"APPROVED FOR RELEASE: 07/13/2001 CIA-RDP86-00513R001343210003-4

KALINOVSKAYA, I.Ya.; PROKHOROVA, E.S.

Otoneurological symptoms in arterial hypotension. Zhur. nevr. i. psikh. 63 no.6:850-852 '63. (MIRA 1.:6)

1. Institut nevrologii (direktor - prof. N.V. Konovalov) AMN SSSR, Moskva.

APPROVED FOR RELEASE: 07/13/2001 CIA-RDP86-00513R001343210003-4"

"APPROVED FOR RELEASE: 07/13/2001 CIA-RDP86-00513R001343210003-4

PROKHOROVA, E.S.

Treatment of patients with hysterical paralysis. Zhur. nevr. i psikh. 64 no.8:1167-1171 '64. (MIRA 17:12)

1. Institut nevrologii (direktor - prof. N.V. Konovalov) AMN SSSR, Moskva.

APPROVED FOR RELEASE: 07/13/2001 CIA-RDP86-00513R001343210003-4"

"APPROVED FOR RELEASE: 07/13/2001 CIA-RDP86-00513R001343210003-4

ALEKSEYEV, M.A.; NAYDEL', A.V.; PROKHOROVA, E.S.

Conditioned reaction to the duration of stimulation. Trudy Inst. vys.nerv.deiat. Ser.fiziol. 7:3-14 '62. (MIRA 16:2)
(CONDITIONED RESPONSE)

APPROVED FOR RELEASE: 07/13/2001 CIA-RDP86-00513R001343210003-4"

"APPROVED FOR RELEASE: 07/13/2001 CIA-RDP86-00513R001343210003-4

3

Changes in thiamine (vitamin B_1) requirements in the course of therapy with prolonged sleep. L. K. Bauman, E. S. Prokhorova, and V. N. Kuz'mina. *Zhur. Nevropatol. i Psikhiatrii im. Korsakova* 53, 42-6(1953).—Under study were 40 patients of whom 27 suffered from hypertonic diseases, and the rest had a variety of injuries of the nervous system. The daily output of thiamine via the urine in each of the patients was first detd. Patients received 0.6-1.2 g. of barbamil; some received supplemental doses of chloral hydrate. The effect of sleep induced by these drugs on the elimination-rate of thiamine via the urine was then detd. Prior to the [illegible] therapy the patients eliminated on the av. 300 γ of thiamine which indicates that the condition of hypertonia by itself did not produce a thiamine deficiency in the organism. During the course of sleep therapy the elimination of thiamine via the urine was gradually reduced, but not to a considerable extent at first; it then dropped to a very low level which persisted even after sleep therapy was discontinued. Signs of intoxication appeared in some patients which coincided with a sudden drop in the urinary thiamine secretion, which pointed to the fact that in prolonged medicated sleep, unlike normal physiological sleep, the organism's thiamine requirements increase. On the basis of that patient subjected to narcotic sleep therapy were [illegible] concurrently with glucose feeding. [illegible] or completely [illegible] assumed a more favorable picture. The urinary thiamine elimination returned to its normal level and persisted after the patients were out of their sleep, despite the fact that the supplemental administration of thiamine was discontinued.

B. S. Levine

APPROVED FOR RELEASE: 07/13/2001 CIA-RDP86-00513R001343210003-4"

"APPROVED FOR RELEASE: 07/13/2001 CIA-RDP86-00513R001343210003-4

PROKHOROVA, E.S.

Certain pathophysiological mechanisms of hysterical paralysis. Zhur.vys.nerv.deiat. 4 no.6:773-780 N-D '54. (MLRA 8:7)

1. Institut nevrologii Akademii meditsinskikh nauk SSSR.
(PARALYSIS, etiology and pathogenesis, hysteria, conditioned reflex technic of determ. of pathol. & physiol mechanisms)
(HYSTERIA, complications, paralysis, conditioned reflex technic of determ. of pathol. & physiol. factors)
(REFLEX, CONDITIONED, determ. of pathol. & physiol. factors in hysteric paralysis)

APPROVED FOR RELEASE: 07/13/2001 CIA-RDP86-00513R001343210003-4"

"APPROVED FOR RELEASE: 07/13/2001 CIA-RDP86-00513R001343210003-4

PROKHOROVA, G. N.

PETRUSHOV, A., doktor ekonom.nauk; AFANAS'YEV, L.A., kand.ekonom.nauk; DANILEVICH, M.V., kand.ekonom.nauk; YEGIAZAROVA, N.A., kand.ekonom. nauk; KOVALEV, Ye.V.; KOL', M.A.; KUZNETSOV, B.P., kand.ekonom. nauk; KUTSOBINA, N.K.; MARTYNOV, V.A., kand.ekonom.nauk; MEN'SHIKOVA, M.A.; NIKITENKO, B.A.; ONUFRIYEV, Yu.G.; PROKHOROVA, G.N.; RYDVANOV, N.F.; SEGAL', N.M., kand.istor.nauk; UKHOVA, A.M.; FARIZOV, I.O., kand.istor.nauk; SHIFRIN, E.L., doktor ekonom.nauk; SHLIKHTER, A.A., kand.ekonom.nauk; LISOVSKIY, Yu.P.; MARTYNOV, V.D.; GARSIA, L., red.; MOSKVINA, R., tekhn.red.

[Agriculture of capitalist countries; a statistical manual] Sel'skoe khoziaistvo kapitalisticheskikh stran; statisticheskii spravochnik. Otvet.red.A.Petrushov. Moskva, Izd-vo sotsial'no-ekon.lit-ry, 1959. 829 p. (MIRA 13:6)

1. Akademiya nauk SSSR. Institut mirovoy ekonomiki i mezhdunarodnykh otnosheniy.
(Agriculture--Statistics)

APPROVED FOR RELEASE: 07/13/2001 CIA-RDP86-00513R001343210003-4"

"APPROVED FOR RELEASE: 07/13/2001 CIA-RDP86-00513R001343210003-4

PROKHOROVA, G.V.; VINOGRADOVA, Ye.N.; LUKASHENKOVA, N.V.

Determination of antimony, bismuth, and lead impurities in citric acid. Metod. anal. khim. reak. i prepar. no.5/6:117-123 '63. (MIRA 17:9)

APPROVED FOR RELEASE: 07/13/2001 CIA-RDP86-00513R001343210003-4"

"APPROVED FOR RELEASE: 07/13/2001 CIA-RDP86-00513R001343210003-4

PROKHOROVA, I.A.

Morphological changes in monkeys as a result of inoculation with Coxsackie viruses of the subgroup B. Trudy Mosk. nauch.-issl. inst. virus. prep. 2:169-173 '61. (MIRA 17:1)

APPROVED FOR RELEASE: 07/13/2001 CIA-RDP86-00513R001343210003-4"

"APPROVED FOR RELEASE: 07/13/2001 CIA-RDP86-00513R001343210003-4

PROKhOROVA, I.A., Cand. Med. Sci., — (diss) "Pathomorphological experimental infection of Coxsackie B_2," Moscow, 1961, 16 pp (Central Institute for the Advanced Training of Physicians) 250 copies (KL-Supp 9-61, 192)

APPROVED FOR RELEASE: 07/13/2001 CIA-RDP86-00513R001343210003-4"

"APPROVED FOR RELEASE: 07/13/2001 CIA-RDP86-00513R001343210003-4

RUBTSOVA, L.K.; ANTONOVA, L.N.; D'YACHENKO, G.M.; GRACHEVA, N.M.; SYSOYEVA, L.A.; PROKHOROVA, I.I.; PLOTKINA, N.S.

Experience in the clinical use of novobiocin. Antibiotiki 10 no.10:930-934 O '65. (MIRA 18:12)

1. Vsesoyuznyy nauchno-issledovatel'skiy institut antibiotikov; Klinika infektsionnykh zabolevaniy II Moskovskogo meditsinskogo instituta i Institut klinicheskoy i eksperimental'noy khirurgii. Submitted Jan. 14, 1965.

APPROVED FOR RELEASE: 07/13/2001 CIA-RDP86-00513R001343210003-4"

"APPROVED FOR RELEASE: 07/13/2001 CIA-RDP86-00513R001343210003-4

RUBTSOVA, L.K.; BELOZEROVA, O.P.; EYDEL'SHTEYN, S.I.; SEMICH, A.I.; PROKHOROVA, I.I.

Some data on experimental clinical studies on oletetrine. Antibiotiki 10 no.1:79-83 Ja '65. (MIRA 18:4)

1. Vsesoyuznyy nauchno-issledovatel'skiy institut antibiotikov, Moskva.

APPROVED FOR RELEASE: 07/13/2001 CIA-RDP86-00513R001343210003-4"

"APPROVED FOR RELEASE: 07/13/2001 CIA-RDP86-00513R001343210003-4

PROKHOROVA, I. K.

7

7 7

The peroxide products in the catalysis of H_2O_2 decomposition with barium and molybdenum salts. II. [illegible] Bogdanov, T. I. Berkengelm, and I. K. Prokhorova. *Zhur. Fiz. Khim.* 30, 1223-7(1956); cf. *C.A.* 50, 16315a.—The peroxide products that are formed in the decompn. of H_2O_2 catalyzed simultaneously with Na_2MoO_4 and $BaCl_2$ were studied. For large concn. of H_2O_2 these products are red in soln. and yellow in pptd. form. The rate of this reaction decreases with increasing H^+ concn. The temp. coeff. of the reaction rate is 3.2, and the energy of activation is 21.2 kcal. All of the kinetic curves, regardless of the reaction conditions, have a max. (either sharp or slight). Two Ba permolybdates were isolated, a yellow compd. with the formula $BaMoO_3$ and a red compd. $BaMoO_5$. J. R. L.

Chem

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APPROVED FOR RELEASE: 07/13/2001 CIA-RDP86-00513R001343210003-4"

"APPROVED FOR RELEASE: 07/13/2001 CIA-RDP86-00513R001343210003-4

BOGDANOV, G.A.; BERKENGEYM, T.I.; PROKHOROVA, I.K.

Peroxide products in the catalysis of H_2O_2 by barium and molybdenum salts. Part 2. Zhur.fiz.khim. 30 no.6:1223-1227 Je '56. (MLRA 9:10)

(Hydrogen peroxide) (Barium salts) (Molybdenum salts)

APPROVED FOR RELEASE: 07/13/2001 CIA-RDP86-00513R001343210003-4"

"APPROVED FOR RELEASE: 07/13/2001 CIA-RDP86-00513R001343210003-4

BOGDANOV, G.A.; PROKHOROVA, I.K.

New strontium pertungstates and homogeneous catalysis of H_2O_2 by $Na_2WO_4+SrCl_2$ salts. Nauch.dokl.vys.shkoly; khim. i khim. tekh. no.2:264-267 '59. (MIRA 12:8)

1. Predstavlena kafedroy obshchey i neorganicheskoy khimii Moskovskogo tekstil'nogo instituta.
(Hydrogen peroxide) (Catalysis) (Alkaline earth tungstates)

APPROVED FOR RELEASE: 07/13/2001 CIA-RDP86-00513R001343210003-4"

"APPROVED FOR RELEASE: 07/13/2001 CIA-RDP86-00513R001343210003-4

SOV/63-4-3-29/31

5(2)

AUTHORS: Prokhorova, I.K., Bogdanov, G.A.

