

Separation of the Photochemical From the Light-  
Filtering Effect and Latent Photosensitization, by  
Yu. S. Zuev.

RUSSIAN, per, Zhur Fiz Khim, Vol XXXII, No 10, 1958,  
pp 2308-2314.

ATS RJ-1724

SLA 62-18171

Sci - *chem*  
Jul 59

90, 458

The Conversion of Methane to Acetylene in the High Voltage Arc, Part I, by E. N. Yeregin, et al.

RUSSIAN, per, Zhur Fiz Khim, Vol XXXII, No 10, 1958, p 2315

2323

Navy 2232/T-147

ATS-RT-1878

Acetylene

for synthesis

SNH 60-21928

92, 812

Sci-Chem  
Jul 59

The Promoting Effect of Cobalt Iron on the Chromate  
Ion Catalysed Decomposition of Hydrogen Peroxide, by  
G. L. Petrova, G. A. Bogdanov.

RUSSIAN, per, Zhur Fiz Khim, Vol XXXIII, No 10, 1958,  
pp 2324-2332.

ILL RTS 2269 (*Low*)

Sci - M/M  
Feb 64

248,283

The Kinetics and Mechanism of Catalytic Conversions  
of Acetylene, II, Some Questions of the Mechanism  
of the Addition of Various Molecules to Acetylene, by  
R. M. Flid, 15 pp.

RUSSIAN, per, Zhur Fiz Khim, Vol XXII, No 10,  
1958, pp 2339-2346.

SLA 59-10444

ATS-RJ-1908

Sci - Chem  
Sep 59  
Vol 2, No 1

97,281

Vagin, F. V. and Zhukhovitskii, A. A.  
THEORY OF THERMAL-ADSORPTIVE SEPARATION.  
26 June 61, 25p. 6 refs.  
Order from OTS or SLA \$2.60

63-10216

Trans. of Zhurnal Fizicheskoi Khimii (USSR) 1958,  
v. 32, no. 10, p. 2362-2373.

DESCRIPTORS: \*Adsorption, Separation, Gases, Sorption,  
Chromatographic analysis, Thermal diffusion,  
Equations of state, Theory.

A theory of thermal-adsorptive separation of gases based on the assumption of pressure equality in the sorbent layer is presented. In the case of an infinitely great sorption rate and of absence of longitudinal diffusion in the process of thermal desorption, a distribution of the adsorbed substance corresponding to the temperature field is established, the motion velocities (Chemistry--Physical, TT, v. 10, no. 3) (over)

63-10216

I. Vagin, F. V.  
II. Zhukhovitskii, A. A.

Office of Technical Services

On the Charging of a Semiconductor Surface<sup>F</sup>  
During Adsorption, by F. F. Vol'kenshteyn, 12 p.

RUSSIAN, per, Zhur Fiz Khim, 1958, Vol XXXII,  
No 10, pp 2383-2391.

MDF V-135

Sci  
Mar 60  
Vol 2, No 11

109,670

On the Nature of the Negative Temperature Coefficient of the Rate of Radical Combination, by A. D. Stepukhovich.

RUSSIAN, per, Zhur Fiz Khim, Vol XXXII, No 10, 1958, p 2415. - 2417.

Navy 2233/T-148

OTS 60-21787

Sci - Physics  
Jul 59

92, 813

The Radiation Oxidation of Nitrogen. III. Some Questions Concerning the Mechanism of the Reaction and a Comparison With Electrical Discharge Data, by N. T. Daitryev.

RUSSIAN, per, Zhur Fis Khim, Vol XXXII, No 10, 1958, p 2418. - 2423

Navy 2234/T-149

OTS 60-21764

Sci - Physics  
Jul 59

92,815



The Present state of Research on the Phase Diagram  
of the Boron-Carbon System, by G. V. Samsonov, 7 pp

RUSSIAN, per, Zhur Fiz Khim USSR, Vol XXXII, No 10,  
1958, pp 2424-2429.

ATS-55L314

Sci  
Dec 59  
Vol 2, No 4

102,778

Electrochemical Properties of Zirconyl  
Phosphate. Part 1. Electrode Properties  
of Membranes, by E. A. Materova.  
RUSSIAN, per, Zhurnal Fizicheskoi Khimii,  
Vol 38, 1964, pp 676-680.  
NTC 72-10454-07D

Apr 72

The Rate of Desorption, by D. P. Timofeyev.

