

62-10663

Katibnikov, M. A. and Ermolenko, I. N.
ABSORPTION AND LUMINESCENCE SPECTRAL
STUDY OF DYE-POLYELECTROLYTE INTERACTION
IN SOLUTIONS. I. AQUEOUS SOLUTIONS OF
RHODAMINE 6G IN THE PRESENCE OF METH-
ACRYLIC ACID. [1961] 15p. (9 refs. 3 figs. omitted)
6 refs.

Order from OTS or SLA \$1.60

62-10663

Trans. of Vysokomolekulyarnye Soedin[eniya] (USSR)
[1961] v. 3, no. 1, p. 105-112.

DESCRIPTORS: *Dyes, Organic compounds, Acrylic
acids, Polymers, Methanes, Electrolytes, Absorption
spectra, Luminescence, Polarization, Optics,
Pigments.

A study was made of the influence of the concentration
of polymethacrylic acid on absorption spectra, lumines-
cence spectra, intensity of luminescence, and also the
(Chemistry--Organic, TT, v. 7, no. 12) (over)

I. Katibnikov, M. A.
II. Ermolenko, I. N.
III. Title: Aqueous...

Office of Technical Services

Isotactic Polyacrylic Acid and Its Salts, by
V. A. Kargin, et al.

RUSSIAN, per, Vysokomolekulyarnyye Soyedineniya,
Vol III, No 1, 1961, pp 134-138.

Sci - Chem

Apr 62

NLL M. 3371

SLA 62-13770
191, 907

Investigation of the Structure of Isotactic
Polyacrylic Acid and Its Salts, by V. A.
Kargin, et al.

RUSSIAN, per, Vysokomolekulyarnyye Soyedineniya,
Vol III, No 1, 139-143.
1961,

NLL M. 3376
SLA 62-13771, 908

Sci - Chem

Apr 62

62-12661

Korolev, G. V., Makhonina, L. I., and Berlin, A. A.
KINETIC FEATURES OF THE POLYMERIZATION OF
SOME POLYACRYLATE ESTERS. Pt. 1 of Polymeri-
zation in Highly Viscous Media, and Three-Dimen-
sional Polymerization. [1961] 8p.
Order from ATS \$14.95 ATS-33N57R

Trans. of Vysokomolekulyarnye Soedineniya (USSR)
1961, v. 3, no. 2, p. 198-204.

DESCRIPTORS: *Polymerization, Acrylic acids,
*Esters, *Reaction kinetics.

(Chemistry--Organic, TT, v. 7, no. 10)

- I. Korolev, G. V.
- II. Makhonina, L. I.
- III. Berlin, A. A.
- IV. Title: Polymerization ...
- V. ATS-33N57R
- VI. Associated Technical
Services, Inc., East
Orange, N. J.

ATS-RJ-3060

Office of Technical Services

61-25347

Korshak, V. V., Frunze, T. M. and others.
HETEROCHAIN POLYAMIDES. XXVIII. THE SIGNIFI-
CANCE OF HYDROCHLORIC ACID ACCEPTORS IN
THE PREPARATION OF POLYAMIDES BY INTER-
FACIAL POLYCONDENSATION. [1961] 4p.
Order from ATS \$6.25 ATS-44N53R

Trans. of *Vysokomolekulyarnye Soedineniya* (USSR)
1961, v. 3, no. 2, p. 205-207.

DESCRIPTORS: *Amides, Synthesis, Hydrochloric
acid, Condensation reactions, Polymerization,
Polymers.

(Chemistry--Organic, TT, v. 6, no. 8)

- I. Korshak, V. V.
- II. Frunze, T. M.
- III. Title: Significance...
- IV. ATS-44N53R
- V. Associated Technical
Services, Inc.,
East Orange, N. J.

ATS/RJ-3014

185231

Office of Technical Services

KINETICS OF VINYL ACETATE POLYMERIZATION
IN METHANOL, BY L. ALEKSANDRU, M. OPRISH. 7 pp.

RUSSIAN, PR, VYSOKOMOLEKULYARNYYE
SOEDINENIYA, VOL III, NO 2, 1961, PP 3~~26~~⁰-309.

NLL M.3481

SCI - CHEM

OTS 63-18894

JUN 62

199,104

(SF-1879)

The International Macromolecular Chemistry
Symposium in Moscow, by P. V. Kozlov, V. A.
Kabanov, N. A. Plate, 47 pp.

RUSSIAN, per, Vysokomolekulyarnyye Soyedineniya,
Vol III, No 2, 1961, pp 328-348.

JPRS 11387

Sci - Chem
Jan 22

1
178, 957

Investigation of Molecular Interactions in
Polymer Solutions by the Method of Converting the
into Colloidal Systems, by S. Glickman.

RUSSIAN, per, Vysokomolek Ulyarnye Soedineniya

Vol. 3, No. 3, 1961, pp 353-358

GB/39/PA PVM 131/A/344

Sci -
Aug 67

336-139

Korshak, V. V., Fruze, T. M. and others.
HETEROCHAIN POLYAMIDES. [XXIX]. THE IMPORTANCE OF THE HYDROLYSIS OF DICARBOXYLIC ACID CHLORIDES IN INTERFACIAL POLYCONDENSATION. [1961] 5p.

Order from ATS \$8.00

ATS-45N53R

Trans. of *Vysokomolekulyarnye Soedineniya*, 1961, v. 3, no. 3, p. 371-375.

DESCRIPTORS: *Amides, *Polymers, Condensation reactions, *Carboxylic acids, *Chlorides, Hydrolysis.

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

61-25178

- I. Title: Heterochain polymers
- I. Korshak, V. V.
- II. Fruze, T. M.
- III. Title: Importance ...
- IV : ATS-45N53R
- V. Associated Technical Services, Inc., East Orange, N. J.

ATS/RJ-3015

101921

Office of Technical Services

Parini, V. P., Kazakova, Z. S. and others.
POLYMERS WITH A SYSTEM OF CONJUGATED
BONDS AND WITH HETERO ATOMS IN THE CON-
JUGATION CHAIN. Pt. 12 of Preparation and Proper-
ties of Some Poly(Aminoquinones). [1961] 7p.
Order from ATS \$9.00 ATS-51N53R

Trans. of Vysokomolekulyarnye Soedineniya (USSR)
1961, v. 3, no. 3, p. 402-407.

DESCRIPTORS: *Polymers, *Chemical bonds, Molec-
ular structure, Quinones, Amines.

(Chemistry--Organic, TT, v. 7, no. 2)

61-25350

I. Parini, V. P.
II. Kazakova, Z. S.
III. Title: Preparation ...
IV. ATS-51N53R
V. Associated Technical
Services, Inc., East
Orange, N. J.

ATS/RJ-2993

Office of Technical Services

Time-Temperature Dependence of the Strength
of Polymer Fibres, by S. N. Zhurkov,
S. A. Abasov.

RUSSIAN, per, Vysokomol Soedin, Vol III, No 3,
1961, pp 441-449.

NLL M. 3558
FIL/T 5259
OTS 62-16701
181.296

Sci - Phys

Jan 62

The Role of Chemical and Intermolecular Bonds
in Polymer Rupture, by S. N. Zhurkov, S. A.
Abazov.

RUSSIAN, per, Vysokomoz Soedin, Vol III, No 3,
1961, pp 450-455.

NLL M-3531

FIL/T 5260

OTS 62-16702

181,292

Sci - Chem

Jan 62

61-22613

Rodionova, Ye. F. and Kolesnikov, G. S.
POLYMERIZATION AND COPOLYMERIZATION OF
VINYLPHOSPHONIC DICHLORIDE, PT. 31. [1961] 5p.
Order from ATS \$8. 15 ATS-89N51R

I. Rodionova, Ye. F.
II. Kolesnikov, G. S.
III. ATS-89N51R
IV. Associated Technical
Services, Inc., East
Orange, N. J.

Trans. of Vysokomolekulyarnyye Soyedineniya (USSR)
1961, v. 3, no. 3, p. 459-463

ATS/RJ-3002

DESCRIPTORS: *Copolymerization, *Polymerization,
Vinyl radicals, Phosphonyl radicals, Chlorides,
*Polymers.

175324

Office of Technical Services

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

OXIDATION OF HYDROCARBONS IN THE PRESENCE OF
INHIBITORS, BY D. RYSHAVY.

RUSSIAN, PER, VYSOKOMOL SOEDIN, VOL III, NO 3, 1961,
PP 464-469.

