

UNCLASSIFIED

AD NUMBER
AD868214
NEW LIMITATION CHANGE
TO Approved for public release, distribution unlimited
FROM Distribution authorized to U.S. Gov't. agencies and their contractors; Administrative/Operational Use; Mar 1970. Other requests shall be referred to Central Intelligence Agency, Office of Central Reference, 2430 E. Street, NW, Washington, DC 20505.
AUTHORITY
CIA ltr, 7 Sep 2004

THIS PAGE IS UNCLASSIFIED

FOR OFFICIAL USE ONLY



CONSOLIDATED TRANSLATION SURVEY

Number 147

Through 31 March 1970

AD868214

CENTRAL INTELLIGENCE AGENCY
Washington, D.C. 20505

FOR OFFICIAL USE ONLY

CONSOLIDATED TRANSLATION SURVEY

FOR MARCH 1970

TABLE OF CONTENTS

	<u>Page</u>
Preface	iii
Request for Copies	iv
USSR	
Economic	1
Political	3
Military	5
Geographic	7
Sociological	7
Biographic	8
Eastern Europe	
Economic	8
Political	11
Military	12
Sociological	12
Western Europe	
Economic	13
Political	13
Military	14
Sociological	15
Africa	
Economic	15
Political	16
Military	17
Sociological	17
Middle East	
Economic	17
Political	17
Military	18
Sociological	18
Far East	
Economic	18
Political	19
Military	20
Sociological	20

	<u>Page</u>
Latin America	
Economic	21
Political	21
Military	23
Geographic	23
Sociological	23
Scientific	
Aeronautics	24
Agriculture	26
Astronomy & Astrophysics	29
Atmospheric Sciences	29
Behavioral & Social Sciences	32
Biological & Medical Sciences	32
Chemistry	45
Earth Sciences & Oceanography	60
Electronics & Electrical Engineering	66
Energy Conversion (Non-Propulsive)	69
Materials	70
Mathematical Sciences	93
Mechanical, Industrial, Civil & Marine Engineering	94
Methods & Equipment	100
Missile Technology	104
Navigation, Communications, Detection & Countermeasures	104
Nuclear Science & Technology	105
Physics	106
Propulsion & Fuels	116
Space Technology	118
Miscellaneous	118
Information Received on Cover-to-Cover Translations	120
Index to Authors	194

CONSOLIDATED TRANSLATION SURVEY

PREFACE

This survey is prepared monthly from lists received through the cooperation of US government agencies and includes universities, research institutions, and commercial translation organizations. It is a compilation of projects completed or started during the preceding month.

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

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

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

Scientific and technical translations are grouped according to the COSATI subject category list except for military science and ordnance items which are listed under "military" in the appropriate geographic areas.

REQUESTS FOR COPIES

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

Addresses of producers to follow:

ACIC - Aeronautical Chart and Information Center
(see CFSTI)

ACSI - (see DIA)

AEC - Atomic Energy Commission
(see CFSTI)

AEC NSI

Japan Atomic Energy Research Institute
Tokai Research Establishment
Tokai-Mura, Naka-Gun, Ibaraki-ken

AFCRL Res Lib

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

AGU

American Geophysical Union
Suite 506
1145 19th Street, N. W.
Washington, D. C. USA 20036

AIP

American Institute of Physics
335 East 45th Street
New York, New York 10017

Amer Math Soc

American Mathematical Society
P. O. Box 6248
Providence, Rhode Island, USA 02904

ANL - Argonne National Laboratory, Illinois
(see AEC)

APL/JHU

Applied Physics Laboratory
The Johns Hopkins University
8621 Georgia Avenue
Silver Spring, Maryland 20910

ATS

Associated Technical Services, Incorporated
P. O. Box 271
East Orange, New Jersey 07019

BCF - Bureau of Commercial Fisheries
(see Department of Interior)

BISI

British Iron and Steel Industry Translation Service
The Iron and Steel Institute
4 Grosvenor Gardens
London, S.W. 1, England

CB - Consultants Bureau
(see Plenum Press)

CIGB

Central Library
Central Electricity Generation Board
Room 601, Sudbury House
15 Newgate Street
London, E. C. 1.

CESTI

Clearinghouse for Federal Scientific and Technical
Information
Port Royal and Braddock Roads
Springfield, Virginia 22151

CTT

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

Department of Interior

Dept of Interior
Room 8015
Branch of Foreign Fisheries (Translations)
Division of International Affairs
Bureau of Commercial Fisheries
Washington, D. C. 20240

DDC

Defense Documentation Center
Cameron Station
Alexandria, Virginia 22314

DIA

Defense Intelligence Agency
Washington, D. C. 20301

ETC

European Translations Centre
Doelenstraat 101, Delft,
The Netherlands

FP

Faraday Press, Inc.
84 Fifth Avenue
New York, New York, USA 10011

ISTC - Foreign Science and Technology Center
(see Defense Documentation Center)

FTD.- Foreign Technology Division
(see Defense Documentation Center)

HB

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

JPRS

U. S. Department of Commerce
Clearinghouse for Federal Scientific and Technical
Information
Port Royal and Braddock Roads
Springfield, Virginia 22151

NASA

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

Natl Bu Stand

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

NIC

Commander
Naval Intelligence Command Headquarters
NIC-133E
Washington, D. C. 20350

NLL

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

NOO

U. S. Naval Oceanographic Office
Code 4400
Washington, D. C. 20390

NRL

Naval Research Laboratory
Washington, D. C. 20390

NTC

National Translation Center
John Crerar Library
35 West 33rd Street
Chicago, Illinois 60616

ORNL - Oak Ridge National Laboratory
(see AEC)

S/E & S/P

Scripta Publishing Corporation
1511 K Street N. W.
Washington, D. C. 20005

SIC

Scientific Information Consultants, Limited
661 Finchley Road
London, N. W.2, England

SLAC - Stanford Linear Accelerator Center
(see AEC)

Survey of China Mainland Press

Survey of China Mainland Press
American Consulate General
Hong Kong

UCRL - (see AEC)

University of California
Lawrence Radiation Laboratory
Livermore, California

USSR
Economic

Azerbaijani State Plan for 1969 Tallied, 16 pp.
RUSSIAN, per, Bakinskiy Rabochiy, Baku, 1 Feb 1970, pp 1-2.
JPRS 49882

Lenin's Views on Monetary Policy Reviewed, by Z. Atlas, 16 pp.
RUSSIAN, per, Dengi i Kredit, Moscow, Dec 1969, pp 11-21.
JPRS 49,901

Conference Held on Problems of Economic Reform, by R. Vinokur, 11 pp.
RUSSIAN, per, Dengi i Kredit, Moscow, Dec 1969, pp 84-88.
JPRS 49901

Development of Fertilizer Industry Reviewed, 6 pp.
RUSSIAN, per, Ekonomicheskaya Gazeta, Moscow, No 47, Nov 1969, p 17.
JPRS 49852

Payment of Bonuses in Industry Discussed, by F. Yanson, 5 pp.
RUSSIAN, per, Ekonomicheskaya Gazeta, Moscow, No 1, Jan 1970, p 8.
JPRS 49850

Conference on Domestic Services Held in Riga, 8 pp.
RUSSIAN, per, Ekonomicheskaya Gazeta, Moscow, No 2, Jan 1970, pp 1-4.
JPRS 49880

Recommendation of Economic Conference Listed, 11 pp.
RUSSIAN, per, Ekonomicheskaya Gazeta, Moscow, No 2, Jan 1970, pp 4-8.
JPRS 49880

New Wage Conditions in Construction Discussed, by Yu. Ye. Pak, 6 pp.
RUSSIAN, per, Ekonomicheskaya Gazeta, Moscow, No 3, Jan 1970, p 16.
JPRS 49850

USSR
Economic (Contd)

Economic Reform Potential for Trade Network, by V. Shimanskiy, 5 pp.
RUSSIAN, per, Ekonomicheskaya Gazeta, Moscow, No 3, Jan 1970, p 17.
JPRS 49970

Western Theories of Industrial Society Criticized, by I. Dvorkin, 11 pp.
RUSSIAN, per, Ekonomicheskaya Gazeta, Moscow, No 3, 1970, pp 18-19.
JPRS 49882

Deputy Minister Discusses Coal Transport, 6 pp.
RUSSIAN, np, Gudok, Moscow, 9 Oct 1969, p 2.
JPRS 49846

Directors Report on Railroad Achievements, by L. Karpov, Ye. Shchelkunov, 6 pp.
RUSSIAN, np, Gudok, Moscow, 27 Dec 1969, p 1.
JPRS 49846

Economic Experiment at Shchekino Cited, by T. Ashimbayev, S. Sundetov, 6 pp.
RUSSIAN, np, Kazakhstanskaya Pravda, Moscow, 31 Oct 1969, p 2.
JPRS 49850

To Develop the Leninist Science of Controlling the Socialist Economy, by V. Lisitsyn, G. Popov, 1 1/4 pp.
RUSSIAN, per, Kommunist, Moscow, No 1, Jan 1970, pp 56-67.
JPRS 49907

Latvian Fishing Industry Development Examined, by A. Eglit, 7 pp.
RUSSIAN, per, Kommunist Sovetskoy Latvii, Riga, No 11, Nov 1969, pp 17-22.
JPRS 49970

Need for Production Management Improvement Stressed, by K. Tolmadzhev, 8 pp.
RUSSIAN, per, Kommunist Sovetskoy Latvii, Riga, Dec 1969, pp 27-32.
JPRS 49834

Economic Basis of Defense Capability Discussed, by M. Ushakov, 10 pp.
RUSSIAN, per, Kommunist Vooruzhennykh Sil, Moscow, No 2, Jan 1970, pp 35-42.
JPRS 49896

Pros and Cons of Job Migration Discussed, by
I. Achil'diyev, 9 pp.
RUSSIAN, np, Literaturnaya Gazeta, Moscow,
17 Dec 1969, p 10.
JPRS 49814

Engineer Cites Soviet Technical Lag Factors, by
P. Volin, 5 pp.
RUSSIAN, np, Literaturnaya Gazeta, Moscow, 21 Jan
1970, p 10.
JPRS 49825

Making payments from Profits into State Budget,
by I. Levin, 6 pp.
RUSSIAN, per, Morskov Flot, Moscow, No 12, Dec
1969, pp 2-3.
JPRS 49880

The USSR National Economy in 1967 (Statistical
Yearbook), Part II, 668 pp.
RUSSIAN, bk, Narodnoye Khozyaystvo SSSR v 1967
godu, 1967, 1008 pp.
JPRS 49734-2

Close-up on Automation.
RUSSIAN, np, Pravda, 30 May 1969.
NLL Ref: 6167.65 (128)

Knitwear Mill Applies Shchekino Experiment,
by G. Abramson, 5 pp.
RUSSIAN, np, Pravda, Moscow, 16 Dec 1969, p 2.
JPRS 49850

From Ulag-Beg to our Day, by A. Sadykhov.
RUSSIAN, np, Pravda Vostoka, 23 Apr 1969.
NLL Ref: 6167.65 (112)

Fulfillment of Uzbek 1969 State Plan Summarized,
14 pp.
RUSSIAN, per, Pravda Vostoka, Tashkent,
28 Jan 1970, pp 1-2.
JPRS 49901

Decrease in Yield of Fixed Assets Criticized,
by R. G. Safaryan, 7 pp.
RUSSIAN, per, promyshlennost' Armenii, Yerevan,
No 10, 1969, pp 50-53.
JPRS 49852

Mathematical Control of Fisheries, by
N. S. Goryunov.
RUSSIAN, per, Rybnoe Khoz, Vol 45, No 12,
1969, pp 72-73.
*Dept of Inter
BCF/OFF

Creative Cooperation of Subcontractors Discussed,
by P. Shmatov, 5 pp.
RUSSIAN, np, Sotsialisticheskaya Industriya,
Moscow, 8 Jan 1970, p 2.
JPRS 49846

Merits of Industrial Associations Discussed,
by G. Kulsgin, 5 pp.
RUSSIAN, np, Sotsialisticheskaya Industriya,
Moscow, 9 Jan 1970, p 1.
JPRS 49911

Freight Turnover on Estonian Railroad Lagging,
by N. Krasnobayev, 5 pp.
RUSSIAN, np, Sovetskaya Estonia, Tallin,
19 Nov 1969, p 2.
JPRS 49970

Shortcomings in Latvian Economy Criticized,
by A. E. Voss, 11 pp.
RUSSIAN, per, Sovetskaya Latvija, Riga,
21 Jan 1970, pp 1-2.
JPRS 49876

Fulfillment of 1959 RSFSR Economic Plan
Summarized, 22 pp.
RUSSIAN, np, Sovetskaya Rossiya, Moscow,
1 Feb 1970, pp 1, 2.
JPRS 49911

RSFSR Handicraft Industry Considered, by
R. Bardina, 6 pp.
RUSSIAN, per, Sovetskaya Torgovlya, Moscow,
No 11, 1969, pp 18-20.
JPRS 49970

Centralizing Textile Industry Output Sales,
by D. F. Gromov, 5 pp.
RUSSIAN, per, Tekstil'naya Promyshlennost',
Moscow, Dec 1969, pp 9-12.
JPRS 49970

Need for Rural Domestic Services Discussed,
by I. Kuskevich, 5 pp.
RUSSIAN, np, Trud, Moscow, 7 Jan 1970, p 2.
JPRS 49821

USSR
Economic (Contd)

Gosplan Official Reviews 1970 Economic Plan, by A. Malyshev, 9 pp.
RUSSIAN, per, Tyl i Snyazheniye, Moscow, No 1, Jan 1970, pp 7-11.
JPRS 49911

Calculations of Interbranch Plan Described, by V. Belkin, 15 pp.
RUSSIAN, per, Voprosy Ekonomiki, Moscow, Dec 1969, pp 85-95.
JPRS 49834

Economic Problems of Chemicalization, by I. Rakhlin, Kh. Parksheyan, 5 pp.
RUSSIAN, per, Voprosy Ekonomiki, Moscow, No 12, 1969, pp 143-144.
JPRS 49885

Soviet, Japanese Economists Discuss Problems, by B. Dobrovinsky, 5 pp.
RUSSIAN, per, Voprosy Ekonomiki, Moscow, Dec 1969, pp 150-152.
JPRS 49846

The Question of Criteria of Effectiveness of Research Work, by A. P. Solov'yev, 9 pp.
RUSSIAN, bk, Voprosy Ekonomiki i Planirovaniya Nauchnykh Issledovaniy, 1968, pp 33-38.
AIR/FTD/MT-24-195-69

Some Questions of Statistics and Analysis of Works in Branch Scientific Institutions, by P. Ya. Oktyabr'skiy, 14 pp.
RUSSIAN, bk, Voprosy Ekonomiki i Planirovaniya Nauchnykh Issledovaniy, 1968, pp 39-49.
AIR/FTD/MT-24-195-69

Indices for Evaluating the Activity of Scientific and Design-Construction Organizations, by L. S. Blyakhman, A. P. Solov'yev, et al. 26 pp.
RUSSIAN, bk, Voprosy Ekonomiki i Planirovaniya Nauchnykh Issledovaniy, 1968, pp 50-71.
AIR/FTD/MT-24-195-69

Price and Profit of Scientific Development, by I. S. Minko, 18 pp.
RUSSIAN, bk, Voprosy Ekonomiki i Planirovaniya Nauchnykh Issledovaniy, 1968, pp 72-84.
AIR/FTD/MT-24-195-69

Planning as a Branch of Industrial Activity, by P. A. Rodionenkov, 13 pp.
RUSSIAN, bk, Voprosy Ekonomiki i Planirovaniya Nauchnykh Issledovaniy, 1968, pp 130-139.
AIR/FTD/MT-24-195-69

USSR
Political

Latvian CP Official Sums Up Mass Political Work, by A. Voss, 9 pp.
RUSSIAN, per, Agitator, Moscow, No 2, Jan 1970, pp 43-48.
JPRS 49896

Lenin and Party-Mindedness in Literature and Art, by P. Demichev, 22 pp.
RUSSIAN, per, Kommunist, Moscow, No 1, Jan 1970, pp 38-55.
JPRS 49907

Lithuanian Party Decree on Worker Promotion in Party, 5 pp.
RUSSIAN, per, Kommunist, Vil'nyus, No 1, 1970, pp 54-57.
JPRS 49896

The Grandeur of the USSR's Victory and the Impotence of the Falsifiers of History, by G. K. Zhukov, 21 pp.
RUSSIAN, per, Kommunist, Moscow, No 1, Jan 1970, pp 80-94.
JPRS 49907

Party Fighters, by G. Plaskov, 12 pp.
RUSSIAN, per, Kommunist, Moscow, No 1, Jan 1970, pp 95-104.
JPRS 49907

Modern Capitalism and the Scientific-Technical Intelligentsia, by S. Nadel', 15 pp.
RUSSIAN, per, Kommunist, Moscow, No 1, Jan 1970, pp 109-121.
JPRS 49907

The Heroic Path of the Builders of Socialism, by A. Glukhovtsev, 5 pp.
RUSSIAN, per, Kommunist, Moscow, No 1, Jan 1970, pp 122-124.
JPRS 49907

From Compromise to Counterrevolution, by G. Trukan, 7 pp.
RUSSIAN, per, Kommunist, Moscow, No 1, Jan 1970, pp 125-128.
JPRS 49907

Belorussian Party Reviews Work of Primary Cells, 6 pp.
RUSSIAN, per, Kommunist Belorussii, Minsk, Jan 1970, pp 44-47.
JPRS 49896

USSR
Political (Contd)

Tadzhik Party Plenum Issues Resolution on
Kolkhoz Operation, 6 pp.
RUSSIAN, np, Kommunist Tadzhikistana, Dushanbe,
25 Dec 1969, p 1.
JPRS 49825

Report on Dushanbe City Party Aktiv Meeting, 6 pp.
RUSSIAN, np, Kommunist Tadzhikistana, Dushanbe,
15 Jan 1970, p 2.
JPRS 49825

Role of Armed Forces in World Affairs Traced,
by G. Khvatkov, 12 pp.
RUSSIAN, per, Kommunist Vooruzhennykh Sil,
Moscow, No 1, Jan 1970, pp 28-35.
JPRS 49876

Lenin's Theoretical Teaching Discussed, by
D. Kukin, 9 pp.
RUSSIAN, np, Krasnaya Zvezda, Moscow, 13 Jan 1970,
pp 2-3.
JPRS 49795

Two Weeks With the American Astronauts, by
N. Mar. 11 pp.
RUSSIAN, np, Literaturnaya Gazeta, No 48,
26 Nov. 1969,
NASA TT-F-12,714

Lenin's Anti-Religious Articles Reviewed,
16 pp.
RUSSIAN, per, Nauka i Religiya, Moscow,
Dec 1969, pp 12-20.
JPRS 49876

Women's Organizations in Turkey Described,
by Nilufer Efendiyeva, 7 pp.
RUSSIAN, per, Nauka i Religiya, Moscow,
Dec 1969, pp 41-43.
JPRS 49876

Collection of Lenin Atheist Writings Reviewed,
by B. Mar'yanov, 5 pp.
RUSSIAN, per, Nauka i Religiya, Moscow, No 1,
Jan 1970, pp 80-81.
JPRS 49924

Atheist Indoctrination Pamphlet Series Re-
viewed, by V. Timofeyev, 5 pp.
RUSSIAN, per, Nauka i Religiya, Moscow, No 1,
Jan 1970, pp 81-83.
JPRS 49924

USSR
Political (Contd)

Kishinev Party Chief Points to Shortcomings, by
M. D'yaur, 5 pp.
RUSSIAN, np, Pravda, Moscow, 25 Dec 1969, p 2.
JPRS 49795

Various Aspects of Party Discipline Discussed,
by V. Kozhemyako, 15 pp.
RUSSIAN, np, Pravda, Moscow, 5, 9, 11 Jan 1970.
JPRS 49836

Lenin's Philosophical Contributions Discussed,
by F. Konstantinov, 5 pp.
RUSSIAN, np, Pravda, Moscow, 27 Jan 1970,
p 3.
JPRS 49924

Party Decree on Meetings in Yaroslavskay Oblast
Studied, 6 pp.
RUSSIAN, np, Pravda Vostoka, Tashkent, 16 Jan 1970,
p 2.
JPRS 49836

Text of Klauson Speech on Estonian Supreme Soviet,
by V. I. Klauson, 7 pp.
RUSSIAN, np, Sovetskaya Estoniya, Tallin, 20 Dec
1969, p 2.
JPRS 49825

Collective Leadership Concept Lauded, by
A. Shishov, 7 pp.
RUSSIAN, np, Sovetskaya Estonia, Tallin,
28 Dec 1969, pp 1, 3.
JPRS 49896

Leninism, Nationalities Question Discussed, by
Valentin Malanchuk, 5 pp.
RUSSIAN, np, Sovetskaya Estoniya, Tallin, 22 Jan
1970, pp 2, 3.
JPRS 49836

Scientific, Technological Revolution Analyzed,
by I. Artobolevskiy, A. Chekanov, 10 pp.
RUSSIAN, np, Sovetskaya Litva, Kaunas, 4 Jan 1970,
pp 2-3.
JPRS 49795

Lithuanian CP Plenum Resolution and Proceedings
Described, 18 pp.
RUSSIAN, per, Sovetskaya Litva, Vil'nyus,
13 Jan 1970, pp 1, 2, 3.
JPRS 49876

USSR
Political (Contd)

A. Snochkus' Report to Meeting of Lithuanian Ideological Workers, by A. Snochkus, 7 pp.
RUSSIAN, np, Sovetskaya Litva, Vil'nyus, 24 Jan 1970, p 2.
JPRS 49924

Growth of Socialist International Organizations, by N. Lopukhova, 14 pp.
RUSSIAN, per, Voprosy Ekonomiki, Moscow, Dec 1969, pp 118-125.
JPRS 49846

Lenin's Concept of National Problem Upheld, by G. Lomidze, 22 pp.
RUSSIAN, per, Voprosy Literatury, Moscow, Dec 1969, pp 9-28.
JPRS 49876

Lenin's Views on Troop Indoctrination Discussed, by M. Ruban, 9 pp.
RUSSIAN, per, Voyenno-Istoricheskiy Zhurnal, Moscow, No 1, 1970, pp 3-9.
JPRS 49836

Certain Features of Modern Imperialism Traced, by O. Yevseyenko, 27 pp.
UKRAINIAN, np, Radyans'ka Ukrayina, Kiev, 29 Dec 1969, pp 3, 4.
JPRS 49795

Military

Pre-Induction Handbook.
RUSSIAN, bk, 1967, pp 29-34, 55-69, 70-73, 93-137, 147-252, 291-324, 356-476.
DIA/LN 1253-69

Civil Defense--A National Concern, by V. A. Belavskiy
RUSSIAN, bk, Grazhdanskaya Oborona--Vsenarodnoye Delo, 1968, pp 1-33.
*FSTC/HT-23-847-70
*ACSI J-8044
ID 2218430869

The Leninist Principles of Work with Cadres, by M. Nazarov, 14 pp.
RUSSIAN, per, Kommunist, Moscow, No 1, Jan 1970, pp 68-79.
JPRS 49907

USSR
Military (Contd)

Civil Defense Training in Uzbek Republic Discussed, by N. Koz'min, 8 pp.
RUSSIAN, per, Kommunist Uzbekistana, Tashkent, No 11 Nov 1969, pp 39-44.
JPRS 49782

Contemporary Stage of the Revolution in Military Affairs and Demands on Military Cadres, by V. Bondarenko, S. Tyushkevich, 15 pp.
RUSSIAN, per, Kommunist Vooruzhennykh Sil (Navy), 1968, pp 18-25.
AIR/FTD/HT-23-437-68

Psychological Aspects of Naval Life Discussed, by G. Savichev, 5 pp.
RUSSIAN, np, Krasnaya Zvezda, Moscow, 11 Dec 1969, p 2.
JPRS 49893

Attitudes of Soviet and American Recruits Compared, by A. Sgibver, 7 pp.
RUSSIAN, np, Krasnaya Zvezda, Moscow, 20 Dec 1969, p 3.
JPRS 49874

Reply to Letter on Romance of Serving as an Officer, by N. Lyashchenko, 5 pp.
RUSSIAN, np, Krasnaya Zvezda, Moscow, 21 Dec 1969, p 2.
JPRS 49874

Young Officers Advised to Make Good Start, by M. T. Beregovoy, 5 pp.
RUSSIAN, np, Krasnaya Zvezda, Moscow, 24 Dec 1969, p 2.
JPRS 49790

Methods of Studying 1970 Economy Discussed, 6 pp.
RUSSIAN, per, Krasnaya Zvezda, Moscow, 24 Dec 1969, pp 2-3.
JPRS 49790

Rocket Troops Prepare for Lenin Jubilee, by N. Solyanov, 7 pp.
RUSSIAN, np, Krasnaya Zvezda, Moscow, 27 Dec 1969, p 2.
JPRS 49750

Competition Among PVO Troops Emphasized, by N. Solyanov, 5 pp.
RUSSIAN, np, Krasnaya Zvezda, Moscow, 27 Dec 1969, p 2.
JPRS 49790

Krasnaya Zvezda Outlined Plans for 1970, 7 pp.
RUSSIAN, per, Krasnaya Zvezda, Moscow, 27 Dec 1969,
pp 3-4.
JPRS 49790

Krasnaya Zvezda Publishing Plans for 1970, 9 pp.
RUSSIAN, np, Krasnaya Zvezda, Moscow, 27 Dec 1969,
pp 3-4.
JPRS 49750

Romantic Nature of Life as an Officer, by
I. Kh. Bagramyan, 7 pp.
RUSSIAN, np, Krasnaya Zvezda, Moscow, 28 Dec 1969,
p 2.
JPRS 49750

Development and Importance of Command Authority,
by P. A. Belik, 7 pp.
RUSSIAN, np, Krasnaya Zvezda, Moscow, 4 Jan 1970,
p 2.
JPRS 49750

Value of Cruise Critiques Discussed, by
V. Kulukhin, 5 pp.
RUSSIAN, np, Krasnaya Zvezda, Moscow, 6 Jan 1970,
p 2.
JPRS 49782

General Discusses Flying Incidents, by
S. Zhukovskiy, 6 pp.
RUSSIAN, np, Krasnaya Zvezda, Moscow, 7 Jan 1970,
p 2.
JPRS 49782

Role of Military Regulations Stressed, by
N. Vasil'yev, 6 pp.
RUSSIAN, np, Krasnaya Zvezda, Moscow, 9 Jan 1970,
p 2.
JPRS 49790

Personal Contacts with Subordinates Stressed,
by A. Abbasov, 5 pp.
RUSSIAN, np, Krasnaya Zvezda, Moscow, 10 Jan 1970,
p 2.
JPRS 49855

Development of Young Officers Termed Important,
by K. Fedosov, 5 pp.
RUSSIAN, np, Krasnaya Zvezda, Moscow, 14 Jan 1970,
p 2.
JPRS 49855

Applications for Military Schools Advertised,
5 pp.
RUSSIAN, np, Krasnaya Zvezda, Moscow, 14 Jan 1970,
p 4.
JPRS 49855

Word from Parents Cheers Sailors on Cruise,
by V. Zhdanov, 5 pp.
RUSSIAN, np, Krasnaya Zvezda, Moscow, 15 Jan 1970,
p 2.
JPRS 49855

The Soviet Marine Infantry.
RUSSIAN, per, Military Knowledge, No 10, 1969,
pp 30-31.
DIA/LN 690-70

Review of Literature on Naval Radioelectronics,
by S. A. Barchenkov, 7 pp.
RUSSIAN, per, Morskoy sbornik, Moscow,
Dec 1969, pp 103-106.
JPRS 49893

Salisbury's Book on Leningrad Distorts History,
by A. Shchelokov, N. Komarov, 6 pp.
RUSSIAN, np, Red Star, Moscow, 22 Jan 1970, p 3.
JPRS 49830

Night Patrol of Soviet Border Troops Reported,
by A. Grachev, 5 pp.
RUSSIAN, np, Sovetskiy Patriot, Moscow,
14 Jan 1970, p 3.
JPRS 49893

Paramilitary Games for Youth Described,
by Mar SU I. Kh. Bagramyan, 6 pp.
RUSSIAN, np, Sovetskiy Patriot, Moscow,
28 Jan 1970, p 1.
JPRS 49893

Goals of the Soviet Armed Forces in 1970, by
A. A. Grechko, 7 pp.
RUSSIAN, per, Sovetskiy Voin, Moscow, Jan 1970,
pp 3-5.
JPRS 49830

Military Topography - Tank Troopers Manual,
by A. D. Yermolayev, V. V. Ignatenko.
RUSSIAN, bk, Voyennaya Topografiya - Posobiye
Dlya Tankistov.
*ACSI-J-7995
ID 2204001470

The Signal Corps in War and Peace, by N. I. Balayev.
RUSSIAN, bk, Voyennyye Svyazisty v DNI Voyny i Mira,
1968, pp 27-318.
*ACSI J-8014
ID 2204001470

Successes of Ukrainian Academy of Sciences
Outlined, by B. Paton, 5 pp.
RUSSIAN, per, Radyanska Ukraina, Kiev,
11 Jan 1970, pp 1-2.
JPRS 49876

Geographic

Study on Esthetics and Sociology Reviewed,
by L. Stolovich, 6 pp.
RUSSIAN, per, Voprosy Literatury, Moscow,
Jan 1970, pp 217-221.
JPRS 49924

About the Age of the Enemtensky Formation of
Western Kamchatka, by V. N. Sinel'nikova, 17 pp.
RUSSIAN, per, Izv Ak Nauk SSSR, Seriya Geolog,
No 1, 1967, pp 68-74.
Dept of Interior
Bureau of Commercial Fisheries
Office of Foreign Fisheries
A-34-Dec 1969-No 76
On Loan

Anarchic Individualism in Literature Appraised,
by V. Ivanov, 14 pp.
RUSSIAN, per, Znamya, Moscow, No 1, 1970,
pp 244-253.
JPRS 49896

Sociological

Strengths, Faults of Literary Journal
Vsesvit, by Hennadiy Kononov, 5 pp.
UKRAINIAN, np, Literaturna Ukrayina, 13 Jan
1970, p 2.
JPRS 49896

Proposals for Decreasing Drunkenness Discussed,
by A. Gertsenzon, 5 pp.
RUSSIAN, np, Izvestiya, Moscow, 6 Jan 1970, p 4.
JPRS 49795

Popularization of Ukrainian Literature Abroad
Needed, by Oleh Mykytenko, 5 pp.
UKRAINIAN, np, Literaturna Ukrayina, 13 Jan
1970, p 3.
JPRS 49896

Greater Rights for Defense Attorneys Urged,
by Grigoriy Zakharovich Anashkin, 12 pp.
RUSSIAN, per, Literaturnaya Gazeta, Moscow,
No 2, 7 Jan 1970, p 11.
JPRS 49876

Universality of Ukrainian Literature Discussed,
by Pavlo Zahrebel'nyy, 21 pp.
UKRAINIAN, per, Literaturna Ukrayina, Kiev,
No 4, 16 Jan 1970, pp 2-3.
JPRS 49924

Professor Outlines Fatherless Child Problem, by
B. Uralis, 6 pp.
RUSSIAN, np, Literaturnaya Gazeta, Moscow, 7 Jan
1970, p 12.
JPRS 49825

Influence, Direction of Ukrainian Literature
Defended, by Borys Buryak, 7 pp.
UKRAINIAN, per, Radyanska Ukraina, 10 Jan
1970, pp 3-4.
JPRS 49896

Drug Addiction in Soviet Society Criticized,
by D. Kovalev, 8 pp.
RUSSIAN, per, Posev, Frankfurt am Main,
Jan 1970, pp 28-31.
JPRS 49896

Evils of Alcoholism Stressed: Need for
Treatment Urged, by L. Karnaukhov, 8 pp.
UKRAINIAN, np, Radyanska Ukraina, Kiev,
18 Jan 1970, p 4.
JPRS 49924

Apartment Repair Service Needs Support, by
V. Popov, V. Rusakova, 5 pp.
RUSSIAN, np, Pravda, Moscow, 19 Nov 1969,
p 3.
JPRS 49970

Igor' Viktorovich Kragel'skiy, by A. A. Blagonravov, A. Yu. Ishlinskiy. 9 pp.
RUSSIAN, rpt, AN SSSR. Nauchnyy Sovet po Treniyu I Snazkam. Nauchnyye Printsipy i Novyye Metody Ispytaniy Materialov Dlya Uzlov Treniya, 1968, pp 5-9.
AIR/FTD/MT-24-163-69

EASTERN EUROPE

Economic

Automobile Roads and the Development of Tourism in the Peoples Republic of Bulgaria.
BULGARIAN, per, Auto Roads, No 9, 1969.
DIA/LN 651-70

Bulgaria's Role in Socialist Division of Labor Discussed, by Stefan Sharenkov, 6 pp.
BULGARIAN, per, Ikonomicheski zhivot, Sofia, 7 Jan 1970, pp 4-5.
JPRS 49842

Role of Income in Farm Family Consumption Traced, by Atanas Dimitrov, 7 pp.
BULGARIAN, per, Kooperativno Zemedelie, Sofia, No 12, Dec 1969, pp 8-10.
JPRS 49905

Savings Accounts, Insurance Aid Economy, by Dragan Iliev, 5 pp.
BULGARIAN, per, Haruchnik na Agitatora, Sofia, No 21, Nov 1969, pp 38-41.
JPRS 49851

The Price of Fish Industry Products in the Soviet Union, 6 pp.
BULGARIAN, per, Ribno Stopanstvo, Vol 16, No 1, 1969, pp 9-10.
Dept of Interior
Bureau of Commercial Fisheries
Office of Foreign Fisheries
A-34-Dec 1969-No 24
On Loan

Economic Activity of the State Economic Union "Pisciculture Economy", by D. Nedev, 11 pp.
BULGARIAN, per, Ribno Stopanstvo, Vol 16, No 3, 1969, pp 1-3.
Dept of Interior
Bureau of Commercial Fisheries
Office of Foreign Fisheries
A-34-Dec 1969-No 12
On Loan

Economic Stimulation in Fishing Vessel Operation, by G. Solovev, 5 pp.
BULGARIAN, per, Ribno Stopanstvo, Vol 16, No 4, 1969, pp 10-11.
Dept of Interior
Bureau of Commercial Fisheries
Office of Foreign Fisheries
A-34-Dec 1969-No 14
On Loan

Factors Influencing Railroad Development Analyzed, by Jaroslav Kaspar. 15 pp.
CZECH, per, Doprava, Prague, No 5, 1969, pp 9-15
JPRS 49804

Investment Plan for Economic Development Noted, by Karol Ujhazy, 7 pp.
CZECH, np, Prace, Prague, 22 Jan 1970, p 4.
JPRS 49804

Economist Discusses Methods of Recruiting Workers, by Svatopluk Rufert, 7 pp.
CZECH, per, Prace a Mzda, Prague, No 11, Nov 1969, pp 588-593.
JPRS 49804

1969 Status of Czech Economy Published, 6 pp.
CZECH, np, Rude Pravo, Prague, 27 Jan 1970, pp 1, 5.
JPRS 49905

Deputy Minister Reviews Food Situation, by Jan Sevcovic, 6 pp.
CZECH, per, Zemedelske Noviny, Prague, 23 Jan 1970, pp 1, 3.
JPRS 49906

Problems of Implementing Socialist Economics in the GDR Energy Industry, by Klaus Siebold, 17 pp.
GERMAN, per, Bergbautechnik, Leipzig, Dec 1969, pp 617-624.
JPRS 49977

Eastern Europe
Economic (Contd)

Cost, Profit and Turnover Analysis by Profitability Diagrams or "Economy Squares", by E. Hohmann, GERMAN, per. Blech, 1967, March, pp 90-92. NLL Ref: 9022.06 (5591)

Additional Excerpts from 1970 Budget Law, 5 pp. GERMAN, per. Gesetzblatt der Deutschen Demokratischen Republik, East Berlin, Part 1, No 15, 19 Dec 1969, pp 264-268. JPRS 49788

Selection and Training of Crane-Drivers and Drivers of Trackless Shop-Floor Transporters, GERMAN, per. Industrie-Anzeiger, Vol 89, Aug., 1967, pp 18-19, NLL Ref: 9022.06 (6467)

Bloc Trade Agreements with Other Countries, 5 pp. GERMAN, np, Marktinformationen, East Berlin, 29 Dec 1969, p 2. JPRS 49788

Causes of Light Industry's Problems Examined, by Tibor Sebastyen, 6 pp. HUNGARIAN, per. Figyelo, Budapest, 7 Jan 1970, pp 1-2. JPRS 49905

Article Discusses First Two Years of Economic Reform, by Jozsef Bognar, 15 pp. HUNGARIAN, per. Kozgazdasagi Szemle, Budapest, No 1, Jan 1970, pp 1-12. JPRS 49906

Hungarian National Budget for 1970 Presented, 5 pp. HUNGARIAN, per. Magyar Kozlony, Budapest, 23 Dec 1969, pp 885-887. JPRS 49804

Report on 1969 Development of Hungarian Economy, 15 pp. HUNGARIAN, rpt, MTI, Hungarian, 1015 GMT, 3 Feb 1970. JPRS 49977

Nyers Examines Results, Problems of Economic Policy, by Rezső Nyers, 21 pp. HUNGARIAN, per. Tarsadalmi Szemle, Budapest, Jan 1970, pp 3-17. JPRS 49873

Eastern Europe
Economic (Contd)

Railways' Long Range Development Plan Examined, by Istvan Bermann, 6 pp. HUNGARIAN, per. Vasut, Budapest, Nov 1969, pp 1-3. JPRS 49788

Chemical, Refining Industries' Development Urged, by Lech Tarchalski, 8 pp. POLISH, per. Chemik, Warsaw, Oct 1969, pp 363-365. JPRS 49804

Development of Polish Railroads Described, 8 pp. POLISH, per. horyzonty Techniki, Warsaw, Dec 1969, pp 3, 6. JPRS 49804

Drafting of Petroleum Industry's Plans Discussed, by T. Perucki, 13 pp. POLISH, per. Nafta, Katowice, Sept 1969, pp 257-262. JPRS 49842

Conference Proposes Containerization Timetable, by I. Gratkowska, S. Bagdanowicz, 10 pp. POLISH, per. Przegląd Komunikacyjny, Warsaw, No 12, Dec 1969, pp 441-448. JPRS 49804

Growth of Polish Chemical Industry Described, by Zenon Gondek, 9 pp. POLISH, per. Przemysł Chemiczny, Warsaw, Nov 1969, pp 641-644. JPRS 49788

Importance of Conveyance by Reefer Space for the Economics of Fisheries, by F. Golebiowski. POLISH, per. Technika i Gospodarska Morska, Vol 19, No 5(215), 1969, pp 203-205. *TT 70-55048 Available from USDI/BCF

Some Traits of Increasing Sea Fisheries in the Atlantic, by Z. Polanski. POLISH, per. Technika i Gospodarska Morska, Vol 19, No 7(217), 1969, pp 301-304. *TT 70-55050 Available from USDI/BCF

**Initial Exploitation Evaluation of the
Freezer Trawler Type "Laskara" by**

W. Labeck.
POLISH, per, Technika i Gospodarska
Morska, Vol 19, No 8-9(218-219), 1969,
pp 375-378.
*TT 70-55052
Available from USDI/BCF

**Tendencies of Changes in the Economic
System of Sea Fisheries, by A. Owsinski.**

POLISH, per, Technika i Gospodarska
Morska, Vol 19, No 10(220), 1969,
pp 441-444.
*TT 70-55055
Available from USDI/BCF

**Interdependence in the Number of Crew,
Volume and Efficiency of Catches in a
Fishing Vessel, by A. Polanska.**

POLISH, per, Technika i Gospodarska
Morska, Vol 19, No 10(220), 1969,
pp 446-448.
*TT 70-55056
Available from USDI/BCF

Data for 1968 on CEMA Cargo Line Shipping, 5 pp.
POLISH, per, Technika i Gospodarska Morska, Gdansk,
Vol 19, No 11, Nov 1969, pp 485-487.
JPRS 49851

**The Problem of Controlling the Fishing
Fleet Operation, by St. Szymanski.**

POLISH, per, Technika i Gospodarska
Morska, Vol 19, No 11(221), 1969,
pp 488-491.
*TT 70-55057
Available from USDI/BCF

**Program for 1970 Domestic Trade Outlined, by
Z. Siedlewski, 7 pp.**
POLISH, np, Tygodnik Demokratyczny, Warsaw,
18 Jan 1970, p 3.
JPRS 49873

**Future of Petroleum Industry Discussed, by
Jerzy Urban, 11 pp.**

POLISH, per, Zycie Gospodarcze, Warsaw,
25 Jan 1970, pp 1, 10.
JPRS 49977

**Socialist Trade Development Reviewed, by
Eugen Barot, 12 pp.**

ROMANIAN, per, Comertul Modern, Bucharest,
No 11/12, Nov/Dec 1969, pp 8-16.
JPRS 49906

**Introduction of New Technologies Described,
by Aurel Bancila, 6 pp.**

ROMANIAN, per, Constructia de Masini, Bucharest,
No 10, Oct 1969, pp 587-589.
JPRS 49908

**Utilization of Economic Reserves by Enterprises
Scrutinized, by R. Manescu, 11 pp.**

ROMANIAN, per, Finante si Credit, Bucharest,
Nov 1969, pp 3-11.
JPRS 49842

**Improvement of Wholesale Price System Proposed,
by I. Iticovici, 13 pp.**

ROMANIAN, per, Finante si Credit, Bucharest,
Nov 1969, pp 21-29.
JPRS 49842

**Development of Investment Policies Outlined, by
Costinel Iazar, Gheorghe Gorincu, 14 pp.**

ROMANIAN, per, Probleme Economice, Bucharest,
Oct 1969, pp 3-14.
JPRS 49788

**Improvements in Data Processing Recommended,
by Eugeniu Niculescu-Mizil, 6 pp.**

ROMANIAN, per, Probleme Economice, Bucharest,
Oct 1969, pp 35-38.
JPRS 49788

**Agricultural Mechanization Enterprises Analyzed,
by I. Bianu, 14 pp.**

ROMANIAN, per, Probleme Economice, Bucharest,
Oct 1969, pp 51-62.
JPRS 49788

**1965-1969 Grain Production Described, by
Milenko Stojanovic, 6 pp.**

SERBO-CROATIAN, per, Ekonomika Poljoprivrede,
Belgrade, Dec 1969, pp 894-898.
JPRS 49804

**Women's Participation in Production Process
Analyzed, by A. Gluvacov, 9 pp.**

ROMANIAN, per, Revista de Statistica, Bucharest,
No 11, Nov 1969, pp 21-27.
JPRS 49906

Eastern Europe
Economic (Contd)

Federal Budget Breakdown for 1970 Made Public,
62 pp.
SERBO-CROATIAN, per, Sluzbeni List SFRJ,
Belgrade, 31 Dec 1969, pp 1449-1478.
JPRS 49906

Foreign Exchange for 1970 Federal Needs Assigned,
10 pp.
SERBO-CROATIAN, per, Sluzbeni List SFRJ, Belgrade,
31 Dec 1969, pp 1491-1494.
JPRS 49788

Political

Party's Work in Correcting Erring Members Cited,
by Ibrahim Sina, 5 pp.
ALBANIAN, per, Zeri i Popullit, Tirana, 18 Dec
1969, p 2.
JPRS 49881

Czechoslovak Leaders Justify Selves Before
Party, 5 pp.
FRENCH, np, Le Monde, Paris, 1-2 Feb 1970,
p 4.
JPRS 49904

Current Crisis, Revolution and New Left Examined,
by Karel Bartosek, 10 pp.
FRENCH, per, Les Temps Modernes, Paris, Dec 1969,
pp 792-803.
JPRS 49848

Aussenpolitische Korrespondenz Quotes Stibi on
'U.N.', by George Stibi, 5 pp.
GERMAN, per, Aussenpolitische Korrespondenz,
12 Jan 1970, pp 9-11.
JPRS 49978

Socialist Sovereignty, Proletarian Inter-
nationalism, by Herbert Kroeger, 13 pp.
GERMAN, per, Deutsche Aussenpolitik,
East Berlin, Dec 1969, pp 1419-1428.
JPRS 49978

GDR Foreign Policy Reflects its Leninist Nature,
by Anton Latzo, 7 pp.
GERMAN, per, Horizont, East Berlin, No 4, Jan 1970,
pp 8-9.
JPRS 49881

Eastern Europe
Political (Contd)

Party Initiative Needed to Overcome Deficiencies,
by Horst Ritschkowski, 5 pp.
GERMAN, np, Neues Deutschland, East Berlin, 12
Jan 1970, p 3.
JPRS 49804

Important Book on Socialist Political Economics
Reviewed, by Werner Kalweig, Otto Reinhold,
22 pp.
GERMAN, per, Wirtschaftswissenschaft, East Berlin,
Oct 1969, pp 1442-1457.
JPRS 49815

Situation, Development of Party Democracy Noted,
7 pp.
HUNGARIAN, per, Partelet, Budapest, Jan 1970,
pp 14-17.
JPRS 49881

Minister Benkel Discusses Report to Committee,
by Andras Benkel, 16 pp.
HUNGARIAN, per, Partelet, Budapest, Jan 1970,
pp 18-28.
JPRS 49881

Role of Political Commissaries in Civil
Defense Noted, by Mihaly Markovits, 7 pp.
HUNGARIAN, per, Polgari Vedelem, Budapest,
10, 24 Jan 1970, pp 18-19; 6-7, 13.
JPRS 49978

Changes in Administrative Borders Announced,
7 pp.
POLISH, per, Dziennik Ustaw, Warsaw, 22 Dec 1969,
pp 421-425.
JPRS 49815

Polish Ordinances Change Administrative Boundaries,
19 pp.
POLISH, per, Dziennik Ustaw, Warsaw, 30 Dec 1969,
pp 518-524.
JPRS 49815

Lenin Advocated Creative Application of Marxism,
by Al. Gh. Savu, 16 pp.
ROMANIAN, per, Anale de Istorie, Bucharest, Nov-
Dec 1969, pp 96-107.
JPRS 49881

Critical Spirit, Social Responsibility Discussed,
by Ion Mitran, 6 pp.
ROMANIAN, np, Contemporanul, Bucharest, 19 Dec
1969, pp 1, 8.
JPRS 49881

Eastern Europe
Political (Contd)

Leninist Principles Guide Romanian Armed Forces, by Ion Ionita, 6 pp.
RUSSIAN, np, Red Star, Moscow, 15 Jan 1970, p 3.
JPRS 49848

National Defense Council Views Explained, by Milojica Pantelic, 11 pp.
SERBO-CROATIAN, np, Borba, Belgrade, 16 Jan 1970, p 32; 17 Jan 1970, p 12.
JPRS 49848

Changes Noted in Social Structure of Party, 22 pp.
SERBO-CROATIAN, per, Borba Reflektor, Belgrade, 24 Jan 1970, pp 22-28.
JPRS 49881

Military

The Soviet Navy's Development of New Types of Warships, by Von Siegfried Breyer, 21 pp.
GERMAN, per, Marine Rundschau, Vol 5, No 66, Oct 1969, pp 346-359.
Dept of Navy NIC Trans 2983

Guided Missile Techniques, by R. Weisshart, 17 pp.
GERMAN, per, Soldat und Technik, No 1, 1969, pp 35-39.
Dept of Navy NIC Trans 2986

Countermeasures Against the STYX Antiship Missiles, 6 pp.
GERMAN, per, Soldat und Technik, Vol 9, 1969, pp 492-493.
NAV/NIC/Tran-2994-70

Variants of the Kotlin Class Destroyers and Their Modifications, by Siegfried Breyer, 11 pp.
GERMAN, per, Soldat und Technik, Vol 9, 1969, pp 496-499.
NAV/NIC/Tran-2995-70

The System and Organization of National Defense, by Milojica Pantelic, 8 pp.
SERBO-CROATIAN, per, Jugoslovenski Pregled, No 2, 1969, pp 55-58.
ACSI J-7970
ID 2204000970

Eastern Europe
Military (Contd)

Decree Defining Secret National Defense Data, Its Protection, 8 pp.
SERBO-CROATIAN, per, Sluzbeni List SFRJ, Belgrade, No 56, 31 Dec 1969, pp 1501-1503.
JPRS 49904

Decree on Implementation of Requisition in a State of War, 5 pp.
SERBO-CROATIAN, per, Sluzbeni List SFRJ, Belgrade, No 56, 31 Dec 1969, pp 1504-1505.
JPRS 49904

Sociological

Family Structure in Albanian Villages Studied, by Naum Goxho, 6 pp.
ALBANIAN, per, Zeri i Popullit, Tirana, 27 Dec 1969, pp 2-3.
JPRS 49848

University Rector Comments on Future of Higher Education, by Milos Prosek, 7 pp.
CZECH, np, Tvorba, Prague, 28 Jan 1970, pp 3, 4.
JPRS 49904

Meissen Catholic Synod, Social Views Discussed, 5 pp.
GERMAN, per, Begegnung, East Berlin, Nov 1969, pp 13-15.
JPRS 49978

Split of East-West German Catholic Church Advocated, by Hubertus Guske, 5 pp.
GERMAN, per, Begegnung, East Berlin, Dec 1969, pp 6-8.
JPRS 49904

Advanced, Technical School Cadre Development Traced, by Dieter Fitzner, 9 pp.
GERMAN, per, Statistische Praxis, East Berlin, Dec 1969, pp 679-682.
JPRS 49815

Inaccurate Histories of Country Criticized, by Gh. I. Ionita, 21 pp.
ROMANIAN, per, Anale de Istorie, Bucharest, Nov-Dec 1969, pp 48-51.
JPRS 49881

Eastern Europe
Sociological (Contd)

Speeches at Health and Welfare Plenary Session,
by Decebal Colita, 10 pp.
ROMANIAN, per, Muncitorul Sanitar, Bucharest,
13 Jan 1970, pp 1, 2.
JPRS 49848

Dangers of Bad Companions to Youth Stressed,
by Ion Vlaciuc, 6 pp.
ROMANIAN, np, Scinteia, Bucharest, 18 Jan 1970,
pp 1, 5.
JPRS 49978

WESTERN EUROPE
Economic

Commercialization of Fish in France (Re-
port Based on a Survey)
FRENCH, per, Notes et Etudes Documentaires
no. 3408, 10 July 1967
*CFSTI TT 70-58052

The Languedoc-Roussillon Coast Shelters Many
Fishing Harbors of Which Sete is the Most Important
of the Mediterranean Coast, 6 pp.
FRENCH, per, La Pêche Maritime, No 48(1099), 1969,
pp 755-756.
Dept of Interior
Bureau of Commercial Fisheries
Office of Foreign Fisheries
A-34-Dec 1969-No 32
On Loan

20 Years of Research of the Inland Fish-
eries Institute, by H. Herold.
GERMAN, per, Deutsche Fischerei Zeitung,
Vol. 16, no. 10-11, 1969, pp. 299-307.
*CFSTI TT 70-58055

Development of Training in the Field of
Inland Fisheries, by W. Breitenstein.
GERMAN, per, Deutsche Fischerei Zeitung,
Vol. 16, no. 10-11, 1969, pp. 335-339.
*CFSTI TT 70-58056

Husak's Choice: Political, Economic Centralism,
by Franco Bertone, 6 pp.
ITALIAN, per, Rinascita, Rome, 23 Jan 1970,
pp 9-10.
JPRS 49872

Western Europe
Economic (Contd)

Spanish Fishery Statistics and Fishing
Fleet During 1968.
SPANISH, per, Industria Conservera,
Vol. 35, no. 364, 31 Oct 1969, pp. 277-278
*CFSTI TT 70-58054

Political

Hanne Reintoft Discusses Need for Leftwing Unity,
by Claus Ingemann Jorgensen, 5 pp.
DANISH, np, Land og Folk, Copenhagen, 18-19 Jan
1970, p 9.
JPRS 49786

CP Congress Basis-for-Discussion Document
Given, 22 pp.
DUTCH, np, De Waarheid, Amsterdam, 4 Dec 1969,
pp 5, 6.
JPRS 49891

Problems of Revolutionary Movements Discussed,
by Aarne Saarinen, 7 pp.
FINNISH, np, Kansan Utiset, Helsinki, 20 Jan
1970, pp 4, 5.
JPRS 49819

Transition of Socialism in Finland Discussed,
by Ele Alenius, 6 pp.
FINNISH, np, Kansan Utiset, Helsinki,
7 Feb 1970, p 4; 8 Feb 1970, p 4.
JPRS 49913

French CP Criticizes Garaudy's Latest Book,
by Philippe Fuchsmann, 9 pp.
FRENCH, per, Cahiers du Communisme, Paris,
Jan 1970, pp 110-116.
JPRS 49872

1969 French CP Membership Figures Discussed,
by Claude Harmel, 5 pp.
FRENCH, per, Est et Ouest, Paris, 1-5 Jan 1970,
pp 14-16.
JPRS 49841

CP Members Contribute to Congress Draft Theses,
26 pp.
FRENCH, per, France Nouvelle, Paris, 14 Jan 1970,
pp 7-8; 21 Jan 1970, pp 7-8; 28 Jan 1970, pp 6-9.
JPRS 49884

Western Europe
Political (Contd)

Readers State Views on Garaudy, Related Matters, 13 pp.
FRENCH, np, l'Humanite, Paris, 16 Jan 1970, p 4.
JPRS 49786

CP Members Discuss 19th Congress Theses, 15 pp.
FRENCH, np, l'Humanite, Paris, 20 Jan 1970, p 4; 23 Jan 1970, p 4.
JPRS 49872

Roger Garaudy Challenged by Party Member, by Michel Simon, 6 pp.
FRENCH, np, l'Humanite, Paris, 26 Jan 1970, p 4.
JPRS 49841

Marxist-Leninist Party Attacks Swiss Communists, 6 pp.
FRENCH, per, Octobre, Lausanne, Dec 1969-Jan 1970, p 9.
JPRS 49841

Italian Communist Praises Garaudy's New Book, by Lucio Lombardo Radice, 9 pp.
FRENCH, per, Politique Aujourd'hui, Paris, Jan 1970, pp 55-61.
JPRS 49872

Study Lenin on Worker Control, Parliamentarism, Trade Unionism, by Wolfgang Schmidt, 10 pp.
GERMAN, per, Konsequent, West Berlin, Dec 1969, pp 3-12.
JPRS 49913

Elements of 'Leftist Anticommunism' Discussed, by Wolf-Dieter Gudopp, 7 pp.
GERMAN, per, Konsequent, West Berlin, Dec 1969, pp 23-28.
JPRS 49913

Significance for West German CP of Leninist Ideas Analyzed, by Kurt Bachmann, 7 pp.
GERMAN, np, Unsere Zeit, Essen, 24/25 Dec 1969, p 6.
JPRS 49819

Transformation of German Communism Discussed, by Hermann Weber, 10 pp.
GERMAN, np, Vorwaerts, Bonn, 11 Dec 1969, p 13; 18 Dec 1969, p 5.
JPRS 49819

Western Europe
Political (Contd)

Marxism — CP Writer Hews the Old Line, by Walter Hollitscher, 14 pp.
GERMAN, per, Weg und Ziel, Vienna, Vol. 27, No 1, Jan 1970, pp 4-8.
JPRS 49913

PCI's Right and Center-Left Positions Analyzed, by Antonio Gambino, 5 pp.
ITALIAN, np, l'Espresso, Rome, 25 Jan 1970, p 3.
JPRS 49786

Reorganization of CP Advisory Commissions Posed, by Renzo Lapicciarella, 6 pp.
ITALIAN, per, Rinascita, Rome, 16 Jan 1970, p 15.
JPRS 49786

Marxist Review of Theories of Hegel and Engels, by Nicola Badaloni, 11 pp.
ITALIAN, per, Rinascita, Rome, 16 Jan 1970, pp 16-17.
JPRS 49786

Pecchioli Report to CC and CCC on Party Affairs, by Ugo Pecchioli, 20 pp.
ITALIAN, per, l'Unita, Rome, 15 Jan 1970, pp 7-9.
JPRS 49786

Serri Report to CC and CCC on Party-Youth Relations, by Rino Serri, 9 pp.
ITALIAN, per, l'Unita, Rome, 15 Jan 1970, p 8.
JPRS 49786

Swedish CP Offers Support to Striking Miners, by C. H. Hermansson, 6 pp.
SWEDISH, per, Ny Dag, Stockholm, 23-27 Jan 1970, p 3.
JPRS 49819

Military

The Police Forces of the Grand Duchy of Luxembourg, FRENCH, per, Police Nationale, Oct/Nov 1968, pp 39-45.
DIA/LN 623-70

Along the Lines of Naval Defense, by S. Gorshkov, 7 pp.
FRENCH, per, La Revue Maritime, No 269, Oct 1969, pp 1139-1143.
Dept of Navy NIC Trans 2992

Western Europe
Military (Contd)

Africa
Economic (Contd)

Our Army, In Individual Presentations.
GERMAN, per, Der Schweizer Soldat, 30 Sept 1969,
pp 6-7.
DIA/LN 622-70

Manpower Factors Affecting Development, 5 pp.
FRENCH, per, Bulletin de l'Afrique Noire, Paris,
29 Oct 1969, pp 11536-11538.
JPRS 49806

Sociological

Economic and Development Statistics Reviewed,
(Africa), 22 pp.
FRENCH, per, Bulletin de l'Afrique Noire, Paris,
17 Dec 1969, pp 11674-11687.
JPRS 49761

The Present State of Nomadism in the Central and
Western Sahara.
FRENCH, per, Acta Geographica, No 76, Jan/Mar 1969,
DIA/LN 577-70

Details on 1970 General Budget Presented,
(Africa), 5 pp.
FRENCH, per, Bulletin de l'Afrique Noire,
Paris, 21 Jan 1970, pp 11761-11763.
JPRS 49877

AFRICA
Economic

Text of Morocco-Algeria Commercial, Tariff Con-
vention, (Africa), 19 pp.
FRENCH, per, Bulletin Officiel, Rabat, 10 Dec 1969,
pp 1511-1515; 17 Dec 1969, pp 1567-1570.
JPRS 49806

Morocco Sees Itself as a Leading Force Among
Developing Nations, (Africa), 5 pp.
ARABIC, per, al-Anba, Rabat, 20 Dec 1969, pp 10-11
JPRS 49806

Mines and Industry Minister Views Prospects,
(Africa), 6 pp.
FRENCH, np, Le Courrier de Madagascar,
Tananarive, 22 Jan 1970, pp 1, 3; 23 Jan 1970,
pp 1, 2; 24/25 Jan 1970, pp 1, 4.
JPRS 49903

Activities of National Savings Fund in Economic
Life, by Lakhdar Darbani, (Africa), 5 pp.
ARABIC, np, al-Mujahid, Algiers, 4 Jan 1970,
pp 1, 11, 17.
JPRS 49806

Congestion Blocking Algiers Port Discussed,
(Africa), by M. S., 10 pp.
FRENCH, per, Revolution Africaine, Algiers,
10-16 Jan 1970, pp 13-17; 17-23 Jan 1970,
pp 16-17.
JPRS 49866

Special Three-Year Program for Oasis Wilaya
Behind Schedule, (Africa), by Ahmad Khaujah,
5 pp.
ARABIC, per, al-Mujahid, Algiers, 18 Jan 1970,
pp 26-29.
JPRS 49903

Report on Algerian Social Security System, by
Karim Batache, 20 pp. (Africa).
FRENCH, per, Revolution Africaine, Algiers, 17-23
Jan 1970, pp I-XVI.
JPRS 49854

Importance of Minerals in Developing Economy
Described, (Africa), 8 pp.
ARABIC, np, Ash-Shab, Algiers, 31 Dec 1969,
p 7.
JPRS 49903

Finance Minister Explains 1970 Finance Law,
(Africa), by Mamoun Tahiri, 13 pp.
FRENCH, per, La Vie Economique, Casablanca,
9 Jan 1970, pp 1, 3.
JPRS 49866

Significance of 1970 Finance Law Discussed, 9 pp.
(Africa).
FRENCH, per, Algerie Actualite, Algiers, 11-17
Jan 1970, pp 8-9.
JPRS 49840

Africa
Political

Cohesiveness, Nationalism Seen Lacing in Algeria, (Africa), 5 pp.
ARABIC, per, Al-Mujahid, Algiers, 28 Dec 1969, pp 30-31.
JPRS 49806

NLF Issues Proclamation to Ensure Greater Party Unity, (Africa), 5 pp.
ARABIC, per, al-Mujahid, Algiers, 18 Jan 1970, pp 6-7.
JPRS 49903

UNFA Raises Women's Standards Through Vital Projects, (Africa), by Ayit 'Abd ar-Rahman, 5 pp.
ARABIC, per, al-Mujahid, Algiers, 18 Jan 1970, pp 10-11.
JPRS 49903

Tunisian-Algerian Friendship Treaty Discussed, (Africa), 6 pp.
ARABIC, np, As-Sabah, Tunis, 10 Jan 1970, p 3.
JPRS 49854

Libya's Provisional Constitution Announced, (Africa), 6 pp.
ARABIC, np, Ath-Thawrah, Tripoli, 13 Dec 1969, p 3.
JPRS 49806

Portuguese Guinea Called 'United Front Against Imperialism', (Africa), by Luis Cabral, 6 pp.
ENGLISH, per, Tricontinental, Havana, No 15, Nov-Dec 1969, pp 141-146.
JPRS 49903

Prime Minister Calls for Increased Unity, (Africa), 6 pp.
FRENCH, np, L'Action, Tunis, 15 Jan 1970, p 5.
JPRS 49840

Prime Minister Optimistic About Country's Future, (Africa), 25 pp.
FRENCH, np, L'Action, Tunis, 16 Jan 1970, pp 5, 6.
JPRS 49866

Story of a ZAPU Guerrilla Member Told, (Africa), 6 pp.
FRENCH, per, Africasia, Paris, 10-23 Nov 1969, pp 30-32.
JPRS 49761

Africa
Political (Contd)

Senghor's General Policy Report Summarized, (Africa), 9 pp.
FRENCH, per, Bulletin de l'Afrique Noire, Paris, 14 Jan 1970, pp 11737-11742.
JPRS 49877

New Chinese Policy in Africa Analyzed, (Africa), by Jacques Van Broekhuizen, 8 pp.
FRENCH, per, Est & Ouest, Paris, 16-31 Dec 1969, pp 1-4.
JPRS 49877

The Unity of Nigeria and the Communists, by (Africa), by Nicolas Lang, 7 pp.
FRENCH, per, Est et Ouest, Paris, 16-31 Dec 1969, pp 5-7.
JPRS 49877

PAIGC Leader Amilcar Cabral Upbraids Portuguese Colonialism, (Africa), 7 pp.
FRENCH, np, France Nouvelle, Paris, 19 Nov 1969, pp 10, 11.
JPRS 49761

President Addresses Nation at Start of New Year, (Africa), by Sekou Toure, 6 pp.
FRENCH, per, Moroya-Hebdo, Conakry, 1 Jan 1970, pp 3-9.
JPRS 49806

Spectrum of Malagasy Press Organs Examined, (Africa), by Pierre Ravahona, 7 pp.
FRENCH, np, Lumiere, Fianarantsoa, 25 Jan 1970, pp 4, 8.
JPRS 49903

Allal el Fassi Speech at Istiqlal Party Rally, by Allal el Fassi, 21 pp, (Africa).
FRENCH, per, L'Opinion, Rabat, 13 Jan 1970, pp 1, 3, 4.
JPRS 49840

Professor Gives Views on Algerian Personality, (Africa) by Driss Chabou, 23 pp.
FRENCH, per, Revolution Africaine, Algiers, 27 Dec 1969-2 Jan 1970, pp 21-23; 30 Jan 1970, pp 12-14; 10-16 Jan 1970, pp 22-24; 17-23 Jan 1970, pp 20-22.
JPRS 49866

Africa
Political (Contd)

Algerian Supreme State Organs Described, (Africa),
by Herbert Baumann, 20 pp.
GERMAN, per, Staat und Recht, East Berlin, Dec
1969, pp 1903-1918.
JPRS 49840

Liberation Struggle Assessed by Cabral, (Africa),
by Amilcar Cabral, 5 pp.
ITALIAN, np, Rinascita, Rome, 23 Jan 1970, p 28.
JPRS 49806

Historian Discusses African Communist Parties,
(Africa), by P. Manchka, 15 pp.
RUSSIAN, per, Aziya i Afrika Segodnya, Moscow,
No 3, 1969, pp 2-3; No 4, pp 16-18; No 5,
pp 12-14.
JPRS 49866

Military

Lt. Moussa Traore Addresses Army on Army Day,
(Africa), 5 pp.
FRENCH, np, L'Essor, Bamako, 22 Jan 1970,
pp 1, 4.
JPRS 49903

Sociological

Problems and Outlook in Hoggar Area Discussed,
(Africa), 21 pp.
FRENCH, per, Algerie Actualite, Algiers, 11-17
Jan 1970, pp 4-7; 18-24 Jan 1970, pp 4-5.
JPRS 49854

Education Minister Reports on State of Education,
(Africa), 6 pp.
FRENCH, per, L'Essor, Bamako, 11 Nov 1969,
pp 1-3.
JPRS 49877

Two FED Projects Inaugurated at Fort Archambault,
(Africa), 6 pp.
FRENCH, per, Info Tchad, Fort Lamy, 8 Jan 1970,
pp 1-6.
JPRS 49854

Africa
Sociological (Contd)

Traditional Obstacles Face African Development,
(Africa), by J. C. Froelich, 11 pp.
FRENCH, per, Revue Francaise d'Etudes Politiques
Africaines, Paris, Dec 1969, pp 51-63.
JPRS 49761

MIDDLE EAST
Economic

Bahrain Seeks Industrial Growth, Diversity,
by Husayn Rashid as-Sabbagh, 9 pp.
ARABIC, per, Huna Al-Bahrain, Bahrain, Oct 1969,
pp 15-22.
JPRS 49813

New Legislation Defines Worker-Employer
Relationship, 48 pp.
ARABIC, np, al-Yawm, ad-Dammam, 26 Nov 1969,
pp 1, 2, 3, 6, 7.
JPRS 49974

Political

External Maneuver Seen Key to Indirect Strategy
of Guerrillas, by Kamal ad-Din Rif'at, 9 pp.
ARABIC, np, Al-Jumhuriyah, Cairo, 25 Dec 1969,
p 16.
JPRS 49870

Palestinian Revolution Observes Sixth Anniversary,
by 'Abdul-Qader Ibn Saleh, 6 pp.
ARABIC, per, Al-Mujahid, Algiers, 28 Dec 1969,
pp 16-17.
JPRS 49813

Developments in Arab Propaganda Outlined, by
Khalid Muhyi ad-Din, 9 pp.
ARABIC, per, At-Tali'ah, Cairo, Nov 1969,
pp 54-58.
JPRS 49862

Palestinian Resistance Movement Explained,
39 pp.
ARABIC, per, At-Tali'ah, Cairo, Nov 1969,
pp 85-106.
JPRS 49862

General

Origin and Growth of Guerrilla Movement Described,
by Jean-Pierre Vissiot, 12 pp.

FRENCH, per, Le Monde Diplomatique, Paris,

Jan 1970.

JPRS 49870

Four Powers Attempt Middle East Settlement,
by Moshe Shoh, 6 pp.

HEBREW, np, Kol Haam, Tel Aviv, 8 Jan 1970, p 2.
JPRS 49813

Government's Power to Requisition Property
Extended to December 1971, 18 pp.

HEBREW, per, Reshumet/Hatsa'et Hoz, Jerusalem,
No 664, 6 Jan 1970, pp 24-29.

JPRS 49974

Power and Right in our Struggle for Existence,
by Moshe Tabenkin, 6 pp.

HEBREW, np, Zot Haaretz, Tel Aviv, 2 Jan 1970,
pp 2, 8.

JPRS 49862

Iran's Ruling Class in the Past Five Centuries,
by Ali Sh'abani, 17 pp.

PERSIAN, per, Khandaniha, Tehran, 9, 13, 16,
20, 23, 30 Dec 1969, pp 16, 21, 21, 18, 18, 9.

JPRS 49892

Military

UAR Navy Said to Have Sunk Israeli Submarine
'Dakar', by Jamal al-Ghaytani, 5 pp.

ARABIC, np, Al-Akhbar, Cairo, 1 Jan 1970, p 5.
JPRS 49862

General Hofi Interviewed on Exercises, Training,
by Benjamin Landau, 8 pp.

HEBREW, per, Banahanah, Tel Aviv, 20 Jan 1970,
pp 26-27.

JPRS 49862

Sociological

Constitution and Standing Orders of Newly
Established Arab Labor Organizations.

ARABIC, monograph, 284 pp.

*CPSTI TT 70-58070

Refuting the Theory of "Waste is Justified"
by Kung Hsiao-Wen, 6 pp.

CHINESE, per, Hung-Ch'i, 2 Jan 1970

Survey of China Mainland Press

no. 673

20 Feb 1970

Carry Out Well the Class Struggle in the
Sphere of Rural Economy, 5 pp.

CHINESE, per, Hung-ch'i, no. 2, Jan 1970

Survey of China Mainland Press

no. 673

20 Feb 1970

Maritime Traffic Regulation is Promulgated,
9 pp.

FRENCH, per, Journal Officiel du Cambodge,

Phnom Penh, 1 Nov 1969, pp 5241-5248.

JPRS 49868

Final Year Indicates Success of Seven-Year Plan,
by Kobayashi Takashi, 5 pp.

JAPANESE, np, Akahata, Tokyo, 11 Jan 1970, p 3;
12 Jan 1970, p 3.

JPRS 49820

Upon Call from Their Leader They are Speeding up
the Great March for Attainment of all the Important
Goals of the Septennial.

KOREAN, per, Korea, No 155, 1969, pp 10-11, 22-23.

DIA/LN 587-70

Ideological Training and Economic Management
Exhorted, by Yi Ch'ol-bok, 15 pp.

KOREAN, per, Kulloja, P'yongyang, 5 Dec 1969,
pp 9-16.

JPRS 49972

Theory of the Socialist Economy Must be
Practiced, 17 pp.

KOREAN, per, Kulloja, P'yongyang, 5 Dec 1969,
pp 25-33.

JPRS 49972

National Land Construction Discussed, by
To Ung-sun, 14 pp.

KOREAN, per, Kulloja, P'yongyang, 5 Dec 1969,
pp 43-49.

JPRS 49972

Let Us Strengthen Discipline in Production, 5 pp.
KOREAN, np, Nodong Sinmun, P'yongyang, 14 Nov
1969, p 1.
JPRS 49820

Ch'ollima Work Team Movement to be Intensified,
7 pp.
KOREAN, np, Nodong Sinmun, P'yongyang, 27 Nov
1969, p 1.
JPRS 49902

Better Use of Coal and Electricity Urged,
5 pp.
KOREAN, np, Nodong Sinmun, P'yongyang, 30 Nov
1969, p 1.
JPRS 49902

Cold Storage Industry Organization Plans to Build
Cold Storages in the Northeastern Region with an
Aim to Expand the Market of Aquatic Animals,
THAI, per, Thai Fisheries Gazette, Vol 22, No 3,
July 1969, pp 291-296.
*Dept of Inter
BCF/OFF

1969 Budget for Assisting Farmers, by
Thawee Sukhavanija.
THAI, per, Thai Fisheries Gazette, Vol 22, No 3,
July 1969, pp 311-318.
*Dept of Inter
BCF/OFF

U. S. Bomb Halt Makes Clear Need for Job Crack-
down, Cutback, by Che Viet Tan, 7 pp.
VIETNAMESE, np, Nhan Dan, Hanoi, 2 Dec 1969, p 2.
JPRS 49890

To Meet Goals Factory Cracks Down on Tardy,
Lazy Workers, by Duc Son, 6 pp.
VIETNAMESE, np, Nhan Dan, 9 Dec 1969, p 2.
JPRS 49925

Political

Teng Hsiao-P'ing's Self-Examination Published,
10 pp.
CHINESE, per, Chung-kung Yen-chiu, Taipei,
No 11, Nov 1969, pp 90-94.
JPRS 49899

East German Aid to North Vietnam Summarized,
by Edolgard Schulreich, 6 pp.
GERMAN, per, Horizont, East Berlin, No 6,
Feb 1970, pp 3-4.
JPRS 49925

Japanese Reporter Describes His Trip to
Vinh Linh, by Wada Masana, 8 pp.
JAPANESE, np, Akahata, Tokyo, 24 Jan 1970,
p 3; 26 Jan 1970, p 3; 27 Jan 1970, p 3.
JPRS 49912

Revolutionization and Proletarianization of
Society Urged, 13 pp.
KOREAN, per, Kulloja, P'yongyang, 5 Dec 1969,
pp 2-8.
JPRS 49972

Revolutionization of People Recalled, by
Chu Ho, 16 pp.
KOREAN, per, Kulloja, P'yongyang, 5 Dec 1969,
pp 17-24.
JPRS 49972

Factory Party Committee's Role Discussed,
by Sin Su-gun, 16 pp.
KOREAN, per, Kulloja, P'yongyang, 5 Dec 1969,
pp 34-42.
JPRS 49972

Moves to Perpetuate Power in South Korea
Dommed, by Ch'oe P'il-won, 12 pp.
KOREAN, per, Kulloja, P'yongyang, 5 Dec 1969,
pp 50-55.
JPRS 49972

Socialism is the Path for Newly Independent
Nations, by Hyon Myong-jun, 14 pp.
KOREAN, per, Kulloja, P'yongyang, 5 Dec 1969,
pp 56-62.
JPRS 49972

The National Resistance War Against the United
States and for National Salvation in Order to
Liberate South Vietnam, Protect North Vietnam,
and Eventually Reunite the Country Peacefully,
(1965-1969), 18 pp.
VIETNAMESE, bk, Bon Muoi Nam Hoat Dong Cua
Dang, Hanoi, 25 Dec 1969.
JPRS 49867

The Socialist Revolution in North Vietnam and the People's National Democratic Revolution in South Vietnam (1954-1965), 19 pp.
VIETNAMESE, bk, Bon Muoi Nam Hoat Dong Cua Dang, Hanoi, 25 Dec 1969.
JPRS 49867

The Struggle to Protect the National Independence and to Maintain and Consolidate the People's Political Power. The Prolonged Resistance War Against the Aggressive French Colonialists (1945-1954), 17 pp.
VIETNAMESE, bk, Bon Muoi Nam Hoat Dong Cua Dang, Hanoi, 25 Dec 1969.
JPRS 49867

The Struggle to Establish the Party of the Vietnamese Working Class. The August 1945 Revolution and the Establishment of the Democratic Republic of Vietnam (1925-1945), 18 pp.
VIETNAMESE, bk, Bon Muoi Nam Hoat Dong Cua Dang, Hanoi, 25 Dec 1969.
JPRS 49867

Vice President Nguyen Luong Bang Relates Revolutionary Experiences, by
Nguyen Luong Bang, 26 pp.
VIETNAMESE, np, Hanoi Moi, Hanoi, 3, 4, 6, 7, 8, 10, 11, 13, 14, 15 Jan 1970, p 3.
JPRS 49926

General Giap Article on Party Military Rule, by
Vo Nguyen Giap, 66 pp.
VIETNAMESE, per, Hoc Tap, Hanoi, No 12, 1969,
pp 26-28.
JPRS 49878

Vietnamese Military Arts Constantly Develop and Triumph Under Party Banner, by Van Tien Dung,
33 pp.
VIETNAMESE, per, Hoc Tap, Hanoi, No 12, Dec 1969,
pp 89-115.
JPRS 49878

Student Demonstrations in Saigon Said to Frighten Government, by Thanh Ha, 5 pp.
VIETNAMESE, np, Nhan Dan, Hanoi, 9 Jan 1970, p 3.
JPRS 49890

People of Vinh Linh Speak of Unity and Sacrifice in Face of U. S. Attacks, by Tran Dong, 5 pp.
VIETNAMESE, np, Quan Doi Nhan Dan, Hanoi, 8 Dec 1969, p 2.
JPRS 49879

Article Belittles Prospects of Allied Pacification Plan, by Truc Chien, 5 pp.
VIETNAMESE, np, Quan Doi Nhan Dan, Hanoi, 10 Jan 1970, pp 1, 2.
JPRS 49864

Military

Development of Communist Artillery Discussed, by Hsiang Chuan-shu, 12 pp.
CHINESE, per, Chung-kung Yen-chiu, Taipei, No 11, Nov 1969, pp 37-42.
JPRS 49822

The Heroic Army of a Heroic Nation, 9 pp.
VIETNAMESE, per, Hoc Tap, Hanoi, No 12, Dec 1969, pp 1-9.
JPRS 49878

President Ho Talks About Building up the Armed Forces and About Armed Warfare (excerpts), 12 pp.
VIETNAMESE, per, Hoc Tap, Hanoi, No 12, Dec 1969, pp 12-21.
JPRS 49878

Sociological

Article Claims Prostitution Not Dead in Communist China, by Ku Liang, 6 pp.
CHINESE, np, Hsing-tao Jih-pao, Hong Kong, 8, 9, 10 Dec 1969, p 4.
JPRS 49822

Full Warmth and "In a Thousand and One Ways", 13 pp.
CHINESE, per, Hung-ch'i, no 2, Jan 1970
Survey of China Mainland Press
no 673
20 Feb 1970

Akahata Reporter's 1970 Sojourn Through North Korea, by Takasugi Kazuo, 27 pp.
JAPANESE, per, Akahata, Tokyo, 21, 23, 24, 26-31 Jan 1970; 2, 3 Feb 1970, p 2.
JPRS 49975

LATIN AMERICA
Economic

Yugoslav Floating Exhibition Visits Brazilian Port, 5 pp.
PORTUGUESE, np, Jornal Do Brasil, Rio de Janeiro, 8 Jan 1970, p 14.
JPRS 49749

28 Percent of Middle Class Budget Goes for Taxes, by Mario-Lucio Franklin, Johnson Santos, 6 pp.
PORTUGUESE, np, Jornal do Brasil, Rio de Janeiro, 18 Jan 1970, p 22.
JPRS 49817

Presidential Decree Establishes Budget Norms, 6 pp.
PORTUGUESE, np, O Globo, Rio de Janeiro, 24 Jan 1970, p 12.
JPRS 49803

Terminal Fishing Harbors and Markets of the Countries in the Central American Isthmus, by J. L. Gonzalez Lopez, 74 pp.
SPANISH, per, Boletin Tecnico FAO (Ca/FI/68/24), Vol 2, No 1, June 1968.
Dept of Interior
Bureau of Commercial Fisheries
Office of Foreign Fisheries
A-34-Dec 1969-No 17
On Loan

Import Policy and Criteria Reconstructed, by C.S.V., 6 pp.
SPANISH, per, Ercilla, Santiago, Chile, 7-13 Jan 1970, pp 20-21.
JPRS 49803

Analysis of Schultz Commission Report, 20 pp.
SPANISH, np, El Nacional, Caracas, 30 Jan 1970, pp D-12, D-13.
JPRS 49900

Argentine Economic Policy Outlined by Minister, 11 pp.
SPANISH, np, La Prensa, Buenos Aires, 23 Jan 1970, pp 1, 6.
JPRS 49803

New Bankruptcy Regulations Announced, 6 pp.
SPANISH, np, El Siglo, Bogota, 11 Jan 1970, p 3.
JPRS 49817

Communist Deputy Radames Larrazabal Speaks on Budget, 10 pp.
SPANISH, per, Tribuna Popular, Caracas, 22-28 Jan 1970, pp 10-11.
JPRS 49853

Political

Road of Honduran Revolution Discussed, 25 pp.
ENGLISH, per, Tricontinental, Havana, No 15, Nov-Dec 1969, pp 12-38.
JPRS 49810

Misinformation: Product of Imperialist Industry, by Hernan Uribe, 11 pp.
ENGLISH, per, Tricontinental, Havana, No 15, Nov-Dec 1969, pp 58-71.
JPRS 49810

Bolivian President Ovando Interviewed, 6 pp.
SPANISH, np, Clarín, Buenos Aires, 5 Feb 1970, p 12.
JPRS 49916

Possible AD and COMET Alliance Discussed, 5 pp.
SPANISH, per, Elite, Caracas, 23 Jan 1970, pp 12-13, 19.
JPRS 49803

Nationals Advocate Their 'New Republic', by Luis Hernandez Parker, 5 pp.
SPANISH, per, Ercilla, Santiago, Chile, 24-30 Dec 1969, pp 8-9.
JPRS 49749

Leader of Military Coup Discusses Position, 9 pp.
SPANISH, per, Ercilla, Santiago, Chile, 24-30 Dec 1969, pp 10-12.
JPRS 49749

History of 'Academic Renovation' Reviewed, 6 pp.
SPANISH, per, Este and Oeste, Caracas, Dec 1969, pp 20-24.
JPRS 49803

Armando Hart Speaks on Sugar Harvest Offensive, 20 pp.
SPANISH, np, Granma, Havana, 26 Jan 1970, pp 2-3.
JPRS 49875

Latin American Church-Army Relations Studied,
by Hector Borrat, 6 pp.
SPANISH, per, Marcha, Montevideo, 16 Jan 1970,
pp 15, 18.
JPRS 49675

Ciro Roberto Bustos is Permitted First Interview,
by Carlos Maria Gutierrez, 9 pp.
SPANISH, per, Marcha, Montevideo, 16 Jan 1970,
pp 22-23.
JPRS 49875

Ovando Government Analyzed as Bonapartist.
by Rene Zavaleta Mercado, 10 pp.
SPANISH, np, Marcha, 30 Jan 1970, pp 16, 17,
20.
JPRS 49675

Report on Bolivian Guerrilla Chato Peredo,
by Carlos Maria Gutierrez, 10 pp.
SPANISH, per, Marcha, Montevideo, 30 Jan 1970,
pp 18-20.
JPRS 49916

President Frei Reviews Good, Bad Aspects of
1969, 8 pp.
SPANISH, np, La Nacion, Santiago, Chile, 1 Jan
1970, pp 1, 5.
JPRS 49749

President Holds Four-Hour Talks with Newsmen,
8 pp.
SPANISH, np, La Nacion, Buenos Aires, 7 Feb
1970, pp 1, 6.
JPRS 49875

Guerrillas Give News Conference in Mountains,
by Jose Emilio Castellanos, 7 pp.
SPANISH, np, El Nacional, Caracas, 24 Jan 1970,
pp D-13, D-16.
JPRS 49837

Ovando Regime's Revolutionary Progress Hailed,
7 pp.
SPANISH, per, Oiga, Lima, 9 Jan 1970, pp 26-29.
JPRS 49853

Bustos' Interpretation of Current Unrest
Challenged, by Jose Jorge Martinez, 8 pp.
SPANISH, per, El Popular, Montevideo, 16 Jan
1970, pp 2-4.
JPRS 49828

Outdated Cliches of Leftist Reformism Noted,
by Manuel Cabieses Donoso, 6 pp.
SPANISH, per, Punto Final, Santiago, Chile,
6 Jan 1970, pp 4-5.
JPRS 49749

Left Encounters Problems Designating Candidate,
by Manuel Cabieses Donoso, 5 pp.
SPANISH, per, Punto Final, Santiago, 20 Jan
1970, pp 6-7.
JPRS 49900

High School Student Group to be More Radical,
5 pp.
SPANISH, per, Punto Final, Santiago, 20 Jan
1970, pp 10-11.
JPRS 49875

Traditional Left's Bid for Unity Discussed,
10 pp.
SPANISH, per, Punto Final, Santiago, 20 Jan
1970, pp 26-29.
JPRS 49875

Leftist and Rightist Reform Differentiated,
by Alberto Baltra Cortes, 5 pp.
SPANISH, per, Punto Final, Santiago, 20 Jan
1970, pp 30-31.
JPRS 49875

Ovando Versus Debray in Bolivia -- Point and
Counterpoint, 12 pp.
SPANISH, per, Siete Dias, Buenos Aires, 19-25 Jan
1970, pp 70-74.
JPRS 49853

Colombia, Peru to Defend Territorial Waters,
6 pp.
SPANISH, np, El Tiempo, Bogota, 24 Jan 1970,
pp 1, 6.
JPRS 49853

Communists Urge State Exploitation of Copper, 8 pp.
SPANISH, np, Unidad, Lima, 1 Jan 1970, p 2.
JPRS 49749

Castilla Speaks at Technology Institute Graduation,
6 pp.
SPANISH, per, Verde Olivo, Havana, 28 Dec 1969,
pp 28-30.
JPRS 49837

Latin America
Political (Contd)

Mission, Essence of Art Criticism Defined,
by Luis Pavon, 5 pp.
SPANISH, per, Verde Olivo, Havana, 18 Jan
1970, pp 24-26.
JPRS 49875

Military

General Instructions on Assistance in Case of
Public Emergency.
SPANISH, rpt, Instrucciones Generales Sobre-Socorro-
En Caso de Calamidad Publica, 6 June 1968.
DIA/LN 604-70

Geographic

Geography of Cuba - Communications, by
Antonio Nunez Jimenez,
SPANISH, np, Bohemia, 18 July 1969, pp 18-25,
9 Dec 1969.
DIA/LN 575-70

Climatic Regions of Venezuela Described, by
Alfonso J. Freile, 11 pp.
SPANISH, per, Boletin de Geologia, Caracas,
Vol 10, No 19, Dec 1968, pp 40-42; 55; 58; 60;
62-66.
JPRS 49828

Climatic Regions of Venezuela Discussed, by
Alfonso J. Freile, 17 pp.
SPANISH, per, Boletin de Geologia, Caracas,
Vol 10, No 19, Dec 1968, pp 70-78, 88-90,
91-94, 96-98, 107, 111.
JPRS 49837

Sociological

Pacification Group Describes Wide Belt Tribe,
5 pp.
PORTUGUESE, np, Jornal do Brazil, Rio de Janeiro,
19-20 Oct 1969, p 29.
JPRS 49916

Latin America
Sociological (Contd)

Church-State Conflict Aired in Catholic Magazine,
11 pp.
PORTUGUESE, np, O Globo, Rio de Janeiro,
24 Jan 1970, p 5.
JPRS 49817

Education Minister Discusses Problems, 8 pp.
PORTUGUESE, np, O Globo, Correio da Manha,
28 Jan 1970, p 19; 28 Jan 1970, p 10.
JPRS 49900

The Integration of Santaigo de Cuba: An Inside
Look at a Transport Base, by Javier Rodriguez.
SPANISH, np, Bohemia, 4 July 1969, pp 20-26,
5 Dec 1969.
DIA/LN 574-70

Santiago Pastoral Letter on Current Issues,
13 pp.
SPANISH, per, Mensaje, Santiago de Chile,
Jan-Feb 1970, pp 83-88.
JPRS 49916

SCIENTIFIC

Aeronautics

Automated Airport Control System Discussed, by Yu. Usanov, 8 pp.
RUSSIAN, per, Grazhdanskaya Aviatsiya, Moscow, No 10, Oct 1969, pp 24-25.
JPRS 49757

Aircraft Directors, by N. I. Pchel'nikov.
RUSSIAN, bk, Pribery Upravleniya Artilleriyskim Zenitnym Ognem, 1940, pp 3-112.
*FSTC/HT-23-323-70
*ACSI J-8051

Rocket Engines, by T. M. Mel'kumov, N. I. Melik-Pashayev, et al. 620 pp.
RUSSIAN, bk, Raketnyye Dvigateli, 1968, pp 1-511.
AIR/FTD/MT-24-290-69

M. L. Mil' and Soviet Helicopter Development, by D. Ripko, 5 pp.
RUSSIAN, np, Sotsialisticheskaya Industriya, Moscow, 22 Nov 1969, p 3.
JPRS 49757

Method for Study of Thermal Fatigue of Mechanically Loaded Rotor Blades, by G. N. Tret'yachenko, A. P. Voloshchenko, et al. 8 pp.
RUSSIAN, per, Tekhnologiya i Organizatsiya Proizvodstva, No 4, 1968, pp 102-104.
AIR/FTD/MT-24-298-69

The Temperature Field of a Turbine Blade With Transverse Air Cooling, by I. S. Lyubchenko, 7 pp.
RUSSIAN, per, Trudy Kazan. Aviatsionnyy Institut, No 89, 1965, pp 126-131.
AIR/FTD/MT-23-313-69

The Certain Peculiarity of Overexpansion of Supersonic Flow in a Cylindrical Pipe, by F. F. Tarasov. 5 pp.
RUSSIAN, per, Trudy Kazan. Aviatsionnyy Institut, No 93, 1967, pp 25-28.
AIR/FTD/MT-24-212-69

The Role of Profitability in Evaluating the Economic Effectiveness of Aircraft Equipment, by D. N. Andrianov. 8 pp.
RUSSIAN, rpt, Trudy Moscow. Aviatsionnyy Institut 1967, pp 5-12.
AIR/FTD/MT-23-1467-68

Determination of Production Expenditures - the most Important Stage in Economic Evaluation of Aircraft (Missiles), by S. A. Sarkisyan, Ye. S. Minayev. 14 pp.
RUSSIAN, rpt, Trudy Moscow. Aviatsionnyy Institut 1967, pp 13-26.
AIR/FTD/MT-23-1467-68

Certain Problems in Economic Evaluation of Aircraft, by A. V. Glichev. 13 pp.
RUSSIAN, rpt, Trudy Moscow. Aviatsionnyy Institut 1967, pp 27-38.
AIR/FTD/MT-23-1467-68

Method of Investigating the Effectiveness of Automating Machining Processes in Aircraft Production, by I. B. Kuksin, L. A. Lesina. 17 pp.
RUSSIAN, rpt, Trudy Moscow. Aviatsionnyy Institut 1967, pp 39-55.
AIR/FTD/MT-23-1467-68

