ACCESSION NR: AP4043774

phenol), N-phenyl-N'-cyclohexyl-p-phenylenediamine, N,N'-dioctyl-p-phenylenediamine and propylgallate are presented in the Enclosure. The 2nd and 4th of these were the most effective. The authors thank S. G. Entelis and K. S. Kazanskiy for providing the polypropyleneoxide." Orig. art. has: 4 figures.

ASSOCIATION: Institut khimicheskoy fiziki AN SSSR (Institute of Chemical Physics, AN SSSR)

SUBMITTED: 22Jul63 ENCL: 01

SUB CODE: OC NO REF SOV: 006 OTHER: 002

Card 2/3

ACCESSION NR: AP4043774 ENCLOSURE: 01

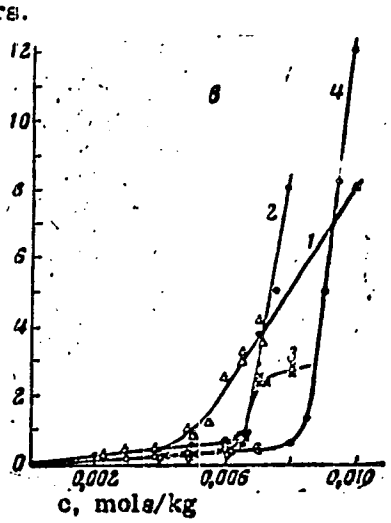


Fig. 1. Dependence of the induction period (τ) of the oxidation of polypropylene oxide on the concentration of antioxidant (c) at 137C and pO_2 = 340 mm Hg. 1 - 2,2-methylene-bis-(4-methyl-6-tert.-butylphenol); 2 - N-phenyl-N'-cyclohexyl-p-phenylenediamine; 3 - N,N'-dioctyl-p-phenylenediamine; 4 - propylgallate.

Card 3/3

L 10761-65 EWT(m)/EWG(v)/EWP(j)/T Pc-4/Pe-5 RM

ACCESSION NR: AP4047194 S/0190/64/006/010/1737/1743

AUTHOR: Kovarskaya, B. M.; Neyman, M. B.; Gur'yanova, V. V.; Rozantsev, E. G.; Nitche, O. N.

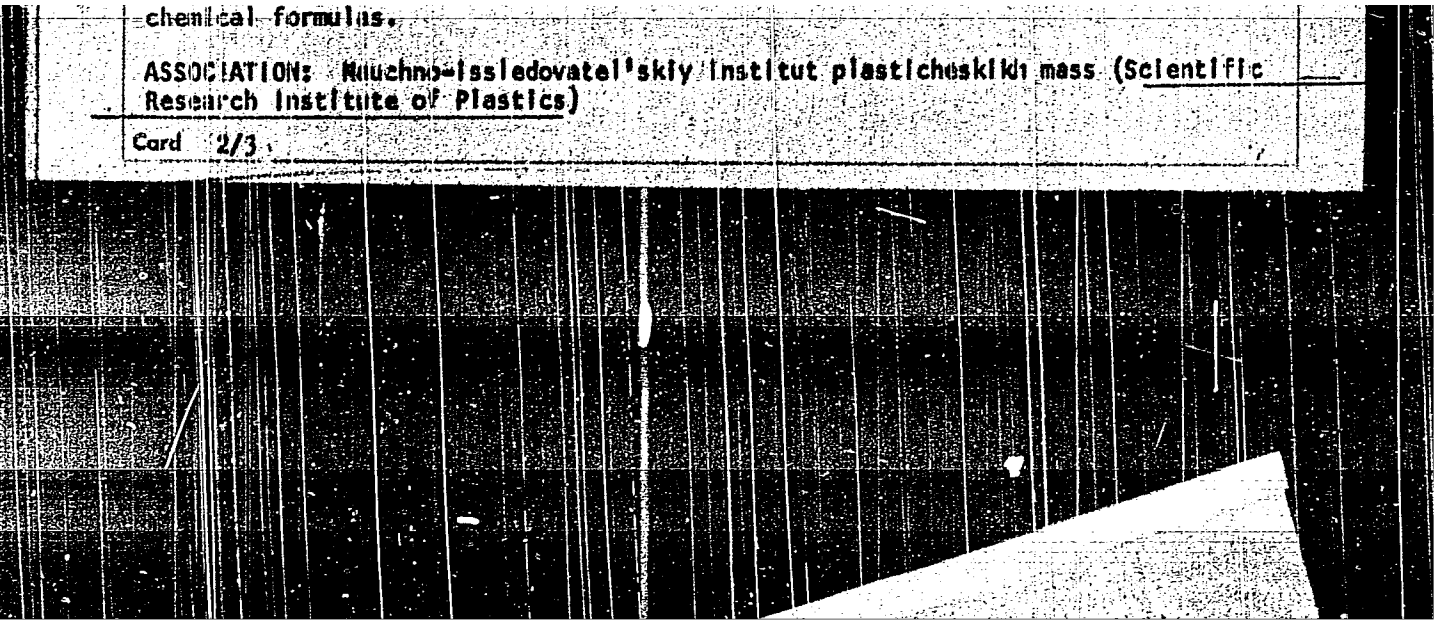
TITLE: Stabilization of polyformaldehyde

SOURCE: Vysokomolekulyarnyye soyedineniya, v. 6, no. 10, 1964, 1737-1743

TOPIC TAGS: formaldehyde, oxidation inhibitor, polycaproamide, polyhexamethylene sebacamide, polyamide 68, hexamethylene adipamide, polyamide 54, polymer stabilization, polyformaldehyde, nitrogen oxide

ABSTRACT: The kinetics and mechanism of the reaction of formaldehyde with different polyamide resins and the effectiveness of a new class of inhibitors of the radical type were investigated during the oxidation of polyformaldehyde. The

dehyde increases considerably with increasing formaldehyde pressure and temperature. By increasing the initial pressure of formaldehyde from 300 to 600 mm Hg, the rate of absorption for polyamide 68 is increased 7 times, and for Kapron and polyamide 54 - 5-6 times. However, the final amount of absorbed formaldehyde decreases with increasing temperature. The possible conversions in polyamide resins were also investigated, as well as the inhibitory effect of polyformaldehyde with different nitrogen oxide radicals - for which the structural formulas are given. The effect of increased pressure during the thermal oxidative degradation of polyformaldehyde with resin 54 (1.5-2%) and an antioxidant (0.5-1%) at 200C, P_{CH_2O}=200 mm Hg, is plotted. The nitrogen oxide radicals were found to be very efficient stabilizers of polyformaldehyde, especially at lower oxidation temperatures (180C). The relationship between the induction period and the concentration by weight of the stabilizer is also plotted. It is shown that the radical inhibitors are consumed mostly by reactions connected with inhibition of the thermal oxidation of polyformaldehyde. The inhibitors retard the oxidation of formaldehyde and are com-



chemical formulas.

ASSOCIATION: Nauchno-issledovatel'skiy institut plasticheskikh mass (Scientific Research Institute of Plastics)

Card 2/3

L 12003-65 EPA(s)-2/ENT(m)/EPF(c)/EPR/ENP(j)/T Pc-4/Pr-4/Ps-4/Pt-10 WW/
RM

ACCESSION NR: AP4047218 S/0190/64/006/010/1885/1890

AUTHOR: Lovantovskaya, I. I.; Kovarskaya, B. M.; Dralyuk, G. V.; Neyman, M. B.

TITLE: Mechanism of thermal oxidative degradation of polyamides

SOURCE: Vysokomolekulyarnyye soyedineniya, v. 6, no. 10, 1964, 1885-1890

TOPIC TAGS: polyamide, nylon, polycaproamide, degradation, thermal oxidative degradation, degradation mechanism

ABSTRACT: In order to elucidate the thermal oxidation mechanism of polyamides, a study has been made of the volatile thermal oxidation products of polycaproamide. The thermal oxidation was carried out in a special apparatus described in the article. The volatile products were analyzed by chromatography, polarography, and chemical

acetalacetoxy. A mechanism is proposed for the formation of these

Card 1/2

L 12003-65
ACCESSION NR: AP4047218

products, which involves peroxide-radical and peroxide decomposition. Orig. art. has: 4 figures and 11 formulas.

ASSOCIATION: Nauchno-issledovatel'skiy institut plasticheskikh mass (Scientific Research Institute for Plastics).

SUBMITTED: 24Dec63 ATD PRESS: 3120 ENCL: 00

SUB CODE: MT, GC NO REF SOV: 008 OTHER: 007

Card 2/2

L 29992-65 EWT(m)/EPF(c)/EWP(j) Pc-4/Pr-4 RM
ACCESSION NR: AP4047220 S/0190/64/006/010/1895/1900

AUTHOR: Gromov, B.A.; Miller, V.B.; Neyman, M.B.; Tarsuyeva, Ye. S.; Shlyapnikov, Yu. A.

TITLE: Mechanism of action of weak antioxidants during the oxidation of polypropylene

SOURCE: Vy*sokomolekulyarny*ye soyedineniya, v. 6, no. 10, 1964, 1895-1900

TOPIC TAGS: polypropylene, polypropylene oxidation, antioxidant, monophenol, isotactic polypropylene, antioxidant consumption

ABSTRACT: In order to confirm the hypothesis that all monphenols are weak antioxidants, the author investigated the oxidation of isotactic polypropylene in the presence of 2,4,6-tri-tert.-butylphenol, 2,6-ditert.-butyl-4-phenylphenol and 4,4'-methylene-bis-(2,6-di-tert.-butylphenol). Samples of polypropylene were oxidized in sealed ampoules as

of antioxidant, the molecular weight of the polymer decreased sharply, and oxidation was

L 29992-65
ACCESSION NR: AP4047220

found to proceed in a non-stationary way at all antioxidant concentrations. Mathematical analysis of these results indicated that the reason for the low degree of effectiveness of the monophenols as antioxidants is that they stimulate branching of the kinetic oxidation chain. Orig. art. has: 1 table, 6 figures and 11 equations.

ASSOCIATION: Institut khimicheskoy fiziki AN SSSR (Institute of Chemical Physics, AN SSSR)

SUBMITTED: 26Dec63 ENCL: 00 SUB CODE: OC, GC

NO REF SOV: 005 OTHER: 000

ACCESSION NR: AP4014501 S/0074/64/033/001/0028/0051

AUTHOR: Neyman, M.B.

