556

Who's Who in Turkey, by Osman Nebioglu,
Ayten Dincer, et al, 1067 pp.
TURKISH, bk, Kim Kimdir Ansiklopedisi, Vol I-VII,
1961-1962, pp 1-763.

JPRS 20490

FAR EAST

Economic

Selected Articles From the Chinese Periodical
Jen-min Chiao-t'ung.

No 2, 31 Jan 1955.

ACSI I-2555
ID 2232459

B. On Preventive Maintenance System, 6 pp,
(pp 15, 16).

C. The Growth of a Big Bridge - Report on the
Construction of a Certain Large Bridge in South
China, by Ning Tzu-nien, 5 pp, (pp 20, 21).

No 5, 15 Mar 1955, pp 20, 21.

ACSI I-2557-C
ID 2232461

A General Description of the Communications of
the Inner Mongolia Autonomous Region, Communica-
tions Data, by Wu Kuo-ch'ing, 5 pp.

No 21, 15 Nov 1955, pp 30, 31.

ACSI I-2568-B
ID 2232472

A General Description of the Conditions of
Communications in Szechwan Province, 6 pp.

The Question of Comparative Prices of Light Industrial
Commodities, by Chao Hua-Ling, 22 pp.

CHINESE, per, Ta Kung Pao, 10 Jun 1963, p 3.

JPRS 20455

Electric Power and Distribution of Industries,
by Liang Jen-ts'ai, 10 pp.

CHINESE, per, Ti-li, No 1, 1963, pp 33-38.

JPRS 20451

Economic Geography and Military Topography of Military
Territory in French Indochina, by Georges Albert Ayme,
177 pp.

FRENCH, bk, Indochina Francaise: Monographie du
ve Territoire Militaire, 1930, pp 1-10, 22-178.

JPRS 20667

Selected Articles From the French Periodical
Realites Cambodgiennes.

31 May 1963, pp 6, 7.

JPRS 20552

General Administration of Taxation, 5 pp.

No 348, 1963, pp 8, 9.

JPRS 20509

Cigarette Production in Cambodia, 5 pp.

No 353, 354, 1963, pp 7, 6.

JPRS 20578

Cotton Growing in Cambodia, by C. Szarwarski,
5 pp.

No 357, 1963, pp A-F.

JPRS 20578

The Khmer Distilleries in Cambodia, 7 pp.

**Far East
Economic (Contd)**

**Selected Articles From the Indonesian Newspaper
Harian Rakjat.**

- 4 Jun 1963, p 1. JPRS 20546
Communist Reaction to New Indonesian Economic
Controls, 14 pp.
- 10 Jun 1963, p 3. JPRS 20546
Indonesian Communist Defends the Economic
Declaration, by D. N. Aidit, 7 pp.
- 11 Jun 1963. JPRS 20546
Save the DEKON -- Rescind Tarrif & Price Increase
Orders, 5 pp, (p 1).
- A Sound Way to Successfully Overcome Economic
and Development Problems, by M. Zaelani,
13 pp, (p 3).
- 29 Jun 1963, p 3. JPRS 20683
Indonesian Communist Party Opposes Government
Economic Measures, 6 pp.
- 5 Jul 1963, p 3. JPRS 20479
PKI Member Discusses Economic Problems, by
J. Piry, 10 pp.
- Policy of the Korean Labor Party for the Develop-
ment of Heavy Industry, 17 pp.
KOREAN, rpt, Chung Kongop Palchon ul Uihan uri
Tang-e Chongeh'aek, 15 May 1961, pp 1-58. JPRS 20503
- Report on Execution of the 1962 Budget and
Explanation of the 1963 Budget, by Han Sang-tu,
15 pp.
KOREAN, per, Chaejong Kumyung, No 5, 1963,
pp 7-21. JPRS 20611
- Analysis of Labor Productivity, by Yi Kun-han,
11 pp.
KOREAN, per, Chaejong Kumyung, No 5, 1963,
pp 39-43. JPRS 20611
- Selected Articles From the Korean Periodical
Kulloja.**
- No 5, 1963. JPRS 20545
The Principle of Socialist Distribution and the
Work-Team Point System, 11 pp, (pp 21-26).
- Organization of the Production Boost System
on Farms, Based on Work Group Units, by
Pak Ch'ang-gwon, 12 pp, (pp 27-33).

Far East
Economic (Contd)

Selected Articles From the Korean Periodical
Kulloja. (Contd)

No 7, 1963, pp 24-30. JPRS 20480
The Creation of the Kun (County) Co-Operative
Farm Management Committee and Further Development
of the Alliance of Workers and Peasants, by
Kim Taek-hyon, 10 pp.

No 8, 20 Apr 1963, pp 39-45. JPRS 20480
The Work Team Internal Accounting System as a
Means of Mass Enterprise Control, by Kim Chae-un,
9 pp.

No 9, 1963, pp 45-48. JPRS 20480
Organization of Production and Labor in Plants
and Enterprises, by Kim Ul-gap, 6 pp.

No 11, 5 Jun 1963, pp 45-48. JPRS 20545
The Relationship Between the Growth of Labor
Productivity and That of Wages of Labor,
by Chong Sun-do 5 pp.

Analysis of Production Plan Fulfillment, 13 pp.
KOREAN, per, Kyongje Chisik, No 2, 1963, pp 34-39. JPRS 20368

Industrial Centers in Hamgyong-Namdo and Kangwon-
Do and the Hamhung Railroad Management Bureau,
by Yu Wan-sop, 6 pp.
KOREAN, per, Kyot'ong Unsu, No 4, 1963, pp 43-45. JPRS 20726

Industrial Centers in Hamgyong-Pukto and Yanggan-
Do and the Chongjin Railroad Management Bureau,
by Yu Wan-chol, 6 pp.
KOREAN, per, Kyot'ong Unsu, No 5, 1963,
pp 43-45. JPRS 20726

Selected Articles From the Korean Newspaper
Minju Chosun.

6 Jun 1963, p 2. JPRS 20480
How to Estimate Target Output in Industry, by
Kang Sun-do, 6 pp.

8 Jun 1963, p 2. JPRS 20480
Establishment and Operation of the Control
System in Irrigation and Water Supply, by
Kim Tu-gyong, 5 pp.

12 Jun 1963. JPRS 20589
On Building the Nations Self-Sustaining Economy,
by Pom-yong Kim, 7 pp, (p 4).

**Far East
Economic (Contd)**

**Selected Articles From the Korean Newspaper
Minju Chosun. (Contd)**

- 12 Jun 1963. JPRS 20589
Fertilization of Rice-Paddies, by Song-t'ae,
5 pp, (p 4).
- 13 Jun 1963, p 2. JPRS 20589
Method of Computing Total Production by
Local Industrial Enterprises, by Ho-sok Lim,
Pyong-mu Li, 9 pp.
- 14 Jun 1963, p 2. JPRS 20589
Method of Computing Productive Capacity of
Local Industrial Enterprising Organizations,
by Yong-yong Yun, 11 pp.
- 18 Jun 1963, p 4. JPRS 20589
Purchase System for Spring Cocoons and
Industrial Crops, by Kim Hak-sun, 5 pp.
- 19 Jun 1963, p 2. JPRS 20589
Method of Computing and Increasing the
Utilization Rate of Equipment by Local Industrial
Enterprising Organizations, by Pang Chin-bom,
9 pp.
- 21 Jun 1963, p 2. JPRS 20480
Method of Calculating the Output of Products
Produced With Locally Available Materials,
by Yim Ho-sok, 5 pp.

**Selected Articles From the Korean Newspaper
Nodong Sinmun.**

- 1 Jun 1963. JPRS 20355
To Strengthen Fresh Water Fish Breeding, by
Han Chil-lip, 5 pp.
- 2 Jun 1963. JPRS 20355
Evaluation, Calculation, and Study of the
Work Day on Collective Farms, by Lee Pong-yon,
5 pp.
- 3 Jun 1963, p 2. JPRS 20355
To Rapidly Increase Mine Production, by
Choe Man-hyon, 6 pp.

Far East
Economic (Contd)

Selected Articles From the Korean Newspaper
Nodong Sinmun. (Contd)

- 5 Jun 1963. JPRS 20355
To Further Strengthen the Marine Products
Processing Operation, by Lee Song-u, 5 pp.
- 7 Jun 1963, p 3. JPRS 20355
Significance of Establishing a Local Industrial
Base in Building Socialism in Our Country,
by Chu Chang-yong, 5 pp.
- 11 Jun 1963, p 2. JPRS 20589
On the Work Team's Independent Accounting
System in the State Farm and Pasture, by
Chon T'ae-wh'an, 5 pp.
- 12 Jun 1963, p 4. JPRS 20589
The Composition of the Cost and the Method
of Decreasing It, by Cho Ch'ang-gi, 5 pp.
- 14 Jun 1963, pp 2, 3. JPRS 20589
On Improving Labor Productive Efficiency in
All the People's Economic Sectors, by
Lim Kae-ch'ul, 15 pp.

Selected Articles From the Mongolian Periodical
Ediyn Dzasag, Erhiyn Asuudal.

JPRS 20537

- No 3, 1962, pp 33-36.
Importance of Bank Loans in Production
Modernization and Mechanization, by B. Dashbaljir,
6 pp.
- No 5, 1962, pp 12-17.
Establishment and Progress of the National
Currency of the Mongolian People's Republic,
by B. Jam'yan, 9 pp.
- No 6, 1962.
Questions of Centralized Development of Motor
Transport of the Mongolian People's Republic,
by T. Nimjim, 9 pp, (pp 36-41).
- Industrial Wholesale Prices of the Mongolian
People's Republic, by D. Chogsom, 10 pp,
(pp 42-47).
- To Introduce the Principle of Additional Pay
for Agricultural Artel Work, by Ts. Otgon,
8 pp, (pp 48-53).

**Far East
Economic (Contd)**

**Selected Articles From the Mongolian Periodical
Namyn Am'dral, No 5, 1963.**

JPRS 20438

Creative Labor is the Basis of Communist Education, 12 pp, (pp 3-8).

A Need to Streamline the Party Organizational Work, by O. Tserendorj, 18 pp, (pp 9-15).

Party Organizations Must Direct Their Work Toward a Firm Management of Production, by G. Gombosuren, P. Tsogtoo, 13 pp, (pp 16-21).

Commercial Production, by M. Peljee, 18 pp, (pp 33-41).

The Work of the Party Non-Staff Apparatus, by H. Dondob, 10 pp, (pp 42-47).

Mechanized Livestock Breeding Stations, 8 pp.
MONGOLIAN, np, Unen, 3 May 1963, p 1.

JPRS 20537

**Selected Articles From the Vietnamese Periodical
Hoc Tap, No 6, 1962.**

JPRS 20321

Enthusiastically Engage in Agricultural Activities and Ardently Love the Countryside, by Nguyen Chuong, 7 pp.

Some Basis Problems Concerning Our First Five Year Plan 1961-1965, by Nguyen Duy Trinh, 51 pp, (pp 1-15).

The Struggle to Increase Labor Productivity During the First Five-Year Plan, by Le Khac, 27 pp, (pp 21-28).

Reinforcement of Trade Activities to Fulfill the First Five-Year Plan, by Nguyen Thanh Binh, 20 pp, (pp 29-34).

The Task of Foreign Trade in the First Five-Year Plan, by Ly Ban, 9 pp, (pp 35-38).

Exchange of Opinions on the Characteristics and Nature of the Vietnamese Farmers, 33 pp, (pp 53-75).

**Far East
Economic (Contd)**

**Selected Articles From the Vietnamese Newspaper
Nhan Dan.**

21 May 1963. JPRS 20353
Bringing Further Success to Industry During
the First Five-Year Plan 1961-1965, 5 pp, (p 1).

A Number of Policies for Encouraging the
Breeding of Livestock, 17 pp, (p 2).

22 May 1963, p 1. JPRS 20353
Turn Agriculture Into a Strong Basis for the
Development of Industry, 6 pp.

23 May 1963, p 3. JPRS 20353
Preparing for Early Production in the Thai-Nguyen
Iron and Steel Works, by Hoang Binh, 5 pp.

25 May 1963, pp 1, 4. JPRS 20620
Commerce Must Serve Production and Improve the
Life of the People, 5 pp.

27 May 1963, p 1. JPRS 20620
Developing Communications and Transportation, 5 pp.

Political

The Chinese Theory of War and Peace, 6 pp.
DANISH, np, SF, Vol V, No 29, 1963, pp 11, 12. JPRS 20723

The 5 July Sino-Soviet Meeting, by Branko Lazitch,
5 pp.
FRENCH, per, Est & Quest, No 303, 1963, pp 1-3. JPRS 20548

The Challenge of the Chinese Communist Party, by
Claude Cadart, 6 pp.
FRENCH, per, France Observateur, No 688, 1963, pp 9, 10. JPRS 20418

The International Communist Conflict: Mao Sees
Establishing a Fourth International, by
Giselher Wirsing, 7 pp.
GERMAN, np, Christ und Welt, Vol XVI, No 27,
5 Jul 1963, p 1. JPRS 20329

The International Communist Conflict: Deterioration
of Sino-Soviet Relations Held To Be Accelerating, by
Carl Gustav Stroehm, 5 pp.
GERMAN, np, Christ und Welt, Vol XVI, No 27,
5 Jul 1963, p 5. JPRS 20329

Far East
Political (Contd)

Selected Articles From the Indonesian Newspaper
Harian Rakjat.

27 May 1963, p 3; 28 May 1963, p 3; 29 May 1963, pp 3, 4. Down With the Counter-Revolutionaries', by D. N. Aidit, 22 pp.	JPRS 20426
6 Jun 1963, p 3. Thirteenth Anniversary of the Indonesian Women's Movement, by S. Ujin, 6 pp.	JPRS 20546
7 Jun 1963, p 3. Thirteen Years of the Communist Womens Movement, 6 pp.	JPRS 20546
8 Jun 1963, p 3. Communist Newspaper Speaks Out on Art and Literature, 14 pp.	JPRS 20546
4 Jul 1963, p 3. The People of Indonesia Support the Struggle of the People of Korea for the Reunification of Their Country, by M. H. Lukman, 6 pp.	JPRS 20479
11 Jul 1963, p 2. Speech by the Head of the Indonesian Delegation to the Moscow Congress of the World Federation of Democratic Women, by Umi Sardjono, 5 pp.	JPRS 20719
18 Jul 1963. A Fundamental Economic Solution Is Not Possible Unless There is a Political Solution, 5 pp, (p 2).	JPRS 20654
Aidit on Political and Defense Problems, by D. N. Aidit, 26 pp, (p 3).	
The International Communist Conflict: Mao Says No to Khrushchev, by Luciano Vasconi, 13 pp. ITALIAN, np, <u>Avanti</u> , 5 Jul 1963, p 2.	JPRS 20453
The Sino-Soviet Dispute, by Boris Suvarin, 5 pp. ITALIAN, per, <u>Corrispondenza Socialista</u> , Jun 1963, pp 335, 336.	JPRS 20347
China-USSR: The Reasons for the Dispute, by Lucio Libertini, 10 pp. ITALIAN, per, <u>Mondo Nuovo</u> , 1963, pp 6, 7.	JPRS 20744

Far East
Political (Contd)

The Chinese and Soviets Discuss, by Paolo Pardo,
7 pp.
ITALIAN, np, Paese Sera, 7 Jul 1963, pp 1, 8. JPRS 20548

The International Communist Conflict: The Chinese
Delegates Have Returned to Peiping, by Giuseppe Boffa,
5 pp.
ITALIAN, np, L'unita, 21 Jul 1963, pp 1, 20. JPRS 20659

Ways of Unifying and Promoting the Movement Against
Atomic and Hydrogen Weapons, by Nakayama Seiichi,
5 pp.
JAPANESE, np, Akahata, 28 May 1963, p 5. JPRS 20328

Anti-Party Revisionists' Attack Upon the Japan
Council Against Atomic and Hydrogen Bombs, by
Kaneko Mitsuhiro, 8 pp.
JAPANESE, np, Akahata, 29 May 1963, p 5. JPRS 20328

The 1962 North Korean Central Yearbook. (NY-7756)
KOREAN, yearbook, Choson Chungang Yongam, P'yongyang,
10 Dec 1962, pp 1-6, 177-223, 229-286, 349-377, 388-394,
431-437, 532-535, 544. *JPRS

Selected Articles From the Korean Periodical
Kulloja.

No 7, 1963, pp 2-9. JPRS 20453
The Present Stage of the Revolution in North
Korea: Present Stage of the Korean Revolution
and Class Indoctrination of the Workers, 12 pp.

No 8, 1963.
The Present Stage of the Revolution in North Korea:
The Banner of Leninism is Victorious, 11 pp, (pp 2-9). JPRS 20453

The Mutual Relations Between Politics and
Economy, by Sin In-kap, 5 pp, (pp 46-48). JPRS 20481

No 9, 1963, pp 20-25. JPRS 20481
Comrade Kim Il-sung's Policy on the Armament
of the Entire Populace and Its Actualization in
the Guerrilla Base of Eastern Manchuria, by
Pak Tung-nyol, 8 pp.

Far East
Political (Contd)

Selected Articles From the Korean Periodical
Kulloja. (Contd)

No 10, 1963. JPRS 20568
The Revolutionary Training of the Party's Cadre,
10 pp, (pp 2-6).

The Model Cast Technique in Party Policy
Implementation, by Kang Chong-jong, 7 pp,
(pp 12-16).

The First Step in Fulfillment of Party Policies
is Understanding, by Yi Sung-nok, 7 pp, (pp 17-20).

No 11, 1963, pp 7-12. JPRS 20553
Refinement of Socialist Patriotism, by Yi Song-gun,
8 pp.

A Need to Raise the Ideological Content of Aymak
Newspapers, by Sh. Tsend, 12 pp.
MONGOLIAN, per, Namyn Am'dral, No 5, 1963, pp 22-27. JPRS 20438

Who Will Win in South Vietnam?, by Nguyen Chi Thanh,
6 pp.
VIETNAMESE, per, Hoc Tap, Jul 1963. JPRS 20704

Improve Co-op Management, Improve Labor Productivity,
Save Food and Foodstuffs, by Tran Van Tu, 6 pp.
VIETNAMESE, np, Nhan Dan, 22 May 1963, p 2. JPRS 20433

Military

Aidit: National Defense Must Bow to the General
Strategy of the Indonesian Revolution, 20 pp.
INDONESIAN, np, Harian Rakjat, 2 Jul 1963, pp 3, 4. JPRS 20479

Njoto: The Conditions Are Good for Intensifying the
Revolutionary Offensive, by Njoto, 6 pp.
INDONESIAN, np, Harian Rakjat, 5 Jul 1963, p 3. JPRS 20479

Summary of Ordnance Material by Ground Self-Defense
Force Ordnance Section. *ACSI I-2971-A-J
JAPANESE, rpt, 1 Oct 1961, pp 5-8, 11-14, 23. ID 2240820

Far East
Geographic

Selected Articles From the Chinese Periodical
Ti-li, No 1, 1963.

JPRS 20451

Preliminary Evaluation of Irrigation and Water Utilization Problems Regarding Rotation Planting of Rice and Wheat, by Szu Hsi-ming, Ch'uan Shih-lin, 7 pp, (pp 1-4).

Discussions on the Wet Sand Formations in the Sand Dunes of Desert Regions as Based Upon Fixed Position Observation Data From a Number of Desert Stations, by Chao Sung-ch'iao, 15 pp, (pp 5-11; 41).

Distribution of Saline Land in Our Country and Methods to Improve or Reclaim This Land, by Huang Chen-kuo, Mu Jung Mei-hsiung, 16 pp, (pp 12-17).

Vegetation Indicators of Land Suitable for Agricultural Cultivation in Sinkiang, by Wang Ho-sheng, 9 pp, (pp 18-20).

Selected Articles From the Chinese Periodical
Ti-li Hsueh-pao, Vol XXVIII, No 4, 1962.

JPRS 20388

The Geomorphological Development of the O-erh-ch'i-ssu River and the Wu-lun-ku River in Sinkiang, by Yen Ch'in-shang, 30 pp, (pp 257-274).

General Discussion of Geomorphology in Leng Lake Region in the Northwestern Part of Tsaidam Basin, by Fan Hsi-p'eng, 29 pp, (pp 275-289).

Important Characteristics of Biogeochemicals in the Principal Landscape-Types of Kwangtung Province, by T'ang Yung-lung, Hsieh Yung-ch'uan, et al, 33 pp, (pp 290-304).

Land and Water Routes Between the Yellow-wei and the Yangtze-han River Systems in China's History, by Huang Sheng-chang, 22 pp, (pp 320-334).

The New Face of China, by Peter Schmid.
GERMAN, bk, China, Reich der Neuen Mitte, 1958,
pp 1-167.

Dept of Interior
440ab Sc348n

**Far East
Sociological**

**Selected Articles From the Korean Periodical
Kulloja.**

No 7, 1963. JPRS 20481
Regarding the Class Front and That of the Mass,
by Kim Yong-gol, Kim Tok-chu, 12 pp, (pp 10-17).

The Educational Program for the Development of
Proletarian Class Consciousness Among Today's
Young People, by Chong Ki-ryon, 5 pp, (pp 18-23).

No 8, 1963, pp 31-38. JPRS 20481
Strengthening Class Indoctrination is an
Important Guarantee for Solidifying the
Revolutionary Position, 11 pp.

No 9, 1963. JPRS 20481
Communist Moral Indoctrination, 8 pp, (pp 2-7).

Moral Indoctrination Among the Younger Generation,
by Kim Song-gi, 6 pp, (pp 8-13).

No 10, 1963, pp 7-11. JPRS 20568
The Present Stage of Socialist Construction
Demands Practical Workers, by Yang Hyong-sop,
5 pp.

No 11, 1963, pp 2-6. JPRS 20553
Development and Strengthening the Activities
of the Industrial Party Committee, 7 pp.

Motion Picture is an Important Instrument of Party
Ideological Work, by M. Jam'yandorj, 9 pp.
MONGOLIAN, per, Namyn Am'dral, No 5, 1963, pp 28-32. JPRS 20438

Implementation of the Policy of Zonal Autonomy With
Regard to Various Nationalities in the Viet Bac Zone,
by Chu Van Tan, 16 pp.
VIETNAMESE, per, Hoc Tap, Jul 1963. JPRS 20739

LATIN AMERICA

Economic

Socialization of the Cuban Economy, 21 pp. RUSSIAN, per, <u>Byul Inostrannoy Kommercheskoy</u> <u>Informatsii</u> , No 5, 1963, pp 88-98.	JPRS 20547
Memoria 1960-1961 Report of the Secretariat of Communications and Transportation of Mexico. SPANISH, rpt, <u>Memoria 1960-1961, Mexican Secretariat</u> <u>of Communications and Transportation, Mexico City,</u> <u>1962, pp 31-39, 77-93, 99, 105, 129, 130.</u>	*ACSI I-3141 ID 2240852
Navigational and Trade Treaty Between Cuba and Albania, 5 pp. SPANISH, np, <u>Gaceta Oficial</u> , 12 Mar 1963, pp 2633-2635.	JPRS 20446
General Price Law, 8 pp. SPANISH, np, <u>Gaceta Oficial</u> , 3 Apr 1963, pp 3417-3420.	JPRS 20446
National Bank of Cuba Signatures, 7 pp. SPANISH, per, <u>Gaceta Oficial de la Republica de Cuba,</u> <u>14 Mar 1963, pp 2747-2749.</u>	JPRS 20602
Changes in the 1963 National Budget, 6 pp. SPANISH, per, <u>Gaceta Oficial de la Republica de Cuba,</u> <u>15 Mar 1963, pp 2773-2776.</u>	JPRS 20602
Organization of Labor Force and Wages, 10 pp. SPANISH, per, <u>Gaceta Oficial de la Republica de</u> <u>Cuba, 18 Mar 1963, pp 2801-2803.</u>	JPRS 20602
Thirty Arrested for Violations of Food Control Regulations, 5 pp. SPANISH, np, <u>Hoy</u> , 31 Jul 1963, p 3.	JPRS 20752
President of Inra-Discusses State of Agricultural Industry, 28 pp. SPANISH, per, <u>El Munko</u> , 11 Jun 1963, p 8.	JPRS 20342
Questions and Answers on Public Incomes, 6 pp. SPANISH, per, <u>Trimestre</u> , 1962, pp 63-68.	JPRS 20536
Practical Applications of Uniform System of Accounting, 5 pp. SPANISH, per, <u>Trimestre</u> , 1962, pp 69-73.	JPRS 20536
Government Economic Legislation Affecting Social Welfare, 13 pp. SPANISH, per, <u>Trimestre</u> , 1962, pp 76-87.	JPRS 20536
Industry Must More Efficiently Serve Agriculture, by Dang Van Quang, 9 pp. VIETNAMESE, np, <u>Nhan Dan</u> , 21 May 1963, p 2.	JPRS 20353

Latin America
Political

The Revolutionary Movement in Colombia, 7 pp.
FRENCH, np, La Voie Communiste, No 36, Jun, Jul 1963,
p 13. JPRS 20658

Secretary's Report to the 12th Argentine Communist
Party Congress, by Victorio Codovilla, 12 pp.
ITALIAN, per, Rinascita, No 21, 1963, pp 17-20. JPRS 19777

Quarterly Plan of Ministry of Foreign Affairs, 6 pp.
SPANISH, per, Gaceta Oficial, Vol LXI, No 67, 1963,
pp 3558-3560. JPRS 20342

Drugs Requiring Prescription, 5 pp.
SPANISH, per, Gaceta Oficial, Vol LXI, No 78, 1963,
pp 4118, 4119. JPRS 20342

The International Communist Conflict: Chilean
Communist Party Head Corvalan Analyzes the Dispute
With the Chinese, by Luis Corvalan, 26 pp.
SPANISH, per, Principios, Jul, Aug 1963, pp 121-153. JPRS 20658

The International Communist Conflict: Chilean Communist
Takes American Journalist in China, Anna Louise Strong,
to Task for Advocating Socialist Disunity, by
Joaquin Gutierrez, 6 pp.
SPANISH, np, El Siglo, 4 Jul 1963, p 2. JPRS 20387

Activities of the Uruguayan Left: El Sol Takes
Issue With El Popular Over the Way to Unity, 5 pp.
SPANISH, np, El Sol, No 166, 12 Jul 1963, p 4. JPRS 20453

Uruguayan Socialists Continue Polemic With Communists,
5 pp.
SPANISH, np, El Sol, No 168, Jul 1963, p 2, 7. JPRS 20705

Political Commission of Peruvian Communist Party
Issues Anti-Government Statement, 6 pp.
SPANISH, np, Unidad, 19 Jul 1963. JPRS 20658

Latin America
Military

Regulations Governing Uniforms and Insignia for Army Personnel.

SPANISH, rpt, Reglamento de Uniformes, Distintivos e Insignias Para el Personal del Ejercito, Bogota, 1951, 237 pp, Encl No 5 to Encl No 2 of C-20-63, OUSARMA, Colombia.

*ACSI I-3237
ID 2244416

Reorganization of the SAF NCO Specialists Corps, 6 pp.
SPANISH, per, Air Ministry Official Bulletin, No 1, 1963,

AF IR 1889005463

Jimenez Grullon Predicts Civil War, 6 pp.
SPANISH, np, El Caribe, 21 Jul 1963, p 6.

JPRS 20602

Sociological

A Criticism of Luis Carlos Prestes, by Lincoln Oest, 5 pp.
PORTUGUESE, np, A Classe Operaria, 15-30 Jun 1963, p 3.

JPRS 20659

Reviews of Conditions in Cuba: People's Courts, by Francisco Alabau Trelles, 5 pp.
SPANISH, per, Estudios Sobre el Comunismo, 1963, pp 100-102.

JPRS 20536

Reviews of Conditions in Cuba: Urgan and Industrial Reforms, by Antonio Alonso Avila, 6 pp.
SPANISH, per, Estudios Sobre el Comunismo, 1963, pp 103-106.

JPRS 20536

Reviews of Conditions in Cuba: Religious Persecution, by Lilia Duthil de Blanco, 7 pp.
SPANISH, per, Estudios Sobre el Comunismo, 1963, pp 106-109.

JPRS 20536

Cuban Social Security Law, 15 pp.
SPANISH, per, Gaceta Oficial, Vol LXI, No 65, 1963, pp 3474-3479.

JPRS 20342

Discussion on Class Warfare in Cuba, 5 pp.
SPANISH, np, Hoy, 31 Jul 1963, p 2.

JPRS 20752

CTC-R Revolutionary Instruction Schools, 5 pp.
SPANISH, np, La Tarde, 2 Jul 1963, p 6.

JPRS 20536

NORTH AMERICA

Political

The New United States Foreign Policy and European Security, by Pierre M. Gallois, 16 pp.
FRENCH, per, Revue de la Defense Nationale, No 4, 1963. AF 1832012163

WORLD WIDE

Economic

The Role of Prices in the Evaluation of Foreign Trade Volume by Country of Exchange, by Adam Marton, 17 pp.
HUNGARIAN, per, Statistikai Szemle, Vol XLI, No 6, 1963, pp 610-625. JPRS 20513

Political

What Should be the General Line of the International Communist Movement, by Michele Mestre, 5 pp.
FRENCH, per, Le Communiste, No 92, Jun, Jul 1963, pp 3, 4. JPRS 20548

The International Communist Conflict: The Split in the Communist World, by David Ellimer, 6 pp.
FRENCH, per, France Observateur, No 686, 27 Jun 1963, pp 8, 9. JPRS 20453

The International Communist Conflict: The Split in the World Communist Movement, by David Ellimer, 6 pp.
FRENCH, per, France Observateur, No 687, 1963, pp 10-12. JPRS 20477

The International Communist Conflict: Socialism Must Keep Its Promises, by David Ellimer, 5 pp.
FRENCH, per, France Observateur, No 690, 26 Jul 1963, p 4. JPRS 20659

French Dissident Communists State Their Views: Anti-Soviet Communist Opposition Criticizes Chinese. French-Chinese Hostilities, 5 pp.
FRENCH, per, La Voie Communiste, No 36, 1963, p 2. JPRS 20606

French Dissident Communists State Their Views: Anti-Soviet Communist Opposition Criticizes Chinese. Peace by Pious Wishing, by Arrieux, 7 pp.
FRENCH, per, La Voie Communiste, No 36, 1963, p 3. JPRS 20606

French Dissident Communists State Their Views: Anti-Soviet Communist Opposition Criticizes Chinese. The Twenty-Five-Point Letter, by Andre Renaud, 11 pp.
FRENCH, per, La Voie Communiste, No 36, 1963, p 16. JPRS 20606

World Wide
Political (Contd)

Organizations Which Support World Communism, by
Robert Orth. (SF-2805)
GERMAN, bk, Hilfsorganisationen des Weltkommunismus,
Ilmgau Verlag, 1963, pp 1-198.

*JPRS

The International Communist Conflict: Moscow on the
Defensive, 7 pp.
GERMAN, np, Christ und Welt, 19 Jul 1963, p 5.

JPRS 20658

The International Communist Conflict: Restalinization
Did Not Take Place, by Carl Gustav Stroebe, 10 pp.
GERMAN, np, Christ und Welt, No 26, 1963, p 5.

JPRS 20453

The International Communist Conflict: Review of Events
Leading to the Split, by Harry Hamm, 17 pp.
GERMAN, np, Frankfurter Allgemeine Zeitung, No 150,
3 Jul 1963, p 11.

JPRS 20387

The International Communist Conflict: Sino-Soviet
Relations are Coming to a Head, by Ernst Kux, 7 pp.
GERMAN, np, Neue Zuercher Zeitung, No 190, 13 Jul 1963,
p 4.

JPRS 20658

The International Communist Conflict: Moscow's Reply
to Peiping's Charges and the Collapse of Sino-Soviet
Talks, by Ernst Kux, 21 pp.
GERMAN, np, Neue Zuercher Zeitung, 21 Jul 1963, p 4F.

JPRS 20658

The International Communist Conflict: The Sino-Soviet
Dialogue -- Two Irreconcilable Monologues, by
Paolo Pardo, 5 pp.
ITALIAN, np, Paese Sera, 15 Jul 1963, pp 1, 11.

JPRS 20658

The International Communist Conflict: Discussion
is a Necessity Following the Publication of the
Soviet and Chinese Documents, 5 pp.
ITALIAN, per, Rinascita, No 29, 20 Jul 1963, p 2.

JPRS 20659

SCIENTIFIC

Aerospace

The Problem of Flight With the Help of Rocket
Propelled Devices-Interplanetary Flights, by
F. A. Tsander.
RUSSIAN, bk, 1961, 442 pp.

*FTD-TT-63-853

Aircraft Gyroscopes, by G. O. Firdlender,
M. S. Kozlov, 197 pp.
RUSSIAN, bk, Aviats Girokopicheskiye Pribory,
Gosudarstvennoye Nauchno-Tekh Izdatel'stvo,
Oborongiz, Moscow, 1961, pp 175-197, 243-377.
9685475

FTD-TT-62-1560

Aviation Records of the USSR, by A. D. Vinokurov,
A. I. Yegorov, 124 pp.
RUSSIAN, bk, Aviatsionnyye Rekordy SSSR, Moscow,
1960, pp 1-95. 9685087

FTD-TT-63-212

Rolling Moment of Flat Wings in an Oblique Super-
sonic Gas Flow, by Yu. I. Krasil'nikov, 17 pp.
RUSSIAN, bk, Inzhenernyy Sbornik, Inst Mekh Ak
Nauk SSSR, Vol XXIX, 1960, pp 124-135. 9669772

FTD-TT-63-402

Nikolayev and Popovich in Space; A Book on the
Unprecedented Group Flight of Space Ships Vostok-3
and Vostok-4 Around the Earth, by M. B. Chernenko.
RUSSIAN, bk, V Kosmose Nikolayev i Popovich; Kniga
o Besprimenom Gruppovom Polete Vokrug Zemli
Kosmicheskikh Korabley Vostok-3 i Vostok-4, Moscow,
1963, 495 pp.

*FTD-TT-63-847

Interplanetary Space Ships, by Yu. Kryuchkov.
RUSSIAN, pamp, DOSAAB, Moscow, 1958, pp 3-72.

Navy Tr 3487
APL 729

Aerodynamic Characteristics of Wings in a Super-
sonic Flow in Presence of Slipping, by
Yu. I. Krasil'nikov, 10 pp.
RUSSIAN, per, Inzhenernyy Zhur, Vol I, No 4, 1961,
pp 18-26. 9685091

FTD-TT-63-388

Wing Flutter at Nonlinear Aerodynamic Forces, by
P. S. Landa, S. P. Strelkov, 11 pp.
RUSSIAN, per, Iz Ak Nauk SSSR, Otdel Tekh Nauk,
Mekh i Mash, No 5, 1962, pp 111-117. 9685053

FTD-TT-63-201

Scientific
Aerospace (Contd)

Selected Articles From the Russian Periodical
Iz Vysshikh Ucheb Zaved Aviats Tekh.

No 3, 1958, pp 78-88. 9669783 Selecting the Relative Value of a Critical Cross-Section of a Nozzle for a Liquid Rocket Engine Chamber, by O. I. Kudrin, 13 pp.	FTD-TT-63-417
No 2, 1962. 9685092 Effect of Gyroscopic Moments From the Power Installation on the Dynamics of the Aircraft, by V. I. Klimov, 10 pp, (pp 15-22).	FTD-TT-63-197
Limitation of Oscillations in a Linear System of Stabilizing a Stable Longitudinal Move- ment, by M. Z. Litvin-Sedoy, 10 pp, (pp 39-47).	
No 3, 1962, pp 25-33. 9685129 Certain Variational Problems on Approximation, and Interaction, by G. I. Kostychev, 13 pp.	FTD-TT-63-401
No 4, 1962, pp 18-26. 9685489 The Optimality of Multistage Rockets, by O. F. Makarov, 13 pp.	FTD-TT-63-427
The First Flight to the Planet Mars. RUSSIAN, np, <u>Pravda</u> , 1962.	RAE Tr No 1026
Weight During Weightlessness, by N. Ya. Selyakov. RUSSIAN, per, <u>Priroda</u> , No 9, 1962, pp 114, 115.	Navy Tr 3493 APL 773
Launching From Orbit - This is, by N. Varvarov, 8 pp. RUSSIAN, per, <u>Tekh Molodezhi</u> , No 3, 1963, pp 6, 7. 9669780	FTD-TT-63-489
Structural Elements of a Liquid-Fuel Rocket Engine, by P. Drakulic, 18 pp. CROATIAN, per, <u>Vojnotehnicki Glasnik</u> , No 3, 1962, pp 200-208. 9685046	FTD-TT-63-346
AN-01 Analog Computer for Wind Tunnel, by Vladimir Nemec, 6 pp. CZECH, per, <u>Kridla Vlasti</u> , No 6, Mar 1962, pp 160, 161. 9684843	FTD-TT-63-187
Control of Cosmic Rockets, by Jindrich Pokorny, 5 pp. CZECH, per, <u>Kridla Vlasti</u> , No 6, Mar 1962, pp 172, 173. 9684843	FTD-TT-63-187

Scientific
Aerospace (Contd)

Research Recently Carried Out by the Bell Helicopter Company, by B. Kelly.

FRENCH, per, Technique et Science Aeronautiques et Spatiales, No 2, 1962, pp 121-125.

RAE Tr No 1020

Fortieth Anniversary of the Aeroflot, 6 pp.

POLISH, per, Skrzydlatą Polska, No 6, 1963, pp 4, 5. 9685048

FTD-TT-63-456

Twin-Engine Helicopters, by Ryszard Witkowski, 7 pp.

