"APPROVED FOR RELEASE: 08/23/2000 CIA-RDP86-00513R001548120004-6

5.3400

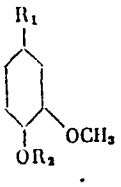
77084
SOV/62-59-12-28/43

AUTHORS: Chuksanova, A. A., Sergeyeva, L. L., Shorygina, N. N.

TITLE: Behavior of Lignin Models on Nitration

PERIODICAL: Izvestiya Akademii nauk SSSR. Otdeleniye khimicheskikh nauk, 1959, Nr 12, pp 2219-2225 (USSR)

ABSTRACT: Nitration of lignin is accompanied by oxidation. The reaction of nitric acid with lignin model compounds was investigated. The following monomers were used as models:



(I) $R_1 = CHOH - CH_2 - CH_3$, $R_2 = CH_3$
(II) $R_1 = CHOH - CH_2 - CH_3$, $R_2 = H$
(III) $R_1 = CH_2 - CHOH - CH_3$, $R_2 = CH_3$
(IV) $R_1 = CH_2 - CHOH - CH_3$, $R_2 = H$
(V) $R_1 = CH_2 - CH_2 - CH_2OH$, $R_2 = CH_3$
(VI) $R_1 = CH_2 - CH_2 - CH_2OH$, $R_2 = H$
(VII) $R_1 = CH_2 - CO - CH_3$, $R_2 = CH_3$
(VIII) $R_1 = CH_2 - CO - CH_3$, $R_2 = H$

Card 1/3

APPROVED FOR RELEASE: 08/23/2000 CIA-RDP86-00513R001548120004-6"

"APPROVED FOR RELEASE: 08/23/2000 CIA-RDP86-00513R001548120004-6

Behavior of Lignin Models on Nitration

77084
SOV/62-59-12-28/43

The nitration was carried out in CCl_4, at 5°. 1-(3,4-Dimethoxyphenyl)-propan-1-ol with 3 M HNO_3 gave the following nitro-compounds: 1-(6-nitro-3,4-dimethoxyphenyl)propan-1-ol (mp 86°), a very small amount of a dinitrocompound (mp 95°) and 2 compounds ($C_{22}H_{28}O_9N_2$). (1) Mp 205°, mol. w. 462 (cryoscopy in benzene), oxidation (15% HNO_3) gave 4,5-dinitroveratrole. (2) Mp 134°, oxidation gave 4,5-dinitroveratrole. Nitration of II gave 3,5-dinitroquaiacol (mp 122°) and a nitrocompound $C_{20}H_{24}O_9N_2$ (mp $140-141^o$), mol. w. 416. Nitration of III with 1 M HNO_3 gave 1(6-nitro-3,4-dimethoxyphenyl)-propan-2-ol (A) (mp $99-100^o$) and with 3 M HNO_3, in addition to A, also 1-(6-nitro-3,4-dimethoxyphenyl)-propan-2-one. Nitration of IV with 1 M HNO_3 gave a mononitro-derivative (mp $95-96^o$). V with 1 and 3 M HNO_3 gave 1-(6-nitro-3,4-dimethoxyphenyl)-propan-3-ol (mp $92-93^o$).

Card 2/3

APPROVED FOR RELEASE: 08/23/2000 CIA-RDP86-00513R001548120004-6"

"APPROVED FOR RELEASE: 08/23/2000 CIA-RDP86-00513R001548120004-6

Behavior of Lignin Models on Nitration

77084
SOV/62-59-12-28/43

VI with 3 M HNO_3 gave a light-brown powder containing 5.32% nitrogen. VII with 3 M HNO_3 gave 1-(6-nitro-3,4-dimethoxyphenyl)-propan-2-one (mp 125.5°). VIII with 3 M HNO_3 gave a dinitroketone (mp 184°) of unknown structure. This seems to indicate that lignin contains 60-70% phenyl-propane structural units capable of being nitrated. The yields are not given. There is 1 table; 9 references, 3 Soviet, 3 German, 1 Finnish, 2 U.S. The 2 U.S. references are: M. Kulka, H. Hibbert, J. Am. Chem. Soc., 65, 1180 (1943); Ph. C. Roberti, R. F. Jork, W. S. MacGregor, ibid. 72, 5760 (1950).

ASSOCIATION: Zelinskiy Institut of Organic Chemistry, Academy of Sciences, USSR (Institut organicheskoy khimii imeni N. D. Zelinskiy Akademii nauk SSSR)

SUBMITTED: March 31, 1958

Card 3/3

APPROVED FOR RELEASE: 08/23/2000 CIA-RDP86-00513R001548120004-6"

"APPROVED FOR RELEASE: 08/23/2000 CIA-RDP86-00513R001548120004-6

SERGEYEVA, L.L.; SHORYGINA, N.N.; LOPATIN, B.V.

Nitration of lignin and model compounds containing an arylcarbinol group. Izv.AN SSSR.Otd.khim.nauk no.7:1295-1302 Jl '62. (MIRA 15:7)

1. Institut organicheskoy khimii im. N.D.Zelinskogo AN SSSR.
(Lignin) (Nitration) (Alcohols)

APPROVED FOR RELEASE: 08/23/2000 CIA-RDP86-00513R001548120004-6"

"APPROVED FOR RELEASE: 08/23/2000 CIA-RDP86-00513R001548120004-6

SERGEYEVA, L.L.; SHORYGINA, N.N.; LOPATIN, B.V.

Nitration of model lignin compounds: 1-veratryl-3-propanol and 1-guaiacyl-3-propanol. Izv. AN SSSR Ser. khim. no.7:1254-1260 Jl '64. (MIRA 17:8)

1. Institut organicheskoy khimii imeni Zelinskogo AN SSSR.

APPROVED FOR RELEASE: 08/23/2000 CIA-RDP86-00513R001548120004-6"

"APPROVED FOR RELEASE: 08/23/2000 CIA-RDP86-00513R001548120004-6

SERGEYEVA, [illegible], SHORUZINA, N.N.

Nitration of model lignin compounds containing benzyl-alcohol and benzyl-alkyl ether groups. Izv. AN SSSR. Ser. khim. no.9: 1630-1637 '65. (MIRA 18:9)

1. Institut organicheskoy khimii im. N.D. Zelinskogo AN SSSR.

APPROVED FOR RELEASE: 08/23/2000 CIA-RDP86-00513R001548120004-6"

"APPROVED FOR RELEASE: 08/23/2000 CIA-RDP86-00513R001548120004-6

88543

S/190/60/002/010/018/026
B004/B054

5 3830

AUTHORS: Lipatov, Yu. S., Sergeyeva, L. M., and Maksimova, V. P.

TITLE: Investigation of the Interaction of Polymers With Fillers. II. Adsorption of Polymers From Solutions on Glass Fiber

PERIODICAL: Vysokomolekulyarnyye soyedineniya, 1960, Vol. 2, No. 10, pp. 1569-1574

TEXT: The authors studied the adsorption of polystyrene and polymethyl methacrylate from solutions of up to 3% on glass fiber (diameter 7 μ). The adsorption experiments were carried out with polystyrene dissolved in the good solvent benzene or in the poor solvent cyclohexanone, as well as with polymethyl methacrylate dissolved in acetone or in toluene. The intrinsic viscosities of the initial solutions are given in Table 2. The decrease in concentration due to adsorption at 25, 40, and 60°C was determined by means of an ФМ-56 (FM-56) nephelometer. Fig. 1 shows the course of adsorption at these temperatures for polystyrene in benzene; Table 1 gives the data for polystyrene in benzene at 25°C. Fig. 3 shows the adsorption of polystyrene from cyclohexanone solution at 40 and 60°C; no adsorption occurred at 25°C. Fig. 2 shows the adsorption of polymethyl

Card 1/2

APPROVED FOR RELEASE: 08/23/2000 CIA-RDP86-00513R001548120004-6"

"APPROVED FOR RELEASE: 08/23/2000 CIA-RDP86-00513R001548120004-6

Investigation of the Interaction of Polymers With Fillers. II. Adsorption of Polymers From Solutions on Glass Fiber

88543
S/190/60/002/010/018/026
B004/B054

methacrylic acid from acetone. Dissolved in toluene, this polymer showed no adsorption. In contrast with diluted solutions, not individual macromolecules are adsorbed from concentrated solutions, but their secondary associations existing in concentrated solutions. The authors mention papers by T. V. Dorokhina, A. S. Novikov, and P. I. Zubov; V. A. Kargin, M. B. Konstantinopol'skaya, and Z. Ya. Berestneva. They thank G. A. Kovtunenko for a prescription specifying the treatment of glass fiber, and V. A. Kargin for his discussion. There are 3 figures, 2 tables, and 8 references: 4 Soviet, 2 US, and 2 German.

ASSOCIATION: Institut obshchey i neorganicheskoy khimii AN BSSR (Institute of General and Inorganic Chemistry of the AS BSSR)

SUBMITTED: June 6, 1960

Card 2/2

APPROVED FOR RELEASE: 08/23/2000 CIA-RDP86-00513R001548120004-6"

"APPROVED FOR RELEASE: 08/23/2000 CIA-RDP86-00513R001548120004-6

SKOROKHOD, O.R.; SERGEYEVA, L.M.

Molecular sorption of some aromatic acids on ion exchangers. Koll. zhur. 23 no.1:100-105 Ja-F '61. (MIRA 17:2)

1. Belorusskiy universitet imeni Lenina, Minsk.

APPROVED FOR RELEASE: 08/23/2000 CIA-RDP86-00513R001548120004-6"

"APPROVED FOR RELEASE: 08/23/2000 CIA-RDP86-00513R001548120004-6

S/190/62/004/004/016/019
B117/B138

S 32200
S 1/05

AUTHORS: Lipatov, Yu. S., Peryshkina, N. G., Sergeyeva, L. M., Vasilenko, Ya. P.

TITLE: The interaction of polymers with fillers. IV. Adsorption of gelatin, polymethacrylic acid and their copolymers by glass fibers from solutions

PERIODICAL: Vysokomolekulyarnyye soyedineniya, v. 4, no. 4, 1962, 596-600

TEXT: The adsorption of edible gelatin and polymethacrylic acid from aqueous solutions, as well as of the copolymers of styrene and methacrylic acid from solutions in organic solvents, was studied with glass fibers at 30°C. It was intended to clarify the effect of the nature of solvent on adsorption and to check previous conjectures. In the concentration range with noticeable structure formation of the gelatin (0.2%), the adsorption of gelatin from aqueous solutions was found to reach a diffuse maximum and to disappear at a concentration of 0.4%. This confirms previous assumptions (Ref. 2: Yu. S. Lipatov, Dokl. AN BSSR, 5, 69, 1961) that the transition of molecular aggregates to the surface becomes more difficult with progressive

Card 1/3

APPROVED FOR RELEASE: 08/23/2000 CIA-RDP86-00513R001548120004-6"

"APPROVED FOR RELEASE: 08/23/2000 CIA-RDP86-00513R001548120004-6

S/190/62/004/004/016/019
B117/B138

The interaction of polymers...

structure formation. For solutions in urea, which prevents structure formation of gelatin, a slighter adsorption and a lower maximum, shifted towards higher concentrations, were ascertained. No adsorption was found in the case of polymethacrylic acid, owing to globular coiling of molecules. During partial neutralization (5-50%) of the acid, which causes uncoiling of the chain, the adsorption values found did not exceeded the measurement errors. Copolymer with a low number of methacrylic acid links (1.6%) was adsorbed from benzene solution, but not from cyclohexanone, which confirmed the theory of the effect of the solvent quality on adsorption. In the concentration range of 0.1 - 2%, copolymer with 24% methacrylic acid links was not adsorbed from any of the solvents used (dioxane, acetone/benzene mixture). Beside the chemical nature of the polymer, the form of its chains and degree of structure formation, other factors must also be considered during the adsorption of water-soluble polymers from aqueous solutions: strong blocking of gelatin molecules (owing to reaction with water), strong intramolecular bonding of carboxyl groups (in the case of polymethacrylic acid) and the interaction between solvent (water) and the surface of the adsorbent. Conclusion: The following main factors affect adsorption of polymers from solutions: (1) shape of the macromolecule; (2) degree of intermolecular

Card 2/3

APPROVED FOR RELEASE: 08/23/2000 CIA-RDP86-00513R001548120004-6"

"APPROVED FOR RELEASE: 08/23/2000 CIA-RDP86-00513R001548120004-6

S/250/62/006/001/002/002
I001/I201

AUTHOR: Lipatov, Yu. S., Perushkina, N. G., Vasilenko, Ya. P., and Sergeyeva, L. M.

