

Special Geodetic Assignment: XLVII. The Abastumani
Astrophysical Observatory, by Ye. K. Kharadze, 19 pp.

RUSSIAN, bk. Abastumanskaya Astrofizicheskaya
Observatoriya, Akademiya Nauk SSR, 1958.

AP SIR-3027

Sci. Geofiz.
Jun 58

88,999

Absorptionsprozesse in der Chemischen Technik. 2nd
German ed. 1953, by V. M. Ramm.

Translated from the Russian edition, 1951.

DSIR 66.09
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G. 11352/0

Deposition on Class, by G. Todireanu.
BESSIE, for, Academia Republica
Populare Romina. Studii Si Cercetari
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pp 525-527.
*FTD-11-05-1194

5/10/65
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Photographic Investigations of the Libration Point L₅
in the Earth-Moon System, by K. Kordylewsky, 7 pp.
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pp 165-169. 9696155
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T-G-64-35

Sci - IS & A
Mar 65

275,073

The 4.5 CM Solar Energy Observed on the Day
of the Annular Eclipse of the Sun on
April 4, 1958, by Morchanov, and Patelova,
6 pp.

RUSSIAN, per, Acta Astronomica Sjnica, Vol VII,
No 1, 1959, 3 pp. 9676522

PTD MEL-1384/1

Sci - Astron., Phys

194,099

3 May 62

Studies on the extraction of red Kober color by
organic solvents for estrogen determination in
urine, by G. Ittrich
RUSSIAN, per, Acta Endocr (Kobonawa), Vol 55,
1960, pp 34-48
REF ID: A6-12-67

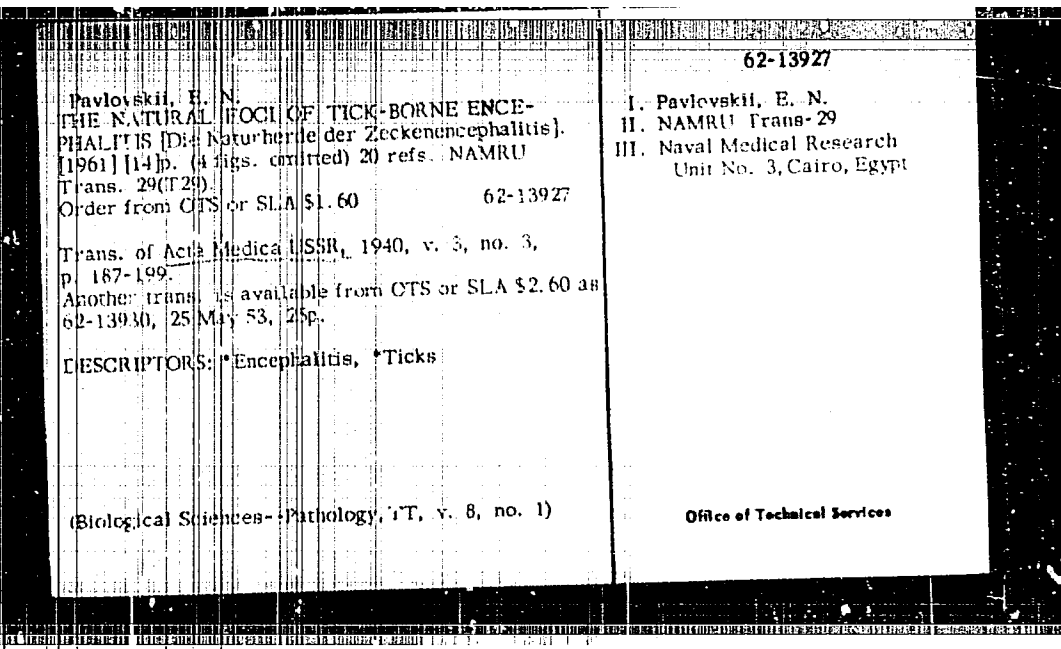
Bic E Mail
July 67

332,091

Effect of Certain Penicillium Fungi on
Staphylococci in Vitro and in Vivo.
By A. V. Jona, A. Jaskevicius, et al.
RUSSIAN, per, Acta Inst. Exp. Med. of Acad.
Sciences, Lithuanian SSR (Vilnius), Nos. 3-4,
1958, pp. 185-192.
SFCSI DT 65-50109

Sci/BEA
Aug 65

287,379



TT-64-167Z7

Gruhl, W. and Ammann, D.
CONCERNING THE DEPENDENCE OF THE GRAIN
BOUNDARY PRECIPITATION ON THE ORIENTATION
OF THE NEIGHBORING CRYSTALS. 10p (+ figs 20 refs
omitted)

I. Gruhl, W.
II. Ammann, D.

Co. Air from SLA \$1.10

TT-64-167Z7

Trans. of Amer. Metallurgical Soc. (U.S.) 1935, v. 3 [no. 4]
p. 317-333.

Metallog. Structures, II, v. 12, no. 4)

Office of Technical Services

order from NTC

ACTA METALLURGICA
1955 V3 P510-512
1960 V8 N10 P700-710
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The Nature of the Conductivity of Non-Aqueous
Solutions, by M. Usanovich, 21 pp.

RUSSIAN, per, Acta Physicochimica URSS, Vol II,
No 2, 1935, pp 239-271.

Sci Mus Lib - 56/0303

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Sci - Chemistry

May 1956

33,796

Pleskow, W. A. and Monosohn, A. M.
 ELECTRODE POTENTIALS OF SODIUM AND POTASSIUM IN LIQUID AMMONIA (Die Elektrodenpotentiale des Natriums und Kaliums in Flüssigem Ammoniak). Nov 60 [1] p. 8 refs.
 Order from L. C. or S. I. A. m. \$2.40, plus \$3.30 AEC-tr-4250

Trans. in manuscript of Acta Physicochimica
 U. R. S. S. 1935, v. 2, p. 615-620.