TIL T 5287

SCI - CHEM

210,227

SEP 62

Ryshavy, D. and Balaban, L.
EFFECT OF POLYMERIZATION CATALYSTS ON
THE DESTRUCTION RATE OF ISOTACTIC
POLYPROPYLENE. [1963] 6p. 4 refs.
Order from OTS or SLA \$1.10 63-18410

Trans. of *Vysokomolekulyarnye Soed[ineniya]* (USSR)
1961, v. 3, no. 3, p. 470-474.
Other translations are available from OTS or SLA
\$1.60 as 63-10811, 9 May 62 [11]p. and from PF in:
Polymer Science USSR, v. 3, no. 1, \$100.00/year.

DESCRIPTORS: *Polyethylene plastics, *Propenes,
Polymers, Degradation, *Catalysts, *Ziegler
catalysts, Aluminum compounds, Zinc compounds,
Ethylenes, Titanium compounds, Chlorides,
*Antioxidants.

The influence of the catalysts used during polymeri-
(Materials--Plastics, TT, v. 10, no. 8) (over)

63-18410

I. Ryshavy, D.
II. Balaban, L.

Office of Technical Services

63-17527-4

POLYMER SCIENCE USSR, 1962, VOL. 3, NO. 4,
P. 535-758. Feb 63, 1v.
Order from PP \$100.00/year

I. Pergamon Press, Inc.,
New York

Trans. of Vysokomolekulyarnye Soedineniya (USSR)
1961, v. 3, no. 4, p. 505-520, 530-535, 541-554,
562-569, 585-593, 637-641; no. 5, p. 657-661, 679-
698, 706-710, 716-723, 748-757, 787-793; no. 6,
p. 801-805, 820-832, 841-846, 861-864, 870-890,
898-900, 908-918, 931-935. Abstracts are included of
selected articles from v. 4, nos. 3-4.

DESCRIPTORS: *Polymers, Chemistry, Copolymeriza-
tion, *Radiation chemistry, *Ethylenes, *Phthalates,
*Benzoyl radicals, *Peroxides, *Ethyl radicals,
*Amines, *Serum-albumin, Polymerization, *Acrylic
resins, *Vinyl radicals, *Acetates, *Thio radicals,
*Valeric acids, Adhesion, *Propenes, *Titanium com-
pounds, *Chlorides, *Amides, *Styrenes, *Butenes,
(Chemistry--Organic, TT, v. 10, no. 4) (over)

Office of Technical Services

Spaskii, S. S. and Karas, L. Ya.
ZUM PROBLEM DER INDIVIDUELLEN QUANTITATI-
VEN AKTIVITÄTSCHARAKTERISTIK UNGESÄTTIG-
TER VERBINDUNGEN BEI DEN KOPOLYMERISAT-
IONS-REAKTIONEN (The Individual and Quantitative
Characteristic of the Activity of Unsaturated Com-
pounds During Copolymerization Reactions). 22p.
Order from TIB \$3.35

Trans. in German of Vysokomolekulyarnye Soedineniya
(USSR) 1961, v. 3, no. 4 [p. 505-514].

DESCRIPTORS: *Copolymerization, Chemical reactions,
Organic compounds.

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

62-27279

- I. Spaskii, S. S.
- II. Karas, L. Ya.
- III. Technische Informations-
bibliothek, Hannover
(West Germany)

Office of Technical Services

The Copolymerization of bis-(Alkylamino)
Alkyl- or Arylboron With Organic Diisocyanates,
by V. V. Korzhak, N. I. Bekasova, 8 pp.

RUSSIAN, per, Vysokomolekulyarnyye Soyedineniya,
Vol III, No 4, 1961, pp 521-524. 9676329

FTD-IT-62-25

Sci - Chem

194, 120

4 May 62

The Copolymerization of B-Substituted
Borazoles With Hexamethylene Diisocyanate,
by V. V. Korshak, V. A. Zamyatina, 7 pp.

RUSSIAN, per, Vysokomolekululyarnyye
Soedineniya, Vol III, No 4, 1951,
pp 525-529. 9676329

FTD-TT-62-25

Sci .. Chem

4 May 62

194, 131

Golova, O. P., Epstein, Ya. E., and Dobrynina, L. I.
 THE EFFECT OF INORGANIC COMPONENTS ON
 THE CLEAVAGE OF C-C-BONDS DURING THERMAL
 DEGRADATION OF CELLULOSE (Vliyanie Neorganicheskikh Komponentov na Rasryt C-C-Svyazei pri Termicheskom Raspade Cellulozy). Sep 63 [7p] 7refs
 FFRB Trans. no. 160.

Order from NRCC

NRCC-C-4553

Trans. of Vysokomolekulyarnye Soedineniya (USSR)
 1961, v. 3, no. 4 [p. 536-540]. (Abstract available)

DESCRIPTORS: *Cellulose, *Pyrolysis, Chemical bonds, Inorganic substances, *Salts, Chlorides, Sulfates, Acetates;

Inorganic salts exert a selective effect on the chemical transformation of cellulose at high temperatures. Chlorides of the monovalent metals have the highest (Chemistry, TT, v. 11, no. 3) (civex)

TT-64-12033

- I. Golova, O. P.
- II. Epstein, Ya. E.
- III. Dobrynina, L. I.
- IV. FFRB Trans-160
- V. NRCC-C-4553
- VI. Forest Products Research Branch (Canada)
- VII. Bureau of Translations (Canada)

Office of Technical Services

**Distinctive Features of the Proton Magnetic
Resonance Spectra of a and b forms of Polypeptide
Chains, by D. Shigorin.**

**RUSSIAN, per, Меморат Vysokomolekuliarnye
Soedineniya, Vol III, No 4, 1961, pp 560-561.**

CSIRO/No 5867

**Sci-Phys
May 63**

OTS 63-15262

229,863

INVESTIGATIONS IN THE FIELD OF CYCLIC
POLYMERIZATION AND COPOLYMERIZATION.
III. SYNTHESIS AND CYCLIC POLYMERIZATION
OF ALIPHATIC DIVINYL ACETALS, BY
S. G. MATSOYAN, ET AL.

RUSSIAN, PER, VYSOKOMOLEKUL SOEDINENIYA,
VOL III, 1961, PP 562-569.

NLL M. ~~4638~~ 3485

199,106

SCI - CHEM

Spectral Investigation of Products Formed During
Polymerization of Styrene With 9-Vinylanthracene
Additions, by A. S. Cherkasov, K. G. Valdaikina,
30 pp.

RUSSIAN, per, Vysokomolekulyarnye Soyedineniya,
vol XII, 1961, pp 570-.

AEC Tr-5065

Ref - Chem
Jul 62
List 70

204, 728

61-25175

Andrianov, K. A. and Pichkhadze, Sh. V.
REACTIONS OF POLY-(ORGANOTITANOSILOXANE)
FORMATION [1961] 6p.
Order from ATS \$9.00

ATS-05N53R

Trans. of Vysokomolekulyarnye Soedineniya (USSR)
1961, v. 3, no. 4, p. 577-581.

DESCRIPTORS: Metalorganic compounds, *Titanium
compounds, *Silicones, Polymers, Synthesis, Chemical
reactions.

- I. Andrianov, K. A.
- II. Pichkhadze, Sh. V.
- III. ATS-05N53R
- IV. Associated Technical
Services, Inc., East
Orange, N. J.

ATS/RJ-2997

101915

Office of Technical Services

62-14819

Tsvetkova, V. I., Pirogov, O. N. and others.
KINETICS AND MECHANISM OF OLEFINS POLYMERIZATION ON COMPLEX CATALYSTS. I. THE KINETIC EQUATIONS AND RATE CONSTANTS OF α -OLEFINS POLYMERIZATION ON THE SYSTEM $TiCl_3 - Al(C_2H_5)_3$ FOR DIFFERENT MANNERS OF ACCOMPLISHING THE PROCESS. [1962] 11p. 5 refs.

Order from OTS or SLA \$1.60

62-14819

Trans. of Vysokomolekulyarnye Soed[ineniya] (USSR) 1961, v. 3, no. 4, p. 585-593.

DESCRIPTORS: *Ethylene, *Polymerization, Reaction kinetics, Titanium compounds, Chlorides, Aluminum, Ethyl radicals, Catalysts, Catalysis.