Determination of the Economic Effectiveness of Expenditures for Special Production Tooling, by M. G. Chernyy. 13 pp.
RUSSIAN, rpt, Trudy Moscow. Aviatsionnyy Institut 1967, pp 56-68.
AIR/FTD/MT-23-1467-68

Determination of the Economic Effectiveness of Mechanization and Automation of Production and Management, by D. P. Andrianov. 9 pp.
RUSSIAN, rpt, Trudy Moscow. Aviatsionnyy Institut 1967, pp 69-77.
AIR/FTD/MT-23-1467-68

Certain Features of Consolidated Calculation of the Cost of Aircraft Equipment Production, by V. A. Pokrovskiy. 8 pp.
RUSSIAN, rpt, Trudy Moscow. Aviatsionnyy Institut 1967, pp 78-86.
AIR/FTD/MT-23-1467-68

Certain Problems of Methods of Economic Studies When Evaluating Aircraft Systems, by S. A. Sarkisyan. 23 pp.
RUSSIAN, rpt, Trudy Moscow. Aviatsionnyy Institut 1967, pp 87-110.
AIR/FTD/MT-23-1467-68

Concerning Effectiveness Indicators of Utilizing Industrial-Enterprise Fixed Assets, by R. M. Polekhina. 5 pp.
RUSSIAN, rpt, Trudy Moscow. Aviatsionnyy Institut 1967, pp 111-115.
AIR/FTD/MT-23-1467-68

Concerning Establishing Progressive Scheduled Planning Norms in Blanking-Stamping Shops, by F. I. Bogomolova, 23 pp.
RUSSIAN, rpt, Trudy Moscow Aviatsionnyy Institut 1967, pp 116-140.
AIR/FTD/HT-23-1467-68

Mechanization and Automation Level of Production Processes and the Method of Calculating it Using Electronic Computers [EC], by V. M. Yegorov. 13 pp.
RUSSIAN, rpt, Trudy Moscow. Aviatsionnyy Institut, 1967, pp 141-155.
AIR/FTD/HT-23-1467-68

A Method for Studying Design Features Affecting Expenditures for Aircraft-Engine Production, by D. Ye. Starik, G. M. Derkach. 12 pp.
RUSSIAN, rpt, Trudy Moscow. Aviatsionnyy Institut 1967, pp 156-168.
AIR/FTD/HT-23-1467-68

Organizational Shortcomings in Norming Basic-Materials Consumption in Producing aircraft Engines, by V. G. Samoylov. 7 pp.
RUSSIAN, rpt, Trudy Moscow. Aviatsionnyy Institut 1967, pp 169-175.
AIR/FTD/HT-23-1467-68

Determining the Production-Cycle Duration Norm for Unit-Assembly Shops by Using Computers, by G. I. Zolotukhina. 13 pp.
RUSSIAN, rpt, Trudy Moscow. Aviatsionnyy Institut 1967, pp 176-186.
AIR/FTD/HT-23-1467-68

Preliminary Determination of the Cost of Newly-Designed Products by the Multiple Correlation Method, by S. V. Moiseyev, V. A. Pokrovskiy. 11 pp.
RUSSIAN, rpt, Trudy Moscow. Aviatsionnyy Institut 1967, pp 187-197.
AIR/FTD/HT-23-1467-68

Methods of Consolidated Preliminary Determination of Special-Tooling Expenditures in Aircraft-Engine Building, by M. G. Chernyy. 26 pp.
RUSSIAN, rpt, Trudy Moscow. Aviatsionnyy Institut 1967, pp 198-224.
AIR/FTD/HT-23-1467-68

Concerning Approximate Calculation of Engine Cost at Initial Design Stages, by D. Ye. Starik. 18 pp.
RUSSIAN, rpt, Trudy Moscow Aviatsionnyy Institut 1967, pp 225-242.
AIR/FTD/HT-23-1467-68

Use of Electronic Computers [EC] in Operational Scheduling of Section Assembly Shops at Series-Production Plants, by L. M. Mamicheva. 20 pp.
RUSSIAN, rpt, Trudy Moscow Aviatsionnyy Institut 1967, pp 243-256.
AIR/FTD/HT-23-1467-68

On Thermal Comfort Wearing of Aviation Helmets, Especially in Helicopters, by N. J. L. vander Valk. DANISH, rpt, RvO-TNO-12F1968-19.
*NASA TT F-12,876

Flight Tests with a Gust Alleviation Device: Design Analysis, by J. Boujot. 10 pp.
FRENCH, rpt, ONERA-TP-698, 1969.
NASA TT F-12,723

Utilization of an Aircraft as a Means of Measuring the Statistical Distribution of Turbulence, by G. Coupry, G. Thomasset. 15 pp.
FRENCH, rpt, Paper Presented at the Aeroclastic Effects and Their Influence on the Pcd. of Flight, Marseille, 21-24 Apr. 1969.
NASA TT-F-12,724

A Device for Muffling the LF Noise Components of Aerodynamic or Gas Dynamic Installations, by A. G. Munin, K. G. Chikin, 3 pp.
FRENCH, Patent No. 1,144,075, 2 Mar 1960, 1961, pp 1-3.
AIR/FTD/HT-23-194-69

Studies of Mixing in Ducted Fanjet Engines, by Albrecht Hartmann. 87 pp.
GERMAN, per, Forschungsber. (Westphalia), No 1925, 1968, pp 1-77.
NASA TT-F-12,562

On the Relation Between Local Skin Friction Coefficients of Turbulent Boundary Layers in Compressible and Incompressible Flow, by J. C. Rotta. 23 pp.
GERMAN, rpt, Proceedings of the WGLR Comm. for Aerodynamics, Sept 1968, pp 11-42.
NASA TT-F-12,712

Theory of Infinitely Thin Profile Oscillating in an Inviscid Subsonic Flow, by H. G. Kuessner.
GERMAN, per, Zeit fuer Flugwissenschaften, Vol 15, No 8-9, 1967, pp 315-323.
NTC-69-16432-01A

Agusta A-109 Helicopter - Technical Specifications.
109 pp.
ITALIAN, per, Istruzioni e Norme di Pilotaggio
Elicottero Agusta A-109, 5 Oct 1969.
ACSI-J-7537
FSTC-HT-23-396-70

The Influence of Construction Deformations upon
the Loading of Navigable Gliders, by W. Stafiej.
19 pp.
POLISH, per, Technika Lotnicza i Astronautyczna,
No 8, 1967, pp 15-20.
AIR/FTD/MT-23-1075-68

Vibration Measurements in Aviation Technology,
by W. Makulski. 16 pp.
POLISH, per, Technika Lotnicza i Astronautyczna,
No 3, 1968, pp 15-20.
AIR/FTD/MT-23-74-69

Hydromagnetic Technology of Aircraft Control
Devices, by S. Boravik. 11 pp.
POLISH, per, Technika Lotnicza i Astronautyczna,
No 5, 1968, pp 8-11.
AIR/FTD/MT-23-515-69

Agriculture

Half Century of the Scientific Institute of
Fertilizers and Insecto-Fungicides, (1919-1969),
by S. I. Vol'fkovich, L. L. Balashev, 21 pp.
RUSSIAN, per, Agrokhimiya, Moscow, No 10, 1969,
pp 3-14.
JPRS 49823

New Model Kolkhoz Regulations Discussed, by
N. Alekseyev, 13 pp.
RUSSIAN, per, Ekonomicheskaya Gazeta, Moscow,
No 50, Dec 1969, pp 5-6.
JPRS 49843

Specialization Urged in Raising Livestock,
by S. Yakovlev, 5 pp
RUSSIAN, per, Ekonomicheskaya Gazeta, Moscow,
No 2, Jan 1970, p 5.
JPRS 49861

Farmers' Social Security Improvements Reviewed,
by A. Ivanov, 6 pp.
RUSSIAN, per, Ekonomika Sel'skogo Khozyaystva,
Moscow, No 11, 1969, pp 109-112.
JPRS 49781

The Chemical Treatment and Wood Preser-
vation.
RUSSIAN, mono, Khimicheskaya Perebotka
i Zashchita Drevesiny, 1964, 241 pp.
*CFSTI TT 70-57102

Work of Kazakh Sovkhoz Outlined, by Yu. Shakutin,
5 pp.
RUSSIAN, np, Kommunisticheskaya Pravda, Moscow, 25
Dec 1969, p 2.
JPRS 49781

Problems in Developing Farm Transport Discussed,
by V. A. Goberman, 10 pp.
RUSSIAN, per, Mekhanizatsiya i Elektrifikatsiya
Sotsialisticheskogo Sel'skogo Khozyaystva, Moscow,
No 11, 1969, pp 4-6.
JPRS 49885

New System of Agricultural Machinery Outlined,
by N. A. Soroko, 8 pp.
RUSSIAN, per, Mekhanizatsiya i Elektrifikatsiya
Sotsialisticheskogo Sel'skogo Khozyaystva, Moscow,
No 12, 1969, pp 5-7.
JPRS 49885

Special Rebuilding of Farm Machinery Proposed,
by A. I. Selivanov, 8 pp.
RUSSIAN, per, Mekhanizatsiya i Elektrifikatsiya
Sotsialisticheskogo Sel'skogo Khozyaystva, Moscow,
No 12, 1969, pp 30-32.
JPRS 49885

Cotton Growing Decree Adopted by Uzbek CP,
9 pp.
RUSSIAN, np, Pravda Vostoka, Tashkent, 16 Jan 1970,
p 1.
JPRS 49836

Land Improvement in Volga Region Planned, by
Ye. Alekseyevskiy, 10 pp.
RUSSIAN, per, Sel'skaya Zhizn', Moscow, 16 Dec
1969, pp 2-3.
JPRS 49781

Farm Equipment Repair Needs Better Organization,
by G. Netkachev, 6 pp.
RUSSIAN, np, Sel'skaya Zhizn', Moscow, 20 Dec 1969,
p 2.
JPRS 49885

Sheep Raising Lag Blamed on Poor Economics, by
L. Stefanyuk, S. Buylov, 5 pp.
RUSSIAN, np, Sel'skaya Zhizn', Moscow, 21 Dec 1969,
p 2.
JPRS 49781

Use of Mineral Fertilizers Examined, by
A. Sokolov, 5 pp.
RUSSIAN, np, Sel'skaya Zhizn', Moscow, 1 Jan 1970,
p 3.
JPRS 49781

New Twin-Engine Vineyard Tractor Described, by
V. Dochkin, N. Chaplygin, 5 pp.
RUSSIAN, per, Sel'skiy Mekhanizator, Moscow, Oct
1969, pp 36-37.
JPRS 49885

Agricultural Reclamation of Takyr, s,
RUSSIAN, mono, Sel'skokhozaistvennoye
Osvoenie Takyrou, 1966
*CFSTI TT 70-571109

Belorussian Party Leader Discusses Agriculture,
by V. F. Mitskevich, 13 pp.
RUSSIAN, np, Sovetskaya Belorussiya, Minsk,
31 Dec 1969, p 2.
JPRS 49861

Price Fluctuations of Estonian Farm Products
Discussed, by V. Khizhnyakov, 5 pp.
RUSSIAN, np, Sovetskaya Estoniya, Tallin, 16 Dec
1969, p 2.
JPRS 49781

Latvian Agriculture in 1969 Reviewed, 15 pp.
RUSSIAN, per, Sovetskaya Latvija, Riga, 25 Dec
1969, pp 1-2.
JPRS 49886

Prospects for Volga Region Irrigation Evaluated,
by B. Smirnov, A. Bondaryuk, 5 pp.
RUSSIAN, np, Sovetskaya Rossiya, Moscow, 5 Jan 1970,
p 2.
JPRS 49781

Smolensk Party Secretary Discusses Lag in
Flax Growing, by P. Makarenkov, 5 pp.
RUSSIAN, np, Sovetskaya Rossiya, Moscow,
8 Jan 1970, p 2.
JPRS 49896

Vologodskaya Oblast Agriculture Discussed,
by S. Ilarionov, 11 pp.
RUSSIAN, np, Sovetskaya Rossiya, Moscow,
20, 21, 22 Jan 1970, p 2.
JPRS 49876

The Structure of the Roots of Sugar Beets
with Different Schedules of Mineral Nu-
trition, by T. A. Filatova.
RUSSIAN, per, Trudy Vses Nauchn Issled
Inst Sakharney Svekly, Vol 35, 1957,
pp 175-198.
*CFSTI TT 70-57117/2

The Scientific and Technical Progress
in Beet Growing, by J. F. Buzanov.
RUSSIAN, per, Vestnik Sel'skokhoz Nauk,
Vol 13, 1967, pp 21-26.
*CFSTI TT 70-57117/1

Estonian Dairy, Meat Products to be Improved,
by N. N. Kozlov, 5 pp.
RUSSIAN, per, Vestnik Sel'skokhozyaystvennoy Nauki,
Moscow, Vol 14, No 9, 1969, pp 115-117.
JPRS 49886

Soil experts Describe New Anti-Erosion Methods,
by A. Lashkov, 12 pp.
RUSSIAN, per, Vestnik Sel'skokhozyaystvennoy Nauki,
Moscow, Vol 14, No 9, 1969, pp 136-141.
JPRS 49886

Seminar Participants Describe Anti-Erosion Methods,
by Ye. I. Tananakin, L. P. Bogachenko, 6 pp.
RUSSIAN, per, Vestnik Sel'skokhozyaystvennoy Nauki,
Moscow, Vol 14, No 9, 1969, pp 141-143.
JPRS 49886

Plenum Discusses Improved Spring Wheat Strains,
by N. M. Grigor'yeva, 12 pp.
RUSSIAN, per, Vestnik Sel'skokhozyaystvennoy Nauki,
Moscow, Vol 14, No 9, 1969, pp 145-151.
JPRS 49886

Fixed Assets of Typical Kolkhoz Analyzed, by
Ye. Tserlevskaya, 15 pp.
RUSSIAN, per, Vestnik Statistiki, Moscow, No 12,
1969, pp 54-63.
JPRS 49843

Scientific
Agriculture (Contd)

Scientific
Agriculture (Contd)

Requirements for Agricultural Progress Analyzed,
by I. Karlyuk, 16 pp.
RUSSIAN, per, Voprosy Ekonomiki, Moscow, No 12,
1969, pp 59-70.
JPRS 49861

Problems of Agricultural Development Discussed,
by Miti Bozo, Shpresa Ganaaj, 5 pp.
ALBANIAN, per, Bashkimi, Tirana, 17 Dec 1969,
pp 2-3.
JPRS 49842

Difficulty in Utilizing Water Resources Stressed,
(Africa), by 'Abdel Majeed al-Marqrani,
Ahmad Khoja, 5 pp.
ARABIC, per, al-Mujahid, Algiers, 4 Jan 1970,
pp 28-31.
JPRS 49806

Farm Mechanization Prospects Described, by
Strakhil Kunev, 5 pp.
BULGARIAN, per, Mekhanizatsiya i Elektrifikatsiya,
Sofia, No 12, Dec 1969, pp 1-3.
JPRS 49873

The Road of Development for China's Socialist
Agriculture, 14 pp.
CHINESE, per, Hung-ch'i, 2 January 1970.
Survey of China Mainland Press
No 673
20 Feb 1970

Prepare the Hills for Afforestation in
the Interest of Revolution, 6pp.
CHINESE, per, Hung-ch'i, no 2, Jan 1970
Survey of China Mainland Press
no 673
20 Feb 1970

Process for the Preparation of a Material for
Accelerating the Growth of Animals.
DUTCH, Patent 68-125 380, 17 June 1969.
NTC-69-10330-02E

Agriculture in Morocco.
FRENCH, per, Afrique, Aug 1969, pp 62-67.
DIA/LN 576

Agarian Problem in Latin America Examined, by
Michel Rochefort, 27 pp.
FRENCH, per, Notes et Etudes Documentaires,
Paris, 17 Oct 1969, pp 59-72.
JPRS 49900

Plant Growth Regulator, by E.C.M. Coxworth,
J. A. Riddell.
FRENCH, Patent 1,400,328.
NTC-69-10322-02D

Crop and Weather Report, November 1969, by
D. Krumbiegel, 5 pp.
GERMAN, per, Feldwirtschaft, East Berlin,
Jan 1970, pp 47-48.
JPRS 49905

Insecticide Reaction Aerosols, by
H. G. Bremer,
GERMAN, per, Zeit fuer Pflanzenkrankheiten
Pflanzenpathologie und Pflanzenschutz,
Vol 70, No 3, 1963, pp 147-157.
NTC-69-16364-02D

Trust Leader Surveys Agricultural Mechanization,
by Erno Kopacsi, 10 pp.
HUNGARIAN, per, Jarmuvek, Mezogazdasagi Gepek,
Budapest, No 12, 1969, pp 446-449.
JPRS 49977

Readiness for Next Year's Farming Urged, 6 pp.
KOREAN, np, Nodong Sinmun, P'yongyang, 23 Nov
1969, p 2.
JPRS 49902

Production of Farm Machinery in 1969, 1970,
5 pp.
POLISH, per, Mechanizacja Rolnictwa, Warsaw,
16-31 Dec 1969, pp 3-4.
JPRS 49905

Marketing of Produce Now Under Agriculture
Ministry, 5 pp.
RUMANIAN, per, Buletinul Oficial, Bucharest,
Part I, No 143, 14 Dec 1969, pp 1143-1145.
JPRS 49905

Profitability of State-Farm Enterprises
Analyzed, 6 pp.
RUMANIAN, per, Ferma si Intreprinderea agricola
de stat, Bucharest, Oct 1969, pp 1-2, 5.
JPRS 49873

Labor Productivity in State Agricultural
Enterprises Analyzed, 7 pp.
RUMANIAN, per, Ferma si Intreprinderea
Agricola de stat, Bucharest, Dec 1969, pp 1-3.
JPRS 49906

Scientific
Agriculture (Contd)

Structuring, Specialization of Agricultural Units Advocated, by I. Stanciu, 6 pp.
ROMANIAN, per, Probleme Agricole, Bucharest, Dec 1967, pp 4-7.
JPRS 49851

Development, Structure of Forests Described, by C. Mocanu, 10 pp.
ROMANIAN, per, Terra, Bucharest, Nov-Dec 1969, pp 14-21.
JPRS 49873

Hizcochuelo Mango variety Environment Described, by Adolfo A. Rodriguez Nodals, 14 pp.
SPANISH, per, Juventud Tecnica, Havana, No 37, 1969, pp 22-30.
JPRS 49803

Model District Lauded for Swift Transplanting, by Than Vinh, 5 pp.
VIETNAMESE, np, Nhan Dan, Hanoi, 21 Jan 1970, p 2.
JPRS 49890

Astronomy & Astrophysics

Venus Atmosphere Model According to the Results of Direct Temperature and Density Measurements, by V. V. Il'inovich, V. A. Sokolov.
RUSSIAN, per, Kosmicheskiye Issledovaniya, Vol 7, No 2, 1969, pp 220-232.
JPRS 49874

Two Thirds of Our Planet, by A. Monin.
RUSSIAN, np, Pravda, 11 May 1969.
NLL Ref: 6167.65 (122)

Extraterrestrial Civilizations. Problems of Interstellar Communication, by L. M. Gindilis, et al.
RUSSIAN, mono, Vnezemnyye Tsivilizatsiy Problemy Mezhsvezdnoy Svyazi, 1969
*CFSTI TT 70-50081
*NASA TT F-631

Ways of Measuring the Earth-Moon Distance, by A. Urszag. 10 pp.
JPRS, rpt,
NASA TT-F-12,729

Scientific
Astronomy & Astrophysics (Contd)

Influence of Solar-Heat Load on Man, by M. Gregorczuk.
POLISH, per, Przegląd Geofiz, No 2, 1966, pp 119-123.
NLL Ref: 5207 (Lib Trans 1359)

Atmospheric Sciences

The Depression of the World Climate in the Holocene and a Possible Way of Reverting it, by P. M. Borisov,
RUSSIAN, per, Izv. A. N. SSSR Ser. Geog., No 2, 1969, pp 47-54,
NLL Ref: 5828.4F (7806)

Dynamical Turbulence in the Atmosphere, by A. S. Monin.
RUSSIAN, per, Izv AN SSSR, Ser Geograf i Geofiz, No 14, 1950, pp 232-254.
NLL Ref: 5828.4F (M 7674)

A Calculation of the Wind Vector and Vertical Friction Motions in the Boundary Layer of the Atmosphere, by V. I. Vorob'ev and P. S. Buyakova,
RUSSIAN, per, Met. Gidr., No 3, 1968, pp 46-62,
NLL Ref: 5828.4F (7813)

The Vector Correlation of the Wind From Time Series of Observations, by Yu. N. Kozlov,
RUSSIAN, per, Met. Gidr., No 2, 1969, pp 88-91,
NLL Ref: 5828.4F (7814)

On the Possibility of Determining the Vertical Distribution of Water Vapor From Measurements of Microwave Emission of the Earth-Atmosphere System, by Ye. P. Dombkovskaya.
RUSSIAN, per, Met i Gid, No 8, 1969, pp 8-14.
Dept of Navy APL/JHU CLB-3 T-619

The Significance of Solar Radiation and Interaction of Physico-Geographical Factors in the Ecology of Animals in Different Landscapes, by I. D. Strel'nikov,
RUSSIAN, per, Probl. Fiz. Geog., Vol 13, 1948, pp 145-155,
NLL Ref: 5828.4F (7830)

Winter Circulation and Meteorological Conditions in the Far Eastern Sector in Two Epochs, by A. S. Chaplygina.
RUSSIAN, per. Rez. Issled. Po Mezhdunarod. Geofiz. Proekt. - Met. Issled., No 15, 1968, pp 50-81.
NLL Ref: 5828.4F (7736)

The Chemical Composition of Cloud Water for Different Cloud Microstructures, by O. P. Petrenchuk,
RUSSIAN, per. Trudy Glav. Geofiz. Observ., No 207, 1968, pp 82-86,
NLL Ref: 5828.4F (7827)

On the Factors which make the General Circulation of the Atmosphere Non-Stationary, by N. I. Yudin,
RUSSIAN, per. Rez. Issled. Po Mezhdunarod. Geofiz. Proekt. - Met., No 16, 1968, pp 15-21,
NLL Ref: 5828.4F (7831)

On the Restoration of Missing Aerological Data at High Levels, by A. A. Petrov,
RUSSIAN, per. Trudy Leningrad. Gidromet. Nauch.-Issled. Tsentr., No 1, 1967, pp 100-108,
NLL Ref: 5828.4F (7826)

On the Spectra of Micrometeorological, Synoptic and Climate Fluctuations in Meteorological Fields, by V. N. Kolesnikova and A. S. Monin,
RUSSIAN, per. Rez. Issled. Po Mezhdunarod. Geofiz. Proekt. - Met. Issled., No 16, 1968, pp 30-56,
NLL Ref: 5828.4F (7816)

Technological Flow Diagram for Aerological Material in Mechanised Control and Statistical Processing of Data, by O. B. Mercalova,
RUSSIAN, per. Trudy Leningrad. Gidromet. Nauch.-Issled. Tsentr., No 13, 1967, pp 107-125,
NLL Ref: 5828.4F (7805)

Long-Term Fluctuations in the General Circulation of the Atmosphere and in Climate and their Relationship to the Main Laws of the Planetary Circulation, by L. L. Dzerdzeyevskiy.
RUSSIAN, per. Rez. Issled. Po Mezhdunarod. Geofiz. Proekt. - Met. Issled., No 16, 1968, pp 252-272.
NLL Ref: 5828.4F (7730)

The Special Features of the Main Terms in the Expansion of the 500MB Geopotential Field in Terms of Natural Functions, by D. A. Mdivaradze,
RUSSIAN, per. Trudy Leningrad. Gidromet. Nauch.-Issled. Tsentr., No 28, 1968, pp 51-63,
NLL Ref: 5828.4F (7825)

Manual on the Climate of the USSR.
RUSSIAN, per. Spravochnik Po Klimatu SSSR, Vol 15.
DIA/LN 173-69/15-1

The Use of Some Characteristics of the Association of Temperature Fields in Forecasting, by M. A. Dujceva, and D. A. Ped',
RUSSIAN, per. Trudy Leningrad. Gidromet. Nauch.-Issled. Tsentr., No 28, 1968, pp 66-72,
NLL Ref: 5828.4F (7829)

Solar Radiation, Radiation Balance and Sunshine.
RUSSIAN, per. Spravochnik Po Klimatu SSSR, Vol 19, Part I, 1965.
DIA/LN 173-69/19-1

The Use of Forecasts in a Probabilistic Form in the Meteorological Service for Aviation, by M. V. Rubinshtein,
RUSSIAN, per. Trudy Leningrad. Nauch.-Issled. Tsentr., Vol 35, 1968, pp 80-91,
NLL Ref: 5828.4F (7815)

On the Problem of Controlling Temperature Data from Atmospheric Soundings with the Aid of a Digital Computer, by N. V. Makurin.
RUSSIAN, per. Tr. Arkt. Antarkt. Nauch. Issled. Inst., No 277, 1966, pp 68-74.
NLL Ref: 5828.4F (7708)

Average Values of Wind Velocity, Wind Direction and their Measurement, by V. Yu. Torochkov, 6 pp.
RUSSIAN, per. Trudy Leningrad. Nauchno-Issledovatel'skiy Institut Gidrometeorologicheskogo Proborostroyeniya, No 18, 1968, pp 43-46.
AIR/FTD/M-24-192-69

The Relation of Visual Range to Meteorological Conditions, by E. N. Dovgvallo,
RUSSIAN, per. Trudy Glav. Geofiz. Observ., No 109, 1961, pp 90-95,
NLL Ref: 5828.4F (7824)

Scientific
Atmospheric Sciences (Contd)

On the Structural Designs of Instruments for Determining Wind Direction, by V. Yu Torochkov, 6 pp.
RUSSIAN, per, Trudy Leningrad. Nauchno-Issled Institut Gidrometeorologicheskogo Proborostroyeniya, No 18, 1968, pp 47-50.
AIR/FTD/MT-24-192-69

Radar Characteristics of Precipitation of Different Nature, Spectra, Intensity and Temperatures in the Centimeter and Millimeter Ranges of Radio Waves, by N. P. Krasnyuk, V. I. Rozenberg, et al. 43 pp.

RUSSIAN, per, Trudy Nalchik. Vysokomyy Geofizicheskiy Institut, No 11, 1968, pp 147-186.
AIR/FTD/MT-24-246-69

Some Climatic Characteristics of Horizontal Visibility Less Than 1 Km, by V. I. Titov, RUSSIAN, per, Trudy Nauch.-Issled. Inst. Aeroklim., No 38, 1967, pp 85-95,
NLL Ref: 5828.4F (7328)

Ways of Estimation the Similarity of Synoptic Situations from Characteristics of the Pressure Field in Regions of Equal Size, by G. A. Lenova, RUSSIAN, per, Trudy Nauch.-Issled. Inst. Aeroklim., No 41, 1968, pp 44-55,
NLL Ref: 5828.4F (7822)

The Automatic Control of Operational Marine Meteorological Information, by B. A. Birman, RUSSIAN, per, Trudy Nauch.-Issled. Inst. Aeroklim., Vol 50, 1968, pp 29-47,
NLL Ref: 5828.4F (7810)

Diurnal Variation of Wind Speed in the Atmosphere Planetary Boundary Layer, by V. M. Sklyarov, RUSSIAN, per, Trudy Nauchno-Issledovatel'skiy Inst. Aeroklimatologii, No 52, 1968, pp 98-119.
*ACSI J-8023

Some Resulting of the Measurement of the Size Distribution of Large Particles in Clouds, by A. M. Borovikov.
RUSSIAN, per, Trudy Tsentr Aerolog Observ, No 36, 1961, pp 3-12.
ATS-RJ-5336

Radar Measurement of the Water Content of Clouds, by V. V. Kostarev.
RUSSIAN, per, Trudy Tsentr Aerolog Observ, No 36, 1961, pp 31-36.
ATS-RJ-5335

Scientific
Atmospheric Sciences (Contd)

The Accuracy of Measuring Cloud Heights by Radar, by A. M. Borovikov, V. V. Kostarev. RUSSIAN, per, Trudy Tsentr Aerolog Observ, No 36, 1961, pp 37-42.
ATS-RJ-5334

Certain Problems in the Physics of Thunderstorms Processes, by V. I. Arabadzhi.
RUSSIAN, per, Ucheniye Zapiski Minsk. Gosud Pedagog Inst im. A. M. Gor'kogo, Ser Fiz-Mat, No 9, 1968, pp 91-105.
ATS-RJ-5344

A Mobile Installation for Collecting Samples of Atmospheric Radioactive Aerosols, by A. N. Gudkov. RUSSIAN, per, Voprosy Dozimetrii i Zashchity ot Izlucheniya, No 6, 1967, pp 138-141.
*FSTC/MT-23-017-70
*ACSI J-8045

Precipitation Produced by Gravitational Condensation in Shallow Warm Clouds Under Fluctuating Conditions, by Hsu Hsu-Ying, LEO Chen-Chan.
CHINESE, per, Chi Hsueh Hsueh Pao, Vol 33, No 1, 1967, pp 106-114.
*FSTC/MT-23-017-70

The Morphogenic Layer of the Atmosphere, by G. Flemming, 15 pp.
GERMAN, per, Z Meteorologie, Vol 19, Nos 7-8, 1967, pp 232-238.
AIR/FTD/MT-23-227-69

Statistical Rules for Seasonal Forecasts and their Testing, by H. Worner,
GERMAN, per, Zeit. Met. Berlin, Vol 20, 1966, pp 283-293,
NLL Ref: 5828.4F (7820)

Sounding of Lower Atmosphere by a Model, Remote-Controlled Aircraft, by H. Bardeau,
ITALIAN, per, Geofisica Met., Vol 17, 1968, pp 13-17,
NLL Ref: 5828.4F (7811)

The Relationship Between Maximum Wind Speed and Diameter of Circular Isobars and the Diameter of the Cloud in a Typhoon as Revealed by Apt Picture, by S. Tsuchiya and S. Ikuma,
JAPANESE, per, Sokko Jihō, Vol 35, 1968, pp 113-116,
NLL Ref: 5828.4F (7812)

Climatic Regions of Venezuela Discussed, by
A. J. Freile, 14 pp.
SPANISH, per, Boletín de Geología, Caracas,
Vol 10, No 19, Dec 1968, pp 4, 12-15, 128-134.
JPRS 49803

Dissipation of Radiation Fog, by E. Valencia and
J. Garmendia,
SPANISH, per, Revista Geof., Vol 27, 1968,
pp 83-81,
ALL Ref: 9626.HF (7819)

Behavioral & Social Sciences

Evaluation of two Methods for Instructing a
Classifier, by V. Yu. Gilyanyauskas,
L. A. Tyal'kenis, 9 pp.
RUSSIAN, per, Trudy AN LITSSR. Seriya B. Fiziko-
matematicheskiye, Khimicheskiye, Geologicheskkiye
i Tekhnicheskkiye Nauki, No 2, 1967, pp 115-120.
AIR/FTD/MT-23-520-68

Science as a Branch of Industrial Activity,
by L. S. Blyakhman. 37 pp.
RUSSIAN, bk, Voprosy Ekonomiki i Planirovaniya
Nauchnykh Issledovaniy, 1968, pp 5-32.
AIR/FTD/MT-24-195-69

Means of Reduction of "Research-Production"
Cycle, by M. A. Yudelevich, M. A. Gusakov. 21 pp.
RUSSIAN, bk, Voprosy Ekonomiki i Planirovaniya
Nauchnykh Issledovaniy, 1968, pp 85-98.
AIR/FTD/MT-24-195-69

Investigation of the Structure of Scientific
and Technical Personnel, by F. L. Person. 15 pp.
RUSSIAN, bk, Voprosy Ekonomiki i Planirovaniya
Nauchnykh Issledovaniy, 1968, pp 99-109.
AIR/FTD/MT-24-195-69

The Problem of Improving the Use of Working Time
in Scientific Establishments, by T. S. Batalina,
V. P. Vorob'yev, et al. 19 pp.
RUSSIAN, bk, Voprosy Ekonomiki i Planirovaniya
Nauchnykh Issledovaniy, 1968, pp 110-122.
AIR/FTD/MT-24-195-69

Demographic Structure of Scientific Workers of
MII and its Influence on the use of Working Time,
by T. S. Batalina. 10 pp.
RUSSIAN, bk, Voprosy Ekonomiki i Planirovaniya
Nauchnykh Issledovaniy, 1968, pp 123-129.
AIR/FTD/MT-24-195-69

Components of Effectiveness of Scientific Work
at Technical Higher Educational Institutions, by
V. M. Petrov. 18 pp.
RUSSIAN, bk, Voprosy Ekonomiki i Planirovaniya
Nauchnykh Issledovaniy, 1968, pp 140-153.
AIR/FTD/MT-24-195-69

Scientific-Research Work by Students in Higher
Educational Institutions, by V. M. Orol. 12 pp.
RUSSIAN, bk, Voprosy Ekonomiki i Planirovaniya
Nauchnykh Issledovaniy, 1968, pp 154-161.
AIR/FTD/MT-24-195-69

Economic Bases for Planning the Training of
Cadres of Specialists in Agriculture, by
A. A. Markin. 20 pp.
RUSSIAN, bk, Voprosy Ekonomiki i Planirovaniya
Nauchnykh Issledovaniy, 1968, pp 162-176.
AIR/FTD/MT-24-195-69

Planning the Preparation of Cadres with Special
Secondary Education, by Ye. S. Lysenko. 17 pp.
RUSSIAN, bk, Voprosy Ekonomiki i Planirovaniya
Nauchnykh Issledovaniy, 1968, pp 177-188.
AIR/FTD/MT-24-195-69

Problems in the Improvement of the Organization
of the Laboratory Base of Higher Educational
Institutions, by L. I. Kastrikin. 7 pp.
RUSSIAN, bk, Voprosy Ekonomiki i Planirovaniya
Nauchnykh Issledovaniy, 1968, pp 189-193.
AIR/FTD/MT-24-195-69

Memory Devices, by L. P. Krayzmer. 167 pp.
RUSSIAN, bk, Zapominayushchiye Ustroystva,
1966, pp 1-167.
ACSI-J-7037
RSTC-HT-23-028-70

Biological & Medical Sciences

Evolution of Gall-forming Midges, by
B. M. Mamayev.
RUSSIAN, bk, 1968, 236 pp.
*CESTI TT 70-57118

Flora Plantarum Cryptogamarum USSR.
Vol 6. (Fungi) (II) Family Hydnaceae,
by T. L. Nikolajeva.
RUSSIAN, bk, 1961, 431 pp.
*CESTI TT 70-57098

8. 0.4.
 (b) $\frac{1}{2} \times \frac{1}{2} \times \frac{1}{2} = \frac{1}{8}$ Moles of $\text{S}_2\text{O}_3^{2-}$ in 100 ml

The Action of Semisynthetic Penicillins on the Plasmic Microbe, by Z. V. Yermilova, L. S. Nazarovskaya, ¹ Pl. RUSSIAN, per, Antibiotiky, Moscow, No 12, 1968, pp 1024-1031.

Properties of Acetylcholinesterase in the Brain of the Carp, by I. L. Brik, 8 pp.
RUSSIAN, per, Biokhimiya, Vol 34, No 1, Jan-Feb 1969, pp 90-94.
Dept of Interior
Bureau of Commercial Fisheries
Office of Foreign Fisheries
A-34-Dec 1969-No 8
On Loan

Possible Fish Productivity of the World Ocean, by
P. A. Moiseyev.
RUSSIAN, bk, Biologicheskkiye Resursy Mirovogo
Okeana, 1969, pp 216-230.
*Dept of Interior
Bureau of Commercial Fisheries
Branch of Foreign Fisheries

The Effect of Microelements on the Growth
of *Fomes Annosus* in Culture, by
A. P. Vasileuskas
RUSSIAN, per, Botanicheskiy Zhurnal,
Vol. 49, No. 7, 1964, pp. 1045-1047.
*CSTI TT 70-57101

The Suction Force of Fomes Annosus, by
S. F. Negruckij
RUSSIAN, per, Botanicheskiy Zhurnal,
Vol. 49, no. 10, 1964, pp. 1480-1481.
*CFSII TT 78-57100

quantity and species composition of
fields - contaminating ingredients of
brown flares, by L. A. Bolternyazev,
Kosiv, per. Luki Gusev, Arkana
Lening. Sel'sk. khoz. Akad. 17, 1962, V.
1, 119-121. Vol. 18, 1962, pp. 119-121.
[Rus. Lit. "Zn. 111]

Systematic Position and Variation of the
Organism Producing Bruneomycin an Anti-
tumor Antibiotic, by E. S. Kudrina
RUSSIAN, per, Antibiotikii, Vol. 11, no. 5
1966, pp. 400-405.
*CENTI TT /0-57139

Probability Logic Construction of an Autodidactic Diagnostic Process on Mathematical Machines, by M. L. Bykhovskiy, 15 pp.
RUSSIAN, per, Eksperimental' Khirurgiya, No 1, 1962, pp. 3-11.
AIR/FTD-HT-23-243-68

Diurnal Rhythm of Functions in Humans During Restricted Mobility, by N. E. Panferova.
RUSSIAN, per, Fiziologicheskii Zhurnal SSSR im. I. M. Sechenova, Vol. 50, No. 6, 1964, pp. 741-749.
*NASA TT F-12,733

Flora USSR, vol. 7, by V. L. Komarov
RUSSIAN, bk, Flora SSSR, vol. 7, 1937
*CFSTI TT 70-50084

Flora USSR, vol. 8, by V. L. Komarov
RUSSIAN, bk, Flora SSSR, vol. 8, 1939
*CFSTI TT 70-50085

The Functional State of the Kidneys in Workers Exposed to the Prolonged Action of Chlororganic Chemical Poisons, by N. G. Logonovskiy, 6 pp.
RUSSIAN, rpt, Funktsionalnoye Sostoyaniye Pochek u Rabotayushchikh v Usloviyakh Dlitelnogo Vozdeystviya Khlororganicheskikh Yedokhimikatov in Vrachebnoye Delo.
*NASA TT-F-12,669

The Yield of Products from Gasification of coniferous Species Bark, by V. A. Lyamin
RUSSIAN, per, Gidroliznaia i Lesokhimi-cheskaya Promyshlennost' No. 3, 1965 pp. 13-14.
*CFSTI TT 70-57095

Insecticides and Their Application in Medical Practice, by V. I. Vashkov, M. N. Sukhova, et al 889 pp.
RUSSIAN, bk, Insektitsidy i ikh Primeneniye v Meditsinskoj Praktike, 1965, pp. 1-524.
AIR/FTD/AT-24-309-68

A New Genus of Actinomycetales - Promicromonospora GEN. Nov., by N. A. Krasil'nikov
RUSSIAN, per, Izvestiya Akademiy Nauk SSSR, Seriya Biologicheskaya, 1961, pp. 107-112.
*CFSTI TT 70-57133

Actinosporangium - A New Genus of the Family Actinoplanaceae, by N. A. Krasil'nikov
RUSSIAN, per, Izvestiya Akademiy Nauk SSSR, Seriya Biologicheskaya, Vol. - no. 1 1961, pp. 113-116.
*CFSTI TT 70-57132

Symbiotic Assimilation of Nitrogenous Plants, by N. M. Semahanova
RUSSIAN, per, Izv. Akad. Nauk SSSR, Ser. Biol. No. 3, 1966, pp. 393-413.
*CFSTI TT 70-57093

Reduction of Maize Grain by an Inertia-Screen Reduction-Separation Machine, by A. Bobeev
RUSSIAN, per, Izvest. Vysshikh Uchebnykh Zavedeniy, Pishchevaya Tekhnologiya Vol. 1, no. 50, 1966, pp. 81-86.
*CFSTI TT 70-57126

Alteration of Physical Properties of Maize Corn in its Hydrothermic Treatment, by I. K. Chaika
RUSSIAN, per, Izvestiya Vysshikh Uchebnykh Zavedeniy, Pishchevaya Tekhnologiya Vol. 4, no. 53, 1966, pp. 65-68.
*CFSTI TT 70-57124

Some Structural Mechanical Properties of Maize Corn, by I. V. Mastagunin
RUSSIAN, per, Izvestiya Vysshikh Uchebnykh Zavedeniy, Pishchevaya Tekhnologiya, Vol. 5, no. 48, 1966, pp. 22-28.
*CFSTI TT 70-57125

The Influence of Kinematic and Adjusting Parameters of a Huller on Maize Seed-Coats Separation, by I. V. Mastagunin
RUSSIAN, per, Izvestiya Vysshikh Uchebnykh Zavedeniy, Pishchevaya Tekhnologiya, Vol. 2 no. 57, 1967, pp. 50-56.
*CFSTI TT 70-57127

Pressing Problems of Modern Transfusions, by A. N. Filatov, 10 pp.
RUSSIAN, per, Khirurgiya, No 5, 1968, pp. 70-75.
ACSI J-7971
ID 2204001070

Fauna of the USSR - Larvae and Pupae of the Trichoptera (Annulipalpia) vol 2, no 1, by S. G. Lepneva.
RUSSIAN, mono, Lichinki i Kukolki Podotryada Kol'chatoshchupikovykh (annulipalpia) - Fauna SSSR Rucheiniki, 1964
*CFSTI TT 70-50082

Fauna of the USSR. Larvae and Pupae of the Trichoptera (Integripalpia). vol 2 no 2, S. G. Lepneva.
RUSSIAN, mono, Lichinki i Kukolki Podotryada Tsel'noshchupikovykh (Integripalpia). Fauna SSSR. Rucheiniki, 1966
*CFSTI TT 70-50083

Machine Diagnosis and Information Retrieval in Medicine, 184 pp.
RUSSIAN, bk, Mashinnaya Diagnostika i Informatsionnyy Poisk v Meditsine, 1969, pp 1-195.
AIR/FTD/INT-23-281-69

A Self-Training Algorithm for Diagnosis of Diseases, by Yu. M. Gilev, M. L. Mirianashvili, 9 pp.
RUSSIAN, per, Meditsinskaya Radiologiya, Moscow, No 3, 1969, pp 73-78.
JPRS 49812

Method for Improving the Effectiveness of Pneumatic Hypothermic Devices and a Craniocerebral Cooling Apparatus, by O. A. Smirnov, 7 pp.
RUSSIAN, per, Meditsinskaya Tekhnika, Moscow, Vol 3, No 5, 1969, pp 11-14.
JPRS 49751

Verticillate Branching in Actinomycetes, by A. E. Kriss
RUSSIAN, per, Mikrobiologiya, Vol. 7 no. 1, 1938, pp. 105-111.
*CFSTI TT 70-57129

An Algorithm for Distinguishing Uncentered Visual Forms, by V. S. Vainshtein. 5 pp.
RUSSIAN, rpt, Moscow. Vsesoyuznyy Institut Nauchoy i Tekhnicheskoy Informatsii. Avtomaticheskoye Chteniye Teksta, 1967, pp 86-89.
AIR/FTD/INT-23-1425-68

Frost-Resistant Monkeys, by N. Akritov.
RUSSIAN, np, Moskovskiy Komsomlets, 19 Apr 1969.
ILL Ref: 6167.65 (118)

Myocardial Infarction, by Ye. I. Chazov.
RUSSIAN, per, Nauka i Zhizn, No 3, 1969.
ILL Ref: 6167.65 (107)

Principal Food Fishes in the Shelf Waters of Brazil and Argentina, by Ye. S. Prosvirov, 165 pp.
RUSSIAN, bk, Novye Raiony Promysla v Yugo-Zapadnoi Atlantike, 1969, pp 75-101.
*Dept of Interior
Bureau of Commercial Fisheries
Branch of Foreign Fisheries

Other Fish Species in the Shelf Waters of Brazil and Argentina, by Ye. S. Prosvirov.
RUSSIAN, bk, Novye Raiony Promysla v Yugo-Zapadnoi Atlantike, 1969, pp 102-107.
*Dept of Interior
Bureau of Commercial Fisheries
Branch of Foreign Fisheries

Effect of Solar Activity on the Frequency of Functional Leukopenias and Relative Lymphocytoses by N. A. Shul'ts. 18 pp
RUSSIAN, rpt, O Vliyaniy Solnechnoy Aktivnosti na Chastotu Funktsional'nykh Leykopeniy i Otnositel'nykh Limfotsitozov, 1967.
NAS/NASA/TT F-592-70

Key to Microscopic Soil Fungi (Order Moniliales with the Exception of Subfamily Aspergilleae), by M.A. Litvinov
RUSSIAN, mono, Opredelitel' Mikroskopicheskikh Pochvennykh Gribov (poryadok Moniliales, za iskl'yucheniem Podsemeistva Aspergilleae), 1968.
*CFSTI TT 70-57099

Plant Parasitic Nematodes, Vol II, Partial Taxonomy of Phytonematodes, by A. A. Paramonov.
RUSSIAN, bk, Osnovy Fitogel'mintologiy. Chastiya Taksonomiya Fitonematod, 1964, 447 pp.
*CFSTI TT 70-57116

Sawflies of the Baikal Area, by B. N. Verzhutskiy
RUSSIAN, mono, Philil'shchiki Pribaikal'ya, 1966
*CFSTI TT 70-57091

The Functional Morphology of the Insect Neurosecretory System During Active Development and Under Different Types of Diapause, by T. W. Kind.
RUSSIAN, bk, Photoperiodic Adaptations in Insects and Acari, 1968, pp 153-191.
*CFSTI TT 70-57120

Absorptive Activity of Root Systems of Plants, by I. I. Kolosov
RUSSIAN, mono, Poglotitel'naya Deyatel'-nostv Kornevykh Sistem Rasteniy, 1962
*CFSTI TT 70-57092

Application of Biologicals, by A. T. Kravchenko, R. A. Saltykov, 30 pp.
RUSSIAN, bk, Prakticheskoye Rukovodstvo po Primeneniyu Biologicheskikh Preparatov, Moscow, 1968, 220 pp.
JPRS 49784

Bionics: Simulation or Creativity, by K. Ivanov-Muroumskiy.
RUSSIAN, np, Pravda Ukrainy, 25 Mar 1969.
ALL Ref: 6167.65 (105)

Tephrosia in the humid Subtropics of the USSR, by L. A. Razdorskaja
RUSSIAN, per, Priroda, no. 1, 1943
pp. 67-70.
*CFSTI TT 70-57122

Toxicology of Products of Vital Activity and Their Role in the Formation of Artificial Atmospheres of Hermetically Sealed Chambers, by V.V. Kustov, 131 pp.
RUSSIAN, per, Problemy Kosmicheskoy Biologii, vol 11, 1969.
*NASA TT F-634

A New Commercial Fish - Macrurus Rupestris, by L. N. Pechenik.
RUSSIAN, per, Rybnoe Khoz, Vol 45, No 12, 1969, pp 7-9.
*Dept of Inter
BCF/OFF

Formation Period of Winter Schools of Silver and Red Hake in Northwest Atlantic, by Ye. I. Kononov.
RUSSIAN, per, Rybnoe Khoz, Vol 45, No 12, 1969, pp 10-11.
*Dept of Inter
BCF/OFF

Optimal Nitrogen to Phosphorus Ratio in Organomineral Fertilizers for Sturgeon Ponds, by V. V. Mil'shteyn.
RUSSIAN, per, Rybnoe Khoz, Vol 45, No 12, 1969, pp 15-17.
*Dept of Inter
BCF/OFF

Peculiarities of Cisco (Coregonus plied) Acclimatization, by B. N. Saltup.
RUSSIAN, per, Rybnoe Khoz, Vol 45, No 12, 1969, pp 19-20.
*Dept of Inter
BCF/OFF

Effect of Hydrochemical Factors on the Condition of Live Fish During Transportation, by A. M. Yevdokimov.
RUSSIAN, per, Rybnoe Khoz, Vol 45, No 12, 1969, pp 21-22.
*Dept of Inter
BCF/OFF

Deepwater Macrurus Fishery, by I. Ya. Akhlynov.
RUSSIAN, per, Rybnoe Khoz, Vol 45, No 12, 1969, pp 31-33.
*Dept of Inter
BCF/OFF

Mackerel Purse Seining in Northwestern Pacific, by Yu. P. Smirnov.
RUSSIAN, per, Rybnoe Khoz, Vol 45, No 12, 1969, pp 33-35.
*Dept of Inter
BCF/OFF

Introduction of the Insecticidal Tephrosia SPP to the USSR, by L. A. Razdorskaja
RUSSIAN, per, Sovetskaya Botanika, 5/6, 1941, pp. 67-78.
*CFSTI TT 70-57121

An Electroradiographic Method of Investigation in Diagnosing Diseases of the Cardiovascular System and Respiratory Organs, by N. R. Paleyev. 8 pp.
RUSSIAN, per, Sovetskaya Meditsina, No 11, 1968, pp 22-26/
AIR/FTD/MT-24-219-69

All-Union Conference on Acoustics, by N. I. Alekseyeva, 5 pp.
RUSSIAN, per, Sudostroyeniya, No 6, 1968, pp 60-61.
AIR/FTD/HT-23-479-69

Larval Bivalve Molluscs of the Sevastopol Region of the Black Sea, by K. A. Zakhvatkina, 59 pp.
RUSSIAN, per, Trudy Ak Nauk SSSR, Sevastopol'skoy Biologicheskoy Stantsiy, No 11, 1959, pp 108-152.
Dept of Interior
Bureau of Commercial Fisheries
Office of Foreign Fisheries
A-34-Dec 1969-No 62
On Loan

Communities of Benthic Fauna in the Western Bering Sea, by L. A. Filatova, N. G. Barsanova, 117 pp.
RUSSIAN, per, Trudy Instituta Okeanologii, Vol LXIX, 1964, pp 6-27.
LAV/300/TRAN-455-69

Distribution of Benthic Fauna in the Western Bering Sea by Tropic Zones and Some General Problems of Trophic Zonation, by A. P. Kuznetsov, 101 pp.
RUSSIAN, per, Trudy Instituta Okeanologii, Vol LXIX, 1964, pp 98-177.
LAV/300/TRAN-460-69

Distribution of Euphausiid in the Great Newfoundland Bank Area Depending on the Dynamics of Water Mass, by S. S. Drobyshcheva, 14 pp.
RUSSIAN, per, Trudy Polyarnogo Nauchno-Issledovatel'skogo i Proektnogo Instituta Morskogo Rybnogo Khozyaistva i Okeanografii Im, No 16, 1964, pp 79-88.
Dept of Interior
Bureau of Commercial Fisheries
Office of Foreign Fisheries
A-34-Dec 1969-No 18
On Loan

Ecological-Physiological Peculiarities of Certain Species of Fish, by P. A. Korzhuev, 9 pp.
RUSSIAN, per, Trudy Soveshchaniy Ikhtiolog. Komiss. Akad. Nauk SSSR, No 8, 1958, pp 364-371.
Dept of Interior
Bureau of Commercial Fisheries
Office of Foreign Fisheries
A-34-Dec 1969-No 29
On Loan

The Accumulation of Sugar in Various Forms and Stains of Beet and Prospects for a Further Increase in the Sugar Content of Sugarbeet, by A. S. Okanenko.
RUSSIAN, per, Trudy Vses Nauchn Issled Inst Sakharney Svekly, Vol 35, 1957, pp 29-55.
*CFSTI TT 70-57117/6

The Sugar Content of the Roots of Sugarbeets, by A. Ye. Maksimovich.
RUSSIAN, per, Trudy Vses Nauchn Issled Inst Sakharney Svekly, Vol 35, 1957, pp 57-72.
*CFSTI TT 70-57117/5

Features of Growth and Cell Division in High-sugar and High-yield Sugar Beet Varieties, by S. Ye. Gomolyako.
RUSSIAN, per, Trudy Vses Nauchn Issled Inst Sakharney Svekly, Vol 35, 1957, pp 87-95.
*CFSTI TT 70-57117/3

Intake of Elements of Root Nutrition into Sugar Beet During the Initial Phases of Growth, by A. Ye. Maksimovich.
RUSSIAN, per, Trudy Vses Nauchn Issled Inst Sakharney Svekly, Vol 35, 1957, pp 145-149.
*CFSTI TT 70-57117/4

Microtubules in the Spermatids of the Silkworm, by L. V. Davilova
RUSSIAN, per, Tsitologiya, Vol. 10, no.6 1968, pp. 684-689.
*CFSTI TT 70-57119

Problems in Biophysics, by S. Ye. Bresler, 66 pp.
RUSSIAN, per, Uspekhi Fizicheskikh Nauk, Moscow, Vol 98, No 4, Aug 1969, pp 653-708.
JPRS 49895

Problems of Occupational Hygiene and the Biological Effects of Electromagnetic Fields of Ultra-high Frequencies, by Z. V. Gordon.
RUSSIAN, bk, Voprosy Gigieny Truda i Biologicheskogo Destviya Elektromagnitnykh Poley Sverkhvysokikh Chastot, 1966, 161 pp.
*NASA TT F-12,883

The Age Variability and Range of a Rare Oceanic Fish *Eumecichthys Fiski*, by N. V. Parin, G. N. Pokhil'skaya.
RUSSIAN, per, Voprosy Ikhtiologii, Vol 8, No 6(53), 1968, pp 808-812.
Dept of Interior
Bureau of Commercial Fisheries
Office of Foreign Fisheries
A-34-Dec 1969-No 21
On Loan

Counts of Flying Fishes in the Eastern Indian Ocean, by V. P. Shuntov.
RUSSIAN, per, Voprosy Ikhtiologii, Vol 8, No 6(53), 1968, pp 985-991.
Dept of Interior
Bureau of Commercial Fisheries
Office of Foreign Fisheries
A-34-Dec 1969, No 55
On Loan

Spawning of the Alaska Pollock, by I. I. Serobaba.
RUSSIAN, per, Voprosy Ikhtiologii, Vol 8, No 6(53),
1968, pp 992-1003.
Dept of Interior
Bureau of Commercial Fisheries
Office of Foreign Fisheries
A-34-Dec 1969-No 87
On Loan

The Quality of White Sea Navage eggs in Relation to
the Numbers of Progency, by A. M. Anukhina.
RUSSIAN, per, Voprosy Ikhtiologii, Vol 8, No 6(53),
1968, pp 1004-1008.
Dept of Interior
Bureau of Commercial Fisheries
Office of Foreign Fisheries
A-34-Dec 1969-No 33
On Loan

Resorption of the Sexual Products in Fishes as a
Stimulus to Biological Modification, by
D. A. Kozlovskiy.
RUSSIAN, per, Voprosy Ikhtiologii, Vol 8, No 6(53),
1968, pp 1009-1014.
Dept of Interior
Bureau of Commercial Fisheries
Office of Foreign Fisheries
A-34-Dec 1969-No 10
On Loan

Fish Growth in Relation to Features of the Food
Resources in the Lakes of the South Sakhalin Region,
by O. A. Kliuchareva, A. A. Svetovidova.
RUSSIAN, per, Voprosy Ikhtiologii, Vol 8, No 6(53),
1968, pp 1022-1033.
Dept of Interior
Bureau of Commercial Fisheries
Office of Foreign Fisheries
A-34-Dec 1969-No 37
On Loan

Growth of the Main Fish Species of Lake Glubokoye,
by I. P. Shamardina.
RUSSIAN, per, Voprosy Ikhtiologii, Vol 8, No 6(53),
1968, pp 1041-1047.
Dept of Interior
Bureau of Commercial Fisheries
Office of Foreign Fisheries
A-34-Dec 1969-No 93
On Loan

The Use in Fisheries of (Elaborated) Defensive
Conditioned Reflexes in Young Chum Salmon, by
Y. Kanayama, T. Tuge.
RUSSIAN, per, Voprosy Ikhtiologii, Vol 8, No 6(53),
1968, pp 1048-1051.
Dept of Interior
Bureau of Commercial Fisheries
Office of Foreign Fisheries
A-34-Dec 1969-No 95
On Loan

Formation of Defensive Reflexes in Roach Larvae
Through Imitation, by T. S. Leshcheva.
RUSSIAN, per, Voprosy Ikhtiologii, Vol 8, No 6(53),
1968, pp 1052-1056.
Dept of Interior
Bureau of Commercial Fisheries
Office of Foreign Fisheries
A-34-Dec 1969-No 5
On Loan

The Maneuverability of Aquatic Animals, by G. V. Zuev,
A. F. Kudriashov.
RUSSIAN, per, Voprosy Ikhtiologii, Vol 8, No 6(53),
1968, pp 1057-1062.
Dept of Interior
Bureau of Commercial Fisheries
Office of Foreign Fisheries
A-34-Dec 1969-No 31
On Loan

Transplantation of Fishes and Aquatic
Invertebrates in 1965, by A. F. Karpevich,
H. K. Lukonina.
RUSSIAN, per, Voprosy Ikhtiologii, Vol 8,
No 6(53), 1968, pp 1063-1079.
Dept of Interior
Bureau of Commercial Fisheries
Office of Foreign Fisheries
A-34-Dec 1969-No 28
On Loan

Fish Productivity of the Aral Sea in Terms
of the Present State of its Food Resources,
by N. Ye. Bykov.
RUSSIAN, per, Voprosy Ikhtiologii, Vol 8,
No 6(53), 1968, pp 1080-1086.
Dept of Interior
Bureau of Commercial Fisheries
Office of Foreign Fisheries
A-34-Dec 1969-No 27
On Loan

Changes in the Relative Size of the Jaw Apparatus in Fishes in Relation to Age, by V. D. Burdak.
RUSSIAN, per, Voprosy Ikhtiologii, Vol 8, No 6(53), 1968, pp 1091-1094.

Dept of Interior
Bureau of Commercial Fisheries
Office of Foreign Fisheries
A-34-Dec 1969-No 9
On Loan

All-Union Conference on Fish in Relation to Fishing Technique and Tactics, by N. G. Dmitriyeva.
RUSSIAN, per, Voprosy Ikhtiologii, Vol 8, No 6(53), 1968, pp 1117-1119.

Dept of Interior
Bureau of Commercial Fisheries
Office of Foreign Fisheries
A-34-Dec 1969-No 4
On Loan

Provisional Results of the Hatchery Reproduction of Sturgeon in the Caspian Sea, by Ch. M. Mageramov.
RUSSIAN, per, Voprosy Ikhtiologii, Vol 8, No 6(53), 1968, pp 1102-1105.

Dept of Interior
Bureau of Commercial Fisheries
Office of Foreign Fisheries
A-34-Dec 1969-No 47
On Loan

Cultivation of Four Group A Arboviruses in Transferable Cells of the Hamster Embryo Renal Epithelium (VNC-21), by B. F. Semenov.
6 pp.

RUSSIAN, per, Voprosy Virusologii, 1966, pp 213-217.
ACSI-J-7816
FSTC-HT-23-054-70

Materials on the Biology of Perch, Dace and Ide in North Baykalian Lakes, by V. N. Sorokin.
RUSSIAN, per, Voprosy Ikhtiologii, Vol 8, No 6(53), 1968, pp 1105-1110.

Dept of Interior
Bureau of Commercial Fisheries
Office of Foreign Fisheries
A-34-Dec 1969-No 36
On Loan

Arbovirus Infections of Monkeys Captured in the Jungles of Northern Nigeria, by B. F. Semenov, B. A. Lapin.

RUSSIAN, per, Voprosy Virusologii, 1967, pp 755-757.
ACSI-J-7830
FSTC-HT-23-057-70

Morpho-Ecological Analysis of the Development of Fishes, by A. I. Smirnov.
RUSSIAN, per, Voprosy Ikhtiologii, Vol 8, No 6(53), 1968, pp 1111-1112.

Dept of Interior
Bureau of Commercial Fisheries
Office of Foreign Fisheries
A-34-Dec 1969-No 30
On Loan

Method of Increasing Hemagglutinating and Infective Activity of Arboviruses in Tissue Culture, by A. O. Rejepova. 8 pp.

RUSSIAN, per, Voprosy Virusologii, 1968, pp 618-623.
ACSI-J-7831
FSTC-HT-23-058-70

All-Union Scientific Conference on Questions of Aquatic Toxicology, by A. G. Gusev, S. P. Fediy.

RUSSIAN, per, Voprosy Ikhtiologii, Vol 8, No 6(53), 1968, pp 1114-1117.

Dept of Interior
Bureau of Commercial Fisheries
Office of Foreign Fisheries
A-34-Dec 1969-No 25
On Loan

1969 List of Honored Physicians of Georgia, 12 pp.

RUSSIAN, np, Zarya Vostoka, Tbilisi, 19 Nov 1969, p 2.
JPRS 49762

A Study of the Possibility of Oral Immunization of Experimental Animals with Smallpox Vaccine Virus. Report No 1. Immunological Shifts in the Vaccinated Animals, by A. A. Vorobev, G. T. Patrikeyev.

RUSSIAN, per, Zh Mikrobiol Epidemiol Immunobiologii, Vol 43, No 8, 1966, pp 69-72.
FTC-69-16130-06M

Protective Antigens by Hemophilus Pertussis Isolated by Various Methods, by I. A. Lapayeva, M. S. Zakharova.

RUSSIAN, per, Zh Mikrobiol Epidemiol Immunobiologii, Vol 43, No 8, 1966, pp 72-77.
FTC-69-16131-06M

Change in Blood Pressure Response to Stimulation of the Vagus After Injection of Aminazin, by Ye. L. Golubeva, A. I. Shumilina.
RUSSIAN, per, Zh Nevropatologii i Psikiatrii, Vol 59, No 6, 1966, pp 489-494.
WTC-69-10003-00P

Nervous and Psychic Disorders Resulting From Lesion by Poisonous Gonionemous Jellyfish of the Primor'ye, by P. V. Mikhalev, L. P. Yatskov, 7 pp.
RUSSIAN, per, Zhurnal Nevropatologii i Psikiatrii, Vol 68, No 3, 1968, pp 436-440.
NAV/NIC/Tran-3000-70

Chromosome Mutations Induced by Spaceflight Factors in Barley Seeds During the Circumlunar Flights of the Automatic Stations Zond 5 and Zond 6, by N. I. Nuzhdin, 16 pp.
RUSSIAN, per, Zhurnal Obshchey Biologii, Moscow, No 1, Jan-Feb 1970, pp 72-83.
JPRS 49979

Specific Differences Between the European and Pacific Navagas, by A. N. Svetovidov, 10 pp.
RUSSIAN, per, Zoologicheskii Zhurnal, Vol 44, No 2, 1965, pp 220-227.
Dept of Interior
Bureau of Commercial Fisheries
Office of Foreign Fisheries
A-34-Dec 1969-No 66
On Loan

Diurnal Migrations of the Bottom Larvae of Insects in the River Stream, by I. M. Levanidova, V. Ya. Levanidov.
RUSSIAN, per, Zoolog. Zh., Vol 44, No 3, 1965, pp 373-385.
Dept of Interior
Bureau of Commercial Fisheries
Office of Foreign Fisheries
A-34-Dec 1969-No 38
On Loan

Contribution to the Knowledge of Moridae, by A. N. Svetovidov, 11 pp.
RUSSIAN, per, Zoologicheskii Zhurnal, Vol 46, No 11, 1967, pp 1684-1693.
Dept of Interior
Bureau of Commercial Fisheries
Office of Foreign Fisheries
A-34-Dec 1969-No 63
On Loan

Peculiarities in the Microscopic Structure of the Cerebellum in Eliginus Navaga and Gadus Morhua Marisalbi Deryugin in Respect to Their Mode of Life, by A. N. Svetovidov, 7 pp.
RUSSIAN, per, Zoologicheskii Zhurnal, Vol 47, No 12, 1968, pp 1823-1827.
Dept of Interior
Bureau of Commercial Fisheries
Office of Foreign Fisheries
A-34-Dec 1969-No 67
On Loan

Some Problems of Neurobionics, by K. O. Ivanov-Iuromskiy, S. Y. Zaslavskiy, 11 pp.
UKRAINIAN, per, Visnik Akademii Nauk Ukrayns'koy RSR, Kiev, No 7, 1969, pp 72-78.
JPRS 49811

On the Taxonomy of Actinomyces of the Lavendulae Group, by A. G. Kuchayeva.
BULGARIAN, per, Academie des Sciences de Bulgarie, Classe des Sciences Biologiques, Vol 13, 1961, pp 102-124.
*CFSTI TT 70-57128

Control of Virus Hemorrhagic Septicemia in Trout, by N. M. Margaritov, 5 pp.
BULGARIAN, per, Ribno Stopanstvo, Vol 16, No 2, 1969, pp 4-5.
The Dept of Interior
Bureau of Commercial Fisheries
Office of Foreign Fisheries
A-34-Dec 1969-No 22
On Loan

Studies on Tick Infestation of Domestic Animals in Nanking, by P.-H. Chang, C.-C. Teng.
CHINESE, per, Acta Zoologica Sinica, Vol 15, No 1, 1964, pp 132-136.
WTC-69-15764-00C

Problems of Noise and Its Effect on Hearing, by F. Singer, J. Nemecek. 15 pp.
CZECH, per, Ceskoslovenska Otolaryngologie, Vol 17, No 1, 1968, pp 13-21.
ACSI-J-7897
ID 2204000470

Erythema Multiforme (Stevens-Johnson Syndrome) Under Treatment with Long-acting Sulfonamides, by J. E. Clausen.
DANISH, per, Ugeskrift for Læger, Vol 128, 1966, pp 769-773.
WTC-69-10051-00E

Scientific
Biological & Medical Sciences (Contd)

Patchopharmacological Experiments on Animals Using S.1544 (Phenelzine), by H. Barak, L. Lounay.
FRENCH, per, Annales Moreau de Tours, Vol 1, 1962, pp 229-233.
NTC-69-1592-3-0

Clinical Trial of Phenelzine, by H. Barak, M. Richardeau.
FRENCH, per, Annales Moreau de Tours, Vol 1, 1962, pp 243-252.
NTC-69-15927-3-0

Asthmatiform Pulmonary Affections of Workers Exposed to Inhalation of Chromium, Nickel and Aniline, by L. Tolot.
FRENCH, per, Arch Mal Prof, No 18, 1956, pp 291-295.
NLL Ref: 9022,401 (746-160)

Resistance of Catfish to Sudden Temperature Changes, by N. Charlon, 35 pp.
FRENCH, per, Bulletin Francais de Pisciculture, 1968, Vol 41, No 230, pp 6-25; Vol 41, No 231, pp 41-51.
Dept of Interior
Bureau of Commercial Fisheries
Office of Foreign Fisheries
A-34-Dec 1969-No 16
On Loan

Culture of Brown Trout and Rainbow Trout in Water at High Temperatures, by Enrique Calderon, 10 pp.
FRENCH, per, Bulletin Francais de Pisciculture, Vol 41, No 230, 30 Sept 1968, pp 26-35.
Dept of Interior
Bureau of Commercial Fisheries
Office of Foreign Fisheries
A-34-Dec 1969-No 20
On Loan

Doctor-patient Relationship, Hospital Conditions Stressed, (Africa), by Sekou Toure, 26 pp.
FRENCH, per, Horoya-Hebdo, Conakry, 13-19 Dec 1969, pp 3-36.
JPRS 49806

New Antigens in SV40 Transformed Cells. Demonstration of Three New Antigenic Constituents in Several Cell Lines of Different Species Transformed by the SV40.
FRENCH, per, Int J Cancer, No 4, 1969, pp 616-625.
*AEC/ORNL-Tr-2287

Scientific
Biological & Medical Sciences (Contd)

Thin-layer Chromatography of Several Narcotics, by L. Dryon.
FRENCH, per, Journal de Pharmacie de Belgique, Vol 19, 1964, pp 19-32.
NTC-69-16453-060

Medical Colloquium Decisions Reported, (Africa), 11 pp.
FRENCH, per, l'Opinion, Rabat, 13 Jan 1970, pp 1, 3; 14 Jan 1970, p 3.
JPRS 49840

Hemangioma of the Lower Maxillary, by R. Marie.
FRENCH, per, Revue de Stomatologie, Vol 54, 1953, pp 940-950.
*ACSI J-8074
ID 2204002570

The Metabolism of Antovitamin K, by Ch. Blatrix, FRENCH, per, Revue Francaise D'Etudes Cliniques et Biol., Vol 13, 1968, pp 568-573,
NLL Ref: 5828.4F (13461)

Culture in Vitro of Crustacean Cells, by J. M. Quiot
FRENCH, per, Secondo Colloquio Internazionale Sulle Culture di Tessuto Degli Invertebrati, 1968, pp. 102-109.
*CFSTI TT 70-58050
AVAILABLE ONLY FROM BCF

Formation in Vitro of Cellular Immunity Reactions in Insects, by A. Vey, 10 pp.
FRENCH, per, Secondo Colloquio Internazionale Sulle Culture di Tessuto Degli Invertebrati, 1968, pp. 254-263.
*CFSTI TT 70-58051

Bacteriological Study on a Combination Containing Equal Parts of Tetracycline and Novobiocin, by J. Monnier, R. Bourse.
FRENCH, per, Toulouse Medical, Vol 65, 1964, pp 827-844.
NTC-69-16516-06M

Electrophoretic Studies of Blood in Normal Carp and Carp with Ascites, by H. K. Liebmann, S. Ridmuller, 16 pp.

GERMAN, per, Allgemeine Fischerei-Zeitung, Vol 85, No 20, 1960, pp 45-48.

Dept of Interior

Bureau of Commercial Fisheries

Office of Foreign Fisheries

A-34-Dec 1969-No 11

On Loan

The 24-Hour Rhythm of Chlorine Secretion, by F. Gerritzen. 8 pp.

GERMAN, per, Arch. Ges. Physiol. Vol 238, 1937, pp 483-488.

NASA TT-F-12,705

Variation of Man's Plasma Volume During Immersion in a Thermo-Inert Water Bath, by D. Kaiser.

GERMAN, per, Arch Ges Physiol, Vol 308, 1969, pp 166-173.

NASA TT F-12,422

The Hypolimnic Carbon Dioxide Accumulation as an Indicator of Biological Productivity, by Waldemar Ohle.

GERMAN, per, Archiv fur Hydrobiologie, Vol 46, No 2, 1952, pp 153-285.

Dept of Interior

Bureau of Commercial Fisheries

Office of Foreign Fisheries

A-34-Dec 1969-No 69

On Loan

Pharmacological Investigation of N-methyl-piperaziny-N-ethylphenothiazine, by O. Nieschulz, K. Popendiker.

GERMAN, per, Arzneimittelforschung, Vol 7, 1957, pp 106-113.

NTC-69-16513-060

Experiments on the Cultivation of the Parasitic Larval Stages of *Haemonchus Contortus* in Vitro, by H.-P. Schulz.

GERMAN, per, Berliner- und Muenchener Tierarztliche Wochenschrift, Vol 80, No 5, 1957, pp 59-95.

NTC-69-16066-06M

The Effect of Erythropoietin and Somatotrophic Hormones on the Maturation of Reticulocytes In Vitro, by H. M. Engelbrecht.

GERMAN, per, Blut, Vol 19, No 7, 1969, pp 385-393.

*NASA TT F-12,870

Suppression of Somatotrophic Hormone (STH) in Fatty Degeneration, by H. J. Quabbe, H. Helge. GERMAN, per, Deutsche Gesellschaft fuer Innere Medizin, Verhandlungen, Vol 73, 1967, pp 389-394.

NTC-69-16446-06A

Evaluation of the Toxicity of Pest Control Agents, by G. J. van Esch.

GERMAN, per, Deut Lebensmittel Rundschau, Vol 62, 1966, pp 342-346.

NTC-69-16291-06T

Fibrinolysis and Blood Loss After Prostate Operations and Their Susceptibility to Treatment by Antifibrinolytics. ϵ -amino-caproic Acid and the Kallikrein Inhibitor Trasylol, by R. Schmutzler, H. Fuerstenberg. GERMAN, per, Deut Med Woch, Vol 91, No 7, 1966, pp 297-303.

NTC-69-16049-06E

On the Thrombolytic Therapy of Fresh Cardiac Infarcts. Part I. Introduction, Treatment Plans, Overall Clinical Results, by R. Schmutzler, F. Heckner.

GERMAN, per, Deut Med Woch, Vol 91, No 13, 1966, pp 501-507.

NTC-69-16048-06E

Anaphylactic Antibodies, by G. I. Pardoe and G. Uhlenbruck. GERMAN, per, Deut. Med. Wochenschrift, Vol 94, No 23, 1969, pp 1248-1253, NLL Ref: 9022.27 (1071)

Electrochemical Reduction of Chromic Acid-containing Waste Water, by G. Schulze. GERMAN, per, Galvanotechnik, Vol 58, No 7, 1967, pp 475-480.

NTC-69-16359-07A

Vitamin E Activity of Various Tocopherol Metabolites According to the Hemolysis Tests, by J. Prohl.

GERMAN, per, Internationale Zeit fuer Vitaminforschung, Vol 39, 1969, pp 304-307.

*NASA TT F-12,871

Tissue Adhesives in Urology, by E. Simons. GERMAN, per, Melsunger Medizinisch-Pharm Mitt aus Wissenschaft Praxis, Vol 42, No 110, 1968, pp 49-56.

NTC-69-15788-06E

Discussion of the Lectures by Contzen, Helms and Others on Various Uses of Tissue Adhesives, by H. Contzen, K. von Windheim.

GERMAN, per, Melsanger Medizinisch-Pharm. Mitt und Wissenschaft Praxis, Vol 50, No 110, 1966, pp 27-30.

NTC-69-16505-06C

Polymers as Embedding Medium for Ultra Structure Research. Part II. Use and Comparison of Known and New Embedding Mixtures, by D. Fengel, E. Baldermann.

GERMAN, per, Mikroskopie, Vol 23, No 7-8, 1968, pp 220-236.

NTC-69-16505-06C

Pain in Expert Testimony, by KL. Jarosch, 13 pp.

GERMAN, per, Monatsberichte der Deutschen Akademie der Wissenschaften zu Berlin, Vol 9, No 12, 1967, pp 956-967.

ACSI J-7705

Determination of the Absolute Hearing Threshold in Fish, by H. Autrum, D. Poggendorf.

GERMAN, per, Naturwissenschaften, Vol 38, No 18, 1951, pp 434-435.

NLL Ref: 9022.15 (trans 1402)

Regulation of RNA Synthesis in Fern Gametophytes by Light, by H. Drann, H. Mohr.

GERMAN, per, Planta, Vol 72, No 3, 1967, pp 232-240.

NTC-69-16528-06C

Explosion Protection in Rooms Used for Medical Purposes, by G. Bittner,

GERMAN, per, PTB. -Mitteilungen, Vol 79, No 3, 1969, pp 186-189,

NLL Ref: 8313.4 (5777)

Biochemical-technological Studies on Wet Processing of Maize. Part I. Present Art of the Maize Steeping Process, by G. Wahl.

GERMAN, per, die Staerke, Vol 21, No 3, 1969, pp 9-13.

NTC-69-16004-06A

On the Origin of radiation Resistance in Mice After Remaining for Several Days in Hypoxia - Functional State and Radiation Reaction of Blood Building Tissue, by B. Tribukait.

GERMAN, per, Strahlentherapie, Vol 138, 1969, pp 457-470.

*NASA TT F-12,869

Practical Significance and Value Criteria of External Corticoids, by E. G. Weirich.

GERMAN, per, Wiener Medizinische Wochenschrift, Vol 110, No 34-35, 1966, pp 661-665.

NTC-69-16050-06C

The Stimulus Parameters of Vestibular Coriolis Effect by H. Lornschein, G. Schubert.

GERMAN, per, Zeit fur Biologie, Vol 110, No 4, Nov 1958, pp 269-275.

NLL Ref: 5297 (Lib trans 1349)

Quantitative Determination of the Beta-24-(1,24-)Globulins by Immunodiffusion, by K. Bachmann, G. Batory.

GERMAN, per, Zeit fur Immun Allergie und Klinische, Vol 130, No 4, 1966, pp 343-347.

NTC-69-16192-06C

Radical Concentration of Ratliver-Mitochondria in its Dependence on Various Factors, by M. Kaldschmidt

GERMAN, per, Zeit fur Naturforsch, No 23B, 1968, pp 798-803.

NLL Ref: 9023.175 (554)

Investigations of the Contents in Hyaluronidase in the Serum of Healthy and Rheumatic Individuals and the Possibility to Inhibit the Activity of Hyaluronidase, by F. Hartmann, G. Matijevic.

GERMAN, per, Zeit fur Rheumaforschung, Vol 11, 1962, pp 23-31.

NTC-69-16000-06C

Homology of Pharyngeal and Maxillary Glands in Formicidae and Apidae, by O. Dieter.

GERMAN, per, Zoologischer Anzeiger, Vol 161, 1958, pp 216-226.

NTC-69-16492-06C

Biology Department Reports on General Assembly, by Janos Szentagothai, 14 pp.

HUNGARIAN, per, MTA Biologiai Tudomanyok Osztalyanak Kozlemenyei, Budapest, No 1, 1969, pp 1-13.

JPRS 49883

Biological Sciences Department Notes Activities, 41 pp.

HUNGARIAN, per, MTA Biologiai Tudomanyok Osztalyanak Kozlemenyei, Budapest, No 1, 1969, pp 15-47.