TITLE: The Homogeneous Catalysis of H_2O_2 by the Salts Na_2WO_4 + $SrCl_2$

PERIODICAL: Khimicheskaya nauka i promyshlennost', 1959, Vol 4, Nr 3, pp 413-414 (USSR)

ABSTRACT: It has been shown that $SrCl_2$ does not catalyze the decomposition process of H_2O_2, whereas Na_2WO_4 decomposes hydrogen peroxide. The addition of $SrCl_2$ to Na_2WO_4 decreases the reaction rate considerably. The reaction rate is directly proportional to the concentration of OH^- ions. In the temperature interval of 25 - 45°C the reaction rate changes appreciably which is explained by the formation of intermediate products. The relative concentration of the intermediate peroxide products is a function of the substrate and the temperature. The change of electric conductivity as well as the rate of catalysis is determined by the intermediate complexes. For explaining all phenomena, it is necessary to assume the formation of at least 3 complexes. There are 5 Soviet references.

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"APPROVED FOR RELEASE: 07/13/2001 CIA-RDP86-00513R001343210003-4

The Homogeneous Catalysis of H_2O_2 by the Salts Na_2WO_4 $SrCl_2$ SOV/63-4-3-29/31

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

SUBMITTED: November 3, 1958

Card 2/2

APPROVED FOR RELEASE: 07/13/2001 CIA-RDP86-00513R001343210003-4"

"APPROVED FOR RELEASE: 07/13/2001 CIA-RDP86-00513R001343210003-4

SOV/156-59-2-11/48

5(2)

AUTHORS: Bogdanov, G. A., Prokhorova, I. K.

TITLE: The Homogeneous Catalysis of H_2O_2 Caused by the Salts Na_2WO_4 + $SrCl_2$ and New Strontium Pertungstates (Gomogennyy kataliz H_2O_2 solyami Na_2WO_4 + $SrCl_2$ i novyye pervol'framaty strontsiya)

PERIODICAL: Nauchnyye doklady vysshey shkoly. Khimiya i khimicheskaya tekhnologiya, 1959, Nr 2, pp 264-267 (USSR)

ABSTRACT: The catalysis mentioned in the title is reversible and homogeneous. The curves of figure 1 show the effect of the strontium ion upon the decomposition of hydrogen peroxide: 1) The addition of $SrCl_2$ reduces the velocity with increasing concentration of Sr^{2+}-ions; 2) in the case of increasing concentration of $SrCl_2$ the maximum of the curves becomes flatter. Herefrom the conclusion is drawn that in the course of catalysis intermediate products form, i.e. strontium pertungstates of different composition. The activation energy E and the temperature coefficient γ were not constant in neutral medium but were dependent on the concentration and temperature: $dE/dc = d\gamma/dc < 0$ and $dE/dT = d\gamma/dT < 0$. In acid medium,

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"APPROVED FOR RELEASE: 07/13/2001 CIA-RDP86-00513R001343210003-4

SOV/156-59-2-11/48

The Homogeneous Catalysis of H_2O_2 Caused by the Salts Na_2WO_4 + $SrCl_2$ and New Strontium Pertungstates

however, $dE/dc = d\gamma/dc = 0$. The electric conductivity was measured in alkaline, acid and neutral medium (Fig 2, Table 1). Also from these measurements it was possible to draw conclusions to the formation of intermediate compounds. The latter were also found in isolated state and as strontium pertungstates of different composition: $SrWO_6 \cdot 5H_2O$, $SrWO_6 \cdot 2H_2O$, $SrWO_8 \cdot 3H_2O$, $SrWO_8 \cdot 2H_2O$. They decompose readily under separation of oxygen. Their heats of decomposition and the specific weights (Table 2) were determined for the purpose of proving their individualism. There are 2 figures, 2 tables, and 4 Soviet references.

PRESENTED BY: Kafedra obshchey i neorganicheskoy khimii Moskovskogo tekstil'nogo instituta (Chair of General and Inorganic Chemistry, Moscow Textile Institute)

SUBMITTED: June 20, 1958

Card 2/2

APPROVED FOR RELEASE: 07/13/2001 CIA-RDP86-00513R001343210003-4"

"APPROVED FOR RELEASE: 07/13/2001 CIA-RDP86-00513R001343210003-4

PROKHOROVA, I.K.; BOGDANOV, G.A. (Moscow)

Strontium pertungstates. Part 1. Zhur.fiz.khim. 35 no.10:2177-2181 O '61. (MIRA 14:11)

(Strontium tungstate)

APPROVED FOR RELEASE: 07/13/2001 CIA-RDP86-00513R001343210003-4"

"APPROVED FOR RELEASE: 07/13/2001 CIA-RDP86-00513R001343210003-4

BOGDANOV, G.A.; PROKHOROVA, I.K.

Kinetics of decomposition of peroxo salts in solution. Zhur. fiz. khim. 36 no.9:1932-1937 S '62. (MIRA 17:6)

1. Tekstil'nyy institut, Moskva.

APPROVED FOR RELEASE: 07/13/2001 CIA-RDP86-00513R001343210003-4"

"APPROVED FOR RELEASE: 07/13/2001 CIA-RDP86-00513R001343210003-4

KUZNETSOV, Ye.V.; PROKHOROVA, I.P.; FAYZULLINA, D.A.

Chemical transformations of polystyrene. Vysokom.soed. 3 no.10: 1544-1548 O '61. (MIRA 14:9)

1. Kazanskiy khimiko-tekhnologicheskiy institut imeni S.M. Kirova.

(Styrene polymers)

APPROVED FOR RELEASE: 07/13/2001 CIA-RDP86-00513R001343210003-4"

"APPROVED FOR RELEASE: 07/13/2001 CIA-RDP86-00513R001343210003-4

PROKHOROVA, I.P., ordinator

Results of operative treatment of goiter. Nauch. trudy SamMI 22:61-64 '63. (MIRA 17:9)

1. Iz kliniki fakul'tetskoy khirurgii Samarkandskogo meditsinskogo instituta.

APPROVED FOR RELEASE: 07/13/2001 CIA-RDP86-00513R001343210003-4"

"APPROVED FOR RELEASE: 07/13/2001 CIA-RDP86-00513R001343210003-4

ALEKSANDROVA, T.A., kand. tekhn. nauk; PROKHOROVA, I.Ya., inzh.

Russian and imported graphite-containing crucibles. Trudy Inst. ogneup. no.35:127-136 '63. (MIRA 17:12)

APPROVED FOR RELEASE: 07/13/2001 CIA-RDP86-00513R001343210003-4"

"APPROVED FOR RELEASE: 07/13/2001 CIA-RDP86-00513R001343210003-4

ACC NR: AR7004028 SOURCE CODE: UR/0081/66/000/020/M008/M008

AUTHOR: Novikov, A. N.; Prokhorova, I. Ya.

TITLE: Analysis of the properties of silicon carbide products with additions of high-refractory oxides

SOURCE: Ref. zh. Khimiya, Part II, Abs. 20M64

REF SOURCE: Tr. Vses. in-ta nauchno-issled. i proyektn. rabot ogneuporn. prom-sti, vyp. 37, 1965, 3-14

TOPIC TAGS: silicon carbide, refractory oxide, refractory product mass, oxidation, refractory addition

ABSTRACT: Silicon carbide containing 5—10% SiO_2 and 5—10% ZrO_2 are found to have the best mechanical properties: porosity 21.4—22.8%; yield strength during compression 524—630 kg/cm^2; bend strength 335—428 kg/cm^2; wear resistance 2.19—3.40 mm; thermal stability > 25 heating-casting cycles; deformation under load as follows: onset of failure at 1610—1630 dc; 40% reduction at 1670—1800°; thermal conductivity at 800C 10—11 kcal/m-hour-degree; linear expansion coef-

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ACC NR: AR7004028

ficient 5.2—5.6.10^{-6} at 20—1400C. Products from such compounds are noted for their high temperature oxidation resistance. No indication of slagging was noted following 5 annealings at up to 145C. Compounds with 5—10% SiO_2 show the least silicon-carbide oxidation. Addition of 5—10% TiO_2 results in high density products with apparent porosity of 14—18% and high abrasion resistance of up to 1.8—2 mm. However, repeated annealing ($<$4 times at 1450°C is maximum) reduces the heat resistance and increases the oxidation of silicon carbide. The use of Cr_2O_3 as an addition is not recommended in the manufacture of silicon carbide products, since they show high porosity (23.6—24.9%) and low abrasion resistance (4.14—4.8 mm). An oxide content above 10% is not desirable. Further tests of an silicon-carbide compound containing 5—10% SiO_2 amd 5—10% ZrO_2 are recommended. Orig. art. has a bibliography of 8 reference items. Authors' abstract. [Translation of abstract] [AM]

SUB CODE: 11/

Card 2/2

APPROVED FOR RELEASE: 07/13/2001 CIA-RDP86-00513R001343210003-4"

"APPROVED FOR RELEASE: 07/13/2001 CIA-RDP86-00513R001343210003-4

ALEKSANDROVA, T.A.; PROKHOROVA, I.Ya.; GALUSHKO, N.A.; SHABASHOV, Ya.F.; FRUMKINA, Yu.A.

Carborundum-graphite crucibles for melting copper-base alloys. Ogneupory 27 no.5:208-211 '62. (MIRA 15:7)

1. Vsesoyuznyy institut ogneuporov (for Akeksandrova, Prokhorova). 2. Zavod "Krasnyy Tigel'" (for Galushko). 3. Zavod "Krasnyy Byborzhets" (for Shabashov, Frumkina).
(Crucibles) (Refractory materials)

APPROVED FOR RELEASE: 07/13/2001 CIA-RDP86-00513R001343210003-4"

"APPROVED FOR RELEASE: 07/13/2001 CIA-RDP86-00513R001343210003-4

PROKHOROVA, I.Ya.; NOVIKOV, A.N.

Improving the quality of carborundum refractories. Ogneupory 29 no.3:137-141 '64 (MIRA 17:3)

1. Vsesoyuznyy institut ogneuporov.

APPROVED FOR RELEASE: 07/13/2001 CIA-RDP86-00513R001343210003-4"

"APPROVED FOR RELEASE: 07/13/2001 CIA-RDP86-00513R001343210003-4

ACCESSION NR: AP4021665 S/0131/64/000/003/0137/0141

AUTHORS: Prokhorova, I. Ya.; Novikov, A. N.

TITLE: Improving the quality of the carborundum refractory materials

SOURCE: Ogneupory*, no. 3, 1964, 137-141

TOPIC TAGS: refractory material, carborundum, suspension binder, dry binder, powdered silicon binder, Chl clay, gas permeability

ABSTRACT: The technique of baking carborundum materials, used at Semilukskiy ogneuporny*y zavod (Semiluksk Refractory Plant) was unsatisfactory because items thicker than 20 mm had friable, black, undesirable cores. This defect was caused by the incomplete burning of the coke residue formed in the process. Experiments were conducted with different mineral binders to improve the quality of the products. One series of these experiments involved the introduction of a binder in suspension so as to secure a more even distribution of the binding element in the mixture and a better burning of the organic binder. In other experiments finely powdered silicon was introduced into the mixture. No black cores were formed in the items made of carborundum (usual grain size) with the suspension-

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"APPROVED FOR RELEASE: 07/13/2001 CIA-RDP86-00513R001343210003-4

ACCESSION NR: AP4021665

binders made of sulfite-alcohol malt grains and clay Chl. The addition of metallic silicon to the mixture improved the quality of the product. The mass with 10% powdered silicon had the best properties. The use of the suspension-binders in the mixtures with 10% powdered Si requires further extensive industrial testing. Orig. art. has: 6 tables.

ASSOCIATION: Vsesoyuznyy institut ogneuporov (All-Union Institute of Refractory Materials)

SUBMITTED: 00 DATE ACQ: 08Apr64 ENCL: 00

SUB CODE: ML NO REF SOV: 001 OTHER: 001

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"APPROVED FOR RELEASE: 07/13/2001 CIA-RDP86-00513R001343210003-4

ALEKSANDROVA, T.A.; PROKHOROVA, I.Ya.

