

Polarization During Ion Redox Processes
Rechargings, Ions of Iron, Thallium,
Cerium, And Vanadium, by N. Antropov,
E. Mizgireva.

RUSSIAN, per, Zhur Fiz Khim, Vol XV,
1941, pp 776-792. 9230471
AEC-Tr-6572

Sci-Phys
Dec 65

293,340

Vibration Spectra of Hydrocarbon Molecules.
VI. Relation Between Vibration Form and Symmetry of
Molecules, by M. A. El'yashovich, 19 pp.

RUSSIAN, part, Zhur Fiz Khim, Vol IV, No 7-8, 1941,
pp 831-845,

Sci Tr Center RT-1140

Scientific - Physics

Jul 54 CNS

16,062

Vibration Spectra of Hydrocarbon Molecules. VII. A
Simplified Method of Setting up Equations for the Deter-
mination of Vibration Frequencies of Polyatomic Molecules,
by M. A. El'yashovich, 23 pp.

RUSSIAN, per: Zhur Fiz Khim, Vol XV, No 7-8, 1941,
pp 847-864.

Sci Tr Center RT-1141

Scientific - Physics

16,063

Jul 54 CTS

Vibration Spectra of Hydrocarbon Molecules. VIII.
Calculation of Constants of the Potential Energy
According to the Vibration Frequencies of Methane and
Ethane, by M. I. Stepanov, 21 pp.

*Russkii ... Fizika Vol. IV, no 7-8, 1941,
p. 851-861.*

Sci Tr Center RT-1221

Scientific - Physics

Jul 54 CTC 16,059

Chemical Bond in Solid Compounds 1, by A. K. Berger, 9 pp.

RUSSIAN, per, Zhur Fiz i Khim, Vol XV, 1941, pp. 927-933

SLA R-2967

Sci

Jul 59

92,398

The Nature of Photochemical and Additive
Coloring of Fluorite, by L. N. Shamovskiy,
12 pp.

RUSSIAN, ~~Zhur. Fiz. Khim.~~ Zhur. Fiz. Khim, Vol XV, No 7-8,
1941, pp 934-941.

Sci Tr Center
RT-1443

Scientific - Chemistry

18,878

Diffraction of Rapid Electrons in Thin Films
of Cellulose Esters, by V. A. Kargin, D. I.
Leipunskaya.
RUSSIAN, per, Zh. Fiz. Khim., Vol 15, No 9, 1941,
pp 1011-1021.
NLL 5828.4# (11868)

Sci - Chem
Sept. 67

340,146

Process of Solution and Swelling of Cellulose
Esters. II., by A. Tager, V. A. Kargin,
RUSSIAN, per, Zh. Fiz. Khim, Vol 15, No 9,
1941, pp 1036-1054.
NLL 5828.4F (11854)

Sci - Chem
Sept. 67

340,356

KARUSTINSKII, A. F.
R-2974. Thermodynamics of the hydration of
electrolytes. Zhur. Fiz. Khim., 15, p.1055-56,
1941. (2p.)

The Effect of Pressure on the Heat of the
Formation of Ammonia, by Y. S. Kuznetsovskiy,
and Y. S. Karapetyants, 8 pp.

RUSSIAN, per, Zhur Fiz Khim, Vol IV, No 7-8,
1951, pp 966-973.

4

ATS RT-197
Asso Tech 80J15R

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SLA R-2963

Jul 58

69. 786

Limited ~~in~~ Joint Solubility of Gases at High Pressures, by I. R. Krichevskiy, D. S. Tsiklis, 2 pp.

RUSSIAN, per, Zhur Fiz Khim, Vol XV, No 9, 1941, pp. 1059.

SLA R-2973

Sci

Jul 59

92,410

Condensation of Supersaturated Vapor, by N. M.
Tunitakiy, 13 pp.

RUSSIAN, per, Zhur Fiz Khim, Vol XV, 1941, pp
1061-1071.

