"APPROVED FOR RELEASE: 06/09/2000 CIA-RDP86-00513R000206820017-5

KHOZAK, V.K.; VAYNSHTEYN, B.I.; BREGER, A.Kh.; KAPLUNOV, M.Ya.; SYRKUS, N.P.

Design of the radiator of radiochemical units for tire vulcanization using the gamma radiation of spent fuel rods of the nuclear reactor. Kauch.i res. 21 no.12:26-29 D '62. (MIRA 16:1)

1.Nauchno-issledovatel'skiy institut shinnoy promyshlennosti i Nauchno-issledovatel'skiy fiziko-khimicheskiy institut im. L.Ya.Karpova.

(Vulcanization)
(Gamma rays--Industrial applications)

APPROVED FOR RELEASE: 06/09/2000 CIA-RDP86-00513R000206820017-5"

"APPROVED FOR RELEASE: 06/09/2000 CIA-RDP86-00513R000206820017-5

S/844/62/000/000/123/129
D444/D307

AUTHOR: Breger, A. Kh.

TITLE: The present state and prospects for the use of powerful sources of nuclear radiations in radiation chemistry

SOURCE: Trudy II Vsesoyuznogo soveshchaniya po radiatsionnoy khimii. Ed. by L. S. Polak. Moscow, Izd-vo AN SSSR, 1962, 709-724

TEXT: This article reviews Western and Soviet literature for the period 1954 - 1960. The following aspects are considered: a nuclear reactor as the source (use of kinetic energy of fragments, radiation contour in a nuclear reactor, use of the gamma radiation of a mixture of fragments in radiation installations under various hot-cell operating conditions, use of volatile and gaseous fragments as radiation sources); isotope radiation sources; particle accelerators. From the national-economy aspect the use of nuclear reactors and nuclear-industry waste products is to be preferred over other sources. There are 3 tables and 74 references.

Card 1/2

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"APPROVED FOR RELEASE: 06/09/2000 CIA-RDP86-00513R000206820017-5

The present state ... S/844/62/000/000/123/129
D444/D307

ASSOCIATION: Fiziko-khimicheskiy institut im. L. Ya. Karpova (Physico-Chemical Institute im. L. Ya. Karpov)

Card 2/2

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"APPROVED FOR RELEASE: 06/09/2000 CIA-RDP86-00513R000206820017-5

S/190/63/005/004/020/020
B101/B220

AUTHORS: Ivanov, V. S., Sukhikh, T. A., Breger, A. Kh., Osipov, V. B., Gol'din, V. A.

TITLE: Radiation polymerization of maleic N-phenyl maleinimide in solid state

PERIODICAL: Vysokomolekulyarnyye soyedineniya, v. 5, no. 4, 1963, 628

TEXT: Maleic N-phenylimide, m.p. 89 - 90°C, was polymerized by Co^{60} gamma irradiation. The irradiation yield was ~1000 molecules per 100 ev. At 87.5°C, 0.65 Mr/hr and a dose of 2.2 Mr, 32.5 % of polymer was obtained. At 20°C this yield decreased to 4.5 - 6.5 %. More complete polymerization (79.5 %) was achieved by further heating to 100°C of the ampoules that had been irradiated at 82°C. With 2 - 5 Mr light yellow crystalline powders were obtained, with 10 Mr brown amorphous substances. Dependent on the conditions of production, the polymers are heat-resistant up to 250 - 330°C, soluble in dimethyl formamide and CS_2, insoluble in H_2O, acetone, CCl_4, benzene, toluene, heptane and cyclohexane. The IR spectra of the polymers showed bands of the phenyl ring, the carbonyl group and the C-N bond.

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From a comparison of the IR spectra of monomer and polymer it was concluded that in the course of polymerization the C=C bonds are opened.

SUBMITTED: July 26, 1962

APPROVED FOR RELEASE: 06/09/2000 CIA-RDP86-00513R000206820017-5"

"APPROVED FOR RELEASE: 06/09/2000 CIA-RDP86-00513R000206820017-5

S/081/63/000/004/049/051
B156/B180

AUTHORS: Blokh, G. A., Zhurko, V. A., Zayonchkovskiy, A. D., Kiriyenko, N. V., Karpov, V. L., Breger, A. Kh., Tsipenyuk, E. V., Vyazankina, M. A., Bronshteyn, F. V., Bernshteyn, M. Kh., Yabko, Ya. M.

TITLE: The radiation vulcanization of rubbers and reclaimed rubbers together with plastics

PERIODICAL: Referativnyy zhurnal. Khimiya, no. 4, 1963, 648 - 649, abstract 4T349 (Kozhevenno-obuvn. prom-st', no. 5, 1962, 17 - 20)

TEXT: The effects of exposure to radiation were studied on the physical, mechanical and chemical properties of the following combined systems of polymers: rubber СКС-30 (SKS-30), СКБ (SKB), НК(NK) - thermoplastics (low and high molecular-weight polyethylene, and polystyrene); ratios of thermoplastics to rubber of 0 - 100 % were used. The radiation dose (Co^{60}) was 1 - 100 Mrad. The plasticity, hardness, wear-resistance, strength, percentage, elongation, permanent set etc. were determined, and

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plotted versus temperature in the 40 - 200°C range. The effect of irradiation on mixtures of rubbers with polyethylene or polystyrene is that cross-linking occurs between the two polymers, to form substances with valuable physical and mechanical properties: the plasticity is greatly reduced, while the strength, wear-resistance and heat-resistance are improved. Abstracter's note: Complete translation.