JPRS 49883

Present Status of Antipoliomyelitic Vaccination,
by T. Kitson.
ITALIAN, per, Aggiornamenti sulle Malattie da
Infezione, Vol 10, No 3, 1969, pp 121-125.
NRC-69-10000-00E

Contributions to the Knowledge of Neoformations
of the Maxillary Bone with Dental Origin, by
M. Bruno, F. Gombos.
ITALIAN, per, Archivio Stomatologico, Naples,
Vol 11, 1969, pp 291-305.
NRC-69-10000-00E

Preliminary Clinical Research on Ethamsol
Tolerance, by G. Grassi, E. Mammarella.
ITALIAN, per, Giornale Italiano Chemioterapia,
Vol 11, No 4, 1964, pp 193-196.
NRC-69-10000-00E

Clinical Observations on the Treatment of
Psoriasis with Methotrexate. Final Report,
by G. Beltrami, E. Armentano.
ITALIAN, per, Minerva Dermatologica, Vol 41,
1966, pp 170-175.
NRC-69-10000-00E

Effect of Insulin on the Metabolism of
Nucleic Acids in Normal and Neoplastic Cells
Cultured in Vitro, by R. Silvestrini,
A. Marco.
ITALIAN, per, Tumori, Vol 49, 1963, pp 399-412.
NRC-69-10000-00A

Biochemical Fuel Cells, by Shuichi Suzuki
JAPANESE, per, Kagaku To Kogyo, Vol. 17,
No 12, 1964, pp. 1359-1365.
Tr. No 28, Oct 1969
AIR/AFCL/69-0428

New Physiological Solution and the Influence of
Potassium on the Regular Cardiac Rhythm in the
Fresh-Water Mussel, by Henryk Kuziemski.
POLISH, per, Acta Physiologica Polonica, Vol 19,
No 5, 1968, pp 779-788.
Dept of Interior
Bureau of Commercial Fisheries
Office of Foreign Fisheries
A-34-Dec 1969-No 64
On Loan

Consumptive Value and Organoleptic Pro-
perties of the Phytophagous Fish, by
Z. Okoniewski.
POLISH, per, Przemysl Spozywczy, No 7,
1968, pp 304-307.
*TT 70-55059
Available from USDI/BCF

Natural Science Aspects of Controlling
the Volume of Fish Catches, by
B. Draganik.
POLISH, per, Technika i Gospodarska
Morska, Vol 19, No 7(217), 1969,
pp 304-306.
*TT 70-55051
Available from USDI/BCF

Existence of Viruses of Blue-Green Algae,
by V. A. Goryushin and S. M. Chaplinskaya,
ROMANIAN, per, Mikrobiol. Zh., Vol 28, No 2,
1966, pp 94-97,
NLL Ref: 8732 (NRC TT-1369)

Contribution to the Treatment of Anaerobic
Enterotomias in Sheep, by C. Simpetru.
ROMANIAN, per, Revista de Zootehnie si
Medicina Veterinara, Vol 18, No 6, 1966,
pp 69-71.
NRC-69-10000-02E

Benthic Fauna of the Grosnica Reservoir, by
M. Jankovic.
SERBO-CROATIAN, per, Arhiv Bioloskih Nauka, Vol 18,
No 3-4, 1966, pp 313-324.
Dept of Interior
Bureau of Commercial Fisheries
Office of Foreign Fisheries
A-34-Dec 1969-No 88
On Loan

Horizontal and Vertical Distribution of the Benthic
Fauna in the Grosnica Reservoir, by M. Jankovic.
SERBO-CROATIAN, per, Arhiv Bioloskih Nauka, Vol 19,
No 1-2, 1967, pp 53-66.
Dept of Interior
Bureau of Commercial Fisheries
Office of Foreign Fisheries
A-34-Dec 1969-No 89
On Loan

Recently Discovered Constituents of Cannabis
(Hashish), by L. Grlic,
SERBO-CROATIAN, per, Farmaceutski Glasnik,
Vol 24, 1968, pp 455-458,
NLL Ref: 5809.95 (Min. Tech. T 6502)

Scientific
Biological & Medical Sciences (Contd)

Calcifying Epithelial Odontogenic Tumor.
Report of 1 Case, by J. M. Astacio,
A. P. Martinez.
SPANISH, per, Archivos Colegio Medico d'El
Salvador, San Salvador, Vol 17-18, 1968,
pp 283-290.
HTC-69-19929-06E

Epidemiology of Poliomyelitis in the Valencia
Region in the Last Five Years, by
E. Borrajo Guadarrama, J. Colomer Sala.
SPANISH, per, Boletin Sociedad Castellano
Astur Leonesa de Pediatria, Vol 7, 1968,
pp 241-249.
HTC-69-16067-06E

Methotrexate Treatment of Psoriasis, by
O. Groth.
SWEDISH, per, Lakartidningen, Vol 13, No 2,
1966, pp 3000-3005.
HTC-69-16169-06E

Mercury in Fish, by Gunnel Westo, 11 pp.
SWEDISH, per, Var Foda, No 1, 1967, pp 1-7.
Dept of Interior
Bureau of Commercial Fisheries
Office of Foreign Fisheries
A-34-Dec 1969-No 6
On loan

Methyl Mercury in Fish, by Gunnel Westo, 10 pp.
SWEDISH, per, Var Foda, No 2, 1967, pp 13-17.
Dept of Interior
Bureau of Commercial Fisheries
Office of Foreign Fisheries
A-34-Dec 1969-No 7
On Loan

Family Health Plan in Thailand.
THAI, per, The Royal Thai Army Medical Journal,
Vol 22, No 2, pp 833-839.
DIA/LN 624-70

Freshwater Fisheries, by Prida Karnasut.
THAI, per, Thai Fisheries Gazette, Vol 22, No 3,
July 1969, pp 297-310.
*Dept of Inter
BCF/OFF

Scientific
Biological & Medical Sciences (Contd)

Experimental Shrimp Farming at Koak Kham,
by Banchong Teinsongrasmee.
THAI, per, Thai Fisheries Gazette, Vol 22, No 3,
July 1969, pp 359-370.
*Dept of Inter
BCF/OFF

Hanoi Organizes Oriental Medicine within
State Health System, 5 pp.
VIETNAMESE, per, Tap Chi Dong Y, Hanoi,
No 102, Jul-Aug 1969, pp 1-5.
JPRS 49925

Closer Working Relationship Between Western
and Oriental Medicine Urged, 5 pp.
VIETNAMESE, per, Tap Chi Dong Y, Hanoi,
No 102, Jul-Aug 1969, pp 6-9, 45.
JPRS 49925

Chemistry

Investigation of the Electron Structure of the
Ferric Ion, by Yu. S. Karimov,
Ye. G. Rudashevskiy. 11 pp.
RUSSIAN, rpt, AN SSSR. Radiospektroskopicheskiye
i Kvantovokhimicheskiye Metody v Strukturnykh
Issledovaniyakh, 1967, pp 128-133.
AIR/FTD/MT-24-237-69

Chemistry of Heteroorganic Compounds, by
N. A. Vol'kenau, V. L. Dyatkin. 137 pp.
RUSSIAN, bk, AN SSSR. Razvitiye Organicheskoy
Khimi, 1967, pp 100-184.
AIR/FTD/MT-24-187-69

Linear Polyureas With Isocyanurate and
S-Triazine Rings, by L. V. Stepanenko,
V. N. Skopenko, et al. 8 pp.
RUSSIAN, rpt, AN UKRSSR. Sintez i Fiziko-Khimiya
Polimerov; Poliuretany, 1968, pp 32-38.
AIR/FTD/MT-23-234-69

Inhibiting Action of Ethylamines and Propylamines
on the Rate of Combustion of a Mixture of $2H_2 + O_2$,
by K. T. Oganessian, T. G. Mkryan. 8 pp.
RUSSIAN, per, Armianskiy Khimicheskiy Zhurnal,
Vol 21, No 9, 1968, pp 737-742.
AIR/FTD/MT-23-304-69

Methods and Forms of Sulfuric Acid Production, by S. I. Bernshteyn, 5 pp.
RUSSIAN, per, Avtomatizatsiya Khimicheskikh i koksokhimicheskogo Proizvodstv, Moscow, 1958, pp 5-6, 20-21.
JPRS 49776

Technology of Weak Nitric Acid Production, by G. K. Rubtsov, 10 pp.
RUSSIAN, per, Avtomatizatsiya Khimicheskikh i koksokhimicheskogo Proizvodstv, Moscow, 1958, pp 52-53, 58-59, 63, 63-64, 64-66.
JPRS 49776

Automation of Synthetic Rubber and Synthetic Alcohol Production, by N. N. Yelshin, B. A. Filimonov, 34 pp.
RUSSIAN, per, Avtomatizatsiya Khimicheskikh i koksokhimicheskogo Proizvodstv, Moscow, 1958, pp 147-173.
JPRS 49776

Automation of Petroleum Refining and Petrochemical Production, by S. V. Nesmelov, A. B. Bakutkin, 32 pp.
RUSSIAN, per, Avtomatizatsiya Khimicheskikh i koksokhimicheskogo Proizvodstv, Moscow, 1958, pp 354-378.
JPRS 49776

Synthesis of Some Mixed Sulfides of Dithioresorcinol, by A. M. Kuliyeu, S. M. Aliyev, 3 pp.
RUSSIAN, per, Azerbaydzanskiy Khimicheskiy Zhurnal, No 2, 1968, pp 82-84.
AIR/FTD/HT-23-343-69

Life and Magnetic Fields, by M. P. Travkin.
RUSSIAN, per, Chemistry and Life, Sept 1968, pp 22-25.
*ACSI J-8076
ID 2204002870

The Stability and Catalytic Activity of Copper Complexes of Some Peptides, by U. I. Salakhutdinov, 5 pp.
RUSSIAN, per, Dok Ak Nauk Tadzh SSR, Vol 11, No 11, 1968, pp 34-36.
NASA TT F-12,650

Dipole Moments of Cyclic Carbonic Acid Esters, by B. A. Arbuzov, T. G. Shavsha
RUSSIAN, per, Doklady Akademiy Nauk USSR vol. 68, 1949, pp. 1045-1048.
Tr. no 61, Oct 1969
AIR/AFCL/69-0466

The Separation of Hydrogen Isotopes on a Palladium Cathode, by G. N. Trusov,
RUSSIAN, per, Doklady A. N. SSSR, No 138, 1961, NLL Ref: 9091.9F (WII Trans. 207)

On the Conformational Changes Connected With Na⁺ - K⁺ ATPase Activity, by V. K. Lishko.
RUSSIAN, per, Dok Ak Nauk SSSR, Vol 187, No 5, 1969, pp 1191-1193.
Dept of Navy APL/JHU T-2391

Toxic Properties of Aspergillus Isolated from Feed Mixtures, by I. K. Doltorniyazov.
RUSSIAN, per, Dokl Moskov, Ordena Lenina Sel'skokhoz Akad im. K. A. Timiryazova, Vol 85, 1963, pp 196-203.
*CFSTI TT 70-57140

Influence of Extracting Agent, Method of Extraction and Carrier on Toxicity of Extracts of Tephrosia, by Z. K. Bogatova.
RUSSIAN, per, Doklady Vses Akad S.-KH. Nauk, No 9, pp 21-25.
*CFSTI TT 70-57123

Principal Electrode Parameters Determining the Degree of Chemical Macro-Heterogeneity in Weld Metal in Alloying Through a Coating, by A. A. Yerokhin, G. N. Kotov.
RUSSIAN, per, Fiz Khim Obrab Mat, No 1, 1969, pp 54-61.
NLL Ref: 9022.401 (746/174)

Thermodynamic Equilibria in the S-H₂O, Se-H₂O and Te-H₂O Systems in the Temperature Range 25-300°C and their Geochemical Interpretations, by I. B. D'yachkova and I. L. Kodakovskiy,
RUSSIAN, per, Geokhimiya, No 11, 1968, pp 1358-1375,
NLL Ref: 9022.401 (746-262)

The Chemical Composition of Soluble Tars of Various Origin, by L. V. Kromina
RUSSIAN, per, Gidroliznaia i Lesokhimi-cheskaia Promyshlennost' Vol. 18, no. 7 1966, pp. 9-12.
*CFSTI TT 70-57096

The Chemical Composition of Soluble Tars from Gasification of Spruce Bark, by L. V. Kromina
RUSSIAN, per, Gidroliznaia i Lesokhimi-cheskaia Promyshlennost', Vol. 19 no. 6, 1966, pp. 9-11.
CFSTI TT 70-57097

Oxidation of Organic Compounds. Part XX. Effect of Water Additions on the Catalytic Oxidation of Aromatic Compounds, by A. S. Kostromin, V. S. Kudinova.
RUSSIAN, per, Izv ANKazSSR, Seriya Khimicheskaya, No 2, 1958, pp 56-61.
NTC-69-16530-07C

Polymerization of Dimethylcyclosilazanes in the Presence of Ammonium Chloride, by G. Ya. Rumba, I. I. Zviyedre. 9 pp.
RUSSIAN, per, Izvestiya AN LATSSR. Seriya Khimicheskaya, No 2, 1967, pp 160-164.
AIR/FTD/MT-23-1189-68

The Reaction of Polymer Stabilizers Against Light in the Photosensitized Reaction of Hydrocarbon Oxidations. Part I. Action Mechanism of Light Stabilizers, by V. I. Goldenberg, V. Ya. Shlyapintokh.
RUSSIAN, per, Izv ANSSSR, Ser Khimicheskaya, No 7, 1968, pp 1483-1489.
NTC-69-16572-07E

Trimethylolaminomethane in Mannich Reactions, by D. A. Nesterenko, O. M. Savchenko, 15 pp.
RUSSIAN, preprint, Izv An SSSR, Ser Khim, 1969.
AEC/UCRL-Tr-10387-69

Fluoropolynitroalkyl Formulas, by L. T. Yeremenko, F. Ya. Natsibullin, 11 pp.
RUSSIAN, per, Izvestiya AN SSSR, Ser Chem, Reprint 31 March 1969, pp 1-9.
Dept of Navy NIC Trans 2972

Certain Properties of Molten (Liquid) Aluminum Oxide, by Yu. V. Zubarev, 5 pp.
RUSSIAN, per, Izv Akad Nauk SSSR, Neorg Mater, No 5, 1969, pp 1563-1565.
AEC/SC-Tr-70-4000

Radiolysis of Some Inorganic Compounds in the Field of Intense Gamma Emission, by S. V. Stardubtsov, I. M. Blaunshteyn.
RUSSIAN, per, Izv Ak Nauk UzSSR, Seriya Fiziko-Matematicheskikh Nauk, No 5, 1960, pp 77-80.
NTC-69-16753-07E

Movements of the Liquid Bath when an Oxygen Jet is Directed into it, by G. I. Demin.
RUSSIAN, per, Izv VUZ Chern Met, No 7, 1967, pp 173-176.
M.I.L Ref: 9022.06 (5975)

Influence of Chemical Composition on the Pressure Tightness of Casting in 5Sn-5Pb-1Mn Bronze, by L. E. Kuzin, V. M. Chursin.
RUSSIAN, per, Izv VUZ Tsvet Met, Vol 11, No 6, 1968, pp 121-125.
M.I.L Ref: 9022.401-(746/173)

The Use of Plasma in Chemical Technology, by G. P. Stelmakh, A. S. Sakhiyev.
RUSSIAN, per, Khim Prom, Vol 42, 1966, pp 486-492.
NTC-69-15749-07D

Adsorption of Normal Alkanes C₁₀-C₂₈ from Isooctane Solution on CaA Zeolite, by M. I. Fal'kovich, Yu. A. Yeltekov.
RUSSIAN, per, Khimiya i Tekhn Toplivo i Masel, No 2, 1969, pp 10-14.
NTC-69-16431-07C

Electrical Conductivity of Dry Lacquer/Paint Films and the Potentials Generated on Films Coated in an Electric Field, by M. M. Freidin.
RUSSIAN, per, Lakokrasochnye Materialy i ikh Primeneniye, No 6, 1964, pp 26-31.
NTC-69-16407-07D

Methods of Investigating Surface Chemical Compounds With the aid of IR Spectroscopy, by L. P. Morozova, N. A. Krotova. 7 pp.
RUSSIAN, rpt, Nauchnaya Konferentsiya po Fiziko-Khimicheskoy Mekhanike Poristyykh i Voloknistyykh Dispersnykh Struktur i Materialov, 1965, 1967, pp 509-514.
AIR/FTD/MT-24-266-69

Production of C₈ Aromatic Hydrocarbons by Catalytic Reforming of Gasoline Fractions, by G. N. Maslyanskiy, A. A. Potapova.
RUSSIAN, per, Neftekhimiya, Vol 7, No 3, 1967, pp 392-397.
NTC-69-16568-07C

Equilibrium in the Hydrocracking of Biphenyl, by M. Ya. Botnikov, M. G. Gonikberg.
RUSSIAN, per, Neftekhimiya, Vol 8, No 6, 1968, pp 833-836.
NTC-69-16574-07A

A Study of the Thermal Hydrocracking of Biphenyl, by M. Ya. Botnikov, M. G. Gonikberg.
RUSSIAN, per, Neftekhimiya, Vol 8, No 8, 1968, pp 825-832.
NTC-69-16573-07A

New Means of Plant Protection, by N. N. Mel'nikov, 68 pp.
RUSSIAN, bk, Novyye Sredstva Zashchity Rasteniy, Moscow, 1969, pp 1-79.
JPRS 49844

Luminescence of Aromatic Aldehydes and Ketones, by V. L. Yermolayev, 34 pp.
RUSSIAN, per, Opt Spektrosk, No 1, 1956, pp 523-535
AEC/UCRL-Tr-10371

Influence of Oxide Particles on Properties of Sintered Nickel, by V. M. Sergeenkova,
RUSSIAN, per, Poroshkovaya Met., No 6, 1969, pp 81-86,
NLL Ref: 9022.401 (746-318)

Problems of Distribution and Experimental Evaluation of Permissible Levels of ^{137}Cs , ^{90}Sr , and ^{106}Ru .
RUSSIAN, bk, Problemy Raspredeleniya i Eksperimentalnoi Otsenki Dopustimyykh ^{137}Cs , ^{90}Sr i ^{106}Ru , 1968.
*AEC

Radiation Corrosion, by A. V. Byalobzheskiy, 216 pp.
RUSSIAN, bk, Radiatsionnaya Korroziya, 1967.
*AEC

Application of Hydrocyclones in the Sugar Manufacture, by G. I. Adamov.
RUSSIAN, per, Sakharnaya Prom, No 10, 1958, pp 14-20.
NTC-69-15490-07A

Investigation of Alloys of the System Ni-Mn-Cr, by O. P. Yelutin, G. V. Pshechenkova.
RUSSIAN, per, Sb Tr Ts N-i Inst Chern Met, No 25, 1962, pp 189-213.
NLL Ref: 9022.401 (746/151)

Kinetics and the Mechanism of Certain Reactions of Concentrated Ozone, by G. I. Yemel'yanova, B. V. Strakhov. 25 pp.
RUSSIAN, rpt, Sovremennyye Problemy Fizicheskoy Khimii. Voprosy Kinetiki Khimicheskikh Reaktsiy, 1968, pp 149-171.
AIR/FTD/MT-24-244-69

Methods of Preparation of Electrodes for Electrochemical Measurements, by V. G. Bunzhe.
RUSSIAN, per, Tr Inst Khim AN SSR, No 12, 1964, pp 157-159.
NLL Ref: 9022.401 (746-107)

Oxidation of Organic Compounds. Part XVI. Effect of Side-chain Structure on Vapor-phase Oxidation of Monoalkyl Benzenes in the Presence of Vanadium Catalysts, by A. V. Solomin, B. V. Suvorov.
RUSSIAN, per, Trudy Ak Nauk Kaz SSR, Inst Khim Nauk, Vol 2, 1958, pp 182-187.
NTC-69-15755-07C

Kinetics of Formation of Hydrogen on Iron Catalyst, by A. A. Gavrilova.
RUSSIAN, per, Trudy Ak Nauk SSSR, Inst Goryuchikh Iskopayemykh, Vol 18, 1952, pp 48-53.
NTC-69-10430-07D

Principles of the Formation of Isopropylbenzenes in the Presence of Aluminum Chloride, by V. G. Plyusnin, Ye. P. Babin,
RUSSIAN, per, Trudy Ak Nauk SSSR, Uralskiy Filial Inst Khimii, No 4, 1960, pp 3-20.
NTC-69-16536-07C

Heterolytic Dissociation of Peroxy Compounds Report No 4. The Kinetics of Cumyl Hydrogen Peroxide Dissociation in n-butyl Alcohol and Mixtures of Same with Benzene Promoted by an Acid-Catalyst, by V. P. Maslennikov, V. A. Shuchunov.
RUSSIAN, per, Trudy po Khimii i Khimicheskoy Tekhnologii, No 3, 1965, pp 50-58.
NTC-69-10474-07C

Radio Indicator Method for Studying Detergent and Antioxidant Properties of Engine Oil Additives, by G. I. Shor, Yu. S. Zaslavskiy. 7 pp.
RUSSIAN, per, Trudy Moscow Vses Nauch-Issled Inst po Pererabotke Nefti, No 10, 1967, pp 163-168.
AIR/FTD/MT-23-277-69

Method of Studying Sizes and Charges of Particles Formed by Detergent Additives in Motor Oils, by G. I. Shor, Yu. S. Zaslavskiy. 14 pp.
RUSSIAN, per, Trudy Moscow Vses Nauch-Issled Inst po Pererabotke Nefti, No 10, 1967, pp 169-179.
AIR/FTD/MT-23-277-69

Apparatus for Determining High-temperature Grease Drop-forming Temperatures, by N. A. Rusinova. 4 pp.
RUSSIAN, per, Trudy Moscow Vses Nauch-Issled Inst po Pererabotke Nefti, No 10, 1967, pp 329-332.
AIR/FTD/MT-23-277-69

A Rapid Scrubber for the Removal of Chlorine from Gases, by G. M. Ginodman, D. S. Glikin.
RUSSIAN, per, Tsvetnye Metally, Vol 35, No 3, 1962, pp 42-48.
NTC-69-16535-07A

Installations for Ozoning Water (Excerpts),
by I. F. Kozhinov, 18 pp.
RUSSIAN, mono, Ostanovki Dlya Ozonirovaniya Vody,
1968, pp 9-21.
AIR/FTD/INT-23-315-69

Copolymerization and Reactions of the Copolymers
of Methyl-substituted Derivates of Styrene with
Dienes, by V. V. Korshak, A. B. Davankov.
RUSSIAN, mono, Vysokomolekulyarnye Soedineniya,
Khimicheskiye Svoistva i Modifikatsiya Polimerov,
Sbornik Statey, 1964, pp 28-32.
NTC-59-14412-07C

On the Synthesis of High-Molecular Fluorinated
Polyheterocycles, by Ye. L. Zaytseva, R. M. Gitina,
et al. 3 pp.
RUSSIAN, per, Vysokomolekulyarnye Soedineniya.
Kratkiye Sodobshcheniya. Seriya B, Vol 9, No 7,
1967, pp 498-499.
AIR/FTD/INT-23-326-68

Cratering Blasts, by M. M. Dokuchayev, 133 pp.
RUSSIAN, bk, Vzryv na Vybros, 1963.
AEC/UCRL/Tr-10420-69

Investigation of the Reason for the Change
in the Stability of Certain Palladium-Rhodium
Alloys upon their Interaction with Hydrogen,
by A. A. Rodina,
RUSSIAN, per, Fiz. Khim., Vol 42, 1968,
pp 1822-1824,
NLL Ref: 6180.59 (2095)

Impregnation of Porous Nickel Plates in Concentrated
Cadmium-Chloride Solutions, by Ye. I. Gamaskin.
RUSSIAN, per, Zh Prikl Khim, Vol 42, No 1, 1969,
pp 127-131.
NLL Ref: 9022.401 (746/180)

A Procedure for Purification of Nitrogen and Other
Inert Gases, by V. P. Mikheyev, G. V. Cherepok,
2 pp.
RUSSIAN, Patent No. 216,631, 12 Sept 1964, 1968,
p 1.
AIR/FTD/INT-23-222-69

Concerning the Interpretation of the Vibration
Spectrum of Urea, by O. V. Nefedov,
O. V. Fialkov'ska.
UKRAINIAN, per, Ukrainskiy Fiz Zh, Vol 11,
1968, pp 194-198.
NTC-59-14088-07D

Pyrimido (2,1-b) Thiazolium Salts and Derived
Cyanine Dyes, by V. S. Lashchev,
V. M. Denkovskaya.
UKRAINIAN, per, Ukrainskiy Khim Zh, Vol 30,
1968, pp 64-69.
NTC-59-14240-07C

Process for the Purification of Fluids, by
F. Samhaber, H. Hollriegel.
AUSTRIAN, Patent 222,097.
NTC-59-16325-07A

Study of Preparation of Phosphates for Pre-
venting Corrosion of Metals, by Pao-ting Hsu,
Ping-liang Niu. 5 pp.
CHINESE, per, Chung-kuo K'o Hsueh Yuan Ying Yung
Hua Hsueh Yen Chiu So Chi K'an, No 5, 1961,
pp 81-82.
AIR/FTD/INT-23-1304-68

A Study of the Equilibrium Between HF-H₂O Gas
and Slags of the CaO-CaF₂ and CaO-SiO₂-CaF₂
System, by Yuan-Sun, H.,
CHINESE per. Li Hsueh Hsueh Pao, Vol 7, No 1,
1964, pp 24-31,
NLL Ref: 9022.06 (5860)

Chloromethylation of a Copolymer of Styrene
with Divinylbenzene, by F. Juracka.
CZECH, per, Chemicky Prumysl, Vol 9, 1959,
pp 269-271.
NTC-59-16289-07A

Preparation of Some Organo Derivatives of
Lentonite for Stabilizing Emulsions, by
M. Gregor, P. Mocikova.
CZECH, per, Chemicky Prumysl, Vol 10, No 7-8,
1968, pp 393-398.
NTC-59-15992-07A

Complexometric Titration (Chelatometry), Part 7, by
M. Malat.
CZECH, per, Coll Czech Chem Comm, No 19, 1954,
pp 1156-1161.
NLL Ref: 9022.401 (746/182)

Complexometric Titration (Chelatometry), Part 8,
by R. Pribil, Z. Roubal.
CZECH, per, Coll Czech Chem Comm, No 19, 1954,
pp 1162-1170.
NLL Ref: 9022.401 (746/183)

Stabilization of Sugar Liquor by Means of
Anion Exchange Resins in Sulphite Cycle,
by K. Langer, J. Burianek.
CZECH, per, Listy Cukrovarnicke, Vol 53,
No 7, 1957, pp 153-158.
NTC-69-16480-07A

Thermodynamic Properties and Degree of Order
of the B-Phase of the Zinc-Gold System,
by J. Terpilowski,
CZECH, per, Zeszyty Naukowe Politechniki
Wroclawskiej, Vol 4, 1958, pp 13-23,
NLL Ref: 8732 (NRC TT-1372)

Method of Phosphoric Acid Production, by
M. Franz, P. Hegner.
CZECH, Patent 124,309.
NTC-69-16357-07A

The Method of Utilizing Chemically Bound Nitrogen
in the Catalytic Reduction of Nitrogen Oxides,
by S. Jaros, J. Krouzek.
CZECH, Patent 124,669,
NTC-69-16035-07A

Process for the Production of Electrolytic
Manganese and Chlorine in a Diaphragm Cell.
DUTCH, Patent 65-01 844.
NTC-69-16349-07A

Chlorine Cell with Mercury Cathode.
DUTCH, Patent 66-03 492.
NTC-69-16346-07A

Properties of Chloroperoxides, by A. Kirmann,
R. Nouri-Bimorghl.
FRENCH, per, Bulletin Societe Chimique de
France, 1968, pp 3213-3220.
NTC-69-16444-07C

Atomic Absorption Flame Photometry. Description
of Apparatus Specially Developed in the
Laboratory, by G. Thilliez,
FRENCH, per, Chimie Analytique, Vol 46, No 1,
1964, pp 3-22,
NLL Ref: 9022.09 (5097)

Study of a Static Mathematical Model for a
Multicomponent Industrial Distillation, by
M. B. Girard, M. B. Jeantet.
FRENCH, per, Chimie et Industrie. Genie
Chimique, Vol 100, No 5, 1968, pp 666-673.
NTC-69-15982-07A

Control of a Superfractionating Column by
Means of a Digital Computer, by R. Duchatel,
R. Sempe.
FRENCH, per, Chimie et Industrie. Genie
Chimique, Vol 101, No 1, 1969, pp 43-55.
NTC-69-16360-07A

Contribution to the Study of the Diffusion at
Infinite Dilution in the Plutonium-Nickel and
Uranium-Aluminium Systems, by J. J. Blochet.
FRENCH, rpt, CEA R-3577.
NLL Ref: 9091.9F (Downreay 396)

Application of Gamma Absorptiometry to the Analysis
of Uranium in Solutions, by Michel Lavaud, 27 pp.
FRENCH, rpt, CEA-R-3708.
AEC/LIB-Tr-218

Absorption of Cesium Films in the Region of 2300-
11,000 A, by Roger Payan, David Roux, 5 pp.
FRENCH, per, Compt Rend, Ser A and B, Vol 267,
1968, pp 1173-1176.
AEC/ORNL-Tr-2206

A Study of Hydrogen Cyanide Chlorination. The
Importance of Hydrogen Cyanide and Cyanuric
Chloride, by H. Oleinek.
FRENCH, per, Revisita de Chimie, Vol 16, No 1,
1965, pp 19-22.
NTC-69-15941-07B

Study of a Device Permitting the Direct Measuring
of a Catalyst's Activity, by H. Roques,
M. Berthelin.
FRENCH, per, Revue de l'Institut Francaise du
Petrole et Annales des Combustibles Liquides,
Vol 23, No 9, 1968, pp 1144-1156.
NTC-69-15985-07A

Properties of the Dowex A-1 Amino Acetic Salt
Resin. II. Relative Affinities of the Resin with
Several Cations, by Robert Rosset, 15 pp.
FRENCH, Soc Chimique de France Bulletin, 5e Series,
1966
AEC/UCRL-10426-69

Apparatus for Producing Chemical Reactions
with the Aid of Intensive Electronic Bombard-
ment.
FRENCH, Patent 1,212,101.
NTC-69-16314-07A

Process for the Preparation of Synthetic Ion Exchange Resins with Porous Structure.
FRENCH, Patent 1,225,537.
NTC-69-16315-07A

Process for the Production of Alpha-hydroxy Beta-mercaptocarboxylic Acids or Salts Thereof.
FRENCH, Patent 1,409,730.
NTC-69-16341-07A

Machine for Production of Sodium Hydroxide Flakes from Melted Soda Bath.
FRENCH, Patent 1,447,392.
NTC-69-16348-07A

Process and Apparatus for the Protection of Electrolysis Cells.
FRENCH, Patent 1,450,902.
NTC-69-16344-07A

Process for the Production of Ethylene Perchloride.
FRENCH, Patent 1,456,362.
NTC-69-16310-07A

Process for the Production of Chloromethanes.
FRENCH, Patent 1,471,895.
NTC-69-16335-07A

Process for the Production of Saturated Aliphatic Alcohols.
FRENCH, Patent 1,500,656.
NTC-69-16319-07A

Process for Manufacture of Phosphoric Acid, by E. B. Lopker.
FRENCH, Patent 1,506,968.
NTC-69-16356-07A

Desalination Process for Seawater and the Necessary Equipment, by M. Gondouin.
FRENCH, Patent 1,519,897.
NTC-69-16355-07A

Oligomerization of α -Olefins.
FRENCH, Patent 1,523,795.
NTC-69-15893-07C

The Action of Sodium Hypophosphite on Aqueous Nickel Salt Solutions, by C. Paal and L. Friederici.
GERMAN, per. Ber. Dt. Chem. Ges., Vol 25, 1931, pp 1766-1776,
NLL Ref: 9022.401 (746-261)

The Action of Hydrazine on Aqueous Nickel Salt Solutions, by C. Paal and L. Friederici,
GERMAN, per. Ber. Dt. Chem. Ges., Vol 65, 1932, pp 19-24,
NLL Ref: 9022.401 (746-234)

Recording Determination of the Molecular Weight Distribution of Polymers, by H.-J. Cantow, E. Seifert.
GERMAN, per. Chemie-Ingenieur-Technik, Vol 38, No 10, 1966, pp 1032-1038.
NTC-69-16282-07C

Structural Parameters of Polyolefins and Their Significance for Applied Technology, by J. Plenikowski, O. Hahmann.
GERMAN, per. Chemie-Ingenieur-Technik, Vol 38, No 10, 1966, pp 1063-1076.
NTC-69-16283-07C

Influence of the Catalyst in Cyclopropanization with Haloform and Ethylene Oxide, by D. Klamann, M. Flügge.
GERMAN, per. Chemie-Ingenieur-Technik, Vol 39, No 17, 1967, pp 1024-1030.
NTC-69-15981-07A

The Determination of Pore-size Distribution in Coarsely Porous Materials by Mercury Porosimetry, by B. Reich.
GERMAN, per. Chemie-Ingenieur-Technik, Vol 39, No 22, 1967, pp 1275-1279.
NTC-69-16397-07A

Wear-Resistant and Corrosion-Resistant Hard Surfacing Powders for the Chemical Industry, by A. Baumel, W. Adamitsch.
GERMAN, per. Chem Ing Techn, Vol 41, No 1-2, 1969, pp 22-26.
NLL Ref: 9022.401 (746/145)

Inclusion Compounds, Part XXI. the Optical Rotatory Dispersion of Complexes of Cyclo-dextrins and of Amylose with Several Azo Dyes in Aqueous Solution, by K. Sensse, F. Cramer.
GERMAN, per. Chemische Berichte, Vol 102, 1969, pp 509-521.
NTC-69-16009-07C

The Determination of Bromine and Chloride in Organic Compounds Using a Modified Schoninger Technique, by K. Praeger, H. Furst.
GERMAN, per. Chem Techn, No 10, 1958, pp 537-538.
NLL Ref: 9022.401 (746/176)

Analysis of High-boiling Chloroparaffins. Chromatographic and Infra-red Spectroscopic Characteristics, by H. Rosner, P. H. Berthold.

GERMAN, per, Chemische Technik, Vol 17, No 10, 1965, pp 598-602.
NTC-69-16398-07C

Damage of Platinum Catalysts in Their Industrial Use, by H. Blume, C. Szkibik.
GERMAN, per, Chemische Technik, Vol 18, No 8, 1966, pp 449-454.
NTC-69-16399-07A

Gas Chromatography of Inorganic Fluorine Compounds (1), by O. Pitak,
GERMAN, per, Chromatographia, Vol 2, No 7, 1969, pp 304-308,
NLL Ref: 9091.9F (CA Trans. 225)

The Application of a Small Computer to X-Ray Spectrochemical Analysis of Alloy Steel, by H. de Laffolie.
GERMAN, per, DEW Techn Ber, No 8, 1968, pp 128-136.
NLL Ref: 9022.401 (746/144)

The Precipitation Behaviour of Some Heat-Resistant Iron-, Cobalt-, and Nickel-Base Alloys, by G. Lennartz and A. von den Steinen,
GERMAN, per, DEW Tech. Ber., Vol 9, 1969, pp 163-176,
NLL Ref: 9022.401 (746-286)

Solubility of Molybdenum and Tungsten in Nickel-Base Alloys at 1200°C, by H. Brandis,
GERMAN, per, DEW-Tech. Ber., Vol 9, 1969, pp 204-213,
NLL Ref: 9022.401 (746-284)

Study of Structural Changes in Nickel-Chromium Alloys Differing in Chromium Content, by W. Spryra,
GERMAN, per, DEW Tech. Ber., Vol 9, 1969, pp 230-247,
NLL Ref: 9022.401 (746-283)

Methods of Computation for Prediction Based on Composition of Formation of Certain Phases During Long-Time Stressing of Heat-Resistant Nickel-Base Alloys, by A. von der Steinen and F. Schubert,
GERMAN, per, DEW Tech. Ber., Vol 9, 1969, pp 305-313,
NLL Ref: 9022.401 (746-280)

RECAN, per, Elektrotechnische Zeit, Ausgabe A. Zentralblatt fuer Elektrotechnik, Vol 89, No 18, 1968, pp 433-437.
NTC-69-16117-09C

Identification of Organic Compounds by Microthermal Analysis According to L. Kofler, by A. Martinek.
GERMAN, per, Fachzeitung fuer das Laboratorium, No 5, 1967, pp 350-361.
NTC-69-15933-07C

Investigation of the Molecular Weight Distribution of Polyethylene Terephthalate During Condensation Polymerization and Thermal Degradation, by K. Gehrke, G. Reinisch.
GERMAN, per, Faserforschung und Textiltechnik, Vol 17, No 5, 1966, pp 201-207.
NTC-69-15736-07A

Tertiary Oxonium Salts-new Alkoxylation Catalysts, by W. Umbach, W. Stein.
GERMAN, per, Fette-Seifen-Anstrichmittel, Vol 71, No 1, 1968, pp 48-53.
NTC-69-16383-07C

Reduction of Hydrocarbons by Metals in Liquid Ammonia. Part VII. Theories, by W. Neckel.
GERMAN, per, Forschritte der Chemischen Forsch, Vol 6, No 2, 1966, pp 197-250.
NTC-69-16123-07C

Mixed Anhydrides from Carbobenzoxycarboxylic Acids and Chlorotrimic Acid for the Esterification of Aromatic and Aliphatic Hydroxyl Compounds, by K. Brenner, J. P. Zimmermann.
GERMAN, per, Helvetica Chimica Acta, Vol 40, No 3, 1957, pp 604-610.
NTC-69-16122-07C

Solvent Effects in Nuclear Magnetic Resonance Spectra of Saturated Hydrocarbons, by T. Winkler, W. von Philipsborn.
GERMAN, per, Helvetica Chimica Acta, Vol 51, No 1, 1968, pp 183-190.
NTC-69-15973-07C

Effect of Afterpulses in Photomultipliers Used for Liquid Scintillation Counting, by K. Friedrich, M. Leistner.
GERMAN, per, Isotopenpraxis, Vol 4, No 7, 1968, pp 251-255.
NLL Ref: 5809.95 (T.6426)

Absolute Determination of the Lattice Structure of Lithium Hydride, by Karl Hensen, 8 pp.
GERMAN, per, J Inorg Nucl Chem, Vol 31, 1969, pp 919-923.
AEC/LA-Tr-69-23

Molecular Theory of Linear and Nonlinear Relaxation Phenomena, by F. Schwarzl.
GERMAN, per, Kolloid-Zeitschrift, Vol 165, No 1, 1959, pp 88-96.
NTC-69-16435-07D

The Preparation of Macromolecular with Functional End Groups. Communication No 1, by G. Greber, A. Balciunas.
GERMAN, per, Makromolekulare Chemie, Vol 69, 1963, pp 193-205.
NTC-69-16124-07C

Multimerization. Association and Aggregation. Part III. Influence of Open Association on the Undisturbed Dimensions of Polyethylene Glycols, by H.-G. Elias.
GERMAN, per, Makromolekulare Chemie, Vol 103, 1957, pp 214-229.
NTC-69-16273-07C

The Radically Initiated Homopolymerization of Maleic Anhydride, by D. Braun, I. A. Aziz El Sayed.
GERMAN, per, Makromolekulare Chemie, Vol 124, 1969, pp 249-262.
NTC-69-16377-07C

Determination of Halogen (Cl, Br, I) and Sulphur on the Same Sample, Based on the Micromethod of L. Schoniger, by H. Boetius.
GERMAN, per, Mikrochim Acta, 1958, pp 321-324.
NLL Ref: 9022.401 (746-104)

On the Chemistry of Reductone. The Determination of the Enediol-(α)- α -Carbonyl Grouping with Tellman's Reagent and the Polarographic Anodic Oxidation Step, by F. Petuely, U. Kuensberg.
GERMAN, per, Monatshefte Chemie, Vol 63, 1952, pp 80-94.
NTC-69-16125-07C

On the Motion of the Ions and the Profile of the Spark Lines in the Positive Column of a Discharge. II. Radial Motion of the Ions in a Low Pressure Discharge, by Yu. M. Kagan and V. I. Perel.
GERMAN, per, Optika i Spektroskopiya, Vol 4, No 1, 1959.
NLL Ref: 5828.4F (M 7803)

Electron Microscopic Study of Spinodal Decomposition in CuNiFe Alloys, by R. Cadoret and P. Delavignette.
GERMAN, per, Physica Status Solidi, Vol 32, 1969, pp 553-565.
NLL Ref: 9022.401 (746-326)

Proton Resonance Studies in Paramagnetic Organometallic Uranium(IV)-Alkoxy-Complexes, by R. V. Ammon, B. Kanellakopoulos, 19 pp.
GERMAN, reprint, Radiochim Acta, No 11, 1969, pp 162-168.
AEC/RFP-Tr-61-70

Fractionation of Starch, by P. Hiemstra, W. C. Bus.
GERMAN, per, die Staerke, Vol 8, 1956, pp 239-251.
NTC-69-16238-07A

New Polymethine Synthesis. Part III. Preparation of Mono-cis and Di-cis-fixed Cyanines, by H. E. Mikolajewski, S. Daehne.
GERMAN, per, Tetrahedron, Vol 24, 1968, pp 6689-6694.
NTC-69-16042-07C

Evaluation of Potential Curves in Their Entire Course, by F. L. Mahn.
GERMAN, per, Zeit fuer Anal Chemie, Vol 244, No 4, 1969, pp 229-231.
NTC-69-16071-07C

The Non-existence of Higher Nickel Carbide, by J. Schmidt.
GERMAN, per, Z fuer Anorganische und Allegemeine Chemie, Vol 216, 1933, pp 85-98.
*NASA-TT-F-12,872

On Carbide Hydrolysis, by N. G. Schmaki.
GERMAN, per, Z fuer Elek-Chem, Vol 40, 1934, pp 68-70.
*NASA-TT-F-12,873

On Decomposition of Carbides Through Water or Diluted Acids, by J. Schmidt.
GERMAN, per, Zeit fuer Elektrochemie, Vol 40, No 4, 1934, pp 170-174.
*NASA TT F-12,874

Mechanism of the Electrolytic Deposition and Dissolution of Solid Metals. Part I. Events at the Stationary Dissolution of Silver Electrodes and the Velocity of the Passage Reactions, by H. Gerischer, R. P. Tischer.
GERMAN, per, Zeit fuer Elektrochemie, Vol 51, No 2, 1957, pp 1159-1162.
NTC-69-16090-07D

Electrolytic Deposition and Anodization of Solid Metals. Part II. Galvanostatic Switching Events on Silver Electrodes and Kinetics of Crystal Growth, by H. Gerischer.

GERMAN, per, Zeit fuer Elektrochemie, Vol 62, No 3, 1958, pp 290-294.
NTC-69-16114-07D

X-ray Analysis of the Electron Density Distribution in Crystals. Part VI. Electron Distribution in Silicon, by S. Gottlicher.

GERMAN, per, Zeit fuer Physik Chemie Neue Folge, Vol 21, 1959, pp 133-145.
NTC-69-16126-07D

The Freezing of Water in Ion Exchanges and Their Pore Structure, by G. Dickel, K. Bunzl.

GERMAN, per, Zeit fuer Physik Chemie Neue Folge, Vol 51, No 1/2, 1966, pp 13-26.
NTC-69-16279-07D

Sugar Liquor Filtration by Means of Funda Filters, by J. Manina.

GERMAN, per, Zeit fuer Zuckerindustrie, Vol 13, No 11, 1963, pp 622-628.
NTC-69-16537-07A

Process for the Production of Predominantly Straight-chain Butyraldehyde and Butanol According to the Oxo Process.

GERMAN, Patent Application B 37 606.
NTC-69-16039-07A

Deep Cooling Washing Process in Several Steps for the Purification of Crude Gases Containing Sulfur and Rich in CO₂, by E. Karwat.

GERMAN, Patent 907,928.
NTC-69-16334-07A

Process for the Purification of Gases by Deep Cooling and Washing with Organic Fluids,

GERMAN, Patent 925,006.
NTC-69-16333-07A

Process for the Purification of Gases, Especially Those for Synthetic and Heating Purposes.

GERMAN, Patent 936,714.
NTC-69-16332-07A

Process for the Regeneration of Exhausted Mixed Bed Ion Exchange Materials, by

R. Kamin, N. J. Trenton.
GERMAN, Patent 976,746.
NTC-69-16310-07A

Process for the Continuous Production of Pure Alkylbenzol Sulfonic Acids, Containing no Free Sulfuric Acid, by G. Spengler, J. Gansheimer.

GERMAN, Patent 1,050,329.
NTC-69-16329-07A

Process for the Diminishing of Any Hydrogen Development Which May Occur in Chlorine-alkali Electrolysis by the Amalgam Process.

GERMAN, Patent 1,224,284.
NTC-69-16343-07A

Process for the Production of Alkali Nitrates from Alkali Chlorides.

GERMAN, Patent 1,227,880.
NTC-69-16330-07B

Diaphragm Cells for the Production of Chloride and Caustic Potash from an Alkali Metal Chloride Solution, by Electrolysis.

GERMAN, Patent 1,252,643.
NTC-69-16313-07A

Procedure for the Purification of Titanium Tetrachloride from Organic Substances, by P. Porte, J. Richerd.

GERMAN, Patent 1,271,693.
NTC-69-16353-07A

Process for the Production of Sodium Carbonate.

GERMAN, Patent 1,188,059.
NTC-69-16350-07A

Effect of Trace Contaminations on the Electrolysis of Alkali Chloride Carried Out by Mercury Cathodes, by A. Czernotzky.

HUNGARIAN, per, Acta Chimica, Vol 18, 1959, pp 167-171.
NTC-69-16296-07D

Several New Directions in the Development of Oxo Synthesis: Hydroformylation of Olefins and Hydrogenation of Aldehydes with Rhodium Carbonyl Catalyst, by B. Heil, L. Marko.
HUNGARIAN, per, Magyar Kemikusok Lapja, Vol 23, No 12, 1968, pp 669-676.
NTC-69-16586-07C

Studies of Formaldehyde Resins. Part 52. Kinetic Studies of the Reactions of 2,4-dimethylbenzyl Alcohol and Bis-(2,4-dimethylbenzyl) Ether with Aliphatic Acids, by M. Imoto.
JAPANESE, per, Kogyo Kagaku Zasshi, Vol 63, No 10, 1960, pp 1807-1811.
ATS-JS-176

Parabanic Acid-Formaldehyde Resins, by R. Oda, R. Baba.
JAPANESE, per, Kogyo Kagaku Zasshi, Vol 64, No 4, 1961, pp 741-742.
ATS-JS-175

Sulfochlorination of Polypropylene, by T. Ohshika.
JAPANESE, per, Kogyo Kagaku Zasshi, Vol 64, No 7, 1961, pp 1299-1302.
ATS-JS-192

Infrared Spectra of Sulfochlorinated Polypropylene, by T. Ohshika.
JAPANESE, per, Kogyo Kagaku Zasshi, Vol 64, No 10, 1961, pp 1855-1859.
ATS-JS-193

Studies on the Polymerization of Ethylene. Part 2. Synthesis of 1-butene from Ethylene by Dimerization, by A. Takahashi.
JAPANESE, per, Kogyo Kagaku Zasshi, Vol 66, No 10, 1963, pp 1472-1476.
ATS-JS-243

Studies on PVC. Part 39. Chlorosulfonation of Polypropylene and Some Reactions of the Products with Amines, by K. Takemoto.
JAPANESE, per, Kogyo Kagaku Zasshi, Vol 66, No 21, 1963, pp 1925-1927.
ATS-JS-196

Polymerization of Propenyl Chloride Isomers, by A. Shimizu, T. Ohtsu.
JAPANESE, per, Kogyo Kagaku Zasshi, Vol 67, No 6, 1964, pp 900-910.
ATC-19-1371-07C

Studies on the Hydrothermal Growth of Corundum Single Crystals, by O. Yamaguchi.
JAPANESE, per, Kogyo Kagaku Zasshi, Vol 67, No 10, 1964, pp 1499-1501.
ATS-JS-210

Studies on the Pyrolysis of Organic Chlorides. Part IV. Co-pyrolysis of 1,2-dichloroethane and 1,1,2,2-tetrachloroethane, by T. Onouchi.
JAPANESE, per, Kogyo Kagaku Zasshi, Vol 68, 1965, pp 220-222.
ATC-19-1434-07C

Electrical Resistivity of Carbon Black-kaolin Composite Sintered Materials. Part 6. Electrical Resistivity of Loosely Packed Carbon Black as a Function of Pressure, by E. Kato, M. Hasegawa.
JAPANESE, per, Kogyo Kagaku Zasshi, Vol 69, No 3, 1966, pp 384-391.
ATS-JS-211

Electrical Resistivity of Carbon Black-kaolin Composite Sintered Materials. Part 7. Electrical Resistivity of Loosely Packed Carbon Black as a Function of Bulk Density, by E. Kato, M. Hasegawa.
JAPANESE, per, Kogyo Kagaku Zasshi, Vol 69, No 3, 1966, pp 392-398.
ATS-JS-212

Effect of Pressure on the Detonation Limit of Ethylene, by Y. Hashiguchi.
JAPANESE, per, Kogyo Kagaku Zasshi, Vol 69, No 4, 1966, pp 593-597.
ATS-JS-261

Decomposition of Phenylazotriphenylmethylene in Benzene, by M. Harada.
JAPANESE, per, Kogyo Kagaku Zasshi, Vol 69, No 5, 1966, pp 962-966.
ATS-JS-256

Studies on the Manufacture of Propylene Oxide. Part 5. Synthesis of Propylene Oxide by the Oxidation of Propylene with Peracetic Acid Under Pressure, by J. Imamura.
JAPANESE, per, Kogyo Kagaku Zasshi, Vol 69, No 8, 1966, pp 1459-1462.
ATS-JS-259

Induced Thermal Decomposition of Hydrocarbons. Part 3. Thermal Dehydrogenation of Cyclopentene. Studies on the Pyrolysis of Cyclopentene, by H. Tanji.

JAPANESE, per, Kogyo Kagaku Zasshi, Vol 70, No 3, 1967, pp 307-311.
ATS-JS-247

Direct Synthesis of Acetone from Propylene and Water. Part 1. Direct Synthesis of Acetone from Propylene and Water Over Metal-solid Acid Catalysts, by K. Ohki, Z. Ozaki.

JAPANESE, per, Kogyo Kagaku Zasshi, Vol 70, No 3, 1967, pp 307-311.
ATS-JS-248

Direct Synthesis of Acetone from Propylene and Water. Part 2. Direct Synthesis of Acetone from Propylene and Water Over Metal Oxide-solid Acid Catalysts, by T. Yamamoto, Z. Ozaki.

JAPANESE, per, Kogyo Kagaku Zasshi, Vol 70, No 5, 1967, pp 684-686.
ATS-JS-244

Direct Synthesis of Acetone from Propylene and Water. Part 2. Direct Synthesis of Acetone from Propylene and Water Over Metal Oxide-solid Acid Catalysts, by T. Yamamoto, Z. Ozaki.

JAPANESE, per, Kogyo Kagaku Zasshi, Vol 70, No 5, 1967, pp 687-689.
ATS-JS-245.

Studies on the Copolymerization of Polypropylene. Part 7. Copolymerization of Propylene and p-N,N-DI-Alkylaminostyrene in the Presence of Titanium Trichloride-triethylaluminum Catalysts, by I. Hayashi, R. Ichikawa.

JAPANESE, per, Kogyo Kagaku Zasshi, No 5, 1967, pp 728-832.
ATS-JS-194

Reactions of Alkylbenzenes. Part 2. Dealkylation of Alkylbenzenes by Aluminum Chloride, by K. Itoh.

JAPANESE, per, Kogyo Kagaku Zasshi, Vol 70, No 6, 1967, pp 918-921.
ATS-JS-239

Fuel Cell Using a Ferricyanide-Ferrocyanide-System, by F. Takahashi, et al.

JAPANESE, per, Kogyo Kagaku Zasshi, no 70 1967, pp. 1075-1078.
Tr. no 57, Oct 1969
AIR/APCRL/69-0427

High-pressure Polymerization of Vinyl Chloride, by T. Imoto.

JAPANESE, per, Kogyo Kagaku Zasshi, Vol 70, No 11, 1967, pp 1952-1955.
ATS-JS-186

Solubility of Durene and Isodurene at Low Temperatures, by E. Nakamura.

JAPANESE, per, Kogyo Kagaku Zasshi, Vol 71, No 11, 1968, pp 1851-1855.
ATS-JS-241

Catalytic Properties of Palladium Salts in Acetic Acid. Part III. Oxidation of Metallic Palladium with a Cupric Salt in Acetic Acid, by M. Tamura, T. Yasui.

JAPANESE, per, Kogyo Kagaku Zasshi, Vol 71, No 11, 1968, pp 1859-1862.
WTC-69-10012-07D

Polymerization of Vinyl Monomers by Alkali Salts, by Y. Minoura.

JAPANESE, per, Kogyo Kagaku Zasshi, Vol 72, No 4, 1969, pp 979-983.
ATS-JS-159

Polymerization of Vinyl Monomers in the Presence of Chlorosilane Compounds and Metal Halides, by Y. Minoura, H. Toshima.

JAPANESE, per, Kogyo Kagaku Zasshi, Vol 72, No 4, 1969, pp 984-989.
ATS-JS-160

Crystallinity of Ethylene-propylene Terpolymers, by I. Iwami.

JAPANESE, per, Nippon Gomu Kyokaishi, Vol 42, No 2, 1969, pp 101-109.
ATS-JS-162

Study of Functional Groups on the Surface of Carbon Blacks. Part 3. Determination of the Surface Functional Groups of Carbon Blacks, by S. Suzuki, K. Miyazaki.

JAPANESE, per, Nippon Kagaku Zasshi, Vol 70, No 3, 1967, pp 299-304.
ATS-JS-209

Effect of Macroreticular Ion-Exchange Resins,
by T. Tanabe, T. Tanigata, 22 pp.
JAPANESE, per, Nippon Kagaku Zasshi, Vol 87,
1968, pp 181-185.
AEC/UCRL-17-10411-69

Effect of Zinc and Aluminum on Corrosion of
Aluminum Brass by Polluted Water, by Zenichi Tanabe
JAPANESE, per, Nippon Kinzoku Gakkaishi, Vol 27,
No 7, 1963, pp 337-341.
*AEC/ORNL

Acetoquuanamine Formaldehyde Resins, by
K. Fujiwara.
JAPANESE, per, Nippon Secchaku Kyokai Shi,
Vol 3, No 4, 1967, pp 280-290.
ATS-JS-173

Reactive Polymers and Adhesion, by M. Okawara.
JAPANESE, per, Nippon Setchaku Kyokai Shi, Vol 4,
No 2, 1968, pp 71-81.
ATS-JS-171

Principal Refractive Indices and Temperature
Dependence of Birefringence in $Gd_2(MoO_4)_3$, by
Sadao Nomura.
JAPANESE, per, Oyo Buturi, Vol 38, No 9, 1969,
pp 886-889.
*FSTC/HT-23-824-70
*ACSI J-8050

Studies of Reforming Reactions. Part 2. Hydrodecy-
clization of Methylcyclopentane and Benzene in
the Presence of a Reforming Catalyst, by
K. Iijima.
JAPANESE, per, Sekiyu Gakkai Shi, Vol 5, No 4,
1962, pp 243-248.
ATS-JS-257

Vapor-liquid Equilibria of the Propylene-propane
System at Low Temperatures, by M. Hirata.
JAPANESE, per, Sekiyu Gakkai Shi, Vol 10, No 7,
1967, pp 440-443.
ATS-JS-249

Activity of Synthetic Zeolite Catalysts in the
Disproportionation Reaction of Toluene, by
H. Matsumoto.
JAPANESE, per, Sekiyu Gakkai Shi, Vol 10,
No 8, 1967, pp 572-575.
ATS-JS-238

Orientation and Elastic Anisotropy of Stretched
Crystalline Polymers, by M. Maeda, S. Hibi.
JAPANESE, per, Sen-i to Kogyo, Vol 1, No 11,
1968, pp 653-65.
ATS-JS-183

Studies of Surface Functional Groups of Carbon
Blacks, by J. Yamada.
JAPANESE, per, Tanso, Vol 44, 1966, pp 20-29.
ATS-JS-210

Lattice Defects Produced in the Working of
Low-Carbon Steel Sheet and their Annihilation
Processes, by H. Takamura,
JAPANESE, per, Tetsu-to-Hagane, Vol 52, No 11,
1966, pp 149-152,
NLL Ref: 9022.06 (5599)

A Study of the Crystallization of Hydrated
Sodium Sulfate with a Recycle Cooling Type
Crystallizer, by K. Tawara.
JAPANESE, per, Tokyo Kogyo Shikensho Hokoku,
Vol 58, No 6, 1963, pp 268-280.
ATS-JS-217

Studies on Molding Compounds from Calcined
Gypsum and Synthetic Resins. Part 1, by
S. Nagai.
JAPANESE, per, Yogyo Kyokai Shi, Vol 59,
No 658, 1951, pp 146-150.
ATS-JS-221

Synthesis and Some Surface-active Properties of
Propane Sultone Derivatives, Part 5. Cellulose
Derivatives, by H. Hirai.
JAPANESE, per, Yukagaku, Vol 17, No 11, 1968,
pp 623-628.
ATS-JS-240

Polysulfone, by S. Nakajima, Y. Minoura.
JAPANESE, per, Yuki Gosei Kagaku Kyokai Shi,
Vol 24, No 9, 1966, pp 606-610.
MTC-69-13510-07C

Ferrocene-type Polymers, by T. Asahara,
Y. Ichikawa.
JAPANESE, per, Yuki Gosei Kagaku Kyokai Shi,
Vol 26, No 11, 1968, pp 1018-1023.
ATS-JS-163

A Method for the Manufacture of Hexachlorocyclopentadiene, by S. Takahashi.
JAPANESE, Patent Application 470, 1963.
ATS-JS-227

Manufacture of Cationic Polymerization Catalysts
Having Maleic Anhydride and Aldehyde as Components, by S. Okamura.
JAPANESE, Patent No 2470, 1969.
ATS-JS-164

A Method of Reforming Polyolefins, by R. Matsuura.
JAPANESE, Patent No 2220, 1968.
ATS-JS-166

A Method of Manufacturing Polyolefin Oxide, by
T. Fujimoto.
JAPANESE, Patent No 9367, 1968.
ATS-JS-167

Depolymerization of Polyolefins, by T. Fujimoto.
JAPANESE, Patent No 9368, 1968.
ATS-JS-168

Method for the Modification of Polymers of the
Propylene Group, by T. Seki.
JAPANESE, Patent No 9370, 1968.
ATS-JS-169

Process for the Purification of Terephthalic
Acid, by R. H. Wear.
JAPANESE, Patent Application 10,322, 1962.
ATS-JS-229

Purified and Stabilized Polyolefins, by
N. Takashima.
JAPANESE, Patent 10,567, 1962.
ATS-JS-197

Process for the Production of Hardening Products from Lower Aromatic Hydrocarbon-formaldehyde Resins, by H. Kakiuchi, J. Neokawa.
JAPANESE, Patent 13,795, 1962.
ATS-JS-181

Process for the Production of Hardening Products from Lower Aromatic Hydrocarbon-formaldehyde Resins, by H. Kakiuchi, J. Neokawa.
JAPANESE, Patent 13,795, 1962.
ATS-JS-181

A Method of Improving the Physical Properties of Polyethylene-containing Waste (Spent) Catalysts, by H. Furuse.
JAPANESE, Patent No 15,686, 1968.
ATS-JS-165

Preparation of a Polyvinyl Derivative Soluble in Water, by H. Suzumura.
JAPANESE, Patent 17,693, 1962.
ATS-JS-188

Preparation of Hexachlorocyclopentadiene, by
N. Aimi.
JAPANESE, Patent Application 19,006, 1968.
ATS-JS-228

Method for the Manufacture of Dicyclopentadiene, by M. Nambu, K. Yoguchi.
JAPANESE, per, Patent Application No 19,633, 1964.
ATS-JS-255

Manufacture of Propylene Oxide, by K. Fukui.
JAPANESE, Patent Application 19,686, 1966.
ATS-JS-260

Manufacture of Rapidly Dissolving Fumaric Acid Mixtures, by Y. Inoue, M. Mitsuno.
JAPANESE, Patent Application 20,201, 1964.
ATS-JS-230

Analysis of Organic Acids Formed During Oxidation Initiated by Products of the Radiation Oxidation of n-Decane, by Z. Kecki, K. Mechalska.
POLISH, per, Przemysl Chemiczny, Vol 47, No 1, 1968, pp 38-41.
NTC-69-16542-07C

Scientific
Chemistry (Contd)

Ascorbic Acid as Reducing Agent. Part II. Kinetics of Reduction of Ions of Palladium with Ascorbic Acid in the Presence of Potassium Chloride and Azotic Acid, by R. Ripan, G. Pop.
RUMANIAN, per, Revue Roumaine de Chemie, Vol 12, No 1, 1967, pp 7-12.
NTC-69-16273-07D

Methods of Eliminating Oxides of Nitrogen from the Gases Used in the Synthesis of Ammonia, by E. Constantinescu, E. Platon.
RUMANIAN, Patent 2,015.
NTC-69-16036-07A

Open System Combustion Method of Determining Methylmercury Chloride Residues in Tomatoes, by P. Pigati, A. Pigati.
SPANISH, per, Archivos Instituto Biologico Sao Paulo, Vol 34, No 3, 1967, pp 193-198.
NTC-69-15742-07C

Process for Producing Hydrogen Peroxide, by W. Amrein.
SWISS, Patent 268,529.
NTC-69-16352-07A

Earth Sciences & Oceanography

Swampy Forests and Bogs of Siberia, by N. I. Plyavchenko, 215 pp.
RUSSIAN, bk, Akademiya Nauk SSSR, Sibirskoye Otd., Inst Lesa i Drevesiny, 1965.
NTC/FSTC/HT-23-310-70

Distribution of Radioactive Elements in Sediments of the Black Sea, by I. Ye. Starik, 8 pp.
RUSSIAN, per, Dok Ak Nauk SSSR, Vol 129, No 5, 1959, pp 1142-1145.
Dept of Interior
Bureau of Commercial Fisheries
Office of Foreign Fisheries
A-34-Dec 1969-No 94
On Loan

Scientific
Earth Sciences & Oceanography (Contd)

Sedimentary Thickness in the Arabian Sea Basin, by Yu. P. Neprochnov, 5 pp.
RUSSIAN, per, Dok Ak Nauk SSSR, Vol 139, No 1, 1961, pp 177-179.
Dept of Interior
Bureau of Commercial Fisheries
Office of Foreign Fisheries
A-34-Dec 1969-No 51
On Loan

The Use of Piezoelectric Effect in Rocks for Underground Prospecting for Piezoelectric Materials, by M. P. Volarovich, 5 pp.
RUSSIAN, per, Doklady Akad Nauk SSSR, Vol 162, No 3, 1965, pp 556-558.
AEC/BNL-Tr-297-69

Soil Physics, by S. V. Nerpin
RUSSIAN, mono, Fizika Pochvy, 1967
*CFSTI TT 70-57144

Water Regime of Soils of the Bogarnoy Zone of the Uzbek Republic, by A. A. Rode.
RUSSIAN, per, Genezis i Geografiya Pochv Academy of Sciences of USSR Transactions of the Docuchayayev Soil Institute, vol 25 1947, pp. 94-129.
*CFSTI TT 70-57115

Genesis and Geography of Soils.
RUSSIAN, mono, Genezis i Geografiya Pochv, 1966.
*CFSTI TT 70-57112

Specific Electric Resistance of Frozen Bedrocks in the Natural State, by V. S. Yakupov.
RUSSIAN, per, Geologiya i Geofizika, No 12, 1966, pp 79-87.
NTC-69-15999-08L

The Phasic Presentation of Seismic Signals, by S. V. Goldin.
RUSSIAN, per, Geologiya i Geofizika, No 5, 1968, pp 65-73.
NTC-69-16571-08K

The Method of Submerged Seismic Detectors, by I. I. Bobrovnik, V. K. Monastyr'ev.
RUSSIAN, per, Geologiya i Geofizika, No 8, 1966, pp 102-101.
NTC-69-16000-08K

Determination of Permittivity and Resistivity by the Dielectric Logging Method, by Yu. N. Antonov.

RUSSIAN, per, Geol i Geofiz Ak Nauk SSSR, Sibirsk Otd, No 5, 1967, pp 109-111.
ATS-RJ-5315

Double-beam Down-hole Gamma-gamma Density Meter, by G. B. Varvarin.

RUSSIAN, per, Geol i Geofiz Akad Nauk SSSR, Sibirsk Otd, No 6, 1967, pp 89-97.
ATS-RJ-5321

Analysis of Closed Correlation of Seismic Waves, by S. V. Gol'din.

RUSSIAN, per, Geol i Geofiz Akad Nauk SSSR, Sibirsk Otd, No 7, 1968, pp 82-94.
ATS-RJ-5314

The Use of the Pulsed Neutron-neutron Method in the Control of Oil-field Development, by V. A. Koshlyuk.

RUSSIAN, per, Geologiya Nefti i Gaza, Vol 12, No 7, 1968, pp 46-49.
WTC-69-15997-081

The Primary Migration During Subsidence and Lithogenesis of Sediments, by

N. A. Yermenko, S. G. Kheruchev.
RUSSIAN, per, Geologiya Nefti i Gaza, Vol 12, No 9, 1968, pp 5-6.
WTC 69-15994-086

The Influence of Evaporation on the Processes of Formation of the Cold Antarctic Waters, by V. G. Ledenev, 7 pp.

RUSSIAN, per, Informatsionnyi Byulleten' Sovetskoy Antarkticheskoy Ekspeditsiy, No 44, 1963, pp35-38.
Dept of Interior

Bureau of Commercial Fisheries
Office of Foreign Fisheries
A-34-Dec 1969-No 1
On Loan

On the Parameter Characterizing Lee Waves,

by T. N. Binikova and B. N. Kozhevnikova,
RUSSIAN, per, Izv. A. N. SSSR Fiz. Atmos. Okean., Vol 5, 1969, pp 550-554,
NLL Ref: 5828.4F (7818)

Microseism on the Floor of the Baltic Sea and the Northern Part of the Atlantic Ocean, by

F. I. Monakhov, 22 pp.
RUSSIAN, per, Izv Ak Nauk SSSR, Seriya Geofizicheskaya, No 7, 1962, pp 895-907.

Dept of Interior
Bureau of Commercial Fisheries
Office of Foreign Fisheries
A-34-Dec 1969-No 50
On Loan

Pulsations of the Horizontal Components of the Velocity of Ocean Currents Owing to Large-Scale Turbulence, by V. B. Shtokman, 18 pp.

RUSSIAN, per, Izvestiya Akad Nauk SSSR, Seriya Geograficheskaya i Geofizicheskaya, 1941, pp 475-483.

Dept of Interior
Bureau of Commercial Fisheries
Office of Foreign Fisheries
A-34-Dec 1969-No 72
On Loan

Investigation of the Shape of Anomalies in Gamma-gamma Density Logging, by V. A. Artsybashev, Ye. P. Popov.

RUSSIAN, per, Izv VUZ Geol i Razvedka, Vol 11, No 7, 1968, pp 118-123.
ATS-RJ-5320

Choice of Receiver for a Velocity-logging Bore-hole Instrument, by G. B. Gorbonitskiy.

RUSSIAN, per, Izv VUZ Geol i Razvedka, Vol 11, No 8, 1968, pp 127-136.
ATS-RJ-5318

Joint Application of Radiometry and Gravimetry in Prospecting for Oil- and Gas-bearing Structures, by Yu. I. Klestov, L. K. Orlov.

RUSSIAN, per, Izv VUZ Neft i Gaz, Vol 10, No 8, 1967, pp 24-26.
ATS-RJ-5309

Qualitative Evaluation of Soils, by S. N. Taichinov

RUSSIAN, mono, Kachestvennaya Ots'enka Pochvy Bonitirouka, 1966.
*CFSTI TT 70-57145

Classification of the Soils of the Plains of the Maritime and Near Amur Areas, by G. I. Ivanov

RUSSIAN, mono, Klassifikatsiya Pochv Ravini Primer'ya i Priamur'ya, 1966
*CFSTI TT 70-57107

The Loessial Rocks of the USSR, by
Y. V. Popov
RUSSIAN, mono, Leossvye Porody SSSR, 1966
*CFSTI TT 70-57108

A New Surface Salinity Map of the Northern Pacific
Ocean, by A. M. Muromtsev, 8 pp.
RUSSIAN, per, Meteorologiya i Gidrologiya, No 6,
1956, pp 36-38.
Dept of Interior
Bureau of Commercial Fisheries
Office of Foreign Fisheries
A-34-Dec 1969-No 75
On Loan

Formation of Negative Temperature Gradients Near a
Water Surface, by S. P. Malevskiy-Malevich.
RUSSIAN, per, Met i Gid, No 3, 1969, pp 53-59.
Dept Of Navy APL/JHU CLB-3 T-620

Micromorphological Methods in the In-
vestigations of Genesis of Soils, by
S. V. Zonn
RUSSIAN, mono, Mikromorfologicheskii
Metod v Issledovanii Genezise Pochv, 1966
*CFSTI TT 70-57110

Problems of Human Penetration of the Ocean Depths,
by A. I. Figichev, 11 pp.
RUSSIAN, per, Morskoy Sbornik, No 4, 1968, pp 78-83
NAV/NIC/Tran-2996-70

Use of Statistical Methods to Estimate the
Physical Properties of Rocks in Conditions
Similar to Those in Place, by
L. M. Marmorshtein, M. M. Yellanskiy.
RUSSIAN, per, Nauchno-Issled Inst Geol Arktiki
Uchenye Zapiski, No 10, 1967, pp 185-192.
TTC-9-1-1964-000

Control of the Spectrum of the Vibrations Excited
by a Vibration, by T. M. Grodzyanskaya.
RUSSIAN, per, Neftgaz Geol i Geofiz, No 9, 1967,
pp 33-35.
ATS-RJ-5305

On Formation and Distribution of the Low-Salinity
Water Interlayer in the Northern Part of the
Pacific Ocean, by V. I. Kuska, 27 pp.
RUSSIAN, per, Okeanologiya, Vol 2, No 5, 1962,
pp 769-782.
Dept of Interior
Bureau of Commercial Fisheries
Office of Foreign Fisheries
A-34-Dec 1969-No 74
On Loan

About the Influence of Volcanic Eruptions on the
Chemistry of Ocean Water, by V. V. Siniukov, 10 pp.
RUSSIAN, per, Okeanologiya, Vol 4, No 4, 1964,
pp 644-650.
Dept of Interior
Bureau of Commercial Fisheries
Office of Foreign Fisheries
A-34-Dec 1969-No 48
On Loan

On the Scales of Oceanic Turbulence, by
R. V. Ozmidov, 13 pp.
RUSSIAN, per, Okeanologiya, Vol 6, No 3, 1966,
pp 393-398.
Dept of Interior
Bureau of Commercial Fisheries
Office of Foreign Fisheries
A-34-Dec 1969-No 71
On Loan

Soil-Geographical and Land-Scape-Geo-
chemical Investigations (for the Aim of
Agricultural and Mineral Deposits), by
M. A. Glazovskia, 237 pp.
RUSSIAN, mono, Pochvenno-Geograficheskiye
i Landschaftno-geokhimicheskiye Issledo-
vaniya, 1964.
*CFSTI TT 70-57111

The Elaboration of a General Classifi-
cation of Soils of the USSR, by
I. P. Gerasimov.
RUSSIAN, per, Pochvovedenie, No. 7,
1942, pp. 3-14.
*CFSTI TT 70-57113

A Classification of Soils is Needed:
Not Just Their Lists, by K. P. Gorshenin,
RUSSIAN, per, Pochvovedenie, No. 6, 1953
pp. 45-49.
*CFSTI TT 70-57114

The Soils of Sakhalin, by A. M. Ivlev.
RUSSIAN, mono, Pochvoy Sakhalina, 1965,
115 pp.
*CFSTI TT 70-57104

The Soils of the Alma-Ata Oblast, by
S. I. Sokolov.
RUSSIAN, mono, Pochvy Alma-Atinskoy
Oblasti, No 4, 1962, 432 pp.
*CFSTI TT 70-57106

Scientific
Earth Sciences & Oceanography (Contd)

The Soils of Uralsk Oblast, by N. J. Kotin.
RUSSIAN, mono, Pochvy Ural'skoy Oblasti,
1967, 348 pp.
*CFSTI TT 70-57103

Soils of Trans Baikal, by N.A. Nogina
RUSSIAN, mono, Pochvy Zabay Kal'ya, 1964
*CFSTI TT 70-57105

Composition of Ground Water and Water Extracts
of Rocks from the Western Part of the Russian
Platform, by G. V. Bogomolov.
RUSSIAN, mono, Porovye Rastvory i Metody ikh
Izucheniya Minsk Nauka i Tekhnika, 1968,
pp 40-44.
NTC-69-15900-08D

Estimating the Quantity of Intersitital
Solutions Squeezed Out of Clay Sediments
Under Natural Conditions, by Yu. V. Mukhin.
RUSSIAN, mono, Porovye Rastvory i Metody ikh
Izucheniya Minsk Nauka i Tekhnika, 1968,
pp 45-53.
NTC-69-15897-08G

Method for Investigations of the Gas Phase
Composition of Inclusions in Minerals, by
N. A. Shugurova.
RUSSIAN, mono, Porovye Rastvory i Metody ikh
Izucheniya Minsk Nauka i Tekhnika, 1968,
pp 109-116.
NTC-69-15901-08G

'Pulse' of the Earth's Magnetosphere, by
V. A. Troitskaya, 18 pp.
RUSSIAN, per, Priroda, Moscow, No 12, 1969,
pp 9-17.
JPRS 49889

On the Problem on the Eradication of Arctic
Ice, by Yu. P. Doronin,
RUSSIAN, per, Probl. Arkt. Antarkt., No 28,
1968, pp 21-28,
NIL Ref: 5828.4F (7823)

Evaluation of the Reliability of Isolation of
Faint Geophysical Anomalies by the Method of
Inverse Probabilities, by A. A. Nikitin.
RUSSIAN, per, Razved Geofiz, No 15, 1966,
pp 88-93.
ATS-RJ-5303

Scientific
Earth Sciences & Oceanography (Contd)

Application of the Method of Inverse Probabilities
to Processing of Geophysical Data, by
A. A. Nikitin, A. G. Tarkhov.
RUSSIAN, per, Razved Geofiz, No 15, 1966,
pp 94-98.
ATS-RJ-5302

Relationship Between the Attenuation Constant
and The Lithology of Rock and Propagation
Velocity for the Elastic Waves, by
A. D. Pavlenkin.
RUSSIAN, per, Razved Geofiz, No 22, 1967,
pp 38-44.
ATS-RJ-5304

Evaluation of the Presence of Oil and Gas in
Clayey Reservoirs, by Ye. Yu. Mikolayevskiy,
R. G. Aliyev.
RUSSIAN, per, Razved Geofiz, No 25, 1968,
pp 85-94.
ATS-RJ-5311

The Use of Poisson's Ratio for Geological
Interpretation of Gravity and Magnetic
Anomaly Analogs, by A. A. Lyubimov,
G. A. Lyubimov.
RUSSIAN, per, Razvedka i Okhrana Nedr, Vol 34,
No 7, 1968, pp 38-42.
ATS-RJ-5308

Method of Analytical Continuation of Gravity and
Magnetic Anomalies into the Lateral Space and
Results of Its Application, by K. I. Sokolovskiy.
RUSSIAN, per, Razvedka i Okhrana Nedr, Vol 34,
No 9, 1968, pp 33-37.
ATS-RJ-5307

Certain Possibilities of Improving Seismic
Reconstructions, by Ye. K. Chalikova,
V. F. Faustova.
RUSSIAN, per, Razvedochnaya Geofizika, No 21,
1967, pp 3-15.
NTC-69-16566-08K

The Computational Processing of Reflection
Data, by G. H. Bogdanik, Ye. I. Buyanova.
RUSSIAN, per, Razvedochnaya Geofizika, No 22,
1967, pp 27-37.
NTC-69-16567-08K

Long-Range Hydrological Forecasts and Abundance of Commercial Fish, by M. A. Bogdanov, S. I. Potayichuk, 8 pp. RUSSIAN, per, Rybnoe Khozyaistvo, Vol 45, No 9, 1969, pp 7-12.
Dept of Interior
Bureau of Commercial Fisheries
Office of Foreign Fisheries
A-34-Dec 1969-No 26
On Loan

Tectonics of the Turan Plate, by I. S. Volvovskiy, R. G. Garetskiy.
RUSSIAN, per, Trudy Ak Nauk SSSR, Geologicheskoy Inst, No 165, 1966, 288 pp.
ACIC-TC-1437

Mesozoic and Cenozoic History and Structure of the Earth's Crust in the Okhotsk Region, by M. S. Markov, 8 pp.
RUSSIAN, per, Akad Nauk SSSR, Trudy Geologicheskogo Instituta, No 168, 1967, pp 211-214.
Dept of Interior
Bureau of Commercial Fisheries
Office of Foreign Fisheries
A-34-Dec 1969-No 49
On Loan

Investigation of Longitudinal Wave Velocities in Sedimentary Rock Filled with Liquids at High Confining Pressures, by M. P. Volarovich. RUSSIAN, per, Trudy Akad Nauk SSSR, Inst Fiz Zemli, No 37(204), 1966, pp 140-148.
ATS-RJ-5306

Origin of the Bottom Relief of the Okhotsk Sea, by G. B. Udintsev, 14 pp.
RUSSIAN, per, Trudy Inst Okeanologii, Ak Nauk SSSR, No 13, 1955, pp 5-15.
Dept of Interior
Bureau of Commercial Fisheries
Office of Foreign Fisheries
A-34-Dec 1969, No 52
On Loan

Some Results of the Investigation of Black Sea Interstitial Water, by O. V. Gniskina.
RUSSIAN, per, Trudy ANSSSR, Inst Okeanologii, Vol 54, 1962, pp 47-57.
NTC-69-16184-08J

The Third Phase of the Study of Antarctica From the End of the Second World War to the Present, by A. I. Shalimov, 29 pp.
RUSSIAN, per, Trudy Nauchno-Issledovatel'skogo Instituta Geologii Antarktiki, No 95, 1957, pp 5-8.
Dept of Interior
Bureau of Commercial Fisheries
Office of Foreign Fisheries
A-34-Dec 1969-No 2
On Loan

The Second Stage of Study of Antarctica Since the End of the 19th Century to the Start of the Second World War, by A. I. Shalimov, 62 pp.
RUSSIAN, per, Trudy Nauchno-Issledovatel'skogo Instituta Geologii Antarktiki, No 95, 1957, pp 15-39.
Dept of Interior
Bureau Of Commercial Fisheries
Office of Foreign Fisheries
A-34-Dec 1969-No 3
On Loan

Hydraulic Transportation in Hydraulic Mines and Means of Improvement, by A. Ye. Smoldyrev. RUSSIAN, per, Ugol, 39(9), 1964, pp 42-45.
*AEC/ORNL-Tr-2283

Dynamics of a Fire in a Horizontal Mine Working, by S. N. Osipov, V. N. Zhadan.
RUSSIAN, per, Ugol' Ukrainy, Vol 11, No 9, 1967, pp 35-38.
NLL Ref: S313.4 (SRRR trans 5612)

The Work of the 7th Session of the Scientific Council Devoted to the Problem "The Biological Resources of the White Sea and of Karelian Inland Waters", by A. M. Guliyeva, L. P. Ryzhkov. RUSSIAN, per, Voprosy Ikhtiologii, Vol 8, No 6(53), 1968, pp 1113-1114.
Dept of Interior
Bureau of Commercial Fisheries
Office of Foreign Fisheries
A-34-Dec 1969-No 34
On Loan

Fundamental of Geographic Forecasting Described, by I. V. Bestuzhiv-Lada, 15 pp.
RUSSIAN, per, Yunost', Moscow, No 12 Dec 1969, pp 89-94.
JPRS 49825

Investigation into the Influence of Wood Fires on Descensional or Ascensional Ventilation in a Steep Inclined Seam, by K. Grumbrecht.
CZECH, per, Uhli, Vol 10, No 7, 1968, pp 265-268.
NLL Ref: 8313.4 (SMRE 5656)

The Mineral Industry in the Development Plan for 1968-1972.
FRENCH, per, Afrique Magazine, Aug 1969, pp 84-90.
DIA/LN 579-70

New Means of Surveying Rock Masses, by B. Schneider.
FRENCH, per, Annales Inst Tech des Batiment et des Travaux Publics, Vol 20, No 235-236, 1967, pp 1055-1094.
NTC-69-16561-08G

1968 Mining Activity and Exploration Reported, (Africa), 6 pp.
FRENCH, per, Bulletin de l'Afrique Noire, Paris, 15 Oct 1969, pp 11498-11501.
JPRS 49761

The Cartographic Use of Orbital Photographs, by J. J. Hausknecht.
FRENCH, per, Bulletin du Comite Francais de Cartographie Fascicle 41, No 3, Aug-Sept 1969 pp 223-224.
*ACIC-TC-1610

World Aquaculture, Present State and Potential, the CNEOX Program and its Realization, by L. Laubier.
FRENCH, per, Communication Faite aux Journees de l'exploration et l'exploitation des Oceans, 1969
*CFSTI TT 70-58053

General Order of Operations 6/69 for Geodetic Program Prepeole, by B. Lago. 19 pp.
FRENCH, rpt, Ordre Gen. d Operations 6/69. Campagne Geodesique (Bretigny). Nov 1969. 17 pp.
NASA TT-F-12,779

Treatment of Doppler Data in Semi-Dynamical Geodesy, by J.-P. Chassaing. 10 pp.
FRENCH, rpt, Paper Presented at COSPAR Meeting, Prague, 11-24 May 1969.
NASA TT-F-12,727

On the Numerical Computation of Gravimetric Plumbline Deflection Differences and Their Accuracy, by B. Wrobel.
GERMAN, rpt, Dissertation, 1967, 161 pp.
ACIC-TC-1550

The Distribution of the Water Volume and the Current Condition in the West Channel of the Skagerrak During the Skagerrak Expedition in the Summer of 1966, by G. Tomczak.
GERMAN, per, Deut Hydrograph Zeit, Vol 21, No 3, 1968, pp 97-105.
NLL Ref: 9022.15 (trans 1382)

Experiments to Determine the Radius of Action of Radio Waves in Level-bedded Hydrogenetic Rocks, by H. Michel.
GERMAN, per, Kali und Steinsalz, No 3, 1968, pp 95-99.
NTC-69-15995-08G

New Oligocene Microfossils Which Had Been Preserved in an Organic Substance, by P. Morgenroth.
GERMAN, per, Neues Jahrbuch fuer Geologie und Palaeontologie. Abhandlungen, Vol 127, No 1, 1968, pp 1-12.
NTC-69-15977-08G

Reproduction of Paleozoic Hystrichosphaera, by A. Eisenack.
GERMAN, per, Neues Jahrbuch fuer Geologie und Palaeontologie. Abhandlungen, Vol 131, No 1, 1968, pp 1-22.
NTC-69-15975-08G

A Preparation Technique for Randomly Oriented Powder Samples of Clay Minerals, Especially Developed for X-ray Diffractometry with Counter-tube Goniometers with Vertical Rotation Axes, by H. Lenz, V. Kraemer.
GERMAN, per, Neues Jahrbuch fuer Mineralogie Monatshefte, No 2, 1968, pp 90-92.
NTC-69-15974-08G

Velocity Change of Sedimentary Rocks Due to Uniaxial Pressure, by S. Homsho.
JAPANESE, per, Butsuri-Tanku, Vol 19, No 3, 1968, pp 70-75.
NTC-69-15993-08G

Relation Between the Electrode Potential of Sulfide Minerals and Their Floatability, by S. Nakai, T. Wakamatsu.
JAPANESE, per, Nippon Kogyo Kaishi, Vol 80, No 918, 1968, pp 675-682.
NTC-69-15790-08G

On the Determination of Nozzle Performance of a Hydraulic Mining Device, by Yukio Yoshizawa, 14 pp.
JAPANESE, per, Nippon Kogyo Kaishi, Vol 81, No 10, 1965, pp 29-34.
AEC/ORNL-Tr-2245-70

Scientific
Earth Sciences & Oceanography (Contd)

On the Floatability of Minerals Possessing
Inherent Floatability, by S. Mukai,
T. Wakamatsu.
JAPANESE, per, Suiyokaishi, Vol 15, No 5,
1964, pp 225-228.
ITC-69-15761-08C

From the Black Sea to the Atlantic, by
T. Wierzbowski, 6 pp.
POLISH, per, Tygodnik Morski, Vol 11, No 2(503), 1968
p 10.
Dept of Interior
Bureau of Commercial Fisheries
Office of Foreign Fisheries
A-34-Dec 1969-No 85
On Loan

Electronics & Electrical Engineering

Method of Measurement of Temporary Damping of
Oscillatory Processes in Structures and Mechanisms,
by G. S. Lyubashevskiy, B. D. Tartakovskiy. 9 pp.
RUSSIAN, rpt, AN UKRSSR, Prikladnaya Akustika i
Vibratsionnaya Tekhnika, 1968, pp 84-91.
AIR/FTD/MT-24-228-69

Calculating the Compensating Reflector in a Two-
Reflector Antenna with Circular Symmetry, by
I. V. Vavilova, 11 pp.
RUSSIAN, per, Antenny, Moscow, No 5, 1969, pp 72-
81.
JPRS 49755

The Problem of Large System Effectiveness,
by G. K. Stolyarov, 7 pp.
RUSSIAN, per, Doklady Akademii Nauk SSR,
Moscow, Vol 189, No 2, 1969, pp 265-268.
JPRS 49888

Applying the Principle of the Maximum in
Calculating Optimal Controls for Discrete
Systems, by R. Gabasov, F. M. Kirillova,
6 pp.
RUSSIAN, per, Doklady Akademii Nauk SSSR,
Moscow, Vol 189, No 5, 1969, pp 963-966.
JPRS 49888

Scientific
Electronics & Electrical Engineering
(Contd)

Locating the Points at which Damage Occurs to
the Winding Insulation of Electric Machines
in Operation, by N.L. Sakhnovskii.
Russian, per, Elekt. Stantsii, Vol 33 No. 8,
pp 73-75
CEGB
C.E. Tr. 260

The Switching of a 330 kV Autotransformer with
Parallel Operation by means of Breakers, by
G. K. Zadrey.
RUSSIAN, per, Elekt Stantsii, Vol 39, Mar-Apr
1969, pp 83-85.
CEGB
SDI Tr-17984

Determining the Maximum Surge Current no Load
Switching of a Transformer, by V. I. Molyshev.
RUSSIAN, per, Elektrichestvo, No 6, 1968, pp 16-18.
NLL Ref: 3774.5 (EE trans 1877)

New Design of a High-Rated D. C. Machine, by
V. S. Borushko.
RUSSIAN, per, Elektrotehnika, No 7, 1967, pp 14-15.
NLL Ref: 3774.5 (EE Trans 1863)

Photoelectric Tracking Systems, by
P. V. Nikolayev, Yu. A. Sabinin, 165 pp.
RUSSIAN, bk, Fotoelektricheskiye Sledyashchiye
Sistemy, Leningrad, 1969, pp 1-136.
JPRS 49973

Compatibility of Digital Computers in a Particu-
lar Computing Complex, by Ye. Ye. Zul'fugarzade,
F. V. Mayorov. 8 pp.
RUSSIAN, Izvestiya AN AZERBSSR. Seriya Fiziko-
Tekhnicheskikh i Matematicheskikh Nauk, No 2,
1966, pp 71-75.
AIR/FTD/MT-23-552-68

Problems of Programming Automation in the
Estonian SSR, by B. Tamm. 29 pp.
RUSSIAN, per, Izvestiya AN ESTSSR. Fizika,
Matematika, No 3, 1967, pp 267-285.
AIR/FTD/MT-23-404-68

High-Frequency Single-Cycle Shift Register, by
L. K. Samoylov. 13 pp.
RUSSIAN, per, Izvestiya VUZ. Elektromekhanika,
No 2, 1968, pp 141-147.
AIR/FTD/MT-24-209-69

The Electrical Properties of Polycrystalline Ferrites in the Audio and Infrared Frequency Bands, by V. D. Stashuk, 7 pp.
RUSSIAN, per, Izvestiya VUZ. Fizika, No 4, 1967, pp 135-138.
NAV/NIC/Tran-2988-70

Synthesis of the Control Mechanism of the Current Receivers of an Electromotor, by V. V. Solomin.
RUSSIAN, per, IZV. VUZ. Mashinostroyeniye, No 11, 1968, pp 5-7.
*Dept of Navy APL/JHU J-1474

The Noise Immunity of an Elementary Signal During Phase-Shift Keying, by A. I. Volynkin, 12 pp.
RUSSIAN, per, IVUZ. Radioelektronika, Vol 10, No 4, 1967, pp 370-377.
AIR/FTD/INT-23-313-68

The Influence of Finite Ground Conductivity on the Directivity Patterns of Vertical Antennas, by G. H. Krylov, 7 pp.
RUSSIAN, per, Leningrad. Universitet. Problemy Difraktsii i Rasprostraneniya Voln, No 6, 1966, pp 139-143.
AIR/FTD/INT-23-118-68

Design of Aircraft Electric Power Supply Systems, by G. D. Vlasov, 452 pp.
RUSSIAN, bk, Mashinostroyeniye, 1967, pp 1-411.
AIR/FTD/INT-23-259-69

Error-Locating Codes, by V. V. Kiselev-Gusev, 6 pp.
RUSSIAN, per, Materialy Yubileyn. Nauchno-Tekhn. Konferentsii, No 4, 1967, pp 217-220.
AIR/FTD/INT-23-360-69

Symposium on Methods and Equipment for Conversion of Graphic Information for Input into Electronic Computers, by A. I. Petrenko, 5 pp.
RUSSIAN, per, Mekhanizatsiya i Avtomatizatsiya Upravleniya, No 2, 1967, pp 60-61.
AIR/FTD/INT-23-27-69

Surface TE-Wave in Multilayered Systems, by V. I. Gordiyenko, 10 pp.
RUSSIAN, per, Otbor i Peredacha informatsii, Kiev, No 20, 1969, pp 25-32.
JPRS 49839

An Investigation of the Effect of Oscillator Frequency Fluctuation on the Quality of Operation of a SDT'S (Selektsiya Dvizhushchikhsya Tselei; Moving Target Selection) System with Internal Coherence, by V. Ya. Plekin, P. N. Serdyukov, 10 pp.
RUSSIAN, per, Radiotekhnika, Moscow, Vol 24, No 10, Oct 1969, pp 13-19.
JPRS 49827

A Method of Compensating for the Amplitude Fluctuations of a Signal Reflected from an Aircraft, by I. V. Baryshev, 7 pp.
RUSSIAN, per, Samoletostroyeniye i Tekhnika Vozdushnogo Flota, No 13, 1968, pp 39-43.
AIR/FTD/INT-23-210-69

On Errors of Computer Devices for Aircraft, by V. A. Papov, 7 pp.
RUSSIAN, per, Samoletostroyeniye i Tekhnika Vozdushnogo Flota, No 13, 1968, pp 44-47.
AIR/FTD/INT-24-300-69

Small-Sized Infrared Frequency Equipment 0.001-8hz, by V. S. Lerman, V. Ye. Mikulenok, 7 pp.
RUSSIAN, per, Sistemy Ipravleniya i Peredachi Informatsiy V Elektroenergetike, pp 190-196.
Dept of Navy NIC Trans 2973

Complex Computer Modelling System, by N. M. Sotskiy, 9 pp.
RUSSIAN, bk, Sredstva Analogovoy i Analogo-Tsifrovoy Vychislitel'noy Tekhniki, 1968, pp 190-196.
AIR/FTD/INT-24-215-69

Development of the Cinetelevision Technique in the USSR, by V. A. Burgov, 23 pp.
RUSSIAN, per, Tekhnika Kino i Televideniya, No 9, 1967, pp 5-12.
AIR/FTD/INT-23-383-68

The Effectiveness of Software Monitoring in the Minsk-222 Computer System, by A. K. Olefir, 8 pp.
RUSSIAN, rpt, Trudy Akademii Nauk SSSR. Sibirskoye Otdeleniye. Institut Matematiki. Vychislitel'nyye Sistemy. Simpozium, Mai 1966, 1967, pp 32-37.
AIR/FTD/INT-23-438-68

A System for Data Exchange Between Two Computers, by B. F. Kipurov, A. K. Olefir, et al. 5 pp.
RUSSIAN, rpt, Trudy Akademii Nauk SSSR. Sibirskoye Otdeleniye. Institut Matematiki. Vychislitel'nyye Sistemy. Simpozium, Mai 1966, 1967, pp 85-88.
AIR/FTD/INT-23-438-68

An Accumulator with Photo-Electronic Signal Selection, by V. I. Chernyan, 9 pp.
RUSSIAN, per, Trudy Tsentral'noy Aerologicheskoy Observatorii, Moscow, No 36, 1961, pp 135-141.
JPRS 49752

Recognizing Symbolic Information by the Correlated Group Method, by V. M. Gordtsov, 8 pp.
RUSSIAN, rpt, Trudy Vsesoyuznaya Konferentsiya po Informatsionno-Poiskovym Sistemam i Avtomatiziro-Vannoy Obrabotke Nauchno-Tekhnicheskoy Informatsii, 3d, Moscow, 1966, 1967, pp 300-304.
AIR/FTD/M-24-216-69

Manual-Work Book on the Fundamentals of Electronics and Radar, by G. V. Zimina, 37 pp.
RUSSIAN, bk, Voennoye Izdatel'stvo Ministerstva Oborony SSSR, 1967, pp 470-501.
Dept of Navy NIC Trans 2999

On the Excitation of Waveguides-I, by A. A. Samarskiy, A. N. Tikhonov, 24 pp.
RUSSIAN, per, Zh Tekh Fiz, Vol 17, 1947, pp 1283-1296.
AEC/BNL-Tr-300-69

Excitation of Waveguides. II(1), by A. A. Samarskiy, A. N. Tikhonov, 16 pp.
RUSSIAN, per, Zh Tekh Fiz, Vol 17, No 12, 1947, pp 1431-1440.
AEC/BNL-Tr-308-69

Conversion of Information Form and Automation of Research, by A. I. Kondalyev, 15 pp.
UKRAINIAN, per, Visnyk Akademiyi Nauk Ukrain'skoyi RSR, Kiev, No 7, 1969, pp 35-45.
JPRS 49980

Field Effect Transistors in Electronic Circuits, by Z. Lukes.
CZECH, per, Slaboprudy Obzor, Vol 29, No 4, 1968, pp 222-229.
NLL Ref: 9022.81 (trans 2572)

Accuracy of Diffusion Operations, by J. Balas.
CZECH, per, Slaboprudy Obzor, Vol 29, No 10-11, pp 585-589.
NLL Ref: 9022.81 (trans 2579)

Dielectric Wires as Millimeter Wave Guides, by A. G. van Nie.
DUTCH, per, Nederlands Tijdschrift voor Natuurkunde, Vol 29, No 1, 1963, pp 1-9.
NLL Ref: 9022.81 (trans 2565)

Influence of the Movement of a Foundation on the Distribution of Forces on the Feet of a Pylon, by M. P. Hautefeuille.
FRENCH, per, Bulletin Societe Francaise des Electriciens, Ser 8, Vol 3, No 33, 1962, pp 478-486.
NTC-69-16555-09C

New Principles in Telephone Signalling, by P. Lucas.
FRENCH, per, Commutation et Electronique, 18 July 1967, pp 7-23.
NLL Ref: 9022.81 (trans 2507)

Magnetic Spectrometers and Detection Equipment for the Orsay Linac, by B. Milman.
FRENCH, per, L'Onde Electrique, Vol 42, 1962, pp 310-329.
*AEC/LB/G-Tr-2941

The Artificial Pollution Test of Outdoor Insulators, by G. Leroy, P. Despres.
FRENCH, per, Revue Generale de l'Electricite, Vol 77, No 2, 1967, pp 162-171.
NTC-69-15741-09C

Statistical Theory of Electrical Breakdown, by J. M. Guin.
FRENCH, per, Revue Generale de l'Electricite, No 77, Apr 1968, pp 430-436.
NLL Ref: 3774.5 (EE trans 1895)

Electricite de France. The Tidal Power Station in the Rance Estuary, by R. Allary.
FRENCH, per, Technique des Travaux, Vol 42, No 1-2, 1966, pp 22-46.
NLL Ref: 5206 (133)

A Method and an Apparatus for Heating by Means of Induction.
FRENCH, Patent 1,531,472.
NTC-69-10030-09C

The Mechanism of Conduction in Aluminium Oxide at High Temperatures, by W. A. Fischer, E. Ackermann.
GERMAN, per, Arch Eisenhutt, No 39, 1968, pp 273-276.
NLL Ref: 9022.06 (6591)

Sub-span Lengths for Bundled Conductors, by L. Moeske.
GERMAN, per, Bulletin Schweizerischer Elektrotechnischer Verein, Vol 99, 1966, pp 720-732.
NTC-69-15741-09A

Scientific
Electronics & Electrical Engineering
(Contd)

Physical Principles of Practical Liquid Resistors for Pulse Voltages, by W. Mosch, 9 pp.
GERMAN, per, Deut Elektrotech, Vol 9, No 6, 1955, pp 214-218.
AEC/LASLUC/Tr-4144-70

Proposal for the Data Processing of Telemetry Data of the German Scientific Satellite AZUR-1, by W. Markwitz, 27 pp.
GERMAN, rpt, Deutsche Versuchsanstalt fur Luft und Raumfahrt, DVL Report No 778, Aug 1968.
Dept of Navy NIC 2984

Electrical Multiple Unit Train 1500 V Direct Current for the Suburban Line Cairo-Helwan, Egypt, by W. Schroder.
GERMAN, per, Elektrische Bahnen, Vol 29, No 4, 1958, pp 83-94.
NLL Ref: 3774.5 (EE trans 1879)

Generation and Significance to Space Charges in Synthetic Films Through Corona Discharges, by W. Boeck.
GERMAN, per, Elektrotechnische Zeit. Ausgabe A. Zentralblatt fuer Elektrotechnik, Vol 88, No 26, 1967, pp 647-652.
NTC-69-16757-09C

Switchgear and Switching Installation, by B. Fleck, E. Maass.
GERMAN, per, ETZ 'B', No 17, 1965, pp 387-395.
NLL Ref: 3774.5 (EE trans 1890)

Experience with the Occurrence of Corrosion in a Cooling-Water Circuit, by H. G. Moller, G. Masthoff.
GERMAN, per, Mitt Verein Grosskesselbetrieb, No 49, 1969, pp 44-50.
NLL Ref: 9022.401 (746/184)

The Chronoamperometric Investigation of Metallic Monolayers, by E. Schmidt, H. R. Gygax, 34 pp.
GERMAN, per, Zeitschrift Elektrochem, Vol 12, 1966, pp 300-319.
NAV/NIC/Tran-2976-70

Energy Distribution in the Beam of an Electron Gun With a Single-Crystal Spherical Cathode. A: Influences in the Acceleration Regions, by K. J. Hansen. 20 pp.
GERMAN, per, Zeit. Naturforsch. Vol 24A, Feb. 1969, pp 214-225.
NASA TT-F-12,559

Scientific
Electronics & Electrical Engineering
(Contd)

Official Cites Need for ADP System Designers, by Jozef Sniecinski, 10 pp.
POLISH, per, Maszyny Matematyczne, Warsaw, Dec 1969, pp 1-4.
JPRS 49905

Energy Conversion (Non-Propulsive)

Application of the Pure Flexion of Crystal Plates in Crystal Holders for Focussing X-Ray Spectrographs, by A. B. Gilvarg, 5 pp.
RUSSIAN, per, Dokl Akad Nauk SSSR, Vol 77, 1950, pp 489-491.
AEC/NP-Tr-1852

Precision-Type Two Phase Infrared Frequency Generator, by S. A. Kravchenko, 9 pp.
RUSSIAN, per, Izmeritel'naya Tekhnika, No 9, 1966, pp 61-64.
Dept of Navy NIC Trans 2982

Construction of Electric Power Station at Kirshi, by V. Ambrazhevich, 5 pp.
RUSSIAN, np, Leningradskaya pravda, Leningrad, 27 Dec 1969, p 1.
JPRS 49850

Controlled Fusion Electric Generator, by Augier Montgremier, 7 pp.
FRENCH, Patent No 1,599,596.
AEC/NP-Tr-1853

The Present State of Development in the Field of Primary Batteries and Accumulators, by P. Ruettschl.
GERMAN, per, Bulletin Schweizerischer Elektrotechnischer Verein, Vol 50, No 10, 1967, pp 436-440.
NTC-69-15772-10C

Contribution to the Development of Underground Hydroelectric Power Stations, by H. Imethl, H. Frankhauser.
GERMAN, per, Wasser und Energiewirtschaft, Vol 59, No 8-9, 1967, pp 345-356.
NTC-69-16463-10B

Method for Manufacturing Solid Electrolyte Capacitors, by N. Hasegawa.
JAPANESE, Patent Publication SHO 44-6 103.
NTC-69-16033-10C

Electrolyte for Electrolytic Capacitor, by
S. Hara.
JAPANESE, Patent Publication SHO 44-6 107.
NTC-69-10032-100

Activities of Energetics Institute Reviewed,
by Ramus Radulet, 11 pp.
ROMANIAN, per, Studii si Cercetari de Energetica
si Electrotehnica, Bucharest, Vol 19, No 4, 1969,
pp 675-684.
JPRS 49383

Role of Energetics Institute in Electric Power
Systems Described, by M. Marinescu, E. Arie,
7 pp.
ROMANIAN, per, Studii si Cercetari de Energetica
si Electrotehnica, Bucharest, Vol 19, No 4, 1969,
pp 691-696.
JPRS 49883

Role of Energetics Institute in Thermoenergetics
Described, by C. A. Vasilescu, V. Pimsner, 8 pp.
ROMANIAN, per, Studii si Cercetari de Energetica
si Electrotehnica, Bucharest, Vol 19, No 4, 1969,
pp 697-703.
JPRS 49883

Materials

An Evaluation of the Desulphurising Ability of
Industrial Fluxes Used for Electro Slag
Remelting, by Moldavskii, et al.,
RUSSIAN, per, A.N. Inst. Met. Baikov, F.K. Osnovy
Proizv. Stali, 1967, pp 251-255
*BISI 7936

On the Surface of Interaction During Electroslag
Remelting, by M.M. Zlyuev and Yu. M. Mironov,
RUSSIAN, per, A.N. Inst. Met. Baikov, F. K. Osnovy
Proizv Stali, 1967, pp 256-260
*BISI 7935

Elastic Constants of Oriented Fiberglass at
Raised Temperatures, by D. V. Zambakhidze, 10 pp.
RUSSIAN, per, AN GRUZSSR. Soobshcheniya, Vol 44,
No 1, 1966, pp 173-180.
AIR/FTD/MT-24-174-69

Chemisorption of Propylene on Copper Oxides
Studied by Infrared Spectroscopy, by
K. P. Zhdanova, A. A. Filippova, et al. 8 pp.
RUSSIAN, per, AN SSSR. Institut Khimicheskoy
Fiziki. Problemy Kinetiki i Kataliza, No 12,
1968, pp 211-215.
AIR/FTD/MT-24-177-69

The Behaviour of Boreen and Cerium During the Melting
of Steel and Their Influence on Some Properties
of Stainless Steel, by E. I. Moshkevich, et al,
RUSSIAN, per, Akad. Nauk SSSR Inst. Met. A.A. Baikov
Fiz. Khim. Osnovy Proizv. Stali, 1967, pp 189-191,
BISI 7570

Some Questions of Technology in the Production
of Large-Dimension Forgings From Alloy V93, by
F. V. Tulyankin. 20 pp.
RUSSIAN, bk, AN SSSR. Institut Metallurgii.
Legkiye Splavy i Metody ikh Obrabotki, 1968,
pp 79-90.
AIR/FTD/MT-24-231-69

Investigation of the Mechanical Properties of
Foil Made From Aluminum And Certain of its
Binary Alloys, by M. Ye. Drita, Ye. S. Kadaner,
et al. 12 pp.
RUSSIAN, bk, AN SSSR. Institut Metallurgii.
Legkiye Splavy i Metody ikh Obrabotki, 1968,
pp 114-121.
AIR/FTD/MT-24-231-69

Economics and Regions of Possible Application
of Cold Pressing of Aluminum-Based Alloys, by
I. L. Perlin, L. Kh. Raytbarg. 11 pp.
RUSSIAN, bk, AN SSSR. Institut Metallurgii.
Legkiye Splavy i Metody ikh Obrabotki, 1968,
pp 156-162.
AIR/FTD/MT-24-231-69

Effect of Short-term Heating After Deformation
During Thermomechanical Treatment on Properties
of Alloy VT15 and its Welded Joints, by
G. Ye. Kainova, M. Kh. Shorshorov. 8 pp.
RUSSIAN, bk, AN SSSR. Institut Metallurgii.
Legkiye Splavy i Metody ikh Obrabotki, 1968,
pp 212-225.
AIR/FTD/MT-24-231-69

Effect of Plastic Deformation and Annealing of
Damping of Ultrasonics in Magnesium and Magnesium
Alloys With Neodymium in the Megahertz Range of
Frequencies, by M. Ye. Drita, L. L. Rokhlin,
et al. 9 pp.
RUSSIAN, bk, AN SSSR. Institut Metallurgii.
Legkiye Splavy i Metody ikh Obrabotki, 1968,
pp 225-230.
AIR/FTD/MT-24-231-69

Theoretical Calculation of Damping of Ultrasonics in Magnesium and Alloys Based on it, by L. L. Rokhlin. 23 pp.
RUSSIAN, bk, AN SSSR, Institut Metallurgii. Legkiye Splavy i Metody ikh Obrabotki, 1968, pp 230-232.
AIR/FTD/MT-24-231-69

Damping of Ultrasonics in Alloys of Mg-Cd and Mg-Zn Systems at Frequencies of 10 and 20 MHz, by L. L. Zusman. 4 pp.
RUSSIAN, bk, AN SSSR, Institut Metallurgii. Legkiye Splavy i Metody ikh Obrabotki, 1968, pp 237-247.
AIR/FTD/MT-24-231-69

Garnissage (Lined Crucible) Melting of Titanium, by S. G. Glazunov, I. A. Zhikharev, et al. 17 pp.
RUSSIAN, bk, AN SSSR, Institut Metallurgii. Legkiye Splavy i Metody ikh Obrabotki, 1968, pp 247-254.
AIR/FTD/MT-24-231-69

Features of the Technology of Production of Ingots and Semi-finished Products from Corrosion-Resistant Titanium Alloys of Type 4201, by N. F. Anoshkin, Ye. I. Oginskaya. 14 pp.
RUSSIAN, bk, AN SSSR, Institut Metallurgii. Legkiye Splavy i Metody ikh Obrabotki, 1968, pp 254-261.
AIR/FTD/MT-24-231-69

Investigation of Diffusion Mobility of Nickel in β -Phase of Titanium and its Alloys, by S. Z. Bokshtein, T. A. Yemel'yanova, et al. 12 pp.
RUSSIAN, bk, AN SSSR, Institut Metallurgii. Legkiye Splavy i Metody ikh Obrabotki, 1968, pp 261-267.
AIR/FTD/MT-24-231-69

Nonuniform Beta-Phase Decomposition in Titanium Alloys VT15, by I. I. Novikov, O. V. Kasparova, et al. 11 pp.
RUSSIAN, bk, AN SSSR, Institut Metallurgii. Legkiye Splavy i Metody ikh Obrabotki, 1968, pp 268-277.
AIR/FTD/MT-24-231-69

Characteristics of Production of Thermally Hardenable Titanium Alloys, by I. N. Kaganovich, Ye. D. Igumenshchev, et al. 15 pp.
RUSSIAN, bk, AN SSSR, Institut Metallurgii. Legkiye Splavy i Metody ikh Obrabotki, 1968, pp 282-286.
AIR/FTD/MT-24-231-69

New Trends in the Planning and Construction of Modern Rolling Mills, by P. I. Polukhin, I. N. Potatov, et al. 12 pp.
RUSSIAN, bk, AN SSSR, Institut Metallurgii. Legkiye Splavy i Metody ikh Obrabotki, 1968, pp 286-293.
AIR/FTD/MT-24-231-69

Physicochemical Investigation of the Alloys in the System Niobium-Tungsten-Molybdenum-Chromium, by D. I. Prokov'yev, I. V. Grum-Grzhimaylo. 7 pp.
RUSSIAN, rpt, AN SSSR, Institut Metallurgii. Svoistva i Primeneniye Zharoprochnykh Splavov, 1966, pp 128-131.
AIR/FTD/MT-23-272-68

Economically Alloyed Heat-Resistant Alloys. EP404 and EP454, by R. F. Khamalakh, I. A. Krasnova, et al. 6 pp.
RUSSIAN, rpt, AN SSSR, Institut Metallurgii. Svoistva i Primeneniye Zharoprochnykh Splavov, 1966, pp 205-208.
AIR/FTD/MT-23-272-68

Method of Testing Radiation Wear Resistance of Polymer Coatings Applied by the Rotaprint Method, by Ye. A. Dukhovskoy, A. A. Silin. 5 pp.
RUSSIAN, rpt, AN SSSR, Nauchnyy Sovet po Treniyu i Smazkam. Nauchnyye Printsipy i Novyye Metody Ispytaniy Materialov Dlya Uzlov Treniya, 1968, pp 91-94.
AIR/FTD/MT-24-163-69

Method for Investigation of Energy Losses in Dry Friction Joints with Rotaprint (Rotary) Lubrication, by Yu. N. Drozdov, V. G. Pavlov. 6 pp.
RUSSIAN, rpt, AN SSSR, Nauchnyy Sovet po Treniyu i Smazkam. Nauchnyye Printsipy i Novyye Metody Ispytaniy Materialov dlya Izlov Treniya, 1968, pp 133-136.
AIR/FTD/MT-23-376-69

Formula for Calculating the Viscosity of Petroleum Oils at Low Temperatures, by Sh. S. Gadzhiyev. 5 pp.
RUSSIAN, per, Azer Neftyanoye Khozy, Vol 45, No 9, 1966, pp 39-40.
AIR/FTD/MT-23-544-68

Chemiluminescent Method for Studying the Thermal Stability of Motor Oils With Additives, by F. G. Suleymanova, G. G. Gurylev. 6 pp.
RUSSIAN, per, Azerbaydzhanskoye Neftyanoye Khozyaystvo, Vol 47, No 3, 1968, pp 42-43.
AIR/FTD/MT-23-117-69

Corrosion of Carbon Steel in Acetic Acid and an Electrochemical Method for Protecting the Steel, by A. A. Farkhadov, A. M. Balyan, et al. 8 pp. RUSSIAN, rpt, Bor'ba Korroziyey v Khimicheskoy i Neftepetrokharabatyvayushchey Promyshlennosti, 1967, No 1, pp 86-91.