SLA R-2972

Sci

Jul 59

92,440

Shorygin, P. P.
QUANTITATIVE MOLECULAR SPECTRAL ANALYSIS
[1961] 7p. 6 refs.
Order from OTS or SLA \$1. 10

61-16694

Condensed trans. of Zhurnal Fizicheskoi Khimii (USSR)
1941, v. 15, no. 10, p. 1072-1081.

DESCRIPTORS: *Quantitative analysis, *Raman
spectroscopy, Theory, Toluene, Methyl radicals,
Cyclohexanes, Hydrocarbons.

The range of applicability of quantitative analysis by
the Raman spectra method and factors affecting the
width and intensity of Raman lines are discussed. Data
are given on the distribution of intensities in the
spectra of toluene and methylcyclohexane and examples
cited of analysis of complex mixtures of hydrocarbons.
The available data point to a method of quantitative
analysis of individual hydrocarbons in light motor fuels.
(Author)

(Chemistry--Analytical, TT, v. 6, no. 7)

61-16694

L. Shorygin, P. P.

181720

Office of Technical Services

Highly Purified Aluminum Silicate Sols, by M. E. Shistimashvili, V. A. Kargin, 8 pp.

RUSSIAN, per, Zhur Fis Khim, Vol XV, 1941, pp 1121-1128.

SLA R 2954

Sci

Jul 59

92,433

Electrochemical Determination of Thermodynamical
Constants of Oxides of Some Metals, by I. A.
Makolkhin. 5 p

RUSSIAN, per, Zhur Fiz Khim, Vol XVI, 1942, pp 13-17.

SLA R-2925

Sci

Jul 59

91,403

Determination of Thermodynamic Constants
of Sulfides of Mercury and Silver from
Electromotive-Force Measurements, by I. A.
Makolkin, 7 pp.

RUSSIAN, per, Zhur Fiz Khim, Vol XVI, 1942,
pp 18-22.

SLA R-2242

Sci

72,059

Aug 58

The Mechanism of Action of Collectors in Flotation,
XXIII, by M. E. Lipets, 16 pp.

RUSSIAN, per, Zhur Fiz Khim, Vol XVI, 1942, pp 59-
71.

SLA/R-2626

Sci
Apr 59

84, 881

Votinov, A., Kobeko, P., and Mareš, F.
RESEARCH ON POLYMERS. VII. DEPOLYMERIZA-
TION OF LINEAR POLYMERS. [1962] 3p.
Order from OTS or SLA \$1.10 62-14640

[Condensed] trans. of Zhurnal Fizicheskoi Khimii
(USSR) 1962, v. 36, no. 3/4, p. 106-114.

DESCRIPTORS: *Polymers. Decomposition, *Styrenes,
Methyl radicals, *Acrylic resins, Reaction kinetics.

(Materials--Plastics, TT, v. 8, no. 7)

62-14640

I. Votinov, A.
II. Kobeko, P.
III. Mareš, F.
IV. Title: Depolymerization ...

Office of Technical Services

Fastovskii, V. I. and Krestinskii, Yu. A.
SOLUBILITY OF ARGON ON LIQUID OXYGEN.
[1962] 3p. 4 refs.

Order from OTS or SLA \$1.10

62-14638

Trans. of Zhur[na]l Fizi[chesko]i Khim[i] (USSR)
1942, v. 16, no. 5/4, p. 148-151.

DESCRIPTORS: *Argon, Solubility, *Liquefied
gases, Oxygen.

The solubility of solid argon in liquid oxygen was investigated tensimetrically at 72.8-79.09°K, and a considerable deviation of the experimental data from ideal solubility established. An empirical equation was derived permitting calculation of the solubility of argon in liquid oxygen. (Author)

62-14638

I. Fastovskii, V. I.
II. Krestinskii, Yu. A.

Physico-Chemical Investigations of Solutions in
Liquefied Gases. 29. The Catalytic Activity of
Nitro-Indicators in Liquid Ammonia. Salt Effect in
the Ammonolysis Reaction of Pilocarpine, by E. A.
Izraelovich, A. I. Shatenshtein, 19 pp.

RUSSIAN, no per, Zhur Fiz Khim, Vol XVII, No 1, 1943,
pp 24-31.