RUSSIAN, per, Zhur Fiz Khim, Vol XXXII, No 11,  
1958, pp 2483-2486.

NLL M. 2577

Sci - Chem

*113, 878*

Nov 61

61-20705

Tkachenko, G. V., Stupen, L. V. and others.  
THE COPOLYMERIZATION OF VINYL CHLORIDE  
WITH METHACRYLIC ACID ESTERS. [1961] [9]p.  
10 refs.  
Order from OTS or SLA \$1.10                      61-20705

I. Tkachenko, G. V.  
II. Stupen, L. V.

Trans. of Zhurnal Fizicheskoi Khimii (USSR) 1958,  
v. 32, no. 11 [p. 2492-2499].

DESCRIPTORS: \*Vinyl chlorides, Copolymerization,  
Polymerization, \*Acrylic acids, Acids, Esters,  
Benzoates, Polymers, Molecular weight.

The copolymerization of vinyl chloride with methyl-,  
n-butyl-, n-octyl methacrylates and vinyl benzoate  
was studied. The rates of the copolymerization of  
vinyl chloride with methacrylates and the molecular  
weights of the polymers in all of the corresponding  
monomers are less than with acrylates. These values  
(Chemistry--Organic, TT, v. 7, no. 10)                      (over)

Office of Technical Services

Yeremin, Ye. N.  
THE KINETICS OF ELECTROCRACKING OF METH-  
ANE [K Voprosu o Kinetike Elektrokrekninga Metana].  
[1961] 7p.  
Order from ATS \$12.55                      ATS-52N51R

Trans. of Zhurnal Fizicheskoy Khimii (USSR)  
1958, v. 32, no. 11, p. 2543-2549.

DESCRIPTORS: \*Methanes, Decomposition, Hydro-  
carbons, Reaction kinetics.

(Chemistry--Physical, TT, v. 6, no. 3)

61-22612  
(63-18412)

- I. Yeremin, Ye. N.
- II. ATS-52N51R
- III. Associated Technical Services, Inc., East Orange, N. J.

ATS-RJ-2892

175323

Office of Technical Services

Studies in the Mechano-Chemistry of Polymers  
XXIII. Mechanical and Chemical Processes  
in the Mastication of PVC, by A. A. Berlin,  
et al.

RUSSIAN, per, Zhur Fiz Khim, Vol XXXII,  
No 11, 1958, pp 2565-2570.

CSIRO

207,417

Sci - Chem  
Aug 62

The Use of the Electric Arc in Calorimetry,  
by A. F. Vorob'yev, S. M. Skuratov, 8 pp.

RUSSIAN, per, Zhur Fiz Khim, Vol XXXII, No 11,  
1958, pp 2580-2585.

SLA 60-13082

Sci  
Aug 61

OTS, Vol III, No 12

163,132

S-85/60

(NY-3554).

On the Computation of a Single Coefficient of the  
Separation of Isotopes for Equilibrium Processes,  
by Ye. M. Kuznetsova, A. V. Makarov, G. M.  
Panchenkov, 3 pp.

RUSSIAN, per, Zhur Fiz Khim, Vol XXXII, No 11,  
1958, pp 2641-2643.

JPRS 2476

114,730

Sci - Chem  
Apr 60



1/19/59

"The 40 th Anniversary of the Physico-Chemical  
Institute imeni L. Ya. Karpov" /unsigned article/,  
Zhurnal Fizicheskoy Khimii, Vol 32, No 12,  
Dec 58, pp 2657-2662.

SIR T-16.

NCH-202 507

Field 7D

Slytsina, Z. A.  
THE INHIBITING EFFECT AND THE STRUCTURE OF  
INHIBITORS. 2. THE INHIBITED POLYMERIZATION  
OF METHYLACRYLATE. 1965, 16p. TC-1221.  
Order from TC: \$15.00 as TC-1221

Trans. of Zhurnal Fizicheskoe Khimii (USSR) v32 n12  
p2663-73 1958.

I. Trans-Chem  
Knoxville, Tenn.  
II. Title: Inhibited. . .

The Electrochemical and Corrosion Behavior of  
Steel and Nickel Electrodes in Sulphuric Acid  
Solutions Subjected to the Action of Rays, by  
N. Ya. Bune, Ya. M. Kolotyrkin, G. S. Tyurikov,  
11 pp.