AIR/FTD/MT-23-427-69

Investigation of the Formation of Titanium Aluminide Ti_3Al From a Solid Solution by the Modulus of Elasticity Method, by I. I. Kornilov, S. G. Fedotov, et al. 6 pp. RUSSIAN, rpt, Diffuzionnyye Protsessy v Metallakh, 1968, pp 110-113.

AIR/FTD/MT-24-218-69

The Mechanism of Joint Formation in Solid-State Welding of Aluminum Oxide Ceramics with Niobium, by Ye. S. Karakozov, A. S. Kotelkin. RUSSIAN, per, Fizika i Khimiya Obrabotki Materialov, No 3, 1968, pp 123-129. Dept of Navy NRL 1197

Electrodeposition of Aluminum and Aluminum Alloys with Simultaneous Hydrogen Evolution, by V. Gromov, E. Ponomarev. RUSSIAN, per, Izv Ak Nauk Latv SSR, Khim., 1967, No 1, pp 3-10. AIR-5289-111

Polarization E.M.F. and Activity of Aluminum in the Electrolysis of Cryolite-alumina Metals by A. V. Vakhobov, A. I. Belyayev. RUSSIAN, per, Izv Ak Nauk SSSR, Metall., No 4, 1967, pp 64-72. ATS-RJ-5273

An Investigation of the Mathematical Model of Polling Ingots on a Blooming Mill, by E. G. Patruncov. RUSSIAN, per, Izv VUZ Chern Met., No 3, 1968. PISI 7333

On the Rational Distribution of Draughts Among the Passes During Rolling on Reversing Mills, by E. I. Bakov. RUSSIAN, per, Izv. VUZ Chern. Met., No. 4, pp 76-82. PISI 7337

Structure of Plastic Diffusion Layers when Chromizing Steel from a Sublimed Phase, by E. P. Ponomarenko, et al., RUSSIAN, per, Izv. VUZ Chern. Met., No. 10, 1969, pp 93-97. *HB 8041

Physico-mechanical Properties of Collagen Fibers, by I. I. Mikayelyan, V. A. Katin. RUSSIAN, per, Izv VUZ Tekhn Legkoy Prom., No 1, 1969, pp 42-50. PFC-9-1 521-116

An Investigation of Electrode Processes in a Chloride-Fluoride Electrolyte Containing Lithium Fluoride Additions in the Electrolytic Refining of Aluminum, by M. I. Lavrent'yev. RUSSIAN, per, Izv VUZ Tsvetn Met., Vol 10, No 2, 1967, pp 52-56. ATS-RJ-5274

Equilibrium in the Nickel-Sulfur-oxygen System, by S. K. Chuchmarev. RUSSIAN, per, Izv VUZ Tsvet Met., Vol 10, No 6, 1967, pp 32-37. ATS-RJ-5289

Kinetics of the Sulfidization of Molybdenum with Sulfur Vapors, by A. N. Zelikman. RUSSIAN, per, Izv VUZ Tsvetn Met., Vol 11, No 2, 1968, pp 77-81. ATS-RJ-5284

Studies of the Decomposition of a Super-saturated Solid Solution in Duralumin-type Alloys, by V. G. Davydov, I. I. Novikov. RUSSIAN, per, Izv VUZ Tsvetnaya Metall., No 4, 1967, pp 117-123. PISI 7337-11F

An Automatic System for Measuring the Electrical Conductivity of Solutions Used in the Manufacture of Alumina, by R. B. Popov. RUSSIAN, per, Khim Prom, Inform Nauk-tekhn Zh., No 2, 1964, pp 45-47. ATS-UJ-5271

Investigation of the LIII X-Ray Band of Nickel in Nickel-aluminum Alloys, by R. D. Bartosevich. RUSSIAN, per, Khim Svyaz v Poluprov i Tverd Tela, Inst Fiz Tverd Tel i Poluprov Akad Nauk Belorussk SSR, 1966, pp 127-130. ATS-RJ-5287

Influence of Solid Paraffins on the Structural and Mechanical Properties of Asphalts, by A. G. Kozlovskaya, A. V. Kiselevskiy, RUSSIAN, per, Kolloidnyy Zhurnal, Vol 30, No 6, 1968, pp 922-926.
ATL Ref: 9022.401 (746/134)

Application of Glass Lubricant During Extrusion of Titanium Alloys, by I. V. Anisimova, G. B. Kozlov, et al. 6 pp.
RUSSIAN, per, Kuznechno-Shtampovodnoye Proizvodstvo, No 11, 1968, pp 11-13.
ATR/FTD/MU-24-221-69

Advanced Methods Used in Forging and Pressing, by P. V. Kamnev, 5 pp.
RUSSIAN, per, Kuznechno-Shtampovodnoye Proizvodstvo, Moscow, Nov 1969, pp 1-2.
JPRS 49833

Electrochemical Protection of Metals From High-Intensity Cavitation Effects, by L. N. Ien'kova, A. A. Vysotskiy, et al. 10 pp.
RUSSIAN, per, Leningrad. Tsentral'nyy Nauchno-Issledovatel'skiy Institut Morskogo Flota. Informatsionnyy Sbornik, No 49, 1967, pp 62-71
ATR/FTD/MT-25-266-69

Characteristics of Recrystallization of Nickel-Base Alloys, by B. B. Diodidov, V. G. Rozenberg, et al. 5 pp.
RUSSIAN, per, Moscow. Voennoy Metallurgicheskoy Institut. Informatsionnyy Sbornik, No 6, 1968, pp 248-251.
ATR/FTD/MT-23-549-69

The Effect of Carbon on the Electrical Conductivity of Cryolite-alumina Melts, by M. M. Vetyukov.
RUSSIAN, per, Nauchn Dokl Vysshey Shkoly, Met, No 1, 1958, pp 247-251.
ATS-RJ-5272

Effects of Prolonged Isothermal Treatment on the Properties of ZrO Sub 2 Refractory Material, by A. G. Karaulov. 13 pp.
RUSSIAN, per, Ogneupor. y, No 9, 1968, pp 45-51.
NASA TT F-12,575

Polymers and Plastics. Continuous Condensation of Phenol with Formaldehyde Catalyzed by a Rank Correlation Method, by I. S. Volenak.
RUSSIAN, per, Plasticheskiye Massy, No 2, 1968, pp 10-12.
ATL Ref: 9022.401 (746/134)

Physical Properties of Carbonyl Nickel Powders and Their Influence on Technological Characteristics, by A. N. Verblowskiy.
RUSSIAN, per, Poroshkovaya Metallurgiya, Vol 9, No 1, 1969, pp 6-12.
ATL Ref: 9022.401 (746/134)

Homogeneity of Electrolytic Iron-Nickel Powders, by L. D. Konchakovskaya, V. V. Shorokhod.
RUSSIAN, per, Poroshkovaya Metallurgiya, Vol 9, No 1, 1969, pp 25-28.
ATL Ref: 9022.401 (746/132)

Effect of Low-Temperature Annealing on the Properties of Nickel Powders. Part 1, by I. F. Fedorchenko, I. P. Arutyunyan.
RUSSIAN, per, Poroshkovaya Metallurgiya, Vol 9, No 1, 1969, pp 29-33.
ATL Ref: 9022.401 (746/135)

Solubility of Metal Sulfates at Elevated Temperatures, by V. I. Goryachkin, S. I. Sobol.
RUSSIAN, per, Sbornik Nauchn Tr Gos Nauchn-Issled Inst Tsvetn Metal, No 23, 1965, pp 252-262.
ATS-RJ-5256

Thermomechanical Treatment of Metal and Alloys. Volume I. Thermomechanical Treatment of Alloys, by M. S. Bernshteyn.
RUSSIAN, bk, Termomekhanicheskaya Obrabotka Metallov. Termomekhanicheskaya Obrabotka Splavov, 1968, pp 294-596.
*FSTC/MT-23-788-70
*ACSI J-8042

Deformation and Fracture of Titanium Alloys. Part 1. Deformation of Heat-Treated Titanium Alloys, by A. G. Yeliseyev, G. B. Galkarov.
RUSSIAN, per, Trudy Aviats. Tekhn. Inst., No 1, 1968, pp 170-182.
ATL Ref: 9022.401 (746/134)

On the Contact Areas Between Metal and Rolls and Forces Acting During the Rolling of Beams in Common and Universal Roll Passes, by V. A. Teryaev and Yu. V. Pavlovich,
RUSSIAN, per, Trudy Inst. Chernoi Met., Vol 29, 1969, pp 140-154,
*BISI 50.

Use of a Coordinate Net in the Investigation of the Process of Extrusion of Titanium Alloys which Exhibit Anisotropy, by Yu. M. Aryshenskiy, I. I. Kaluzhskiy, et al.

RUSSIAN, per, Trudy Kafedry Proizvodstva Metal'nykh Apparatov, Aviatsionnyy Institut, No 20 1965, pp 61-68

AIR/FTD/INT-23-400-69

A Study of the Crystallization of Titanium Dioxide in Enamel, by V. V. Vargin.

RUSSIAN, per, Trudy Leningrad Tekhnol Inst im. Lenzoveta, No 34, 1955, pp 36-44.

ATS-RJ-5297

The Problem of the Chemical Resistance of Titania Enamels, by V. V. Vargin.

RUSSIAN, per, Trudy Leningrad Tekhnol Inst im. Lenzoveta, No 34, 1955, pp 45-47.

ATS-RJ-5295

Geometrical and Thermomechanical Parameters of the Deformation of Some Titanium Alloys, by A. I. Terlanov, G. S. Gasharov.

RUSSIAN, per, Trudy Tekhnol Inst im. Lenzoveta, No 34, 1955, pp 48-50.

ATS-RJ-5296

Electrolytic Refining of Coppers with Intermittent Superimposition of Alternating Current, by L. A. Kryuchkov.

RUSSIAN, per, Trudy Ural Nauch-Issled Proekt Inst Mednoy Prom, No 6, 1965, pp 300-301.

ATS-RJ-5255

Forms of Copper Loss in Slags, by I. A. Montil'o, RUSSIAN, per, Trudy Ural Nauch-Issled Proekt Inst Mednoy Prom, Vol 10, 1967, pp 228-234.

ATS-RJ-5282

Potentiometric Method for Determining Base Numbers of Additives and Oils Containing Additives, by A. F. Lyashenko, V. P. Muzychenko. 7 pp.

RUSSIAN, per, Trudy Moscow Vses Nauch-Issled Inst po Pererabotke Nefti, No 10, 1967, pp 154-159.

AIR/FTD/INT-23-277-69

Method for Thermographic Examination of Lubricating Oil Antiseizing Additive Stability and Reactions with Metals, by I. Ye. Vinogradova, R. Kh. Khalikov. 13 pp.

RUSSIAN, per, Trudy Moscow Vses Nauch-Issled Inst po Pererabotke Nefti, No 10, 1967, pp 180-190.

AIR/FTD/INT-23-277-69

Radio Indicator Method for Examining the Chemical Activity of Antiseizing Additives at 200-600°C in the Oil-metal Contact Zone, by Yu. S. Zaslavskiy, G. I. Shor. 9 pp.

RUSSIAN, per, Trudy Moscow Vses Nauch-Issled Inst po Pererabotke Nefti, No 10, 1967, pp 191-198.

AIR/FTD/INT-23-277-69

Radio Indicator Method of Examining the Reaction Mechanism of Organomolybdenum Oil Additives, by Yu. S. Zaslavskiy, G. I. Shor. 8 pp.

RUSSIAN, per, Trudy Moscow Vses Nauch-Issled Inst po Pererabotke Nefti, No 10, 1967, pp 199-205.

AIR/FTD/INT-23-277-69

Application of Solid Lubricant Material to Friction Surfaces, by L. N. Sentyurkhina, Z. S. Rubtsova. 11 pp.

RUSSIAN, per, Trudy Moscow Vses Nauch-Issled Inst po Pererabotke Nefti, No 10, 1967, pp 299-308.

AIR/FTD/INT-23-277-69

Apparatus and Method for Comparative Evaluation of Wear on Solid Lubricant Surfaces, by K. I. Klimov, L. F. Rudakova. 6 pp.

RUSSIAN, per, Trudy Moscow Vses Nauch-Issled Inst po Pererabotke Nefti, No 10, 1967, pp 309-313.

AIR/FTD/INT-23-277-69

Evaluation of Wear-ability and Antifriction Properties of Solid Lubricant Coatings on the "MI" Machine, by V. A. Listov, V. A. Markov. 9 pp.

RUSSIAN, per, Trudy Moscow Vses Nauch-Issled Inst po Pererabotke Nefti, No 10, 1967, pp 314-321.

AIR/FTD/INT-23-277-69

Evaluation of the Stability of Oils and Greases in the Rolling Friction Zone, by K. I. Klimov. 9 pp.

RUSSIAN, per, Trudy Moscow Vses Nauch-Issled Inst po Pererabotke Nefti, No 10, 1967, pp 322-328.

AIR/FTD/INT-23-277-69

Phase Diagram of the Niobium-Tin System, by V. N. Svednikov, V. M. Pan, et al. 9 pp.

RUSSIAN, rpt, Trudy Soveshchaniye po Metallovedeniyu, Fiziko-khimii i Metallofizike Sverkhprovodnikov, 2d and 3d, 1966, 1967, pp 152-157.

AIR/FTD/INT-24-178-69

Scientific
Materials (Contd)

Artificial Cooling of the Vertical-spike Soderberg-type Aluminum Reduction Cell Anode, by M. A. Korobov.
RUSSIAN, per, Tsvet Met, Vol 41, No 6, 1968, pp 52-55.
ATS-RJ-5278

The Production of Anode Nickel in Oxygen Converters, by S. Ye. Vaisburd.
RUSSIAN, per, Tsvet Met, Vol 41, No 12, 1968, pp 32-36.
ATS-RJ-5286

Automation of Coke Calcining in Tubular Rotary Furnace, by V. P. Topcharev, A. L. Rukovskiy.
RUSSIAN, per, Tsvet Met, Vol 42, No 8, 1969, pp 58-62.
ATS-RJ-5280

Solubility of Alumina in Cryolite, by I. S. Kachanovskaya.
RUSSIAN, per, Tsvet Met, Vol 42, No 9, 1969, pp 64-66.
ATS-RJ-5270

Krasnovodsk Refinery Repeats Shchekino Experiment, by G. Vasil'yeva, 7 pp.
RUSSIAN, np, Turkmen'skaya Iskra, Ashkhabad, 8 Jan 1970, p 2.
JPRS 49850

Investigation of the Vapor Permeability of Thermal Insulation Materials, by D. M. Dudnik. 6 pp.
RUSSIAN, per, Ukraine. Ministerstvo Vyshego i Srednego Spetsial'nogo Obrazovaniya. Kholodil'naya Tekhnika i Tekhnologiya, No 4, 1967, pp 45-49.
AIR/FTD/IT-23-541-68

The Mechanism of Light Aging and Light Stabilization of Polymers, by Yu. A. Yershov, S. I. Kusina.
RUSSIAN, per, Uspekhi Khimiy, Vol 38, No 2, 1969, pp 289-320.
ITC-69-16385-111

The Effect of Structural Transformations on the Relaxation Stability of Austenitic Steels and Alloys, by A. M. Borzdyka. 8 pp.
RUSSIAN, rpt, Vsesoyuznoye Nauchno-Tekhnicheskoye Soveshchaniye po Voprosam Prochnosti Materialov i Konstruktivnykh Elementov pri Vysokikh Temperaturakh 4th, 1967, pp 251-257.
AIR/FTD/MT-24-188-69

Scientific
Materials (Contd)

Reactions of Granular Copolymers of Vinyltoluene with Divinylbenzene and Other Cross-linking Agents, by A. B. Davankov, O. A. Vitol.
RUSSIAN, per, Vysok Soed, Vol 3, 1961, pp 1566-1571.
ITC-69-16362-111

Study of the Crystallization Process of Oriented Amorphous Polyethyleneterephthalate, by L. G. Kazaryan, D. Ya. Tsvankin.
RUSSIAN, per, Vysok Soed, Vol 9A, No 2, 1967, pp 377-384.
ITC-69-16140-111

Investigation of the Thermal Oxidation Degradation of Polytrifluoroethylene IR-Spectroscopy, by Ts. S. Dunayevskaya, L. I. Tarutina. 5 pp.
RUSSIAN, per, Vysokomolekularnyye Soyedineniya. Seriya B. Kratkiye Soobshcheniya, Vol 10, No 11, pp 868-869.
AIR/FTD/IT-23-431-69

The Mechanism of the Formation of Anodic Oxide Films on Aluminum, by A. V. Shreider.
RUSSIAN, per, Zh Prikl Khim, Vol 39, No 12, 1966, pp 2697-2705.
ITC-69-16400-11F

Progress in the Creation of Composite Materials From Oxides and Metals, by P. P. Budnikov. 19 pp.
RUSSIAN, per, Zhur. Vses. Khim. Obshch, Vol 12, No 2, 1968, pp 122-129.
NASA TT-F-12,654

A Lubricant for Deep Drawing of Machine Parts, by N. I. Mal'nikova, M. I. Nenin. 2 pp.
RUSSIAN, Patent No. 186,064, 26 Jan 1965, 1966, p 1.
AIR/FTD/IT-23-217-69

Synthetic Oil, by Ye. B. Zel'vyanskaya, L. A. Sadovnikova, 4 pp.
RUSSIAN, Patent No. 215,376, 2 Dec 1966, 1968, pp 1-2.
AIR/FTD/IT-23-221-69

Procedure for Obtaining Lithium-Calcium Plastic Lubricant, by G. I. Svishevskaya, L. N. Sterkhova, 3 pp.
RUSSIAN, Patent No. 216,884, 20 Mar 1967, 1968, pp 1-2.
AIR/FTD/IT-23-220-69

Preserving Lubricant, by T. I. Ambartsumyan, L. L. Baybakova, 3 pp.
RUSSIAN, Patent No. 218,362, 14 Apr 1967, 1968, pp 1-2.
AIR/FTD/HT-23-219-69

Phosphor with Red Luminescence for Vacuum Devices, by A. V. Moskvina, Z. I. Klabukova, 2 pp.
RUSSIAN, Patent No. 222,565, 11 July 1966, 1968.
AIR/FTD/HT-23-504-69

Pre-Treatment of Steel Sheet Prior to Enamelling, by V. E. Gorbatenko and G. V. Berdova,
RUSSIAN, Patent 234,822, 26 August 1969,
BISI 7933

Effect of Temperature on the Mechanical Properties of Unidirectional Fiberglass Reinforced Plastic, by Y. V. Bilida. 5 pp.
UKRAINIAN, per, Dopovidi. AN UKRPSR. Seriya A Fizyko-Tekhnichni ta Matematychni Nauky, No 3, 1967, pp 259-262.
AIR/FTD/HT-23-1211-68

On the Problem of Quartz Ceramic Molding by the Slip Casting Method, by P. P. Budnikov, Yu. Ye. Pivinsky. 5 pp.
UKRAINIAN, per, Dopovidi. AN UKRPSR. Seriya A Fizyko-Tekhnichni ta Matematychni Nauky, Seriya A, No 8, 1967, pp 732-735.
AIR/FTD/HT-23-1210-68

Investigations of a Molybdenum-Nickel-Silicon (Mo-Ni-Si) System, by R. V. Skolozdra, Ye. I. Gladishevs'kiy. 6 pp.
UKRAINIAN, per, Lvov. Universitet. Visnyk. Seriya Khimichna, No 9, 1967, pp 21-24.
AIR/FTD/HT-23-522-69

A Study of the Thermal Dissociation of Molybdenum Carbonyl. 2. The Effect of Temperature on the Carbon Content of the Molybdenum and Its Micro-hardness, by A. A. Rozen.
UKRAINIAN, per, Ukr Khim Zh, Vol 26, 1960, pp 151-157.
ATS-UJ-5285

Process for the Manufacture of Threads, Fibers, Brush Bristles, Tapes and the Like, Endowed with a High Elasticity, from High Linear Polymers.
BELGIAN, Patent 517,351.
NTC-69-10405-11E

Process for Preparation of Stabilized Acrylonitrile Polymer Solutions, by C. Saeling, E. Koss.
BELGIAN, Patent 619,097.
NTC-69-10401-111

A Method for Obtaining Non-woven Fabrics and Similar Products from Viscose Rayon Fibers.
BELGIAN, Patent 714,232.
NTC-69-10025-11E

Self-Stabilised Equipment for the Aerometric Assessment of Blast-Furnace Coke Quality, by I. Janousek,
CZECH, per. Hutník, Vol 18, No 12, 1968, pp 537-539
BISI 7435

Evaluating Roll Pressures and Torsion Moments in Hot Rolling with Grooved Rolls of Simple Shapes, by J. Jedlicka,
CZECH, per. Hutník, Vol 19, No. 1, 1969
BISI 7440

Major Technically and Economical Operating Data of Main Divisions in Iron and Steel Plant in Trinec, by J. Sunkala,
CZECH, per. Hutník, Vol 19, No. 8, 1969, pp 282-286,
*BISI 7947

Reconstructing Blast Furnace Division of Iron and Steel Plant in Trinec, by I. Kudelka and J. Radl,
CZECH, per. Hutník, Vol 19, No. 8, 1969, pp 287-289,
*BISI 7948

Improved Oxygen Blowing Technique in Open-Hearth Process, by K. Riha,
CZECH, per. Hutník, Vol 19, No. 8, 1969, pp 290-295
*BISI 7949

Teeming Rail Steel into Ingot Moulds Provided with Insulation Inserts, by F. Cechura and E. Kaczmarczyk,
CZECH, per. Hutník, Vol 19, No. 8, 1969, pp 296-302
*BISI 7950

Vacuum Treatment of Steel at Iron and Steel Plant in Trinec, by J. Lang, CZECH, per. Hutník, Vol 19, No. 8, 1969, pp 302-307
*BISI 7951

Manufacturing High-Grade Steels in 230-t MB Furnaces and their Teeming into Large Ingots at Iron and Steel Plant in Trinec, by J. Uricar and P. Pohl, CZECH, per. Hutník, Vol 19, No. 8, 1969, pp 307-311
*BISI 7952

New Reinforcing Bar Steel Grade 10 607, by F. Cechura, CZECH, per. Hutník, Vol 19, No. 8, 1969, pp 312-315
*BISI 7953

Central Control of Seaking Pit Department in Blooming Mill 11 at Iron and Steel Plant in Trinec, by O. Obdržalek, et al., CZECH, per. Hutník, Vol 19, No. 8, 1969, pp 315-320
*BISI 7954

Natural and Artificial Ageing of Rails, by J. Hons, CZECH, per. Hutník, Vol 19, No. 8, 1969, pp 322-325
*BISI 7955

Operation Test of New Type Oil Emulsions for Cold Strip Rolling, by V. Dedek, et al., CZECH, per. HUTN. Listy, Vol. 19, No. 2, 1964, pp 102-108
BISI 7880

The Heat Losses of an Ingot During Its Solidification by F. Havlicek. 16 pp. CZECH, per. Hutnicke Listy, Vol 23, No 2, 1968, pp 87-92.
AIR/FTD/HT-23-485-69

The Influence of the Degree of Deformation in the Production of Semi-Finished Shapes on the Quality of Roller-Bearing Steels, by J. Jech, CZECH, per. Hutn. Listy, Vol 23, No. 11, 1968, BISI 7307

Note on Optimum Method in Treatment of Return Sinter, by J. Hancle and R. Scholz, CZECH, per. Hutn. Listy., Vol 24, No 8, 1969, pp 553-557,
*BISI 8075

Rapid Reheating of High Carbon and Alloy Steel Billets, by M. Redr, et al., CZECH, per. Hutn. Listy., Vol 24, No 8, 1969, pp 571-580,
*BISI 8076

Role of Rare-Earth Elements in Spring Carbon Steel Production, by F. Benes, CZECH, per. Hutn. Listy, No. 8, 1969, pp 561-570
*BISI 7918

Experimental Teeming of Electric Steel Through Cross-Shaped Nozzles, by V. Maroszczyk and K. Polach, CZECH, per. Hutn. Listy., Vol 24, No 9, 1969, pp 632-634,
*BISI 8077

Corrosion Resistant Austenitic CrNiSteels with very Low Carbon Content, by M. Zezulova and J. Petřmanova, CZECH, per. Hutn. Listy., Vol 24, No 9, 1969, pp 635-640,
*BISI 8078

Effect of Temperature, Chemical Analysis and Structure Conditions on Hot Yields Stress of Steels - II - High-Alloy Mono- and Two-Phase Steels Grades, by M. Zidek, et al., CZECH, per. Hutn. Listy., Vol 24, No 9, 1969, pp 650-670,
*BISI 8080

Heat-Treated Steel Plates with High Yield Point for Weldable Structures, by M. Sicha, CZECH, per. Hutn. Listy., Vol 24, No 9, 1969, pp 657-670,
*BISI 8081

Comparison of the Electroslag and the Vacuum Arc Remelting Process of Alloyed Steels and Alloys, by Z. Buzek and J. Hlineny, CZECH, Paper No 135, International Congress on Electro-Heat, Brighton, May 1968,
*BISI 8108

Inhomogeneity of Plastic Deformation During Static and Dynamic Loading of Mild Steels, by M. Slesar, et al.,
CZECH, per. Kovove Mat., Vol 7, No. 3, 1969, pp 242-253
*BISI 7910

Nonuniformity of Plastic Deformation at Static and Dynamic Load of Mild Steels, by M. Slesar, et al.
CZECH, per. Kovove Mat., Vol 7, No 3, 1969, pp 254-276,
*BISI 8103

Maintenance of Sinter Plant and the Life of its Basic Units, by J. Guzej
CZECH, rpt. Sbornik Prednasek Proneserych na DNT Zavodny Udrzby Zavodu, Nov. 15-16, 1967, pp 54-61
BISI 7304

Effect of Various Coke Grain Size on a Blast Furnace Operation, by Z. Radominski.
CZECH, rpt. Sbornik Prednasek z Konference o Rozvoji Hutnictvi, Nov 22-24, 1968, pp 89-97.
BISI 7079

The Determination of the Activity of Sulphur in Fe-X-S Systems in a Laboratory Electroslag Furnace, by I. Chmelar, et al.,
CZECH, per. Sbornik V. S. B. Ostrave, Vol 14, No 3, 1968, pp 175-181,
*BISI 8061

The Effect of the Method of Deoxidation on the Cleanliness of Vacuum-Arc and Electroslag Remelted Ball-Bearing Steel, by J. Hlineny, et al.,
CZECH, per. Sbornik V. S. B. Ostrave, Vol 14, No 3, 1968, pp 183-194,
*BISI 8062

The Effect of Vacuum-Arc and Electroslag Remelting on the Properties of Alloyed Steels, by Z. Kletecha, et al.,
CZECH, per. Sbornik V. S. B. Ostrave, Vol 14, No 3, 1968, pp 195-209,
*BISI 8063

Using Hollow Electrodes on 30-Ton Electric-Arc Steelmaking Furnace, by P. Kozelsky, et al.,
CZECH, per. Sbornik V. S. B. Ostrave, Vol 14, No 3, 1968, pp 211-216,
*BISI 8064

The Intensification and Economization of Electric Furnace Steelmaking by Means of Auxiliary Burnes, by Z. Buzek, et al.,
CZECH, per. Sbornik V. S. B Ostrave, Vol 14, No 3, 1968, pp 217-223,
*BISI 8065

The Extraction and Depth Deoxidation of Electric-Furnace Steel, by Z. Buzek, et al.,
CZECH, per. Sbornik V. S. B. Ostrave, Vol 14, No 3, 1968, pp 225-234,
*BISI 8066

The Influence of Sulphur Content and of the Way of Deoxidation with Classical and Complex Deoxidizers on the Values of Notch Toughness of Steel Castings, by A. Hutla and Z. Burek,
CZECH, per. Sbornik V. S. B. Ostrave, Vol 14, No 3, 1968, pp 235-241,
*BISI 8067

Economizing Production of Electric Carbon Steel Used for Castings by Means of the Single-slag Technology and Depth Deoxidation with Aluminum, by Z. Buzek, et al.,
CZECH, per. Sbornik V. S. B. Ostrave, Vol 14, No 3, 1968, pp 243-246,
*BISI 8068

The Hetergenity of the Chemical Composition of the Bath During the Production of Stainless Steel in 30-50n Electric Arc Furnaces, by M. Benda, et al.,
CZECH, per. Sbornik V. S. B. Ostrave, Vol 14, No 3, 1968, pp 263-268,
*BISI 8069

The Possibilities of Using Argon and Argon-Oxygen Mixtures During the Production of Stainless Steel, by Z. Buzek, et al.,
CZECH, per. Sbornik V. S. B. Ostrave, Vol 14, No 3, 1968, pp 269-273
*BISI 8070

The Influence of Technological Factors in the Properties of High Mn Content Steel, by F. Kufa,
CZECH, per. Sbornik V. S. B. Ostrave, Vol 14, No 3, 1968, pp 275-283
*BISI 8071

Several Methods of Improving the Quality of Ball-Bearing Steel, by F. Sroka and L. Krol, CZECH, per. Sbornik V. S. B. Ostrave, Vol 14, No 3, 1968, pp 285-290,
*BISI 8072

The Effect of Liquid Steel and Slag on the Corrosion of Teeming-Ladle Refractories, by M. Kepka, CZECH, per. Sbornik V. S. B. Ostrave, Vol 14, No 3, 1968, pp 291-305,
*BISI 8073

The Influence of the Foregoing Deformation Rate on the Deformation and the Strength Properties of the GSN 12 013 Steels, by J. Michel, CZECH, per. Sbornik V. S. T. Kosiciach, No 2, 1968, pp 119-126,
*BISI 8091

New Kinds of High-Speed Steels, by O. Moravek, CZECH, per. Strojirenska vyroba, Vol 16, No 9, 1968, pp 641-
*BISI 8082

New Processes of Continual Heat Galvanizing of Thin Steel Sheets and Possibilities of Their Application, by P. Somsky, CZECH, per. Strojirenska vyroba, Vol 16, No 9, 1968, pp 646-653,
*BISI 8083

Hot Cutting of Rust-Resisting and Heat Resisting Steels, by J. Prosek, CZECH, per. Strojirenska vyroba, Vol 16, No 10, 1968, pp 723-732,
*BISI 8084

Process Effectiveness of Steel Sheets, by J. Solar, CZECH, per. Strojirenska vyroba, Vol 17, No 1, 1969, pp 36-39,
*BISI 8085

New-Types of High Speed Steels for Cutting Tools, by L. Zeleznik and V. Rocek, CZECH, per. Strojirenska vyroba, Vol 17, No 5, 1969, pp 344-346,
*BISI 8086

Steel Sheet with Heat-Applied Aluminium Plating, by P. Kersch, CZECH, per. Strojirenska vyroba, Vol 17, No 6, 1969, pp 420-425,
*BISI 8087

Production Problems of Hammer Forged and Drop Forged Forgings, by A. Jicha, CZECH, per. Strojirenska vyroba, Vol 17, No 6, 1969, p 430-
*BISI 8088

Heat Treatment of Sintered Steels, by I. Pisch, CZECH, per. Strojirenska vyroba, Vol 17, No 7, 1969, pp 484-488,
*BISI 8089

Development of Equipment for Brittle Fracture Testing by the Double Tension Method, by R. Starek and J. Dokoupil, CZECH, per. Strojirenstvi, Vol 18, No. 12, 1968, pp 886-889
*BISI 7926

Assessment Criteria of Structural Steels from the Aspect of Brittle Fracture, by M. Holzmann and J. Man, CZECH, per. Strojirenstvi, Vol 19, No. 9, 1969, pp 568-579
*BISI 7911

Steels with Increased Resistance to Atmospheric Corrosion, by J. Baroch, CZECH, per. Strojirenstvi, Vol 19, No. 9, 1969, pp 598
*BISI 7912

Heat Generated by Drilling Can Be Utilized for Softening Hard Steel, by J. Hrubec, CZECH, per. Strojirenstvi, Vol 19, No 10, 1969, pp 640-643,
*BISI 8074

Prehardened Mixtures, by A. Hrbek and J. Svoboda, CZECH, per. Technicke Zpravy, Vol 4, No 9, 1963
BISI 7262

Cooling Sinter in Czech Sinter Plants, by Z. Barta, CZECH, per. Techn. Zpravy VZKG Istrave, Vol 2, 1968, pp 49-58,
BISI 7300

Development and Application of the Non-Carburizing Synthetic Slag for Bottom-Bouring of Steel Ingots, by L. Smrha, J. Martinek and J. Brabrik,
CZECH, rpt. V.Z.K.O., 1968, pp 68-69
*BISI 619

High-Carbon Steel Rail Development Discussed, by Jiri Vyslouzil, 12 pp.
CZECH, per, Zeleznicni Doprava a Technika, Prague, No 9, 1969, pp 270-272.
JPRS 49851

Welding Conditions and Heat Treatment in Electro-Slag Welding of Low Carbon, Low-Alloy Pressure Vessel Steel 100mm Thick, by, E. Malinowska,
SLOVAK, per, Zvaranie, Vol 17, No. 10, 1968, pp 293-299
BISI 7305

Methods of Finishing Cellulose Material, by B. Fochner.
CZECH, Patent 110,140.
NTC-69-16399-11E

Method of Oxidation of Cu-Cl Concentrate and Cathode Sludge I and II During the Electrolytic Production of Uranium, by M. Hett.
CZECH, Patent 111,000.
NTC-69-16399-11E

Process for the Preparation of Resin Products with Catalyst.
DUTCH, Patent 69-09 441.
NTC-69-16391-11E

Process for the Production of a Rapidly Dissolving Concentrate of an Anticorrosive Active Agent.
DUTCH, Patent 67-17 364.
NTC-69-16391-11E

Process for Emulsion Polymerization of Vinyl Fluoride.
DUTCH, Patent 69-09 221, 21 Oct 1968.
NTC-69-16392-11E

Process for the Manufacture of Self-adhering Non-woven Textiles and Apparatus for the Practice of the Process.
DUTCH, Patent 69-09 432, 17 Dec 1968.
NTC-69-16391-11E

Sanitary Products.
DUTCH, Patent 68-06 620, 23 Dec 1968.
NTC-69-16397-11E

Process for the Reserving of Fiber Material from Natural Polyamides or Synthetic Materials Dyed with Acid Dyes.
DUTCH, Patent 68-09 336, 7 Jan 1969.
NTC-69-16399-11E

Nonwoven Textile Material from Continuous Filaments.
DUTCH, Patent 68-09 573.
NTC-69-16399-11E

Grafting of Vinyl Monomers Onto Cellulosic Textile Fibers, by L. Neimo, H. Sihtola.
FINISH, per, Paperi ja Puu, Vol 50, No 10, 1968, pp 565-573.
NTC-69-16426-11E

Composite Materials Reinforced by Fibers. The Case of Alumina Wiskers, by P. Grenier.
FRENCH, per, l'Aeronautique et l'Astronautique, No 7, 1968, pp 29-38.
*NASA-TT-F-12,868

Metallurgical Characteristics of Blast Furnace Slags, by R. Jon
FRENCH, per, C.D.S. Circ., No. 10, 1967, pp 2217-2238
BISI 6606

Lining of Mouth with Controllable Diameter, by P. Brochenin
FRENCH, per, C.D.S. Circ., No. 7-8, 1968, pp 1699-1707
BISI 7139

First Practical Results of a Gammascopie in Industrial Use, by J. Pactem, et al.,
FRENCH, per, C. D. S. Circ., No. 4, 1969, pp 1051-1071,
*BISI 8099

Rapid Photometric Determination of Aluminium Using Chromazurol S in Non Alloyed Steels and Iron Ores, by L. Buck,
FRENCH, per, Chim. Anal., Vol 47, Jan. 1965, pp 10-16
BISI 7692

Recent Advances on the Formulation of Hydraulic Refractory Cements and Concretes, by J. Arnold.
FRENCH, per, Chimie et Industrie, Vol 70, No 6, 1953, pp 1081-1085.
NTC-69-16539-11E

Scientific
Materials (Contd)

Study of the Optimized Conditions for Fabrication of Uranium Dioxide Pellets by Pressing, by A. Ledac, 19 pp.
FRENCH, rpt, CEA-DM-1741.
AEC/AERE-Tr-1114

Recent Developments in the Production of Steels for Drop Forging Dies, by R. Imbaud,
FRENCH, per. Formage Trait, Met., No. 6, 1969
pp 35-41
BISI 7858

The Influence of Temperature Variations During Heat Setting Upon the Dyeing Speed of Polyester Fibers, by R. Freytag, J. Blouquin.
FRENCH, per, Inst Textile de France. Bulletin, Vol 22, No 137, 1967, pp 585-594.
NTC-69-16508-11E

Phosphate Production Problematic but Rising, (Africa), 6 pp.
FRENCH, np, La Presse, Tunis, 24-26 Dec 1969, p 2.
JPRS 49761

Direct Reduction of Iron Ore. Process Using Methane Converted by Carbon Dioxide, by I. Tripsa, et al.,
FRENCH, per. Met. Constr. Mecan., Vol 101, April 1969, pp 221-226,
*BISI 7920

The LD Process in Japan, by G. Grenier,
FRENCH, per. Mines Met., May, pp 143-144, 148;
June, pp 173-174, 176, 1969,
*BISI 8094

Determination of Unsaturation of Elastomers, by R. Pautrat.
FRENCH, per, Revue Generale du Caoutchouc, Vol 45, No 6, 1968, pp 739-746.
NTC-69-16389-11J

Electrical Measurements of the Migration Tendencies of Plasticizers, by E. Bouvier, B. Fallou.
FRENCH, per, Revue Generale d'Electricite, Vol 73, No 5, 1964, pp 295-304.
NTC-69-16120-11I

Scientific
Materials (Contd)

Continuous Weighing of Molten Steel in Ladle During the Casting of Ingot - I - Equipment, II - Operational Results, by G. Haler,
FRENCH, per. Rev. Met., Vol 63, No 12, Dec. 1966, pp 1005-1018,
*BISI 8079

Study of Origin of Aluminium Inclusions in Electric Steels, by A. Kohn, et al,
FRENCH, per. Rev. Met., Vol 66, May 1969, pp 325-339
BISI 7687

The Practice of Dynamic Control of Oxygen Conversion, by W. F. Dennis, et al.,
FRENCH, per. Rev. Met., Vol 66, July/Aug 1969, pp 519-526
*BISI 7925

Using Mass Spectrometry for Continuous Gas Analysis in Iron and Steel Production, by G. Heitz and F. Thomas,
FRENCH, per. Rev. Met., Vol 66, No 10, Oct. 1969, pp 641-652,
*BISI 8097

A Phenomenological Study of Creep, by C. Crussard,
FRENCH, per. Rev. Met. Mem. Sci., Vol 66 May 1969, pp 333-346
BISI 7802

Experimental Methods in Research on Surface Impregnation of Leather, by J. L. Gardon, J. A. Lowell.
FRENCH, per, Revue Technique des Industries du Cuir, Vol 60, No 6-7, 1968, pp 210-223.
NTC-69-16390-11G

Study of Contact Phenomena Between Glass and Oxide at a High Temperature by Electric Potential Measurements, by E. Plumet.
FRENCH, per, Silicate Industriels, Vol 19, No 4, 1954, pp 141-153.
NTC-69-16443-11B

Polarization of Refractory Oxides Immersed in Molten Glass, by P. Le Clerc, I. Peyches.
FRENCH, per, Silicate Industriels, Vol 19, No 11, 1954, pp 374-379.
NTC-69-16475-11B

Contribution to the Determination of the Dimensions of Particles in a Ground Mixture, by A. Masson, FRENCH, Silicates Industriels, Vol 33, 1968, July-Aug., pp 217-226
BISI 7040

Substances Such as Films, Fibers, Sheets and Similar Resistant to High Temperatures and Process for Their Manufacture, by I. Wison. FRENCH, Patent 1,364,238.
NTC-69-16318-11E

Improvements in Surface Coatings, by S. J. Fershee, 10 pp.
FRENCH, Patent No. 1,406,882, Oct 6, 1969.
AEC/MLM-Tr-1676

Process for the Removal of Coatings.
FRENCH, Patent 1,417,401.
NTC-69-16342-11K

New Sulfured Plastic Material and Their Preparation.
FRENCH, Patent 1,428,502.
NTC-69-16327-11I

Improved Chromeplating Process.
FRENCH, Patent 1,440,517.
NTC-69-16346-11D

New Sulfohydriyl Resins and Their Applications.
FRENCH, Patent 1,446,975.
NTC-69-16345-11I

Tobacco Smoke Filters Retaining Hydrocyanic Acid.
FRENCH, Patent 1,465,842.
NTC-69-16326-11G

Polymercaptanes with Urethane Bonds.
FRENCH, Patent 1,487,515.
NTC-69-16336-11I

Product for the Stripping of Lacquers, Varnishes, Paints, Base Coats and the Like.
FRENCH, Patent 1,508,661.
NTC-69-16328-11K

Process for Making Metal Coatings Adhere to Polyolefin Foundations, by F. H. Ancker.
FRENCH, Patent 1,515,346.
NTC-69-16311-11F

A Modified Carbohydrate for Smoking Mixtures.
FRENCH, Patent 1,523,686.
NTC-69-16408-11G

Pressure-Sensitive Adhesive.
FRENCH, Patent 1,542,319.
NTC-69-16340-11A

Modern Methods for Testing the Stress Corrosion Behavior of Metals with Examples of Cases of Damage, by W. Steinhäuser, G. Urban.
GERMAN, per, Aluminium, Vol 45, No 3, 1969, pp 156-161.
NTC-69-15800-11F

On the Cavitation Phenomena in Turbulent Mixing Zones Especially on the Boundary of Fast Liquid Jets, by F. C. Roesler
GERMAN, per, Anzeiger Österreich. Akad. Wissensch. Math Klasse, Vol 87, 1950,
BISI 7526

Oxygen Activity in the Iron-Oxygen System and the Possibilities of its Control at Steelmaking Temperatures, by H. Schenck and E. Steinmetz, GERMAN, per, Arch. Eisenh., Vol 38, Dec. 1967, pp 871-873
BISI 7691

Recarburization of Plain Carbon Steel During Oxy-Acetylene Cutting, by J. Krahe and F. Müller
GERMAN, per, Arch. Eisenh., Vol 39, May 1968, pp 347-351
BISI 7808

Effect of High Quenching Rates on the Hardness of Martensitic Structures, by W. Peter and H. Finkler, GERMAN, per, Arch. Eisenh., Vol 39, Aug 1968, pp 617-622
BISI 7141

Structure and Mechanical Properties of a Ferritic-austenitic Steel Containing Approximately 25% Chromium and 4% Nickel, by H. J. Schuller, H. Henneke.
GERMAN, per, Arch Eisenhutt, No 39, 1968, pp 843-848.
NLL Ref: 9022.401 (746-80)

An Improved Specimen Stressing Device for Testing of Steels for Susceptibility to Inter-crystalline Stress Corrosion Using Jones-type Specimens, by W. Hummitzsch, W. Zwintzsch.
GERMAN, per, Arch Eisenhutt, No 39, 1968, pp 849-854.
NLL Ref: 9022.401 (746-81)

Properties of Sintered Steels Produced of Unalloyed and Alloyed Powders Obtained by Water Atomization of Molten Steels, by N. Dautzenberg,
GERMAN, per. Arch. Eisenh., No 40, 1969, pp 351-357
ALL Ref: 9022,401 (746-200)

Determination of the Oxygen Content in Liquid Steel by Neutron Activation in an Oxygen Steel Plant, by M. Lacomble, et al.
GERMAN, per. Arch. Eisenh., Vol 40, May 1969, pp 451-454
BISI 7502

The Effect of the Distribution of Vanadium Carbide Precipitates on the Creep Rupture Strength of Low-Alloy Chromium-Molybdenum-Vanadium Steels, by T. Prnka, et al.,
GERMAN, per. Arch. Eisenh., Vol 40, No 6, June 1969, pp 499-504,
BISI 7635

Effect of Nucleation on the Reduction Rate of Iron Oxides, by W. Morawietz,
GERMAN, per. Arch. Eisenh., Vol 40, July 1969, pp 523-530
*BISI 7931

The Iron Oxide Apatite Constitutional Diagram $\text{Fe-FeO}_x\text{-CaO-P}_2\text{O}_5$, by G. Tromel, et al.,
GERMAN, per. Arch. Eisenh., Vol 40, No 10, Oct. 1969, pp 813-819,
BISI 7914

Calculation of the Coefficient of Heat Transition for the Hot Rolling and Forging Processes, by O. Pawelski,
GERMAN, per. Arch. Eisenh., Vol 40, Oct 1969, pp 821-827
*BISI 7939

Pelletizing of Iron Ore, Worldwide, by W. Pietsch
GERMAN, per. Aufbereitungs-Tech., Vol 9, No 5, 1968, pp 201-214
BISI 7165

Lay-Out of Hydraulic Descaling Plants, by W. Herold,
GERMAN, per. Bander Bleche, Vol 10, No 5, May 1969, pp 279-288,
BISI 7892

Evaluation of Pulsating Stress for the Prevention of Damage to Pipelines and Pressure Vessels, by D. Uebing,
GERMAN, per. Bander Bleche, Vol 10, No 6, June 1969, pp 355-359,
BISI 7906

Manufacture of Tubes for Cold Drawing, by M. Vater and H. Kron,
GERMAN, per. Bander Bleche, Vol 10, Aug 1969, pp 476-489
*BISI 7915

Special Methods for the Manufacture of Large-Diameter Seamless Pipes, by E. Kursetz,
GERMAN, per. Bander Bleche, Vol 10, No 8, Aug. 1969, pp 492-495.
BISI 7783

Effect of Furnace Atmosphere on the Hot Crushing Strength of Various Refractories, by H. E. Schweite and H. Wierich,
GERMAN, per. Ber. Dtsch. Keram. Ges., Vol 45, No. 9 1968
BISI 7050

Electron Microscopic Examination of Needle Iron Ore Oolites in Powder Preparations and Thin Sections, by O. E. Radczewski and P. Schneiderhoehn,
GERMAN, per. Beitr. Miner. Petrogr., Vol 8, 1962, pp 349-353
*BISI 8090

Roller Seam Welding of Strip Galvanised Thin Sheet, by F. Bonner and E. Bettenworth,
GERMAN, per. Blech (Coburg), Vol 16, No. 8, 1969, pp 390-394,
*BISI 7941

Characterization of Carbons and Graphites Through Analysis of the (001) X-Ray Interference, by N. Christu, E. Fitzer, 19 pp.
GERMAN, per. Carbon, No 7, 1969, pp 397-411.
AEC/ORNL-Tr-2209-70

Continuous Manufacture of Phthalates from Phthalic Anhydride and High Boiling Alcohols, by H. Suter,
GERMAN, per. Chemie Ingenieur Technik, Sept 1969,
BISI 7815

Investigations on the Adiabatic Absorption of Hydrogen Chloride, by B. Haase and H. Koch, GERMAN, per. Chemische Technik, Vol 20, Dec 1968, pp 138-152, *ISI 7-10

The Behaviour of Metal Cylinders and Metal Sheets in the Standing Field of a Linear Motor, by H. Kramer and T. Lutzeler, GERMAN, per. ETZ-A., Vol 90, No 21, 1969, pp 549-550, *ISI 8109

Methods of Production and Technological Properties of Sintered Permanent Magnets, by E. Schuler, GERMAN, per. DL Techn Ber, No 8, 1968, pp 147-150, *ISI Ref: 9022.401 (746/120)

Finishing Reactions in Organic Solvents, by H.-D. Goelden, GERMAN, per. Faerber-Zeitung, No 11, 1966, pp 512-516, NTC-69-15940-11K

A Harder Metallurgically Produced Material of High Carbon Content for Service as Tools or Components Subject to Wear, by F. Trehn, GERMAN, per. DL Techn Ber, Vol 8, No 4, 1968, pp 257-268, *ISI Ref: 9022.401 (746/122)

Full-width Continuous Machine for Textile Cleaning, Dyeing, Finishing, GERMAN, per. Faerber-Zeitung, No 6, 1967, pp 257-268, NTC-69-15940-11K

Investigation of the Precipitation Behaviour of Small Amounts of Boron in a Steel Containing 1% Cr and 13% Ni, by H. Brandis and E. Horn, GERMAN, per. DL Techn Ber, Vol 9, No 2, 1969, pp 213-217, *ISI 7-11

An International Survey of Dry Cleaning, by E. J. Davies, GERMAN, per. Faerber-Zeitung, No 8, 1968, pp 441-446, NTC-69-15763-11K

The Corrosion of Wire Rod, by A. E. Hirschenfelder, GERMAN, per. Drant, Vol 19, No 1, 1968, *ISI 1008

Corrosion of Metals for National Production Systems, Part I. The Variation of Some Practical Properties with Particle Size for Organic Pigments, by H. Herke, W. Herbst, GERMAN, per. Farbe und Lack, Vol 74, No 11, 1968, pp 145-147, NTC-69-16387-11E

Present Trends in Heat Treatment of Steel Wire from the Rolling Temperature, by E. Jaenichen, GERMAN, per. Drant Welt, No. 9, 1968, pp 281-284, *ISI 7135

The Stress-strain Behavior of Core-spun Yarns, by G. Trommer, GERMAN, per. Faserforschung und Textiltechnik, Vol 19, No 11, 1968, pp 518-526, NTC-69-16387-11E

Investigation of the Corrosion Behavior of Steel Wire in the Presence of Sulfur Dioxide, by E. Jaenichen, GERMAN, per. Drant Welt, No. 9, 1968, pp 281-284, *ISI 7135

Constitution and Properties of Surfactants, by E. Goette, GERMAN, per. Fette-Seifen-Anstrichmittel, Vol 71, No 3, 1969, pp 219-223, NTC-69-16384-11K

Investigation of the Corrosion Behavior of Steel Wire in the Presence of Sulfur Dioxide, by E. Jaenichen, GERMAN, per. Drant Welt, No. 9, 1968, pp 281-284, *ISI 7135

Problems Arising in the Storage of Bulk Materials, by K. Koch, GERMAN, per. Fordern Heben, Vol 17, No. 2, 1967, *ISI 7135

Theory of the Linear Induction Motor Presented in Simplified Form, by K. Polyzakos, GERMAN, per. ETZ-A., Vol 90, No 21, 1969, pp 549-550, *ISI 8109

Accidents with Shop Floor Transport Vehicles,
by H. J. Laumann,
GERMAN, per, Forderung Heben, Vol 19, June 1969,
*BISI 6156

Theoretical Considerations on the Solidification
of Unkilled Steel, by P. Milles,
GERMAN, per, Freiberger Forschung, No B137,
1968, pp 19-31,
*BISI 6116

The Influence of Addition Agents on the
Properties of Chemical Plating, Electroplating
and Corrosion Deposits, by J. G. G. G.
GERMAN, per, Galvanotechnik, Vol 2, No 18,
1968, pp 11-18,
*BISI 6116

Glasses with Selective Reflection Properties,
by H. Schroeder,
GERMAN, per, Glas-Email-Keramik-Technik, Vol 17,
No 5, 1966, pp 161-165,
*BISI 6116

Design of Lay Tanks for Heavy Water. Results
of a Comparative Study, by D. Starinsky,
GERMAN, per, Glastechnische Berichte, Vol 41,
No 12, 1968, pp 177-180,
*BISI 6116

Aspects of the Problem of the Use of Oxygen in
Glass-Melting Furnaces, by R. Holster,
GERMAN, per, Glastechnische Berichte, Vol 41,
No 12, 1968, pp 177-180,
*BISI 6116

Dissolution of Vitreous Silica in an $\text{Na}_2\text{O}-\text{CaO}-\text{SiO}_2$ Melt, by M. Truhlarova, P. Veprek,
GERMAN, per, Glastechnische Berichte, Vol 42,
No 1, 1969, pp 9-11,
*BISI 6116

The Electric Conductivity of Glasses at High
Field Intensities, by L. Zager,
A. Pannikolov,
GERMAN, per, Glastechnische Berichte, Vol 42,
No 2, 1969, pp 37-43,
*BISI 6116

Dielectric Losses of Glasses in the Microwave
Range, by E. K. Anashkin,
GERMAN, per, Glastechnische Berichte, Vol 42,
No 2, 1969, pp 37-43,
*BISI 6116

^{27}Al Nuclear Resonance as an Indicator for
Structural Changes in $\text{CaO}-\text{Al}_2\text{O}_3-\text{SiO}_2$ Glasses,
by H. Dutz, G. W. Schulz,
GERMAN, per, Glastechnische Berichte, Vol 42,
No 3, 1969, pp 89-92,
*BISI 6116

The Alkaline Portion of the $\text{Na}_2\text{O}-\text{SiO}_2$ System,
by L. Loeffler,
GERMAN, per, Glastechnische Berichte, Vol 42,
No 3, 1969, pp 92-96,
*BISI 6116

Critical Specific Rupture Energy and Its
Determination in Various Glasses by Means
of Ultrasonic-Fractography, by F. Kerkhof,
H. Richter,
GERMAN, per, Glastechnische Berichte, Vol 42,
No 4, 1969, pp 129-136,
*BISI 6116

Glasses and Crystalline Compounds in the
 $\text{K}_2\text{O}-\text{TiO}_2$ and $\text{Cs}_2\text{O}-\text{TiO}_2$ Systems, by
H. Marfels,
GERMAN, per, Glastechnische Berichte, Vol 42,
No 5, 1969, pp 161-176,
*BISI 6116

Effect and Side Effect of Plastic Injections, by
R. Schuhmachers,
GERMAN, per, Der Hautarzt, Vol 16, No 10, 1965,
pp 458-465,
*BISI 6116
ID 2204002370

Fluorescence-Microscopic Observations on
Fungus-Infested Wood, by H. von Aufsess,
H. von Pechmann,
GERMAN, per, Holz als Roh- und Werkstoff,
Vol 26, No 2, 1968, pp 50-61,
*BISI 6116

Operational Results of an Industrial Electroslag
Melting Equipment, by W. Holzgruber,
GERMAN, Paper No 139, International Congress on
Electro-Heat, Brighton, May 1968,
*BISI 6107

Dependence of the Initial Permeability of Grain-
Oriented Iron-Silicon Sheets on the Frequency
of Demagnetisation, by G. Krose and L. Passon,
GERMAN, per, L. Angew. Physik, Vol 23, No 3, 1967,
*BISI 6107

Synthetic Fat Liquors for Leather, by
W. Penae.
GERMAN, per, das Leder, Vol 7, No 1, 1956,
pp 29-33.
NTC-69-16373-11G

Effect of Sulfochlorides in the Greasing of
Chrome Leathers, by G. Otto.
GERMAN, per, das Leder, Vol 16, No 1, 1965,
pp 18-21.
NTC-69-16374-11G

Rules in the Greasing of Retanned Chrome
Leathers, by G. Otto.
GERMAN, per, das Leder, Vol 16, No 8, 1965,
pp 171-174.
NTC-69-16375-11G

Rationalizing Chrome Tanning, by H. Spahrkaes,
J. Schmid.
GERMAN, per, das Leder, Vol 17, No 10, 1966,
pp 249-255.
NTC-69-16376-11G

Developments for More Economical Chrome Tanning,
by G. Otto.
GERMAN, per, das Leder, Vol 17, No 12, 1966,
pp 285-289.
NTC-69-16379-11G

Short-time Depliation. A Significant Advance
in Hoechst Oxidative Depliation, by
K. Rosenbusch.
GERMAN, per, das Leder, Vol 17, No 12, 1966,
pp 289-292.
NTC-69-16378-11G

Remarks on the Building Up and Performance in
Industrial Applications of Water-emulsifiable
Leather Greases, by J. Plapper.
GERMAN, per, das Leder, Vol 18, No 3, 1967,
pp 45-54.
NTC-69-16377-11G

Investigation of Polymer Crystallization, by
J. P. Arlie, P. Spegt.
GERMAN, per, Makromolekulare Chemie, Vol 104,
1967, pp 212-229.
NTC-69-16468-11I

Effect of Water Soluble Polymers Combined with
Dispersing Agents and Wetting Agents on the
Stability of Azo Disperse Dyes, by F. Wolf,
H. Bauer.
GERMAN, per, Melliand Textilberichte, Vol 49,
No 4, 1968, pp 404-470.
NTC-69-16013-11C

Industrial Machines in Connection with the
Thermosol Process, by H.-U. Etz.
GERMAN, per, Melliand Textilberichte, Vol 50,
No 3, 1969, pp 313-320.
NTC-69-16381-11E

The Hydrodynamic Fleece Molding and Its Pro-
perties as Compared with Other Methods of
Molding, by P. Graff.
GERMAN, per, Melliand Textilberichte, Vol 50,
1969, pp 404-409.
NTC-69-16469-11E

New Short-Time Test for Phosphated, etc.
Steel Sheet, by W. Machu, et al.,
GERMAN, per, Metalloberfläche, Vol 22, No. 9,
1968, pp 274-277
*IB 8035

Researches on Stabilization of UAl_3 in Nuclear
Fuels of High Aluminum Content, by H. E. Exner,
G. Petzow, 13 pp.
GERMAN, per, Metall, Vol 23, No 3, 1969, pp 220-225.
AEC/ORNL-Tr-2261-70

Determination of Cobalt in Steel by Atomic Absorption
by K. Doerffel and G. Allam
GERMAN, Neue Hütte, Vol 13, 1968 pp. 378-379
BISI 7039

Measurement of Specks and Shives in Pulp and
Paper Stock with an Optic-electronical Device,
by W. Dreht, H.-J. Rothamel.
GERMAN, per, das Papier, Vol 22, No 10A, 1966,
pp 765-782.
NTC-69-16372-11L

Practical Synthesis of Multivariable Control
Systems? Illustrated by the Example of the
Reversing Mill, by D. Strole,
GERMAN, rpt. Preprint IFAG Symposium
Dusseldorf 1968,
BISI 7627

The Evolution of Macroscopic Inclusions in Rimming Steel and Possibilities for Preventing them, by G. Mix,
GERMAN, per. Radex-Rund., No. 4, 1969, pp 618-638,
*BISI 7937

Build-Up Welding of Wheel Flanges of Rail Vehicles with the Aid of Shielded Arc Welding, by H. Becker,
GERMAN, per. Schweissen Schneiden, Vol 10, No 11, 1958, pp 442-444,
BISI 7800

Influence of Fuels (Gas Coke and Anthracite) on Quick Lime Burned in High-efficiency Shaftkilns, by B. Butterling.
GERMAN, per. Silikattechnik, Vol 14, No 5, 1963, pp 150-154.
NTC-69-16363-11B

The Green Coloration of Glass, by R. Kempf.
GERMAN, per. Sprechsaal fuer Keramik-Glas-Email-Silikate, Vol 55, No 12, 1969, pp 360-362.
NTC-69-16363-11B

Pneumatic Conveying of Glass Batch, by W. Mueller.
GERMAN, per. Sprechsaal Keramik-Email-Silikate, Vol 100, No 10, 1967, pp 611-617.
NTC-69-16368-11B

Planning and Construction of a Forging Plant and Experience in its Running, by E. Waldherr,
GERMAN, per. Stahl Eisen, Vol 89, Apr. 1969, pp 389-398
BISI 7398

Study of the Mechanical Behaviour of Iron Ore and Pellets Under Isothermal Reduction Conditions, by O. Burghardt and K. Crebe,
GERMAN, per. Stahl Eisen, Vol 89, May 1969, pp 561-573
BISI 7844

Operating Experience with Adjustable Throat Armour by W. Engel,
GERMAN, per. Stahl Eisen, Vol 89 June 1969
BISI 7610

Examination of the Resistance to Scoriification of Refractory Bricks, by H. Kosmider, et al,
GERMAN, per. Stahl Eisen, Vol 89, June 1969, pp 724-735
BISI 7744

Experiences with the Use of a Slinger for Ladle Lining, by H. Kleeschulte
GERMAN, per. Stahl Eisen, Vol 89, Aug 1969, pp 859-863
BISI 7745

Addition of Oxygen During Sintering, by E. Mazanek and M. Wyderko,
GERMAN, per. Stahl Eisen, Vol 89, Aug 1969, pp 863-866
*BISI 7943

Effect of Sinter Sizing and of Sinter and Slag Basicity on the Production of Basic Pig Iron, by D. Schulz, et al.
GERMAN, per. Stahl Eisen, Vol 89, Aug. 1969, pp 905-917.
BISI 7837

Ranges of Different Dephosphorisation in the System $(CaO)^1 - (SiO_2)^1 - (FeO)^1$ and Conclusions to be drawn therefrom, for Obtaining Low Phosphorus Contents When Blowing Low-Phosphorus Pig Iron, by F. Bardenheuer, et al.,
GERMAN, per. Stahl Eisen, Vol 89, No. 18, 1969, pp 988-994
*BISI 7919

Effect of Non-Metallic Inclusions Under Different Conditions of Deformation on the Anisotropy of the Mechanical Properties of Heavy Steel Plates, by M. Wahlster, et al.,
GERMAN, per. Stahl Eisen, Vol 89, Sept 1969, pp 1037-1044
*BISI 7924

Tests to Determine the Effect of Grain Size and State of Stress on the Transition Temperatures of Steel and Comparison of the Results with those of the Dislocation Theory of Brittle Fracture, by A. Kochendorfer, et al.,
GERMAN, per. Stahl Eisen, Vol 89, Sept 1969, pp 1053-1061
*BISI 7923

Study on the Effect of the Normalising Temperature and of the Cooling Rate on the Mechanical Properties of Fine-Grained Structural Steels Containing Vanadium, by W. Dahl, et al.,
GERMAN, per. Stahl Eisen, Vol 89, Sept 1969, pp 1062-1069
*BISI 7922

Scientific
Materials (Contd.)

Calculation of the Progress of Temperatures in the Finishing Train of Hot Rolling Mill for Wide Stripes, by O. Pawelski,
GERMAN, per. Stahl Eisen, Vol 89, Oct 1969,
pp 1146-1150
*BISI 7940

Destruction of Material of Ingot Moulds of Lamellar Cast Iron in Service, by R. N. Das, et al.,
GERMAN, per. Stahl Eisen, Vol 89, No 22, 1969,
pp 1202-1211
*HB 7933

Effect of Niobium and Vanadium on the Structure and Properties of Low Pearlite Steels Killed by Aluminum, by L. Meyer, et al.,
GERMAN, per. Stahl Eisen, Vol 89, Oct. 30, 1969,
pp 1235-1249
*BISI 7907

Experiences with an Isotope Thickness Measuring Device in an Automated Heavy Plate Mill, by G. Wiethoff, et al.,
GERMAN, per. Stahl Eisen, Vol 89, Nov 1969, p 1294-
*BISI 7946

Effect of Reduction Per Pass, Reduction Ratio, Etc. During Cold Reducing of Tubes, on their Mechanical Properties, by W. Dahl, et al.,
GERMAN, per. Stahl Eisen, Vol 89, No 11, Nov 1969,
pp 1357-1363,
*BISI 8095

Developments in the Production of Parallel-Flange Beams in Universal Mills, by H. Matthai,
GERMAN, per. Stahl Eisen, Vol 89, No 25, 1969,
pp 1423-1426,
*BISI 8100

Considerations Regarding the Construction of Large Capacity Basic Oxygen Furnaces, by O. M. Duhring and A. A. Patuzzi,
GERMAN, per. Stahl Eisen, Vol 89, No 26, 1969,
pp 1441-1446
*HB 8100

Destruction of Material of Ingot Moulds, by R. N. Das, et al.,
GERMAN, per. Stahl Eisen, Vol 89, No 26, 1969,
pp 1480-1487,
*HB 7933 - II

Scientific
Materials (Contd.)

Problems During Processing of Elastic Yarns in the Knitting Industry, by H. W. Krause.
GERMAN, per. Textilindustrie, Vol 70, No 11, 1968, pp 793-800.
NTC-69-16014-11E

Dry Non Woven Fabrics, Production and Application, by C. L. Nottebohm.
GERMAN, per. Textilindustrie, Vol 71, No 3, 1969, pp 172-179.
NTC-69-16089-11E

Woven and Fleece Goods (Non-woven), by W. Iseli.
GERMAN, per. Textilveredlungen, Vol 3, No 9, 1968, pp 481-490.
NTC-69-16507-11E

Considerations for the Problem of the Relationships between the Structure of Fibers and the Properties of Fiber, by H. Kraussig.
GERMAN, per. Textilveredlung, Vol 4, No 1, 1969, pp 26-37.
NTC-69-16751-11E

Contribution to the Problem of the Reactions Between Pig Iron and Slag in the Blast Furnace, by B. Gerstenberg, et al.,
GERMAN, per. Thyssenforschung, Vol 1, No. 3, 1969,
pp 81-91
BISI 7836

Static Process Control of the Oxygen Converter Process with the Aid of an Increment Model, by E. Kohler, et al.,
GERMAN, per. Thyssenforschung, Vol 1, No 3, 1969, pp 92-96,
*BISI 8092

The Accelerating Influence of Sulphur Dioxide and Water on the Atmospheric Corrosion of Rusted Iron, by K. Barton and Z. Bartonova,
GERMAN, per. Werks. Korros., Vol 20, No. 3, 1969, pp 216-221
*BISI 7929

Investigation of the Formation of Whiskers on Vapor Deposited Tin Films, by A. Politycki, H. P. Kehrner.
GERMAN, per. Zeit fuer Metallkunde, Vol 60, 1969, pp 17-21.
NTC-69-16439-11F

Scientific
Materials (Contd)

Influence of Cathode Sublimation on the Former Balance of a High Current Carbon Arc, by E. Hinrichs and R. Wienecke, GERMAN, per. Z. Fur Physik, No 156, 1959, pp 592-597, *BISI 8092

Process for the Improvement of the Transparency of Low Pressure Polyolefins, by H. Koenig, GERMAN, Patent 1,021,571, NTC-69-16007-111

Process for Coating Articles of All Kinds with Unsaturated Polyester Resins, by K.-H. Hauck, F. Hecker-Over, GERMAN, Patent 1,025,302, NTC-69-16324-11C

Process for the Production of Mixed Polymers from Vinyl Chloride and Vinyl Ethers in Aqueous Suspensions, GERMAN, Patent 1,046,082, NTC-69-16320-111

Vaporization Inhibitor for the Protection of Metal Objects from Corrosion, by L. Gervang, GERMAN, Patent 1,009,243, NTC-69-16336-11F

Application of Case-Hardening Steels for Parts Requiring Accelerated Oxidised and Pearlitised Transformation After Heat Treatment, GERMAN, Patent Specification No. 1,183,695, *BISI 8104

Process for the Production of a Glass Load, GERMAN, Patent 1,237,739, NTC-69-16323-11B

Process for Water-Proofing of Leather, by E. D. Brown, GERMAN, Patent 1,245,531, NTC-69-16354-11G

Preparation of Slow-burning Polyester Molded Pieces, by W. Lautenschlager, K. Engelhardt, GERMAN, Patent 1,287,311, NTC-69-16029-111

Some Technological Problems in the Production of Aluminum Oxide Ceramics from Aluminous Earth, by L. Sztankovics, HUNGARIAN, per. Hiradastech Ipari Kut Intez Kozlem, Vol 8, No 1, 1968, pp 37-57, *AEC/ORNL

Scientific
Materials (Contd)

Chemical Compositions and Structure of Sodium Aluminium Silicates and Reduction of Sodium Losses in the Bayer-process, by A. Juhasz, F. Orban, HUNGARIAN, per. Kohaszati Lapok, Vol 100, No 1, 1967, pp 40-44, NTC-69-16011-11F

Passage from the Discontinuous System to the Continuous in the Purification of Solutions of Zinc Sulphate for Electrolysis, by P. Benvenuti, T. Michelis, ITALIAN, per. Metallurgia Italiana, Vol 60, No 5, 1968, pp 417-423, NTC-69-16172-11F

LD Converter Production of Dynamo Steel, by J. Oggero, et al., ITALIAN, per. Met. Ital., June 1969, pp 246-250, *BISI 7932

Discussion on the Extension of the Dean and Davis Viscosity Index in the Field of Oils Having a Viscosity Index Above 100, by R. Chializza, ITALIAN, per. Rivista del Combustibili, Vol 21, No 13, 1966, pp 514-520, NTC-69-16064-11H

Study on the Rust Layer on Atmospheric Corrosion Resistant Low Alloy Steels, I - Formation of Artificial Rusts, by K. Matsuko and Y. Hisamatsu, JAPANESE, per. Boshoku Gijutsu, Vol 17, No. 10/11, 1968, pp 465-470, *BISI 7927

Study on the Rust Layer on Atmospheric Corrosion Resistant Low Alloy Steels, II - Specific Surface Area of Rusts, by K. Matsuko and Y. Hisamatsu, JAPANESE, per. Boshoku Gijutsu, Vol 17, No. 11/12, 1968, pp 17-20, *BISI 7928

Mechanism of Stabilization of PVC, by T. Kimura, JAPANESE, per. Enka Bunka to Porima, Vol 5, No 5, 1965, pp 18-29, NTC-69-16523-111

Fundamental Problems and Recent Studies in the Polymerization of Vinyl Chloride, by T. Ohtsu, T. Nakata, JAPANESE, per. Enka Bunka to Porima, Vol 5, No 6, 1965, pp 14-27, NTC-69-16522-111

On the High Top Pressure Blast Furnace Operation-
Analysis of Muroran No. 3 Blast Furnace Operation
Data, by T. Yamada, et al.,
JAPANESE, per. Fuji Iron and Steel Techn. Rep.,
Vol 19, No 6, June 1966, pp 99-108,
BISI 7669

Continuous and Automatic Measurement of Calorific
Value of Heavy Oil by the Use of Neutron, by
Kyoichi Miyashita, 12 pp.
JAPANESE, per. Genshiryoku Kogyo, Vol 13, No 10,
1967, pp 52-55.
AEC/NSJ-Tr-152

Studies of Heat and Wear Resistance of Sintered
Alloys, by I. Yajima and H. Murayama,
JAPANESE, per. J. Japan Soc. Powder Met.,
Vol 14, No. 4, 1969, pp 196-202
*HB 8028

An Electronic Tensile Testing Machine for
Automatic Control of Strain Rate Between the
Gauge Marks at Elevated Temperatures,
by T. Matsuba, et al.,
JAPANESE, per. J. Soc. Mat. Sci. Japan,
Vol 18, Mar. 1969, pp 219-220,
BISI 7694

On the New Method of Heat Capacity Determination
by T. Inagawa, H. Kiyoshi.
JAPANESE, per. Kobunshi Kagaku, Vol 11, No 11,
1969, pp 211-217.
ATS-11-1119-111

Effect of Binders on the Manufacture of Graphite
Materials. Part 3. Effect of Binders on the
Physical Properties of Graphite Materials, by
Y. Takeuchi, J. Okada.
JAPANESE, per. Kogyo Kagaku Zasshi, Vol 68,
No 7, 1965, pp 1188-1194.
ATS-JS-213

On the Determination of Micro Amounts of Niobium
in Iron and Steel by the Spectrophotometric
Method, by T. Sakaki,
JAPANESE, per. Nippon Kinzoku, Vol 32, No.9, 1968,
pp 913-916,
BISI 7609

The Effects of Sulphur on the Recrystallization
of Cold Rolled 3.17% Al-Fe Alloy Sheets,
by H. Nakae and N. Goshi,
JAPANESE, per. Nippon Kinzoku, Vol 33, No. 5,
1969, pp 593-597
*BISI 7614

The Anionic Behavior of Copper in Aqueous NaCl
Solutions, by H. Sugawara, S. Shimodaira,
JAPANESE, per. Nippon Kinzoku Gakkaishi,
Vol 33, No 6, 1969, pp 765-769.
ATS-11-1119-111

Study on the Purification of Mine Sulfate
Solutions: the Removal of Cobalt and Its
Recovery, by S. Goto.
JAPANESE, per. Nippon Kogyo Kaishi, Vol 72,
1969, pp 414-417.
ATS-11-1119-111

Development of New High-Strength Special Steel
Propeller for Mammoth Ships, by K. Taniguchi, et al.
JAPANESE, per. Nippon Zoseigakukai Ronbunshu,
Vol 123, No. 6 (June) 1968, pp 59-73,
BISI 7402

Hydrothermal Synthesis of Magnetic Iron-cobalt
Oxides, by S. Konoaka, T. Ando.
JAPANESE, per. Osaka Kogyo Gijutsu Shikensho
Kiho, Vol 14, No 4, 1968, pp 321-341.
ATS-11-1119-111

Ferroelectric and Ferroelastic $Gd_2(MoO_4)_3$. I.
General Theory of Ferroelastics, by Keitsiro Aizu.
JAPANESE, per. Oyo Buturi, Vol 38, No 9, 1969,
pp 825-832.
*FSTC/HT-23-823-70
*ACSI J-8049

Ferroelectric and Ferroelastic $Gd_2(MoO_4)_3$. II.
Function and Applications of $Gd_2(MoO_4)_3$, by
Akio Kumada.
JAPANESE, per. Oyo Buturi, Vol 38, No 9, 1969,
pp 833-844.
*ACSI J-8048

Picepale Resins for Adhesives Applications, by
K. Oya.
JAPANESE, per. Seichaku, Vol 12, No 1, 1968,
pp 27-34.
ATS-JS-170

Properties of Silica Affecting Expanding Gypsum
Molds, by I. Teraoka.
JAPANESE, per. Sekko to Sekkai No, Vol 70, 1964,
pp 96-99.
ATS-JS-222

Size Distribution of Air Voids and the Durability of Air-entrained Mortar and Concrete, by T. Soda.
JAPANESE, per. Sembo Ronbunshu, No 13,
1969, pp 23-25.
*BISI 7912

Silicon-Free Electrical Steel Samlox-A,
by T. Inokura and T. Matsuoka,
JAPANESE, per. Sumi. Met., Vol 39, Jan. 1968,
pp 7-11
*BISI 7913

On the Continuous Cooling Transformation of Steels for Low Temperature Services, by T. Kamitane and M. Ohtani,
JAPANESE, per. Sumi. Met., Vol 39, Apr. 1968,
pp 152-157
*BISI 7914

Study of Directional Silicon Sheet - 1
by T. Matsuoka,
JAPANESE, per. Tetsu-to-Hagane, Vol 52, No 10,
1968, pp 1635-1638,
*BISI 7915

The Effect of Ingot Size and Capping Time on the Distribution, Composition and Type of Non-Metallic Inclusion in Large Rimming Ingots, by K. Asano, et al.,
JAPANESE, per. Tetsu-to-Hagane, Vol 54, May 1968, pp 643-672
*BISI 7916

Effect of Zinc Crystal Orientation on the Corrosion of Tinplate, by H. Asano and Oyagi,
JAPANESE, per. Tetsu-to-Hagane, Vol 55, No. 2,
1969, pp 184-189,
*BISI 7917

Large Scrap Charges in Basic Oxygen Furnace Steelmaking by use of Oxy-Fuel Blowing, by S. Yamamoto and K. Shio,
JAPANESE, per. Tetsu-to-Hagane, Vol 55, No 11,
1969, Lecture 97; S487
*BISI 7918

re. Internal Corrosion of Cans by Nitrate,
by Y. Iwamoto, et al.,
JAPANESE, per. Toyo Inst. Food. Techn., Vol 8,
1968
*BISI 7919

A Method of Manufacturing Gas Mixtures Containing Acetylene and Ethylene, by A. C. Vialaron.
JAPANESE, Patent 34, 1965.
*ATS-JS-215

Polyolefin Composite Materials, by S. Morimoto.
JAPANESE, Patent No 927, 1965.
*ATS-JS-190

A Method for the Manufacture of Ketene by the Thermal Decomposition of Methyl Acetate, by S. Yoshioka.
JAPANESE, Patent Application 3509, 1961.
*ATS-JS-226

Method for the Manufacture of Easy-to-dye Polyolefins, by Y. Arai, H. Kodama.
JAPANESE, Patent 9429, 1963.
*ATS-JS-201

Method for the Manufacture of Polyolefins that Dye Well, by Y. Arai.
JAPANESE, Patent No 9437, 1963.
*ATS-JS-196

Method for the Manufacture of Synthetic Hard Resins, by T. Inokuchi, M. Matsumoto.
JAPANESE, Patent 14,246, 1962.
*ATS-JS-179

Easily Dyeable Polyolefins, by Y. Urata.
JAPANESE, Patent 27,629, 1964.
*ATS-JS-200

A Method for the Manufacture of Easily Dyeable Polypropylene Fibers, by K. Miyamichi.
JAPANESE, Patent 27,636, 1964.
*ATS-JS-199

A Method of Treating Useful Water, Waste Water, and Various other Suspensions, by Y. Furukawa.
JAPANESE, Patent 28,565, 1965.
*ATS-JS-214

Foundry Coke, by T. Hagiwara.
JAPANESE, Patent 194,648, 1952.
*ATS-JS-231

Scientific
Materials (Contd)

Preparation of Polyacrylonitrile Synthetic
Fibers with Excellent Thermal Stability, by
T. Otsuka, Y. Kikuchi.
JAPANESE, Patent Publication SHO 41-17 010.
NTC-69-10031-111

Preparation of Polyacrylonitrile Synthetic
Fibers with Excellent Thermal Stability, by
T. Otsuka, Y. Kikuchi.
JAPANESE, Patent Publication SHO 41-17 010.
NTC-69-10031-111

Manufacture of Synthetic Fibers of the Poly-
acrylonitrile Type, by T. Otsuka, Y. Kikuchi.
JAPANESE, Patent Publication SHO 41-29 419.
NTC-69-10031-111

Manufacture of Synthetic Fibers of the Poly-
acrylonitrile Type with Excellent Thermal
Stability, by Y. Ichikawa, R. Inai.
JAPANESE, Patent Publication SHO 42-2 379.
NTC-69-10031-111

Electrolytic Plating, Process of Poly-
acrylonitrile, by R. Otsuka, A. Mori.
JAPANESE, Patent Publication SHO 43-7 134.
NTC-69-10031-111

Spinning Method for Polyesterether Fibers, by
R. Otsuka, M. Yoshino.
JAPANESE, Patent Publication SHO 43-19 028.
NTC-69-10031-111

Spinning Method for Polyester Production, by
R. Otsuka, M. Yoshino.
JAPANESE, Patent Publ SHO 43-23 479.
NTC-69-10031-111

Treatment of Polyester Fibers.
JAPANESE, Patent Publication SHO 43-27 402.
NTC-69-10031-111

Preparation of Dyeable Polyester Copolymers,
by K. Tanabe, H. Yasui.
JAPANESE, Patent Publication SHO 43-26000.
NTC-69-10031-111

Improvement in the Adhesion of Synthetic
Filaments Used as Rubber Reinforcements,
by T. Ikeda, K. Hashida.
JAPANESE, Patent Publication SHO 43-27 194.
NTC-69-10031-111

Preparation of Conjugated Fibers, by T. Ono.
JAPANESE, Patent Publication SHO 43-27 450.
NTC-69-10031-111

Prevention of Coloring in the Acrylonitrile
Solution Polymerization, by I. Ito.
JAPANESE, Patent Publication SHO 43-28 114.
NTC-69-10031-111

Melting Method of Spun Yarn, by M. Inoue.
JAPANESE, Patent Publication SHO 44-903.
NTC-69-10031-111

Manufacture of Modified Polypropylene, by
K. Nakatsuka, M. Ide.
JAPANESE, Patent Publication SHO 44-1 540.
NTC-69-10031-111

A Method of Surface Treatment of Vulcanized
Rubber, by T. Kitahara, T. Nagata.
JAPANESE, Patent Publication SHO 44-2 961.
NTC-69-10031-111

Procedure Used in the Manufacture of Cellulose
Pulp.
NORWEGIAN, Patent 111,879.
NTC-69-10031-111

The Effect of Performed Coke on the Permeability
of the Blast Furnace Charge Column, by J. Wanot,
POLISH, per. Hutnik, Vol 36, No. 5, 1969, pp 214-221
*BISI 7930

Thermal Stability of Refractory Ceramic Materials
in a High Temperature Gas Flow, by
V. I. Dauknis. 11 pp.
POLISH, rpt, IAEA Symp on Hydromagnetic Elec
Power Generation, Warsaw, 1968, pp 3059-3072.
NASA TT F-12,652

Investigations Concerning the Value of the
Methods for Determining the Properties of Raw
Materials and Anode Paste Used in the Aluminum
Industry for the Production of Soderberg-type
Anodes, by A. Kozyelska, T. Iach.
POLISH, per. Koks, Smola, Gaz, Vol 13, No 9,
1968, pp 245-252.
ATS-RJ-5279

Sintered Steel Products with Compensated Shrinkage,
by K. Missol.
POLISH, per, Prace Inst Hutn, Vol 19, No 6, 1967,
pp 397-403.
NLL Ref: 9022,401 (746-102)

Apparatus for Spraying Thin Films by the Flash
Evaporation Method, by M. Oszwalfoedki. 5 pp.
POLISH, per, Przegląd Elektroniki, No 7, 1968,
pp 329-331.
AIR/FTD/MT-23-207-69

The Use of Cold-welded Joints in the Production
of Transformers, by J. Grabowski.
POLISH, per, Przegl Elektrotech, Vol 44, No 10,
1968, pp 442-445.
ATS-PJ-5290

Recent Trends in the Production of Electric
Steel, by K. Radzwicki,
POLISH, per, Wiadomosci Hutn., Vol 25, No. 2,
1969, pp 47-49,
*BISI 7942

The Mechanical Properties of Single Fibers,
by B. Duncker, L. Nordman.
SWEDISH, per, Svensk Papperstidning, Vol 71,
No 5, 1968, pp 165-177.
NTC-69-16426-11L

Procedure for the Production Principally of
Linear 1,2-epoxy Resins in the Presence of a
Lithium Salt as the Catalyst, by O. L. Nikles.
SWEDISH, Patent 170,155.
NTC-69-16590-111

Mathematical Sciences

Dynamics of Nonholonomic Systems, by
Ju. I. Neymark
RUSSIAN, bk
*American Mathematical Society

A New Method for Solving the Hilbert Boundary
Value Problem for Several Unknown Functions, by
N. P. Vekua. 6 pp.
RUSSIAN, per, AN GRUZSSR. Soobshcheniya, Vol 52,
No 1, 1968, pp 17-20.
AIR/FTD/MT-23-438-69

Numerical Results of the Theory of Radiowave
Diffraction Around the Earth's Surface, by
P. A. Azriliant, M. G. Belkina.
RUSSIAN, bk, Chislennye Rezul'taty Teoriy
Difraktsiy Radiovoln Vokrug Zemnoy Poverkhnosti;
2nd ed., 1957.