TITLE: The adhesion of polymers to a solid surface and their adsorption from solutions

PERIODICAL: Akademia nauk Belaruskay. Doklady, v. 6, no. 1, 1962, 42–44

TEXT: Gelatine water solutions and copolymers of styrene with methacrylic acid in organic solvents on—the surface of glassfiber—were investigated by a method similar to that described in a previous paper (Ref. 6, Yu. S. Lipatov, L. M. Sergeeva, V. P. Maksimova, Vysikomoleksoyed., 2, 1570, 1960). The concentration was determined by means of a spectrometer СФ-4 (SF-4) with precision up to 0.001%. The copolymer solutions was determined by means of a nephelometer ФМ-56 (FM-56) with exactness up to 0.01%. Adsorption of copolymers with distribution of 1.6% and 24% of methacrylic acid was investigated. In cases of gelatine in water solution the adsorption is low, but it attains a maximum, (see Ref. 2, Yu. S. Lipatov, DAN BSSR, v. 5, 69, 1961). Adsorption of a copolymer with a distribution of 1.6% of methacrylic acid approaches the adsorption of pure polystyrene. In the case of 24% of methacrylic acid there is no adsorption from solvents of the copolymer. Comparison of the adsorption and adhesion shows that there is no direct link between adhesion of the polymer and its adsorption in spite of their dependence on the interaction between functional groups in the polymers molecule's form and the suface groups. There are different conditions for adsorption from

Card 1/2

APPROVED FOR RELEASE: 08/23/2000 CIA-RDP86-00513R001548120004-6"

"APPROVED FOR RELEASE: 08/23/2000 CIA-RDP86-00513R001548120004-6

45401
S/190/63/005/002/023/024
B101/B102

15.8210

AUTHORS: Lipatov, Yu. S., Lipatova, T. E., Vasilenko, Ya. P., Sergeyeva, L. M.

TITLE: Study of the interaction between polymers and fillers. VII. Glass transition point and packing density of filled polystyrene and polymethyl-methacrylate

PERIODICAL: Vysokomolekulyarnyye soyedineniya, v. 5, no. 2, 1963, 290-295

TEXT: Polystyrene (PS) and polymethyl methacrylate (PMMA) were filled with glass fibers 20-50 mm long, or cut to a length of 0.1-0.2 mm, or with powdered glass. Films were made of these and the glass transition point T_g was determined dilatometrically. PMMA had two T_g; in nonfilled PMMA $T_{g_1} = 85.5^\circ C$, $T_{g_2} = 113^\circ C$. Results: T_g rose with increasing degree of filling. Moreover, the form of the filler was important. T_g increased, e.g., from $84^\circ C$ for nonfilled PS to $94^\circ C$ for 50% filling with short glass

Card 1/3

APPROVED FOR RELEASE: 08/23/2000 CIA-RDP86-00513R001548120004-6"

"APPROVED FOR RELEASE: 08/23/2000 CIA-RDP86-00513R001548120004-6

fiber, to 88°C with long glass fiber, to 108°C for powdered glass. In PMMA with 50% short glass fiber filling T_{g_1} = 110°C, T_{g_2} = 131.8°C. With higher degrees of filling, T_{g_2} was no longer observed. T_{g_1} increased linearly with the degree of filling, T_{g_2} somewhat more slowly. The rise of T_g is explained by the mobility of the molecular bundles on the surface being limited by the formation of strong physical bonds. In PMMA the increase of T_g is steeper because of its better adhesion to the glass. With increasing degree of filling, the swelling of the films increased equally, i.e., in PS from 80% for nonfilled to 290% for 50%-filled, in PMMA from 220 to 310%. Hence it is concluded that the packing density decreases owing to the filling. In PS, T_g fell almost linearly with increasing content in plasticizer (dimethyl phthalate). This is due to the plasticizer inducing a hindrance to the formation of stronger bonds between the polymer molecules and the surface. With equal content of plasticizer, T_g falls more sharply with a higher degree of filling. Thus the properties of filled films of

APPROVED FOR RELEASE: 08/23/2000 CIA-RDP86-00513R001548120004-6"

"APPROVED FOR RELEASE: 08/23/2000 CIA-RDP86-00513R001548120004-6

rigid polymers differ from those of nonfilled films in having higher T_g and looser molecular packing. There are 5 figures and 2 tables.

ASSOCIATION: Institut obshchey i neorganicheskoy khimii AN BSSR (Institute of General and Inorganic Chemistry AS BSSR)

SUBMITTED: September 30, 1961

APPROVED FOR RELEASE: 08/23/2000 CIA-RDP86-00513R001548120004-6"

"APPROVED FOR RELEASE: 08/23/2000 CIA-RDP86-00513R001548120004-6

ACCESSION NR: AP4027714 S/0183/64/000/002/0027/0030

AUTHOR: Sergeyeva, L. M.; Rogovin, Z.A.

TITLE: Synthesis of modified polyvinyl alcohol fibers with ion exchange properties

SOURCE: Khimicheskiye volokna, no. 2, 1964, 27-30

TOPIC TAGS: Polyvinyl alcohol fiber, ion exchange, synthesis, modified polyvinyl alcohol, amine modified polyvinyl alcohol, macroradical formation, gra. copolymer, polyvinyl alcohol polymethacrylic acid copolymer, polyvinyl alcohol pol. methylvinylpyridine copolymer, ion exchange fabric, stability, swelling, exchange process rate, cation exchange fiber, anion exchange fiber

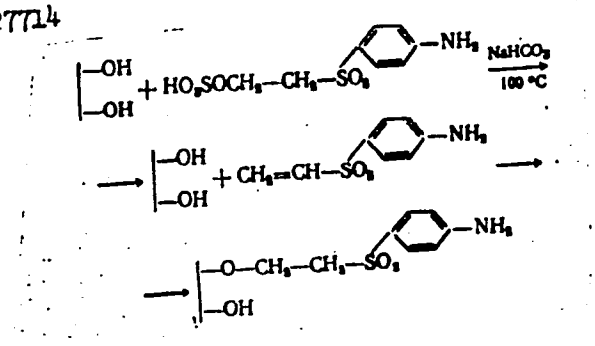
ABSTRACT: The possibility was investigated of preparing modified polyvinyl alcohol (PVA) fibers and cloth with a high ion exchange capacity by a method developed at the Moscow Textile Institute Laboratory for the synthesis of cellulose copolymers (Z. A. Rogovin, Sun T'un, N. D. Khvostenko, A. D. Virnik, Vysokomol. soyed., 4, 4, 571 (1962)). In this, aromatic aminogroups are introduced into the macromolecules of the original polymer:

Card 1/4

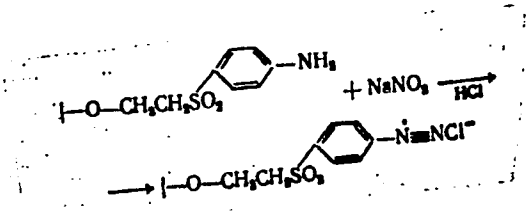
APPROVED FOR RELEASE: 08/23/2000 CIA-RDP86-00513R001548120004-6"

"APPROVED FOR RELEASE: 08/23/2000 CIA-RDP86-00513R001548120004-6

ACCESSION NR: AP4027714



diazotized:



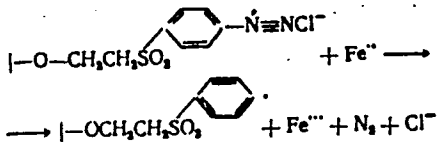
Card 2/4

APPROVED FOR RELEASE: 08/23/2000 CIA-RDP86-00513R001548120004-6"

"APPROVED FOR RELEASE: 08/23/2000 CIA-RDP86-00513R001548120004-6

ACCESSION NR: AP4027714

and the diazo group decomposed in the presence of Fe^{+2}, forming macroradicals:



Methacrylic acid is then grafted onto this polyvinyl fiber containing aromatic amine cross-linkages between the macromolecules (about 1 amino group for 10-15 elementary macromolecule segments). An aqueous solution of methacrylic acid in which $FeSO_4$ is dissolved is contacted with PVA. By reacting for 2 hours at 80-100C, and using 20-30% monomer in the solution, 140-150 wt.% of polymethacrylic acid may be grafted onto the PVA fiber. This corresponds to an ion exchange capacity of 8.2-9.5 mg.equivs/gm. The ion exchange capacity depends on the pH of the medium, and the process is completed in 10 min. The modified PVA cation exchange fabric is stable in 2N acid or alkali solutions at 20-100C. An attempt similarly to prepare a graft copolymer of PVA with 2,5-dimethylvinylpyridine resulted in a polymethylvinylpyridine-modified PVA fiber whose anion exchange capacity was no more than 2 mg.equivs/gm. The exchange process with this material

Card 3/4

APPROVED FOR RELEASE: 08/23/2000 CIA-RDP86-00513R001548120004-6"

"APPROVED FOR RELEASE: 08/23/2000 CIA-RDP86-00513R001548120004-6

ACCESION NR: AP4027714

also required only 8-10 min.; the degree of swelling in water at 80C was 210%. "The experimental work was conducted with the participation of L. Komaldniyets. Orig. art. has: 2 tables, 4 figures and 3 equations.

ASSOCIATION: Moskovskiy tekstil'nyy institut (Moscow Textile Institute)

SUBMITTED: 24Sep62 DATE ACQ: 22Apr64 ENCL: 00

SUB CODE: MA, CH No. REF. SOV: 006 OTHER: 000

Card 4/4

APPROVED FOR RELEASE: 08/23/2000 CIA-RDP86-00513R001548120004-6"

"APPROVED FOR RELEASE: 08/23/2000 CIA-RDP86-00513R001548120004-6

L 14349-65 EWP(e)/EWT(m)/EPF(c)/EPR/EWP(j)/EWP(b)/T Pc-4/Pq-4/Pr-4/Ps-4 ASD(m)-3/
RPL WW/RM/WH
ACCESSION NR: AP4047008 S/0250/64/008/009/0590/0593

AUTHOR: Lipatov, Yu. S.; Sergeyeva, L. M.

TITLE: Effect of filler on structure formation in polymers

SOURCE: AN BSSR. Diklady*, v. 8, no. 9, 1964, 590-593

TOPIC TAGS: filler, polymer, structure, supramolecular structure, tailor made material, polystyrene, polymethyl methacrylate

ABSTRACT: The effect of fillers on the supramolecular structure of polymers has been studied with a view toward the preparation of tailor-made materials. Polystyrene and poly(methyl methacrylate) containing various amounts of chopped glass fiber strand were used. Specimens were prepared by casting films from solutions and by compression molding at 185C. Changes in polymer structure, such as in the packing density of macromolecules and bundle- and globule-type supramolecular formations, were evaluated quantitively by determining specific surface and porosity through inert-solvent sorption experiments and by thermodynamic computations. The following conclusions were drawn: 1) filler incorporation has a marked effect on structure formation in that it changes the arrangement of macromolecules and supramolecular formations; 2) even with a given amount of filler, structures having

Card 1/2

APPROVED FOR RELEASE: 08/23/2000 CIA-RDP86-00513R001548120004-6"

"APPROVED FOR RELEASE: 08/23/2000 CIA-RDP86-00513R001548120004-6

L 14349-65
ACCESSION NR: AP4047008

different properties can be produced by different processing methods; 3) quantities reflecting the mechanical properties of filled polymers can be correlated with those quantities which characterize structure and packing density. Changes in mechanical properties upon filler addition, however, are not due solely to the incorporation of the filler and the resultant formation of structures. Mechanical changes are also governed by property changes in the polymer proper as a result of molecule-filler surface interaction and changes in structure-formation conditions. Orig. art. has: 2 figures and 2 tables

ASSOCIATION: Institut obshchey i neorganicheskoy khimii AN BSSR (Institute of General and Inorganic Chemistry, AN BSSR)

SUBMITTED: 17Jan64 ENCL: 00 SUB CODE: GC, MT

NO REF SOV: 005 OTHER: 000

Card 2/2

APPROVED FOR RELEASE: 08/23/2000 CIA-RDP86-00513R001548120004-6"

"APPROVED FOR RELEASE: 08/23/2000 CIA-RDP86-00513R001548120004-6

L 10184-66 EWT(m)/ETC/EWG(m) DS/RM

ACC NR: AP5028482 SOURCE CODE: UR/0286/65/000/020/0065/0065

AUTHORS: Rogovin, Z. A.; Virnik, A. D.; Sergeyeva, L. M.

