"APPROVED FOR RELEASE: 06/15/2000 CIA-RDP86-00513R001343510013-0

L 17902-66

ACCESSION NR: AP5021419

lead to the formation of molecular nitrogen and hydrogen. The effect of propylene involves the capture of atomic hydrogen and radicals. A substantial decomposition of hydrazine was found to take place at the walls of the reaction vessel. Orig. art. has: 8 figures and 11 formulas.

ASSOCIATION: Fiziko-khimicheskiy institut im. L. Ya. Karpova (Physicochemical Institute)

SUBMITTED: 26May64 ENCL: 00 SUB CODE: GC,NP

NO REF SOV: 002 OTHER: 003

jc

Card 2/2

APPROVED FOR RELEASE: 06/15/2000 CIA-RDP86-00513R001343510013-0"

"APPROVED FOR RELEASE: 06/15/2000 CIA-RDP86-00513R001343510013-0

L 05197-67 EWT(m)/EWP(j) JG/RM

ACC NR: AP7000763 SOURCE CODE: UR/0076/66/040/003/0714/0718

PUKHAL'SKAYA, G. V., KOTOV, A. G., and PSHEZHETSKIY, S. Ya.

20
B

"Phototransformations of Radicals in γ-Irradiated Frozen Acetone"

14

Moscow, Zhurnal Fizicheskoy Khimii, Vol 40, No 3, Mar 1966, pp 714-718

Abstract: EPR spectra of acetone were determined at 77°K after the acetone had been irradiated at this temperature with gamma-rays or ultraviolet light. The spectra indicated that while photolysis with UV resulted in the formation of acetyl radicals and methyl radicals, acetonyl radicals formed principally on gamma-radiolysis. On irradiation of the acetone with UV previously subjected to the action of gamma-radiation, the acetonyl radicals that had formed were photolyzed according to the equation $CH_3COCH_2 \rightarrow CH_3 + CH_2CO$. On further irradiation with UV, formation of acetyl radicals took place. Apparently the ketene that had formed by photolysis of acetonyl radicals decomposed according to the equation $CH_2CO \rightarrow CH_2 + CO$ and the methylene radicals thereupon entered into some sort of reaction giving rise to acetyl radicals. The photodecomposition of acetonyl radicals proceeded much faster than that of acetone molecules. The curve indicating the relation between the wave length of absorbed light and the rate of decomposition of light

UDC: 541.15

Card 1/2

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"APPROVED FOR RELEASE: 06/15/2000 CIA-RDP86-00513R001343510013-0

L 09297-67

ACC NR: AP7000763

absorption by acetone. Orig. art. has: 7 figures and 2 formulas. [JPRS: 37,177]

TOPIC TAGS: acetone, EPR spectrum, photolysis

SUB CODE: 07 / SUBM DATE: 08May65 / ORIG REF: 005 / OTH REF: 004

Card 2/2 vmb

APPROVED FOR RELEASE: 06/15/2000 CIA-RDP86-00513R001343510013-0"

"APPROVED FOR RELEASE: 06/15/2000 CIA-RDP86-00513R001343510013-0

ACC NR: AP7011834 SOURCE CODE: UR/0020/66/171/006/1380/1383

AUTHOR: Pukhal'skaya, G. V.; Kotov, A. G.; Pshezhetskiy, S. Ya.

ORG: none

TITLE: Transformations of free radicals under the action of light in gamma-irradiated methylamines

SOURCE: AN SSSR. Doklady, v. 171, no. 6, 1966, 1380-1383

TOPIC TAGS: Primary aliphatic amine, free radical, chemical energy conversion, gamma irradiation, spectrophotometer / SF-4 spectrophotometer, DRSh-500 irradiation apparatus

SUB CODE: 07

ABSTRACT: S. Ya. Pshezhetskiy et al., using certain gamma-irradiated polymers and olefins as an example, previously established the reversible isomerization of radicals as a result of the migration of free valence between carbon atoms. Considering it important to ascertain whether such free valence transitions are possible between different atoms, particularly transitions between nitrogen and carbon, the authors studied spontaneous, as well as ultraviolet-light-induced transformations of free radicals in gamma-irradiated aliphatic amines (methylamine, dimethylamine and trimethylamine). Irradiation on a cobalt-60 gamma source

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ACC NR: AP7011834

and DRSh-500 lamps, as well as recording of EPR spectra on an RE 1301 instrument and of absorption spectra on an SF-4 spectrophotometer were done at a temperature of 77° K. When necessary, the irradiation with light was done directly in the resonant cavity of a microwave spectrometer. The results are discussed in detail. This article was presented by Academician S. S. Medvedev on 14 February 1966. Orig. art. has: 3 figures and 3 formulas. [JPRS: 40,422]

Card 2/2

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"APPROVED FOR RELEASE: 06/15/2000 CIA-RDP86-00513R001343510013-0

L 35911-66 EWT(m)/EWP(j) CG/RM

ACC NR: AP6014890 SOURCE CODE: UR/0076/65/039/012/2892/2895

46

B

AUTHOR: Roginskiy, V. A.; Kotov, A. G.; Pshezhetskiy, S. Ya.

ORG: Moscow physico-chemical Institute im. L. Ya. Karpov (Moskovskiy fiziko-khimi heskiy institut)

TITLE: Formation of free radicals in frozen solutions of methanol and carbon tetrachloride under the effect of gamma radiation

19

SOURCE: Zhurnal fizicheskoy khimii, v. 39, no. 12, 1965, 2892-2895

TOPIC TAGS: methanol, carbon tetrachloride, free radical, cryogenic effect, gamma irradiation, EPR

ABSTRACT: Samples for electron paramagnetic resonance investigation and for determination of the gases and HCl formed during electrolysis were freed from dissolved air by repeated evacuation of solutions frozen at 90°K to 10^{-4} mm Hg. The samples thus prepared were irradiated in the polycrystalline state with a Co^{60} source. The radiation dose was 1.6 Mrad/sec. The samples for electron paramagnetic resonance investigation and for gas analysis were irradiated together at 77°K. The electron paramagnetic resonance spectra were also recorded at 77°K in a type Re-1301 radiospectrometer. The pressure which developed during

UDC: 541.15

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L 35911-66

ACC NR: AP6014890

radiolysis of the gases was measured with a manometer to an accuracy of ± 0.07 mm Hg. Before measurement of the pressure, the gases were thawed out and refrozen, after which the gases which did not condense at 77°K were introduced into the measuring system. The composition of the gases was determined by mass spectrometry. The yield of HCl was determined by titration with silver nitrate. Experimental results are exhibited in a series of curves. It was found that the dependence of the yield of radicals on the composition of the solutions was characterized by a maximum; the amount of "superadditive" radicals coincides with the yield of HCl. The formation "superadditive" is explained by the reaction of H atoms with CCl_4 molecules and of Cl atoms with CH_3OH molecules. Orig. art. has: 6 formulas and 5 figures.

SUB CODE: 07, 20/ SUBM DATE: 14Apr64/ ORIG REF: 005/ OTH REF: 008

Card 2/2

APPROVED FOR RELEASE: 06/15/2000 CIA-RDP86-00513R001343510013-0"

"APPROVED FOR RELEASE: 06/15/2000 CIA-RDP86-00513R001343510013-0

L 15192-66 EWT(m)/EWP(j)/T/EWA(h)/EWA(1) RM/GS
ACC NR: AT5023443 SOURCE CODE: UR/0000/65/000/000/0194/0205

62
B+1

AUTHOR: Milinchuk, V. K.; Pshezhetskiy, S. Ya.

ORG: none

TITLE: Recombination and transformation of free radicals in γ-irradiated polymers

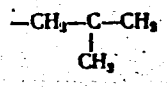
SOURCE: Simpozium po elementarnym protsessam khimii vysokikh energiy. Moscow, 1963. Elementarnyye protsessy khimii vysokikh energiy (Elementary processes of the chemistry of high energies); trudy simpoziuma. Moscow, 1965, 194-205

TOPIC TAGS: radiation polymerization, polymer, isoprene, polyisobutylene, polybutadiene, EPR spectrum, gamma irradiation, free radical, alkyl radical

19,44,55

ABSTRACT: Recombination and transformation of free radicals in γ-irradiated (15--1500 megarads, 77-323°K, γ-irradiation duration 0-40 min) polyisobutylene, polyisoprene, polypropylene, and polybutadiene were investigated using the EPR technique. The object of the study was to elucidate the mechanistic details of the free radical reactions in polymers. The EPR spectra show, that during γ-irradiation of polypropylene (77°K and 25 megarads), recombination of

$$-CH_2-\underset{\displaystyle CH_3}{\underset{|}{C}}-CH_2$$



Card 1/3

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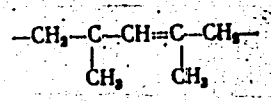
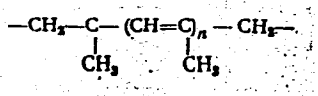
"APPROVED FOR RELEASE: 06/15/2000 CIA-RDP86-00513R001343510013-0

L 15192-66
ACC NR: AT5023443

alkyl radicals, and the transformation of these radicals into



alkyl radicals and



polyene radicals, take place. The β_1 parameter as a function of γ-irradiation duration at various temperatures is shown in fig. 1. Similar graphic data on the β_2 parameter are given. In polypropylene and polyisobutylene, the radical recombination proceeds via the migration of hydrogen atoms from one carbon atom of the polymer chain to another. This mechanism does not apply to radical recombination in polyisoprene and polyisobutylene.

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"APPROVED FOR RELEASE: 06/15/2000 CIA-RDP86-00513R001343510013-0

L 15192-66
ACC NR: AT5023443

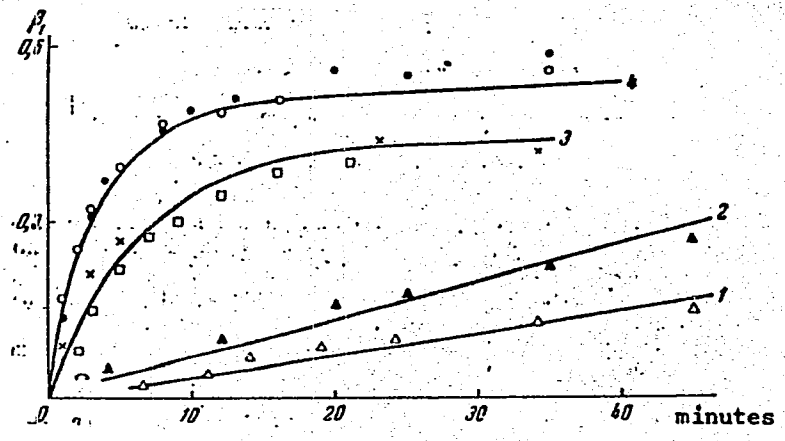

Fig. 1. β_1--ratio of concentrations of alkyl radicals to alkyl radicals; 1--273°K; 2--290°K; 3--308°K; 4--323°K.