TITLE: Mechanism of thermo-oxidative degradation and stabilization of polymers

SOURCE: Uspekhi khimii, v. 33, no. 1, 1964, 28-51

TOPIC TAGS: polymer oxidation, stabilization, thermal oxidation, oxidation mechanism, stabilization mechanism, liquid phase oxidation, gas phase oxidation, solid phase oxidation, radical chain oxidation theory, polypropylene, antioxidant, critical antioxidant concentration, antioxidant oxidation initiation, free radical stabilizer, boron stabilizer, EPR analysis, hydroperoxide radical, oxidation inhibitor, boric acid derivative stabilizer

ABSTRACT: This article reviews and interprets the literature on polymer oxidation and stabilization. Topics included: liquid and gas phase oxidation, the development of the radical chain oxidation theory and methods (EPR, kinetic, chemoluminescent, polarographic,

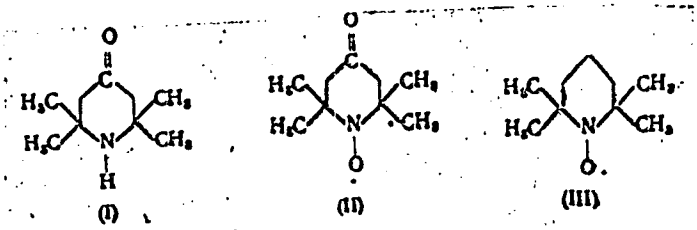
Card 1/4 3

ACCESSION NR: AP4014501

inhibitor) available for studying these reactions; solid phase oxidation and only the recent EPR method of investigating the paroxide and alkyl radicals in such systems; oxidation of polypropylene, especially atactic polypropylene in which the final degradation products are formed by decomposition of the first oxidation product, the hydroperoxide; critical antioxidant concentration and antioxidant consumption which in actuality does not follow a linear function; initiation of oxidation by antioxidants which can occur if the inhibitor itself is oxidized, or if an inhibitor radical of low activity sometimes reacts with a polymer molecule to form an active radical, or if the antioxidant reacts with hydroperoxides; synergism; free radicals as stabilizers, radicals of amine derivatives in which the active amine H is replaced with O, especially the radical

Card 2/3

ACCESSION NR: AP4014501



(I) (II) (III)

which is effective in retarding thermal oxidation of polyamides, hydrocarbons, polypropylene and even polyformaldehyde; and boron stabilizers, the recently found antioxidant activity of boric acid derivatives. Orig. art. has: 28 figures, 27 equations and 9 formulae.

ASSOCIATION: Institut khimicheskoy fiziki, AN SSSR (Institute of

Card 3/4 3

NEYMAN, M.B., prof.

Lengthening the life of polymers. Priroda notes on books. Priroda 53 no.7:32-38 '64. (MIRA 17:7)

1. Institut khimicheskoy fiziki AN SSSR, Moskva.

NEYMAN, M.B.; MEDZHIDOV, A.A.; ROZANTSEV, E.G.; SKRIPKO, L.A.

New reaction for forming stable Würster salts.
Dokl. AN SSSR 154 no.2:387-390 Ja'64. (MIRA 17:2)

1. Institut khimicheskoy fiziki AN SSSR. Predstavleno akademikom A.A. Balandinym.

ACCESSION NR: AP4013332 S/0020/64/154/003/0631/0633

AUTHOR: Blyumenfel'd, A. B.; Neyman, M. B.; Kovarskaya, B. M.

TITLE: Thermal degradation of polyformaldehyde

SOURCE: AN SSSR. Doklady*, v. 154, no. 3, 1964, 631-633

TOPIC TAGS: polyformaldehyde, thermal degradation, decomposition, free radical mechanism, IR spectrum, mass spectrometry, chromatography

ABSTRACT: A study was made to determine if either of the following free radicals were involved in the thermal decomposition of polyformaldehyde:

$$\sim C-CH_2-O-CH_2-O\cdot$$
$$\sim C-CH_2-O-\dot{C}H_2$$

Formaldehyde was separated at 300C from the thermal decomposition products and the remaining products were analyzed chromatographically by their IR spectra and on the mass spectrometer. Methanol, methyl

Card 1/2

ACCESSION NR: AP4013332

formate, water, hydrogen, methane, and products containing the ether linkages -C-O-C-O-C- were found. Since no formic acid was detected, free radical (1) is not involved in the reaction. The thermal destruction of polyformaldehyde is a complex process which includes the formation of free radical (2). Orig. art. has: 2 figures and 7 equations.

ASSOCIATION: Gosudarstvenny*y nauchno-issledovatel'skiy institut plasticheskikh mass (State Scientific Research Plastics Institute)

SUBMITTED: 22Jul63 DATE ACQ: 26Feb64 ENCL: 00

SUB CODE: CH NO REF SOV: 005 OTHER: 002

Card 2/2

KONOVALOVA, N.P.; BOGDANOV, G.N.; MILLER, V.B.; NEYMAN M.B.; ROZANTSEV, E.G.; EMANUEL', N.M.

Antitumorigenic activity of stable free radicals. Dokl. AN SSSR 157 no.3:707-709 Jl '64. (MIRA 17:7)

1. Institut khimicheskoy fiziki AN SSSR. 2. Chlen-korrespondent AN SSSR (for Emanuel').

KAMINSKAYA, L.F.; [illegible], E.G.; MEYMAN, M.B.

Synthesis of free tetroxyl radicals in hydrogenated pyrene.
Izv. AN SSSR Ser. khim. no.1:115-118 '65.
(MIRA 18:2)

1. Institut elementoorganicheskikh soyedineniy AN SSSR.

ROZANTSEV, E.G.; GOLUBEV, V.A.; NEYMAN, M.B.

Some free iminoxyl radicals in the series of hydrogenated pyridine. Izv. AN SSSR Ser. khim. no.2:391-392 '65. (MIRA 18:2)

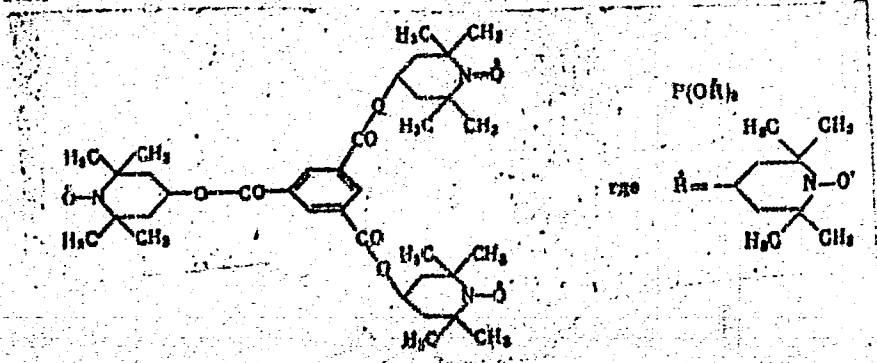
First kinetically stable individual iminoxyl biradical. Ibid.:393-394 (MIRA 18:2)

1. Institut khimicheskoy fiziki AN SSSR.

Card 1/3

L 48980-65

ACCESSION NR: AP5009664

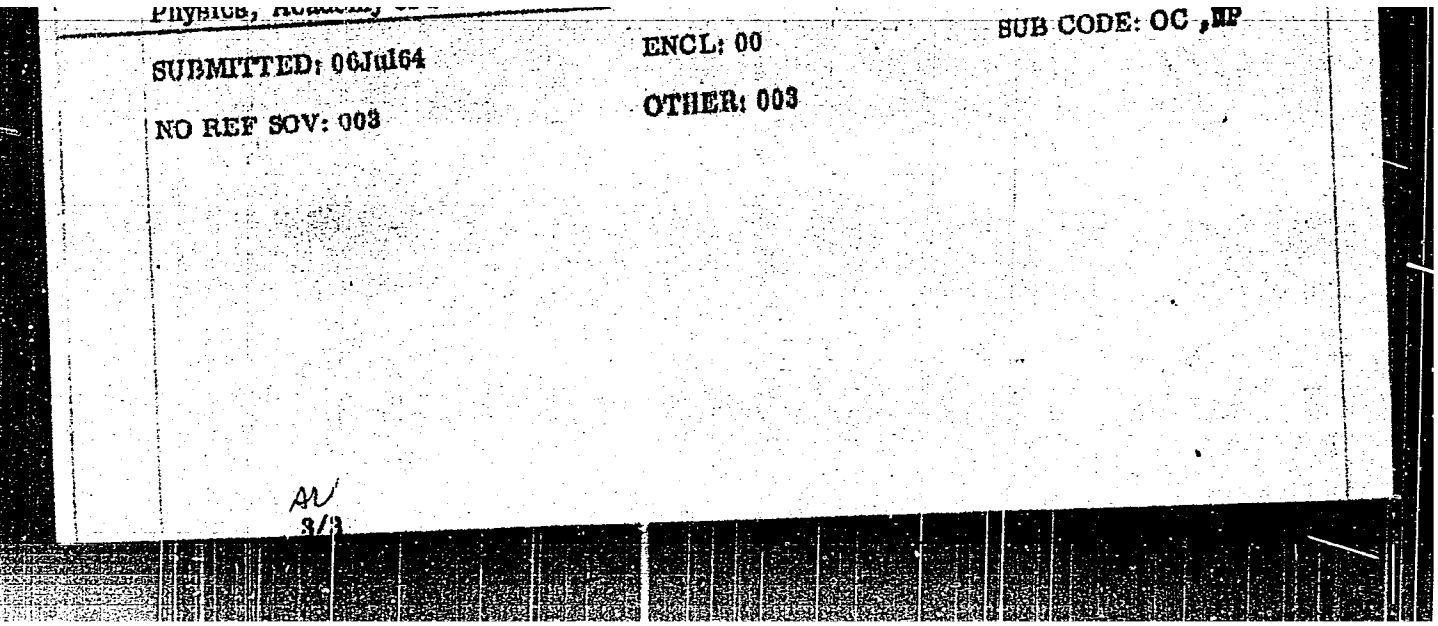


(1)

Tetraradicals (I) and (II) are paramagnetic crystalline compounds, stable both in solution

L 48980-65
ACCESSION NR: AP5009664

ASSOCIATION: Institut khimicheskoy fiziki Akademii nauk SSSR (Institute of Chemical Physics, Academy of Sciences, SSSR)



Physics; Academy of

SUBMITTED: 06Jul64 ENCL: 00 SUB CODE: OC, NP

NO REF SOV: 003 OTHER: 003

AV
8/3

ROZANTSEV, E.G.; GOLUBEV, V.A.; NEYMAN, M.B.; KOKHANOV, Yu.V.