ORG: none

TITLE: Method for obtaining cation-exchange materials. Class 39, No. 175648

SOURCE: Byulleten' izobreteniy i tovarnykh znakov, no. 20, 1965, 65

TOPIC TAGS: ion exchanger, ion exchange resin, ion exchange, polymer, cation exchanger

ABSTRACT: This Author Certificate presents a method for obtaining cation-exchange materials by treating polyvinylalcohol or products derived from the latter with polyfunctional acids. To obtain thermally and chemically stable materials mono- and di-(3,6,8-trisulfo-1-naphthylamino) derivatives of chlorotriazines are used as polyfunctional acids.

SUB CODE: 11, 07/ SUBM DATE: 19Jun63

Card 1/1 UDC: 661.183.123.2:678.744.72

APPROVED FOR RELEASE: 08/23/2000 CIA-RDP86-00513R001548120004-6"

"APPROVED FOR RELEASE: 08/23/2000 CIA-RDP86-00513R001548120004-6

LIPATOV, Yu.S.; SERGEYEVA, L.M.

Some regularities of the adsorption of macromolecules from solutions. Koll. zhur. 27 no.2:217-223 Mr-Ap '65. (MIRA 18:6)

1. Institut obshchey i neorganicheskoy khimii AN BSSR, Minsk.

APPROVED FOR RELEASE: 08/23/2000 CIA-RDP86-00513R001548120004-6"

"APPROVED FOR RELEASE: 08/23/2000 CIA-RDP86-00513R001548120004-6

L 2572-66 EWT(m)/EPF(c)/EWP(j) DJ/GS/RM UR/0000/65/000/000/0285/0289

ACCESSION NR: AT5022679

AUTHORS: Akishin, A. I.; Troyanovskaya, G. I.; Isayev, L. N.; Sergeyeva, L. M.; Andreyeva, M. G.; Marchenko, Ye. A.; Alekseyev, N. M.

TITLE: Behavior of friction junctions and some self-lubricating materials in a vacuum under ion bombardment

SOURCE: AN SSSR. Nauchnyy sovet po treniyu i smazkam. Teoriya treniya i iznosa (Theory of friction and wear). Moscow, Izd-vo Nauka, 1965, 285-289

TOPIC TAGS: friction, wear, solid lubricant, molybdenum disulfide, polymer, ion radiation effect/ AMAN self lubricating material, AF ZA plastic lubricant

ABSTRACT: The effects of hydrogen ion bombardment on the coefficient of friction and on wear of friction junctions were investigated. Self-lubricating materials containing graphite, MoS_2, WS_2, $MoSe_2$, and various polymeric bonding matrices, and, in particular, material AMAN, bronze-based metalloceramic coated with MoS_2 and plastic AF-ZA were tested in the apparatus shown on Fig. 1 on the Enclosure. The specimens were irradiated with 3-Kev hydrogen ions, and their friction and wear characteristics against a steel shoe (1 kg load, 1.2 m/sec) were measured over a

Card 1/4

APPROVED FOR RELEASE: 08/23/2000 CIA-RDP86-00513R001548120004-6"

"APPROVED FOR RELEASE: 08/23/2000 CIA-RDP86-00513R001548120004-6

L 2572-66

ACCESSION NR: AT5022679

2

9.5-hour period (1 hour run-in, 2 hours in vacuum, 6 hours in vacuum under radiation and 30 minutes without radiation, or 1 hour run-in and 8.5 hours in vacuum without radiation). It was found that the coefficient of friction decreased significantly in vacuum, but that radiation had no measurable effects on friction or wear of any materials tested. Thus the coefficient of friction can be calculated from

$$f = 0{,}35 C_5 \left(\frac{p_c}{H_c B}\right)^{\frac{1}{6}} + 0{,}9\beta + \frac{\tau_0}{HB},$$

(where β = adhesion coefficient, C_5 and γ = microstructure characteristics, τ_0 = specific shear adhesion, p_c = contour pressure) which is suggested by Kragel'skiy and Mikhin. The wear can be calculated from

$$I = k \frac{h\left\{-\ln\left[1 - \frac{h_{max}}{R}\left(\frac{p}{bHB}\right)^{\frac{1}{\nu}} - \sqrt{2\frac{h_{max}}{R}\left(\frac{p}{bHB}\right)^{\frac{1}{\nu}} \frac{1 - \frac{2\tau}{\sigma_s}}{1 + \frac{2\tau}{\sigma_s}}}\right]\right\}^2}{l(\nu+1)[\ln(1+\delta)]^2} \frac{p}{HB},$$

(where θ = angle of irregularities on friction surface, δ = elongation in tension, τ_s = yield point). Orig. art. has: 2 formulas, 3 tables, and 2 figures.

ASSOCIATION: Nauchnyy sovet po treniyu i smazkam, AN SSSR (Scientific Committee on Friction and Lubrication, AN SSSR)

Card 2/4

APPROVED FOR RELEASE: 08/23/2000 CIA-RDP86-00513R001548120004-6"

"APPROVED FOR RELEASE: 08/23/2000 CIA-RDP86-00513R001548120004-6

L 2572-66

ACCESSION NR: AT5022679

SUBMITTED: 18May65 ENCL: 01 SUB CODE: FP, ME

NO REF SOV: 002 OTHER: 001

Card 3/4

APPROVED FOR RELEASE: 08/23/2000 CIA-RDP86-00513R001548120004-6"

"APPROVED FOR RELEASE: 08/23/2000 CIA-RDP86-00513R001548120004-6

L 2572-66

ACCESSION NR: AT5022679 ENCLOSURE: 01

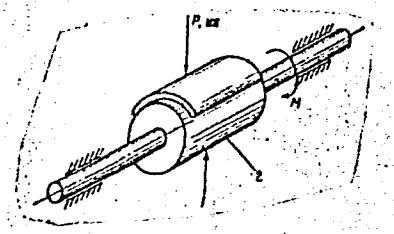


Fig. 1. Experimental apparatus: 1 - ion stream, 2 - specimen

Card 4/4

APPROVED FOR RELEASE: 08/23/2000 CIA-RDP86-00513R001548120004-6"

"APPROVED FOR RELEASE: 08/23/2000 CIA-RDP86-00513R001548120004-6

SERGEYEVA, L.M.; LIPATOV, Yu.S.

Adsorption of vapors in the system polymer - filler. Koll.zhur. 27 no.3:435-440 My-Je '65. (MIRA 18:12)

1. Institut obshchey i neorganicheskoy khimii AN BSSR, Minsk. Submitted Dec. 2, 1963.

APPROVED FOR RELEASE: 08/23/2000 CIA-RDP86-00513R001548120004-6"

"APPROVED FOR RELEASE: 08/23/2000 CIA-RDP86-00513R001548120004-6

L 41334-66 EWT(m)/EWP(j)/T RM

ACC NR: AP6025617 SOURCE CODE: UR/0413/66/000/013/0075/0075

26

B

AUTHORS: Sergeyeva, L. M.; Rogovin, Z. A.

ORG: none

TITLE: A method for imparting insolubility to polyvinyl alcohol fiber. Class 39, No. 183374

SOURCE: Izobreteniya, promyshlennyye obraztsy, tovarnyye znaki, no. 13, 1966, 75

TOPIC TAGS: polyvinyl alcohol, synthetic fiber, polymer cross linking

ABSTRACT: This Author Certificate presents a method for imparting insolubility to polyvinyl alcohol fiber by treating it with a cross-linking agent. To increase the fiber's resistance to the action of concentrated acids and bases, epichlorhydrin is used as the cross-linking agent. Either a concentrated or a water-acetone dilute alkali solution may be used as a catalyst for the cross-linking reaction. The fiber may be treated with the alkali solution prior to treatment with the cross-linking agent. [04]

SUB CODE: 07/ SUBM DATE: 17Aug63/ ATD PRESS: 5058

Card 1/1 11b UDC: 677.494.744.72:677.862.522:66.062.539

APPROVED FOR RELEASE: 08/23/2000 CIA-RDP86-00513R001548120004-6"

"APPROVED FOR RELEASE: 08/23/2000 CIA-RDP86-00513R001548120004-6

L 10418-67 EWT(m) DS/RM (A)
ACC NR: AP6029925 SOURCE CODE: UR/0413/66/000/015/0089/0089

23

AUTHORS: Leykin, Yu. A.; Davankov, A. B.; Korshak, V. V.; Cherkasova, T. A.; Sergeyeva, L. M.

ORG: none

TITLE: A method for obtaining a phosphorus-containing cationite. Class 39, No. 184449 [announced by Moscow Institute of Chemical Technology im. D. I. Mendeleyev (Moskovskiy khimiko-tekhnologicheskiy institut)]

SOURCE: Izobret prom obraz tov zn, no. 15, 1966, 89

TOPIC TAGS: cation, phosphorus, copolymerization, copolymer, hydrolysis

ABSTRACT: This Author Certificate presents a method for obtaining phosphorus-containing cationite by copolymerizing various diesters of nucleus-substituted styrylphosphinic acid and cross-linking agents. The copolymer is then hydrolized. To obtain a selective cationite with one stage of dissociation, the hydrolysis is conducted in an alkaline medium.

SUB CODE: 07/ SUBM DATE: 28May64

UDC: 678.85:661.183.123.2.002.2

Card 1/1 bjp

APPROVED FOR RELEASE: 08/23/2000 CIA-RDP86-00513R001548120004-6"

"APPROVED FOR RELEASE: 08/23/2000 CIA-RDP86-00513R001548120004-6

11(7)

SOV/19-58-7-374/392

AUTHORS: Frolov, A.G., Borisenko, L.D., Tyurkin, M.N., Rabinovich, Yu.M., Sergeyeva, L.M., and Polosukhin, A.Ya.

TITLE: Screw Feeder for High-Pressure Hydrotransportation of Unsorted Coal (Shnekovyy pitatel' dlya vysokonapornogo gidrotransporta ryadovogo uglya)

PERIODICAL: Byulleten' Izobreteniy, 1958, Nr 7, p 84 (USSR)

ABSTRACT: Class 81e, 76. Nr 114138 (582300 of 20 Aug 1957). A screw feeder for hydro-transport of coal with natural humidity; with constant parameters of the helical chambers over their entire length, this ensures a constant volume of transported coal within the feeder. Water leakage is eliminated by counter-pressure of water pressing coal back and making a "coal plug" between the free end of the feeder and the water inlet.

Card 1/1

APPROVED FOR RELEASE: 08/23/2000 CIA-RDP86-00513R001548120004-6"

"APPROVED FOR RELEASE: 08/23/2000 CIA-RDP86-00513R001548120004-6

SERGEYEVA, L.N.

TRAKHTENBERG, D.M.; RODIONOVSKAYA, E.I.; GORDINA, Z.V.; SERGEYEVA, L.N.

Producing a crystal erythromycin base. Med.prom. 11 no.7:14-19 Jl '57. (MLRA 10:8)

1. Vsesoyuznyy nauchno-issledovatel'skiy institut antibiotikov
(ERYTHROMYCIN)

APPROVED FOR RELEASE: 08/23/2000 CIA-RDP86-00513R001548120004-6"

"APPROVED FOR RELEASE: 08/23/2000 CIA-RDP86-00513R001548120004-6

PETROV, K.A.; YEVDAKOV, V.P.; SERGEYEVA, L.N.; LEDOVSKIKH, V.A.