Orig. art. has: 4 figures, 3 formulas.

SUB CODE: 07/ SUBM DATE: 23Feb65/ ORIG REF: 015 / OTH REF: 008

Card 3/3

APPROVED FOR RELEASE: 06/15/2000 CIA-RDP86-00513R001343510013-0"

"APPROVED FOR RELEASE: 06/15/2000 CIA-RDP86-00513R001343510013-0

SOROKIN, Ya.A.; PSHEZHETSKIY, S.Ya.

Kinetics and sensitization of ammonia radiolysis in the gaseous phase under the effect of fast electrons. Zhur. fiz. khim. 39 no.8:1955-1959 Ag '65. (MIRA 18:9)

1. Fiziko-khimicheskiy institut imeni Karpova, Moskva.

APPROVED FOR RELEASE: 06/15/2000 CIA-RDP86-00513R001343510013-0"

"APPROVED FOR RELEASE: 06/15/2000 CIA-RDP86-00513R001343510013-0

PSHEZHETSKIY, V.S.; KARGIN, V.A.; BAKH, N.A.

Solid state polymerization of acetaldehyde induced by γ rays. Vysokom.soed. 4 no.5:728-733 My '62. (MIRA 15:7)

1. Moskovskiy gosudarstvennyy universitet imeni Lomonosova.
(Acetaldehyde) (Polymerization) (Gamma rays)

APPROVED FOR RELEASE: 06/15/2000 CIA-RDP86-00513R001343510013-0"

"APPROVED FOR RELEASE: 06/15/2000 CIA-RDP86-00513R001343510013-0

PSHEZHETSKIY, V.S.; KARGIN, V.A.; BAKH, N.A.

X-ray induced polymerization of acetaldehyde in the condensed phase. Vysokom.soed. 3 no.6:925-930 Je '61. (MIRA 14:6)

1. Moskovskiy gosudarstvennyy universitet imeni M.V.Lomonosova.
(Acetaldehyde) (Polymerization)

APPROVED FOR RELEASE: 06/15/2000 CIA-RDP86-00513R001343510013-0"

"APPROVED FOR RELEASE: 06/15/2000 CIA-RDP86-00513R001343510013-0

SLUTSKER, A.I.; GROMOV, A.Ye.; PSHEZHETSKIY, V.S.

Structure and strength of acicular crystals of polyoxymethylene produced by the directional polymerization method. Fiz. tver. tela 6 no. 2:456-461 F '64. (MIRA 17:2)

1. Fiziko-tekhnicheskiy institut imeni A.F.Ioffe AN SSSR, Leningrad.

APPROVED FOR RELEASE: 06/15/2000 CIA-RDP86-00513R001343510013-0"

"APPROVED FOR RELEASE: 06/15/2000 CIA-RDP86-00513R001343510013-0

PSHEZHETSKIY, V.S.; KARGIN, V.A.; KAPANCHAN, A.T.; RYBNIKOVA, L.F.

Polymerization of solid-phase trioxane initiated by X- and γ-irradiation. Vysokom.soed. 6 no.8:1442-1449 Ag '64. (MIRA 17:10)

1. Moskovskiy gosudarstvennyy universitet imeni M.V.Lomonosova.

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"APPROVED FOR RELEASE: 06/15/2000 CIA-RDP86-00513R001343510013-0

ACCESSION NR: AP4043782 S/0190/64/006/008/1442/1449

AUTHOR: Pshezhetskiy, V. S., Kargin, V. A., Kapanchan, A. T., Ry*bnikova, L. F.

TITLE: Solid phase polymerization of trioxane initiated by x-rays and Gamma rays

SOURCE: Vy*sokomolekulyarny*ye soyedineniya, v. 6, no. 8, 1964, 1442-1449

TOPIC TAGS: radiation polymerization, solid phase polymerization, X-ray, Gamma ray, trioxane, polyformaldehyde, polymerization inhibitor, radical polymerization

ABSTRACT: Polymerization of monocrystalline or polycrystalline trioxane to polyformaldehyde, during and after irradiation with x-rays (300 rad/sec.) or Gamma rays (500 rad/sec.) was studied in the presence of phenol, aniline, benzene, naphthalene, β-naphthylamine, phenanthrene, anthracene, decalin, butyraldehyde, paraldehyde and benzaldehyde in an attempt to clarify the role of the crystal lattice in both stages of the process. Additives which react with the polymer chains (aromatic compounds and aldehydes) were found to inhibit polymerization proportionally to the cube root of the inhibitor concentration, while additives not reacting with the chains showed no inhibitory effect at all. The polymerization began at temperatures above 313K, progressed at an increasing rate as the temperature

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ACCESSION NR: AP4043782

increased, and was stimulated by the presence of oxygen. Due to the high rate of chain termination in the presence of radiation, the polymers formed during irradiation had molecularweights only 10% as high as those of polymers formed after irradiation. The degree of monomer conversion, as well as the radical concentration, was maximal at 200-230K, indicating that the process is most likely initiated by a radical mechanism. Orig. art. has: 6 tables, 7 figures and 4 chemical equations.

ASSOCIATION: Moskovskiy gosudarstvenny*y universitet imeni M. V. Lomonosova (Moscow State University).

SUBMITTED: 23Sep63 ENCL: 00 SUB CODE: OC

NO REF SOV: 005 OTHER: 002

Card 2/2

APPROVED FOR RELEASE: 06/15/2000 CIA-RDP86-00513R001343510013-0"

"APPROVED FOR RELEASE: 06/15/2000 CIA-RDP86-00513R001343510013-0

L 38302-65 EWT(m)/EPF(c)/EPF(n)-2/EWP(j)/T Pc-4/Pr-4/Pu-4 GG/RW

ACCESSION NR: AR5003330 S/0081/64/000/021/S013/S013

41
B

SOURCE: Ref. zh. Khimiya, Abs. 21S69

AUTHOR: Pshezhetskiy, V. S.; Tupikov, V. I.

TITLE: A study of the role of free radicals in the solid-phase polymerization of acetaldehyde under the influence of Gamma radiation

CITED SOURCE: Sb. Vysokomolekul. soyedineniya. Geterotsepn. vysokomolekul. soyedineniya. M., Nauka, 1963, 213-219

TOPIC TAGS: free radical, radical polymerization, polymerization mechanism, solid phase polymerization, acetaldehyde polymerization, radiation polymerization, chain growth, chain rupture, Gamma radiation, electron paramagnetic resonance, thermographic analysis, radical recombination

TRANSLATION: Using the method of electron paramagnetic resonance, the authors studied the role of radicals in the polymerization of crystalline acetaldehyde under the influence of γ-radiation. In the dosage interval 0.1-10 Mrad, the number of polymer chains per unit volume is equal in order of magnitude to the number of

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ACCESSION NR: AR5003330

radicals, while the molecular weight is proportional to the fraction of non-polymerized monomer and inversely proportional to the dose. The ratio between the rate constants of chain growth and bimolecular disruption is 0.4. At low doses, chain rupture apparently takes place at defects in the crystal lattice. Thermographic analysis showed that the highest rate of polymerization is observed at temperatures from -155 to -134C, where recombination of radicals takes place in discontinuous jumps. The authors suggest that the polymer chain carries a $CH_3C(O)\cdot\cdot OC(CH_3)H$ radical which arises under the influence of ionizing radiation. The formation of ion-radicals is also possible. V. Irzhak.

SUB CODE: OC, NP ENCL: 00

Card 2/2

APPROVED FOR RELEASE: 06/15/2000 CIA-RDP86-00513R001343510013-0"

"APPROVED FOR RELEASE: 06/15/2000 CIA-RDP86-00513R001343510013-0

ACCESSION NR: AT4034007 S/0000/63/000/000/0220/0226

AUTHOR: Pshezhetskiy, V. S.; Tupikov, V. I.

TITLE: Kinetics of propagation of gamma-initiated polymerization in solid acetaldehyde

SOURCE: Geterotsepnyye vysokomolekulyarnyye soyedineniya (Heterochain macromolecular compounds); sbornik statey. Moscow, Izd-vo "Nauka," 1963, 220-226

TOPIC TAGS: polymer, acetaldehyde, solid phase polymerization, radiation polymerization, polymerization catalyst, polymerization temperature, gamma radiation, polymerization kinetics

ABSTRACT: The rate of propagation of the reaction front, and the critical and peak polymerization temperatures were determined for gamma-initiated radiation polymerization in solid acetaldehyde. Samples purified by vacuum distillation were cooled to a polycrystalline solid, then irradiated (Co^{60}, 20,000 curies, 0.5-10.0 Mrad) in long, thin glass ampoules immersed in liquid nitrogen. Critical temperatures of 119.5-123K and peak temperatures of 142.2-147.5K were obtained as averages for five experiments at 3.7 and 6.3 Mrad, respectively, and three thermocouple locations. The polymerization front travelled 1.29 cm/sec at 4.0 Mrad, 2.34 cm/sec at 6.9 Mrad, and about 2.70 cm/sec at 10.0 Mrad. The equation

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"APPROVED FOR RELEASE: 06/15/2000 CIA-RDP86-00513R001343510013-0

ACCESSION NR: AT4033996 S/0000/63/000/000/0129/0133

AUTHOR: Pshezhetskiy, V. S.; Kargin, V. A.

TITLE: Gamma- or X-ray polymerization of solid propionaldehyde

SOURCE: Geterotsepnyye vysokomolekulyarnyye soyedineniya (Heterochain macromolecular compounds); sbornik statey. Moscow, Izd-vo "Nauka," 1963, 129-133

TOPIC TAGS: polymer, radiation polymerization, solid phase polymerization, propionaldehyde, propionaldehyde polymerization, polypropionaldehyde, hydrocarbon radical, hydrocarbon radical effect, binary bond orientation

ABSTRACT: Specimens of solid amorphous propionaldehyde, polycrystalline material and macrocrystalline monomer (derivation procedures given) were polymerized in a cryostat (-100 to -196C, 10^{-4} mm vacuum, X-ray or gamma radiation $1.5 \cdot 10^{17}$ to $8.4 \cdot 10^{18}$ ev/g·min). The polypropionaldehyde obtained was a rubbery substance with molecular weight $3\text{-}5 \cdot 10^5$. It was found that radiation polymerization in the solid phase occurs only with a crystalline monomer, a phenomenon related to the definite orientation of binary bonds which promotes formation of a polymer chain. Polymerization is impeded, sometimes terminated, by any interference with this orientation, and takes place near the m.p. (-103.5C). The need for some freedom of rotational-oscillatory movement in the propionaldehyde

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ACCESSION NR: AT4033996

molecules is governed by differences in distances between atoms in the monomer's crystalline lattice and in the polymer chain. Comparison of polymerization mechanisms for propionaldehyde, acetaldehyde and formaldehyde indicates a significant effect of the magnitude of a molecule's hydrocarbon radical on temperature and rate of the reaction, as well as on molecular weight and yield of the polymer. "The authors express gratitude to N. A. Bakh for evaluating the results of this study". Orig. art. has: 4 tables, 2 graphs.