New stable iminoxyl biradicals. Izv. AN SSSR. Ser. khim. no.3: 572-573 '65. (MIRA 18:5)

1. Institut khimicheskoy fiziki AN SSSR.

where (r_i) is the concentration of the stable radical, and (RH) is the concentration of ethylbenzene. When $(RH) \gg (r_i)$,

$$\lg \frac{(r_i)_0}{(r_i)} = 0{,}87k(RH)t \qquad (2)$$

Treatment of experimental data on the change in the concentration of the stable [illegible] equation (2) produced linear relationships from which [illegible]

KHLOPLYANKINA, M.S.; BUCHACHENKO, A.L.; VASIL'YEVA, A.G.; NEYMAN, M.B.

Temperature dependence of cage effect in liquid-phase reactions. Izv. AN SSSR. Ser. khim. no.7:1296-1298 '65. (MIRA 18:7)

1. Institut khimicheskoy fiziki AN SSSR.

GOLUBEV, V.A.; ROZANTSEV, E.G.; NEYMAN, M.B.

Some free iminoxyl reactions involving an unpaired electron.
Izv. AN SSSR. Ser. khim. no.11 1927-1936 '65.
(MIRA 18:1)

1. Institut khimicheskoy fiziki AN SSSR.

L 11111-66 EWT(m)/EWP(j)/T/ETC(m) RPL WW/RM

ACC NR: AP6002100 SOURCE CODE: UR/0062/65/000/011/2055/2057

44 55 44 55 44 55 46 Q3

AUTHOR: Neyman, M. B.; Krinitskaya, L. A.; Rozantsev, E. G.

44 55

ORG: Institute of Chemical Physics, Academy of Sciences SSSR (Institut khimicheskoy fiziki Akademii nauk SSSR)

7,44,55

TITLE: Inhibition of the thermal oxidative degradation of polycaproamide by stable imineoxyl radicals from hydrogenated pyrrols

SOURCE: AN SSSR. Izvestiya. Seriya khimicheskaya, no. 11, 1965, 2055-2057

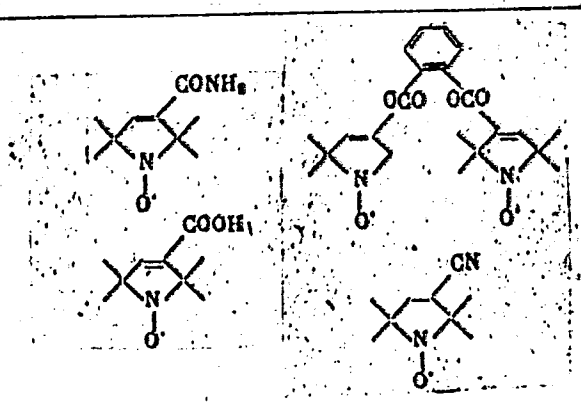
TOPIC TAGS: polymer, polycaproamide, antioxidant, inhibitor, polymer stability

ABSTRACT: Previous work had shown that some imineoxyl radicals are antioxidants and can inhibit the thermal oxidative degradation of polymers. In this work the following stable imineoxyl radicals, previously synthesized by the authors, were tested for their ability to retard the thermal oxidative degradation of polycaproamide:

Card 1/2 UDC: 541.6+541.51

L 11111-66

ACC NR: AP6002100



They were found to inhibit the destruction of polycaproamide, exhibiting a well-pronounced induction period at 160C. The inhibiting properties of the above radicals drop sharply when the temperature of the process is raised to 200C. Orig. art. has: 1 table, 2 figures. [VS]

SUB CODE: 07 SUBM DATE: 18Mar65/ ORIG REF: 008/ OTH REF: 002
ATD PRESS: 4176

Card 2/2

L 10199-66 EWT(m)/EWP(j)/EWA(c) RPL RM

ACC NR: AP5028458 SOURCE CODE: UR/0286/65/000/020/0021/0021

AUTHORS: Rozantsev, E. G.; Golubev, V. A.; Neyman, M. B.

ORG: none

TITLE: Method for obtaining individual polyradicals. Class 12, No. 175504

SOURCE: Byulleten' izobreteniy i tovarnykh znakov, no. 20, 1965, 21

TOPIC TAGS: polyradical, polymer triethylamine, polymerization

ABSTRACT: This Author Certificate presents a method for obtaining individual polyradicals. To obtain polyradicals stable towards oxygen, the stable radical 1,4,2,6,6,-tetramethyl-4-oxypiperidine-1-oxyl is reacted with hexamethylenediisocyanate in benzene solution at a temperature of ~ 100C or with phosphorus trichloride in benzene solution in presence of triethylamine at 0C, or with the tetrachloroanhydride of pyromellitic acid in piperidine solution at 0C.

SUB CODE: 07/ SUBM DATE: 24Oct64/

Card 1/1 UDC: 547.77.8.024

L 15335-66 EWT(m)/EWP(j)/T/ETC(m)-6 WW/RM

ACC NR: AP6000983 (A) SOURCE CODE: UR/0286/65/000/022/0059/0059

AUTHORS: Kovarskaya, B. M.; Gurbyanova, V. V.; Rozantsev, E. G.; Neyman, M. B. 41 03

ORG: none

TITLE: A method for obtaining stabilized polyformaldehyde. 15,44,55 Class 39, No. 176406 16

SOURCE: Byulleten' izobreteniy i tovarnykh znakov, no. 22, 1965, 59

TOPIC TAGS: polymer, polymerization, polyformaldehyde plastic, nitrogen compound

ABSTRACT: This Author Certificate presents a method for obtaining stabilized polyformaldehyde by introducing into the finished polymer a stabilizing system consisting of a polyamide and nitrogen-containing compound. To increase the thermostability of the polymer, 2,2,6,6-tetramethyl-4-oxypiperidinoxyl, phenylcarbonate-2,2,6,6-tetramethyl-4-ethyl-4-oxypiperidinoxyl is used as the nitrogen-containing compound.

SUB CODE: 11/ 07/ SUBM DATE: 17May63

QC

Card 1/1 UDC: 678.644'141.048.2

2

ROZANTSEV, E.G.; NEYMAN, M.B.

Reply to certain remarks of O.L.Lebedev and G.A.Razuvaeva in connection with the priority of the discovery of nonradical reactions of free radicals. Zhur. org. khim. 1 no.7:1337-1338 Jl '65. (MIRA 18:11)

VASSERMAN, A.M.; BUCHACHENKO, A.L.; ROZANTSEV, Ye.G.; NEYMAN, M.B.

Dipole moments of molecules and radicals. Di-tert-butyl nitroxide. Zhur. struk. khim. 6 no.3:467-468 My-Je '65. (MIRA 18:8)

1. Institut khimicheskoy fiziki AN SSSR.

BOGDACHENKO, A. [illegible]; [illegible], [illegible]; [illegible]; NEYMAN, M.B.

π-Complexes of [illegible] radical [illegible]

1. [illegible]

APPROVED FOR RELEASE: Monday, July 31, 2000 CIA-RDP86-00513R00113682000

L 1139-66 EWT(m)/EPF(c)/EWP(j)/T/EWP(t)/EWP(b)/EWA(c) IJP(c)/RPL JD/RM

ACCESSION NR: AP5022593 UR/0190/65/007/009/1515/1519
678.01:54

AUTHORS: Gur'yanova, V. V.; Kovarskaya, B. M.; Krinitskaya, L. A.; Neyman, M. B.; Rozantsev, E. G.

TITLE: On the possibility of initiating the chain oxidation of polymers by nitrogen oxide radicals

SOURCE: Vysokomolekulyarnyye soyedineniya, v. 7, no. 9, 1965, 1515-1519

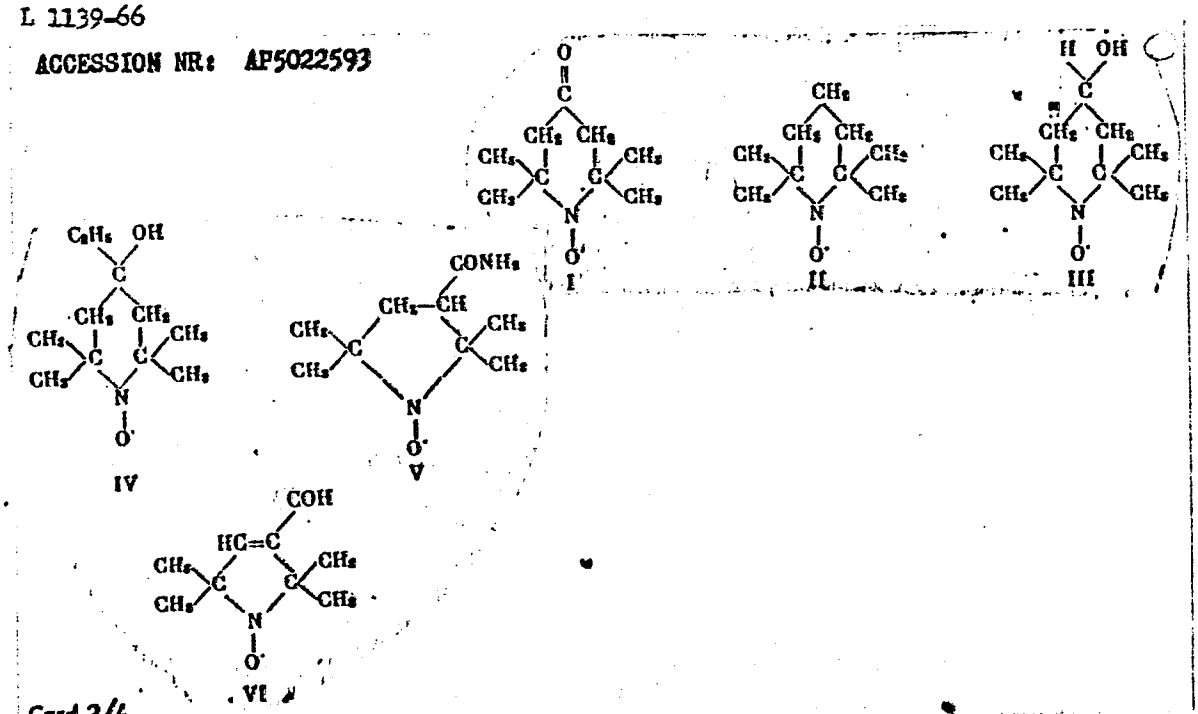
TOPIC TAGS: free radical, EPR, polymerization, hydrazobenzene, free radical polymerization

ABSTRACT: The kinetics, activation energies and preexponential factors for six reactions between six different iminoxyl radicals and hydrazobenzene have been determined. The investigation was undertaken to extend currently available information on the abstraction of nitrogen-bound hydrogen atoms by nitrogen oxide radicals discussed by M. B. Neyman, Yu. G. Mamedova, P. Blenke, and A. L. Buchachenko (Dokl. AN SSSR, 144, 392, 1962). The radicals studied were:

Card 1/4

L 1139-66

ACCESSION NR: AP5022593



Card 2/4

L 1139-66
ACCESSION NR: AP5022593

The rate of reaction was followed by observing the changes in the EPR and UV spectra. The experimental results for hydrazobenzene are shown graphically in Fig. 1 on the Enclosure. Reaction rate constants and preexponential factors for the six different radicals are given in tabular form. A reaction mechanism is proposed. It is concluded that nitrogen oxide radicals are capable of abstracting nitrogen-bound hydrogen, giving rise to an active radical that is capable of initiating oxidation. Orig. art. has: 1 table, 3 graphs, and 3 equations.