148, 724

- I. Alkali metal ammonia systems - Conductivity
1. Pleskow, W. A.
- II. Monosohn, A. M.
- III. AEC-tr-4250
- IV. Michigan State U., East Lansing
- V. Contract AT (11-1)312

Office of Technical Services

(Unannounced)

tp 30

US-1

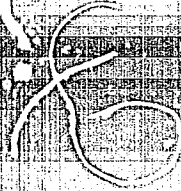
V. A. PLESKOV, A. M. MONOSZON

Electrode potentials in water and liquid ammonia

Acta Physicochim. URSS, 2, 621-632 (1935). University
of Michigan

English

Erratum



Combined Approximation Method for Self-Consistent
Calculation in the Many-Electron Problem,
by H. Hellman.
RUSSIAN, per, Acta Physicochimica URSS,
Vol 1, No 6, 1935, pp 913-940.
NASA TT P-10, 848

Sci-Phys
Jun 67

327,301

Influence of Pressure on the Intensity of
Visible Radiation from the Flame, by N.

Kondratyev, N. Kondratyev, 9 pp.

RUSSIAN, per Acta Physicochimica U.R.S.S., Vol. IV,
No 4, 1936.

Available
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Sol
Aug 60

121,713

Dabini, M. and Saverina, E.
THE POROSITY AND ADSORPTION PROPERTIES OF
ACTIVATED CHARCOAL. [1960] 17p. 10 refs.

I. Dabini, M.
II. Saverina, E.

Order from SLA \$1.40. 62-16187

Trans. of Acta Physicochim[ica] U. R. S. S., 1936,
v. 4, no. 5, p. 647-674.

Another trans. is available from ATS \$21.95 as
ATS-55M40G [1960] 17p.

DESCRIPTORS: Activated carbon, Charcoal, Adsorption
Porosity, Physical chemistry.

(Unannounced)

Office of Technical Services

63-23290

Slygin, A., Frumkin, A., and Medvedovskii, W.
PLATINUM ELECTRODES. II. THE ADSORPTIVE
PROPERTIES OF THE PLATINUM ELECTRODE
(Über die Platinelektrode) tr. by F. Hudswell.
Jan 61 [27]p. 1D refs. NP-tr-598.
Order from OCS or SIA \$2.60 63-23290

- I. Slygin, A.
- II. Frumkin, A.
- III. Medvedovskii, A.
- IV. NP-tr-598
- V. Atomic Energy Research
Establishment (Gt. Brit.)

Trans. of Acad. Physicochemical U. R. S. S., 1936,
v. 4, no. 6, p. 911-918.

DESCRIPTORS: *Electrodes, *Platinum, Adsorption.

See also 63-23291

Office of Technical Services

(Chemistry--Physical, TT, v. 10, no. 8)

Roginskii, S. and Schechter, A.
CHEMICAL REACTIONS IN ELECTRICAL DIS-
CHARGES. III. INVESTIGATION OF THE HETERO-
GENEOUS RECOMBINATION OF ATOMS (Chemische
Reaktionen in Elektrischen Entladungen. III. Unter-
suchung der Heterogenen Rekombination von Atomen) tr.
by Jerome Danburg, Oct 62 [20]p. 9 refs. AmMetSoc
T-G-186.
Order from OTS or SLA \$1.60 63-19207

Trans. of Acta Physicochimica U. R. S. S., 1937, v. 6,
no. 3, p. 401-418.

DESCRIPTORS: *Electrical discharges, *Chemical
reactions, *Recombination reactions, *Hydrogen,
*Nitrogen, *Oxygen, *Platinum catalysts, *Tungsten,
*Aluminum Stabilizers, Metals, Oxides, Surfaces

The recombination of hydrogen and nitrogen atoms on
Pt and W over a wide range of temperature was investi-
(Chemistry-Physical, TT, v. 10, no. 2) (over)

- I. Roginskii, S.
- II. Schechter, A.
- III. AmMetSoc:T-G-186
- IV. American Meteorological
Society, Boston, MASS.
- V. Contract AF-19(64)Y-113
- VI. Title: Investigation...

Office of Technical Services

Investigation of the Flame of CO and C₂H₂.
III. The Influence of the Composition of the
Mixture on the Intensity of the Visible
Radiation from the Flame, by H. Kondratyev.
V. Kondratyev, 12 pp.

RUSSELL, per, Acta Physicochimica U.R.S.S.,
Vol. VII, No. 4, 1937.

Available
in English
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Sci
Aug 60

121,701

Investigations of the Flame of CO and O₂.
III. The Absolute Intensity of the Electronic
Radiation From the Flame, by H. Kondratyeva,
V. Kondratyev, 7 pp.

RUSSIAN, *Acta Physicochimica U.R.S.S.*
Vol VI, No 5, 1937.

Available
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at LC

121,700

Sci
AUG 60

The Light Absorption and Absolute Concentration
of Hydroxy, by L. Avramenko, V. Kondratyev,
14 pp.

RUSSIAN, in Acta Physicochimica U.R.S.S.,
Vol VII, No 1, 1937.

Available
in English
at LC

Sci
Aug 60

121,723

The Maximum Valence of Elements and Atomic Structure (RU). The Formation of Chemical Compounds and the Periodic System of Elements, by S. Orskov, 42 pp.

Full translation.

RUSSIAN, per, Acta Physicochim. URSS, Vol VIII, 1938,
pp 811-847.

AEC Tr 1331

Scientific - Nuclear Physics, Chemical Compounds,
Elements

Aug 52 OHS/ENF

On the Mechanism of the Recombination of
Radicals in the Electric Discharge, by
V. Kondratyev, 8 pp.