RUSSIAN, per, Zhur Fiz Khim, Vol XXXII, 1958,  
pp 2679-2685.

AEC NP Tr-445

Sci - Chem

125, 748

Relation Between the Energy Yield and the Kinetics  
of a Radiation-Chemical Reaction, by S. Ya.  
Psheshetskiy, M. T. Duitryev. UNCLASSIFIED

RUSSIAN, per, Zhur Fiz. Khim, Vol XXXII, No 12,  
1958, pp 2686-2689. 927828

Navy 2211/NRL 727

Sci - Physics, Chem  
Jul 59

92, 828

Shatenshtein, A. I. and Izrallevich, E. A.  
COMPARISON OF DEUTERO EXCHANGE AND  
METALATION OF ALKYL BENZENES. [1962] 9 pp.  
30 refs.

Order from OTS or SLA \$1.10

63-15923

Trans. of Zhurnal Fizicheskoi Khimii (USSR) 1958  
[v. 32] no. 12, p. 2711-2716.

DESCRIPTORS: \*Metalorganic compounds, \*Potassium  
compounds, Amides, \*Alkyl radicals, \*Benzenes,  
\*Deuterated compounds, Exchange reactions, \*Metal-  
tion, Reaction kinetics

The rate of deuterio exchange between a solution of  
potassiumide (0.02N) in liquid deuterioammonia and the  
aromatic rings and alkyl groups of the following alkyl  
benzenes:  $C_6H_5CH_3$ , iso- $C_6H_5C_2H_5$ , tert- $C_6H_5C_4H_9$ ,  
and n- $C_6H_5C_6H_9$  has been measured at 25, 10, and 0°C.  
It has been found that deuterio exchange and the metal-  
(Chemistry--Physical, TT, v. 10, no. 1) (over)

63-15923

I. Shatenshtein, A. I.  
E. Izrallevich, E. A.  
III. Translations, New York

Office of Technical Services

The Use of Radioactive Sulfur to Study H<sub>2</sub>S-  
Poisoning of Ammonia-Synthesis Catalyst, by  
M. I. Balaevskova, L. O. Apel'bayeva, M. I.  
Temkin.

RUSSIAN, per, Zhur Fiz Khim, Vol XXIII, No 12,  
1950, pp 2717-2724.

OSIR LLU M.791 (loan) Dept of Interior  
TN7, E57, No 163

Sci - Chem  
Jan 60

SLA 59-18543 105,046

Dissociation of Deuterooctane Under Elec-  
tron Impact, by M. V. Gur'yev, M. V.  
Tikhomirov, 10 pp.

RUSSIAN, per, Zhur Fiz Khim, Vol XXXII,  
No LXXII, 1958, pp 2731-2738.

ATS-0842R  
ATS/RS-2545

Sci  
Vol IV, No 11  
Jun 62

199,250

Boraskov, G. K.  
CATALYST INTERACTION WITH THE REACTION  
SYSTEM. [1963] 10p. 20 refs.  
Order from OTS or SLA \$1.10

63-14330

Trans. of Zhur[na]l Khim[ii] (USSR) 1958,  
v. 32 [no. 12] p. 2739-2747.

DESCRIPTORS: \*Catalysts, Chemical reactions, Theory,  
Metals, Oxides, Reaction kinetics.

In the course of a catalytic reaction, besides the  
action of the catalyst on the reagents, there is always  
an action on the reacting system on the catalyst  
leading to changes in its composition and consequently  
in its properties. To each composition of the reacting  
mixture there corresponds a definite, steady state  
composition of the catalyst depending upon the ratio of  
the rates of interaction between the catalyst and the  
(Chemistry--Physical, TT, v. 10, no. 3) (over)

63-14330

I. Boraskov, G. K.

Office of Technical Services



The Conversion of Methane to Acetylene in a High-Voltage Arc. Part 2. The Effect of Hydrogen, by E. N. Eremin,

RUSSIAN, per, Zhur Fiz Khim, Vol XXXII, No 12, 1958, pp 2767-2771.