Dept of Navy APL/JHU T-2382

Impossibility of Eliminating Complete
Sorting when Calculating Functions with
Respect to their Graphs, by M. I. Dekhtyar',
6 pp.
RUSSIAN, per, Doklady Akademii Nauk SSSR,
Moscow, Vol 189, No 4, 1969, pp 748-751.
JPRS 49888

Estimating the Complexity of Realizing
Monotonic Symmetrical Functions by Formulas
Based on $\sqrt{2} + 7$, by L. S. Khasin, 7 pp.
RUSSIAN, per, Doklady Akademii Nauk SSR,
Moscow, Vol 189, No 4, 1969, pp 752-755.
JPRS 49888

Application of Linear Programming in Geophysics,
by S. V. Shalayev.
RUSSIAN, per, Geol i Geofiz Ak Nauk SSSR,
Sibirsk Otd, No 5, 1965, pp 87-93.
ATS-RJ-5316

Realizing the Functions of Logic Algebra in one
Class of Circuits mad of Functional and
Switching Elements, by S. S. Kravtsov. 13 pp.
RUSSIAN, per, Problemy Kibernetiki, No 19, 1967,
pp 285-292.
AIR/FTD/MT-24-207-69

Logical Basis of Information Theory and Probability
Theory, by A. N. Kolmogorov.
RUSSIAN, per, Problemy Peredachi Informatsiy, Vol 5,
No 3, 1969, pp 3-7.
*Dept of Navy APL/JHU J-1472

The Conditions of Boundedness of Information
Between Two Gaussian Processes, by D. S. Apokorin.
RUSSIAN, per, Problemy Peredachi Informatsiy, Vol 5,
No 3, 1969, pp 22-27.
*Dept of Navy APL/JHU J-1473

Analysis of the Simplest Schemes, by
B. L. Rozhdestvenskiy, N. N. Yanenko.
RUSSIAN, mono, Sistemy Kvazilineynykh Uravneniy,
1968, pp 359-370.
NTC-69-16410-12A

On the Accuracy of Finite-Difference Representations of Derivatives, by R. L. Kagan and G. Kh. Khataunkulov,
RUSSIAN, per, Trudy Glav. Geofiz. Obs., No 228, 1969, pp 49-86,
NLL Ref: 5828.4F (7809)

About Certain Explicit Iteration Methods for Solving a Multidimensional Biharmonic Equation, by I. M. Molchanov. 7 pp.
UKRAINIAN, per, Dopovidi. AN UKRNSR. Fiziko-Tekhnichni ta Matematychni Nauky, Seriya A, No 4, 1968, pp 308-311.
AIR/FTD/MT-23-374-69

On the Extension of Binary Set Computation to the Computation of Matrices with Elements in a Complete Boolean Algebra, by J. Riguet.
FRENCH, wk per, Comptes Rendus, No 238, 1954, pp 2382-2385,
NLL Ref: 9021.7 (52)

Use of a Partition Method in the Solution of Certain Partial Differential Equations Whose Domain Has an Infinite Strip, by M. Poloujadoff, J. C. Sabonnadiere
FRENCH, per, C. R. Acad. Sc., Vol 266, Ser B, 1968, pp 230-233.
Dept of Navy APL/JHU T-2384

Functions and Distributions of a Single Real Variable. Applications to the Laplace and Fourier Transforms, by Robert Legendre. 37 pp.
FRENCH, rpt, ONERA-TP-137.
NASA TT F-12,567

Mechanical, Industrial, Civil &
Marine Engineering

Coaxial-Type Helicopters, by N. I. Kamov, 8 pp.
RUSSIAN, per, SOURCE UNKNOWN, pp 18-20,
Dept of Navy NIC Trans 2981

Experimental Installation for Investigation of Wear Resistance of Toothed Friction Pairs With a Rotary Lubrication System Operating in a Vacuum at Increased Temperatures, by V. I. Yegorov, L. O. Vaysfel'd, et al. 6 pp.
RUSSIAN, rpt, AN SSSR, Nauchnyy Sovet po Treniyu i Smazkam. Nauchnyye Printsipy i Novyye Metody Ispytaniy Materialov Dlya Uzllov Treniya, 1968, pp 174-177.
AIR/FTD/MT-24-163-69

Scientific
Mechanical, Industrial, Civil &
Marine Engineering (Contd)

Minimax Problems of Control With a Priori Information, by A. I. Propoy.
RUSSIAN, per, Avtomatika i Telemekhanika, No 7, 1969, pp 18-29.
*Dept of Navy APL/JHU J-1458

Development of Motor Vehicle Industry Reviewed, 7 pp.
RUSSIAN, per, Avtomobil'naya Promyshlennost, Moscow, Jan 1970, pp 1-3.
JPRS 49969

Engine Life, by I. A. Mishin, 307 pp.
RUSSIAN, bk, Dolgovechnost Dvigately, 30 Jul 1968.
FSTC/MT-23-135-69
ACSI J-7278

Motor Vehicle Plant Wants Subcontractor Support, by F. Ninchenko, 6 pp.
RUSSIAN, per, Ekonomicheskaya Gazeta, Moscow, No 50, Dec 1969, p 9.
JPRS 49852

The Effect of Blade Linkage Systems on the Vibrational Strength of Turbine Blades, by D. A. Arkadiev.
RUSSIAN, per, Energomashinostroenie, Vol 14, no 3, 1968, pp. 6-9
CEGB CE-Tr-4944
ETC-69-23177

Effect of Forging Reduction Ratio on Anisotropy of Properties of Large Forgings, by M. P. Braun, B. B. Vinokur. 10 pp.
RUSSIAN, per, Fizika i Khimiya Obrabotki Materialov, No 4, 1967, pp 134-140.
AIR/ TD/MT-23-229-69

Hydrodynamics of MID Devices Employing Liquid Metals, by O. A. Liyelausis. 123 pp.
RUSSIAN, bk, Gidrodinamika Zhidkometallicheskih MGD-Ustroystv, 1967, pp 1-196.
AIR/FTD/MT-23-106-69

Gyroscopes -- Production and Research, by G. A. Slomyanskiy, 182 pp.
RUSSIAN, bk, Giroskopy -- Proizvodstvo i Issledovaniye, Moscow, 1969, 188 pp.
JPRS 49860

Some Cases of the Elastic Equilibrium of an Anisotropic Plate with a Noncircular Opening (Plane Problem), by S. G. Lekhnitskiy, 37 pp.
RUSSIAN, per, Inzhenernyy Sbornik, Vol 22, 1955, pp 160-187.

AIR/FTD/MT-23-366-69

Project to Save Aral Sea Proposed, Described, by A. Kiyatkin, 7 pp.
RUSSIAN, np, Kazakhstanskaya Pravda, Alma Alta, 17 Oct 1969, p 4.
JPRS 49763

Armenian Machine-Tool Plants Need Modernizing, by M. Kas'yan, 5 pp.
RUSSIAN, np, Kommunist, Yerevan, 20 Nov 1969, p 3.
JPRS 49833

Working Fluids Used in (Shipboard) Hydraulic Devices, by G. M. Shchudinskiy, L. G. Rapoport, 12 pp.
RUSSIAN, per, Leningrad. Tsentral'nyy Nauchno-Issledovatel'skiy Institut Morskogo Flota. Informatsionnyy Sbornik, No 54, 1967, pp 26-37.
AIR/FTD/MT-23-265-69

Views on Role of Engineers Disclosed, 7 pp.
RUSSIAN, np, Literaturnaya Gazeta, Moscow, 10 Dec 1969, p 10.
JPRS 49814

A Town on the Shore of the Arctic Sea.
RUSSIAN, per, Morskoy Flot, No 8, 1969, pp 41-42.
DIA/LN 585-70

Transport Minister Discusses Railroad Safety, by Stefan Pavel, 9 pp.
ROMANIAN, np, Lupta CFR, Bucharest, 24 Jan 1970, pp 1, 3.
JPRS 49905

Automation of Taganrog Plant Discussed, by N. Lutay, 6 pp.
RUSSIAN, per, Nauchno Tekhnicheskoye Obshchestvo, SSSR, Moscow, No 9, 1969, pp 28-29.
JPRS 49833

Soviet Power-Engineering Plans and Programs Reviewed, 8 pp.
RUSSIAN, per, Ogonek, Moscow, No 51, 1969, pp 6-7.
JPRS 49814

Progress at Tol'yatti Motor Vehicle Plant Reviewed, by S. Bogatko, Ye. Man'ko, 6 pp.
RUSSIAN, np, Pravda, Moscow, 3 Jan 1970, p 2.
JPRS 49847

Calculations for Strength and Oscillations in Rocket Engines, by A. F. Gurov, 471 pp.
RUSSIAN, bk, Raschety na Prochnost i Kolebaniya v Raketnykh Dvigatelyakh, 1966, pp 1-91, 123-455.
AIR/FTD/MT-24-276-69

Electric Fish Schooling Device Used as a Fish Barrier, by Yu. N. Ovsyankin.
RUSSIAN, per, Rybnoe Khoz, Vol 45, No 12, 1969, pp 12.
*Dept of Inter
BCF/OFF

Performance of the Fishermen of Factory Stern Trawler Nakhodka,
RUSSIAN, per, Rybnoe Khoz, Vol 45, No 12, 1969, pp 43-45.
*Dept of Inter
BCF/OFF

Trends in Network Technique Applied to Fleet Operations, by V. V. Ivchenko.
RUSSIAN, per, Rybnoe Khoz, Vol 45, No 12, 1969, pp 65-67.
*Dept of Inter
BCF/OFF

Approximate Estimate of Friction in Composite Bearings, by N. I. Brokhin, 6 pp.
RUSSIAN, per, Samoletostroyeniye i Tekhnika Vozdushnogo Flota, No 8, 1966, pp 3-6.
AIR/FTD/MT-23-504-68

Advances in Agricultural Machines Discussed, by K. Belyak, 5 pp.
RUSSIAN, np, Sotsialisticheskaya Industriya, Moscow, 22 Nov 1969, p 2.
JPRS 49833

Problems in Developing New Farm Machinery Aired, by A. Korobeynikov, 5 pp.
RUSSIAN, np, Sovetskaya Rossiya, Moscow, 3 Dec 1969, p 2.
JPRS 49833

The Hydrodynamic Resistance of Tubular Heat-Exchangers, by A. A. Promyslov, A. V. Shilokhvostov, 10 pp.
RUSSIAN, per, Sudostroyeniye, No 8, 1968, pp 27-32.
Dept of Navy NTC Trans 2985

Need for Labor Safety Improvements Discussed,
by N. Ryzhkov, 5 pp.
RUSSIAN, np, Trud, Moscow, 11 Dec 1969, p 2.
JPRS 49814

The Investigation of Stresses in a Compressor-
Blade Foil, by V. B. Gorlov, 5 pp.
RUSSIAN, rpt, Trudy Vsesoyuznaya Konferentsiya
po Polyarizatsionno-Opticheskomu Metodu Issledo-
vaniya Napryazheniy, 5th, Leningrad, 1964,
1966, pp 330-334.
AIR/FTD/INT-23-152-68

Design Trends and Selection of the Proper
Design for Modern Aluminum Plants, by
L. N. Boblov.
RUSSIAN, per, Tsvet Met, Vol 42, No 9, 1969,
pp 18-20.
ATS-RJ-9208

Machine Building Plant Planning and Speciali-
zation, B. V. Vlasov, Ye. D. Sokolina, 9 pp.
RUSSIAN, per, Vestnik Mashinostroyeniya, Moscow,
Oct 1969, pp 3-5.
JPRS 49758

Hoisting, Conveyor Equipment Output Discussed,
by A. O. Spivakovskiy, 14 pp.
RUSSIAN, per, Vestnik Mashinostroyeniya, Moscow,
No 11, 1969, pp 3-8.
JPRS 49885

Technical Advances in Tractor Building Traced,
by I. I. Trepenankov, G. G. Kolobov, 12 pp.
RUSSIAN, per, Vestnik Mashinostroyeniya, Moscow,
No 12, 1969, pp 6-10.
JPRS 49847

Electronic Motor Vehicle Diagnosis Proposed,
by V. Ponomarev, 5 pp.
RUSSIAN, np, Vyshka, Baku, 10 Jan 1970, p 2.
JPRS 49969

Tour of Motor Vehicle Plants Along Volga, by
A. Brodskiy, N. Semina, 9 pp.
RUSSIAN, per, Za Rulem, Moscow, No 1, 1970,
pp 4-6.
JPRS 49852

Pressure Gage, by P. S. Kuznetsov, 3 pp.
RUSSIAN, Patent No. 214,163, 21 Dec 1966, 1968,
pp 1-2.
AIR/FTD/INT-23-213-69

Calorimetric Probe for Measuring the Gas Flow
Stagnation Temperature, by V. I. Polyakov,
Ye. U. Repik, 3 pp.
RUSSIAN, Patent No. 224,855, 2 Jan 1967, 1968,
pp 1-2.
AIR/FTD/INT-23-503-69

Irrigation Experts and Farmers Disagree on
Effects of Aswan High Dam, by Fihmi Huwaydi,
6 pp.
ARABIC, np, al-Ahram, Cairo, 28 Oct 1969, p 3.
JPRS 49870

With the Fishing Boat "Tropica" in the Ocean,
by T. Velchev, 5 pp.
BULGARIAN, per, Ribno Stopanstvo, Vol 16, No 3,
1969, pp 9-11.
Dept of Interior
Bureau of Commercial Fisheries
Office of Foreign Fisheries
A-34-Dec 1969-No 15
On Loan

My Opinions on the Elimination of End Oscillations
of Arc-shaped Rollers in a Double-row, Spherical,
Centripetal, Roller Bearing, by Hsi-jen Kuo, 8 pp
CHINESE, per, Shang Hai Chi Hsien, No 6, 1962,
pp 16-17.
AIR/FTD/INT-23-1301-68

A Steel Arched Bridge in Czechoslovakia.
CZECH, per, Auto Roads, No 9, 1969.
DIA/LN 651-70

Process for the Treating of the Surface of
Installations Containing Water and/or Steam.
DUTCH, Patent 69-10 914.
MTC-69-10321-13H

Great Hydraulic Projects.
FRENCH, per, Afrique Magazine, Aug 1969, pp 14-21.
DIA/LN 578-70

The Mechanical Properties of Freshly Mixed
Concrete for Precasting, by M. Mamillan.
FRENCH, per, Annales Inst Technique du
Batiement et des Travaux Publics, No 201,
1964, pp 912-952.
MTC-69-15780-13C

The Linear Induction Motor, by M. Victorri,
P. Reyx.
FRENCH, rpt, Brochure of the Merlin-Gerin Co.
Dept of Navy APL/JHU T-2381

Linear Induction Motors. Principles, Technique and Application.

FRENCH, rpt, Brochure of the Merlin-Gerin Co.
Dept of Navy APL/JHU T-2387

Improving the Theory of Tractive Linear Induction Motors, by M. Poloujadoff.

FRENCH, per, C. R. Acad Sc., Vol 263, Ser B, 1966, pp 605-607.
Dept of Navy APL/JHU T-2385

Theoretical and Experimental Study of the Influence of the Return Section on the Operation of Linear Induction Motors With a Short Stator, by

M. Poloujadoff, P. Reyx.
FRENCH, per, C. R. Acad Sc., Vol 263, Ser B, 1966, pp 799-802.
Dept of Navy APL/JHU T-2386

Study of the Currents Induced in the Secondary of a Linear Motor With a Short Stator Fed by a System of Balanced Currents, by M. Poloujadoff.

FRENCH, per, C. R. Acad. Sc., Vol 266, 1968, pp 272-275.
Dept of Navy APL/JHU T-2383

Study of Transient Movements in Water Distribution Networks, by Y. Labye.

FRENCH, per, Houille Blanche, Vol 21, No 5, 1966, pp 531-542.
NRC-69-16395-13B

Specifications Applicable to Sanitary Plumbing for Dwellings.

FRENCH, per, Its Document Technique Unifie, No 60, 1959, 27 pp.
*TT 70-58067

Available from NBS

Study of the Emptying of a Bathtub with an Air-section and Branch-pipe Outlet for Free Air.

FRENCH, per, Its Compte Rendu de Recherche, No 6, 1967, 32 pp.
*TT 70-58068

Available from NBS

Sanitary Valves and Fittings (Supply and Discharge).

FRENCH, rpt, Norme Francaise NF D18-201: Robinetterie Sanitaire (Alimentation et Vidage), 1965, 31 pp.

*TT 70-58066

Available from NBS

Stop Valves and Drawing Valves.

FRENCH, rpt, Norme Francaise NF E29-139: Robinets d'arret et de Puisage, 1965, 18 pp.

*TT 70-58065

Available from NBS

French Standard NF P41-201 to P41-204: Water Distribution; Code of Minimum Performance Standards.

FRENCH, rpt, Norme Francaise: NF P41-201 a P41-204: Distribution d'eau; Code des Conditions minimales d'execution des Travaux, 1942, 14 pp.

*TT 70-58064

Available from NBS

The Keumgang-San Factory Ship, (Production Capacity 300 Tons per Day) Constructed in Holland for North Korea, 6pp

FRENCH, per, La Pêche Maritime, Vol.48 no. 1101, Dec 1969, pp. 974-979.

*CFSTI TT 70-58049

AVAILABLE ONLY FROM BCF

Introduction to the Problems of Dam Foundations in Rock, by P. Duffaut.

FRENCH, per, Revue de l'Industrie Minerale, Vol 45, No 6, 1963, pp 409-426.

NRC-69-16557-13M

Outline of a History of Super-Highways in the World, in Europe and in France, by A. G. Bonnet.

FRENCH, per, Revue des Routes et des Aerodromes, July/Aug 1969, pp 45-52, 57-72.

DIA/LN 561-70

Method and Apparatus for Machining High-conductivity Metal Elements by Electric Sparkerosion.

FRENCH, Patent 1,220,607.

NRC-69-16403-13H

Tetrahedral Container.

FRENCH, Patent 1,222,847.

NRC-69-16404-13D

Process and Installation for the Cleaning and Degreasing of Metal Strip.

FRENCH, Patent 1,489,427.

NRC-69-16337-13H

Report IL 59'107 Concerning the Investigation of Plumbing Drains. Part I - The General Behavior of Structural Elements. GERMAN, rpt, Bericht IL 57-107 Über die Untersuchung von Entwässerungsinstallationen: Das Allgemeine Verhalten der Bauelemente, 9 Mar 1959.
*TT 70-58059
Available from NBS

Report IL 59'107 Concerning the Investigation of Plumbing Drains. Part II - The Quantitative Behavior of Structural Elements. GERMAN, rpt, Bericht IL 57-107 Über die Untersuchung von Entwässerungsinstallationen: Das Quantitative Verhalten der Bauelemente, 28 Jan 1960.
*TT 70-58060
Available from NBS

Report IL 59'107 Concerning the Investigation of Plumbing Drains. Part III - The Behavior of Descending Pipe-lines. GERMAN, rpt, Bericht IL 57-107 Über die Untersuchung von Entwässerungsinstallationen: Das Verhalten des Fallstranges, 1 Aug 1961.
*TT 70-58069
Available from NBS

Report IL 59'107 Concerning the Investigation of Plumbing Drains. Part I - The General Behavior of Structural Elements. GERMAN, rpt, Bericht IL 57-107 Über die Untersuchung von Entwässerungsinstallationen: Das Allgemeine Verhalten der Bauelemente, 9 Mar 1959.
*TT 70-58059
Available from NBS

Report IL 59'107 Concerning the Investigations of Plumbing Drains. Part II - The Quantitative Behavior of Structural Elements. GERMAN, rpt, Bericht IL 57-107 Über die Untersuchung von Entwässerungsinstallationen: Das Quantitative Verhalten der Bauelemente, 28 Jan 1960.
*TT 70-58060
Available from NBS

Report IL 59'107 Concerning the Investigations of Plumbing Drains. Part III - the Behavior of Descending Pipe-lines. GERMAN, rpt, Bericht IL 57-107 Über die Untersuchung von Entwässerungsinstallationen: Das Verhalten des Fallstranges, 1 Aug 1961.
*TT 70-58069
Available from NBS

German Standards, DIN 1986: Sewage Systems for Premises. Part II - Specifications for Determination of the Internal Diameters of Pipe Lines.

GERMAN, rpt, Deutsche Normen, DIN 1986: Grundstücksent-wässerungsanlagen; Bestimmungen für die Ermittlung der Lichten Weiten der Rohrleitungen, June 1962.
*TT 70-58059
Available from NBS

German Standards, DIN 1986: Sewage Systems for Premises. Part III - Specifications for Service. GERMAN, rpt, Deutsche Normen, DIN 1986: Grundstücksent-wässerungsanlagen; Regeln der für den Betrieb, Dec 1963.
*TT 70-58059
Available from NBS

German Standards, DIN 1986: Sewage Systems for Premises. Part I - Specification for the Construction. GERMAN, rpt, Deutsche Normen, DIN 1986: Grundstücksent-wässerungsanlagen; Technische Bestimmungen für den Bau, June 1962.
*TT-70-58059
Available from NBS

Drinking Water Supply Installations on Premises; Specifications for Installation and Service. GERMAN, rpt, Deutsche Normen, DIN 1988: Trinkwasserleitungenanlagen in Grundstücken; Technische Bestimmungen für Bau und Betrieb, 1962, 14 pp.
*TT 70-58060
Available from NBS

Instructions for the Computation of Cold Water Pipes in Housing Units. GERMAN, rpt, Deutscher Verein von Gas- und Wasserfachmannern. Wasserleitungen für Trinkwasserversorgung, Arbeitsblatt W308, 1955, 15 pp.
*TT 70-58057
Available from NBS

Surface Protection Against High-Temperature Corrosion in Aircraft Power Plants, by G. Lehnert, GERMAN, per, DEW Tech. Ber., Vol 9, 1969, pp 285-290, NLL Ref: 9022.401 (746-292)

Alignment, by O. Schonrock, 6 pp. GERMAN, per, Handbuch der Physik, 1928, pp 733-736. AEC/NP-tr-1848

A Method of Evaluating Experiments Direction at Ascertaining Suitability for Soldering, by G. Becker. GERMAN, per, Schweissen und Schneiden, Vol 20, No 7, 1968, pp 318-322. NTC-69-15986-13E

The Influence of the Type of Carriageway Pavement on Bridge Design, by D. J. Baenziger. GERMAN, per, Schweizerische Bauzeitung, Vol 83, No 36, 1965, pp 619-631. NTC-69-15738-13M

Sanitary Installations with Prefabricated Elements, by A. Gaechter. GERMAN, per, Schweizerischer Verein von Gas- und Wasserfachmannern. Monatsbulletin, Vol 47, No 4, 1967, pp 77-90. *TT 70-58062 Available from NBS

Development and Testing of After-treatment Agents for Fresh Concrete, by H. Kleinert. GERMAN, per, Silikattechnik, Vol 13, No 11, 1962, pp 392-398. NTC-69-16360-13C

Rating of Water Meters According to Date of Consumer Equipment on the Basis of Experiments of Munich Waterworks, by F. Himmler. GERMAN, rpt, Sonderdruck aus der DVGW Broschüre, Seite 76 bis 86, 11 pp. *TT 70-58061 Available from NBS

On the Measuring of Sewer Pipes, by H. Kaiser. GERMAN, per, Sonderdruck aus dem Gesundheits-Ingenieur, Vol 73, No 9-10, 1952, pp 152-157. * TT 70-58063 Available from NBS

The Pneumatic Transportation of Loose Goods, Under Special Consideration of the Transportation of Starch, by F. A. Guenther. GERMAN, per, Stuerke, Vol 13, 1961, pp 312-319. NTC-69-16119-131

Alexander Square as a Compact City. GERMAN, per, VDI Nachrichten, No 43. 22 Oct 1969, p 19. DIA/LN 610-70

Waterproofing Coating of Asphalt Concrete as Seen from a German Point of View, by A. Loehr. GERMAN, per, die Wasserwirtschaft, Vol 57, No 1, 1967, pp 46-53. NTC-69-16558-13M

Closed Circuit TV in the Service of Water Engineering, by H. Jann. GERMAN, per, Wasserwirtschaft, Vol 57, No 3, 1967, pp 133-138. NTC-69-16551-13B

The Distributing-ring Separator, by S. Schauer. GERMAN, per, Zement-Kalk-Gips, Vol 21, No 9, 1968, pp 381-385. NTC-69-15732-13H

Sprinkling System Consisting of Several Articulated Sprinkler Vehicles, by Paul Zeyssolff, 9 pp. GERMAN, Patent No. 324,113 Dept of Commerce Patent Office

Scientific Review of Civil Engineering. HUNGARIAN, per, Melyepiteslydomanyi Szemle, No 9, 1969, pp 406-410. DIA/LN 662-70

Contribution to Study of New Apparatus for the Measurement of Horizontal Displacements in Large Dams. Study No 4 of Group 1. by A. Marand. ITALIAN, per, L'Energia Elettrica, Vol 3, No 12A, 1961, pp 1099-1074. NTC-69-16119-131

Scientific
Mechanical, Industrial, Civil &
Marine Engineering (Contd)

Calculation of Arch Dams of any Kind with the
Method of Total Minimum Potential Energy, by
M. Fanelli.
ITALIAN, per, l'Energia Elettrica, Vol 39,
No 8, 1962, pp 566-578.
NTC-69-16164-13M

On the Determination of the Performance of Nozzle
of the Hydraulic Mining Device, by Yukio Yoshizawa.
JAPANESE, per, Nippon Kogyo Kaishi, Vol 81, 1965,
pp 29-34.
*AEC/ORNL

New Well Logging Method Using the Neutron Tube,
by Toshimobu Itoh, 23 pp.
JAPANESE, per, Oyo Butsuri, Vol 37, 1968,
pp 322-333.
AEC/NSJ-Tr-146

On the Stress Around Slot which is Provided
to Pass a Longitudinal Frame Through Transverse
Web., by R. Nagamoto and Y. Taguchi,
JAPANESE, per, Seibu Zosenkai Kaiho, Vol 37,
Feb 1969,
NLL Ref: 9022.065 (3103)

Apparatus for the Melting Method of Spun
Yarn, by Y. Nakamura.
JAPANESE, Patent Publication SHO 44-2 054.
NTC-69-16592-13I

A Drilling Method for the Spinneret, by
T. Okamura, W. Ichikawa.
JAPANESE, Patent Publication SHO 43-19 098.
NTC-69-16599-13I

Possibility of Applying the Theory of
Waiting Lines for Investigating the
Fishing Harbor's Operation, by
J. Madziar.
POLISH, per, Technika i Gospodarska
Morska, Vol 19, No 5(215) 1969,
pp 205-206.
*TT 70-55049
Available from USDI/BCF

New Baltic Cutter for Polish Fisheries,
by B. Pradzynski, J. Raczynski.
POLISH, per, Technika i Gospodarska
Morska, Vol 19, No 8-9(218-219), 1969,
pp 378-381.
*TT 70-55053
Available from USDI/BCF

Scientific
Mechanical, Industrial, Civil &
Marine Engineering (Contd)

Speed of Fish Freezing on the Factory
Trawler "B-15", by A. Balcerski.
POLISH, per, Technika i Gospodarska,
Morska, Vol 19, No 8-9(218-219), 1969,
pp 384-387.
*TT 70-55054
Available from USDI/BCF

Fishery Guard Vessels, by T. Wojick.
POLISH, per, Technika i Gospodarska
Morska, Vol 19, No 11(221), 1969,
pp 494-498.
*TT 70-55058
Available from USDI/BCF

Increased Train Speeds Discussed, by
Ch. Turbutiu, 6 pp.
RUMANIAN, per, Revista Cailor Ferate,
Bucharest, Nov 1969, pp 525-527.
JPRS 49842

Highway Construction Standards and Trends,
by P. Stanescu, 5 pp.
RUMANIAN, per, Standardizarea, Bucharest,
Nov 1969, pp 566-567.
JPRS 49905

Spanish Experience in Canal Construction Produces
a New Technique, by M. S. Sarrajan.
SPANISH, per, Revista de Obras Publicas, Vol 115,
No 6, 1967, pp 451-464.
NTC-69-16162-13B

Methods & Equipment

Effect of the Reynolds Number of tip Losses, by
A. S. Maksudyan, V. A. Chamikov. 9 pp.
RUSSIAN, per, Izvestiya AN ARMSR. Seriya
Tekhnicheskikh Nauk, Vol 20, No 2, 1967, pp 53-59
AIR/FTD/HT-23-247-68

Properties of Infrared Film, by I. I. Breydo.
RUSSIAN, per, Izv Glavnaya Astronomicheskaya
Observatoriya, No 177, 1964, pp 165-170.
NTC-69-15942-14E

A Unique Instrument.
RUSSIAN, np, Moskovskaya Pravda, 16 Apr 1969.
NLL Ref: 6167.65 (121)

Measures Against Paper Electrization, by
G. S. Mazo.
RUSSIAN, per, Poliografiya, No 8, 1968,
pp 35-37.
NTC-69-16043-14E

Plasticization of Cellulose Acetate Motion
Picture Film Support, by G. I. Braginskiy,
N. I. Volynkin.
RUSSIAN, per, Tekhnika Kino i Televideniya,
Vol 12, No 4, 1968, pp 14-18.
NTC-69-16044-14E

Effect of Non-diffusing Color Couplers on the
Sensitizing Effect of Benzinimidazolo-carbocyanines,
by Ye. B. Lifshits, I. I. Levkoyev.
RUSSIAN, rpt, Transactions of the Conference
on Theory and Technology of Photographic
Process, Zakopane, Poland, Sept 16-21, 1968,
pp 18/1-18/9.
NTC-69-16100-14E

Relationship Between the Structure of Adsorption
and Wetting Properties of Wetting Agents in
Coating Photographic Emulsions, by
S. M. Levi, O. K. Smirnov.
RUSSIAN, rpt, Transactions of the Conference
on Theory and Technology of Photographic
Process, Zakopane, Poland, Sept 16-21, 1968,
pp 29/1-29/10.
NTC-69-16101-14E

Some Problems of the Theory of Extrusion
Coating, by S. M. Levi.
RUSSIAN, rpt, Transactions of the Conference
on Theory and Technology of Photographic
Process, Zakopane, Poland, Sept 16-21, 1968,
pp 32/1-32/9.
NTC-69-16102-14E

Aging of Infrared Emulsions and Desensitization,
by A. S. Kheyman, V. P. Donatova.
RUSSIAN, rpt, Transactions of the Conference
on Theory and Technology of Photographic
Process, Zakopane, Poland, Sept 16-21, 1968,
pp 41/1-41/8.
NTC-69-16098-14E

Contrast Function and Its Application for
Evaluating Motion Picture Film Sharpness,
by G. A. Istomin, G. G. Gribakin.
RUSSIAN, rpt, Transactions of the Conference
on Theory and Technology of Photographic
Process, Zakopane, Poland, Sept 16-21 1968,
pp 61/1-61/12.
NTC-69-16097-14E

Injection of Current Carriers into Organic
Semiconductors from Electrolytic Contacts
and the Application of this Process in
Electrophotography, by V. M. Fridkin,
V. Yu. Litvinenko.
RUSSIAN, rpt, Transactions of the Conference
on Theory and Technology of Photographic
Process, Zakopane, Poland, Sept 16-21, 1968,
pp 76/1-76/12.
NTC-69-16099-14E

Effect of Polyethylene Glycol on the Develop-
ment of Silver Bromide and Silver Iodobromide
Photographic Emulsions, by V. I. Sheberstov,
T. G. Ovechkina.
RUSSIAN, per, Zhurnal Nauch i Prikl Fotogr i
Kinemat, Vol 12, No 5, 1967, pp 362-364.
NTC-69-16265-14E

Dependence of the Resolving Power of Photographic
Papers Upon the Aperture of the Resolving
Power Camera Lens, by Yu. N. Gorokhovskiy,
T. A. Lomachenkova.
RUSSIAN, per, Zhurnal Nauch i Prikl Fotogr i
Kinemat, Vol 13, No 2, 1968, pp 130-131.
NTC-69-16221-14E

New Type of Fading of the Latent Image in
Nuclear Emulsions at Liquid Helium Tempera-
ture, by V. I. Matvyenko, K. A. Petrzhak.
RUSSIAN, per, Zh Nauch i Prikl Fotogr i
Kinemat, Vol 13, No 2, 1968, pp 132-133.
NTC-69-16111-14E

The Correctness of the Application of Gaussian
Distribution for Evaluating the Random Devia-
tions of the Optical Density of Developed
Photographic Image, by S. B. Gurevich.
RUSSIAN, per, Zhurnal Nauch i Prikl Fotogr i
Kinemat, Vol 13, No 2, 1968, pp 137-138.
NTC-69-16213-14E

Non-emulsion Photographic Layers for Preparing
Images of Individual Nuclear Particle Tracks,
by A. L. Kartuzhanskiy, V. Ye. Privalova.
RUSSIAN, per, Zhurnal Nauch i Prikl Fotogr i
Kinemat, Vol 13, No 2, 1968, pp 139-145.
NTC-69-16256-14E

Determination of Frequency-contrast Characteristics of Photographic Emulsions, by A. F. Mel'kanovich, V. V. Mineyev.

RUSSIAN, per, Zhurnal Nauch i Prik Fotogr i Kinemat, Vol 13, No 3, 1966, pp 200-202.
NTC-69-16247-14E

Fixing-washing Apparatus for Processing Pellicle Stacks, by V. V. Barabov.

RUSSIAN, per, Zhurnal Nauch i Prik Fotogr i Kinemat, Vol 13, No 3, 1966, pp 212-214.
NTC-69-16242-14E

Granularity Spectra of Black-and-white Motion Picture Films, by M. A. Aingorn.

RUSSIAN, per, Zhurnal Nauch i Prik Fotogr i Kinemat, Vol 13, No 3, 1966, pp 214-215.
NTC-69-16241-14E

Effect of Polyethylene Glycol on Silver Bromide and Silver Iodo-bromide Photographic Emulsions, by A. M. Sharapova, S. M. Rychkova.

RUSSIAN, per, Zhurnal Nauch i Prik Fotogr i Kinemat, Vol 13, No 3, 1966, pp 216-217.
NTC-69-16240-14E

Effect of Peroxide Compounds on the Hardening Development Process, by L. V. Krasnyi-Admoni.

RUSSIAN, per, Zhurnal Nauch i Prik Fotogr i Kinemat, Vol 13, No 3, 1966, pp 218-219.
NTC-69-16239-14E

Intentionally Active Surface Layer of Silver Halide Emulsion Grains, by Ye. V. Kalbfleisner.

RUSSIAN, per, Zhurnal Nauch i Prik Fotogr i Kinemat, Vol 13, No 3, 1966, pp 219-221.
NTC-69-16238-14E

Effect of Silver Iodide on Photographic Emulsion in Macro-graininess Depending Upon the Nature of Developing Agent, by I. M. Kilinskiy, T. Ye. Klanner.

RUSSIAN, per, Zhurnal Nauch i Prik Fotogr i Kinemat, Vol 13, No 3, 1966, pp 222-223.
NTC-69-16237-14E

Experiments on Investigations of the Role of Silver Halide Complexes in the Formation of Photochemical Sensitivity of Silver Halide Emulsions, by V. M. Belous.

RUSSIAN, per, Zhurnal Nauch i Prik Fotogr i Kinemat, Vol 13, No 3, 1966, pp 224-225.
NTC-69-16236-14E

Photography of High-pressure Water Jets Exposed to the Illumination of Nitrogen Shere Pulse Lamp, by N. N. Negodayev, V. G. Yushkov.

RUSSIAN, per, Zhurnal Nauch i Prik Fotogr i Kinemat, Vol 13, No 4, 1966, pp 241-245.
NTC-69-16107-14E

Electrophotographic Layers for Vacuum Ultraviolet Spectral Region, by L. N. Vinokurova, S. G. Grenishin.

RUSSIAN, per, Zhurnal Nauch i Prik Fotogr i Kinemat, Vol 13, No 4, 1966, pp 299-301.
NTC-69-16152-14E

Multiplication of Electron Excitations During Photolysis and Photographic Sensitivity of Silver Halide Emulsions, by Yu. A. Cherkasov. RUSSIAN, per, Zhurnal Nauch i Prik Fotogr i Kinemat, Vol 13, No 4, 1966, pp 302-304.
NTC-69-16153-14E

New Method of Development of Electrophotographic Latent Image, by H. Fiedler, W. Herms.

RUSSIAN, per, Zhurnal Nauch i Prik Fotogr i Kinemat, Vol 13, No 4, 1966, pp 307-308.
NTC-69-16200-14E

Method and Technology of Photographic and Visually Observing Subjects in the High Frequency Current Field, by G. S. Frantov, V. I. Mikhalevskiy.

RUSSIAN, per, Zhurnal Nauch i Prik Fotogr i Kinemat, Vol 13, No 4, 1966, pp 309-310.
NTC-69-16201-14E

Effect of Gelatin and Dispersity of the Solid Phase of Emulsion on the Emulsion Spectral Light Sensitivity, by A. B. Pyatnitskaya. RUSSIAN, per, Zhurnal Nauch i Prik Fotogr i Kinemat, Vol 13, No 4, 1966, pp 310-312.
NTC-69-16210-14E

Effect of Polyethylene Glycol in the Developer on the Structural Characteristics of Developed Image, by V. I. Shcherbakov, S. A. Borovkova. RUSSIAN, per, Zhurnal Nauch i Prik Fotogr i Kinemat, Vol 13, No 4, 1966, pp 313-317.
NTC-69-16202-14E

Scientific
Methods & Equipment (Contd)

Nature of Photographic Sensitivity, by
K. V. Chibisov.
RUSSIAN, per, Zhurnal Nauch i Prikl Fotogr i
Kinemat, Vol 13, No 4, 1968, pp 310-317.
WTC-69-1-1207-14E

Theory of Fading (Regression) of Photographic
Latent Image, by S. V. Izmaylov.
RUSSIAN, per, Zhurnal Nauch i Prikl Fotogr i
Kinemat, Vol 13, No 5, 1968, pp 354-356.
WTC-69-1-1223-14E

Photostereopolymerization Recording of Infor-
mation, by N. G. Nishodkin.
RUSSIAN, per, Zh Nauch i Prikl Fotogr i
Kinemat, Vol 13, No 5, 1968, pp 359-360.
WTC-69-1-1225-14E

Nature of Photographic Silver Bromide
Emulsion Luminescence Centers, by
A. A. Sadykova, V. G. Vlasov.
RUSSIAN, per, Zh Nauch i Prikl Fotogr i
Kinemat, Vol 13, No 5, 1968, pp 360-362.
WTC-69-1-1204-14E

Developing and Hardening Properties of Thiazoly
Derivatives of Pyrocatechol and Pyrogallol, by
M. S. Khaykin, Ye. F. Rul'.
RUSSIAN, per, Zh Nauch i Prikl Fotogr i Kinemat,
Vol 13, No 5, 1968, pp 362-363.
WTC-69-1-1220-14E

Polyphton Mechanism of Spectral Sensitization.
by I. A. Akimov, A. V. Shauliya.
RUSSIAN, per, Zh Nauch i Prikl Fotogr i
Kinemat, Vol 13, No 5, 1968, pp 364-365.
WTC-69-1-1203-14E

Electrostatic Recording of Signals on Paper
without Dielectric and Conductive Coatings,
by Ye. G. Melikyan, M. S. Avakyan.
RUSSIAN, per, Zhurnal Nauch i Prikl Fotogr i
Kinemat, Vol 14, No 1, 1969, pp 49-51.
WTC-69-1-1247-14E

Substitution of Non-silver Materials for
Silver Halides in Photographic Systems, by
V. I. Sheberstov, K. V. Chibisov.
RUSSIAN, per, Zh Nauch i Prikl Fotogr i
Kinemat, Vol 14, No 1, 1969, pp 61-70.
WTC-69-1-15710-14E

Scientific
Methods & Equipment (Contd)

A Gravity-Wave Detector With a Superconducting
Resonant Element, by G. Ya. Lavrent'ev.
RUSSIAN, per, Zh Tekhn Fiz, Vol 39, No 7, 1969,
pp 1316-1320.
Dept of Navy APL/JHU T-2388

Methods and Apparatus Used in Design of Projection
Nozzles for Sandblasting Machines.
FRENCH, Patent No 513,375, 30 Oct 1920.
*ACSI J-8058
ID 2204003370

Grain Growth of Silver Bromide in Highly
Disperse Gelatin Solutions, by V. V. Jones.
GERMAN, per, Zeit fuer Wissenschaft Photogr,
Photophys und Photochem, Vol 50, 1959,
pp 138-150.
WTC-69-1-1241-14E

Some Technical Features of the AFU-75 Tracking
Camera.
HUNGARIAN, per, Geodesia es Kartografia, 1969,
pp 175-177.
DIA/LN 658-70

Dye Sensitization of Zinc Oxide. Part III.
by Takahashi, C. Shishido.
JAPANESE, per, Denshi Shashin, Vol 2, No 1,
1960, pp 19-18.
WTC-69-1-15746-14E

Phosphor Sensitization of Zinc Oxide. Part I.
by T. Takahashi, C. Shishido.
JAPANESE, per, Denshi Shashin, Vol 2, No 1,
1960, pp 19-23.
WTC-69-1-15745-14E

X-ray Measurement of the Degree of Crystallinity
of Poly(vinyl Alcohol) Films Using A Counter,
by I. Sakurada, Y. Nukishuna.
JAPANESE, per, Kobunshi Kagaku, Vol 12, 1955,
pp 483-486.
ATG-JS-184

Large Vibration Test Machine, by I. Kama,
M. Kama.
JAPANESE, per, Kinon Kikai Gakkaishi, Vol 4,
No 519, 1961, pp 103-104.
WTC-69-1-1594-14E

Scientific
Methods & Equipment (Contd)

Effect of Blending on the Mechanical Properties of Films Obtained from Emulsions, by K. Shibayama, E. Jidai.
JAPANESE, per, Shikizai Kyokaishi, Vol 40, No 4, 1967, pp 150-154.
ATS-JS-172

Biaxial Tensile Tester for Flat Plates, by K. Sakaguchi, S. Kawabata, 16 pp.
JAPANESE, per, Zairyo, Vol 17, 1968, pp 356-360.
AEC/SCL-Tr-69-254

Method of Manufacture of Electrolytic Tinplate With High Corrosion-Resistance, by T. Ando.
JAPANESE, Patent No. 38-11255, 1963
CRL D 292
ETC-67-73319

Methods of Preparing Resistance Spot-Welded Adhesive Bonds Using Thermosetting Adhesives, by Henryk Zatyka.
POLISH, per, SOURCE UNKNOWN, pp 14-29.
*FSTC/HT-23-671-70
*ACSI J-8046

Light Sensitivity of Mercury (II) Compounds by W. Wojciak, Z. Stachowiak.
POLISH, rpt, Transactions of the Conference on Theory and Technology of Photographic Process, Zakopane, Poland, Sept 16-21, 1968, pp 77/1-77/10.
WTC-69-10096-14E

Missile Technology

Principles of Solid-Fuel Rocket Design, by Ya. M. Shapiro, G. Yu. Mazing, et al. 389 pp.
RUSSIAN, bk, Osnovy Proyektirovaniya Raket na Tverdom Toplivo, 1968, pp 1-352.
AIR/FTD/AF-23-268-69

Scientific
Navigation, Communications, Detection
& Countermeasures

Marine Biology and the Fleet, by N. I. Tarasov, 39 pp.
RUSSIAN, rpt, 1949, pp 3-30.
Dept of Navy NIC Trans 2993

Radio Wave Propagation in Cosmic Communications, by N. A. Armand, M. A. Kolosov, 165 pp.
RUSSIAN, bk, 1969, pp 3-155.
Dept of Navy NIC Trans 2980

Signal Matching in a Radio Interferometer with Independent Receivers, by V. A. Alekseyev, 5 pp.
RUSSIAN, per, Izv VUZ Radiofizika, Vol 11, No 10, 1968, pp 1477-1479.
ACSI J-7724
FSTC/HT-23-084-70

Assessment of the Technical Possibilities of Ensuring Unperturbability of a Single-Cyrocompass with Negative Pendulousness, by M. N. Blagoveshchenskiy, V. M. Kogan, 23 pp.
RUSSIAN, bk, Otsenka Tekhnicheskoy Vozmozhnosti Obespecheniya Nevozmozhchayemosti Odnegiroskopongogo Kompasas Otritsatel'noy Mayatnikovost'yu, 1968.
NAV/NIC/Tran-2970-70

Radar Probing of the Troposphere Under Clear Sky Conditions, by G. B. Brylev, 20 pp.
RUSSIAN, per, Trudy Leningrad-Glavnaya Geofizicheskaya Observatoriya, No 231, 1968, pp 38-54.
ACSI J-7720
FSTC/HT-23-085-70

Telegraph and Telephone Administration Report for Fiscal Year 1968.
BELGIAN, rpt, Regie des Telegraphes et des Telephones Rapport Sur L'Exercice 1968, 12 Dec 1969, pp 37, 38, 54, 61, 66-69.
DIA/LN 597-69

Investigation of Interaxis Coupling and Simulation of the Dynamical Behavior of a Stabilized Platform With an Analog Computer, by U. Krogmann.
GERMAN, rpt, Bundesministerium fur Wissenschaftliche Forschung, Research Report W 68-35, 1968, pp 1-68.
*Dept of Navy APL/JHU J-1455

Effect of Stochastic Disturbances on the Behaviour of a Stabilized Platform With Gasbearing Gyros as Sensors, by U. Krogmann.
GERMAN, rpt, Bundesministerium fur Wissenschaftliche Forschung, Research Report W 68-36, 1968, pp 1-62.
*Dept of Navy APL/JHU J-1454

Scientific
Navigation, Communications, Detection
& Countermeasures (Contd)

Insertion Contacts in Communications and Power
Technology, by W. Merl.
GERMAN, per, SOURCE UNKNOWN, pp 3-8.
*FSTC/HT-23-690-70
*ACSI J-8047

Nuclear Science & Technology

Reactor Layout and Design for Shipboard Nuclear
Plants, by B. A. Kuznetsov, 251 pp.
RUSSIAN, bk, 1966.
Dept of Navy NIC Trans 2997

Progress Report on the 3.5 BeV Electron-Positron
Colliding-Beam Installation (VEPP-3), by
G. I. Budker, I. Ya. Protopopov, 10 pp.
RUSSIAN, rpt, Akad Sci SSSR, Institute Nuclear
Physics, Siberian Section, 1969.
AEC/SLAC-Tr-109-70

High-Energy Interactions of Gamma Quanta and
Electrons with Nuclei, by V. N. Gribov, 40 pp.
RUSSIAN, rpt, Akad Sci SSSR, A. F. Ioffe Institute
of Engineering Physics, Leningrad. 4th Winter
Seminar 5-17 Feb, 1969, Part I.
AEC/SLAC-Tr-102-70

The Use of Water-Water Reactors in Small Nuclear
Power Plants, by V. A. Zhil'tsov, A. P. Kotov, 22
RUSSIAN, per, Atomnaya Energiya, Vol 26, No 5,
1969, pp 403-410, 445.
NAV/NIC/Tran-2977-70

Dynamics of Steam Formation in a Two-Loop Nuclear
Power Plant During a Decrease of Power, by
M. Kh. Dorri, M. M. Solov'yev, 3 pp.
RUSSIAN, per, Atomnaya Energiya, Vol 27, No 1,
July 1969, pp 48-49.
NAV/NIC/Tran-2978(B)-70

Dispersion Type Fuel Elements for Nuclear Re-
actors, by A. G. Samoylov, A. I. Kashtanov,
147 pp.
RUSSIAN, bk, Dispersionnyye Teplovydelyayushchiye
Elementy Yadernykh Reaktorov, Moscow, 1969, pp 103-
262.
JPRS 49787

Scientific
Nuclear Sciences & Technology (Contd)

Damping of Coherent Beam Oscillations in a
Storage Ring, by Ya. S. Derbenev, N. S. Dikanskiy,
37 pp.
RUSSIAN, preprint No 315, Institute Nuclear
Physics, Siberian Academy of Sci, 1969
AEC/SLAC-Tr-106-70

Intranuclear Cascades with Allowance for α -Clusters,
by V. S. Barashenkov, O. B. Abdinov, 9 pp.
RUSSIAN, rpt, JINR-P2-4568.
AEC/ORNL-Tr-2243

On the effect of Ultrasound on the Formation
of Ionizing Particle Tracks in Liquid-hydrogen
Bubble Chamber, by V. A. Akulichev.
RUSSIAN, rpt, JINR-P13-4702, 1969.
*AEC

Tissue Dosimetry of Radiations Generated by High-
Energy Accelerators, by V. T. Golovachik.
RUSSIAN, rpt, JINR-P16-4765, 1969
*AEC/ORNL-Tr-2286

Synthesis and Search for Heavy Transuranium
Elements, by G. N. Flerov, V. A. Druin, 15 pp.
RUSSIAN, per, Priroda, Moscow, Nov 1969, pp 9-17.
JPRS 49858

Development of Controlled Thermonuclear Synthesis
Research in the Ukraine (1957-1968), by
V. T. Tolok, 9 pp.
UKRAINIAN, per, Visnik Akademiyi Nauk Ukrayins'koyi
PPSR, Kiev, No 5, 1969, pp 24-30.
JPRS 49859

The Nuclear Explosive, a Potential Asset to
Chemical Industry, by P. Cohn, M. Dupuis, 13 pp.
FRENCH, per, Energ Nucl, No 10, 1968, pp 224-230.
AEC/UCRL-Tr-10372

The Thermonuclear Future of Magnetic Configuration
of the Tokamak, by P. Hubert.
FRENCH, per, Nucl Fusion, No 9, 1969, pp 209-214.
*AEC/ORNL-Tr-2282

Investigations on Cyclones for Steam Separation
in Boiling Water Reactors, 59 pp.
GERMAN, rpt, Allgemeine Elektrizitaets-Gesellsch,
July 1-Sept 30, 1967.
AEC/EURAEC-2104

Simulation of Coolant Ejection in Na-2 Fuel
Element, by P. Fette, H. D. Grossgarten, 16 pp.
GERMAN, rpt, KFK-925
AEC/EURFNR-628

The Decontamination of a Reactor Water Coolant Loop Demonstrated at the Rossendorf WWR-S Type Research Reactor, by H. Unger, D. Westphal.
GERMAN, per, Kernenergie, Vol 11, No 11/12, 1968, pp 285-290.
NLL Ref: 3774.5 (EE Trans 1904)

Shielding Measurements in Rheinsberg Nuclear Power Plant, by W. Gerullis.
GERMAN, per, Kernenergie, Vol 12, No 10, 1969, pp 328-340.
*AEC/ORNL-2289

Operations of Isotope Institute Reviewed, by Pal Tetenyi, 26 pp.
HUNGARIAN, per, Kemial Kozlemenye, Budapest, No 3, 1969, pp 321-345.
JPRS 49780

Physics

Convective Heat and Mass Exchange (Collection of Articles). 309 pp.
RUSSIAN, bk, AN BSSR, Institut Teplo-i Massobmena. Issledovaniya Konvektivnogo Teplo-i Massoperezenosa, Vol 10, 1968, pp 1-423.
AIR/FTD/HT-23-242-69

Effect of Heating on the Operation of a Ruby Laser, by A. S. Rubanaw, A. V. Chaley, 8 pp.
RUSSIAN, per, AN BSSR, Vestsi, Seriya Fiz-Matematy Navuk, No 2, 1968, pp 80-85.
AIR/FTD/HT-23-523-69

Experimental Determination of Electron Concentrations and Effective Frequencies of Electron Collisions With Neutral Particles in Air, N₂, O₂, CO, Argon and CO₂ Behind Shock Waves, by Yu. S. Lobastov. 18 pp.
RUSSIAN, rpt, AN SSSR, Energeticheskiy Institut. Issledovaniya po Fizicheskoy Gazodinamike, 1966, pp 119-130.
AIR/FTD/HT-23-943-68

Anomalous Absorption of Cyclotron Waves in Confined Plasma, by L. S. Bogdankevich, A. A. Rukhadze, 20 pp.
RUSSIAN, preprint No 72, Akad Nauk SSSR, Institute Fiziki.
AEC-Tr-7073

Attenuator Based on a Ferrite Resonance Switch, by L. Ye. Tsopp, 8 pp.
RUSSIAN, rpt, NP-17759, Akad Nauk SSSR, Institute Fiziki.
AEC-Tr-7067

Long-Wave Perturbations of Stellarator Magnetic Systems Geometry, by I. I. Danilkin, 40 pp.
RUSSIAN, rpt, NP-17779, Akad Nauk SSSR, Institute of Fiziki.
AEC-Tr-7059

Confinement of Plasma in Stellarators, 54 pp.
RUSSIAN, rpt, Akad Nauk SSSR, Institut Fiziki, Moscow.
AEC-Tr-7072

Introduction to the Statistical Theory of Non-linear Particle-Wave Interactions in Plasma, Parts I & II, by L. M. Kovrizhnykh.
RUSSIAN, rpt, Akad Nauk SSSR, Inst Fiziki, Preprint No 117, NP-17885, Pt 1, pp 1-73, NP-17885, pt 2, pp 73-154, 1968.
*AEC

Detection and Analysis of Induced Emission in Argon Pinch Discharges, by A. N. Vasil'eva, 61 pp.
RUSSIAN, rpt, Akad Nauk SSSR, Instit Fiziki, Preprint No 184, Rept NP-17892, 1968.
*AEC

Wave Equations Approximating the Precise Solutions for Nonlinear Electrodynamics and Optics, by V. M. Yeleonskiy, 39 pp.
RUSSIAN, rpt, Preprint No 37, Report, NP-17915, Akad Nauk SSSR, Inst Fiziki, 1969.
*AEC

Equilibrium and Stability of Plasma Currents in Toroidal Systems, by S. E. Rosinskiy, 39 pp.
RUSSIAN, rpt, Akad Nauk SSSR, Inst Fiziki, NP-17973, Preprint No 51, 1969.
*AEC

On the Possibility of Amplifying Electromagnetic Emission Related to the use of Averaged High-Frequency Field Forces, by G. S. Lukyanchikov, 6 pp.
RUSSIAN, rpt, Akad Nauk SSSR Inst Fiziki, NP-18007, 1969.
*AEC

Elastic Halfspace with Spherical Cavity, by G. G. Chankvetadze.
RUSSIAN, per, Akademiya Nauk SSSR, Institut Mekhaniki Inzhenernyi Sbornik, Vol 28, 1969, pp 65-73.
ITC-69-16427-20K

Electronic and Atomic Collisions Bibliography of Russian Literature for Years 1946-1966, 69 pp.
RUSSIAN, rpt, Akad Nauk SSSR, Leningrad, Fiz-Tekh Institute.
AEC-Tr-7093

Absorption of Electromagnetic Waves in a Strongly Inhomogeneous Plasma, by A. D. Piliya, V. I. Fedorov 14 pp.
RUSSIAN, rpt, FTI-104, Akad Nauk SSSR, Leningrad, Fiziko-Tekh Instit.
AEC-Tr-7070

Calculating the Slowing Down Process of Non-Relativistic Electrons in Helium, by G. D. Alkhazov 42 pp.
RUSSIAN, rpt, Akad Nauk SSSR, Leningrad, Fiziko-Tekh Institute, FTI-108.
AEC/ANL-Tr-774

Linear Wave Transformation in an Inhomogeneous Magnetoactive Plasma, by A. D. Piliya, 18 pp.
RUSSIAN, rpt, FTI-144, Akad Nauk SSSR, Leningrad, Fiziko Tekh Institute.
AEC-Tr-7069

Interaction of a Plasma Beam with a Plasma Cylinder in the Magnetic Field of a Divertor, by V. G. Zykov, 9 pp.
RUSSIAN, rpt, Akad Nauk Uk SSR, Fiz-Tekh Inst, FTI-167, 1968.
*AEC

Helium Pumping by Condensed Layers of Gas in the Pressure Interval 10^{-9} to 10^{-13} TORR, by V. B. Yuferov, 9 pp.
RUSSIAN, rpt, Akad Nauk UK SSR, Fiziko-Tekh Instit, FTI-231.
*AEC

Mass-Energetic Measurements of Plasma Entrapped into the Aperture of the Divertor During Injection Through the Magnetic Gap, by V. M. Zalkind, 12 pp.
RUSSIAN, rpt, Akad Nauk Uk SSR, Fiz-Tekh Inst, NP-17665, 1968.
*AEC

Mechanism of Resonance Heating of Electrons in Beam-Plasma Discharge, by Yu. G. Zaleskiy, 10 pp.
RUSSIAN, rpt, Akad Nauk Uk SSR, Fiz-Tekh Inst, NP-17945, 1968
*AEC

Effect of Gamma Irradiation on the Electrical Characteristics of Specially Pure Silicon, by S. V. Starodubtsev, B. M. Mikhayelyan, et al. 8 pp.
RUSSIAN, rpt, AN UZSSR, Fiziko-Tekhnicheskii Institut. Fizicheskiye Svoystva Otdo Chistykh Metallov i Poluprovodnikov, 1966, pp 127-133.
AIR/FTD/HT-23-537-68

Turbulent Heating of Plasma Ions During the Growth of Electron-Acoustic Instability, by V. L. Sizonenko 20 pp.
RUSSIAN, rpt, Akad Nauk Uk SSR, Fiziko-Tekh Inst, FTI-213
*AEC

Extension of the Limits of Measurement of Plasma Density by Means of a Laser Interferometer with Phase Modulation of the Optical Signal, by L. A. Dushin, 8 pp.
RUSSIAN, rpt, FTI-165, Akad Nauk Ukr SSR, Fiziko Tekh Institute, 1968.
*AEC

Interaction of Moving Plasma with an Oblique M Magnetic Field, by V. S. Voitsenya, 15 pp.
RUSSIAN, rpt, Akad Nauk Uk SSR, Fiziko-Tekh, NP-17664, 1968.
*AEC

Steady-State Cyclic-Coordinate Problems of Anisotropically Conducting Fluids. Flow Past Bodies. Wave Guides, by V. S. Tklich. 27 pp.
RUSSIAN, bk, AN UKR SSR, Institut Gidromekhaniki. Sovremennyye Voprosy Gidrodinamiki; Materialy Letney Shkoly po Gidrodinamike, 1967, pp 66-87.
AIR/FTD/HT-23-137-69

Action of Supersonic Oscillations on Diffusion Processes in Liquids, by A. V. Kortnev, T. V. Makarova.
RUSSIAN, per, Akustika i Ul'trazvuk, No 1, 1966, pp 20-41.
ITC-09-15944-20D

The Energy Distributions of Fast Neutrons Passing Through Reactor Shielding, by A. P. Veselkin, Yu. A. Yegorov, 18 pp.
RUSSIAN, per, Atomnaya Energiya, Vol 26, No 6, 1969, pp 523-529.
Dept of Navy NIC Trans 2979

Frequency Dependence of the Absorption of Sound in Polymers, by Kh. M. Khalilov, B. V. Muratova.
RUSSIAN, per, Dok Ak Nauk Azerbaid SSR, Vol 24, No 5, 1968, pp 8-11.
WTC-69-16015-20A

Effect of a Small Transverse Perturbation on the Helical Instability in the Oscillator, by B. A. Uspenskiy, I. M. Vikulin.
RUSSIAN, per, Fiz Tekh Poluprov, Vol 2, No 10, 1968, pp 1436-1440.
ATS-RJ-5266

High-Rate Reactions in Solution Behind the Front of Strong Shockwaves, by V. K. Kedrinskiy.
RUSSIAN, per, Dok Ak Nauk SSSR, Vol 187, No 1, 1969, pp 130-133.
*Dept of Navy APL/JHU J-1459

Mechanism of Generation in CO₂ Laser, by N. N. Scholev.
RUSSIAN, rpt, Intern Conf Phys Electron Atomic Collisions, 5th, Leningrad, 17-23 July 1967.
ATS-RJ-5244

The Decomposition Mechanism of Benzene in Irradiation With Laser, by O. F. Kulikov.
RUSSIAN, per, Dok Ak Nauk SSSR, Vol 187, No 5, 1969, pp 1060-1063.
*Dept of Navy APL/JHU J-1471

Relaxation Processes and Inversion of Population in CO₂ Lasers, by B. F. Gordiyets.
RUSSIAN, rpt, Intern Conf Phys Electron Atomic Collisions, 5th, Leningrad, 17-23 July 1967.
ATS-RJ-5243

An Adjusting Double-Rim Stage with the Second Rim Bypassed at High Loads, by I. I. Kirillov, V. D. Pshenichnyy, 9 pp.
RUSSIAN, per, Energomashinostroyeniye, No 9, 1965, pp 7-9.
AIR/FTD/MT-23-295-68

Thermal Conductivity in the Case of a Finite Heat Propagation Rate, by V. V. Kharitnikov.
7 pp.
RUSSIAN, per, Inzh-Fiz Zh, Vol 16, No 4, 1969, pp 737-741.
NASA TT F-12,647

Bibliography on Heat and Mass Transfer (1964-1966), by R. A. Dolinskaya, V. M. Murashko. 628 pp.
RUSSIAN, bk, Filial Fundamental'noy Biblioteki AN BSSR. Institut Teplo-I Massobmena AN BSSR. Bibliografiya po Teplo-I Massobmena (1964-1966), Vol 1, 1968, pp 1-509.
AIR/FTD/MT-23-803-68

The Temperature Dependence of the Diffusion Coefficient of Gases, by Ye. M. Nafikov, A. G. Usmanov.
RUSSIAN, per, Inzhenerno-Fiz Zhurnal, Vol 17, No 3, 1969, pp 530-534.
Dept of Navy APL/JHU T-2390

Developing High-Frequency Fields in Plasma Installations, by G. I. Zverev, 18 pp.
RUSSIAN, rpt, Fiz-Tekh Inst, NP-17893, 1969.
*AEC

Some Problems in the Dimensionless Generalization of the Characteristics of Blown Electric Arcs, by A. S. Koroteyev, O. I. Yas'ko.
RUSSIAN, per, Inzh-fiz Zh, Ak Nauk Belorus SSR, Vol 10, No 1, 1966, pp 26-31.
ATS-RJ-5253

Interaction of Two Plasma Blobs in the Magnetic Field of a Divertor, by V. G. Zykov, RUSSIAN, rpt, Fiz. Tekh. Inst. Kharkov., No 166, 1968, 10pp.,
NLL Ref: 9091.9F (CFO/656)

Specific Peculiarities of a Theory of Shells from Modern Materials, by S.A. Ambartsyan.
RUSSIAN, per, Izv Ak Nauk ArmSSR, Mekhanika, Vol 21, No 4, 1969, pp 3-19.
WTC-69-15765-20K

Interaction of Plasma Fluxes with the Plasma Cylinder in the Magnetic Field of the Divertor, by V. G. Zykov, RUSSIAN, rpt, Fiz. Tekh. Inst. Kharkov., No 169, 1968, 9pp.,
NLL Ref: 9091.9F (CFO/657)

Heat Transfer on a Transverse Homogeneous Magnetic Field, by Yu. A. Mikheylov, P. Ya. Obois.
RUSSIAN, per, Izv Ak Nauk LatSSR, Seriya Fiz i Tekhn Nauk, No 2, 1969, pp 19-29.
WTC-69-16006-20M

On the Thermodynamics of the Process of Separation of a Gas into two Flows With Different Energy, by M. G. Dubinskiy. 23 pp.
RUSSIAN, per, Izvestiya AN SSSR, Energetika i Transport, No 4, 1968, pp 130-143.
AIR/FTD/HT-24-238-69

The Magnetic Field in Superconducting Shielded Synchronous Machines, by A. I. Bertinov, A. V. Golovkin, 10 pp.
RUSSIAN, per, Izvestiya AN SSSR, Energetika i Transport, No 2, 1969, pp 96-101.
AIR/FTD/HT-23-430-69

A Method of Formulating the Boundary Conditions in Problems of Viscous Fluid Flow, by T. S. Varzhanskaya, 5 pp.
RUSSIAN, per, Izv Akad Nauk SSSR, Mekh Zhid i Gaza, No 3, 1963, pp 142-144.
AEC/SC-Tr-4003-70

The Physical Properties of a Flow in the Separation Region for the Threedimensional Interaction of the Boundary Layer with a Shock Wave, by V. S. Avduyevskiy, K. I. Medvedev.
RUSSIAN, per, Izv. A. N. SSSR Mekhanika Zhid. i Gaza, No 1, 1967, p 25.
N.L. Ref: 5207 (Lab trans 1342)

One-Dimensional Nonequilibrium Airflow, by V. P. Stulov, V. P. Shkadova. 11 pp.
RUSSIAN, per, Izvestiya AN SSSR, Mekhanika Zhidkosti i Gaza, no. 2, 1968, pp 81-86.
AIR/FTD/HT-23-197-69

Supersonic Flow Past Axisymmetric Cones With Flares, by V. M. Borisenko.
RUSSIAN, per, Izv AN SSSR, Mekhan Zhid i Gaza, No 3, 1969, pp 46-55.
Dept of Navy APL/JHU T-2392

Averaging the Kinetic Boltzmann Equation From the Transverse Velocity for the Case of One-Dimensional Gas Flow, by V. A. Rykov.
RUSSIAN, per, Izv AN SSSR, Mekhan Zhid i Gaza, No 4, 1969, pp 120-127.
*Dept of Navy APL/JHU J-1469

The Use of a Capacitor in the Study of Photoelectric Sensitivity Spectral Distribution in Semiconductors, by Ye. K. Putseyko.
RUSSIAN, per, Izv Ak Nauk SSSR, Ser Fiz, Vol 16, No 1, 1952, pp 34-45.
MTC-69-15748-20L

Influence of Trapping Centers on the Dember Effect and Photoconductivity of Semiconductors at High Illuminance Levels, by D. A. Aronov, Ya. P. Kotov.
RUSSIAN, per, Izv Ak Nauk Uzbek SSR, Seriya Fiziko-Matematicheskikh Nauk, Vol 10, No 3, 1968, pp 71-77.
MTC-69-15524-20F

Energy Characteristics of a Plasmatron with Magnetic Arc Stabilization, by A. V. Nikolayev, I. D. Kulagin.
RUSSIAN, per, Izv Sibirsk Otd Akad Nauk SSSR, No 10, 1966, pp 27-30.
ATS-RJ-5248

Nonlinear Axisymmetric Vibrations of Cylindrical Shells Wound from Elastic Filaments, by A. K. Yel'patevskiy, A. A. Dudchenko.
RUSSIAN, per, Izv VUZ Aviats Tekh, No 1, 1969, pp 14-20.
MTC-69-16579-20K

On the Influence of Boundary Conditions on the Stability of a Cylindrical Shell Loaded by External Pressure and Axial Tensile Forces, by S. M. Kan, V. L. Ingultsov.
RUSSIAN, per, Izv VUZ Aviats Tekh, No 1, 1969, pp 27-33.
MTC-69-16578-20K

Diffusion of Hydrogen in Carbon Steels, by G. I. Batalin, 8 pp.
RUSSIAN, per, IVUZ Chern Met, Vol 5, No 5, 1962, pp 131-133.
AEC/UCRL-Tr-10367

Influence of Ultraviolet Irradiation on the Photoconductivity of Silver Bromide Crystals, by K. M. Loskutov.
RUSSIAN, per, Izv VUZ Fiz, No 1, 1959, pp 97-101.
MTC-69-15754-20F

Excitation of Metals by Deformation, by R. I. Mints, V. S. Kortov.
RUSSIAN, per, Izv VUZ Fiz, No 3, 1968, pp 44-50.
ATS-RJ-5262

Investigation of Radiation-induced Surface Breakdowns by Means of Exoelectronics Emission, by D. I. Bayazov.
RUSSIAN, per, Izv VUZ Fiz, No 3, 1968, pp 150-152.
ATS-RJ-5263

Scientific
Physics (Contd)

Special Features of Exoelectronic Emission
Arising During Friction of Metals, by
V. D. Yedokimov.
RUSSIAN, per, Izv VUZ Fiz, No 4, 1968, pp 23-26.
ATS-RJ-5264

Equation for the Effective Potential of an Atom
With Oscillatory Corrections, by
O. V. Troshin. 9 pp.
RUSSIAN, per, Izv. VUZ Fiz., No 5, 1968,
pp 36-41.
NASA TT-F-12,736

Investigations into the Stresses Between
Individual Wires of Stranded Rope,
by P. P. Nesterov and V. M. Ivanovskiy,
RUSSIAN, per, Izv. VUZ Gorn. Zh., Vol 12, No 12,
1968, pp 100-103,
NLL Ref: 8313.4 (5713)

Optimum Conditions for Applying the Inefficient
Counter Method for Separating Particles According
to their Primary Ionizing Power, by A. Tyapkin,
11 pp.
RUSSIAN, rpt, JINR-P1-3686.
AEC/CERN-Tr-69-17

Nonlocal Quantum Field Theory, Nonlinear Inter-
action Lagrangians, and Convergence of the
Perturbation-Theory Series, by G. V. Yefimov,
16 pp.
RUSSIAN, preprint, JINR P2-4546, 1969.
AEC/SLAC-Tr-108-69

Stationary State of a Polarized Self-Focusing
Ring (Acceleration of an Electron-Ion Bunch),
by Ye. A. Perelshteyn, 26 pp.
RUSSIAN, rpt, JINR-P9-4423, 1969.
AEC/UCRL-Tr-1401-69

Vibration of Nonsymmetric Plates in a Gas Flow,
by G. A. Marchenko. 5 pp.
RUSSIAN, per, Kharkov. Politekhicheskii Institut.
Dinamika i Prochnost' Mashin, No 6, 1967,
pp 37-41.
AIR/FTD/MT-23-418-69

A Method for Determining the Current Density of
an Arc Being Moved in a Narrow-slot Cavity by
an External Magnetic Field, by A. L. Tslaf.
RUSSIAN, per, Latvijas PSR Zinatnu Akad Vestsi
Fiz un Tekhn Zinatnu Ser, No 4, 1966, pp 81-86.
ATS-RJ-5255

Scientific
Physics (Contd)

The Magic of Big Molecules, by V. Androsov.
RUSSIAN, np, Leningradskaya Pravda, 21 Mar 1969.
NLL Ref: 6167.65 (107)

Noise of Hot Current Carriers in p-type Germanium,
by V. A. Bareikis.
RUSSIAN, per, Lietuvos Fiz Rinkiny, Lietuvos
TSR Mosklui Akad Lietuvos TSR Aukstosios
Mokyklos, Vol 7, No 2, 1967, pp 381-384.
ATS-RJ-5257

Thermoelectric Power in Semiconductors Due to
Hot Current Carriers, by J. K. Pozela,
K. K. Repras.
RUSSIAN, per, Lietuvos Fiz Rinkiny, Lietuvos
TSR Mosklui Akad Lietuvos TSR Aukstosios
Mokyklos, Vol 6, No 4, 1966, pp 523-537.
ATS-RJ-5258

The Question of Measuring Average Velocity Rate
in Pipes by Means of Point-Type Sensors, by
V. M. Kos, Yu. I. Sitnitskiy, 6 pp.
RUSSIAN, per, Lvov. Politekh Institute, Kontrol-
Izmeritel'naya Tekh, No 4, 1969, pp 123-126.
AIR/FTD/MT-23-420-69

Magnetohydrodynamic Phenomena in an Electric
Arc, by G. B. Serdyuk.
RUSSIAN, per, Magnitn Gidrodinam Akad Nauk
Latv SSR, No 4, 1966, pp 136-146.
ATS-RJ-5252

Magnetic Traps, by K. D. Sinelnikov.
RUSSIAN, bk, Magnitnye Lovushki, Vol 3, 1968,
pp 1-74, 147-236.
*AEC

Wave Processes in an Elastic Thin-walled
Cylindrical Shell Under Sudden Application
of a Force To Its Endface, by A. I. Malyshch.
RUSSIAN, per, Mekhanika Tverdogo Tela, No 2,
1969, pp 138-141.
NRC-69-16178-20K

Electron-Optical Frequency Multiplier, by
A. G. Zharov, N. V. Kravtsov, et al. 8 pp.
RUSSIAN, Moscow. Institut Avtomatiki i Telemekhaniki
(Tekhnicheskoy Kibernetiki.). Teoriya i Sredstva
Avtomatiki, 1968, pp 326-330.
AIR/FTD/MT-24-288-69

Possibility of Using an Iris Waveguide as an
Accelerating Section in a Proton Synchrotron, by
Ye. R. Alekhin, Yu. A. Khlestkov, et al. 11 pp.
RUSSIAN, per, Moscow. Inzhenerno-Fizicheskii
Institut. Uskoriteli, No 9, 1967, pp 110-119.
AIR/FTD/MT-24-182-69

Scientific
Physics (Contd)

Atom and the Arctic.

RUSSIAN, np, Moskovskiy Komsomolets, 16 Apr 1969.
NLL Ref: 6167.65 (121)

Nonlinear Distortions During Modulation of the
Radiation of a Semiconductor Laser, by
Yu. A. Skomorovskiy, A. G. Muradyan, 8 pp.
RUSSIAN, bk, Poluprovodnikovyye Pribory v Tekh
Elektrosvyazi, 1967, pp 217-223.
AIR/FTD/MT-23-223-69

Radiation Coefficient of Refractory Compounds,
by G. V. Samsonov, I. A. Podchernyayeva.
RUSSIAN, per, Poroshkovaya Metallurgiya, No 5,
1969, pp 43-50.
NTC-69-16577-20M

The Propagation of an Unloading Wave,
by Kh. A. Rakhmatulin,
RUSSIAN, per. Prik. Mat. i Mekh., Vol 9, No 1,
1945, pp 91-100,
NLL Ref: 8732 (NRC TT-1376)

The Impact on a Flexible String,
by Kh. A. Rakhmatulin,
RUSSIAN, per. Prik. Mat. i Mekh., Vol 11, No 8,
1947, pp 379-382,
NLL Ref: 8732 (NRC TT-1378)

The Flow of a Heavy Liquid Over an Undulating
Surface, by N. N. Moiseyev,
RUSSIAN, per. Prik. Mat. i Mekh., Vol 21, 1957,
pp 15-20,
NLL Ref: 5828.4F (7807)

Experimental Investigation of the Characteristics
of an Arc Discharge in a Transverse Magnetic
Field, by S. G. Lopatskiy, V. G. Andropov.
RUSSIAN, rpt, Proc Intern Symp Magnetohydrodyn
Elec Power Generation, 2nd, Salzburg, 4-8 July
1966, Vol 11, pp 133-139.
ATS-RJ-5249

Problems of Using Hot-Electron Plasma in MHD
Generators, by A. A. Vedenov, Ye. P. Velikov.
RUSSIAN, rpt, Proc Intern Symp Magnetohydrodyn
Elec Power Generation, 2nd, Salzburg, 4-8 July
1966, Vol 11, pp 395-408.
ATS-RJ-5250

Scientific
Physics (Contd)

Conductivity of a High Density Plasma, by
V. A. Alekseyev.