RUSSIAN, par, Acta Physicochimica U.R.S.S.,
Vol. VIII, No 5, 1935.

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in English
at LC

Sci

Aug 60

121,704

Study of the Organic Peroxides Forming During the
Decomposition by Oxidation of Saturated Hydrocarbons,
by K. I. Ivanov, 29 pp.

RUSSIAN, per; Acta Physiochim, SSSR, Vol IX, No 3/4,
1938, pp 421-452.

SLA R Tr R-819

54,478

Sci - Chemistry, fuels
Oct. 57

(S) (U)

The Theory of the Thermal Explosion. II. Thermal
Explosion for Monomolecular Reactions, by O. M.
Tolst, P. V. Malentjev, 26 pp.

RUSSIAN, Tr. Akad. Fizichesk. Nauk 1939,
Vol. XII, No. 2, 1939, pp 153-180.

JPRS 7033

Sci - Physics
22 Nov 60

155, 330

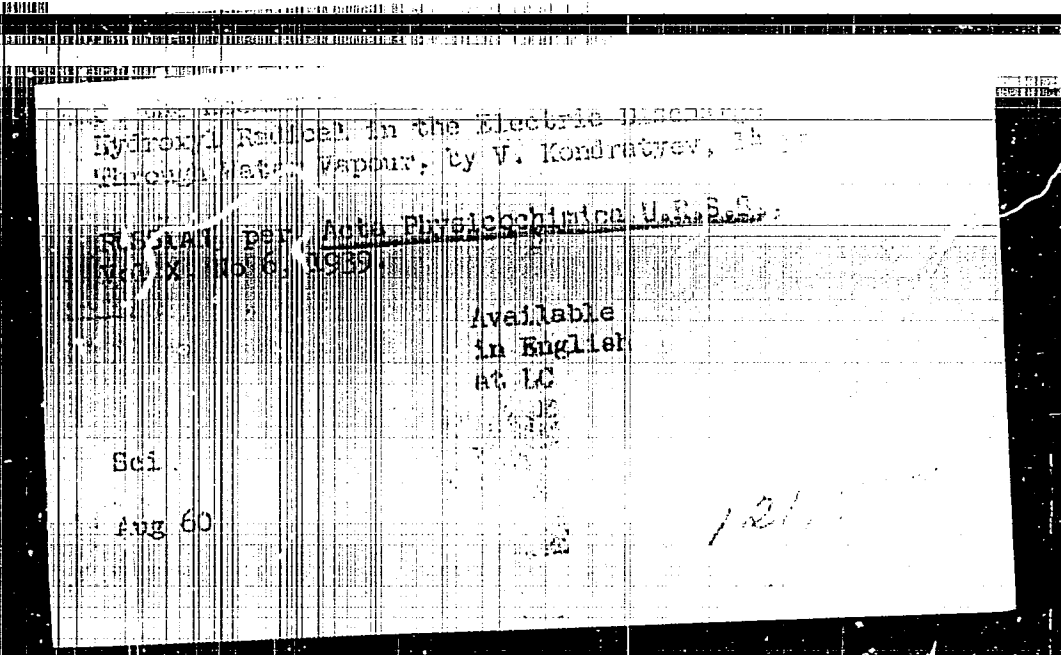
Adsorption of a Gas Accompanied by its
Dissociation, by O. I. Leypunsky, 10 pp.
Acta Physicochimica U.R.S.S., Vol X,
No 4, 1959.

Available
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S-11

Aug 60

121,710



Investigations of the flame of CO and C₂H₂.
VI. Photochemical Oxidation of CO Near the Region
of Self-Initiation, by H. Kondratyev,
V. Kondratyev, 8 pp.

RUSSIAN, see Acta Physicochimica U.S.S.R.
Vol. X, No. 3, 1958.

Available
in English
at LC

Sci

Aug 60

121,722

61-12653

Fastovskii, V. G. and Gurvich, Y. G.
INVESTIGATION OF THE EQUILIBRIUM BETWEEN
LIQUID AND GAS IN THE BINARY SYSTEM OXY-
GEN-KRYPTON. [1960] 11p.
Order from ATS \$12.45

I. Fastovskii, V. G.
II. Gurvich, Y. G.
III. ATS-53M47G
IV. Associated Technical
Services, Inc.,
East Orange, N. J.

Trans. of Acta Physico-Chimica U. R. S. S. 1939,
v. 11, no. 6, p. 883-898.

DESCRIPTORS: *Oxygen. *Krypton. Liquids. Gases.
Chemical equilibrium.

(Chemistry - Physical, TT, v. 10, no. 1)

Office of Technical Services

Investigation of the Flame of CO and O₂
VII. The OH Radical in Flames of Moist Carbon
Monoxide, by H. Kondratyeva, V. Kondratyev, 8 pp.

RUSSIAN, Acta Physicochimica U.R.S.S.
Vol III, No 1, 1940.

Available
in English
at LC

Sci

Aug 60

121,706

Production of Sulphur Monoxide by Photochemical
Processes, by A. Jakovleva, V. Kondratyev, et al.

RUSSIAN Part
No. 2 1940. Acta Physicochimica U.R.S.S.

Available
in English
at LC

Sci

Aug 60

121,748

Kinetics of Anisole Synthesis on Promoted Catalysts,
by M. Tselin, V. Puzhev,

RUSSIAN, no par, *Acta Physicochim USSR*, Vol XII,
No 3, 1960, pp 327-356.

Ames Tech Sv RJ-308

Scientific - Chemistry

36,522

(\$5.50)

The Radiation of the Low-Temperature Flame of
Carbon Disulphide, by V. Kondratyev, 10 pp.