POLISH, per, Skrzydlatą Polska, No 6, 1963, pp 6, 7. 9685048

FTD-TT-63-456

Present Problems of Soviet Aeronautics, by

Klie Carafoli, 6 pp.

RUMANIAN, np, Rominia Libera, No 56, 25 Nov 1962, p 2. 9684914

FTD-TT-63-302

Wing-Fuselage Interference in High-Order Conical

Flow, by Elie Carafoli, Dan Mateescu, 23 pp.

RUMANIAN, per, Studii Si Cercetari de Mecanica Aplicata, Vol XIII, No 2, 1962, pp 275-294. 9685059

FTD-TT-63-391

Agriculture

Contribution to the Study of Forest Phytocoenoses, by N. Katz.

RUSSIAN, per, Botan Zhur, Vol XXVIII, No 4, 1943, pp 154-170.

CSIRO/No 6133

Formation of Inflorescences in Grapevines Vitis

Vinifera L. During Winter and Spring in Relation to

Increased Fruit Yield, by Z. Kolesnik.

RUSSIAN, per, Botan Zhur, Vol XLIV, 1959, pp 1730-1734.

CSIRO/No 6189

The Continuous Method of Grain Processing After

Harvesting, by Z. Chukhar'ko.

RUSSIAN, per, Ekonom Sel'skogo Khoz, Vol XXXIII, No 8, 1962, pp 85-88. 9209790

USDA Tr A-1377

Methods of Statistical-Phytosociological Analysis

of Forest Associations, by N. Konovalov, V. Povarnitsyn.

RUSSIAN, per, Iz Leningrad Lesnogo Inst, No 35, 1927, pp 69-104.

CSIRO/No 6186

Scientific
Agriculture (Contd)

Components of the Cutting Force and Work of
Cutting in Removing Branches From Logs, by
V. Nesterenko.
RUSSIAN, per, Lesnoi Zhur, Vol V, No 2, 1962,
pp 63-67.

CSIRO/No 6265

Animal Husbandry on Private Plots of Members of
Cooperatives, by Dimitur Yanev, 14 pp.
BULGARIAN, per, Zhivotnovudstvo, Vol XVII, No 5,
1963, pp 26-32.

JPRS 20406

Selected Articles From the Chinese Periodical
Chih-ping Chih-shih.

*ACSI I-3154
ID 2240859

Vol II, No 4, 1958.
D. Survey Report on Outbreaks and Control
of Stem Rust of Wheat in Anhwei During 1958,
(pp 202-216).

A. Notes on Experimental Studies on Several
Major Diseases and Their Control of Wheat,
(pp 216-222).

B. The Epidemiology of Wheat Rusts in China,
Their Control, and Problems Encountered in
Research Work, (pp 222-228).

C. Considerations for the Control of Stripe
Rust of Wheat in the Winter Growing, by
Chi Liang, (pp 228-233).

Vol III, No 2, 1959, pp 34-37.
E. How Fall Wheat Seedlings Were Hit by Leaf
Rust in the Peiping Hung-Ch'i People's Commune
During 1958.

Armilaria Root Rot in Cryptomeria Japonica D. Don
Plantations in Sao Miguel Island, by N. F. Dos Santos
de Azevedo.
FRENCH, per, Estudos e Informacao, Vol CXXIV, 1960,
pp 28-35.

NZDIA

Patscherkofel Phytotron, by L. Roussel.
FRENCH, per, Revue Forestiere Francaise, No 12,
1960, pp 769-774.

NZDIA

Scientific
Agriculture (Contd)

Further Contribution to the Development of Cost Accounting in Forestry, by R. Fromer.
GERMAN, per, Allgemeine Forst- und Jagdzeitung, 1962, pp 105-109.

NZDIA

Anatomical Studies of Tobacco Plants. Dissection of Tobacco Tissue. 1. Development of the Vascular Bundle in the Tobacco Seedling, by M. Fukuda.
JAPANESE, per, Bulletin Hatano Experimental Station, No 39, 1956, pp 59-66.

CSIRO/No 6174

Correlation Between Diameter Ratio and Production in Vineyards Based on American Stocks, by E. Zuluaga, L. Ponce.
SPANISH, per, Instituto Provincial Agropecuario, No 6, 1961, pp 167-178.

CSIRO/No 6188

Competition Between White Clover and Perennial Rye-Grass With Differences in Light Intensity and Moisture Supply, by G. Ennik.
SWEDISH, per, Instituut vor Biologisch en Scheikundig Onderzoek van Landbouwgewassen, Wageningen, 1960, pp 37-50.

CSIRO/No 6058

Biological & Medical Sciences

Use of Radioisotopes and Radiation in the Control of Insect Pests of Plants and Animals, by S. V. Andreyev, B. K. Martens, et al, 11 pp.
RUSSIAN, rpt, pp 1-14.

JPRS 20425

Radioelectronics in Biology, by L. B. Kaminir.
RUSSIAN, bk, 1962, 56 pp.

*FTD-TT-63-830

Selected Articles From the Russian Book
Biotsenozy Obrastanii v Kachestve Biopoglotitelya, 1961.

JPRS 20327

Research Direction and Objectives, by S. N. Skadovskiy, V. I. Uspenskaya, 11 pp, (pp 8-15).

Special Methods of Determining the Quantitative Features of Fouling Communities, by M. A. Messineva, V. I. Uspenskaya, 16 pp, (pp 130-142).

Seasonal Quantitative Changes in Fouling Communities, by S. N. Skadovskiy, M. A. Messineva, 43 pp, (pp 143-180).

Scientific
Biological & Medical Sciences (Contd)

Selected Articles From the Russian Book
Biotsenozy Obrastanii v Kachestve Biopoglotitelya,
1961. (Contd)

JPRS 20327

The Development of Biocoenoses in Relation to the
Nature and Shape of Artificial Surfaces, by
M. A. Messineva, V. I. Uspenskaya, 19 pp, (pp 181-197).

Development of Phytocoenoses and Their Uptake of
Organic Matter in the Dipper, the Stilling Basin
of the Rublevo Pumping Station, by S. N. Skadovskiy,
A. L. Byukhatova, et al, 25 pp, (pp 198-220).

Experimental Studies of Growth Accumulation on
Sieves in an Experimental Setup at the Rublevskaya
Water-Pumping Station, by S. N. Skadovskiy,
A. L. Bryukhatova, et al, 17 pp, (pp 298-314).

Perspectives of Biophysical-Chemical Methods of
Treating Water for Purposes of Water Supply, by
S. N. Skladovskiy, M. A. Messineva, et al, 5 pp,
(pp 341-349).

Transmission of the Distant Effect of Ionizing Radiation,
by O. P. Domareva, 9 pp.
RUSSIAN, bk, Deystviye Ioniziruyushchikh Izlucheniya na
Organizm, Moscow, 1962, pp 162-166.

JPRS 20421

The Effect of Protective Substances on the Survival
and Changes in Internal Organs of Mice With Different
Radiosensitivity Subjected to X-Ray Irradiation, by
N. I. Nuzhdin, I. A. Nechayev, 46 pp.
RUSSIAN, bk, Deystviye Ioniziruyushchikh Izlucheniya na
Organizm, Moscow, 1962, pp 173-197.

JPRS 20421

Epidemiological Investigation in a Focus of Infection,
by G. D. Grinberg, 96 pp.
RUSSIAN, bk, Epidemiologicheskoye Obsledovaniye v
Ochage Infektsii, 1962, pp 3-131.

JPRS 20376

Scientific
Biological & Medical Sciences (Contd)

Selected Articles From the Russian Book
Gigiyena i Toksikologiya Novykh Pestitsidov i Klinika
Otravleniy, Chapter X, 1962.

JPRS 20727

Materials for the Study of the Health of Workers
Engaged in the Productions of Chlorindan and
Heptachlorine, by P. I. Kalyaganov, 5 pp, (pp 426-430).

On the Remote Consequences of Chronic Intoxication
by Organic Mercury Compounds in Workers Engaged in
the Production of Granozan, by M. I. Ashbel',
R. G. Khil', 9 pp, (pp 430-439).

On the Remote Consequences of the Toxic Affection
of the Cardio-Vascular System in the Intoxication of
Workers Engaged in the Production of Granozan by
Organic Mercury Compounds, by N. S. Lashchenko, 7 pp,
(pp 439-446).

Concerning Some of the Characteristics of the Clinical
Course of Acute Intoxication by Mercaptophos and the
Intermediate Products of Its Production, by I. S. Fayerman,
E. M. Bongard, 7 pp, (pp 446-451).

Materials for Substantiating the Prophylactic Application
of Unithiol in Work With Organic Mercury Compounds, by
I. M. Trakhtenberg, G. I. Kulik, 8 pp, (pp 451-458).

Clinical Picture and Therapy of Acute Intoxications by
Mercaptophos, by A. V. Golubeva, E. R. Guglin, 6 pp,
(pp 458-462).

Functional Condition of the Kidneys in Workers Engaged
in the Production of DDT, by Ye. P. Krasnyuk, 7 pp,
(pp 466-472).

Use of Antibiotics in the Preservation of Food Products,
by G. B. Duvrova.
RUSSIAN, bk, Gostorgizdat, Moscow, 88 pp.

NRC/Ref. C-4210

Swine Plague.
RUSSIAN, bk, Infektsionnyye Bolezni Sviney, Chap VI,
1961, pp 50-130.

*ACSI I-3153-A
ID 2240858

Infectious Encephalomyelitis of Swine IEN, Teshen's
Diseases, Contagious Paralysis.
RUSSIAN, bk, Infektsionnyye Bolezni Sviney, Chap XXIV,
1961, pp 510-541.

*ACSI I-3153-B
ID 2240858

Biological & Medical Sciences (Contd)

Application of the Method of Isotopic Myelography in the Neurosurgical Clinic, by F. M. Lyass, 52 pp.
RUSSIAN, bk, Izotopnaya Miyelografiya, Moscow, 1962, pp 72-123; 127, 128.

JPRS 20478

Mediating Function of Acetylcholine and the Nature of Choline Receptors, by T. M. Turpayev, 36 pp.
RUSSIAN, bk, Mediatornaya Funktsiya Atsetilkholina i Priroda Kholinoreseptors, 1962, 21 pp.

Navy Tr 3523
NMS 801

Second Scientific Conference of the Institute of Cytology of the Academy of Sciences USSR, by V. Ya. Aleksandrov, L. F. Andreyeva, 85 pp.
RUSSIAN, bk, II Nauchnaya Konferentsiya Inst Tsitologii an SSSR. Tezisy Dokladov, Leningrad, 1962, pp 3-88.

JPRS 20634

Man in Space Flight, by Vladimir Ivanovich Yazdovskiy, 17 pp.
RUSSIAN, bk, Nauka i Chelovechestvo, 1962, pp 348-358, 408-410.

JPRS 20673

Pathoanatomical Radiation-Induced Changes in Lungs, by A. E. Ivanov, 119 pp.
RUSSIAN, bk, Patologoanatomicheskie Izmeneniya Legkikh Pri Luchevoi Bolezni, Moscow, 1961.

AEC-Tr-5500

On the Problem of the Functional Condition of the Cerebral Cortex in Patients Suffering From Hypertension on the Basis of Data on Rhythm Assimilated in an Electroencephalogram, by S. Ye. Ginzburg, 15 pp.
RUSSIAN, bk, Problemy Sosudistoy Neyrokhirurgii, Minsk, 1962, pp 202-213.

JPRS 20487

On the Compensation of the Motor Functions After the Removal of Cerebral Tumors, by V. I. Savich, 10 pp.
RUSSIAN, bk, Problemy Sosudistoy Neyrokhirurgii, Minsk, 1962, pp 235-243.

JPRS 20487

Velocity, Acceleration, Weightlessness, by P. K. Isakov, R. A. Stasevich, 63 pp.
RUSSIAN, bk, Skorosti, Uskoreniya, Nevesomost', Moscow, Chapters 4, 5, 1962, pp 81-147.

JPRS 20345

Salt Resistance in Plants and Ways to Increase It, by P. A. Genkel.
RUSSIAN, rpt, Timiryazevskie Chteniya, Vol XII, 1954, 82 pp.

PANSDOC/351

Scientific
Biological & Medical Sciences (Contd)

Studies on the Effect of Ionizing Radiations Upon the Nervous System, by P. F. Minayev, 38 pp.
RUSSIAN, bk, Vliyaniye Ioniziruyushchikh Izlucheniya na Tsentral'nuyu Nervnuyu Sistemu, Moscow, 1962, pp 5-7, 84-113, 131.

JPRS 20317

Injuries From Atomic Bomb Explosions, by A. A. Vishnevskiy, M. I. Shrayber, 23 pp.
RUSSIAN, bk, Voyenno-Polevaya Khirurgiya, Moscow, 1962, pp 45-58, 69-76, 122-125.

JPRS 20511

Survivability and Indication of Pathogenic Microorganisms in the Environment, by V. V. Skvortsov, V. S. Kiktenko. (NY-7764)
RUSSIAN, bk, Vyzhivayemost' i Indikatsiya Patogennykh Mikrobov vo Vneshney Srede, Moscow, 1960, 348 pp.

*JPRS

Measures For Protection From Ionizing Radiations When Working With Radioactive Isotopes, by G. F. Baratov, 63 pp.
RUSSIAN, bk, Zashchita Naseleniy v Usloviyakh Primeneniya Atomnogo, Khimicheskogo, i Bakteriologicheskogo Oruzhiya, 1962, pp 378-424.

JPRS 20729

Shifts in Adsorptivity of Tissue in Accute Radiation Sickness, by Ye. G. Dolgov, 6 pp.
RUSSIAN, per, Arkhiv Patologii, Vol XXIV, No 3, 1963, pp 62-65.

JPRS 20713

On the Classification of Tumorous Lesions of the Hemopoietic System, by R. D. Shtern, 11 pp.
RUSSIAN, per, Arkhiv Patologii, Vol XXV, No 3, 1963, pp 3-9.

JPRS 20714

Study of Pigment State and Transformation in Purple and Green Photosynthesizing Bacteria, by Yu. Ye. Yerokhin, A. A. Krasnovskiy.
RUSSIAN, per, Biofizika, Vol VIII, No 4, 1963, pp 446-456.

*ITD-TT-63-867

Ploidy in Perennial Species of Medick, Medicago, by E. N. Sinskaya, Z. P. Maleyeva.
RUSSIAN, per, Botan Zhur, Vol XLIV, No 8, 1959, pp 1103-1113.

NRC/Ref. C-4186

Scientific
Biological & Medical Sciences (Contd)

Podocarpophyllum - a New Conifer Genus From the Jurassic Carboniferous Deposits of Angren in Central Asia, by N. P. Gomolitsky.
RUSSIAN, per, Botan Zhur, Vol XLVII, No 7, 1962, pp 1029-1032.

NZDIA

On Certain Characteristics of Higher Nervous Functions in Animals Antenatally Irradiated With Ionizing Radiation, by I. A. Piontkovskiy, M. G. Ayrapetyants, 8 pp.
RUSSIAN, per, Bull Eksper Biol i Medit, Vol LV, No 1, 1963, pp 26-30.

JPRS 20731

Immunogenic Properties of Some Fractions of Causative Agents of Plague, by M. M. Faybich, N. F. Nepogodin, et al, 7 pp.
RUSSIAN, per, Bull Eksper Biol i Medit, Vol LV, No 1, 1963, pp 77-80.

JPRS 20740

Twenty-Four Hour Periodicity of Mitoses in Mice Following the Action of Gamma-Rays, by L. P. Kosichenko, 6 pp.
RUSSIAN, per, Bull Eksper Biol i Medit, Vol LV, No 1, 1963, pp 114-117.

JPRS 20735

Zoogeographic and Ecological Observations on Small Mammals in Yunnan Province, China, by A. G. Voronov, 15 pp.
RUSSIAN, per, Byull Moskov Obshch Ispyt Prirody, Otdel Biologii, Vol XLVIII, No 2, 1963, pp 18-28.

JPRS 20600

Material on the Fauna and on the Biology of Amphibians and Reptiles in the Tropical Zone of Yunnan Province China, by A. G. Bannikov, 18 pp.
RUSSIAN, per, Byull Moskov Obshch Ispyt Prirody, Otdel Biologii, Vol XLVIII, No 2, 1963, pp 29-42.

JPRS 20600

A Study of the Mitotic Cycle of the Epithelial Cells of the Cornea in Mice by Means of Tritium-Tagged Thymidine, by M. G. Chumak, 7 pp.
RUSSIAN, per, Dok Ak Nauk SSSR, Vol CXLIX, No 4, 1963, pp 960-962.

JPRS 20519

The Protective Action of Radioprotectors, Cysteamine, Cystinamine, and AET, on the Radiometric Effect Caused by Oleic Acid Oxidation Products, by M. L. Kakushkina, N. P. Korolev, et al, 6 pp.
RUSSIAN, per, Dok Ak Nauk SSSR, Vol CXLIX, No 4, 1963, pp 973-975.

JPRS 20517

Scientific
Biological & Medical Sciences (Contd)

- Entomological Research in the Mongolian Peoples Republic,
by A. Tsendsuren, 8 pp.
RUSSIAN, per, Entomolog Obozreniye, Vol XLII, No 1, 1963,
pp 219-225. JPRS 20688
- Level of Certain Reactive Protein Groups of Blood
Serum in Chronic Mercury Intoxication, by
V. A. Shalimov, 8 pp.
RUSSIAN, per, Farmakolog i Toksikolog, Vol XXIII, No 1,
1960, pp 67-71. JPRS 20350
- Hyperthermia in Dogs and Its Dependence on Available
Body Water During Muscular Exercise at High Environ-
mental Temperature, by M. P. Shek, 9 pp.
RUSSIAN, per, Fiz Zhur SSSR, Imeni I. M. Sechenova,
Vol XLIX, No 5, 1963, pp 542-547. JPRS 20748
- Modified Tissular Resistance Accompanying Acclimati-
zation of Animals to Moderate Hypoxia Under Natural
Conditions, by L. V. Serova, 7 pp.
RUSSIAN, per, Fiz Zhur SSSR, Imeni I. M. Sechenova,
Vol XLIX, No 5, 1963, pp 639-642. JPRS 20749
- Use of Ferric Chloride Solutions to Detoxify and
Remove Mercury, by S. F. Yavorovskaya, 6 pp.
RUSSIAN, per, Gig i San, No 3, 1949, pp 19-22. JPRS 20348
- Pollution of the Air by Mercury Fumes at a Control-
Testing Station, by M. M. Gimadeyev, 6 pp.
RUSSIAN, per, Gig i San, Vol XXIII, No 4, 1958, pp 75-77. JPRS 20350
- Combined Action of Neutron Irradiation and Elevated
Temperature on Animals, by A. F. Gur'yev, 7 pp.
RUSSIAN, per, Gig i San, Vol XXXVIII, No 5, 1963,
pp 24-29. JPRS 20379
- The Problem of the Functional State of the Thyroid
Gland in Chronic intoxications With Certain Poisons,
Lead, Mercury, by A. M. Monayenkova, 12 pp.
RUSSIAN, per, Gig Truda i Professional Zabol, pp 44-48. JPRS 20350
- Toxic Changes in the Cardio-Vascular System in Chronic
Intoxication With Organic Mercury Compounds, by
N. S. Lashchenko, 11 pp.
RUSSIAN, per, Gig Truda i Professional' Zabol, No 11,
1961, pp 23-29. JPRS 20350

Scientific
Biological & Medical Sciences (Contd)

On the Problem of the Mechanism of the Selectivity
of Toxicity of Organophosphorus Insecticides, by
Yu. S. Kagan, 9 pp.
RUSSIAN, per, Gig Truda i Professional Zabol, Vol VII,
No 5, 1963, pp 38-43.

JPRS 20522

Triad of Fallot Clinical Picture, Diagnosis, and
Surgical Treatment, by V. I. Burakovskiy,
M. V. Murav'yev, et al, 9 pp.
RUSSIAN, per, Grud Khir, Vol V, No 3, 1963, pp 3-8.

JPRS 20521

On the Problem of Lobectomy in Pulmonary Carcioma,
by A. N. Novikov, N. D. Garin, et al, 7 pp.
RUSSIAN, per, Grud Khir, Vol V, No 3, 1963, pp 54-57.

JPRS 20484

Biological Oxidation in Microbiology, by
V. N. Shaposhnikov, 28 pp.
RUSSIAN, per, Iz Ak Nauk SSSR, Ser Biol, No 3, 1963,
pp 348-365.

JPRS 20575

Experimental Research in Space Physiology, by
P. V. Vasil'yev, A. D. Voskreseskiy, et al.
RUSSIAN, per, Iz Ak Nauk SSSR, Ser Biol, No 1,
1963, pp 15-23.

*NASA TT F-186

Prevention of Occupational Mercury Poisoning, by
M. M. Gimadeyev, 6 pp.
RUSSIAN, per, Kazan Medit Zhur, No 5, 1960, pp 81-84.

JPRS 20350

Outbreak of Ectromelia in Rabbits, by V. A. Pankov,
A. T. Babicheva, 5 pp.
RUSSIAN, per, Krolikovodstvo i Zverovodstvo, No 7,
1962, pp 25-27.

AEC-Tr-5849

Radiation Exposure of Medical Personnel During Work
With AU 198 Granules in Neuro-Oncological Clinics,
by A. A. Volkov, N. K. Murathodzhayev, et al, 7 pp.
RUSSIAN, per, Medit Radiol, Vol VIII, No 5, 1963,
pp 39-43.

JPRS 20520

The Protective and Therapeutic Effect of Synergistic
Action of Effective Substances on the Outcome of
Radiation Sickness in Animals, by A. M. Stashkov,
V. P. Korotkova, 8 pp.
RUSSIAN, per, Medit Radio, Vol VIII, No 5, 1963,
pp 79-82.

JPRS 20520

Scientific
Biological & Medical Sciences (Contd)

Morphological Changes of Bone Tissue Nerves of Animals in Acute Radiation Sickness, by M. N. Pavlova, 9 pp.
RUSSIAN, per, Ortoped Travmat i Protezir, Vol XXIV, No 2, 1963, pp 9-14.

JPRS 20720

Investigation of the Coagulating Blood System After the Infusion of Protein Blood Substitute BK-8 in Experiment During Surgery, by N. A. Messineva, Ye. V. Karaseva, et al, 6 pp.
RUSSIAN, per, Problemy Gematolog i Perelivaniya, Vol VIII, No 6, 1963, pp 45-48.

JPRS 20523

Comparative Productivities of Ctenopharyngodon and Hypophthalmichthys, by F. Sukhoverkhov, A. Pisarenkova, 10 pp.
RUSSIAN, per, Rybovodstvo i Rybolovstvo, No 2, 1963, pp 13-16.

JPRS 20599

Contribution to the Study of the Age-Associated Characteristics of the Excitability and Functional Mobility of the Neuromuscular Apparatus in Warm-Blooded Animals, by S. I. Fudel-Osipova, 8 pp.
RUSSIAN, per, Sechenov Physiological Journal of USSR, Vol XLVIII, No 9, 1962, pp 1099-1104. 9210344

NIH 7-28-63

Effect of a Growth-Helping Substance of Petroleum Derivation on the Growth and Development of Some Perennial Plants, by A. N. Gul'akhmendov.
RUSSIAN, per, Trudy Inst Pochvoveden i Agrokhimii, Ak Nauk Azer SSR, Vol IX, 1960, pp 31-37.

NRC/Ref. C-4172

Radioactive Isotopes and Ionizing Radiations in Marine Biology, by G. G. Polikarpov, 25 pp.
RUSSIAN, per, Trudy Sevastopol Biolog Stantsii, Vol XIII, 1960, pp 275-292.

JPRS 20630

Effect of a Bacterial Film on the Leaching Out of Poisons From Antifouling Paint, by M. A. Dolgopol'skaya, Ye. S. Gurevich, et al, 9 pp.
RUSSIAN, per, Trudy Sevastopol Biolog Stantsii, Vol XIII, 1960, pp 309-314.

JPRS 20733

Scientific
Biological & Medical Sciences (Contd)

Toxicity of Poisons Used in Antifouling Paints,
by M. A. Dolgopol'skaya, Ye. S. Gurevich, 15 pp.
RUSSIAN, per, Trudy Sevastopol Biolog Stantsii,
Vol XIII, 1960, pp 315-324.

JPRS 20733

New Information on the Marine Period of Life and
the Marine Fishery of Pacific Salmon, by
I. B. Birman.

RUSSIAN, per, Trudy Soveshchaniy Ikytiolog
Komissiya, Ak Nauk SSSR, No 10, 1960, pp 151-164.

NRC/Ref. C-4195

Selected Articles From the Russian Periodical
Trudy Vses Gidrobiolog Obshch, Vol XI, 1961.

JPRS 20386

Some Data on the Reproduction of Dreissena
Polymorpha Pallas in the Uchinsk Reservoir, by
A. A. Kachanova, 7 pp, (pp 117-121).

Materials on the Biology of Mountain Rivers of the
Soviet Transcarpathian Area, by V. S. Ivlev,
V. M. Ivasik, 24 pp, (pp 171-188).

Relationship Between the Fodder Biomass and
Fish Production in Carp Ponds, by V. P. Lyakhnovich,
13 pp, (pp 299-308).

On Some Ways of Affecting Fresh Water Aquatic Life,
by A. V. Frantsev, 10 pp, (pp 323-330).

On a Hydrobiological Method of Decontaminating
Water Polluted With Organic Materials and on
Biocenology in Hydrobiology, by S. N. Skadovskiy,
9 pp, (pp 331-337).

Some Considerations Regarding the Introduction of
New Species of Fodder Fauna in the Crimean Waters,
by N. A. Zhuravel', 9 pp, (pp 338-344).

Distribution of Hydrophytes in the Reservoirs of
the Volga-Don Canal and Their Sanitation-Epidemiologi-
cal Evaluation, by A. A. Potapov, 8 pp, (pp 354-360).

Scientific
Biological & Medical Sciences (Contd)

Selected Articles From the Russian Periodical
Trudy Vses Gidrobiolog Obschch, Vol XI, 1961. (Contd)

JPRS 20386

On the Chemical and Sanitation-Biological Role
of Macrophytes in the Klyaz'minskoye Reservoir,
by N. M. Kabanov, 11 pp, (pp 361-369).

Increasing the Productivity of Industrial
Mollusks Unio Species Reproduction in Connection
With the Maintenance of Nacreous Raw Materials in
Our Inland Waters, by B. V. Vlastov, L. V. Yerokhina,
16 pp, (pp 394-405).

Increasing the Productivity of Industrial Mollusks
Unio Species Reproduction in Connection With
Maintenance of Nacreous Raw Materials in Our Inland
Waters, by B. V. Vlastov, 6 pp, (pp 406-410).

Exobiology - A New Field of Scientific Research, by
A. A. Inshenetskiy.
RUSSIAN, per, Vest Ak Nauk SSSR, Vol XXXII, No 11,
1962, pp 58-63.

*NASA TT F-166

The Use of Microorganisms in Feed Production, by
D. L. Shamis, 5 pp.
RUSSIAN, per, Vestnik Ak Nauk SSSR, No 5, 1963,
pp 58-60.

JPRS 20677

Radioactive Carbon in Hydrobiological Research, by
Yu. I. Sorokin, 5 pp.
RUSSIAN, per, Vest Ak Nauk SSSR, No 6, 1963, pp 69-71.

JPRS 20614

Improving Modern Apparatuses for Prolonged Artificial
Respiration, by V. P. Doroshchuk, 11 pp.
RUSSIAN, per, Vest Khirurg, Vol XC, No 3, 1963,
pp 81-87.

JPRS 20662

Studies of the Water and Thermal Regime of Leaves in
Plants of Different Ecological Types Under Natural
Conditions, by T. Gorishina.
RUSSIAN, per, Vest Leningrad Univ, Vol III, 1960,
pp 90-98.

CSIRO/No 6202

Ultraviolet-Induced and Spontaneous Mutations
in Chlorella Vulgaris Beijer, by K. V. Kvitko,
V. I. Khropova, 9 pp.
RUSSIAN, per, Vest Leningrad Univ, Ser Biol,
No 9 (2), 1963, pp 150-156.

JPRS 20609

Scientific
Biological & Medical Sciences (Contd)

Disturbance of Auditory and Vestibular Functions in Chronic Intoxication With Mercury, by Z. F. Nestrugina, 10 pp.
RUSSIAN, per, Vest Otorinolaringolog, Vol XX, No 4, 1958, pp 32-37.

JPRS 20350

Toxicity of Feeds Infected by Common Moulds, by B. G. Levitskiy, V. A. Konyukhova.
RUSSIAN, per, Veterinariya, Vol XXIV, No 10, 1947, pp 40-43.

GB/221

Some Systematic and Contact Insecticides Against Web Mite, by N. E. Aleksidze, G. V. Dolidze.
RUSSIAN, per, Vinodelie i Vinogradarstvo SSSR, No 5, 1961, pp 37-59.

NRC/Ref. C-4167

New Chemical Agent for Control of Phylloxera, by L. M. Kogan.
RUSSIAN, per, Vinodelie i Vinogradarstvo SSSR, No 8, 1961, pp 38-41.

NRC/Ref. C-4173

Biochemical and Morphological Changes in the Liver of Rats in Carcinogenesis Induced by N-Dimethylamino-azobenol and Amarant Injections, by B. L. Rubenchik, A. I. Bykorez, 9 pp.
RUSSIAN, per, Voprosy Onkologii, Vol IX, No 4, 1963, pp 68-75.

JPRS 20516

Prosthesis of Defects of the Anterior Abdominal Wall With a Capron Net After Removal of a Neoplasm, by A. Ya. Fishchenko, I. V. Ogorodnik, 5 pp.
RUSSIAN, per, Voprosy Onkologii, Vol IX, No 4, 1963, pp 93-95.

JPRS 20516

On the Etiology of Amyotrophic Lateral Sclerosis, by Kh. L. Bel'man.
RUSSIAN, per, Voprosy Psikhiatr i Nervopatolog, No 7, 1961, pp 86-94.

NIH 6-27-63

Conference on Research Methods in the Pathophysiology of Higher Nervous Activity of Man and Medical Psychology, by V. N. Myasishchev, I. M. Tonkonogiy, 8 pp.
RUSSIAN, per, Voprosy Psikhsolog, No 3, 1963, pp 176-180.

JPRS 20543

Properties of a Virus Isolated From the Feces of a Patient With Infectious Hepatitis Strain K3, by V. A. Ananyev, N. V. Kaverin.
RUSSIAN, per, Voprosy Virusolog, No 2, 1963, pp 217-221.

NIH 6-21-63

**Scientific
Biological & Medical Sciences (Contd)**

- Blood Picture of Individuals Working With Mercury and Its Organic Compounds, by V. Ye. Balashov, 5 pp.
RUSSIAN, per, Vrachebnoye Delo, No 6, 1959, pp 625-628. JPRS 20350
- The Trend of the Epidemiology of Influenza, by V. M. Zhdanov.
RUSSIAN, per, Zhur Mikrobiol, Epidemiol i Immunobiol, No 6, 1962, pp 148-155. NIH 6-43-63
- Staining Isolated Bacterial Structures With Fluorescent Antibodies, by I. F. Mikhaylov, Ye. S. Stanislavskiy, 9 pp.
RUSSIAN, per, Zhur Mikrobiol, Epidemiol i Immunobiol, Vol XXXIV, No 6, 1963, pp 74-78. JPRS 20618
- Criteria of the Specific Brightness of Bacteria Stained With Fluorescent Antibodies, by I. F. Mikhaylov, 7 pp.
RUSSIAN, per, Zhur Mikrobiol Epidemiol i Immunobiol, Vol XXXIV, No 7, 1963, pp 94-97. JPRS 20747
- Familian Amyotrophic Lateral Sclerosis, by T. L. Bunina.
RUSSIAN, per, Zhur Nevropatol Psikhiat imeni S. S. Korsakova, Vol LX, No 9, 1960, pp 1096-1100. NIH 6-12-63
- Broadening Biological Research in Psychiatry, by M. Ye. Vartanyan, 13 pp.
RUSSIAN, per, Zhur Nevropatol i Psikhiat imeni S. S. Korsakova, Vol LXIII, No 6, 1963, pp 804-813. JPRS 20369
- Selected Articles From the Russian Periodical Zoel Zhur.
- Vol XLI, No 7, 1962.
- Acclimatization of Fish and of Invertebrates, by A. F. Karpevich, 26 pp, (pp 969-985). JPRS 20499
- Rate of Fat Consumption at Different Temperatures and Life Cycles in Calanus Finmarchicus Gunn and Calanus Glacialis Jaschn, by A. P. Sushkina, 14 pp, (pp 1004-1012). JPRS 20502
- Role of the Trouble Factor in the Ecology of Wild Animals and Birds, by P. B. Yurgenson, 7 pp, (pp 1056-1060). JPRS 20498

Scientific
Biological & Medical Sciences (Contd)

Selected Articles From the Russian Periodical
Zool Zhur. (Contd)

- Vol XLI, No 8, 1962.
Regularities in the Distribution of Hibernation
Places and Migration Routes in Bird Populations,
by A. V. Mikheyev, 19 pp, (pp 1210-1219). JPRS 20608
- Protection of Natural Resources in the Light of
the Resolutions of the 22nd CPSU Congress, by
K. N. Blagosklonov, 14 pp, (pp 1121-1131). JPRS 20415
- Some General Regularities of the Dynamics of
Animal Populations, by N. P. Naumov, G. V. Nikolskiy,
18 pp, (pp 1132-1141). JPRS 20608
- Vol XLII, No 5, 1963.
The Hydrobiological Regime of the Kuybyshev
Reservoir: Forecast and Reality, by V. I. Zhadin,
19 pp, (pp 641-651). JPRS 20487
- Peculiarities of Ichthyofauna Distribution in
the Southeast Bering Sea, by V. P. Shuntov,
18 pp, (pp 704-715). JPRS 20623
- Morphological Characteristics of Microtus
Hyperboreus Vinogr, by V. G. Krivosheyev, 16 pp,
(pp 752-762). JPRS 20627
- Pest Control Agent, by Bertha Brandli-Schafroth, 6 pp.
AUSTRIAN, Patent No 167,432. Patent Office
- The Basic Medicinal Remedies of Chinese Medicine.
CHINESE, bk, Chapters I-VI. *FTD-TT-63-815
- Selected Articles From the Chinese Periodical
Chung-hua Wai-k'o Tsa-chih.
- Vol IX, No 3, 1961, pp 242, 243.
Chinese Journal of Surgery. *ACSI I-3189-A
ID 2244397
- Vol X, No 11, 1962, pp 718-721.
Chinese Journal of Surgery. *ACSI I-3189-B
ID 2244397
- Vol XI, No 1, 1963.
Cerebral Hemispherectomy for Malignant Brain Tumor,
by Tuan Kuo-sheng, Chao Ch'ung-chih, et al, 9 pp,
(pp 6-9). JPRS 20617

Scientific
Biological & Medical Sciences (Contd)

Selected Articles From the Chinese Periodical
Chung-hua Wai-k'o Tsa-chih. (Contd)

Vol XI, No 1, 1963.
Fatal Transfusion Reactions From Contamination
of Stored Blood, by Chin Shih-ao, Hsieh Yu-chin,
et al, 13 pp, (pp 35-40).

JPRS 20617

Experimental Studies of Perfusion in Upper Half
of Body of Animals Under Hypothermia Anesthesia,
Utilizing Heart-Lung Machine, by Su Hung-hsi,
et al, 11 pp, (pp 45-49).

Vol XI, No 2, 1963.
Open-Heart Surgery for Acyanotic Heart Disease
With Extracorporeal Circulation, by Su Hung-hsi,
Lin Ch'ung-chia, et al, 6 pp, (pp 87-89).

JPRS 20617

Preliminary Work Using Glucose of Dextran Solution
Blood Substitutes to Prime Heart-Lung Machine in
Extracorporeal Circulation, by Wang Yuan-ch'ang,
Chang T'ien-hui, et al, 9 pp, (pp 102-106).

The Use of Heparinized Blood Substitutes in
Hypothermic Partial Perfusion, by Shang Te-yen,
Hsu Shou-ch'ing, et al, 7 pp, (pp 107-110).

Clinical Value of Burn Wound Infection Bacteria
in Antibiotic Sensibility Tests, by Hsu Yueh-ju,
Liu Yueh-han, et al, 15 pp, (pp 111-116).

Sheathed Cylinder Thermovariator for Hypothermic
Extracorporeal Circulation With Direct Vision
Operations, by Jen Ch'ang-yu, Wan Te-hsing, et al,
11 pp, (pp 120-122).

Research on the Characteristics of the Shanghai
Model No 2, Horizontal Rotating-Disk Oxygenator,
by Yeh Ch'un-hsiu, Cheng Kuei-yuan, et al, 5 pp,
(pp 123, 124).

Preliminary Report on Clinical Utilization of the
Shanghai Model No 2, Oxygenator, by Yeh Ch'un-hsiu,
Sung Hsiang-ming, et al, 9 pp, (pp 125-127).

Critique of Huang Chia-szu's Surgical Theory, by
T'ien T'ung-kuei, Chao Chih-yun, et al, 8 pp,
(pp 166-168).