The kinetic equations are derived for various methods of investigating α -olefin polymerization on $TiCl_3-Al(C_2H_5)_3$ catalysts. On the basis of the equations a (Chemistry--Organic, TT, v. 8, no. 6) (over)

I. Tsvetkova, V. I.
II. Pirogov, O. N.
III. Title: Kinetic ...

Office of Technical Services

Investigation of the Degradation of Condensation Resins. Thermo-Oxidative Degradation of Hardened Epoxy Resins, by M. B. Neiman.

RUSSIAN, per, Vysokomolekulyarnye Soedinyeniya, Vol III, 1961, pp 602-606.

NLL RTS 2431
(loan copy)

Jul 64

Investigation of the Degradation of Polycondensation Resins. Part 3. Thermooxidative Degradation of Hardened Epoxy Resins, by H. B. Heiman. RUSSIAN, par, Vysokomolekul Soedin, Vol 3, No 4, 1961, pp 602-606.
ATS-4896

Sci
Dec 68

368,764

61-25218

Shirokova, N. I., Russkova, E. F. and others.
STUDIES OF POLYCARBONATES. [III]. STUDIES OF
2,2-Bis(4-HYDROXYPHENYL)PROPANE POLYCARBON-
ATES IN A HOMOGENEOUS MEDIUM AND THEIR
PROPERTIES. [1961] 9p.
Order from ATS \$12.50

ATS-60N52R

Trans. of Vysokomolekulyarnye Soedineniya (USSR)
1961, v. 3, no. 4, p. 642-649.

DESCRIPTORS: *Carbonates, Chemical properties,
Propanes, Hydroxides, Phenyl radicals.

- I. Shirokova, N. I.
- II. Russkova, E. F.
- III. Title: Studies of 2,2-Bis...
- IV. ATS-60N52R
- V. Associated Technical
Services, Inc., East
Orange, N. J.

ATS/RJ-3001

18193

Office of Technical Services

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

Polyakova, A. M., Korshak, V. V., and
Tambovtseva, E. S.

α -METHYLSTYRENES CONTAINING Sn, Pb and Ge.
Pt. 7 of the Polymerization of Ring-Substituted
 α -Methylstyrenes under Pressure. [1961] 4p.
Order from ATS \$4. 64

ATS-92N53R

Trans. of Vysokomol kulyarnye Soedineniya (USSR)
1961, v. 3, no. 5, p. 662-664.

DESCRIPTORS: *Styrenes, *Methyl radicals, Tin,
Lead, Germanium, Polymerization, Pressure.

(Chemistry--Organic, TT, v. 7, no. 3)

62-1208)

- I. Polyakova, A. M.
- II. Korshak, V. V.
- III. Tambovtseva, E. S.
- IV. Title: Polymerization ...
- V. ATS-92N53R
- VI. Associated Technical
Services, Inc.,
East Orange, N. J.

ATS-RJ-3093

Office of Technical Services

Degteva, T. G.

THERMAL DEGRADATION OF FLUORINATED ELASTOMERS OF THE KEL-F AND PFP/VF TYPES
(Termicheski Raspad Ftorsoderzhashchikh Elastomerov Tipa Kel-F i PFP/VF) tr. by G. Kinner, Sep 61. [12p] 8refs RAE Library Trans. no. 967; AD-265 016. Order from OTS, SLA, or ETC \$1.60 TT-63-24371

Trans. of Vysokomolekulyarnye Soedineniya (USSR) 1961, v. 3, no. 5, p. 671-678. (Abstract available)

DESCRIPTORS: *Elastomers, Pyrolysis, Heat resistant plastics, Polymers, Structural properties, Heat of activation, Reaction kinetics, Fluorides, Heat of reaction, Ethylenes, Chlorides, Propenes, Polyvinyl chloride.

The thermal degradation of Kel-F and PFP/VF elastomers was investigated over the temperature range (Materials--Elastomers, TT, v. 11, no. 5) (over)

TT-63-24371

I. Degteva, T. G.
II. RAE Trans-967
III. AD-265 016
IV. Royal Aircraft Establishment (Gt. Brit.)

Office of Technical Services

Korotkov, A. A. and Li, Tsung-Ch'ang.
EFFECTS OF PREPARATION CONDITIONS ON THE
SPECIFICITY FOR THE POLYMERIZATION OF
PROPYLENE FOR CATALYSTS BASED ON
 β -TiCl₃ + Al(C₂H₅)₃. Pt. 1 of Effects of the Struc-
ture of Titanium Trichloride on the Stereospecificity
of Catalysts. [1961] 8p. 8 refs.
Order from RIS \$14.00

RIS G-314a

Trans. of Vysokomolekulyarnye Soedineniya (USSR)
1961, v. 3, no. 5, p. 686-690.

DESCRIPTORS: *Propenes, Polymerization, *Titanium
compounds, *Chlorides, Aluminum compounds, Ethyl
radicals, *Catalysts, Catalysts, Preparation, Crystal
structure, Stereochemistry, Polymers.

(Chemistry--Physical, TT, v. 7, no. 5)

62-12434

- I. Korotkov, A. A.
- II. Li, Tsung-Ch'ang
- III. Title: Effects of the
Structure ...
- IV. RIS G-314a
- V. Research Information
Service, New York

Office of Technical Services

62-12435

Korotkov, A. A. and Li, Tsung-Ch'ang.
CHANGES IN THE STRUCTURE AND CATALYTIC
BEHAVIOR OF TITANIUM TRICHLORIDE AFTER
HEAT TREATMENT, Pt. 2 of Effects of the Structure
of Titanium Trichloride on the Stereospecificity of
Catalysts. [1961] 11p. 6 refs.
Order from RIS \$20.00

RIS G-314b

Trans. of Vysokomolekularnye Soedineniya (USSR)
1961, v. 3, no. 5, p. 691-698.

DESCRIPTORS: *Titanium compounds, *Chlorides,
*Catalysts, Catalysis, Heat treatment, Crystal
structure, Stereochemistry, X-ray diffraction analysis,
Electron microscopy, Chemical analysis.

(Chemistry--Physical, TT, v. 7, no. 5)

I. Korotkov, A. A.
II. Li, Tsung-Ch'ang
III. Title: Effects ...
IV. RIS G-314b
V. Research Information
Service, New York

Office of Technical Services

Rafikov, S. R., Zhubanov, B. A. and others.
INVESTIGATIONS IN THE FIELD OF POLYMER
SYNTHESIS I. SYNTHESIS OF POLYAMIDES BASED
ON XYLYLENEDIAMINES. [1961] 8p.
Order from ATS \$13. 45 ATS-28N35R

Trans. of Vysokomolekulyarnye Soedineniya (USSR)
1961, v. 3, no. 5, p. 699-705.

DESCRIPTORS: *Amides, *Polymers, Synthesis,
Xylenes, Amines, Chemical reactions.

(Chemistry--Organic, TT, v. 7, no. 3)

62-12093

I. Rafikov, S. R.
II. Zhubanov, B. A.
III. Title: Synthesis ...
IV. ATS-28N35R
V. Associated Technical
Services, Inc.,
East Orange, N. J.

ATS-RJ-3069

Office of Technical Services

62-13909

Sokolova, T. A. and Rudkovskaya, G. A.
CYCLIC POLYMERIZATION. I. N-METHYLDIMETH-
ACYLAMIDE. [1961] [7]p. 23 refs.
Order from OTS or SLA \$1.10 62-13909

I. Sokolova, T. A.
II. Rudkovskaya, G. A.
III. Translations, New York

Trans. of Vysokomolekulyarnye Soedineniya (USSR)
[1961] v. 3, p. 706-710.

DESCRIPTORS: *Polmerization, *Amides, Polymers,
Peroxides, *Molecular structure, Methyl radicals.

N-methylmethacrylamide can be block polymerized
with peroxide initiators, yielding a soluble linear
polymer that contains rings in its chain. The cyclic
structure of polymethylmethacrylamide was estab-
lished by synthesis of a similar polymer via deamina-
tion of polymethylmethacrylamide.

(Chemistry--Organic, TT, v. 7, no. 11)

Office of Technical Services

Neimark, I. E., Chuiko, A. A., and
Slinyakova, I. B.
LES SILICES OLEFINO-SUBSTITUÉES COMME
FILLERS ACTIFS DES POLYMÈRES (Olefin-
substituted Silicas as Active Fillers of Polymers). 12p.
15 refs. FR-2899 (text in French).
Order from OTS or ETC \$1.85 62-26151.