RUSSIAN, 1940; Acta Physicochimica U.R.S.S.;
Vol XIII, No 5, 1940.

Available
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Sci

Aug 60

121,767

Chemical Action of Ultrasound, by S. S. Urazov'-
skiy and I. G. Polotskiy, 8 pp.

RUSSIAN, per, Acta Physicochim SSSR, Vol XIII,
1940, pp 443-453.

SLA R-2624

Sci

Aug 58

72,725

(NY-4839)

The Theory of the Thermal Explosion. Part IV.
Study of Heat Transfer in Closed Containers for the
Purpose of Determining the Explosion Constants,
by O. M. Todor, E. H. Karadin, 25 pp.

RUSSIAN, per, Acta Physicochimica U. R. S.S., Vol XIV
No 1, 1941, pp 53-70.

JPRS 7055

135,822

Sci - Phys

Dec 60

<p>Syrkin, Ya. and Dyatkina, M. THE STRUCTURE OF NAPHTHALENE MOLECULE [1961] 4p. 4 refs. Order from OTS or SIA \$1.10 61-16873</p> <p>Trans. of Acta Physicochimica U. R. S. S. . 1941, v. 14, no. 3, p. 105-118.</p> <p>DESCRIPTORS: *Naphthalenes, Molecular structure, Molecules</p> <p>The peculiarities of the behavior of naphthalene are discussed under consideration of the proposed theories of the structure of its molecule. The reactions of naphthalene can be explained from the quantum mechan- ical point of view.</p> <p>(Chemistry--Organic, TT, v. 6, no. 8)</p>	<p>61-16873</p>
<p>I. Syrkin, Ya. II. Dyatkina, M.</p>	<p>61-16873</p>
	<p>Office of Technical Services</p>

61-16871

Kricherskil, I. R. and Levchenko, G. T.
THE COMPRESSIBILITY OF GAS MIXTURES: THE
P-V-T DATA FOR BINARY AND TERNARY MIX-
TURES OF METHANE, NITROGEN AND HYDROGEN.

I. Kricherskil, I. P.
II. Levchenko, G. T.
III. Title: p-v-T...

[1961] 2p., 20 refs.
Order from OTS on SLA \$1.10 61-16871

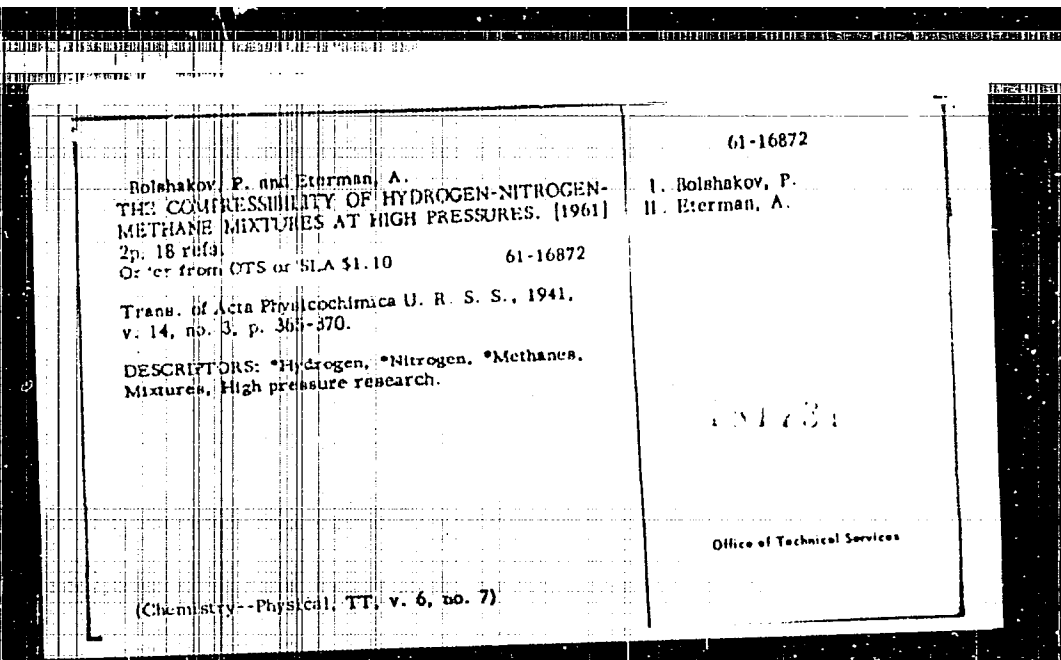
Trans. of Acad. Physical Chem. U. R. S. S., 1941,
v. 14, no. 2, p. 271-278

DESCRIPTORS: *Gases, *Methanes, *Nitrogen,
*Hydrogen, Physical properties, Chemical properties,
Mixtures, Pressure, Temperature, Volume.

135116

A study was made of the compressibility of the binary
mixtures methane-nitrogen (three compositions) and
methane-hydrogen (two compositions) at the tempera-
tures 0°, 50°, 100°, 150°, and 200°C and pressures
100 to 700 atm. The compressibility of the ternary
mixtures methane-nitrogen-hydrogen (three composi-
tions) was also studied. (over)

Office of Technical Services



61-16667

Gantmakher, A. and Medvedev, S.
THE CHANGE IN THE RAMAN SPECTRA OF
CHLOROPRENE AND ISOPRENE IN THE POLYMERI-
ZATION PROCESS. [1961] 3p. 11 refs.
Order from OTS or SLA \$1.10 61-16667

- I. Gantmakher, A
- II. Medvedev, S

Trans. of Acta Physicochimica U. R. S. S., 1942,
v. 16, no. 1/2, p. 1-11.

DESCRIPTORS: *Chloroprenes, *Isoprene, *Raman
spectroscopy, Polymerization.