ASSOCIATION: Institut plasticheskikh mass (Plastics Institute) 44,55

SUBMITTED: 24Sep64 ENCL: 01 SUB CODE: OC, GC

NO REF SOV: 011 OTHER: 002

Card 3/4

L 1139-66
ACCESSION NR: AP5022593

ENCLOSURE: 01

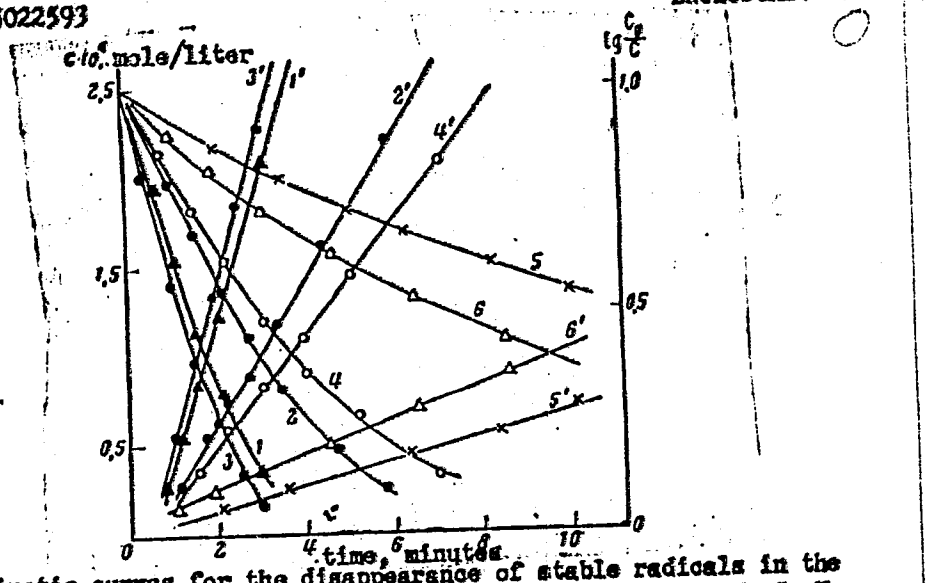


Fig. 1. Kinetic curves for the disappearance of stable radicals in the reaction with hydrazobenzene. 1- radical I; 2- II; 3- III; 4- IV; 5- V; 6- VI; 1'. - 6' disappearance of radicals I - VI represented as log C/C_0 vs time

Card 4/4

NEYMARK, B.Ye., kand. tekhn. nauk; VORONIN, L.K., inzh.

Thermal conductivity and electrical resistance of EI211 steel. Energomashinostroenie 11 no.7:33-34 Jl '65. (MIRA 18:7)

ROZANTSEV, E.G.; KALACHNIKOVA, L.A.; NEYMAN, M.B.

Effect of stable free radicals on the thermal oxidative degradation of polypropylene. Zhur.prikl.khim. 38 no.3:700-705 Mr '65. (MIRA 18:11)

1. Institut khimicheskoy fiziki AN SSSR. Submitted March ..., 1963.

MEDZHIDOV, A.A.; BUCHACHENKO, A.L.; NEYMAN, M.B.

Possibility of acid-basic catalysis of radical reactions. Dokl. AN SSSR 161 no.4:878-881 Ap '65. (MIRA 18:5)

1. Institut khimicheskoy fiziki AN SSSR. Submitted September 22, 1964.

BUCHACHENKO, A.L.; GOLUBEV, V.A.; NEYMAN, M.B.; ROZANTSEV, E.G.

Electron paramagnetic resonance spectra of individual polyradicals.
Dokl. AN SSSR 163 no.6:1416-1418 Ag '65.
(MIRA 18:8)

1. Institut khimicheskoy fiziki AN SSSR. Submitted January 21, 1965.

L 13818-66 EWT(m)/EWP(t) WW/RM

ACC NR: AP6002481 (A) SOURCE CODE: UR/0191/66/000/001/0042/0044

AUTHORS: Neyman, M. B.; Kovarskaya, B. M.; Levantovskaya, I. I.; Yazvikova, M. P.

ORG: none

TITLE: Thermo-oxidative degradation of polytetrahydrofurane

SOURCE: Plasticheskiye massy, no. 1, 1966, 42-44

TOPIC TAGS: polymer, oxidative degradation, oxidation, oxidation kinetics

ABSTRACT: To extend the work on the properties of polytetrahydrofurane, published by A. B. Blyumenfel'd, M. B. Neyman, and B. M. Kovarskaya, (DAN SSSR, 154, 631, 1964), the thermo-oxidative degradation of polytetrahydrofurane was studied in the temperature interval of 90--120C. The experimental technique is that described by V. B. Miller, M. B. Neyman, and Yu. A. Shlyapnikov (Vysokomolek. soyed., 1, 1703, 1959). The kinetics of oxygen absorption, the thermal dependence of the induction period, the autocatalytic factor, the time for the maximum accumulation of hydroperoxides, and the dependence of the induction period on the concentration of a number of antioxidants at 120C and 200 mm ϕ_2 pressure were determined. The experimental results are presented graphically (see Fig. 1). It was found that the autocatalytic factor φ and the induction period τ are given by

Card 1/2 UDC: 547.722.3:54=126.01:536.495:543.872

L 13818-66

ACC NR: AP6002481

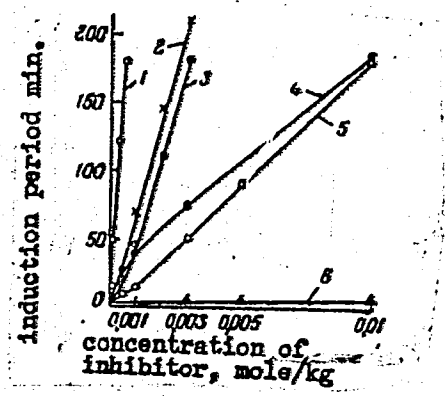


Fig. 1. Dependence of the induction period on the concentration of antioxidant. 1 - N-phenyl-N'cyclohexyl-n-phenylene-diamine; 2 - 2,2-methylene-bis-(4-methyl-6-tert-butyl)-phenol (stabilizer 2246); 3 - pyrocatechine; 4 - 2,6-di-tert-butyl-4-methylphenol (ionol); 5 - ionolpyrocatechine-phosphite; 6 - trifonolphenyl phosphite (polygard). T = 200C, $P\phi_2$ = 200 mm.

$$\varphi = ae^{-\frac{\gamma_1}{T}}$$

$$\tau = be^{-\frac{\gamma_2}{T}}$$

where γ_1 and γ_2 are equal to 6000 and 7000 respectively, and a and b are constant. Orig. art. has: 5 graphs and 8 equations.

SUB CODE: 11/ SUBM DATE: none/ ORIG REF: 006/ OTH REF: 004

Card 2/2

L 20804-66 EWP(j)/EWT(m)/ETC(m)-6/T IJP(c) RM/WW

ACC NR: AP6005943 (A) SOURCE CODE: UR/0191/66/000/002/0005/0008

AUTHORS: Moiseyev, V. D.; Suskina, V. I.; Neyman, M. B.

ORG: none

TITLE: Composition of microproducts and mechanism of thermal decomposition of polyvinyl chloride

SOURCE: Plasticheskiye massy, no. 2, 1966, 5-8

TOPIC TAGS: free radical, thermal decomposition, combustion mechanism, polyvinyl chloride

ABSTRACT: Products and kinetics of thermal decomposition of polyvinyl chloride (I) at 215—300C have been investigated to determine the mechanism of the reaction. Latex of I, with bulk density 0.52 g/cc (containing less than 0.0075% of iron and less than 0.4% of moisture and volatiles), was used for experimentation. Equipment and method of decomposition, as well as analytical methods, have been described earlier by M. S. Khloplyankina, M. B. Neyman, and V. D. Moiseyev (Plast. massy, 2, 9, 1961) and by V. D. Moiseyev, M. B. Neyman, and V. I. Suskina (Vysokomolek. soyed., vyp. Khimicheskiye svoystva i modifikatsiya

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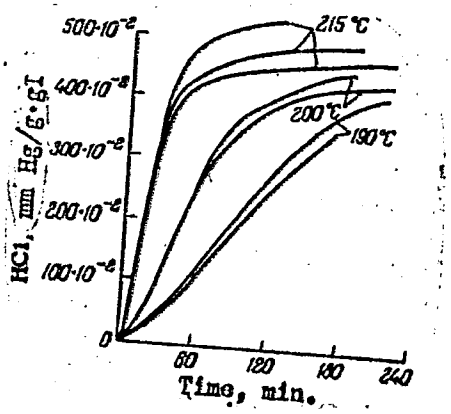
UDC: 678.743.22.01:536.495

L 20804-66

ACC NR: AP6005943

polimerov, str. 86, 114, 1964). Figure 1 indicates that the reaction is

Fig. 1. Pressure of HCl evolved during the decomposition of I, as function of time and temperature.



autocatalytic in character. The presence of C_2-C_4 hydrocarbons among gaseous products of reaction is explained by free radical-chain decomposition process.