Trans. in French of Vysokomolekulyarnye
Soedineniya (USSR) 1961, v. 3, no. 5, p. 711-715.

DESCRIPTORS: *Silicides, Polymers, Additives.

(Materials--Plastics, TT, v. 9, no. 8)

62-26151

I. Neimark, I. E.
II. Chuiko, A. A.
III. Slinyakova, I. B.
IV. FR-2899
V. Centre National de la
Recherche Scientifique
(France)

Office of Technical Services

Lyubetskii, S. G., Dolgoplosk, B. A., and
Erusalimskii, B. L.
KINETICS OF ETHYLENE POLYMERIZATION IN
BENZENE AND HEPTANE SOLUTION. Pt. 1 of the
Polymerization of Ethylene Under the Influence of Free
Radicals. [1962] 7p.
Order from ATS \$9.25

ATS-67N53R

Trans. of Vysokomolekulyarnye Soedineniya (USSR)
1961, v. 3, no. 5, p. 734-739.

DESCRIPTORS: *Ethylenes, *Polymerization,
*Reaction kinetics, *Benzenes, Free radicals,
Solutions, Heptanes.

(Chemistry--Organic, TT, v. 7, no. 11)

62-12784

I. Lyubetskii, S. G.
II. Dolgoplosk, B. A.
III. Erusalimskii, B. L.
IV. Title: Polymerization of...
V. ATS-67N53R
VI. Associated Technical
Services, Inc.,
East Orange, N. J.

ATS RJ-3826

Office of Technical Services

Studies on the Electroconductivity of Polymers.
IV. Effect of Dipole Polarization (Polystyrene,
Poly-p-Chlorostyrene, ~~ET~~ Styrene-Acrylonitrile
Copolymer, by B. I. Sashin, M. P. Eidel'nant,
14 pp.

RUSSIAN, per, Vysokomolekulyarnye Soyedineniya,
Vol. III, No 5, 1961, pp 761-767. 9206074.

AEC/SCL Tr 461

Sci - Ubez

May 63

220,908

Polymerization of Chloroprene by
Metal-Organic Compounds, by
B. L. Erusalimskii.
RUSSIAN, per, Vysokomolekulyarnye
Soedineniya, Vol 3, 1961, p 798.
NTC 72-11262

May 72

Yakovleva, M. K., Sheinker, A. P., and Abkin, A. D.
STUDY OF THE MECHANISM OF RADIATIVE POLY-
MERIZATION. II. MECHANISM OF CARBONIUM
POLYMERIZATION OF STYRENE AND METHYL
METHACRYLATE UNDER THE ACTION OF GAMMA
RAYS. [1961] 6p.
Order from ATS \$9.10

ATS-90N5-4R

Trans. of Vysokomolekulyarnye Soedineniya (USSR)
1961, v. 3, no. 6, p. [828]-832.

DESCRIPTORS: *Polymerization, *Gamma rays,
Radiation effects, *Styrenes, Carbon, Ions, Polymers,
*Acrylic resins.

(Chemistry--Organic, TT, v. 7, no. 4)

62-12088

- I. Yakovleva, M. K.
- II. Sheinker, A. P.
- III. Abkin, A. D.
- IV. Title: Mechanism ...
- V. ATS-90N54R
- VI. Associated Technical
Services, Inc.,
East Orange, N. J.

Office of Technical Services

Nudel'man, Z. N., Sviridova, A. V., and Novikov,
A. S.
SYNTHESIS OF LINEAR ALUMINOSILOXANE POLY-
MERS BY THE SILANOL CONDENSATION METHOD.
[1961] 5p.
Order from ATS \$9. 40 ATS-21NS6R

Trans. of Vysokomolekulyarnye Soedineniya (USSR)
1961, v. 3, no. 6, p. 841-846.

DESCRIPTORS: *Aluminum compounds, *Silanes,
*Polymers, Synthesis, Condensation reactions

(Chemistry--Organic, TT, v. 7, no. 3)

62-12113

I. Nudel'man, Z. N.
II. Sviridova, A. V.
III. Novikov, A. S.
IV. ATS-21NS6R
V. Associated Technical
Services, Inc., East
Orange, N. J.

ATS-RJ-3094

Office of Technical Services

Mikhailov, B. M. and Aronovich, P. M.
ORGANOBORON COMPOUNDS. LXXVII. POLYMER-
IZATION OF THE BUTYL ESTER OF VINYLBORIC
ACID. [1961] 5p.
Order from ATS \$8.00 ATS-89N54R

Trans. of Vysokomolekulyarnye Soedineniya (USSR)
1961, v. 3, no. 6, p. 861-864.

DESCRIPTORS: *Organic compounds, *Boron com-
pounds, *Vinyl radicals, *Boric acids, Esters, Poly-
merization, Acids.

(Chemistry--Organic, TT, v. 7, no. 3)

62-12087

I. Mikhailov, B. M.
II. Aronovich, P. M.
III. Title: Polymerization ...
IV. ATS-89N54R
V. Associated Technical
Services, Incl, East
Orange, N. J.

ATS-RJ-3092

Office of Technical Services

Frolova, M. I., Nevskii, L. V., and Ryabov, A. V.
INVESTIGATION OF PHOTODEGRADATION BY THE
USE OF RADIOCARBON C¹⁴. Pt. 2 of the Aging of
Poly(Methyl Methacrylate) under the Action of Light.
[1961] 6p.
Order from ATS \$3.95

ATS-57N54R

Trans. of *Vysokomolekulyarnye Soedineniya (USSR)*
1961, v. 3, no. 6, p. 877-881.

DESCRIPTORS: *Photochemical reactions, *Radio-
active isotopes, Polymers, Light, Chemical reactions,
Aging. *Acrylic resins.

(Chemistry--Organic, TT, v. 7, no. 4)

62-12086

- I. Frolova, M. I.
- II. Nevskii, L. V.
- III. Ryabov, A. V.
- IV. Title: Aging ...
- V. ATS-57N54R
- VI. Associated Technical
Services, Inc.,
East Orange, N. J.

Office of Technical Services

62-12085

Krylov, O. V. and Sinyak, Yu. E.
NEW CATALYSTS FOR THE POLYMERIZATION
OF ETHYLENE OXIDE. [1961] 8p.
Order from ATS \$5.50 5P - ATS-56N54R

Trans. of Vysokomolekulyarnye Soedineniya (USSR)
1961, v. 3, no. 6, p. 898-900.

DESCRIPTORS: *Ethylene oxide, *Polymerization,
*Catalysts.

(Chemistry--Inorganic, TT, v. 7, no. 4)

- I. Krylov, O. V.
- II. Sinyak, Yu. E.
- III. ATS-56N54R
- IV. Associated Technical Services, Inc., East Orange, N. J.

ATS - RJ-3054
also 62-13832

Office of Technical Services

Pshezhetskii, V. S., Kargin, V. A., and Bakh, N. A.
X-RAY INDUCED POLYMERIZATION OF ACETAL-
DEHYDE IN THE CONDENSED PHASE. [1961] 6p.
Order from ATS \$9.75 ATS-91N54R

Trans. of Vysokomolekulyarnye Soedineniya (USSR)
1961, v. 3, no. 6, p. 925-930.

DESCRIPTORS: *Acetaldehydes, *Polymerization.

(Chemistry--Organic, TT, v. 7, no. 4)

62-12089

- I. Pshezhetskii, V. S.
- II. Kargin, V. A.
- III. Bakh, N. A.
- IV. ATS-91N54R
- V. Associated Technical Services, Inc., East Orange, N. J.

Office of Technical Services

Ozonization (Ozonation) of Atactic Polypropylene,
by M. Lazar, I. Pavlinets, et al. 9 pp.

RUSSIAN, per, Vysokomolekulyarne Soedineniya,
Vol III, No 6, 1961, pp 943-947. 9207636

AEC-SCL-Tr-469

OTS 63-23470

Sci - Phys
6 Jun 63

231,862

Nov 61

(SF-1878)

Sergey Sergeyevich Medvedev, 4 pp.

RUSSIAN, per, Vysokomolekulyarnyye Soyedineniya,
No 6, 1961, pp 948-950.

JPRS 10277

USSR

174,094

Biog

61-20877

Oriova, A. V. and Nagdaseva.
CHANGES IN THE MICROSCOPIC STRUCTURE OF
POLYETHYLENE TEREPHTHALATE FIBERS DURING
HEATING. [1961] 6p. (7 diagr. 3 tables omitted)

3 refs.