15171

Office of Technical Services

(Physics--Spectroscopy. TT, v. 6, no. 7)

Krichevskii, I. and Gamburg, D.
SOLUBILITY OF LIQUIDS IN COMPRESSED GASES:
SOLUBILITY OF BENZENE IN COMPRESSED
NITROGEN. [1961] 4p. 35 refs.
Order from OIS or SLA \$1.10 61-16642

Trans. of Acad. Physicochimica U. R. S. S., 1942,
v. 16, p. 363-375.

DESCRIPTORS: *Liquids, *Benzenes, Solubility,
*Nitrogen, Solvent action, Gases.

The solubility of benzene in compressed nitrogen was studied at temperatures from 35° to 100°C and pressures up to 1100 kg/cm². The shape of the solubility curve of the substance in the compressed gas is discussed qualitatively. It was proved experimentally that on the solubility curve of benzene in compressed nitrogen there is not only a minimum, but also a point of inflexion. With increasing pressure, the partial molar volume of benzene dissolved in nitrogen passes through a minimum. (Author)

I. Krichevskii, I
II. Gamburg, D.
III. Title: Solubility...

195104

Office of Technical Services
(Chemistry--Physical, TT,
v. 6, no. 8)

Photochemical oxidation of
Kondratyev, 10 pp.

RUSSIAN, part Acta Physicochimica U.R.S.S., Vol XVI,
No 5, 6, 1942.

Available
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Sci

Aug 60

121,711

61-16643

Baiandin, A. A., Marushkin, M. N., and Afanas'ev, M. M.
CONTACT DECOMPOSITION OF HYDROCARBONS: CONVERSION OF NORMAL-BUTANE UNDER THE ACTION OF CARBON DIOXIDE OVER NICKEL-ALUMINA CATALYSTS. [1961] 4p. 25 refs.
Order from OTS or SLA \$1.10 61-16643

Trans. of Acta Physicochimica U. R. S. S., 1942, v. 17, p. 83-92.

DESCRIPTORS: *Hydrocarbons, *Butanes, Decomposition, *Carbon dioxide, *Alumina-nickel catalysts, Catalysts, Chemical reactions.

The conversion of n-butane and carbon dioxide over nickel-alumina is investigated experimentally. A scheme of the reaction mechanism is given which accounts for a successive shortening of the carbon chain and explains the formation of carbon, being in accord (Chemistry--Organic; TT, v. 6, no. 10) (over)

- I. Ralandin, A. A.
- II. Marushkin, M. N.
- III. Afanas'ev, M. M.
- IV. Title: Conversion...

Office of Technical Services

61-16644

Balandin, A. A. and Kostin, F. K.
KINETIC STUDY OF DEHYDROGENATION OF
CYCLOHEXANE. [1961] pp. 14 refs

I. Balandin, A. A.
II. Kostin, F. K.

Order from OCS or SLA \$1.10 61-16644

Trans of Acta Physicochimica U.R.S.S., 1942, v. 17,
p. 212-217.

DESCRIPTORS: Dehydrogenation, *Cyclohexanes,
Catalysts, Hydrocarbons, Benzenes, Reaction kinetics

196105

The catalytic dehydrogenation of cyclohexane was in-
vestigated over copper on chromium oxide, copper on
chromium oxide with a mixture of barium oxide and
chromium oxide, and ammonium chromate. The influence
of temperature upon the reaction rate was studied.
Benzene is the predominant resulting product. Its
yield at 330° is about 10%, 13% and 51% with the first,
second and third catalysts, respectively. The conclu-
sion is reached that on the active border lines of the
(Chemistry--Physical, IT, v. 6, no 8) (over)

Office of Technical Services

Frank Kamenetski, D. A. and Markovich, V. G.
ISOMERIZATION EQUILIBRIUM ALLENE \rightleftharpoons METHYLACETYLENE. [1961] [2]p. 6 refs.

Order from OTS or SIA \$1.10 61-16653

Trans. of Acad. Physicochimica U. R. S. S., 1942,
v. 17, p. 308-313.

DESCRIPTORS: *Alkenes, *Propynes, Isomeric transitions, Chemical equilibrium.

The equilibrium constant for the isomerization of allene has been calculated by the statistical method, from the spectroscopic data and the heats of hydrogenation obtained by Katsinkovsky and co-workers. The experimental data of Slobodine concerning this equilibrium are discussed, and it is concluded that, owing to the experimental difficulties, the theoretical values are more trustworthy. An error in the estimation of the entropy of allene given by Linnett and Avery is corrected.
(Author)

I. Frank Kamenetski, D. A.
II. Markovich, V. G.

105106

Office of Technical Services
(Chemistry--Physical, TT, v. 6,
no. 8)

Avramenko, L. I.
HYDROXYL IN FLAMES; II. HYDROXYL IN ACETYLENE FLAME. [1962] 3p. 4 refs.

Order from OTS or SLA \$1.10 62-14615

[Condensed] transl. of *Acta Physicochimica U. R. S. S.*,
1943, v. 16, no. 1, p. 56-68.

DESCRIPTORS: *Hydroxyls; *Acetylenes, Hydrocarbons, *Flames.

I. Avramenko, L. I.
II. Title: Hydroxyl

(Chemistry--Physical, IT: v. 8, no. 7)

Office of Technical Services

On the Reaction of Water Gas Conversion in
Quartz Vessels, by V. Kondratyev, M. Ziskin,
13 pp.

RUSSIAN, Tr. Akad. Khimichesk. Nauk SSSR,
Vol. VIII, No 4, 1943.

Available
in English
at LC

Sci

Aug 60

121,705

Rapid Combustion in Rough Tubes, by V. Diment,
K. Shchelkin, 12 pp.