Investigating the daub used for the lining of electric channel furnaces. TSvet. met. 37 no.9:88-90 S '64. (MIRA 18:7)

APPROVED FOR RELEASE: 07/13/2001 CIA-RDP86-00513R001343210003-4"

"APPROVED FOR RELEASE: 07/13/2001 CIA-RDP86-00513R001343210003-4

ALEKSANDROVA, T.A.; PROKHOROVA, I.Ya.; [illegible], Yu.Ya.; [illegible], V.A.

Manufacture and testing of high-alumina hearth bottom blocks for channel type induction furnaces. TSvet.met. 38 no.7:[illegible] '65. (MIRA 18:8)

APPROVED FOR RELEASE: 07/13/2001 CIA-RDP86-00513R001343210003-4"

"APPROVED FOR RELEASE: 07/13/2001 CIA-RDP86-00513R001343210003-4

S/131/62/000/005/001/004
B105/B138

AUTHORS: Aleksandrova, T. A., Prokhorova, I. Ya., Galushko, N. A., Shabashov, Ya. F., Frumkina, Yu. A.

TITLE: Carborundum-graphite crucibles for the melting of copper-base alloys

PERIODICAL: Ogneupory, no. 5, 1962, 208-211

TEXT: A production process for crucibles suitable for producing copper-chromium master alloys and chromium bronze in the high-frequency furnace СКЕ-281 (OKB-281) has been developed at the Vsesoyuznyy institut ogneuporov (All-Union Institute of Refractory Materials). 500 kg crucibles were produced by hydrostatic pressing in the Luzhskiy zavod "Krasnyy tigel'" (Luga Plant "Krasnyy tigel'"). The charge consisted of carborundum, crucible graphite, elementary silicon, and Chasov-Yar clay, with sulfite-alcohol waste liquor, density 1.27 g/cc., as binder. During the burning, β-SiC is formed from the elementary silicon and graphite: $Si+C \rightarrow \beta\text{-}SiC$. Si_{el} and SiC were determined in the analytical chemistry laboratory of the VIO by K. K. Kolobova's method. After burning the

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"APPROVED FOR RELEASE: 07/13/2001 CIA-RDP86-00513R001343210003-4

crucibles showed the following properties: apparent porosity 19.8%, compressive strength 145 kg/cm^2, electrical volume resistivity 0.0044 ohm · mm^2/m, permeability to gas 0.02 l·m/m^2·hr·mm water column, depth of cavity in a sandblast wearability test 4.9 mm, coefficient of thermal conductivity at 800°C λ = 8.5 kcal/m·hr·degree. Microscopic examination showed that the crucibles contained no metal after use in the OKB-281 furnace. 500 kg carborundum-graphite crucibles have a life of 35-40 copper-chromium melts, and up to 75 for the БХ-08 (BKh-08) bronze. Because of the low resistivity of the crucibles, the furnace could be finely adjusted, the metal melted more rapidly and, besides this, the electro corundum crucible bedding was well fritted. These crucibles are suitable for the producing copper-base alloys with a permissible silicon content of up to 0.02 - 0.03%. There are 2 figures and 5 tables.

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"APPROVED FOR RELEASE: 07/13/2001 CIA-RDP86-00513R001343210003-4

Carborundum-graphite crucibles for ... S/131/62/000/005/001/004
B105/B138

ASSOCIATION: Vsesoyuznyy institut ogneuporov (All-Union Institute of Refractory Materials) (Aleksandrova, T. A., Prokhorova, I. Ya.); Zavod "Krasnyy Tigel'" (Plant "Krasnyy Tigel'") (Galushko, N. A.); Zavod "Krasnyy Vyborzhets" (Plant "Krasnyy Vyborzhets") (Shabashov, Ya. F., Frumkina, Yu. A.).

Card 3/3

APPROVED FOR RELEASE: 07/13/2001 CIA-RDP86-00513R001343210003-4"

"APPROVED FOR RELEASE: 07/13/2001 CIA-RDP86-00513R001343210003-4

PROKHOROVA, K.I.

Women workers in the machinery industry of the Moscow Economic Council. Mashinostroitel' no.3:35-38 Mr '59. (MIRA 12:3)
(Moscow--Machinery industry) (Moscow--Women--Employment)

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"APPROVED FOR RELEASE: 07/13/2001 CIA-RDP86-00513R001343210003-4

25(0) SOV/117-59-3-24/39

AUTHOR: Prokhorova, K.I.

TITLE: Women-Machinebuilders of the Moscow City Sovnarkhoz (Zhenshchiny mashinostoiteli Mosgorsovnarkhoza)

PERIODICAL: Mashinostroitel', 1959, Nr 3, pp 35 - 38 (USSR)

ABSTRACT: Tribute is paid to women workers, engineers, designers, superintendents and foremen working in the Moscow city area industry, on the occasion of "Woman's Day", March 8th. Women make up 47% of the labor in the electric industry, 55% in the radio and instrument industry, 38% in the machine tool and tool industry, and 44% in the automobile industry. Personal tribute is paid to the following: Yekaterina Ivanovna Fedosova, Chief of Byuro normalizatsii i standartizatsii (the Normalization and Standardization Bureau) of the plant "Krasnyy proletariy"; engineer and Stalin Prize Laureate; Nina Petrovna Stepynina, engineer-designer, now the head of a designer group developing a spline-grinder auto-

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SOV/117-59-3-24/37

Women-Machinebuilders of the Moscow City Sovnarkhoz

matic at the Moskovskiy zavod shlifoval'nykh stankov (Moscow Grinding Machines Plant); Ye.D. Kiseleva, engineer-designer of the Stankozavod imeni Ordzhonikidze (Machine Tool Plant imeni Ordzhonikidze) who developed the base component units of the hydro-profiling (gidrokopiroval'nyy) semi-automatics "1722" and "1712" which received diplomas at the All-Union Industry Exhibition; S.I. Ipatova, chemical engineer and Stalin Prize Laureate, chief of the refractory metals laboratory of the Moskovskiy elektrolampovyy zavod (Moscow Electric Lamp Plant), who developed the production technology of "non-slacking" tungsten, is now leading the development work on the production technology for obtaining plastic rhenium; L.N. Andrianova, chief of Laboratoriya tsvetnykh elektronno-luchevykh trubok (Laboratory of Colored Electron-Ray Tubes) of the OKB of the Moscow Electric Lamp Plant, also Stalin Prize Laureate, who participated in the international conferences on color television in 1956 and 1958 in Paris and Prague;

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"APPROVED FOR RELEASE: 07/13/2001 CIA-RDP86-00513R001343210003-4

SOV/117-59-3-24/37

Women-Machinebuilders of the Moscow City Sovnarkhoz

M.M. Drongovskaya, designer of Moskovskiy zavod malolitrazhnykh avtomobiley (Moscow Small-Displacement Car Plant) who developed the relay-regulator with semi-conductors which cut by 2 - 3 kg the weight of generators now used in the cars "Zil-111" and "Chayka". Tribute is also paid to a machine tool setter who mastered the technique of operating three multi-cutter lathes at one time. About 1,500 brigades are taking part in a competition for the name of "Communist Work Brigade". The conditions include raised output, cut costs, the use of new techniques, further technical education, and high moral qualities. In several instances, girl worker brigades took the obligation to produce work of high quality and making the technical inspection needless. There are 7 photographs.

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"APPROVED FOR RELEASE: 07/13/2001 CIA-RDP86-00513R001343210003-4

SYTENKO, L.S. (g. Ussuriysk, Primorskogo kraya); LESKOVA, A.Ya., kand. [illegible]l'skokhozyaystvennykh nauk; PROKHOROVA, K.P.

Experience in using entobacterin. Zashch. rast. ot vred. i bol. 7 no.1:37-38 '62. (MIRA 15:6)

1. Vsesoyuznyy institut zashchity rasteniy (for Leskova).
2. Saveduyushchaya laboratoriyey Voronezhskoy biostantsii (for Prokhorova).

(Insecticides)

APPROVED FOR RELEASE: 07/13/2001 CIA-RDP86-00513R001343210003-4"

"APPROVED FOR RELEASE: 07/13/2001 CIA-RDP86-00513R001343210003-4

SLEPOVICH, F.I., inzh.; PROKHOROVA, K.P., inzh.

Reconditioning waste FSKh-26 enamel and ground coat no.138 at the Minsk Tractor Plant. Mash.Bel. no.4:162-163 '57. (MIRA 11:9)
(Paint)

APPROVED FOR RELEASE: 07/13/2001 CIA-RDP86-00513R001343210003-4"

"APPROVED FOR RELEASE: 07/13/2001 CIA-RDP86-00513R001343210003-4

PROKHOROVA, K.V.

Comparison of the composition of recent vegetation with subfossil spore and pollen spectra (in the northern taiga). Bot. zhur. 50 no.5:626-638 My '65. (MIRA 18:10)

1. Kazanskiy gosudarstvennyy universitet.

APPROVED FOR RELEASE: 07/13/2001 CIA-RDP86-00513R001343210003-4"

"APPROVED FOR RELEASE: 07/13/2001 CIA-RDP86-00513R001343210003-4

POPOV, P.A.; PROKHOROVA, K.V.

Morphology of spores in some recent species of the genus Osmunda L. Dokl. AN SSSR 137 no.4:957-960 Ap '60. (MIRA 14:3)

1. Kazachinskaya geologopoiskovaya ekspeditsiya Krasnoyarskogo geologicheskogo upravleniya. Predstavleno akademikom V. N. Sukachevym.

(Ferns) (Spores(Botany))

APPROVED FOR RELEASE: 07/13/2001 CIA-RDP86-00513R001343210003-4"

"APPROVED FOR RELEASE: 07/13/2001 CIA-RDP86-00513R001343210003-4

VINITSKIY, I.G.; KRASNOV, B.P.; KRASNOVA, N.G.; NAZAROV, Yu.I.; NOVIKOV, I.G.; PROKHOROVA, L.A.; IVANOV, N.N., prof., red.; CHEBAYEVSKAYA, L.P., red.

[Album of models in descriptive geometry] Al'bom modelei po nachertatel'noi geometrii. [By] I.G.Vinitskii i dr. Podol'sk, Vysshaia shkola, 1964. 135 p. (MIRA 17:8)

APPROVED FOR RELEASE: 07/13/2001 CIA-RDP86-00513R001343210003-4"

"APPROVED FOR RELEASE: 07/13/2001 CIA-RDP86-00513R001343210003-4

S/823/62/000/000/003/007
B125/B102

24.7600

AUTHORS: Kirillov-Ugryumov, V. G., Petrukhin, A. A., Prokhorova, L. A., Rozental', I. L.