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L 20804-66

ACC NR: AP6005943

A possible path of formation of these products as well as of hydrogen, carbon monoxide and benzene isolated among the products is suggested. Stabilization of I can be achieved by addition of suitable inhibitors of radical-chain reaction. Orig. art. has: 1 table, 2 figures, and 4 equations.

SUB CODE: 11/ SUBM DATE: none/ ORIG REF: 008/ OTH REF: 009

Card 3/3

L 16199-66

ACCESSION NR: AP5022593 UR/0190/65/007/009/1515/1519
678.01:54

AUTHORS: Gur'yanova, V. V.; Kovarskaya, B. M.; Krinitskaya, L. A.; Neyman, M. B.; Rozantsev, E. G.

TITLE: On the possibility of initiating the chain oxidation of polymers by nitrogen oxido radicals

SOURCE: Vysokomolekulyarnyye soyedineniya, v. 7, no. 9, 1965, 1515-1519

TOPIC TAGS: free radical, EPR, polymerization, hydrazobenzene, free radical polymerization

ABSTRACT: The kinetics, activation energies and preexponential factors for six reactions between six different iminoxyl radicals and hydrazobenzene have been determined. The investigation was undertaken to extend currently available information on the abstraction of nitrogen-bound hydrogen atoms by nitrogen oxide radicals discussed by M. B. Neyman, Yu. G. Mamedova, P. Blenke, and A. L. Buchachenko (Dokl. AN SSSR, 144, 392, 1962). The radicals studied were:

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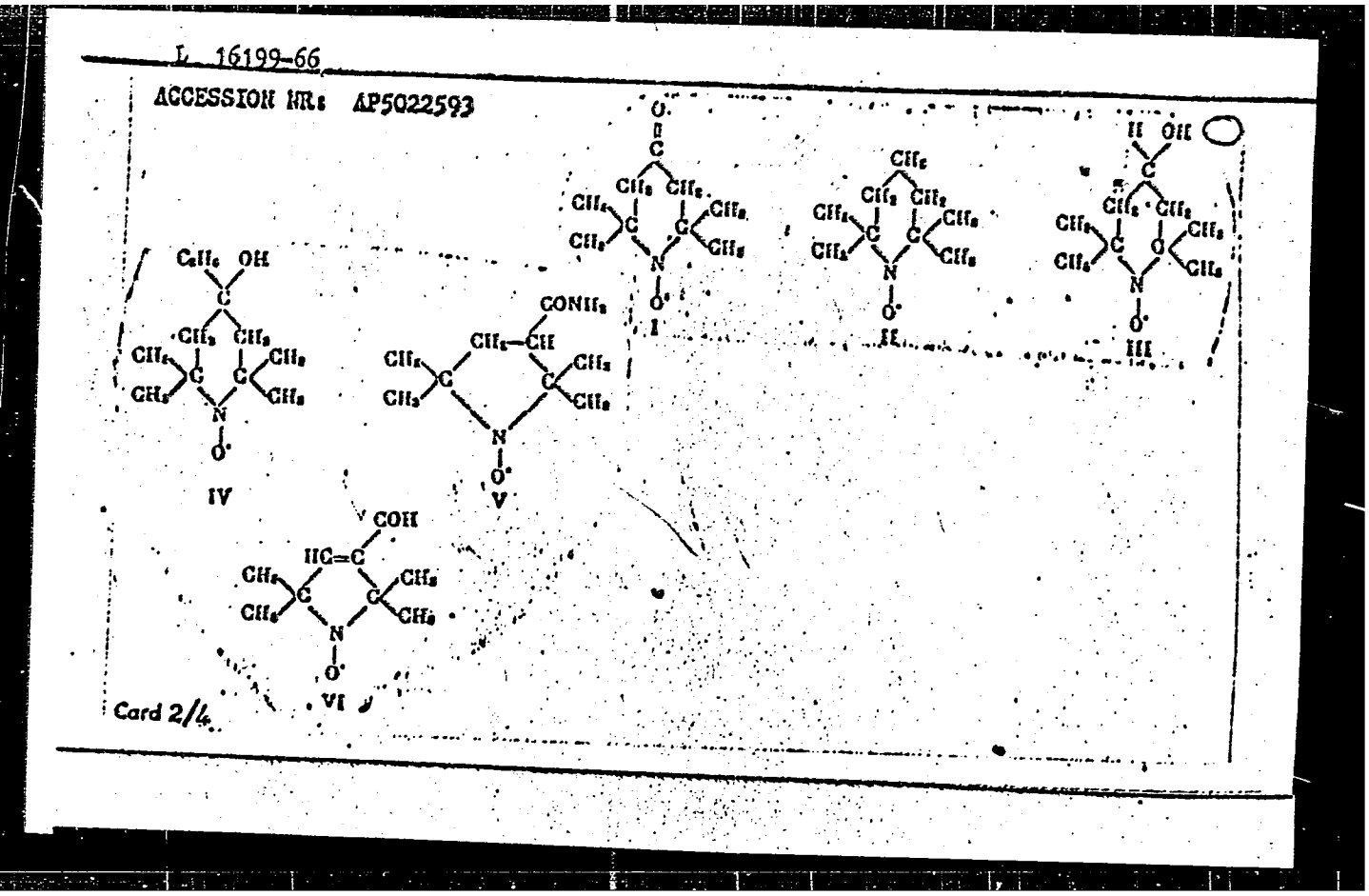
ACCESSION NR: AP5022593



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ACCESSION NR: AP5022593

The rate of reaction was followed by observing the changes in the EPR and UV spectra. The experimental results for hydrazobenzene are shown graphically in Fig. 1 on the Enclosure. Reaction rate constants and preexponential factors for the six different radicals are given in tabular form. A reaction mechanism is proposed. It is concluded that nitrogen oxide radicals are capable of abstracting nitrogen-bound hydrogen, giving rise to an active radical that is capable of initiating oxidation. Orig. art. has: 1 table, 3 graphs, and 3 equations.

ASSOCIATION: Institut plasticheskikh mass (Plastics Institute)

SUBMITTED: 24Sep64 ENCL: 01 SUB CODE: OC, GC

NO REF SOV: 011 OTHER: 002

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L 16199-66

ACCESSION NR: AP5022593

ENCLOSURE: 01

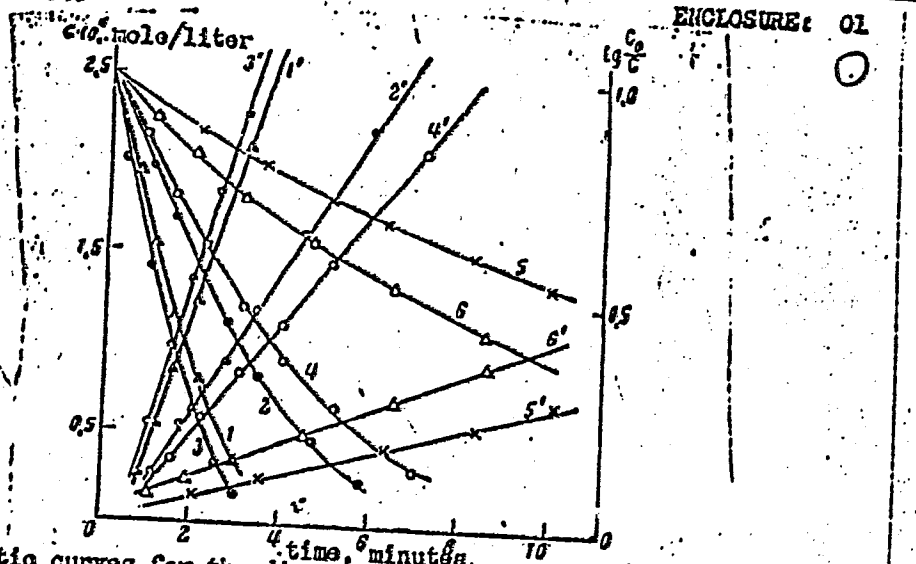

Fig. 1. Kinetic curves for the disappearance of stable radicals in the reaction with hydrazobenzene. 1- radical I; 2- II; 3- III; 4- IV; 5- V; 6- VI; 1' - 6' disappearance of radicals I - VI represented as log C/C_0 vs time

Card 4/4

L 25618-66 EWT(m)/EWP(j) JW/RM

ACC NR: AP6016109 SOURCE CODE: UR/0062/65/000/011/1927/1936

AUTHOR: Golubev, V. A.; Rozantsev, E. G.; Neyman, M. B.

ORG: Institute of Chemical Physics, AN SSSR (Institut Khimicheskoy fiziki AN SSSR)

TITLE: Some reactions of free iminoxyl radicals with the participation of an unpaired electron

SOURCE: AN SSSR. Izvestiya. Seriya khimicheskaya, no. 11, 1965, 1927-1936

TOPIC TAGS: organic nitrogen compound, halide, chemical reaction, alcohol, ketone, aldehyde, hydroxylamine

ABSTRACT: Previously unknown iminoxyl halides were produced by the action of chlorine and bromine on free iminoxyl radicals. The reactions of the iminoxyl halides with water, amines, and alcohols were studied. The reaction of 2,2,6,6-tetramethyl-4-hydroxypiperidine-1-oxyl chloride with water results in the formation of the initial radical and a number of other reaction products, from which only 2,2,6,6-tetramethyl-4-oxopiperidine-1-oxyl could be isolated. The vigorous reaction of iminoxyl halides with amines also leads to the formation of iminoxyl radicals. The reactions of iminoxyl halides with primary and secondary alcohols give quantitative yields of the corresponding hydroxylamines; primary alcohols are oxidized to the corresponding aldehydes, while secondary alcohols are oxidized to the ketones. In the case of tertiary butyl alcohol, the formation of an intramolecular ring is impossible, and the reaction proceeds according to a

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UDC: 541.515+542.91

L 25618-66

ACC NR: AP6016109

radical mechanism, indicated by a rapid increase in the concentration of the iminoxyl radical. The interaction of iminoxyl radicals with hydrogen chloride depends on the solvent in which the reaction takes place and on the concentration of the hydrochloric acid. Orig. art. has: 2 figures, 6 formulas, and 1 table. [JPRS]

SUB CODE: 07 / SUBM DATE: 17Jun65 / ORIG REF: 014 / OTH REF: 005

Card 2/2

L 37213-66 EWT(m)/EWP(j) RM

ACC NR: AP6014407 SOURCE CODE: UR/0062/66/000/004/0675/0679

AUTHOR: Rozantsev, E. G.; Krinitskaya, L. A.; Neyman, M. B.