RUSSIAN, per, Acta Physicochimica U.R.S.S.,
Vol XIX, No 4, 1944.

Available
in English
at LC

Sci.
Aug 60

121,712

61-18172

Roginskii, S. and Tsclinakaya, T.
EXPERIMENTAL INVESTIGATION OF THE ROLE OF
SUPERSATURATION IN THE PREPARATION OF
CATALYSTS. (196) 7p. 40 refs.
Order from OTS or LA 51-10

I. Roginskii, S.
II. Tsclinakaya, T.

61-18172

Tranz. d. Akad. Phys. khim. U. R. S. S. 1944,
v. 19, p. 225-227.

DESCRIPTION: ... nickel catalysts. Nickel compounds,
Oxides, Carbonates. Decomposition.

18172

The decomposition of nickel carbonate is shown to
proceed as an autocatalytic process. The reaction
velocity increases with rising reaction supersaturation.
An extremely rapid decay of carbonate is observed at
partial pressures of carbon dioxide from 10^{-4} to 10^{-2}
mm Hg, and a rather slow one near equilibrium. It is
shown that the values of the reciprocals of the lapse of
time, necessary to reach a certain degree of decompo-
(Chemistry - Physical, ITT, v. 6, no. 7) (over)

Office of Technical Services

61-18171

Bagdasar'yan, Kh.
PHOTOLYMERIZATION OF VINYL ACETATE.

I. Bagdasar'yan, Kh.

1946: 7, 18, ref. 61-18171

Orig. from O.T.S. on LA 5110

Transl. from *Para. cuc. in vest. U.S.S.R. S.S.* 1944

(7, 18) p. 228-233

DESCRIPTIONS: *Acetates. *Vinyl radicals. Photo-

chemistry. Polymerization.

The photopolymerization of vinyl acetate in mixtures with ethyl acetate and benzene has been investigated. The rate of photopolymerization of pure vinyl acetate and in mixtures with ethyl acetate is proportional to the square root of the intensity of incident light. A peculiar relation is established between the ratio $V/\sqrt{I_0}$ and the concentration of vinyl acetate. The temperature dependence of the rate of polymerization corresponds to an activation energy of 6.3 kcal. The length of the molecular chain is shown to be proportional to the (Chem. & Phys. A. 11, v. 6, no. 7) (over)

18171

Office of Technical Services

Decrease of Detonation Velocity in Rough Tubes,
by K. Shelkin, 5 pp.

RUSSIAN, Acta Physicochimica U.R.S.S.,
Vol. XI, No. 2, 1945.

Available
in English
at LC

Sci

Aug 60

121,709

On the Components of the Reaction $H-O_2=OH-O$ and
 $H_2-O_2=2OH$, by N. Semenov, 12 pp.

RUSSIAN, year Acta Physicochimica U.R.S.S.,
Vol XX, No 3, 1945.

Available
in English
at LC

Sci

Aug 60

121,699

The Dynamics of the Sorption of Mixtures, by
O. Todes, 28 pp.

RUSSIAN, per: Acta Physicochimica U.R.S.S.,
Vol. XX, No. 3, 1949.

Available
in English
at LC

Sci

Aug 60

121,698

61-18187

Medvedev, S. and Tseitlin, P.
OXIDATION AND POLYMERIZATION OF STYRENE.
[1961] 15 pp. 14 refs.
Order from ODS or SLA \$1.60 61-18187

I. Medvedev, S.
II. Tseitlin, P.

Trans. of Acad. Physicochimica U. R. S. S., 1945.
v. 20, p. 3-30

DESCRIPTORS: Styrenes, Polymerization, Oxidation,
Free radicals.

Experiments showed that styrene oxidation comprises two chain processes, a primary and a secondary one, which take place with the intermediate formation of peroxide compounds. The formation of secondary chains is due to the decomposition of acylperoxides formed from the unstable peroxides of benzaldehyde and styrene. Propagation of both chain processes occurs through free radicals. The ratio of oxidized to polymerized styrene remains constant at different temperatures, with admixture of benzaldehyde and benzoyl
(Chemistry--Physical, TT, v. 6, no. 7) (over)

Office of Technical Services

61-18334

Shekhter, A., Roginskii, S., and Isaev, B.
ELECTRON-MICROSCOPICAL INVESTIGATION OF
CATALYSTS ON ASBESTOS AS A CARRIER. [1961]

7p. 6 refs.

Order from OJIS or SL: 51.10

61-18334

- I. Shekhter, A.
- II. Roginskii, S.
- III. Isaev, B.
- IV. Title: Asbestos ...

Trans. of Acad. Physical-Chemical U.S.S.R., 1945, v. 20,
p. 117-126 (also publ. in Akademiya Nauk SSSR,
Otdeleniye Khimicheskikh Nauk, Izvestiya, 1945,
p. 322-328).

DESCRIPTORS: *Catalysts, *Electron microscopy,
*Asbestos fibers, Filters.

The electron-microscopical method was applied to a
study of carrier catalysis, in particular to oxide and
metal contacts deposited on asbestos. The effect of
heating on the structure of chrysotile and anthophyllite
asbestos was studied and destruction of fibers, be-
(Chemistry-Physical, v. 7, no. 6) (over)

Office of Technical Service

61-18353

I. Bol'shakov, P.

Bol'shakov, P.
PARTIAL MOLAL VOLUMES, FUGACITY AND
ACTIVITY COEFFICIENTS OF NITROGEN AND
HYDROGEN IN THEIR MIXTURES AT HIGH PRES-
SURES. [1961] 5p. 0 refs.
Order from GTS or SLA \$1.10 61-18353

Trans. of Acta Physicochimica U. S. S. S., 1945, v. 20,
p. 259-267.