TITLE: Evaluation of the possibility of using cosmic rays for examining the muon structure

SOURCE: Nekotoryye voprosy fiziki elementarnykh chastits i atomnogo yadra. Ed. by V. D. Mikhaylov and I. L. Rozental'. Mosk. inzh.-fiz. inst. Moscow, Gosatomizdat, 1962, 77-82

TEXT: The nature of electromagnetic interaction at distances of $\sim 10^{-13}$ cm may perhaps be revealed by investigating the muon-electron scattering at electron energies of 10-100 Bev. Cosmic radiation is suggested as a source of high-energy muons. Table 1 contains the probabilities

$$w(E) = \int_{E_{0\,\text{мин}}}^{\infty} \frac{2Cm}{E^2}\left[1 - \frac{E}{E_{\text{макс}}} + \frac{1}{2}\left(\frac{E}{E_0}\right)^2\right] \frac{(\gamma-1)\cdot E_k^{\gamma-1}}{(E_k+E_0)^{\gamma}}\, dE_0, \quad (8)$$

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that δ-electrons of energy E may be produced by cosmic-ray muons of any energy, the total production probabilities for electrons of energies above a given value, and the root-mean-square values of the transverse momentum transferred by electrons of energy E. The total number $N(E)=W(E)\Omega\cdot l\cdot tj_0$ of δ-electrons with energies greater than E, recorded by an ionization calorimeter, is $N \simeq 60$ t for E = 10 Bev (t is given in days). Here, μ-e scattering occurs in a target with a thickness of $l = 20$ g/cm^2; $\Omega = 5.5\cdot 10^4$ cm^2·sterad is the aperture ratio of the measuring apparatus, and $j_0 = 0.5\mu\,(\text{cm}^2\cdot\text{sterad}\cdot\text{min})^{-1}$ is the muon flux at sea level. The effect of the form factor of the muon-electron system is characterized by probability deviations $\Delta w/w = ((w(E)-w_1(E))/w(E) = a^2\bar{p}^2/3$ of some per cent at most. The integral probability w_1 is

$$w_1(E) = \int_{E_0=m}^{\bar{E}} \chi'(E, E_0)\left(1 - \frac{p_\perp^2 a^2}{3}\right) dE_0 \qquad (16),$$

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and (8) can be reduced to $w(E) = (Cm/E^2)(E_k/E_{o\ min})^{\gamma-1}$, where $C = 0.15\ Z/A$. There are 2 tables.

Таблица 1

E, Бэв	$w(E)$	$W(E)$	$\bar{p}_\perp$, Мэв/с
10	$1{,}5 \cdot 10^{-5}$	$7{,}91 \cdot 10^{-5}$	80
20	$0{,}183 \cdot 10^{-5}$	$1{,}61 \cdot 10^{-5}$	110
30	$0{,}0518 \cdot 10^{-5}$	$0{,}63 \cdot 10^{-5}$	130
40	$0{,}0211 \cdot 10^{-5}$	$0{,}333 \cdot 10^{-5}$	140
50	$0{,}0103 \cdot 10^{-5}$	$0{,}2 \cdot 10^{-5}$	160
70	$0{,}0035 \cdot 10^{-5}$	$0{,}09 \cdot 10^{-5}$	190
100	$0{,}0011 \cdot 10^{-5}$	$0{,}039 \cdot 10^{-5}$	220

Table 1

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"APPROVED FOR RELEASE: 07/13/2001 CIA-RDP86-00513R001343210003-4

PROKHOROVA L.A.

21 (0), 24 (0)

AUTHOR: Tyagunov, G. A. SOV/89-7-2-18/24

TITLE: Scientific Conference of the MIFI (Nauchnaya konferentsiya MIFI)

PERIODICAL: Atomnaya energiya, 1959, Vol 7, Nr 2, pp 176-177 (USSR)

ABSTRACT: The yearly scientific meeting was held from 17 April to 15 May 1959 in the Moskovskiy inzhenerno-fizicheskiy institut (Moscow Physical Engineering Institute). More than 600 participants from 100 different institutes attended the 2 plenary and 18 sectional conferences. A total of 148 lectures were held. The following lectures are specially mentioned: M. K. Romanovskiy on the thermo-nuclear examinations, N. G. Basov on the physical foundations of molecular generators and amplifiers, A. I. Leypunskiy on the construction of a fast reactor, I. Ya. Pomeranchuk on the theory of the peripheral collision of mesons and nucleons, A. B. Migdal on superfluidity and momentum of inertia of the nuclei, A. S. Kompanevets on the strong electromagnetic gravity wave, V. I. Gol'danskiy on levels which are excited within the nucleus shell and methods of comprehending them, I. L. Rozental' and L. A. Prokhorova on the analysis of the possible experiments for the determination of the measurements of the μ-mesons, V. I. Dianov-Klokov on the spectrum of liquid and crystalline hydrogen under pressure (8000-10000 atm) and an instrument for measuring the absorption curves, V. [illegible] Lyapidevskiy and O. V. Glamazdina on new application possibilities of the diffusion chamber, A. V. Shal'nov on calculation methods for linear electron accelerators with migratory waves, P. A. Ryazin, A. B. Minervin and A. I. Zabeyev on new theories of the electron capture under betatron conditions of the acceleration, Ye. G. Pyatnov on optimum wave length for a generator, S. P. Lomnev and G. A. Tyagunov on magnetic focussing in a linear electron accelerator, O. A. Val'dner, P. A. Dmitrovskiy, D. M. Zorin, Yu. V. Mizin on the 3 new linear accelerators of the MIFI, and V. V. Kuznetskiy, O. A. Val'dner, V. V. Katov and I. N. Chesnokov on examination of the electron movement in the system of the eletron with consideration of the scattering fields, O. A. Krayev on impulse method for measuring the heat conduction capacity of liquids and the theory of this method, Ya. [illegible] Khabakhpashev, Yu. M. Il'in and D. A. Chirov on heat transmission to the eutectic Na-K which flows in a circular space, V. I. Petrovichev on heat transmission to circulating mercury, N. M. Royzin on special conditions when working with a flat triode in the impulse technique, O. S. Poturayev on calculation methods and construction of an impulse transformer for instruments with semi-conductor elements, Ya. A. Khetagurov on a possibility judge the characteristics of magnetic recording of impulses, B. I. Kal'nin on the element system for a universal digital computer, V. S. Malov on multiple control of the parameters of technologic processes, P. I. Popov on analysis of several systems with which physical energy apparatus can be automatically started, Yu. I. Topchayev on a method to examine the quality of a reactor control when the reactivity changes stepwise or linearily, G. A. Leont'yev and A. I. Yevstyukhin on examination of the iodine method of refining niobium and characteristics of the metal obtained, P. L. Gruzin and G. G. Ryabova on examination of the micro-distribution of carbon, tungsten, iron and other elements in zirconium and its alloys by use of autoradiography, G. B. Fedorov on determination of the sublimation heat of zirconium and nickel by using radioactive indicators and G. B. Fedorov and A. N. Semenikhin on determination of the diffusion coefficients of chromium, nickel, iron and chromium nickel steels. The literature for all these lectures will be published by the MIFI in a symposium.

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"APPROVED FOR RELEASE: 07/13/2001 CIA-RDP86-00513R001343210003-4

DAVIDSON, G.O.; PROKHOROVA, L.B.[translator]; MOROZOV, V.N.[translator]; TURCHIN, V.F. [translator]; POPOVA, M.F., red.

[Biological effects of whole-body gamma radiation on human beings] Biologicheskie posledstviia obshchego gamma-oblucheniia cheloveka. Pod red. M.F.Popovoi. Moskva, Atomizdat, 1960. 107 p. (MIRA 14:8)

1. Johns Hopkins University. Operations Research Office. (RADIOACTIVE FALLOUT) (GAMMA RAYS—PHYSIOLOGICAL EFFECT)

APPROVED FOR RELEASE: 07/13/2001 CIA-RDP86-00513R001343210003-4"

"APPROVED FOR RELEASE: 07/13/2001 CIA-RDP86-00513R001343210003-4

GOL'DSHTEYN, M.I., professor; PROKHOROVA, L.G.

Treatment of polycythemia vera with radioactive phosphorus. Sov. med. 20 no.12:25-28 D '56. (MLRA 10:1)

1. Iz Kazanskogo meditsinskogo instituta.
(POLYCYTHEMIA VERA, ther.
radioactive phosphorus)
(PHOSPHORUS, radioactive
ther. of polycythemia vera)

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"APPROVED FOR RELEASE: 07/13/2001 CIA-RDP86-00513R001343210003-4

USSR/Human and Animal Physiology - Blood. Blood Diseases. T-3

Abs Jour : Ref Zhur - Biol., No 18, 1958, 84113

Author : Gol'dshteyn, M.I., Prokhorova, L.G.
Inst : -
Title : Treating True Polycythemia Patients with Radioactive Phosphorus.

Orig Pub : Sov. meditsina, 1956, No 12, 25-28.

Abstract : Seven 25-55 years old true polycythemia patients (5 men and 2 women) in whom the disease has lasted for up to 12 years, took P^{32} internally on an empty stomach in doses of 50 ml of a 5 percent glucose solution (single dose, 1-2 mcurie, entire dose, 6-8 mcurie). P^{32} . . administered every 6-8 days under strict supervisoin. At the end of the treatment the general condition of the patients was found to be good; 2-3 months later blood normalization was observed to have taken place. Skin and mucosa were of normal color. Remissions were of a stable and long-lasting nature.

-- M.B. Gol'dberg

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(4)

L 9106-65 ESD(t)/AFWL/RAEM(t)/SSD

ACCESSION NR: AT4048278 S/0000/64/000/000/0001/0004

AUTHORS: Bondarenko, I. I.; Kuznetsov, V. F.; Nesterov, V. G.; Pavlinchuk, V. A.; Prokhorova, L. I.; Rabotnov, N. S.; Smirenkin, G. N.; Usachev, L. N.

TITLE: Effect of the energy gap in the channel spectrum on the fission process

SOURCE: Vliyaniye energeticheskoy shcheli v spektre kanalov na protsess deleniya, 1964, 01-04 *

TOPIC TAGS: nuclear fission, fission cross section, fission product, fission neutron, angular distribution, uranium, plutonium

ABSTRACT: The experiments reported constitute a later stage of a study of the fission process (Yu. A. Blyumkina et al., Atomnaya energiya, v. 15, 64, 250, 1963), and are intended to clarify further the nature of the previously observed correlation between the irreg-

Card 1/3 *[No source given.]

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ACCESSION NR: AT4048278

ularities in the energy dependences of the fission characteristics. The angular distribution of the cross section $\sigma_f(\theta)$ of the fission of U^{233}, U^{235}, and Pu^{239} by neutrons with energies between 0.08 and 1.25 MeV was measured by a procedure described elsewhere (V. G. Nesterov et al., Atomnaya energiya 16, no. 6, 1964). The data obtained on $\sigma_f(\theta)$ confirm the earlier results of the authors (V. G. Nesterov et al., Atomnaya energiya 10, 620, 1961 and 11, 248, 1961) and show that the correlated increases and decreases in the asymmetry $\sigma_f(0°)/\sigma_f(90°)$ correspond to abrupt changes in the angular distributions of the fission fragments. The various irregularities in the angular distributions at different fissioning-neutron energies are interpreted as being connected with the opening up of new fission channels. In particular, the change in the character of $\sigma_f(\theta)$ when U^{235} is fissioned by neutrons with $E_n \lesssim 0.3$ MeV is due to the opening up of fission channels with $k = 2$ (k -- projection of total angular momentum of the compound nucleus on the fission axis). It is also shown that, in contrast to earlier notions, new

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ACCESSION NR: AT4048278

fission channels can open up at energies up to the excitation energy at the saddle point ($E^* = 2.5$ MeV), where the energy gap of even-even nuclei is noticeable larger (~2.7 MeV) than in the equilibrium state. The presence of an energy gap in the level spectrum of the transition nucleus U^{236} can likewise explain the observed decrease in the number of secondary fission neutrons near 2.2 MeV. Other experimental data are interpreted in light of these results. Orig. art. has: 3 figures.

ASSOCIATION: None

SUBMITTED: 00 ENCL: 00

SUB CODE: NP NR REF SOV: 004 OTHER: 007

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APPROVED FOR RELEASE: 07/13/2001 CIA-RDP86-00513R001343210003-4"

"APPROVED FOR RELEASE: 07/13/2001 CIA-RDP86-00513R001343210003-4

BOL'SHOV, V. I.; PROKHOROVA, L. I.; OKOLOVICH, V. N.; SMIRENKIN, G. N.