ORG: Institute of Chemical Physics, Academy of Sciences SSSR (Institut khimicheskoy fiziki Akademii nauk SSSR)

TITLE: Free iminoxyl radicals in the hydrogenated pyrrole series

SOURCE: AN SSSR. Izvestiya. Seriya khimicheskaya, no. 4, 1966, 675-679

TOPIC TAGS: free radical, chemical reaction, heterocyclic base compound, secondary amine, chemical valence

ABSTRACT: Free iminoxyl radicals of hydrogenated pyrrole were synthesized and the possibility of running reactions with them without affecting the free valency was studied. The free iminoxyl radicals of the amides of 2,2,5,5-tetramethylpyrrolinecarboxylic acids and 2,2,5,5-tetramethylpyrrolidine were prepared by catalytic oxidation. These radicals are very stable to oxygen, can be used to inhibit radical processes, and can be readily reduced to the corresponding heterocyclic analoga of hydroxylamine or amines. A new method proposed for protecting the

UDC: 542.91+547.7+541.51

Card 1/2

L 37213-66

ACC NR: AP6014407

secondary amino groups in amino acids comprises oxidizing the amino groups to iminoxyl radicals, esterifying with diazomethane and reducing the ester radical to the amino ester. Orig. art. has: 1 table, 1 figure and 4 equations.

SUB CODE: 07/ SUBM DATE: 17Jan64/ ORIG REF: 014 OTH REF: 004

Card 2/2

L 33427-66 EWT(m)/EWP(j) JW/RM

ACC NR: AP6012724 (A) SOURCE CODE: UR/0190/66/008/004/0769/0770

AUTHOR: Shlyapnikova, I. A.; Miller, V. B.; Neyman, M. B.; Shlyapnikov, Yu. A.

ORG: None

TITLE: Upper critical concentration of an antioxidant

SOURCE: Vysokomolekulyarnyye soyedineniya, v. 8, no. 4, 1966, 769-770

TOPIC TAGS: antioxidant additive, ~~polypropylene,~~ solution concentration, oxidation, ~~antioxidant, critical concentration~~

ABSTRACT: The upper critical concentration of an antioxidant has been investigated. It was shown that antioxidant additives increase the probability that the degenerated chain branching under certain conditions, does possess lower and upper critical concentrations. The upper critical concentration during polypropylene oxidation is shown in the presence of antioxidant-phenyl-β-naphtylamine. Orig. art. has: 1 figure and 3 formulas. [NT]

SUB CODE: 11/ SUBM DATE: 15Oct65/ ORIG REF: 003/

Card 1/1 UDC: 678.01:54

L 04458-67 EWT(m)/EWP(j)/T IJP(c) WW/RM

ACC NR: AP6030233 SOURCE CODE: UR/0030/66/000/008/0064/0068

AUTHOR: Neyman, M. B. (Doctor of chemical sciences); Shlyapnikov, Yu. A. (Candidate of chemical sciences)

ORG: none

TITLE: Studies in polymer oxidation inhibition

SOURCE: AN SSSR. Vestnik, no. 8, 1966, 64-68

TOPIC TAGS: antioxidant additive, oxidation inhibition, heat resistant plastic, reaction mechanism

ABSTRACT: Research on the mechanism of action of polymer antioxidants carried out over a period of six years at the Institute of Chemical Physics, Academy of Sciences USSR has been reviewed. Early experiments showed that the effectiveness of an antioxidant depends not only on the constant of the rate of reaction of the inhibitor with peroxide radicals, but also on its structure, particularly on the number and mutual arrangement of the reactive functional groups. This was revealed, inter alia, in a comparative study of the antioxidant effectiveness of monohydroxy and dihydroxy hindered phenol-type antioxidants. On the basis of this research, a new theory of antioxidant action was formulated, which not only explains presently known facts but predicts new phenomena. For example, this theory explained the synergistic effect of two antioxidants, and correctly predicted the existence of a critical

Card 1/2 UDC: 541.6

L 04458-67

ACC NR: AP6030233

concentration of synergistic mixtures below which the synergistic effect vanishes. The synergistic effect of two antioxidants was attributed to one of them being a chain-reaction inhibitor and the other, a hydroperoxide-reducing agent (e.g., a thio ether). It is claimed that the theory permits a new approach to the selection of polymer antioxidants which, unlike the purely empirical approach used heretofore, takes into account theoretical data. The new approach has already yielded dividends in the preparation of a polypropylene which withstands a temperature of 120C for 4000 hr. Orig. art. has: 3 figures. [ATD PRESS: 5066-F]

SUB CODE: 07 / SUBM DATE: none

Card 2/2 egk

NEYMAN, M.G.; GRISHKEVICH, A.P.; BESSMERTNIY, A.S., redaktor; RODCHENKO, N.I., tekhnicheskiy redaktor

[Trade and technical schools of Leningrad; a manual for entrants in the 1956 school year] Tekhnicheskie uchilishcha i tekhnikumy Leningrada; spravochnik dlia postupaiushchikh v 1956 godu. [Leningrad] Lenizdat, 1956. 164 p. (MLRA 9:10)
(Leningrad--Technical education)

KOROSTELEV, Nikolay Borisovich; HEYMAN, Mikhail Isaakovich; BOYANOVSKIY, S.Ye., red.; ROMANOVA, Z.A., tekhn.red.

[Mass movement for the promotion of sanitary culture] Massovoe dvizhenie za sanitarnuiu kul'turu. Moskva, Gos.izd-vo med.lit-ry Medgiz, 1960. 39 p. (MIRA 13:9)
(Sanitation)

RABINOVICH, Anna Solomonovna, doktor med. nauk; NEYMAN, M.I., red.; BUKOVSKAYA, N.A., tekhn. red.

[Take care of your teeth; advice to parents and educators] Sokhraniaite zuby; sovety roditeliam i vopitateliam. Moskva, Medgiz, 1963. 22 p. (MIRA 16:11)
(TEETH--CARE AND HYGIENE)

YANUSHEVSKIY, I.K., kand. med. nauk; NEYMAN, M.I., red.; BASHMAKOV, G.M., tekhn. red.

[Don't smoke!] Ne kuri! Moskva, Gos.izd-vo med. lit-ry, 1963. 28 p. (MIRA 16:12)

(TOBACCO HABIT)

GENIN, Abram Moiseyevich; GUROVSKIY, Nikolay Nikolayevich; YEMEL'YANOV, Mikhail Dmitriyevich; SAKSONOV, Pavel Petrovich; YAZDOVSKIY, Vladimir Ivanovich; NEYMAN, M.I., red.; BARMAKOV, G.M., tekhn. red.

[Man in space] Chelovek v kosmose. Moskva, Medgiz, 1963. 159 p. (MIRA 17:3)

KUDRYAVTSEVA, Anna Il'inichna; NEYMAN, M.I., red.; PETROVA, N.K., tekhn. red.

[Prevention of tuberculosis in children] Preduprezhdenie tuberkuleza u detei. Moskva, Medgiz, 1963. 21 p. (MIRA 17:2)

LARIONOV, Leonid Fedorovich, prof.; NEYMAN, M.I., red.; CHULKOV, I.F., tekhn. red.

[Cancer; its causes, prevention and treatment] Rak; prichiny, preduprezhdenie i lechenie. Izd.3. Moskva, [Medgiz], 1963. 106 p. (MIRA 17:1)

1. Chlen-korrespondent AMN SSSR (for Larionov).

SOBOLEVA, V.D., doktor med. nauk; SKORBILINA, T.N., red.; NEYMAN, M.I., red.; KOKIN, N.M., tekhn. red.

[Protect children from infectious diseases] Beregite detei ot zaraznykh zabolevanii. Izd. 2., isp. i dop. Moskva, Moskva, Medgiz, 1963. 184 p. (MIRA 17:2)

DARKEVICH-SERAFIMOV, Ivan Mikhaylovich, prof.; NEYMAN, M.I., red.

[Human beings should be healthy] Chelovek dolzhen byt' zdorovym. Moskva, Meditsina, 1964. 126 p.
(MIRA 18:1)

BUCHKO, Anatoliy Fed[illegible]ovich; [illegible], [illegible].I., [illegible].

[Take care of your heart! Sanat[illegible] and health resort treatment of heart and vascular lesions in chronic diseases of the digestive organs] Beregite serdtse! Sanatorno-kurortnoe lechenie [illegible] serdtsa i sosudov pri khronicheskikh zab[illegible] organov pishchevareniia. M[illegible], [illegible], [illegible]. [illegible] p. [illegible] (MIRA [illegible])

GUBERGRITS, Aleksandr Yakovlevich; LESHCHINSKIY, Lev Aleksandrovich; NEYMAN, M.I., red.

[Rheumatic fever] Revmatizm. Izd. 2. Moskva, Meditsina, 1964. 40 p. (MIRA 17:4)

BAZHENOV, Ivan Pavlovich; NEYMAN, M.I., red.; LYUDKOVSKAYA, N.I., tekhn. red.

[Tobacco ruins the health] Tabak gubit zdorov'e. Izd.2. Moskva, Izd-vo "Meditsina," 1964. 29 p. (MIRA 17:3)

SHUB, Rafail L'vovich, prof.; NEYMAN, M.I., red.

[Vitamins for the mother and child] Vitaminy materi i rebenku. Moskva, Meditsina, 1964. 15 p. (MIRA 17:6)

KISELEV, Oleg Aleksandrovich; NEYMAN, M.I., red.

[Let's eliminate venereal diseases] Unichtozhim venericheskie bolezni. Moskva, Meditsina, 1964. 23 p.
(MIRA 17:6)

KOROBKEVICH, O.V.; SKOBELKINA, T.N., red.; NEYMAN, M.I., red.

[For elderly people] Dlia pozhilykh. Moskva, Meditsina, 1964. 252 p. (MIRA 17:5)

TARASOVA, Ol'ga Titovna; NEYMAN, M.I., red.