Scientific
Biological & Medical Sciences (Contd)

- Skin Changes in Work With Radioactive Luminescent Paint, by L. Jirasek, O. Jurnen, 7 pp.
CZECH, per, Acta Univ Carolinae, Med Suppl, Vol XIV, 1961, pp 219-222. AEC-Tr-5815
- The Effect of Freezing Temperature on the Percentage of Destruction and Physiological Damage of Micro-organisms, by Jan Arpai, 20 pp.
CZECH, per, Biologia, Vol XVI, No 1, 1961, pp 31-39. AEC-Tr-5847
- Question of Experimental Pathogenicity and Resistance of the Organism Against the Infection by Influenza Viruses of the A-FE Group, by Dionyz Blaskovic.
CZECH, per, Ceskoslovenska Epidemiologie, Mikrobiologie, Immunologie, Vol VII, No 6, 1958, pp 361-364. NIH 5-37-63
- Leukemia and Pregnancy, by B. Wiedermann, J. Prochazka, et al.
CZECH, per, Vnitřní Lekarství, No 2, 1956, pp 598-607. NIH 5-38-63
- Models of Nerve Cells, by M. ten Hoopen.
DUTCH, per, Tijdschrift van het Nederlands Radio-genootschap, Vol XXVII, No 1, 1962, pp 17-32. *Navy/APL 259
- Salmon Species New to the Arctic Ocean, by K. Sergejeff.
FINNISH, per, Suomen Kalastuslehti, Vol LXVII, No 6, 1960, pp 219-221. NRC/Ref. C-4238
- Idiopathic Stenoses of the Outflow Tract of the Left Ventricle, by P. Soulie, F. Joly, et al.
FRENCH, per, Acta Cardiologica, Vol XVII, No 4, 1962, pp 335-378. NIH 6-29-63
- Depressive States, by Jacob Wyrsch.
FRENCH, per, Acta Psychosomatica, No 1, 1948, pp 3-42. NIH 6-15-63
- The Attraction Exercised on Anopheles Maculipennis Atroparvus by Carbon Dioxide in Apparatus of Choice II, by P. H. van Thiel, C. Weurman.
FRENCH, per, Acta Tropica, Vol IV, No 1, 1947, pp 1-9. NIH 5-14-63
- Cytological Manifestations of the Infections of KB Cell With Parainfluenza I Myxovirus Sendai Virus, by G. Demont, A. Berkuloff, et al.
FRENCH, per, Annales de l'Institut Pasteur, Vol CIV, 1963, pp 26-42. NIH 6-40-63

Scientific
Biological & Medical Sciences (Contd)

Absorption and Utilisation of Luminous Energy by Plants Cultivated Under Natural Conditions, by C. Costes.
FRENCH, per, Annales de Physiologie Vegetale, Vol III, 1960, pp 175-229.

MU/T. 518

Arguments in Favor of the Independence of the Mechanisms of Action of Various Neurohypophyseal Peptides on the Osmotic Flow of Water and the Active Transport of Sodium in the Same Receptor; Studies in the Bladder and Skin of Rana Esculenta L, by J. Bourguet, J. Maetz.
FRENCH, per, Biochimica Biophysica Acta, Vol LII, 1961, pp 552-565.

NIH 6-3-63

Tyrosine Metabolism of Insects. XI. Control of Tyrosine Metabolism by Ecdysone, by Peter Karlson, Constantin E. Sekeris.
FRENCH, per, Biochimica et Biophysica Acta, Vol LXIII, 1962, pp 489-495.

NIH 6-20-63

Comparison of the Effectiveness of Five Anti-brucellosis Vaccines in Ewes, by H. Lafonetre.
FRENCH, per, Bulletin Academie Veterinaire de France, No 8, 1962, pp 319-324.

NZDIA

What are the Stimuli That Incite the Anopheles Maculipennis Atroparvus to Visit and to Sting Man or Livestock?, by P. van Thiel.
FRENCH, per, Bulletin Societe de Pathologie Exotique, Vol XXX, 1937, pp 193-203.

NIH 5-7-63

Selected Articles From the French Periodical
Comptes Rendus Academie des Sciences.

Vol CLXXX, 1926, pp 1142-1144.
The Formation of Hyposulphites at the Expense of Sulphur by Soil Micro-Organisms, by G. Guittonneau.

CSIRO/No 6223

Vol CLXXXII, 1926, pp 661-663.
The Oxidation of Sulphur by Microbes, by G. Guittneau.

CSIRO/No 6224

Vol CLXXXV, 1927, pp 1518-1520.
The Influence Exerted on Nitrification by Sulphur and the Products of Its Solubilization in the Soil, by G. Guittonneau.

CSIRO/No 6225

Vol CCXLVIII, No 8, 1959, pp 1209-1211.
Plant Morphology. Transformation of the Vegetative Apex in Nicotiana Tabacum L. White Burley Variety Into Floral Apex, by J. Bonnard.

CSIRO/No 6176

Scientific
Biological & Medical Sciences (Contd)

- Cytopathogenic Effect of Influenza B Myxovirus, Lee Strain, on Culture Cells, by Andre Berkaloff, Theo Stussi, et al.
FRENCH, per, Journal Microscopie, No 1, 1962, pp 351-362. NIH 6-28-63
- Mouse and Human Mammary Cancer. Comparative Study in the Electron Microscope, by Francoise Haguenau.
FRENCH, per, Pathologie Biologie, Vol VII, No 9, 10, 1959, pp 989-1015. NIH 5-24-63
- Nicotiana Tabacum L.: Vegetative Point and Morphology, by J. Bonnard.
FRENCH, per, Revue de Cytologie et de Biologie Vegetales, Vol XX, No 3, 1959, pp 187-228. CSIRO/No 6177
- Electron Microscope Study of the Infrastructural Changes Presented by the Polynuclear Neutrophils in Aseptic Inflammatory Foci, by A. Policard, A. Collet, et al.
FRENCH, per, Revue d'Hematologie, Vol XIV, No 2, 1959, pp 97-117. NIH 5-19-63
- The Gm(a), Gm(b), Gm(x) Factors in the Course of Leukoses, by A. Eyquem, J. Dausset, et al.
FRENCH, per, Vox Sang, No 7, 1962, pp 362-369. NIH 6-38-63
- Pentastomida, by R. Hemons.
GERMAN, bk, Bronns: Klassen des Tierreichs, Berlin, 1935, Vol IV: Arachnoiden, Book 1: Pentastomida, 29 pp. *Navy/NMS
- New Ways of Fruit Storage, by K. Zanon.
GERMAN, rpt, South Tyrolian Farmers' Calendar, 1961, 12 pp. NRC/Ref. C-4108
- Possibilities of Quick Maturing of Fruit and Vegetables, by K. Zanon.
GERMAN, rpt, South Tyrolian Farmers' Calendar, 1962, 9 pp. NRC/Ref. C-4109
- Histology of the Testes in Pituitary Tumors, by Horst Noelle.
GERMAN, per, Acta fuer Endocrinologica, Vol XXXVII, 1961, pp 103-109. NIH 5-21-63
- Pregnancy Test on Earthworm, by G. Hasenbein.
GERMAN, per, Archiv fuer Gynakologie, Vol CLXXXI, 1951, pp 15-28. INSDOC/T. 5087

Scientific
Biological & Medical Sciences (Contd)

A New Surgical Method for the Radical Treatment of
Femoral Hernia, by Ed. Bassini, 36 pp.

GERMAN, per, Archiv fuer Klinische Chirurgie,
Vol XLVII, 1894, pp 1-25.

Navy Tr 3520
NMS 798

The Pressure-Volume Relationships in the Warm-
Blooded Heart, by W. Gebhardt.

GERMAN, per, Archiv fuer Kreislaufforschung, Vol XXXIV,
1961, pp 201-244.

NIH 5-42-63

Therapy of Diabetic Retinopathy, by U. Dardenne, 32 pp.

GERMAN, per, Arzneimittel-Forsch, Vol IX, 1959,
pp 672-678.

AEC-UCRL-Tr-937

The Mechanism of Radiation Damage to Nerves at
Low Dosage Levels, by W. Kroebel, K. Vaneslow.

GERMAN, per, Atomkernenergie, Vol VI, No 10, 1961,
pp 385-396.

*Navy/APL 249

The Larval System of Werner, by G. Friese.

GERMAN, per, Beitrage zur Entomologie, Vol X,
No 1, 2, 1960, pp 8-25.

CSIRO/No 6086

Lumbar Puncture of Hydrocephalus, by H. Quincke.

GERMAN, per, Berliner Klinische Wochenschrift,
Vol XXXVIII, 1891, pp 929-933.

NIH 5-22-63

Impairment of Fatty Acid Synthesis in Hunger and
Alloxan-Diabetes II. Fatty Acid Synthesis in the
Liver of Alloxan-diabetic Rats, by Otto Wieland,
I. Neufeldt, et al.

GERMAN, per, Biochemische Z, Vol CCCXXXVI, 1963,
pp 455-459.

NIH 5-33-63

The Biochemical Function of Biotin IV. The

Biosynthesis of Biotin, by Axel Lezius,
Erika Ringelmann, et al.

GERMAN, per, Biochemische Z, Vol CCCXXXVI, 1963,
pp 510-525.

NIH 5-31-63

The Contribution of Kinetin Research Towards an
Understanding of Plant Correlations, by K. Mothes.

GERMAN, per, Deutsche Botanische Gesellschaft,
Berichte, Vol LXXIV, 1961, pp 24-41.

CSIRO/No 6180

On a Method of Direct Detection of the Virus Y in
Different Parts of the Potato Tuber, by F. Sprau.

GERMAN, per, Deutsche Botanische Gesellschaft
Berichte, Vol LXXIV, No 5, 1961, pp 164-169.

NRC/Ref. C-4187

Scientific
Biological & Medical Sciences (Contd)

Water-Soluble Bitter Substance From Oats, by W. Mohr.
GERMAN, per, Deutsche Lebensmittel-Rundschau, Vol XLIX,
1953, pp 127-131.

GB/221

Variola. Clinical Medicine, Epidemiology and Laboratory
Diagnosis of a Case of Varioloid Imported on a Flight,
by K. H. Andres, H. Lieske, et al.
GERMAN, per, Deutsche Medizinische Wochenschrift,
Vol LXXXIII, No 1, 1958, pp 12-17, 25-26.

NIH 5-5-63

Possibilities and Limits of Psychopharmacotherapy
With Tranquilizers and Neuroleptics, by H.-J. Haase.
GERMAN, per, Deutsche Medizinische Wochenschrift,
Vol LXXXVIII, No 11, 1963, pp 505-514.

NIH 6-2-63

Problems Connected With the Manufacturing of Processed
Cheese, by A. Moyer.
GERMAN, per, Deutsche Molkerei-Zeitung, Vol LXXXII,
No 31, pp 1115-1117, No 32, pp 1156-1159, No 33,
pp 1190-1192, 1961.

CSIRO/No 5664

On the Formation of Hydorgen Sulphide in Meat by
Microorganisms and by Heating, by H. Baumgartner,
F. Baum.
GERMAN, per, Ernährungsforschung, Vol V, No 1, 1960,
pp 40-55.

CSIRO/No 6149

Semi-Micro Determination of Antioxidants in Lard,
by B. A. J. Sedlacek.
GERMAN, per, Fette und Seifen, Vol LXIII, No 11, 1961,
pp 1053-1056.

GB/221

Participation of Enzymes in Formation of Fatty Bitter
Substance in Damaged Grains, by B. Thomas, M. Rothe.
GERMAN, per, Getreide und Muhl, Vol IV, 1954, pp 17-19.

GB/221

Behavior of Gluten Proteins in the Treatment of Flour
With Gamma Rays, by A. R. Deschreider, 21 pp.
GERMAN, per, Getreide und Muhl, Vol X, No 5, 1960,
pp 49-54.

AEC-Tr-5798

Isolation and Properties of Lipofuscin From Human
Heart Tissue, by G. Siebert, P. B. Diezel, et al.
GERMAN, per, Histochemie, No 3, 1962, pp 17-45.

NIH 6-33-63

Contribution to Tetanus Treatment, by W. Nagel.
GERMAN, per, Kinderarztliche Praxis, Vol III, 1961,
pp 107-110.

INSDOC/T. 5261

Scientific
Biological & Medical Sciences (Contd)

Electron Microscopic Demonstration of Unusual Particles
in the Interstitial Cell of the Human Lung, by
Heribert Schulz.

GERMAN, per, Klinische Wochenschrift, Vol XXXVIII,
No 15, 1960, pp 912-916.

NIH 6-17-63

The Heterogenicity of Leucinaminopeptidase. Investi-
gation of Organs and Serum in Diseases of the Liver,
Gallbladder and Pancreas, by B. Schobel, F. Wewalka.
GERMAN, per, Klinische Wochenschrift, Vol XL, No 20,
1962, pp 1048-1056.

NIH 6-4-63

Microscopic Study of the Skeletons of Coccolithineae
Calcium Flagellata. Summary of Methods and Results.
I. The Shape of the Coccosphere and Its Structural
Elements. II. Microstructure of the Coccoliths, by
E. Kemptner.

GERMAN, per, Mikroskopie, Vol VII, 1952, pp 375-386.

NZDIA

How Do Mosquitoes Find Their Host?, by
B. Schaerffenberg.

GERMAN, per, Naturwissenschaften, Vol XLIX, No 17,
1962, pp 386-388.

NIH 5-39-63

On the Behavior of Cardiac Glycosides in the Kidney
as Cause of Differences in Their Diuretic Activity,
by Gunther Vogel, Fritz Lauterbach.

GERMAN, per, Naunyn-Schmiedeberg's Archiv fuer
Experimentelle Pathologie und Pharmakologie,
Vol CCXLIV, 1963, pp 334-350.

NIH 5-3-63

Changes of the Leukocyte Picture in Actinotherapy
of Malignant Tumors, by J. Durkovsky, V. Eichnerova,
et al.

GERMAN, per, Neoplasma, Vol IX, No 5, 1962, pp 507-516.

NIH 5-26-63

Applanation Tonometry of a Prone Patient, by G. Strobl.
GERMAN, per, Ophthalmologica, Vol CXLIV, 1962,
pp 93-96.

*Navy/APL 268

The Basal Motor Function of the Brain Cortex During
Phases of Desynchronized EEG Activity in the Natural
Sleep of Cats, by E. Kanzow, D. Krause, et al.

GERMAN, per, Pflugers Archiv, Vol CCLXXIV, 1962,
pp 593-607.

NIH 5-6-63

Transtubular Sodium Chloride Flow and Permeability
to Nonelectrolytes in the Proximal and Distal Con-
volution of the Rat Kidney, by K. H. Gertz.

GERMAN, per, Pflugers Archiv, Vol CCLXXVI, 1963,
pp 336-356.

NIH 5-10-63

Scientific
Biological & Medical Sciences (Contd)

Experiments on the Quantitative Determination of β -Indole-Acetic Acid Heteroauxin and Its Localization in the Tissues of Plants, by V. Ebert.
GERMAN, per, Phytopathologische Z, Vol XXIV, 1955, pp 216-242.

CSIRO/No 6172

Optical Behaviour of Plant Tissue in Long-Wave Ultraviolet Light, by P. Metzner.
GERMAN, per, Planta, Vol X, 1930, pp 281-313.

GB/221

Photodynamic Separation of Mutations in Spores of *Penicillium Notatum*, by Reinhard Kaplan.
GERMAN, per, Planta, Vol XXXVIII, 1950, pp 1-11.

*AEC

A New Heat Exchanger for the Cold Rooms Used for the Quick Freezing of Cattle Meat, by U. Sellario.
GERMAN, per, Schlacht-und Viehhof-Zeitung, Vol LX, No 10, 1960, pp 343-345.

CSIRO/No 5878

Suicide. Sickness Unto Death.
GERMAN, per, Der Spiegel, Vol XVII, No 5, 1963, pp 32-44.

NIH 5-8-63

The Influence of Quantitative Undernutrition on Growth, Blood and Blood Formation of Rats of Various Ages, by G. Zbinden, A. Studer.
GERMAN, per, Verhandlungen der Naturforschenden Gesellschaft in Basel, Vol LXVII, No 2, 1956, pp 341-366.

CSIRO/No 6141

Radioautographic Studies on Bone Marrow Erythroblasts Incubated in Vitro With H^3 -Thymidine, by Carlo Mauri.
GERMAN, per, Wiener Zeitschrift für Innere Medizin, Vol XLII, 1961, pp 354-361.

NIH 5-47-63

A Rhinovirus of Cattle, by Konrad Bogel, Hans Bohm.
GERMAN, per, Z Bakteriologie i Originale, Vol CLXXXVII, 1962, pp 2-14.

NIH 5-1-63

Effect of External Factors on the Action of Wind on the Transpiration of Plants, by W. Griep.
GERMAN, per, Z fuer Botanik, Vol XXXVI, 1940, pp 1-54.

CSIRO/No 5844

Investigations Into Chamois in the Elbsandstein District, by L. Briedermann.
GERMAN, per, Z fuer Jagdwissenschaft, No 4, 1961, pp 139-166.

NZDIA

**Scientific
Biological & Medical Sciences (Contd)**

Investigations on the Vaccine Virus. Report V. Electron-Microscope Study on the Pepsin Decomposition of the Elementary Body Upon Variation of Fixation and pH Value, by Dietrich Peters. GERMAN, per, Z fuer Naturforschung, Vol XIIb, No 11, 1957, pp 697-703.

NIH 6-5-63

Optokinetic Effectiveness of Moving Periodic Patterns From Measurement Taken on the Beetle *Clorophanus Viridis*, by Bernhard Hassenstein. GERMAN, per, Z fuer Naturforschung, Vol CXLVI, No 10, 1959, pp 659-674.

Navy Tr 3438
APL 309

Observations on the Systematic Classification of Some Parrots, by H. Boetticher. GERMAN, per, Zoologischer Anzeiger, Vol CXLIII, 1943, pp 191-200.

CSIRO/No 6219

Second Report on the Selection of Malus Stocks and Their Vegetative Reproducibility, by G. Futh. GERMAN, per, Zuchter, Vol XXXI, No 8, 1961, pp 340-346.

NCR/Ref.
C-4078

Leukemia and Pregnancy, by E. Gallico. HEBREW, per, Harefuah, Vol LVI, 1959, pp 172-174.

NIH 5-46-63

Some Remarks on the Problem of Insect Resistance to Insecticides, by K. R. S. Asher. HEBREW, per, Tavruah, Vol VIII, 1956, pp 30-34.

PANSDOC/496

Concentration of Adenovirus Antigens by Simple Methods, by M. Simon. HUNGARIAN, per, Kiserletes Orvostudomány, No 14, 1962, pp 298-305.

NIH 6-24-63

Origin and Significance of the Mechanical Properties of the Lung, by I. Setnikar. ITALIAN, per, Archiv di Fisiol, Vol LV, No 3, 1955, pp 349-374.

NIH 6-9-63

The Verbal-Mimetic-Emotional Disolution in Amyotrophic Lateral Sclerosis, by C. Gentili, V. Volterra. ITALIAN, per, Giornale Psichiat Neuropatol, Vol LXXXVIII, 1960, pp 467-496.

NIH 5-35-63

Milk Changes Following Infections of the Udder, by G. Mantovani. ITALIAN, per, Societa Italiana delle Scienze Veterinarie, Vol XI, pp 171-176.

NZDIA

Scientific
Biological & Medical Sciences (Contd)

- Studies on Experimental Uremia, by S. Schiano,
F. D'Onofrio, 13 pp.
ITALIAN, per, Sperimentale, Vol CVII, 1957,
pp 435-446. Navy Tr 3521
NMS 799
- The Preparation of Anti-Virus Substance Abikoviromycin,
by Umezawa Hamao, Tazaki Masakatsu, et al.
JAPANESE, bk, Tokukyu Kobo, Sep 1954, pp 1, 2. NIH 5-2-63
- Adenosinetriphosphate and Related Compounds in the
Muscles of Aquatic Animals, by T. Saito.
JAPANESE, per, Bulletin Japanese Society of Scientific
Fisheries, Vol XXVII, No 5, 1961, pp 461-470. NRC/Ref. C-4235
- A Survey of Studies on Carcinogenesis, by Hideya Endo.
JAPANESE, per, Journal Japan Biochem, Vol XXXIV, No 8,
1962, pp 319-330. NIH 5-13-63
- Epidemiological Study on Amyotrophic Lateral Sclerosis
ALS and Other Neighboring Motor Neuron Disease in KII
Peninsula, by K. Kusi.
JAPANESE, per, Seishin Shinkeigaku Zasshi, Vol LXIV,
1962, pp 85-89. NIH 5-36-63
- Spontaneous Sensory Impulses of the Superior Laryngeal
Nerve in the Cat, by Tadaaki Sumi.
JAPANESE, per, Seitai no Kagaku, Vol IX, No 3, 1958,
pp 235-240. NIH 5-15-63
- Sensory Impulses From the Larynx and the Mechanism
of Formation Thereof, by Tadaaki Sumi.
JAPANESE, per, Seitai no Kagaku, Vol X, No 1, 1959,
pp 30-38. NIH 5-16-63
- Preparation of Triostin, a New Antibiotic, by
Ken Katagiri.
JAPANESE, Patent No 9,150, 1961. NIH 6-31-63
- Cell Counts of Can Milk, by O. Klasttrup.
NORWEGIAN, per, Nordisk Veterinaermedicin, Vol XII,
1960, pp 621-638. NZDIA
- Some Factors Influencing the Pigmentation of Nodules
of Leguminous Plants, by A. Nowotny-Mieczynska.
POLISH, per, Acta Microbiologica Polonica, Vol I,
No 1, 1951, pp 42-51. NZDIA
- Numerical Distribution and Frequency of Incidence of
Species in the Ground Stratum, by M. Dabrowski.
POLISH, per, Ekologia Polska, Vol IV, No 12, 1956,
pp 349-376. CSIRO/No 6131

Scientific
Biological & Medical Sciences (Contd)

- Tentative Explanation of the Mechanism of Action of Adrenalin on the Contractile Activity of the Human Uterus, by Miroslaw Telko, Anna Cieciorowska. POLISH, per, Ginekologia Polska, Vol XXXI, No 2, 1960, pp 263-268. NIH 5-23-63
- Modifications of Proteins of Lyophilized Gluten Treated by Gamma Irradiation. I., by A. R. Deschreider, 11 pp. POLISH, per, Przeglądu Zbozowo-Mlynarskiego, Vol V, No 1, 1961, pp 4-9. 9210698 AEC-Tr-5795
- Modifications of Proteins of Lyophilized Gluten Treated by Gamma Irradiation. II., by A. R. Deschreider, 8 pp. POLISH, per, Przeglądu Zbozowo-Mlynarskiego, Vol V, No 2, 1961, pp 29-34. 9210708 AEC-Tr-5797
- Changes in Physical and Mechanical Properties of Poplar Wood, Populus Marilandica Bosc. Induced by the Fungus Poria Vaporaria, by M. Kubiak. POLISH, per, Sylvan, Vol CVI, No 3, 1962, pp 25-38. CSIRO/No 6229
- Pneumopathy, Produced on Rats With Nephrotoxic Sera, by Jose Augusto Laus Filho, et al, 30 pp. PORTUGUESE, per, Revista Association Medica Brasil, Vol VI, 1960, pp 185-196. Navy Tr 3522 NMS 800
- The Biology of the Codling Moth as the Basis for Its Control, by M. Tadic, 97 pp. SERBO-CROATIAN, bk, Biologija Kao Osnova za Njegovo Suzbijanje, 1957, 100 pp. OTS 60-21681 PL-480
- Segmental Squares, Linings of Pressure Tunnels in Anisotropic Mountain Massives, by Dj. Lazarevic, 107 pp. SERBO-CROATIAN, bk, Segmentni Kvadrati, Obloge Hidrotehnickih Tunela Pod Pritiskom u Anizotropskim Brdskim Masivima, Vol II, 1955, 75 pp. OTS 60-21657 PL-480
- Selected Articles From the Serbo-Croatian Periodical Lijecnicki Vjesnik, Vol LXXXIV, 1962.
- No 1. OTS 62-11763/1
Medical Journal, by T. Beritic, 67 pp. PL-480
- No 2. OTS 62-11763/2
Medical Journal, by T. Beritic, 56 pp. PL-480
- No 3, OTS 62-11763/3
Medical Journal, by T. Beritic, 61 pp. PL-480
- No 4, OTS 62-11763/4
Medical Journal, by T. Beritic, 49 pp. PL-480

Scientific
Biological & Medical Sciences (Contd)

Species, Distribution and Seasonal Incidences of Ticks in Dalmatia With Reference to the Occurrence of Tick Paralysis, by V. Cvjetanovic.
SERBO-CROATIAN, per, Veterinaria, 1956, Vol IV, 1956, pp 589-594.

NRC/Ref.
C-4076

The Organ of Johnston of the Culicidae, by Antonio Arnal.
SPANISH, per, Bol Real Soc Esp Historia Nat, Biolog Sec, Vol LVI, No 1, 1958, pp 5-20.

NIH 6-30-63

Familial and Hereditary Amyotrophic Lateral Sclerosis. Study of the Araque Family, by N. R. Lopez Aydillo.
SPANISH, per, Trabajos del Instituto Cajal de Investigaciones Biologicas, Vol LII, 1960, pp 153-167.

NIH 5-43-63

Chemistry

Bonding Agents and the Technology of Adhesive Bonding, by D. A. Kardashov, 376 pp.
RUSSIAN, bk, Klei i Tekhnologiya Skleivaniya, Moscow, 1960, pp 1-285. 9685476-V

FTD-TT-62-1617

Polymers With Inorganic Main Chains, by Kuz'ma Andrianovich Andryanov, 664 pp.
RUSSIAN, bk, Polimery s Neorganicheskimi Glavnymi Tsepyami Molekul, 1962, 327 pp.

JPRS 20272

Solidified Gas, by B. I. Losev.
RUSSIAN, bk, Tverdy Gaz, 1962, pp 1-32.

*ACSI I-2891
ID 2237320

Oxygen Exchange in Halogenic Acids and Its Mechanism, by A. I. Brodskiy.
RUSSIAN, per, Dok Ak Nauk SSSR, Vol CI, No 5, 1955, pp 869-871.

Navy Tr 3460
APL 645

The Ternary System: Aluminum-Magnesium-Lithium Report II. Phase Diagrams of Auxiliary Cross Sections, by F. I. Shamray, 14 pp.
RUSSIAN, per, Iz Ak Nauk SSSR, Otdel Khim Nauk, No 1, 1948, pp 83-94. 9685467

DDC RSIC-32

Thermodynamics of Tungsten Carbides, by V. I. Alekseyev, L. A. Shvartsman.
RUSSIAN, per, Iz Ak Nauk SSSR Otdel Tekh Nauk, No 1, 1963, pp 91-96.

*BISI 3321

Scientific
Chemistry (Contd)

Determination of the Activity of Oxygen in Iron-Carbon-Oxygen Melts Using the EDC Method, by V. P. Luzgin, A. F. Vishkarev.
RUSSIAN, per, Iz Vysshikh Ucheb Zaved Chern Metal, No 5, 1963, pp 44-50.

*BISI 3350

Study of Basic Oxygen Process Using Various Coolants, by V. V. Smoktiy.
RUSSIAN, per, Iz Vysshikh Ucheb Zaved Chern Metal, No 5, 1963, pp 58-54.

*HB 5985

Characteristics of the Ultraviolet Spectra of Some Types of Aromatic Hydrocarbons, by A. Siryuk, K. Zimina.
RUSSIAN, per, Khim i Tekh Topliva i Masel, No 5, 1962, pp 23-26.

CSIRO/No 6197

Determination of Extent of Fire and Explosion Hazard of Chemical Industries and Standards of Design of Explosion Hazardous Plants, by V. S. Nikolayev, 21 pp.
RUSSIAN, per, Khim Prom, 1957, pp 302-306. 9210729

AEC-UCRL
Tr-933(L)

Fluidized Beds Issue.
RUSSIAN, per, Khim Prom, No 11, 1962, pp 781-857.

*UKAEA-Springfields
Tr-146

The Formation of a Dialectic-Materialistic World Outlook in Students Taking Chemistry Courses, by T. M. Perepelova, 13 pp.
RUSSIAN, per, Khim v Shkole, No 3, May, Jun 1963, pp 55-61.

JPRS 20638

New Principles in the Organization of Small-Scale Production, by Ye. R. Valashek, 8 pp.
RUSSIAN, per, Medit Prom SSSR, No 3, 1963, pp 23-28.

JPRS 20635

Principles of Building and Installing Small-Scale Production Units, by V. I. Zeyfman, 5 pp.
RUSSIAN, per, Medit Prom SSSR, No 3, 1963, pp 28-31.

JPRS 20635

Preparation of Stereospecific Polymers by γ -Irradiation of Inclusion Complexes, by O. Glavati, L. Polak.
RUSSIAN, per, Neftekhimi, No 2, 1962, pp 318-323.

CSIRO/No 6196

A Mass Spectrometer for Investigating the Processes Which Occur When Electrons and Ions Collide With Molecules, by E. L. Frankevich, V. L. Tal'roze, 14 pp.
RUSSIAN, per, Pribery i Tekh Eksper, No 2, 1957, pp 48-53. 9684973

Emmanuel Coll Res
Lang Ctr
E-T-R-63-7

Scientific
Chemistry (Contd)

Condensation of Vapours in Presence of Inert Gases, by
K. P. Vishnevsky.
RUSSIAN, per, Referativnyi Zhur Khim, Vol IV, 1953,
pp 161-167.

INSDOC/T. 5233

Effect of Carbonation on Some Properties of Auto-
claved Concrete Including Silicate Materials, by
Ya. S. Silayenkov, G. W. Tikhomirov.
RUSSIAN, per, Stroitel Materialy, Vol VII, No 4,
1961, pp 30-33.

GB/250/T. 29

Fibrous Carbon, by V. Yu. Nikolayev, V. I. Kasatochkin,
22 pp.
RUSSIAN, per, Trudy Inst Goryuchikh Iskopayemykh,
Iz Ak Nauk SSSR, Vol XVIII, 1962, pp 135-148.
9669353

FTD-TT-63-330

Refining of Unsaturated, High-Sulfur, Cracked
Distillates Without External Hydrogen, by
V. G. Plyusnin, D. F. Vorfalomayev, et al.
RUSSIAN, per, Trudy Sbornik Rabot Laboratorii
Neftesinteza, Ak Nauk SSSR, Ural'skiy Filial, Trudy
Instituta Khimii, No 4, 1960, pp 85-94.

*FTD-TT-63-782

Rate of Oxidation of Iron in Air and in Oxygen at
High Temperatures, by V. V. Ipat'yev, V. I. Tikhomirov.
RUSSIAN, per, Uchenye Zapiski Leningradskogo Gosudarst
Univ imeni A. A. Zhdanova, No 175, Seriya Khim Nauk,
No 14, Part I, 1954, pp 7-20.

BISI 3197

Preparation of Boron Trifluoride, by G. M. Panchenkov,
A. V. Makarov, 5 pp.
RUSSIAN, per, Vest Moskov Univ, No 1, 1963, pp 3-6.
9209193

AEC-Tr-5732

Complex Periodate Compounds of Rare Earth Elements,
by I. P. Alimarin, I. V. Puzdrenkova, 5 pp.
RUSSIAN, per, Vest Moskov Univ Ser Mat, Mekhan,
Astron, Fiz i Khim, Vol XIV, No 2, 1959, pp 213-216.

AEC-Tr-5703

Synthesis of Linear and Cyclo-Linear Organosilicon
Compounds With Phenylene Siloxane Chains in the
Molecule, by V. E. Nikitenkov.
RUSSIAN, per, Vysokomolekularnye Soyediniya, Vol IV,
No 1, 1962, pp 105-108.

*Redstone Arsenal

Scientific
Chemistry (Contd)

Isotopic Exchange of Oxygen in Acid and Salt Solutions and Its Mechanism, by A. E. Bordskiy, N. A. Vysotskaya. RUSSIAN, per, Zhur Fiz Khim, Vol XXXII, No 7, 1958, pp 1521-1531.

*Navy/APL 231

Extraction of Amine-Nitrates, by V. V. Fomin, V. T. Potapova. RUSSIAN, per, Zhur Neorg Khim, Vol VIII, No 4, 1963, pp 990-1002.

*AEC

Synthesis of Some Physiologically Active Organo-Phosphorus Compounds, by M. I. Kabachnik, N. N. Godovikov, et al, 11 pp. RUSSIAN, per, Zhur Obshch Khim, Vol XXXIII, No 4, 1963, pp 1335-1342.

JPRS 20448

Glasses of the System $\text{Na}_2\text{O--Al}_2\text{O}_3\text{--P}_2\text{O}_5$ as the Basis of Enamels on Aluminum, by V. V. Vargin, T. S. Tsekhomskaya, 12 pp. RUSSIAN, per, Zhur Prik Khim, Vol XXXV, No 11, 1962, pp 2363-2368. 9685068

FTD-TT-63-464

Issued to American Cyanamid Company for a Polymer Agent to Treat Textiles and for the Process to Prepare It. BELGIAN, Patent No 600676

GB/256/T.1473

Chromatography With a Hydrogen-Flame Ionization Detector, by Ting Ching-ch'un, Li Wen-hao, et al, 16 pp. CHINESE, per, Hua-hsueh T'ung-pao, No 12, 1962, pp 41-47.

JPRS 20362

Electrolytic Polishing With an Electrolyte Containing Perchloric Acid, by E. Pisa. CZECH, per, Bezpecnost a Hygiena Prace, Vol XII, No 4, 1962, pp 103-106.

OT 7309

Physical Chemistry of Masonry, by T. Sneek. FINNISH, per, Teknillisen Kemian Aikakauslehti, Vol XVII, No 16, 1960, pp 547-557.

CSIRO/No 6134

Experimental Methods Applies to the Study of Combustion of Solid Propellants, by P. Tavernier, J. Boisson. FRENCH, rpt, Experimental Method in Combustion Research.

OT 7310

Scientific
Chemistry (Contd)

Properties of Nitric Solutions of Plutonyl. II.
Formation of Plutonyl Complexes in Nitric Solutions,
by M. E. Krevinskaya, et al.
FRENCH, rpt, Les Proprieties des Solutions Nitriques
du Plutonyle. II. Formation de Complexes du Plutonyle
dans les Solutions Nitriques.

*AEC

Treatment of Irradiated Fuels by Volatilization of
Fluorides, by P. Faugeras, 41 pp.
FRENCH, rpt, Symposium on Aqueous Reprocessing Chemistry
for Irradiated Fuels, 23-26 Apr 1963.

AEC-Tr-5811

Some Equilibriums of Hydrogen and of Deuterium With
Cerium and Gadolinium, by Rodolphe Viallard, 73 pp.
FRENCH, per, Annalen Chimie, Vol XX, 1945, pp 5-72.

AEC-SCL
Tr-483

The Study of the Correspondences of the Results of
Electrophoreses on Paper and Across a Starch Gel and
of the Immunoelectrophoresis of Serum Proteins in
Agar, by Jean Moretti, Genevieve Boussier, et al.
FRENCH, per, Bulletin de la Societe de Chimie
Biologique, Vol XLI, No 1, 1959, pp 79-87.

NIH 6-10-63

Nuclear Magnetic Resonance in Natural Products.
Study of Some Flavone Derivatives and Related
Substances, by J. Massicot, J. Marthe.
FRENCH, per, Bulletin de la Societe Chimique de
France, No 10, 1962, pp 1962-1970.

CSIRO/No 6286

Products Arising From the Reaction of Gaseous
Uranium Hexafluoride on Solid Uranium-Tetrafluoride,
by H. Nguyen-Nghi.
FRENCH, per, Bulletin de la Societe Chimique de
France, No 1, 1963, pp 72-.

*UKAEA-Springfields
Tr-152

Analysis of Gas in Metals by Emission Spectrography,
by R. Berneron.
FRENCH, per, Centre Document Siderurgique Circulaire,
Vol XX, No 3, 1963, pp 743-748.

*BISI 3291

Determination of Oxygen in Steels, by M. Hanin.
FRENCH, per, Centre Document Siderurgique Circulaire,
Vol XX, No 3, 1963, pp 767, 777.

*BISI 3293

Constitution of Echinulin Synthesis of 2-Tertiary-
Amyl-5, 7-Diisooamyltrptophan, by G. Casnati.
FRENCH, per, Chimica e l'Industria, Vol XLIII, 1961,
pp 412-414.

NRC/Ref. C-4199

**Scientific
Chemistry (Contd)**

Rapid Method for Determining the Principal Elements
in Natural Silicate Rock, by A. Behr, et al.
FRENCH, per, Chimie Analytique, Vol XLII, 1960,
pp 557-560.

NZDIA

Hydrolysis of Mixtures of Uranium Mono- and
Dicarbide, by Jean Besson, Pierre Blum, et al, 8 pp.
FRENCH, per, Comptes Rendus Academie Sciences, Vol CCLVI,
1963, pp 681-685.

AEC-Tr-5718

Experimental Findings and Discussion on the Mechanism
of Passive-Layer Formation on Chromium-Nickel-Steels,
by W. Schwenk, A. Rahmel.
FRENCH, per, Electrochimica Acta, Vol V, 1961,
pp 180-201.

*FTD-TT-63-775

Concerning the Intermediate Stages in the Transformation
of Allotropic Modifications and the Catalytic Influence
on These Processes by Foreign Gases, by Gustav F. Huttig,
12 pp.
GERMAN, per, Angewandte Chemie, Vol LIII, 1940, pp 35-39.
9209183

AEC-Tr-5685

Paper Chromatography Investigation of Inks, Dyes and
Lipsticks, by Swarup Narain Tewari.
GERMAN, per, Archiv fuer Kriminologie, Vol CXXVI, 1960,
pp 26-32.

*Redstone Arsenal

Separation of Amino Acids.
GERMAN, per, Archiv Pharm, Vol CCXCII, 1959, pp 119-.

*UKAEA-Springfields
Tr-158

Detection and Quantitative Determination of Thio-
phosphoric Esters in Biological Material, by
R. Fischer, W. Klingelholler.
GERMAN, per, Archiv fuer Toxikologie, No 19, 1961,
pp 119-136.