Some data on the spontaneous fission of Cm^{244}. Atom. energ. 17 no.1:28-34 Jl '64. (MIRA 17:7)

APPROVED FOR RELEASE: 07/13/2001 CIA-RDP86-00513R001343210003-4"

"APPROVED FOR RELEASE: 07/13/2001 CIA-RDP86-00513R001343210003-4

SOV/68-58-11-16/25

AUTHORS: Gilyazetdinov L.P., Evreinova M.D. and Prokhorova L.I.

TITLE: An Investigation of High Boiling Fractions of Coal Tar using the Method of Chromatographic Analysis (Issledovaniye vysokokipyashchikh fraktsiy kamennougol'noy smoly metodom khromatograficheskogo analiza)

PERIODICAL: Koks i Khimiya, 1958, Nr 11, pp 51-54 (USSR)

ABSTRACT: An attempt to apply the chromatographic method for determining the group chemical composition of crude unpurified fractions of coal tar is described. The method adopted was as follows: 18g samples were passed through two columns in series filled with silicagel; for desorption the following solvents (200ml each) were used in succession: n-hexane, n-hexane + benzole; benzole, ethyl ether, alcohol-benzene, ethyl alcohol and acetone. Primary identification of desorbed hydrocarbons and organic compounds was based on the colour of the solutions and chromatographic curves (Fig 1). This was later confirmed by coefficients of refraction, melting temperatures, molecular weights (cryoscopy in benzene) and iodine numbers of products freed from solvents. Physico-chemical characteristics of the

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"APPROVED FOR RELEASE: 07/13/2001 CIA-RDP86-00513R001343210003-4

SOV/68-58-11-16/25

An Investigation of High Boiling Fractions of Coal Tar using the Method of Chromatographic Analysis

identified groups of compounds for the investigated coal tar fractions are given in Table 1, physico-chemical characteristics of the coal tar fractions investigated in Table 2, and the results of their chromatographic analysis in Table 3. The following chemical groups were separated: 1) paraffinic, naphthenic and olefinic hydrocarbons, 2) monocyclic aromatic hydrocarbons, 3) naphthenic-aromatic hydrocarbons and phenylalkenes, 4) dicyclic aromatic hydrocarbons, 5) phenanthrene group, 6) anthracene group, 7) tricyclic hetero compounds, 8) pyridene bases and 9) phenols and other acid compounds. On the basis of the chromatographic analysis the number of aromatic rings and the content of carbon in aromatic structures for mean molecule of the samples investigated were calculated, whereupon the molecule weight was taken as the same for all groups and equal to the molecular

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"APPROVED FOR RELEASE: 07/13/2001 CIA-RDP86-00513R001343210003-4

SOV/68-58-11-16/25

An Investigation of High Boiling Fractions of Coal Tar using the Method of Chromatographic Analysis

weight of the starting sample. In this way some new characteristics were obtained for the individual coal tar fractions, namely the degree of cyclisation and aromatisation.

There are 3 tables, 1 figure and 9 references (7 Soviet, 2 English).

ASSOCIATION: NII Shinnoy Promyshlennosti (Scientific Research Institute of the Tire Industry)

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"APPROVED FOR RELEASE: 07/13/2001 CIA-RDP86-00513R001343210003-4

L 11357-65 EPA(s)-2/EWT(m)/EPF(c)/EPR/EWP(j)/T Pc-4/Pr-4/Ps-4/Pt-10 RPL
WW/RM

ACCESSION NR: AP4045096 S/0020/64/158/001/0130/0132

AUTHOR: Adrova, N. A.; Prokhorova, L. K.; Koton, M. M.
(Corresponding member AN SSSR)

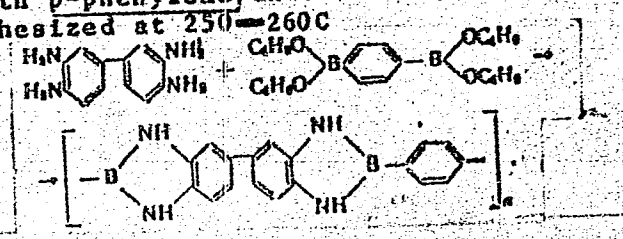
B

TITLE: Preparation of polymers with bi(borabenzimidazole) rings in the backbone

SOURCE: AN SSSR. Doklady*, v. 158, no. 1, 1964, 130-132

TOPIC TAGS: heat resistant polymer, boron containing polymer, nitrogen containing polymer

ABSTRACT: Polymers containing 6,6-bi(2-borabenzimidazole) units alternating with p-phenylene units or oxygen atoms in the backbone have been synthesized at 250—260C



(I)

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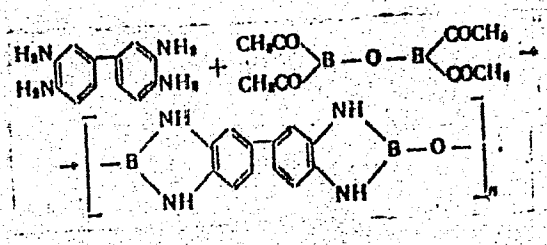
L 11357-65

ACCESSION NR: AP4045096



(II)

This research, part of a study of the synthesis of heat-resistant polymers containing stiff heterocyclic rings in the backbone, was done to study the effect of backbone structure on the thermal stability of such polymers. Polymer II is the first polymer containing B-O-B units ever prepared. The polymers are infusible dark-brown powders soluble in sulfuric acid. Both polymers have low molecular weight, and both, especially II, are stable in air at 300--400C. Polymer II hydrolyzes in moist air. Orig. art. has: 2 formulas, 1 table, and 1 figure.

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"APPROVED FOR RELEASE: 07/13/2001 CIA-RDP86-00513R001343210003-4

L 11357-65
ACCESSION NR: AP4045096

ASSOCIATION: Institut vysokomolekulyarnykh soyedineniy Akademii nauk SSSR (Institute of High-Molecular-Weight Compounds, Academy of Sciences SSSR)

SUBMITTED: 04May64 ATD PRESS: 3118 ENCL: 00

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

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APPROVED FOR RELEASE: 07/13/2001 CIA-RDP86-00513R001343210003-4"

"APPROVED FOR RELEASE: 07/13/2001 CIA-RDP86-00513R001343210003-4

ACC NR: AP7011355 SOURCE CODE: UR/0062/66/000/010/1824/1828

AUTHOR: Adrova, N. A.; Prokhorova, L. K.; Koton, M. M.

ORG: Institute of High-Molecular Compounds, Academy of Sciences USSR (Institut vysokomolekulyarnykh soyedineniy AN SSSR)

TITLE: Production of new polymers with dibenzophosphorimidazoline links in the principal chain

SOURCE: AN SSSR. Izvestiya. Seriya khimicheskaya, no. 10, 1966, 1824-1828

TOPIC TAGS: polymer heat resistance, ester, polycondensation

SUB CODE: 07

ABSTRACT: A number of heat-resistant polymers containing dibenzophosphorimidazoline links in the principal chain were produced by polycondensation of 3,3'-diaminobenzidine with tetraphenyl esters of phosphorus-containing acids in equimolar quantities with heating for two hours in a stream of inert gas at 250-260° C. The phenyl esters included triphenoxyphosphine, diphenoxychlorophosphine, tetraphenyl ester of pentamethylene diphosphorous acid, tetraphenylpyrophosphate and tetraphenylpyrophosphite. The resultant materials show thermal stability with heating up to 400°C. The authors

UDC: 541.64+541.6+547.7+661.718.1

0931 1735

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"APPROVED FOR RELEASE: 07/13/2001 CIA-RDP86-00513R001343210003-4

ACC NR: AP7011355

thank Ye. I. Pokrovskiy for taking the infrared spectra of the polymers. Orig. art. has: 2 figures, 5 formulas, 1 table. [JPRS: 40,351]

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APPROVED FOR RELEASE: 07/13/2001 CIA-RDP86-00513R001343210003-4"

"APPROVED FOR RELEASE: 07/13/2001 CIA-RDP86-00513R001343210003-4

ACCESSION NR: AT4033978 S/0000/63/000/000/0009/0010

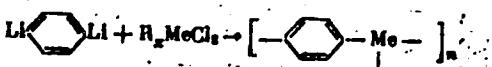
AUTHOR: Adrova, N. A.; Koton, M. M.; Prokhorova, L. K.

TITLE: Preparation of polymers containing phenylene groups and tin, antimony and phosphorus atoms in the principal chain

SOURCE: Geterotsepny*ye vy*sokomolekulyarny*ye soyedineniya (Heterochain macromolecular compounds); sbornik statey. Moscow, Izd-vo "Nauka," 1963, 9-10

TOPIC TAGS: polymerization, polymer, phenylene group, tin, antimony, phosphorus, metallic polymer

ABSTRACT: New metallic polymers: (1) poly-p-phenylenediphenylstannine, (2) poly-p-phenylenetriphenylstibine, and (3) poly-p-phenylenephenylphosphine, have been prepared by polycondensation resulting from the interaction of dilithiumphenylene and organometallic dichlorides by the scheme



(1)

in which Me is Sn, Sb or P, and R is C_6H_5. The n-butyllithium for the reaction

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"APPROVED FOR RELEASE: 07/13/2001 CIA-RDP86-00513R001343210003-4

ACCESSION NR: AT4033978

was prepared by reacting n-butylbromide with lithium in petroleum ether (boiling point 28-30C), and dilithiumphenylene was prepared by reacting the n-butyllithium with dibromobenzene in petroleum ether in an atmosphere of nitrogen. The polymers were prepared by reacting equimolar amounts of dilithiumphenylene and diphenyltin dichloride (1), triphenylantimony dichloride (2), and phenyldichlorophosphine (3) for ½ hour at -25C and a subsequent overnight period at room temperature. The melting points, Cl and Me-contents, polymerization coefficients and weight loss after thermal treatment of the polymers are given. Orig. art. has: 2 tables.

ASSOCIATION: Institut vy*sokomolekulyarny*kh soyedineniy AN SSSR (Institute of Macromolecular Compounds, AN SSSR)

SUBMITTED: 26Apr62 DATE ACQ: 30Apr64 ENCL: 00

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

Card 2/2

APPROVED FOR RELEASE: 07/13/2001 CIA-RDP86-00513R001343210003-4"

"APPROVED FOR RELEASE: 07/13/2001 CIA-RDP86-00513R001343210003-4

PROKHOROVA, L.K.

AID P - 3425

Subject : USSR/Chemistry

Card 1/1 Pub. 152 - 10/18

Authors : Bolotov, B. A., P. M. Adrov, and L. K. Prokhorova

Title : Catalytic transformations of n-propyl and n-butyl alcohols

Periodical : Zhur. prikl. khim., 28, 5, 516-522, 1955

Abstract : Experiments were carried out with copper catalysts activated by ThO_2, MnO, Al_2O_3. At 250°C, the alcohols were transformed into esters (40-45%); at 325°C, sym. ketones (45%) were formed (catalyst, Cu-ThO_2). At 400-425°C, ketones were formed (36%) (catalyst, Cu-MnO-Al_2O_3). Five tables, 4 diagrams, 3 references, 2 Russian (1955).

Institution : None

Submitted : No date

APPROVED FOR RELEASE: 07/13/2001 CIA-RDP86-00513R001343210003-4"

"APPROVED FOR RELEASE: 07/13/2001 CIA-RDP86-00513R001343210003-4

ADROVA, N.A.; PROKHOROVA, L.K.