2, 4, 5-trichlorophenyl esters of methylthiophosphinic and methylphosphinic acids. Zhur.ob.khim. 31 no.10:3414-3417 O '61. (MIRA 14:10)

(Phosphinothioic acid) (Phosphinic acid)

APPROVED FOR RELEASE: 08/23/2000 CIA-RDP86-00513R001548120004-6"

"APPROVED FOR RELEASE: 08/23/2000 CIA-RDP86-00513R001548120004-6

KOLPASHNIKOV, A.I., kand. tekhn. nauk; OSIPOVA, A.D., inzh.; SHOR, I.R., inzh.; SHLENSKIY, G.N., inzh.; SERGEYEVA, L.N., inzh.

Developing a procedure for the manufacture and investigating the physicomechanical properties of thin magnesium alloy sheets. Trudy MATI no.57:58-65 '63. (MIRA 16:12)

APPROVED FOR RELEASE: 08/23/2000 CIA-RDP86-00513R001548120004-6"

"APPROVED FOR RELEASE: 08/23/2000 CIA-RDP86-00513R001548120004-6

PAISOV, A.I., kand. tekhn. nauk; SHLENSKIY, G.N., inzh.; SERGEYEVA, L.N., inzh.

Structural changes during the heating of SAP [sintered aluminum powder]. Trudy MATI no.57:127-134 '63. (MIRA 16:12)

APPROVED FOR RELEASE: 08/23/2000 CIA-RDP86-00513R001548120004-6"

"APPROVED FOR RELEASE: 08/23/2000 CIA-RDP86-00513R001548120004-6

[illegible] .[illegible]; [illegible], [illegible]; KALMYKOVA, G.Ya.; SERGEYEVA, L.N.; [illegible], [illegible]; NESTEROVA, G.A.

[illegible] of enzymatic preparations (protease and amylase), isolated from the thermoduric strain of Bac. mesentericus. Prikl. biokhim. i mikrobiol. 1 no.3:263-268 My-Je '65. (MIRA 18:7)

[illegible] Institut mikrobiologii AN SSSR.

APPROVED FOR RELEASE: 08/23/2000 CIA-RDP86-00513R001548120004-6"

"APPROVED FOR RELEASE: 08/23/2000 CIA-RDP86-00513R001548120004-6

YAKUBOV, G.Ye.; [illegible], N.G.; SERGEYEVA, L.N.; ARTAMONOVA, O.I.; KHOKHLOV, A.S.

Mycetins B_1, B_2 and C, the new antibiotics of the rhodomycin group. Antibiotiki 10 no.9:771-776 S '65. (MIRA 18:9)

1. Institut khimii prirodnykh soyedineniy i Institut mikrobiologii AN SSSR, Moskva.

APPROVED FOR RELEASE: 08/23/2000 CIA-RDP86-00513R001548120004-6"

"APPROVED FOR RELEASE: 08/23/2000 CIA-RDP86-00513R001548120004-6

KOSMACHEV, A.Ye. [deceased]; KHOKHLOVA, Yu.M.; KALMYKOVA, G.Ya.; PROSNYAKOVA, I.M.; SERGEYEVA, L.N.

Production and isolation of an antibiotic from the thermophilic Actinomyces T-12/3. Mikrobiologiia 34 no.3:437-441 My-Je '65. (MIRA 18:11)

1. Institut mikrobiologii AN SSSR.

APPROVED FOR RELEASE: 08/23/2000 CIA-RDP86-00513R001548120004-6"

"APPROVED FOR RELEASE: 08/23/2000 CIA-RDP86-00513R001548120004-6

PAISOV, A.I., kand. tekhn. nauk; SERGEYEVA, L.N., inzh.

Character of the distribution of the oxide phase in SAP [sintered aluminum powder]. Trudy MATI no.57:136-138 '63. (MIRA 16:12)

APPROVED FOR RELEASE: 08/23/2000 CIA-RDP86-00513R001548120004-6"

"APPROVED FOR RELEASE: 08/23/2000 CIA-RDP86-00513R001548120004-6

1. OZOL, P. ZH.; SERGEYEVA, L. P.

2. USSR (600)

4. Electric Transformers

7. Relay protection os step-down transformers with current connection from single phase short circuit at the low voltage of 380/ 220 volts, Energ. biul., No. 9, 1952.

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

APPROVED FOR RELEASE: 08/23/2000 CIA-RDP86-00513R001548120004-6"

"APPROVED FOR RELEASE: 08/23/2000 CIA-RDP86-00513R001548120004-6

SERGEYEVA, L.S. ; SELITSKIY, I.A.

Current distribution in a porous electrode of a lead cell. Zhur. fiz. khim. 39 no. 1:204-206 Ja '65. (MIRA 19:1)

1. Filial Vsesoyuznogo akkumulyatornogo instituta. Submitted January 20, 1964.

APPROVED FOR RELEASE: 08/23/2000 CIA-RDP86-00513R001548120004-6"

"APPROVED FOR RELEASE: 08/23/2000 CIA-RDP86-00513R001548120004-6

SHENDEREY, Ye.R.; IVANOVSKIY, F.P.; Prinimali uchastiye: TYUR.MA. I.S.; SERGEYEVA, L.Ye.; DORFMAN, I.M.

Solubility of acetylene in acetone at low temperatures. Zhur. prikl.khim. 37 no.7:1557-1562 Jl '64.

(MIRA 18:4)

APPROVED FOR RELEASE: 08/23/2000 CIA-RDP86-00513R001548120004-6"

"APPROVED FOR RELEASE: 08/23/2000 CIA-RDP86-00513R001548120004-6

Paving the way for contaminable enamels. Tekh. mol. 25 no.4: 17-18 Ap '57. (MLRA 10:6)

(Enamel and enameling)

APPROVED FOR RELEASE: 08/23/2000 CIA-RDP86-00513R001548120004-6"

"APPROVED FOR RELEASE: 08/23/2000 CIA-RDP86-00513R001548120004-6

1. SERGEYEVA, N.

2. USSR (600)

4. Telephone Switchboards

7. How we eliminate technical irregularities in telephone switchboard stations, Sov. sviaz., 3, No. 4, 1953.

9. Monthly List of Russian Accessions, Library of Congress, April, 1953, Uncl.

APPROVED FOR RELEASE: 08/23/2000 CIA-RDP86-00513R001548120004-6"

"APPROVED FOR RELEASE: 08/23/2000 CIA-RDP86-00513R001548120004-6

SKALON, V.N.; SERGEYEVA, M.A., redaktor.

[Russian explorers of the 17th century in Siberia] Russkie zemleprokhodtsy - issledovateli Sibiri XVII veka. Pod red. M.A.Sergeeva. Moskva, Izd. Moskovskogo obshchestva ispytatelei prirody, 1951. 197 p. (MLRA 6:7)
(Siberia--Discovery and exploration)

APPROVED FOR RELEASE: 08/23/2000 CIA-RDP86-00513R001548120004-6"

"APPROVED FOR RELEASE: 08/23/2000 CIA-RDP86-00513R001548120004-6

S/123/62/000/002/009/012
A004/A101

AUTHORS: Golubev, S. S., Sergeyeva, M. A.

TITLE: Milling with contact lubrication

PERIODICAL: Referativnyy zhurnal, Mashinostroyeniye, no. 2, 1962, 100, abstract 2B567 ("Tr. Ural'skogo politekhn. in-ta", 1961, v. 112, 89-93)

TEXT: The authors suggest a milling method with contact lubrication of the milling cutter cutting edge, which eliminates the drawbacks of milling with cooling. It was found out that the best results are obtained by wetting the milling cutter with an emulsion consisting of 1% borax, 0.15% sodium nitrate, 0.15% soap and 98.7% water. An insignificant wetting of the cutting edges of the milling cutter by the contacting method during the milling of grade 45 steel increases the service life by a factor of 1.5 - 2, cuts the power consumption by up to 10 - 15% and improves the quality of the surface finish. With contact lubrication, the component, machine tool and working place remain clean and dry, while the liquid consumption is insignificant (some tenths fractions of a liter per shift). Contact wetting is not expedient in cast iron milling owing to

Card 1/2

APPROVED FOR RELEASE: 08/23/2000 CIA-RDP86-00513R001548120004-6"

"APPROVED FOR RELEASE: 08/23/2000 CIA-RDP86-00513R001548120004-6

Milling with contact lubrication

S/123/62/000/002/009/012
A004/A101

the increase in power consumption, galling of the milling cutter and clogging of the tooth space by fine dust. The authors present a schematic diagram of the lubrication device. There are 4 figures and 1 table.

I. Bernshteyn

[Abstracter's note: Complete translation]

Card 2/2

APPROVED FOR RELEASE: 08/23/2000 CIA-RDP86-00513R001548120004-6"

"APPROVED FOR RELEASE: 08/23/2000 CIA-RDP86-00513R001548120004-6

GOLUBEV, S.S., kand. tekhn. nauk; SERGEYEVA, M.A., inzh.

Milling with contact lubrication. Trudy Ural. politekh. inst. no.112:89-93 '61. (MIRA 16:7)

(Metal cutting—Lubrication)

APPROVED FOR RELEASE: 08/23/2000 CIA-RDP86-00513R001548120004-6"

"APPROVED FOR RELEASE: 08/23/2000 CIA-RDP86-00513R001548120004-6

GOLUBEV, S.S.; SERGEYEVA, M.A.

Precision and roughness of a textolite surface machined on lathes. Trudy Ural. politekh. inst. no.[illegible] '65 (MIRA [illegible])

APPROVED FOR RELEASE: 08/23/2000 CIA-RDP86-00513R001548120004-6"

"APPROVED FOR RELEASE: 08/23/2000 CIA-RDP86-00513R001548120004-6

SERGEYEVA, M. A.

"Influence of a Nutritional Protein Deficiency on the Condition of the Endocrine Glands of a Growing Organism," Sub. 24 May 47, Inst of Nutrition, Acad Med Sci USSR.

Dissertations presented for degrees in science and engineering in Moscow in 1947.
Cand Biological Sci.
SO: Sum.No.457, 18 Apr 55

APPROVED FOR RELEASE: 08/23/2000 CIA-RDP86-00513R001548120004-6"

"APPROVED FOR RELEASE: 08/23/2000 CIA-RDP86-00513R001548120004-6

MAKARYCEV, A.J.; SERGEJEVA, M.A.

Role of dietary proteins in production of conditioned reflexes in animals. Sborn. pathohysiol. trav. vyz. 5 no.3:77-80 Dec 51. (CIML 21:4)

APPROVED FOR RELEASE: 08/23/2000 CIA-RDP86-00513R001548120004-6"

"APPROVED FOR RELEASE: 08/23/2000 CIA-RDP86-00513R001548120004-6

MAKARYCHEV, A.I.;SERGE'YEVA, M.A.

Role of proteins in food in conditioned reflex function in animals. Zh. vysshei nerv. deiat. 2 no. 2:169-181 Mar-Apr 1952. (CLML 23:3)

1. Laboratory of Higher Nervous Activity of the Institute of Nutrition of the Academy of Medical Sciences USSR.

APPROVED FOR RELEASE: 08/23/2000 CIA-RDP86-00513R001548120004-6"

"APPROVED FOR RELEASE: 08/23/2000 CIA-RDP86-00513R001548120004-6

Lab Higher Nervous activity

Effect of lecithin on the activity of the conditioned reflexes of animals. A. I. Makarychev and M. A. Sergeeva (Nutrition Inst., Acad. Med. Sci. U.S.S.R., Moscow). *Voprosy Pitaniya* 14, No. 2, 21-6(1955).—Three groups of dogs were employed to det. the effect of lecithin (I) on the conditioned reflexes of cerebral cortex by making use of the method of the conditioned food reflexes. The dogs of the 1st group received *per os* during 6-10 days in addn. to a normal diet 0.2, 0.5, and 5 g. I/dog/day, those of the 2nd group 20 and 200 g. of brain tissue (equiv. to 0.5 and 5 g. I, resp.), and those of the 3rd group received separately the equiv. amts. of choline, oleic acid, palmitic acid, stearic acid, inorg. P (NaH_2PO_4), and glycerol which were present in 0.5 g. I. The results showed that feeding of small doses (0.2 and 0.5 g.) of I always increased the activity of the conditioned reflexes of cerebral cortex, the effect being observed either during the exptl. feeding or after the addn. of I had been stopped, depending on the strength of the nervous system of the dog. The feeding of large doses (5 g.) of I caused a decrease of the conditoned reflexes, and in the case of the dogs possessing a weak type of nervous system it caused a prolonged retardation of the activity of the cerebral cortex. The different constituents of I differed greatly in their physiol. effects. Glycerol, palmitic and stearic acids increased the conditioned reflex activity of the cerebral cortex. Oleic acid in the amt. used exercised a neg. effect, but when it was used in the amt. present in 0.25 g. I, a pronounced pos. effect was noticed. Inorg. P increased both the stimulating and retarding effects of the cortex. However, the dogs after a short period of P feeding refused to eat their ration. Choline exercised a strong neg. effect on the reflex activity of the cortex. In the cases of palmitic, stearic, and oleic acid the results have been confirmed by studying the biochem. activity of the cerebral cortex.