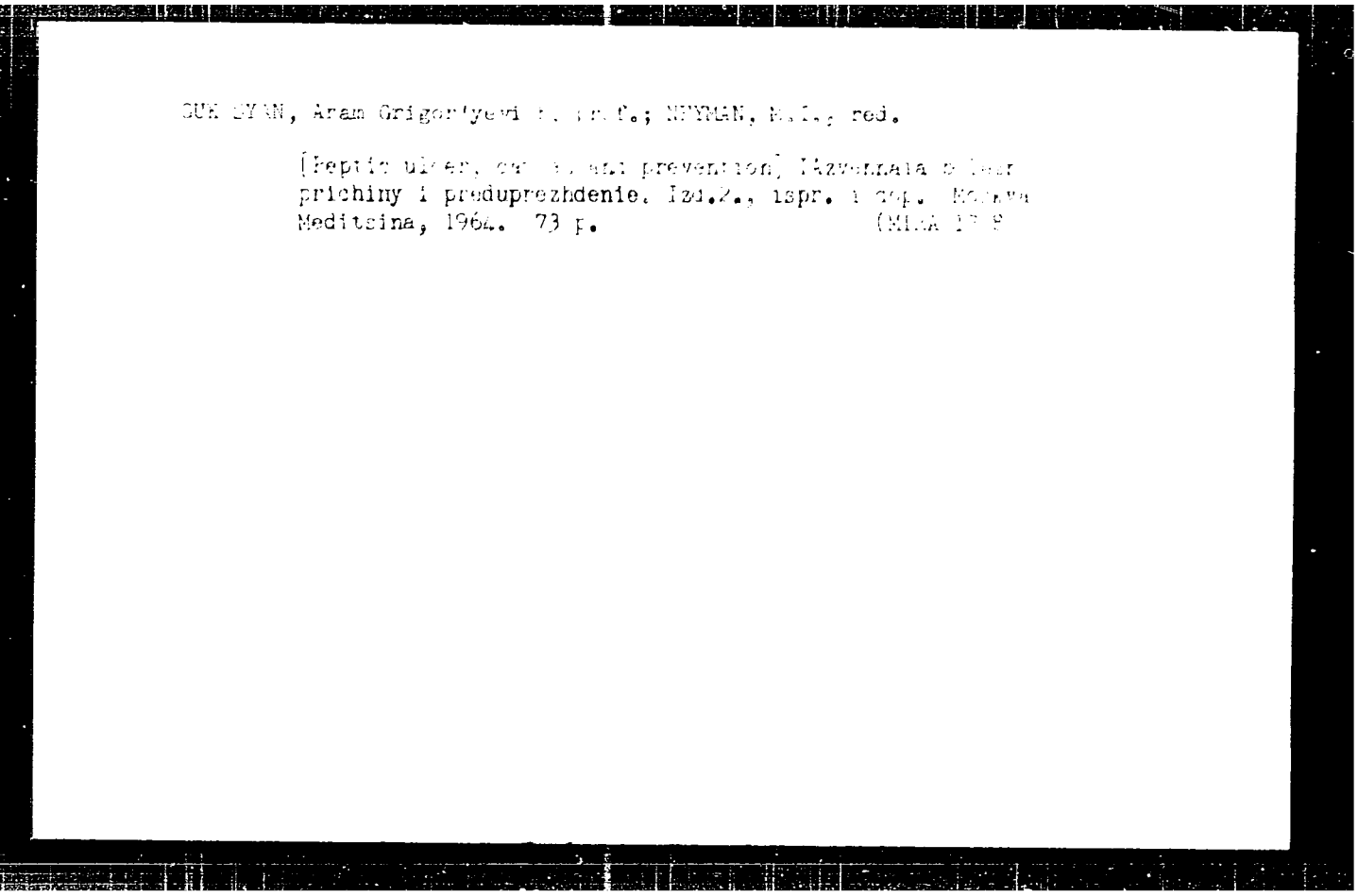
[How to protect children from colds; advice to parents. Tak oberegaiut detei ot prostudy; sovety roditeliam. Moskva, "Meditsina," 1964. 26 p. (MIRA 17:5)

BORISOGLEBSKIY, Lev L'vovich; NEYMAN, M.I., red.

[When medicine becomes business; essays on contemporary American medicine] Kogda meditsina - biznes; ocherki sovremennoi amerikanskoi meditsiny. Moskva, Meditsina, 1964. 86 p. (MIRA 17:6)

SULTANOV, Mekhti Nadzhaf, kand. med. nauk; NEYMAN, M.I., red.

[Venomous bites; treatment and prevention] IAdovitye ukusy; lechenie i profilaktika. Moskva, Izd-vo "Meditsina," 1964. 53 p. (MIRA 17:5)



GUK GYAN, Aram Grigor'yevich, prof.; NEYMAN, M.I., red.

[Peptic ulcer, causes and prevention] Yazvennaia bolezn' prichiny i preduprezhdenie. Izd.2., ispr. i dop. Moskva Meditsina, 1964. 73 p. (MIRA 17:8

NEYMAN, M. I.

NEYMAN, M. I.: "The possibility of working high-quality ceramics by ...-ting ." Min Higher Education USSR. Leni...rad Order of La...r Red Banner Tec...nological Inst imeni Leningrad Soviet. Leningrad, 1956. (Dissertation for the de...ree of doctor in Technical Sciences)

SO: Knizhnaya Letopis', No 36, 1956, Moscow.

HEYMAN, Moisey Isaakovich; CHULOSHNIKOVA, Ye.P., inzh., red.; FREGER, D.P., tekhn.red.

[Experience in constructing pressmolds for parts made of inorganic materials] Opyt konstruirovaniia pressform dlia detalei iz neorganicheskikh materialov. Leningrad, 1956. 13 p. (Leningradskii dom nauchno-tekhnicheskii listok, no.28. Kholodnaia shtampovka) (MIRA 10:12)

(Founding)

AUTHOR BOGORODITSKIY, N.P., BOYS, G.V., KOZLOVSKAYA, M.N., NEYMAN, M.I., PA - 2792

TITLE Mechanical Strenght of Radioceramics in Connection with Heat Treatment. (Mekhanicheskaya prochnost' radiokeramiki v svyazi s termicheskoy obrabotkoy - Russian)

PERIODICAL Zhurnal Tekhn. Fiz., 1957, Vol 27, Nr 4, pp 675-681, (U.S.S.R.)
Received 5/1957 Reviewed 6/1957

ABSTRACT The following three materials mainly used in radio industry were investigated. 1) Ultra porcelain UF-46 on a corundum basis. 2) Ticond T-80 on a rutile basis. 3) Ceramic material on a zirconium-titanate basis TK-20. Crystal sizes were 4 and from 2 to 40 and from 10 to 15 respectively. Measurements of the temperature coefficients of capacity were carried out at a temperature of from 30-70° C and a frequency of 2.10^6 kc. The mechanical strength of radioceramics is closely connected with the forming of a boundary layer between the crystals. This layer has the capability of further crystallization, which leads to the forming of microgaps. Hardening of ceramics at temperatures above the critical temperature for forming gaps is of special importance for the purpose of increasing the mechanical strength. Mechanical and electric strength are closely connected with each other. On the account of the forming of microgaps the electric strength of the ceramics decreases by one order of magnitude. The ceramic materials investigated have a certain critical temperature for the forming of gaps which has to be taken into

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Mechanical Strength of Radioceramics in Connection with Heat Treatment. PA - 2792

account in the case of technological processes. In three chapters the influences exercised by temperature in annealing and cooling down on the properties of the samples are dealt with.
(16 illustrations and 4 citations from Slav publications).

ASSOCIATION
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SUBMITTED 1.11.1956
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Card 2/2

72-58-3-9/15

AUTHOR: Neyman, M. I.

TITLE: Devices for the Determination of the Composition of Gas-Milieu in Burning Ceramics (Ustanovki dlya opredeleniya sostava gazovoy sredy pri obzhige keramiki)

PERIODICAL: Steklo i Keramika, 1958, Nr 3, pp. 29-31 (USSR)

ABSTRACT: The author investigated - together with engineer G. V. Boys and A. V. Barabanov - the composition of the fuel gases in burning ceramics in furnaces with fuel oil heating. It was found in this connection that the fuel gases contain nitrogen, oxygen, carbon monoxide, carbon dioxide, hydrogen, hydrocarbons and steam. An approximate composition of the gas in the furnace-chamber is given in table 1. Various appliances of Soviet manufacture for gas-analysis of the types GEUK -21, GED -49, MGK -18o, OA- 2202 and imported outfits of the type Mono-Duplex, as well as some others, were investigated. All of them were carefully investigated in works and were found to be unfit for this purpose. The devices of GSKB for separated analyses of oxygen and carbon monoxide, represent automatc outfits for

Card 1/2

Devices for the Determination of the Composition of Gas - Milieu in Burning Ceramics 72-58-3-8/15

the continuous control of the gas- milieu in the furnaces. The device for the determination of oxygen MN-5102 designed by constructor A. M. Shereshevskiy, is based on the utilization of the dependence of the paramagnetic receptivity of oxygen on temperature. The gas-analytic equipment for the determination of carbon monoxide OA-2102 (constructor N.P. Syromyatnikov) is given in figure 1 and its technical characteristic features are shown in table 2. The change of the oxygen-and carbon monoxide content in burning ceramics in reverberatory furnaces with fuel-oil-heating is given in figure 2. The scheme of a gas-analytical equipment with the furnace is given in figure 3. The developed gas analyzers show the following advantages:small inertia, low gas-consumption for the analysis, low energy consumption, and reliability in operation. The analysis takes place continuously and automatically. Moreover, these equipments contain electronic potentiometers by means of which the gas-analyzers can be used as indicators for schemes of an automatic control of the combustion processes.There are 3 figures and 2 tables.

Card 2/2

1. Gases--Chemical analysis

PHASE I BOOK EXPLOITATION SOV/4379

Vsesoyuznaya konferentsiya po fizike dielektrikov. 2d 1958

Fizika dielektrikov, trudy vtoroy vsesoyuznoy konferentsii (Physics of Dielectrics, Transactions of the 2d All-Union Conference on the Physics of Dielectrics) Moscow, Izd-vo AN SSSR, 1960. 532 p. Errata slip inserted. 5,000 copies printed.

Sponsoring Agency: Akademiya nauk SSSR. Fizicheskiy institut imeni P.N. Lebedeva.

Ed. of Publishing House: Ye.L. Starokadomskaya, Tech. Ed.: I.N. Dorokhina. Editorial Board: (Resp. Ed.) G.I. Skanavi Doctor of Physics and Mathematics (Deceased), and K.V. Filippova, Candidate of Physics and Mathematics.