Order from OTS or SLA \$1.10

61-20877

Trans. of Vysokomolek [ulyarnye] Soed [inentya] (USSR)
1961, v. 3, no. 7 [p. 953-955].

DESCRIPTORS: *Microstructure, *Ethylenes, *Poly-
mers, *Phthalates, Crystallization, Heating, Elas-
ticity, Temperature, Surfaces, Films, Fibers, *Tires,
*Synthetic fibers, *Cordage.

A structural heterogeneity of polyethylene terephtha-
late fibers is discovered where the basic stem and the
surface film react differently towards an elevation of
temperature. The rapid crystallization in the isotropic
(Materials--Textiles, TT, v. 7, no. 8) (over)

I. Oriova, A. V.
II. Nagdaseva

201457

Office of Technical Services

63-17527-5

POLYMER SCIENCE USSR, 1962, VOL. 3, NO. 5,
P. 759-986. Mar 63, 1v.
Order from PP \$100.00/year

I. Pergamon Press, Inc.,
New York

Trans. of Vysokomolekulyarnye Soedineniya (USSR)
1961, v. 3, no. 7, p. 960-970, 980-983, 991-1014,
1031-1040, 1044-1061, 1072-1083, 1091-1099, 1110-
1115; no. 8, p. 1135-1149, 1170-1175, 1203-1216,
1220-1223, 1238-1246; no. 9, p. 1311-1320, 1332-1346,
1352-1357, 1377-1388, 1415-1420. Abstracts are in-
cluded of selected articles from v. 4, nos. 5-6.

DESCRIPTORS: *Polymers, Chemistry, *Radiation
chemistry, *Styrenes, *Alcohols, *Cyanates, *Cellu-
lose, *Nitriles, *Propenes, Surface tension, Chlorina-
tion, Sulfonation, *Benzenes, Polymerization, *Ethyl-
enes, *Metalorganic compounds, *Vinyl radicals,
*Acetals, *Acrylic resins, *Photolates, *Chlorides,
*Glycols, *Methyl radicals, *Silicones, *Rubber,
(Chemistry--Organic, TT, v. 10, no. 4) (over)

Office of Technical Services

Il'ina, D. E., Krentsel', B. A., and Topchlev, A. V.
SULFOCHLORINATION OF POLYPROPYLENE. [1961]
Order from ATS \$9.50 ATS-20N57R

Trans. of Vysokomolekulyarnye Soedineniya (USSR)
1961, v. 3, no. 7, p. 995-999.

DESCRIPTORS: *Sulfonation, *Chlorination, Polymers,
*Propenes.

(Chemistry--Organic, TT, v. 7, no. 10)

62-12541

- I. Il'ina, D. E.
- II. Krentsel', B. A.
- III. Topchlev, A. V.
- IV. ATS-20N57R
- V. Associated Technical
Services, Inc.,
East Orange, N. J.

ATS-RJ-3055

Office of Technical Services

Polyakov, A. I., Derevitskaya, V. A., and Rogovin, Z. A.

NEW CELLULOSE AND OTHER POLYSACCHARIDE DERIVATIVES. XIV. SYNTHESIS OF ESTERS OF CELLULOSE WITH α -AMINO ACIDS. 1961, 8p. 5 refs.

Order from OTS or SLA \$1.10

62-14285

Trans. of Vysokomol[ekulyarnye] Soed[ineniya] (USSR) 1961, v. 3, no. 7, p. 1027-1030.

DESCRIPTORS: *Polysaccharides, *Cellulose esters, Synthesis, *Amino acids, Glycine, Alanine, Alcohols, Methanols, Phenols, Formamides, Carbohydrates.

A method has been developed for synthesizing cellulose esters with α -amino acids by substituting the sulfonic acid groups in the corresponding cellulose ethers. The effect of the nature of the solvent on the direction of the substitution reaction has been established. In dimethyl- (Chemistry--Organic, TT, v. 9, no. 4) (over)

62-14285

I. Polyakov, A. I.
II. Derevitskaya, V. A.
III. Rogovin, Z. A.
IV. Title: Synthesis ...

Office of Technical Services

Adrova, N. A., Koton, M. M., and Klages, V. A.
PREPARATION OF NEW ORGANOTIN POLYMERS.
[1961] 4p.
Order from ATS \$4.50

ATS-26N56R

Trans. of Vysokomolekulyarnye Soedineniya (USSR)
1961, v. 3, no. 7, p. 1041-1043.

DESCRIPTORS: *Polymers, *Metalorganic compounds,
*Tin compounds.

(Chemistry--Organic, TT, v. 7, no. 4)

62-12114

- I. Adrova, N. A.
- II. Koton, M. M.
- III. Klages, V. A.
- IV. ATS-26N56R
- V. Associated Technical Services, Inc., East Orange, N. J.

ATS-RJ-3091

Office of Technical Services

Gurvich, L. G.
DEPENDENCE OF THE TENSILE STRENGTH OF
POLYMER FIBERS ON THE CHARACTER OF THE
MOLECULAR WEIGHT. [1961] 4p.
Order from ATS \$5.50

ATS-52N56R

Trans. of Vysokomolekulyarnye Soedineniya (USSR)
1961, v. 3, no. 7, p. 1062-1064.

DESCRIPTORS: *Polymers, *Fibers, Tensile prop-
erties, Molecular weight.

NAL M 8846

(Materials--Textiles, TT, v. 7, no. 4)

62-12115

- I. Gurvich, L. G.
- II. ATS-52N56R
- III. Associated Technical Ser-
vices, Inc., East Orange,
N. J.

ATS-RJ-3083

Office of Technical Services

O. B. Ptitsyn

Theory of Polyelectrolyte Solutions. Part I.
Dimensions of Polyelectrolyte Molecules at
Small Degrees of Ionization.
RUSSIAN, per, Vysokomolekulyarnye Soedineniya,
Vol 3, 1961, pp 1084-1090
NIC 72-13229-07D

sept 72

Manyasek, Z.
THE FORMATION AND DECOMPOSITION OF HYDRO-
PEROXIDES OF ATACTIC POLYPROPYLENE. 10p.
5 refs. MTWL: 1103.
Order from OTS or ETC \$1.55

62-26041

Trans. of Vysokomolekulyarnye Soedineniya (USSR)
1961, v. 3, no. 7, p. 1104-1108.

DESCRIPTORS: *Propenes, Polymers, Oxidation,
*Peroxides.

62-26041

- I. Manyasek, Z.
- II. MTWL-1103
- III. Stichting Moeilijk
Toegankelijke Wetenschap-
pelijke Literatuur

Office of Technical Services

Ryshavy, D., Balaban, L. and others.
OXIDATION OF ISOTACTIC POLYPROPYLENE
(Oksidatsiya izomakmicheskogo Polipropilena). [1961]
[12]p. 5 refs.
Order from OTS or SLA \$1.60

62-14283

Trans. of Vysokomol[ekulyarnye] Soed[ineniya] (USSR)
1961, v. 3, no. 7, p. 1110-1115.

DESCRIPTORS: *Propenes, Polymers, *Oxidation,
Stability, Molecular weight, Chemical reactions,
Processing, Production, Chemical industry.

Experimental results on the oxidation of polypropylene
between 120 and 150°C are given. A polypropylene
with a molecular weight of 400,000 and an ash content
of 0.5% was investigated. The degradation products
decrease the rate of oxidation. The overall activation
energy of oxidation between 120° and 150°C was
E = 29 kcal, the activation energy of acetaldehyde
(Engineering--Chemical, TT, v. 8, no. 2) (over)

62-14283

I. Ryshavy, D.
II. Balaban, L.

Office of Technical Services

62-10226

I. Tsetlin, B. L.
II. Medved, T. Ya.

Tsetlin, B. L., Medved, T. Ya. and others.
RADIATION POLYMERIZATION OF OXIDES OF
TERTIARY MONOVINYLPHOSPHINES. 15 Sep 61
[3]p. 3 refs.

Order from OTS or SLA \$1.10 62-10226

Trans. of Vysokomolekulyarnye Soedineniya (USSR)
1961, v. 3, p. 1117-1118.

DESCRIPTORS: *Vinyl radicals, *Phosphine oxides,
*X-rays, *Polymerization, Thermal stresses, Sta-
bility, Plastics.