E. Wierbicki

APPROVED FOR RELEASE: 08/23/2000 CIA-RDP86-00513R001548120004-6"

"APPROVED FOR RELEASE: 08/23/2000 CIA-RDP86-00513R001548120004-6

SERGEYEVA, M.A.

The influence of different ratios of fat and carbohydrate in the rations on conditioned reflex activity in dogs. M. A. Sergeeva (Nutrition Inst., Acad. Med. Sci. U.S.S.R., Moscow). *Voprosy Pitaniya* 15, No. 1, 9-15(1956).—Different ratios of fat and carbohydrate in the rations change in a definite manner the conditioned reflex activity (salivation) in dogs. The responses to different stimuli were less and the latent period was longer when the ration contained 60% fat and 20% carbohydrate, as compared with the isocaloric ration of 30 and 50% (control), resp. When the ration contained 15% fat and 65% carbohydrate the excitability was increased. E. Wierbicki

Lab Higher Nervous Activity

APPROVED FOR RELEASE: 08/23/2000 CIA-RDP86-00513R001548120004-6"

"APPROVED FOR RELEASE: 08/23/2000 CIA-RDP86-00513R001548120004-6

SERGEYEVA, M.A.

Effect of lecithin on the conditioned reflex activity of rats. M. A. Sergeeva (Nutrition Inst., Acad. Med. Sci. U.S.S.R., Moscow). *Voprosy Pitaniya* 15, No. 5, 65-6(1956).—White rats receiving per os 1 or 25 mg. lecithin (I)/200 g. body wt. for 40 days were tested for the developing of the conditioned reflex activity (electroirritation in a 3-chamber passage; conditioned signals of light and sound). Before and after the expt. the animals were tested for the bioelec. activity of the cerebrum (electroencephalograms). The results indicate that the small dose of I increased the development of the conditioned reflex activity (increased excitability of the cerebrum), while the large dose did the opposite. E. Wierbicki

Lab. Higher Nervous Activity

APPROVED FOR RELEASE: 08/23/2000 CIA-RDP86-00513R001548120004-6"

"APPROVED FOR RELEASE: 08/23/2000 CIA-RDP86-00513R001548120004-6

BORINSKAYA, Ye.N.; GLUBINA, A.Yu.; MARSHAK, M.S.; SERGEYEVA, M.A.; SOROKIN, G.Ye.

Dietary regimen for patients with heart failure [with summary in English] Vop.pit.17 no.2:32-39 Mr-Ap '58. (MIRA 11:4)

1. Iz nauchno-organizatsionnogo otdeleniya (zav. - prof. M.S. Marshak) Kliniki lechebnogo pitaniya i laboratorii obmena veshchestv i energii (zav. - prof. O.P.Molchanova) Instituta pitaniya AMN SSSR, Moskva.

(CONGESTIVE HEART FAILURE, therapy
dietary regimen (Rus))
(DIETS, therapeutic use
congestive heart failure (Rus))

APPROVED FOR RELEASE: 08/23/2000 CIA-RDP86-00513R001548120004-6"

"APPROVED FOR RELEASE: 08/23/2000 CIA-RDP86-00513R001548120004-6

GRUBINA, A.Yu.; KRAYKO, Ye.A.; MASLENIKOVA, Ye.M.; RAZUMOV, M.I.; SERGEYEVA, M.A.; SKIRKO, B.K.; SHISHOVA, OLA.

Effect of food enriched by methionine on the development of experimental silicosis in white rats. Vop.pit. 20 no.3:41-46 My-Je '61. (MIRA 14:6)

1. Iz Instituta pitaniya AMN SSSR, Moskva.
(LUNGS--DUST DISEASES) (METHIONINE) (DIET)

APPROVED FOR RELEASE: 08/23/2000 CIA-RDP86-00513R001548120004-6"

"APPROVED FOR RELEASE: 08/23/2000 CIA-RDP86-00513R001548120004-6

GRUBINA, A.Yu.; YEZHOVA, Ye.N. [deceased]; KRAYKO, Ye.A.; MASLENNIKOVA, Ye.M.; RAZUMOV, M.I.; SERGEYEVA, M.A.; SKIRKO, B.K.

Influence of riboflavin on the course of experimental silicosis in white rats. Vop. pit. 20 no.6:40-45 N-D '61. (MIRA 15:6)

1. Iz Instituta pitaniya AMN SSSR, Moskva.
(LUNGS--DUST DISEASES)
(RIBOFLAVIN--PHYSIOLOGICAL EFFECT)

APPROVED FOR RELEASE: 08/23/2000 CIA-RDP86-00513R001548120004-6"

"APPROVED FOR RELEASE: 08/23/2000 CIA-RDP86-00513R001548120004-6

[illegible]

Effect of riboflavin- and methionine-enriched diets on the course of experimental silicosis. Vop. pit. 22 n.4:35-38 [illegible] (MIRA 17:10)

[illegible] Moskva.

APPROVED FOR RELEASE: 08/23/2000 CIA-RDP86-00513R001548120004-6"

"APPROVED FOR RELEASE: 08/23/2000 CIA-RDP86-00513R001548120004-6

GALEGOV, G.A.; SERGEYEVA, M.A.; MARDASHEV, S.R.

Synthesis of DL-N15—beta-methylaspartic acid. Biokhimiia 29 no.3: 497-501 My-Je '64. (MIRA 18:4)

1. Institut biologicheskoy i meditsinskoy khimii AMN SSSR, Moskva.

APPROVED FOR RELEASE: 08/23/2000 CIA-RDP86-00513R001548120004-6"

"APPROVED FOR RELEASE: 08/23/2000 CIA-RDP86-00513R001548120004-6

EPSHTEYN, Ya.A., prof., SERGEYEVA, M.I.

Kinetics of peptolysis in gamma-irradiated serum albumin. Trudy Stal.med.inst. 27:51-53 '57 (MIRA 11:9)
(BLOOD PROTEINS)
(GAMMA RAYS--PHYSIOLOGICAL EFFECT)

APPROVED FOR RELEASE: 08/23/2000 CIA-RDP86-00513R001548120004-6"

"APPROVED FOR RELEASE: 08/23/2000 CIA-RDP86-00513R001548120004-6

BOGDANOV, N.F.; PRAVEN'KAYA, T.I.; SERGEYEVA, M.I.; BRASHCHENKO, Ye.M.

Separation of aromatics from petroleum products with the aid of an aluminosilicate adsorbent in a propane solution. Trudy GrozNII no.4:189-198 '59. (MIRA 12:9)
(Petroleum products) (Aromatic compounds) (Adsorption)

APPROVED FOR RELEASE: 08/23/2000 CIA-RDP86-00513R001548120004-6"

"APPROVED FOR RELEASE: 08/23/2000 CIA-RDP86-00513R001548120004-6

24826
S/081/61/000/011/031/040
B103/B202

15.6400

AUTHORS: Bogdanov, N. F., Mitrofanov, M. G., Stepuro, S. I., Sergeyeva, M. I.

TITLE: Production of low-solidifying oils by the method of extractive deparaffination

PERIODICAL: Referativnyy zhurnal. Khimiya, no. 11, 1961, 483, abstract 11M192 (11M192). ("Tr. Groznensk. neft. n.-i. in-t", vyp. 7, 1960, 93 - 103)

TEXT: In the course of the extractive deparaffination at the Groznenskiy neftemaslozavod (Groznyy Petroleum Refinery) up to 65 % oil with a solidification point of -30 to -32°C is obtained from the MC-20 (MS-20) oil of the Zhiriovskaya petroleum freed from paraffin when treated with dichloroethane benzene at temperatures of from -35° to -38°C. It is expedient to apply extractive deparaffination as an additional treatment to the conventional processes of deparaffination in the apparatus available. A scheme is given. [Abstracter's note: Complete translation.]

Card 1/1

APPROVED FOR RELEASE: 08/23/2000 CIA-RDP86-00513R001548120004-6"

"APPROVED FOR RELEASE: 08/23/2000 CIA-RDP86-00513R001548120004-6

SERGEYEVA, M.K.

✓ New method of synthesis of esters of phosphonic and thiophosphonic acids. XXI. Addition of dialkyl thiophosphites and dialkyl dithiophosphoric acids to anils. A. N. Pudovik and M. K. Sergeeva (State Univ., Kazan). *Zhur. Obshchei Khim.* 25, 1769-66(1955); cf. *C.A.* 47, 2687a.

50, 4808c.—An equimolar mixt. of $(RO)_2PSH$ and the desired anil in a small vol. of EtOH was treated with a few drops of RONa soln.; almost no heat effect was observed. After 20-30 min. on a steam bath the mixt. was allowed to solidify. In reactions with $(RO)_2PS_2H$, this was added dropwise to an equimolar amt. of anil in EtOH with ice cooling and the mixt. was finally heated 10-15 min. on a steam bath. The following $RNHCHR^1P(S)(OR^2)_2$ were prepd. (R, R^1, R^2, % yield, and m.p. given): *p-MeOC₆H₄, Ph, Et*, 43.2, 48°, *Ph, p-Me₂NC₆H₄, Et*, 60, 100-100.5°, *p-MeC₆H₄, Ph, Et*, 62.3, 67°, *m-MeC₆H₄, Ph, Et*, 52.2, 77-8°, *m-MeC₆H₄, m-MeC₆H₄, Et*, 50, 84-5°, *1-C₁₀H₇, Ph, Et*, 54.1, 136.5°, *Ph, Ph, Bu*, 78.3, 53°, *p-MeOC₆H₄, Ph, Bu*, 63.2, 45-6°, *Ph, p-Me₂NC₆H₄, Bu*, 81.2, 80°, *m-MeC₆H₄, m-MeC₆H₄*, 73, 57-8°, *Ph, p-MeC₆H₄, Bu*, 61.3, 36°, *p-MeC₆H₄, Ph, Bu*, 71.8, 75.5°, and *m-MeC₆H₄, Ph, Bu*, 65.6, 47-7.5°. The following $RNHCHR^1SP(S)(OR^2)_2$ were prepd. from $(R^2O)_2PS_2H$ (consts. as above): *Ph, Ph, Et*, 89.1, 103-4°, *p-MeC₆H₄, Ph, Et*, 60.4, 101-2°, *m-MeC₆H₄, p-Me₂NC₆H₄, Et*, 93.5, 128-30°, *p-MeC₆H₄, p-Me₂NC₆H₄, Et*, 95.1, 145°, *p-MeC₆H₄, p-Me₂CHC₆H₄, Et*, 57.6, 110-11°, *p-MeOC₆H₄, p-MeOC₆H₄, Et*, 86.5, 127-8°, and *Ph, p-Me₂NC₆H₄, Me*, 28.9, 127°. Addn. of 4 g. $(EtO)_2PS_2H$ to 2.29 g. BzH gave a slight rise in temp. augmented by addn. of a little EtONa-EtOH; after 15 min. on a steam bath followed by 1 day at room temp. there was obtained 1 g. solid, presumably $(Et)_2P(S)SCH(OH)Ph$, m. 104°. *p*-$ClC_6H_4N{:}CHPh$ with $(EtO)_2PS_2H$ in Et_2O gave a solid, m. 119-20°, identified as *p-ClC₆H₄NH₃.HS₂P(OEt)₂*, which apparently formed by hydrolysis of the anil in contact with moisture. The salt was readily prepd. from the 2 components on mixing; similarly were prepd. the following salts: *PhNH₃.HS₂P(OEt)₂*, m. 80°, *p-MeC₆H₄NH₃.HS₂P(OEt)₂*, m. 87-8°, and *2-C₁₀H₇NH₃.HS₂P(OEt)₂*, m. 116-17°. Since the anils were so readily attacked by moisture, the following technique was used for prepn. of the dithiophosphoric esters from the chloro derivs.: 2.07 g. *p*-$ClC_6H_4NH_2$ in dry MePh was treated with 1.75 g. BzH, the mixt. heated briefly on a steam bath without access to atm. moisture, and the solvent removed *in vacuo*; the residual anil was treated with 3 g. $(EtO)_2PS_2H$, and the mixt. stirred a few min. and allowed to crystallize in an open dish, yielding 6.3 g. *p-ClC₆H₄NHCH(Ph)SP(S)(OEt)₂*, m. 96-7°. Similarly was prepd. 90% *p-ClC₆H₄NHCH(C₆H₄Me-p)SP(S)(OEt)₂*, m. 96°. Although a reaction evidently took place between $(EtO)_2PS_2H$ and *p*-MeC_6H_4CHO or *p*-$Me_2CHC_6H_4CHO$ in the presence or absence of NaOR, no cryst. products could be isolated.