Sci Tr Ctr RT-3486

Scientific - Chemistry

34,865

May 56 GTS/dex

Kinetics of Catalytic Oxidation of Acetylene on
Active Manganese Dioxide, by V. Roiter, M. Rusov,
17 pp.

RUSSIAN, per, Zhur Fiz Khim, Vol XVII, No 2, 1943,
pp 87-96.

Sci Tr Center RT-1209

SLA 61-16953

Scientific - Chemistry

Jul 54 CTS

16,045

R-478-N

Photo Chemical Nitration of Benzene and of
Nitrobenzene by Means of Oxides of Nitrogen, by
I. O. Gomislavets,

RUSSIAN, per, Zhur Fiz Khim, Vol XVII, 1943,
pp 102-107.

*JPRS for AEC

Sci - Phys
16 Feb 61

High - Pressure Apparatus, by I. R.
Krichevskiy and D. S. Tsiklis, 14 pp.

RUSSIAN, per, Zhur Fiz Khim, Vol XVII,
1943, pp 115-125.

SIA R-2288

Sci

Aug 58

72,191

Diffusion Phenomena at the Limits of Propagation of
Flame: Experimental Investigation of the Inhibition
of Explosive Mixtures of Carbon Monoxide, by N. P.
Drozdov, Ya. B. Zel'dovich, 1944.

RUSSIAN, per, Zhur Fiz Khim, Vol XVII(3), Moscow,
1943, pp 134-154.

OT 77-63-20561
Carnel Aeronautical Laboratories
Inc., USA
Tr No OT/388

Scientific - Chemistry, diffusion, flame, explosive,
mixtures, carbon monoxide

Index Aeronauticus

OT 65-16812
SLA RT-973

Vibration Spectra of Hydrocarbon Molecules. IX.
Calculation of Frequencies of Propane and Butane,
by M. A. El'yashevich, B. I. Stepanov, 13 pp.

RUSSIAN, per, Zhur Fiz Khim, Vol. XVII, No 3, 1943,
pp 145-158.

Sci Trans Center RT-412

scientific - Physics
CTS/DEK

10,897

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Thermodynamic Properties of Compressed
Ammonia, by Y. S. Kazarnoskiy and M. K.
Karapetants, 19 pp.

RUSSIAN, per, Zhur Fiz Khim, Vol XVII,
1943, pp 172-186.

SLA R-2282

Sci

Aug 58

72,183

Solubility of Liquids in Compressed Gases. I.
Solubility of Benzene in Compressed Nitrogen,
by I. R. Krichevskiy and D. Gamburg, 13 pp.

RUSSIAN, per, Zhur Fiz Khim, Vol XVII, 1943, pp
215-225.

SLA R-2281

Sci

Aug 58

72,190

13 212

Ca-1

DAIN B. Ya., KUTSAYA B. F., LIBERZON E. A.

Reactions in the electron affinity spectra of divalent chromium
and iron ions

Zhur. Fiz. Khim., 17, No. 4, 226-235 (1943)

TT 138 - English

E u r a t o m

Sci Tr Ctr

TT 138

Measurement of the Specific Volume of
Melts in the System $B_2O_3-SiO_2$, by A. A.
Lecart'eva, 6 pp.

RUSSIAN, per, Zhur Fiz Khim, Vol XVII, 1943,
pp 264-268.

SIA R-2174

Sci

Aug 58

72,056

The Equation of State of Krichevskiy and
Kasarnovskiy, by M. Temkin, 2 pp.

RUSSIAN, per, Zhur Fiz Khim, Vol XVII,
1943, pp 269-270.

SI.A R-2186

Sci

Aug 58

72,213

The Capacity of a Mercury Electrode in the
Presence of Polyvalent Cations, by M. Vorsina
and A. Frankin, 18 pp.

RUSSIAN, per, Zhur Fiz Chem, Vol XVII, 1943,
pp 295-310.

SLA R-2283

Sci

72,025

Aug 58

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The Free Energy of Diffusion Double Layer, by
A. Frumkin, 4 pp.