ASSOCIATION: Moskovskiy gosudarstvenny*y universitet im. M. V. Lomonosova (Moscow State University)

SUBMITTED: 16Aug62 DATE ACQ: 30Apr64 ENCL: 00

SUB CODE: OC NO REF SOV: 003 OTHER: 000

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APPROVED FOR RELEASE: 06/15/2000 CIA-RDP86-00513R001343510013-0"

"APPROVED FOR RELEASE: 06/15/2000 CIA-RDP86-00513R001343510013-0

ACCESSION NR: AT4034006 S/0000/63/000/000/0213/0219

AUTHOR: Pshezhetskiy, V. S.; Tupikov, V. I.

TITLE: The role of free radicals in the solid phase polymerization of acetaldehyde initiated by gamma-radiation

SOURCE: Geterotsepny*ye vy* sokomolekulyarny*ye soyedineniya (Heterochain macromolecular compounds); sbornik statey. Moscow, Izd-vo "Nauka," 1963, 213-219

TOPIC TAGS: polymer, radiation polymerization, gamma radiation, ultraviolet radiation, radical, free radical, radical recombination, free radical formation, solid phase polymerization, polymerization catalyst, electron paramagnetic resonance analysis, acetaldehyde polymerization

ABSTRACT: In order to study the formation and recombination of free radicals during irradiation of crystalline acetaldehyde, samples solidified by slow immersion in liquid N (or amorphous samples obtained by rapid immersion) were gamma-irradiated (Co^{60}, 20,000 curies, 530 rad./sec) and the electron paramagnetic resonance spectra were determined. In the dosage range 0.1-10.0 Mrad. the concentration of free radicals corresponded in order of magnitude to the polymer chain concentration. Recombination of radicals was found to be discontinuous at

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"APPROVED FOR RELEASE: 06/15/2000 CIA-RDP86-00513R001343510013-0

ACCESSION NR: AT4034006

-125 to -150C (i.e. the polymerization temperature range). At radiation doses below 0.2 Mrad., chain termination was monomolecular, while at higher radiation doses a bimolecular process set in. Ultraviolet radiation also initiated the polymerization of crystalline acetaldehyde, the concentration and characteristics of the free radicals corresponding to those for gamma-radiation. These results indicate a "radical" pattern for polymerization initiated by gamma- or ultraviolet radiation. "The author expresses gratitude to V. A. Kargin and S. Ya. Pshezhetskiy for their valuable advice and evaluation." Orig. art. has: 2 tables, 5 graphs, 8 formulas and 5 chemical structures.

ASSOCIATION: Moskovskiy gosudarstvenny*y universitet im. M. V. Lomonosova (Moscow State University); Fiziko-khimicheskiy institut im. L. Ya. Karpova (Institute of Physical Chemistry)

SUBMITTED: 08Feb63 DATE ACQ: 30Apr64 ENCL: 00

SUB CODE: OC NO REF SOV: 002 OTHER: 001

Card 2/2

APPROVED FOR RELEASE: 06/15/2000 CIA-RDP86-00513R001343510013-0"

"APPROVED FOR RELEASE: 06/15/2000 CIA-RDP86-00513R001343510013-0

ACCESSION NR: AP4013504 S/0181/64/006/002/0456/0461

AUTHORS: Slutsker, A. I.; Gromov, A. Ye.; Pshezhetskiy, V. S.

TITLE: Structure and strength of whisker crystals of polyoxymethylene obtained by directional polymerization

SOURCE: Fizika tverdogo tela, v. 6, no. 2, 1964, 456-461

TOPIC TAGS: whisker crystal, polyoxymethylene, polymer, polymerization, directional polymerization, strength, crystal strength, crystal structure

ABSTRACT: The authors have studied oriented polyoxymethylene in whisker crystals by x-ray diffraction. The crystals were grown by polymerization in trioxane crystals by radiation initiation. Results show that layered structure does not develop because the specific growth of the polymer crystal does not allow the polymer molecule to incline toward the fold conformation. In contrast to the layered structure in crystals grown from solution, the structure of crystals grown by directional polymerization lacks the layered structure. The structures are illustrated diagrammatically in Fig. 1 on the Enclosure. The strength of the whisker crystals of polyoxymethylene decreased with increase in crystal diameter, from 350

Card 1/3

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"APPROVED FOR RELEASE: 06/15/2000 CIA-RDP86-00513R001343510013-0

ACCESSION NR: AP4013504

kg/mm^2 for crystals with a diameter of 2.4 microns to only 36 kg/mm^2 for crystals with a diameter of 12 microns. Many reasons may be found for this, but the authors believe the basic reason to be more complete polymerization in the more slender needles. They consider the ease with which the larger needles split into smaller needles to be evidence of this conclusion. "The authors express their sincere thanks to Professor A. V. Stepanov and E. M. Nadgornyy for making possible the use of their experiments and setups for investigating polymers. L. Gorshkova, a student at LPI im. M. I. Kalinina, took part in making the measurements. The authors also sincerely thank S. N. Zhurkov for his interest in the work and his valuable discussions." Orig. art. has: 3 figures and 1 table.

ASSOCIATION: Fiziko-tekhnicheskiy institut im. A. F. Ioffe AN SSSR, Leningrad (Physical and Technical Institute AN SSSR)

SUBMITTED: 03Aug63 DATE ACQ: 03Mar64 ENCL: 01

SUB CODE: PH NO REF SOV: 004 OTHER: 006

Card 2/3

APPROVED FOR RELEASE: 06/15/2000 CIA-RDP86-00513R001343510013-0"

"APPROVED FOR RELEASE: 06/15/2000 CIA-RDP86-00513R001343510013-0

BAKEYEV, N.F.; PSHEZHETSKIY, V.S.; KARGIN, V.A.

Electron microscope study of structure arising during interaction between polyelectrolyte macromolecules. Vysokom.soed. 1 no.12:1812-1816 D '59. (MIRA 13:5)

1. Moskovskiy gosudarstvennyy universitet. Khimicheskiy fakul'tet.
(Electrolytes) (Macromolecular compounds)

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23773

5.3830 R209 1234 1372

S/190/61/003/006/016/019
B110/B208

AUTHORS: Pshezhetskiy, V. S., Kargin, V. A., Bakh, N. A.

TITLE: Polymerization of acetaldehyde in the condensed phase under the action of X-rays

PERIODICAL: Vysokomolekulyarnyye soyedineniya, v. 3, no. 6, 1961, 925 - 930

TEXT: According to M. Maga et al. (Ref. 1: Simpozium po makromolekulyarnoy khimii, Moskva, June, 1960. Khimiya i tekhnologiya polimerov, No. 7 - 8, 102, 1960) polymerization in the solid phase takes place at low temperatures under the action of ionizing radiation. V. A. Kargin, V. A. Kabanov and V. P. Zubov (Ref. 8: Vysokomolek. soyed., 265, 1959) observed a transition from the amorphous into the crystalline state in the polymerization. According to N. N. Semenov (Ref. 9: Simpozium po makromolekulyarnoy khimii, Moskva, June, 1960. Khimiya i tekhnologiya polimerov, No. 7 - 8, 196, 1960) the crystal lattice causes a special polymerization mechanism. The authors studied the acetaldehyde polymerization by means of X-rays in the solid phase. The acetaldehyde fraction (boiling

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point 20.1 - 20.4°C/760 mm and n_D^6 = 1.3400) was allowed to solidify in 10-ml ampuls filled with N_2 (residual pressure 10^{-4} mm) for 30 sec. The sample was irradiated with the ВХВ (VKhV) X-ray tube with ~ 60 kv and 100 ma at the temperature of liquid nitrogen as well as at different temperatures in the cryostat. The absorption energy was determined on the ferrous sulfate dosimeter. The polymerizate was dissolved in acetone with 1 % inhibitor (naphthylamine), precipitated in water; the molecular weights were determined viscosimetrically in methyl ethyl ketone at 17.8°C according to: $[\eta] = 5.36 \cdot 10^{-4} M^{0.65}$. The absence of the increase of the conversion degree (Fig. 1) as well as the decrease of molecular weight with increasing integral radiation dose are indicative of destruction processes in addition to polymerization. In order to explain the influence of the physical conditions of the phase upon the polymerization the monomer was cooled down under different conditions. Quick cooling for 1 min gave a transparent amorphous monomer. Slow cooling of the liquid and cooling of the vapors gave monomers with different degrees of crystallinity. Irradiation was made at different temperatures. As, according to Table 2, the degree of monomer conversion and the polymer

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B110/B208

Polymerization of acetaldehyde...

molecular weight are directly proportional to the degree of crystallinity, acetaldehyde is polymerized by X-rays in the crystalline phase. Polymerization takes place according to G. Moravtsev (Ref. 4: Khimiya i tekhnologiya polimerov, No. 10, 23, 1959) as radical mechanism polymerization (I), similarly as in the liquid phase or by radical migration in the crystal lattice (II) or according to N. N. Semenov (Ref. 9: Simpozium po makromolekulyarnoy khimii, Moskva, June, 1960. Khimiya i tekhnologiya polimerov. No. 7 - 8, 196, 1960). In the case of (I) the radical acceptors are said to have a negative effect on polymerization, and a difference should exist between these and substances with similar configuration, which, however, do not accept radicals. In (II), this difference is not assumed to exist. The authors determined yield and molecular weight on incorporation of various admixtures into acetaldehyde. All admixtures having nearly the same effect on the degree of conversion, this must be due to fracture of the crystal lattice. The latter had to be the greater, the larger the geometric molecular dimensions are. The effect observed is due to the formation of some defect in the crystal lattice. Polymerization thus takes place in the solid phase, otherwise the effect of the admixtures would not be so homogeneous and intense.

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B110/B208

Polymerization of acetaldehyde..