RUSSIAN, rpt, Proc Intern Symp Magnetohydrodyn
Elec Power Generation, 2nd, Salzburg, 4-8 July
1966, Vol 11, pp 617-621.
ATS-RJ-5251

The Ionization Instability of Plasma with Hot
Electrons, by Ye. D. Velikov. 13 pp.
RUSSIAN, rpt, Proc of 7th Intern Conf on
Phenomena in Ionized Gases, Belgrade, 1965,
pp 675-681.
NASA TT F-12,684

Radioactive Isotopes and Organism, by Yu. I. Moskaev
391 pp.
RUSSIAN, bk, Radioaktivnye Izotopy i Organizm,
1969
*AEC

Bending Design for Elastic Plates of Variable
Thickness with Two Free Opposite Sides, by
Yu. P. Petrov. 15 pp.
RUSSIAN, per, Samoletostroyeniye i Tekhnika
Vozdushnogo Flota, No 11, 1967, pp 61-71.
AIR/FTD/HT-23-422-69

Homogeneous Schemes with Pseudo-viscosity,
by B. L. Rozhdestvenskiy, N. M. Yanenko.
RUSSIAN, mono, Sistemy Kvazileneynykh Uravneniy,
1968, pp 393-407.
NTC-69-16411-20D

Atom in the Tundra.
RUSSIAN, np, Sovetskaya kossia, 26 Apr 1969.
NLL Ref: 6167.65 (121)

Stabilized Arc Column with Axial Gas Flow, by
A. V. Pustogarov.
RUSSIAN, per, Teplofiz Vysok Temperatur Akad
Nauk SSSR, Vol 4, No 2, 1966, pp 173-176.
ATS-RJ-5256

Experimental Methods in Liquid Metal Systems,
by V. I. Subbotin, 20 pp.
RUSSIAN, bk, Teploobmen pri Kipenii Metallov v
Usloviyakh Yestestvennoy Konveksii, 1969,
pp 40-52, Chapter 1.
AEC/ANL-Tr-793-70

Intensification of the Light of a CO₂ Laser
by Carbon Dioxide, Heated and Then Abruptly
Cooled in a Shock Tube, by Z. P. Dronov.
RUSSIAN, per, Trudy Fiz Inst Akad Nauk SSSR,
No 103, 1967, pp 1-10.
ATS-RJ-5242

Thermochemistry of Silicates-Heat of Formation of Iron Orthosilicate, by A. F. Kapustinskiy.
RUSSIAN, per, Trudy Kimiko-Tekhnolicheskii Institut, no 38, 1962, pp. 7-10.
CRL D 184
ETC-68-24437

Proceedings of the Sixth All-Union Annual Winter School on Space Physics (18 March-1 April 1969) Part I, by S.N. Vernov
RUSSIAN, bk, Trudy Shestoy Vsesoyuznoy Yezhegodnoy Zimney Shkoly Po Kosmofizike (18 Marta-1 Aprelya 1969 g) 1969
*CFSTI TT 70-50070

Proceedings of the Sixth All-Union Annual Winter School on Space Physics (18 March-1 April 1969) Part II., by S.N. Vernov
RUSSIAN, bk, Trudy Shestoy Vsesoyuznoy Yezhegodnoy Zimney Shkoly po Kosmofizike (18 Marta-1 Aprelya 1969 g) 1969
*CFSTI TT 70-50080

An Investigation of Strain Sensitivity, by A. N. Arsenyeva-Geyl, 5 pp.
RUSSIAN, per, Uchenyye Zapiski Leningrad Univ., No 336, 1968, pp 157-159.
AIR/FTD/HT-23-421-69

Study of Electrical Transfer in Steels by the Method of Inert Tags, by S. D. Gertsriken et al.
RUSSIAN, per, Ukrain. Fiz. Zh. 6, 1961, pp. 129-135.
*CFSTI TT 70-57087

Investigation of the Effect of Small Admixtures Sn and Sb on the Parameters of the Volumetric and Boundary Diffusion of These Admixtures into Cu, by S. D. Gertsriken, et al.
RUSSIAN, per, Ukrain. Fiz. Zh. vol. 6, 1961 pp. 398-407
*CFSTI TT 70-57086

Internal Friction in Ordered FE-NI Alloy, II, by F. N. Dunayev, et al.
RUSSIAN, per, Ukrain Fiz. Zh. 8, 1963, pp. 398-401.
*CFSTI TT 70-57088

Determination of the Diffusion Coefficients of H and Co in NI by Means of a Mass Spectrometer, by L. M. Ryabchykov, 5 pp.
RUSSIAN, per, Ukrain Fiz. Zh. 9, 1964, pp. 303-308.
*CFSTI TT 70-57089

Electric Transfer and Diffusion of Fe into Ni, by P. P. Kuzmenko, et al.
RUSSIAN, per, Ukrain. Fiz. Zh. 11, 1966, pp. 664-668.
*CFSTI TT 70-57090

Effect of Diffusion on the Mossbauer Spectrum of Impurity Complexes in Crystals, by M. A. Krivoglaz, et al.
RUSSIAN, per, Ukrain. Fiz. Zh. Vol. 11 1966, pp. 1215-1221.
*CFSTI TT 70-57085

Physical Phenomena in Semiconductors with a Negative Differential Conductivity, by A. F. Volkov, Sh. M. Kogan.
RUSSIAN, per, Usp Fiz Nauk, Vol 96, No 4, 1968, pp 633-672.
ATS-RJ-5245

Physics of Interplanetary Plasma and Laboratory Experiments, by M. Podgornyi, R. Z. Sagdeyev.
RUSSIAN, per, Usp Fiz Nauk, Vol 98, No 3, 1969, pp 409-440.
*Dept of Navy APL/JHU J-1457

On Possibility of Measuring the Difference of a Group Path During Ionospheric Soundings, by Ye. L. Afraymovich. 4 pp.
RUSSIAN, per, Vestnik AN KAZSSR No 8, 1968, pp 65-67.
AIR/FTD/HT-23-509-69

Role of the Structure of Surface Layer in the Process of External Friction of Polymer Materials, by V. A. Belyy.
RUSSIAN, rpt, Vsesoyiznyy Simpozium o Prirode Treniya Tverdykh Tel, Minsk, 1969, pp 35-68.
*NASA TT F-12,890

High Frequency Properties of Plasma, by V. T. Tolok, 224 pp.
RUSSIAN, bk, Vysokochastotnye Svoistva Plazmy, Vol 3, 1968.
*AEC

Electron Diffraction Study of the Structure of Cadmium Iodide, by Z. G. Punnsker, 34 pp.
RUSSIAN, per, Zh Fiz Khim, Vol 15, No 5, 1941, pp 559-576.
AEC/ANL-Tr-794-70

The Interaction of Acoustic Waves with Burning Surface of Condensed Systems, by S. S. Novikov, Yu. S. Ryazantsev, 12 pp.
RUSSIAN, per, Zh Prikladnoy Mekh i Tekh Fiziki, No 2, 1966, pp 57-68.
AIR/FTD/INT-23-930-68

Certain Characteristics of the Use of Laser Spectra in a Monopulsed System for Analysis, by V. I. Kasatkin, 6 pp.
RUSSIAN, per, Zh Prik Spekt, Vol 3, No 2, 1968, pp 223-225.
NASA TT F-12,696

Possibilities for Using Lasers in the Monopulse Mode for Spectral Analysis, by V. V. Panteleyev, 6 pp.
RUSSIAN, per, Zh Prik Spekt Ak Nauk Belorus SSR, Vol 3, No 6, 1968, pp 905-908.
NASA TT F-12,697

Precipitation of Moisture on Conductors with Corona, by N.B. Bogdanova et al.
Russian, per, Zhurnal Tekhn. Fiziki, Vol 1, Mar-Apr 1969, No. 3, pp 110-1100.
CEGB
SDI Tr. 179-3

Method for Lowering the Pressure in Vessels with Cryogenic Liquids, by V. G. Pron'ko, A. I. Vinnikov, RUSSIAN, Patent No. 205,041, 29 Apr 1966, pp 1-2.
AIR/FTD/INT-23-1380-68

A Procedure for Heat Treatment of High Temperature Strain Gages, by V. P. Zharkov, 2 pp.
RUSSIAN, Patent No. 213,399, 30 Dec 1964, 1968, pp 1-2.
AIR/FTD/INT-23-214-69

Contribution to the Theory of Overheating Instability in Semiconductor Plasma, by V. M. Yakovenko.
UKRAINIAN, per, Ukr Fiz Zh, Vol 13, No 9, 1966, pp 1489-1492.
ATS-RJ-5246

The Problem of Luminosity and Luminance, by D. A. Shklover, CZECH, per, Svetotekhnika, Vol 14, No 4, 1968, pp 5-10,
ILL Ref: 5196 (1489)

Ducted Fans with Downstream Diffusion, by B. Chezlepretre.
FRENCH, rpt, 66-Bc-17, 1968, 76 pp.
*NASA TT F-12,891

Influence of the Diffraction of Certain Perfectly Conducted Obstacles on the Precision of the Goniometry of Electromagnetic Emissions, by G. Dubost, 33 pp.
FRENCH, per, Ann Radioelec, Vol 22, No 90, 1967, pp 368-386.
AEC/SC-Tr-69-1060

Crystallographic Study of the Erbium-Selenium System, by Micheline Guittard, Jean Flauhaut, 6 pp.
FRENCH, rpt, C.R. Acad Sci, No 264, Ser C, 1951-1954.
AEC/NLM-Tr-1704-69

Penetration of a Neutralized Ions-Electrons Beam into a Magnetic Barrier. Conditions affecting the Height of the Barrier--I, by J. M. Dolique, 5 pp.
FRENCH, rpt, Compt Rend, Vol 256, 1963, pp 3984-3987
AEC/SC-Tr-70-400

Induced π Walls and Mobile Walls Formed Due to Induced Anisotropy, by M. Paulis, M. Szwed.
FRENCH, per, Journal de Physique, Vol 28, 1967, pp 223-229.
AEC-9-1409-20L

Intermolecular Bonds in Supersonic Jets Electron Diffraction Study, by P. Audit.
FRENCH, per, Jnl de Physique, No 30, 1969, pp 192-202.
ILL Ref: 9091.9F (CTO/620)

Calculation of Alpha-Nucleon Cascades, by J. P. Cohen, 22 pp.
FRENCH, per, Nucl Phys, Vol 84, 1966, pp 316-336.
AEC/ORNL-Tr-1704-70

Photography of a Satellite Reflecting Laser Beams, by Georges Jacovlev, 7 pp.
FRENCH, per, La Recherche Aerospatiales, No 123, Apr. 1968, pp 85-87.
NASA TT-F-12,726

Generalized Similar Solutions of Boundary Layer Equations, by L. G. Loytsyanskiy. 6 pp.
FRENCH, per, Revue Roumaine des Sciences Techniques. Serie de Mecanique Appliquee, Vol 13, No 4, 1968, pp 549-553.
AIR/FTD/MT-23-470-69

Effect of Heat Transfer Conditions on the Accuracy of Measurement of a Thermometer Probe in Air Channels, Part I, by H. Rudolphi.
GERMAN, per, Arch Tech Messen, Vol 397, 1969, pp 25-28.
*AEC/LB/G-tr-2940

On the Question of a Universal Flow Theory, by R. Schroeder.
GERMAN, per, die Bautechnik, Vol 41, No 1, 1964, pp 9-13.
NTC-69-16554-20D

Noise Levels in Transformers and Methods of Reducing Noise Radiation, by G. Spillman.
GERMAN, per, BBC-Nachrichten, Vol 50, No 1, 1968, pp 34-40.
ILL Ref: 5774.5 (EE trans 1900)

The Continuous Spectrum of the one Atmosphere Argon Arc in the 2700-5000 Å Spectral Range, by H. Gundel, W. Neumann. 16 pp.
GERMAN, per, Beitrage aus der Plasmaphysik, Vol 7 No 3, 1967, pp 221-231.
AIR/FTD/MT-23-165-68

Electron Microscopical Study of Hard Magnetic Powders by L. Born.
GERMAN, per, Die Techn Ber, No 8, 1968, pp 234-241.
ILL Ref: 9022.401 (746/145)

Lippich's Method, O. Schonrock, 13 pp.
GERMAN, per, Handbuch Physik, 1928, pp 757-761.
AEC/NP-Tr-1854

Particle-Size Spectrometry of Aerosols Through Light Scattering in a Laser Beam, by W. Jacobi, J. Eichler, 18 pp.
GERMAN, RPT, Hahn-Meitner-Institut fur Kernforschung, 1967, pp 1-20.
AEC/SC/Tr-69-1052

Production of Hydrogen Plasma by Giant Pulse Lasers by P. Mulser, 55 pp.
GERMAN, rpt, Institut for Plasma Physics, No IPP 3/95, June 1969.
AEC/UCRL-Tr-10424-69

Application of the Root-Locus Method to Aeroelastically Coupled Systems, by P. Hamel,
GERMAN, per, Jahrbuch der WGLR, 1967, pp 350-362,
ILL Ref: 5207 (1359)

Comparison of Shielding Calculations and Measurements at the Kahl Reactor, by H. G. Fendler.
GERMAN, per, Kerntechnik, No 12, 1966, pp 548-555.
*AEC/ORNL

Magnetic and Structural Study of Solid Solution, by A. Rager, R. Frischart.
GERMAN, per, Materials Research Bulletin, Vol 3, 1968, pp 253-254.
NTC-69-16707-20C

Optical Investigations of Metal Particles from Nozzle Flow into a Vacuum, by C. Batalli-Cosmovici. 89 pp.
GERMAN, per, Max-Planck-Inst fuer Phys und Astrophys, May 1968, pp 8-110.
NASA TT F-12,689

Formation of Flux Threads in Type II Superconductors, by G. Takacs.
GERMAN, per, Physica Status Solidi, Vol 21, 1967, pp 119-121.
NTC-69-16560-20A

Theory of the Transfer of Similarity During Transport Processes in Non-Newtonian Media, by J. Pawlowski,
GERMAN, per, Rheologica Acta, Vol 6, No 1, 1967, pp 54-61,
ILL Ref: 5628.4F (13409)

The Acoustics of the New Studio Building of the Bavarian Broadcasting Service, by W. Struve.
GERMAN, per, Rundfunktechnische Mitteilungen, Vol 8, 1964, pp 10-16.
NTC-69-16560-20A

New Results of Research on the Flow of Materials in the Plastic Deformation of Metallic Materials, by M. Vater,
GERMAN, per, Techn. Mitt., Vol 59, Oct 1966, pp 500-507,
ILL Ref: 9022.06 (6028)

Vibration Aspects for the Selection of Machine Foundations, by G. Simon.
GERMAN, per, V.D.I. Zeits., Vol 5, Mar-Apr 1967, p 422.
CSCG
C.E. Tr. 111

Boundary Conditions in the Presence of Oblique Reaction Waves in Supersonic Flow, by L. Bartha.
GERMAN, per, Zeit fur Flugwissenschaften, Vol 16, No 12, 1968, pp 437-444.
NLL Ref: 5267 (L16 trans 1558)

Vapor Pressure Measurements in the Lead-Thorium System, by Wigbert Gans, O. Knacke, 8 pp.
GERMAN, per, Z Metallk, Vol 57, No 1, 1966, pp 46-49.
AEC/ORNL-Tr-2228-69

Interferometric Investigations of Electromagnetically Accelerated Shock Waves, II, by H. Brinkschulte, 15 pp.
GERMAN, per, Z Naturforsch, Vol 22a, 1967, pp 438-443.
AEC/SC-Tr-69-1058

Temperature Dependence of Gaseous Normal and Ortho-Deuterium Thermal Conductivities at Liquid Hydrogen Temperatures, by W. Uebelhack, W. Eichenauer, 5 pp.
GERMAN, per, Z Naturforsch, 22a, 1967, p 1528.
AEC/LA-Tr-4122

The Spectroscopy of the Liquid and Solid Near the Transition State, by G. S. O'Brien, M. G. Winkler.
GERMAN, per, Zeit fur Naturforschung, Vol 23a, 1968, pp 1-17.
NRC-69-16437-201

Optical Excitation in Charge Transfer Reactions of Rare Gas Ions at Collision Energies from 5 to 300 eV, by R. Gerken.
GERMAN, per, Zeit fur Naturforschung, Vol 23a, 1968, pp 270-277.
NRC-69-16437-201

Epitaxy of Thin Gold Films Evaporated on Alkali Halides in Ultra High Vacuum, by R. W. Adam.
GERMAN, per, Zeit fur Naturforschung, Vol 23a, 1968, pp 1526-1536.
NRC-69-16437-20B

Lloyd's Interference Experiment with X Rays, by W. Linnik, 6 pp.
GERMAN, per, Z Phys, Vol 65, 1930, pp 107-110.
AEC/NP-Tr-1844

Concerning Screen-Type Reflection Gratings, by L. E. Hellwege.
GERMAN, per, Zeit fur Physik, No 106, 1957, pp 508-509.
NLL Ref: 5809.95 (1.6353)

Concerning Screen-Type Reflection Gratings (Supplement), by L. E. Hellwege.
GERMAN, per, Zeit fur Physik, No 111, 1958, pp 495-497.
NLL Ref: 5809.95 (1.6354)

Linear Markings on Fracture Surfaces, by H. Wallner,
GERMAN, per, Zeit. fur Physik, Vol 114, 1939, pp 308-376,
NLL Ref: 5828.4F (7817)

Magnetofriction of Polycrystalline Mn-Zn Ferrites, by B. Pataky.
HUNGARIAN, per, Meres Automat, Vol 15, No 3, 1967, pp 104-106.
ATS-HJ-5267

Coolant Mixtures Involving Highly Dispersed Liquid in Superheated Vapour, by M. Cumo, 23 pp.
ITALIAN, rpt, Comitato Nazionale 1'Energia Nucleare, RTI/TR-STAV (66)3.
AEC/AERE-Tr-1115

Void, Friction and Vibrations Associated with Localised Boiling, by P. Gregorio, C. Merlini, 29 pp.
ITALIAN, rpt, Politecnico di Torino, PT-IN-24, 1965.
AEC/AERE-Tr-1114

Analysis and Evaluation of a D₂O Moderated CO₂ Cooled Power Reactor, by Hiroji Mochizuki, 26 pp.
JAPANESE, per, Fapig, Vol 46, 1967, pp 98-107.
AEC/NSJ-Tr-151

Reaction Kinetics of Coal Hydrogenation at High Pressure, by T. Ishii.
JAPANESE, per, Kagaku Kagaku, Vol 29, No 12, 1965, pp 983-994.
ATS-JS-254

Swelling of Poly(vinyl Alcohol). Part I. Relation Between Swelling Index and Crystallinity of Poly(vinyl Alcohol) Films Having Different Degrees of Polymerization, by I. Sakurada.
JAPANESE, per, Kobunshi Kagaku, Vol 12, No 128, 1955, pp 506-510.
ATS-JS-185

Formation of Acetylene from Coal by Argon Plasma, by Y. Kawana.
JAPANESE, per, Kogyo Kagaku Zasshi, Vol 69, No 6, 1966, pp 1144-1150.
ATS-JS-236

Continuous Coking Process for Tar Pitch in Fluidized Beds. Part 2. A Single Reactor with Steam as the Fluidizing Gas, by O. Uemaki.
JAPANESE, per, Kogyo Kagaku Zasshi, Vol 70, No 7, 1967, pp 1189-1194.
ATS-JS-252

Study of sulphatizing Roasting of Laterite. I. Effect of Steam Added on Sulphatizing of Nickel, by S. Tagaka.
JAPANESE, per, Nagoya Kogyo Daigaku Gakuho, vol. 16, 1964, pp. 320-325
CRL D. 232
ETC-68-24464

Mechanism of Coal Hydrogenolysis at a High Pressure, by Y. Maekawa.
JAPANESE, per, Nenryo Kyokaishi, No 488, 1967, pp 927-934.
ATS-JS-253

Theoretical Heat of Dissolution of Hydrated Salts (Copper Sulfate), by F. Ishikawa
JAPANESE, per, Nihon Kagaku Zasshi, vol. 44, 1923, pp. 708-725.
*CFSTI TT 70-57148

Ion-Exchange and Isotope-effect of Lithium Ions in Formamide, by Yoshihiro Mori, 10 pp.
JAPANESE, per, Nippon Kagaku Zasshi, Vol 88, Oct 1967, pp 1053-1056.
AEC/NSJ-Tr-147

Kinetic Study on the Pyrolysis of Propane in the Presence of Hydrogen, by T. Kunugi.
JAPANESE, per, Sekiyu Gakkai Shi, Vol 9, No 11, 1966, pp 890-895.
ATS-JS-234

Acetylene Formation from Methane Using a Perpendicular Flow Burner, by H. Miyajima.
JAPANESE, per, Sekiyu Gakkai Shi, Vol 12, No 1, 1969, pp 37-42.
ATS-JS-235

Pyrolysis of Propane in an Induction-coupled Argon Plasma Jet, by Y. Nishimura.
JAPANESE, per, Sekiyu Gakkai Shi, Vol 12, No 9, 1969, pp 698-702.
ATS-JS-233

Tensiometric Sensing Element for Measuring Low Pressures, by W. Styburski. 8 pp.
POLISH, per, Pomiary, Automatyka, Kontrola, No 4, 1968, pp 148-149.
AIR/FTD/HT-23-495-69

Epitaxial Growth of Silicon Layers Produced by Reducing SiCl_4 with Hydrogen on a Silicon Base, by H. Goral.
POLISH, per, Przeglad Elektroniki, Vol 9, No 5, 1966, pp 215-225.
ETC-69-16045-205

Semiconductor Properties of Sintered Bodies in the System ZnO-TiO_2 , by P. Balta, F. Oprea.
RUMANIAN, per, Acad Rep Populare Romine, Studii Cercetari Met, Vol 7, 1962, pp 405-414.
ATS-RU-5247

Stability of Electric Panels Placed in a Strain of Supersonic Gas, by L. Librescu.
RUMANIAN, per, Studii si Ceretari de Mecanica Aplicata, Vol 28, No 1, 1969, pp 153-167
*NASA-TT-F-12,867

Propulsion & Fuels

Hydrodynamics of Hydrofoils. Wave Theory and Cavitation, by V. M. Ivchenko. 26 pp.
RUSSIAN, bk, AN USSR Institut Gidromekhaniki. Sovremennyye Voprosy Gidrodinamiki; Materialy Letney Shkoly po Gidrodinamike, 1967, pp 155-178.
AIR/FTD/HT-23-137-69

5. Basic Technical Data of the Engine, by Ye. L. Bel'man. 5 pp.
RUSSIAN, bk, Aviatsionnyy Turboreaktivnyy Dvigatel' RD-3F-500, 1968, pp 25-27.
AIR/FTD/MT-24-214-69

Six Phase Turbo Generator Windings, by G. I. Plutovskiy.
RUSSIAN, per, Elektrotehnika, No 10, 1968, pp 1-6.
MLL Ref: 3774.5 (ML trans 1966)

Penetration Depth and Boundaries of a Circular Turbulent Gas Diffusion Flame in the Transverse Flow, by A. Kink, Yu. Ivanov. 7 pp.
RUSSIAN, per, Izvestiya AN ESTSSR. Fizika, Matematika, No 2, 1967, pp 196-200.
AIR/FTD/MT-23-516-68

Calculating the Pliability of Elastic Bearings for Turbomachines, by Ye. A. Artemov. 10 pp.
RUSSIAN, per, Izv VUZ Mashinostroyeniye, No 7, 1968, pp 48-54.
AIR/FTD/MT-23-383-69

The Operation of an Air-Feed Jet Combustion Chamber Under Unstable Conditions, by I. P. Goldayev, A. P. Motornenko, 8 pp.
RUSSIAN, per, Samoletostroyeniya i Tekhnika Vozdushnogo Flota, No 5, 1966, pp 59-64.
AIR/FTD/MT-23-354-68

The Optimum Incident Angle on Low-Aspect-Ratio Rotor Blades of a Compressor Stage, by V. V. Kovalevskiy, 8 pp.
RUSSIAN, per, Samoletostroyeniye i Tekhnika Vozdushnogo Flota, No 11, 1967, pp 24-28.
AIR/FTD/MT-24-242-69

An Experimental Investigation of Supersonic Turbine Grids, by V. B. Panfilovich. 8 pp.
RUSSIAN, per, Trudy Kazan. Aviatsionnyy Institut, No 93, 1967, pp 77-83.
AIR/FTD/MT-24-156-69

Investigation of Acoustic Cases of Vibrational Combustion, by V. B. Shteynberg. 6 pp.
RUSSIAN, per, Trudy Leningrad. Tsentral'nyy Nauchno-issledovatel'skiy i Proyektiro-Konstruktorskiy Kotloturbinnyy Institut, No 64, 1965, pp 42-45.
AIR/FTD/MT-23-425-68

More Results of Planning and Research of the Water Turbine Working Lotor with 200 mm head, by B. B. Levskiy.
RUSSIAN, per, Energoash, No 1, 1969, pp 1-6.
MLL Ref: 3774.5 (trans 1961)

Investigation of a Hydraulic Steam Turbine Regulation System and Tests Concerning the Off-Loadin Behavior with the Aid of a Model Control System, by E. L. Röhnermann.
GERMAN, per, Vbl-Beits, Vol 105, No 2, 1961, pp 64-65
MLL Ref: 3774.5 (ML trans 1963)

Process and Device to Eliminate the Carbon Deposit in the Combustion Chamber of a Combustion Engine, by Laurence W. Becker.
GERMAN, Patent No 860,434, 22 Dec 1952.
*ACSI J-8057
ID 2204002470

Results of a Cycle of Tests Carried Out in Operation on One of the Low Static Excitation Groups for 370 kVA Turboalternators, by E. Ferrari.
ITALIAN, per, Elektrotehnika, Vol 55, No 10, 1968, pp 746-758.
MLL Ref: 3774.5 (ML trans 1962)

Some Problems with Engine Testing Methods for Evaluating Motor Oils, by Y. Katayama.
JAPANESE, per, Sekiyu Gakkai Shi, Vol 3, No 9, 1965, pp 697-703.
ATS-JS-251

An Approximate Method of Calculating the Performance of an Axial Compressor on the Basis of its Geometry, by J. Trzczyk. 9 pp.
POLISH, per, Lodz. Politechnika. Katedra Ciepnych Maszyn Przeplywowych Ciepne Maszyny Przeplywowe, No 63, 1967, pp 171-176.
AIR/FTD/MT-23-89-69

Effect of Aircraft-Engine Turbine Design on the Size of Blade Tip Clearance, by S. Szczecinski, 8 pp.
POLISH, per, Technika Lotnicza i Astronautyczna, No 6, 1967, pp 5-8.
AIR/FTD/MT-23-1076-68

Space Technology

Space Law, by G. P. Zhukov, 291 pp.
RUSSIAN, bk, Kosmicheskoe Pravo, 1966
CFSTI TT 68-50636
NASA TT F-517

Scientific
Space Technology (Contd)

On Top of the Rocket, by Boris Kolesov. 6 pp.
RUSSIAN, np, Trud, 15 May 1969, p 1.
AIR/FTD/HT-23-466-69

The Guiana Space Center, by M. Audobert. 13 pp.
FRENCH, rpt, Le Centre Spatial Guyanais.
NASA TT-F-12,656

The Dynamic Use of Artificial Satellite Orbits, by
M. Schneider.
GERMAN, rpt, Bundesministerium fur Wissenschaftliche
Forschung Research Report W 68-55, 1968, pp 1-23.
Dept of Navy APL/JHU T-2389.

Reliability of Space Systems, by A. Marks, 7 pp.
POLISH, per, Tech Lotnicza i Astronautyczna, No 7,
1968, pp 1-3.
AIR/FTD/HT-23-453-69

Miscellaneous

Audits in Medical Institutions Reorganized,
by A. Yakovchenko, 7 pp.
RUSSIAN, per, Bukhgalterskiy Uchet, Moscow, No 11,
1969, pp 45-50.
JPRS 49753

Effectiveness of Scientific Research,
by S. I. Golosovskiy
RUSSIAN, bk, Effektivnost' Nauchnykh
Issledovaniy, 1969
*CFSTI TT 70-57146

For the Sake of Man.
RUSSIAN, np, Izvestiya, 18 Apr 1969.
JPL Ref: 6167.65 (116)

On the Pliocene, by V. N. Sinelnikova, L. A. Skiba,
20 pp.
RUSSIAN, per, Izv Ak Nauk SSSR, Seriya Geologicheskaya
No 8, 1967, pp 114-124.
Dept of Interior
Bureau of Commercial Fisheries
Office of Foreign Fisheries
A-34-Dec 1969-No 77
On Loan

Scientific
Miscellaneous (Contd)

Plans to Aid Relations of Science and Industry,
by A. Levikov, 9 pp.
RUSSIAN, np, Literaturnaya Gazeta, Moscow, 1 Jan
1970, p 10.
JPRS 49754

Scientific Creativity.
RUSSIAN, bk, Nauchnoe Tvorchestvo, 1969
*CFSTI TT 70-57147

New Ideas in Medical Education Proposed, by
Z. Yanushkevichus, 11 pp.
RUSSIAN, per, Medelya, Moscow, No 49, 1969,
pp 6-7.
JPRS 49831

1969 State Prizes Awarded for Science and
Technology, 8 pp.
RUSSIAN, np, Zarya Vostoka, Tbilisi, 7 Nov 1969,
pp 3, 4.
JPRS 49807

Research in Mathematics at the Ukrainian SSR
Academy of Sciences in the Past 50 Years, by
Yu. O. Mitropol's'kiy, 26 pp.
UKRAINIAN, per, Visnik Akademii Nauk Ukrain-
s'koi RSR, Kiev, No 5, 1969, pp 8-23.
JPRS 49832

The Jivaros, by Philippe Ziegler.
FRENCH, per, Connaissance du Monde, No 119, 1968,
pp 39-51.
ACSI J-7289
ID 2204001670

Resolution of the Transport Equation by the
Method of Invariant Plunging, by A. Chapot.
FRENCH, per, Radioprotection, No 3, 1968,
pp 265-291.
*AEC/ORNL-Tr-2289

Osseus Angiomata, by R. Meary.
FRENCH, per, Revue de Practicien, Vol 10, No 31,
1960, pp 3415-3416.
*ACSI J-8064
ID 2204001870

Academy Chemical Department Reports on Work,
by Bela Lengyel, 72 pp.
HUNGARIAN, per, Kemai Közlemenyek, Budapest,
No 3, 1969, pp 265-320.
JPRS 49780

Scientific
Miscellaneous (Contd)

Events Involving Chemical Department Presented,
6 pp.
HUNGARIAN, per, Kemial Kozlemenyek, Budapest,
No 3, 1969, pp 345-350.
JPRS 49780

Central Maritime Commission of the Committee of
Science and Technology, by J. Stalinski, 6 pp.
POLISH, per, Budownictwo Okretowe, Vol 14, No 6,
1969, pp 181-182.
Dept of Interior
Bureau of Commercial Fisheries
Office of Foreign Fisheries
A-34-Dec 1969-No 83
On Loan

Activities of Polish Academy of Sciences Cited,
46 pp.
POLISH, per, Nauka Polska, Warsaw, No 5,
1969, pp 151-161.
JPRS 49902

Integration of Research Facilities Supported,
by Tadeusz Lodwysocki, 6 pp.
POLISH, per, Przeglad Techniczny, Warsaw, 18 Jan
1970, pp 1, 4, 5.
JPRS 49883

The AX-2.
SPANISH, np, Siete Dias, 13 Oct 1969.
Encl to IR 6-804-0222-69
DIA/LN 657-70

Jumpers Versus Wolves.
YUGOSLAVIAN, per, Front, Oct 1969, pp 12-14.
DIA/LN 679-70

INFORMATION RECEIVED DURING
MARCH
ON COVER-TO-COVER TRANSLATIONS

Archivum Immunologiae et Therapiae Experimentalis, Vol 17, No 6, 1969. CFSTI TT 69-50006/6	Elektrokhimiya, Vol 5, No 9, Sep 1969. CB
Avtomatyka, No 3, May-June 1969. S/E	Fizika Tverdogo Tela, Vol 11, No 8, 1969. American Institute of Physics Vol 11, No 8, Feb. 1970
Biokhimiya, Vol 34, No 4, Part 1, Jul-Aug 1969. CB	Fiziologiya Rasteniy, Vol 16, No 4, July-Aug 1969. CB
Denki Gakkai Zasshi, Vol 89, No 6, 1969. S/E	Folia Morphologica, Vol 28, No 2, 1969. CFSTI TT 69-50003/2
Doklady Akademiy Nauk SSSR, Vol 186-187, May-Aug 1969. CB	Izvestiya Akademiy Nauk SSSR, Fizika Zemli, No 9, Sep 1969. The American Geophysical Union
Doklady Akademiy Nauk SSSR, Vol 187, Nos 1-3, July 1969. CB	Izvestiya Akademiy Nauk SSSR, Metally, No 5, 1968. Scientific Information Consultants
Doklady Akademiy Nauk SSSR, Vol 187, Nos 4-6, Aug 1969 CB	Izvestiya Akademiy Nauk SSSR, Seriya Fizicheskaya, Vol 33, No 2, Feb 1969. Columbia Technical Translations
Doklady Akademiy Nauk SSSR, Vol 188, No 1-6, 1969. The Am Math Soc Vol 10, No 5, Sept-Oct 1969	Izvestiya VUZ. Fizika, Vol 9, No 4, July-August 1966 The Faraday Press, Inc.
Elektrokhimiya, Vol 5, No 7, July 1969. CB	Kolloidnyi Zhurnal, Vol 30, No 2, Mar-Apr 1968. CB
Elektrokhimiya, Vol 5, No 8, Aug 1969. CB	Kolloidnyi Zhurnal, Vol 30, No 3, May-Jun 1968. CB

Zhurnal, Vol 29, No 4, Jul-Aug 1969.
CB

Kolloidnyi Zhurnal, Vol 30, No 5, Sep-Oct 1968.
CB

Kolloidnyi Zhurnal, Vol 30, No 6, Nov-Dec 1968.
CB

Kosmicheskaya Biologiya i Meditsina,
Vol 3, No 6, 1969.
JPRS 49928

Kristallografiya, Vol 14, No 3, May-June 1969.
The Am Inst of Phys
Vol 14, No 3, Nov-Dec 1969

Metallurg, No 7-8, July-August 1969.
CB

Nukleonika, Vol 13, No 4-5, 1968.
CFSTI TT 68-50011/4-5

Nukleonika, Vol 13, No 6, 1968.
CFSTI TT 68-50011/6

Nukleonika, Vol 13, No 7, 1968.
CFSTI TT 68-50011/7

Nukleonika, Vol 13, No 8, 1968.
CFSTI TT 68-50011/8

Radiotekhnika i Elektronika, Vol 14, No 8, 1969.
Scripta Publishing Corporation

Tyl I Snabzheniye Sovetskikh Vooruzhennykh
Sil, No 8, 1969.
ACSI J-7296

Tyl I Snabzheniye Sovetskikh Vooruzhennykh
Sil, No 12, 1969.
ACSI J-7903

Tyl I Snabzheniye Sovetskikh Vooruzhennykh
Sil, No 1, 1970.
*ACSI J-8133

Vestnik Akademii Nauk SSSR, Vol 29, No 12,
December 1969.
JPRS 49953

Vestnik Svyazi, Vol 29, No 12, 1969.
JPRS 49947

Voyenno Meditsinskiy Zhurnal, No 8, 1969.
ACSI J-7346

Voyenno Meditsinskiy Zhurnal, No 11, 1969.
ACSI J-7901

Voyenno-Meditsinskiy Zhurnal, No 1, 1970.
*ACSI J-8108

Yadernaya Fizika, Vol 9, No 5, May 1969.
The Am Inst of Phys
Vol 9, No 5, Nov 1969

Yadernaya Fizika, Vol 9, No 6, June 1969.
American Institute of Physics
Vol 9, No 6, Dec 1969

Zhurnal Eksperimental'noy i Teoreticheskoy Fiziki,
Vol 56, No 4, 1969
American Institute of Physics
Vol 29, No 4, Oct 1969

Zhurnal Prikladnoi Khimiy, Vol 42, No 8, 1969.
CB

Available from CFSTI TT 69-50006/6

SOVIET AUTOMATIC CONTROL

— Ukrainian Journal of Automation

1969

NUMBER 3

CONTENTS

Page

DYNAMIC SYSTEMS

- L. L. Voznyuk and V. I. Ivanenko: Transformation of Observation Space in the Statistical Synthesis of Nonlinear Closed-Loop Systems with Several Controllers 1
- V. S. Nedavnyy, V. V. Shervashydze and V. I. Korzhov: Stability of Relay Control Systems with Dead Zone 7

EXTREMAL, OPTIMAL, ADAPTIVE, AND SELF-ADJUSTING SYSTEMS

- V. D. Kudryts'kyy: Optimal Extrapolation of Multidimensional Random Processes 10

INFORMATION AND INTERPOLATION SYSTEMS

- V. I. Vasylyev and V. Yu. Reuts'kyy: Effect of Previous Input Signal History on the Recognition of Moving or Variable Objects 14
- A. G. Ivakhnenko and V. D. Dmitrov: Stochastic Algorithms and the Group Method of Data Handling in Prediction of Random Events 20
- V. G. Lapa: Adaptive Predicting Filters 34
- N. K. Miloslavskaya and S. T. Polyakov: Minsk-1 Digital Computer Simulation of an Algorithm for Handwritten Character Recognition 42

BIONICS AND HEURISTIC PROGRAMMING

- O. I. Polovynkin: Recommendations for Compiling Algorithms for Computer Solution of Design and Invention Problems 46

NEW ELEMENTS AND DEVICES FOR AUTOMATION

- Yu. P. Sobornikov: Adaptive Threshold Elements and Plastic Quasineurons Using Parametric Subharmonic Oscillators 58

AUTOMATA AND DIGITAL COMPUTERS

- Ye. M. Vavilov and V. G. Totsenko: A Method for Checking Discrete Automata 63
(Contd)

Available from Scripta Electronica, Inc.

REVIEWS AND CORRESPONDENCE

Remarks on V.N. Stepanenko's Paper, "Adaptive Algorithms for Statistical Control"	68
Author's Reply to K.O. Larionov's Remarks on V.N. Stepanenko's Paper, "Adaptive Algorithms for Statistical Control"	69

EDITOR'S NOTE

With the exception of certain trigonometric and hyperbolic functions, Soviet mathematical symbols are the same as those encountered in the American literature. For the reader's convenience a list of such exceptions and their American equivalents is given below.

<u>Soviet Usage</u>	<u>American equivalent</u>
Arch	$\cosh^{-1}$
Arcth	$\coth^{-1}$ (ctnh ⁻¹)
Arsh	$\sinh^{-1}$
Arth	$\tanh^{-1}$
arccos	$\cos^{-1}$ (arc cos)
arctg	$\cot^{-1}$ (arc cot)
arcsin	$\sin^{-1}$ (arc sin)
arctg	$\tan^{-1}$ (arc tan)
ch	cosh
cosec	csc
ctg	cot (ctn)
cth	coth (ctnh)
rot	curl
sch	sech
sh	sinh
tg	tan
th	tanh

Available from Scripta Electronica, Inc.

CONTENTS

	Engl./Russ.
Ribosome Proteins of Chloroplasts and Cytoplasm, as Investigated by Polyacrylamide-Gel Electrophoresis - M. S. Odintsova and N. P. Yurina	533 667
Dynamics of Peroxidase Components from Corn Leaves Infected with Smut - B. A. Rubin and E. N. Lushchinskaya	539 674
Purification of Polyhedron Protein of the Silkworm Nuclear Polyhedrosis Virus and Investigation of Its Association - Dissociation Processes in Solutions - E. A. Kozlov, V. M. Sogulyaeva, T. L. Levitina, V. Sereshak, and S. V. Serebraynyi	543 679
Characteristics of the Internal Proteins of Bacteriophages T2 and DDVI - N. K. Kokurina, N. A. Braude, and T. I. Tikhonenko	549 686
Accumulation of Lipid Peroxides in the Organs of Tumor-Bearing Animals in Vivo - E. A. Neifakh and V. E. Kagan	554 692
Properties of Substrates of the Aldolase Reaction and Searches for Models of Aldolase - I. V. Mel'nichenko, N. Ya. Kozlova, and A. A. Yasnikov	559 699
A Simple Procedure of Quantitative Chromatographic Analysis on the Ultramicro Scale - S. V. Kuz'min, V. V. Matveev, E. K. Pressman, and L. S. Sandakhchiev	564 706
Isolation of Low-Molecular-Weight (4S) RNA from the Lipoproteins of Rat-Liver Endoplasmic-Reticulum Membranes - L. Z. Tulegenova and V. S. Shapot	569 712
Degradation of DNA to Purine Sequences by Hydrolysis of Apyrimidinic Acid with Aniline - B. F. Vanyushin and Ya. I. Bur'yanov	574 718
Histone Content of the Cell Nuclei of Regenerating Rat-Liver - L. V. Orlova, M. I. Nedelyaeva, and V. M. Ridionov	583 729
Oxidation of Egg Albumin by N-Bromosuccinimide and Its Effect on the Antigenic Properties of Protein - F. V. Shmakova and E. D. Kaverzneva	587 734
Participation of Thyroid Hormones in the in Vitro Obtention of the Dinitrophenol Effect on Oxidative Phosphorylation in Rabbit Liver Mitochondria - G. I. Medvedeva	593 741
Proteinization of Thiamine upon Simultaneous Administration of Other Derivatives of the Vitamin Modified with Respect to the Pyrimidine Component - Yu. M. Ostrovskii, G. A. Dosta, M. N. Sadovnik, A. Schellenberger, and G. Hubner	596 745
Study of Kinetics and Mechanism of Acid Inactivation of α -Amylases - N. A. Zherbtsov, E. A. Krayushkina, and Z. K. Avdeeva	601 752
Tumor Lipids: Phospholipid Composition of Cell Nuclei from the Liver, Ascites Hepatoma, and Jensen Sarcoma - S. N. Kuz'mina, L. P. Troitskaya, I. B. Zbarskii, E. V. Dyatlovitskaya, T. I. Torkhovskaya, and L. D. Bergel'son	610 763
Study of the Structural Proteins of Bacteriophage DDVI - V. V. Mesyanzhinov, M. Mazzarelli, T. A. Bogomolova, and B. F. Poglazov	615 768

The Russian press date (podpisano k pechatu) of this issue was 7/24/1969.
Publication therefore did not occur prior to this date, but must be assumed
to have taken place reasonably soon thereafter.

Available from Consultants Bureau

ELECTRICAL ENGINEERING IN JAPAN

DENKI GAKKAI ZASSHI

VOLUME 89

1969

NUMBER 6

CONTENTS

	Page
S. Ihara and K. Kaiho: A Criterion for Stability of Composite Superconductors.	1
H. Terasa, Y. Hashimoto, M. Arakane and Y. Kawaguchi: Self-Extinction of Secondary Arcs of 500-kV Insulator Strings	11
Y. Miki: Transient Response of Transistorized High-Speed Mho Relays	20
A. Ushida and E. Ikeno: Analysis of Parametric Oscillators Coupled with a Transformer	28
T. Machida and H. Sasaki: Transient Stability of AC Systems Under DC Transmission Line Fault.	38
T. Suzuki, I. Kishizima, Y. Ohuchi and K. Anjo: Study of Switching Surge Flashover Probability Using Multigaps	46
K. Honda: Application of Information Theory to the Location of Hourly Rainfall Observatories	54
T. Yamaguchi: Analysis of Harmonics on AC Line Generated by Three-Phase Bridge Rectifier.	62
K. Okuyama and Y. Ikeda: Factors Affecting Coil-to-Coil and Neutral Point Surge Voltages of Transformer.	72
T. Fujimaki and K. Ohniwa: Analog Simulation of DC Series Servomotor	80

Available From Scripta Electronica, Inc.

DOKLADY BIOCHEMISTRY

A translation of the Biochemistry Section of *Doklady Akademii Nauk SSSR*

Volumes 186-187

May-August, 1969

CONTENTS

Engl./Russ.

VOLUME 186, MAY-JUNE, 1969

Functional Peculiarities of the DNA of Diffuse and Condensed Chromatin—L. N. Anan'eva and A. E. Berman.	109	222
Effect of Inhibitors of Energy Metabolism on the Synthesis and Decomposition of RNA in Animal Cells—L. M. Volkova and N. G. Shuppe	112	225
Biosynthesis of Chlorophyll under the Action of an Extract from Propionic Acid Bacteria Cells—T. N. Godnev, G. A. Lipskaya, and I. K. Fartotskaya.	115	228
Presence of γ -Aminobutyric Acid in the Cerebral and Main Vessels of Man and Animals S. A. Mirzoyan, B. A. Kazaryan, and V. P. Akopyan	117	231
Reversible Change in the Absorption Spectra and Fluorescence of Adsorbates of Magnesium Pthalocyanine and Chlorophyll—V. F. Gachkovskii.	119	471
Detection of Specific Individual Proteins of the Rat Brain—Z. S. Geishenovich, A. A. Simchuk, and L. M. Rumbesht.	122	474
Antitumoral Activity of Polymer Compounds—O. V. Zubova, Yu. E. Kirsh, T. S. Lebedeva, A. A. Shorokhova, A. B. Silaev, V. A. Kabanov, and V. A. Kargin	125	477
Structure of the Blood Group Substances. Degradation of the Blood Group Substance (A + H) under the Action of an Enzyme Preparation from <i>Clostridium perfringens</i> —N. K. Kochetkov, V. A. Derevitskaya, L. M. Likhoshesterov, and M. D. Martynova	129	1195
Activity of Certain Enzymes in Lupin Nodule Fractions—V. L. Kretovich, Z. G. Evstigneeva, K. B. Aseeva, O. N. Zargaryan, and E. M. Martynova	132	1198
Postribosomal RNA-Containing Particles of the Cytoplasm of Animal Cells According to the Data of Analysis in a CsCl Density Gradient—L. P. Ovchinnikov, N. V. Belitsina, A. Ts. Avanesov, and A. S. Spirin	136	1202
Influence of Potassium Ions on the Respiration of the Neuron and the Neuroglia of the Lateral Vestibular Nucleus of the Rabbit—N. G. Aleksidze and K. Blomstrand	140	1429
L-Threonine Dehydrase of a Tobacco Tissue Culture—V. L. Kretovich, É. M. Sinel'nikova, Z. S. Kagan, and R. G. Butenko.	142	1431
Tissue Specificity of the Primary Structure of Animal DNA—A. L. Mazin, B. F. Vanyushin, and G. K. Korotaev	145	1434

VOLUME 187, JULY-AUGUST, 1969

Influence of Fluorides on the γ -Amylase Activity of the Rabbit Liver—D. M. Belen'kii and E. L. Rozenfel'd	151	201
Absence of Mercaptoethylguanidine and Guanidoethyldisulfide among the Conversion Products of 2-Aminoethylisothiuronium in the Organism and Cell—A. G. Tarasenko, É. Ya. Graevskii, M. M. Konstantinova, A. A. Mandrugun, I. V. Nekrasova, and V. M. Fedoseev	153	203

(Contd)

Available From Consultants Bureau

CONTENTS

(continued)

Engl./Russ.

Activity of Dehydrogenases, Amino and Ketoacids of <i>Rhizobium lupini</i> —V. L. Kretovich, V. I. Romanov, Z. G. Evstigneeva, T. G. Shorosheva, Yu. S. Borodulin, and S. P. Samsonova.	156	456
Conformational Changes in Flagellin during Self-Assembly—A. L. Metlina and B. F. Poglazov.	158	459
Physicochemical Properties and Amino Acid Composition of Pyocine R and Its Components —P. P. Garyaev, N. N. Latysheva, and B. F. Poglazov.	161	931
Synthesis in Vivo of Lamellar Protein during Formation of Structure of Corn Chloroplasts on Exposure to Light—M. I. Molchanov, N. S. Balaur, and É. N. Bezinger.	166	935
Systematization of the Codons of the Genetic Code—Yu. B. Rumer.	169	937
Effect of Lecithin SOL on the Activity of Myosin in the System Myosin Lecithin —K. B. Serebrovskaya, T. O. Balaevskaya, and T. I. Osipova.	171	939
Properties of Labile Photooxidized Forms of Chlorophyll b—V. B. Evstigneev, N. A. Sadovnikov, and G. D. Olovyannishnikova.	173	1184
Photoactivity of Chlorophyll in Aqueous Systems of the Amphoteric Surfactant Lecithin —G. A. Korneeva and K. B. Serebrovskaya.	177	1188
Conformational Changes Associated with $\text{Na}^+ - \text{K}^+$ -ATPase Activity—V. K. Lishko, M. K. Malysheva, and N. M. Polyakova.	179	1191
Localization of Reactions of N- and C-Oxidation of Dimethylaniline and of Peroxidation of Unsaturated Fatty Acids in the NADPH_2 -Oxygenase System of Microsomes —A. I. Archakov, L. F. Panchenko, I. I. Karuzina, and T. A. Aleksandrova.	182	1415
Polymorphism of Blood Serum Proteins and of the Hemoglobin of the Buffalo (<i>Bubalus indicus brachyceros</i>)—L. A. Zubareva, O. N. Solomonova, N. I. Kuznetsov, and S. B. Kyazimov.	186	1419
Role of Copper and Molybdenum in Regulating the Properties of Xanthine Oxidase and Urate Oxidase—V. V. Koval'skii and I. E. Vorotnitskaya.	189	1422
Synthesis of Cellulose from $\text{UDP-C}^{14}\text{-G}$ in Vitro by an Enzyme Derived from Cotton Seedlings—B. N. Stepanenko and A. V. Morozova.	192	1425
ERRATA.	194	

The Russian press dates (podpisano k pechatii) of the first and last issues covered in this issue of the translation were, respectively, 4/23/1969 and 8/20/1969. Publication of the material translated in this issue therefore is known to have occurred not prior to the earlier of these dates, but must be assumed to have taken place at intervals starting reasonably soon after this date and ending shortly after the later date.

Available From Consultants Bureau

CONTENTS

Engl./Russ.

Effect of Intrinsic Radiation from the Sb^{124} Isotope on the Surface Processes Accompanying the Diffusion of Antimony into Germanium - V. S. Arakelyan, Vikt. I. Spitsyn and V. B. Lazarev	429	116
Investigation of Cationic Aquocomplexes by Nuclear Magnetic Resonance - Yu. A. Zubov, S. P. Petrosyants, N. M. Buslaeva, and V. P. Tarasov	434	120
Redox Potential and Dimensions of Silver Particles under "Manual" Development Conditions - E. A. Galashin, E. P. Senchenkov, and K. V. Chibisov	438	124
Structural Changes in Polyethylene Fibers during Thermal Processing - Yu. A. Zubov, V. I. Selikhova, and V. A. Kargin	441	126
Investigation of Fast Reactions in Solution behind Strong Shock Wave Fronts - V. K. Kedrinskii, N. K. Serdyuk, R. I. Soloukhin, and S. V. Stebnovskii	445	130
Theory of a Film-Type Diode in Ionic Current Carriers - N. S. Lidorenko and A. L. Muler	449	134
Reactivity of Alkylaromatic Peroxy Radicals with Respect to Triphenylmethane - I. A. Opeida and R. V. Kucher	453	138
Formation of the OH Radical in the Sensitized Photooxidation of Water - A. K. Chibisov, V. A. Kuz'min, and A. P. Vinogradov	456	142
Volume Effect on the Structure of Detonation Fronts - Yu. N. Denisov	460	358
Zone Mechanism of the Development of Solid-Phase Reversible Reactions - G. B. Manelis and V. A. Strunin	463	362
Glass Electrode with Electronic Function - A. M. Pisarevskii, M. M. Shul'ts, B. P. Nikol'skii, and A. A. Belyustin	465	365
Kinetics of the Formation of Latex Particles in the Process of Emulsion Polymerization - L. M. Pis'men and S. I. Kuchanov	468	368
Infrared Spectra of Deuterated Methanol, Adsorbed on Montmorillonite - Yu. I. Tarasevich and F. D. Ovcharenko	472	372
Formation of Active Centers during Polymerization of Butadiene on the Catalyst System $AlCl_3 - CoCl_2 \cdot Py_2$ - G. V. Timofeeva, N. D. Seregina, N. A. Kokorina, and S. S. Medvedev	475	376
Effect of a Shift in the Pressure Gradient in a Component of a Binary Mixture, Undergoing a Phase Transition of the First Kind - V. E. Fadeev	478	379
Optical Rotation of Aqueous Solutions of Surface Active Steroids - Sodium Cholate and Desoxycholate - N. N. Tsikurina and Z. N. Markina	481	381
Luminescence Investigations of Silver Chloride and Silver Chloride-Iodide Photographic Emulsions - V. M. Belous and K. V. Chibisov	484	593
Photochemical and Thermal Interaction of Acid Chlorides with Aromatic Tertiary Amines - N. P. Glukhoedov, I. E. Kardash, A. N. Pravednikov and S. S. Medvedev	488	597
Charging of Elastically Deformed Electrode - A. Ya. Gokhshtein	492	601

(Contd)

Available from Consultants Bureau

Engl./Russ.

Measurement of the Surface Tension of Modified Water — B. V. Deryagin, Z. M. Zorin, V. V. Karasev, V. D. Sobolev, E. N. Khromova, and N. V. Churaev	496	605
Investigation of the Nature of the Active Center in the Polymerization of β -Propiolactone on Triethylphosphine by the NMR Method — M. A. Markevich, L. K. Pakhomova, and N. S. Enikolopyan	499	609
Influence of an Electrolyte Preliminarily Dissolved in Water and Monohydric Alcohols on the Heat of Solution of a Second Electrolyte at 25°C — K. P. Mishchenko, S. V. Shadskii, and I. I. Lonkevich	503	613
Passage of a Combustion Wave in Solid Propellant through an Inert Barrier — S. S. Novikov and Yu. S. Ryazantsev	506	616
Ellipsometry and Thickness of Surface Layers — A. I. Rusanov and V. I. Phsenitsyn	509	619

The Russian press dates (podpisano k pechati) of the first and last issues covered in this issue of the translation were, respectively, 6/17/1969 and 7/4/1969. Publication of the material translated in this issue therefore is known to have occurred not prior to the earlier of these dates, but must be assumed to have taken place at intervals starting reasonably soon after this date and ending shortly after the later date.

Available from Consultants Bureau

DOKLADY PHYSICAL CHEMISTRY

A translation of the Physical Chemistry Section of *Doklady Akademii Nauk SSSR*

Volume 187, Numbers 4-6

August, 1969

CONTENTS

Engl./Russ.

Calculation of the Activity of the Components of Solid Solutions Formed by Normal and Inverted Spinels in an Approximation of Non-ideal Solutions—B. G. Brokhovetskii, V. F. Bilakirev, R. Ya. Dobrovinski, A. N. Men', G. P. Popov, and G. I. Chufarov.	513	839
Preparation of Magnetic Controlled Electrical Resistors from Eutectic Alloys—V. N. Vigdorovich.	516	842
Boundary Viscosity of Some Polycymethylsiloxanes—B. V. Deryagin, V. V. Karasev, I. A. Lavygin, L. I. Skorokhodov, and E. N. Khromova.	520	846
Temperature Dependence of the Hydrolysis of p-Nitrophenyl Acetate, Catalyzed by the Polyoxymethylene Ester of N-Benzoylhistidine—A. B. Solov'eva, L. N. Topchieva, V. A. Kabanov, and Academician V. A. Kargin.	524	850
Calculation of Diffusion Coefficients in Porous Adsorbents—D. P. Timofeev and N. A. Tverdokhlebo.	528	854
Inhibiting Activity of Methylated Phenols—E. M. Tochina, L. M. Postnikov, V. Ya. Shlyapintokh, G. A. Nikiforov, and V. V. Ershov.	531	857
Effect of Vibrations on Visco-Elastic Behavior of Amorphous Polymers—G. V. Vinogradov, Yu. G. Yanovskii, A. I. Isaev, and Academician V. A. Kargin.	534	1075
Crystallization Kinetics of Hyperperitectic Alloys in the System Sn-Sb—Ya. V. Grechnyi, V. N. Ipatova, and L. E. Lev.	538	1079
Formation of Chlorine Dioxide during the Thermal Decomposition of Ammonium Perchlorate—V. I. Gritsan, V. N. Panfilov, and V. V. Boldyrev.	540	1082
Investigation of the Effects of Small Additions of Platinum to the Energy of the Bond between Oxygen and Vanadium Pentoxide—N. I. H'chenko, Yu. I. Pyatnitskii, G. I. Golodets, and V. A. Roiter.	542	1085
Magnetic Susceptibility of Various Adducts of Vanadyl VO(II) Acetate—V. T. Kalinnikov, V. V. Zelentsov, O. D. Ubozhenko, and T. G. Aminov.	546	1089
Probable Mechanism of the Formation of Adsorption Layers of Biomacromolecules—R. A. Kul'man.	548	1092
Effect of Liquid Metals on the Strength of Graphite—V. I. Savenko, A. V. Kharitonov, Yu. I. Koshelev, V. I. Kostikov, N. V. Pertsov, and E. D. Shchukin.	552	1096
Formation of Carbon Black from Acetylene at 1750-2100°K—P. A. Tesner and B. N. Al'tshuler.	555	1100
Highly Elastic Deformations, Shear Stresses, and Thixotropy of Polymer Melts. Low-Molecular-Weight Polyisobutylene—A. A. Trapeznikov and T. I. Korotina.	558	1103
X-ray Diffraction Study of the Hardening of Single-Mineral Binding Agents—A. F. Shchurov, M. A. Sorochkin, and G. M. Plavnik.	561	1107
EPR Spectra and Structure of Iminoxy Biradicals—E. G. Rozantsev and V. I. Suskina.	565	1332

(Contd.)

Available from Consultants Bureau

Engl./Russ.

Electrokinetic Potential of Barium Sulfate Precipitates—Viktor I. Spitsyn, E. A. Torchenkova, and L. N. Glazkova	568	1335
---	-----	------

The Russian press dates (podpisano k pechati) of the first and last issues covered in this issue of the translation were, respectively, 7/23/1969 and 8/20/1969. Publication of the material translated in this issue therefore is known to have occurred not prior to the earlier of these dates, but must be assumed to have taken place at intervals starting reasonably soon after this date and ending shortly after the later date.

Available from Consultants Bureau

SOVIET MATHEMATICS

DOKLADY AKADEMII NAUK SSSR
Tom 188 Nos. 1-6, 1969

Vol. 10, No. 5

September-October, 1969

TABLE OF CONTENTS

	Russian page nos.	Page
Budak, B. M. and Moskal, M. Z. <i>Classical solution of the multidimensional multifront Stefan problem</i>	(9-12)	1043
Ventcel', A. D. and Freidlin, M. I. <i>On the limiting behavior of an invariant measure under small perturbations of a dynamical system</i>	(13-16)	1047
Geiler, V. A. <i>Functors defined by reflexive K-spaces</i>	(17-19)	1052
Egorov, Ju. V. <i>On subelliptic pseudodifferential operators</i>	(20-22)	1056
Emelin, I. V., Krasnosel'skiĭ, M. A. and Pokrovskii, A. V. <i>Inertial games</i>	(23-26)	1060
Zverovič, È. I. <i>The Bohnke-Stein kernel and closed-form solution of Riemann's boundary value problem on the torus</i>	(27-30)	1064
Lašnev, N. S. <i>On continuous decompositions of collectively normal spaces</i> ..	(31-32)	1069
Mal'cev, A. A. <i>A topological version of Stupecki's theorem for certain compacta</i>	(33-36)	1071
Rozanov, Ju. A. and Kozlov, M. V. <i>On asymptotically efficient estimation of regression coefficients</i>	(37-40)	1075
Roitberg, Ja. A. <i>On boundary values of generalized solutions of elliptic equations</i>	(41-44)	1079
Šahbazjan, K. V. <i>Scheme programming languages</i>	(45-48)	1084
Abdullaev, S. K. and Babaev, A. A. <i>Some estimates for a singular integral with summable density</i>	(263-265)	1088
Aleksandrov, I. A. and Gutljanskii, V. Ja. <i>On the coefficient problem in the theory of univalent functions</i>	(266-268)	1091
Brudovskii, B. S. <i>Semi-integral and quasi-nuclear mappings</i>	(269-271)	1095
Emeličev, V. A. and Komlik, V. I. <i>The solution of discrete programming problems by the construction of a sequence of schemes</i>	(272-273)	1098
Kačurovskii, R. I. <i>The regular points, spectrum and eigenfunctions of non-linear operators</i>	(274-277)	1101
Krivenkov, Ju. P. <i>On a certain form of the optimality conditions</i>	(278-281)	1106
Lašnev, N. S. <i>On completely irreducible mappings of completely regular spaces</i>	(282-285)	1111
Pasynkov, B. A. <i>On topological groups</i>	(286-289)	1115
Ruhlev, V. S. <i>On saturated and completely saturated subspaces of certain sequence spaces</i>	(290-293)	1119
Suetin, P. K. <i>Areally orthogonal polynomials and Bieberbach's polynomials</i> ..	(294-296)	1123
Akperova, O. A. and Džavadov, M. G. <i>On the expansion in eigenfunctions corresponding to a part of the set of eigenvalues of a nonselfadjoint second-order differential operator</i>	(503-506)	1127 (Contd)
Baĭguzov, N. S. <i>On the rate of convergence of differentiated Lagrange and</i>		

Available From The American Mathematical Society
Vol 10, No 5, Sept-Oct 1969

	Russian page nos.	Page
<i>Hermite interpolation polynomials</i>	(507-510)	1132
Vainberg, A. M. <i>Nonlinear equations with monotone operators</i>	(511-513)	1136
Gorčakov, Ju. M. <i>A collection process</i>	(514-516)	1139
Levin, B. V. and Fainleib, A. S. <i>Average values of multiplicative functions</i>	(517-519)	1142
Levič, E. M. <i>Representation of solvable groups by matrices over a field of characteristic zero</i>	(520-521)	1146
Lozanovskii, G. Ja. <i>On the representation of spaces of regular functionals and some applications</i>	(522-524)	1149
Mikljukov, V. M. <i>Removable singularities of quasi-conformal mappings in space</i>	(525-527)	1153
Pokrovskii, L. D. <i>The Dirichlet problem for pseudodifferential equations depending on a parameter</i>	(528-531)	1156
Popov, V. I. <i>L. S. Pontrjagin's maximum principle in the theory of univalent functions</i>	(532-534)	1161
Strygin, V. V. <i>Singularities of the averaging principle for evolution equations</i>	(535-537)	1165
Blagoveščenskii, Ju. N. <i>On the distribution of extreme terms of order statistics</i>	(735-738)	1169
Gordin, M. I. <i>The central limit theorem for stationary processes</i>	(739-741)	1174
Dolgačev, I. V. <i>On the purity of the set of singular points of a morphism of schemes</i>	(742-744)	1177
Krasovskii, N. N. and Subbotin, A. N. <i>Mixed control in a differential game</i> ...	(745-747)	1180
Krylov, A. L. <i>Cauchy problem for Laplace's equation in the complex domain</i>	(748-751)	1184
Maergoiz, M. D. <i>Choice of a parameter in a minimization problem</i>	(752-755)	1188
Osipov, S. I. <i>A representation of the Laplace transformation of the function $\exp(-t^2)\operatorname{erf}(at)$</i>	(756-757)	1193
Rozenfel'd, B. I. <i>On principal bundles whose bases satisfy the second axiom of countability</i>	(758-761)	1196
Akivis, M. A. <i>Canonical expansions of the equations of a local analytic quasi-group</i>	(967-970)	1200
Brodskii, M. S. and Isaev, L. E. <i>Triangular representations of dissipative operators with an exponential type of resolvent</i>	(971-973)	1204
Brègmen, L. M. and Fokin, I. N. <i>On the structure of optimal strategies in some matrix games</i>	(974-977)	1208
Voskresenskii, V. E. <i>On the birational equivalence of linear algebraic groups</i>	(978-981)	1212
D'jakonov, E. G. <i>The solution of some nonlinear systems of difference equations</i>	(982-985)	1216
Zaĭnulabidov, M. M. <i>On a boundary value problem for a model equation of mixed type with two perpendicular lines of degeneracy</i>	(986-989)	1221
Ionin, V. K. <i>Riemannian spaces with Euclidean isoperimetric inequality</i>	(990-992)	1225
Kaplan, A. A. and Rubinšteĭn, G. Š. <i>The Kuhn-Tucker theorem</i>	(993-996)	1228
Kiprijanov, I. A. and Ključancev, M. I. <i>Estimates of a surface potential generated by a generalized shift operator</i>	(997-1000)	1232
Kozlova, Z. I. <i>On some $\Delta\Sigma$-operations the bases of which are obtained by union of chains of the base of the original operation</i>	(1001-1003)	1237
Kublanovskaja, V. N. <i>On an application of Newton's method to the determination of eigenvalues of λ-matrices</i>	(1004-1005)	1240
Raĭkov, D. A. <i>Semiabelian categories</i>	(1006-1009)	1242

(Contd)

Available From The American Mathematical Society
Vol 10, No 5, Sept-Oct 1969

	Russian page nos.	Page
Stupina, I. D. Some properties of R - and R^c -operations	(1010-1013)	1246
Šikin, E. V. On regular realization in the large in E^3 of two-dimensional class C^2 metrics with negative curvature of class C^1	(1014-1016)	1251
Štern, A. I. Completely irreducible class I representations of real semisimple Lie groups	(1017-1019)	1254
Ačil'diev, A. I. Eigenfunctions of the first boundary value problem for elliptic equations degenerate at certain points	(1207-1209)	1258
Brodskii, I. B. On the invariants of the group of triangular matrices of n th order with ones on the main diagonal	(1210-1213)	1262
Golodets, V. Ja. On finite groups of automorphisms of hyperfinite factors	(1214-1216)	1266
———, Addendum: Approximately finite groups and hyperfinite factors of type II_1		1269
Gol'dman, M. A. A characterization of functionally separable spaces and Tikhonov spaces by means of divergent nets	(1217-1220)	1270
Danilin, Ju. M. On an approach to minimization problems	(1221-1222)	1274
Karatoprakliiev, G. D. On a boundary value problem for equations of mixed type in multidimensional domains	(1223-1226)	1277
Ključancev, M. I. Estimates for solutions of boundary value problems with Bessel operator	(1227-1230)	1281
Kozlova, A. I. On some applications of the index comparison principle and separability laws of the space $J^{\omega\nu}$	(1231-1233)	1286
Kolesov, Ju. S. Schauder's principle and the stability of periodic solutions ..	(1234-1236)	1290
Laričeva, V. V. A new algorithm for obtaining higher approximations in the averaging method	(1237-1240)	1294
Levič, E. M. On a problem of P. Hall	(1241-1243)	1299
Sibgatullin, N. R. Representation of functions in the form of a superposition of waves in two- and three-dimensional Lobachevskii spaces	(1244-1247)	1302
Šalašova, L. Ja. Timan's approximation theorem for functions having a con- tinuous derivative of fractional order	(1248-1249)	1307
Table of contents for the next issue (Vol. 10, no. 6, November-December, 1969) Russian original		
Tom 179, nos. 1-6		1308-a

CORRECTIONS

The following corrections are translated from p. 926 of Tom 189.

P. G. Aizengendler, *An application of Newton's diagram to the problem of the stability of periodic solutions*, Vol. 9 (1968), no. 2, 459-463 (Russian pages Tom 179, 1015-1018).

On page 462, line 15, "nonnegative" should be "positive",
line 17, $s > 1$ should be $s > 2$.

Available From The American Mathematical Society
Vol 10, No 5, Sept-Oct 1969

SOVIET ELECTROCHEMISTRY

A translation of *Élektrokhiimiya*

Volume 5, Number 7

July, 1969

CONTENTS

	Engl./Russ.
New Work Concerning the Structure of the Electric Double Layer—E. B. Damaskin	717 771
Study of Anodic Processes on Iridium in Low Temperature Sulfuric Acid Solutions —N. V. Pospelova, A. A. Rakov, and V. I. Veszlovskii	740 797
Calculating the Electrical Field of an Electrolyzer in a Multilayer Medium—V. T. Ivanov . . .	746 804
Photoelectrochemical Investigation of Anodic Dissolution of Nickel in Sulfuric Acid —A. Sh. Valeev and A. M. Ushanova	750 809
Surface Structural Changes in Iron during Anodic Dissolution in Hydrochloric Acid —A. Sh. Valeev, R. V. Bismukhametov, and M. A. Chvala	755 814
Equivalent Circuit and Conductivity for Electrochemical Desorption at a Hydrogen-Covered Electrode—I. M. Novosel'skii and N. N. Gudina	761 820
Establishment of the Equilibrium State of a Platinum Electrode in an Iodine-Iodide System—A. M. Trukhan, Yu. M. Povarov, and P. D. Lukovtsev	767 826
BRIEF COMMUNICATIONS	
The Cause of Catalytic Evolution of Hydrogen from Acid Solutions of Tribenzylamine —A. L. Asatiani and C. A. Todoradze	773 833
Anodic Oxidation of Hydrazine on Smooth Palladium in Alkaline Solutions—B. P. Nesterov and N. V. Korovin	774 836
Influence of Monoethanol Amine on the Solution of Silver Anodes in a Ferrocyanide Silver- Plating Electrolyte—B. R. Georgievskii	779 838
Porosity, Luster, and Hardness of Electrolytic Co-Ni-P Alloys Produced in an Ultrasonic Field —N. I. Abramova, N. N. Balashova, and É. I. Meshcherskaya	781 840
Photoelectrochemical Processes at a ZnO Electrode. III. Oxygen Reduction at Electrodes with Different Degrees of Alloying—V. P. Pakhomov, D. M. Shub, and V. I. Veselovskii .	784 843
Electrolysis of Chloric Acid Solutions in Presence of Acrylonitrile—N. S. Tsvetkov and E. P. Koval'chuk	788 848
Electrolytic Reduction of Aliphatic Aldehydes. III. Effect of Electrode Material and Electrolysis Conditions on Electrolytic Reduction of Propionaldehyde—V. G. Khomyakov, A. P. Tomilov, and B. G. Soldatov	790 850
Electro-Reduction of Aliphatic Aldehydes. IV. Effect of the Length of the Hydrocarbon Chain on the Electro-Reduction of Aliphatic Aldehydes—V. G. Khomyakov, A. P. Tomilov, and B. G. Soldatov	793 853
Reduction of Metals at Liquid Gallium and Mercury—I. G. Vasil'eva	796 856
Electrochemical Behavior of a Solid Bismuth Electrode in Perchlorate Electrolytes —M. S. Grilikhes, B. S. Krasikov, and N. S. Solotskaya	799 859
Joint Adsorption of Organic Compounds on Mercury Electrodes—G. A. Dobren'kov and G. D. Shilotkach	803 863
Cathodic Reduction during Chlorate Production—V. A. Shlyapnikov and T. S. Filippov	806 866
Cathodic Hydrodimerization of Methylthienylketone—E. V. Kryukova, and A. P. Tomilov	808 869
Oscillopolarographic Study of the Temperature Dependence of the Diffusion Coefficients for a Number of Chlorides in an LiCl-KCl Supporting Electrolyte—I. I. Naryshkin and V. P. Yurinskii	810 871

(Contd)

Available from Consultants Bureau

(continued)

	Engl./Russ.
Overvoltage of Hydrogen Liberation in the Electrolysis of Concentrated Alkali Solutions. Niobium Cathode—V. Z. Lokshinov and A. L. Rotinyan.	812 873
Mechanism of Cathodic MnO_2 Reduction in Neutral Solutions—F. A. Mendzheritski	815 875
Effect of Oxidizing Agents on Cobalt Amalgam—B. K. Toibaev, S. A. Levitskaya, and A. I. Zebrev.	817 878
Behavior of 2-Acetyl-5-Bromothiophene on a Mercury Electrode—A. B. Ershler, I. M. Levinson, S. G. Mairanovskii, G. A. Todoradze, and Yu. B. Vol'kenshtein	819 880
Catalytic Waves of Dialkyl Sulfoxides in Unbuffered Aqueous Solutions—V. G. Luk'yanitsa.	822 883
Adsorption of Aliphatic Alcohols on a Bismuth Electrode—R. Ya. Puilerits, U. V. Palm, and V. É. Past.	825 886
Cathodic Reduction of Benzoylferrocene and Ferrocenylaldehyde—L. N. Nekrasov N. N. Nefedova, and A. D. Korsun	828 889
Reduction of 2-Chloropyridine on a Dropping Mercury Electrode—S. G. Mairanovskii and R. G. Baosheva.	832 893

The Russian press date (podpisano k pečati) of this issue was 6/25/1969.
Publication therefore did not occur prior to this date, but must be assumed
to have taken place reasonably soon thereafter.

Available from Consultants Bureau

SOVIET ELECTROCHEMISTRY

A translation of *Élektrokhiimiya*

Volume 5, Number 8

August, 1969

CONTENTS

Engl./Russ.

BRIEF COMMUNICATIONS

Anodic Polarization in Nonaqueous Solutions of Polyelectrolytes—V. P. Barabanov and N. N. Ovsyannikov	837	899
Light Emission from Electrode Processes—M. L. Orestov	839	901
Mechanism of the Electrolytic Reduction of Dialkyltin Dichlorides at a Dropping Mercury Electrode—Yu. M. Tyurin, Vyach. N. Flerov, and Z. A. Nikitina	842	903
Dependence of the Kinetics of the Anodic Process at a Platinized Titanium Anode on the pH of Chloride Solutions—I. E. Veselovskaya, S. D. Khodkevich, and L. M. Yakimenko ..	845	906
Anodic Polymerization of Acrylonitrile in Sulfuric Acid Solution—N. S. Tsvetkov and E. P. Koval'chuk	849	909
Regular Features of the Kinetics of the Reduction of Potassium Nitrate at a Copper Cathode with Time—R. K. Kvaratskheliya and R. I. Agladze	851	911
Electrochemical Reduction of Oxygen on Smooth Platinum in the Presence of a Cation Exchange Membrane—V. I. Lysenko and N. A. Fedotov	856	915
"Effective Valence" during Metal Dissolution. Dissolution of Indium Amalgam—A. I. Molodov, G. N. Markos'yan, and V. V. Losev	858	918
Chromatographic Analysis of the Products of the Open-Circuit Interaction of Allyl Alcohol with Rhodium Black—G. A. Bogdanovskii, Zh. I. Bobanova, Yu. N. Bogoslovskii, and G. D. Vovchenko	862	921
Overvoltage during Chlorine Evolution at Pyrographite—M. Franz and A. L. Rotinyan	865	925
Influence of Crystal Roughness on the Smoothing of Nickel Platings—N. Ya. Kovarskii and N. P. Gnusin	868	928
Anisotropy of the Steady-State Potentials of the Faces of a Bismuth Single Crystal—G. P. Petrov	871	931
Diffusion Potentials—L. A. Ryazantseva, P. G. Antonov, and V. E. Mironov	873	933
Differential Capacity Curves for a Mercury Electrode in Coumarin Solutions—B. B. Dmaskin, S. L. Dyamkina, and S. I. Petrochenko	875	935
Extremal Conditions of Operation of Thermogalvanic Elements—G. A. Kaluzhina, A. Ya. Shatalov, and M. A. Rubtsova	878	938
Electrochemical Oxidation of Hydrogen on Nickel in Alkali under a Pressure of up to 100 atm and the Influence of Chloride Ions on It—S. M. Salei and A. I. Krasil'shchikov...	881	940
Measurement of Diffusion Coefficients by a Chronopotentiometric Method as Applied to Divalent Iron Ions in a Molten Equimolar Mixture of Potassium and Sodium Chlorides—N. I. Komilov, V. E. Solomatin, and N. G. Ilyushchenko	885	945
Kalousek Electromechanical Switch and Its Incorporation into the LP-60 Polarograph—A. M. Khopin, G. G. Dubovik, and S. I. Zhdanov	887	947
Influence of the Medium and Electrode Material on the Electroreduction of Alkyl Aryl Ketones—I. A. Avrutskaya, M. Ya. Fiohsin, S. D. Kabanova, and L. E. Gerasimova ...	890	951

(Contd)

Available from Consultants Bureau

Electrical Double-Layer Capacitance at a Mercury-Ethylene Glycol Interface - D. I. Delapardze, G. A. Fedoradze, and Sh. S. Delapardze	894	955
Influence of pH of the Solution on the Passivation of Nickel- V. A. Lovachev, A. I. Oshe, and S. N. Kabanov	897	958
Investigation of Polarization in the Electrodeposition of Nickel-Tungsten Alloys in the Region of Temperatures above 100°C- A. T. Vas'ko and V. V. Tobolin	900	961
Investigation of the Photoelectrochemical Effect on Anode-Polarized Tungsten- A. T. Vas'ko and V. N. Zaichenko	904	964
Polarographic Behavior of Ethyl-0,0-Dimethyldithiophosphoryl- α -Phenyl Acetate (Cydiol) - E. S. Kosmatyi and M. G. Tret'yak	905	965
Polarographic Reduction of Phenazine N-Monoxide and Its Derivatives to Anion-Radicals - L. L. Gordienko, A. G. Chukhlantseva, Yu. P. Rozum, and V. P. Chernetskii	907	967
Nature of the Polarization of an Antimony Electrode in Strongly Acid Solutions of Chlorides- I. G. Norakidze, V. A. Kazakov, and A. T. Vagramyan	910	970
Iodide Concentration Circuits with a Constant Concentration of the Electrolyte K_2 in Dimethylformamide, Acetonitrile, and Methanol- A. E. Gorenbein	912	972
Determination of the Composition of the Complex of Zinc in Zincate Solutions of KOH - B. N. Kabanov, T. I. Popova, A. I. Oshe, and Ya. Ya. Kulyavik	915	974
One Possible Method of Determining the Parameters of Electrochemical Systems - A. A. Chernenko	918	978
Effect of Adsorption of Ions and Molecules on the Photoemission of Electrons at the Metal-Electrolyte Boundary- Z. A. Rotenberg and U. V. Pleskov	923	982
Reduction of the Chloride and Bromide Complexes of Palladium (II) at the Dropping Mercury Electrode- V. I. Kravtsov and I. I. Shereshevskaya	926	985
Activity of Chromium Oxide in a Melt of the System $CaO-Al_2O_3$	929	989
Determining the Order of an Electrochemical Reaction by Means of a Rotating Disc Electrode with a Ring- V. Yu. Filinovskii	932	991
Calculation of the Height of the Polarographic Waves in the Absence of a Limiting Current Plateau- G. S. Ginzburg	936	994
Polarography of Ions of Alkali Metals in Propylene Carbonates- V. A. Kuznetsov, N. G. Vasil'kevich, and B. B. Damaskin	939	997
Change in Electrochemical Properties of a Silver Electrode when Coated with a Thin Layer of Ag_2O - L. Muller, P. Yanets, and R. Landsberg	943	1001
Anodic Carboxylation of Hydrocarbons with Conjugated Double Bonds- A. G. Kornienko, L. A. Mirkind, and M. Ya. Fioshin	946	1003
Investigation of the Effect of the pH of the Solution on the Evolution Potential of Hydrogen in Alkaline Solutions on Gallium II- E. N. Potanova and I. A. Bagotskaya	950	1007
Interpretation of the Differential-Capacitance Curves of a Bismuth Electrode - R. Ya. Pullerit's, U. V. Palm, and V. É. Past	952	1009
Influence of the pH of the Solution on the Adsorption of Fatty Acids on a Mercury Electrode - A. V. Chizhov and B. B. Damaskin	955	1012
LETTERS TO THE EDITOR		
Mechanism of the Work of a Hydrophobic Electrode- A. G. Pshenichnikov, Yu. I. Kryukov, and R. Kh. Burshtein	958	1016
Polarographic Reduction of Aromatic Nitriles- L. S. Reishakhrit, T. B. Argova, L. V. Vesheva, and T. V. Forsova	959	1017
Electrooxidation of Lower Chlorocarboxylic Acids in the Presence of Free Radical Acceptors - M. A. Khrizolitova, L. A. Mirkind, and M. Ya. Fioshin	960	1018
Hydrogen-Isotope Separation Factor and Mechanism of the Elementary Act - L. I. Krishtalik and V. M. Tsionskii	961	1019

(Contd)

Available from Consultants Bureau

ELEKTROKHIIMIYA
Vol 5, No 8, 1969

(continued)

	Engl./Russ.
Electrothermoelastic Effect in Reversible Electrode Deformation--A. Ya. Gokhshtein	962 1019
REVIEWS	
G. S. Sveshnikov' Electrochemical Processes in Sulfide Deposits--Reviewed by A. L. Rotinyan .	963 1021

The Russian press date (poepisano k pechatu) of this issue was 7/25/1969.
Publication therefore did not occur prior to this date, but must be assumed
to have taken place reasonably soon thereafter.

Available from Consultants Bureau

SOVIET ELECTROCHEMISTRY

A translation of *Élektrokhimiya*

Volume 5, Number 9

September, 1969

CONTENTS

Engl./Russ.

BRIEF COMMUNICATIONS

Alternating-Current Study of the Electrochemical Processes at a Platinum Electrode in a Solid Electrolyte — A. L. L'vov, E. P. Lomova, and E. N. Gushchina	965	1027
Neutralization of Positive Sodium and Potassium Ions at a Glass-Vacuum Boundary by Thermal Electrons — Yu. A. Volokhov, A. P. Fedorov, and V. I. Danilkin	968	1030
Cathodic-Reduction Kinetics for Oxygen at a Nickel Oxide Electrode in Concentrated KOH Solutions at 200°C — Yu. M. Pashkov, G. S. Tyurikov, and N. P. Vasilistov	971	1033
Adsorption of Bromide Anions on a Smooth Platinum Electrode — Ya. Veber, Dzh. Pirtskhalava, Yu. B. Vasil'ev, and V. S. Bagotskii	975	1037
Polarization of a Flowing Mercury Cathode during Discharge of Sodium Ions — G. I. Volkov and Yu. V. Lyadin	979	1041
Oscillopolarographic Investigation of Certain Chlorides against a Background of LiCl-KCl — I. I. Naryshkin, V. P. Yurinskii, and P. T. Stangrit	981	1043
Oxidation of Hypochlorite at a Platinum Anode — T. S. Filippov and Yu. V. Dobrov	984	1046
Stability of the Potential Distribution over the Walls of a Cylindrical Tube — É. N. Rudenko, and N. P. Poddubnyi	988	1049
Solubility and Diffusion of Oxygen in Solutions of Potassium Hydroxide and Phosphoric Acid — A. M. Yatskovskii and N. A. Fedotov	991	1052
Chemisorption and Electrooxidation of Hydrocarbons on a Platinum Electrode. IX. The Nature of the Chemisorbed Particles Formed during the Adsorption of Propane — A. G. Pshenichnikov, A. M. Bogachev, and R. Kh. Burshtein	993	1054
Separation of Calcium and Sodium on an Amalgam Electrode — E. K. Spasskaya and L. M. Yakimenko	997	1058
Rate of Displacement of Sodium by Calcium from Solution during Amalgam Exchange — E. K. Spasskaya and L. M. Yakimenko	1000	1061
Polarographic Investigation of Oxides of Tin, Vanadium, and Antimony against a Background of Molten Carbonates — V. V. Kuz'movich and N. Kh. Tumanova	1003	1064
Cementation of Metals by Amalgams in Nonaqueous Solutions. II. Cementation of Antimony from Solutions of its Halides in Nonpolar Organic Solvents by Sodium Amalgam — V. P. Gladyshev, L. M. Ruban, and L. P. Petrova	1006	1067
Nature of the Cathodic Film Appearing during Chromium Electrodeposition from Halide Solutions — M. A. Shluger and E. N. Osobenkova	1010	1070
Mechanism of the Growth of Filamentary Silver Crystals during Nonsteady Electrolysis Conditions — M. S. Zubov, D. V. Fedoseev, L. A. Uvarov, and A. T. Vagramyan	1012	1073
Effect of Crystal Roughness on the Microrelief of Copper Deposits — V. N. Golubev and N. Ya. Kovarskii	1015	1075
Study of the Behavior of Phenylanthranilic Acid at a Platinum Electrode in a Sulfuric Acid Medium — R. N. Zolotar' and V. B. Avilov	1018	1078
Method for Investigating Electrode Impedance — Yu. Ya. Lukomskii	1020	1080

(Contd)

Available from Consultants Bureau

(continued)

Engl./Russ.

Electrochemical Behavior of Hydrogen Peroxide on a Nickel Electrode in an Alkaline Solution - G. P. Samoilov, E. I. Khramcheva, N. A. Shumilova, and V. S. Bagotskii . . .	1022	1082
Effect of Halide Anions on Hydrogen Overvoltage in Solid Gallium in 1N H ₂ SO ₄ - I. A. Bagotskaya and T. I. Khalturina	1025	1085
D. hydrogenation of Methanol during Adsorption on a Smooth Iridium Electrode and the Nature of the Nonstationary Currents - S. S. Sedova, Yu. B. Vasil'ev, and V. S. Bagotskii	1028	1088
Reduction of Oxygen on Thallium - A. N. Doronin and O. L. Kabanova	1032	1092
Adsorbabilities of Cis- and Trans-1,2-Dibromoethylenes on Mercury - I. G. Markova and I. G. Fokhtistov	1035	1035
Polarography in Nonaqueous Solvents. III. Polarography of Iodo- and Bromobenzenes, Benzaldehyde, and p-Chlorobenzaldehyde in Mixed Solvents - V. D. Bezuglyi	1038	1098
Overvoltage of Hydrogen on Saturated Iridium Amalgam in Alkaline Solutions of Salts of the Alkaline Earth Metals - I. P. Gladkikh and V. N. Korshunov	1042	1102
Adsorptive Properties of a Platinum Electrode in Solutions of Acids without the Addition of Indifferent Electrolyte - O. A. Petrii, A. N. Frumkin, and V. V. Topolev	1044	1104
Determination of the Adsorption of Ions by the Method of Adsorption Potentials. II. The Adsorption of Br ⁻ on Rhodium and Iridium - O. A. Petrii, Nguyen van Tue, and Yu. G. Kotlov	1048	1108
Ionization of Oxygen in Mixtures with Carbon Dioxide at Electrodes Partially Immersed in Carbonate Melts. II. Effect of Electrolyte Composition, Temperature, and Nature of Metal, on the Kinetics of the Ionization of Oxygen in Carbonate Melts - Yu. M. Pashkov and G. S. Tyurikov	1052	1112
Study of the EMF of Galvanic Cells Including Sulfonic Acid Cation Exchange Membranes and Solutions of Magnesium and Baride Chlorides - Z. S. Alagova, O. K. Stefanova, and E. A. Materova	1056	1116
Nonequilibrium Charging of the Surface of p-Type Germanium - Kh. A. Roolaid, M. D. Krotova, and Yu. V. Pleskov	1060	1120
Ionization of Oxygen in a Metal-Gas-Ion Exchange Membrane Electrolyte System - V. I. Lysenko and N. A. Fedotov	1062	1122
Impedance Study of the Mechanism of Copper Electrocrystallization in the Neighborhood of the Equilibrium Potential - Z. A. Tkachik, K. M. Gorbunova, and É. S. Sevast'yanov	1065	1125
Polarization Curve of Redox Processes on Anthracene - V. A. Myamlin and B. T. Lozhkin	1069	1129
LETTERS TO THE EDITOR		
Polarographic Waves in Acid Solutions of Sodium Thiosulfate - A. G. Voloshin	1073	1134

The Russian press date (podpisano k pechati) of this issue was 8/25/1969. Publication therefore did not occur prior to this date, but must be assumed to have taken place reasonably soon thereafter.

Available from Consultants Bureau

FIZIKA TVERDOGO TELA EDITORIAL BOARD

A. I. Ansel'm
A. S. Borovik-Romanov
L. P. Gor'kov
O. V. Konstantinov
M. I. Kornfeld
(Associate Editor)
L. I. Korovin
(Secretary)
M. I. Korzunskii
M. A. Krivoglas
G. V. Kuryumov
I. M. Lifshitz
Ch. B. Lushchik
A. N. Orlov
A. F. Prikhot'ko
A. R. Regel
S. M. Ryvkin
G. A. Smolenskii
V. M. Tuckevich
B. K. Vainshtein
V. S. Vavilov
L. F. Vereshchagin
S. N. Zhurkov
(Editor)
Institute of Physicotechnical Institute

V. P. Zhurav

Soviet Physics SOLID STATE

A Translation of "Fizika Tverdogo Tela"

(Russian Original Vol. 11, No. 8, pp. 2057-2412, August, 1969)

Vol. 11, No. 8, pp. 1663-1950

February, 1970

CONTENTS

		PAGE	RUSS. PAGE
Radiation of Electromagnetic Waves by Charged Particles in Statistically Nonuniform Crystals. <u>G. A. Beglashvili and Yu. S. Monin</u>	(T)	1663	2057
Local Oscillations and Optical Phonons in Solid Solutions. <u>V. S. Vinogradov</u>	(T)	1666	2062
Resonance Absorption of the Pure Modes of a Monochromatic Sound Wave by Paramagnetic Ions of a Crystal. <u>V. P. Derevenskii</u>	(T)	1673	2072
Focusing of Atomic Collisions in an fcc Lattice Containing an Isolated Vacancy. <u>G. V. Zhukov and V. M. Kolyada</u>	(T)	1677	2077
Positron Annihilation in Metal Oxides. <u>A. D. Tsyganov, A. Z. Varisov, A. D. Mokrushin, and E. P. Prokop'ev</u>	(E/T)	1679	2079
Energy Levels of Ions with $d^2(d^8)$ and d^5 Type Shells in Tetragonal Crystal Fields. <u>D. M. Sveridov and T. F. Veremeichik</u>	(T)	1686	2088
Magnetic Structure and Fe^{2+} Ion Positions in the Hexagonal Ferrite $BaCo_{1.7}Fe_{0.25}Fe_{1.7}O_{27}$. <u>T. A. Khimich, V. F. Belov, M. N. Shipko, and E. V. Korneev</u>	(E/T)	1690	2093
Field Distribution in a Metal-Dielectric-Metal Junction System. <u>Sh. N. Gifeisman</u>	(T)	1693	2097
The Change in the Crystal Field Potential in a Homologous Series of Crystals Having the Scheelite Structure. <u>M. V. Eremin, I. N. Kurkin, O. I. Mar'yakhina, and L. Ya. Shekun</u>	(E/T)	1697	2103
Photocurrent Saturation and Negative Differential Photoconductivity in CdSe. <u>J. J. Vaitkus, J. K. Višćakas, S. C. Karpinskas, and A. K. Urbelis</u>	(T/E)	1703	2111
Delta-Function Potential Approximation in the Theory of Negatively Charged Electronic Color Centers. <u>A. A. Berezin and V. B. Kirii</u>	(T)	1709	2118
Ferromagnetic Resonance in Yttrium Garnet with Holmium Impurity. <u>A. N. Ageev and A. G. Gurevich</u>	(E)	1712	2122
Band Domains of Obliquely Deposited "Supercritical" Permalloy Films. <u>L. S. Palatnik, A. G. Ravlik, L. I. Lukashenko and V. N. Samofalov</u>	(E)	1719	2130
Parametric Excitation of Magnetostatic Waves in a Tangentially Magnetized Plate. <u>A. V. Vashkovskii and B. A. Murmuzhev</u>	(T)	1723	2135
The Nature of the Active Center for Selenium Epitaxial Growth on KI and KBr Single Crystal Cleavage Surfaces. <u>I. D. Nabitovich</u>	(E)	1726	2139
Mössbauer Study of Iodine Dioxide. <u>Yu. S. Grushko, B. G. Lur'e, and A. N. Murin</u>	(E)	1733	2144 (Contd)

Available from American Institute of Physics
Vol 11, No 8, Feb. 1970

	RUSS. PAGE	PAGE
Magnetic Properties in Strong Pulsed Magnetic Fields of Some Manganites Having the Perovskite Structure. <u>A. T. Starovoitov, V. I. Ozhogin, and V. A. Bokov.</u>	(E)	1740 2153
Effective Parameters of Ferrites. <u>I. A. Gilinskii</u>	(T)	1745 2159
Theory of Surface Donor States in Silicon and Germanium. <u>A. A. Kharpushin.</u>	(T)	1748 2163
Surface Vibrations in Ionic Crystals. <u>V. V. Bryksin and Yu. A. Firsov.</u>	(T)	1751 2167
Theory of Dimensional (Size) Oscillation Effects and Geometrical Resonances in Normal Metal Films. <u>G. A. Gogadze and I. O. Kulik</u>	(T)	1762 2182
Kinetic Phenomena in Neodymium Chalcogenides in the Magnetic Ordering Region. <u>V. P. Zhuze, V. I. Novikov, V. M. Sergeeva, and S. S. Shalyt</u>	(E)	1770 2192
Dispersion of Elastic Waves in a Crystal Containing Macroscopic Spherical Inclusions. <u>A. Kovalev and A. Kosevich</u>	(T)	1773 2196
Effect of the Activator Concentration on the Degree of Association of Impurity Centers in the System $SrF_2:Gd^{3+}$. <u>F. Z. Gil'fanov, L. D. Livanova, M. S. Orlov, and A. L. Stolov.</u>	(E)	1779 2203
The Mechanical Aftereffect and Creep of Metals. <u>B. Ya. Pines and I. G. Ivanov.</u>	(E)	1783 2208
Effects of Impurities on the Main Absorption Edge of GaP. <u>A. N. Pikhlin and D. A. Yas'kov</u>	(E)	1787 2213
Scattering of Light by Concentration Fluctuations and Generation-Recombination Noise. <u>A. G. Aronov</u>	(T)	1791 2219
Interpretation of the Phenomenon of Field Emission in p-Type Ge. <u>P. G. Shlyakhtenko.</u>	(E)	1794 2222
Selective Crystallization on Elements of the Surface Electrical Structure of LiF Crystals. <u>G. I. Distler and V. P. Vlasov</u>	(E)	1798 2226
State of Electrons Near a Phase Transition and in Disordered Systems. <u>M. A. Krivoglaz.</u>	(T)	1802 2230
Oxygen Centers in the $CaF_2:Dy^{3+}$ and $SrF_2:Dy^{3+}$ Systems. <u>R. K. Luks, L. D. Livanova and A. L. Stolov</u>	(E)	1810 2241
NMR Spectra of Diffusing Water Molecules in Crystals. <u>N. A. Sergeev, O. V. Falaleev, and S. P. Gabuda</u>	(T/E)	1815 2248
Nonlinear Reflection and Refraction of Coherent Light in Thin Metal Films. <u>G. V. Krivoshekov and V. I. Stroganov</u>	(T/E)	1818 2252
Phonon Spectra in Thin Films. <u>Yu. A. Romanov and M. Sh. Erukhimov.</u>	(T)	1823 2258
Temperature-Induced Changes in the Electron Paramagnetic Resonance Spectrum of Mn^{2+} in Pyromorphite $Pb_3(PO_4)_2Cl$. <u>L. G. Glinkskaya, M. Ya. Shcherbakova, and V. V. Bakakin</u>	(E)	1827 2263
Photoluminescence of Undoped Gallium Arsenide Crystals. <u>V. S. Bagaev and L. I. Paduchikh</u>	(E)	1832 2268
Temperature Dependence of the Integrated Intensity for Light Absorption by Localized Oscillations. <u>I. P. Ipatova, A. A. Maradudin, and A. V. Subashiev</u>	(T/E)	1834 2271
Hot Photoelectrons in Semiconductors. <u>Yu. P. Ladyzhinskii</u>	(T)	1842 2282
Diffuse X-Ray Scattering by an AlZn Single Crystal During Decomposition. <u>G. V. Kleshchev, D. V. Shumilov, A. I. Sheinkman, V. A. Toldin, and A. G. Parfenov.</u>	(E)	1847 2289
Charge Distribution Near a Dislocation in an Ionic Crystal. <u>I. G. Margvelashvili and Z. K. Saralidze</u>	(T)	1854 2296
Intraband Absorption of Electromagnetic Waves in Doped Semiconductors. <u>Yu. S. Gal'pern and A. L. Éfros</u>	(T)	1858 2301

(Contd)

Available from American Institute of Physics
Vol 11, No 8, Feb. 1979

		RUSS. PAGE	PAGE
Magnetic Properties of the Alloy $MnAu_2$ in Intense Pulsed Magnetic Fields Under High Hydrostatic Pressure. I. G. Fakidov and R. Adiatullin	(E)	1861	2305
Temperature Dependence of the Elastic Moduli of the Metamagnetic Compound $MnAu_2$. I. G. Fakidov and É. V. Kleimenov	(E)	1865	2309
Investigation of Absorption of Longitudinal Ultrasonic Waves in CaF_2 , BaF_2 , and SiO_2 . A. D. Gingis, A. I. Morozov, B. A. Stankovskii, and V. V. Golotsvan	(E/T)	1868	2313
Role of Exciton States During Two-Quantum Absorption in Semiconductors. V. I. Bredikhin and V. N. Genkin	(T)	1871	2317
Magnetic Properties of an Isotropic Two-Sublattice Ferrimagnet in the Noncollinear Phase. V. K. Buzylev and L. V. Kurbatov	(T)	1875	2322
Magnetic Properties of Manganese Arsenide in Strong Pulsed Magnetic Fields. N. P. Grazhdankina, É. A. Zavadskii, and I. G. Fakidov	(T/E)	1879	2327
Galvanomagnetic and Thermomagnetic Phenomena in a Strong Magnetic Field. É. Normantas	(T)	1886	2337
First-Order Phase Transition in an Antiferromagnet in an External Magnetic Field. V. G. Bar'yakhtar, E. V. Zarochintsev, and V. A. Popov	(T)	1891	2344
Shift of the Paramagnetic Resonance Line Due to a Spin-Phonon Interaction. V. A. Timofeev	(T)	1897	2353
Effective Quadrupole-Quadrupole Interaction Between Impurity Molecules in a Crystal. N. E. Kamenogradskii and Yu. V. Konobeev	(T)	1900	2357
BRIEF COMMUNICATIONS			
Temperature Change of Electric Broadening and Shift of the Cr^{3+} EPR Line in Zinc Tungstate. V. M. Chernov	(E)	1903	2361
Possible Mechanism of Photothermal and Thermal Destruction of F Centers in Alkali-Halide Crystal Phosphors. F. N. Zaitov, E. S. Dudarev and V. I. Sidlyarenko	(E/T)	1905	2362
Supplementary Absorption During Excitation of Magnetoelastic Waves in Ferroelectrics. K. V. Goncharov and V. I. Uchastkin	(E)	1907	2365
The Acoustoelectric Effect in $SbSI$. V. Kunigelis, V. Samulionis, and É. Garshka	(E)	1909	2367
Dispersion Laws in Crystals of Orthorhombic Symmetry Forming a Γ_2^+ Lattice. T. N. Sushkevich	(T)	1910	2368
The Nature of Recombination Radiation in Cadmium Telluride. G. P. Golubev	(T)	1912	2370
Electron Damping of Ultrasonic Lamb Waves in CdS . I. Ya. Kucherov and I. V. Ostrovskii	(E)	1914	2373
Kinetics of Ordering in a $NiO - MgO$ Solid Solution. S. A. Chudinova, S. P. Kuz'kina, and O. N. Shvirin	(E/T)	1917	2375
Electric Transport and Diffusion of Molybdenum in a Nickel-Molybdenum Solid Solution. D. F. Kalinovich, I. I. Kovenskii, M. D. Smolin, and V. M. Statsenko	(E)	1919	2378
Spectrum of an Electron Localized at an Edge Dislocation. M. I. Molotskii	(T)	1921	2380
Synthesis of a Third Polymorphic Modification of Arsenic Selenide at High Pressures. V. A. Kirkinskii, A. P. Ryaposov, and V. G. Yakushev	(E)	1923	2382
Spin-Lattice Relaxation of Arsenic Donors in Germanium. E. M. Gershenson, B. D. Danilov, N. M. Pevin, and M. S. Fogel'son	(E)	1925	2384
Hole Processes and Structure-Sensitive Radiation Coloring of KCl . S. M. Muradov	(E)	1927	2386

(Contd)

Available from American Institute of Physics
Vol 11, No 8, Feb. 1970

		RUSS. PAGE	PAGE
Use of a Black Absorber to Measure the Mössbauer Coefficient in Cobalt Oxides. <u>S. I. Bondarevskii, V. T. Shipatov, P. P. Seregin,</u> and <u>K. V. Perepech.</u>	(E)	1929	2388
Electrical Structure of Alkali Halides During Their Disintegration in Solid Solutions. <u>G. I. Distler, V. N. Lebedeva, V. V. Moskvina,</u> and <u>E. I. Kortukova.</u>	(E)	1931	2390
Effect of "Interaction" Terms on the Constants of the Spin Hamiltonian. <u>A. N. Men', D. S. Farberov, and P. G. Filippov</u>	(T/E)	1934	2393
Electrical Properties of Tantalum Carbide at High Temperatures. <u>O. A. Golikova, É. O. Dzhabarov, A. I. Avgustinik,</u> and <u>G. M. Klimashin.</u>	(E)	1936	2395
Internal Friction in Single Crystals of Barium Titanate. <u>A. Yu. Kudzin,</u> <u>L. K. Bunina, and O. A. Grzhegorzhevskii.</u>	(E)	1939	2397
Relation Between the Electrical Resistivity and Dislocation Density in Polycrystalline Metals. <u>M. Ya. Fuks.</u>	(E)	1941	2399
Characteristic Electron Energy-Loss Spectrum for Ruthenium. <u>V. V. Zashkvara, V. S. Red'kin, and M. I. Korsunskii</u>	(E)	1944	2402
Low-Temperature Phase Transition in the Polar State of the Organic Semiconductor Phthalocyanine. <u>Yu. A. Vidadi, E. A. Chistyakov,</u> and <u>L. D. Rozenshtein.</u>	(E)	1945	2403
"Phonon Wind" and Dislocation Damping. <u>V. I. Al'shits</u>	(T)	1947	2405

Available from American Institute of Physics
Vol 11, No 8, Feb. 1970

SOVIET PLANT PHYSIOLOGY

A translation of *Fiziologiya Rastenii*

Volume 16, Number 4

July-August, 1969

CONTENTS

	Engl./Russ.
Chloroplast Organization and Photochlorophyllide Metabolism in Corn Leaves in Darkness and Light—S. V. Tageeva, G. E. Savchenko, G. A. Semenova, and A. A. Shlyk	483 581
Some Ecological-Physiological Features of the Action Spectrum of Photosynthesis at Light Saturation—V. M. Gold	495 594
After-Effect of High Temperature on the Photosynthetic Metabolism of Labeled Carbon in Peas—A. M. Shcherbakova	502 603
Assimilation of Urea and Change in the Composition of Free Amino Acids during Phosphorus Starvation of Plants—T. N. Chernyavskaya and O. F. Tueva	506 608
Content of Nitrogen and Phosphorus Compounds in Buckwheat Mitochondria Depending on the Conditions of Mineral Nutrition—O. A. Sokolov	512 615
Influence of the Conditions of Phosphorus Nutrition on the Absorption and Conversion of Phosphorus in the Cytoplasmic Structures of Cabbage Roots—P. A. Vlasyuk, L. A. Levchenko, and P. P. Mel'nichuk	517 621
Influence of the Conditions of Mineral Nutrition on the Rate of Moisture Exudation by Corn Roots—A. N. Kremnina	522 626
Effect of NaCl and Na ₂ SO ₄ on Growth of Tissues of Plants of Different Ecological Groups in Tissue Cultures—E. I. Komizerko	528 632
Effect of Isoosmotic Concentrations of NaCl and Na ₂ SO ₄ on Rate of Photosynthesis and Photochemical Activity of Corn Chloroplasts—L. P. Lapina and S. A. Bikmukhametova	532 638
Initial Pathways of Glucose Transformation during Respiration of Plants under Various Conditions of Soil Salinization—N. V. Zhukouskaya, N. F. Lyakhova, and E. S. Volkova	536 643
Determination of the Change in Cold Resistance of Plants by the Amount of Sap Expressed from the Leaves—L. A. Nezgovorov, A. K. Solov'ev, and L. N. Rodina	541 650
Washing out Sugars from Tillering Nodes of Frost-Hardened Winter Wheat Plants —T. I. Trunova	547 658
Physiological Indicators of Resistance in Hard Wheats—A. I. Shchukina	553 666
Effect of Kinetin on the Activity of Pumpkin Root Systems—M. G. Abutalybov, A. A. Mardanov, and N. B. Vezirova	559 673
Interaction of Phytohormones and Their Effect on the Growth of Isolated Pumpkin Cotyledons—A. L. Kursanov, O. N. Kulaeva, and T. P. Mikulovich	564 680
Cytological Study of the Effect of 6-Benzylaminopurine and Kinetin on Isolated Flax Cotyledons—I. N. Sveshnikova and V. A. Khokhlova	570 687
Accumulation of Sugars Absorbed from Solution in the Ends of the Conducting Bundles and in the Mesophyll Cells of the Sugar Beet Leaf—N. A. Pristupa	575 692
Comparative Study of Free Nucleotides in Two Varieties of Cotton Plants —A. P. Ibragimov and L. S. Plekhanova	580 698
Content and Accumulation of Polyphosphates in Cells of <i>Scenedesmus Obliquus</i> (Turpin) Kützlin of Different Ages—E. N. Markarova and S. S. Baslavskaya	584 702 (Contd)

Available from Consultants Bureau

Effect of Light and Darkness on the Mitochondrial Ultrastructure of Rudbeckia and Chenopodium Leaves—É. L. Milyaeva, N. P. Akseanova, and T. N. Konstantinova	589	712
Effect of Phenazone on the Content of Phenolic Compounds and Carbohydrates in Sugar Beet—S. M. Mashtakov and G. P. Kudryavtsev	593	713
Effect of Chlorocholine Chloride on the Growth and Water Status of Various Winter Wheat Varieties—A. I. Uskov and A. V. Pyatygin	599	721
BRIEF COMMUNICATIONS		
Effect of Nicotinic Acid and Its Analogs on Certain Physiological Processes and Productivity of Spring Wheat—F. A. Polimbetova, É. I. Omarova, and E. D. Bogdanova	603	726
Effect of Actinomycin D on the Biosynthesis of RNA and Protein in Germinating Cotton Seeds—Kh. Kh. Karimov and S. V. Kudinova	607	730
Investigation of the Diurnal Variations of the Free Radical Concentration in Potato Leaves —A. I. Mochalkin and K. I. Mochalkina	610	732
Photosynthetic Apparatus of Sugar Beets in a Nutrient Medium Varying in Composition of Trace Elements—G. A. Lipskaya and A. I. Antipova	612	734
Uptake of Radiophosphorus P^{32} by Tree Roots from Solutions with a Different Carbon Dioxide Content—A. V. Veretennikov	615	737
Activity of Glucose-6-Phosphate Dehydrogenase and Aldolase in Growing and Aging Corn Coleoptiles—É. E. Khavkin and L. A. Podolyakina	618	740
PRACTICAL APPLICATIONS		
Pulsed Sprinkling of Agricultural Crops—G. V. Lebedev, V. G. Egorov, and V. G. Bryukvin	620	743
METHODS		
Automatic Installation for Recording the Rate of Photosynthesis in a Closed Cycle System of Small Volume—Yu. V. Krylov	623	746
Some Results of Measuring Direct Solar Photosynthetically Active Radiation by a Spectral Phytoactinometer—A. A. Fedyushin and V. P. Bedenko	631	756
REVIEWS		
P. A. Vlasjuk, Biological Elements in the Life of Plants—Reviewed by L. K. Polishchik and D. F. Protsenko	634	760
Dmitrii Filippovich Protsenko (on the Occasion of his 70th Birthday)—N. M. Belokon', A. V. Kaplya, S. I. Mininberg, L. K. Polishchuk, and L. A. Sirenko	637	763
Vasilii Feofilovich Kuprevich—M. N. Goncharik	639	765

The Russian press date (podpisano k pechati) of this issue was 7/15/1969.
Publication therefore did not occur prior to this date, but must be assumed
to have taken place reasonably soon thereafter.