DESCRIPTORS: *Nitrogen, *Hydrogen, Mixtures,
Gases, High pressure research, *Activity coefficient.

The partial molal volumes of hydrogen and nitrogen in
their mixtures at temperatures ranging from zero to
200°C and pressures up to 1000 atm were calculated
from P - V - T data. The rule of Lewis and Randall
was found to hold fairly well for the fugacities of
hydrogen (nitrogen) upwards of 200°C. (Author)
(Chemistry--Physical, TT, v. 7, no. 7)

Office of Technical Services

Detection and Measurement of the Concentration
of Hydrogen Atoms in a Hydrogen Flame, by H.
Kondratieva, V. Kondratiev, 12 pp.

RUSSIAN, non. Acta Physicochimica U.R.S.S.,
Vol XXI, No 1, 1946.

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Aug 60

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ACTA PHYSICOCHEMICA URSS Vol XXI, No 3 May/June 1946

16 pp

"Adsorptive Properties and Structure of Adsorbents.
I. Limiting Adsorption from Solutions and Activated
Charcoal"

A. Kisselev, K. Shcherbakova

Proj 2091

18T94

ACTA PHYSICOCHEMICA URSS Vol XXI, No 3 May/June 1946

8 pp

"An Electron Microscopic Investigation of Smoke
Deposits"

A. Shekhter, S. Roginsky, S. Sakharova

In English available at
Lib of Congress
Sci Museum Lib 50/1896

Fig 2095

16795

D-3-117

Hydrogen Atoms in Hydrogen Flames, by N.
Kondratiev, 7. Kondratiev, 74 pp.
RUSSIAN, per Acta Physicochimica U.R.S.S.,
Vol. XXI, No. 2, 1966.

Available
in English
at IC

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61-20156

Rubinshtein, A. and Pribytkova, N.
THE ROLE OF PRIMARY SUBMICROSCOPIC CRYSTALS IN HETEROGENEOUS CATALYSIS. [1961]

[8]p. 23 refs.
Order from OTS or SLA \$1.10 61-20156

Reprint of Acta Physicochimica U. R. S. S., 1946, v. 21,
p. 79-100.

DESCRIPTORS: Crystals, *Catalysis, Deformation,
Lattices, Catalysts, Reaction kinetics, Butanols,
Chemical equilibrium, Thermochemistry

I. Rubinshtein, A.
II. Pribytkova, N.

(Unannounced)

Office of Technical Services

61-20157

Adirovich, E.
MECHANISM OF THE INFLUENCE OF SULFUR
COMPOUNDS ON THE KNOCK VALUE OF
ETHYLATED GASOLINE. [1961] 2p. 12 refs.
Order from OTS or SLA \$1.10 61-20157

Reprint of Acta Physicochimica U. R. S. S., 1946,
v. 21, p. 283-288.

DESCRIPTORS: Gasoline, Knocking, Sulfur com-
pounds, Chemical reactions.

I. Adirovich, E.

(Unannounced)

Office of Technical Services

01-2158

THE EUTECTICS AND SOLID SOLUTIONS OF
PARAFFINS [1961] [4]p. 19 refs.

L. Kravchenko V.

Order from OTS or SIA \$1.10

61-20158

Reprint from Acta Physicochimica U. R. S. S. 1946,
v. 21, p. 335-344.

DESCRIPTION: Solutions; Equilibria; Melting

ACTA PHYSICO-CHEMICA URSS. SER. III,

10 pp

"The Melting Point of Organic Crystals"

V. Kravchenko

In English
at Lib of Congress

26T75

ACTA PHYSICOCHEMICA URSS Vol XXII, No 1

Jan 1947

20 pp

"Statistics of the Surface of Active Charcoal Deduced
from the Kinetics of Activated Adsorption"

Keyer, S. Rozhinskiy

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in English

26155

ACTA PHYSICOCHEMICA URSS Vol XXII, No 1

Jan 1947

11 pp

"The Effect of Surface-Active Substances on the
Evaporation of Water Drops in the Spheroidal State,
Part II"

N. Pletenera, P. Reh binder

In English
Available Lib of Congress

26T56

ACTA PHYSICOCHEMICA URSS Vol XXII, No 1

Jan 1947

16 pp

"The Role of the Adsorption of Hydroxyl in the Chain
Mechanism of Hydrogen Combustion"

V. Vojtevodskiy

In English
Avail in Lib of Congress

26T58

ACTA PHYSICOCHEMICA URSS Vol XXII, No 1

Jan 1947

161pp

"On Anomalous Phase Transitions (Behavior of Substances
Near their Critical Point)"

I. Krichevskiy, A. Rosen

In English
Avail in Lib of Congress

26159

ACTA PHYSIOCHEM. CA. URES Vol XXII, No 1 Jan 1967

16 pp

"Absorption of Gas from an Air Current by Granular Material, Part II"

A. Tikhonov, A. Schuchowitzky

In English
Avail Lib of Congress

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ACTA PHYSICOCHEMICA URSS Vol XXII, No 1 Jan 1947

16 pp

"Solvation of Nonelectrolytes and the Compressibility
of their Solutions"

A. Passynskiy

In English
Avail Lib of Congress

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ACTA. PHYSIOCOCHIMICA URSS Vol XXII, No 1 Jan 1971

20 pp

"Kinetics of Hydrogenation and of Related Reactions:
Part II, Kinetics of Hydrogenation with Nickel, Platinum,
and Copper"

A. Balandin

Available at Lib of Congress

Proj 1563

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In English

26T2

ACTA PHYSICOCHEMICA VOL XLII, No 1

20 pp

"Kinetics of Hydrogenation and of Related Reactions:
Part I, The Mechanism of Hydrogenation, Dehydrogenation,
and Deuterium Exchange"