NZDIA

Thermochemical Investigations on Montmorillonites of
Different Type, Grain Size and Cation Loading, by
R. Gauglitz, H. Schwiete.
GERMAN, per, Berichte der Deutschen Keramischen
Gesellschaft, Vol XXVIII, No 2, 1961, pp 43-47.

CSIRO/No 5496

Crystalline Forms of Silica and Their Transformation
Behaviour, by O. Florke.
GERMAN, per, Berichte der Deutschen Keramischen
Gesellschaft, Vol XXXVIII, No 3, 1961, pp 89-97.

CSIRO/No 6138

A Contribution on the Quantitative Analysis of
Clays, Kaolins and Similar Minerals by X-Ray Methods,
by J. Wiegmann, G. Kranz.
GERMAN, per, Berichte der Deutschen Keramischen
Gesellschaft, Vol XXXVIII, No 7, 1961, pp 294-302.

CSIRO/No 6126

Scientific
Chemistry (Contd)

Trace Analysis With Flame Ionisation Detector and Packed Separating Columns in Gas Chromatography. I. Determination of Traces of Acetylene in Ethylene and Detection of Trace Components in Water, by U. Schwenk.

GERMAN, per, Brennstoff-Chemie, Vol XLII, No 6, 1961, pp 194-199.

GB/256/T,1453

Pilot Plant for the Continuous Cultivation of Micro-organisms, by A. Flechter, 18 pp.

GERMAN, per, Chemie Ingenieur Technik, Vol XXXIV, No 10, 1962, pp 692-696. 9208805

AEC-Tr-5648

Principles and Methods of Granulation, by H. Rumpf. GERMAN, per, Chemie Ingenieur Technik, Vol XXX, No 3, 1963, pp 144-158.

*UKAEA-Winfrith Heat
Tr-15

Selected Articles From the German Periodical
Chemische Berichte.

Vol XXIII, 1890, pp 3023-3033.
On Hydrazoic Acid (Azomide) N_3H , by Th. Curtius.

*Redstone Arsenal

Vol XXX, 1897, pp 586-593.
On Semi-Oxamazine, by Wilhelm Kerp, Karl Unger.

*Redstone Arsenal

Vol XL, 1907, pp 1176-1193.
On the Hydrolysis of 1. 2. 4. 5-Tetrazine- 3.6-Dicarboxylic Acid, by Th. Curtius, August Darapsky, et al.

*Redstone Arsenal

Vol LIXb, 1926, pp 565-589.
The Effect of Carbonylazide, CON_6 , on Aromatic Hydrocarbons, by Th. Curtius.

*Redstone Arsenal

Vol LXXXIX, 1956, pp 2921-2933.
Synthesis With Pyridylpyridinium Halides - Introduction of Halogen, of the Thiol and Thioether Groups Into the 4-Position of the Pyridine Nucleus, by Dietrich Jerchel, Hans Fischer.

Navy Tr 3454
APL 336

Vol XCI, 1958, pp 1266-1273.
Syntheses With Pyridylpyridinium Halides - Introduction of Substituted Amino Groups Into the 4-Position of the Pyridine Nucleus, by Dietrich Jerchel, Ludwig Jakob.

Navy Tr 3453
APL 335

Vol XCVI, 1963, pp 866-880.
Constitution of Ganglio-N-Tetraose and Ganglioside G_1 , by Richard Kuhn, Herbert Wiegandt.

NIH 6-16-63

Scientific
Chemistry (Contd)

Extraction Experiments on Chemically Drying Coating Films, by R. Bult.

GERMAN, per, Farbe und Lack, Vol LXIX, No 1, 1963, pp 15-21.

GB/39/Pa

The Electrolytic Enrichment of the Heavy Hydrogen Isotope, by H. Erlenmeyer, Hans Gaertner, 5 pp.

GERMAN, per, Helvetica Chimica Acta, Vol XVII, 1934, pp 30, 31.

AEC-NP-Tr-1022

A Laboratory Installation for the Electrolytic Fractionation of Hydrogen Isotopes Paper III, by H. Erlenmeyer, Hans Gaertner, 17 pp.

GERMAN, per, Helvetica Chimica Acta, Vol XVIII, 1935, pp 419-426.

AEC-NP-Tr-1024

The Separator Tube. XXIV. Preparation of $18O_2$ and the Problem of Enrichment of $17O$, by Klaus Ciusius, Kuno Schleich, 22 pp.

GERMAN, per, Helvetica Chimica Acta, Vol XLV, 1962, pp 1704-1721.

AEC-Tr-5791

A Laboratory Installation for the Electrolytic Fractionation of Hydrogen Isotopes Paper II, by H. Erlenmeyer, Hans Gaertner, 15 pp.

GERMAN, per, Helvetica Physica Acta, Vol XVII, 1934, pp 1226-1231.

AEC-NP-Tr-1023

$n'-\gamma$ Correlation for the $^{24}Mg(n,n'\gamma)$ Reaction at 3.25 Mev, by H. R. Brugger, T. Niewodniczanski, et al, 53 pp.

GERMAN, per, Helvetica Physica Acta, Vol XXXV, 1962, pp 3-33.

AEC-NP-Tr-1012

Tyrosine Metabolism of Insects. IV. The Phenol Oxidase System of Calliphora and How It Is Affected by the Hormone Ecdysone, by P. Carlson, A. Schweiger.

GERMAN, per, Hoppe-Seylers Z. Physiol Chem, Vol CCCXIII, 1961, pp 199-210.

NIII 6-44-63

Aggregation of Protein Free of Disulphide and Sulphydryl Groups, by R. Jaenicke, J. Stauff.

GERMAN, per, Kolloid Zeitschrift, Vol CLXXVIII, No 2, 1961, pp 143-160.

CSIRO/No 6061

Investigations on the Use of Hydrazine for Protection Against Corrosion, by H. Kohle.

GERMAN, per, Mitteilungen der Vereinigung der Grosskesselbesitzer, No 78, Jun 1962, pp 144-146.

CEGB 2775

Scientific
Chemistry (Contd)

Decomposition Experiments on Starch in the Absence of Coreactants and Their Paper Technology Aspects, by M. Samec.

GERMAN, per, Oesterreichische Chemiker-Zeitung, Vol LXI, No 1, 1962, pp 12-17.

CSIRO/No 6168

Investigations of the Conditions of Formation of Technically Useful Oxide Layers, by H. Schenck, H. Kupperbusch.

GERMAN, per, Stahl und Eisen, Vol LXXXIII, No 3, 1963, pp 154-162.

BISI 3195

A Simple Programming Apparatus for Gas Chromatography, by H. Abegg.

GERMAN, per, Z Chromatographie, Vol IX, 1962, pp 405-410.

CSIRO/No 6294

Stability and Spread of Flames, by H. G. Wagner.

GERMAN, per, Z fuer Elektrochemie, Vol LXV, No 3, 1961, pp 290-295.

OT 7322

On the Mechanism of Transport of Adsorbable Gases in Pores, by Von R. Haul, H. Moesta.

GERMAN, per, Z fuer Elektrochemie, Vol LXVI, 1962, pp 754-757.

*UKAEA-Capenhurst
Tr-91

Determination of the Diffusion Coefficient of H₂, O₂, N₂ and He in Water and Blood Serum With Convection Kept Constant, by K. H. Gertz, H. H. Loeschke.

GERMAN, per, Z fuer Naturforschung, Vol IXb, No 1, 1954, pp 1-9.

NIII 5-45-63

Precipitation of Calcium Fluoride From Supersaturated Solutions, by A. Torborg-Jensen, 22 pp.

GERMAN, per, Z. Physikalische Chemie, No 180, 1937, pp 93-116.

AEC-Tr-5661

Quantitative Separation of Amino Acids by Exchange Adsorption on Aluminium Oxide, by T. Wieland, 9 pp.

GERMAN, per, Z fuer Physiologische Chemie, Vol CCLXXIII, No 1, 2, 1942, pp 24-30. 9209165

AEC-NP
Tr-1002

Concentration of the Intracellular Tryptophan in Escherichia Colia, by Frank C. Happold, Thomas A. Scott.

GERMAN, per, Z fuer Physiologische Chemie, Vol CCCI, 1962, pp 118-123.

NIII 6-42-63

Process for the Preparation of Acrylic Acid Esters, by Walter Reppe, Robert Stadler, 9 pp.

GERMAN, Patent No 944,789.

Patent Office

Scientific
Chemistry (Contd)

Volatile Products Obtained From Edible Oils by
Open Air Heating, by B. Toi, et al.
JAPANESE, per, Journal Japanese Oil Chemists
Society, Vol XI, No 10, 1962, pp 504-507.

CSIRO/No 6295

Use of a Plasma Generator for the Spectroscopic
Analysis of Titanium-Base Alloys, by E. E. Vainshtein,
V. V. Korolev, et al, 16 pp.
POLISH, per, Chemia Analitczna, Vol VII, 1962,
pp 187-194.

AEC-NP-Tr-986

Earth Sciences & Astronomy

On the Exchange of Water Between the Earth and
Space, by V. F. Derpgol'ts.
RUSSIAN, bk, Geograficheskiiy Sbornik, Geograficheskoye
Obshchestvo SSSR, Astrogeologiya, Moscow, Vol XV,
1962, pp 198-207.

*ITD-TT-63-841

Differentiation of Rare-Earth Elements in the
Magmatic Process, by Yu. A. Balashov.
RUSSIAN, bk, Khimiya Zemnoy Kory, Vol I, 1962,
pp 352-365.

*NASA TT F-179

Meteorological Satellites, by K. Ya. Kondrat'yev.
RUSSIAN, bk, Meteorologicheskiye Sputniki, Leningrad,
1963, 311 pp.

*NASA TT F-177

The Primary Production of Bodies of Water, by
G. G. Vinberg, 601 pp.
RUSSIAN, bk, Pervichnaya Produktsiya Voedoemov,
Minsk, 1960.

AEC-Tr-S692

Problems of Physics of the Atmosphere, by
K. Ya. Kondrat'yev.
RUSSIAN, bk, Problemy Fiziki Atmosfery, Leningrad,
1963, 105 pp.

*NASA TT F-184

Method and Apparatus for Studying Boundary Layer
of the Atmosphere From Ships, by I. V. Vasil'chenko,
P. A. Vorontsov, et al, 14 pp.
RUSSIAN, bk, Trudy Glavnaya Geofiz Observ, imeni
A. I. Voyeykova, No 135, 1962, pp 120-128. 9685094

FTD-TT-63-533

Scientific
Earth Sciences & Astronomy (Contd)

Microbarograph for the Registration of Very Small
Fluctuations of Atmospheric Pressure Caused by
the Passage of Internal Waves, by A. A. Gus'kov,
5 pp.
RUSSIAN, bk, Trudy Morskogo Gidrofiz Inst, Iz Ak
Nauk SSSR, Moscow, Vol XXIII, 1961, pp 148-150.
9669771

FTD-TT-63-541

Selected Articles From the Russian Book
Trudy Tsentral Aerol Observ, No 32, 1961. 9685050

FTD-TT-62-1511

The Investigation of Certain Errors in the
Determination of the Absorption of Solar
Radiation in the Atmosphere With Pyranometers,
by V. G. Kastrov, 27 pp, (pp 46-65).

Certain Features of Radiation Processes in the
Lower Troposphere of the Antarctic, by
V. I. Shlyakhov, 12 pp, (pp 66-72).

Absorption of Solar Radiation in the Lower
Troposphere, by V. G. Kastrov, 21 pp, (pp 73-83).

The Asymmetry of Light Scattering in the Atmosphere,
by V. G. Kastrov, 6 pp, (pp 84-87).

Transactions of the All-Union Scientific Meteorological
Conference. Vol 1, General Information, Resolutions,
and Plenary Lectures.

RUSSIAN, bk, Trudy Vsesoyuznogo Nauchnogo Meteorolog-
icheskogo Soveshchaniya, Vol I, 1962, 187 pp.

*NASA TT F-168

Determination of Absolute Geologic Age by the Rhenium
Method, by V. M. Aleksandruk, 6 pp.

RUSSIAN, per, Byull Kom Opredele Absolyut Vozrasta
Geol Format, No 4, 1961, pp 144-147. 9210728

AEC-Tr-5858

Device for Measuring Temperature Coefficients of
Small Magnets, by V. N. Bobrov, 5 pp.

RUSSIAN, per, Geomagnetizm i Aeronomiya, Iz Ak Nauk
SSSR, Vol II, 1962, pp 550-552. 9669360

FTD-TT-63-423

Cosmic Cold, Horizons of Science, by B. Verkin,
A. Galkin, et al, 6 pp.
RUSSIAN, np, Izvestiya, 2 Nov 1960, p 6. 9685491

FTD-TT-63-513

Infra-Red Photography of the Outer Solar Corona,
by N. A. Martynchuk, V. V. Trokof'yeva.
RUSSIAN, per, Iz Ak Nauk SSSR, Krymskaya Astrofiz
Observ, Vol XXVIII, 1962, pp 288-292.

*RAND

Scientific
Earth Science & Astronomy (Contd)

On the Use of Perforated Materials for Two-Dimensional Seismic Modelling, by P. G. Gilbershteyn, I. I. Gurvich. RUSSIAN, per, Iz Vysshikh Ucheb Zaved Geol Razvedka, No 1, 1960, pp 139-156.

*AID

Approximate Calculation of Pressure Wave Energy Expenditures to Shattering, Displacement, and Deformation of Solid Rocks, by A. N. Khanukayev, 8 pp. RUSSIAN, per, Izvest Vysshikh Ucheb Zaved, Gornyi Zhur, No 2, 1960, pp 90-94. 9210727

AEC-UCRL
Tr-931(L)

Selected Articles From the Russian Periodical Met i Gid.

No 6, 1963.

JPRS 20398

Calculation of the Distribution of Water Temperature Along a Vertical Line, by N. A. Belinskiy, M. G. Glagoleva, et al, 9 pp, (pp 18-24).

Influence of Temperature Anomalies on the Ice Cover of the Arctic, by L. I. Zubenok, 8 pp, (pp 25-30).

Computation of Baroclinic Depth, by G. Ya. Shkudova, 12 pp, (pp 35-40).

The Organization and Methods Used in Expeditionary Hydrological Work at the Mouth of a River, by N. A. Rodionov, 8 pp, (pp 47-50).

Literature on Meteorology and Hydrology for 1962 Articles in Journals and Special Collections of Articles, 5 pp, (pp 61, 62).

No 7, 1963.

JPRS 20716

The Use of High-Speed Computers for the Purposes of Planning the Development of a Network of Aerological Stations, by S. A. Mashkovich, 10 pp, (pp 3-9).

Computation of the Radiation Balance of the Earth's Surface-Atmosphere System and Its Components, by B. Ye. Shneyerov, 11 pp, (pp 10-17).

Errors Permissible in Determining Heat Balance Components, by I. I. Melent'yeva, 8 pp, (pp 28-33).

The Regulation of Melt Water by Glaciers, by G. N. Golubev, 5 pp, (pp 42-44).

Literature on Meteorology and Hydrology for 1962 Papers in Journals and Collections of Articles, 11 pp, (pp 58-61).

Scientific
Earth Sciences and Astronomy (Contd)

- Ultrasonic Echo Soundings for Geophysical Purposes,
by L. A. Sergeyev, 19 pp.
RUSSIAN, per, Prik Geofiz, Vol XX, 1958, pp 141-154. Navy Tr 3432
HO 115
- On Measuring the Polarization of Light in Fog, by
T. P. Toropova, 6 pp.
RUSSIAN, per, Trudy Ak Nauk Kazakhskoy SSR
Astrofiz Inst, Vol III, 1962, pp 144-148. 9685368 AID Rpt T-63-102
- Physics of Earthquakes and Explosion Seismology,
by Yu. V. Riznichenko, G. I. Aksenovich, et al,
558 pp.
RUSSIAN, per, Trudy Inst Fiz Zemli imeni O. Yu. Shmidt,
No 25 (192), 1962, 360 pp. JPRS 20465
- Radar Scattering by Non-Spherical Particles, by
A. B. Shupiat'skiy, 23 pp.
RUSSIAN, per, Trudy Tsentral Aerolog Observ, No 30,
1959, pp 39-52. 9685104 Amer Meteorol Soc
T-R-402
- Variations in the Intensity of Cosmic Rays.
RUSSIAN, per, Trudy Yakutskogo Filiala, Ser Fiz,
Ak Nauk SSSR, No 4, 1962, 164 pp. *NASA TT F-183
- Water Vapor in the Stratosphere, by M. S. Malkevich,
Yu. B. Samsonov, 47 pp.
RUSSIAN, per, Uspekhi Fiz Nauk, Vol LXXX, No 1, 1963,
pp 93-124. JPRS 20628
- Cosmic Mineralogy - A New Branch of Science, by
D. P. Grigor'yev.
RUSSIAN, per, Vest Ak Nauk SSSR, Vol XXXII, No 4,
1962, pp 21-24. *NASA TT F-170
- Physical Conditions on Mars, by N. P. Barabashov.
RUSSIAN, per, Vest Ak Nauk SSSR, Vol XXXII, No 10,
1962, pp 18-25. *NASA TT F-165
- The Question of Utilization of Ground Water Sources
for Farming Irrigation in Tientsin-Ts'ang and Hsien
Region From the Viewpoint of Geomorphology, by
Liu Tsun-hai, 13 pp.
CHINESE, per, Ti-li, No 6, 1961, pp 258-262. JPRS 20002
- The Chemical Composition of the Natural Water in
Hsiao T'eng-ko-li Sand Area in Inner Mongolia, by
Ch'en Ching-sheng, 14 pp.
CHINESE, per, Ti-li, No 11, 1961, pp 250, 263-267. JPRS 20002

Scientific
Earth Sciences & Astronomy (Contd)

Selected Articles From the Chinese Periodical
Ti-li Hsueh-pao, Vol XXIX, No 1, 1963.

JPRS 20450

Hydrochemical Characteristics of the Rivers of
China, by Lo Chia-hsiang, Wang Te-ch'un, 37 pp,
(pp 1-12).

The Question of Historical Floods and Droughts
in Hupeh Province and Their Relation to Changes
in Solar Activity, by Ch'iao Sheng-hsi, 31 pp,
(pp 14-23).

An Evaluation of Natural Conditions in Economic
Geography, by Teng Ching-chung, 23 pp, (pp 25-32).

Some Modern Characteristics of Cartography, by
Ch'en Shu-p'eng, 36 pp, (pp 36-47).

An Interpretation of and an Introduction to Some
Principles and Methods Concerning the Division
of Production and Consumption Regions, by
Yang Wu-yang, 39 pp, (pp 63-77).

A Review of the Climate of Cities by Kratzer,
by Hsiao T'ing-k'uei, 19 pp, (pp 78-83).

The Reasons for the Temperature Drop in South China
in the Winter Half of the Year - A Debate With
Comrade Wang I-hsien, by T'ang So-fu, 8 pp,
(pp 84-86).

To the Near and Distant Universe, 442 pp.
CZECH, bk, Do Blizkeho i Vzdaleneho Vesmiru, 1960,
pp 1-328. 9685477

FTD-TT-62-7

The Wide-Angle Sky Photograph as an Aid in Radiation
Research, by Inge Dirmhirn, 21 pp.
GERMAN, per, Archiv fuer Meteorologie, Geophysik und
Bioklimatologie, Series B, 1957, pp 143-148. 9684969

Amer Meteorol Soc
T-G-136

Electromagnetic Induction as a Basis for a Thunder-
storm Theory, by A. Puehringer, 7 pp.
GERMAN, per, Archiv fuer Meteorologie, Geophysik und
Bioklimatologie, Vol XII, No 2, 1961, pp 262-270.

JPRS 20686

Tritium and Helium-Contents in Meteorites, by J. Geiss,
B. Hirt, et al.
GERMAN, per, Helvetica Physica Acta, Vol XXXIII, 1960,
pp 590-593.

*AEC

Scientific
Earth Sciences & Astronomy (Contd)

Frequency and Duration of Individual Fadings at
Tropospheric Scatter Intervals, by J. Grosskopf,
L. Fehlhaber, 31 pp.
GERMAN, per, Nachrichtentechnische Z., Vol XV, No 2,
1962, pp 71-78. 9684972

Emmanuel Coll Res
Lang Ctr E-T-G-63-4

Radiation-Induced Turgor Movements Radio-Nasty, in
Mimosas and Other Sensitive Plants, by O. Hug,
H. Miltenburger, 6 pp.
GERMAN, per, Naturwissenschaften, Vol XLIX, 1962,
pp 499, 500.

AEC-NP-Tr-1023

The Secondary Scattering of Light During Total Solar
Eclipse, by R. Cialdea, 21 pp.
ITALIAN, per, Annali di Geofisica, Vol X, 1957,
pp 61-70. 9684980

Amer Meteorol Soc
T-I-11

Preliminary Data for Studying the Correlation Between
Total Ozone Thickness and Phenomena in the Upper
Troposphere, by Giorgio Fea, Adriano Gazzola, 12 pp.
ITALIAN, per, Rivista di Meteorologia Aeronautica,
Vol XXII, 1962, pp 22-30. 9685173

DDC RSIC-24

Selected Articles From the Japanese Periodical
Journal of Meteorological Research.

Vol X, 1958.
Radio Duct Seen on a Weather Radar PPI-Scope, by
Masuo Onuki, 23 pp, (pp 517-524). 9685471

DDC RSIC-38

On the Time Lag of Dines Pressure-Tube Anemograph,
by Yukio Yajima, 12 pp, (pp 661-665). 9685468

DDC RSIC-34

Classification of Weather Types at Aikawa, by
Shinzo Sheshimo, 22 pp, (pp 686-692). 9685469

DDC RSIC-36

Vol XI, 1959.
A Synoptic Study of the Mesoscale Instability
Lines Associated With Severe Local Storms, by
S. Yamada, 27 pp, (pp 155-168). 9685470

DDC RSIC-37

On the Diurnal Variation of Atmospheric Pressure,
by I. Fujimura, 6 pp, (pp 726, 727). 9685464

DDC RSIC-39

Vol XIII, 1961, pp 778-793. 9685466
Studies on the Air Temperature Measurement, by
T. Arai, 38 pp.

DDC RSIC-31

Scientific
Electronics

A Semiautomatic Device For the Treatment of Bubble-Chamber Stereoscopic Pictures, by L. M. Barkov, K. N. Nukhin, et al.
RUSSIAN, rpt, 1962.

*UKAEA-Harwell-
Tr-1867

Electrodes and Fluxes for Arc Welding, by N. B. Fishbeyn, 65 pp.
RUSSIAN, bk, Elektrody i Flyusy Dlya Dugovoy Svarki, Moscow, 1961, pp 1-62. 9669635

FTD-TT-62-1522

Research in Electron Theory of Crystals, by S. I. Pekar, 240 pp.
RUSSIAN, bk, Issledovaniya po Elektronnoi Teorii Kristallov, Moscow, 1951.

AEC-Tr-5575

Navigation and Gyroscopic Devices, 189 pp.
RUSSIAN, bk, Trudy Inst No 147, Mosk Ordена Lenin Aviats Inst imeni Sergo, Navigatsionnyye i Girokovicheskiye Ystroystva, Moscow, 1962, pp 1-139. 9685481

FTD-TT-63-473

Long Lines With Parameters Varying Along Their Length, by V. A. Il'in, 18 pp.
RUSSIAN, per, Elektrichestvo, No 2, 1950, pp 53-59. 9669819

AID Report
T-63-90

The Phase Velocity of Electromagnetic Waves in the 1-25 kc Range, by G. A. Mikhaylova, T. I. Kurakina.
RUSSIAN, per, Geomagnetizm and Aeronomiya, Vol III, No 2, 1963, pp 223-226.

*Navy/APL 265

Dneproges - In an Electron Tube in the Forefront of Science, by V. Shubova.
RUSSIAN, np, Izvestiya, 21 Dec 1962, p 5.

Navy Tr-3512
APL 829

Apparatus for Measuring Electron Beam Profile, by Yu. V. Troitskiy.
RUSSIAN, per, Pribory i Tekh Eksper, Vol VI, 1957, pp 113, 114.

*UKAEA-Harwell-
Tr-1878

Nonhomogeneous Lines, by A. L. Fel'dshteyn, 12 pp.
RUSSIAN, per, Radiotekhnika, Vol VI, No 5, 1951, pp 38-46. 9669813

AID Report
T-63-96

Nonhomogeneous Line Synthesis Based on Given Frequency Characteristics, by A. L. Fel'dshteyn, 17 pp.
RUSSIAN, per, Radiotekhnika, Vol VII, No 6, 1952, pp 55-66. 9669813

AID Report
T-63-96

Scientific
Electronics (Contd)

Improving the Interference Protection of Radio Reception of AM-Signals by Employing Nonlinear Feedbacks in the High Frequency Part of Receiving Installation, by A. A. Gorbachev, 10 pp.
RUSSIAN, per, Radiotekhnika, Vol XVII, No 2, 1963, pp 37-42. 9660395

FTD-TT-63-477

Quantitative Estimation of Dazzle Produced by Street Lighting Installations, by N. A. Ostrovskiy.
RUSSIAN, per, Svetotekhnika, Vol VIII, No 6, 1962, pp 1-9.

GB/93/
RLC 1091

A Two-Plate Crystal Light Modulator, by G. S. Arushanov.
RUSSIAN, per, Tekh Kino i Televideniya, No 12, 1958, pp 32-38.

*NASA TT F-101

Investigation of Gas Movement and Heat Transfer in Rotating Rotors, by V. V. Mal'tsev, 18 pp.
RUSSIAN, per, Vest Elektro Prom, No 11, 1962, pp 15-22. 9684845

FTD-TT-63-366

Structure of the Electromagnetic Field of a Vertical Dipole and a Vertical Antenna in Space Above a Plane Earth, by G. N. Krylov, G. I. Makarov.
RUSSIAN, per, Vest Leningrad Univ, Vol III, No 16, 1960, pp 42-66.

Navy Tr 3449
APL 331

The Problem of the Manifestation of the Azo Group in Vibrational and Electronic Spectra, by S. S. Dubov, V. A. Ginsburg.
RUSSIAN, per, Zhur Vses Khim Obshch imeni D. I. Mendeleyeva, Vol VII, 1962, pp 583, 584.

*AEC

Automatic Electronic Multipoint Instrument for Controlling and Regulating Temperature, by A. Kh. Udovichenko, G. I. Reshetov, et al, 5 pp.
RUSSIAN, Patent No 147044, (Appl. Nr 669289/26, 6 June 1960), pp 1-3. 9685474

FTD-TT-63-430

Electromagnetic Field of a Plane-Parallel Plate Under Self-Excitation, by B. A. Sotskiy, A. M. Goncharenko.
BELORUSSIAN, per, Dok Ak Navuk BSSR, Vol VI, No 5, 1962, pp 297-300.

Navy Tr 3506
APL 807

Electromagnetic Field Inside a Plane-Parallel Plate in a Resonance Absorption Regime, by A. P. Khapalyuk.
BELORUSSIAN, per, Dok Ak Navuk BSSR, Vol VI, No 5, 1962, pp 301-304.

Navy Tr 3513
APL 830

Scientific
Electronics (Contd)

Conditions for Generating Radiation by a Plane-Parallel Plate, by A. P. Khapalyuk, B. I. Stepanov. BELORUSSIAN, per, Vestsi Ak Navuk Belaruskay SSR, Ser Fiz-Tekh Navuk, No 4, 1961, pp 132-133.

Navy Tr 3456
APL 340

High-Voltage Ventricular Defibrillation, by Joseph Vokoun. CZECH, rpt, 1961.

Navy Tr 3501
APL 802

Radar Today and Tomorrow, by Josef Bednark, 85 pp. CZECH, bk, Radar Dnes a Zitra, 1961, pp 1-143, Encl No 1 to R-89-62, OUSARMA, Czecho.

ACSI I-6002
ID 2194394

Radioelectronics in Guided Missiles, by P. T. Atasenkov. CZECH, bk, Radioelektronika Rizenych Strel, Nase Vojsko, 1962, 174 pp.

*FTD-TT-63-772

Device for Measuring the Electric Conductivity in an Electrolytic Solution, by Zdenek Solc, Karel Cermak. CZECH, per, Chemické Listy, Vol LIII, 1959, pp 847, 848.

*AEC

Selected Articles From the Czech Periodical Slaboproudý Obzor, Vol XXIII, No 10, 1962.

*ACSI I-3144
ID 2240855

A. Linear Systems Analysis With the Aid of Automatic Computers, by Jiri Vlach, (pp 551-557).

B. Reception of Signals on a Frequency of 21 Mc/s in the Skip Region, by Ludmila Triskova, (pp 558-561).

C. Multiple Bothsides-Matched Band-Pass Filters, by Jaroslav Navratil, Jiri Cincala, (pp 562-567).

D. An Analogue Frequency Analyzer, by M. Koci, M. Netusil, (pp 568-572).

**Scientific
Electronics (Contd)**

**Selected Articles From the French Periodical
L'Onde Electrique.**

Vol XXXV, 1955, pp 1033-1047. 9210719 Regulation of the Voltage of the Van de Graaff Generator at Saclay, by A. Gabet, J. Taieb, 23 pp.	AEC-NP-Tr-3948
Vol XLI, 1961. Liquid Hydrogen Bubble Chamber CBH 81. Generalities, by R. Florent, B. Gregory, et al, (pp 1001-1006).	*AEC
The Liquid Hydrogen Bubble Chamber CBH 81 Optics, by J. Badier, (pp 1025-1028).	
Experiences at CERN, by B. Gregory, (pp 1034-1041).	
Analysis of Bubble Chamber Photographs, by J. Crussard, (pp 1042-1046).	
Vol XLII, 1962, pp 541-553. Thermal Conduction in Solids, by J. Tavernier, 36 pp.	AEC-NP-Tr-997
Electric Conditioning of Dwellings, by Felix-Marie-Leon Rabeau, 9 pp. FRENCH, Patent No 976,815.	Patent Office
On Wave Propagation in Wireless Telegraphy, by A. Sommerfeld, 22 pp. GERMAN, per, <u>Annalen der Physik</u> , Vol IV, No 81, 1926, pp 1135-1153.	AEC-UCRL- Tr-950(L)
Layer Thickness Measurement With the Help of Radiation, by H. Hart. GERMAN, per, <u>Elektrie</u> , No 3, 1962, pp 82-88.	*BISI 3282
The Human Memory as an Information Store, by E. Schaefer. GERMAN, per, <u>Elektronische Rundschau</u> , Vol XIV, No 3, 1960, pp 79-84.	Navy Tr 3503 APL 804
The Earth as an Alternating Current Conductor, by O. Mayr. GERMAN, per, <u>Elektrotech Z</u> , 1925, No 36, pp 1352-1355; No 38, pp 436-440.	RAE Tr No 1023
Development of a High Constancy Shortwave Decade Exciter Stage for a Range of 1.5 to 30 Mc/s, by H. Valdorf, R. Klinger. GERMAN, per, <u>Frequenz</u> , Vol XIV, No 10, 1961, pp 3-11.	TIL T 5326

Scientific
Electronics (Contd)

The Electric and Thermoelectric Properties of the System $(\text{Bi}_{1-x}\text{Sb}_x)_2\text{Te}_{1-y}\text{Se}_y$, by G. Gramberg, H. G. Plust.
GERMAN, per, Helvetica Physica Acta, Vol XXXVI, No 2, 1963, pp 237-247.

*UKAEA-Harwell-
Tr-1880

On the Throwing Power of Electrolytic Baths, by E. Haub, K. Buller.
GERMAN, per, Metalloberfläche, Vol XV, Sep, Oct 1961, pp 261-264, 293-301.

*BISI 3333

A Contribution to the Theory of Signal Distortions Through Non-Linear Characteristic Curves, by E. Augustin.
GERMAN, per, Nachrichtentechnik, Vol XII, No 12, 1962, pp 455-460.

*ACSI I-3139
ID 2240850

The Directional Dependence of the Critical Microwave Field Strength for Secondary Resonance and a Parallel Field in Single Crystals of Manganese-Magnesium-Cobalt-Ferrites, by W. Haubenreisser, et al, 23 pp.
GERMAN, per, Physica Status Solidi, Vol II, 1962, pp 734-766. 9684974

Emmanuel Coll
Res Lang Ctr
E-T-G-63-2

The Hall Effect in the Inhomogeneous Magnetic Field, by Julius Brunner, 10 pp.
GERMAN, per, Solid-State Electronics, Vol I, 1960, pp 172-175.

AEC-Tr-5827

Terrain Dependent Direction Finder Failures and Their Avoidance During Operation of the Ultra Shortwave Revolving Adcock Direction Finder PST 467 and 589, by H. Kunze, H. Rarrei.
GERMAN, per, Telefunken-Zeitung, Vol XXXIV, No 133, Sep 1961, pp 215-220.

*ACSI I-3188
ID 2244396

Number of Possible Stretches in Directional Radio Connections With the 7-GHz-Portable, by R. Schienemann.
GERMAN, per, Telefunken-Zeitung, Vol XXXIV, No 133, Sep 1961, pp 221-231.

*ACSI I-3187
ID 2244395

Approximate External Conditions in Electromagnetism, by Dario Graffi, 11 pp.
ITALIAN, per, Accademia delle Scienze dell'Istituto di Bologna, Atti, Classe di Scienze Fisiche, Series XI, Vol V, 1958, pp 88-94. 9685179

Emmanuel Coll
Res Lang Ctr
E-T-I-63-1

Amalgamated Public Electric Power System in Southeastern Norway.
NORWEGIAN, per, Elektroteknisk Tidsskrift, No 10, 5 Apr 1963, pp 165-176.

*ACSI I-3196
ID 2244403

Scientific
Electronics (Contd)

Application of the Photovoltaic Effect in the Study of the Homogeneity of Germanium, by J. Swiderski, 43 pp.
POLISH, per, Archiwum Elektrotechniki, Vol X, No 2, 1961, pp 441-467. 9684978

Emmanuel Coll
Res Lang Ctr
E-T-P-63-1

Amplification Circuits With Transistors Duplicating Multiplicating Current Carriers, by A. Filipkowski, 18 pp.
POLISH, per, Archiwum Elektrotechniki, Vol XI, No 4, 1962, pp 765-780. 9685089

FTD-TT-63-505

Radio Electronics in the Exploration of Outer Space, 6 pp.
POLISH, per, Kraj Rad, No 19, 1963, pp 10, 11.

JPRS 20588

Method of Experimental Study of Radiowave Scatter Propagation Conducted With the Country and the Results Obtained, by Janusz Molski, 10 pp.
POLISH, per, Przegląd Telekomunikacyjny, No 7, 1962, pp 197-202.

ACSI I-2404-A
ID 2229441

Type Tg N24 DK Multiplex Telegraphy Devices, by Jan Bienczak, 9 pp.
POLISH, per, Przegląd Telekomunikacyjny, No 7, 1962, pp 202-206.

ACSI I-2404-B
ID 2229441

Engineering

A Radiation Thermometer, by I. D. Semikin, 18 pp.
RUSSIAN, bk, Avtomatizatsiya i Priborostroyeniye, Inst Avtomatiki Gosplana UKSSR, Sbornik Nauchnykh Trudov, Kiev, No 2, 1961, pp 153-164. 9685051

FTD-TT-63-64

Parts and Elements of Gyroscopic Devices, by N. F. Babayeva, V. M. Yerofeyev, et al.
RUSSIAN, bk, Detalii i Elementy Giroskopicheskikh Priborov, Leningrad, 1962, pp 74-150; 249-263; 333-432.

*FTD-TT-63-838

Engine Gas Dynamics, by A. I. Borisenko.
RUSSIAN, bk, Gazovaya Dinamika Dvigatelya, Moscow, 1962, 793 pp.

*FTD-TT-63-852

Defects of Press Castings and Methods for Their Prevention Chapter VIII, by E. S. Stebakov, V. Ya. Tarutin, 26 pp.
RUSSIAN, bk, Lit'e Vyzhimaniyem, Gosudarstvennoye, Nauchno-Tekhnicheskoye Iz Mash Literaturny, Moscow, 1962, pp 96-110. 9685492

FTD-TT-63-713

Scientific
Engineering (Contd)

Navigation Instruments, by V. P. Seleznev,
740 pp.
RUSSIAN, bk, Navigatsionnyye Ustroystva, Moscow,
1961, pp 1-615. 9669801-V

FTD-TT-62-1414

Investigation of Non-Metallic Materials for
Sliding Bearings Suitable for Certain Conditions
of Friction in Chemical Machine Construction, by
I. V. Vasil'yev, 13 pp.
RUSSIAN, brochure, Plastmassy kak Antifriktsionnye
Materialy, Iz Ak Nauk SSSR, Moscow, 1961, pp 86-95.
9684842

FTD-TT-63-260

Device for Pulse-Tests of Microthin Alloy
Cores, by V. G. Mikhalev, L. L. Mekhel', 28 pp.
RUSSIAN, bk, Pribor Dlya Impul'snykh Ispytaniy
Mikronnykh Serdechnikov, Moscow, 1961, pp 1-30.
9669776

FTD-TT-62-1865

Operation of Heat Engines, by A. V. Kvasnikov.
RUSSIAN, bk, Rabochiye Protsessy Teplovykh
Dvigatelye, Moscow, 1962, pp 5-47.

*FTD-TT-63-864

Selected Articles From the Russian Book
Raschet Prostranstvennykh Konstruktsii, Moscow,
Vol IV, 1958.

Survey of Investigation in the Theory of
Bending of Plates and Shells During the
Period 1941-1957, by A. S. Gol'mir,
(pp 451-475).

*NASA TT F-180

Stability of Reinforced Circular Cylindrical
Shells Subject to Compression and Pure Bending,
by K. D. Turkin, (pp 477-498).