Available From Consultants Bureau

CONTENTS

Sokolowska-Pituchowa J.: The 100-year-old history of the <i>Theatrum Anatomicum</i> in Cracow	93
Sokolowska-Pituchowa J.: Professors of the chair of descriptive and topographic anatomy in Cracow in the past hundred years	102
Kohmann S., Kuś J., Sokolowska-Pituchowa J.: The School of Kazimierz Kostanecki	108
Skowron S.: The scientific activity of K. Kostanecki in the field of experimental cytology and developmental mechanics	112
Kohmann S.: Kazimierz Kostanecki, Anatomist of the Jagellonian University	122
Kuś J.: The history of injection methods in the morphological sciences	134
Sokolowska-Pituchowa J.: The history of studies on the lymphatic system	147
Sokolowska-Pituchowa J.: Some of Teichmann's anatomical techniques	158
Plasecki Z., Jugowski F., Piotrowski J.: Forms of the renal pelvises in man in casts and radiograms	161
Miaśkiewicz C.: Age and rate of ossification of the epiphyseal cartilages of the foreleg in boys	172
Sokolowska-Pituchowa J., Miaśkiewicz C.: The sesamoid bones in Negroes	179
Konaszewska-Rymarkiewicz K., Szlaga-Sobechowicz Z.: Menarche and the constitutional factor in girl students	184
Sokolowska-Pituchowa J., Wohn A., Feret J.: The behavior of diaphorase of coenzyme I (NAD) in the course of degeneration of the sciatic nerve in hooded rats after freezing of the nerve	189
Sokolowska-Pituchowa J., Feret J., Wohn A.: Histochemical analysis of degenerative lesions in peripheral nerves under the influence of steroid hormones	199
Feret J.: A rare case of „costoepitrochlear muscle”	204

Available from CPSTI TT 69-50003/2

CONTENTS

	Page	
	English	Russian
A. G. MOSKVINA, Study of the Displacement Field of Elastic Waves in Dependence of Characteristics of Earthquake Foci	545	3
S. A. FEDOTOV AND S. A. BOLDYREV, Frequency Dependence of the Body-Wave Absorption in the Crust and the Upper Mantle of the Kuril-Island Chain	553	17
V. I. PASECHNIK, Calculation of Phase Velocity Dispersion in Absorbing Media	563	34
G. V. YEGORKINA, The Use of Recordings of Converted Seismic Waves to Study Crustal Anisotropy	567	40
S. I. PEREL'MAN, Experimental Data Concerning the Non-Gaussian Distribution of Random Components of Geophysical Observations	574	51
V. N. STRAKHOV, Approximation of Solutions of Incorrectly-Posed Linear Problems in Hilbert Space with Applications to Exploration Geophysics II	581	64
V. I. BAGIN, S. YU. BRODSKAYA, V. I. GON'SHKOVA, G. N. PETROVA AND D. M. PECHERSKIY, Data Concerning the Magnetic Properties of Plateau Basalts and Alkaline Basaltoids on the Southern Boundary of the Russian Platform	596	97
SCIENTIFIC COMMUNICATIONS		
P. YA. BERSHTEYN (Barstein), Propagation of Love Waves in an Anisotropic Inhomogeneous n-Layered Medium	601	165
L. G. IVANKIN AND YU. A. TARAKANOV, Effect of Microseisms on a Sea-Bottom Gradient Meter	604	109
V. A. TROITSKAYA, E. T. MATVEYEVA AND A. V. GUL'EL'MI, Amplification and Attenuation of Beads in Isolated Series	607	113
CHRONICLE		
N. A. POPOV, E. V. LAVRENTYEVA, P. S. MATVEYEV, V. G. BALENKO, N. I. PANCHENKO, E. I. OBREZKOVA, I. A. DYCHKO, E. I. YEVTUSHENKO, O. V. CHUPRUNOVA, I. P. OGORODNIK, P. A. KORBA, V. G. GOLUBITSKIY, V. G. BULATSEN, E. I. POPOVA, V. N. SINCHESKUL, B. F. SINCHESKUL, E. I. BOBOVOZ, A. A. SLAVINSKAYA, AND OTHERS, Zinaida Nikolaevna Aksent'yeva (Obituary)	609	116

Available from The American Geophysical Union

RUSSIAN METALLURGY

English translation of

IZVESTIYA AKADEMII NAUK SSSR

METALLURGY

The journal covers ferrous and non-ferrous metallurgy, including ore beneficiation, extraction and refining, mechanical properties at ordinary and elevated temperatures, alloy compositions and structures, effects of impurities and methods of purification, methods of testing both for routine examination and for research investigations, etc. Increasing attention is being paid to metals and alloys with new properties, such as, very high strength, resistance to high temperatures, radiation and corrosion, superconductor and semiconductor materials.

Bimonthly

© Scientific Information Consultants Ltd., 661 Finchley Road, London, N.W.2

LIST OF CONTENTS

1968, No. 5

	Page	
	orig.	transl.
Salautin V.A., Evseyev P.P., Ratner B.Ya., Gnuchev S.M., Ponomarev B.I.		
VARIATIONS IN COMPOSITION AND PROPERTIES OF ELECTRIC-FURNACE SLAGS DURING SLAG TREATMENT OF TRANSFORMER STEEL (Abr.tr.)	3	4
Levenets N.P. (decd.), Lopukhov G.A., Samarin A.N.		
FUME FORMATION DURING OXYGEN BLOWING OF PIG IRON (Abr.tr.)	11	9
Krichevets M.I., Povolotskiy D.Ya., Zhukov D.G.		
DISTRIBUTION OF OXYGEN BETWEEN STEEL AND SLAG IN ELECTROSLAG REMELTING	15	12
Shantarin V.D., Esin O.A., Boronenkov V.N.		
KINETICS OF THE REACTION BETWEEN FERROUS SLAGS AND LIQUID PIG IRON (Abr.tr.)	18	15
Novokhatskiy I.A., Borts Yu.M., Kopyrin I.A.		
SOLUBILITY OF WATER VAPOUR IN MOLTEN BLAST FURNACE SLAGS (Abr.tr.)	27	22
Mariyenbakh L.M., Veytsman E.V.		
THE PHYSICO-CHEMICAL HYDRODYNAMICS OF A STEEL REFINING BATH (Abr.tr.)	34	27
Zaytsev V.Ya., Vanyukov A.V., Kolosova V.S.		
REACTIONS BETWEEN IRON-SILICATE SLAGS AND Ni ₃ S ₂ -FeS OR Cu ₂ S-FeS SULPHIDE SYSTEMS (Abr.tr.)	39	29
		(Contd)

Available from Scientific Information Consultants

IZVESTIYA AKADEMIYE NAUK SSSR, METALLY
No 5, 1968

Okunev A.I., Barinov V.A. ELECTROTHERMAL REDUCTION OF ZINC-BEARING MATTES-SLAG MELTS (Abr.tr.)	46	33
Deryabin A.A., Popel' S.I., Sabarov L.N. NON-EQUILIBRIUM VALUES OF INTERFACIAL TENSION AND ADHESION IN A METAL-OXIDE SYSTEM (Abr.tr.)	51	37
Baum D.A., Gel'd P.V., Kocherov P.V., Ryss M.A. VISCOSITIES OF IRON, SILICON AND IRON-SILICON ALLOYS (Abr.tr.)	60	43
Svyazhin A.G., Vishnarev A.F., Yavoytsky V.I. DETERMINATION OF THE VAPOUR PRESSURE OF LIQUID IRON USING LEVITATION MELTING (Abr.tr.)	67	47
Kozlov V.A., Mikulinskiy A.S. MECHANISM OF THE SILICON REDUCTION OF CALCIUM OXIDE IN VACUUM (Abr.tr.)	74	52
Dubrovina A.S., Kuznetsov V.L., Ezakov V.I., Chirkov N.A., Kusakov L.N. INFLUENCE OF SALT ADDITIONS ON THE SPEED OF THERMIT-TYPE REDUCTIONS (Abr.tr.)	79	56
Vigdorovich V.N., Uvarova E.S. DISTRIBUTION OF IMPURITIES DURING CRYSTAL GROWING FROM THE MELT (Abr.tr.)	89	62
Ivanova R.V., Bel'skiy A.A. THE CONDITIONS FOR ELECTROMAGNETIC MIXING IN THE ZONE DURING ZONE MELTING OF METALS (Abr.tr.)	93	66
Chernyak A.S., Batsuyev A.A., Perepelitsa L.S. THE SULPHATION OF PYROCHLORITE AND TITANITE (Abr.tr.)	96	68
Pavlov I.M., Masterov V.A., Barykin N.P. THE INFLUENCE OF THE STRUCTURE OF A PACK ON THE ROLLING PARAMETERS	101	72
Prokof'yev V.I., Semenov V.A., Galitskiy V.P. THE SHAPE OF THE LOOP BETWEEN THE STANDS AND ITS TENSION DURING CONTINUOUS ROLLING (Abr.tr.)	103	74
Smirnov V.S., Grigor'yev A.K., Bobylev B.K. USE OF A DIGITAL COMPUTER IN SOLVING BY NUMERICAL METHODS TECHNOLOGICAL PROBLEMS IN THE PLASTIC DEFORMATION OF METALS (Abs.)	107	76
Trakhtenberg B.F., Kenis M.S., Shubina M.A. TEMPERATURE/FORCE DISTRIBUTION AND RELATION- SHIPS GOVERNING DIE WEAR IN HOT FORMING	111	77
Durnev V.D. DISLOCATION KINETICS AND SIMULATION IN THE DEFORMATION OF METALS BY PRESSURE (Abr.tr.)	117	81
Zhukov A.A., Epshteyn L.Z., Ogarev A.P., Tomas V.K., Ul'yanova B.Ya. STRUCTURAL FEATURES OF ALUMINIUM IRON WITH LAMELLAR OR SPHEROIDAL GRAPHITE (Abr.tr.)	123	84
Teykh V.A. INTERPHASE DISTRIBUTION OF NICKEL IN CAST IRON	130	89
Milinskaya I.N., Tomilin I.A. SOLUBILITY OF NITROGEN IN ALPHA-IRON (Abr.tr.)	132	91

(Contd)

Available from Scientific Information Consultants

Chertov V. M. THE (MECHANICAL) PROPERTIES OF CAST CONSTRUCTIONAL STEEL AFTER PRIOR DEFORMATION	136	95
Saranov A. A., Pomichev O. I. STRUCTURAL CHANGES DURING THE DEFORMATION AND ANNEALING OF CEMENTITE (Abr. tr.)	140	98
Bokshcheyn S. Z., Emel'yanova T. A., Kishkin S. T., Mirskiy L. M. CORRELATION BETWEEN THE CHEMICAL AND STRUCTURAL HETEROGENEITIES AND THE MECHANICAL PROPERTIES OF TITANIUM ALLOYS (Abr. tr.)	144	102
Tumanov V. I., Shechetilina E. A., Elmanova S. M., Serebrova O. I. STRUCTURE AND MECHANICAL PROPERTIES OF CAST AND SINTERED Co-WC ALLOYS (Abr. tr.)	152	107
Panov V. S., Meyerson G. A. TEMPERATURE DEPENDENCE OF THE STRENGTH AND HARDNESS OF WC-TaC-Co AND WC-NbC-Co ALLOYS (Abr. tr.)	160	109
Philimonenko V. N., Pivovarov B. Kh. STRUCTURAL CHANGES IN THE SURFACE LAYERS OF TUNGSTEN CARBIDE-COBALT HARD ALLOYS AFTER ELECTROSPARK TREATMENT	165	112
Kats A. M., Pikunov M. V., Bakhtiarov R. A. EFFECT OF CASTING CONDITIONS ON THE RECRYSTALLIZATION OF BRASS LS 63-3	169	115
Zimin N. V. RECRYSTALLISATION KINETICS OF BRASS L62 DURING RAPID INDUCTION HEATING	176	120
Epanchintsev O. G., Chistyakov Yu. D. THE FORMATION OF VACANCY PATTERNS ON THE SURFACE OF ALUMINIUM (Abr. tr.)	181	124
Kleyn G. A., Krakhmalev V. A. IMPURITY SEGREGATION AT THE INTERGRANULAR SURFACES OF MOLYBDENUM (Abs.)	186	127
Mirochnichenko I. S. FORMATION OF QUASI-EUTECTIC STRUCTURES IN Al-CuAl ₂ ALLOYS	188	128
Matveyeva N. M., Nikitina S. V., Zezin S. B. INVESTIGATION OF THE QUASI BINARY SYSTEMS MnSn ₂ -FeSn ₂ , MnSn ₂ -CoSn ₂ AND FeSn ₂ -CoSn ₂ (Abr. tr.)	194	132
Rayevskiy I. I., Grigor'yev A. T. PHASE DIAGRAM OF THE Nb-Be SYSTEM (Abr. tr.)	198	134
Danilin V. N., Yatsenko S. P. USE OF THE E. M. F. METHOD TO IMPROVE THE ACCURACY OF THE Ga-Sn PHASE DIAGRAM (Abr. tr.)	203	137
Zarechnyuk O. S., Kolobnev I. F. X-RAY STRUCTURAL INVESTIGATION OF ALUMINIUM-RICH Y-Cu-Al ALLOYS (Abr. tr.)	208	140
Amonenko V. M., Pavlov V. S. PHASE TRANSFORMATIONS IN LANTHANUM (Abr. tr.)	212	142
SCIENTIFIC CONFERENCE ON INORGANIC CHEMISTRY, COMMEMORATING THE FIFTIETH ANNIVERSARY OF THE N. S. Kurnakov INSTITUTE OF GENERAL AND INORGANIC CHEMISTRY (Abs.)	215	143

Available from Scientific Information Consultants

Table of Contents

Page
Orig. Trans.

Transactions of the Sixth All-Union Conference on Ferroelectricity

Theory

Group-theoretical investigation of some second-order phase transitions with change in the number of atoms in the unit cell - Yu.I.Sirotnin & L.M.Mikhel'son	178	161
Phase transitions from the point of view of thermodynamic stability - V.Dvořák & V.Janovec	183	165
On the electron-phonon nature of ferroelectric phase transformations - N.N.Kristofel' & P.I.Konsin	187	169
A model Hamiltonian for a ferroelectric crystal - V.T.Khozyainov	192	174
An "interband" theory of spontaneous polarization and ferroelectric phase transformations - I.B.Bersuker & B.G.Vekhter	199	180
On the possibility of a formal interpretation of spontaneous polarization as a consequence of ordered motion of electrons - I.S.Zheludev	204	184
Theory of electric induction waves in semiconducting ferroelectric crystals - M.S.Shur	207	187
Influence of free carriers on the infrared spectrum of a ferroelectric - R.E.Pasynkov	213	192
On the theory of the dielectric and optical properties of ferroelectrics of the oxygen octahedron type - L.B.Meisner & I.S.Rez	222	201
Theoretical possibilities for determining the sizes of Káznig regions - B.N.Rolov	227	205
Influence of Káznig regions on the dielectric properties of perovskite-type ferroelectrics - B.N.Rolov	232	211
Mechanism of dynamic polarization of BaTiO ₃ -type ferroelectrics in the phase transformation region - V.V.Dem'yanov & S.P.Solov'ev	235	213

Spectroscopy

Structure of the H ₂ PO ₄ ion in a ferroelectric KH ₂ PO ₄ crystal - E.A.Popova & A.I.Stekhanov	243	221
On the molecular mechanism of the ferroelectric transition in crystals of the triglycine sulfate group - E.K.Galanov, L.D.Kislovskii, L.A.Shuvalov & N.R.Ivanov	246	224
Micromechanism of the ferroelectric transition in ammonium fluoroberyllate - I.P.Aleksandrova, K.S.Aleksandrov & L.I.Zherebtsova	251	228
NMR spectra of ²⁷ Al and the phase transition in the ferroelectric CH ₃ NH ₃ Al(SO ₄) ₂ ·12H ₂ O - I.S.Vinogradova & L.G.Falaleeva	254	231
Proton magnetic resonance and the nature of the spontaneous polarization in colemanite - N.I.Zavarzina & S.P.Gabuda	258	235
Nuclear magnetic resonance in the ferroelectric K ₄ Ru(CN) ₆ ·3H ₂ O - A.G.Lundin, E.P.Zeer & S.P.Gabuda	261	237

(Contd)

Available from Columbia Technical Translations

Proton magnetic resonance in potassium hydroselenite - A.G.Lundin & V.N.Shcherbakov	264	240
Nuclear quadrupole resonance, calculation of electric field gradients in ferroelectric CsGeCl ₃ , and nuclear magnetic resonance in some cesium-bearing perovskites - A.F.Volkov, V.I.Svergun, Yu.N.Venevtsev & G.K.Semin	266	242
Nuclear quadrupole resonance in antimony sulfoiodide and sulfobromide crystals - S.N.Popov, N.N.Krainik & I.E.Myl'nikova	271	247
Nuclear quadrupole resonance of ⁷⁵ As in ferroelectric crystals of the KDA type - A.P.Zhukov, I.S.Rez, V.I.Pakhomov & G.K.Semin	274	250
Nuclear quadrupole resonance spectra of ⁷⁵ As in some chalcogenides - E.A.Kravchenko, S.A.Dembovskii, A.P.Chernov & G.K.Semin	279	254

Physical Properties of Single Crystals

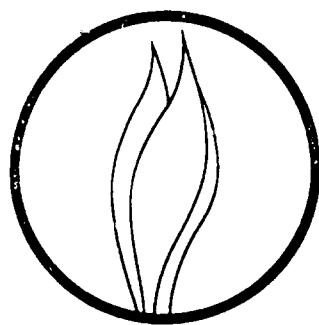
Electro-optical properties of perovskite-type ferroelectric crystals of complex composition - G.A.Smolenskii, A.A.Berezhnoi, N.N.Krainik & I.E.Myl'nikova	282	258
Temperature and wavelength dependence of the r ₄₁ electro-optical coefficient of ADP and KDP crystals - O.G.Vlokh, L.F.Lutsiv-Shumskii & T.T.Lyubitskii	284	260
Optical absorption and defects in gamma-irradiated Rochelle salt crystals - E.V.Peshikov & D.N.Mukhteremov	287	263
Ferroelectric materials for optical applications - I.S.Rez	289	266
Dielectric properties of simple and deuterated lithium-thallium tartrates - B.Brezina, F.Smutny, J.Janosek & V.Marecek	297	273
Polarization and domain structure of KH ₂ PO ₄ crystals in static electric fields - V.V.Gladkii, I.S.Zheludev & E.V.Sidnenko	300	276
Dependence of the pyroelectric properties of some ferroelectrics on the conditions of preliminary poling - N.D.Gavrilova, V.K.Novik, V.A.Koptsik & S.V.Ivanova	306	281
Induced phase transformation in barium titanate single crystals - V.Z.Borodin & V.G.Kuznetsov	308	284
Dielectric polarization of PbMg _{1/3} Nb _{2/3} O ₃ at frequencies from 10 ⁻² to 10 ⁵ Hz - V.V.Kirillov & V.A.Isupov	313	288
On the role of dielectric viscosity in polarization switching processes in ferroelectric crystals - V.M.Rudyak	316	292
Concerning the determination of spontaneous polarization from hysteresis-loop measurements - I.Yanta, I.Mastner, Z.Malek, Ya.Shtreiblova & Ya.Velvarski	322	297
Electromechanical properties of barium titanate single crystals near the Curie point - L.K.Bunina & A.Yu.Kudzin	326	301
Anisotropy of ultrasound absorption in uniaxial ferroelectrics near the Curie point - K.A.Minaeva, A.P.Levanyuk & B.A.Strukov	328	304
Elastic and piezoelectric properties of doped SbSI crystals - L.M.Belyaev, V.A.Lyakhovitskaya & I.M.Sil'vestrova	331	306
Dielectric nonlinearity and domain structure of SbSI crystals - P.L.Zaks, R.E.Pasynkov, L.N.Syrkin & A.M.El'gard	338	312
Hydrothermal synthesis and ferroelectric properties of SbSI crystals - V.I.Popolitov, B.N.Litvin, A.N.Lobachev, V.A.Yurin & L.A.Agal'tsov	341	315

(Contd)

Available from Columbia Technical Translations

Nonlinear behavior of barium titanate single crystals in ultrahigh frequency fields - I.V.Ivanov & N.A.Morozov	344	317
On the existence of a critical point for ferroelectric SbSI - T.R. Volk, E.I.Gerzanich & V.M.Fridkin	346	319
Thermodynamic characteristics of the ferroelectric phase transition in triglycine sulfate at high pressure - G.G.Leonidova & N.P.Netesova	351	323
Radiation-induced phase transitions in BaTiO ₃ -type ferroelectrics - I.I.Kuz'min, S.P.Solov'ev & V.V.Zakurkin	354	326
Thermal conductivity of triglycine sulfate type crystals near the order-disorder phase transition - E.N.Dimarova & Yu.M.Poplavko	361	332
Calorimetric study of the phase transition in Sb ₂ S ₃ - T.A.Pikka & V.M.Fridkin	364	335
Heat conductivity of potassium dihydrophosphate near the Curie point - D.B.Linskii, E.I.Ponomarenko & E.V.Sidnenko	365	337
Mechanism of the frost method of revealing p-n junctions, p and n regions, and domain structure in low-temperature ferroelectrics - S.D.Toshev, I.G.Amov & N.P.Ivanchev	368	339
Defects in triglycine sulfate crystals - V.P.Konstantinova, V.F.Minkov & V.M.Maksimov	371	342
Effect of a constant electric field on repolarization processes in BaTiO ₃ single crystals in sinusoidal electric fields - E.V. Sinyakov & E.F.Dudnik	376	347
Defects and domain structure in BaTiO ₃ single crystals - E.P.Guenok, A.Yu.Kudzin & S.F.Levchenko	379	350

Available from Columbia Technical Translations



Soviet Physics Journal

The Faraday Press
cover-to-cover translation of *Izvestiya VUZ. Fizika*

Contents Volume 9, Number 4 · July-August 1966

Editorial Board

Izvestiya VUZ. Fizika

a publication of the
Higher Education Institutes
USSR

K. V. Savitskii,
Editor-in-Chief

V. E. Zuev,
Associate Editor

M. A. Bol'shanina

V. S. Vavilov

A. A. Vorob'ev

P. V. Golubkov

E. F. Gross

B. S. Dzhelepov

V. A. Zhdanov

V. I. Iveronova

V. N. Kessenikh

I. A. Parfianovich

V. A. Presnov

N. A. Prilezhaeva

A. L. Rvachev

A. B. Sapozhnikov

A. A. Sokolov

K. V. Shalimova

Faraday Advisory Editors

R. C. Glass
The City University, London

B. R. Pamplin
Bath University of Technology

J. P. Suchet
Centre National de la Recherche
Scientifique, Paris

	Russian page	English page
Recombination Luminescence in KI-Tl Phosphor. I. A. Parfianovich and V. G. Krongauz	7	1
Optical Absorption of Polycrystalline Films of Zinc Telluride, Cubic Modification. K. V. Shalimova, I. Spinulescu-Carnaru, and N. V. Pirogova	12	6
Electrical Conductivity and Optical Absorption of Polycrystalline Films of Zinc Telluride, Hexagonal Modification. K. V. Shalimova, I. Spinulescu-Carnaru, and N. V. Pirogova	17	9
Behavior of Energy Levels and Absorption Bands of Mono- substituted Benzene with Variation in the Parameters. O. A. Ponomarev	21	11
Some Observations on Models of Absorption Spectra. V. E. Zuev and S. D. Tvorogov	25	14
Electrical Conductivity Characteristics of Soda-Lime-Silicate Glasses in Strong Electrical Fields after Gamma Irradiation. A. I. Siryak	31	18
On the Theory of Collective Motion in a System of Interacting Particles. R. M. Yul'met'ev	36	21
Diffusion of Aluminum in the Iron-Bronze Binary System. E. P. Ponomarenko	45	26
Checking Heat Treatment of Ferromagnetic Components by the Eddy Current Method. R. E. Ershov	52	30
Measurement of Specimen Permittivity Using a Waveguide Bridge. N. G. Shcheglov	62	36
On the Simplification of the Technique for Calculating the Envelope of Trajectories of Particles in Accelerators. Yu. Ya. Lembra	65	38
Theory of Ordering of Ternary Substitutional Solid Solutions. V. P. Fadin, G. G. Minaeva, and V. E. Panin	70	41

(Continued)

Available from The Faraday Press, Inc.

Single Issue: \$35

Annual Subscription: \$125

© 1969 by The Faraday Press, Inc.

All rights reserved. This publication or parts thereof may not
be reproduced in any form without permission of the publisher.

The Faraday Press, Inc.

84 FIFTH AVENUE, NEW YORK, N. Y. 10011

Contents (cont'd)

	Russian page	English page
Radiation from a Train of Charges Passing through a Cylindrical Resonator. G. P. Fomenko	79	46
Effects of X-Rays on Electrophysical Properties of Germanium and of Germanium p-n Junctions. II. Electrophysical Properties of Germanium under Hard X-Ray Irradiation. M. A. Krivov and S. V. Malyanov	84	49
On the Parametric Description of an Inhomogeneous, Optically Dense Plasma. I. The Dispersion Shape of a Spectral Line. N. G. Preobrazhenskii and G. A. Kolobova	88	52
On the Parametric Description of an Inhomogeneous, Optically Dense Plasma. II. The Doppler Shape of a Spectral Line. N. G. Preobrazhenskii and G. A. Kolobova	92	55
The Problem of Photographic Methods of Investigating the Mechanism of Creepage in Liquids. V. Ya. Ushakov	96	58
Investigation of the Electrical Conductivity of Powdered Dielectrics. Ya. I. Panova	101	61
Energy Spectra of Electrons in a Crystal. Part IX. Characters of the Weight Corepresentations of the Point Groups D_{2h} , D_{4h} , and D_{6h} . N. V. Kudryavtseva and V. A. Chaldyshev	108	66
Effect of Gamma Radiation on the Dielectric Properties of Quartz. G. I. Potakhova	110	71
Friction of Synthetic Corundum and Silicon Carbide on Hardened ShKh15 Steel. V. N. Kashcheev and V. M. Glazkov	114	74
Effect of Roentgen Radiation on Germanium and Germanium p-n Junctions. III. The Action of X-Rays on Germanium p-n Junctions. M. A. Krivov and S. V. Malyanov	118	76
Determination of the Optical Characteristics of Thin Film Coatings. II. I. A. Tekucheva	122	79
Phonons in Films. B. A. Tavger and V. Ya. Demikhovskii	130	84
The Effect of the Excitation Density on the Radioluminescence of Single Crystals of ZnS-Ag. Part I. V. S. Bezel and F. F. Gavrilov	138	89
The Calculation of Some Coulomb and Noncoulomb Sums for a Wurtzite-Type Lattice. V. F. Konusov and L. A. Brysneva	142	92
On Relativistic Wave Equations. V. S. Tumanov	151	99
Brief Communications and Letters to the Editor		
The Hall Effect (Laboratory Experiment). K. K. Bogma and M. I. Skrebneva	159	104
The Nature of the Rectifying Properties of a Metal-SiC Contact. I. K. Vereshchagin and A. S. Kirichuk	160	105
The "Polyelectret" Effect in Single Crystals of Potassium Bromide. V. R. Tikhomirov	162	106
Stored-Energy Kinetics in Alkali Halide Crystals after Proton Bombardment. E. K. Zavadovskaya, A. V. Kuz'mina, E. M. Golovchanskii, and V. G. Vakhromeev	163	107
Heat of Formation of Solid Solutions and the Energy Stored in Them under Proton Bombardment. E. K. Zavadovskaya, A. V. Kuz'mina, and E. M. Golovchanskii	165	108
Charged Oscillator in a Magnetic Field. V. M. Dubner	167	109
The Isobar of a Real Gas. V. A. Yurkov and Z. G. Ivashchenko	169	110
Magnetic Characteristics of Yttrium-Gallium and Yttrium-Gallium-Gadolinium Ferrites. G. A. Petrakovskii and V. F. Litovchenko	171	111
Effect of Fabrication Conditions on the Physical Parameters of the Base of a Planar Silicon Diode. U. M. Kulish and S. A. Zaidman	173	113
Quantum Absorption of Light in Transition Metals. F. A. Abramskii	174	114
Evaluation of Some Effective Cross Sections for Collisions of the Second Type between Metastable Helium Atoms and Atoms of Neon. V. V. Kokhanenko, N. A. Prilezhaeva, and L. A. Chernenko	175	115
Calculation of the Band Structure of Gallium Arsenide by the Pseudo-Potential Method. A. S. Poplavnoi and V. A. Chaldyshev	177	116
Parameters of Probabilistic Processes Obeying the Exponential Law. V. Ya. Gavrik	179	117

Available from The Faraday Press, Inc.

COLLOID JOURNAL

of the USSR

A translation of *Kolloidnyi Zhurnal*

Volume 30, Number 2

March-April, 1968

CONTENTS

	Engl./Russ.
The Seventieth Birth Day of Boris Aristarkhovich Dogadkin	123 171
The Electrostatic Component of Adhesion of Dielectric Particles to a Metal Surface - I. N. Aleinikova, B. V. Deryagin, and Yu. P. Toporov . .	124 177
Adsorption of Ammonia on Coarse-Pored Silica Gel - B. G. Aristov, S. P. Dzhabadov, and A. V. Kiselev	133 183
Mechanism of Foam-Dust Interaction - A. A. Balakirev and V. K. Tikhomirov . .	139 191
Influence of the "Structure" and Surface Nature of Carbon Blacks on the Rate of Formation of Coagulation Structures in Hydrocarbon Media - G. M. Bartenev, N. M. Lyalina, and N. N. Lezhnev	142 194
Definition of the Concepts "Capillary Pressure" and "Height of Capillary Rise of Liquid" in Porous Bodies - M. A. Bukhbinder	146 199
Durability of Adhesive Bonds between Metals and Epoxy Resin Compositions under the Influence of Electrolyte Solutions - É. É. Virlich and N. A. Krotova	150 204
Influence of Peat-Alkali Reagent on Structure Formation in Aqueous Clay Suspensions - M. P. Volarovich, I. I. Lishtvan, and N. M. Mamedova	155 210
Rheological Properties of Solutions of Polybutyl Methacrylate in Butyl Methacrylate - D. N. Emel'yanov, A. A. Trapeznikov, N. A. Shabalina, and T. G. Basova	160 216
Dependence of the Adsorption of Nitrogen, Argon, and Oxygen on Rutile on the Temperature of Vacuum Calcination of the Specimen - A. A. Isirikyan and I. A. Kazmenko	163 220
Mathematical Modeling of Periodic Chromatographic Zones in Precipitates - P. I. Kaushanskaya and I. B. Tsesarskit	169 228
Investigation of the Sintering of Industrial Silica Gel - A. V. Kiselev, Yu. S. Nikitin, and É. B. Oganesyian	172 232
Influence of the Molecular Weight and of the Molecular Weight Distribution of Polyisobutylenes on the Rheological Properties of their Solutions in Mineral Oils - G. I. Kichkin	177 238
Strength Properties of Pyridine Rubber Vulcanizates Containing Both Covalent and Coordinate Bonds - E. P. Kopylov, É. G. Lazaryants, and V. G. Épshtein	182 244
Influence of Temperature on the Surface Activity of Soaps of Saturated Carboxylic Acids in Aqueous Solutions - N. Z. Kostova, Z. N. Markina, P. A. Rebinder, and A. E. Kuz'mina	186 249
Structure of Polymer-in-Polymer Dispersions - V. N. Kuleznev, B. A. Dogadkin, and V. D. Klykova	190 255
Vibrational Conveying of Structurized Disperse Systems under the Influence of Multifrequency Vibrations - B. A. Lishanskii and N. V. Mikhailov	192 258 (Contd)

Available from Consultants Bureau

(continued)

	Engl./Russ.	
Quasi-Spontaneous Emulsification at the Interface between Two Liquids in Presence of Surface-Active Substances - S. A. Nikitina and O. S. Mochalova.	197	264
Influence of Amorphous Fluctuation Networks on the Characteristics of Jet Flow of Solutions of Amphiphilic Copolymers - Yu. N. Panov, S. A. Agranova, and S. Ya. Frenkel'	201	269
Influence of Surface-Active Substances on Stability of Lyophobic Sols. Investigation of the Dependence of Stabilization of a Colloidal Silver Iodide Solution on the Temperature and the Nature of the Coagulant Electrolyte - I. P. Sapon and Yu. M. Glazman.	205	274
Thermodynamics of Liquid Crystals - V. K. Semenchenko and N. V. Kuznetsova. .	208	279
Microstructure of Polyurethane Foams - O. G. Tarakanov and G. S. Zaspink . . .	212	284
Sorption of Surface-Active Substances by Inorganic Precipitates. Influence of Electrolyte Concentration on Sorption of Petrov Catalyst and OP-7 by Hydroxide, Sulfide, and Phosphate Collectors - B. N. Khrustalev, V. V. Pushkarev, and N. V. Dranitsyna.	214	286
Solubilization of Hydrocarbons of Various Types in Aqueous Solutions of a Biologically Active Semicolloid, Sodium Cholate - N. N. Tsikurina, Z. N. Markina, G. A. Chirova, and P. A. Rebinder	219	292
Wettability of Carbon Blacks by Water and Solutions of Surface-Active Agents - B. Ya. Yampol'skii and N. N. Lezhnev	224	299
Determination of the Dynamic Shape Factor and Apparent Density of Nonspherical Aggregated Particles in Aerosols Containing a Solid Disperse Phase - A. T. Litvinov	228	304
LETTERS TO THE EDITOR		
Formation of Droplets of Anomalous Water on a Flat Quartz Surface - B. V. Deryagin, Z. M. Zorin, and N. V. Churaev.	232	308

The Russian press date (podpisano k pechat) of this issue was 3/19/1968.
Publication therefore did not occur prior to this date, but must be assumed
to have taken place reasonably soon thereafter.

Available from Consultants Bureau

COLLOID JOURNAL

of the USSR

A translation of *Kolloidnyi Zhurnal*

Volume 30, Number 3

May-June, 1968

CONTENTS

	Engl./Russ.
Interaction of Foams with n-Valeric Acid - A. A. Balakirev and V. K. Tikhomirov.	235 315
Investigation of Brownian Movement in Non-Newtonian Liquids with the Aid of the Mössbauer Effect - Tsv. Bonchev, B. Manushev, and B. Kostadincheva.	238 319
Proton Magnetic Resonance in a Vermiculite Single Crystal - A. G. Brekhunets, V. V. Mank, I. V. Matyash, F. D. Ovcharenko, and Yu. I. Tarasevich.	242 324
Conditions for Floating of a Multilayer Disperse Body on the Surface of a Liquid Confined between Solid Walls - M. A. Bukhbinder and P. L. Aron.	246 329
Influence of Certain Chemical Additives on Structure Formation in Peat - G. P. Viryasov and I. I. Lishtvan.	251 335
Mechanism of Water Flow through Cellophane Membranes - V. D. Volgin, Yu. I. Dytnerskii, and A. N. Planovskii.	256 342
Influence of Certain Polymer Properties on Production of Artificial Aqueous Dispersions - L. P. Gustova, D. M. Sandomirskii, B. A. Dogadkin, and G. N. Zachesova.	261 348
Interaction of Surface Hydroxyl Groups on Silica with Molecules of Water and Alcohols - V. Ya. Davydov and A. V. Kiselev.	265 353
Dehydration Temperatures of Polyethylene Oxides in Aqueous Electrolyte Solutions - B. I. Dashevskaya, M. Kh. Gluzman, and G. M. Fridman.	270 359
The Action of Ultrasound on Disperse Systems - P. A. Egorov.	273 363
Monomer Emulsions Thickened by Bentonites - V. D. Enal'ev, B. T. Iapan, and L. V. Gurenko.	275 366
Observation of Stepped Films of Water on the Surface of Quartz in Polarized Light - Z. M. Zorin and N. V. Churaev.	279 371
Investigation of the Mechanism of Structure Formation in Filled Polyesters - P. I. Zubov, M. R. Kiselev, and I. A. Sukhareva.	282 375
Nature of the Supersaturated Solutions Formed during Hydration of β -Dicalcium and Tricalcium Silicates - B. F. Keshelava, E. P. Andreeva, and P. A. Rebinder.	286 379
Influence of the Surface Chemistry of Adsorbents and Fillers on Adsorption of Polymers. Adsorption from Solutions of Polyvinyl Acetate and Polyalkyl Acrylates on Silicas - A. V. Kiselev, V. I. Lygin, I. N. Solomonova, D. O. Usmanova, and Yu. A. Él'tekov.	291 386
Development of Disperse Structures in Models of Petroleum Bitumens - A. S. Kolbanovskaya.	296 393
Influence of Magnesium Sulfate on the Strength of Highly Disperse Fine-pored Magnesium Oxide and Hydroxide Structures - S. I. Kontorovich.	300 399
Packing of Graphite Particles under the Influence of Vibrations - Yu. A. Liberman and N. V. Mikhailov.	304 404 (Contd)

Available from Consultants Bureau

CONTENTS

(continued)

Engl./Russ.

Adsorption of Hydrocarbons on Clay Minerals. Adsorption of Benzene - F. D. Ovcharenko, F. A. Belik, and Yu. I. Tarasevich	307	408
Surface-active Properties of Certain Dioctyl Esters of Sulfosuccinic Acid - S. V. Rudenko, K. O. Averbakh, O. K. Smirnov, and S. M. Levi	312	414
Effects of Glycerol and Paraffin on the Structure and Properties of Lithium and Sodium Greases - V. V. Sinitsyn, E. V. Aleeva, and B. N. Kartinin	314	417
Dynamic-Optical Properties of Polyvinyl Alcohol Gels - V. V. Speranskii and L. S. Gembitskii	318	423
Electron Microscope Study of the Structure of Fluorocopolymer Latex Films - Z. M. Ustinova, G. R. Mazina, L. M. Latsko, N. M. Fodiman, R. M. Panich, S. S. Voyutskii, and D. P. Trofimovich	325	432
Investigation of the Thixotropy of Structurized Dispersions with Low Contents of Disperse Phase - V. A. Fedotova, Kh. Khodzhaeva, and P. A. Rebinder	328	435
Influence of Solubilized Hydrocarbon Additives on the Rheological Properties of Aqueous Solutions of a Biologically Active Semicolloid, Sodium Cholate - N. N. Tsikurina, Z. N. Markina, and G. A. Chirova	333	443
Adsorption of d- and dl-sec-Butylamine and Benzene on Titanogels - A. F. Sholin, V. V. Patrikeev, A. E. Agronomov, and A. A. Balandin	338	450
Colloid-chemical Factors in Pearl Polymerization of Vinyl Monomers. Assessment of the Effectiveness of Stabilization of a Polymerizing Macroemulsion - A. I. Yurzhenko, I. A. Andor, and N. N. Zayats	342	455
Centrifugal Method of Inductive Unipolar Electrification in Formation of Aerodisperse Systems - V. F. Dunsksii and K. A. Krishtof	347	461
Methods of Investigating the Chemical Resistance of Ion Exchangers to Radiation - A. M. Semushin, I. A. Kuzin, and I. A. Galitskaya	351	466

The Russian press date (podpisano k pechatii) of this issue was 5/21/1968.
Publication therefore did not occur prior to this date, but must be assumed
to have taken place reasonably soon thereafter.

Available from Consultants Bureau

COLLOID JOURNAL

of the USSR

A translation of *Kolloidnyi Zhurnal*

Volume 30, Number 4

July-August, 1968

CONTENTS

	Engl	Russ.
Some Energy Aspects of Adsorption at Liquid-Liquid Interfaces - A. A. Abramzon and E. E. Malakhova	355	475
Desorption of a Surfactant from a Monolayer at a Water-Air Interface by a Drop of Solvent - R. A. Avetisyan and A. A. Trapeznikov	358	480
Investigation of the Dependence of Plasticity of the Clay-Water System on the Concentration of the Disperse Phase - A. A. Bagrov	362	486
Interaction of Foams with Certain Liquids - A. A. Balakirev and V. K. Tikhomirov	366	490
Electrophoretic Mobility and Interaction of Particles - E. E. Bibik, I. S. Lavrov, and O. M. Merkushev	369	494
Investigation of the Sorption of Counter Ions during Coagulation of Lyophobic Sols by Mixed Electrolytes - A. A. Baran, Yu. M. Glazman, A. I. Korsunskaya, and D. N. Strazhesko	371	496
Kinetics of Breakdown of Electrolyte Foams - V. G. Gleim, V. Ya. Khentov, and M. M. Bashkirov	376	503
Stabilization of Styrene Monomer and Prepolymer Drops in Aqueous Solutions of Partially Acetylated Polyvinyl Alcohols - E. V. Gromov, N. Ya. Kozarinskaya, M. V. Ostrovskii, A. A. Abramzon, L. F. Dokukina, R. Kh. Barenbaum, E. I. Egorova, L. Ya. Kremnev, V. V. Gromov, and R. S. Muravnik	380	508
Adsorption of Dinonyl Phthalate from a Hydrocarbon by Natural Adsorbents - V. I. Ezdakov, L. D. Yablochkina, and N. A. Urmanova	383	513
Adhesion Numbers in Detachment of Polydisperse Particles - A. D. Zimon	386	517
Influence of Solid Paraffins on the Structural and Rheological Properties of Bitumens - A. S. Kolbanovskaya and A. V. Rudenskii	390	522
Some Aspects of the Theory of Drop Evaporation and Growth - I. Ya. Kolesnik	394	527
Strength Properties of Unfilled Vulcanizates Made from Butyl Rubbers of Different Structures - N. A. Krasnoshchekova and A. L. Zaides	399	533
Dependence of the Specific Tear Energy of Carbon Black Vulcanizates on the Temperature and Tearing Rate - A. I. Lukomskaya, B. A. Dogadkin, and E. M. Upolovnikova	403	539
Electric Discharge Effects in Freshly Formed Sodium Sulfate Crystals - D. M. Mambetov, Z. Kh. Gubaidullin, and S. Khalmurzaev	408	546
Metallopolymers Made by the Thermal Method from Polystyrene and Colloidal Metal Particles - E. M. Natanson, Z. R. Ulberg, F. E. Davilenko, and G. P. Prikhod'ko	413	551
Some Aspects of the Thermodynamics of Cation Exchange in Soils - G. V. Nemirov, M. B. Minkin, T. P. Dukhnina, and M. S. Ostrikov	417	558
Shrinkage Stresses and Deformation of Condensation Structures in Acetylcellulose. The System Acetylcellulose-Diethylene Glycol Ethyl Ether - M. S. Ostrikov, A. V. Strizhakova, N. A. Abaturova, and I. N. Vlodavets	420	562 (Contd.)

Available from Consultants Bureau

(continued)

Engl./Russ.

Stabilization of Concentrated Emulsions under Conditions of Transfer of a Surface-Active Emulsifier through the Interface - V. N. Prigorodov, S. A. Nikitina, and A. B. Taubman	424	569
The Theory of Dispersion. 1. Thermodynamics of Monodisperse Systems - A. I. Rusanov, E. D. Shchukin, and P. A. Rebinder	428	573
Mechanism of Mutual Flocculation of Particles Differing in Size - V. D. Samygin, A. A. Barskii, and S. M. Angelova	435	581
Surface Tension Isotherms of Mixed Solutions of Ionic and Nonionic Surfactants - T. S. Solov'eva, L. V. Eremina, and R. M. Panich	440	587
Surface Properties of Quartz - G. S. Strel'tsyn	444	592
Kinetics of Absorption of an Aqueous Aerosol by Solution Surfaces - M. V. Tovbin and D. F. Datsenko	448	596
Influence of the Nature of the Solvent on the Electrical Conductivity of Polymer (Pentaerythritol Phthalate) Solutions - A. A. Trapeznikov and G. G. Petrzhek	452	602
Investigation of the Sol-Concentration Effect - Yu. M. Chernoberezhskii, A. I. Yanklovich, and A. B. Zel'tser	457	608
Influence of Solubilization of Hydrocarbons on the Rheological Properties of Aqueous Solutions of Sodium Soaps of Saturated Acids at Various Temperatures - A. V. Chinnikova, Z. N. Markina, and N. Z. Kostova	461	613
Investigation of Solubilization of Natural Resins and Synthetic Macromolecular Compounds - N. P. Shpenzer, Yu. A. Krylatov, and S. L. Talmud	467	620
LETTER TO THE EDITOR		
Influence of the Nature of the Dispersion Medium on the Rheological Properties of Acrylonitrile - Methyl Acrylate Copolymer - A. I. Krashennnikov, É. I. Petrov, and R. A. Malakhov	471	625
CHRONICLE		
Symposium on Rheology - A. Ya. Malkin and V. N. Kuleznev	472	627

The Russian press date (podpisano k pechatii) of this issue was 7/11/1968. Publication therefore did not occur prior to this date, but must be assumed to have taken place reasonably soon thereafter.

Available from Consultants Bureau

COLLOID JOURNAL

of the USSR

A translation of *Kolloidnyi Zhurnal*

Volume 30, Number 5

September-October, 1968

CONTENTS

Engl./Russ.

Petr Aleksandrovich Rebinder (On His Seventieth Birthday)	475	635
Complete Rheological Characteristics of Thixotropically Strengthened Structures in Dilute Aqueous Bentonite Suspensions—V. A. Fedotova and P. A. Rebinder	483	644
Condensation Structures of Acetylcellulose—N. A. Abaturova, I. N. Vlodavets, and P. A. Rebinder	492	656
Theory of the Rheological Properties of Quasi-Solid Disperse Structures. Rheological Properties of Structurized Suspensions—G. M. Bartenev and N. V. Ermilova	496	662
Influence of Exchange Ions on the Physicochemical Properties and Structure Formation of Hydromica in Aqueous Dispersions—G. R. Vagner, Yu. I. Tarasevich, S. P. Nichiporenko, N. N. Kruglitskii, and A. A. Govorov	502	669
Influence of Ultrasound on Structure Formation in Aqueous Dispersions of Kaolinite and Bentonite Clays—M. P. Volarovich, I. I. Lishtvan, N. M. Mamedova, and A. I. Yashchenko	508	677
Diffusion on Crystal Surfaces in Relation to Their Real Structure—Ya. E. Geguzin and Yu. S. Kaganovskii	511	681
Internal Stresses in Porous Structures of Magnesium Hydroxide and Calcium Sulfate Dihydrate, and Their Influence on Strength—S. I. Kontorovich, Zh. G. Malikova, E. A. Shabanova, and E. D. Shchukin	518	691
Electron-Microscopic Investigation of Particles of New Phases Formed from Metastable Aqueous Solutions of Polyvinyl Alcohol and Polyvinyl Formal —G. N. Kormanovskaya, É. I. Evko, V. V. Churakov, V. M. Luk'yanovich, and I. N. Vlodavets	522	696
Formation of Coagulation Structures of Modified Palygorskite in an Aqueous Medium—N. N. Kruglitskii, F. D. Ovcharenko, S. V. Bondarenko, S. V. Barshehevskaya, N. S. D'yachenko, and N. V. Vdovenko	526	701
Mutual Reinforcement Effect in Polymer Mixtures—V. N. Kuleznev, V. D. Klykova, and B. A. Dogadkin	531	707
Hydration Kinetics in Hardening of Mineral Cements in Presence of Quartz Aggregate—T. Yu. Lyubimova	536	713
Kinetics of Dispersity Variation during Hardening of Mineral Cements in Presence of Quartz Aggregate—T. Yu. Lyubimova and P. A. Rebinder	542	721

(Contd)

Available from Consultants Bureau

(continued)

Engl./Russ.

Kinetics of Formation of Coagulation Structures in Dispersions of Carbon Blacks in a Hydrocarbon Medium—N. M. Lyalina, N. N. Lezhnev, and B. Ya. Yampol'skii	549	730
The Theory of Dispersion. 2. Dispersion in Vacuo—A. I. Rusanov, F. M. Kuni, E. D. Shchukin, and P. A. Rebinder	553	735
The Theory of Dispersion. 3. Dispersion in a Liquid Medium—A. I. Rusanov, F. M. Kuni, E. D. Shchukin, and P. A. Rebinder	561	744
Physicochemical Characteristics of Hardening of Magnesium Oxide Cement. The Kinetics of Formation of Disperse Hardening Structures by the Interaction of Magnesium Oxide with Magnesium Chloride in an Aqueous Medium —E. S. Solov'eva, B. I. Smirnov, E. E. Segalova, and P. A. Rebinder	570	754
Influence of Calcium Chloride on Chemical Interaction in Aqueous Suspensions of Tricalcium Aluminate—N. P. Stukalova and E. P. Andreeva	575	761
Mechanism of Breakdown of Disperse Structures by the Simultaneous Action of Vibration and Addition of Surface-Active Substances—N. B. Ur'ev and N. V. Mikhailov	580	767
Adsorptional Lowering of Hardness and Its Influence on Contact between Solid Surfaces in a Liquid Medium—G. I. Fuks and I. B. Gantsevich	585	774
Influence of Additions of Solubilized Hydrocarbons on the Rheological Properties of Aqueous Sodium Oleate Solutions at Various Temperatures —A. V. Chinnikova, Z. N. Markina, and P. A. Rebinder	592	782
LETTERS TO THE EDITOR		
Adhesion of Microparticles in Polymer Solutions—E. D. Yakhnin, É. I. Averbakh, and A. B. Taubman	596	788

The Russian press date (podpisano k pechat) of this issue was 9/11/1968.
Publication therefore did not occur prior to this date, but must be assumed
to have taken place reasonably soon thereafter.

Available from Consultants Bureau

COLLOID JOURNAL

of the USSR

A translation of *Kolloidnyi Zhurnal*

Volume 30, Number 6

November-December, 1968

CONTENTS

	Engl./Russ.
Dependence of Surface Tension on Temperature - A. A. Abramzon and Yu. B. Moiseeva	599 795
Influence of the Nature of the Protective Substance in Latex on the Colloid-Chemical Properties of Carbon Black-Latex Mixtures - E. A. Aleksandrova, D. M. Sandomirskii, and B. A. Dogadkin	603 800
Nature of the Aggregation Stability of Colloidal Solutions. Present State of the Problem and Some Routes of Its Future Development - V. M. Barboi, Yu. M. Glazman, and G. I. Fuks	606 804
Influence of Filler Particle Shape on the Kinetics of Structure Formation in Polymer Solutions - V. N. Borodina, S. N. Tolstaya, and A. B. Taubman	611 811
Influence of an Alternating Electric Field on Light Absorption in Clay Suspensions - A. M. Gutkin and E. A. Shcherbakova	614 815
A Note on Non-local Rules of Solution-Surface Layer Equilibrium Diagram - V. T. Zharov, A. I. Rusanov, and S. A. Levichev	617 819
Influence of the Conditions of Formation of Polyester Coatings on Their Supermolecular Structure and Properties - P. I. Zubov, M. R. Kiselev, and L. A. Sukhareva	623 827
Formation of Ultrathin Aluminum Hydroxide Films at the Sol-Air Interface - N. M. Kim and S. G. Mokrushin	626 831
Investigations of Fibrous Aerosol Filters. Diffusional Deposition of Aerosols in Fibrous Filters - A. A. Kirsh and N. A. Fuks	630 836
Investigation of the Pore Structure of Adsorbents Formed by Hydrothermal Treatment of Commercial Silica Gel - A. V. Kiselev, Yu. S. Nikitin, A. I. Sakharov, and É. B. Oganesyan	635 842
Kinetics of Ion Exchange Sorption of Tetramethyloctylbenzene Sulfonate Ions and Micelles by ÉDÉ-10P Anion Exchange Resin - A. I. Koganovskii and N. A. Klimenko	640 847
Influence of Additions of Polyvinyl Alcohol on Structure Formation in Aqueous Dispersions of Clay Minerals - L. E. Kuznetsova and N. N. Serb-Serbina	644 853
Surface Properties of Polyvinyl Formals - R. A. Kul'man, I. N. Vlodavets, A. I. Éterman, and T. F. Nikulina	649 860
Influence of Added Macromolecular Substances on Precipitation of Calcium Sulfate - O. V. Neiman and M. I. Belikova	651 863
Some Colloidal Characteristics of Salts of Monohydroperfluoroalkanoic Acids - A. F. Nikolaev, T. N. Zelenkova, R. M. Panich, G. R. Mazina, R. A. Nesynova, and K. V. Belogorodskaya	654 867
Shrinkage Stresses and Deformations of Condensation Structures of Acetylcellulose. The System Acetylcellulose-Dioxane-Water - M. S. Ostrikov, A. V. Strizhakova, N. A. Abaturova, and I. N. Vlodavets	657 871

(Contd)

Available from Consultants Bureau

Adsorption of Carboxymethylcellulose and Aliphatic Amines on Salt and Clay Minerals - M. M. Pavlyuchenko, Kh. M. Aleksandrovich, É. E. Litvinenko, and A. P. Medvedeva	660 875
Microrheology of Disperse Systems and Polymers. Calculation of the Stress Tensor of a Suspension of Rigid Ellipsoids - V. N. Pokrovskii	664 881
Adsorption of Water Vapor on Cation-Substituted Montmorillonite - Yu. I. Tarasevich, V. M. Valitskaya, and F. D. Ovcharenko	671 889
Influence of a Wave on the Ability of Monolayers of Oxyethylated Octadecanols to Lower the Rate of Evaporation of Water - A. A. Trapeznikov and R. A. Avetisyan	677 897
Influence of Surfactants on Structure Formation in Mineral - Polymer Dispersions - E. D. Yakhnin, Yu. V. Egorova, A. B. Taubman, and É. N. Shkol'nikova	682 904
Luminescence Method for Determination of Porosimetric Curves - Yu. B. Mekler	685 908
 CHRONICLES	
Sixth (Jubilee) All-Union Conference on Colloid Chemistry - G. I. Fuks	688 911
Summary of the Symposium on Mechanochemistry and Mechanoemission - B. V. Deryagin, N. A. Krotova, and Yu. A. Khrustalev	692 914
USSR National Committee on Surfactants - B. P. Kotel'nikov	695 916
 INDEX	
Author Index, Volume 30, Numbers 1-6, 1968	699
Table of Contents, Volume 30, Numbers 1-6, 1968	703

The Russian press date (podpisano k pechati) of this issue was 11/4/1968.
Publication therefore did not occur prior to this date, but must be assumed
to have taken place reasonably soon thereafter.

Available from Consultants Bureau

SPACE BIOLOGY AND MEDICINE

Vol. 3, No. 6, 1969

- USSR -

Complete translation of the Russian-language periodical Kosmicheskaya Biologiya i Meditsina published in Moscow by the Meditsina Publishing House.

CONTENTS	PAGE
V. I. Lenin: Problems in Natural Science and Space Exploration (N. A. Agadzhanian, V. I. Fofanov).....	1
Physiochemical Methods for Producing Formaldehyde for Carbohydrate Synthesis in Life-Support Systems (M. A. Lobanova, Yu. Ye. Sinyak).....	11
ORIGINAL ARTICLES	
Effect of Synthetic Carbohydrates on Growth and Toxin Formation of Type-A Cl. Perfringens (G. F. Shemanova).....	27
Effect of Prolonged Hypothermia on Content of Ammonia, Glutamine and Amide Groups of Total Proteins in Large Hemispheres of Rats (L. M. Slez).....	33
Effect of Gas Medium on Body Tolerance to Low Temperatures (I. P. Shcherbachev).....	39
	(Contd)

Available from JPRS 49928

Proliferative Activity of Bone Marrow in Dogs During Chronic γ -Irradiation (T. M. Zukhbaya).....	45
Effect of Different Decompression Rates on Altitude Tolerance of Rats (A. V. Sergiyenko).....	51
Toxicology of Some Polymers (V. D. Yablochkin).....	59
SPACE MEDICINE	
Basic Principles for Development of Acceleration Training Schedules (V. I. Stepantsov, A. V. Yeregin).....	72
Effect of Diet Containing Destroyed Cells of Unicellular Algae on Composition of Enteric Microflora (V. M. Shilov, et al.).....	83
Food Ration for Spaceship Crews for Flights Lasting One Month (V. P. Bychkov, P. P. Ivanov).....	89
Effect of Electrical Stimulation of Lower Extremity Muscles on Increased Orthostatic Tolerance (B. B. Yegorov, et al.).....	96
Alveolar Ventilation and Pulmonary Circulation Under the Influence of Negative Pressure on the Lower Body (A. M. Genin, et al.).....	102
METHODS	
A Method for Continuous Registry of Bioelectric Activity of the Anterior and Posterior Spinal Cord Nerve Roots in Dogs (S. A. Skuratova, V. S. Oganov).....	109
BRIEF COMMUNICATIONS	
Dynamics of Elimination of 5-Oxyindoleacetic Acid in Rats During Prolonged Hypokinesia (Z. S. Dolgun, S. P. Novikova).....	114
	(Contd)

Available from JPRS 49928

Kosmicheskaya Biologiya i Meditsina
Vol 3, No 6, 1969

Effect of Hypokinesia on Conditioned Reflex Activity
of White Rats
(L. N. Khruleva)..... 116

Effect Exerted on Human Body by Brief Exposure in an
Atmosphere with an Increased Carbon Dioxide Content
(V. S. Moskalenko)..... 119

CONGRESSES AND CONFERENCES

Work of Third International Symposium on Fundamental Problems
of Human Life in Space Dedicated to 20th Anniversary of
World Health Organization (WHO)
(P. V. Vasil'yev, N. N. Gurovskiy)..... 122

Available from JPRS 49928

KRISTALLOGRAFIYA
EDITORIAL BOARD
N. V. Belov
(Editor)
Institute of Crystallography
Academy of Sciences of the USSR,
Moscow
G. B. Bokii
A. A. Chernov
V. A. Frank-Kamenetskii
V. L. Indenbom
A. I. Kitaigorodskii
V. A. Koptak
Z. G. Pinsker
A. V. Shubnikov
L. A. Shvalov
(Secretary)
B. K. Vainshtein
G. S. Zhdanov
(Associate Editor)

Soviet Physics CRYSTALLOGRAPHY

A Translation of "Kristallografiya"

(Russian Original Vol. 14, No. 3, pp. 385-568, May-June, 1969)

Vol. 14, No. 3, pp. 319-484

November-December, 1969

CONTENTS

		RUSS. PAGE	PAGE
Evgraf Stepanovich Fedorov (50th Anniversary of His Death).			
A. V. Shubnikov	(R)	319	387
The Design of Tables of Shubnikov Space Groups of Dichroic Symmetry.			
R. P. Ozerov	(T)	323	393
Theory of Order-Disorder Phase Transitions in Molecular Crystals. II.			
D. A. Badalyan, A. G. Khachatryan, and A. I. Kitaigorodskii	(T)	333	404
Calculation of the Structure and Lattice-Energy Surface of Naphthalene and Anthracene Crystals. K. V. Mirskaya and I. E. Kozlova	(T)	339	412
A Kossel Model of the Kinetics of Growth and Evaporation Normal to a {100} Face. D. E. Temkin	(T)	344	417
Toward a Theory of Diffusionless Crystal Growth. D. E. Temkin	(T)	349	423
Distribution Functions and Diffraction Intensity in a Linear System of Particles. D. Ya. Tsvankin	(T)	355	431
Evaluation of Deviations from Isomorphism in Protein Crystals.			
V. Sh. Raiz and N. S. Andreeva	(E/T)	360	437
Determination of the Crystal Structures of Several Three-Component Semiconductors with the General Formula ABX ₂ . A. S. Avilov, K. A. Agaev, G. G. Guseinov, and R. M. Imamov	(E)	364	443
A Neutron Diffraction Study of the Structure of Magnetoplumbite.			
O. P. Aleshko-Ozhevskii, M. K. Fack, and I. I. Yamzin	(E)	367	447
An Infrared Spectroscopic Study of Tourmalines. I. I. Plyusnina, B. G. Granadchikova, and I. E. Voskresenskaya	(E)	370	450
Anisotropy of Light Scattering at Microscopic Defects in Artificial Quartz.			
N. M. Melankholin, E. V. Antonov, I. N. Guseva, L. A. Gordienko, and V. E. Khadzhi	(E)	376	456
X-Ray, Dielectric, and Piezoelectric Investigations of Solid Solutions in the PbTiO ₃ -BaNb _{4/3} O ₃ System. A. S. Viskov and Yu. N. Venevtsev.	(E)	379	460
Calculation of the Transverse Components of Certain Fourth-Rank Tensors for Single Crystals with a Cubic System by Means of an Electronic Digital Computer I. I. Smyslov	(T/E)	385	468

(Contd)

Available From The American Institute of Physics
Vol 14, No 3, Nov-Dec 1969

		RUSS. PAGE	PAGE
Use of the Mössbauer Effect to Study the Distribution of Fe and Sn Impurity Atoms in Vanadium Pentoxide. <u>A. A. Abdullaev, L. M. Belyaev, T. V. Dmitrieva, G. F. Dobrzhanskii, V. V. Ilyukhin, and I. S. Lyubutin.</u>	(E)	389	473
Phase Conversions in Liquid Crystals of the Homologs of Dialkoxyazoxybenzene. <u>A. P. Kapustin and L. I. Mart'yanova</u>	(E/T)	394	480
Infrared Dichroism Study of Liquid Crystals of n-Alkoxybenzoic Acids. <u>M. M. Kusakov, V. L. Khodzhaeva, M. V. Shishkina, and I. I. Konstantinov</u>	(E)	396	485
Crystal Orientation in Lead Sulfide Films Vacuum-Deposited on Muscovite. <u>S. A. Semiletov, R. V. Kudryavtseva, V. N. Pogodina, V. V. Karabinskaya</u>	(E)	402	491
Hydrothermal Crystallization in the System $\text{A}_2\text{O}-\text{TR}_2\text{O}_3-\text{SiO}_2-\text{H}_2\text{O}$. I. Synthesis of Crystals of Alkali Metal Yttrium Silicates. <u>B. A. Maksimov, B. N. Litvin, V. V. Ilyukhin, and N. V. Belov</u>	(E)	407	498
BRIEF COMMUNICATIONS			
Smoothing of the Electron Distribution Function by Modification of Its Fourier Coefficients. <u>B. M. Shchedrin and V. I. Simonov</u>	(T)	411	502
Structural Characteristics of Cubic ZrO_2 Stabilized by Calcium. <u>S. K. Filatov and V. A. Frank-Kamenetskii</u>	(E)	414	505
Electron Paramagnetic Resonance Study of Tourmalines. <u>A. I. Novozhilov, I. E. Voskresenskaya, and M. I. Samoilovich</u>	(E)	416	507
Electrooptical Properties of Barium Titanate in the Paraelectric Phase. <u>A. S. Sonin and V. É. Perfilova</u>	(E)	419	510
Electrooptical Properties of Thallium-Cadmium Langbeinite. <u>A. S. Vasilevskaya, I. G. Gancev, I. S. Rez, and A. S. Sonin</u>	(E)	421	511
Yttrium Aluminate Containing TR^{3+} Ions as an Active Medium for Lasers. <u>Kh. S. Bagdasarov, G. A. Bogomolova, A. A. Kaminskii, A. M. Kevorkov, and G. I. Rogov</u>	(E)	423	513
Electrical Polarization of Crystals during Torsional Deformation. <u>I. S. Zheludev, Yu. S. Likhacheva, and N. A. Lilceva</u>	(E/T)	425	514
Hydrothermal Etching of Matched Fractured Prism Faces of Quartz. <u>M. S. Joshi and P. N. Kotru</u>	(E)	427	516
Experimental Study of the Effect of Texture on the Form of Diffraction Lines. <u>A. S. Kagan and S. M. Prokoshina</u>	(E)	429	518
The Optical Activity of Cholesteryl Propionate-p-Azoxyanisole Mixtures. <u>V. N. Aleksandrov and I. G. Chistyakov</u>	(E)	431	520
Effect of Temperature on the Texture of Nematic Paraazoxyanisole Oriented by an Electric Field. <u>E. A. Kosterin</u>	(E)	435	524
The Effect of Impurities in Ionic Crystals on the Epitaxy of Gold. <u>A. A. Sokol and V. M. Kosevich</u>	(E)	438	527
Various Properties of Epitaxial Films of Si Obtained by Sublimation in Vacuum from Sources Doped with As and P. <u>V. P. Kuznetsov and V. V. Postnikov</u>	(E)	441	529
Use of X-Ray Microanalysis for Investigation of β -SiC Crystals by the Vapor-Liquid-Solid Mechanism. <u>V. V. Bakovets and G. V. Berdichevskii</u>	(E)	444	531
Hydrothermal Crystallization in the $\text{A}_2\text{O}-\text{TR}_2\text{O}_3-\text{SiO}_2-\text{H}_2\text{O}$ System. II. Synthesis of Sc-Silicates of Alkali Elements. <u>B. A. Maksimov, B. N. Litvin, V. V. Ilyukhin, and N. V. Belov</u>	(E)	447	534
Filamentary Diamond Crystals. <u>B. V. Deryagin, L. L. Bullov, V. M. Zubkov, A. A. Kochergina, and D. V. Fedoseev</u>	(E)	449	535

(Contd)

Available From The American Institute of Physics
Vol 14, No 3, Nov-Dec 1969

		RUSS. PAGE	PAGE
Distribution of Volatile Impurities Ahead of the Crystallization Front in a Melt. <u>B. D. Lainer, V. V. Voronkov, M. G. Mil'vidskii,</u> and <u>V. V. Rakov.</u>	(T)	451	537
Hydrothermal Growth of Large Dislocation-Free Crystals of Quartz. <u>L. A. Gordienko, V. F. Miuskov, V. E. Khadzhi, and L. I. Tsinober.</u> . . .	(E)	454	539
Peculiarities of Crystallization of Barium Hexaferrite on Seeds. <u>S. Sh. Gendelev, R. I. Zvereva, and L. D. Fedorovich.</u>	(E)	457	542
The Hydrothermal Crystallization of Sb_2S_3 . <u>V. I. Popolitov.</u>	(E/T)	461	545
REVIEW			
Charge Separation by Crystallization. <u>A. M. Mel'nikova</u>	(R)	464	548
CHRONICLES			
First Autumn School on Apparatus and Methods of Studying the Atomic Structure of Matter. <u>Yu. A. Simonov.</u>	(R)	480	564

Available From The American Institute of Physics
Vol 14, No 3, Nov-Dec 1969

**METALLURG
EDITORIAL BOARD**

G. I. Adaryukov	Yu. R. Mil'to
S. V. Bazilevich	I. D. Novikov
I. G. Bukhvostov	F. M. Novikova
M. A. Chernenko	(Associate Editor)
E. S. Danslov	G. A. Osipov
V. A. Ermolaev	M. A. Pertsev
V. M. Fainshtein	(Editor)
B. G. Fastovskii	B. S. Shapiro
S. M. Gnuchev	P. A. Shiryayev
F. F. Grigor'ev	V. G. Sindin
G. M. Itskovich	V. S. Slavkin
A. P. Kablukovskii	E. N. Tikhomirov
M. M. Kaufman	Yu. V. Torshilov
L. Z. Khodak	D. I. Turkenich
E. V. Kochinev	M. M. Zin'kovskii

METALLURGIST

A translation of **METALLURG**

Published in cooperation with
the Board of Governors of Acta Metallurgica

© 1970 CONSULTANTS BUREAU, NEW YORK, A DIVISION OF PLENUM PUBLISHING CORPORATION, 227 West 17th Street, New York, N.Y. 10011

Numbers 7-8

July-August, 1969

CONTENTS

Engl./Russ.

NUMBER 7, JULY, 1969

Vigorous Stride of the Five-Year Plan	395	1
PIG IRON		
Melting Pig Iron with the Use of Silicon Coke—V. A. Shatlov and V. P. Gorbachev	398	3
Manufacture of Charging Equipment for 2700 m ³ Capacity Blast Furnaces—O. P. Gaponov and I. N. Sheenko	401	5
Improved Performance of Self-Balancing 168-GR Screens and DZMO Shakers —V. M. Zinin and N. I. Noskov	403	7
Dynamic Balancing of Exhauster Rotors—V. E. Savitskii	406	9
Automatic Plant for Maintaining a Constant Level of Solutions in Tanks for Sprayers of Casting Machines—V. F. Bannykh	409	12
IN THE WORLD OF METALLURGY		
[Blast Furnace Tap Hole Drilling Machine (The Iron Age, Vol. 200, No. 18, 475 (1967)).		13]
[Capacity of a Metallurgical Plant and Its Profitability (J. Iron and Steel Institute, Vol. 206, No. 5, 442 (1968))		13]
Fighting Dust Accumulation in the Charging Equipment and Galleries of Sintering Plants —B. G. Novikov, V. G. Aleinikov, A. L. Ermakov, and V. N. Bashkatov	410	13
Senior Foreman—I. P. Chirkov	411	14
STEEL		
World Record of Zhdanov Steelmakers—V. O. Kulikov, A. E. Prikhozhenko, E. G. Gryzlov, and V. I. Yakimenko	413	15
Quality of Rolled Sections after Deoxidizing and Alloying of Steel in the Ladle —A. A. Kurdyukov, V. T. Tereshchenko, Vyoig Min'Tyong, A. M. Kondratyuk, A. M. Otengenden, and V. L. Yavoiskii	416	17
Increasing the Life of Door Linings of Open-Hearth Furnaces—B. I. Ilyukhin and K. M. Golubyatnikova	420	20 (Contd)

Annual Subscription: \$125.

Single Issue: \$30

Single Article: \$15

All rights reserved. No article contained herein may be reproduced for any purpose whatsoever without permission of the publisher. Permission may be obtained from Consultants Bureau, New York, a division of Plenum Publishing Corporation, 227 West 17th Street, New York, N. Y. 10011, U. S. A.

Available from Consultants Bureau

CONTENTS

(continued)

	Engl./Russ.
Pressure Casting of Steel Slabs—A. G. Kotin, V. G. Litvinenko, V. M. Yankelevich, A. N. Karasevich, A. E. Sapozhnikov, V. N. Krupenik, and V. A. Gudyrya	423 23
Steel Melter of Magnitka Holder of the Order of Lenin—A. Khinkis	427 26
Story of One Search—G. P. Davydenko	429 28
 IN THE WORLD OF METALLURGY	
Direct Reduction of Iron Ore	430 28
 ROLLING	
Rolling the No. 22 I-Beam—G. D. Feigin, I. M. German, and E. V. Kozopasov	431 29
Operation of the 260 Wire Mill after Reconstruction—V. Z. Budovskii	434 31
Protection of Pipe against Corrosion during Transportation and Storage—B. S. Malkin, V. T. Biryukov, G. K. Strizhak, M. V. Golosnaya, L. M. Kishkin, P. A. Esaulov, T. P. Grigor'eva, and V. N. Kochanov	438 34
 IN OUR ROLLING MILLS	
Production of Profile Tubes—M. S. Rybakov	441 38
Tenth Anniversary of the East-Slovak Metallurgical Combine	443 38
 SAFETY AT WORK	
Training Foremen in a Uniform Safety System—T. N. Khoroshev	445 39
 NEW FROM ABROAD	
[Iron Powder from Liquid Cast Iron (Metal Progress, Vol. 93, No. 2, p. 9, 1968)	41
Creative Cooperation—V. I. Dovgopol	448 42
"Silver" from Clay—S. Venetski	451 44
Scientific Organization of Labor for the Blast-Furnace Worker, Steelmaker, and Millman —M. Shumskii and M. Reznikov	454 46
 <u>NUMBER 8, AUGUST, 1969</u> 	
25th Anniversary of the Research Institute of Ferrous Metallurgy—N. I. Sheftel'	459 1
 THE FIGHTERS OF LENIN'S GUARD	
"Let Dzerzhinskii Do It . . ."—B. Shur	462 3
 CAST IRON	
Increasing the Efficiency of Sinter Strand Charging—V. I. Bykov, Yu. S. Rud', and V. G. Kucher	466 5
Converter Sludge for Use in Sinter Production—E. Z. Freidenzon, I. P. Khudorozhkov, M. P. Antoshechkin, M. Ya. Groshev, and I. A. Ozhiganov	468 6
Performance of a Blast Furnace with Two Iron Notches Emptying into a Single Cast House —B. F. Yashchenko	471 8
Ladle Treatment of Titanium-Containing Pig Iron—N. F. Lomaka, A. L. Bychin, and I. A. Esin	474 11
Improved Construction of Blast-Furnace Stoves—A. V. Rostembskii, A. V. Sorokin, and P. V. Sorokin	476 12
 ON THE BLAST FURNACE PLANTS OF THIS COUNTRY	
Operation of Blast Furnace Hoists—V. I. Il'kun, A. P. Kravchenko, and Yu. Z. Ratner	478 13
Family Relic—V. I. Alibekov	479 14
 STEEL	
Use of Manganese Ore in Oxygen Converters—S. G. Afanas'ev and P. I. Yugov	481 15 (Contd)

Available from Consultants Bureau

CONTENTS

(continued)

	Engl./Russ.
Separate Delivery of Oxygen and Fuel to the Port of a Single-Flue Open-Hearth Furnace - M. A. Magiuson, A. I. Shatukhov, G. A. Sedach, M. K. Musikhina, L. G. Avilov, A. I. Zavodilenko, and A. G. Panchenko	485 18
Use of Calcium Silicon for Deoxidizing Transformer Steel - Z. V. Klochkova, S. M. Gnuchev, A. G. Zubarev, V. A. Alyavdin, A. D. Kapustin, A. F. Kablukovskii, B. G. Sobolev, N. F. Markov, T. E. Pravdina, and A. M. Mamot	489 21
Reducing the Trimming of Continuously Cast Slabs - D. A. Dyudkin, A. M. Kondratyuk, and K. P. Murzov	493 25
Development of the Technique of Producing Three-Layer Steel 60-2kp-60 - A. I. Chichkanov, M. I. Loganov, and V. I. Shevchenko	496 27
ROLLED IRON	
The Nature of Wear of Tube Rolling Mill Rolls - V. P. Goncharov and N. M. Vedyakin	498 29
Operation of Plate Mill Lubrication Systems - A. T. Shevtsov and V. I. Rospasienko	501 32
Production of High-Temperature Wire - Ya. S. Shvartsbart	505 35
Installation for the Rehardening of Rolls - K. S. Tarasov and A. A. Ganich	507 37
Strengthening the Shafts of the Centerer Lever Housing - I. A. Utin, M. I. Mukhtarov, and A. I. Abdullaev	508 37
Reducing the Noise from the Inspection Stands of the Wheel Rolling Shop - N. I. Dreiman, B. M. Zlobinskii, E. S. Pimenov, and Yu. I. Khesin	509 38
Scientific Organization of Labor in the Molding Shop of the Roll Plant - N. G. Veselov, E. S. Sapiro, and A. N. Moskalev	511 39
Increasing the Productivity of Cranes - A. A. Ivanov, A. A. Kravchenko, I. A. Ushakov, F. M. Leiner, V. P. Mishchenko, and O. A. Mamontov	512 39
V. V. Lempitskii, I. N. Golikov, and N. F. Sklokin. Advanced Techniques for Improving Steel Quality - Reviewed by V. S. Slavkin	513 40
Technical Data Retrieval Service - Tasks and Problems - S. Andreev	516 42
Japanese 15-ton Low-Frequency Coreless Induction Furnace	519 43
[INTERNATIONAL LIAISONS]	
[XVII Session of the Administrative Committee of the International Association of Metalworkers Trade Unions - Yu. Khitsenko	44]
Determination of Downtime at the 275 Rolling Mill - V. N. Boltsov	520 46
Available from Consultants Bureau	

NOTE

The Table of Contents lists all material that appeared in the original Russian journal. Items originally published in English or generally available in the West are not included in the translation and are shown in brackets. Whenever possible, the English-language source containing the omitted items is given.

The Russian press dates (podpisano k pechati) of the first and second issues covered in this issue of the translation were, respectively, 6/4/1969 and 7/4/1969. Publication of the material translated in this issue is therefore known to have occurred not prior to the earlier of these dates, but must be assumed to have taken place in two parts, the second being published shortly after the later of the dates.

CONTENTS

Introduction	1
B. Dziunikowski - Determination of Main Components in Ores by Radiometric Methods	2
Cz. Bobrowski, E. Chruściel, T. Dabek, K. Korbel, J. Massalski, T. Owsiak, J. Studnicki - Design of a Pulsed Neutron Source and a Bore-Hole Fast Neutron Generator	10
B. Turkowa, K. Umiastowski, J. Zawadzki - Radiometric Measurement of the Filter Tube Depth in a Bore-Hole	23
J. A. Czubek, A. Lenda - Studies on Energy Distributions of Scattered γ -Rays in Natural Gamma Logging	31
J. Chabuciński - Elimination of the Effect of Chemical Composition of Rocks on the Gamma-Gamma Density Logging	41
K. Umiastowski - The Effect of Constructional Factors on the Calibration Curves for Gamma-Gamma Density Probes	51
M. Jakubowski, J. Sapula - Application of Isotopic Methods for Determining Physical Properties of Soils in the Structure of the Geotechnical Cross Section	58
J. Makowski, A. Lewandowski - Radiometric Method for Studying Water Reservoir Bottom Tightness	68
A. Padzik, J. Niemczynowicz, E. Frączek - Use of Tritium in Hydrogeological Studies	78
L. Barański, B. Turek, J. Lubecka, A. Zuber - Attempts at Employing Single-Well Methods for Determining Water Leakage in Dams	88
J. Niemczynowicz, A. Padzik, E. Frączek - A Radiographic Probe for Determining the Direction of Ground Water Filtration in Drill Holes	99
L. Barański, K. Korbel, A. Zuber - A Device for Measuring the Direction and Flow Rate in Open Water Reservoirs	103
E. Frączek, J. Niemczynowicz, A. Padzik - Tracer Studies on Mixing of Waste Waters with Surface Waters	112
J. Bors, M. Czepkowski, J. Szopka - Single-Well Isotopic Methods in Hydrogeological Investigations for Draining Purposes in the "Adamów" Mine	121
K. Orczyk - Geophysical Radiometric Instruments Designed and Produced by the Petroleum Industry Geophysical Enterprise in Cracow	131
J. Sokolowski - Major Results of Radiometric Measurement Application in Deep Bore-Holes	138
J. A. Czubek - The Range of Nuclear Measurement Methods for Soil Moisture and Density	151
R. Burek, Cz. Mirkowski, J. Pawlak - Radiometric Determination of Inorganic Substance (Ash Content) in the Hard Coals of the Upper Silesian Coal Basin and the Brown Coals of Turów Mine	168
M. Dąbek, K. Muras - Certain Problems of Soil Density Measurement with Gamma-Gamma Probes Constituting Components of GGW-Type Assemblies	179
A. Szyborski, J. Krupa - Detection of Solid Raw Material Deposits by Well-Logging Methods	194
A. Szyborski - Determination of Ash Content in Brown Coal by Gamma-Gamma Logging	204
A. Prączyński, V. V. Sulin, H. Ch. Vitozhents - Analysis of Copper and Silver in Copper Ores by the Photon Activation Method	215

Available from CERN TT 68-511/4-5

CONTENTS

PHYSICS

B. Buras, A. Holas — Intensity and Resolution in the Neutron Time-of-Flight Powder Diffractometry	1
J. Jateczak — The Energy Spectrum of Extensive Air Showers of Cosmic Rays	32
M. Gąsior, H. I. Lizurej, H. Niewodniczański, A. W. Potempa — Rapid Separation of Radioactive Elements by the Method of Vacuum Evaporation	46
Z. Kozłowski, M. Sadowski — Investigations on Gas Conditions in the Operation of a Coaxial Plasma Injector	55
A. Szechter, S. Chwaszczewski, A. T. Mikulski — Noise Measurements in the ANNA Reactor	73

CHEMISTRY

S. Mine, H. Wincel — Mass Spectrometric Studies of Ion-Molecule Reactions in Binary Systems. II — Reactions in Paraffin-Water Systems	88
R. Przytycka — Investigations on the Distribution of Radium Between the Solid and the Liquid Phase in the Process of "Synchronized" Precipitation. Part III. Barium-Radium Oxalate and Barium-Radium Iodate	101

ENGINEERING AND EQUIPMENT

Z. Komor, T. Rydzewski — Enrichment of a Sample of Descriptors Collected on the Principle "First Come First Served" in Content Addressable Memory Systems	109
---	-----

BIOLOGY

A. M. Danciewicz, A. Mazanowska — Biochemical Lesions Induced in Subcellular Structures by Ionizing Radiation. VI — the Formation of Lipid Peroxides in Rat Liver	118
---	-----

Available from CFSTI TT 68-50011/6

CONTENTS

PHYSICS

- M. Gryziński, J. Nowikowski, M. Sadowski, S. Suckewer—Review of Research on Hot Plasma Performed at the Department of Plasma Physics and Technology, Institute of Nuclear Research 1
- A. Holas—Collimators in Neutron Time-of-Flight Powder Diffractometry 33

CHEMISTRY

- A. Zieliński, I. Stronksi—The Determination of Distribution Coefficients and Stability Constants of Chelates of Ni^{2+} and UO_2^{2+} with Some Schiff's Bases 44
- W. Zablotny, K. Akerman, J. Wiśniewski, R. Winnicki, M. Lelental, B. Michalski, A. Chrusbasik—Isotopic Studies of Solid Phase Movements in a Fluidized Bed 53
- S. Wajda, F. Pruchnik, A. Zarzeźny—The Structure of Tri-Nuclear Rhenium(IV) Thiocyanate Compounds Investigated by Radioisotopic Exchange in the System $[Re_3(OH)_2(SCN)_4]^{+} S^{14}CN$ 66
- Z. Kęcki, S. Kosek, W. Stachowicz—Oxygen Effect on Gamma Irradiated Frozen Solutions in Tetrahydronaphthalene 81

ENGINEERING AND EQUIPMENT

- J. Bouzyk, W. Ciechanowicz, W. Filipczak, S. Latek—Reactor Noise Analysis by Analog Computer Techniques 90

Available from CFSTI TT 68-50011/7

CONTENTS

PHYSICS

- J. Jędrzak — Localization of the Axes of Individual Extensive Air Showers of Cosmic Radiation 1
- R. Brandt, T. Kroginski, E. Piasecki, H. Piekarczyk, M. Sowinski, J. Chwaszczewska, M. Moszyński — Experience in the Use of Semiconductor Detectors for Fission Studies in the High-Energy Proton Beam at CERN 18
- L. Freindl, W. Karcz — Ion Focusing Properties of a Double Magnetic Quadrupole Lens Pair 31
- A. Holas — Focusing of the Time-of-Flight Diffractometer for Structure Analysis 43
- S. Latek, J. Topa — Resonance Integral Measurement by the Pile Oscillator Method 53

CHEMISTRY

- W. Szymanski — Heterogeneous Isotopic Exchange Between the Atom of a Metal in the Salt Precipitate and Its Ion in the Solution 67
- J. Szadłowski, T. Więch, M. Zieliński — The Isotopic Exchange Kinetics in the Gaseous Hydrogen Chloride-Pyridine Hydrochloride and the Gaseous Hydrogen Chloride-Picolinic Acid Hydrochloride Systems 82
- A. Halpern, K. Sawlewicz — Valence Distribution of ^{76}As Resulting from β -Decay in ^{76}Ge -Labeled Inorganic Crystals 91

ENGINEERING AND EQUIPMENT

- M. Moszyński — Adaptation of the Time-to-Amplitude Converter to Time Measurements with the Aid of Semiconductor Radiation Detectors 100
- S. Sekowski — The Effect of a Silver Undercoat on the Measurement of the Gold Coating Thickness by the β -Reflection Method 109

LETTERS TO THE EDITOR

- A. Biełkowski — A Transistorized Vacuum Gage with a Thermocouple Probe 116

Available from CPSTI TT 60-53011/8

RADIO ENGINEERING AND ELECTRONIC PHYSICS

RADIOTEKHNIKA I ELEKTRONIKA

NUMBER 8

1969

CONTENTS

	Page
V.A. Andriyev: Effect of the Atmosphere of a Planet on Fresnel Diffraction of Ultrashort Radio Waves	1175
Ya.N. Fel'd and I.V. Sukharevskiy: Use of Nonresonance Green's Functions in Constructing Integral Equations of the Problems of Diffraction at Open Screens	1181
L.B. Tartakovskiy and A.I. Rubinshteyn: Mutual Effect of Plane Waveguide Type Elementary Radiators with Open Ends	1187
V.I. Molyavko, K.P. Yatsuk and V.M. Mitrofanov: Investigation of Surface Waves in Radial Helix Structures	1194
V.I. Popovkin, G.I. Shcherbakov and V.I. Yelumeyev: Optimum Synthesis of Antennas for Restricted Departures of the Distribution Function of Sources from the Specified Distribution	1200
B.M. Minkovich: Optimum Interpolation Synthesis of Radiation Patterns of Aperture Antennas ..	1204
G.I. Veselov and V.M. Krekhtunov: Natural Oscillations in a System of N Open Dielectric Waveguides	1211
V.A. Popov: An Approximately Optimum Detector of Gaussian Signal Immersed in Gaussian Noise	1218
B.I. Shakhmarin: Investigation of a Piecewise-Linear APC System	1224
Yu.V. Nadelyayev: Average Duration of Multichannel Sequential Detection	1231
Yu.A. Kolosov: Basic Characteristics of Optical Receiver with Electro-Optical Image Converter and Superorticon	1239
V.V. Mlechin: Stability of Discrete Delay-Line Networks	1243
V.A. Malyshev: Resonant Properties of Two Discontinuities in a Transmitting Channel	1255
E.G. Levchenko, A.K. Nematik and V.E. Chayka: Investigation of Symmetric Slow-Wave Structures of the Coupled-Resonator-Network Type	1260
V.I. Gayduk, V.M. Kiselev and E.I. Nefedov: A Self-Consistent Theory of Nonradiating Charge Clusters Localized by its Electromagnetic Field	1269
N.A. Savich and D.Ya. Shtern: Characteristics of Absolute Dispersion Interferometers for Plasma Investigations	1280
V.M. Gusev, Yu.G. Kozlov and V.G. Naumenko: High Frequency Planar Silicon Transistor Based on Ion-Implanted p-n-p Structure	1285
BRIEF COMMUNICATIONS	
P.E. Krasnushkin and V.D. Snabalin: The Influence of the Direction of Arrival of Night Atmospherics on Their Waveform	1288
V.D. Ivanova: Theory of Wave Propagation in a Rectangular Spiral in the Presence of Plasma ..	1292
A.S. Polyanskiy and R.M. Sedletskiy: Signal Synthesis from a Specified Multi-Peak Correlation Function	1294
V.V. Bykov: Some Properties of the Integral of a Random Function	1296
V.V. Mlechin: Logarithmic Frequency Characteristics of Typical Discrete Stages with Linear Delay	1298
V.A. Losovskiy and M.M. Shakhmayev: Analysis of Frequency-Modulated Tunnel Diode Oscillator Using a Nonlinear p-n Capacitive Junction in the Tuned Circuit	1301
G.Yu. Kobzarev: Instability of the Characteristics of a Variable Negative-Resistance Amplifier	1304
Ye.P. Moskalenko and V.A. Malyshev: Effect of the Second Harmonic on TWT Operation in a Distributed Nonlinear Active Medium	1307
F.V. Lisovskiy: Constructing Isoenergy Surfaces in k-Space for Analyzing Spin Wave Scattering Processes	1310
I.A. Deryugin, N.I. Lyashenko and L.L. Stakhurskiy: Electromagnetic Radiation Emitted by Yttrium-Gallium Ferrite in Longitudinal Pumping Fields	1313

(Contd)

This issue published February 1970
Available from Scripta Publishing Corporation

A.G. Akmanov, A.I. Kovrigin and N.K. Podolskaya: Frequency Discrimination in Laser Radiation	1315
F.A. Korolev, V.V. Lebedeva, A.I. Ohntsov and V.M. Salimov: Experimental Determination of Lower Levels Life Time in Argon Laser.	1318
B.A. Akanayev: Amplification of Very Narrow Optical Pulses in Combinational-Active Medium.	1321
A.P. Balashova, V.I. Salin, L.A. Serebrov and N.L. Yasnopol'skiy: Variation of Signal Polarity in High Impedance Thin Film Target Circuits	1324
A.M. Siz'man: Correlation Analysis Applied to Time Photoelectron Multipliers.	1327
I.M. Bronshteyn and A.N. Brozdnicenko: Secondary Electron Emission from Cu-Be Alloy	1329

ABSTRACTS OF DEPOSITED ARTICLES

R.I. Trukhayev and V.V. Khomenyuk: Optimal Effort Distribution in Radar Search	1331
R.I. Trukhayev and V.V. Khomenyuk: The Submersion Method Applied to Optimal Effort Distribution Problems in Radar Search	1332
N.K. Kul'man: Noise Immunity of Optimal Receivers in Combinations of Pulsed and Continuous Modulation.	1333
B.V. Drozdov: Errors in a Method of Restoring Continuous Signals	1334
V.A. Gorokhov and N.N. Kachala: Compound Transistors in Pulse Circuits	1334
I.N. Petrov and O.V. Sorokin: Conductivity and Thermal EMF of an Oxide Cathode in Cesium Vapor	1335
O.V. Sorokin: Oxide Work Function and Rubidium Oxide Conductivity.	1335

EVENTS

A.P. Balashova: Meeting of Scientific Council on Electron Physics (Cold Cathodes)	1336
M.V. Gomoyunova and T.L. Matskevich: Scientific Session Devoted to the Memory of L.N. Dobretsov	1337

OBITUARIES

Aleksandr Alekseyevich Lebedev	1339
Boris Alekseyevich Vvedenskiy.	1340

Available from Scripta Publishing Corporation

EDITOR'S NOTE

With the exception of certain trigonometric and hyperbolic functions, Soviet mathematical symbols are the same as those encountered in the American literature. For the reader's convenience a list of such exceptions and their American equivalents is given below.