The polymerization of oxides of diethylvinylphosphine
(I) and diphenylvinylphosphine (II) was initiated by
the radiation method. The samples were irradiated
in the fused state in vacuum. For irradiation of I,
the dose strength was 4.5×10^{16} ev/ml sec, length of
(Materials--Plastics, TT, v. 7, no. 10) (over)

Office of Technical Services

62-12662

Shostakovskii, M. F., Kotrelev, V. N. and others.
SYNTHESIS AND REACTIONS OF TIN-CONTAINING
ESTERS OF ACRYLIC AND CINNAMIC ACIDS. Pt. 4
of Organotin Monomers and Polymers. [1961] 3p.
Order from ATS \$3.50 ATS-03N57R

Trans. of Vysokomolekulyarnye Soedineniya (USSR)
1961, v. 3, no. 8, p. 1128-1130.

DESCRIPTORS: *Synthesis, *Chemical reactions,
*Esters, Acrylic acids, Styrenes, *Tin compounds,
*Cinnamic acids.

I. Shostakovskii, M. F.
II. Kotrelev, V. N.
III. Title: Organotin ...
IV. ATS-03N57R
V. Associated Technical
Services, Inc., East
Orange, N. J.

ATS-RJ-3089

Office of Technical Services

(Chemistry--Organic, TT, v. 7, no. 10)

Shostakovskii, M. F., Kotrelev, V. N. and others.
STUDY OF THE FORMATION OF ORGANOTIN POLY-
MERS AS A FUNCTION OF THE POLYMERIZA-
TION CONDITIONS AND SOME PHYSICOCHEMICAL
PROPERTIES OF ORGANOTIN COPOLYMERS. Pt. 5
of the Synthesis and Transformation of Organotin
Monomers and Polymers. [1961] 4p.
Order from ATS \$6.00

ATS-88N56R

Trans. of Vysokomolekulyarnye Soedineniya (USSR)
1961, v. 3, no. 8, p. 1131-1134.

DESCRIPTORS: *Tin, *Polymers, Metalorganic com-
pounds, Synthesis, Physical chemistry, Polymeriza-
tion, Copolymerization.

(Chemistry--Organic, TT, v. 7, no. 3)

62-12119

- I. Shostakovskii, M. F.
- II. Kotrelev, V. N.
- III. Title: Synthesis ...
- IV. ATS-88N56R
- V. Associated Technical
Services, Inc., East
Orange, N. J.

ATS-RJ-3090

Office of Technical Services

62-18382

Firsov, A. P., Tsvetkov, V. I., and Chirkov, N. M.
KINETICS AND MECHANISM OF α -OLFIN POLYMERIZATION ON COMPLEX CATALYSTS. II. POLYMERIZATION OF PROPYLENE IN THE PRESENCE OF TITANIUM TRICHLORIDE WITH VARIOUS ALKYLALUMINUM COMPOUNDS. [1962] 11p, 9 refs.
Order from OTS or SLA \$1.60 62-18382

I. Firsov, A. P.
II. Tsvetkov, V. I.
III. Chirkov, N. M.
IV. Title: Polymerization ...

Trans. of Vysokomolekulyarnye Soed[ineniya] (USSR) 1961, v. 3 [no. 8] p. 1161-1169.

DESCRIPTORS: *Propenes, Polymerization, Reaction, Kinetics, Catalysts, *Complex compounds, *Titanium compounds, Chlorides, *Metalorganic compounds, *Aluminum compounds.

The polymerization of propylene under the influence of α -TiCl₃ and various AlR₃ compounds was investigated. The aluminum compounds were Al(C₂H₅)₃. (over)
(Chemistry--Physical, TT, v. 9, no. 5)

Office of Technical Services

Kinetics and Mechanism of the Initial Stage
of Condensation Between Terephthalyl Chloride
and Ethylene Glycol. Part II. Temperature
Dependence of the Reaction Rate, by

S. G. Entelis.

RUSSIAN, per, Vysokomolekulyarnye Soedineniya,
Vol 3, No 8, 1961, pp 1170-1175.

NTC-70-13072-111

Feb 72

Studies in the Field of Co-ordination Chain
Polymers. V. Synthesis of Metal-Containing
Bis-(β -Ketones), by V. V. Korshak.

RUSSIAN, per, Vysokomolekulyarnyye
Soyedineniya, Vol III, No 8, 1961, pp 1203-1209.

NTL Ref: 5828.4 1962 (10092)
(Loan)

Sci -
Jul 63

238, 378

Gromov, B. A., Miller, V. B. and others.
MOBILITY OF IONOLE IN POLYPROPYLENE AND
POLYFORMALDEHYDE. [1962] 6p. (2 figs. omitted)
3 refs.

Order from OTS or SLA \$1.10

62-14422

Trans. of Vysokomolekulyarnye Soedineniya (USSR) 1961,
v. 3, no. 8, p. 1231-1233.

DESCRIPTORS: *Polymers, Stabilization, *Phenols,
Butyl radicals, Methyl radicals, Diffusion, *Propenes,
*Formaldehydes.

The diffusion coefficients of 2,6-di-tert-butyl-4-methyl-
phenol (ionole) in polypropylene and polyformaldehyde
for various temperatures were determined. Within a
temperature interval of 60-110° the diffusion coefficient
of ionole in propylene is equal to $D = 5 \cdot 10^6 \cdot e^{-2300/RT}$,
and the diffusion coefficient of ionole in polyformaldehyde
(at 80-110°) is equal to $D = 2,5 \cdot 10^1 \cdot e^{-16300/RT}$.
(Author)

62-14422

1. Title: Ionole
- I. Gromov, B. A.
- II. Miller, V. B.

(Chemistry--Physical, TT,
v. 9, no. 5)
Office of Technical Services

Thermochemical Criteria of Plasticized
Drawing, by E. Z. Fainberg, N. V. Mikhailov. 6p
RUSSIAN, per, Vysokomolekulyarnye Soedineniya,
Vol 3, No 8, 1961, pp 1234-1237.
SLA TT-66-10657.

Sci-M&M
Jul 66

306,109

X-Ray Examination of Polyethylene Single Crystals
at Various Temperatures, by Li-Shan.

RUSSIAN, per, Vyskomolekulyarnye Soedineniya,
Vol III, No 8, 1961, pp 1238-1242

NIL M 8847

Sci - Chem
Mar 63

223,696

62-12660

Levin, P. I., Lukovnikov, A. F. and others.
MANIFESTATION OF SYNERGISM IN MIXTURES OF
MERCAPTOBENZIMIDAZOLE WITH SOME INHIB-
ITORS. Pt. 1 of Mutual Intensification (Synergism) of
Antioxidant Activity. [1961] Sp.
Order from ATS \$7.50

ATS-71N57R

Trans. of Vysokomolekulyarnye Soedineniya (USSR)
1961, v. 3, no. 8, p. 1243-1246.

DESCRIPTORS: *Thiols, *Benzimidazoles, Inhibition,
Pharmacology, *Antioxidants.

(Biological Sciences--Pharmacology, TT, v. 7, no. 10)

- I. Title: Synergistic action
- I. Levin, P. I.
- II. Lukovnikov, A. F.
- III. Title: Mutual ...
- IV. ATS-71N57R
- V. Associated Technical
Services, Inc., East
Orange, N. J.

Office of Technical Services

Theory of Polyelectrolyte Solutions. Part II.
Macromolecules of Polyelectrolytes in Salt
Solutions, by O. B. Ptitsyn
RUSSIAN, per, Vysokomolekulyarnye Soedineniya,
Vol 3, 1961, pp 1251-1259
NTC 71-16824-07D

Feb 72

62-17154

Bykov, A. N.
SYNTHESIS AND INVESTIGATION OF SOME COL-
ORED POLYAMIDES. [1962] 4p.
Order from ATS \$7.10

ATS-13P59R

I. Bykov, A. N.
II. ATS-13P59R
III. Associated Technical
Services, Inc., East
Orange, N. J.

Trans. of Vysokomolekulyarnye Soedineniya (USSR)
1961, v. 3, no. 9, p. 1307-1310.

DESCRIPTORS: *Amides, Polymers, Synthesis, Colors

ATS-RS-3606

NLL M 8839

(Chemistry--Organic, TT, v. 8, no. 2)

Office of Technical Services

62-17155

Bogdanov, M. N., Kudryavtsev, G. I. and others.
SYNTHESIS OF SOME POLYAMIDES DERIVED FROM
 ω -AMINOCARBOXYLIC ACIDS CONTAINING BEN-
ZENE AND CYCLOHEXANE RINGS IN THE METH-
YLENE CHAINS. [1962] 8p.
Order from ATS \$13.25 ATS-14P59R

Trans. of Vysokomolekulyarnye Soedineniya (USSR)
1961, v. 3, no. 9, p. 1326-1331.