ATS RJ-2073

ATS-26131K

Sci - Chem

May 60

115,379

The Mechanism of Formation of  $H_2O$  and  $H_2O_2$  in the  
Reaction of Hydrogen Atoms With  $O_2$  Molecules,  
by L. I. Avramenko, B. V. Kolesnikova. USSR

RUSSIAN, per, Zhur Fiz Khim, Vol XXIII, No 12,  
1958, pp 2780-2786.

DSIR LIU RTS 1218

(17s. 6d.)

Sci - Chem  
Nov 59

100,787

The Kinetics of Consecutive Reactions in a  
Recycle-Flow System, by S. V. Dobrovol'skiy,  
V. Ya. Polotnyuk.

RUSSIAN, per, Zhur Fiz Khim, vol XXXII, No 12,  
1958, pp 2792-2796.

SI # 88-1003  
ATS RJ-2037

Sci - Chem  
Dec 59

103,971

Bochnar, D. A., Gambaryan, N. P., Stankevich, I. V.,  
and Chistyakov, A. L.

A QUALITATIVE DETERMINATION OF THE STA-  
BILITY OF HETEROCYCLIC SYSTEMS WITHIN THE  
FRAMEWORK OF THE HUCKEL APPROXIMATION.  
[1963] 9p 2refs

Order from OTS, SLA, or ETC \$1.10 TT-63-20684

Trans. of Zhur[na] Fiz[ichesko] Khim[ii] (USSR) 1958,  
v. 32 [no. 12] p. 2797-2802. (Abstract available)

DESCRIPTORS: \*Heterocyclic compounds, \*Organo-  
boranes, Chemical bonds, Stability, Atomic orbitals,  
Polynomials.

A purely qualitative method is proposed for deciding,  
within the framework of the Hückel approximation, the  
question of the presence of a "closed electron shell" in  
conjugated systems and, in this sense, the question of  
the relative stability of such systems. This method con-  
(Physics--Molecular, TT, v. 11, no. 3) (over)

TT-63-20684

1. Title: Borepin
2. Title: Hückel  
approximation
3. Title: Molecular orbital  
theory

- I. Bochnar, D. A.
- II. Gambaryan, N. P.
- III. Stankevich, I. V.
- IV. Chistyakov, A. L.

Office of Technical Services

Thermochemistry of Isotopes. I. Calorimetric  
Investigation of the Heat of Formation of Hydrogen  
Sulfide and Deuterium Sulfide, by A. F. Kapustinskiy,  
R. T. Kan'kovskiy, 12 pp.

RUSSIAN, per, Zhur Fiz Khim, Vol XXXII, No 12, 1958,  
pp 2810-2816.

US Dept of Commerce  
National Bur of Standards

Sci - Phys  
May 61

148,772

Filippov, Yu. V. and Yemel'yanov, Yu. M.  
 ELECTRICAL THEORY OF OZONIZERS. III. THE  
 ELECTRIC CURRENT IN OZONIZERS (Elektriches-  
 kaya Teoriya Ozonatorov. III. Elektricheskiy Tok v  
 Ozonatorakh) tr. by E. Feigl. [1960] [14]p. (foreign  
 text included) 5 refs. Trans. no. 4850.  
 Order from LC or SLA ml\$2.40, ph\$3.30 61-15173

Trans. of Zhurnal Fizicheskoy Khimii (USSR) 1958,  
 v. 32, no. 12, p. 2817-2823.

The previous theory (Zhur. Fiz. Khim. 31: 1628, 1957)  
 is used to derive expressions for the dependence of the  
 effective and mean values of the strength of the current  
 flowing through the ozonizer on (1) the parameters of  
 the apparatus and (2) the magnitudes of the voltage ap-  
 plied to the terminals. (See also 59-10012)

(Engineering--Electrical, TT, v. 5, no. 5)

61-15173

1. Electric discharges
2. Ozone--Production
3. Title: Ozonizer
- I. Philippov, Yu. V.
- II. Yemel'yanov, Yu. M.
- III. Title: Electric...
- IV. CSIRO Trans-4850
- V. Commonwealth Scientific  
 and Industrial Research  
 Organization (Australia)

146,964

Office of Technical Services

12 216

US-14 \*UK-12

GUR'EV M. V., TIKHOMIROV M. V., TUNITSKI N. N.