*NASA TT F-181

Stability of Orthotropic Cylindrical Shells,
by O. N. Len'ko, (pp 499-524).

*NASA TT F-182

Engineering Gas Dynamics, by M. Ye. Deych.
RUSSIAN, bk, Tekhnicheskaya Gazodinami, Second Ed,
Moscow, 1961, 670 pp.

*FTD-TT-63-846

Methods of Testing for Creep in Models of Turbine
Discs, by S. I. Matveyev.
RUSSIAN, bk, Voprosy Metalloved Kotloturbinnnykh
Materialov, 1955, pp 86-103.

TIL T 4957

The Effect of Vibromixing on the Strength of
Cement Solutions and Concrete, by M. Subbotkin,
B. Trinker.
RUSSIAN, per, Beton i Zhelezobeton, No 6, 1962,
pp 271-274.

CSIRO/No 6139

Scientific
Engineering (Contd)

Determination of Mean Square Interpolation Error,
by Yu. M. Bykov.
RUSSIAN, per, Iz Ak Nauk SSSR Otdel Tekh Nauk Energet
i Avtomat, No 6, Nov, Dec 1962, pp 113-119.

*Navy/APL 263

Flow Past a Plate at High Supersonic Velocities,
by V. I. Kholyavko, 10 pp.
RUSSIAN, per, Iz Ak Nauk SSSR, Otdel Tekh Nauk,
Mekh i Mash, No 5, 1962, pp 26-31. 9684847

FTD-TT-63-485

Supersonic Flow Past a Flat Triangular Plate,
by D. A. Mel'nikov, 11 pp.
RUSSIAN, per, Iz Ak Nauk SSSR, Otdel Tekh Nauk,
Mekh i Mash, No 6, 1962, pp 33-39. 9669774

FTD-TT-63-375

Certain Properties of Supersonic Flow in the
Initial Section of a Gas Ejector, by
A. Ya. Cherkez, 20 pp.
RUSSIAN, per, Iz Ak Nauk SSSR, Otdel Tekh
Nauk, Mekh i Mash, No 6, 1962, pp 40-49. 9669774

FTD-TT-63-375

Selected Articles From the Russian Periodical
Iz Vysshikh Ucheb Zaved Aviats Tekh.

No 1, 1959, pp 81-88. 9685483
Calculation of the Characteristics of Axial
Forepumps, by I. V. Mirolyubov, 13 pp.

FTD-TT-63-418

No 2, 1962, pp 152-158.
Effect of Nonstationary Pulsating Gas Flow on
Heat-Transfer Characteristics, by
L. I. Kudryashchev, I. A. Gusev.

*Navy/APL 246

No 4, 1962.
Analysis of Structurally Orthotropic Shells of
Revolution, by Ye. F. Burnistrov, (pp 57-67).

*FTD-TT-63-813

Equilibrium and Vibration Equations of
Asymmetrical Sandwich Shells, by M. I. Il'amov,
(pp 68-78).

Motion of an Asymmetrical Gyroscope Pendulum, by
P. M. Alabuzhev, I. Ya. Shpigel'burd, et al,
10 pp.
RUSSIAN, per, Iz Vysshikh Ucheb Zaved Mash, No 6,
1962, pp 64-70. 9685069

FTD-TT-63-467

Some Questions of Mechanization in Unit-Load
Stores of Mechanical Engineering Works, by
M. A. Preobrazhenskiy, 16 pp.
RUSSIAN, per, Mekhan i Avtomat Proiz, No 12,
1962, pp 25-28.

NLL Tr Bulletin
Vol V No 8 1963

Scientific
Engineering (Contd)

Device for Observing Anomalous Dispersion in Rapid Processes, by A. M. Shikhtin, V. S. Egorov.
RUSSIAN, per, Optika i Spektroskopiia, Vol II, No 4, 1957, pp 543, 544.

Navy Tr 3457
APL 349

The Prospects for Using Aluminum Alloys in River Ship Construction, by G. Yefremov, 5 pp.
RUSSIAN, per, Rechnoy Transport, No 10, 1961, pp 26-28.

Navy Tr 3414
ONI 947

Increasing the Range of Stable Operation of an Axial Compressor Stage, by V. N. Ershov, et al.
RUSSIAN, per, Teploenergetika, No 9, 1962, pp 41-44.

*UKAEA/Risley

Investigations Into Earth Cutters and Trails on New Designs of Dragline Buckets, by A. I. Fedorov.
RUSSIAN, per, Trudy Vses Nauch-Issled Inst Transportnogo Stroitel'stva, No 41, 1961.

ISI

Determination of the Profile of Least Resistance of an Annular Wing, by B. I. Borisov, 5 pp.
RUSSIAN, per, Vest Mosk Univ Ser I Matemat i Mekh, No 1, 1961, pp 62-65. 9685064

FTD-TT-63-397

A Machine for Testing Materials for Dilation Distension and Compression at Temperatures From 1.4°K to 1500°K, by R. I. Garber, I. A. Gindin, et al, 5 pp.
RUSSIAN, per, Zavod Lab, Vol XXVIII, 1962, pp 865-868.

AEC-SCL-Tr-482

Electrohydraulic Method of Feeding and Atomizing Liquid Fuels and Other Liquids and Device for Its Accomplishment, by L. A. Yutkin, L. I. Gol'tsova, 6 pp.
RUSSIAN, Patent No 119403, (App1 No 441894/25, 20 Jan 1951), pp 1-3. 9685482

FTD-TT-63-478

Relay Device, by Manfred Liske, 5 pp.
RUSSIAN, Patent No 144553, (App1 No 728146/24-7, 26 Apr 1961), pp 1-4. 9685097

FTD-TT-63-499

Scientific
Engineering (Contd)

A Device for Reproducing Subsonic Electric Frequencies Directly Recorded on Magnetic Tape by Ordinary Electromagnetic Heads, by A. I. Naydenov. RUSSIAN, Patent No 150.262, Klass 42g, 10₀₁, 1961, pp 1, 2.

*ACSI I-3140
ID 2240851
519th MI Bn

Welding in USSR, 207 pp.
CZECH, bk, Svarovani v CSSR a SSSR, Svarovani v SSSR, Part II, Slovenske Vydavatelstvo Technickej Literatury, 1961, pp 127-254.
9685090-V

FTD-TT-63-1677

Are Conditions in Czechoslovakia Suitable for the Introduction of the Kaldo Process?, by J. Beevar.
CZECH, per, Hutnik, Vol XII, No 7, 1962, pp 331-335.

BISI 3322

The Production of Spiral Weld Tubes, by K. Lajcok, J. Chevanec.
CZECH, per, Hutnik, Vol XII, No 7, 1962, pp 336-339.

BISI 3290

About an Ion Power Plant, 5 pp.
CZECH, per, Kridla Vlasti, No 6, Mar 1962, p 169. 9684843

FTD-TT-63-187

Comparative Study of the Reducibility of Sinter and Pellets by Three Different Test Methods, by A. Poos, R. Linder.
FRENCH, rpt, Paper Presented at the Journees Internationales de Siderurgie in Luxembourg, 1-4 Oct 1962, pp 117-126.

BISI 3032

Protective Measures in Switzerland During Work on High and Low Tension Installations, by E. Homberger.
FRENCH, Bulletin Association Suisse des Electriciens, 1961, pp 1029-1034.

NZDIA

Engineering of Caissons, by J. Bellier, M. Tourasse, 32 pp.
FRENCH, per, Bulletin d'Informations Scientifiques et Techniques, No 20, 1958, pp 56-58.

AEC-Tr-5828

Manufacture and Testing of Modern High Pressure Boilers, by N. Henseler.
FRENCH, per, Energie, Vol XV, No 1, 1963, pp 1-11.

*UKAEA-Risley-
Tr-429

Discharge Measurements in Non-Parallel Stream-line Flows, by M. Salvo.
FRENCH, per, Houille Blanche, No 1, 1962, pp 58-63.

NZDIA

Scientific
Engineering (Contd)

Mechanical Processing of Second-Growth Hardwood in the Forest for the Manufacture of Paper Pulp, by E. Mailliet.

FRENCH, per, Papeterie, Vol LXXXIV, No 2, 1962, pp 128-133.

NRC/Ref. C-4083

The Application of the Process of Dry Charging at the Hagendange Coke-Oven Plant, by J. de Miscal, G. David.

FRENCH, per, Revue de l'Industrie Minerale, Vol XLIII, 1961, pp 713-725.

B Coke R.A.

Smokejack for Engine Houses, by Otto Fabel, 6 pp.

FRENCH, Patent No 423,494.

Patent Office

Improvements in the Manufacture of Steel and the Fixation of Nitrogen, 13 pp.

FRENCH, Patent No 563,031.

Patent Office

Toy, by Jouet, 5 pp.

FRENCH, Patent No 1,146,275.

Patent Office

Improvements in Ducted-Airfoil Aircraft, Especially Annular Wing Aircraft, by Helmut Ph. von Zborowski, 7 pp.

FRENCH, Patent No 1,193,847.

Patent Office

Kovar - A Useful Material in High Vacuum and Instrument Engineering, by Werner Espe.

GERMAN, bk, C. F. Winter'sche Verlagshandlung, Fussen/Bayern, 1956, pp 5-85.

*Navy/APL 224

Calculations for Strip Coilers, by P. Gruner, K. Neumann.

GERMAN, rpt, Maschinenmarkt Spanlose Formung, Parts I, II, No 85, 78, 1962, pp 15-24, 29-30.

*BISI 3208

Possibilities for the Construction of Hot-Blast Stoves for Achieving Maximum Blast Temperatures, by E. E. Hofmann.

GERMAN, rpt, Paper Presented at the Journees Internationales de Siderurgie in Luxembourg, 1-4 Oct 1962, pp 483-494.

BISI 3025

Preliminary Guide-Lines for Testing Filters for Air- and Gas-Borne Particles, 28 pp.

GERMAN, bk, Vorlaufige Richtlinien zur Prufung von Filtern zur Abscheidung von Schwebstoffen, 1961.

AEC-Tr-5810

Scientific
Engineering (Contd)

- Water Cooled Turbogenerators, by K. Wanke.
GERMAN, per, ABG Mitteilungen, Vol LII, No 9, 10,
1962, pp 429-438. GB/153/775
- Trials to Determine the Convective Heat Transfer
Coefficients in Narrow Bricked Ducts, by
H. H. Bohm.
GERMAN, per, Archiv fuer Eisenhuttenwesen, Vol VI,
No 4, 1933, pp 423-431. SCOW
- Determination of Texture by the Reflection Method,
by F. Wever, H. Botticher.
GERMAN, per, Archiv fuer Eisenhuttenwesen,
Vol XXXIV, No 3, 1963, pp 205-210. BISI 3264
- Consequent Development From Continuous Casting
to Continuous Rolling, by H. Benteler.
GERMAN, per, Berg-und Huttenmannische Monatshefte,
Vol CVII, No 4, 1962, pp 144-151. BCRA 70
- Critical Observations on the German Specifications
for the Calculation of the Supporting Beams of
Two-Way Slabs and Proposals for a New Method of
Calculation, by F. Dischinger.
GERMAN, per, Beton und Eisen, Vol XLI, 1942,
pp 86-91, 103-108, 127-130. NRC/Ref. C-4204
- Conveying Systems in Modern Tube Welding
Factories, by E. Gorissen.
GERMAN, per, Deutsche Hebe-und Fordertechnik,
Parts 1-5, Vol IX, 1963. *BISI 3348
- Method for Determining Extremely Low Water
Contents of Insulating Oils, by M. Engel, R. Moebes.
GERMAN, per, Elektrie, Vol XVI, 1962, pp 157-159. GB/125/
IB 2085
- Operation of Sprinkling Plants Under H. T. Lines,
by K. Schrotek.
GERMAN, per, Elektrotechnik und Maschinenbau,
Vol LXXIX, No 6, 1962. NZDIA
- The Arc-Plasma Burner, A New Form of High-
Temperature Heat Source, by F. Wendler, 10 pp.
GERMAN, per, Elektrotechnische Zeit, Vol LXXXIIIA,
1962, pp 773-776. AERE-Harwell-
Tr-931
- Effect of Nozzle Shape on Flow Behaviour of
Nozzles Operating With Water in Various Thermodynamic
States, by H. Friedrich, G. Vetter.
GERMAN, per, Energie, Vol XIV, No 1, 1962, pp 1-9. CEGB 2562

Scientific
Engineering (Contd)

Manufacture and Testing of Modern High Pressure Boilers, by H. Henseler.

GERMAN, per, Energie, Vol XV, No 1, 1963, pp 1-11.

*UKAEA-Risley

Pressure Losses in Transport Pipes of Pneumatic Conveying Systems, by W. Konrath.

GERMAN, per, Fordern und Heben, No 8, 1960, pp 609-613.

NCB.A. 1965/ME

The Design of Filters With the Aid of the Catalog of Normalized Low-Pass Filters, by R. Saul, 27 pp.

GERMAN, per, Frequenz, Vol XV, No 4, 1961, pp 111-121. 9685234

Emmanuel Coll
Res Lang Ctr
E-T-R-G-62-28

The Properties and Applications of Precious Metal Coatings in Engineering, by Heinz W. Dettner.

GERMAN, per, Galvanotechnik, Vol LIII, No 2, 1962, pp 87-92.

*AEC

The Test Coking Plant of the Steinkohlenbergbauverein, by W. Roerink, K. G. Beck.

GERMAN, per, Gluckauf, Vol XCVIII, 1962, pp 224-231.

BCRA 68

The Influence of the Flue Temperature on High-Temperature Carbonisation in Top-Charged

Horizontal Coke Ovens, by W. Weskamp, W. Dressler.

GERMAN, per, Gluckauf, Vol XCVIII, 1962, pp 567-577.

BCRA 69

The Influence of the Moisture Content of Coking Coals on High-Temperature Coking in Top-Charged Ovens, by K. G. Beck, W. Weskamp.

GERMAN, per, Gluckauf, Vol XCVIII, 1962, pp 1559-1568.

BCRA 72

Organization Measures in the Tonometer Problem, by G. Strobl.

GERMAN, per, Klinische Monatsblätter fuer Augenheilkunde, Vol CXL, No 6, 1962, pp 801-813.

*Navy/APL 267

Calculation and Design of Vessels Under External Pressure, by H. Meinke.

GERMAN, per, Konstruktion, Vol XI, No 4, 1959, pp 131-138.

*UKAEA-Springfields-Tr-151

Simplified Calculation of Structural Elements by Equations of Third Degree, by H. Meinke.

GERMAN, per, Konstruktion, Vol XII, No 6, 1960, pp 254-256.

*UKAEA-Springfields-Tr-150

Leaching-Out of Lead From Lead-Stabilised PVC Pipes, by H. Niklas, W. Meyer.

GERMAN, per, Kunststoffe, No 1, 1961.

NZDIA

Scientific
Engineering (Contd)

Welding of Semi-Finished Polypropylene Products.
GERMAN, per, Kunststoffe, No 2, 1961.

NZDIA

The Support of Fast-Rotating High-Powered Gear
Units, by W. Froessel, 9 pp.
GERMAN, per, Maschinenmarkt, Vol LXIII, No 22,
1957, pp 1-4.

AEC-TRG-Inf-
Ser-287

The Development of Suitable Strip Coiler Con-
structions, by P. Gruner.
GERMAN, per, Maschinenmarkt, Vol LXIX, No 50,
1963.

*BISI 3345

Water-Side Corrosion in Oil-Fired Steam Boilers,
by C. Janssen.

GERMAN, per, Mitteilungen der Vereinigung der
Grosskesselbesitzer, No 75, 1961, pp 427-731.

CEGB 2628

Investigations in to the Permissible Silica
Content of Medium-Pressure Boilers, by
E. Schumann.

GERMAN, per, Mitteilungen der Vereinigung der
Grosskesselbesitzer, No 76, 1962, pp 58-61.

CEGB 2685

Practical Experience With 14 Mo.V. 63 High
Temperature Pipe Material in the Mannheim Steam
Power Station, by H. Haferkamp.

GERMAN, per, Mitteilungen der Vereinigung der
Grosskesselbesitzer, Vol LXXXIV, Jun 1963,
pp 186-194.

*BISI 3352

Processing of Information by Man, by K. Kupfmüller.
GERMAN, per, Nachrichtentechnische Zeitschrift,
Vol XII, No 2, 1959, pp 68-74.

*Navy/APL 266

Methods of Heat-Treatment to Avoid Flake Formation
in Steel, by H. Bittersmann, O. Kramer.

GERMAN, per, Neue Hütte, Vol VIII, No 4, 1963,
pp 225-231.

*BISI 3327

A Simple Method for the Determination of the
Temperature of Luminous Flames, by F. Kurlbaum.
GERMAN, per, Physikalische Zeitschrift, No 9,
1902, pp 187, 188.

CEGB 2531

Report on Calculation Method for High Temperature
Regenerators in the Iron and Steel Industry,
by R. Turk, E. Schirarz-Bergkamp.
GERMAN, per, Radex Rundschau, No 12, 1962,
pp 311-330.

*BISI 3294

Scientific
Engineering (Contd)

Initial Conditions for Linear Transfer Elements,
by O. Follinger.

GERMAN, per, Regelungstechnik, Vol IX, No 4,
1961, pp 149-153.

Navy Tr 3552
APL 334

The Give in Expansions of Corrugated Tubes, by
F. Salzman.

GERMAN, per, Schweizerische Bauzeitung, Vol CXXVII,
No 11, 1946, pp 127-130.

*Redstone
Arsenal

Selected Articles From the German Periodical
Stahl und Eisen.

Vol LXXXII, No 11, 1962, pp 1655-1661.
Manipulators and Conveying Installations as a
Means for Mechanizing the Forging Operation,
by H. Kirmse.

BISI 3097

Vol LXXXIII, No 4, 1963.
Design of a Programmed Universal-Slabbing Mill
Design and Operation of the Rolling Mill, by
K. A. Zimmermann, (pp 504-509).

*BISI 3303

Vol LXXXIII, No 6, 1963, pp 702-715.
Recent Operational Investigations on the Main
Drives of Ingot Cogging Mills, by M. Preske.

*BISI 3349

Development and Use of Vacuum Devices, by K. Herr.
GERMAN, per, Die Technik, Vol XVIII, No 5, 1963,
pp 360-363.

*ACSI 1-3241
ID 2244418

Corrosion of Pipes Carrying Seawater, by
O. Thome-Johannesen.
GERMAN, per, Teknisk Ukeblad, No 33, 1961,
pp 789-793.

CEGB 2745

The Rolling of Continuous Welded Billets, by
A. E. Lendl, R. Preissler.
GERMAN, per, Verein Deutscher Ingenieure
Zeitschrift, Vol C, No 2, 1958, pp 165-171.

BISI 3253

Overhead Chain Conveyors for Mail Bags, by
F. Praetorius.
GERMAN, per, Z fuer das Post- und Fernmeldewesen,
1962, pp 194-202.

NZDIA

Molding Material for the Production of Objects
of High Impact and Notched Impact Strength, by
W. Graulich, P. Schneider, et al, 7 pp.
GERMAN, Patent No 1,140,706.

Patent Office

Scientific
Engineering (Contd)

Examination of Corrosion Processes in Boiler Plants
by Testing the Hydrogen Content of the Steam, by
D. Moso, I. Radi.

HUNGARIAN, per, Energia es Atometichnika, Vol XIV,
1961, pp 21-27.

CEGB 2569

Phenomena Taking Place in Turbine Blade Grids and
Correct Development of Profile, by Istvan Erdody,
13 pp.

HUNGARIAN, per, Energia es Atometechnika, No 8,
1962, pp 337-342. 9684912

FTD-TT-63-133

Hanger for Supporting Shelves, Cabinets and the
Like, by Bahus Gustav, 7 pp.

NORWEGIAN, Patent No 94,965.

Patent Office

Valve for Free and Captive Balloons, by
R. Di Maio.

POLISH, per, Aerotechnica, Vol IX, No 3, 1929,
pp 121-124.

MU/T. 517

Hydraulic Study of Screens, Trash Racks of
Water Intakes, by L. Levin.

PORTUGUESE, rpt, International Association for
Hydraulic Research, 7th Meeting Lisbon, 1957,
Proc 1.

NZDIA

Study of the Vibration of Bars in a Screen,
Trash Rack Caused by Vortex Formation, by
L. Castex.

PORTUGUESE, rpt, International Association
for Hydraulic Research, 7th Meeting, Lisbon
1957, Proc C21, pp 1-11.

NZDIA

Three-Valued Logic in the Circuit Automation, by
M. C. Badillo.

SPANISH, per, Revista de Calculo Automatico y
Cibernetica, No 16, 1957, pp 1-7.

*AEC

Scientific
Fuel & Propulsion

Determination of the Degree of Oxidation and Prediction of Coal Quality From Petrographic Characteristics, by I. I. Ammosov, I. N. Eremin. RUSSIAN, per, Trudy Inst Gory Iskopayemykh, Ak Nauk SSSR, Vol XIV, 1960, pp 3-22.

CRL/T. 1237

The State of the Art in Lubricant Research and the Trend of Development, by Chen Shao Li, 13 pp. CHINESE, per, K'o Hsueh T'ung Pao, No 2, 1962, pp 9-13. 9685070

FTD-TT-63-267

Oil Addition to the Charge for Coking, by B. Splichal. CZECH, per, Hutnicke Listy, Vol XVI, No 9, 1961, pp 609-617.

B Coke R.A.

Injection of Auxiliary Fuels Into Blast Furnaces, by A. Decker. FRENCH, rpt, Paper Presented at the Journees Internationales de Siderurgie in Luxembourg, Oct 1962, pp 327-345.

BISI 3024

Selected Articles From the Polish Periodical Prace Glowny Inst Gornictwa.

No 69, 1950, pp 1-14.

GB/198/F.196/7

Tests on Mild Hydrogenation of Coals With Coke-Oven Gas, by R. Pampuch.

No 119, 1952, pp 1-12.

GB/198/F.196/7

Separation of Pyrites From Coals, by D. Korol.

No 153, 1954, pp 1-16.

GB/198/F.196/7

Swelling of Coal and Its Structure: The Role of Hydrogen Bonds, by R. Pampuch.

No 215, 1958, pp 1-18.

GB/198/F.196/7

Economic Effectiveness of Investments in the Preparation of Coarse Coal Sizes, by A. Kabiesz.

Unstable Performance of Liquid Fuel Rocket Engines, by R. Staniszewski, 14 pp. POLISH, per, Wojkowy Przegląd Lotniczy, No 8, 1962, pp 48-56. 9685065

FTD-TT-63-357

Scientific
Materials & Metallurgy

Analyses of Refractory Compounds.
RUSSIAN, bk, 1962, 256 pp.

*FTD-TT-63-814

Automation of Continuous Furnaces, by
Sergey Aleksandrovich Malyy, 24 pp.
RUSSIAN, bk, Avtomatizatsiya Metodicheskikh Pechey,
Chapters III, IV, 1962, pp 18-38.

JPRS 20698

The Hot Molding of Ceramic Products, by
P. O. Gribovskiy, 34 pp.
RUSSIAN, bk, Goryacheye Lit'ye Keramicheskikh
Izdeliy, Gos Energ Izd-vo, Moscow, 1961,
pp 4-10, 45-48, 362-373, 391-394. 9684915

FTD-TT-63-146

Production of Steel by the Method of Electroslag
Remelting, by S. A. Leybenzon, A. F. Tregubenko.
(SF-2799)
RUSSIAN, bk, Proizvodstvo Stali Metodom Elektrosh-
lakovogo Pereplava, Moscow, 1962, pp 1-237.

*JPRS

Selected Articles From the Russian Book
Tsiklicheskaya Prochnost' Metallov, Ak Nauk SSSR,
Inst Metallurgii imeni A. A. Baykova, Moscow,
1962. 9685063

FTD-TT-62-1872

Investigation of the Possibility of Applying
the Accelerated Method of Determining Fatigue
Strength Under Conditions of an Asymmetric
Loading Cycle and With Various Production Treat-
ments, by M. A. Yel'yasheva, 14 pp, (pp 123-133).

Fundamental Factors on Investigation of the
Effect of the External Media on Fatigue
Resistance, by T. V. Karpenko, 9 pp,
(pp 233-237).

Corrosion-Fatigue Resistance of Cast Brass, by
V. A. Bykov, G. N. Vsevolodov, 9 pp, (pp 238-242).

Apparatus for Study of Metal Corrosion Fatigue,
by S. A. Gladyshevskaya, L. V. Ignatyuk, et al,
10 pp, (pp 250-256).

Influence of Temperature and Technological
Factors on the Endurance of Thermal-Shock-
Resisting Steel and Alloys, by B. I. Aleksandrov,
19 pp, (pp 257-266).

Scientific
Materials & Metallurgy (Contd)

Investigating Diffusion Mobility of Zirconium in
Zirconium-Niobium Alloys, by G. G. Ryabova,
P. L. Gruzin, 8 pp.
RUSSIAN, bk, Trudy Metallurgiya i Metallovedeniya
Chistykh Metallov, Inzhenerno-Fizicheskoy Inst.,
Moscow, No 3, 1961, pp 120-126. 9685052

FTD-TT-63-258

Precipitation of Ni_3Ta From Alloys of Nickel
Tantalum Binary System, by I. I. Kornilov,
E. N. Pylayeva.
RUSSIAN, per, Dok Ak Nauk SSSR, Vol XCI, 1953,
pp 841-843.

*AEC-UCRL

Effect of High Pressure on Thermal Properties of
a Solid Body, by K. P. Rodionov.
RUSSIAN, per, Fiz Metall i Metall. Vol III,
1956, pp 26-30.

*AEC

Selected Articles From the Russian Periodical
Iz Vysshikh Ucheb Zaved, Chern Metal.

No 1, 1962, pp 124-130.
Electrical Transport of Thallium and Cobalt in
Liquid Metallic Solutions, by D. K. Belashchenko,
G. A. Grigorev.

*AEC

No 5, 1962, pp 120-130.
Charge Transfer in Liquid Binary Alloys and Its
Relation to Electrical Resistance, by
D. K. Belashchenko.

*AEC

No 7, 1962, pp 137-139.
Electrical Transfer of Nickel Impurities in the
Molten Metals, by G. A. Grigorev, D. K. Belashchenko.

*AEC

No 5, 1963.
Kinetics of Reduction of Fluxed Sinter With
Solid Carbon, by P. N. Ostriuk, S. T. Rostovtsev,
(pp 19-25).

*HB 5982

Imet Reduction Process in a Fluid Red, by
N. S. Vavilov, (pp 26-33).

*HB

Deoxidizing Power of Rare-Earth Elements, by
G. Kinne, A. F. Vishkarev, (pp 65-69).

*HB 5984

Microstructure of Boronized Surface Layers on
Iron and Steel, by A. N. Minkevich, (pp 162-169).

*HB 5986

Scientific
Materials & Metallurgy (Contd)

Oxidation and Decarburisation of Steel in Air
Furnaces With Partial Burning of Natural Gas,
by V. N. Kostyakov, A. E. Erinov.

RUSSIAN, per, Kuznechno-Shtampovochnoe Proiz-
vodstvo, No 1, 1963, pp 29-32.

BISI 3229

Relationship Between the Fatigue Strength and Creep
Strength of Alloys at High Temperatures, by
V. A. Parfenov.

RUSSIAN, per, Metallov i Metallovedenie, No 6,
1957, pp 17-23.

CEGB 2790

Observation of Dislocation Structures in the
Alloy KhN77TYuR, by V. D. Sadovskiy, 7 pp.

RUSSIAN, per, Metall i Term Obra, Metallov, No 9,
1962, pp 2-5. 9669374

FTD-TT-63-322

Solidification Rate and Depth of the Liquid
Phase of the Continuously Cast Billet of Low
Carbon Rimming Steel, by G. M. Itskovich,
N. I. Sautkin.

RUSSIAN, per, Metallurg, No 5, 1963, pp 10-12.

BISI 3323

Immersion Pyrometers Sheaths for Measuring the
Temperature of Liquid Metals, by K. S. Kutateladze,
E. N. Zedginidze.

RUSSIAN, per, Ogneupory, No 5, 1962, pp 223-225.

BISI 3216

Film Thickness Control by Means of Crystal
Resonator, by A. I. Akishin, V. S. Zazulin,
6 pp.

RUSSIAN, per, Pribory i Tekh Eksper, No 1, 1963,
pp 152-154. 9684825

AID Rpt T-63-86

Mechanized Brazing of Heat-Exchanger Tubes, by
S. L. Milichenko, 5 pp.

RUSSIAN, per, Svaroch Proizvod, No 7, 1963,
pp 28, 29.

JPRS 20734

Separation of Liquid Eutectics by Centrifuging,
by A. A. Vertman, A. M. Samarin.

RUSSIAN, per, Trudy Inst Met imeni A. A. Baykova,
No 10, 1962, pp 152-154.

*AEC

Electron Beam Vapor Deposition, by V. K. Pereverzev.

RUSSIAN, per, Trudy Inst Met imeni A. A. Baykova,
Ak Nauk SSSR, No 11, 1962, pp 209-220.

*NASA TT F-185

On the Problem of the Nature of Phase Transformations
in Metals and Alloys, by N. M. Ivanova, T. A. Lebedev.

RUSSIAN, per, Trudy Politekh Inst, 1962, pp 108-114.

*AEC

Scientific
Materials & Metallurgy (Contd)

The Determination of the Alkali Metals, by
M. L. Yashchenko, G. V. Ovchinnikova, et al,
13 pp.

RUSSIAN, per, Trudy Pyatoi Sessii Komis po
Opredeleliyu Absolyut Vozrasta Geol Formatsii Ak
Nauk SSSR, Otdel Geol-Geogr Nauk, 1958, 1960,
pp 296-307.

AEC-Tr-5822

Oxidation Rate of Iron and Steam in Carbon Dioxide
Gas at High Temperatures, by V. I. Tikhomirov,
I. A. Gofman.

RUSSIAN, per, Ucheniye Zapiski Leningrad
Gosudarst Univ imeni A. A. Zhdanova, Ser Khim
Nauk, No 175, No 14, Part I, 1954, pp 21-35.

BISI 3198

Oxidation Rate of Iron in Mixtures of Steam With
Oxygen or With Hydrogen, by V. I. Tikhomirov,
I. A. Gofman.

RUSSIAN, per, Ucheniye Zapiski Leningradskogo
Gosudarstvennogo Univ imeni A. A. Zhdanova,
Ser Khim Nauk, No 175, No 14, Part I, 1954,
pp 36-51.

BISI 3199

Viscosity of Boron Trifluoride, by G. M. Panchenkov,
et al.

RUSSIAN, per, Vest Moscow Univ Ser II Khim,
Vol XVII, No 5, 1962, pp 11-13.

*AEC

Internal Stresses in Coatings. XI. Methods of
Calculating Internal Stresses in Polymer and Paint
and Varnish Coatings, by A. T. Sanzharovskiy,
12 pp.

RUSSIAN, per, Vysokomolek Soyed, Vol II, No 11,
1960, pp 1698-1702. 9210747

AEC-NP-Tr-1017

Study of Saturated Vapor Pressures of Liquid
Metals and of Their Impurities by the Gas
Carrier Method, by V. T. Burtsev, A. M. Samarin.
RUSSIAN, per, Zavod Lab, Vol XXVIII, No 10,
1962, pp 1199-1203.

*AEC

Process for Production of Corrosion Protective
Phosphate Coatings on Ruated or Scaly Iron or
Steel Surfaces and Zinc or Zinc Alloys, 10 pp.
AUSTRIAN, Patent No 168,640.

Patent Office

Process for Casting Steel in Ingot Molds Containing
Liquid Slag, 12 pp.
AUSTRIAN, Patent No 215,609 (Corresponding French
Add. Patent No 73,094 to 1,129,601).

Patent Office

Scientific
Materials & Metallurgy (Contd)

Information Pertaining to the News of Processing Metals on a Press, by P. Davidkov, St. N. Stamatov, 6 pp.

BULGARIAN, per, Tekhnika, No 10, 1961, pp 36, 37. 9685055

FTD-TT-63-568

Determination of the Number and Size of Particles Existing in a Material, by Jiri Likes, 8 pp. CZECH, rpt, Conference on Applications of Mathematics in the Engineering Industry, Prague, 1962, pp 59-67.

AEC-Tr-5833

Method of Heat Treatment of Heavy Forgings and Rolled Products From Carbon and Alloy Steels, by L. Toman, J. Hladky. CZECH, per, Hutnicke Listy, Vol XVII, No 12, 1962, pp 910, 911.

*ACSI I-3243
ID 2244420
519th MI Bn

Hot Forgeability of Silicon Steels, by J. Telecky. CZECH, per, Hutnik, Vol IX, No 4, 1959, pp 121-128.

*BISI 3338

Materials for Stopper Tubes of Tundishes Used for Vacuum Degassing of Transformer Steel, by A. Richner. CZECH, per, Hutnik, Vol XII, 1962, pp 586-590.

*BISI 3342

Protective Atmospheres Saturated With Lithium Vapour, by B. Prenosil. CZECH, per, Strojirenstvi, Vol IX, No 12, 1959, pp 939-942.

BISI 3202

Notes on the Preparatory Phase of Mineral Exploration, by J. Lombard. FRENCH, bulletin, Chronique des Mines et de la Recherche Miniere, 1961, pp 5-14.

MU/T 516

Rapid Potentiometric Method for the Determination of Trivalent Chromium, by M. J. Allard, M. Bonnemay. FRENCH, rpt, Chrome Dur, 1959-1960, pp 33-39.

*BISI 3332

Scientific
Materials & Metallurgy (Contd)

Selected Articles From the French Report,
Paper Presented at the Journees Internationales
de Siderurgie, Luxembourg, 1-4 Oct 1962.

Pneumatic Injection of Dry Coal in No 2 Blast Furnace of the Compagnie Des Hauts Fourneaux at Chasse, by P. Chauzat, C. Reveil.	BISI 3171
Present State of the Theory of Heat Exchanges in the Blast Furnace, by B. I. Kitayev, J. G. Yaroshenko, (pp 45-57).	BISI 3168
The Movement of Gas in the Blast Furnace Stock Column, by M. Hansen, (pp 58-68).	BISI 3022
Study of the Gas Movements and Their Effects in the Shaft of the blast Furnace, by F. Paschal, F. Himber, (pp 69-84).	BISI 3023
The Relationship of Calorific, Material and Reduction Balances of the Blast Furnace Under Various Operating Conditions, by E. Schurmann, D. Bulter, (pp 89-112).	BISI 3026
Method for Testing the Reduction of Iron Ore, by L. von Bogdandy, P. Dickens, (pp 142-156).	BISI 3033
The Use of Probes in Controlling Blast Furnace Operations, by A. Roederer, Y. Boudier, (pp 165-174).	BISI 3169
Theoretical Aspects of Effect of High Top Pressure on the Operation of the Blast Furnace, by F. Himber, D. Dutilloy, (pp 202-212).	BISI 3028
Analysis of the Performance of Blast Furnace No 3 Working With a Slag Volume of 275 kg/t of Pig Iron at Oscar Simigaglia Works of Italsider, Genova-Cornigliano, by T. Barbieri, (pp 302-310).	BISI 3035
Report of Experiments on the Injection of Light Fuel in the Hot Blast Main of Blast Furnace II at Belval, Arbed, by J. M. Wagener, N. Majerus, (pp 433-441).	BISI 3170

Scientific
Materials & Metallurgy (Contd)

Inventory Control of Spare Parts in the Steel Industry,
by Melese.

FRENCH, rpt, Proceeding Second International
Conference on Operational Research, 1960,
pp 309-321.

*BISI 3337

Study of the Thermal Decomposition of Uranyl
Oxalates and of Uranium IV, by R. Bressat,
B. Claudel, et al.

FRENCH, per, Bulletin de la Societe Chimique de
France, No 3, 1963, pp 464-470.

*AEC

Mineral Synthesis in Organic Media, by R. Weil,
R. Hocart, et al, 26 pp.

FRENCH, per, Bulletin de la Societe Francaise de
Mineralogie et de Cristallographie, Vol LXXVII,
1954, pp 1084-1101. 9684975

Emmanuel Coll
Res Lang Ctr
E-T-R-F-62-35

Selected Articles From the French Periodical
Centre de Documentation Siderurgique Circulaires.

No 9, 1961, pp 2033-2038.

BISI 3218

Accelerating Melting Using Auxiliary Oxygen/
Natural Gas Burners in a 10 Tonne Electric
Furnace Charged With 16 1/2 Tonnes, by
R. Dessain.

No 5, 1962, pp 1259-1276.

BISI 3276

Removal of Surface Cracks With Cutting Torch,
by M. Donze.

No 3, 1963.

Gas Analysis in Metals by Emission Spectrography
by R. Berneron, (pp 743-748).

BISI 3291

Determination of Hydrogen in Steels and
Ferro-Alloys, by J. Calmettes, L. Glenst,
(pp 749-766).

*BISI 3292

Study of the Blast Furnace, by J. Michard.

FRENCH, per, Centre d'Etude Superieures de la
Siderurgie, Parts 3, 4, Cahier II, 1959, pp 19-38.

BISI 3280

Simple Method for Preparing Nitrides of the
Actinide Metals and the Rare Earths, by F. Anselin.
FRENCH, per, Comptes Rendus Academies Science,
Vol CCLVI, 1963, pp 2616-2619.

*AEC

A New Nuclear Material: Sintered Magnesium Oxide,
by M. Salesse, R. Caillat, et al.

FRENCH, per, Journal of Nuclear Materials,
Vol VIII, No 1, 1963, pp 39, 40.