RUSSIAN, per, Zhur Fiz Khim, Vol XVII, No 5/6,
pp 300-312. 1943

SLA R-2259

Sci

Aug 58

72,162

Surface Tension of Solutions, by A. Zhurkhovitskiy,
5 pp.

RUSSIAN, *Izv. Akad. Nauk SSSR Ser. Fiz. Khim.*, Vol XVII, No 5/6, 1943,
pp 313-317.

SLA R-2295

Sci

Aug 58

72, 220

Kinetics of Real Chemical Processes, by
V. M. Breitman, 10 pp.

RUSSIAN, per, Zhur Fiz Khim, Vol XVIII,
1943, pp 356-363.

SLA R-2429

Sci

Aug 58

72,158

Natanson, G. L. and Kagan, M. Ya.
CATALYTIC ALKYLATION OF HYDROCARBONS IN
THE GASEOUS PHASE. [1961] 11p. 26 refs.
Order from OTS or SLA \$1.60 61-16918

Trans. of Zhurnal Fizicheskoi Khimii (USSR) 1943,
v. 17, p. 381-390

DESCRIPTORS: *Hydrocarbons, Gases, *Catalysts,
Aluminum compounds, Silicates, Decomposition,
Alkyl radicals, Benzenes, Ethylenes, Propenes,
Toluene, Reaction kinetics

It was established that aromatic hydrocarbons can be
alkylated and aliphatic-aromatics dealkylated in the
gaseous phase over aluminosilicate catalysts. Mo-
bility of the alkyl groups is brought about by these
catalysts which makes double decomposition of the
hydrocarbons possible. Considerations are presented
pertaining to the possible mechanism of catalytic con-
densation of hydrocarbons. (Author)

61-16918

I. Natanson, G. L.
II. Kagan, M. Ya.

105405

(Chemical--Physical, TT,
v. 6, no. 9)

Office of Technical Services

Medvedev, S., Koritskaya, O., and Alekseeva, E.
FREE RADICALS IN POLYMERIZATION PROCESSES.
[1961] 11p. 10 refs.
Order from OTS or SLA \$1.60

61-16902

61-16902

I. Medvedev, S.
II. Koritskaya, O.
III. Alekseeva, E.

Trans. of Zhurnal Fizicheskoi Khimii (USSR) 1963,
v. 37, p. 391-407.

DESCRIPTORS: *Polymerization. *Free radicals.
Reaction kinetics. *Chloroprenes.

In "liquid phase" polymerization of chloroprene under the action of benzoyl peroxide or tetratin hydroperoxide free radicals can be detected by (1) liberation of iodine from hydrogen iodide and (2) addition of iodine. The second method gives satisfactory quantitative results. An increase of the amount of free radicals in the process of polymerization of chloroprene occurs (1) as a result of increasing viscosity of the medium, hindering interaction of radicals (chain rupture) and (2) because of the branching of polymerization chains. The (Chemistry-Physical, 11, v. 6, no. 7) (over)

Office of Technical Services

Volatility of Gaseous Mixtures, by M.
Menkin, 12 pp.

RUSSIAN, per, Zhur Fiz Khim, Vol XVII,
1943, pp 414-423.

SLA R-2297

Sci

Aug 58

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Bibliography of the Studies of the
Karpov Physical-Chemical Institute for
the Period 1934 to 1943, by K. S.
Bagdasaryan, 88 pp.

RUSSIAN, per, Zhur Fiz Khim, Vol XVII,
1943, pp 424-445.

SLA R-2268

Sci

Aug 58

72,156

Boreskov, G. K. and Sokolova, T. I.
DE KINETICA VAN DE KATALYTISCHE OXYDATIE
VAN ZWAVELDIOXYDE OP IJZEROXYDE (Kinetics
of contact oxidation of sulfur dioxide in the presence
of ferric oxide), 25 p. 19 refs. MTWL: 690. (Text
in Dutch).
Order from OTS or ETC \$2.- 61-17375

Trans. of Zhurnal Fizicheskoi Khimii (USSR) 1944,
v. 18, p. 87-101.

DESCRIPTORS: *Oxidation, Catalysis, *Sulfur com-
pounds, *Dioxides, Iron compounds, Oxides.