Synthesis and polymerization of tritylmethacrylate. Vysokom. soed. 3 no.10:1508-1510 O '61. (MIRA 14:9)

1. Institut vysokomolekulyarnykh soyedineniy AN SSSR.
(Methacrylic acid) (Polymerization)

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"APPROVED FOR RELEASE: 07/13/2001 CIA-RDP86-00513R001343210003-4

1ST AND 2ND ORDERS

PROCESSES AND PROPERTIES INDEX

3RD AND 4TH ORDERS

118

Vitamin C in certain physiological and pathological processes. G. N. Prokhorova. *Problemy Endokrinol.* 4, No. 4, 92(1958).—The degree and character of C avitaminosis was studied in deviations of carbohydrate metabolism (diabetes mellitus, liver impairment). A normal condition (sufficient vitamin C intake and absorption) can be demonstrated by detg. vitamin C excretion. When the body becomes satd. with this vitamin, any excess ingested is completely excreted. In hypovitaminosis and avitaminosis any C vitamin ingested will be retained partially or completely. In some cases when symptoms of C avitaminosis appear, a test dose of the vitamin will be excreted more or less completely. In such cases it is believed that the body has less, or no ability to utilize vitamin C. Vitamin C acts on carbohydrate metabolism similarly to insulin or to adrenaline depending on conditions. C. S. Shapiro

ASM SLA METALLURGICAL LITERATURE CLASSIFICATION

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"APPROVED FOR RELEASE: 07/13/2001 CIA-RDP86-00513R001343210003-4

ACCESSION NR: AP4042257 S/0089/64/017/001/0028/0034

AUTHORS: Bol'shov, V. I.; Prokhorova, L. I.; Okolovich, V. N.; Smirenkin, G. N.

TITLE: Some data on the spontaneous fission of Cm^{244}

SOURCE: Atomnaya energiya, v. 17, no. 1, 1964, 28-34

TOPIC TAGS: curium, nuclear fission, fission product, prompt neutron, spontaneous fission, fission cross section

ABSTRACT: In view of surprising violations of the smooth variation, in the case of transplutonium nuclei, of the average kinetic energy of the fragments and of the average number of prompt neutrons per fission event from isotope to isotope, the authors have undertaken to obtain more precise data for the spontaneous fission of Cm^{244} and to analyze the causes of this phenomenon. The average kinetic energy of the fission fragments for spontaneous fission of Cm^{244} was found

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ACCESSION NR: AP4042257

to be 182.3 ± 2.3 MeV, with a half-width of the distribution 24.8 ± ± 2.5 MeV at half the height and an average number of 2.71 ± 0.4 prompt neutrons per fission event. The kinetic energy was measured by means of a double ionization chamber and comparison with the well established value of the kinetic energy of U^{235} fission by thermal neutrons. The procedure is described in detail. The number of prompt neutrons was determined by recording the coincidences between the pulses of a neutron detector, in which is placed an ionization fission chamber with the investigated substance. The results indicate that the average kinetic energy has low sensitivity to even large changes in the excitation energy and the angular momentum of the compound nucleus. The transcurium nuclei as a rule do not obey the linear variation of the kinetic energy with $Z^2/A^{1/3}$. Attention is called to the correlation between the anomalies in the dependence of E_k and ν on the nucleon composition of the fissioning nucleus and the variation of the most probable fragment masses. A hypothesis that the observed effects are connected with a change in the "elastic"

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ACCESSION NR: AP4042257

properties of the produced fragments is discussed. It is concluded that the individual properties of the produced fragments have a strong influence on the fission process. Although the concrete mechanisms whereby the shells affect different fission methods and their characteristics are unknown, a likely conclusion is that the direct influence of the nuclear shell structure on the dynamics of fission is one of the most important factors. "The authors are grateful to A. G. Kozlov, V. B. Pavlovich for preparation of the Cm^{244} compounds, Z. A. Aleksandrova for participation in individual stages of the work, and N. Ye Fedorova and Yu. M. Turchin for help with the measurements." Orig. art. has: 5 figures and 4 formulas.

ASSOCIATION: None

SUBMITTED: 23Oct63 ENCL: 01

SUB CODE: NP NR REF SOV: 008 OTHER: 017

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APPROVED FOR RELEASE: 07/13/2001 CIA-RDP86-00513R001343210003-4"

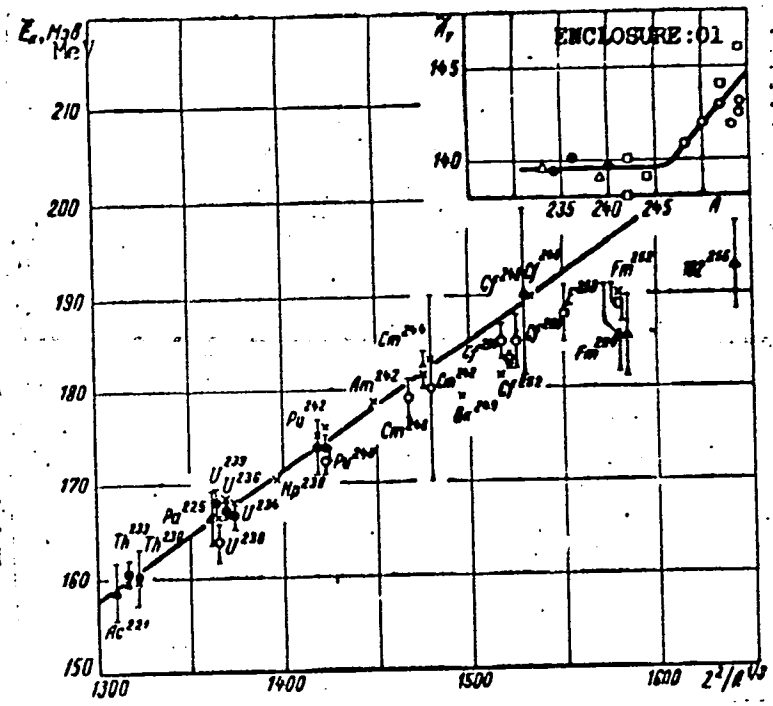
"APPROVED FOR RELEASE: 07/13/2001 CIA-RDP86-00513R001343210003-4

ACCESSION NR: AP4042257

Dependence of average fragment kinetic energy on the parameter $Z^2/A^{1/3}$ ($E_k = 0.140Z^2/A^{1/3} - 24.5$ MeV)

o - spontaneous fission
●, ▲ - fission by neutrons and ions
× - values calculated from balance equation

Insert - dependence of most probable mass of heavy fragment on the mass of the fissioning nucleus, as obtained by others



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"APPROVED FOR RELEASE: 07/13/2001 CIA-RDP86-00513R001343210003-4

SHMELEV, Sergey Vladimirovich; KOMILITSINA, L.I., otv. za vyp.; PROKHOROVA, L.I., red.; BARANOVA, N.N., tekhn.red.

[Laboratory and practical work in dyeing and printing of cotton fabrics (in the training of dyers and calico printers in professional technical schools)] Laboratorno-prakticheskie raboty po krasheniiu i pechataniiu khlopchato-bumazhnykh tkanei (pri obuchenii krasil'shchikov i raklistov v professional'no-tekhnicheskikh uchilishchakh). Moskva, Proftekhizdat, 1963. 57 p. (MIRA 17:4)

APPROVED FOR RELEASE: 07/13/2001 CIA-RDP86-00513R001343210003-4"

"APPROVED FOR RELEASE: 07/13/2001 CIA-RDP86-00513R001343210003-4

BONDARENKO, I. I.; KUZNETSOV, V. F.; NESTEROV, V. G.; PAVLINCHUK, V. A.; PROKHOROVA, L. I.; RABOTNOV, N. S.; SMIRENKIN, G. N.; USACHEV, L. N., Obninsk

"Effects of energy gap in channel spectrum on the fission process."

report submitted for Intl Conf on Low & Medium Energies Nuclear Physics, Paris, 2-8 Jul 64.

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"APPROVED FOR RELEASE: 07/13/2001 CIA-RDP86-00513R001343210003-4

SOV/56-37-2-12/56

21(7)

AUTHORS: Kuz'minov, B. D., Kutsayeva, L. S., Nesterov, V. G., Prokhorova, L. I., Smirenkin, G. P.

TITLE: Some Characteristics of the Spontaneous Fission of U^{238}

PERIODICAL: Zhurnal eksperimental'noy i teoreticheskoy fiziki, 1959, Vol 37, Nr 2(8), pp 406-412 (USSR)

ABSTRACT: The average number of neutrons emitted by excited fragments per decay event $\bar{\nu}$ has already been experimentally and theoretically determined. It was found that with the excitation energy E_χ of the fragments $\bar{\nu}$ grows nearly linearly. In the introduction some previous papers are discussed, as well as the theoretical fundamentals of a calculation of $\bar{\nu}$. For the determination of $\bar{\nu}$ the authors employed the method of measuring the double coincidence of the prompt neutrons and of the spontaneous fissions of U^{238} and Pu^{240}. As detector of the spontaneous fission of U^{238} two multi-layer ionization chambers connected in parallel were used (Fig 1). 12 g U^{238} + U^{235} was applied in 2 mg/cm^2 thick on both sides of an aluminum foil and Pu (92% Pu^{240} + 8% Pu^{239})

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"APPROVED FOR RELEASE: 07/13/2001 CIA-RDP86-00513R001343210003-4

SOV/56-37-2-12/56

Some Characteristics of the Spontaneous Fission of U^{238}

upon a platinum foil. In the case of the uranium experiments, the chamber was filled with argon (5 atm), and in the case of plutonium with 90% Ar + 10% CO_2(35 mm Hg). The fission chamber was surrounded by 24 proportional counters connected in parallel ($B^{10}F_3$ in paraffin); an electronic apparatus recorded the pulses of chamber, counters, and coincidence circuit. The latter had a resolving power of $\sim 6.10^{-4}$ sec. Random coincidences made a contribution of $< 0.2\%$ (Pu) and ~ 0.01 (U), respectively, and could therefore be neglected. A total of ~ 2400 coincidences was recorded in the case of U^{238} and ~ 12000 in the case of Pu^{240}. Three series of measurements were carried out; the following was obtained: $\bar{\nu}(U^{238})/\bar{\nu}(Pu^{240}) = (2.1 \pm 0.1)/(2.26 \pm 0.05) = 0.92 \pm 0.03$. In the following the measurement of Δ was discussed. $\Delta = (\bar{\nu}^2 - \bar{\nu})/\bar{\nu} = 1 - 1/\nu_m$ holds, where ν_m denotes the largest possible number of emitted neutrons. The method is briefly ex-

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"APPROVED FOR RELEASE: 07/13/2001 CIA-RDP86-00513R001343210003-4

Some Characteristics of the Spontaneous Fission of U^{238} SOV/56-37-2-12/56

plained on the basis of a scheme (Fig 2). By denoting the ratio $(\bar{\nu}^2 - \bar{\nu})/\bar{\nu} = \delta$, $\delta_U/\delta_{Pu} = 1.085 \pm 0.02$. $\Delta_U = 0.95 \pm 0.05$ was obtained. By means of these data the number Q of the neutrons emitted within the time unit per g uranium was calculated as amounting to $Q = (64.5 \pm 2)$ neutrons/g.sec according to three different methods which are briefly explained. The average life-time of the neutrons was determined as amounting to $\tau = 1.44.10^{-4}$ sec; $\eta = 0.82 \pm 0.02$ ($\eta \approx 1 - e^{-T/\tau}$) at $T = 2.38.10^{-4}$ sec (duration of pulse); $\lambda = Q/\bar{\nu} = (31 \pm 1.5)$ fissions/g.h and half-life $T_{1/2} = (6.5 \pm 0.3).10^{15}$a. In conclusion, the results are discussed and compared with those obtained by other authors (Table 1,2). The authors finally thank Professor A. I. Leypunskiy for his interest, and I. I. Bondarenko and V. S. Stavinskiy for discussions. There are 2 figures, 2 tables, and 15 references, 5 of which are Soviet.