The results obtained indicate a polymerization in the solid phase due to properties of the crystal lattice. The number of the ion pairs formed may be estimated from the absorbed radiant energy, and compared with the number of molecular chains calculated from the molecular weights. If the formation of an ion pair gives rise to the formation of a reaction chain, the ionizing energy absorbed will be 30 ev. At a total absorbed energy of 10^{19} ev/cm^3, $3.3 \cdot 10^{17}$ reaction chains appear per cm^3. For $\bar{M}$ = 600,000; $\bar{P}_n$ = 13,300, conversion degree 35.2 %; initial monomer = 7.8 g the total number of molecules per cm^3 was: $n = 3.66 \cdot 10^{21}$, and the mean number of molecular chains: $n/P = 2.7 \cdot 10^{17}$. The latter corresponds to the number of ion pairs. A reaction chain is thus formed during the formation of each ion pair. The authors conclude from their thermodynamic data and thermographic measurements that this polymerization mechanism is no radical mechanism. Temperature change from -195°C to -132°C does not affect the reaction rate. Slight increase of the conversion degree is due to increasing molecule mobility. When, however, the melting point is passed, the conversion degree decreases abruptly. The activation energy is 0.45 kcal/mole. The authors conclude from all results that the polymeri-

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23773

S/190/61/003/006/016/019
B110/B208

Polymerization of acetaldehyde...

zation of acetaldehyde in the solid phase takes place by means of expansion on the crystal lattice.
There are 2 figures, 4 tables, and 11 references: 4 Soviet-bloc and 7 non-Soviet-bloc. The three most recent references to English-language publications read as follows: E. J. Lawton; W. T. Grubb; J. S. Balwit, J. Polymer Sci., 19, 455, 1956. Ref. 6: G. Adler: J. Chem. Phys., 31, 848, 1959. Ref. 7: B. Baysal, G. Adler, D. Ballantine, P. Colombo. J. Polymer Sci., 44, 117, 1960.

ASSOCIATION: Moskovskiy gosudarstvennyy universitet im. M. V. Lomonosova (Moscow State University imeni M. V. Lomonosov)

SUBMITTED: November 4, 1960

Card 5/8

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"APPROVED FOR RELEASE: 06/15/2000 CIA-RDP86-00513R001343510013-0

37440

S/190/62/004/005/016/026
B110/B108

5.4600
5.3830

AUTHORS: Pshezhetskiy, V. S., Kargin, V. A., Bakh, N. A.

TITLE: Gamma-induced solid-state polymerization of acetaldehyde

PERIODICAL: Vysokomolekulyarnyye soyedineniya, v. 4, no. 5, 1962, 726-733

TEXT: A study was made of gamma-induced solid-state polymerization of acetaldehyde single crystals in order to elucidate the role played by the crystal lattice in the process of polymerization. Additions of acetone and methyl cyclohexane may have the following effects: (1) The "host" molecule is inside the crystallite, and hinders the propagation of the polymerization chain in the lattice; (2) the "host" molecule is outside the crystallite, and hinders the propagation of the polymerization chain between the crystallites. It was found that, as in the case of polymerization of acetaldehyde in a polycrystal, small additions to the single crystal lower the degree of conversion (polycrystal, 25%; single crystal, 40%) and the molecular weight ([η](polycrystal)=3; [η](single crystal)=4). Thus,

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irrespective of the degree of crystallinity, additives form lattice defects where chain rupture occurs. Thermographic investigation showed that temperature jumps occurred below the melting point of crystalline acetaldehyde when slowly heated at a rate of 1.4°C/min and irradiated with $\sim 10^{19}$ ev/cm^3 at -196°C. As the radiation dose was increased, the jumps shifted to lower temperatures (-135 - -154°C). Addition of 0.5 - 18% by weight of acetone lowered both the degree of conversion and the size of the thermographic peak. This proves that the liberation of heat is not due to the recombination of radicals. The mean rate of polymerization and the mean period of addition of one monomer molecule to the growing chain were calculated from the angle of inclination of the peak, and were found to be 0.009 - 0.018 m/sec and $8.6 \cdot 10^{-6}$ - $1.6 \cdot 10^{-6}$ sec, respectively. The rates of polymerization indicate that acetaldehyde does not obey the laws of thermal explosion. Conclusions: (1) Solid-state polymerization between -134 and -153°C is dependent on the radiation dose; (2) the temperature shift is caused by more polymerization centers at higher doses; (3) at low temperatures, the reaction is very slow since the molecules are immobile;

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(4) in the range of -140 to -150°C the molecular mobility increases and the reaction is accelerated; this is still promoted by the liberation of heat; (5) at higher radiation doses, an avalanche-like extension of the reaction occurs even at lower temperatures. The molecular weight is presumably lowered by an increase in the rate of chain rupture owing to the formation of active centers. There are 5 figures and 2 tables.

ASSOCIATION: Moskovskiy gosudarstvennyy universitet im. M. V. Lomonosova (Moscow State University imeni M. V. Lomonosov)

SUBMITTED: April 5, 1961

APPROVED FOR RELEASE: 06/15/2000 CIA-RDP86-00513R001343510013-0"

"APPROVED FOR RELEASE: 06/15/2000 CIA-RDP86-00513R001343510013-0

PSHIBYLOVICH, Z.V.; KRONGAUZ, V.A.; BAGDASAR'YAN, Kh.S.

Radiolysis of some hydrocarbons studied by means of gas chromatography and electron paramagnetic resonance. Kin. i kat. 4 no.3:489-491 My-Je '63. (MIRA 16:7)

1. Fiziko-khimicheskiy institut imeni Karpova.
(Hydrocarbons--Spectra) (Radiation)
(Gas chromatography)

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L 10703-63 EWP(j)/EPF(c)/EWT(1)/EWT(m)/BDS--AFFTC/ASD--Pc-4/Pr-4--RM/WW

ACCESSION NR: AP3002023 S/0195/63/004/003/0489/0491

70
69

AUTHOR: Pshiby*lovich, Z. V.; Krongauz, V. A.; Bagdasar'yan, Kh. S.

TITLE: Study of the radiolysis of some hydrocarbons by gas chromatography and electron paramagnetic resonance

SOURCE: Kinetika i kataliz, v. 4, no. 3, 1963, 489-491

TOPIC TAGS: radiolysis, hydrocarbons, gas chromatography, electron paramagnetic resonance, alkyl benzenes, intramolecular energy migration, Gamma rays, n-octane, n-octylbenzene

ABSTRACT: The purpose of this work was to verify earlier conclusions that alkylbenzenes are appreciably more stable to irradiation than expected when independent radiolytic decomposition of side chain and ring is postulated. Analyses of data obtained showed that intramoleculear energy migration is at least five times more probable than intermolecular transfer. The main gaseous product of irradiation of n-octane, an equimolecular mixture of octane and benzene and n-octylbenzene with Gamma-rays from Co sup 60 was hydrogen in yield independent of dose up to 100 megarad and falling in the sequence shown. The low hydrogen yield from n-octylbenzene is ascribed to intermolecular migration of energy from side chain to

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ACCESSION NR: AP3002023

benzene ring. From EPR spectra it is suggested the radical formed from n-octylbenzene has the unpaired electron on the carbon adjacent to the benzene nucleus and that this is the site of the bond breakage. Orig. art. has: 2 figures and 1 table.

ASSOCIATION: Fiziko-khimicheskiy institut im. L. Ya. Karpova (Physicochemical Institute)

SUBMITTED: 10Jul62 DATE ACQ: 12Jul63 ENCL: 00

SUB CODE: 00 NO REF SOV: 004 OTHER: 006

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Card 2/2

APPROVED FOR RELEASE: 06/15/2000 CIA-RDP86-00513R001343510013-0"

"APPROVED FOR RELEASE: 06/15/2000 CIA-RDP86-00513R001343510013-0

KUDRYAVTSEV, N.T.; TSUPAK, T.Ye.; PSHILUSSKI, Ya.B.

Electrolytic deposition of nickel from sulfate-chloride solutions in the presence of aminoacetic acid. Trudy MKHTI no.44:80-85 '64. (MIRA 18:1)

APPROVED FOR RELEASE: 06/15/2000 CIA-RDP86-00513R001343510013-0"

"APPROVED FOR RELEASE: 06/15/2000 CIA-RDP86-00513R001343510013-0

KUDRYAVTSEV, N.T.; PSHILUSSKI, Ya.B.

Electrodeposition of chromium from solutions of chromium sulfate. Izv.vys.ucheb.zav.;khim. i khim.tekh. 6 no.2:274-279 '63. (MIRA 16:9)

1. Moskovskiy khimiko-tekhnologicheskiy institut imeni D.I.Mendeleyeva, kafedra tekhnologii elektrokhimicheskikh proizvodstv.

(Chromium plating)

APPROVED FOR RELEASE: 06/15/2000 CIA-RDP86-00513R001343510013-0"

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L 10686-63 EWP(q)/EWT(m)/BDS--ASD/ESD-3--RM/JD
ACCESSION NR: AP3002400 S/0153/63/006/002/0274/0279

59
58

AUTHOR: Kudryavtsev, N. T.; Pshilusski, Ya. B.

TITLE: Investigation of the electrodeposition of chromium from chromium sulfate solutions

SOURCE: IVUZ. Khimiya i khimicheskaya tekhnologiya, v. 6, no. 2, 1963, 274-279

TOPIC TAGS: electrodeposition of chromium, chromium sulfate solutions, complex Cr-amino acid compounds, buffering, Beta-chrome

ABSTRACT: Cr sup 3+ forms a whole series of complex compounds with amino acids (glycine, asparagine), assuring high buffering in these solutions. The best electrodeposition of Cr is from 1-2N chromium solutions with a high glycine concentration at pH 2.5-3 at room or elevated temperature. In the presence of glycine the cathodic potential is displaced toward negative values because of complex formation; increasing temperature to 40C displaces potential in the positive direction and increases yield of precipitated metal with the current. These electrolytic chromium deposits do not have cracks, adhere well to the base-metal surface. They are of hexagonal Beta chrome structure. "V. A. Kononovich took part in the experimental work." Orig. art. has: 7 figures.

Association: Moscow Institute of Chemical Technology

Card 1/2

APPROVED FOR RELEASE: 06/15/2000 CIA-RDP86-00513R001343510013-0"

"APPROVED FOR RELEASE: 06/15/2000 CIA-RDP86-00513R001343510013-0

L 10686-63 EWP(q)/EWT(m)/BDS--ASD/ESD-3--RM/JD
ACCESSION NR: AP3002400 S/0153/63/006/002/0274/0279

59
58

AUTHOR: Kudryavtsev, N. T.; Pshilusski, Ya. B.