DESCRIPTORS: *Amides, Polymers, Synthesis,
*Amino acids, *Carboxylic acids, *Benzenes, *Cyclo-
hexanes, *Methanes, Chemical reactions.

(Chemistry--Organic, TT, v. 8, no. 1)

I. Bogdanov, M. N.
II. Kudryavtsev, G.I.
III. ATS-14P59R
IV. Associated Technical
Services, Inc., East
Orange, N. J.

Office of Technical Services

Polymerization of Methylmethacrylate in a
Strong Direct Electric Field, by M. M.
Khaletskiy, B. I. Sukhorukov.

RUSSIAN, per, Vysokomolekuliarnye Soedineniya,
Vol. III, 1961, pp 1347-1351. 9205022

AISC-UCRL-Tr-906(L)

Sci - Phys

227,043

Apr 63

62-12962

Moiseev, V. D. and Neiman, M. B.
MOLECULAR WEIGHT, NUMBER OF DOUBLE
BONDS AND THE MECHANISM OF THERMAL DEG-
RADATION OF VINYL POLYMERS. [1962] 9p.
3 refs.
Order from CTS(Chem) \$9.00 CTS(Chem)-261
subsequent copies \$1.50

Trans. of Vysokomolekulyarnye Soedineniya (USSR)
1961, v. 3, no. 9, p. 1383-1388.

DESCRIPTORS: *Polymers, *Vinyl radicals, Molecu-
lar weight, Chemical bonds, Deterioration, Temper-
ature, Molecules, Atoms, Molecular isomerism.

(Chemistry--Organic, TT, v. 8, no. 4)

- I. Moiseev, V. D.
- II. Neiman, M. B.
- III. CTS(Chem)-261
- IV. Chemical Translating
Service, Palo Alto, Calif.

ATS-15P5912
ATS-RJ-3597

Office of Technical Services

Meklakov, A. I., Pimenov, G. G., and
Sagitov, R. Ya.
INVESTIGATION OF POLYMERS SUBJECTED TO
UNIAXIAL STRETCHING AT HIGH DEFORMATION
RATES. [1962] 6p.
Order from ATS \$9. 25 ATS-73P62R

Trans. of Vysokomolekul[yarnye] Soedineniya] (USSR)
1961, v. 3, no. 9, p. 1410-1414.

DESCRIPTORS: *Polymers, Tensile properties,
*Deformation, Plastic flow, Viscosity.

(Chemistry--Physical, TT, v. 9, no. 2)

62-34270

- I. Meklakov, A. I.
- II. Pimenov, G. G.
- III. Sagitov, R. Ya.
- IV. ATS-73P62R
- V. Associated Technical Services, Inc.,
East Orange, N. J.

ATS-RS-3594

Office of Technical Services

62-17157

Kitaigorodskii, A. I., Tsvankin, D. Ya., and
Petrov, Yu. M.
LONG PERIODS IN ENANT FIBERS. [1962] 2p.
Order from ATS \$2.50 ATS-16P59R

Trans. of Vysokomolekulyarnye Soedineniya (USSR)
1961, v. 3, no. 9, p. 1428.

DESCRIPTORS: *Synthetic fibers, *Amines,
*Enanthic acid, Polymers, Preparation, Condensation
reactions.

ALL M E E E E

(Materials--Textiles, TT, v. 8, no. 10)

- I. Title: Enanth fibers
- I. Kitaigorodskii, A. I.
- II. Tsvankin, D. Ya.
- III. Petrov, Yu. M.
- IV. ATS-16P59R
- V. Associated Technical
Services, Inc.,
East Orange, N. J.

Office of Technical Services

63-17527-6

POLYMER SCIENCE USSR, 1962, VOL. 3, NO. 6,
P. 987-1166. May 63, 1v
Order from PF \$100.00/year

I. Pergamon Press, Inc.,
New York

Trans. of Vysokomolekulyarnye Soedineniya (USSR)
1961, v. 3, no. 10, p. 1446-1448, 1482-1494,
1511-1523, 1549-1560, 1591-1606; no. 11,
p. 1635-1660, 1669-1683, 1692-1697, 1716-1738,
1746-1754; no. 12, p. 1769-1773, 1794-1799,
1816-1822, 1857-1862, 1874-1875. Abstracts are in-
cluded of selected articles from v. 4, nos. 7-8.
Another trans. of p. 1482-1490 is available from OTS
or SLA \$1.10 as 63-18414 [1963] 10p.

DESCRIPTORS: *Polymers, Chemistry, *Plastics,
*Polyethylene plastics, *Ziegler catalysts, *Isoprene,
*Styrene plastics, *Triazines, *Halocarbon plastics,
*Fluorocarbons, Catalysts, *Polyvinyl chloride,
*Silicones, *Metalorganic compounds, Aluminum com-
(Chemistry--Organic, TT, v. 10, no. 10) (Over)

Office of Technical Services

Korotkov, A. A. and Rakova, G. V.
COPOLYMERIZATION OF ISOPRENE WITH STYRENE:
THROUGH BUTYLLITHIUM. [1963] 10p. 11 refs.
Order from OTS or SLA \$1.10 63-18414

Trans. of Vysokomolekulyarnye Soed[ineniya] (USSR)
1961, v. 3 [no. 10] p. 1482-1490.

DESCRIPTORS: *Isoprene, *Styrenes, *Butyl radicals,
*Lithium compounds, Copolymerization, Reaction
kinetics, Catalysts.

The copolymerization of isoprene and styrene under
the influence of butyllithium in benzene at 30 C was
investigated (catalyst concentration 0.004 Mole/l,
over-all monomer concentration 2 Mole/l). The com-
position of the copolymer as function of the initial
monomer mixture obeys Wall's equation: $\lg A/A_0 =$
 $\delta \lg B/B_0$. The monomer reactivity constants are: $\alpha =$
(Materials--Plastics, TT, v. 10, no. 8) (over)

63-18414

1. Title: Butyllithium
I. Korotkov, A. A.
II. Rakova, G. V.

Office of Technical Services

Aromatic Polyrizines, by A. A. Berlin, B. I.
Liozan'kiy, et al.

RUSSIAN, per, Vysokomolekul'arnye Soedineniya,
Vol. III, No 10, 1961, pp 1491-1494. 9204995

AEC-SCL-P-454

Sci - Chem

Apr 63

226,852

Polymerization Kinetics of Hydrocarbons With
Conjugated Bonds, II. Polymerization of
Phenylacetylene and the Paramagnetic Proper-
ties of the Polymers, by P. S. Shantarovich,
I. A. Shliapnikova, 11 pp.

RUSSIAN, par, Vysokomolekulyarnye Soedeniya
Vol III, No 10, 1961, pp 1495-1499.

906696 9066960

ABC SCL-T-435

Soc - Phys
Oct 62

212, 686

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.
NTC-69-16362-111

Sci-Materials
Feb 70

402,940

Sidorovich, A. V. and Kuvshinski, E. V.
THERMOMECHANICAL PROPERTIES OF THE LINEAR
AMORPHOUS POLYMERS POLYMETHYLMETHACRY-
LATE AND POLYSTYRENE, tr. by George N.
Kasachkoff. 29 Nov 62 [15]p. 10 refs. [AMC] (Redstone)
Trans-nr 41-62.
Order from OTS or SLA \$1.60

63-13394

Trans. of [Vysokomolekulyarnye Soedineniya] (USSR)
1961, v. 3, no. 11, p. 1698-1704.

DESCRIPTORS: Polymers, *Plastic films, Mechanical
properties, Temperature, *Acrylic resins, *Styrenes,
Deformation, Elasticity.

A thermomechanical study of the amorphous linear
polymers polymethylmethacrylate and polystyrene was
carried out at low levels of tensile stress. The thermo-
mechanical properties of these two polymers were found
(Materials--Plastics, TT, v. 9, no. 3). (over)

63-13394

- I. Sidorovich, A. V.
- II. Kuvshinski, E. V.
- III. AMC (Redstone) Trans-
41-62
- IV. Army Missile Command,
Redstone Arsenal, Ala.