The mass spectra of large molecules

\* Zhur. Fiz. Khim., 32, No. 12, p. 2847 (1958)

US-14: ATS-09M42R. § 2.75 - English

\*UK-12: English

E u r a t o m  
ATS/RJ-2546

The Synthesis of Some Deuterated Aromatic Hydrocarbons and their Raman Spectra, by A. I. Shatenshtein.

Shatenshtein.

RUSSIAN, per, Zh Fiz Khim, Vol 32, No 1, 1958,

pp 146-151.

HEW-NIH

12-4-67

Sci/B & M  
Feb 68

349,425



ZHURNAL FIZICHESKOI KHIMII - monthly  
(Soviet Journal of Physical Chemistry)  
Translation begins with 1959,  
Vol. 33, No. 7  
Lag time: 6-8 months  
Order from: The Chemical Society  
Publications Sales Office  
Blackhorse Road  
Letchworth, Herts.  
1971. £ 40.0.0./year U.K.  
\$ 144.00 or £ 60.0.0./year elsewhere  
£ 7.10.0 single issues  
Orders paid in advance

ZHURNAL FIZICHESKOI KHIMII

Vol 33, Nos 7-12, 1959

Cover-to-cover Cleaver-Hume Press LTD

Available Br 5 Library

No 7, pp 1674-1675 JPRS 3368

No 12, pp 2755-2766 JPRS 2736

Viscosity Measurements with Microamounts of  
Liquid, by V. S. Bondarenko.  
RUSSIAN, per, Zhurnal Fizicheskoi Khimii, Vol 38,  
1964, pp 1273-1275.  
NTC 71-14363-07D

(NY-4844)

CO + O<sub>2</sub> Flame Radiation and the Mechanism of This  
Reaction, by M. Zatsiorskiy, V. Kondrat'ev, S.  
Solnyshkova, 14 pp.

RUSSIAN, per, Zhur Fiz Khim, Vol XIV, No 12, 1960,  
pp 1521-1527.

JPRS 7532

Sci - Chem

Feb 61

139.356

Electrosynthesis of O<sub>3</sub>. I. Kinetics of the  
Synthesis of O<sub>3</sub> Under Flow Conditions, by  
Yu. V. Filippov, Yu. H. Eshol'yanov.  
RUSSIAN, per, Zh Fiz Khim, Vol 35, 1961,  
pp 407-415.  
AEC-NL-Trans-522

Specific Electrical Conductivity of Aqueous Potassium  
Chloride Solutions at High Temperature, by  
S. V. Gorbachev, V. I. Kondratev.

RUSSIAN, per, Zhur Fiz Khim, Vol XXXV, No 6, 1961,

NZDIA

Sci  
Jun 63

TT-62-28764

Gilozova, A.P. and Tereshkin, I.A.  
SUR L'INFLUENCE DE LA PRESSION SUR LA COM-  
BUSTION DES EXPLOSIFS (O Zavisimosti Storo-  
Goren'ya Vvrychivaykh Veshchestv ot Davleniya)  
(Pressure Dependence of the Burning Velocity of  
Explosives). 22p. (foreign text included) 4refs.  
CNRS-VI 725.

Order from OIS, ETC or CNRS \$2.60 TT-62-28764

Trans. in French of #Zhurnal Fizicheskoi Khimii  
(USSR) 1961, v. 35, no. 7, p. 1622-1628.

Trans. in English available from OIS, ETC or SLA  
\$1.00 as 62-14212, 1962, 12p.

DESCRIPTORS: \*Explosive materials, Tetryl, Ammo-  
nium picrate, RDX, Nitroglycerin, Combustion,  
Velocity, Pressure.

(Chemistry--Physical, TT, v. 11, no. 8)

I. Gilozova, A.P.  
II. Tereshkin, I.A.  
III. CNRS-VI 725  
IV. Centre National de la Recherche  
Scientifique, Paris

Office of Technical Services  
European Translation Centre

Zarif'yants, Y. A., Kiseliev, V. F., and  
Fedorov, G. G.

ADSORPTION CHIMIQUE DE L'OXYGÈNE A LA SUR-  
FACE D'UN GRAPHITE A UN ÉLÉMENT FORMÉ (Khim-  
icheskaya Adsorbtsiya Kisloroda na Poverkhnosti Svez-  
hego Raskola Grafita) tr. by Mihalovic. 26 Dec 61  
[8]p. (Russian text included) 3 refs. CEA Trans.  
no. R 1462 (text in French).  
Order from OTS or SLA \$1.10 62-24573

Trans. in French of #Zh[urnal] Fiz[icheskoi] Khim[ii]  
(USSR) 1961, v. 35, no. 8, p. 1885-1886.