<u>Soviet Usage</u>	<u>American equivalent</u>
Arch	$\cosh^{-1}$
Arcth	$\coth^{-1}$ (ctnh ⁻¹)
Arsh	$\sinh^{-1}$
Arth	$\tanh^{-1}$
arccos	$\cos^{-1}$ (arc cos)
arctg	$\cot^{-1}$ (arc cot)
arcsin	$\sin^{-1}$ (arc sin)
arctg	$\tan^{-1}$ (arc tan)
ch	cosh
cosec	csc
ctg	cot (ctn)
cth	coth (ctnh)
rot	curl
sch	sech
sh	sinh
tg	tan
th	tanh

VESTNIK OF THE USSR ACADEMY OF SCIENCES

Vol. 29, No. 12, December 1969

Selected articles from the Russian-language periodical Vestnik Akademii Nauk SSSR published by the USSR Academy of Sciences.

CONTENTS	PAGE
The 1969 State Prizes (M. V. Keldysh).....	1
Awarding the Gold Medals imeni K. E. Tsiolkovskiy to Pilot-Cosmonauts.....	8
IN THE PRESIDIUM OF THE ACADEMY OF SCIENCES USSR	
Contemporary Tasks of the Social Sciences in the Light of Lenin's Ideas.....	10
The Intercosmos-1 Satellite and Its Scientific Program (L. A. Vedeshin, M. G. Kroshkin).....	20
The Mendeleyev Year of Chemistry.....	31
THE DEEP CAUSES OF GEOLOGICAL PROCESSES	
Physicochemical Processes in the Earth's Upper Mantle (V. A. Magnitskiy).....	37
The Connection of Geological Structures on the Surface With the Deep Structure of the Earth's Depths (I. A. Rezanov).....	44
Problems of Isostasy (M. Ye. Artem'yev).....	55 (Contd)

Available from JPRS 49953

CONTENTS (Continued)

Page

SCIENTIFIC SURVEYS AND REPORTS

Investigations of Natural Resources by Means of Artificial Earth Satellites (B. V. Vinogradov, K. Ya. Kondrat'yev).....	64
The Long-Wave Photoconductivity of Semiconductors (T. M. Lifshits).....	77
Steam Solutions (M. A. Styrikovich).....	87
Leading Problems in the Development of Motor-Vehicle Transport (D. P. Velikanov).....	99
Reinforced Plastics (G. D. Andreyevskaya).....	108

INTERNATIONAL SCIENTIFIC RELATIONS

Collaboration of the Academy of Sciences USSR with Scientific Centers of France and Italy (A. M. Chikalov, Ye. D. Tabakeyev).....	116
The Status and Tasks of Protozoology (Yu. I. Polyanskiy).....	119
The Study and Synthesis of Inorganic and Heteroorganic Polymers (K. A. Andrianov, B. V. Bocharov).....	125
Problems in the Corrosion of Metals (Ya. M. Kolotyrkin).....	130
Brief Reports.....	135
In Memory of Academician V. V. Vinogradov.....	151
In Memory of Academician V. A. Kargin.....	153

SESSIONS, CONFERENCES AND MEETINGS

Interaction of the Ocean and Atmosphere (S. S. Zilitinkevich, D. V. Kravchenko).....	155
---	-----

(Contd)

Available from JPRS 49953

VESTNIK AKADEMII NAUK SSSR
Vol 29, No 12, 1969

CONTENTS (Continued)	Page
Chronicle and Information.....	162
Criticism and Bibliography (B. Ya. Kuritskiy, S. V. Fomin).....	166
New Books.....	170
Index of Articles and Materials Published in the Journal <u>Vestnik</u> of the Academy of Sciences USSR in 1969.....	179
Alphabetical Index of Authors of Articles and Materials Published in the Journal in 1969.....	204
Available from JPRS 49953	

HERALD OF COMMUNICATIONS

Vol. 29, No. 12, 1969

- USSR -

Selected articles from the Russian-language periodical Vestnik Svyazi, published by the Ministry of Communications USSR and the Central Committee of the Communications Workers Union.

CONTENTS	PAGE
LATEST COMMUNICATIONS EQUIPMENT	
Television Receiver Kvant	1
Radio-Phonograph Combination Sirius-5	3
All-Purpose Measuring Rack	4
MATERIALS OF THE FIFTH PLENUM OF THE CC OF COMMUNICATIONS WORKERS UNION	
Success Lies in Persistent Labor	5
COMMUNICATIONS ENGINEERING	
Compensation-Type Device for the Elimination of Noise in Communications Circuits (V.F. Kalyuzhnyy)	9
Developed in Kiev (V.A. Samoylov)	19
Vibration Method of Locating Poor Contacts (A.V. Kholin)	20
Available from JPRS 49947	(Contd)

CONTENTS (Continued)	Page
Electronic Switchboard (N.S. Posysayev)	26
Filament Transformer for a Circuit with a Common Grid (V.I. Kreminskiy, V.N. Ryffa)	28
Seminar on Color Television	37
On the Provision for Emergency Power Supply for Communications Equipment (P.A. Sul'g)	39
'Sinus' Looks for the Wanted Party	44
COMMUNICATIONS ECONOMICS	
Evaluation of Periods for Putting the Planned Capacities Into Use (M.A. Gorelik)	45
Electronic Brain of a Ministry	56
ORGANIZATION AND OPERATION OF COMMUNICATIONS FACILITIES	
Telegrams Will Move Faster (S.I. Martsenitsen)	57
AT THE COLLEGIUM OF THE MINISTRY OF COMMUNICATIONS USSR	
On the Adoption of Multiprogram Wire Broadcasting	61
On Holding the Third Exhibition of Scientific and Technical Creativity of the Young People of Moscow and Moscow Oblast ...	63
VESTNIK SVYAZI	
A List of the Main Articles Published in the Journal Vestnik Svyazi During 1969	65
Abstracts of Articles Published in the Journal Vestnik Svyazi No 12, 1969	76
Appointments	78

Available from JPRS 49947

	Page	Russian Reference
Surface Tension of Dilute He ³ -He ⁴ Solutions	585	56 1089
K. N. Zinov'eva and S. T. Bolarev		
Modulation Effects in Optically Oriented Metastable He ⁴	591	56 1100
V. S. Korol' and A. N. Kozlov		
Turbulent Diffusion and Ion Heating in the Current-driven Instability	595	56 1108
N. S. Buchel'nikova and R. A. Salimov		
Fluctuations of Radiation Buildup in Gas Lasers	601	56 1120
E. V. Baklanov, S. G. Rautian, B. I. Troshin, and V. P. Chebotaev		
Mechanism of Pulsed Superradiance from 2p-1s Transitions in Neon	607	56 1132
A. A. Isaev and G. G. Petrash		
Slowing Down of 0.5-30 keV Protons in Some Materials	615	56 1146
E. P. Arkhipov and Yu. V. Gott		
Electron-ion Recombination in the Track of an Ionizing Particle and the Scintillation Mechanism of Noble Gases	619	56 1152
B. A. Dolgoshein, V. N. Lebedenko, A. M. Rogozhin, B. U. Rodionov and E. N. Shuvalova		
Lasers with Resonator Mirror Transmission Varying over the Cross Section . . .	624	56 1161
Yu. A. Kalinin, A. A. Mak, A. I. Stepanov, A. V. Folomeev, and V. A. Fromzel'		
Problem of the Existence of a Metallic State in Dynamically Compressed Carbon	628	56 1169
R. F. Trunin, G. V. Simakov, B. N. Moiseev, I. V. Popov, and M. A. Podurets		
Relative Compressibility of Copper, Cadmium, and Lead at High Pressures . . .	630	56 1172
R. F. Trunin, M. A. Podurets, B. N. Moiseev, G. V. Simakov, and L. V. Popov		
Stimulated Four-field Parametric Scattering	632	56 1175
A. P. Veduta and B. P. Kirsanov		
Stimulated Mandel'shtam-Brillouin Scattering and the Propagation of Hypersound in Viscous Liquids	638	56 1186
I. Sh. Zlatin, S. V. Krivokhizha, and I. L. Fabelinskiĭ		
Muonium Depolarization Processes in Germanium Single Crystals	643	56 1195
D. G. Andrianov, G. G. Myasishcheva, Yu. V. Obukhov, V. S. Roganov, V. G. Firsov, and V. I. Fistul'		
Investigation of μ^+ -Meson Depolarization in Scintillating Plastics in Differently Oriented Magnetic Fields	645	56 1199
G. G. Myasishcheva, Yu. V. Obukhov, V. S. Roganov, and V. G. Firsov		
Elementary Processes of Change of Charge States in the Interaction between Protons and Hydrogen Molecules	648	56 1204
V. V. Afrosimov, G. A. Leĭko, Yu. A. Mamaev, and M. N. Panov		
The Anomalous Intensity Distribution in Satellites in Neutron Diffraction Investigations of Block Helicoidal Structures	655	56 1217
O. P. Aleshko-Ozhevskiĭ and I. I. Yamzin		
Diamagnetic Resonance in a Magnetic Field Normal to the Surface of the Metal	658	56 1223
V. P. Naberezhnykh and N. K. Dans		
Measurement of the Electron Mean Free Path in Potassium by Means of the Radio Frequency Size Effect	663	56 1232
V. S. Tsol' and V. F. Gantmakher		(Contd)

Available from American Institute of Physics
Vol 29, No 4, Oct 1969

	Page	Reference
Quantum Scattering of an Electron Beam Due to the Two-Stream Instability in a Plasma	669	56 1252
V. B. Krasovitskii	674	56 1252
On the Spectral Theory of Radiation Transport Equations	679	56 1262
Yu. N. Barabamenkov	685	56 1273
Magnetic Scattering of Neutrons	685	56 1273
V. G. Baryshevskii and L. N. Korennaya	688	56 1278
Contribution to the Theory of Elementary Electron Transfer Reactions in Polar Liquids	688	56 1278
A. A. Ovchinnikov and M. Ya. Ovchinnikova	694	56 1290
Thermodynamic and High-frequency Properties of a Paramagnet with Negative Anisotropy Constant at Low Temperatures	694	56 1290
L. D. Filatova and V. M. Tsukernik	698	56 1297
Superconducting Alloys in a Strong Alternating Field	698	56 1297
L. P. Gor'kov and G. M. Eliashberg	704	56 1309
Influence of Nonlinear Effects on Current Instability in a Plasma	704	56 1309
A. S. Kingsep	710	56 1321
Quantum Oscillations of the Potential Difference in a Nonuniform Magnetic Field	710	56 1321
M. Ya. Azbel', N. B. Brandt, and R. G. Mints	712	56 1325
Equation of State of an Excited Gas	712	56 1325
V. N. Mal'nev	719	56 1338
Absorption of Sound in Liquid He ³	719	56 1338
B. S. Luk'yanchuk	722	56 1344
Sensitized Fluorescence in Pure Alkali Metal Vapors	722	56 1344
Yu. A. Vdovin, V. M. Galitskii, and N. A. Dobrodeev	727	56 1354
Excitation Spectrum of an Antiferromagnetic Heisenberg Chain	727	56 1354
A. A. Ovchinnikov	733	56 1366
Effects of P- and T-parity Violation in Resonance Scattering of γ Radiation	733	56 1366
V. A. Belyakov and V. P. Orlov	738	56 1375
Parametric Excitation of a Quantum Oscillator	738	56 1375
V. S. Popov and A. M. Perelomov	746	56 1391
Galvanomagnetic Phenomena in Metals in the Quantum Limit	746	56 1391
A. A. Abrikosov	754	56 1407
Coherence Effects in the Propagation of an Ultrashort Light Pulse in a Medium with Two-photon Resonance Absorption	754	56 1407
É. M. Belenov and I. A. Poluéktov	757	56 1412
Effect of a Frequency Filter on the Emission Spectrum of Semiconductor Lasers	757	56 1412
P. G. Eliseev, Yu. M. Popov, and N. N. Shulkin	761	56 1419
Theory of the Muonium Mechanism of μ^+ -Meson Depolarization in Media with Tensor Relaxation of the Muonium Electron Spin	761	56 1419
I. G. Ivanter	767	56 1432
Photomagnetic Effect in a Quantized Magnetic Field for Electrons Heated by Light	767	56 1432
R. I. Lyagushchenko and I. N. Yassievich	772	56 1441
Anisotropy of the Critical Current for Surface Superconductivity near the Field Strength H_{C3}	772	56 1441
A. I. Rusinov	776	56 1448
Some Features of the Hydrodynamic Mechanism of Electric Conductivity of Metals in a Magnetic Field	776	56 1448
S. I. Shevchenko		

Available from American Institute of Physics
Vol 29, No 4, Oct 1969

JOURNAL OF APPLIED CHEMISTRY of the USSR

A translation of *Zhurnal Prikladnoi Khimii*

Volume 42, Number 8

August, 1969

CONTENTS

	Engl./Russ.
The Periodic Law of D. I. Mendeleev - T. V. Volkova	1687 1681
Study of the Crystallization of Ammonium Sulfate - V. A. Odintsov, L. N. Matusevich, and V. A. Postnikov	1593 1687
Interaction of the Chlorides of Iron and Chromium with Certain Oxides and Spinel - G. F. Fefelova, I. S. Morozov, and T. S. Shibneva	1598 1693
Separation of Thorium and Uranium (VI) with the Aid of SDV-3 Resin - A. I. Zhukov, E. I. Kazantsev, and V. A. Zhitenev	1603 1699
Investigation of Iron-Chromium Catalysts on Alumina-Silica Support for Conversion of Carbon Monoxide in a Fluidized Bed - V. A. Chechko, V. N. Anokhin, L. A. Tarasov, V. M. Teslenko, and I. P. Mukhlenov	1608 1705
Decomposition of Nitrogen Oxides by Electric Discharge in a Fluidized Bed of Solid Particles - E. A. Bykov, V. N. Anokhin, A. N. Efremov, and I. P. Mukhlenov	1612 1710
Preparation of Mercury and Bismuth Selenides - G. S. Klebanov, N. A. Ostapkevich, N. V. Pakhomova, and A. V. Morozov	1617 1715
Analysis of the Kinetics of Leaching of Porous Aluminate Sinters - V. V. Borzenko, B. I. Arlyuk, M. N. Smirnov, and V. A. Mazel'	1621 1720
State of Titanium (IV) and Its Changes during Thermal Hydrolysis in Sulfuric Acid Solutions - Yu. D. Dolmatov	1627 1725
Thermodynamic Analysis of Chemical Reactions Occurring during Glass Formation in the System $Al(PO_3)_3$ -NaF - L. N. Urusovskaya and A. K. Yakhkind	1633 1732
Viscosity and Structure of Glassy Systems Based on Aluminum Metaphosphate - S. V. Nemilov	1640 1740
Interaction of Zirconium Oxychloride with Sulfuric Acid in Aqueous Solutions - S. M. Flaks and I. A. Sheka	1646 1747
Solubility of SO_2 in Water at Elevated Temperatures and Pressures - R. P. Rafal'skii and A. I. Zarubin	1652 1754
Structure Formation in Silica Having the Properties of a Filler or an Adsorbent - E. I. Dalmatskaya and S. L. Gol'dis	1656 1758
Liquid-Vapor Equilibria in Tellurium-Selenium and Tellurium-Sulfur Systems - L. V. Kozhitov and A. V. Vanyukov	1661 1764
Protection of Steel by Condensation Products of Amines and Aldehydes against Corrosion in Acid Media - N. G. Klyuchnikov and G. L. Nemchanina	1668 1772
Optimization of the Formaldehyde Yield Obtained by Oxidation of Natural Gas in a Fluidized Catalyst Bed - I. P. Mukhlenov, A. I. Vitvitskii, and A. Ya. Averbukh	1671 1775

(Contd)

Available from Consultants Bureau

(continued)

Engl./Russ.

Investigation of the Hypophosphite Utilization Factor in Alkaline Solutions for Chemical Nickel Plating - V. A. Zhikh and B. I. Esin	1674	1778
Validity of Vrevskii's First and Second Laws When Reactions Occur in the Vapor Phase - N. P. Markuzin	1681	1785
Calculation of the Power Consumption of Rotational Equipment - O. A. Kokushkin, A. A. Baram, and I. S. Pavlushenko	1688	1793
Influence of Roughness of a Wetted Wall on Heat Transfer to a Liquid Film - E. G. Vorontsov	1693	1799
Investigation of the Porous Structure of AG-3 Type Carbons - N. M. Malin	1696	1802
Investigation of the Kinetics of Emulsion Polymerization of Styrene with the Aid of a Digital Computer - S. N. Sautin, P. A. Kulle, and N. I. Smirnov	1703	1812
Distribution of Ethylene Oxide during Its Reactions with Alcohols and Water and Calculation of the Composition of the Products Formed - N. N. Lebedev, V. P. Savel'yanov, and Yu. I. Baranov	1707	1815
Viscosity of Concentrated Solutions of Polyvinyl Acetate in Different Solvents - V. L. Trizno, V. V. Konsetov, S. S. Mnatsakanov, M. E. Rozenberg, and A. F. Nikolaev	1716	1825
Synthesis of Methacrylates and Acrylates from α -Hydroxy Acids - O. V. Kuz'michev, B. F. Ustavshchikov, and M. I. Farberov	1721	1830
Influence of Temperature on Supersaturation of Acetylene Solutions in Acetone under Atmospheric Pressure - I. I. Kvasenkov and V. M. Shleynikov	1727	1837
Structural Characteristics and Prospects of Practical Utilization of Polyimides (Polyarimides) - M. M. Koton	1731	1841
Preparation and Properties of Sulfonated Lignin Carbons - V. M. Zverev, G. M. Belotserkovskii, and T. G. Plachenov	1740	1851
New Method for Preparing Copolymers of Allyl (or Methallyl) Alcohol and Salts of Acrylic (or Methacrylic) Acid - I. V. Andreeva, M. M. Koton, A. I. Turbina, and N. V. Kukarkina	1745	1857
Condensation of Methyl Ethyl Ketone with Methanol in the Vapor Phase - B. A. Bolotov and V. L. Klyuev	1750	1862
Hydrolysis of Methyl Acetate in Concentrated Solutions in Presence of a Sulfonated Cation Exchanger - M. I. Balashov, L. A. Serafimov, and S. V. L'vov	1754	1865
Polarographic Analysis of Acetone-Formaldehyde Resins - B. M. Bulygin, N. I. Apryatkina, and N. I. Borodkina	1759	1872
Purification of Formaldehyde Solutions (Formalin) by Ion Exchange Resins - A. E. Obratsov, M. P. Shashalevich, and N. P. Chikrizova	1764	1877
Formation and Dehydrochlorination of Chlorohydrin Ethers during Synthesis of Epoxy Resins - S. M. Rozentuler, A. G. Pozamantir, and A. F. Nikolaev	1768	1881
BRIEF COMMUNICATIONS		
Utilization of Wastes from the Soda Ash Industry - V. D. Glukhovskii, A. I. Postorenko, and Yu. A. Sukhovii	1774	1888
Removal of Iron and Titanium from Kaolins by Chlorination - V. G. Brin and N. I. Eremin	1776	1889
Study of Adhesion of N-P Fertilizer ("Nitrophos") to Various Materials - Yu. F. Zhdanov, E. V. Roganov, and B. N. Egorov	1779	1892
Structural Changes in Molten Sodium Tripolyphosphate, $\text{Na}_3\text{P}_3\text{O}_{10}$ - L. A. Ionova, V. V. Nechaeva, N. N. Postnikov, and A. I. Soklakov	1782	1894
Contours of the Phase Diagram of the Ternary System Consisting of Sodium, Zinc, and Lead Chlorides - I. V. Aleksanyants, N. M. Demido, A. S. Malyugin, and A. D. Podgorelyi	1785	1897
Study of Production of Self-Reinforced and Self-Bonding Materials (SRM) - A. N. Antonov and L. P. Mikhailova	1788	1899

(Contd.)

Available from Consultants Bureau

(continued)

Engl./Russ.

Influence of Low-Power Electric Discharge on the Particle-Size Composition of Suspensions - V. G. Kozhemyakin, O. S. Lavrov, O. V. Smirnov, and E. A. Terent'eva	1792 1903
Influence of Oxygen and of a Water Line on Corrosion Cracking of Brass in Ammonia Solution - V. A. Zaitsev, V. V. Skorcheletti, and L. N. Lozhkin	1794 1905
Possibility of Utilization of Acid Filtrates Obtained after Removal of Iron from Kaolins - V. V. Lapin and D. V. Tishchenko	1797 1908
Composition of Commercial Undecalactone - V. M. Dashunin, G. A. Samotuga, and N. V. Rodionova	1798 1909
Separation of Elements in Spent Liquor after Pickling Cr18Ni10Ti Steel - R. M. Slobodova, P. V. Dybina, and N. N. Balashova	1801 1911
Investigation of Liquid-Vapor Equilibria in Multicomponent Systems with the Aid of Vapor Pressure Measurements - T. A. Buevich and V. T. Zharov	1805 1915
Liquid-Vapor Equilibrium in the Benzene-Acetic Acid System - M. L. Molochnikov, T. S. Kudryavtseva, and V. B. Kogan	1807 1916
Some Characteristics of the Thermomechanical Properties of Glass Fabrics - V. P. Kurkin and M. N. Bessonov	1809 1918

The Russian press date (podpisano k pechatu) of this issue was 8/11/1969. Publication therefore did not occur prior to this date, but must be assumed to have taken place reasonably soon thereafter.

Available from Consultants Bureau

INDEX TO AUTHORS

This index does not include authors listed in the cover-to-cover tables of contents.

- A -

Abbasov, A.	6
Abd ar-Rahman, Ayit	16
Abdinov, O. B.	105
Abramson, G.	2
Achil'diyev, I.	2
Ackermann, W.	68
Adam, R. W.	115
Adamitsch, W.	51
Adamov, G. I.	48
Afrsymbovich, Ye. L.	112
Aimi, N.	59
Aingorn, M. A.	102
Akhlynov, I. Ya.	36
Akimov, I. A.	103
Akio Kumada	90
Akritov, N.	35
Akulichev, V. A.	105
Alekseyev, N.	26
Alekseyev, V. A.	104, 111
Alekseyeva, N. I.	36
Alekseyevskiy, Ye.	26
Alenius, Ele	13
Aleshin, Ye. R.	110
Aliyev, R. G.	63
Aliyev, S. M.	46
Alkhazov, G. D.	107
Allam, G.	86
Allary, R.	68
Amano, I.	55
Ambartsumyan, S. A.	108
Ambartsunyan, T. I.	76
Ambrashevich, V.	69
Ammon, R. V.	53
Anrein, W.	60
Anrhein, E. M.	85
Anashkin, Grigoriy Zakharovich	7
Ancker, F. H.	82
Ando, T.	90, 104
Andriyanov, D. N.	24
Andriyanov, D. P.	24
Andropov, V. G.	111
Androsov, V.	110
Anisimova, I. V.	73
Anoshkin, N. F.	71
Antonov, Yu. N.	61

Anukhina, A. M.	38
Apokorin, D. S.	93
Arabadzhi, V. I.	31
Armi, Y.	91
Arbuzov, B. A.	46
Aril, E.	70
Arkadiyev, D. A.	94
Arlie, J. P.	86
Armand, N. A.	104
Armentano, E.	44
Arnold, J.	80
Aronov, D. A.	109
Arsenyeva-Geyl, A. N.	112
Artemov, Ye. A.	117
Artobolevskiy, I.	4
Artsybashev, V. A.	61
Arutyunyan, R. P.	73
Aryshenskiy, Yu. M.	74
Asahara, T.	59
Asano, H.	91
Asano, K.	91
Ashimbayev, T.	1
Astacio, J. N.	45
Atlas, Z.	1
Audebert, M.	118
Audit, P.	113
Autrum, H.	43
Avakyan, M. S.	103
Avduevskiy, V. S.	109
Aziz El Sayed, I. A.	53
Azrilliyant, P. A.	93

- B -

Baba, R.	56
Babichev, F. S.	49
Babin, Ye. P.	48
Bachmann, Kurt	14
Backhausz, R.	43
Badaloni, Nicola	14
Baenziger, D. J.	99
Bagdanowicz, S.	9
Bagramyan, I. Kh.	6
Bakutkin, A. B.	46
Balas, J.	68
Balashev, L. L.	26
Balayev, N. I.	7
Balcerski, A.	100

Balciunas, A.	55
Baldermann, L.	43
Balta, P.	116
Baltra Cortes, Alberto	22
Balyan, A. M.	72
Bancila, Aurel	10
Barabov, V. V.	102
Barashenkov, V. S.	105
Barat, Eugen	10
Barchenkov, S. A.	6
Bardeau, H.	31
Bardenheuer, F.	87
Bardina, R.	2
Bareyikis, V. A.	110
Baroch, J.	79
Barragan, M. S.	100
Barsanova, N. G.	37
Barta, Z.	79
Bartlma, F.	115
Barton, K.	88
Bartosek, Karel	11
Bartosevich, R. D.	72
Baruk, H.	41
Baryshev, I. V.	67
Batache, Karim	15
Batalin, G. I.	109
Batalina, T. S.	32
Batalli-Cosmovici, C.	114
Batory, G.	43
Bauer, K.	52
Bauer, M.	86
Baumann, Herbert	17
Baumel, A.	51
Baxa, J.	84
Bayazov, D. I.	109
Baybakova, L. L.	76
Becker, G.	99
Becker, H.	87
Becker, Laurence W.	117
Belavskiy, V. A.	5
Belik, P. A.	6
Belkin, V.	3
Belkina, M. G.	93
Belous, V. M.	102
Beltrani, G.	44
Belyak, K.	95
Belyayev, A. I.	72
Belyy, V. A.	112
Benda, M.	78
Benes, F.	77
Benkei, Andras	11
Benvenuti, P.	89
Berdova, G. V.	76
Beregovoy, M. T.	5

Bermann, Istvan	9
Bernshteyn, M. S.	73
Bernshteyn, S. I.	46
Berthelin, M.	50
Berthold, P. H.	52
Bertinov, A. I.	109
Bertone, Franco	13
Bestuzhiv-Lada, I. V.	64
Bianu, I.	10
Bilida, Y. V.	76
Binikova, T. N.	61
Birman, B. A.	31
Bitschkowski, Horst	11
Bittner, G.	43
Blagonravov, A. A.	8
Blagoveshchenskiy, M. N.	104
Blatrix, Ch.	41
Blaunshteyn, I. M.	47
Blechet, J. J.	50
Blouquin, J.	81
Blume, H.	52
Blyakhman, L. S.	3, 32
Bobeyev, A.	34
Boblov, L. N.	96
Bobrovnik, I. I.	60
Boeck, W.	69
Boehmer, B.	80
Boetius, M.	53
Bogochenko, L. P.	27
Bogatko, S.	95
Bogatova, Z. K.	46
Bogdanik, G. N.	63
Bogdankevich, L. S.	106
Bogdanov, M. A.	64
Bogdanova, N. B.	113
Bognar, Jozsef	9
Bogomolov, G. V.	63
Bogomolova, F. I.	25
Bokshsteyn, S. Z.	71
Bondarenko, V.	5
Bondaryuk, A.	27
Bonner, F.	83
Bonnet, A. G.	97
Borisenko, V. M.	109
Borisov, P. M.	29
Bornschein, H.	43
Borovikov, A. M.	31
Borovkova, S. A.	102
Borowik, S.	26
Borrajo Guadarrama, E.	45
Borrat, Hector	22
Borushko, V. S.	66
Borzdyka, A. M.	75
Botnikov, M. Ya.	47

Bouyet, P.	41
Bourse, P.	41
Bouvier, P.	81
Bozhkov, B.	33
Bozo, Miti	28
Braginskiy, G. I.	101
Brandis, H.	52, 84
Braun, D.	53
Braun, M. P.	94
Brecht, W.	86
Breitenstein, W.	13
Brekhin, N. I.	95
Bremer, H. G.	28
Brenner, M.	52
Bresler, S. Ye.	37
Breydo, I. I.	100
Breyer, Siegfried	12
Breyer, Von Siegfried	12
Brik, I. L.	33
Brinkschulte, H.	115
Brochenin, P.	80
Brodskiy, A.	96
Brown, E. D.	89
Bruno, M.	44
Brylev, G. B.	104
Bubnovskaya, V. N.	49
Buck, L.	80
Budker, G. I.	105
Budnikov, P. P.	76
Bunzhe, V. G.	48
Bunzl, K.	54
Burdak, V. D.	39
Burghardt, O.	87
Burgov, V. A.	67
Burianek, J.	50
Buryak, Borys	7
Bus, W. C.	53
Butterling, B.	87
Buyakova, P. S.	29
Buyanova, Ye. I.	63
Buylov, S.	27
Buzanov, J. F.	27
Buzek, Z.	77, 78
Byalobzheskiy, A. V.	48
Bykhovskiy, M. L.	34
Bykov, N. Ye.	38

- C -

Cabieses Donoso, Manuel	22
Cabral, Amilcar	17
Cabral, Luis	16
Cadoret, R.	53
Calderon, Enrique	41

Canow, H. J.	51
Cechura, F.	76, 77
Cervený, L.	89
Chabou, Driss	16
Chaley, A. V.	106
Chalikova, Ye. K.	63
Chang, P. H.	40
Chankvetadze, G. G.	106
Chaplinskaya, S. M.	44
Chaplygin, N.	27
Chaplygina, A. S.	30
Chapot, A.	118
Charlon, N.	41
Chassaing, J. P.	65
Chayika, I. K.	34
Chazov, Ye. I.	35
Che Viet Tan	19
Chekanov, A.	4
Cherepok, G. V.	49
Cherkasov, Yu. A.	102
Chernikov, V. A.	100
Chernyan, V. I.	68
Chernyy, M. G.	24, 25
Chezlepretre, B.	113
Chibisov, K. V.	103
Chikin, K. G.	25
Chmelar, I.	78
Ch'oe P'il-won	19
Christu, N.	83
Chu Ho	19
Chuchmarev, S. K.	72
Churayeva, A. M.	102
Chursin, V. N.	47
Chyarnauskas, V. Yu.	32
Clausen, J. E.	40
Cohen, J. P.	113
Cohn, P.	105
Colita, Decebal	13
Colling, G.	98
Colomer Sala, J.	45
Comes, F. J.	115
Constantinescu, M.	60
Contzen, H.	43
Coupry, G.	25
Coxworth, E. C. M.	28
Cramer, F.	51
Crussard, C.	81
Cumo, M.	115
Czernotzky, A.	54

- D -

Daehne, S.	53
Dahl, W.	87, 88
Danilkin, I. I.	106

as, G. N.	88
Paulnis, V. I.	92
Paulzenberg, V.	85
Davankov, A. B.	49, 75
Davilova, L. V.	37
Davis, E. J.	84
Davydov, V. G.	72
Dayimov, N. I.	72
Dedek, V.	77
Dekhtyar', M. I.	93
de Laffolie, H.	52
Delavignette, P.	53
Demichev, P.	3
Demin, G. I.	47
Dennis, W. F.	81
Derbenev, Ya. S.	105
Derkach, G. M.	25
Despres, P.	68
Dickel, G.	54
Dieter, O.	43
Dikanskiy, N. S.	105
Dimitrov, Atanas	8
ad-Din, Khalid Muhyi	17
Diomidov, B. B.	73
Dmitriyeva, N. G.	39
Dobrovinskiy, B.	3
Dochkin, V.	27
Doerffel, K.	86
Dokuchayev, M. M.	49
Dolinskaya, R. A.	108
Dolique, J. M.	113
Doltornyazov, I. K.	33, 46
Dombkovskaya, Ye. P.	29
Donatova, V. P.	101
Doronin, Yu. P.	63
Dorri, M. Kh.	105
Dovgyallo, Ye. N.	30
Draganik, B.	44
Drits, M. Ye.	70
Drobysheva, S. S.	37
Dronov, Z. P.	111
Drozdov, Yu. N.	71
Druin, V. A.	105
Drumm, H.	43
Dryon, L.	41
Dubinskiy, M. G.	109
Dubost, G.	113
Duc Son	19
Duchatel, R.	50
Dudchenko, A. A.	109
Dudnik, D. M.	75
Duffaut, P.	97
Duhring, O. M.	88

Dunayev, F. N.	112
Dunayevskaya, Ts. S.	75
Duncker, B.	93
Dupuis, M.	105
Dushin, L. A.	107
Dutz, H.	85
Dvorkin, I.	1
D'yachkova, I. B.	46
Dyatkin, V. L.	45
D'yeur, M.	4
Dzerdzeyevskiy, B. L.	30

- E -

Eichenauer, W.	115
Eichler, J.	114
Eisenack, A.	65
Elias, H. G.	53
Emilio Castellanos,	
Jose	22
Engel, W.	87
Engelbrecht, H. M.	42
Engelhardt, K.	89
Etz, H. U.	86
Exner, H. E.	86

- F -

Fal'kovich, M. I.	47
Fallou, B.	81
Fanelli, M.	100
Farkhadov, A. A.	72
el Fassi, Allal	16
Faustova, V. F.	63
Fediy, S. P.	39
Fedorchenko, I. M.	73
Fedorov, V. I.	107
Fedosov, K.	6
Fedotov, S. G.	72
Fel'dman, Ye. L.	117
Fendler, H. G.	114
Fengel, D.	43
Ferrari, E.	117
Fershee, S. J.	82
Fette, P.	105
Fialkovs'ka, O. V.	49
Fiedler, H.	102
Figichev, A. I.	62
Filatov, A. N.	34
Filatova, T. A.	27
Filippova, A. A.	70
Finkler, H.	82
Filatova, Z. A.	37

Flaughaut, Jean	113
Fleck, B.	69
Flemming, G.	31
Flerov, G. N.	105
Fligge, M.	51
Frankhauser, H.	69
Franklin, Mario-Lucio	21
Frantov, G. S.	102
Franz, M.	50
Frehn, F.	84
Freidin, M. M.	47
Freile, A. J.	32
Freile, Alfonso J.	23
Freytag, R.	81
Fridkin, V. M.	101
Friederici, L.	51
Friedrich, K.	52
Froelich, J. C.	17
Fruchart, R.	114
Fuchsmann, Philippe	13
Fuerstenberg, H.	42
Fujimoto, T.	59
Fujiwara, K.	58
Fukui, K.	59
Furst, H.	51
Furukawa, Y.	91
Furuse, H.	59

- G -

Gabasov, R.	66
Gabriel, J.	85
Gadzhiev, Sh. S.	71
Gaechter, A.	99
Gamaskin, Ye. I.	49
Gambino, Antonio	14
Ganaj, Shpresa	28
Gans, Wigbert	115
Gansheimer, J.	54
Gardon, J. L.	81
Garetskiy, R. G.	64
Garmendia, J.	32
Gasbatenko, V. Ye.	76
Gauze, G. G.	33
Gavrilova, A. A.	48
Gehrke, K.	52
Gerasimov, I. P.	62
Gerischer, H.	53, 54
Gerritzen, F.	42
Gerstenberg, B.	88
Gertsenzon, A.	7

Ghigliarza, E.	60
Gilev, Yu. M.	35
Gilvarg, A. E.	69
Gindilis, L. M.	29
Ginodman, G. M.	48
Girard, M. B.	50
Gitina, R. M.	49
Gladishevs'kiy, Ye. I.	76
Glazovskiya, M. A.	62
Glazunov, S. G.	71
Glichev, A. V.	24
Glikin, D. S.	48
Glukhovtsev, A.	3
Gluvacov, A.	10
Goberman, V. A.	26
Goelden, H. D.	84
Goette, E.	84
Goldayev, I. P.	117
Goldenberg, V. I.	47
Gol'din, S. V.	60, 61
Golebiowski, F.	9
Golosovskiy, S. I.	118
Golovachik, V. T.	105
Golovkin, A. V.	109
Golubeva, Ye. L.	40
Gombos, F.	44
Gomolyako, S. Ye.	37
Gondek, Zenon	9
Gondouin, M.	51
Gonikberg, M. G.	47
Gonzalez Lopez, J. L.	21
Goral, H.	116
Gorbatenko, V. Ye.	76
Gorbonitskiy, G. B.	61
Gordiyenko, V. I.	67
Gordiyets, B. F.	108
Gordon, Z. V.	37
Gorincu, Gheorghe	10
Gorlov, V. B.	96
Gorobtsov, V. M.	68
Gorokhovskiy, Yu. N.	101
Gorshenin, K. P.	62
Gorshkov, S.	14
Goryachkin, V. I.	73
Goryunov, N. S.	2
Goryushin, V. A.	44
Goto, S.	90
Gottlicher, S.	54
Goxho, Naum	12
Grabowski, J.	93
Grachev, A.	6
Graff, P.	86

Reger, M.	40
Regere, M.	10
Regorio, F.	115
Grenier, G.	81
Grenier, P.	80
Grenishin, S. G.	102
Gribakin, G. G.	101
Gribov, V. N.	105
Grigor'yeva, N. M.	27
Grlie, L.	44
Grodzyanskaya, T. M.	62
Gromov, D. F.	2
Gromov, V.	72
Grossgarten, H. D.	105
Groth, O.	45
Grumbrecht, K.	65
Grum-Grzhimaylo, I. V.	71
Gudkov, A. N.	31
Gudopp, Wolf-Dieter	14
Guenther, F. A.	99
Guittard, Micheline	113
Guliyayeva, A. M.	64
Gundel, H.	114
Gurevich, S. B.	101
Gurov, A. F.	95
Gurylev, G. G.	71
Gusakov, M. A.	32
Gusev, A. G.	39
Guske, Hubertus	12
Gutierrez, Carlos Maria	22
Guzej, J.	78
Gygax, H. R.	69

- H -

Haase, B.	84
Hagiwara, T.	91
Hahmann, O.	51
Hahn, F. L.	53
Hahnemann, H. W.	117
Haler, G.	81
Hamel, P.	114
Hancle, J.	77
Hanszen, K. J.	69
Hara, S.	70
Harada, M.	56
Harmel, Claude	13
Hartmann, Albrecht	25
Hartmann, F.	43

Hausknecht, D. G.	60
Hautefeuille, M. F.	68
Havlicek, F.	77
Hayashi, I.	57
Hayashi, K.	90
Hecer-Over, F.	89
Heckel, W.	52
Heckner, F.	42
Hegner, P.	50
Heil, B.	54
Heitz, G.	81
Helge, H.	42
Hellwege, K. H.	115
Henneke, H.	82
Hensen, Karl	53
Herbst, W.	84
Hermansson, C. H.	14
Herms, W.	102
Hernandez Parker, Luis	21
Herold, H.	13
Herold, W.	83
Hibi, S.	58
Hiemstra, P.	53
Himmler, F.	99
Hinrichs, E.	89
Hirai, H.	58
Hirata, M.	58
Hiroji Mochizuki	115
Hirschfelder, H. D.	84
Hlineny, J.	77, 78
Hohmann, E.	9
Hollitscher, Walter	14
Hollriegl, H.	49
Holzgruber, W.	85
Holzmann, M.	79
Homsho, S.	65
Hons, J.	77
Hori, Y.	55
Horn, E.	84, 114
Hrbek, A.	79
Hrubec, J.	79
Hsiang Chuan-shu	20
Hsu Hua-Ying	31
Hua Pao-ting	49
Hubert, P.	105
Hummitzsch, W.	82
Hutla, A.	78
Huwaydi, Fihmi	96
Hyon Myong-jun	19

- I -

Ichickowa, W.	100
Ichikawa, R.	5
Ichikawa, Y.	59, 92
Ide, F.	92
Igumenshchev, Ye. D.	71
Iijima, K.	58
Ikeda, T.	92
Ikuma, S.	31
Ilarionov, S.	27
Iliev, Dragan	8
Imamura, J.	56
Imbaud, R.	81
Imoto, M.	56
Imoto, T.	57
Inai, R.	92
Ingultsov, V. L.	109
Inokuchi, T.	91
Inokuma, T.	91
Inoue, M.	92
Inoue, Y.	59
Ionita, Gh. I.	12
Ionita, Ion	12
Iseli, W.	88
Ishibashi, T.	55
Ishii, T.	116
Ishikawa, F.	116
Ishlinskiy, A. Yu.	8
Istomin, G. A.	101
Iticovici, I.	10
Ito, I.	92
Ito, Y.	55
Itoh, K.	57
Ivanov, A.	26
Ivanov, G. I.	61
Ivanov, V.	7
Ivanov, Yu.	117
Ivanov-Muromskiy, K.	36
Ivanov-Muromskiy, K. O.	40
Ivanovskiy, V. M.	110
Ivanyuta, L. I.	33
Ivchenko, V. M.	116
Ivchenko, V. V.	95
Ivlev, A. M.	62
Iwami, I.	57
Iwamoto, Y.	91
Izmaylov, S. V.	103

- J -

Jacobi, W.	114
Jacovlev, Georges	113
Jaenichen, E.	84

Jankovic, M.	44
Jann, H.	99
Janousek, I.	76
Jaros, S.	50
Jarosch, Kl.	43
Jeanet, M. B.	50
Jech, J.	77
Jedlicka, J.	76
Jicha, A.	79
Jidai, E.	104
Jon, R.	80
Jones, V. V.	103
Jorgensen, Claus Ingemann	13
Juhasz, A.	89
Juracka, F.	49

- K -

Kachanovskaya, I. S.	75
Kadaner, Ye. S.	70
Kagan, R. L.	94
Kagan, Yu. M.	53
Kaganovich, I. N.	71
Kaiser, D.	42
Kaiser, H.	99
Kakiuchi, H.	59
Kal'manson, Ye. V.	102
Kaluzhskiy, I. I.	74
Kalweig, Werner	11
Kamewada, M.	55
Kamnev, P. V.	73
Kamov, N. I.	94
Kan, S. N.	109
Kanayama, Y.	38
Kanellakopulos, B.	53
Kapustinskiy, A. F.	112
Karakozov, Ye. S.	72
Karaulov, A. G.	73
Karimov, Yu. S.	45
Karlyuk, I.	28
Karnasut, Prida	45
Karnaukhov, L.	7
Karpevich, A. F.	38
Karpov, L.	1
Kartuzhanskiy, A. L.	101
Karwat, E.	54
Kasatkin, V. I.	113
Kashtanov, A. I.	105
Kaspar, Jaroslav	8
Kasparova, O. V.	71
Kastrikin, L. I.	32
Kas'yan, M.	95
Katayama, Y.	117
Kato, E.	56

Kato, J.	55
Kato, S.	59
Kawabata, S.	104
Kawamura, H.	55
Kawana, Y.	116
Kayinova, G. Ye.	70
Kazaryan, L. G.	75
Kazu, I.	103
Kazuo, N.	103
Kecki, Z.	59
Kedrinskiy, V. K.	108
Kehrer, H. P.	88
Keitsiro Aizu	90
Kempf, R.	87
Kepka, M.	79
Kerkhof, F.	85
Kersch, P.	79
Kett, M.	80
Khalikov, R. Kh.	74
Khalilov, Kh. M.	108
Khamalakh, R. F.	71
Kharitnikov, V. V.	108
Khasin, L. S.	93
Khatamkulov, G. Kh.	94
Khaujah, Ahmad	15
Khaykin, M. S.	103
Kheynman, A. S.	101
Khizhnyakov, V.	27
Khlestkov, Yu. A.	110
Khoja, Ahmad	28
Khutorezky, G. M.	117
Khvatkov, G.	4
Kiizu, Y.	92
Kikukawa, K.	55
Kilinskiy, I. M.	102
Kimura, T.	89
Kind, T. W.	35
Kink, A.	117
Kipurov, B. F.	67
Kirillov, I. I.	108
Kirillova, F. M.	66
Kirmann, A.	50
Kiselev-Gusev, V. V.	67
Kitahara, T.	92
Kiyatkin, A.	95
Klabukova, Z. I.	76
Klamann, D.	51
Klanner, T. Ye.	102
Klauson, V. I.	4
Kleeschulte, H.	87
Kleinert, H.	99
Klestov, Yu. I.	61
Kletecha, Z.	78
Klimov, K. I.	74
Kliuchareva, O. A.	38

Klyuev, M. M.	70
Knacke, O.	115
Kobayashi, H.	92
Kobayashi Takashi	18
Koch, H.	84
Koch, K.	84
Kochendorfer, A.	87
Kodakovskiy, I. L.	46
Kodama, H.	91
Koenig, H.	89
Kofler, L.	52
Kogan, Sh. M.	112
Kogan, V. M.	104
Kohler, E.	88
Kohn, A.	81
Kolbanovskaya, A. S.	73
Kolesnikova, V. N.	30
Kolesov, Boris	118
Kolmogorov, A. N.	93
Kolobov, G. G.	96
Kolosov, I. I.	36
Kolosov, M. A.	104
Komarov, N.	6
Komarov, V. L.	34
Komori, S.	55
Konchakovskaya, L. D.	73
Kondalyev, A. I.	68
Konovalov, Hennadiy	7
Konovalov, Ye. I.	36
Konstantinov, F.	4
Koo Chen-Chao	31
Kopacsi, Erno	28
Korcek, S.	84
Kornilov, I. I.	72
Korobeynikov, A.	95
Korobov, M. A.	75
Koroteyev, A. S.	108
Korshak, V. V.	49
Kortnev, A. V.	107
Kortov, V. S.	109
Korzhuiev, P. A.	37
Kos, V. M.	110
Koshlyak, V. A.	61
Kosmider, H.	87
Kostarev, V. V.	31
Kostromin, A. S.	47
Kotelkin, A. S.	72
Kotin, N. J.	63
Kotov, A. P.	105
Kotov, G. N.	46
Kotov, Ya. P.	109
Kovalev, D.	7
Kovalevskiy, V. V.	117
Kovrizhnykh, L. M.	106
Kozelsky, P.	78

Kozhemyako, V.	4
Kozhevnikova, B. N.	61
Kozhinov, V. F.	49
Kozlov, G. B.	73
Kozlov, N. N.	27
Kozlov, Yu. N.	29
Kozlovskiy, D. A.	38
Koz'min, N.	5
Kozyelska, A.	92
Kraemer, V.	65
Krahe, J.	82
Kramer, H.	84
Krasil'nikov, N. A.	34
Krasnobayev, N.	2
Krasnova, I. A.	71
Krasnyi-Admoni, L. V.	102
Krassig, H.	88
Krasyuk, N. P.	31
Krause, H. W.	88
Kravchenko, A. T.	36
Kravchenko, S. A.	69
Kravtsov, N. V.	110
Kravtsov, S. S.	93
Krayzmer, L. P.	32
Kriss, A. Ye.	35
Krivoglaz, M. A.	112
Kroeger, Herbert	11
Krogmann, U.	104
Kromina, L. V.	46
Krose, G.	85
Krotova, N. A.	47
Krouzek, J.	50
Krumbiegel, D.	28
Krylov, G. N.	67
Kryuchkov, L. A.	74
Ku Liang	20
Kuchayeva, A. G.	40
Kudelka, I.	76
Kudinova, V. S.	47
Kudrina, Ye. S.	33
Kudriyashov, A. F.	38
Kuenssberg, U.	53
Kuessner, H. G.	25
Kufa, F.	78
Kukin, D.	4
Kuksin, I. B.	24
Kulagin, I. D.	109
Kulikov, O. F.	108
Kuliyev, A. M.	46
Kulsgin, G.	2
Kulukhin, V.	6
Kunev, Strakhil	28
Kung Hsiao-Wen	18
Kunin, R.	54
Kunitake, T.	91

Kunugi, T.	116
Kuo Hsi-jen	96
Kursetz, E.	83
Kusina, S. I.	75
Kuska, V. I.	62
Kuskevich, I.	2
Kustov, V. V.	36
Kutin, V. A.	72
Kuziemski, Henryk	44
Kuzin, L. Ye.	47
Kuzmenko, P. P.	112
Kuznetsov, A. P.	37
Kuznetsov, B. A.	105
Kuznetsov, P. S.	96
Kuznetsov, V. D.	33

- L -

Labecki, W.	10
Labye, Y.	97
Lach, T.	92
Lacomble, M.	83
Lago, B.	65
Landau, Benyamin	18
Lang, J.	77
Lang, Nicolas	16
Langer, K.	50
Lapayeva, I. A.	39
Lapicciarella, Renzo	14
Lapin, B. A.	39
Lashkov, A.	27
Latzo, Anton	11
Laubier, L.	65
Laumann, H. J.	85
Launay, L.	41
Lautenschlager, W.	89
Lavaud, Michel	50
Lavrent'yev, G. Ya.	103
Lavrent'yev, M. I.	72
Lazar, Costinel	10
Le Clerc, P.	81
Ledac, A.	81
Ledenev, V. G.	61
Legendre, Robert	94
Lehnert, G.	99
Leistner, M.	52
Lekhnitskiy, S. G.	95
Lengyel, Bela	118
Len'kova, L. N.	73
Lennartz, G.	52
Lenova, G. A.	31
Lepneva, S. G.	35
Lerman, V. S.	67
Leroy, G.	68
Lerz, H.	65

Leshcheva, T. S.	38
Lesina, L. A.	24
Levanidov, V. Ya.	40
Levanidova, I. M.	40
Levi, S. M.	101
Levikov, A.	118
Levin, I.	2
Levkoyev, I. I.	101
Librescu, L.	116
Liebmann, H. K.	42
Lifshits, Ye. B.	101
Linnik, W.	115
Lishko, V. K.	46
Lisitsyn, V.	1
Listov, V. A.	74
Litvinenko, V. Yu.	101
Litvinov, M. A.	35
Liyelausis, O. A.	94
Lobastov, Yu. S.	106
Loeffler, L.	85
Loehr, A.	99
Loganovskiy, N. G.	34
Lomachenkova, T. A.	101
Lomidze, G.	5
Lopatskiy, S. G.	111
Lopker, E. B.	51
Lopukhova, N.	5
Loskutov, K. N.	109
Lowell, J. A.	81
Loytsyanskiy, L. G.	114
Lucas, P.	68
Luethl, H.	69
Lukes, Z.	68
Lukonina, H. K.	38
Lukyanchikov, G. S.	106
Lutay, N.	95
Lyamin, V. A.	34
Lyashchenko, N.	5
Lyashenko, A. F.	74
Lysenko, Ye. S.	32
Lyubashevskiy, G. S.	66
Lyubchenko, I. S.	24
Lyubimov, A. A.	63
Lyubimov, G. A.	63

Maass, E.	69	Maslennikov, V. P.	48
Machu, W.	86	Maslyanskiy, G. N.	47
Madziar, J.	100	Masson, A.	82
Maeda, M.	58	Mastagunin, I. V.	34
Maekawa, T.	90	Masthoff, G.	69
Maekawa, Y.	116	Matijevic, G.	43
Mageramov, Ch. M.	39	Matsuba, T.	90
Makarenkov, P.	27	Matsuko, K.	89
Makarova, T. V.	107	Matsumoto, H.	58
Makarovskaya, L. N.	33	Matsumoto, M.	91
Maksimovich, A. Ye.	37	Matsuoka, T.	91
Maksudyan, A. S.	100	Matsuura, R.	59
Makulski, W.	26	Matthai, H.	88
Makurin, N. V.	30	Matvyenko, V. I.	101
Malanchuk, Valentin	4	Mayorov, F. V.	66
Malat, M.	49	Mazanek, E.	87
Malevskiy-Malevich,		Mazing, G. Yu.	104
S. P.	62	Mazo, G. S.	101
Malinovska, E.	80	Medinaradze, D. A.	30
Malyshev, A.	3	Meary, R.	118
Malyshev, A. I.	110	Mechalska, K.	59
Mamayev, B. M.	32	Medvedev, K. I.	109
Mamicheva, L. M.	25	Meister, R.	85
Mamillan, M.	96	Melik-Pashayev, N. I.	24
Mammarella, E.	44	Melikyan, Ye. G.	103
Manchkha, P.	17	Mel'kanovich, A. F.	102
Manescu, R.	10	Mel'kumov, T. M.	24
Manina, J.	54	Mel'nikov, N. N.	48
Man'ko, Ye.	95	Mel'nikova, N. I.	75
Mar, N.	4	Mercalova, O. B.	30
Marazio, A.	99	Merkle, K.	84
Marchenko, G. A.	110	Merl, W.	105
Marco, A.	44	Merlini, C.	115
Marfels, H.	85	Merson, F. L.	32
Margaritov, N. M.	40	Meyer, L.	88
Marie, R.	41	Michel, J.	79
Marinescu, M.	70	Michelis, T.	89
Markin, A. A.	32	Mikayelyan, I. I.	72
Marko, L.	54	Mikhalev, P. V.	40
Markov, M. S.	64	Mikhalevskiy, V. I.	102
Markov, V. A.	74	Mikhayelyan, B. N.	107
Markovits, Mihaly	11	Mikhaylov, Yu. A.	108
Marks, A.	118	Mikheyev, V. P.	49
Markwitz, W.	69	Mikhnevich, V. V.	29
Marmorshtein, L. M.	62	Mikolayevskiy, Ye. Yu.	63
Maroszczyk, V.	77	Mikulenok, V. Ye.	67
al-Marqrani, Abdel		Milman, B.	68
Majeed	28	Mil'shteyn, V. V.	36
Martinek, A.	52	Minayev, Ye. S.	24
Martinez, A. P.	45	Minayev, V. V.	102
Martinez, Jose Jorge	22	Minko, I. S.	3
Mar'yanov, B.	4	Minoura, Y.	57, 58
Mashio, E.	59	Mints, R. I.	109
		Mirianashvili, M. L.	35
		Mishin, I. A.	94

Missol, W.	93
Mitran, Ion	11
Mitropol's'kiy, Yu. O.	118
Mitskevich, V. F.	27
Mitsuno, M.	59
Mix, G.	87
Miyajima, H.	116
Miyamichi, K.	91
Miyashita, Kyoichi	90
Miyazaki, K.	57
Mkryan, T. G.	45
Mocanu, C.	29
Mocikova, P.	49
Moecks, L.	68
Mohr, H.	43
Moiseyev, N. N.	111
Moiseyev, P. A.	33
Moiseyev, S. V.	25
Molchanov, I. M.	94
Moldavskiy,	70
Molitor, W.	52
Moller, H. G.	69
Molyshev, V. I.	66
Momarov, V. L.	34
Monakhov, F. I.	61
Monastyrev, V. K.	60
Monin, A.	29
Monin, A. S.	29,30
Monnier, J.	41
Montgremier, Augier	69
Montil'o, I. A.	74
Moravek, O.	79
Morawietz, W.	83
Morgenroth, P.	65
Mori, A.	92
Moriaze, M.	55
Morikawa, T.	55
Morimoto, S.	91
Morozova, L. P.	47
Mosch, W.	69
Moshkevich, E. I.	70
Moskalev, Yu. I.	111
Moskvin, A. V.	76
Motornenko, A. P.	117
Mueller, W.	87
Mukai, S.	65,66
Mukhin, Yu. V.	63
Muller, F.	82
Mulser, P.	114
Munin, A. G.	25
Muradyan, A. G.	111
Murashko, V. M.	108
Muratova, B. V.	108
Muremtsev, A. M.	62
Muzychenko, V. P.	74
Mykytenko, Oleh	7

- N -

Nadel', S.	3
Nafikov, Ye. M.	108
Nagai, S.	58
Nagamoto, R.	100
Nagao, H.	92
Nagata, T.	92
Nakae, H.	90
Nakajima, S.	58
Nakamura, E.	57
Nakamura, Y.	53,100
Nakata, T.	89
Nakatsuka, K.	92
Nakhodkin, N. G.	103
Nambu, H.	59
Naokawa, J.	58
Nastagumin, I. V.	34
Natsibullin, F. Ya.	47
Nazarov, M.	5
Nedev, D.	8
Nefedov, O. V.	49
Negodayev, N. N.	102
Negruckij, S. F.	33
Neimo, L.	80
Nemecek, J.	40
Neprochnov, Yu. P.	60
Nerpin, S. V.	60
Neruchev, S. G.	61
Nesmelov, S. V.	46
Nesterenko, D. A.	47
Nesterov, P. P.	110
Netkachev, G.	26
Neumann, W.	114
Nevski, D. U.	117
Neymark, Ju. I.	93
Nguyen Luong Bang	20
Nickel, H.	65
Niculescu-Mizil, Eugeniu	10
Nieschulz, O.	42
Nikitin, A. A.	63
Nikles, O. L.	93
Nikolajewski, H. E.	53
Nikolayev, A. V.	109
Nikolayev, P. V.	66
Nikolayeva, T. L.	32
Nilles, P.	85
Ninchenko, F.	94
Nishikawa, Y.	55
Nishimura, Y.	116
Niu, Ping-liang	49
Nobuoka, S.	90
Nogina, N. A.	63
Nonin, M. I.	75
Nordman, L.	93

Nezhdin, N. I.	51
Nezhdin, N. I.	59
Nezhdin, N. I.	71, 72
Nezhdin, N. I.	113
Nukishuna, Y.	103
Nunez Jimenez, Antonio	23
Nuzhdin, N. I.	40
Nyers, Rezso	9

- O -

Obdrzalek, O.	77
Obuka, T.	92
Oda, R.	56
Ofuna, T.	92
Oganesyan, K. T.	45
Ogawa, M.	55
Oggero, J.	89
Oginskaya, Ye. I.	71
Ohki, K.	57
Ohle, Waldemar	42
Ohshika, T.	56
Ohtani, M.	91
Ohtsu, T.	56, 89
Okada, J.	90
Okamura, S.	55, 59
Okamura, T.	100
Okanenko, A. S.	37
Okawara, M.	58
Okazaki, M.	92
Okoniewski, Z.	44
Oktyabr'skiy, P. Ya.	3
Olefir, A. K.	67
Oleinek, H.	50
Ono, T.	92
Onouchi, T.	56
Oprea, F.	116
Orban, F.	89
Orel, V. M.	32
Orlov, L. K.	61
Orszag, A.	29
Osipov, S. N.	64
Oszwalfoedki, M.	93
Otto, G.	86
Oudin, J. M.	68
Ovechkina, T. G.	101
Ovsyankin, Yu. N.	95
Owsinski, A.	10
Oya, K.	90
Ozaki, Z.	57
Ozmidov, R. V.	62
Ozols, P. Ya.	108

- P -

Paal, C.	51
Pactem, J.	80
Pak, Yu. Ye.	1
Paleyev, N. R.	36
Pan, V. M.	74
Panferova, N. Ye.	34
Panfilovich, V. B.	117
Panteleyev, V. V.	113
Pantelic, 'Milojica	12
Papanikolau, E.	85
Papov, V. A.	67
Paramonov, A. A.	35
Pardoe, G. I.	42
Parin, N. V.	37
Parksheyan, Kh.	3
Pataky, B.	115
Paton, B.	7
Patrikeyev, G. T.	39
Patrunov, F. G.	72
Paulis, H.	113
Paulmann, F.	98
Pautrat, R.	81
Pavel, Stefan	95
Pavlenkin, A. D.	63
Pavlov, V. G.	71
Pavon, Luis	23
Pawelski, O.	83, 88
Pawlowski, J.	114
Payan, Roger	50
Pchel'nikov, N. I.	24
Pecchioli, Ugo	14
Pechenik, L. N.	36
Ped', D. A.	30
Pense, W.	86
Perel, V. I.	53
Perelshteyn, Ye. A.	110
Perlin, I. L.	70
Perucki, T.	9
Peter, W.	82
Petrenchuk, O. P.	30
Petrenko, A. I.	67
Petrov, A. A.	30
Petrov, V. M.	32
Petrov, Yu. P.	111
Petrzhak, K. A.	101
Petuely, F.	53
Petzow, G.	86
Peyches, I.	81
Pietsch, W.	83
Pigati, A.	60
Pigati, P.	60
Piliya, A. D.	106
Pimsner, V.	70

Plak, A.	24
Plak, I.	79
Plak, A.	52
Pivinsky, Yu. Ye.	76
Plappor, J.	86
Plaskov, G.	3
Platon, E.	60
Plekin, V. Ya.	67
Plenikowski, J.	51
Pyumat, E.	81
Plyavchenko, N. I.	60
Plyusnin, V. G.	48
Podchernyayeva, I. A.	111
Podgornyi, M.	112
Podwysocki, Tadeusz	119
Poggendorf, D.	43
Pokhil'skaya, G. N.	37
Pokrovskiy, V. A.	24,25
Polanska, A.	10
Polanski, Z.	9
Polekhina, R. M.	24
Politycki, A.	88
Poloujadoff, M.	84,94
	97
Polukhin, P. I.	71
Polyakov, V. I.	96
Ponomarenko, Ye. P.	72
Ponomarev, V.	96
Pop, G.	60
Popendiker, K.	42
Popov, G.	1
Popov, I. V.	62
Popov, R. B.	72
Popov, V.	7
Popov, Ye. P.	61
Pormale, M.	72
Porte, P.	54
Potapova, A. A.	47
Potatov, I. N.	71
Potayichuk, S. I.	64
Pozela, J. K.	110
Pradzynski, B.	100
Praeger, K.	51
Preobrazhenskaya, T. P.	33
Pribil, R.	49
Privalova, V. Ye.	101
Prnka, T.	83
Prokov'yev, D. I.	71
Proll, J.	42
Promyslov, A. A.	95
Pron'ko, V. G.	113
Propoy, A. I.	94
Prosek, J.	79
Prosek, Milos	12
Prosvirov, Ye. S.	35

Protopopov, I. Ya.	105
Pshechenkova, G. V.	48
Pshenichnyy, V. D.	108
Punnsker, Z. G.	113
Pustogarov, A. V.	111
Putseyko, Ye. K.	109
Pyatnitskaya, A. B.	102

- Q -

Quabbe, H. J.	42
Quiot, J. M.	41

- R -

Radczewski, O. E.	83
Radice, Lucio	
Lombardo	14
Radl, J.	76
Radominski, Z.	78
Radulet, Remus	70
Radzwicki, K.	93
Rakhlin, I.	3
Rakhmatulin, Kh. A.	111
Rappeport, L. G.	95
Ravahona, Pierre	16
Raytharg, L. Kh.	70
Razdorskaja, L. A.	36
Redr, M.	77
Rehm, G.	98
Reich, B.	51
Reinhold, Otto	11
Reinisch, G.	52
Repik, Ye. U.	96
Repsas, K. K.	110
Reyx, P.	96,97
Rezepova, A. O.	39
Richardreau, M.	41
Richerd, J.	54
Richter, H.	85
Riddell, J. A.	28
Ridmuller, S.	42
ad-Din Rif'at, Kamal	17
Riguet, J.	94
Riha, K.	76
Ripan, R.	60
Ritossa, P.	44
Rocheffort, Michel	28
Rode, A. A.	60
Rodina, A. A.	49
Rodionenkov, P. A.	3
Rodriguez, Javier	23
Rodriguez Nodals,	
Adolfo A.	29
Roesler, F. C.	82

Rosenbusch, K.	86
Rosenfeld, G. S.	33
Rosinskiy, S. E.	106
Rosner, H.	52
Rosset, Robert	50
Rothamel, H.-J.	86
Rotta, J. C.	25
Roubal, Z.	49
Roux, David	50
Rozen, A. A.	76
Rozenberg, V. G.	73
Rozenberg, V. I.	31
Rozhdestvenskiy, B. L.	93, 111
Ruban, M.	5
Rubanaw, A. S.	106
Rubinshtein, M. V.	30
Rubtsov, G. K.	46
Rubtsova, Z. S.	74
Rudakova, L. F.	74
Rudashevskiy, Ye. G.	45
Rudenskiy, A. V.	73
Rudolphi, H.	114
Ruetschi, P.	69
Rufert, Svatoplul	8
Rukhadze, A. A.	106
Rukovskiy, A. L.	75
Rul', Ye. F.	103
Rumba, G. Ya.	47
Rumpf, K. K.	84
Rusakova, V.	7
Rusinova, N. A.	48
Ryabchikov, L. M.	112
Ryazantsev, Yu. S.	113
Rychkova, S. M.	102
Rykov, V. A.	109
Ryzhkov, L. P.	64
Ryzhkov, N.	96

- S -

Saarinen, Aarne	13
as-Sabbagh, Husayn Rashid	17
Sabinin, Yu. A.	66
Sabonnadiere, J. C.	94
Sadao Nomura	58
Sadovnikova, L. A.	75
Sadykhov, A.	2
Sadykova, A. A.	103
Safaryan, R. G.	2
Sagdeyev, R. Z.	112

Sakharov, G. S.	73, 74
Sakhiyev, A. S.	47
Sakhnovskiy, N. L.	66
Sakurada, I.	103, 106
Salakhutdinov, U. I.	46
Ibn Saleh, 'Abdul-Qader	17
Saltup, B. N.	36
Saltykov, R. A.	36
Samarskiy, A. A.	68
Samhaber, F.	49
Samoylov, A. G.	105
Samoylov, L. K.	66
Samoylov, V. G.	25
Samsonov, G. V.	111
Sarkisyan, S. A.	24
Sato, H.	59
Savchenko, O. M.	47
Savichev, G.	5
Savu, Al. Gh.	11
Scarano, E.	55
Schauer, S.	99
Schenck, H.	82
Schlumbohm, H.	115
Schmakl, N. G.	53
Schmid, J.	86
Schmidt, E.	69
Schmidt, J.	53
Schmidt, Wolfgang	14
Schmutzler, R.	42
Schneider, B.	65
Schneider, M.	118
Scholz, R.	77
Schonrock, O.	99, 114
Schroeder, H.	85
Schroeder, R.	114
Schroder, W.	69
Schubert, F.	52
Schubert, G.	43
Schuhmachers, R.	85
Schuler, K.	84
Schuller, H. J.	82
Schulreich, Edelgard	19
Schulz, D.	87
Schulz, G. W.	85
Schulz, H.-P.	42
Schulze, G.	42
Schwarzl, F.	53
Schweite, H. E.	83
Sebastyen, Tibor	9
Seifert, E.	51
Seki, T.	59
Selivanov, A. I.	26

Semahanova, N. M.	34	Sihtola, H.	87
Semenov, B. F.	39	Silin, A. A.	71
Semina, N.	96	Silvestrini, R.	44
Sempe, B.	50	Simon, G.	115
Sensse, K.	51	Simon, Michel	14
Sentyurkhina, L. N.	74	Simons, E.	42
Serdyuk, G. B.	110	Sin Su-gun	19
Serdyukov, P. N.	67	Sina, Ibrahim	11
Sergeyenkova, V. M.	49	Sinel'nikov, K. D.	110
Serobaba, I. I.	38	Sinel'nikova, V. N.	7, 118
Serri, Rino	14	Singer, F.	40
Sevcovic, Jan	8	Sinpetru, S.	44
Sgibver, A.	5	Sinyukov, V. V.	62
Sh'abani, Ali	18	Sitnitskiy, Yu. I.	110
Shabliya, A. V.	103	Sizonenko, V. L.	107
Shakutin, Yu.	26	Skiba, L. A.	118
Shalayev, S. V.	93	Sklyarov, V. M.	51
Shalimov, A. I.	64	Skolozdra, R. V.	76
Shamardina, I. P.	38	Skomorovskiy, Yu. A.	111
Shapiro, Ya. M.	104	Skopenko, V. N.	45
Sharenkov, Stefan	8	Skorokhod, V. V.	73
Shavsha, T. G.	46	Slesar, M.	78
Shchelkunov, Ye.	1	Slomyanskiy, G. A.	94
Shchelokov, A.	6	Smirnov, A. I.	39
Shchuchinskiy, G. M.	95	Smirnov, B.	27
Sheberstov, V. I.	100, 102	Smirnov, O. A.	35
	103	Smirnov, O. K.	101
Shibayama, K.	104	Smirnov, Yu. P.	36
Shilokhvostov, A. V.	95	Smoldyrev, A. Ye.	64
Shima, T.	92	Smrha, L.	80
Shimanskiy, V.	1	Snechkus, A.	5
Shimizu, A.	56	Sneh, Moshe	18
Shimodaira, S.	90	Sniecinski, Jozef	69
Shiroido, Y.	92	Sobel, S. I.	73
Shishido, C.	103	Sobolev, N. N.	108
Shishkina, O. V.	64	Soda, T.	91
Shishov, A.	4	Sokolina, Ye. D.	96
Shkadova, V. P.	109	Sokolov, A.	27
Shklover, D. A.	113	Sokolov, S. I.	62
Shlyapintokh, V. Ya.	47	Sokolov, V. A.	29
Shmatov, P.	2	Sokolovskiy, K. I.	63
Shor, G. I.	48, 74	Solar, J.	79
Shorshorov, M. Kh.	70	Solomin, A. V.	48
Shreider, A. V.	75	Solomin, V. V.	67
Shteynberg, V. B.	117	Solovev, G.	8
Shtokman, V. B.	61	Solov'yev, A. P.	3
Shuchunov, V. A.	48	Solov'yev, M. M.	105
Shugurova, N. A.	63	Solyanov, N.	5
Shuichi Suzuki	44	Somonet, W.	113
Shul'ts, N. A.	35	Somsky, P.	79
Shumilina, A. I.	40	Sorokin, V. N.	39
Shuntov, V. P.	37	Soroko, N. A.	26
Sicha, M.	77	Sotskiy, N. M.	67
Siebold, Klaus	8	Spahrkaes, H.	86
Siedlewski, Z.	10	Spegt, P.	86

Stachowiak, Z.	54
Stafiej, W.	114
Stankovskiy, A. O.	96
Spryra, R.	52
Stoka, E.	79
Stachowiak, Z.	104
Stafiej, W.	26
Stalinski, J.	119
Stanciu, I.	29
Stanescu, P.	100
Stardubtsov, S. V.	47
Starek, R.	79
Starik, D. Ye.	25
Starik, I. Ye.	60
Starodubtsev, S. V.	107
Starzinsky, D.	85
Stashuk, V. D.	67
Stefanyuk, L.	27
Stein, W.	52
Steinhauser, W.	82
Steinmetz, E.	82
Stelmakh, G. P.	47
Stepanenko, L. V.	45
Sterkhova, L. N.	75
Stihi, George	11
Stojanovic, Milenko	10
Stolovich, L.	7
Stolyarov, G. K.	66
Strakhov, B. V.	48
Strel'nikov, I. D.	29
Strole, D.	86
Struve, W.	114
Stulov, V. P.	109
Styburski, W.	116
Subbotin, V. I.	111
Sueling, C.	76
Suga, K.	57
Sugawara, H.	90
Sukhavanija, Thawee	19
Sukhova, M. N.	34
Suleymanova, F. G.	71
Sundetov, S.	1
Sunkala, J.	76
Suter, H.	83
Suvorov, B. V.	48
Suzuki, S.	57
Suzumura, H.	59
Svechnikov, V. N.	74
Svetovidov, A. N.	40
Svetovidova, A. A.	38
Svishevskaya, G. I.	75
Svoboda, J.	79
Szczecinski, S.	117
Szentagothai, Janos	43

Szkibik, C.	52
Sztankovics, L.	89
Szymanski, St.	10

- T -

Tabenkin, Moshe	18
Tagaka, S.	116
Taguchi, Y.	100
Tahiri, Mamoun	15
Takacs, S.	114
Takahashi	103
Takahashi, A.	56
Takahashi, F.	57
Takahashi, S.	59
Takahashi, T.	103
Takai, N.	57
Takamura, H.	58
Takashima, N.	59
Takasugi Kazuo	20
Takemoto, K.	56
Takeuchi, Y.	90
Tamm, B.	66
Tamura, M.	57
Tanabe, K.	92
Tanaka, T.	55
Tananakin, Ye. I.	27
Tani, Y.	55
Taniguchi, K.	90
Tanji, H.	57
Tarama, K.	58
Tarasov, F. F.	24
Tarasov, N. I.	104
Tarchalski, Lech	9
Tarkhov, A. G.	63
Tartakovskiy, B. D.	66
Tarutina, L. I.	75
Tawara, K.	58
Tayichinov, S. N.	61
Teinsongrsmee.	
Banchong	45
Teng, C.-C.	40
Teraoka, I.	90
Terpilowski, J.	50
Teryayev, V. A.	73
Tetenyi, Pal	106
Than Vinh	29
Thanh Ha	20
Thilliez, G.	50
Thomasset, G.	25
Tikhonov, A. N.	68
Timofeyev, V.	4
Tischer, R. P.	53
Titov, V. I.	31
Tkalich, V. S.	107

To Ung-son	18
Tolmadzhev, K.	1
Tolok, V. T.	105, 112
Tolot, F.	41
Tomezak, G.	65
Topcharev, V. P.	75
Torochkov, V. Yu.	30, 31
Toshima, H.	57
Toshimobu Itoh	100
Toure, Sekou	16, 41
Fran Dong	20
Travkin, M. P.	46
Trenton, N. J.	54
Trepnenkov, I. I.	96
Tret'yachenko, G. N.	24
Tribukait, B.	43
Tripsa, I.	81
Troitskaya, V. A.	63
Tromel, G.	83
Trommer, G.	84
Troshin, O. V.	110
Truc Chien	20
Truhlarova, M.	85
Trukan, G.	3
Trusov, G. N.	46
Trzczyk, J.	117
Tserlevskaya, Ye.	27
Tslaf, A. L.	110
Tsopp, L. Ye.	106
Tsuchiya, S.	31
Tsvankin, D. Ya.	75
Tuge, T.	38
Tulyankin, F. V.	70
Turbutiu, Ch.	100
Tyal'ksnis, L. A.	32
Tyapkin, A.	110
Tyushkevich, S.	5

- U -

Uchida, M.	92
Udintsev, G. B.	64
Uebelhack, W.	115
Uebing, D.	83
Uemaki, O.	116
Ueno, S.	55
Uhlenbruck, G.	42
Ujhazy, Karol	8
Umbach, W.	52
Unger, H.	106
Urata, Y.	91
Urban, G.	82
Urban, Jerzy	10
Uribe, Herman	21
Uricar, J.	77

Urtanis, B.	7
Usanov, Yu.	24
Ushakov, M.	1
Usmanov, A. G.	108
Uspenskiy, B. A.	108

- V -

Vainshtein, V. S.	35
Vaisburd, S. Ye.	75
Vakhobov, A. V.	72
Valencia, E.	32
Van Tien Dung	20
Van Broekhuizen, Jaques	16
van der Valk, N. J. L.	25
van Esch, G. J.	42
van Nie, A. G.	68
Vargin, V. V.	74
Varvarin, G. B.	61
Varzhanskaya, T. S.	109
Vashkov, V. I.	34
Vasilescu, C. A.	70
Vasileuskas, A. P.	33
Vasil'yev, N.	6
Vasil'yeva, A. N.	106
Vasil'yeva, G.	75
Vater, H.	83, 114
Vavilova, I. V.	66
Vaysfel'd, L. O.	94
Vedenov, A. A.	111
Vekua, N. P.	93
Velchev, T.	96
Velikov, Ye. D.	111
Velikov, Ye. P.	111
Veprek, P.	85
Verblovskiy, A. M.	73
Vernov, S. N.	112
Verzhutskiy, B. N.	35
Veselkin, A. P.	107
Vetyukov, M. M.	73
Vey, A.	41
Vialaron, A. G.	91
Victorri, M.	96
Viennot, Jean-Pierre	18
Vikulin, I. M.	108
Vinnikov, A. I.	113
Vinogradova, I. Ye.	74
Vinokur, B. B.	94
Vinokur, R.	1
Vinokurova, L. N.	102
Vitol, O. A.	75
Vlaci, Ion	13
Vlasov, B. V.	96
Vlasov, G. D.	67
Vlasov, V. G.	103

Vo Nguyen Giap	20
Voitsenya, V. S.	107
Volarovich, N. P.	60,64
Volchek, I. S.	73
Vol'fkovich, S. I.	26
Volin, P.	2
Vol'kenau, N. A.	45
Volkov, A. F.	112
Voloshchenko, A. P.	24
Volvovskiy, I. S.	64
Volynkin, A. I.	67
Volynkin, N. I.	101
von Aufsess, H.	85
von den Steinen, A.	52
von Pechmann, H.	85
von Philipsborn, W.	52
von Windheim, K.	43
Vorobev, A. A.	39
Vorob'ev, V. I.	29
Vorob'yev, V. P.	32
Voss, A.	3
Voss, A. Ye.	2
Vyslouzil, Jiri	80
Vysotskiy, A. A.	73

- W -

Wada Masana	19
Wahl, G.	43
Wahlster, M.	87
Wakamatsu, T.	65,66
Waldherr, E.	87
Waldschmidt, M.	43
Wallner, H.	115
Wanot, J.	92
Wear, R. H.	59
Weber, Hermann	14
Weirich, E. G.	43
Weisshart, R.	12
Wellern, H. O.	115
Westo, Gunnel	45
Westphal, D.	106
Wiendieck, K.	98
Wierich, H.	83
Wierzbanowski, T.	66
Wiethoff, G.	88
Winkler, T.	52
Wizon, I.	82
Wojciak, W.	104
Wojick, T.	100
Wolf, F.	86
Worner, H.	31
Wrobel, B.	65

- Y -

Yajima I.	90
Yakovchenko, A.	118
Yakovenko, V. M.	113
Yakovlev, S.	26
Yakupov, V. S.	60
Yamahe, T.	58
Yamada, H.	92
Yamada, J.	58
Yamada, T.	90
Yamagata, K.	58
Yamaguchi, O.	56
Yamamoto, S.	91
Yamamoto, T.	57
Yanenko, N. N.	93,111
Yanson, F.	1
Yanushkevichus, Z.	118
Yas'ko, O. I.	108
Yasui, H.	92
Yasui, T.	57
Yatskov, L. P.	40
Yedokimov, V. D.	110
Yefendiyeva, Nilufer	4
Yefimov, G. V.	110
Yeglit, A.	1
Yegorov, V. I.	94
Yegorov, V. M.	25
Yegorov, Yu. A.	107
Yeleonskiy, V. M.	106
Yellanskiy, M. M.	62
Yelpatevskiy, A. N.	109
Yelshin, N. N.	46
Yeltekov, Yu. A.	47
Yelutin, O. P.	48
Yemel'yanova, G. I.	48
Yemel'yanova, T. A.	71
Yermenko, I. T.	47
Yermenko, N. A.	61
Yermolayev, A. D.	6
Yermolayev, V. L.	48
Yermol'yeva, Z. V.	33
Yerokhin, A. A.	46
Yershov, Yu. A.	75
Yevdokimov, A. M.	36
Yevlanov, N. G.	73,74
Yevseyenko, O.	5
Yi Ch'ol-hok	18
Yoguchi, K.	59
Yoshihiro Mori	116
Yoshino, M.	92
Yoshioka, S.	91
Yuan-Sun, H.	49
Yudelevich, M. A.	32
Yudin, N. I.	30

Yuferov, V. B.	107
Yukio Yoshizawa	65, 100
Yushkov, V. G.	102

- Z -

Zadrey, G. K.	66
Zager, L.	85
Zahrehel'nyy, Pavlo	7
Zakharova, M. S.	39
Zakhvatkina, K. A.	36
Zalesskiy, Yu. G.	107
Zalkind, V. M.	107
Zambakhidze, D. V.	70
Zaslavskiy, S. Y.	40
Zaslavskiy, Yu. S.	48, 74
Zatyka, Henryk	104
Zavaleta Mercado, Rene	22
Zaytseva, Ye. L.	49
Zelevnik, L.	79
Zelikman, A. N.	72
Zel'vyanskaya, Ye. B.	75
Zenichi Tanabe	58
Zeyssolff, Paul	99
Zezulova, M.	77
Zhadan, V. M.	64
Zharkov, V. P.	113
Zharov, A. G.	110
Zhdanov, V.	6
Zhdanova, K. P.	70
Zhikharev, I. A.	71
Zhil'tsov, V. A.	105
Zhukov, G. K.	3
Zhukov, G. P.	117
Zhukovskiy, S.	6
Zidek, M.	77
Ziegler, Philippe	118
Zimina, G. V.	68
Zimmermann, J. P.	52
Zoeppf, W. T.	98
Zolotukhina, G. I.	25
Zonn, S. V.	62
Zuharev, Yu. V.	47
Zuev, G. V.	38
Zul'fugarzade, Ye. Ye.	66
Zusman, L. L.	71
Zverev, G. I.	108
Zviyedre, I. I.	47
Zwintzsch, W.	82
Zykov, V. G.	107, 108

* * * *

UNCLASSIFIED
Central Intelligence Agency



Washington, D.C. 20505

7 September 2004

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

Dear Ms. Schoen:

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

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

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

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

Sincerely,

A handwritten signature in dark ink, appearing to read "Sergio N. Alcivar".

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

Enclosures:

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

UNCLASSIFIED



Processing of OGA-Held CIA Documents

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

OGA Doc ID	Job Num	Box	Fldr	Doc	Doc ID	Document Title	Pub Date	Pages	Decision	Proc Date
AD0866011	78-03109A	63	1	8	145	Consolidated Translation Survey Through 31 January 1970	1/31/1970	237	Approved For Release	3/25/2004
AD0866891	78-03109A	64	1	1	146	Consolidated Translation Survey Through 28 February 1970	2/28/1970	237	Approved For Release	3/25/2004
AD0868214	78-03109A	64	1	2	147	Consolidated Translation Survey Through 31 March 1970	3/31/1970	222	Approved For Release	3/25/2004
AD0869588	78-03109A	64	1	3	148	Consolidated Translation Survey Through 30 April 1970	4/30/1970	225	Approved For Release	3/25/2004
AD0871388	78-03109A	64	1	4	149	Consolidated Translation Survey Through 31 May 1970	5/31/1970	286	Approved For Release	3/25/2004
AD0872361	78-03109A	64	1	5	150	Consolidated Translation Survey Through 30 June 1970	6/30/1970	339	Approved For Release	3/25/2004
AD0873815	78-03109A	64	1	6	151	Consolidated Translation Survey Through 31 July 1970	7/31/1970	274	Approved For Release	3/25/2004
AD0834385	78-03109A	47	1	4	17	Consolidated Translation Survey For May 1959	6/17/1959	193	Approved For Release	3/25/2004
AD0834386	78-03109A	47	1	5	18	Consolidated Translation Survey For June 1959	7/17/1959	177	Approved For Release	3/25/2004
AD0834387	78-03109A	47	1	6	19	Consolidated Translation Survey For July 1959	8/24/1959	254	Approved For Release	3/25/2004
AD0834388	78-03109A	47	1	7	20	Consolidated Translation Survey For August 1959	9/18/1959	209	Approved For Release	3/25/2004
AD0834389	78-03109A	47	1	8	21	Consolidated Translation Survey For September 1959	10/20/1959	261	Approved For Release	3/25/2004
AD0834491	78-03109A	47	1	9	22	Consolidated Translation Survey For October 1959	11/16/1959	181	Approved For Release	3/25/2004
AD0834492	78-03109A	47	1	10	23	Consolidated Translation Survey For November 1959	12/22/1959	214	Approved For Release	3/25/2004
AD0834493	78-03109A	47	1	11	24	Consolidated Translation Survey For December 1959	1/20/1960	202	Approved For Release	3/25/2004
AD0834494	78-03109A	47	1	12	25	Consolidated Translation Survey For January 1960	2/25/1960	198	Approved For Release	3/25/2004
AD0834495	78-03109A	47	1	13	26	Consolidated Translation Survey For February 1960	2/1/1960	248	Approved For Release	3/25/2004
AD0834496	78-03109A	48	1	1	27	Consolidated Translation Survey For March 1960	3/1/1960	223	Approved For Release	3/25/2004
AD0834497	78-03109A	48	1	2	28	Consolidated Translation Survey For April 1960	4/1/1960	287	Approved For Release	3/25/2004
AD0834498	78-03109A	48	1	3	29	Consolidated Translation Survey For May 1960	5/1/1960	312	Approved For Release	3/25/2004
AD0834499	78-03109A	48	1	4	30	Consolidated Translation Survey For June 1960	6/1/1960	277	Approved For Release	3/25/2004
AD0834500	78-03109A	48	1	5	31	Consolidated Translation Survey For July 1960	7/1/1960	186	Approved For Release	3/25/2004
AD0834501	78-03109A	48	1	6	32	Consolidated Translation Survey For August 1960	8/1/1960	317	Approved For Release	3/25/2004
AD0834502	78-03109A	48	1	7	33	Consolidated Translation Survey For September 1960	9/1/1960	287	Approved For Release	3/25/2004
AD0834503	78-03109A	48	1	8	34	Consolidated Translation Survey For October 1960	10/1/1960	322	Approved For Release	3/25/2004
AD0834504	78-03109A	48	1	9	35	Consolidated Translation Survey For November 1960	11/1/1960	289	Approved For Release	3/25/2004