61-17375

- I. Boreskov, G. K.
- II. Sokolova, T. I.
- III. MTWL-690
- IV. Stichting Moeilijk
Toegankelijke Wetenschap-
pelijke Literatuur

Office of Technical Services

Mechanism of Oxidation of Sulfur Monoxide, by
E. Kondrat'eva, V. Kondrat'ev.

RUSSIAN, no per, Zhur Fiz Khim, Vol XVIII, No 3/4,
1944, pp 102-109. 271254

Assoc Tech Sv RJ-211
\$12.75

Scientific - Chemistry
CIS 73/Oct 1955

27,478

178/60

(SP-1045)

Combustion of Carbon Monoxide-Oxygen Mixtures in
Quartz Vessels, by V. N. Kondrat'yev, 9 pp.

RUSSIAN; per, Zhur Fiz Khim, Vol XVIII, No 3/4,
1944, pp 110-114.

JPRS 4017

Sci - Chem

Sep 60

126, 085

Thermodynamic Properties of N at Pressures from 1000 to 6000 Atmospheres, by P. E. BoI shakov, 11 pp.

RUSSIAN, per, Zhur Fiz Khim, Vol XVIII, 1944, pp 121-130.

SIA R-2432

Sci

Aug 58

72,048

Dielectric Permittivity and Dipole Moments of
Some Organic Substances, by V. Ya. Krasil'nikov,
22 p.

RUSSIAN, per, Zhur Fiz Khim, 1944, Vol XVIII,
No 3, pp 174-182.

NRCC TT-794

Natl Sci Council TT-794

107,052

Sci
Feb 50
Vol 2, No 9

True Solutions, by I. R. Krichevskiy, 9 pp.

RUSSIAN, per, Zhur Fiz Khim, Vol XVIII, 1944,
pp 187-193.

SLA R-2433

Sci

Aug 58

72,189

Vapor Pressure of Solid Acetylene, by P. Z.
Burbo.

RUSSIAN, per, Zhar Pis Khim, Vol XVIII, No 5-6,
1944, pp 253-257.

Assoc Tech Serv RJ-1451
" " " 33K25R

Sci - Chem

Apr 59

85,324

Tsklis, D. S.
EXTRAPOLATION OF DATA CLOSE TO THE
CRITICAL REGION. [1961] 2p. 5 refs.
Order from OTS or SCA \$1.10

61-20130

Trans. of Zhurnal Fizicheskoi Khimii (USSR) 1944,
v. 15, p. 258-259.

DESCRIPTORS *Methanes, *Ammonia, Solubility,
Pressure, Temperature, Chemical equilibrium, Gases,
Vapors.

A discussion of the mutual solubility of methane and
ammonia under pressures up to 800 kg/sq. cm. and
temperatures of 25^o to 50^o C. indicates the necessity
of special precautions in extrapolating data close to
the critical point. (Author)

(Chemistry--Physical, TT, v. 6, no. 12)

61-20130

I. Tsklis, D. S.

187050

Office of Technical Services

Overvoltage at a Mercury Cathode in Concentrated Solutions, by Z. A. Iofa and A. N. Frankin,
RUSSIAN, per, Zhurnal Fizicheskoi Khimii,
Vol XVIII, No 7-8, 1944, pp 268-282.
NLE FTS 3065
(On Loan or Purchase)

Sci-Chem
Apr 67

324,446

61-18195

I. Danilova, V. I.

Danilova, V. I.
PHOTOCHEMICAL DECOMPOSITION OF ACETONE
AND BENZENE ADSORBED ON ACTIVATED CARBON
AND ACTIVE NICKEL. [1961] 7p. 8 refs.
Order from OTS or SLA \$1.10 61-18195

Trans. of Zhurnal Fizicheskoi Khimii (USSR) 1944,
v. 18, p. 315-320.

DESCRIPTORS: *Acetones, *Benzenes, Decomposition,
*Photochemical reactions, Activated carbon, Nickel.