DESCRIPTORS: \*Adsorption, \*Oxygen, \*Graphite,  
Cooling, Temperature.

(Chemistry--Physical, TT, v. 8, no. 3)

62-24573

I. Zarif'yants, Y. A.  
II. Kiseliev, V. F.  
III. Fedorov, G. G.  
IV. CEA-tr-R1462  
V. Commissariat à l'Energie  
Atomique (France)

Office of Technical Services



(SF-1878)

Ukrainian Republican Conference on Adsorption and Methods of Chromatographic Analysis, by K. V. Chmutov, 6 pp.

RUSSIAN, per, Zhur Fiz Khim, Vol XXXV, No 9, pp 2170-2172.

JPRS 13570<sup>6</sup>

Sci - Chem

May 62

~~Sci - Chem~~ 193, 511  
Keep in file

(SF-2212)

M. M Dubinin, by B. P. Bering, V. V. Serpinskiy,  
5 pp.

RUSSIAN, per, Zhurnal Fizicheskoy Khimii,  
No 11, 1961, pp ~~225-227~~.

JPRS 13882

USSR  
Biog  
Jun 62

63-10748

Kobozev, N. I., Semiokhin, I. A., and Pitskhelauri, E. N.  
REACTION BETWEEN HYDROGEN AND OXYGEN IN THE SILENT ELECTRICAL DISCHARGE. VIII. MECHANISM OF THE PROCESS (Vzaimodelstviye Vodoroda s Kislorodom v Fikhom Elektricheskom Razryade). [1962] [15]p. 14 refs.  
Order from OIS or SLA \$1.60 63-10748

Trans. of *Zhurnal Fizicheskoi Khimii (USSR)* 1962, v. 36 [no. 3] p. 443-448.

DESCRIPTORS: \*Hydrogen, \*Oxygen, \*Electric discharges, Chemical reactions, \*Reaction kinetics, Electrochemistry.

Water vapors and particularly argon have been shown to be energy catalysts of the formation and of the decomposition of  $H_2O_2$ . At low concentrations they act (Chemistry--Physical, TT, v. 10, no. 3) (over)

- I. Kobozev, N. I.
- II. Semiokhin, I. A.
- III. Pitskhelauri, E. N.
- IV. Title: Mechanism ...

Office of Technical Services

Vysotskite-a New Sulphide of Palladium and  
Nickel, by A.D.DGenkin, O. E. Zvyagintsev.  
RUSSIAN, per, Zapiski Vsesoyuznogo Mineralogiche-  
skogo Obshchestva, Vol 91, No 6, 1962,  
pp 718-725.  
NLL RTS 2713

Sci - Earth Sci & Ocean  
Sept. 67

340,391

Marina, L. I., Nashel'skii, A. Ya., and Yakobson,  
S. V.

INVESTIGATION OF THE DECOMPOSITION PRESSURE  
OF GALLIUM PHOSPHIDE. [1962] 11p. 16 refs.  
Order from OTS or SLA \$1.60

63-10772

Trans. of *Zhurnal Fizicheskoi Khimii* (USSR) 1962,  
v. 36, no. 5, p. 1086-1088.  
Another trans. is available from OTS or SLA \$1.10  
as 62-18968, 2 Aug 62 [8]p.

DESCRIPTORS: \*Semiconductors, \*Gallium compounds,  
\*Phosphides, Decomposition, Pressure, Crystallization,  
Temperature, Phosphorus, Vapor pressure.

The temperature dependence of the decomposition  
pressure of gallium phosphide expressed in the following  
terms has been determined

$$\lg P = - \frac{10770}{T} + 9,996.$$

(Chemistry--Physical, TT, v. 9, no. 11)

(over)

63-10772

I. Marina, L. I.  
II. Nashel'skii, A. Ya.  
III. Yakobson, S. V.

Office of Technical Services

Electrosynthesis of Ozone. V. Synthesis of Ozone  
in a Flow Under Reduced Pressure, by V. G. Samoylovich,  
V. P. Vendillo.