*UKAEA-Harwell-
Tr-1869

Scientific
Materials & Metallurgy (Contd)

Preparation, Fabrication and Metallurgical
Properties of Composite Materials of the Mg/MgO
Type, by J. Herenguel.
FRENCH, per, Journal of Nuclear Materials, Vol VIII,
No 1, 1963, pp 49-59.

*UKAEA-Harwell-
Tr-1870

Influence of Pressure on Diffusion in the U - Al,
U - Cu, and U - Ni Systems, by Y. Adda, M. Beyeler,
et al, 18 pp.
FRENCH, per, Les Memoires Scientifiques de la
Revue de Metallurgie, Vol LVII, 1960, pp 423-434.

AEC-NE HW-Tr-48

Some Observations Concerning the Influence of
Oxidation on Creep in a Mild Steel Armco Iron,
by O. Paar, J. Moreau.
FRENCH, per, Les Memoires Scientifiques de la
Revue de Metallurgie, Vol LXIX, 1962, pp 629-642.

BISI 3311

Selected Articles From the French Periodical
Revue de Metallurgie.

No 10, 1948, pp 402-410.
Thermoelectric Capacity of Metals, by
C. Crussard, F. Aubertin.

CEGB 2683

No 11, 1960, pp 1003-1018.
The Elastic Deformation of Four-High Rolling Mill
Rolls, by B. Fazan.

*BISI 3341

1961, pp 835-846.
On the Cavities Observable in Aluminium and
Its Alloys, by C. Renon, J. Calvet.

MU/T.519

No 12, 1961, pp 1029-1037.
Recent Developments in Hot Piercing and Ex-
trusion Using Glass as a Lubrication, by
Jacques Sejournet.

CEGB 2685

No 3, 1962, pp 249-254.
Elimination of Corrosion Products: Pickling
Steel in Hydrochloric Acid Medium, by
S. Menasce, A. Hache.

BISI 2961

No 9, 1962, pp 751-756.
The Influence of Alpha-Producing Trace
Elements Aluminium, Tin on the Forgeability
of Semi-Hard Carbon Steel, by P. Bastien,
P. A. Portevin.

BISI 3254

Scientific
Materials & Metallurgy (Contd)

Selected Articles From the French Periodical
Revue de Metallurgie. (Contd)

No 2, 1963, pp 105-113.
Continuous Monitoring of the Carbon Content of
the Bath in Refining Processes With Pure Oxygen,
by J. Dumont-Fillon, F. Mangin.

BISI 3283

No 5, 1963, pp 461-470.
Fatigue and Friction, by Y. de Villemeur.

*IIB 5990

Furnace for the Direct Production of Steel From
Iron Ore, by Prosper Negre, Nathan-Louis Paves,
6 pp.
FRENCH, Patent No 22,597 (Addition to 509,875).

Patent Office

Selected Articles From the German Periodical
Archiv fuer Eisenhuettenwesen.

Vol XXVII, 1956.
The Phase Diagram Ferrous Oxide-Aluminum Oxide,
by Wilhelm Anton Fischer, Alfred Hoffman,
14 pp, (pp 343-346).

AEC-UCRL-
Tr-913(L)

Investigation of the Kinetics of Martensite
Formation, by Heinrich Beisswenger, Erich Scheil,
22 pp, (pp 413-420).

AEC-UCRL-Tr-
883(L)

Vol XXXII, 1961.
Stress-Corrosion Cracking of Soft Iron in
Calcium Nitrate Solutions, by A. Baumel,
H. J. Engell, (pp 379-386).

CEGB 2564

The Investigation of Pitting Corrosion in
Chemically Resistant Austenitic Steels, by
E. Brauns, W. Schwenk, (pp 387-396).

CEGB 2563

Vol XXXIII, 1962.
Mathematical Statistics in Iron and Steelmaking
Plants - Part II - Planning and Evaluation of
Trails and Operating Records, by H. Knuppel,
A. Stumpf, (pp 67-76).

*BISI 3324

Equilibrium in the Reaction of Sulphur Between
Molten Carbon-Saturated Iron and Lime-Silica-
Alumina-Magnesia Slags at 1550°C, by H. Schenck,
M. Froberg, (pp 589-591).

BISI 3145

Scientific
Materials & Metallurgy (Contd)

Selected Articles From the German Periodical
Archiv fuer Eisenhuettenwesen. (Contd)

- Vol XXXIII, 1962.
The Segregation Effect of Chromium in Iron Nickel-Sulphur System, by R. Vogel (pp 723-727). BISI 3223
- The Effect of the Potential on the Inter-crystalline Corrosion of a Tempered Austenitic Chrome-Nickel Steel, by H. J. Schuller, (pp 853-862). BISI 3177
- Vol XXXIV, 1963.
Measurement of the Viscosity of Molten Metals at High Temperatures, by H. Schenck, C. Froberg, (pp 93-100). BISI 3248
- The Relationship Between the Heat Treatment and the Corrosion Resistance of Stainless Steels Containing Approximately 17% CR in Boiling Concentrated Nitric Acid, by A. Baumel, (pp 135-146). BISI 3287
- Sensitive Analysis of Structural Constituents in Metal Microsections by X-Ray Diffraction, by H. Kudielka, H. Moller, (pp 181-185). BISI 3262
- Laws Governing Carbon Monoxide Evolution in Partially Killed Steels During Solidification, by H. Knuppel, (pp 357, 358). *BISI 3335
- The Crystallorgraphic Properties of Cementite Precipitation in Austenite, by W. Pitsch, (pp 381-390). *BISI 3320
- Thoughts on the Production of Cold-Rolled Sections, by E. Borgfelder.
GERMAN, per, Bander Bleche Rohre, No 2, 1961, pp 64-67. BISI 3206
- Non-Destructible Testing of Bars and Tubes in Alternating Magnetic Fields, by R. Crome.
GERMAN, per, Bander Bleche Rohre, No 1, 1963, pp 16-21. BISI 3225
- Experiments and Evaluation of the Life of Ingot Moulds, by H. Trenkler.
GERMAN, per, Berg-und Huttenmannische Monatshefte, No 10, 1962, pp 335-341. *BISI 3329
- Biochemical Studies on the Crystalline Isozymes of the Lactate Dehydrogenase From Human Organs, by E. D. Washcmuth, G. Pfeleiderer, 18 pp.
GERMAN, per, Biochemische Zeitschrift, Vol CCCXXXVI, 1963, pp 545-556. Navy Tr 3519
NMS 797

Scientific
Materials & Metallurgy (Contd)

Damage in the Form of Bulges Occurring With Inlaid Parquet Flooring on a Mastic Asphalt Screed, by K. Schulze.
GERMAN, per, Boden Wand und Decke, No 8, 1961, pp 346-350.

GB/21/LC 1118

On the Catalytic Influence of Hydrofluoric Acid on the Formation of Carbon Monofluoride, by Walter Ruedorff, Gerda Ruedorff, 8 pp.
GERMAN, per, Chemische Berichte, Vol LXXX, 1947, pp 413-417.

AEC-Tr-5854

Investigations of the Transmission Processes in Fluidized Solids, by Walter Broetz, 26 pp.
GERMAN, per, Chemie-Ingenieur-Technik, Vol XXVIII, 1956, pp 165-174.

AEC-Tr-5844

Assessing the Degrees of Rust on Sheet Steels as a Basis for the Preparation of Rust-Protective Coatings, by I. Alfort.
GERMAN, per, Deutsche Farben-Zeitschrift, Vol XIII, No 5, 1959, pp 177-183.

AEI 2874

Synthetic Emeralds. Parts I, II, and III, by W. F. Eppler, 40 pp.
GERMAN, per, Deutsche Goldschmiede Zeitung, 1958, pp 193-197; 249-251; 327-329; 381-385.

AEC-UCRL-Tr-914(L)

Do-It-Yourself Paints in Switzerland, by G. Meyer.
GERMAN, per, Farbe und Lack, Vol LXVIII, No 9, 1962, pp 638-642.

GB/39/Pa/
PVM131/A/201

Wet Strength of Leaf-, Stalk- and Fruit Fibres, by W. Bobeth, H. Martin.
GERMAN, per, Faserforschung und Textiltechnik, Vol XII, 1961, pp 587-593.

GB/221

Galvanic Noble Metal Platings for Electrical Engineering, by A. Kleinle, O. Loebich.
GERMAN, per, Galvanotechnik, Vol LIII, No 2, 1962.

*AEC

The Influence of Some Elements on Spheroidal Graphite Formation in Cast Iron, by J. Verelst, A. De Sy.
GERMAN, per, Giesserei, Vol XLIII, No 6, 1956, pp 305-315.

*BISI 3347

Improvement of the Notch Impact Strength of 13% Chrome Steel Castings, by E. von Rajakovics.
GERMAN, per, Giesserei, Vol L, No 1, 1963, pp 3-6.

BISI 3312

Scientific
Materials & Metallurgy (Contd)

- Machining Quality of Synthetic Products, by
W. Spath, 27 pp.
GERMAN, per, Gummi und Asbest, Vol VIII, 1955,
pp 612-620. INSDOC/T.4993
- Method of Hardenability Tests on Steels To Be
Hardened Inductively, by K. Kegel.
GERMAN, per, Harterei-Technische Mitteilungen,
Part II, Vol XV, No 2, 1960, pp 96-101. BISI 3230
- Electron Microscope Investigation of Zinc Oxide,
by Hugo Strunz.
GERMAN, per, Heidelberger Beitrage zur Mineralogie
und Petrographie, Vol II, 1950, pp 216-234. *AEC
- Investigations on the Origin and Growth of Pitting
Corrosion Points, by H. J. Engell, N. D. Stolica.
GERMAN, per, Korrosion, No 13, 1960, pp 14-20. CEEB 2631
- Pitting Phenomena on Aluminium Roofing Materials,
by H. Cohen.
GERMAN, per, Korrosion, Vol XIII, 1960, pp 200-310. NRC/Ref. C-4074
- The Testing and Behaviour of Metallic Materials
When Subjected to Water Jet Impact and Cavitation,
by M. Vater.
GERMAN, per, Korrosion und Metallschutz, Vol XX,
No 6, 1944, pp 171-179. CEEB 2780
- Application of the Dielectric Method for
Investigating Plastics, by G. Langbein, 22 pp.
GERMAN, per, Kunststoffe, Vol LI, 1961, pp 503-508. AEC-SCI-Tr-481
- Possibilities for Vulcanizing Vegetable Tanned
Upper Leather, by W. Fischer.
GERMAN, per, Leder, Vol XII, No 9, 1961,
pp 223-226. SACSIR/No 236
- Measurements of Heat and Moisture Transfer Through
Textiles, by J. Mecheels.
GERMAN, per, Melliand Textilberichte, Vol XLIII,
No 6, 1962, pp 585-588. CSIRO/No 6158
- Cross Impact Tests on Tyre Cords Having Various
Yarn and Cord Twists, by W. Wegener.
GERMAN, per, Melliand Textilberichte, Vol XLIII,
No 9, 1962, pp 928-935. GB/256/T.1458
- Latest Data on the Deformation Behavior of the
Metals Niobium, Tantalum, Molybdenum and Tungsten
at Low and Moderate Temperatures, Part I, by
F. Ostermann, 27 pp.
GERMAN, per, Metall, Vol XVI, 1962, pp 656-661. AEC-Tr-4770 (Pt 1.)

Scientific
Materials & Metallurgy (Contd)

Latest Data on the Deformation Behavior of the Metals Niobium, Tantalum, Molybdenum and Tungsten at Low and Moderate Temperatures, Part II, by F. Ostermann, 26 pp.

GERMAN, per, Metall, Vol XVI, 1962, pp 979-984.

AEC-Tr-5770
(Pt 2)

Rhenium, by J. Sagoschen.

GERMAN, per, Metallwissenschaft und Technik, Vol XVI, No 12, 1962, pp 1193-1195.

*AEC

Direct Enamelling on Decarburised Steel Sheet, by K. Lang.

GERMAN, per, Mitteilungen des Vereins Deutscher Emailfachleute, Vol X, No 9, 1962, pp 101-108.

BISI 3244

Shaping of the Heat-Treated Prestressing Steels St 140/160, by W. Lehnert.

GERMAN, per, Neue Hutte, Vol VII, No 3, 1962, pp 164-166.

BISI 3078

A New Type of Combustion Process for the Precise Determination of Sulphur in Foundry Pig Iron, by H. Horn, E. Kendler.

GERMAN, per, Neue Hutte, Vol VIII, No 1, 1963, pp 31-35.

BISI 3267

Effect of Cold-Work and Annealing on Size, Shape and Orientation of Martensite Particles in Nickel-Chromium-Iron Alloys, by G. Rassmann, O. Henkel.

GERMAN, per, Neue Hutte, Vol VIII, No 4, 1963, pp 232-240.

*BISI 3328

Considerations Regarding the Determination of the Nitrogen Content of Steel by Wet Methods, by D. Blazejak-Ditges.

GERMAN, per, Radex Rundschau, No 1, 1963, pp 335-350.

BISI 3278

Analytical Method of Calculation of the Coke Consumption for Pig Iron Production and Its Application to Present Attempts to Lower Coke Consumption, by W. Heiligenstaedt.

GERMAN, per, Radex Rundschau, No 3, 1963, pp 441-461.

*BISI 3340

Scientific
Materials & Metallurgy (Contd)

Selected Articles From the German Periodical
Stahl und Eisen.

Vol LXXVIII, No 8, 1958, pp 509-516. General Rules 1956 for Cost Accounting in the Iron and Steel Industry and Their Introduction, by Carl-Ernst Schulz.	RTB
Vol LXXXII, No 6, 1962, pp 762-771. Studies on the Possibilities of Removing the Dust From Bottom Blown Basic Steel Converters, by W. Dehne, H. Gunther.	BISI 2911
Vol LXXXIII, No 1, 1963, pp 145-154. Change of Mechanical Properties of Rail Steels Owing to Hydrogen Effusion, by W. Heller, W. Janiche.	BISI 3255
Vol LXXXIII, No 2, 1963. Desulphurisation of Pig Iron With Powdered Lime Outside the Blast Furnace, by W. Esche, M. Haucke, (pp 270-281).	BISI 3210
Characteristics of Tensile Testing Machines and Their Effect on the Strain Rate at the Lower Yield Point, by A. Krisch, R. Schweitzer, (pp 290-298).	BISI 3212
Vol LXXXIII, No 3, 1963. Production, Properties and Testing of Plastic Coated Steel Strip, by M. Reimann, W. Sieckmann, (pp 317-327).	BISI 3241
Process for the Production of Plastic Coated Steel Strip, by G. von der Dunk, B. Meuthen, (pp 357-358).	*BISI 3335
Vol LXXXIII, No 5, 1963. Oxygen in Killed and Semi-Killed Steel, by J. Koenitzer, R. Hammer, (pp 569-577).	*BISI 3318
Determination of the Reducibility of Ores, Sinter and Pellets in the Two-Stage Test, by H. Krainer, M. Wahlster, (pp 578-585).	*BISI 3319
Investigation on the Detection for Defects of Heavy Rolled Plate by Y-Rays, by R. Dresia, W. Sengpiel, (pp 585-593).	*BISI 3336

Scientific
Materials & Metallurgy (Contd)

Selected Articles From the German Periodical
Stahl und Eisen. (Contd)

- Vol LXXXIII, No 6, 1963.
Seamless Steel Tubes for Exploitation of
Petroleum or Natural Gas, by W. V. Greytz,
G. Lautenbusch, (pp 785-767). *HB 5991
- Steels for the Oil Refining and Petrochemical
Industries, by L. Schaeben, K. J. Westerfield,
(pp 778-789). *HB 5992
- Vol LXXXIII, No 7, 1963, pp 382-387.
Production of Open Hearth Steel With Phosphorus
Rich Pig Iron by Top Blowing With Oxygen Report
No 758, by K. O. Zimmer, K. Walden. BISI 3258
- Vol LXXXIII, No 8, 1963, pp 449-457.
Effect of Deformation of Austenite Prior to
Martensite Transformation in Low Alloy Structural
Steels, by K. Detert, C. Schmidt-Krayer. BISI 3310
- Vol LXXXIII, No 11, 1963, pp 669-675.
Development and Design of a Hot Blast Stove With
Combustion Chamber Outside of the Checkerwork,
by A. Heuer, H. Tallmann. *BISI 3326
- Twist Distribution in the Yarn During the Spinning
Process. Part I, by W. Wegener, H. Landwehrkamp.
GERMAN, per, Textil-Praxis, Vol XVII, No 10, 1962,
pp 995-1000. GB/256/T.1465
- Twist Distribution in the Yarn During the Spinning
Process. Part II, by W. Wegener, B. Wulffhorst.
GERMAN, per, Textil-Praxis, Vol XVII, No 12,
1962, pp 1218-1230. GB/256/T.1470
- Determination of the Purity of Metals by Means of
Damping Measurements, by H. J. Seemann, R. Mandler,
35 pp.
GERMAN, per, Vakuum-Tech, Vol XI, 1962, pp 161-167. AEC-NP-Tr-1011
- The Effect of Treatment With Lithium-Oxide
Vapour on the Oxidation Rate of Iron, by
Brauns, Rahmel.
GERMAN, per, Werkstoffe und Korrosion, Vol VII,
1956, pp 448-452. CEEB 2459
- The Mechanism of Atmospheric Rusting of Iron,
by G. Schikorr.
GERMAN, per, Werkstoffe und Korrosion, No 2, 1963,
pp 69-80. *BISI 3339

Scientific
Materials & Metallurgy (Contd)

Potentiometric Method for the Determination of Small Boron Contents in Steels, by H. J. Grabner. GERMAN, per, Z fuer Analytische Chemie, Vol CLXXXIV, No 5, 1962, pp 327-341.

BISI 3281

Cerium - Magnesium Alloys, by Rudolf Vogel, 26 pp. GERMAN, per, Z Anorganische Chemie, Vol XCI, 1915, pp 277-298.

AEC-UCRL-ir-930(L)

Beryllium Nitride, by Fr. Fichter. GERMAN, per, Z fuer Anorganische und Allgemeine Chemie, Vol XCIII, 1915, pp 84-94.

*AEC

Decarburization and Denitriding of Iron-Silicon Alloys, by J. D. Fast. GERMAN, per, Z Elektrochemie, Vol LXIII, No 7, 1959, pp 765-772.

BISI 2844

A Photometric Determination of Zinc in Iron Ore, by H. Pohl. GERMAN, per, Z fuer Erzbergbau und Metallhüttenwesen, No 1, 1963, pp 18-21.

BISI 3286

Electron-Microscopic Investigation of Vacancy Agglomerates in Quenched Face-Centered Cubic Crystals, Particularly in Ni - Co Alloys, by Siegfried Mader, Alfred Seeger, et al, 21 pp. GERMAN, per, Z fuer Metallkunde, Vol LII, 1961, pp 785-794.

AEC-Tr-5843

The Diffraction of Electron Beams by Double-Layers of UO_2 , by Siegfried Steeb, 20 pp. GERMAN, per, Z fuer Metallkunde, Vol LIII, 1962, pp 541-547. 9208778

AEC-UCRL-Tr-897(L)

Selected Articles From the German Periodical Z fuer Naturforsch, Vol XVIIa, 1962.

Theory of the Stacking Fault Energy in Face-Centered Cubic Metals, by Horst Statz, 27 pp, (pp 906-921).

AEC-Tr-5831

The Electric Resistance of Stacking Faults in Face-Centered Cubic Metals, by Horst Statz, 30 pp, (pp 994-1010).

AEC-Tr-5832

Self-Diffusion in Molten Potassium, by J. Rohlin, A. Lodding, 7 pp, (pp 1081-1085).

AEC-Tr-5864

The Use of Isotope Transport to Study the Effective Diffusion in Liquid Metals, by A. Lodding, A. Klemm, 7 pp, (pp 1085-1088).

AEC-Tr-5865

Scientific
Materials & Metallurgy (Contd)

- Low Alloy Rails With Increased Silicon Content for Chinese Railroads, by Sun Tse-yun, 6 pp.
GERMAN, per, Z der Organization fuer die Zusammenarbeit der Eisenbahnen (OSShD), No 2, 1963, pp 20-22. JPRS 19882
- The Siliconizing and Titanizing of Iron, Nickel and Copper, by A. Schneider, H. P. Siegfriedt.
GERMAN, per, Z fuer Technik, Industry und Handel, Vol XIII, No 6, 1959, pp 547-549. BISI 3279
- Fatigue Behaviour of Metallic Materials as a Function of the Temperature Under High Constant and Variable Stresses, by G. Gurtler, E. Schmid.
GERMAN, per, Z Verein Deutscher Ingenieure, Vol LXXXIII, No 25, 1939, pp 749-752. CEGB 2808
- Retained Austenite and Its Examination in Hardened Steel, by E. Fuchs.
HUNGARIAN, per, Kohaszati Lapok, Vol XCIV, No 2, 1961, pp 57-61. *BISI 3343
- Influence of Small Cavities on the Velocity of Sound in Metals, by F. Gatto.
ITALIAN, per, Alluminio, Vol XIX, No 1, 1950, pp 19-26. *AEC
- Study of the Behaviour of Various Types of Aluminium Continuously Immersed in Seawater Under Fouling Conditions, by E. Mor, G. Luft.
ITALIAN, per, Alluminio, Vol XXX, 1960, pp 200-310. NRC/Ref. C-4085
- Experiments and Thermodynamic Considerations on Desulphurization of Fe-S and Fe-C-S Alloys in Vacuum Melting, by R. Ohno.
JAPANESE, per, Nippon Kinzoku Gakkai-Si, Vol XXIII, No 8, 1959, pp 489-493. *BISI 3344
- Identification of Textile Fibres and the Detection of Mixed Fibres by Infra Red Absorption Spectra, by H. Sobue, S. Fukuhara.
JAPANESE, per, Sen-i Gakkaishi, Vol XVIII, No 2, 1962, pp 121-129. GB/256/T.1419
- Mechanical Capped Steel for Hot-Rolled Sheet, by Y. Mitarashi, H. Fujimaki.
JAPANESE, per, Tetsu to Hagane, Vol XLVI, No 9, 1960, pp 1219-1221. BISI 2780
- Corrosion of Runner Bricks in Aluminium Killed Steel Pouring Practice, by K. Oba, H. Hiragushi.
JAPANESE, per, Tetsu to Hagane, Vol XLVI, No 9, 1960, pp 1244-1246. *BISI 3331

Scientific
Materials & Metallurgy (Contd)

Capped Rimmed Steel and Its Deep Drawing Properties,
by M. Takamuka, S. Tsuda.
JAPANESE, per, Tetsu to Hagane, Vol XLVI, No 9,
1960, pp 1280-1282.

BISI 2781

New Swedish Iron Ore, by F. Mogensen.
SWEDISH, per, Blad for Bergshandterings Vanner,
Vol XXVI, No 3, 1943, pp 128-135.

NZDIA

Photometric Determination of Bismuth in Stainless
Steel and Ferro-Molybdenum, by C. G. Carlstrom,
V. Palvarinne.
SWEDISH, per, Jernkontorets Annaler, Vol CXLVI,
No 6, 1962, pp 453-461.

BISI 3309

Oxelosund Steelworks, by N. Bonthron.
SWEDISH, per, Teknisk Tidskrift, 1962,
pp 1217-1251.

NZDIA

Diffusion of Silicon in Titanium, Tantalum,
Molybdenum and Iron, by G. V. Samsonov,
M. S. Koval'chenko, et al, 6 pp.
UKRAINIAN, per, Dopovidi Ak Nauk Ukrain RSR, No 1,
1959, pp 32-36. 9685490

FTD-TT-63-262

Scientific
Mathematics & Data Processing

Approximate Investigation of Some Types of Strongly
Nonlinear Autonomous Systems, by V. V. Kazakevich,
92 pp.

RUSSIAN, bk, Avtomaticheskoye Upravleniye i
Vychislitel'nogo Tekhnika, Gosudarstvennoye
Nauchno-Tekhnicheskoye Iz Mash Literaturny, No 5,
Moscow, 1962, pp 365-442. 9685480

FTD-TT-63-319

Compiling and Interpreting Systems for Use of Standard
Programs and for the BESM Computer of the Academy of
Sciences USSR Computer Center, by V. M. Kurochkin,
52 pp.

RUSSIAN, bk, Kompiliruyushchaya i Interpretiruyushchaya
Sistemy Ispol'zovaniya Standartnykh Program Dlya Mashiny
BESM-2 VTs AN SSSR, Moscow, 1961, pp 1-57. 9685049

FTD-TT-62-1496

Statistical and Probability Simulation as a Possible
Principle of Constructing Control Systems, by
V. V. Chavchavadze, 13 pp.

RUSSIAN, bk, Nauchno-Tekhnicheskoye Obshchestvo
Priborostroitel'noy Promyshlennosti. Primeneniye
Vychislitel'noy Tekhniki Dlya Avtomatizatsii Proizvodstva.
Trudy Soveshchaniya Provedennogo v Oktyabre 1959 G.,
Moscow, 1961, pp 52-62.

JPRS 20660

Application of Computer Techniques in Determination
of the Dynamic Characteristics of Controlled Processes
During Their Normal Operation, by V. V. Solodovnikov,
A. S. Uskov, 34 pp.

RUSSIAN, bk, Nauchno-Tekhnicheskoye Obshchestvo
Priborostroitel'noy Promyshlennosti. Primeneniye
Vychislitel'noy Tekhniki Dlya Avtomatizatsii
Proizvodstva. Trudy Soveshchaniya, Provedennogo v
Oktyabre 1959 G., Moscow, 1961, pp 458-482.

JPRS 20660

Methods for Solving Questions of Stability in the
Large, by N. P. Erugin, 12 pp.

RUSSIAN, per, Iz Ak Nauk SSSR, Vol I, 1955, pp 133-141.

Amer Math Soc

A General Solution of the Problem of Motion of a
Heavy Solid Body Around a Fixed Point, by
A. N. Filatov, 19 pp.

RUSSIAN, per, Iz Ak Nauk Uzbekskoy SSR, No 6, 1961,
pp 23-33.

JPRS 20660

Scientific
Mathematics & Data Processing (Contd)

Selected Articles From the Russian Periodical
Iz Ak Nauk SSSR, Ser Matemat.

- Vol XXI, 1957, pp 627-654. Amer Math Soc
Asymptotic Calculation of Periodic Solutions
of Systems of Differential Equations Containing
Small Parameters in the Derivatives, by
E. F. Mischenko, 32 pp.
- Vol XXI, 1959, pp 605-626. Amer Math Soc
Asymptotic Behavior of the Solutions of Systems
of Differential Equations With a Small Parameter
in the Higher Derivatives, by L. S. Pontryagin,
26 pp.
- Vol XXIV, 1960, pp 3-42. Amer Math Soc
The Theory of Optimal Processes. I. The Maximum
Principle, by V. G. Boltyanskiy, R. V. Gamkrelidze,
et al, 40 pp.
- Vol XXVI, 1962, pp 361-390. 9669632 FTD-TT-63-181
Exceptional Cases of Integral Equations of the
Convolution Type and Equations of the First Kind,
by F. D. Gakhov, V. I. Smagina, 43 pp.
- Sommerfeld's Polynomial Method, by S. A. Smolyanskiy,
5 pp.
RUSSIAN, per, Iz Vysshikh Ucheb Zaved -- Fiz, No 4,
1961, pp 12-16. JPRS 20660
- Measures of Dependence Between Variables and the
Spectra of Stochastic Kernels and Matrices, by
O. V. Sarmonov, V. K. Zakharov, 29 pp.
RUSSIAN, per, Matemat Sbornik, Vol LII(94), No 4,
1960, pp 953-990. 9210815 NIH 7-21-63
- A Boundary Value Problem and Certain Questions of the
Variation of Its Solutions, by V. P. Skripnik, 42 pp.
RUSSIAN, per, Matemat Sbornik, Vol LV (97), No 4,
1961, pp 449-472. JPRS 20660
- On Typically Real Functions of Order p , by
S. A. Gelfer, 22 pp.
RUSSIAN, per, Matemat Sbornik, Novaya Scriya, Vol XXXV,
No 77, 1954, pp 193-214. Amer Math Soc
- Characterization of Compound Singular Points of a
System of Two Differential Equations by Means of
Rough Singular Points of Closely Related Systems, by
N. A. Gubar, 34 pp.
RUSSIAN, per, Matemat Sbornik, Novaya Scriya, No 40(82),
1956, pp 23-56. Amer Math Soc

Scientific
Mathematics & Data Processing (Contd)

The Significance of Dynamic Programming and Game Theory for Physiology, by P. I. Gulyayev, 33 pp.
RUSSIAN, per, Nervnaya Sistema, No 3, 1962,
pp 177-189.

JPRS 20629

An Electronic Model of a Game, by V. A. Ganzen,
8 pp.
RUSSIAN, per, Nervnaya Sistema, No 3, 1962,
pp 190-194.

JPRS 20629

Selected Articles From the Russian Periodical
Priklad Matemat i Mekh.

Vol XXI, 1957, pp 309-319.
On Stability With Large Initial Perturbations,
by N. N. Krasovskiy, 14 pp.

Amer Math Soc

Vol XXVI, No 1, 1962.
Variational Problems in the Optimization of
Control Processes, by V. A. Troitskiy, 23 pp,
(pp 29-38).

JPRS 20660

Peculiarities Occurring Upon the Introduction of
a Small Parameter in Investigating Non-Linear
Oscillations in Automatic Systems, by Ye. P. Popov,
18 pp, (pp 62-69).

Synthesis of a Linear System of Automatic Control
With Restricted Displacements of Controlling
Devices, Based on the Criterion of Minimal Square
Deviation at the Given Instant, by K. Shtaydten,
21 pp, (pp 70-79).

Selected Articles From the Russian Periodical
Sibirskiy Matemat Zhur.

JPRS 20660

Vol II, No 5, 1961.
The Principle of the Extremum for a System of
Second-Order Differential Equations, by
V. Ya. Skorobogat'ko, 21 pp, (pp 746-758).

Asymptotic Behavior of Solutions of a Many-Dimensional
System of Differential Equations Having a Singular
Point of Higher Order, by A. A. Shestakov, 37 pp,
(pp 767-788).

A Method for Numerical Integration of Ordinary
Differential Equations, by O. K. Daugavet, 8 pp,
(pp 792-796).

The Numerical Solution of Integro-Differential Equa-
tions With a Quasi-Linear Differential Operator and
the Generalized Volterra Operator, by G. B. Linkovskiy,
V. F. Kravtsov, 5 pp, (pp 797-800).

Vol II, No 6, 1961, pp 904-912.
Parameter Dependence of the Solutions of Differential
Difference Equations, by V. P. Rubanik, 16 pp.

Scientific
Mathematics & Data Processing (Contd)

Special Features of the Performance of the Control
Computer as the Digital Controller of a Boiler-
Turbine Unit, by V. N. Levitskiy.
RUSSIAN, per, Teploenergetika, No 9, 1962, pp 22-27.

*UKAEA-Winfrith Heat
Tr-19

The Conditionality of Matrices, by D. K. Faddeyev,
7 pp.
RUSSIAN, per, Trudy Matemat Inst imeni V. A. Steklov,
No 53, 1959, pp 387-391. 9684970

Emmanuel Coll Res
Lang Ctr E-T-R-63-8

Mathematical Problems in the One-Velocity Theory
of Particle Transport, by V. S. Vladimirov, 303 pp.
RUSSIAN, per, Trudy Matemat Inst Ak Nauk SSSR,
Vol LXI, 1961.

AECL-1661

On a Variational Method in the Theory of Analytic
Functions, by G. M. Goluzin, 14 pp.
RUSSIAN, per, Uchenyye Zapiski Leningrad Univ,
Ser Matemat Nauk, Vol CXLIV, No 23, 1952, pp 85-101.

Amer Math Soc

The Asymptotic Stability in the Large of the Trivial
Solution of a Dynamical System of Two Differential
Equations, by N. N. Vinogradov, 14 pp.
RUSSIAN, per, Uchennye Zapiski Minsk, Gosudarst
Ped Inst A. M. Gor'k, No 7, 1957, pp 145-158.

Amer Math Soc

On the Existence of a Limiting Regime of a Certain
Non-Linear System of Ordinary Differential Equations,
by B. P. Demidovic, 12 pp.
RUSSIAN, per, Uchenyye Zapiski Moskov, Gosudarst Univ
Ser Mat, No 8, 1955, pp 3-12.

Amer Math Soc

Selected Articles From the Russian Periodical
Uspekhi Matemat Nauk.

Vol XI, No 5, (71), 1956, pp 60-66.
The Method of Variations in the Theory of p-Valent
Functions, by S. A. Gel'fer, 8 pp.

Amer Math Soc

Vol XI, No 6, (72), 1956, pp 117-144.
Certain Questions in the Spectral Theory of Self-
Adjoint Differential Operators, by B. M. Levitan,
32 pp.

Amer Math Soc

Vol XII, No 3 (75), 1957, pp 389-396.
Some Theorems on Limit Cycles for the Equation of
Lienard, by M. G. Hudai-Verenov, 10 pp.

Amer Math Soc

Vol XIII, No 2 (80), 1958, pp 189-194.
Some Theorems on Boundedness of Solutions of Ordinary
Differential Equations, by Yu. A. Klovov, 6 pp.

Amer Math Soc

Vol XIII, No 3 (81), 1958, pp 111-143.
Trace Formulas for Sturm-Liouville Differential
Operators, by L. A. Dikiy, 36 pp.

Amer Math Soc

Scientific
Mathematics & Data Processing (Contd)

Questions of Stability in the Large and Regulating Properties for a Certain System of Differential Equations. I., by B. N. Skackov, 18 pp.
RUSSIAN, per, Vest Leningrad Univ Ser Matemat, Mekh, Astronom, Vol XIII, No 3, 1957, pp 67-80.

Amer Math Soc

On Periodic Solutions of Differential Equations With a Small Parameter, by Yu. A. Ryabov, 12 pp.
RUSSIAN, per, Vest Moskov Univ Ser Matemat, Mekh, Astronom, Fiz, Khim, Vol XI, No 2, 1956, pp 3-12.

Amer Math Soc

Estimates From Below of Eigenvalues of Positive Operators, by L. T. Savinov.
RUSSIAN, per, Zhur Vychislitel'noy Matemat i Matemat Fiz, Vol I, 1961, pp 714-719.

Navy Tr 3489
APL 732

Graphic Conditions Insuring That All the Roots of an Algebraic Equation Have Real Negative Parts, by Dusan Mitrovic.
FRENCH, per, Comptes Rendus Academie des Sciences, Vol CCXL, 1955, pp 1177-1179.

Navy Tr 3464
APL 649

On Conditions Insuring That the Real Parts of the Roots of a Polynomial With Real Coefficients by Negative, by Robert Meynieux.
FRENCH, per, Comptes Rendus de l'Academie des Sciences, Jul, Aug 1962, pp 56-58.

*Navy/APL 223

Determinants With Predominant Principal Diagonal and the Absolute Convergence of Linear Iterative Processes, by Alexander Ostrowski.
GERMAN, per, Commentarii Math Helvetici, Vol XXX, 1956, pp 175-210.

NIH 5-9-63

Conference on Mathematical and Physical-Technical Problems of Cybernetics, by Schrauber.
GERMAN, per, Die Technik, Vol XVII, No 9, 1962, pp 648-651.

*ACSI I-3118-B
ID 2240842

Applications of the Quotient-Difference Algorithm, by Heinz Rutishauser.
GERMAN, per, Z fuer Angewandte Mathematik und Mechanik, Vol V, 1954, pp 496-508.

*Navy/APL 273

Determination of the Eigenvalues and the Eigenvectors of a Matrix With the Help of the Quotient-Difference Algorithm, by Heinz Rutishauser.
GERMAN, per, Z fuer Angewandte Mathematik und Mechanik, Vol VI, 1955, pp 387-401.

*Navy/APL 271

Scientific
Mathematics & Data Processing (Contd)

Comparison Between the Svedberg, Maximal Gradient and Three-Point Methods for the Evaluation of Curves of the Ultracentrifuge Obtained With Philpot-Svensson Optical System, by M. Gohatia, L. Hubner. GERMAN, per, Z fuer Naturforschung, Vol XVb, 1960, pp 351-364.

NIH 5-12-63

Application of Three-Valued Symbolic Logic in the Theory of Automatic Devices. I. Realization of Fundametal Functions in the Circuit Design, by Marek Greniewski, 6 pp. ITALIAN, per, Comun Acad Rep Populare Romine, Vol VI, 1956, pp 225-229.

AEC-SCL-
Tr-479

Application of Three-Symbol Logic to the Theory of Automatic Devices. III. Circuits With Real Contacts, by Gr. C. Moisil, 5 pp. ITALIAN, per, Comun Acad Rep Populare Romine, Vol VI, 1956, pp 505-508.

AEC-SCL-
Tr-478

Behavior of the Integral Curves of a System of Differential Equations Near a Singular Point in a Space of More Than One Dimension, by L. E. Reizin, 14 pp. LATVIAN, per, Latvijas PSR Zinatnu Ak Vestis, No 3(128), 1958, pp 107-120.

Amer Math Soc

(m+n)-Element Algebras and Their Applications to Relay Contact Networks, by M. Greniewski. POLISH, per, Zastosowania Matematyki, Vol IV, 1958, pp 142-168.

*AEC

Nuclear Sciences & Technology

Selected Articles From the Russian Book Atomnaya Promyshlennost, Moscow, 1962.

JPRS 20754

Nuclear Reactions as a Source of Energy, by P. T. Astashenkov, 9 pp, (pp 10-22).

The Production of Deuterium and Tritium, by P. T. Astashenkov, 8 pp, (pp 113-124).

The Production of Lithium, a Metal of the Future, by P. T. Astashenkov, 6 pp, (124-132).