Q. Baladin

Available at Lib of Congress
In English

26T3

ACI. PRESE "CHIMICA USSR Vol XXII, No 1

Jan 1981

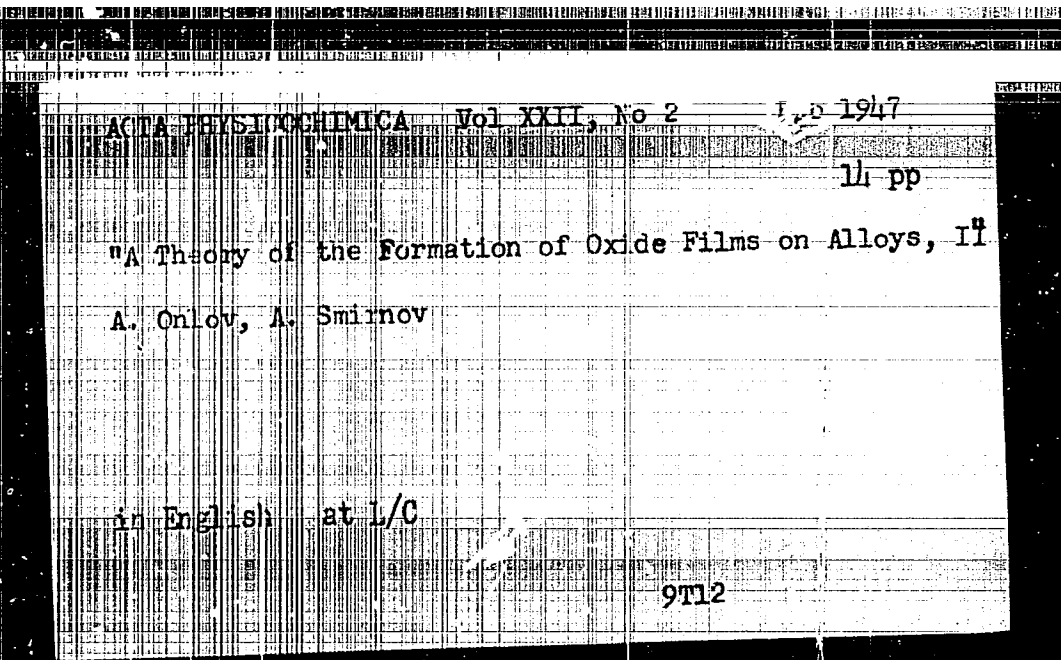
17 pp

"The Formation of Nitric Oxide During Combustion and Explosions: Part III, Influence of Vessel Size and Combustion Rate"

D. Frank-Kamenetzkiy

Available at Lib of Congress
in English

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ACTA PHYSICOCHEMICA VOL. XXII, No 2

Feb 1947

26 pp

"Photoconductivity of Thin Layers of Dye in the
Solid State"

A. Vartanian

in English at L/C

ACTA PHYSICOCHEMICA VOL XXII, No 2 Feb 1947

12 pp

"The Influence of Adsorption on the Surface Motion
of Mercury Drops"

T. Kryukova

ACTA PHYSICO-CHEMICA VOL XXII, No 2

Feb 1947

18 pp

"On Heterogeneous Ionic Catalysis"

V. Goldanskiy, N. Chirkov

In English at I/C

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ACTA PHYSICOCHIMICA VOL XXII, No 2 Feb 1947

6 pp

On the Detonation Mechanism of Liquid Explosives:
An Estimate of the Heating of Liquid Nitric Esters by
a Shock Wave

S. Ratner

ACTA PHYSICOCHEMICA VOL XXII, No 2 Feb 1947

7 pp

"On the Laws Governing the Separation Process of Solids of Different Floatability, and the Content of the Floated Solid in the Concentrate and its Recovery"

Z. Volkova

in English at L/C

9T18

ACTA METALURGICA VOL XXII, NO 1

12 pp

"Certain Properties of Real Crystals of Vanadium Nitride"

V. Epelbaum

in English at L/C

9T19

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ACTA FINESTROCHEMICA

VOL. XXXI, NO. 1

10 pp

"The Crystal Chemistry of Aromatic Compounds: III,
The Packing Coefficient in Organic Crystals"

A. Kitaigorodski

in English at I/C

9T20

ACTA PHOTOCHEMICA VOL. XVII, N°

6 pp

"The Symmetry of the Molecule and the Selection Rules
for the Electronic Vibration Spectrum of Allene"

M. Kovner

in English at L/C

9T21

ACTA PHYSICOCHEMICA VOL. XXII, NO. 2 1968

14 pp

"Characteristics of the Fluidity-Temperature Relation
For Liquids by the Blowing-Off Method"

M. Kussakov, E. Razumovskaya

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10 pp

"The Temperature Dependence of the Viscosity of Molten Silicates"

A. Leontieva

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9T23

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16 pp

"The Compressibility of Colloidal Solutions and the
Solubility of Colloids"

A. Passynsky

in English at L/C

9T24

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24 pp

"A Theory of Vibrational Spectra of Polyatomic
Molecules, V"

B. Stepanov

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9T25

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14 pp

"An Investigation of the Exchange Adsorption of Electrolytes on Fatty Acid Crystals by the Conduction Method, Part III"

A. Trapeznikov, M. Lipetz

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The Development of Some Piroplasmidae in Vertebrate
Hosts, by M. V. Krylov.
RUSSIAN, per, Acta Protozoologica, Vol 2, 1964, pp 307-
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Metabolism of Denervated Insect Muscle, by ...
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Sci - Engr
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The Theory of Radiocommunication Channels
with Random Varying Parameters, by V. I.
Siforov, 2 IP.
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