SUBMITTED: March 25, 1959

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APPROVED FOR RELEASE: 07/13/2001 CIA-RDP86-00513R001343210003-4"

"APPROVED FOR RELEASE: 07/13/2001 CIA-RDP86-00513R001343210003-4

21(0) PHASE I BOOK EXPLOITATION SOV/2081

International Conference on the Peaceful Uses of Atomic Energy, 2d., Geneva, 1958

Doklady sovetskikh uchenykh; yadernaya fizika (Reports of Soviet Scientists; Nuclear Physics) Moscow, Atomizdat, 1959. 552 p. (Series: Its: Trudy, Vol. 1) 8,000 copies printed.

Eds. (Title page): A.I. Alikhanov, Academician; V.I. Veksler, Academician; and N.A. Vlasov, Candidate of Physical and Mathematical Sciences; Ed. of this volume: S.I. Broxdov and B.V. Zaretskiy, Candidates of Physical and Mathematical Sciences; Ed. (Inside book): G.L. Smolyan; Tech. Ed.: Ye.I. Mazel'.

PURPOSE: This collection of articles is intended for scientific research workers and other persons interested in nuclear physics. The volume contains 43 papers presented by Soviet Scientists at the Second Conference on Peaceful Uses of Atomic Energy, held in Geneva in September 1958.

COVERAGE: It is divided into two parts. Part I contains 17 papers dealing with plasma physics and controlled thermonuclear reactions, and Part II contains 26 papers on nuclear physics, including problems of particle acceleration and of cosmic ray physics. The first paper by L.A. Artsimovich presents a review of Soviet work on controlled thermonuclear reactions. The remaining papers in Part I deal with particular problems in this field.

The papers in Part II deal in detail with various problems in nuclear physics, such as the fission of heavy atoms and their isotopes, and with the study of cosmic radiation by means of artificial earth satellites and rockets, described in a paper by S.N. Vernov. The Russian-language edition of the proceedings of the conference is published in 16 volumes. The first 6 volumes contain all the papers presented by Soviet scientists as follows: Volume (1), Yadernaya fizika (Nuclear Physics); Volume (2), Yadernyye reaktory i yadernaya energetika (Nuclear Reactor and Nuclear Power); Volume (3), Yadernoye goryuchego metally (Nuclear Fuel and Reactor Metals), Volume (4), Khimiya radioelementov i radiatsionnykh prevrashcheniy (Chemistry of Radioelements and of Radiation Transformations); Volume 5, Radiobiologiya i radiatsionnaya meditsina (Radiobiology and Radiation Medicine); Volume (6) Poluchenie i primenenie izotopov (Production and Use of Isotopes). The other 10 volumes contain selected papers presented at the Conference by non-Soviet scientists. In the present volume discrepancies between the English and Russian language editions of the proceedings have been noted in three articles where the texts are not identical; viz; Andrianov, et al, "High Current Pulsed Discharge"; Akhiyezer, et al, "High Frequency Plasma Oscillation"; and Bogolyubov, "Investigations of the Many-body Problem". The serial numbers of reports 2302 and 2508 are reversed in the English edition. Report 2211, by Simonikov, et al, is numbered 2536 in the English edition.

TABLE OF CONTENTS:

PROKHOROV', L. I.

Selinov, I.P. The Spontaneous Fission of Californium-254 in Type I Supernovae, and Anomaly in the Abundance of the Isotopes of Xe, Ba, and Sm (Report 2052) 400
Personalities mentioned include Ye.Ye. Barvai, Ya.A. Kliadne, G. Ya. Shakhpis, Ya.A. Shakasnikov, and G.N. Nik.

Gordeyev, I.V., V.Ya. Popko. Estimate of Absorption Cross Section of Fission Fragments of Uranium-235 at Energy of 0.025 to 10^6 Ev. and Calculation of Action of Fragments in Intermediate Reactors (Report 2223)
Personalities mentioned include A.I. Leypunskiy, Member of the Academy of Sciences, USSR; L.N. Usachev, Candidate of Physico-mathematical Sciences; and G. I. Tsebiashkiy.

Bondarenko, I.I., R.D. Ens'minov, L.S. Artsayeva, L.I. Prokhorova, and G.N. Smirenkin, Average Number and Spectrum of Prompt Neutrons in Fast Neutron Induced Fission (Report 2187) 438
Personalities mentioned include Ya.I. Baranov, V.G. Verub'yeva, L.A. Galubova, N.E. Galubova, and N.Ya. Tsimmerman.

Ivanova, N.S., V.I. Ostroumov and N.A. Filov. Angular Correlation of Charged Particles From Uranium Fission by High Energy Protons and Pi Mesons (Report 2039) 452

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"APPROVED FOR RELEASE: 07/13/2001 CIA-RDP86-00513R001343210003-4

PROKHOROVA, L. I. (and I. I. Bondarenko, B. D. Kuzminov, L. S. Kutsayeva, G. N. Smirenkin)

"THE AVERAGE NUMBER OF SPECTRUM OF PROMPT NEUTRONS EMITTED IN FISSION INDUCED BY FAST NEUTRONS".

By I. I. Bondarenko, B. D. Kuzminov, L. S. Kutsayeva, L. I. Prokhorova and G. N. Smirenkin.

Report presented at 2nd UN Atoms-for-Peace Conference, Geneva, 9-13 Sept. 1958.

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"APPROVED FOR RELEASE: 07/13/2001 CIA-RDP86-00513R001343210003-4

PROKHOROVA, [illegible]

AUTHORS: [illegible]

TITLE: Mean [illegible] of U^{233}, U^{235}, Pu^{239} by [illegible] and 15 MeV neutrons ([illegible] neytronov pri [illegible] U^{233}, U^{235}, Pu^{239} [illegible] 4 i 15 MeV).

PERIODICAL: Atomnaya Energiya, 1958 [illegible]

ABSTRACT: The following [illegible] were obtained:

Isotope to undergo fission	ν_T +)	E_n in MeV	$\nu(E)\,\nu_T$	$\nu(E)$	$\Delta\nu/\Delta E$
U^{233}	2,[illegible]±0,0[illegible]	[illegible],0±0,3 MeV 15,0±0,5 MeV	1,20±0,04 1,73±0,06	[illegible]±0,[illegible] [illegible]±0,17	0,[illegible]±0,[illegible] 0,[illegible]±0,[illegible]
U^{235}	2,[illegible]7±0,0[illegible]	[illegible],0±0,3 MeV 15,0±0,5 MeV	1,22±0,04 1,82±0,07	3,[illegible]±0,[illegible] 4,[illegible]±0,[illegible]	0,[illegible]±0,[illegible] 0,[illegible]±0,[illegible]
Pu^{239}	[illegible],[illegible]±0,06	[illegible],0±0,3 MeV 15,0±0,5 MeV	1,18±0,03 1,[illegible]2±0,0[illegible]	[illegible]±0,[illegible] [illegible],71±[illegible]	0,[illegible]±0,[illegible] 0,[illegible]±0,[illegible]

+) ν_T = [illegible] neutron [illegible] liberated in the [illegible] neutron.

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APPROVED FOR RELEASE: 07/13/2001 CIA-RDP86-00513R001343210003-4"

"APPROVED FOR RELEASE: 07/13/2001 CIA-RDP86-00513R001343210003-4

Mean Prompt Neutron Numbers in the Fission of U^{233}, U^{235} and [illegible], Pu^{239} by 4 and 15 Mev Neutrons.

There are 1 table and 11 references, 5 of which are Russian.

SUBMITTED: July 6, 1957

Available: Library of Congress

Card 2/2

1. Neutrons-Energy Measurement 2. Uranium 233 fission-Measurement 3. Uranium 235 fission-Measurement 4. Plutonium 239 fission-Measurement

APPROVED FOR RELEASE: 07/13/2001 CIA-RDP86-00513R001343210003-4"

"APPROVED FOR RELEASE: 07/13/2001 CIA-RDP86-00513R001343210003-4

SMIRENKIN, G.N.; BONDARENKO, I.I.; KUTSAYEVA, L.S.; MISHCHENKO, Kh.D.; PROKHOROVA, L.I.; SHEMETENKO, B.P.

Mean prompt neutron numbers in the fission of U^{233}, U^{235}, and Pu^{239} by 4 and 15 Me v neutrons. Atom.energ. 4 no.2:188-190 F '58. (Nuclear fission) (Neutrons) (MIRA 11:4)

APPROVED FOR RELEASE: 07/13/2001 CIA-RDP86-00513R001343210003-4"

"APPROVED FOR RELEASE: 07/13/2001 CIA-RDP86-00513R001343210003-4

PROKHOROVA, L. K.

4

✓Catalytic transformation of propyl and butyl alcohols. B. A. Bolotov, P. M. Adrov, and L. K. Prokhorova. *Zhur. Priklad. Khim.* 28, 516-22(1955); *J. Appl. Chem. U.S.S.R.* 28, 489-94(1955)(Engl. translation); cf. *C.A.* 50, 15786.—PrOH and BuOH passed over a Cu catalyst activated with ThO_2 at 250° yielded 40-50% esters; the formation of PrO_2CEt or BuO_2CPr is replaced by formation of sym. ketones in 45% yields when the temp. is raised to 325°. A similar Cu catalyst with MnO and Al_2O_3 admixts. (up to 25% by wt.) give ketonization of BuOH at 400-25°, yielding up to 36% Pr_2CO. A mixt. of EtOH and BuOH over Cu catalyst promoted with ThO_2 gave 22% MeCOPr and 12% Pr_2CO, when the operating temp. was raised from 275° to 325°; the yield of Me_2CO remained at 8-9% regardless of temp., while that of BuO_2CPr dropped from 5% to 2.3%.

G. M. Kosolapoff

CH

2

APPROVED FOR RELEASE: 07/13/2001 CIA-RDP86-00513R001343210003-4"

"APPROVED FOR RELEASE: 07/13/2001 CIA-RDP86-00513R001343210003-4

PROKHOROVA, L.K.

Catalytic conversion of *n*-propyl and *n*-butyl alcohols. D. A. Bolotov, P. M. Adrov and L. K. Prokhorova (*Zh. prikl. Khim.*, 1955, 28, 516—522).—When passed over a ThO_2-activated Cu catalyst at 250°, *n*-propyl and *n*-butyl alcohols give 40—45% yield of esters (propyl propionate and butyl butyrate respectively), but at 325° they give 45% yield of symmetrical ketones; at higher temp. the formation of aldehydes and high-boiling by-products increases. With a catalyst consisting of 16CuO : 4MnO : 1Al_2O_3 at 400—425°, *n*-butyl alcohol gave a 36% yield of dipropyl ketone. Detailed analyses of the reaction products under various conditions are given. By feeding mixed alcohols, mixed ketones can be produced.

F. W. KIRKBRIDE.

CH

2

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[illegible]

[illegible]

1. [illegible]
2. [illegible]

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28182

S/190/61/003/010/010/019
B124/B110

15.8070

AUTHORS: Adrova, N. A., Prokhorova, L. K.