Scientific
Nuclear Sciences & Technology (Contd)

Selected Articles From the Russian Book Conference on
Practical Application of Short-Life Radioisotopes
Produced in Small Research Reactors.

Vol II, 1962.

Needles of Yttrium-90 for Endo-Electron Therapy
Interstitial Beta Therapy, by B. Pierquin,
M. Mortreuil, et al., (pp 201-212).

AEC-Tr-5825

Various Applications of Short-Life Radioisotopes
in the Study of Metals, by A. Kohn, (pp 285-304).

AEC-Tr-5824

Vol I, 1963, pp 141-157.

Contribution to the Study of the Preparation of
Tellurium-132 and of Iodine-132, by R. Stiennon-Bovy,
G. Haegeman-Geladi, 26 pp.

AEC-Tr-5793

Efficiency of Pulsating Column for the General
Theory of Intensified Counter Current Extractors,
by A. M. Rozen.

RUSSIAN, bk, Ekstraktsiya, Teoriya, Primenenie,
Apparatura, Sbornik Statei, Vypusk 2, 1962,
pp 301-319.

*AEC

Certain Hydraulics and Mass Transfer Laws in
Capped Pulsation Columns, by A. M. Rozen, et al.
RUSSIAN, bk, Ekstraktsiya, Teoriya, Primenenie,
Apparatura, Sbornik Statei, Vypusk 2, 1962,
pp 310-339.

*AEC

Energy, Its Sources on Earth and Its Origin,
Part IV, by P. P. Lazarev, 105 pp.
RUSSIAN, bk, Energiya Yeye Istochniki na
Zemle i Yeye Proiskhozhdeniye, Izd-vo Ak Nauk
SSSR, Moscow, 1959, pp 195-276. 9685088

FTD-TT-61-479

Extraction of Fermium and of Mendelevium:
(TBP - HNO and TBP - HCl Systems), by
I. Brandshtetr, Tung-Seng Wang, et al, 20 pp.
RUSSIAN, rpt, Joint Institute for Nuclear
Research, 1962.

AEC-UCRL-
Tr-922

The Separation of Caesium-137 and Strontium-90
for the Final Processing of Concentrated
Fission Product Solutions, by A. Raagenbass,
J. Lefevre, 12 pp.
RUSSIAN, rpt, Proceedings of the Conference on
the Treatment and Storage of High-Level
Radioactive Wastes, Vienna, 1962.

AERE-ilarwell-
Tr-941

Scientific
Nuclear Sciences & Technology (Contd)

Fluctuation of the Neutron Yield in Pulsed Fast Reactors, by L. Pal, G. Nemeth, 31 pp.
RUSSIAN, rpt, Proceedings of the Symposium on Pile Neutron Res Phys, Vienna, 1960, 1962, pp 491-507.

AEC-NP-
Tr-1016

Plasma Physics and Controlled Nuclear Fusion Research, Conference Proceedings, Salzburg, 4-9 September 1961. Part I, 1034 pp.
RUSSIAN, bk, Trudy Konferentsii no Issledovaniyu Fiziki Plazmy i Upraolyaemomu Yadernomu Sintezu, Salzburg, 4-9 Sep 1961. 9210283

AEC-Tr-5589

Plasma Physics and Controlled Nuclear Fusion Research, Conference Proceedings, Salzburg, 4-9 September 1961. Part II, 1034 pp.
RUSSIAN, bk, Trudy Konferentsii no Issledovaniyu Fiziki Plazmy i Upraolyaemomu Yadernomu Sintezu, Salzburg, 4-9 Sep 1961. 9210283

AEC-Tr-5589

Determination of the Burnup of Fuel Rods Using the Magnetic Gamma Spectrometer, by L. V. Groshev, A. M. Demidov, 31 pp.
RUSSIAN, per, Atomnaya Energ, Vol XIII, 1962, pp 458-466.

AEC-Tr-5835

The Reaction of Complex Formation in the Chemical Technology of Uranium, by E. E. Chernyayev, G. V. Ellert, 20 pp.
RUSSIAN, per, Atomnaya Energiya, Vol XIV, 1963, pp 383-394.

AEC-Tr-5870

Liquid Porous Electrodes in a System With a Required Introduction Reagent, by I. G. Gurevich, V. S. Bagotskiy.
RUSSIAN, per, Inzher Fiz Zhur, Vol VI, No 5, 1963, pp 75-85.

*AEC

The Influence of Surface Roughness on the Resistance to Flow of Liquids and on Convective Heat Exchange, by B. M. Teverovskiy, 8 pp.
RUSSIAN, per, Iz Vysshikh Ucheb Zaved Energ, No 7 1958, pp 84-89.

AEC-TRG-Inf-
Ser-219

Thermal Decomposition of Certain Nitrates, by M. M. Karavayev, I. P. Kirillov.
RUSSIAN, per, Izvest Vysshikh Ucheb Zaved, Khim i Khim Tekh, Vol II, No 2, 1959, pp 231-237.

*UKAEA-Harwell-
Tr-1881

Scientific
Nuclear Sciences & Technology (Contd)

- The Influence of the Gamma-Irradiation of Wheat Flour On Its Quality, On the Elastic-Flexible-Sticky Properties of Gluten Proteins, on Doughs, and Also on the Quality of the Bread, by B. A. Nikolayev, S. S. Shkadina, 6 pp. RUSSIAN, per, Khlebopekarnaya i Konditerskaya Promyshlennost', Vol IV, No 5, 1960, pp 8-10. 9210743 AERE-Harwell-Tr-950
- An Electron-Diffraction Study of the Structure of Thin Films of Cadmium Sulfide, Selenide, and Telluride, by S. A. Semiletov. RUSSIAN, per, Kristallografiya, Vol I, No 3, 1956, pp 304-310. *AEC
- A Read-Out Equipment for a Multi-Channel Discriminator, by H. Ostertag, K. H. Lauterjung, et al, 13 pp. RUSSIAN, per, Nuclear Instruments and Methods, Vol XVI, 1962, pp 301-304. AEC-NP-Tr-1014
- On Propagation of Instantaneous Excitations, by G. I. Basenblatt. RUSSIAN, per, Prikl Matemat i Mekh, Vol XVII, 1953, pp 455-460. *AEC
- Effects of Temperature on Extraction With Tributylphosphate, by A. M. Rozen, et al. RUSSIAN, per, Radiokhimiya, No 5, 1962, pp 591-600. *UKAEA-Risley
- Adsorption of Pu(IV) on Glass and Quartz, by A. G. Smartseva. RUSSIAN, per, Radiokhimiya, No 6, 1962, pp 647-655. *UKAEA-Risley
- Some Data on Behaviour of U(IV) in Nitric Acid Solutions, by N. P. Ermolayev, et al. RUSSIAN, per, Radiokhimiya, No 6, 1962, pp 678-685. *UKAEA-Risley
- Determination of Optimum Parameters of Drift Tubes for Cavity Resonators in Proton Linear Accelerators, by V. G. Andreyev, 8 pp. RUSSIAN, per, Radiotekh Inst, Ak Nauk SSSR, 1962. 9210712 AEC-NP-Tr-959

Scientific
Nuclear Sciences & Technology (Contd)

Selected Articles From the Russian Periodical
Teploenergetika.

- No 6, 1960, pp 69-72.
Heat Transfer Resistance of Pipe Bundles
Arranged in Chequerboard Order and With
Continuous Spiral Ribbing, by V. G. Fastovskiy,
U. V. Petrovskiy, 5 pp.
AEC-TRG-Inf-
Ser-301
- No 9, 1962.
Principles of Constructing a Control-
Computer Algorithm for the Overall Automation
of a Boiler Turbine Unit, by V. M. Rushchinskiy,
(pp 11-17).
*UKAEA-
Winfrith Heath-
Tr-17
- Starting and Stopping a 50 M-W Boiler-Turbine
Unit Incorporating a Control Computer, by
M. A. Duel, A. F. Mar'enko, (pp 18-22).
*UKAEA-
Winfrith Heath-
Tr-18
- No 3, 1962, pp 66-69.
Critical Heat Loads and Heat Transfer in Forced
Motion of Water in Tubes in the Superhigh
Pressure Range 175-200 atm, by A. P. Ornatskiy.
*UKAEA-Risley
Tr-431
- Activation Energy of Electrode Processes on Porous
Electrodes, by O. S. Ksenzok, 6 pp.
RUSSIAN, per, Ukrain Khim Zhur, Vol XXIII, 1957,
pp 443-447.
AEC-Tr-5803
- Hydrogen Isotope of Mass 3, by V. I. Chernyayev, 25 pp.
RUSSIAN, per, Uspekhi Fiz Nauk, Vol XXI, 1939,
pp 466-477.
AEC-NP-Tr-993
- The Development of Automatic Control Methods
Using Nuclear Radiations, by N. N. Shumilovskiy,
L. V. Mel'tser, 7 pp.
RUSSIAN, per, Vest Ak Nauk SSSR, Vol XXX, No 3,
1960, pp 42-46.
AERE-Harwell-
Tr-945
- Polarization of Porous Electrides. I. Distribution
of Current and Potential Within the Electrode, by
V. S. Daniel'Bek, 27 pp.
RUSSIAN, per, Zhur Fiz Khim, Vol XXII, 1948,
pp 697-710.
AEC-Tr-5814
- The Influence of Collisions of Uniform Charged
Particles on the Diffusion of Plasma Across
a Strong Magnetic Field, by V. E. Golant.
RUSSIAN, per, Zhur Tekh Fiz, Vol XXXIII, No 3,
pp 257-262.
*AEC

Scientific
Nuclear Sciences & Technology (Contd)

Spectroscopic Investigation of Collective Motion of Ions N IV on the Alpha Installation, by A. B. Berezin, A. N. Zaidel', et al.
RUSSIAN, per, Zhur Tekh Fiz, Vol XXXIII, No 3, pp 291-295.

*AEC

Flow of a Laminar Conducting Gas Jet in a Space With a Magnetic Field, by K. I. Strakhovich, Yu. A. Sokovishin, 7 pp.
BELORUSSIAN, per, Inzh Fiz Zhur, Ak Nauk Beloruss SSR, Vol V, No 10, 1962, pp 65-69.

AEC-Tr-5821

Occupational Chronic Damage From Radiation Sustained in Work With Radium and Strontium 90, by A. David, J. Muller, et al, 21 pp.
CZECH, per, Acta Univ Carolinae Med Supply, Vol XIV, 1961, pp 207-218.

AEC-Tr-5816

On the Question of Measurability of Electro-Magnetic Field Quantities, by N. Bohr, L. Rosenfeld, 47 pp.
DANISH, per, Kgl Danske Videnskab Selskab Mat Fys Medd, Vol XII, 1933, pp 1-65.

AEC-UCRL-
Tr-957(L)

Radiochemistry and Its Development at the University of Helsinki, by Jorma K. Miettinen, 8 pp.
FINNISH, rpt, Atomenergia ja Suomi, 1945-1962, 1962, pp 88-93.

AEC-NP-Tr-960

Measurement of Amplitude Fluctuations in a Rapid Response Photomultiplier, by P. Raimbault, 20 pp.
FRENCH, rpt, CEA-1770, 1961. 9210737

AEC-UCRL-
Tr-942(L)

Analysis of Traces of Carbon in Sodium, by J. Sannier, A. Vasseur, 10 pp.
FRENCH, rpt, 1962.

AEC-Tr-5839

Translation Balance for Measuring the Magnetic Susceptibilities at High or Low Temperatures, by A. Blaise, M. A. Peuch.
FRENCH, rpt, 1962.

*AEC

Internal Friction Owing to Interaction Between Dislocations and Solute Atoms, by G. Schoeck.
FRENCH, per, Acta Metall, Vol XI, 1963, pp 617-622.

*AEC

Scientific
Nuclear Sciences & Technology (Contd)

Selected Articles From the French Periodical
Bulletin Informations Scientifiques et Techniques,
No 63, 1962.

- Safety Problems of Graphite-Moderated Gas-Cooled Natural Uranium Power Reactors, by J. Bourgeois, D. Costes, et al, 26 pp, (pp 9-24). AEC-Tr-5823
- Safety Problems Concerning Research Reactors Moderated and Cooled With Ordinary Water, by J. Lacour, J. Rastoin, et al, 13 pp, (pp 25-30). AEC-Tr-5817
- Some Safety Problems of a Reactor Fitted With Pressure Tubes, by A. Meunier, R. Roche, et al, 22 pp, (pp 31-42). AEC-Tr-5818
- Studies on the Safety Containment Zones of the Rapsodie Reactor, by G. Drevon, M. Gelee, et al, 11 pp, (pp 43-48). AEC-Tr-5859
- Application of Neutron Activation Analysis to the Study of the Impurities in Nuclear Graphites, by S. May.
FRENCH, per, Bulletin de la Societe Chimique de France, No 12, 1961, pp 2203-2208. *UKAEA-Harwell-Tr-1868
- Behavior of Explosives Under the Action of Gamma Rays, by Erminio Plantanida, Marcello Piazzzi, 15 pp.
FRENCH, per, Chimie et Industrie, Vol XLIII, 1961, pp 1389-1393. AEC-AD-284470
- Contribution to the Study of Cortical Function and Synthetic Carcinogenic Substances, by Ng. Buu-hoi, A. Rakoto, 6 pp.
FRENCH, per, Comptes Rendus de l'Academie des Sciences, Vol CXLI, 1947, pp 111-114. AEC-Tr-5829
- Determination of the Coefficients of Diffusion and a Study of the Kirkendall Effect in the Couple Uranium-Titanium, by Y. Adda, J. Philibert.
FRENCH, per, Comptes Rendus de l'Academie des Sciences, Vol CCXLVII, 1958, pp 80-83. *AEC
- Research in Gamma Irradiation of Wheat Flour, by A. R. Deschreider, 9 pp.
FRENCH, per, Conserva, Vol X, No 6, 1961, 1962, pp 115-117. AEC-Tr-5773
- Behavior of the Proteins of Lyophilized Gluten After Treatment With Gamma Rays, by A. R. Deschreider, 19 pp.
FRENCH, per, Industries Alimentaires et Agricoles, Vol LXXVIII, 1961, pp 243-252. 9210720 AEC-Tr-5794

Scientific
Nuclear Sciences & Technology (Contd)

- Corrosion by Uranium Hexafluorides, by
L. M. Vincent.
FRENCH, per, Indust Atomiques, Vol VII, No 1, 2,
1963, pp 66-77; 79-80. *UKAEA-
Risley-Tr-432
- Super Molecular Behaviour of Nucleic Acids: Their
Prolonged Luminescence, by Pierre Douzou,
Jean-Claude Francq, et al, 15 pp.
FRENCH, per, Journal Chimie Phys, Vol LVIII, 1961,
pp 926-933. AEC-Tr-5868
- Radiolysis of Aqueous Solutions of Plutonium, by
Monique Pages, 31 pp.
FRENCH, per, Journal Chimie Phys, Vol LIX, 1962,
pp 63-77. AEC-NP-1007
- Analysis of Oxygen in Sodium. The Mercury
Method: Its Use in the Case of Very Small
Quantities, by L. Champeix, R. Darras, et al, 14 pp.
FRENCH, per, Journal of Nuclear Materials, Vol I,
1959, pp 113-119. AEC-Tr-5840
- New Methods of Personal Dosimetry, by R. Paoletti,
6 pp.
FRENCH, per, Minerva Nucleaire, Vol II, 1958,
pp 393, 394. AEC-UCRL-
Tr-954(L)
- Refractive Index of Air in the Visible Region of
the Spectrum, by Toshiro Masui, 6 pp.
FRENCH, per, Revue d'Optique, Vol XXXVI, 1957,
pp 281-284. AEC-UCRL-
Tr-955(L)
- Measurements of Electron Cascades in Lead by
Means of a Bubble Chamber, by Herbert Lengeler,
61 pp.
GERMAN, rpt, 1962. AEC-Tr-5785
- Experimental Basis for the Design of a Processing
Hot Laboratory Plant of the E.I.R. Facility at
Wurenlingen, by H. R. von Gunten.
GERMAN, rpt, Experimentelle Grundlagen fur den ban
der Abfallaufbereitungsanlage im Hotlabor des eir
in Wurenlingen, 1962. *AEC
- Dosimetry of Ionising Radiation Using Plastics, by
I. Kugler, A. Scharmann, 11 pp.
GERMAN, per, Atomkernenergie, Vol IV, No 1, 1959,
pp 23-27. 9210744 AERE-Harwell-
Tr-932
- Safe Containment of Power Reactors, by T. Jaeger,
23 pp.
GERMAN, per, Atomkernenergie, Vol V, No 1, 1960,
pp 15-18; Vol V, No 3, 1960, pp 100-107. AEC-TRG-Inf-
Ser-275

Scientific
Nuclear Sciences & Technology (Contd)

- Design Principles for Gas Cooled Ship Reactors, by
D. Smidt, 15 pp.
GERMAN, per, Atomkernenergie, Vol V, 1960, pp 361-366. AEC-TRG-Inf-Ser-314
- Shielding Against Beta Radiation, by T. Musialowicz,
F. Wachsmann, 8 pp.
GERMAN, per, Atompraxis, Vol VI, 1960, pp 404-407. AEC-TRG-Inf-Ser-24
- Nuclear Energy for the Propulsion of Space Vehicles,
by Eberhard Rees.
GERMAN, per, Atomwirtschaft, Vol VII, No 5, 1962,
pp 256-260. *AEC
- Heat Transfer in Annular Flow Cross Sections, by
O. Walger, 9 pp.
GERMAN, per, Chemie-Ingenieur-Technik, Vol XXV,
1953, pp 474-476. AEC-Tr-5841
- Ion Exchangers. A Survey of Their Characteristic
Properties, by Milan Marhol, 36 pp.
GERMAN, per, Chemische Listy, Vol LVI, 1962,
pp 728-762. AEC-Tr-5813
- Thermal Conductivity of Gas Mixtures, by
H. Lehmann.
GERMAN, per, Chemie Technik, Vol IX, No 9, 1957,
pp 530-537. *UKAEA-Risley-Tr-436
- The Shaping of Test Electrodes According to
Rogowski, by Carl Stoerk.
GERMAN, per, Elektrotechnische Zeitschrift, No 2,
1931, pp 43-45. *AEC
- The Effect of X-Irradiation of the Process of CO₂
Production by Apples in the Course of Development,
by Johannes Wolf, 9 pp.
GERMAN, per, Flora, Vol CL, 1961, pp 175-178. AEC-NP-Tr-995
- Hetero Genous Isotopic Exchange. Exchange of F13 O4
With Fe⁵⁹, by Von K. Egger.
GERMAN, per, Helvetica Chimica Acta, Vol XLVI,
No 148, 1963, pp 1339-1354. *AEC
- Condensation of Radioactive Cadmium and Silver on
Metal Surfaces, by H. Frauenfelder, O. Huber, et al.
GERMAN, per, Helvetica Physica Acta, Vol XXI,
1948, pp 197. *AEC
- Exchange Interaction Between Superconduction
Electrons of a Superconductor and Paramagnetic Ions,
by Walter Baltensperger.
GERMAN, per, Helvetica Physica Acta, Vol XXXII, 1959,
pp 197-212. *AEC

Scientific
Nuclear Sciences & Technology (Contd)

- Scalers Using Tunnel Diodes, by E. Baldinger, U. Spycher, et al. 6 pp.
GERMAN, per, Helvetica Physica Acta, Vol XXXV, 1962, pp 237-240. AEC-NP-Tr-994
- Changes in Surface Characteristics on Heating of Titanium in Air, by Vladimir Sedlacek, 14 pp.
GERMAN, per, Hutnicka Listy, Vol XVII, 1962, pp 53-58. AEC-Tr-5826
- Concerning the Causes of the Balancer-Amplitude Oscillations, by G. Glaser.
GERMAN, per, Jahrbuch der Deutschen Gesellschaft fuer Chronometrie, 1956, pp 23-31. *AEC
- A Contribution to the Dynamics of the Pallet Escapement, by G. Glaser.
GERMAN, per, Jahrbuch der Deutschen Gesellschaft fuer Chronometrie, 1956, pp 49-64. *AEC
- Activation Perturbation by Self-Absorption and Flux Depression in Activation Analysis, by P. Morzek.
GERMAN, per, Kernenergie, Vol V, No 12, 1962, pp 839. *AEC
- Laboratory Study on Chlorinating Beneficiatine of Neutrons-Irradiated Irranium Nuclear Fuels, by D. Naumann.
GERMAN, per, Kernenergie, Vol VI, No 2, 1963, pp 73-76. *AEC
- Selection of K^+ Mesons in a Secondary Beam of Saturne, by J. Seguinot, J. Teiger, et al, 21 pp.
GERMAN, per, Nuclear Instruments Methods, Vol X, 1961, pp 205-211. AEC-NP-Tr-1009
- The Impurities in Nuclear-Pure Graphites and Their Effect on the Absorption Cross Section for Thermal Neutrons, by E. Fitzer, W. Gebauhr, et al, 24 pp.
GERMAN, per, Nukleonik, Vol IV, 1962, pp 1-9. AEC-Tr-5856
- Determination of Rare Earths in Graphite by Activation Analysis, by W. Gebauhr, J. Martin, 25 pp.
GERMAN, per, Nukleonik, Vol IV, 1962, pp 9-18. AEC-Tr-5857
- Boundary Conditions for the Neutron Flux in the Finite Cylinder According to the P_L -Approximation of the Transport Equation, by D. Emendoerfer, 28 pp.
GERMAN, per, Nukleonik, Vol V, 1963, pp 74-82. AEC-Tr-5846

Scientific
Nuclear Sciences & Technology (Contd)

Investigation of Atomic Vacancies in Cold-Rolled and Quenched Silver, by F. Ramsteiner, W. Schueule, et al, 19 pp.

GERMAN, per, Physica Status Solidi, Vol II, 1962, pp 1005-1020.

AEC-Tr-5842

Preparation of Graphite-Coated Nuclear Inflammable Matters Using Fluidized-Bed Processes, by F. Benesovsky, E. Rudy.

GERMAN, per, Planseeberichte fuer Pulvermetallurgie, Vol X, 1962, pp 168-177.

*AEC

Comparative Dose Measurements With and Without an Image Intensifier, by K. Hohl, 17 pp.

GERMAN, per, Radiol Clin, Vol XXXI, 1962, pp 247-254.

AEC-NP-Tr-996

The Formation of Organic Substances From Carbon Dioxide in Aqueous Solution by Means of ⁶⁰Co Gamma Radiation, by N. Getoff, 24 pp.

GERMAN, per, Z fuer Naturforsch, Vol XVIIb, 1962, pp 751-757.

AEC-NP-Tr-1006

The Quantum Theory of the Atomic Nucleus, by G. Gamow.

GERMAN, per, Z fuer Physik, Vol LI, 1928, pp 204.

*AEC

Ion Sources, by Albert Ziegler, 10 pp.

GERMAN, Patent 1001429, 27 Jun 1955.

AEC-Tr-5809

Problem of Storing the Fission Products Resulting From the Processing of Irradiated Uranium-Molybdenum Alloys, by P. Faugeras, T. Kikindai, 17 pp.

ITALIAN, rpt, IAEA Symposium on the Treatment and Storage of High-Level Radioactive Wastes, Vienna, 1962.

AERE-Harwell-Tr-939

Research Program of the Montecuccolino Group, by B. Ferretti, F. Pierantoni, 6 pp.

ITALIAN, per, Comitato Nazionale per l'Energie Nucleare, 1960.

AEC-Tr-5704

Measurements of the Flat Surfaces of Uranium and Aluminum, by A. Ascoli, E. Germagnoli.

ITALIAN, per, Energia Nucleare, Vol III, No 1, 1961, pp 23-31.

*Redstone Arsenal

X-Ray Spectroscopic Analysis Using Radioisotopes, by S. Enomoto, C. Mori, 24 pp.

JAPANESE, per, Genshiryoku Kogyo, Vol VIII, No 7, 1962, pp 6-13.

AERE-Harwell-Tr-933

Scientific
Nuclear Sciences & Technology (Contd)

The Titanium-Iodide System, by Funaki Koeman,
Kotaro Uchimura, et al.
JAPANESE, per, Journal of the Chemical Society of
Japan, Indust Chem Sect, Vol LXIV, 1961, pp 129-137.

*AEC

Diffusion Phenomena of the Positive Column in a
Magnetic Field, by M. Sato, Y. Hatta.
JAPANESE, per, Kakuyugo Kenkyu, Vol X, No 5, 1963,
pp 373-386.

*AEC

The Behavior of Fission Product Rare Gases in the
Change of Solid Phase. Oxidation and Reduction of
Uranium Oxides, by Simio Ichiba, 12 pp.
JAPANESE, per, Nippon Genshiryoku Gakkaishi, Vol III,
1961, pp 705-710.

AEC-NP-Tr-925

Research on Tritium-Labelled Compounds. Preparation
of Tritium-Labelled Essential Amino Acids, by
Y. Sato, T. Takahashi, et al.
JAPANESE, per, Radioisotopes, Vol X, No 4, 1961,
pp 488-492.

*UKAEA-Harwell-
Tr-1879

The Fluoroglass Dosimeter With High Performance,
by Ryosuke Yokota, Saburo Nakajima.
JAPANESE, per, Toshiba Review, Vol XVIII, No 2,
1963, pp 1-9.

*AEC-UCRL-
Tr-984

Thermoluminescence Dosimeters, by Z. Polacki,
12 pp.
POLISH, per, Postepy Fiz, Vol XIII, No 2, 1962,
pp 165-175.

AERE-Harwell-
Tr-926

Scientific
Physics

Investigations of Plasma in Ogra, by G. F. Bogdanov,
38 pp.
RUSSIAN, rpt.

AEC-Tr-5804

Basic Problems of the Theory of Laminar Flows,
by S. M. Targ.
RUSSIAN, bk, 1951, 420 pp.

*FTD-TT-63-817

Heating of Bodies at High Supersonic Speeds, by
G. I. Sakharov, et al.
RUSSIAN, bk, 1961, 105 pp.

*FTD-TT-63-816

Hydrodynamic Resistance and Heat Transfer of
Rotating Bodies Objects, by L. A. Dorfman.
RUSSIAN, bk, Gosudarstvennoye Izdatel'stvo Fiziko-
Matematicheskoy Literatury, 1960, 260 pp.

*FTD-TT-63-833

Selected Articles From the Russian Book
Issledovaniye po Eksperimental'noy i Teoreticheskoy
Fiziki, 1959.

The Possibility of Determining the Configuration
of Stereoisomeric Dialkylcyclohexanes From the
Raman Spectra, by V. T. Aleksanyan, Kh. E. Sterin,
(pp 43-52).

*Navy/APL 239

Study of the Temperature Dependence of Raman
Line Widths, by P. A. Bazhulin, A. I. Sokolovskaya,
(pp 56-61).

*Navy/APL 240

Quantum Mechanical Theory of Raman Line Inten-
sities, by I. I. Sobel'man, (pp 192-210).

*Navy/APL 241

Dependence of Raman Line Widths on the Anisotropy
of the Derived Polarizability Tensor, by
M. M. Sushchinskiy, (pp 211-217).

*Navy/APL 242

Study of Raman Spectra of H_2O_2 - H_2O and H_2O -
Dioxane Solutions, by S. A. Urholin, M. Z. Pronina,
(pp 244-253).

*Navy/APL 243

Excitation of Spectral Lines in the Negative
Luminescence of a Gas Discharge, by S. E. Frish,
I. P. Bogdanova, (pp 275-286).

*Navy/APL 244

Photographic Optics, by L. S. Urmakher.
RUSSIAN, bk, Optika Fotograficheskikh i Aerofoto-
grammetricheskikh Priborov, Chapter VII, 1962,
pp 163-200.

*ACSI I-2986-A
ID 2240824

Optics of Photogrammetric Instruments, by
L. S. Urmakher.
RUSSIAN, bk, Optika Fotogrammetricheskikh Priborov,
Chapter VIII, 1962, pp 201-213.

*ACSI I-2986-B
ID 2240824

Scientific
Physics (Contd)

Hysteresis Loops of Uniaxial Ferromagnetic Films,
by V. V. Kobelov, 48 pp.
RUSSIAN, bk, Petli Gisterezisa Ferromagnitnykh
Plenok, Moscow, 1961, pp 1-63. 9669777

FTD-TT-62-1866

Computing an Oscillating System for Stability
With the Aid of Complex Coordinates, by
A. N. Obmorshev, 12 pp.
RUSSIAN, bk, Raschety Detaley i Mekhanizmov
Tochnykh Priborov, Gosudarstvennoye Nauchno-Tekh
Izdatel' Mash Literaturny, Mashgiz, Moscow, 1960,
pp 39-49. 9685093

FTD-TT-63-329

Theory of Unsteady Boundary Layer, by
V. V. Struminskiy.
RUSSIAN, bk, Sbornik Teor Rabot po Aerodinamike,
1957, pp 230-252.

*FTD-TT-63-778

A Numerical Solution of the Heat Transfer
Equation, by Sh. Ye. Mikeladze, 64 pp.
RUSSIAN, bk, Trudy Tbilisskogo Matemat Inst
imena A. M. Razmadze, Ak Nauk Gruzinskoy SSR,
Vol XXVII, Iz Ak Nauk Gruz SSSR, Tbilisi, 1960,
pp 367-410. 9669634

FTD-TT-63-196

Equilibrium of a Toroidal Pinch in a Magnetic
Field, by V. D. Shafranov, 20 pp.
RUSSIAN, per, Atomnaya Energiya, Ak Nauk SSSR,
Vol XIII, No 6, 1962, pp 521-529. 9685054

FTD-TT-63-374

The Kinetics of Biosynthesis, by Vol'kenshteyn,
Godzhayev, et al.
RUSSIAN, per, Biofizika, Vol VIII, No 1, 1963,
pp 3-8.

*ACSI I-3242
ID 2244419

Mechanisms of Dislocation Movement During Elastic
Twinning, by R. I. Garber, Ye. I. Stepina, 17 pp.
RUSSIAN, per, Fiz Tverdogo Tela, Vol V, No 1,
1963, pp 211-219.

JPRS 20708

Formation Defects During Movement of Unsplit
Screw Dislocations, by A. N. Orlov, 13 pp.
RUSSIAN, per, Fiz Tverdogo Tela, Vol V, No 1,
1963, pp 308-314.

JPRS 20708

Errors in Thermocouple Measurement in Flames, by
A. A. Zenin.
RUSSIAN, per, Inzhenerno-Fiz Zhur, Vol V, No 5,
1962, pp 68-74.

Navy Tr 3504
APL 805

Scientific
Physics (Contd)

Effect of the Radiant Component of the Heat Transfer Charge During Sublimation in a Vacuum, by P. A. Novikov.
RUSSIAN, per, Inzhenerno Fiz Zhur, Vol V, No 12, 1962, pp 80-83.

*NASA FF T-178

Vaporization of Solids by Absorbed Radiation Energy, by E. M. Shukhov, 23 pp.
RUSSIAN, per, Inzhenernyy Zhurnal, Vol I, No 4, 1961, pp 27-38. 9685047

FTD-TT-63-77

Problem of Calculating a Turbulent Stream With Very High Temperature, by V. A. Golubev, 10 pp.
RUSSIAN, per, Inzhenernyy Zhur, Vol I, No 4, 1961, pp 51-58. 9685091

FTD-TT-63-388

Theory of Heat Exchange in Boiling, by V. I. Tolubinskiy.
RUSSIAN, per, Iz Vysshikh Ucheb Zaved, Energet, No 1, 1959, pp 15-22.

TIL T 5387

Spectral Reflection Factors and the Sensitivity of Silicon Photoelements, by M. A. Kropotkin, B. P. Kozyrev.
RUSSIAN, per, Iz Vysshikh Ucheb Zaved Fiz, No 4, 1962, pp 118-122.

*Navy/APL 262

Design of a Molecular Generator Based on a Beam of ND₃ Molecules, by N. G. Basov, K. K. Svidzinskiy.
RUSSIAN, per, Iz Vysshikh Ucheb Zaved Radiofiz, Vol I, No 2, 1958, pp 89-94.

Navy Tr 3514
APL 831

On the Motion of a Container Partially Filled With a Liquid Taking Into Account Large Motions of the Latter, by G. S. Narimanov.
RUSSIAN, per, Prik Matemat i Mekh, Vol XXI, 1957, pp 513-524.

*Redstone Arsenal

Oscillations of a Physical Pendulum Having Cavities Filled With a Viscous Fluid, by P. S. Krasnoshchekov, 15 pp.
RUSSIAN, per, Prik Matemat i Mekh, Vol XXVII, No 2, pp 193-202. 9684846

FTD-TT-63-511

Application of the Theory of Lattice Vibrations With Deformable Ions to the Examination of the Physical Properties of Binary Cubic Crystals, by K. B. Tolpygo.
RUSSIAN, per, Sbornik Statei Fizika Tverdogo Tela, Vol I, 1959, pp 211-227.

*AERE-Harwell

Scientific
Physics (Contd)

Experimental Study of Contact Heat Exchange, by
Yu. P. Shlykov, E. A. Ganin.
RUSSIAN, per, Teploenergetika, Vol VIII, No 7,
1961, pp 73-76.

*Redstone Arsenal

The Rolling of Cylindrical Bodies Taking Into
Account the Friction Forces of Cohesion, by
Z. Z. Rudyakov.
RUSSIAN, per, Trudy Inst Zheleznodor Transp,
No 26, 1958, pp 322-335.

Navy Tr 3443
APL 324

A Conical Wing in a Supersonic Gas Flow, by
A. S. Avdonin, 17 pp.
RUSSIAN, per, Vest Leningrad Univ, Ser Matemat,
Mekhan i Astron, No 7, 1962, pp 62-74. 9669773

FTD-TT-63-392

An Approximate Analytical Solution of the
Irrotational Equations of Supersonic Flow Past
Developable Wings, by I. A. Popova, 25 pp.
RUSSIAN, per, Vest Leningrad Univ, Ser Matemat,
Mekhan i Astron, No 7, 1962, pp 87-104. 9669773

FTD-TT-63-392

An Analytical Solution to the Problem of
Supersonic Gas Flow Past a Lattice of Conical
Vanes. I., by N. V. Smirnov, 17 pp.
RUSSIAN, per, Vest Leningrad Univ, Ser Matemat,
Mekhan i Astron, No 7, 1962, pp 105-116. 9669773

FTD-TT-63-392

Propagation of Elastic-Plastic Load Wave in a
Rod of Finite Length, by A. I. Buravtsev, 10 pp.
RUSSIAN, per, Vest Leningrad Univ, Ser Matemat,
Mekh i Astron, No 1, 1963, pp 79-85. 9685487

FTD-TT-63-506

Investigation of a Hysteresis Loop of Cobalt-
Nickel Ferrites, by T. I. Bulgakova, L. S. Guzey,
5 pp.
RUSSIAN, per, Vest Mosk Univ, Ser II, Khim, No 6,
1962, pp 58-60. 9684850

FTD-TT-63-448

Time Variation in the Structure of the Emission
Spectrum of a Neodymium-Activated Glass Laser,
by N. P. Vanyukov.
RUSSIAN, per, Zhur Eksper i Teoret Fiz, Vol XLIV,
No 4, 1963, pp 1151, 1152.

Navy Tr 3502
APL 803

On Some Properties of Vanadium Nitride Crystals,
by V. A. Epel'bau, B. F. Ormont, 16 pp.
RUSSIAN, per, Zhur Fiz Khim, Vol XXI, 1947,
pp 3-10.

AEC-Tr-5805

Scientific
Physics (Contd)

Polarization of the Inner Surface of a Tube, by
O. S. Ksenzhek, V. V. Stender, 23 pp.
RUSSIAN, per, Zhur Fiz Khim, Vol XXXI, 1947,
pp 117-127.

AEC-Tr-5820

Investigation of the Sn-2 Spectrozoal Field
Under Conditions of Photography of Natural
Objects, by A. Ya. Smirnov.
RUSSIAN, per, Zhur Nauch i Prik Fotog i
Kinematog, Vol VI, No 3, 1961, pp 193-202.

*FTD-TT-63-797

Certain Problems Concerning the Movements of
a Conductive Viscous Gas in the Presence of
Magnetic and Electric Fields, by V. P. Shidlovskiy,
9 pp.
RUSSIAN, per, Zhur Prik Mekh i Tekh Fiz, No 5,
1961, pp 10-15. 9685484

FTD-TT-63-202

Problems of Hydrodynamics of Relaxing Media,
by I. P. Stakhanov, Ye. V. Stupochenko.
RUSSIAN, per, Zhur Prik Mekh i Tekh Fiz, No 2,
1963, pp 3-20.

*FTD-TT-63-839

Sublimation of a Blunt Body in the Vicinity of
the Stagnation Point in Plane and Axisymmetrical
Flow of a Gas Mixture, by G. A. Tirskiy, 29 pp.
RUSSIAN, per, Zhur Vychislitel'noy Matemat i
Matemat Fiz, Vol I, No 5, 1961, pp 884-902.
9669633

FTD-TT-63-311

A Combination of the Monte-Carlo Method With the
Quicker Trigger Action Method for Solving Certain
Extremal Problems, by L. S. Gurin, V. P. Lobach,
7 pp.
RUSSIAN, per, Zhur Vychislitel' Matemat i Matemat
Fiz, Vol II, No 3, 1962, pp 499-502. 9685067

FTD-TT-63-231

Locally One-Dimensional Difference Schemes on
Nonuniform Nets, by A. A. Samarskiy.
RUSSIAN, per, Zhur Vychislitel'noy Matemat i
Matemat Fiz, Vol III, No 3, 1963, pp 431-466.