TITLE: Investigation of the electrodeposition of chromium from chromium sulfate solutions

SOURCE: IVUZ. Khimiya i khimicheskaya tekhnologiya, v. 6, no. 2, 1963, 274-279

TOPIC TAGS: electrodeposition of chromium, chromium sulfate solutions, complex Cr-amino acid compounds, buffering, Beta-chrome

ABSTRACT: Cr sup 3+ forms a whole series of complex compounds with amino acids (glycine, asparagine), assuring high buffering in these solutions. The best electrodeposition of Cr is from 1-2N chromium solutions with a high glycine concentration at pH 2.5-3 at toom or elevated temperature. In the presence of glycine the cathodic potential is displaced toward negative values because of complex formation; increasing temperature to 40C displaces potential in the positive direction and increases yield of precipitated metal with the current. These electrolytic chromium deposits do not have cracks, adhere well to the base-metal surface. They are of hexagonal Beta chrome structure. "V. A. Kononovich took part in the experimental work." Orig. art. has: 7 figures.

Association: Moscow Inst. of Chemical Technology

Card 1/2 1

APPROVED FOR RELEASE: 06/15/2000 CIA-RDP86-00513R001343510013-0"

"APPROVED FOR RELEASE: 06/15/2000 CIA-RDP86-00513R001343510013-0

KUDRYAVTSEV, N.T.; PSHILUSSKI, Ya.B.; POTAPOV, I.I.

Investigating chromium sulfate solutions for the electrolytic deposition of chromium. Izv.vys.ucheb.zav.; khim.i khim.tekh. 5 no.4:617-620 '62. (MIRA 15:12)

1. Moskovskiy khimiko-tekhnologicheskiy institut imeni Mendeleyava, kafedra tekhnologii elektrokhimicheskikh proizvodstv.

(Chromium sulfate) (Chromium—Plating)

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"APPROVED FOR RELEASE: 06/15/2000 CIA-RDP86-00513R001343510013-0

PSHIMANOVSKIY, Yanosh [Przymanowski, Janusz], pol'skiy pisatel'; NESTEROV, V., podpolkovnik [translator]

The excellent 45 mm. gun. Voen. znan. 41 no.1:11 Ja '65.
(MIRA 18:2)

APPROVED FOR RELEASE: 06/15/2000 CIA-RDP86-00513R001343510013-0"

"APPROVED FOR RELEASE: 06/15/2000 CIA-RDP86-00513R001343510013-0

PSHIMANOVSKIY, Yanush [Przymanowski, J.]

Polish July. Starsh.-serzh. no.7:21-22 Jl '62. (MIRA 16:6)
(Poland—World War, 1939-1945)

APPROVED FOR RELEASE: 06/15/2000 CIA-RDP86-00513R001343510013-0"

"APPROVED FOR RELEASE: 06/15/2000 CIA-RDP86-00513R001343510013-0

ACCESSION NR: AP4009090 S/0056/63/045/006/1743/1753

AUTHORS: Wang, Nai-yen; Vizi, I.; Yefimov, V. N.; Karzhavina, E. N.; Kim, Khi San; Popov, A. B.; Pikel'ner, L. B.; Pshitula, M. I.; Stadnikov, T.; Ch'eng, Ling-yen; Sharapov, E. I.; Shelontsev, I. I.; Shirikova, N. Yu.; Yazvitskiy, Yu. S.

TITLE: Investigation of the neutron resonances of Rh-103

SOURCE: Zhurnal eksper. i teoret. fiziki, v. 45, no. 6, 1963, 1743-1753

TOPIC TAGS: rhenium 103, neutron resonance, slow neutron spectrometry, p neutrons, s neutrons, force functions, Porter Thomas law, transmission measurement, scattering measurement, capture measurement

ABSTRACT: This is a report of the first results obtained with the slow neutron spectrometer developed at the Ob'yedinenny*y institut yaderny*kh issledovaniy (Joint Institute of Nuclear Research)

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"APPROVED FOR RELEASE: 06/15/2000 CIA-RDP86-00513R001343510013-0

ACCESSION NR: AP4009090

(described by Blokhin et al, in Atomnaya energiya, v. 10, 437, 1961) for a systematic investigation of neutron resonances and for the accumulation of a complete set of parameters for each neutron resonance study. The development was stimulated by the fact that as a rule the number of resonances known for each individual element is statistically limited, and the acquisition of new data on the resonances and their spins is of timely interest. Transmission, scattering and capture measurements were made with this spectrometer for several samples of Rh^{103}, which in addition to being a convenient element for such investigations also lies in the region where resonances induced by p-neutrons might be discovered. The measurements were made at resolutions of 0.04, 0.08, and 0.05 μsec/m, and the parameters of 17 resonances and the spins of 8 levels were determined. The observed deviation from the Porter-Thomas law with a single degree of freedom is attributed to the fact that some 4 or 5 resonances are due to neutrons with unity orbital angular momenta. Force functions for neutrons with zero and unity momenta were esti-

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ACCESSION NR: AP4009090

mated under these assumptions at $S_0 = (0.46 \pm 0.18) \times 10^{-4}$ and $S_1 = (1.8 \pm 1.4) \times 10^{-4}$. "In conclusion, we thank I. M. Frank and F. L. Shapiro for interest in the work and for useful discussions." Orig. art. has: 7 figures, 9 formulas, and 2 tables.

ASSOCIATION: Ob"yedinenny*y institut yaderny*kh issledovaniy (Joint Institute of Nuclear Research)

SUBMITTED: 01Jun63 DATE ACQ: 02Feb64 ENCL: 01

SUB CODE: PH NO REF SOV: 007 OTHER: 006

Card 3/3

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"APPROVED FOR RELEASE: 06/15/2000 CIA-RDP86-00513R001343510013-0

L 11382-63 EWT(m)/BDS AFFTC/ASD

S/120/63/000/002/011/041 55

AUTHOR: Pikel'ner, L. B., Pshitula, M. I., Kim Khi San, Ch'eng Ling-Yen, and Sharapov, E. I.

TITLE: A scintillation detector 19 for registration of scattered neutrons

PERIODICAL: Pribory i tekhnika eksperimenta, March-April 1963, v. 8, no. 2, 51-54

TEXT: The efficiency of the detector relative to neutrons depends slightly on energy and is ~ 10 percent in the hundred electron volt region, while the efficiency relative to γ-rays is three orders of magnitude less in this case. The instrument has a field of view of about 3.6 steradians. The lifetime of neutrons in the detector is ~ 15 μ sec. Part of the spectrum for resonance scattering of neutrons of Rh^{103} is given.

ASSOCIATION: Ob'yedinennyy institut yadernykh issledovaniy (Joint Institute for Nuclear Research)

SUBMITTED: June 20, 1962

Card 1/1 ja/lb

APPROVED FOR RELEASE: 06/15/2000 CIA-RDP86-00513R001343510013-0"

"APPROVED FOR RELEASE: 06/15/2000 CIA-RDP86-00513R001343510013-0

PIKEL'NER, L.B.; PSHITULA, M.I.; KIM KHI SAN; CHEN LIN-YAN' [Ch'eng Ling-yen]; SHARAPOV, E.I.

Liquid scintillation (n, γ)-detector. Prib. i tekh. eksp. 8 no.2:48-50 Mr-Ap '63. (MIRA 16:4)

1. Ob"yedinennyy institut yadernykh issledovaniy.
(Scintillation counters)

APPROVED FOR RELEASE: 06/15/2000 CIA-RDP86-00513R001343510013-0"

"APPROVED FOR RELEASE: 06/15/2000 CIA-RDP86-00513R001343510013-0

PIKEL'NER, L.B.; PSHITULA, M.I.; KIM KHI SAN; CHEN LIN-YAN' [Ch'êng Ling-yen]; SHARAPOV, E.I.

Scintillation detector for recording scattered neutrons. Prib. i tekh. eksp. 8 no.2:51-54 Mr-Ap '63. (MIRA 16:4)

1. Ob"yedinennyy institut yadernykh issledovaniy.
(Scintillation counters) (Neutrons--Scattering)

APPROVED FOR RELEASE: 06/15/2000 CIA-RDP86-00513R001343510013-0"

"APPROVED FOR RELEASE: 06/15/2000 CIA-RDP86-00513R001343510013-0

L 11383-63 EWT(m)/BDS AFFTC/ASD

S/120/63/000/002/010/041

55

AUTHOR: Pikel'ner, L. B., Pshitula, M. I., Kim Khi San, Ch'eng Ling-Yen, and Sharapov, E. I.

TITLE: A liquid (n, γ) scintillation detector

PERIODICAL: Pribory i tekhnika eksperimenta, March-April 1963, v. 8, no. 2, 48-50

TEXT: The article describes a 400 liter liquid scintillation detector for investigation of the cross sections of (n, γ) reactions in transit-time experiments. The instrument's low noise level (less than 2 percent) justifies its low efficiency (30 percent for a 0.5 Mev threshold in the double-coincidence mode). This low noise level is considerably below that of conventional instruments. There are 3 figures.

ASSOCIATION: Ob'yedinennyy institut yadernykh issledovaniy (Joint Institute for Nuclear Research)

SUBMITTED: April 20, 1962

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APPROVED FOR RELEASE: 06/15/2000 CIA-RDP86-00513R001343510013-0"

"APPROVED FOR RELEASE: 06/15/2000 CIA-RDP86-00513R001343510013-0

VAN NAY-YAN' [Wang Nai-yen]; VIZI, I.; YEFIMOV, V.N.; KARZHAVINA, E.N.; KIM KHI SAN; POPOV, A.B.; PIKEL'NER, L.B.; PSHITULA, M.I.; STADNIKOV, T.; CHEN LIN-YAN'; CHARAPOV, E.I.; SHELONTSEV, I.I.; SHIRIKOVA, N.Yu.: YAZVITSKIY, Yu.S.

Neutron resonances in Rh^{103}. Zhur. eksp. i teor. fiz. 45 no.6:1743-1753 D '63. (MIRA 17:2)

1. Ob"yedinennyy institut yadernykh issledovaniy.

APPROVED FOR RELEASE: 06/15/2000 CIA-RDP86-00513R001343510013-0"

"APPROVED FOR RELEASE: 06/15/2000 CIA-RDP86-00513R001343510013-0

PSHIYALKOVSKIY, B.I.

SGO-100 centrifuge for the purification of enamels based on polymerization resins. Lakokras. mat. i ikh prim no.3:64 '61. (MIRA 14:6)

(Enamels and enameling)
(Centrifuges)

APPROVED FOR RELEASE: 06/15/2000 CIA-RDP86-00513R001343510013-0"

"APPROVED FOR RELEASE: 06/15/2000 CIA-RDP86-00513R001343510013-0

PANTELEYEV, D.L.; PSHKOVA, R.Iv.