G. M. Kosolapoff

APPROVED FOR RELEASE: 08/23/2000 CIA-RDP86-00513R001548120004-6"

"APPROVED FOR RELEASE: 08/23/2000 CIA-RDP86-00513R001548120004-6

44839

S/560/62/000/014/011/011
A001/A101

AUTHORS: Krylov, G. N., Martynenko, I. A., Pogrebnyak, Ye. B., Sergeyeva, M.K.

TITLE: An autonomous optical method of determining orientation of an Earth's satellite in space

SOURCE: Akademiya nauk SSSR. Iskusstvennyye sputniki Zemli. no. 14, 1962, 145 - 153

TEXT: The purpose of this investigation is determination of orientation of an Earth's artificial satellite in space from the readings of solar radiation pickups mounted on the satellite. In the first part of the article the problem of determining the vector, denoting direction from the satellite to the Sun, is solved in terms of three direction cosines. The second part deals with the problem of determining the matrix of transformation from the coordinate system "Earth" to the system of "Sputnik". As a result, the matrix was obtained, each of whose elements contained the unknown angle of turn of one system relative to the other. This angle can be determined from the reading of at least one scanning pickup whose optical system fixes the line of horizon, provided that the altitude of the

Card 1/2

APPROVED FOR RELEASE: 08/23/2000 CIA-RDP86-00513R001548120004-6"

"APPROVED FOR RELEASE: 08/23/2000 CIA-RDP86-00513R001548120004-6

satellite above the Earth's surface is known. If the readings of several scanning pickups are known, which determine the line of horizon, then it is possible to calculate from them both the angle of turn and the altitude of the satellite. In the fourth part of the article the authors analyze the problem of forecasting the orientation of the satellite in space. For this purpose they derive the formula for the angular velocity of the satellite using three Euler dynamical equations of rotational motion and three kinematic equations. Then, knowing the angular velocity and time intervals expired from the beginning of motion, one can calculate for the future the orientation of the satellite in space. In conclusion the authors discuss the problem on the number of pickups necessary for determination of orientation; the number is eight, located at the vertices of a cube, of which four will be illuminated by the Sun. There is 1 figure.

SUBMITTED: February 26, 1962.

APPROVED FOR RELEASE: 08/23/2000 CIA-RDP86-00513R001548120004-6"

"APPROVED FOR RELEASE: 08/23/2000 CIA-RDP86-00513R001548120004-6

KRYLOV, G.N.; MARTYNENKO, I.A.; POGREBNYAK, Ye.B.; SERGEYEVA, M.K.

Independent optical method for determining the orientation of an artificial earth satellite in space. Isk.sput.Zem. no.14:145-153 '62. (MIRA 15:11)
(Artificial satellites—Tracking)

APPROVED FOR RELEASE: 08/23/2000 CIA-RDP86-00513R001548120004-6"

"APPROVED FOR RELEASE: 08/23/2000 CIA-RDP86-00513R001548120004-6

SERGEYEVA, M.M. (Leningrad)

Problems in analyzing the work of a Leningrad first aid station.
Sov.med. 21 no.10:132-137 O '57. (MIRA 11:1)
(FIRST AID
station in Leningrad, work analysis)

APPROVED FOR RELEASE: 08/23/2000 CIA-RDP86-00513R001548120004-6"

"APPROVED FOR RELEASE: 08/23/2000 CIA-RDP86-00513R001548120004-6

SERGEYEVA, M.M. (Leningrad, ul. Rentgena, d.5, kv.17)

Diagnosis and treatment of acute pancreatitis in Leningrad hospitals [with summary in English, p.158]. Vest.khir. 78 no.6:60-64 Je '57. (MIRA 10:8)

1. Iz Leningradskogo nauchno-issledovatel'skogo instituta skoroy pomoshchi im. Yu.Yu. Dzhanelidze (dir. - dotsent D.N.Fedorov) i Leningradskoy skoroy pomoshchi (gl. vrach - M.M.Sergeyeva)

(PANCREATITIS
acute, diag. & ther.)

APPROVED FOR RELEASE: 08/23/2000 CIA-RDP86-00513R001548120004-6"

"APPROVED FOR RELEASE: 08/23/2000 CIA-RDP86-00513R001548120004-6

1ST AND 2ND ORDERS

PROCESSES AND PROPERTIES INDEX

3RD AND 4TH ORDERS

BC SERGEYEVA M. M

B-II-1

Determination of o-nitroaniline in presence of its isomerides and of other substances. M. M. Sergeyeva (Prom. Org. Chim., 1940, 7, 150—154).—4—5 g. of particular sample dissolved in 500 ml. of 20% H_2SO_4 and the vol. is made up to 500 ml. 20 ml. of solution are heated with Zn, to reduce o-NO_2-C_6H_4-NH_2 (I) to o-$C_6H_4(NH_2)_2$, the solution is filtered, and 10 ml. of 0·2N-$BaCl_2$ and H_2O to 100 ml. are added to the filtrate. Ten drops of 20% CH_3Ac_2 in EtOH are added to 25 ml. of this solution, and the coloration developing after 2 min. is compared with that given similarly by standard (I). 2 : 4-$(NO_2)_2C_6H_3$-NH_2 interferes; other possible contaminants (NH_2Ph, toluidine, m- and p-NO_2-C_6H_4-NH_2, o- and p-NO_2-C_6H_4-OH, o-, m-, and p-NH_2-C_6H_4-SO_3H) do not interfere. R. T.

COMMON ELEMENTS

COMMON VARIABLES INDEX

MATERIALS INDEX

ASM-SLA METALLURGICAL LITERATURE CLASSIFICATION

AUTHOR INDEX

APPROVED FOR RELEASE: 08/23/2000 CIA-RDP86-00513R001548120004-6"

"APPROVED FOR RELEASE: 08/23/2000 CIA-RDP86-00513R001548120004-6

SERGEYEVA, M. M.

USSR/Chemistry -Thiols Aromatic Compounds Aug 49

"Research in the Field of Aromatic Sulfur Compounds," V. O. Lukashevich, M. M. Sergeyeva, Sci Res Inst of Org Intermediate Products and Dyestuffs imeni K. Ye. Voroshilov, 17½ pp

"Zhur Obshch Khim" Vol XIX, No 8 p. 1473 - 1510

Studied several reactions and complex conversions of sulfur compounds of benzene series. Showed that reducing cleavage of aromatic disulfides by alkaline sulfides proceeds under formation of mercaptides, thiomercaptides (RS_2Na), and dithiomercaptides (RS Na). Obtained thiomercaptides in form of salts of heavy metals. Studied several of their properties. Action on arylthiomercaptides on halogen-substituted nitro-compounds with different radicals did not produce complex disulfides $R_1S - SR_2$, as expected, but a mixture of two simple ones. Studied reducing action of mercaptides and thiomercaptides on (complex) disulfides. Cites 2,2'-dinitrodiphenyltrisulfide as example of instability of compounds of this type. Depending on conditions of the reaction, they can undergo either reductive cleavage of desulfidation. Submitted 12 Mar 48.

PA 149T34

APPROVED FOR RELEASE: 08/23/2000 CIA-RDP86-00513R001548120004-6"

"APPROVED FOR RELEASE: 08/23/2000 CIA-RDP86-00513R001548120004-6

SERGEYEVA M.M.

CA

10

Some reactions of aromatic sulfides. V. O. Lukashevich and M. M. Sergeeva. *Doklady Akad. Nauk S.S.S.R.* **67**, 1041-4(1949). The reaction of disulfides with alk. sulfides in alc. or aq. alc. media proceeds according to $RSSR + 2Na^+ + S_n^{--} \rightarrow RS^- + RS_{n-1}^- + 2Na^+$. This is supported by the following: Ph_2S_2 (2.18 g. in 50 ml. MeOH treated with either Na_2S or Na_2S_2 in MeOH (0.01 mol. in 20 ml.) gave complete soln. in 15 min. with immediate formation of an orange color. Addn. of 0.02 mole $2,4\text{-}(O_2N)_2C_6H_3Cl$ to the solns., letting stand overnight, and extg. with Me_2CO, gave 10% and 79.9%, resp., *2,2',4,4'-tetranitrodiphenyl disulfide*; evapn. of the residual liquid gave a low-melting product, which on shaking with aq. alc. Na_2S gave *2,4-dinitrodiphenyl sulfide* (29.9 and 20.6%, resp.), m. 119.5-20.5°, while concn. of the Me_2CO ext. gave 55.3 and 4.30%, resp., *2,2',4,4'-dinitrodiphenyl sulfide*, m. 190-7°. Heating the final filtrate to 60° and oxidation of the RSH with ferricyanide gave 73.8 and 73.3%, resp., Ph_2S_2. The deviation from the equation is explained by reduction of the intermediate mixed di- and trisulfides by the RSH. $2\text{-}O_2NC_6H_4S_2Ph$ with PhSNa in MeOH gave R_2S_2 and R'_2S_2. *2,4'-Dinitrodiphenyl disulfide*, m. 150-60°, with $2\text{-}O_2NC_6H_4SNa$ in MeOH gave $(2\text{-}O_2NC_6H_4S)_2$ and $4\text{-}O_2NC_6H_4SNa$, while $2\text{-}O_2NC_6H_4S_2Na$ gave the same products. *2,2',4'-Trinitrodiphenyl disulfide*, m. 175-6°, and $2,4\text{-}(O_2N)_2C_6H_3SNa$ gave R_2S_2 and R'_2S_2, while $2\text{-}O_2NC_6H_4SNa$ gave $(2\text{-}O_2NC_6H_4S)_2$ and $2,4\text{-}(O_2N)_2C_6H_3SNa$, and $2,4\text{-}(O_2N)_2C_6H_3S_2Na$ gave $(2\text{-}O_2NC_6H_4S)_2$ and $[2,4\text{-}(O_2N)_2C_6H_3S]_2$. Na_2S in C_6H_6 with $2\text{-}O_2NC_6H_4SCl$ gave 50% $(2\text{-}O_2NC_6H_4)_2S_3$, m. 172-4°, readily cleaved by metal sulfides or reactive Na mercaptides, while less active RSNa derivs. [such as $2,4\text{-}(O_2N)_2C_6H_3SNa$] lead to loss of one S atom and give $(2\text{-}O_2NC_6H_4S)_2$; the same takes place in alc. solns. of weak bases. The RS_2Na derivs. give in EtOH with $AgNO_3$ or $Pb(OAc)_2$ immediate ppts. which darken rapidly in air, forming PbS or Ag_2S; the solns. of RS_2Na (or K) in alc. or H_2O are rapidly oxidized by air, yielding R_2S_2 and S; without access of air a slow decompn. leads to RSNa and S. G. M. Kosolapoff

APPROVED FOR RELEASE: 08/23/2000 CIA-RDP86-00513R001548120004-6"

"APPROVED FOR RELEASE: 08/23/2000 CIA-RDP86-00513R001548120004-6

YEGOROVA, L.M.; SERGEYEVA, M.M.