*FTD-TT-63-819

Excitation of Natural Luminescence of a Plane-
Parallel Plate, by E. P. Zege, A. M. Samson.
BELORUSSIAN, per, Dok Ak Nauk BSSR, Vol VI, No 5,
1962, pp 288-292.

Navy Tr 3505
APL 806

Methods for Investigating the Glass Crystalline
Structure, by M. A. Bezborodov, A. M. Kripskiy.
BELORUSSIAN, per, Shornik Nauch Tr Belorussk,
Politekhn Inst, No 82, 1960, pp 3-15.

*FTD-TT-63-796

Scientific
Physics (Contd)

Nonlinear Optical Phenomena in Plane Parallel Plates,
by B. I. Stepanov, A. M. Samson.
BELORUSSIAN, per, Vestsi Ak Navuk Belaruskay SSR,
Ser Fiz-Tekh Navuk, No 4, 1961, pp 45-49.

Navy Tr 3511
APL 828

A New Branch of Science-Magnetohydrodynamics,
by Tsho Fu-tsin, 7 pp.
CHINESE, per, K'o-hsueh Ta-chung, No 1, 1962,
pp 8, 9. 9684913

FTD-TT-63-207

The Behavior of Non-Relativistic Electrons in a
Magnetic Field and Its Application in Solar Physics,
by Piao Chen, 11 pp.
CHINESE, per, T'ien-wen Hsueh-pao, Vol VII, No 2,
1959, pp 169-174. 9685178

Emmanuel Coll
Res Lang Ctr
E-T-Ch-63-3

Determination of Crystalline Structure of Thiokol
A by an X-Ray Method, by Ladislav Ulicky, 14 pp.
CZECH, per, Chemicke Zvesti, Vol XVI, No 11,
1962, pp 818-828. 9685102

DDC RSIC-25

Calorimetric Methods in Ionization Radiation
Dosimetry, Part I, by Z. Kovar, F. Behounek.
CZECH, per, Jaderna Energie, Vol VIII, No 2,
1962, pp 51-56.

*ACSI I-3244
ID 2244421
519th MI Bn

A Contribution to the Evaluation of Measurements
of Compressor-Blade Cascades at High Subsonic
Velocities, by Otakar Novak, 15 pp.
CZECH, per, Strojnický Casopis, No 3, 1962,
pp 273-288. 9684844

FTD-TT-63-166

Study of the Planets by the Polarization of
Their Light, by A. Dollfus.
FRENCH, rpt, Etude des Planetes par la Polarisation
de leur Lumiere, 1955, 117 pp.

*NASA TT F-188

Vapor Tensions of Hydrogen and New Thermometric
Determinations in the Liquid Hydrogen Region,
by J. Palacios Martinez, H. Kamerlingh Onnes,
9 pp.
FRENCH, per, Archives Neerlandaises des Sciences
Exactes et Naturelles, Vol VIA, 1922, pp 31-39.
9685105

DDC RSIC-26

Determinations of Isotherms of Hydrogen and
Helium at Low Temperature Carried Out With a
View to Examining Whether the Compressibility of
These Gases is Influenced by Quanta, by
J. Palacios Martinez, H. Kamerlingh Onnes, 23 pp.
FRENCH, per, Archives Neerlandaises des Sciences
Exactes, Vol VIA, 1923, pp 253-276. 9685462

DCC RSIC-33

Scientific
Physics (Contd)

Isotherms of Hydrogen Between -104°C and -244°C,
by H. Kamerlingh Onnes, F. M. Penning, 9 pp.
FRENCH, per, Archives Neerlandaises des Sciences
Exactes et Naturelles, Vol VII, Series IIIA, 1924,
pp 157-165. 9685172

DDC RSIC-23

The Positive Direction Magneto-Optic Effect
Manifested by the Phosphorescence Bands of
Ruby and Emerald and the Relationships Between
Emission and Absorption in a Magnetic Field,
by Jean Becquerel, 5 pp.
FRENCH, per, Comptes Rendus Academie des Sciences,
Vol CL, No 26, 1910, pp 1344-1347. 9684977

Emmanuel Coll
Res Lang Ctr
E-T-FC-63-1

Polarized Phosphorescence and the Correlation
Between the Polychroism of Phosphorescence and
That of Absorption, by Jean Becquerel, 5 pp.
FRENCH, per, Comptes Rendus Academie des Sciences,
Vol CLI, No 20, 1910, pp 859-861. 9684977

Emmanuel Coll
Res Lang Ctr
E-T-FC-63-1

Catalysis on Organic Semiconductors, by
Robert Salle, Jacqueline Gallard, et al.
FRENCH, per, Comptes Rendus Academie des Sciences,
Vol CCLVI, No 12, 1963, pp 2588-2590.

*AEC

Behavior of the Proteins of Lyophilized Gluten
After Treatment With Gamma Rays, by A. R. Deschreider,
34 pp.
FRENCH, per, Industries Alimentaires et Agricoles,
Vol LXXVIII, 1961, pp 243-252.

AEC-Tr-5794

Research on the Adsorption of Radioelements in
Solution. I. Adsorption of PU (IV) in Sulfuric
Medium, by H. Haissinsky, Y. Laflamme, 7 pp.
FRENCH, per, Journal Chimie Physique, Vol LV,
1958, pp 510-512. 9210736

AEC-HW-Tr-52

Change of Reaction Control in the Oxidation of
Porous Carbons. Influence of Impurities and the
Original Structure, by E. Bauer, F. M. Lange.
FRENCH, per, Journal Chimie Physique, Vol LVIII,
1961, pp 759-761.

BCRA 67

Study of an Electrical Analogue of Lifting Surfaces
in an Unsteady Flow, by R. Duquenne.
FRENCH, per, Office of National d'Etudes et de
Recherches Aeronautiques, Vol XCVIII, 1960, 89 pp.

TIL T 5323

On the Isomerism of In¹¹⁶, by K. F. Alexander,
H. F. Brinckmann, et al, 5 pp.
FRENCH, per, Phys Letters, Vol IV, 1963, pp 302-304.

AEC-Tr-5848

Scientific
Physics (Contd)

The Stability of the Homogeneous Structure of
Fluidised Beds, by E. Ruckenstein, 9 pp.
FRENCH, per, Revue de Physique, Vol VII, No 1, 1962,
pp 137-143. 9210742

AERE-Harwell-
Tr-942

Use of Betatron and Classical Methods of X- and
Y-Ray Methods of Examination for Control of
Materials and Welding at Electricite de France,
by R. Bath.
FRENCH, per, Revue Universelles des Mines,
Vol XVIII, No 6, 1962, pp 426-436.

BISI 3114

X-Ray Fluorescence Method for the Analysis of Thin
Films, by M. Pluchery.
FRENCH, per, Spectrochimica Acta, Vol XIX, No 2,
1963, pp 533-540.

*BISI 3346

Theory of Moessbauer-Effects, by Joachim Petzold.
GERMAN, bk, Akademie der Wissenschaften, Mathematisch-
Naturwissenschaftliche Klasse, Sitzungsberichte der
Heidelberger, Vol V, 1960, 1961, pp 3-45.

*Redstone Arsenal

Tension Energy, by R. Becker, W. Doring, 36 pp.
GERMAN, bk, Ferromagnetismus, Chap XI, 1939,
pp 128-146. 9684971

Emmanuel Coll
Res Lang Ctr
E-T-G-63-17

A Group-Theory Treatment of the Electron Bands
in the Diamond Lattice, by W. Doring, V. Zehler,
27 pp.
GERMAN, bk, Glessen, Institute fuer Theor
Physik der Justus-Liebig-Hochschule.

Emmanuel Coll
Res Lang Ctr
E-T-R-G-62-31

Critical Opalescence of Solid Solutions, by
A. Muenster, K. Sagel, 35 pp.
GERMAN, bk, Molekular Physik, Vol I, 1958,
pp 23-43.

AEC-NP-Tr-976

Terminal Impedance of Resonant Cylindrical
Tubes, by J. Guittard.
GERMAN, per, Acustica, Vol XII, No 5, 1962,
pp 313-322.

*Navy/APL 260

Contribution to the Geometry of the Tonometer,
by G. Strobl.
GERMAN, per, Albrecht v. Graefe's Archiv fuer
Ophthalmologie, Vol CLXIV, 1962, pp 280-283.

*Navy/APL 274

Scientific
Physics (Contd)

Selected Articles From the German Periodical
Annalen der Physik.

Vol XXVII, 1908, pp 233-300. 9685236 The Influence of Temperature and Magnetization in Selective Absorption and Fluorescence Spectra, by H. du Bois, G. J. Elias, 89 pp.	Emmanuel Coll Res Lang Ctr E-T-G-63-6
Vol XIV, 1932, pp 712-728. 9685237 Line Emission and Absorption of Chromium Phosphors, Part I, by Otto Deutschbein, 24 pp.	Emmanuel Coll Res Lang Ctr E-T-G-63-17
Vol XXVI, 1936, pp 233-257. The Structure of Thin Metal Films Evaporated Onto Rock Salt, by L. Brueck, 43 pp.	AEC-NP-Tr-1032
Vol XIII, No 6, 1953, pp 229-252. 9684968 The Calculation of Energy Bands in the Diamond Crystal, by V. Zehler, 37 pp.	Emmanuel Coll Res Lang Ctr E-T-R-G-62-30
On Vibrations of the Air, by A. Raps. GERMAN, per, <u>Annalen der Physik und Chemie</u> , Vol L, No 10, 1893, pp 193-220.	*Navy/APL 258
Methods and Equipment for Determining the Distribution of Luminous Intensity, by W. Wiechowski. GERMAN, per, <u>Archiv fuer Technisches Messen</u> , 1961, pp 203-206.	NZDIA
The Radiation-Optical Theory of Scintillation, by H. Scheffler, 35 pp. GERMAN, per, <u>Beitrage zur Physik der Atmosphere</u> , Vol XXXIV, 1961, pp 198-233.	ACSI I-2668 ID 2235110
Molecular Flow at Very Low Pressures, by H. L. Eschbach, R. Jaeckel, et al, 11 pp. GERMAN, per, <u>Congress on Vacuum Science and Technology</u> , Vol VIII, 1962, pp 1110-1115.	AERE-Harwell- Tr-944
Converting and Processing Information in the Central Nervous System and in Automotons, by W. Reichardt. GERMAN, per, <u>Deutsche Medizinische Wochenschrift</u> , Vol LXXXV, No 3, 1960, pp 1017-1019.	Navy Tr 3440 APL 311
Schlieren Photography of the Temperature Field Near a Hot Body, by Ernst Schmidt. GERMAN, per, <u>Forschung auf dem Gebiete des Ingenieurwesens</u> , Vol III, Series, A, Jul, Aug 1962, pp 181-189.	*Navy/APL 256

Scientific
Physics (Contd)

Comparative Measurements at Various European Betatron Installations, by J. Kretschko, H. Liesem, et al, 16 pp.
GERMAN, per, Fortschr Gebiete Roentgenstrahlen Nuklearmed, Vol XCV, 1961, pp 553-564. 9209158

AERE-Harwell-
Tr-935

Distillation, by W. Kuhn.
GERMAN, per, Helvetica Chimica Acta, Vol XXV, No 2, 1942, pp 252-295.

*UKAEA-Harwell-
Tr-1874

On Quantization of the Scalar Relativistic Wave Equation, by W. Pauli, V. Weisskopf.
GERMAN, per, Helvetica Physica Acta, No 7, 1934, pp 709-731.

*Navy/APL 232

Theory of Photodisintegration and Format of H^3 and He^3 , by M. Verde.
GERMAN, per, Helvetica Physica Acta, Vol XXIII, 1950, pp 453-474.

MU/T.515

$PdTe_2$ -- A Superconductor With CdI₂ Structure, by J. Guggenheim, F. Hulliger, et al, 5 pp.
GERMAN, per, Helvetica Physica Acta, Vol XXXIV, 1961, pp 408-410.

AEC-UCRL-Tr-921

Some New Results and Methods in Photoelasticity Using Araldite B, by E. Moench.
GERMAN, per, Konstruktion, Vol XIII, No 8, 1961, pp 289-298.

RAE Tr No 1022

Facilities for Flow Investigations at the Institute for Applied Aerodynamics of the Technical University in Dresden, by F. Detsch, 9 pp.
GERMAN, per, Maschinenbautechnik, Vol XII, No 5, 1963, pp 269-271.

JPRS 20378

Thermoconductivity in Electrically Insolated Crystals, by Gunther Liebfried, Ernst Schlomann.
GERMAN, per, Mathematisch-Physikalische Klasse, Vol XXa, 1954, pp 71-93.

*AEC

A Method for the Solution of Unstationary, Multi-layered Heat Conduction and Diffusion Problems With Controlled Boundary Conditions, by O. Machnig, R. Kuester, 15 pp.
GERMAN, per, Nukleonik, Vol IV, 1962, pp 306-310.

AEC-Tr-3863

Intraocular Pressure, Body Position, and Determination of Rigidity, by G. Strobl, P. Follmann.
GERMAN, per, Ophthalmologica, Vol CXLIV, 1962, pp 57-61.

*Navy/APL 270

Scientific
Physics (Contd)

Reflection of Measurement on Open Cavities,
by G. Bauer.
GERMAN, per, Optik, Vol XVIII, No 12, 1961,
pp 603-622.

CSIRO/No 6191

The Dislocation System in Plastically Deformed
Copper Single Crystals, by U. Essmann.
GERMAN, per, Physica Status Solidi, Vol III,
No 5, 1963, pp 932-949.

*UKAEA-Harwell-
Tr-1875

Anti-Matter, by R. Hagedorn.
GERMAN, per, Physikalische Blatter, Vol XVIII,
No 6, 1962, pp 255-263.

*UKAEA-Harwell-
Tr-1876

Correlative Experiments With Brief Evaluations
Based on Rorschach's Test, by Helmut von Bracken,
Gustav Kanter.
GERMAN, per, Psychologische Beitrage, Vol VI,
No 2, 1961, pp 196-207.

NIH 5-25-63

Laser Commission Established, by Schrauber.
GERMAN, per, Die Technik, Vol XVII, No 9, 1962,
p 630.

*ACSI I-3118-A
ID 2240842

A Characteristics Method for 3-D Unsteady Gas
Flows, by Gerhard Bruhn, Volfgang Haack, 30 pp.
GERMAN, per, Z fuer Angewandte Mathematik Physik,
Vol IXb, No 12, 1948, pp 173-190.

AEC-SCL-Tr-475

External and Internal Friction Layers During
Laminar Flow Disturbances, by H. Holstein.
GERMAN, per, Z fuer Angewandte Mathematik und Mech,
No 30, 1950, pp 25-49.

*FTD-TT-63-865

Non-Steady Laminar Flow of an Incompressible Viscous
Fluid in Circular Cylindrical Pipes, by
Werner Gerbes, 16 pp.
GERMAN, per, Z fuer Angewandte Physik, Vol III,
No 7, 1951, pp 267-271. 9684983

Emmanuel Coll
Res Lang Ctr
E-T-G-63-16

Theory and Application of the Mach-Zehnder
Interferometer, by H. Schardin.
GERMAN, per, Z fuer Instrumentenkunde, Vol LIII,
No 9, 10, Part I, II, 1933, pp 396-403, 424-436.

Navy Tr 3507
APL 819

Transmission Characteristics in the Evaluation
System for the Visual Perception of Motion,
by Werner Reichardt, Dezso Varju.
GERMAN, per, Z fuer Naturforschung, Vol CXLVI,
No 10, 1959, pp 674-689.

Navy Tr 3439
APL 310

Scientific
Physics (Contd)

Selected Articles From the German Periodical
Z fuer Physik.

- Vol XLVIII, 1928, p 15.
Investigation of Anomalous Dispersion in
Excited Gases, by R. Ladenburg. *Navy/APL 269
- Vol LVIII, 1929, pp 255-267.
Calculation of the Numbers of Dispersion
Centres in Sodium, by V. K. Proko'ev,
W. K. Prokofjew. *UKAEA-Harwell
Tr-1882
- Vol LXXXVIII, 1934, pp 634-646.
Some Magneto-Elastic Torsion Experiments, by
M. Kornetzki, R. Becker. Navy Tr 3484
APL 717
- Vol CLXI, 1961, pp 550-559.
Dissociation and Charge Exchange of Hydrogen
and Deuterium Molecules During Passage Through
Hydrogen, by Albert Schmid, 16 pp. AEC-Tr-5733
- Vol CLXVI, 1962, pp 477-493.
Cross Sections of Some n, n α -Reactions for
Neutron Energies Between 12 and 19 Mev, by
M. Bormann, S. Cierjacks, et al, 34 pp. AEC-NP-Tr-1021
- Vol CLXX, 1962, pp 526-532.
On the Behavior of 4-f Electrons in Some Rare
Earth Metals Under the Influence of Light,
by Armin Tannhauser. *AEC
- Electronic Interaction During Chemisorption of
Hydrogen on Evaporated Nickel Films, by R. Suhrmann,
Y. Mizushima, et al, 26 pp.
GERMAN, per, Z Physik Chemie, Vol XX, 1959,
pp 332-352. AEC-SCL-Tr-480
- Photochemical Reactions of Some Aromatic Halogen
Compounds, by Z. R. Grabowski, 23 pp.
GERMAN, per, Z Physik Chemie, Vol XXVII, 1961,
pp 239-252. AEC-NP-Tr-1026
- Production of Low Temperatures, by Dezso Novak,
36 pp.
HUNGARIAN, per, Fizikai Szemle, Vol XII, No 7,
1962, pp 206-219. 9669631 FTD-TT-63-268

Scientific
Physics (Contd)

Determination of the Adjoint Thermal Flux by
Perturbation Experiments, by M. Sabau, Th. Rosescu,
5 pp.

ITALIAN, per, Acad Rep Populare Romine, Inst Fiz
Atomica si Inst Fiz Studii Cercetari Fiz, Vol XII,
1961, pp 583-587.

AEC-Tr-5808

Fractionation of the Proteins of Lyophilized
Wheat Gluten Treated With Gamma Rays, by
A. R. Deschreider, 14 pp.

ITALIAN, per, Minerva Dietol, Vol II, 1962,
pp 187-189.

AEC-Tr-5775

Selected Articles From the Italian Periodical
Il Nuovo Cimento, Vol IX, No 3, 1962.

*ACSI 1-3119
ID 2240843

A. The Cerenkov Effect in Optics and in
the Microwave Domain, by M. Abele, (pp 207-213).

B. On the Propagation of Waves in Stratified
Media, by F. Aboles, (pp 214-224).

C. Experimental Study of the Resolution Limit
of Two Points of Light as a Function of Their
Coherence, by A. Arnulf, O. Dupuy, (pp 225-230).

D. Optical Method of Measuring Complex Dielectric
and Magnetic Constants With Centimeter and
Millimeter Wave Lengths, by J. Benoit, T. E. Talpey,
(pp 231-236).

E. Comparison of Results Using Infrared and
Centimeter Spectroscopy, by J. Benoit, T. E. Talpey,
(pp 270-276).

F. Contribution to the Improvement of Separating
Capacity, by M. Francon, (pp 283-287).

G. On the Thermodynamics of Electromagnetic
Waves, by T. Kahan, (pp 304-314).

H. Polarimetry in the Domain of Hertzian Waves,
by A. Kastler, (pp 315-321).

I. Applications of Differential Geometry to
Microwave Optics, by K. S. Kunz, (pp 322-332).

J. Formation of Images in the Microscope, by
P. Lacomme, (pp 333-339).

Scientific
Physics (Contd)

Selected Articles From the Italian Periodical
Il Nuovo Cimento, Vol IX, No 3, 1962. (Contd)

*ACSI I-3119
10 2240843

K. A Method of Improving the Separating
Capacity of Optical Instruments Based on Phase
Amplification, by P. Lacomme, A. Marechal,
(pp 354-357).

L. Eulogy for Professor Luigi Puccianti Upon
Receiving Word of His Death, by G. Polvani,
(pp 478, 479).

M. Words Spoken at the Close of the Meeting,
by A.C.S. Van Heel, (p 480).

Consideration on Measuring Conditions in Differential
Thermal Analysis, by Akira Yamamoto, 10 pp.
JAPANESE, per, Bunseki Kagaku, Vol XII, 1963,
pp 26-32.

AEC-Tr-5837

Electromagnetic Wave Propagation in the Super-
High-Atmosphere, by Tatsuzo Obayashi, 22 pp.
JAPANESE, per, Electric Wave Research Institute,
Report, Vol VIII (35), 1962, pp 194-201. 9684981

Amer Meteorol
Soc T-J-21

Study of Thermal Resistance of Contact Surface,
by F. Tachibana, 20 pp.
JAPANESE, per, Nihon Kikai Gakukai-shi, Vol LV,
No 397, 1952, pp 102-107. 9685174

DDC RSIC-29

Studies in the Physical Chemistry of Amine Acids
and Proteins. Part 3. The Free Energy of Hydration
of Glycine and Its Crystal Energy, by K. Shimura,
11 pp.
JAPANESE, per, Nippon Nogeikagaku Kaishi, Vol XXIV,
1951, pp 412-416.

AEC-Tr-5845

Determination of Lattice Constants by X-Ray
Dif-Fractometer, Lattice Constants of UC and
UC₂, by I. Higashi, 21 pp.
JAPANESE, per, Rika Gaku Kenkyusho Hokoku,
Vol XXXVII, 1961, pp 271-275.

AEC-NP-Tr-1027

Method of Preparing Esters of Alkylmercurithio-
salicylic Acids, by S. Sakai, 23 pp.
JAPANESE, Patent No 324,117, 1957. 9210745

AEC-NP-Tr-1030

Modifications of Proteins of Lyophilized Gluten
Treated by Gamma Irradiation, Part I, by
A. R. Deschreider, 19 pp.
POLISH, per, Przetworstwa Przechowalnictwa Zboz,
Vol V, No 1, 1961, pp 4-9.

AEC-Tr-5795

Scientific
Physics (Contd)

Application of Three-Valued Symbolic Logic in the Theory of Automatic Devices. I. Realization of Fundamental Functions in the Circuit Design, by Marek Greniewski, 5 pp.
ROMANIAN, per, Comunicarile Academiei Republicii Populare Romine, Vol VI, No 2, 1956, pp 225-229.
9210704

AEC-SCL-Tr-479

Investigating Anti-Friction Qualities of Plastics Under Working Conditions of Bearings of Ship Propeller Shafts, by V. A. Buzkov, 5 pp.
UKRAINIAN, per, Dopovidi Ak Nauk Ukraynskoy RSR, No 7, 1962, pp 901-905. 9669782

FTD-TT-63-263

Investigation of the Escape of Charged Particles From a Plasma in a Magnetic Field, by L. L. Pasichnik, O. V. Kozak.
UKRAINIAN, per, Ukrain Fiz Zhur, Vol VII, No 11, 1962, pp 1165-1171.

*NASA TT F-169

Incompleted Long-Range Order in Solid Cu - Al Solutions, by V. E. Panin, V. P. Fadin, et al, 5 pp.
UKRAINIAN, per, Ukrain Fiz Zhur, Vol VIII, 1963, pp 206-210.

AEC-Tr-5807

Scientific
Miscellaneous

Cybernetics and Control of the Economy, by A. I. Kitov, 8 pp.
RUSSIAN, bk, Electron-Economist, 1963, pp 34-37.

JPRS 20685

Cybernetics, by A. Berg, N. Bernshteyn, 49 pp.
RUSSIAN, bk, Filosofskaya Entsiklopediya,
Moscow, Vol II, 1962, pp 495-506.

JPRS 20574

On the Organisation of the Tagging of Mammals in
the USSR, by V. S. Pokrovskiy.
RUSSIAN, bk, Migratsii Zhivot Komissiy po Okhane
Prirody, Ak Nauk SSSR, No 1, 1959, pp 149-160.

NCR/Ref.
C-4231

Selected Articles From the Russian Periodical
Atomnaya Energiya.

JPRS 20730

No 10, 1962, pp 388-390.
Effect of Nuclear Radiation on the Properties of
Materials, by M. S. Koval'chenko, V. S. Neshpor,
6 pp.

No 11, 1962.
Conference on Changes in the Properties of
Materials Under the Influence of Radiation, by
D. Vaysburd, Yu. Zakharov, 5 pp, (pp 497, 498).

Symposium on Reactor Safety and Methods of Appraising
Danger, by A. Veselkin, 6 pp, (pp 498-500).

No 2, 1963, pp 222-224.
Conference on the Use of Particle Accelerators
in Radiochemistry, by Ye. V. Yegorov, M. Ya. Kaplunov,
6 pp.

No 3, 1963, pp 330-332.
Symposium on the Molecular Mechanisms of the
Biological Effect of Ionizing Radiation, by
Yu. S. Lazurkin, 7 pp.

No 6, 1963, pp 591-593.
Fourth All-Union Conference of Schools of Higher
Education on the Theory of Elementary Particles,
7 pp.

Scientific
Miscellaneous (Contd)

Propagandizing Scientific Atheism is Our Honorable Task, by A. M. Bogoutdiniv, I. K. Narzukoulov, et al, 13 pp.
RUSSIAN, np, Kommunist Tadzhikistana, 15 Jun 1963, p 2.

JPRS 20787

Reflections on Soviet Scientific Progress, by A. Berg, 5 pp.
RUSSIAN, np, Moskov Pravda, 18 Jun 1963, p 3.

JPRS 20687

The Nature of Thinking and the Problem of Modeling It, by N. P. Antonov, A. N. Kochergin, 14 pp.
RUSSIAN, per, Nauch Dok Vysshey Shkoly Filosof Nauk, No 2, 1963, pp 37-47.

JPRS 20401

Selected Articles From the Russian Periodical Nauch-Tekh Informat, No 1, 1963.

JPRS 20592

Problems in Scientific Information, by A. I. Mikhaylov, 15 pp, (pp 3-6).

Cyclical Flow of Scientific Information and Activity of Viniti, by Yu. V. Medvedkov, 13 pp, (pp 7-10).

Raising the Qualifications of Scientific Information Personnel From Experience Gained in the All-Union Institute of Scientific and Technical Information, by V. A. Polushkin, 13 pp, (pp 14-17).

Methodology for Using Universal Decimal Classification, by V. I. Vinogradov, K. I. Fedoseyeva, 26 pp, (pp 18-23).

Several Problems in Construction of Information Retrieval Systems, by A. I. Chernyy, 38 pp, (pp 24-30).

Problems in the Construction of Description Information Search Systems, by E. S. Bernshteyn, D. G. Lekhuti, et al, 12 pp, (pp 31-33).

Symposium on Structural Study of Sign Systems, 7 pp, (pp 38, 39).

Meetings, Seminars, and Publications, 5 pp, (pp 48, 49).

Scientific
Miscellaneous (Contd)

A Great Science Moves East, by M. A. Lavrent'yev,
13 pp.
RUSSIAN, per, Nauka i Zhizn', No 9, 1958, pp 1-4, 6.
9685130

FTD-TT-63-236

A New Scientific Center in the USSR, by
M. A. Lavrent'yev, 8 pp.
RUSSIAN, np, Pravda, Nov 1957, p 4. 9685126

FTD-TT-63-240

Anniversary Meeting of Academy of Sciences USSR,
8 pp.
RUSSIAN, per, Priroda, No 12, 1957, pp 107-111.

JPRS 20725

Reports on Machine Translation, 122 pp.
RUSSIAN, per, Sobshcheniya po Mashinomu Perevodu,
No 1, 1962, pp 3-96.

JPRS 19793

Selected Articles From the Russian Periodical
Vest Ak Nauk Kazakh SSSR, No 4, 1963.

JPRS 20400

Results of Scientific Activity of the Academy
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Speeches of Scientists and Decisions on Organiza-
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Results of Scientific Activity of Institutions
of the Department of Mineral Resources for 1962
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Results of Scientific Activity of the Institutes
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7 pp, (pp 52-57).

In the Department of Biological Sciences, 10 pp,
(p 65).

Scientific
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No 12, 1957, pp 3-7. 9685488 Development of Science in Siberia and in the Far East, by M. A. Lavrent'yev, 9 pp.	FTD-TT-63-234
No 4, 1963, pp 98-100. Information on Soviet and Czechoslovak Scientists, 6 pp.	JPRS 20717
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The Design of the New Charter of the Academy of Sciences USSR, by M. I. Agoshkov, 6 pp, (pp 23-25).	
Session of the All-Union Lenin Academy of Agricultural Science. RUSSIAN, per, <u>Vest Sel'skokhoz Nauk</u> , No 5, 1963, pp 3-25.	*USDA
The Definition of the Concept of Information in Cybernetics, by F. P. Tarasenko, 12 pp. RUSSIAN, per, <u>Voprosy Filosofii</u> , No 4, 1963, pp 76-84.	JPRS 20464
General Trends in the Development of Modern Natural Science, by V. I. Siforov, 14 pp. RUSSIAN, per, <u>Voprosy Filosofii</u> , No 4, 1963, pp 85-96.	JPRS 20464
Towards a Comparative Analysis of Objectival Actions and Operations of Control, by L. M. Vekker, 15 pp. RUSSIAN, per, <u>Voprosy Psikhologii</u> , No 2, 1963, pp 17-29.	JPRS 20403
Probability Prognostication in the Activity of the Brain, by I. M. Feygenberg, 12 pp. RUSSIAN, per, <u>Voprosy Psikhologii</u> , No 2, 1963, pp 59-67.	JPRS 20550
Using Information Theory for Studying Human Abilities, by S. I. Shapiro, I. I. Umanskiy, 31 pp. RUSSIAN, per, <u>Voprosy Psikhologii</u> , No 2, 1963, pp 75-90.	JPRS 20680
Regulation on the State Committee for Science and Technical Progress, 7 pp. BULGARIAN, per, <u>Durzhaven Vestnik</u> , No 48, 1963, pp 1-3.	JPRS 20424

Scientific
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Selected Articles From the German Periodical
Dokumentation.

Vol IX, No 5, 1962.

New Organization for Scientific-Technical and
Economic Information in Poland: Part I, by
Stanislaw Telechun, 13 pp, (pp 131-136).

JPRS 20640

Documentation/Information and the Chamber of
Technology, by G. Weissflog, 5 pp, (pp 139-141).

JPRS 20763

Vol IX, No 6, 1962, pp 165-169.

JPRS 20640

New Organization for Scientific-Technical and
Economic Information in Poland: Part II, by
Stanislaw Telechun, 11 pp.

Vol X, No 1, 1963, pp 9-16.

JPRS 20763

Information for Directorial Staffs in the
Government, the Economy, and Party Organizations,
by Josef Koblitz, 14 pp.

Medical Documentation in Hungary, by Maria Szepesi,
12 pp.

GERMAN, per, Dokumentation--Zeitschrift fuer Theorie
und Praxis der Dokumentations und Informationsarbeit,
Vol IX, No 6, 1962, pp 178-181.

JPRS 20358

The Learning Matrix, by K. Steinbuch.

GERMAN, per, Kybernetik, Vol I, No 1, 1961,
pp 36-45.

Navy Tr 3510
APL 824

The Optical Resolving Power of the Facet Eyes of
a Limulus, by Werner Reichardt.

GERMAN, per, Kybernetik, Vol I, No 2, 1961,
pp 57-69.

Navy Tr 3441
APL 312

On the Theory of Lateral Inhibition, by
Werner Reichardt, Gordon MacGinitie.

GERMAN, per, Kybernetik, Vol I, No 4, 1962,
pp 155-165.

Navy Tr 3442
APL 313

News and Short Reports, 7 pp.

GERMAN, per, Radio und Fernsehen, 2 fuer Radio-
Fernsehen-Elektroakustik und Elektronik, No 15,
1960, p 462. 9669770

FTD-TT-63-66

Cybernetic Problems of Life, by N. Mazur.

GERMAN, per, Wissenschaftliche Zeitschrift der
Hochschule fur Elektrotechnik Ilmenau, Vol VII,
No 3, 1961, pp 213-219.

*Navy/APL 255

Scientific
Miscellaneous (Contd)

Correspondence From Abroad. From Culham, by
Y. Ichikawa.

JAPANESE, per, Kakuyugo Kenkyu, Vol X, No 4,
1963, pp 348-355.

*UKAEA-Harwell-
Tr-1883

Stuffer-Box Crimping of Silvers, by K. Sasaki.
JAPANESE, per, Sen i Kikai Gakkai Shi, Vol XIV,
No 149, 1961, pp 61-66.

GB/256/T.1507

Choice of Compound Link Coefficients of
Combined Control Systems, by I. D. Kochubiyevskiy,
9 pp.
UKRAINIAN, per, Avtomatyka, Vol VII, No 6, 1962,
pp 3-9.

JPRS 20486

The Study of Economic Systems With the Aid of
Physical Analogs, by V. V. Kleshchov, 12 pp.
UKRAINIAN, per, Avtomatyka, Vol VII, No 6, 1962,
pp 20-29.

JPRS 20486

Computer for Automatic Control of Complex Pro-
duction Processes, by B. N. Malinovskiy,
I. A. Yanovich, 11 pp.
UKRAINIAN, per, Avtomatyka, Vol VII, No 6, 1962,
pp 30-39.

JPRS 20486

INFORMATION RECEIVED DURING AUGUST
ON COVER-TO-COVER TRANSLATIONS

Atomnaya Energiya, Vol XIII, No 4, Oct 1962.	CB
Avtomaticeskaya Svarka, No 9, 10, 1962.	BWRA
Avtomatika i Telemekhanika, Vol XXIII, No 11, 1962.	ISA
Biokhimiya, Vol XXVII, No 5, Sep-Oct; No 6, Nov-Dec 1962.	CB
Byulleten' Eksperimental'noi Biologii i Meditsiny, Vol LIII, No 4-6, 1962.	CB
Doklady Akademii Nauk SSSR, (Physical Chemistry Section), Vol CXLVI, No 1-6, 1962.	CB
Doklady Akademii Nauk SSSR, (Mathematics Section), Vol CXLIX, No 1-6, 1963.	Amer Math Soc Sov Math - Dok Vol IV, No 2
Fizika Metallov i Metallovedenie, Vol XIII, No 1-3, 1962.	PP
Geokhimiya, No 8, 9, 1962.	Geochem Soc
Geologiya Nefti i Gaza, Vol IV, No 11-B, 1960.	RRG
Izmeritel'naya Tekhnika, No 12, 1962.	ISA
Izvestiya Akademii Nauk SSSR, Otdelenie Khimicheskikh Nauk, No 10, 1962.	CB
Izvestiya Akademii Nauk SSSR, Seriya Fizicheskaya, Vol XXVI, No 8, 1962.	CTT
Izvestiya Akademii Nauk SSSR, Seriya Geofizicheskaya, No 4, 1963.	AGU
Izvestiya Vysshikh Uchebnykh Zavedeniy, Geodeziya i Aerofotos'yenka, No 5, 1962.	AGU
Kauchuk i Rezina, Vol XXI, No 8, 1962.	RAPRA
Kolloidnyi Zhurnal, Vol XXIV, No 6, Nov-Dec 1962.	CB
Optika i Spektroskopiya, Vol XIV, No 2, 5, 1963.	OSA
Plasticheskiy Massy, No 8-12, 1960.	RAPRA
Pochvovedeniye, No 1-3, 1962.	Scripta Technica
Pribory i Tekhnika Eksperimenta, No 6, Nov-Dec 1962.	ISA

Stanki i Instrument, Vol XXXIII, No 4-7, 12, 1962.	PERA
Svarochnoye Proizvodstvo, No 9, 10, 1962.	BWRA
Uspekhi Fizicheskikh Nauk, Vol LXXIX, No 1, 2, 1963.	Amer Inst of Phys Sov Phys - Uspekhi Vol VI, No 1
Uspekhi Khimii, No 12, 1962.	CS
Voyenny Vestnik, No 3, 1963; No 4, 1963; No 5, 1963.	ACSI I-1614-C-E ID 2201421
Zhurnal Analiticheskoi Khimii, Vol XVII, No 6, 7, 1962.	CB
Zhurnal Eksperimental'noi i Teoreticheskoi Fiziki, Vol XLIV, No 1, 1963; Vol XLIV, No 2, 1963.	Amer Inst of Phys Sov Phys - JETP Vol XVII, No 1, 2
Zhurnal Fizicheskoi Khimii, Vol XXXVI, No 12, 1962.	CS
Zhurnal Neorganicheskoi Khimii, No 10, 1962.	CS
Zhurnal Obshchei Khimii, Vol XXXII, No 9-11, 1962.	CB
Zhurnal Prikladnoi Khimii, Vol XXXV, No 10, 1962.	CB

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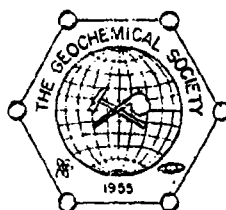
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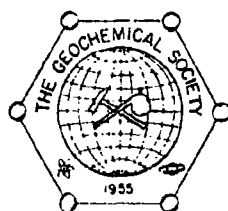
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*This index does not include authors listed in the cover-to-cover table of contents.

7 September 2004

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

Dear Ms. Schoen:

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

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

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

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

Sincerely,



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

Enclosures:

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



Processing of OGA-Held CIA Documents

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

OGA Doc ID	Job Num	Box	Fldr	Doc	Doc ID	Document Title	Pub Date	Pages	Decision	Proc Date
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
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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
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AD0443106	78-03109A	54	1	4	78	Consolidated Translation Survey For June 1964	6/1/1964	191	Approved For Release	3/25/2004
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AD0450482	78-03109A	54	1	7	81	Consolidated Translation Survey For September 1964	9/1/1964	141	Approved For Release	3/25/2004
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AD0455133	78-03109A	54	1	10	84	Consolidated Translation Survey For December 1964	12/1/1964	121	Approved For Release	3/25/2004
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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