Neurological symptomatology in schizophrenia. Zhur. nevr. i psikh 58 no.12:1484-1488 '58. (MIRA 12:1)

1. Psikhonevrologicheskaya bol'nitsa Byala (glavnyy vrach D.L. Panteleyev), Bolgariya.
(SCHIZOPHRENIA, manifest.
neurol. sympts. (Rus))

APPROVED FOR RELEASE: 06/15/2000 CIA-RDP86-00513R001343510013-0"

"APPROVED FOR RELEASE: 06/15/2000 CIA-RDP86-00513R001343510013-0

[illegible] I., A.T.

34141. Rol' Kory bol'shikh polushariy v Formirovanii Kozhnoy bolevoy retseptsii. V sb: Problemy Kortiko-vistseral'noy patologii. M., 1949, s. 33-55

SO: Knizhnaya Letopis' No 6, 1955

APPROVED FOR RELEASE: 06/15/2000 CIA-RDP86-00513R001343510013-0"

"APPROVED FOR RELEASE: 06/15/2000 CIA-RDP86-00513R001343510013-0

[illegible], A.F.

34140. K voprosy o vzaimootnosheni yakh mezhdu eksterotseptivnymi i interotseptivnymi sosudistymi refleksami. V sb: Problemy Kortiko-visceral'noy patologii, M., 1940, s. [illegible]-60

SO: Knizhnaya Letopis' No 6, 1955

APPROVED FOR RELEASE: 06/15/2000 CIA-RDP86-00513R001343510013-0"

"APPROVED FOR RELEASE: 06/15/2000 CIA-RDP86-00513R001343510013-0

PSHONIK, A. T.

PA1/50T57

USSR/Medicine - Reflexes Aug 49
Skin

"The Interrelation Between Extero- and Intero-ceptive Vascular Reflexes During Temperature Stimulation," A. T. Pshonik, 4 pp

"Dok Ak Nauk SSSR" Vol LXVII, No 6, p 1175-78

Exteroceptive reflexes are complicated by intero ceptive reflexes, and conversely. In complex interoceptive impulses extending to the skin and of prolonged activity, it is difficult to eliminate these reflexes which can disrupt the whole function of an organism, and can be the

[redacted] 1/50T57

USSR/Medicine - Reflexes (Contd) Aug 49

important factor in a neurotic disturbance. Submitted by Acad K. M. Bykov, 15 Mar 49.

[redacted] 1/50T57

APPROVED FOR RELEASE: 06/15/2000 CIA-RDP86-00513R001343510013-0"

"APPROVED FOR RELEASE: 06/15/2000 CIA-RDP86-00513R001343510013-0

PSHONIK, A. T.

"More about Basoneuros is," Sov. Med., No. 9, 1949
Mbr. Leningrad Dept. Gereral Physiology, Inst.
Med., Acad,Med. Sci., -c1949-.

APPROVED FOR RELEASE: 06/15/2000 CIA-RDP86-00513R001343510013-0"

"APPROVED FOR RELEASE: 06/15/2000 CIA-RDP86-00513R001343510013-0

1. PSHONIK, A.T.

2. USSR (600)

4. Medicine

7. Cortex of the brain and the receptory function of the organism. Moskva, 1952

9. Monthly List of Russian Accessions, Library of Congress, March, 1953. Unclassified.

APPROVED FOR RELEASE: 06/15/2000 CIA-RDP86-00513R001343510013-0"

"APPROVED FOR RELEASE: 06/15/2000 CIA-RDP86-00513R001343510013-0

PSHONIK, A.T.

Pavlovian theory on conditioned reflexes; 50th anniversary of conditioned reflexes. Vest. vener., Moskva no. 3:10-13 May-June 1952.
(CLML 22:4)

1. Doctor Biological Sciences. 2. Of Leningrad Institute of Experimental Medicine of the Academy of Medical Sciences USSR.

APPROVED FOR RELEASE: 06/15/2000 CIA-RDP86-00513R001343510013-0"

"APPROVED FOR RELEASE: 06/15/2000 CIA-RDP86-00513R001343510013-0

PSHONIK, A.T

RYVLIN, Ya.B., professor (Leningrad); PSHONIK, A.T., professor (Leningrad)

Cortico-visceral theory of the pathogenesis and therapy of endarteritis. Klin. med. 31 no.11:24-28 N '53. (MLRA 6:12)

1. Iz Instituta eksperimental'noy meditsiny Akademii meditsinskikh nauk SSSR (direktor - chlen-korrespondent Akademii meditsinskikh nauk SSSR professor D.A.Biryukov) i kafedry operativnoy khirurgii Leningradskogo stomatologicheskogo instituta (direktor - professor R.I.Gavrilov).

(Arteries--Diseases) (Cerebral cortex)

APPROVED FOR RELEASE: 06/15/2000 CIA-RDP86-00513R001343510013-0"

"APPROVED FOR RELEASE: 06/15/2000 CIA-RDP86-00513R001343510013-0

PSHONIK, A. T.

Pshonik, A. T. - "The progressive ideas of Michurinist teaching in the service of medical sciences", (Survey of reports in the discussion of the general collective activity of the members, corresponding members, and scientific collaborators of the institutes of the Leningrad Union of the Academy of Medical Science, USSR, on 16 and 17 October 1948), Vestnik Akad. med. nauk SSSR, 1948, No. 6, p. 30-38.

So: U-3042, 11 March 53, (Letopis 'Zhurnal 'nykh Statey, No. 7, 1949).

APPROVED FOR RELEASE: 06/15/2000 CIA-RDP86-00513R001343510013-0"

"APPROVED FOR RELEASE: 06/15/2000 CIA-RDP86-00513R001343510013-0

USSR/General Problems of Pathology - Tumors. T-5

Abs Jour : Ref Zhur - Biol., No 3, 1958, 12746

Author : Levin, A.Ye., Pshonik, A.T., Kostyuk, F.F.

Inst : Not given.

Title : Plethysmographic Studies of Cancer Patients.

Orig Pub : Sb. nauch. tr. Krasnoyar. med. in-ta, 1955, No 4, 215-216

Abstract : This is a communication on the vascular responses in cancer patients studied by plethysmography. It was determined that vascular unconditioned and orientation responses, as well as responses to verbal signals, were decreased; this indicates a depression of excitatory processes in the cerebral cortex.

Card 1/1

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"APPROVED FOR RELEASE: 06/15/2000 CIA-RDP86-00513R001343510013-0

PSHONIK, A.T.; FEL'BERBAUM, R.A.

Some data on the law of relative force of conditioned stimuli. Fiziol.zhur.41 no.4:477-484 Jl-Ag '55. (MLRA 8:10)

1. Otdel obshchey fiziologii Instituta eksperimental'noy meditsiny AMN SSSR, Leningrad.
(REFLEX, CONDITIONED,
law of relative force of conditioned stimuli)

APPROVED FOR RELEASE: 06/15/2000 CIA-RDP86-00513R001343510013-0"

"APPROVED FOR RELEASE: 06/15/2000 CIA-RDP86-00513R001343510013-0

PSHONIK, A.T.; SHAKHNOVICH, R.A.

Treatment of hyperkinesia of a functional nature by isolated inhibition of theinert pathological focus of excitation. Zhur.nevr. i psikh.55 no.7:516-517 '55. (MLRA 8:10)

1. Kafedra normal'noy fiziologii i kafedra nervnykh bolezney Krasnoyarskogo meditsinskogo instituta.
(MOVEMENT DISORDERS,
hyperkinesia, ther.,strychnine)
(STRYCHNINE, therapeutic use,
hyperkinesia)

APPROVED FOR RELEASE: 06/15/2000 CIA-RDP86-00513R001343510013-0"

"APPROVED FOR RELEASE: 06/15/2000 CIA-RDP86-00513R001343510013-0

PSHONIK, A.T.

EXCERPTA MEDICA Sec.2 Vol.9/9 Physiology, etc.

4183. PSHONIK A.T. and FELBERGAUM R.A. Dept. of gen. Physiol., Inst. of exp. Med. AN, Leningrad, SSSR. *Cutaneous pressure reception in blind persons (Russian text) FIZIOL. Ž. 1956. 42/2 (210-215)

The plethysmogram of the left hand was recorded during pressure application on the right wrist by means of small loads (from 50 mg. to 1 g.). The typical response to 1 g. and 500 mg. is a slight vasoconstriction in normal as well as in blind persons, but without correlation to the load. In normal persons, loads up to 200 mg. did not elicit any response, while in blind persons 50 mg. always produced a response, which was nearly as strong as that elicited by 1 g. and 500 mg. The blind persons were able to differentiate subjectively the various loads, which was not the case for the normal subjects.

Simonson - Minneapolis, Minn.

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"APPROVED FOR RELEASE: 06/15/2000 CIA-RDP86-00513R001343510013-0

PSHONIK, A.T.,; FEL'BERBAUM, R.A.

Cutaneous reception of pressure in the blind. Fiziol. zhur. 42 no.2: 210-215 F '56. (MLRA 9:6)

1. Otdel obshchey fiziologii Instituta eksperimental'noy meditsiny AMN SSSR, Leningrad.

(TOUCH,
pressure reception by blind (Rus))
(BLINDNESS,
cutaneous pressure reception by blind (Rus))

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"APPROVED FOR RELEASE: 06/15/2000 CIA-RDP86-00513R001343510013-0

PSHONIK, A.T.

PSHONIK, A.T.; FEL'BERBAUM, R.A.

On the problem of changes in the higher nervous activity in women during menstruation. Zhur.nevr. i psikh. Supplement:74 '57. (MIRA 11:1)

1. Otdel obshchey fiziologii (zav. - akademik K.M.Bykov) Instituta eksperimental'noy meditsiny AMN SSSR, Leningrad.
(NERVOUS SYSTEM) (MENSTRUATION)
(CONDITIONED RESPONSE)

APPROVED FOR RELEASE: 06/15/2000 CIA-RDP86-00513R001343510013-0"

"APPROVED FOR RELEASE: 06/15/2000 CIA-RDP86-00513R001343510013-0

PSHONIK, A.T.

"Physiology of frontal lobes of the brain" by N.A. Shustin. Reviewed by A.T.Pshonik. Fiziol.zhur. 46 no.6:768-769 Je '60. (MIRA 13:8)
(BRAIN) (SHUSTIN, N.A.)