Some secondary reactions during methylation of 16,17 -dioxyviolanthrone. Khim. nauka i prom. 3 no.4:542 '58. (MIRA 11:10)
(Violanthrone)

APPROVED FOR RELEASE: 08/23/2000 CIA-RDP86-00513R001548120004-6"

"APPROVED FOR RELEASE: 08/23/2000 CIA-RDP86-00513R001548120004-6

LUKASHEVICH, V.O.; SERGEYEVA, M.N.; CHLENOVA, R.S.

Investigation in the field of sulfides of the aromatic series. Org. poluprod. i kras. no.1:160-167 '59. (MIRA 14:11)
(Sulfides)
(Aromatic compounds)

APPROVED FOR RELEASE: 08/23/2000 CIA-RDP86-00513R001548120004-6"

"APPROVED FOR RELEASE: 08/23/2000 CIA-RDP86-00513R001548120004-6

SERGEYEVA, M.M. (Leningrad)

Methods for checking operational indicators of the emergency medical service. Sov. zdrav. 19 no.9:28-32 '60. (MIRA 13:11)

1. Iz 10-y stantsii Leningradskoy skoroy pomoshchi (glavnyy vrach V.N.Golyakov).
(FIRST AID IN ILLNESS AND INJURY)

APPROVED FOR RELEASE: 08/23/2000 CIA-RDP86-00513R001548120004-6"

"APPROVED FOR RELEASE: 08/23/2000 CIA-RDP86-00513R001548120004-6

SERGEYEVA, M.T. [Serhieieva, M.T.]

Pelecypods from the lower and from the lower part of the middle Carboniferous in the Donets Basin. Geol.zhur. 18 no.3:56-70 '58. (MIRA 11:11)

(Donets Basin--Lamellibranchiata, Fossil)

APPROVED FOR RELEASE: 08/23/2000 CIA-RDP86-00513R001548120004-6"

"APPROVED FOR RELEASE: 08/23/2000 CIA-RDP86-00513R001548120004-6

SERGEYEVA, M.T. [Sergieieva, M.T.]

Taxodonta of the lower Carboniferous period in the Donets Basin and its western extension. Geol.zhur. 18 no.5:23-35 '58. (MIRA 12:1)

(Donets Basin--Mollusks, Fossil)

APPROVED FOR RELEASE: 08/23/2000 CIA-RDP86-00513R001548120004-6"

"APPROVED FOR RELEASE: 08/23/2000 CIA-RDP86-00513R001548120004-6

SERGEYEVA, M.T. [Serhieieva, M.T.]

Fresh-water pelecypods from the lower and middle Carboniferous of the western extention of the Donets Basin. Geol. zhur. 20 no. 5:88-93 '60. (MIRA 14:1)
(Donets Basin—Lamellibranchiata, Fossil)

APPROVED FOR RELEASE: 08/23/2000 CIA-RDP86-00513R001548120004-6"

"APPROVED FOR RELEASE: 08/23/2000 CIA-RDP86-00513R001548120004-6

SERGEYEVA, M.Ya.

Central nervous regulation of immunogenesis in enteric immunization against dysentery. Biul eksp. biol. i med. 37 no.5:66-68 My '54. (MLRA 7:7)

1. Iz Molotovskogo nauchno-issledovatel'skogo instituta vaktsin i syvorotok (dir. A.P.Kobyl'skiy)
(DYSENTERY, immunology,
*vacc., CNS regulation of immunogenesis in orally vaccinated rabbits)
(CENTRAL NERVOUS SYSTEM, physiology,
*regulation of immunogenesis in orally vaccinated rabbits against dysentery)
(VACCINES AND VACCINATION,
*dysentery vacc., CNS regulation of immunogenesis in orally vaccinated rabbits)

APPROVED FOR RELEASE: 08/23/2000 CIA-RDP86-00513R001548120004-6"

"APPROVED FOR RELEASE: 08/23/2000 CIA-RDP86-00513R001548120004-6

SERGEYEVA, N. [Siarheeva, N.]

The village of Putrishki; a collective farm museum tells its story. Rab.i sial. 37 no.6:6-7 Je '61. (MIRA 15:2)
(Grodno District—Historical museums)

APPROVED FOR RELEASE: 08/23/2000 CIA-RDP86-00513R001548120004-6"

"APPROVED FOR RELEASE: 08/23/2000 CIA-RDP86-00513R001548120004-6

SERGEYEVA, N. [Siarheeva, N.]

Their biographies have begun here. Rab. i sial. 37 no. 4:6-7 Ap '61. (MIRA 14:4)

(Polotsk—Construction workers)

APPROVED FOR RELEASE: 08/23/2000 CIA-RDP86-00513R001548120004-6"

"APPROVED FOR RELEASE: 08/23/2000 CIA-RDP86-00513R001548120004-6

SERGEYEVA, N.A.; SUMINA, Ye.B.

Acclimatization of bearded partridges and reacclimatization of white partridges in the central zone. Ornitologiia no.6: 86-95 '63. (MIRA 17:6)

APPROVED FOR RELEASE: 08/23/2000 CIA-RDP86-00513R001548120004-6"

"APPROVED FOR RELEASE: 08/23/2000 CIA-RDP86-00513R001548120004-6

L 19447-63 EWT(1)/EWP(q)/EWT(m)/FCC(w)/FS(v)-2/FCS/BDS/ES(a)/ES(j)/ES(c)/ES(k)/ES(s)-2/ES(t)-2/ES(v)/EEO-2 AEDC/AFFTC/ASD/AFMDC/ESD-3/APGC/SSD Pb-4/Pi-4/Pt-4/Po-4/Pe-4/Pq-4 TT/A/WH/AR/RD/K/DD

ACCESSION NR: AT3006866 S/2560/63/000/015/0102/0103

AUTHOR: Keirim-Markus, I. B.; Kovalev, Ye. Ye.; Sergeyeva, N. A.; Uspenskiy, L. N.

TITLE: Measurement of doses of radiation received by Yu. A. Gagarin and G. S. Titov during the first space flights

SOURCE: AN SSSR. Iskusst. sputniki Zemli, no. 15, 1963, 102-103

TOPIC TAGS: radiation dosimeter, ILK dosimeter, IFKN photodosimeter, proton, neutron, Gamma radiation, thermoluminescent glass

ABSTRACT: Cosmonauts Gagarin and Titov carried ILK luminescent dosimeters in the breast pockets of their oversuits. Each cosmonaut carried three dosimeters with 3.2-mm Al filters, three with 1.3-mm Pb filters, and one without a filter. The dosimeter readings for Gagarin were: 2.9, 2.4, and 1.3 mrad for Al filters; 0.8, 2.2, and 3.0 mrad for Pb filters; and 1.6 mrad without a filter. The readings for Titov were: 12.0, 12.4, and 15.0 mrad for Al filters; 8.0, 10.0, and 8.0 mrad for Pb filters; and 12.0 mrad without a filter. Control dosimeters on the ground registered 0.5—0.6 mrad per diem.

Card 1/2

APPROVED FOR RELEASE: 08/23/2000 CIA-RDP86-00513R001548120004-6"

"APPROVED FOR RELEASE: 08/23/2000 CIA-RDP86-00513R001548120004-6

L 19447-63
ACCESSION NR: AT3006866

2

The two cosmonauts also carried IFKN photodosimeters for the detection of neutron and γ-radiation in special pockets located on the belt of the inner suit. In addition, Titov carried a thermoluminescent glass for the registration of γ-rays and high-energy protons (from 0.1 to 10^6 rad) in a breast pocket. Bremsstrahlung with an energy of 10^5 ev was recorded for Titov. The dose of primary cosmic radiation for the two cosmonauts was 0.4—0.6 mrad per orbit. The similarity of results in the two flights indicates that primarily cosmic radiation was received and that solar flares had little effect. Assuming the RBE to be 7, the absorbed dose received by Titov did not exceed 60 mber. Orig. art. has: 1 table.

ASSOCIATION: none

SUBMITTED: 14Jul62 DATE ACQ: 29Jul63 ENCL: 00

SUB CODE: AM NO REF SOV: 007 OTHER: 001

Card 2/2

APPROVED FOR RELEASE: 08/23/2000 CIA-RDP86-00513R001548120004-6"

"APPROVED FOR RELEASE: 08/23/2000 CIA-RDP86-00513R001548120004-6

L 19451-63 EWT(1)/FCC(w)/FS(v)-2/BDS/ES(a)/ES(j)/ES(c)/ES(k)/ES(t)-2/EEO-2/ES(v) AFFTC/ASD/AMD/AFMDC/ESD-3 Pb-4/Pi-4/Po-4/Pq-4/Pe-4 TT/A/AR/RD/K/DD

ACCESSION NR: AP3007350 S/0293/63/001/001/0179/0181

AUTHOR: Keirim-Markus, I. B.; Sergeyeva, N. A.; Uspenskiy, L. N.

TITLE: Doses of radiation absorbed by Nikolayev and Popovich during their group flight

SOURCE: Kosmicheskiye issledovaniya, v. 1, no. 1, 1963, 179-181

TOPIC TAGS: radiation dosimeter, ILK dosimeter, DKP-50 dosimeter, IKS dosimeter, IFKN photodosimeter, space flight, RBE, bremsstrahlung

ABSTRACT: In addition to ILK dosimeters, Nikolayev and Popovich carried DKP-50 (2 to 50 r) dosimeters in special pockets located on their right hip, large glass IKS dosimeters (for detection of γ-rays and high-energy protons in the 0.02 to 2 x 10^6 rad range) in special abdominal pouches of their oversuits, and IFKN photodosimeters with NIKFI photoplates of the "R" and "Ya" types (for the detection of heavy charged particles and products of nuclear interaction). Absorbed doses were too small to be registered by the DKP-50 or the small IKS glass dosimeters. Average dosimeter readings in mrad for other instruments are shown in Table 1 of the Enclosure. For the

Card 1/2

APPROVED FOR RELEASE: 08/23/2000 CIA-RDP86-00513R001548120004-6"

"APPROVED FOR RELEASE: 08/23/2000 CIA-RDP86-00513R001548120004-6

L 19451-63
ACCESSION NR: AP3007350

2

calculation of absorbed doses in biological tissue, a correction factor of 1.15 was applied to the ILK and IFKN readings and 1.1 to the IKS reading. Absorbed doses in tissue mrad are shown in Table 2. The average absorbed dose in tissue mrad/hr was 0.65 ±0.03 for Vostok-3 and 0.65 ±0.07 for Vostok-4 as compared with 0.36 for the second orbital spaceship and 0.4 for Vostok-2. The bremsstrahlung for Nikolayev and Popovich was 0.07 to 0.08 mrad/hr, while Titov's was 0.17 to 0.23 mrad/hr. Nikolayev's total bremsstrahlung dose with quantum energies of 200 to 500 Kev was 8 ±4 mrad. IFKN data indicate that the upper limit for absorbed doses of thermal neutrons was 5×10^7 neutrons/cm^2 while the upper limit for intermediate and fast neutrons in spaceship cabins was 10^7 neutrons/cm^2. Assuming an RBE factor of 7, the absorbed tissue dose received by the cosmonauts during flight becomes 0.43 ber for Nikolayev and 0.32 ber for Popovich. Orig. art. has: 2 tables.

ASSOCIATION: none

SUBMITTED: 17Oct62 DATE ACQ: 21Oct63 ENCL: 02

SUB CODE: AM NO REF SOV: 007 OTHER: 007

Card 2/2

APPROVED FOR RELEASE: 08/23/2000 CIA-RDP86-00513R001548120004-6"

"APPROVED FOR RELEASE: 08/23/2000 CIA-RDP86-00513R001548120004-6

ACCESSION NR: AP4034803 S/0293/64/002/002/0304/0306

AUTHOR: Bochvar, I. A.; Vasil'yeva, A. A.; Keirim-Markus, I. B.; Prosina, T. I.; Sergeyeva, N. A.; Uspenskiy, L. N.