RUSSIAN, per, Zhur Fiz Khim, Vol XXXVI, No 5, 1962,  
pp 989-992.

\*FTD-TT-62-1462

Sci - Chem

Oct 62

The Isotopic Effect in the Electrolysis  
of Ozone by Rayleigh's Method, by  
I. A. Tikhonirov, V. N. Malenovskiy, 5 pp.

RUSSIAN, per, Zhur Fiz Khim, Vol XXXVI, No 4,  
1962, pp 895-897. 9879883

REF ID: A1-1535

Sci-Chem  
Apr 63

226,718

Hydrolysis of Alkali-Metal Borohdrides (USSR), by  
K. N. Mochalov, G. G. Gil'manshin. 15 pp

RUSSIAN, per, Zhur Fiz Khim, Vol XXVI, No 5, 1962,  
pp 1089-1094.

\*FTD-TT-62-1462

Sci - Chem

Oct 62



Polarographic Study of Borohydrides of  
Alkali Metals, by K. N. Mochalov,  
G. G. Gil'manshin, 13 pp.

RUSSIAN, per, Zhur ~~NAK~~ Fiz Khim, Vol XXXVI,  
No 5, 1962, pp 1089-1094. 9679813

FTD-TT-62-1462

Sci-Chem  
Mar 63

22<sup>4</sup>~~8~~, 718

Infrared Spectroscopy Applied to the Investigation  
of the Reaction of Water With Alumina Surface,  
by A. V. Uvarov.

RUSSIAN, per, Zhurnal Fizicheskoi Khimii, Vol 36,  
1962, pp 1346-1349.

NTC-71-12457-07D

Nov 71

Neutron Diffraction Study of High-Temperature  
Annealed Beryllium Oxide, by E. M. Kuleshov,  
G. G. Sadukov, et al, 5 pp.  
RUSSIAN, per, Zhur Fiz Khim, Vol XXXVI, 1962,  
pp 1369-1371. 9222676  
AAEC-Tr-15

Sci-Phys  
Jun 64

260,943

c

Electrosynthesis of Ozone, by Yu. V. Filippov.

RUSSIAN, per, Zhur Fiz Khim, Vol XXXVI, No 7, 1962,  
pp 1420-1425.

\*FTD-TT-62-1536

Sci - Chem

2 Nov 62

Combustion of Ammonium Perchlorate, by L. D.  
Romodanova, V. I. Roshchupkin.

RUSSIAN, per, Zhur Fiz Khim, Vol XXXVI, No 7, 1962,  
pp 1554, 1555.

\*FTD-TT-62-1561

Sci - Chem

2 Nov 62

Lazorenko-Manevich, R. M.  
THE REDISTRIBUTION OF POTENTIAL AT THE  
SEMICONDUCTOR ELECTROLYTE INTERFACE  
UNDER THE INFLUENCE OF LIGHT. [1963] [11]p.  
7 refs.

Order from OTS or SLA \$1.60 63-14735

Trans. of #Zhur[nal] Fizicheskoj Khimii (USSR)  
1962, v. 36 [no. 9] p. 2066-[2071].

DESCRIPTORS: \*Semiconductors, \*Electrolytes,  
\*Electrodes, \*Light, Distribution, Electric potential,  
Electric currents, \*Electrochemistry, \*Photochemistry.

The effect of illumination on the separate components  
of the overvoltage at the semi-conductor electrode is  
investigated. If a current flows through the system,  
the potential shifts which originate during illumination  
of the electrode in the Helmholtz portion of the double  
layer ( $d\phi_F/d\phi_{O_3}$ ) and in the surface dipole layer  
(Chemistry--Physical, TT, v. 10, no. 4) (over)

63-14735

1. Lazorenko-Manevich, R. M.

Office of Technical Services

Standard Enthalpies of Formation of 1,1-  
Difluoroethylene and Trifluoroethylene, by  
V. P. Kolesov, et al.  
RUSSIAN, per, Zhurnal Fizicheskoi Khimii, Vol 36,  
1962, pp 2078-2081.  
NTC 71-14598-07D

Feb 72

Standard Enthalpies of Formation of Chloro-  
trifluoromethane and Dichloro-Difluoromethane,  
by V. P. Kolesov, et al.  
RUSSIAN, per, Zhurnal Fizicheskoi Khimii, Vol 36,  
1962, pp 2082-2084.  
NTC 71-14597-07D