APPROVED FOR RELEASE: 06/15/2000 CIA-RDP86-00513R001343510013-0"

"APPROVED FOR RELEASE: 06/15/2000 CIA-RDP86-00513R001343510013-0

PSHONIK, A.T.

Cortidovisceral theory and various problems in the higher nervous activity in pathology. Zhur. vys. nerv. deiat. 10 no. 3:355-359 My-Je '60. (MIRA 14:2)

1. Chair of Normal Physiology, Medical Institute, Krasnoyarsk.
(NERVOUS SYSTEM) (CEREBRAL CORTEX)

APPROVED FOR RELEASE: 06/15/2000 CIA-RDP86-00513R001343510013-0"

"APPROVED FOR RELEASE: 06/15/2000 CIA-RDP86-00513R001343510013-0

PSHONIK, A.T., prof.; NIFANT'YEVA, L.D.

Changes in the higher nervous activity in circumscribed neurodermatitis. Vest. derm. i ven. 38 no.4:3-9 Ap '64. (MIRA 18:4)

1. Kafedra normal'noy fiziologii (zav. - prof. A.T.Pshonik) Krasnoyarskogo meditsinskogo instituta.

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"APPROVED FOR RELEASE: 06/15/2000 CIA-RDP86-00513R001343510013-0

PSHONIK, A.T.; GRIBANOV, A.A.

Effect of vitamin B_{12} on conditioned reflex activity in dogs. Zhur. vys. nerv. deiat. 11 no.6:1026-1031 N-D '61. (MIRA 15:3)

1. Chair of Normal Physiology, Krasnoyarsk Medical Institute.
(CONDITIONED RESPONSE)
(CYANOCOBALAMINE)

APPROVED FOR RELEASE: 06/15/2000 CIA-RDP86-00513R001343510013-0"

"APPROVED FOR RELEASE: 06/15/2000 CIA-RDP86-00513R001343510013-0

IVLEVA, V.P.; PSHONIK, A.T., nauchnyy rukovoditel', prof.

Interaction of unconditioned vascular, respiratory, and salivary reactions in healthy persons. Uch. zap. Kras. gos. ped. inst. 15:265-274 '59. (MIRA 14:12)

(Reflexes)

APPROVED FOR RELEASE: 06/15/2000 CIA-RDP86-00513R001343510013-0"

"APPROVED FOR RELEASE: 06/15/2000 CIA-RDP86-00513R001343510013-0

PSHONIK, A.T.; GRIBANOV, A.A.

Vascular and respiratory reflexes in dogs with chronic posthemorrhagic and phenylhydrazine anemias. Biul. eksp.biol.i med. 50 no.9:76-79 S '60. (MIRA 13:11)

1. Iz kafedry normal'noy fiziologii (zav. - prof. A.T.Pshonik) Krasnoyarskogo meditsinskogo instituta.
(ANEMIA) (HEMORRHAGE) (HYDRAZINE)

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"APPROVED FOR RELEASE: 06/15/2000 CIA-RDP86-00513R001343510013-0

BABOSOV, Yevgeniy Mikhaylovich, kand. filos. nauk; STEPANOV, V.I., doktor filos. nauk, prof., nauchnyy red.; PSHONIK, B.M., red.; ZIMA, Ye.G., tekhn. red.

[The new man is trained in collective work]V kollektivnom trude vospityvaetsia novyi chelovek. Minsk, 1962. 31 p. (Obshchestvo po rasprostraneniiu politicheskikh i nauchnykh znanii Belorusskoi SSR, no.12) (MIRA 15:9)
(Labor and laboring classes)

APPROVED FOR RELEASE: 06/15/2000 CIA-RDP86-00513R001343510013-0"

"APPROVED FOR RELEASE: 06/15/2000 CIA-RDP86-00513R001343510013-0

BONDAREVA, Nadezhda Vasil'yevna; KRASIL'NIKOV, A.P., kand. med. nauk, dots., nauchnyy red.; KAPRANOVA, N.V., red.; PSHONIK, B.M., red.; ZIMA, Ye.G., tekhn. red.

[Diseases transmitted to man by animals; an aid for students at popular universities of health] Bolezni, peredaiushchiesia cheloveku ot zhivotnykh; v pomoshch' slushateliam narodnykh universitetov zdorov'ia. Minsk, 1961. 22 p. (Obshchestvo po rasprostraneniiu politicheskikh i nauchnykh znanii Belorusskoi SSR, no.25). (MIRA 15:2)

(ANIMALS AS CARRIERS OF DISEASE)
(COMMUNICABLE DISEASES)

APPROVED FOR RELEASE: 06/15/2000 CIA-RDP86-00513R001343510013-0"

"APPROVED FOR RELEASE: 06/15/2000 CIA-RDP86-00513R001343510013-0

PAMERSKIY, Boris Dmitriyevich; MERETSKAYA, T.A., kand. ekonom. nauk, nauchnyy red.; PSHONIK, B.M., red.; ZIMA, Ye.G., tekhn. red.

[Local industry of the White Russian S.S.R. in the seven-year plan] Mestnaia promyshlennost' Belorusskoi SSR v semiletke. Minsk, 1962. 22 p. (Obshchestvo po rasprostraneniiu politicheskikh i nauchnykh znanii Belorusskoi SSR, no.30) (MIRA 15:2)

(White Russia--Industries)

APPROVED FOR RELEASE: 06/15/2000 CIA-RDP86-00513R001343510013-0"

"APPROVED FOR RELEASE: 06/15/2000 CIA-RDP86-00513R001343510013-0

NOVITSKIY, Vladimir Anatol'yevich, kand. geogr. nauk; PSHONIK, B.M., red.; ZIMA, Ye.G., tekhn. red.

[Electrification is the pivoting point in creating the economics of communism] Elektrifikatsiia - sterzhen' sozdaniia ekonomiki kommunizma. Minsk, 1961. 26 p. (Obshchestvo po rasprostraneniiu politicheskikh i nauchnykh znanii Belorusskoi SSR, no.24) (MIRA 15:2)

(Electrification)

APPROVED FOR RELEASE: 06/15/2000 CIA-RDP86-00513R001343510013-0"

"APPROVED FOR RELEASE: 06/15/2000 CIA-RDP86-00513R001343510013-0

YANCHENKO, Aleksandr Pavlovich, kand.ekon.nauk; ODEL'SKIY, E.Kh., prof., doktor tekhn.nauk, zasluzhennyy deyatel' nauki i tekhniki BSSR, nauchnyy red.; PSHONIK, B.M., red.; ZIMA, Ye.G., tekhred.

[Gas supply for industrial and domestic use in White Russia] Gazosnabzhenie promyshlennosti i byta v BSSR. Minsk, 1961. 31 p. (Obshchestvo po rasprostraneniiu politicheskikh i nauchnykh znanii Belorusskoi SSR, no.6).

(MIRA 14:4)

(White Russia--Gas, Natural)

APPROVED FOR RELEASE: 06/15/2000 CIA-RDP86-00513R001343510013-0"

"APPROVED FOR RELEASE: 06/15/2000 CIA-RDP86-00513R001343510013-0

GORANSKIY, Mikhail Nikolayevich, kand.ekon.nauk; PSHONIK, B.M., starshiy red., otv. za vypusk; KOVAL', A.Ye., red.; ZIMA, Ye.G., tekhn. red.

[The 22d Congress of the CPSU on the consolidation of the economic and defensive power of the U.S.S.R.] XXII s"ezd KPSS ob ukreplenii ekonomicheskogo i oboronnogo mogushchestva SSSR. Minsk, 1962. 27 p. (Obshchestvo po rasprostraneniiu politicheskikh i nauchnykh znanii Belorusskoi SSR, no.10) (MIRA 15:10)
(Russia--Economic policy) (Russia--Defenses)

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"APPROVED FOR RELEASE: 06/15/2000 CIA-RDP86-00513R001343510013-0

PODDUBNAYA, Tat'yana Timofeyevna, kand.med.nauk; ALEKSANDROV, N.N., doktor med.nauk, nauchnyy red.; PSHONIK, B.M., red.; ZIMA, Ye.G., tekhred.

[What one must know about cancer and its control] Chto nado znat' o rake i bor'be s nim. Minsk, 1960. 29 p. (Obshchestvo po rasprostraneniiu politicheskikh i nauchnykh znanii Belorusskoi SSR, no.26). (MIRA 14:1)

(CANCER)

APPROVED FOR RELEASE: 06/15/2000 CIA-RDP86-00513R001343510013-0"

"APPROVED FOR RELEASE: 06/15/2000 CIA-RDP86-00513R001343510013-0

PASHKEVICH, Oleg Nikolayevich, kand.ekon.nauk; PASHKEVICH, Bogdan Vikent'yevich, kand.ekon.nauk; VEDUTA, N.I., kand.ekon.nauk, nauchnyy red.; PSHONIK, B.M., red.; ZIMA, Ye.G., tekhred.

[Machinery industry in White Russia] Belorussiia mashinostroitel'naia. Minsk, 1960. 33 p. (Obshchestvo po rasprostraneniiu politicheskikh i nauchnykh znanii Belorusskoi SSR, no.21). (MIRA 14:2)

(White Russia--Machinery industry)

APPROVED FOR RELEASE: 06/15/2000 CIA-RDP86-00513R001343510013-0"

"APPROVED FOR RELEASE: 06/15/2000 CIA-RDP86-00513R001343510013-0

NIKUL'SKAYA, Anna Gavrilovna, Geroy Sotsialisticheskogo Truda, svinarka; VOYTKO, D.I., kand.sel'skokhoz.nauk, nauchnyy red.; PSHONIK, B.M., red.; VOROTYNSKAYA, S.A., tekhred.

[How I became a swineherd caring for a thousand head] Kak ia stala svinarkoi-tysiachnitsei. Minsk, 1960. 23 p. (Obshchestvo po rasprostraneniiu politicheskikh i nauchnykh znanii Belorusskoi SSSR, no.4). (MIRA 13:5)

1. Sovkhoz imeni Dzerzhinskogo Kopyl'skogo rayona Minskoy oblasti (for Nikul'skaya).

(Swine)

APPROVED FOR RELEASE: 06/15/2000 CIA-RDP86-00513R001343510013-0"

"APPROVED FOR RELEASE: 06/15/2000 CIA-RDP86-00513R001343510013-0

KULESH, Ivan Vlasovich, Geroy Sotsialisticheskogo Truda; MIKHAYLOV, G.V., inzh., nauchnyy red.; PSHONIK, B.M., red.; VOROTYNSKAYA, S.A., tekhred.