PURPOSE: This collection of reports is intended for scientists investigating the physics of dielectrics.

COVERAGE: The Second All-Union Conference on the Physics of Dielectrics held in Moscow at the Fizicheskiy institut imeni P.N. Lebedeva (Physics Institute imeni P.N. Lebedev) in November 1958 was attended by representatives of the principal scientific centers of the USSR and of several other countries. This collection contains most of the reports presented at the conference and summaries of the discussions which followed. The reports in this collection deal with dielectric properties, losses, and polarization, and with specific inductive capacitance of various crystals, chemical compounds, and ceramics. Photoelectrets, ferroelectric crystals, and various radiation and irradiation effects on dielectrics are investigated. The volume contains a list of other papers presented at the conference dealing with polarization, losses, and breakdowns of dielectrics, which were published in the journal Izvestiya AN SSSR, seriya fizicheskaya Nr. and 2 1960. No personalities are mentioned. References accompany each report.

Card 6/

BOGORODITSKIY, Nikolay Petrovich; KAL'MENS, Natan Vladimirovich; HEYMAN, Moisey Isakovich; POLYAKOVA, Natal'ya Lavrent'yevna; ROTENBERG, Boris Abovich; SALITRA, Dmitriy Borisovich; AFANAS'YEVA, Margarita Aleksandrovna; FRIDBERG, Illariy Dmitriyevich; Prinimala uchastiye MUDROLYUBOVA, L.P.; PASYNKOV, V.V., red.; ZHITNIKOVA, O.S., tekhn. red.

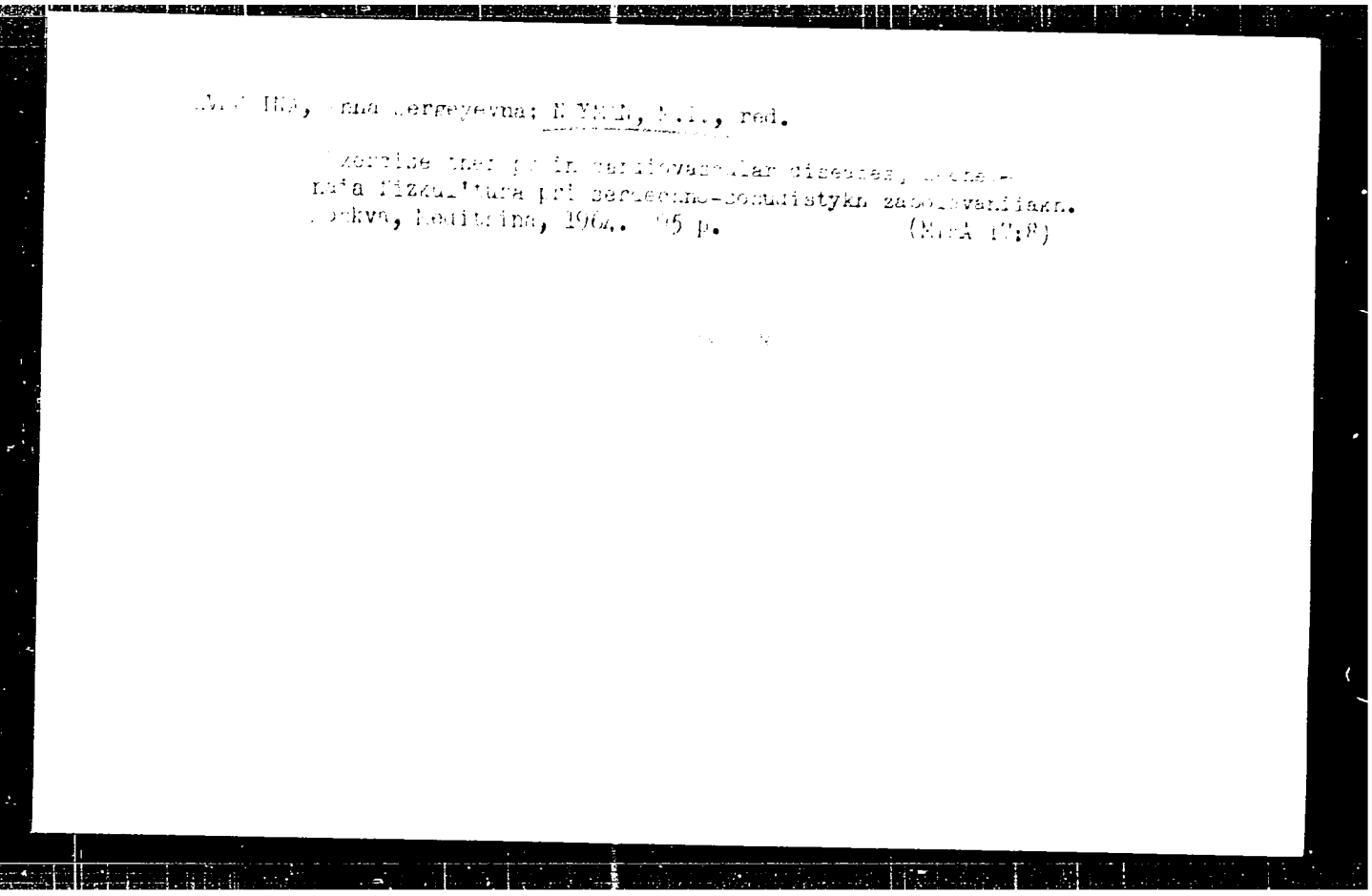
[Ceramic materials in radio engineering] Radiokeramika. Moskva, Gosenergoizdat, 1963. 553 p. (MIRA 16:12)
(Radio--Equipment and supplies)
(Electric engineering--Materials)
(Ceramic materials)

NABOKOV, V.A., prof.; NEYMAN, M.I., red.

[Taiga sickness; tick-borne encephalitis] Taezhnaia bolezn'; kleshchevoi entsefalit. Moskva, Izd-vo "Meditsina," 1964. 18 p. (MIRA 17:5)

NARAVTSEVICH, Zinoviy Abramovich; KHODAKOV, Naum Moiseyevich; NEYMAN, M.I., red.

[For the participant of a tourist trip] Uchastniku turistskogo pokhoda. Moskva, Meditsina, 1964. 39 p. (MIRA 17:5)



[illegible], Anna Sergeyevna; [illegible], L.I., red.

[illegible] fizkul'tura pri serdechno-sosudistykh zabolevaniiakh.
Moskva, Meditsina, 1964. 95 p. (MIRA 17:8)

KHODYKIN, Aleksandr Vasil'yevich, kand. med. nauk; NEYMAN, M.I., red.

[Therapeutic diet in atherosclerosis] Lechebnoe pitanie pri ateroskleroze. Izd.2. Moskva, Meditsina, 1964. 39 p. (MIRA 17:8)

VALOVA, Tat'yana Ivanovna; NEYMAN, M.I., red.

[Disorders of sleep] Rasstroistva sna. Moskva, Medgiz, 1963. 14 p. (MIRA 17:9)

S/

AM4036541 BOOK EXPLOITATION

Bogoroditskiy, Nikolay Petrovich; Kal'mens, Natan Vladimirovich; Neyman, Moisey Isakovich; Polyakova, Natal'ya Lavrent'yevna; Rotenberg, Boris Abovich; Salitra, Dmitriy Borisovich; Afanas'yeva, Margarita Aleksandrovna; Fridberg, Illariy Dmitriyevich

Radioceramics (Radiokeramika). Moscow, Gosenergoizdat, 1963. 553 p. illus., biblio. 7000 copies printed.

TOPIC TAGS: electrical ceramic, electrical insulator, ceramic radio component, ceramic fabrication process

PURPOSE AND COVERAGE: This handbook is intended for technical personnel in the electrical-ceramics industry. It may also be used as a manual for students in higher polytechnical schools specializing in radio components and materials. The text covers the physicochemical and mechanical principles underlying the manufacture of ceramic radio components and gives a detailed description of all stages of production, including process flow sheets, GOST specifications, apparatus designations, and a classification of ceramic materials used in radio engineering. Modernization of the manufacturing

Card 1/4

AM4036541

processes, new materials, and automation are also mentioned. This book is the first Soviet handbook for the new "radio-ceramics" industry.

TABLE OF CONTENTS [Abridged]:

AM4036541

AM4036541

PART V. MACHINING OF FIRED RADIO-CERAMIC PRODUCTS

SUB CODE: MT SUBMITTED: 18May63 NO REF SOV: 208

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Card 4/4

ROMM, Samuil Zusmanovich, kand. med. nauk; NEYMAN, M.I., red.

[Noise-caused trauma of the ear] Shumovaia travma ukha. Moskva, Meditsina, 1964. 36 p. (MIRA 17:12)

MASLOVA, Kira Konstantinovna, kand. med. nauk; NEYMAN, M.I., red.

[Truth about smoking] Pravda o kurenii. Moskva, Meditsina, 1964. 17 p. (MIRA 18:4)

VYAZHEVICH, Vladimir Konstantinovich; NEYMAN, M.I., red.

[Tick-borne encephalitis] Kleshchevoi entsefalit. Moskva, Meditsina, 1964. [illegible] (MIRA 18:3)

VEKHOV, Sergey Pavlovich; SHCHELOVA, Nataliya Filippovna; MEYMAN, M.I., red.

[How to purify and decontaminate water by the simplest means] Kak ochistit' i obezzarazit' vodu s pomoshch'iu prosteishikh sredstv. Moskva, Meditsina, 1965. 23 p. (MIRA 18:10)

ZAFALKEVICH, Irina Feliksovna, kand. ved. nauk; KLYMAN, N. I., red.

[Industrial hygiene of industrial painting with synthetic paints and lacquers; Gigiena truda pri okraske izdelii sinteticheskimi lakokrasochnymi materialami. Moskva, Meditsina, 1965. 25 p. (MIRA 18:6)

KROPACHEV, Aleksandr Mikhaylovich, prof.; NEYMAN, M.I., red.

[Pneumonia in children; treatment, care, prevention] Vospalenie legkikh u detei; lechenie, ukhod, preduprezhdenie. Moskva, Meditsina, 1965. 25 p. (MIRA 18:7)

IGNATOVICH, Zinaida Aleksandrovna; NEYMAN, M.I., red.

[Prevention of food poisonings] Preduprezhdenie pishchevykh otravlenii. Moskva, Meditsina, 1965. 36 p. (MIRA 18:8)