Feb 72



Optical Sensitization of the Photoeffect of  
Zinc Oxide and the Adsorption Isotherms of  
Dyes, by N. N. Markevich, E. K. Putsieko,  
RUSSIAN, per, Zh. Fiz. Khim., Vol XXXVI, No 11,  
1962, pp 2393-2399.  
ATS RJ-4693

Sci-Phys  
Jul 67

329,116

Distribution of Lithium Isotopes in Immiscible  
Solvents, by V. M. Kalotyrkin, N. I. Nikolayev, 2 pp

RUSSIAN, per, Zhur Fiz Khim, Vol XXVI, No 11,  
1962, pp 2540-2541.

Revy Tr 3569/CHI 942

Sci - Chem  
Apr 63

229,270

CIA/FBI 5275

Stryaeva, G. V., Gorbatkina, Yu. A., and  
Andreevskaya, G. D.  
METHODS FOR DETERMINING ADHESION OF  
POLYMERS TO GLASS FIBER SURFACES. [1963] 8p  
10refs  
Order from OTS, SLA, or ETC \$1.10 TT-64-10686

Trans. of *Zhurnal Fizicheskoi Khimii* (USSR)  
1963, v. 37 [no. 1] p. 237-241. (Abstract available)

DESCRIPTORS: \*Surfaces, \*Glass textiles, Polymers,  
\*Adhesion, Polyester plastics, Resins, Binders,  
Fibers (Synthetic), Adhesives.

Two methods were developed for the direct determina-  
tion of the adhesion of polymeric binders to glass fibers.

TT-64-10686

I. Stryaeva, G. V.  
II. Gorbatkina, Yu. A.  
III. Andreevskaya, G. D.

Effect of Stimulation of Trigeminal Nerve on  
Electrotonic Potentials of Dorsal Roots in  
Cats, by T.N.Mamonets.  
RUSSIAN, per, Fiz Zhurnal, 1963, Vol.9, No.3,  
pp.306-310.  
OTS-TP-64-19713

B/M  
Aug 66

308,689

TT-64-14449

Vyrodov, I. P.  
DIFFUSION KINETICS OF REACTIONS. PT. II.  
FIRST ORDER REACTIONS. [1963] 8p 2refs  
Order from OTS, SLA, or ETC \$1.10 TT-64-14449

Trans. of Zhurnal Fizicheskoi Khimii (USSR)  
1963, v. 37 [no. 2] p. 413-419. (Abstract available)

DESCRIPTORS: \*Catalysis, \*Diffusion, \*Reaction  
kinetics, Liquids, Solids, Surface properties.

The diffusion kinetics of reactions at the liquid-solid  
interface are discussed. Diffusion of the products  
occurs within a finite volume (sphere of radius R).  
The reaction at the surface is of the first order up to  
the moment of saturation of the pre-surface layer by  
the products. Following this, no change in the limiting  
concentration in the presurface layer occurs up to the  
end of the reaction between the liquid medium and the  
solid. The solution, proposed for the diffusion problem  
(Chemistry--Physical, TT, v. 11, no. 7) (over)

I. Vyrodov, I. P.  
II. Title: First ...

Office of Technical Services

Thermodynamics of Dielectrics and the Molecular  
Structure of Liquids, by M. I. Shakhparanov,  
6 pp.

RUSSIAN, per, Zhur Fiz Khim, Vol XXXVII, No 5,  
1963, pp 1169-1172. 9217203

AEC-Tr-6074

Sci - Phys  
Jan 64

248,377

Ksenzhek, O. S.  
CAPILLARY EQUILIBRIA IN POROUS MEDIA WITH  
INTERSECTING PORES. [Jan 64] 8p  
Order from ATS \$12.00      ATS-99Q72R

Trans. of #Zhurnal Fizicheski Khimii (USSR)  
1963, v. 37, no. 6, p. 1297-1303.

DESCRIPTORS: \*Porous materials.

(Chemistry--Physical, TT, v. 11, no. 10)

TT-64-12436

I. Ksenzhek, O. S.  
II. ATS-99Q72R  
III. Associated Technical  
Services, Inc., East  
Orange, N. J.

Office of Technical Services