[Our experience in the over-all mechanization of corn and flax cultivation] Nash opyt kompleksnoi mekhanizatsii vozdelyvaniia kukuruzy i l'na. Minsk, 1960. 21 p. (Obshchestvo po rasprostraneniiu politicheskikh i nauchnykh znanii Belorusskoi SSR, no.5). (MIRA 13:4)

1. Mekhanizator kolkhoza "Chyrvony stsyag" Rechitskogo rayona Gomel'skoy oblasti.
(Corn (Maize)) (Flax)

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"APPROVED FOR RELEASE: 06/15/2000 CIA-RDP86-00513R001343510013-0

PSHONIK, L.

Competition among builders in Minsk. Moskva. Profizdat, 1952. 39 p. (54-37839)

1. Building - Minsk. 2. Masonry.

APPROVED FOR RELEASE: 06/15/2000 CIA-RDP86-00513R001343510013-0"

"APPROVED FOR RELEASE: 06/15/2000 CIA-RDP86-00513R001343510013-0

PSHONIK, L.; EVENCHIK, V.

Ways to eliminate the losses of working time on building sites.
Sots. trud 7 no.12:47-52 D '62. (MIRA 16:2)
(White Russia—Construction industry—Labor productivity)
(Time study)

APPROVED FOR RELEASE: 06/15/2000 CIA-RDP86-00513R001343510013-0"

"APPROVED FOR RELEASE: 06/15/2000 CIA-RDP86-00513R001343510013-0

PSHONIK, Lazar' Mikhaylovich; EVENCHIK, Vladimir Nikolayevich; RIMMER, V.S., inzh., nauchn. red.; GLAZUNOVA, Z.M., red. izd-va; SHEVCHENKO, T.N., tekhn. red.

[Organization of labor and wages in the construction projects of White Russia] Organizatsiia truda i zarabotnoi platy na stroikakh Belorussii. Moskva, Gosstroiizdat, 1963. 215 p. (MIRA 16:12)

(White Russia--Wages--Construction workers)

APPROVED FOR RELEASE: 06/15/2000 CIA-RDP86-00513R001343510013-0"

"APPROVED FOR RELEASE: 06/15/2000 CIA-RDP86-00513R001343510013-0

ANUFRIYEV, Viktor Illarionovich; PSHONIK, Lazar' Mikhaylovich; SVENCHIK, Vladimir Nikolayevich; LAPITSKIY, Nikolay Petrovich; KASHTANOV, F., red.; STEPANOVA, N., tekhn.red.

[Manual for foremen and workers of mixed brigades operating on a business accounting basis] V pomoshch' brigadiru i rabochim kompleksnykh khozraschetnykh brigad konechnoi produktsii. Minsk, Gos.izd-vo BSSR. Red.proizvodstvennoi lit-ry, 1960. 130 p. (MIRA 14:3)

(Construction industry--Finance)

APPROVED FOR RELEASE: 06/15/2000 CIA-RDP86-00513R001343510013-0"

"APPROVED FOR RELEASE: 06/15/2000 CIA-RDP86-00513R001343510013-0

PSHONIK, Lazar' Mikhaylovich; ALTUF'YEVA, A.M., red.

[The piecework and the piece-rate bonus wage systems in the construction projects of White Russia] Akkordnaia i sdel'no-premial'naia sistemy oplaty truda na stroikakh Belorussii, Moskva, Stroiizdat, 1964. 100 p. (MIRA 17:12)

APPROVED FOR RELEASE: 06/15/2000 CIA-RDP86-00513R001343510013-0"

"APPROVED FOR RELEASE: 06/15/2000 CIA-RDP86-00513R001343510013-0

PSHONIK, S.S.

Functional change in the pancreas during treatment of chronic tonsillitis. Zdrav. Bel. 7 no.9:25-29 S '61. (MIRA 14:10)

1. Iz kafedry propedevtiki vnutrennikh bolezney Minskogo meditsinskogo instituta (nauchnyy rukovoditel' - prof. I.D.Mishenin).
(PANCREAS) (TONSILS—DISEASES)

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"APPROVED FOR RELEASE: 06/15/2000 CIA-RDP86-00513R001343510013-0

PSHEZHETSKIY, S.Ya.

USSR.

Kinetics of dehydrogenation of butylene. N. A. Shcheglova and S. Ya. Pshezhetskii (L. Ya. Karpov Phys.-Chem. Inst., Moscow). *Zhur. Fiz. Khim.* **28**, 1280-5(1954); cf. preceding abstr.—The dehydrogenation of butylene (I) was studied by a previously described method (*loc. cit.*) at temps. between 450 and 500° in the I partial pressure interval 0.05-0.3 atm. Data are tabulated. Av. values of the rate const. (k) at 450, 475, and 500° were 1.48×10^{-2}, 2.05×10^{-2}, and 5.14×10^{-2}, resp., corresponding to the activation energy 27 + 1 kcal./mole. Addn. of butadiene or H to I had no measurable effect on the reaction rate. The kinetics is described by the equation $w = kc^{0.2}$, where w is the rate of conversion of I and c is the concn. of I.

J. W. Loweberg, Jr.

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AF701597 TREASURE ISLAND BOOK REVIEW. AID 794 - S

PSHEZHETSKIY, S. Ya. and I. A. MYASNIKOV (Phys. - Chem. Institute im. L. Ya. Karpov). DESORBTSIYA KISLOMODA S ORISI TSINKA POD DEYSTVIYEM SVETA I VLIUANIYE YEYE NA FOTOPROVODIMOST' (Desorption of oxygen form zinc oxide under the action of light and its effect on photoconductivity). In Problemy kinetiki i kataliza (Problems of Kinetics and Catalysis), vol. 8. Izdatel'stvo Akademii Nauk SSSR, 1955. Section I: Effect of illumination on the adsorbability of solids. p. 34-39.

At room temperature the conductivity of Zno is extremely sensitive even to minute traces of oxygen. At an oxygen pressure of 10 mm Kh, the conductivity of the ZnO-film decreases to half its original value in 30 min. (Fig. 5, p. 36). At 700-800°C. the effect of oxygen on the photoconductivity of ZnO is less pronounced. Oxygen can be removed from ZnO only be heating it in vacuo at 400-500°C. Fig. 1, (P. 34) shows an apparatus for measuring the conductivity and photoconductivity of ZnO; the conductivity of ZnO is illustrated in Figs. 2, 3 (p. 35), 4, 5 (p.36), 6, 7(p. 37), 9 and 10 (p. 38). Fig. 8 (p. 38) illustrates an apparatus for determination of the conductivity and photoconductivity. Heating of the ZnO-film in the presence of oxygen causes irreversible decrease of conductivity and photoconductivity while on illumination of the film in the presence of oxygen, the conductivity increases again. The dependence of photoconductivity of ZnO in an oxygen atmosphere on the intensity of light is shown in Fig. 10 (p. 38). At 200°C, negative photoconductivity was observed,

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i.e. decreased conductiviy under the action of light. The nature of this effect has not been elucidated as yet. However, at 200°C ZnO does not show the negative effect in the vacuum, which proves that it depends on the presence of oxygen. Eight references, 5 Russian (1936 - 1953). 10 diagrams.

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AF/01597 TREASURE ISLAND BOOK REVIEW AID 821 - S

PSHEZHETSKIY, S. Ya. and I. A. MYASNIKOV. (Physical Chemical Institute im. L. Ya. Karpov).
ISSLEDOVANIYE SVYAZI MEZHDU KATALITICHESKIMI I POLUPROVODNIKOVYMI SVOYSTVAMI OKISI TSINKA (Study of the connection between the catalytic and semiconductor characteristics of zonc oxide). In Problemy kinetiki i kataliza (Problems of Kinetics and Catalysis), vol.8. Izdatel'stvo Akademii Nauk SSSR, 1955. Section III: Connection between the electric conductivty and catalytic activity of semiconductors. p. 175-179.

The electric conductivity and catalytic activity of ZnO in the dehydration of isopropyl alcohol was studied. A description of the experiments is iven. An addtition of 0.4 to 3% oxygen greatly affected the electrical conductivity. The dependence of electric conductivity of ZnO on temperature in an atmosphere of pure nitrogen and in an atmosphere of nitrogen containing 3% oxygen is shown in Fig. 2 (p. 176). The yeild of acetone at various reaction temperatures is shown in Fig. 3 (p. 177). Fig. 4 (p. 177) illustrates the dependence of the conductivity of ZnO on temperature. Results of experiments carried out in pure nitrogen and in N_2 + 2.3% O_2 are shown in Fig. 6 (p. 178) and Fig. 7 and 8 (p. 179). Addition of 3% oxygen has a greatereffect on the electric conductivity than on the catalytic activity. The calculated energy of dehydration of alcohol in a nitrogen atmospher is 48 kg.cal/mol. and in the presence of 2.3%, 38 kg. cal/mol. (Fig. 8, p. 179). Eight diagrams. No references given.

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PSHEZHETSKIY, S. Ya.

MYASNIKOV, I.A.; PSHEZHETSKIY, S. Ya.

Desorption of oxygen from ZnO activated by light and its effect on photoconductivity. Dokl. AN SSSR 99 no.1:125-128 N '54. (MLRA 8:2)

1. Nauchno-issledovatel'skiy fiziko-khimicheskiy institut im. L.Ya. Karpova.
(Zinc oxide) (Photoconductivity)

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PSHEZHETSKIY, S.Ya.

MYASNIKOV, I.A.; PSHEZHETSKIY, S.Ya.

Study of the relation between the catalytic and semiconductive properties of zinc oxide. Dokl. AN SSSR 99 no.2:277-279 N '54. (MLRA 8:2)

1. Fiziko-khimicheskiy institut im. L.Ya.Karpova. Predstavleno akademikom V.A.Karginym.
(Zinc oxide)

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121 16.

Kinetics of the catalytic dimerisation of ethylene. S. J. Pscheshetzki and A. T. Gladischev (*J. Phys. Chem. Russ.*, 1941, **15**, 333—343).—The rate of polymerisation of C_2H_4 at a Ni catalyst at 240—360° at atm. pressure ∝ the pressure of C_2H_4. The apparent energy of activation is 10,500 g.-cal. The reaction yields a mixture of butenes and hexenes. The results indicate that the surface of the catalyst is not uniform. J. J. B.

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ZELIKOV, V.D.; PSHONNOVA, V.G.

Characteristics of the soils of wooded parks, public gardens, and streets of Moscow. Gor. khoz. Mosk. 36 no.5:28-31 My '62. (MIRA 15:7)
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PSHONIK, A. VYELIKIY I BYKOV, K.

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Vyelikii uchyenyy I. P. Pavlov. Nar. obrazovaniye, 1949, No 9, S. 15-22.

SO: Letopis' No. 34

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