Office of Technical Services

Effect of Annealing of Polymer Glasses on the
Temperature Dependence of the Heat Capacity in
the Softening Range, by M. V. Volkenshtein,
Yu. SA. Sharonov, 14 pp.

RUSSIAN, per, Vysokomolekulyarnye Soedineniya,
Vol III, No 11, 1961, pp 1739-1745. 9670069

CSIRO/No. 7647

DDC RSIC-47

OTB, SLA H-7077-63-23755

344,096

Sci - Chem
Sep 63

Studies in the Field of Co-ordination Polymers.
VIII. Polymers Based on Aromatic O,O' -dicarboxyl
Acids and Divalent Metals, by V. V. Korshak.

RUSSIAN, per, Vysokomolekulyarnye Soedineniya,
Vol III, No 12, 1961, pp 1808-1815.

ML M 10007

Sci - Eng Chem
May 63

229,340

Polymers With Conjugated Bonds and Hetero-Atoms in
the Conjugated Bond Chain. Part 19. Some Properties
of Aniline Black, by V. P. Parini.

RUSSIAN, per, Vysokomolekulyarnye Soedineniya, Vol 3,
1961, pp 1870-1873.

NTC-71-10200-07C

Nov 71

On the Mechanism of Reaction Chain
Termination in the Radical Polymerization
of Vinyl Chloride by Means of C¹⁴-Labeled
Initiators, by G. A. Razuvaev.
RUSSIAN, per, Vysokomolekulyarnye Soedineniya,
Vol 3, 1961, pp 1949-1953.
NTC-71-11534-111

Feb 72

POLY SCIENCE USSR, 1963, VOL. 4, NO. 1, P. 1-205,
June 63, 1v.
Order from PP \$140.00/year

Trans. of *Vysokomolekulyarnye Soedineniya* (USSR)
1962, v. 4, no. 1, p. 3-8, 25-29, 42-51, 64-65,
85-90, 98-104, 109-123; no. 2, p. 174-187, 201-206,
237-241, 250-255, 270-275, 304-311; no. 3, p. 351-356,
361-365, 371-375, 383-388, 393-404, 429-432, 463-470;
no. 4, p. 481-491, 516-522, 533-539, 577-582. Ab-
stracts are included of selected articles from v. 4,
no. 9.

DESCRIPTORS: *Polymers, Chemistry, *Elastomers,
*Acrylic resins, *Butadienes, Polymerization, Potas-
sium compounds, *Amides, *Polyvinyl chloride, Radia-
tion chemistry, *Plastics, *Platinum catalysts, *Sty-
rene plastics, Peroxides, *Phenolic plastics, *Fibers
(Chemistry--Organic, TT, v. 10, no. 9) (over)

63-22211-1

I. Pergamon Press, Inc.,
New York

Office of Technical Services

Kinetics of the Disappearance of Free Radical
in Irradiated Polyvinyl Chloride, by Z. S. Egorova,
et al.

RUSSIAN, per, Vysok Soedineniya, Vol IV; No 1, 1962.

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Sci - Nucl Sci

Jul 63

Chelate Polymer Research. Part 2. Physico-
chemical Properties of Chelate Polymers from
5,5'-Methylenebis(Salicylaldehyde), by
V. V. Rode.

RUSSIAN, per, Vysokomolekul Soedin,
Vol 4, No 1, 1962, pp 13-19.
ATS-4880

Sci
Dec 68

368,748

Co-ordination Polymers. IX. Metal-Containing
Polymers Based on Aliphatic Dicarboxylic
 α, α' -dihydroxydicarboxylic and α, α' -dialkoxycarboxylic
Acids, by V. V. Korshak.

RUSSIAN, *pub.*, *Vysokomolekulyarnyye Soyedineniya*,
Vol IV, No 1, 1962, pp 23-24.

MLL Ref: 5828.4 1963 (10 107)
(Loan)

Sci - M/M

343406

TT-64-13664

Reikhsfel'd, V. O. and Ivanova, A. G.
SYNTHESIS OF LINEAR DIMETHYLMETHYLPOLY-
SILOXANES BY THE METHOD OF COPOLYMERIZA-
TION OF CYCLOSILOXANES. [1963] 10p 14refs
Order from OTS, SLA, or ETC \$1.10 TT-64-13664

Trans. of Vysokomolekulyarnye Soedineniya (USSR)
1962, v. 4, no. 1, p. 30-36. (Abstract available)

DESCRIPTORS: Silicones, Synthesis (Chemistry),
Copolymerization, Reaction kinetics, Silanes,
Hydrolysis.

The possibility of synthesizing high-molecular linear polysiloxanes with various contents of CH_3HSiO units by copolymerization of octamethylcyclotetrasiloxane (OMCTS) with tetramethylcyclotetrasiloxane (TMCTS) and pentamethylcyclopentasiloxane (PMCP5) was demonstrated. The copolymerization constants of the monomer pairs studied were calculated. It was established that (Chemistry, TT, v. 11, no. 11) (over)

I. Reikhsfel'd, V. O.
II. Ivanova, A. G.
III. Naval Applied Science Lab.,
Brooklyn, N. Y.

Office of Technical Services

Phosphorus-Containing Polymers. Part 27.
Hetero-Chain Polyesters of
Vinylphosphoric Acid and Certain
Glycols, by V. V. Korshak.
RUSSIAN, per, Vysokomolekul'nyye
Soedineniya, Vol 4, No 1, 1962,
pp 58-63
NTC 72-12379-11I

July 72

Chelate Polymers. Part 3. Some Polymers of
5,5'-Methylenebis(Salicylaldehyde) With
Metals, by A. P. Terent'ev.
RUSSIAN, per, Vysokomolekul Soedin.
Vol 4, No 1, 1962, pp 91-94.
ATS-4881

Sci
Dec 68

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Synthesis of Linear and Cycloliner Organosilicon
Compounds With Phenylsiloxane Chains in the
Molecules, by V. E. Nikitenkov, 7 pp.
RUSSIAN, per, Vysokomolekularnye Soyedinyeniya,
Vol IV, No 1, 1962, pp 105-108. 9692455
DDC xRSIC1158

Sci - Chem
May 64

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62-17276

Baramboim, N. K.
MECHANICAL DEGRADATION OF POLYSTYRENE
AND POLY(METHYL METHACRYLATE) IN THE
PRESENCE OF VARIOUS ACCEPTORS. [1962] 8p.
Order from ATS \$11.60 ATS-37P60R

Trans. of Vysokomolekulyarnye Soedineniya (USSR)
1962, v. 4, no. 1, p. 109-115.

DESCRIPTORS: *Polymers, *Styrenes, *Acrylic res-
ins, *Methyl radicals, Mechanical properties, De-
terioration, Chemical reactions.

(Chemistry--Organic, TT, v. 8, no. 4)

I. Baramboim, N. K.
II. ATS-37P60R
III. Associated Technical
Services, Inc.,
East Orange, N. J.

Office of Technical Services

S-294/62

Electron ~~MM~~ Microscope Study of DNA II. Changes
in the Molecular Morphology of DNA Under the Effect
of Ionizing Radiation, by A. M. Tongur, A. I. ~~YMA~~
Zaydes, et al, (SF-2259).

RUSSIAN, per, Vysolomolekulyarnyye Soyedineniya,
N Vol IV, No 1, 1962, pp 143-144.

*JPRS

Sci - Phys
25 May 62

62-34200

Zhurkov, S. N., Sanfirova, T. P., Tomashevskii,
E. E.
MECHANICAL PROPERTIES OF RUBBER AT HIGH
STRETCH RATES. [1962] 5p.
Order from ATS \$8.25 ATS-20P62R

Trans. of Vysokomolekul[yarnye] Soedin[eniya] (USSR)
1962, v. 4, no. 2, p. 196-200.

DESCRIPTORS: *Rubber, Mechanical properties,
Elasticity.

(Materials--Rubber, TT, v. 8, no. 11)

I. Zhurkov, S. N.
II. Sanfirova, T. P.
III. Tomashevskii, E. E.
IV. ATS-20P62R
V. Associated Technical
Services, Inc., East
Orange, N. J.

Office of Technical Services

POLYINORGANOSILOXANES, BY E. Z. ASNOVICH,
K. A. ANDRIANOV, 7 PP.

RUSSIAN, PER, VYSOKOMOLEKULYARNYYE SOYEDINENIYA,
VOL IV, NO 2, 1962, PP 216-220.

JPRS 16345

SCI - NUCLEAR PHYS

DEC 62

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