The photochemical decomposition of benzene and ace-
tone adsorbed on active nickel and activated carbon was
compared with their behavior in gaseous state. The ex-
perimental equipment permitted measurement of the in-
crease of pressure due to secondary decomposition
products which indicated the results of the experiments.
In which light produced by a spark between zinc and
aluminum electrodes was permitted to act on the charge
either unfiltered or after elimination of light of certain
(Chemistry--Physical, TT, v. 6, no. 7) (over)

61-18195

Office of Technical Services

Berezovskaya, P. I., Varfolomeeva, E. K., and
Stefanovskaya, V. G.
INFLUENCE OF CATALYTIC ADDITIONS ON THE
DECOMPOSITION AND FORMATION OF ORGANIC
PEROXIDES. [1961] 8p. 13 refs.
Order from OTS or SLA \$1.10 (1-18194

Trans. of Zhurnal Fizicheskoi Khimii (USSR) 1944,
v. 18, p. 321-328.

DESCRIPTORS: *Peroxides, *Hydroperoxides, Decom-
position, Hydrocarbons, Oxidation, Catalysis.

The action of catalytic additions on the decomposition
of 5 peroxides was found to depend upon the chemical
nature of these peroxides. The compounds studied
included ethyl, tert. butyl and benzoyl hydroperoxides
and benzaldehyde and acetone peroxides. The additions
comprised antiknocks, knock inducers, antioxidants and
an oxidation catalyst. No regularity or parallelism
(Chemistry--Organic, TT, v. 6, no. 7) (over)

61-18194

I. Berezovskaya, P. I.
II. Varfolomeeva, E. K.
III. Stefanovskaya, V. G.

18194

Office of Technical Services

62-10837

1. Title: Kinetics . . .

JOURNAL OF PHYSICAL CHEMISTRY, 1944, VOL.
18, NO. 9: [TABLE OF CONTENTS AND SELECTED
ABSTRACTS]. [1952] 4p. 9 refs.
Order from OTS or SLA \$1.10

62-10837

Abstract trans. of Zhurnal Fizicheskoi Khimii (USSR)
1944, v. 18, no. 9, p. 329-334, **364-379, 383-385,
405-407.

**A complete trans. is available in French from OTS
or SLA \$4.60 av (1-15792, CEA-tr-R1024, 22 Oct 60
[50]p).

DESCRIPTORS: *Physical chemistry, Abstracting,
*Acetylenes, *Polymerization, Nitrogen compounds,
*Equations of state, Gases, Adsorption, Charcoal,
Solutions, *High pressure research, *Eutectics,
Azo radicals, Phenyl radicals, Naphthalenes, Chemical
reactions, Reaction kinetics, Benzenes.
(Chemistry-Physical, TT, v. 8, no. 6) (over)

Office of Technical Services

BREITMAN, V.M.

R-2429. Kinetics of real chemical processes.
Zhur. Fiz. Khim., 18, p.356-363, 1940. (10p.)

Kazarnovskii, Ya. S. and Levchenko, G. T.
COMPRESSIBILITY OF METHANE AND METHANE-
AMMONIA MIXTURES AT HIGH TEMPERATURES
AND PRESSURES. [1961] 4p. 7 refs.
Order from OTS or SLA \$1.10 61-18226

Trans. of Zhurnal Fizicheskoi Khimii (USSR) 1944,
v. 18, p. 360-382.

DESCRIPTORS: *Methane, *Ammonia, High pressure
research, High temperature research, Equations of
state.

The compressibility of methane under pressures of from
86.6 to 1400 atm was determined at 250 and 300°C with
a limit of error of up to +0.5%. Binary mixtures of
methane and ammonia of four compositions, i.e., con-
taining 37.84, 39.58, 51.85 and 55.72% ammonia, were
determined for pressures ranging from 82 to 1675 atm
and temperatures from 150 to 300°C with a precision of
up to +1%. The data obtained are quite satisfactorily
(Chemistry--Physical, TT, v. 6, no. 7) (over)

61-18226

I. Kazarnovskii, Ya. S.
II. Levchenko, G. T.

181810

Office of Technical Services

Mechanism of the Oxidation of NO, by M.
S. Furman, 4 pp.