TITLE: Synthesis and polymerization of trityl methacrylate

PERIODICAL: Vysokomolekulyarnyye soyedineniya, v. 3, no. 10, 1961, 1509 - 1510

TEXT: Trityl methacrylate was synthesized by reaction between trityl chloride and silver methacrylate $(C_6H_5)_3CCl + CH_2 = C(CH_3)COOAg \longrightarrow CH_2=C(CH_3)COOC(C_6H_5)_3 + AgCl$ for several hours at room temperature and in etheric solution under intensive mixing. The product obtained was purified by recrystallizing from anhydrous petroleum ether. It was a colorless, crystalline substance having its melting point at 101 - 103°C. The yield was 75%. Trityl methacrylate is easily soluble in benzene, methanol, and other organic solvents; it is decomposed by water with formation of triphenyl carbinol (melting point 159 - 161°C). The polymers of trityl methacrylate were synthesized both by polymerization in cyclohexanol solution in the presence of azoisobutyric acid dinitrile with a

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28181

Synthesis and polymerization... S/190/61/003/010/010/019
B124/B110

stepwise temperature rise from 60 to 120°C within 144 hr and by block polymerization in the presence of tert-butyl peroxide with a stepwise temperature rise from 120 to 180°C within 144 hr. The polymers obtained were insoluble in most of the ordinary organic solvents. The resistance to heat was 140 - 155°C (ИФП(IFP)). The loss in weight by 3-hr heating up to 200°C was 45%. Copolymers of trityl methacrylate with styrene and methyl methacrylate in the ratio 1:1 were synthesized under the same conditions. Under heating, the resulting copolymers were soluble in benzene and precipitated by methyl alcohol. The polymerizability of trityl methacrylate was dilatometrically determined in the block in the presence of 0.5 mole% tert-butyl peroxide at 115, 120, and 125°C by means of polymerization kinetics (Fig. 1). The polymerization-activation energy of trityl methacrylate was determined from the tangent of the angle of inclination of the straight line $-\ln k = f(1/T)$ and found to be equal to 20 kcal/mole. The factor of the exponential function was $3.43 \cdot 10^7$ cm^{-2}. There are 2 figures and 3 non-Soviet references.

ASSOCIATION: Institut vysokomolekulyarnykh soyedineniy AN SSSR (Institute of High-molecular Compounds AS USSR)

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L 01263-67 EWT(m)/T IJP(c) WW/RM

ACC NR: AP6003490 (N) SOURCE CODE: UR/0020/66/166/001/0091/0094

AUTHOR: Adrova, N. A.; Koton, M. M. (Corresponding member AN SSSR); Prokhorova, L. K.

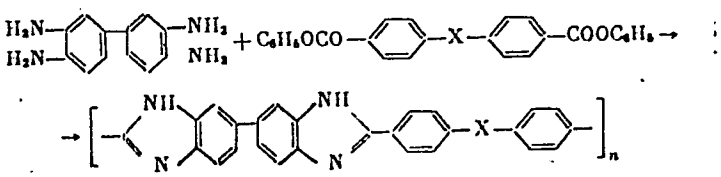
ORG: Institute of High-Molecular-Weight Compounds, AN SSSR (Institut vysokomolekulyarnykh soyedineniy AN SSSR)

TITLE: Synthesis of thermally stable polybenzimidazoles with diphenyl oxide and diphenylsulfone links in the main chain

SOURCE: AN SSSR. Doklady, v. 166, no. 1, 1966, 91-94

TOPIC TAGS: organic synthetic process, resin, thermal stability

ABSTRACT: Polybenzimidazoles were synthesized by thermal method (at 300C in argon a tmospherewith subsequent heating in vacuo) according to the scheme:



where $X = -O-, -SO_2-$.

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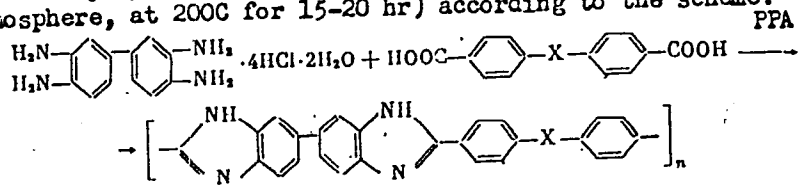
L 01263-67

ACC NR: AP6003490

or in solution of polyphosphoric acid (PPA) (in a mixture of 30 ml H_3PO_4 and 45 g P_2O_5 in argon atmosphere, at 200C for 15-20 hr) according to the scheme:



where X=—O—; —SO_2—.

Thermally synthesized polymers were thermally more stable, but had a very limited solubility. The polymers obtained in PPA were soluble in dimethylformamide and in formic and sulfuric acids. They can form fine transparent films; polymers having diphenyloxide links are more elastic. A comparison of thermal stability of the polymers obtained with such polybenzimidazoles having methylene links is given in Table 1. Orig. art. has: 1 table and 1 fig.

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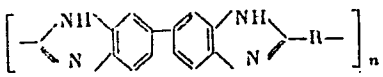
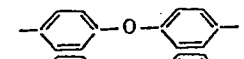
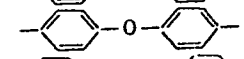
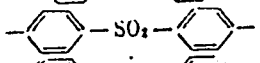
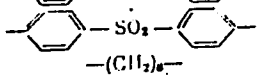
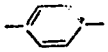
Table 1.



№№ п.п.	R	Conditions of polycond.	[η]	wt. loss in % by heating in air 300°	400°	500°
1		thermal	1,3	2,3	5,0	9,8
2		PPA	2,7	8,9	10,6	31,0
3		thermal	0,5	4,0	5,1	19,0
4		PPA	1,3	9,5	11,0	30,0
5	$-(CH_2)_6-$	thermal	3,0	5,2	16,6	60,0
6		thermal	—	5,2	7,6	23,1

SUB CODE: 11, 07/ SUBM DATE: 14Jun65/ ORIG REF: 003/ OTH REF: 007

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"APPROVED FOR RELEASE: 07/13/2001 CIA-RDP86-00513R001343210003-4

PROKHOROVA, L.M.

Hyaluronidase activity in human sperm. Akush. i gin. no.1: (MIRA 17:6)
40-44 '63.

1. Iz Biokhimicheskoy laboratorii (zav.-prof. L.G. Smirnova) Nauchno-issledovatel'skogo instituta akusherstva i ginekologii Ministerstva zdravookhraneniya RSFSR (dir. - prof. O.V. [illegible]).

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"APPROVED FOR RELEASE: 07/13/2001 CIA-RDP86-00513R001343210003-4

FAVOROVA, L.A.; TKACHEVA, M.N.; BESSMERTNYY, B.S.; KOSTYUKOVA, N.N.; PROKHOROVA, L.N.; MALAKHOVA, N.S.

Role of various sources of respiratory tract infections in closed children's institutions (on a diphtheria model). Report No.1. Zhur. mikrobiol., epid. i immun. 41 no.4:64-70 Ap '64. (MIRA 18:4)

1. Institut epidemiologii i mikrobiologii imeni Gamalei AMN SSSR i Moskovskaya oblastnaya sanitarno-epidemiologicheskaya statsiya.

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KOROSTELEV, V.Ye.; KOVALEVA, N.I.; PROKHOROVA, L.N.; MATKOVSKAYA, Ye.K.; CHERNYSHEVA, N.I.; MATVEYEVA, V.N.; KOSTROMINA, I.N.; SEMINA, N.A.; TELESHEVSKAYA, E.A.

Study of the reaction-producing qualities of the chemically associated vaccine of the Gamaleia Institute of Epidemiology and Microbiology against typhoid fever, parathyphoid fever, and tetanus.. Zhur. mikrobiol.epid.i immun. 33 no.5:121-122 My '62. (MIRA 15:8)

1. Iz Instituta epidemiolgoii i mikrobiologii imeni Gamalei AMN SSSR.
(VACCINES) (TYPHOID FEVER) (PARATYPHOID FEVER) (TETANUS)

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"APPROVED FOR RELEASE: 07/13/2001 CIA-RDP86-00513R001343210003-4

YABLOKOVA, S. N.; Prinimala uchastiye: PROKHOROVA, L. P., khimik-laborant

Corrosion of the color doctor in printing with insoluble azo dyes. Tekst. prom. 23 no.3:67-69 Mr '63. (MIRA 16:4)

1. Nachal'nik khimicheskoy laboratorii tekstil'noy fabriki imeni Zhideleva.

(Textile printing—Equipment and supplies)
(Corrosion and anticorrosives)

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"APPROVED FOR RELEASE: 07/13/2001 CIA-RDP86-00513R001343210003-4

KAZARIN, V.S.; VERBENKO, A.A.; PROKHOROVA, L.V.

Diphtheria of the genitalia in girls and women. Vop. okh. mat. i det. 6 no. 2:83-85 F '61. (MIRA 14:2)

1. Iz kliniki detskikh infektsionnykh bolezney (zav. - zasluzhennyy deyatel' nauki prof. D.D. Lebedev) II Moskovskogo meditsinskogo instituta imeni N.I. Pirogova (dir. - dotsent M.G. Sirotkina) i polikliniki No. 3 Ministerstva zdravookhraneniya SSSR.
(GENERATIVE ORGANS, FEMALE--DISEASES) (DIPHTHERIA)

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"APPROVED FOR RELEASE: 07/13/2001 CIA-RDP86-00513R001343210003-4

PROKHOROVA, M.

SHADRIKOV, I., brigadir molochnotovarnoy fermy; BANNOVA, T. pomoshchnik brigadira, chlen rabochego komiteta; TUMANDEYEVA, L., profgruporg; KAYMAKINA, Ye., doyarka; ANTIPOVA, Yu., doyarka; PROKHOROVA, M., podsmennaya doyarka; ARKHANDEYEV, B., skotnik; NURNUKHAMETOVA, R., telyatnitsa.

Disseminate the progressive practice among all state farm workers. Sov. profsoiuzy 17 no. 5:12-14 Mr '61. (MIRA 14:2)

1. Sovkhoz "Kamash," Kuybyshevskoy oblasti.
(Kuybyshev Province—Dairying) (Socialist competition)

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"APPROVED FOR RELEASE: 07/13/2001 CIA-RDP86-00513R001343210003-4

PROKHOROVA, M., and TUPIKOVA, Z.

"The specific activity of cerebral glycogen increases with the simultaneous reduction of its amount during an excitation induced by phenamine," a paper submitted at the 2nd Conference on Biochemistry of the Nervous System, AS Ukr SSR, 12-16 Feb 1957, Kiev.

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"APPROVED FOR RELEASE: 07/13/2001 CIA-RDP86-00513R001343210003-4

PROKHOROVA, M.I., arkhitektor.

Planting the new grounds of Moscow University. Gor.khoz.Mosk. vol.27 no.9: 16-18 S '53. (MLRA 6:10)

(Landscape gardening) (Moscow University)

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"APPROVED FOR RELEASE: 07/13/2001 CIA-RDP86-00513R001343210003-4

PAKHOMOVA, N. I.

PAKHOMOVA, N. I.: "The squares and boulevards of the city of Kiev (planning and composition)." Academy of Architecture USSR, Moscow, 1956 (Dissertation for the Degree of Candidate in Architectural Sciences)

So: Knizhnaya letopis', No 18, 1956

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"APPROVED FOR RELEASE: 07/13/2001 CIA-RDP86-00513R001343210003-4

PROKHOROVA, M.I.

Spring flower show. Gor.khoz.Mosk.30 no.6:18-20 Je '56. (MLRA 9:9)
(Moscow--Flower shows)

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"APPROVED FOR RELEASE: 07/13/2001 CIA-RDP86-00513R001343210003-4

PROKHOROVA, N.G.

KRAPUKHIN, V.V., kand. tekhn. nauk; ZAYCHENKO, G.N., kand. tekhn. nauk; ROZANOVA, N.S., inzh.; PROKHOROVA, N.G.

Drying hard-alloy manufactures by infrared rays. TSvet.met. 30 no.11: 75-78 N '57. (MLRA 10:11)

1. Mintsvetmetzoloto (for Krapukhin, Zaychenko). 2. Moskovskiy kombinat tverdykh splavov (for Rozanova, Prokhorova).
(Powder metallurgy)
(Infrared rays--Industrial applications)

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