TITLE: Tissue dose of cosmic radiation received by V. F. Bykovskiy and V. V. Tereshkova during tandem orbital flight

SOURCE: Kosmicheskiye issledovaniya, v. 2, no. 2, 1964, 304-306

TOPIC TAGS: tandem flight, Vostok 5, Vostok 6, cosmic radiation, thermal neutrons

ABSTRACT: Dosimetric readings taken during tandem orbital flights of the Vostok-5 (Bykovskiy) and the Vostok-6 (Tereshkova) show that the cosmic radiation doses absorbed by cosmonauts were 80 ±5 mrad and 44 ±5 mrad, respectively. Comparison of the above figures with measurements taken during preceeding flights show that the average intensity of the absorbed radiation was 0.65 mrad x hr^{-1} or 16 mrad x 24 hr^{-1}. The estimates of absorbed doses of thermal neutrons were $(1 \pm 15) \cdot 10^{-4}$ and $(7 \pm 15) \cdot 10^{-4}$ rem for the Vostok-5 and the Vostok-6, respectively. Therefore the respective fluxes of thermal neutrons were $(1 \pm 16) \cdot 10^{5}$ and

Card 1/2

APPROVED FOR RELEASE: 08/23/2000 CIA-RDP86-00513R001548120004-6"

"APPROVED FOR RELEASE: 08/23/2000 CIA-RDP86-00513R001548120004-6

ACCESSION NR: AP4034803

$(8 \pm 16) \cdot 10^5$ cm^{-2} while their densities were 0.2 ±4 and 3 ±7 $cm^{-2} \cdot sec^{-1}$, respectively. The radiation levels on the outer skin of the space capsules were approximately 2—3 times higher than inside the space ships.

ASSOCIATION: none

SUBMITTED: 14Oct63 DATE ACQ: 20May64 ENCL: 00

SUB CODE: AM NO REF SOV: 004 OTHER: 002

Card 2/2

APPROVED FOR RELEASE: 08/23/2000 CIA-RDP86-00513R001548120004-6"

"APPROVED FOR RELEASE: 08/23/2000 CIA-RDP86-00513R001548120004-6

SOMOVA, N.M.; ~~SERGEYEVA, N.A.~~

Pathogenic microflora in rodents found in a harbor area. Zhur. mikrobiol.epid. i immun. 28 no.9:123-128 S '57. (MIRA 10:12)

1. Iz Leningradskoy protivochumnoy laboratorii Ministerstva zdravookhraneniya SSSR.
(RODENTS,
pathogenic microorganisms isolated from various animals found in harbor area (Rus))

APPROVED FOR RELEASE: 08/23/2000 CIA-RDP86-00513R001548120004-6"

"APPROVED FOR RELEASE: 08/23/2000 CIA-RDP86-00513R001548120004-6

17(2,6)

SOV/16-59-6-19/46

AUTHORS: Sergeyeva, N.A., Somova, N.M. and Gur'yanova, L.I.

TITLE: The Pathogenic Microflora of Rodents, Obtained From the Leningrad Merchant Port. II.

PERIODICAL: Zhurnal mikrobiologii, epidemiologii i immunobiologii, 1959, 30, Nr 6, pp 91-95 (USSR)

ABSTRACT: A systematic study of rodents captured in the Leningrad dock area revealed, among other pathogenic microbes, many strains of Erysipelothrix rhusiopathiae. N.G. Olsuf'yev, Ye.M. Tsvetkova, Dunayeva, G.D. Vilyavin and N.I. Kratokhvil' have also shown that these bacteria may be found in rodents and other small animals. V.K. Stefanskiy and A.A. Grinfel'd described 35 cases of erysipeloid among workers in Odessa Fish Plants. P. Svintsov, G.I. Rozhkov, I.S. Gil'man, F.N. Slipenko and A.I. Brind noted cases of erysipelas among veterinary workers and workers in the meat industry. In the present study rodents (mostly grey and black rats) were captured from all parts of the dock area and dock installations. Animals infected with Erysipelothrix rhusiopathiae were found only in the Kleyevoy zavod (Glue Plant), the

Card 1/2

APPROVED FOR RELEASE: 08/23/2000 CIA-RDP86-00513R001548120004-6"

"APPROVED FOR RELEASE: 08/23/2000 CIA-RDP86-00513R001548120004-6

SOV/16-59-6-19/46

The Pathogenic Microflora of Rodents, Obtained From the Leningrad Merchant Port. II.

storages and port refrigerator section. Epidemiological study revealed a connection between the infected rodents and the incidence of erysipelas among workers in the storehouses, refrigerator section, glue plant, etc. There are: 15 Soviet references and 1 table.

ASSOCIATION: Leningradskaya protivochumnaya portovaya i gorodskaya nablyudatel'naya stantsiya (Leningrad Port and City Anti-plague Observation Station).

SUBMITTED: May 21, 1958

Card 2/2

APPROVED FOR RELEASE: 08/23/2000 CIA-RDP86-00513R001548120004-6"

"APPROVED FOR RELEASE: 08/23/2000 CIA-RDP86-00513R001548120004-6

ASTAF'YEV, K.V.; KAZANTSEV, G.V.; TSIBUL'SKIY, K.I.; SHCHERBOV, D.P.; SHMANENKOV, I.V., redaktor; SERGEYEVA, N.A.; BORISOV, A.S., tekhnicheskiy redaktor

[Team and continuous work methods in chemical laboratories] Brigadno-potochnyi metod raboty v khimicheskikh laboratoriiakh. Trudy lab.geol.upr. no.2:3-47 '52. (MLRA 7:11)
(Chemical laboratories)

APPROVED FOR RELEASE: 08/23/2000 CIA-RDP86-00513R001548120004-6"

"APPROVED FOR RELEASE: 08/23/2000 CIA-RDP86-00513R001548120004-6

SHATALOV, Ye.T.; DYUKOV, A.I., redaktor; SERGEYEVA, N.A., redaktor; MANINA, M.P., tekhnicheskiy redaktor

[Aerial magnetic survey; instructions] Instruktsiia po aeromagnitnoi s"emke. Moskva, Gos. izd-vo geologicheskoi lit-ry, 1952. 56 p. [Microfilm] (MLRA 7:10)

1. Zamestitel' ministra geologii (for Shatalov) 2. Russia (1923- U.S.S.R.) Glavnoye geofizicheskoye upravleniye.
(Geological surveys)

APPROVED FOR RELEASE: 08/23/2000 CIA-RDP86-00513R001548120004-6"

"APPROVED FOR RELEASE: 08/23/2000 CIA-RDP86-00513R001548120004-6

SERGEYEVA, N.A.

ALADINSKIY, P.I.; ARONSKIND, S.Sh.; GLAZKOVSKIY, V.A.; KVASKOV, A.P.; SUVOROV, F.S.; SHMANENKOV, I.V., redaktor; BASMANOV, V.A., redaktor; SERGEYEVA, N.A., redaktor; MANINA, M.P., tekhnicheskiy redaktor

[Results of the organization and work of an ore-dressing laboratory] Opyt organizatsii i raboty obogatitel'noi laboratorii. Trudy lab. geol.upr. no.3:3-57 '52. [Microfilm] (MLRA 7:11)
(Ore dressing)

APPROVED FOR RELEASE: 08/23/2000 CIA-RDP86-00513R001548120004-6"

"APPROVED FOR RELEASE: 08/23/2000 CIA-RDP86-00513R001548120004-6

POLYAKOVA, N.V., redaktor; SERGEYEVA, N.A., redaktor; MANINA, M.P., tekhnicheskiy redaktor

[Geophysical prospecting of ore deposits] Geofizicheskaia razvedka rudnykh mestorozhdenii. Moskva, Gos. izd-vo geologicheskoi lit-ry, 1953. 137 p. [Microfilm] (MLRA 7:10)

1. Moscow. Vsesoyuznyy nauchno-issledovatel'skiy institut razvedochnoy geofiziki.
(Prospecting--Geophysical methods)

APPROVED FOR RELEASE: 08/23/2000 CIA-RDP86-00513R001548120004-6"

"APPROVED FOR RELEASE: 08/23/2000 CIA-RDP86-00513R001548120004-6

KARYUKINA, V.N.; ROZHKOVA, Ye.V., redaktor; SERGEYEVA, N.A., redaktor.

[Determining the pH of suspension of minerals] Opredelenie pH suspenzii mineralov. Moskva, Gos. izd-vo geol. lit-ry, 1953. 25 p. (MLRA 7:4)

(Mineralogical chemistry)

APPROVED FOR RELEASE: 08/23/2000 CIA-RDP86-00513R001548120004-6"

"APPROVED FOR RELEASE: 08/23/2000 CIA-RDP86-00513R001548120004-6

LAPTEV, Fedor Fedorovich; SPITSYN, N.I., redaktor; SERGEYEVA, N.A. redaktor; POPOV, N.D., tekhnicheskiy redaktor

[Water analysis] Analiz vody. Pod red. N.I. Spitsyna. Moskva Gos.nauchno-tekhn.izd-vo lit-ry po geologii i okhrane nedr. 1955. 143 p. (MLRA 8:10)
(Water--Analysis)

APPROVED FOR RELEASE: 08/23/2000 CIA-RDP86-00513R001548120004-6"

"APPROVED FOR RELEASE: 08/23/2000 CIA-RDP86-00513R001548120004-6

BOGOMOLOV, Gerasim Vasil'yevich; BOCHEVER, F.M., redaktor; CHURINOV, M.V., redaktor; SERGEYEVA, N.A., redaktor; POPOV, N.D., tekhnicheskiy redaktor.

[Principles of hydrogeology] Osnovy gidrogeologii. Izd.2-oe, dop. i perer. Moskva, Gos.nauchno-tekhn.izd-vo lit-ry po geologii i okhrane nedr, 1955. 189 p. (MLRA 9:6)
(Water, Underground)

APPROVED FOR RELEASE: 08/23/2000 CIA-RDP86-00513R001548120004-6"

"APPROVED FOR RELEASE: 08/23/2000 CIA-RDP86-00513R001548120004-6

SHERBAKOV, D.I., akademik, redaktor; DROZDOV, M.D., redaktor; SHMANENKOV, I.V., redaktor; POGREBITSKIY, Ye.O., professor; GOLUBYATNIKOV, V.D. professor, VARFOLOMEYEV, P.N.,; VUL'F, T.Ye.,; TYZHNOV, A.V., redaktor; SERGEYEVA, N.A., redaktor; KATS, M.Ye., tekhnicheskiy redaktor.

[Mineral resources in the national economy; an album] Poleznye iskopaemye v narodnom khoziaistve; al'bom. Moskva, Gos.nauchno-tekhn. izd-vo lit-ry po geol. i okhrane nedr. No.1 [Energy-producing raw materials ------- Explanatory text] Energeticheskoe syr'e 1955. 12 plates ---- Poiasnitel'nyi tekst. Sost. P.N.Varfolomeev i T.E. Vul'f. Konsul'tanty E.O.Pogrebitskii i V.D.Golubiatnikov. 29 p. (Fuel) (MLRA 8:11)

APPROVED FOR RELEASE: 08/23/2000 CIA-RDP86-00513R001548120004-6"

"APPROVED FOR RELEASE: 08/23/2000 CIA-RDP86-00513R001548120004-6

TURCHUK, Anatoliy Artem'yevich; TITOV, Petr Savvat'yevich; INGOROV, Mikhail Sergeyevich; ORLOV, Lev Nikolayevich; MEDVEDEV, Nikolay Vasil'yevich; BUBNOV, Ye.S., redaktor; SERGEYEVA, N.A., redaktor; GUROVA, O.A., tekhnicheskiy redaktor

[ZIF-300 core drilling unit] Burovoi agregat ZIF-300. Moskva, Gos.nauchno-tekhn.izd-vo lit-ry po geol.i okhrane nedr, 1955. 197 p. [Microfilm] (Boring machinery) (MLRA 9:3)

APPROVED FOR RELEASE: 08/23/2000 CIA-RDP86-00513R001548120004-6"