RUSSIAN, per, Zhur Fiz Khim, Vol XVIII,
1944, pp 386-388.

SLA R-2430

Sci

Aug 58

72,127

Kinetics of the NH_3 Dissociation of Ammonia on
Iron Catalysts, by G. P. Kornichuk, Y. A. Kharizhan,
12 pp UNCLASSIFIED

RUSSIAN, *Pr. Zhur Fiz Khimii*, Vol XVIII, No 9,
1944, pp 389-394.

SLA R-231
Sci-Ctr Center
ER RT-1022

Scientific - Chemistry

15,362

Levchenko, G. T.
THERMODYNAMIC PROPERTIES OF COMPRESSED
METHANE [Termodinamicheskie Svoystva Szhatogo
Metana]. [1961] 9p. 16 refs.
Order from OTS or SLA \$1.10

61-18227

Trans. of Zhurnal Fizicheskoi Khimii (USSR) 1944,
v. 18 [no. 10] p. 453-465.
Another translation is available from SLA as RT-1021.

DESCRIPTORS: *Methanes, *Thermochemistry, High
pressure research, Equations of state.

The fugacity, heat capacities at constant pressure and
volume, the heat content, entropy, free energy, maxi-
mum work and internal energy were calculated for
methane within the temperature interval of from -70 to
+200°C. and pressures of from 10 to 1,000 atm. Mollier
diagrams were constructed for methane. The values
calculated by the author were correlated with calculated
and experimental data reported in the literature.
(Author)

61-18227

I. Levchenko, G. T.

15181

Office of Technical Services

(Chemistry--Physical,
TT, v. 6, no. 7)

The Cathodic Behavior of Iron in Neutral
Solutions, by A. I. Krasil'shchikov

RUSSIAN, per, Zhur Fiz Khim, Vol XVIII, 1944,
pp 537-546.

AEC Tr 1112

Scientific - Physics

100-1112-18

KROTOV, T. V.
R-1918. Theoretical considerations of the process
of formation of an anodic film on aluminum. *Zhur. Fiz.
Khim.*, 18, no.9, p.1550-1554 (7p.)

Zhur Fiz Khim, XIX, 15-47, (1945)

Oxidation of Hydrogen Sulfide from the Point of View
of the Kinetics of the Intermediate Reaction Products

N. M. Emanuel (Inst of Chem Physics, USSR, Acad Sci)

(Wilson Dam 552)

Zhur Fiz Khim XIX, ~~48-51~~ 48-71 (1945)

The Principle of Ensemble and Aggravation in Catalysis.
I. The Method of Fluctuation Analysis of Active Centers of
Catalysis in the Range of Subcrystalline Structures.

H. I. Kobozev, L. A. Nikolayev, I. A. Zubovich, and Yu. M.
Gol'dfel'd (Lab of Catalysis and Gas Electrochem, Moscow
State (Lomonosov) University)

(Wilson Dam 553)

Zhur Fiz Khim XIX, 72-82 (1945)

Partial Pressures in Real Gas Mixtures

M. Temkin (Karpov Physical Chem Inst)

(Wilson Lam 645)

62-10840

JOURNAL OF PHYSICAL CHEMISTRY, 1945, VOL. 19,
NO. 3: [TABLE OF CONTENTS AND SELECTED
ABSTRACTS]. [1962] Sp. 5 refs.
Order from OTS or SLA \$1.10

62-10840

Abstract trans. of Zhurnal Fizicheskoi Khimii (USSR)
1945, v. 19, no. 3, p. 142-149.

DESCRIPTORS: *Physical chemistry, *Abstracts,
Catalysts, Catalysis; Classification, Hydrocarbons,
Colloids, Electrical conductance, Electrochemistry.

Contents:

Principle of ensemble and aggravation in catalysis. II.
Principle of aggravation and structural classification
of catalysts, by N. I. Kobozev

Physicochemical investigation of emulsions of poly-
merizing hydrocarbons.

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DESCRIPTORS: Solids, *Ice, *Phenols, *Benzones,
*Camphors, Iodine, *Evaporation, Vapor pressure,
Test equipment.

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