APPROVED FOR RELEASE: 06/09/2000 CIA-RDP86-00513R000206820017-5"

"APPROVED FOR RELEASE: 06/09/2000 CIA-RDP86-00513R000206820017-5

PAL'MIN, V.V.; BREGER, A.Kh.

Changes occuring in the glutathion and proteins of the sarcoplasm in meat irradiation by gamma rays. Izv.vys.ucheb.zav.; pishch. tekh. no.3:41-45 '63. (MIRA 16:8)

1. Moskovskiy tekhnologicheskiy institut myasnoy i molochnoy promyshlennosti i Nauchno-issledovatel'skiy fiziko-khimicheskiy institut imeni Karpova.
(Meat) (Radiation sterilization)

APPROVED FOR RELEASE: 06/09/2000 CIA-RDP86-00513R000206820017-5"

"APPROVED FOR RELEASE: 06/09/2000 CIA-RDP86-00513R000206820017-5

IVANOV, V.S.; SUKHIKH, T.A.; BREGER, A.Kh.; OSIPOV, V.B.; GOL'DIN, V.A.

Radiation polymerization of N-phenylmaleimide in the solid state. Vysokom.soed. 5 no.4:628 Ap '63. (MIRA 16:5)
(Maleimide) (Radiation) (Polymerization)

APPROVED FOR RELEASE: 06/09/2000 CIA-RDP86-00513R000206820017-5"

"APPROVED FOR RELEASE: 06/09/2000 CIA-RDP86-00513R000206820017-5

L 17094-63 EPR/EWP(j)/EPF(c)/EWT(m)/BDS AFFTC/ASD Pe-4/Pc-4/Pr-4
ACCESSION NR: AP3004711 RM/WW/AR S/0190/63/005/008/1255/1262

AUTHORS: Ivanov, V. S.; Medvedev, Yu. V.; Vasilenko, V. F.; Breger, A. Kh.; Osipov, V. B.; Gol'din, V. A.

TITLE: Studies in radiation polymerization. 2. The radiation polymerization of piperylene

SOURCE: Vysokomolekulyarnye soyedineniya, v. 5, no. 8, 1963, 1255-1262

TOPIC TAGS: radiation polymerization, piperylene, radiolysis, Co^{60}, carbon tetrachloride, argon, krypton

ABSTRACT: Samples of piperylene monomer were placed in sealed glass ampules in an atmosphere of nitrogen, argon, or krypton, and subjected to gamma-irradiation by means of a Co^{60} installation. Following absorption of doses from 1 to 160 Mr, the ampules were opened, the gases subjected to chromatographic study. The obtained polymer was analyzed for viscosity and degree of unsaturation, and was studied by infrared spectroscopy. The gaseous products of radiolysis contained hydrogen, methane, ethylene, acetylene, divinyl and 98.5% piperylene. The degree of unsaturation of the polymer amounted to 84 and 87% for samples receiving 80 and 160 Mr respectively. It was found that the yield of the polymer increased with the

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L 17094-63

ACCESSION NR: AP3004711

2

irradiation dose and that the presence of nitrogen, argon, and krypton exerted a sensitizing effect on radiation polymerization. Infrared spectroscopy revealed that the structure of the polypiperylene consisted mainly of 1,4-trans chains, 1,2-trans chains, or of their combination, while the amount of cis-configurations had decreased trifold. It is concluded that in radiolysis the main line of cleavage of the piperylene molecule consists in the severance of the single bond between the fourth and fifth carbon atoms. The authors are deeply grateful to N. I. Leonova for assistance in infrared spectroscopy. Orig. art. has: 1 table, 2 charts, and 14 formulas.

ASSOCIATION: Leningradskiy gosudarstvenny*y universitet fiziko-khimicheskiy institut im. L. Ya. Karpova (Leningrad State University, Physical-Chemical Institute)

SUBMITTED: 12Feb62 DATE ACQ: 28Aug63 ENCL: 00

SUB CODE: CH NO REF SOV: 008 OTHER: 023

Card 2/2

APPROVED FOR RELEASE: 06/09/2000 CIA-RDP86-00513R000206820017-5"

"APPROVED FOR RELEASE: 06/09/2000 CIA-RDP86-00513R000206820017-5

L 12421-63 EWT(m)/BDS AFFTC/ASD

ACCESSION NR: AP3001414 S/0020/63/150/004/0866/0869 63 57

AUTHOR: Breger, A. Kh.; El*tekov, V. A.; Terent*yev, B. M.; Vaynshteyn, B. I.; Cyrkus, N. P.; Krasnoshchekova, N. A.; Osipov, V. P.; Gol*din, V. A.

TITLE: Absorption of Gamma-radiation energy in macrosystems. 19

SOURCE: AN SSSR. Doklady, v. 150, no. 4, 1963, 866-869

TOPIC TAGS: absorption of energy of Gamma-radiation, Type K-60000 apparatus

ABSTRACT: The energy coefficient of net efficiency of Gamma-radiation, and the value of the cumulative factor of integral current capacity of Gamma-radiation were determined for model apparatus of heat exchanger and tubular, still-type pipe. These determinations were obtained by three non-related methods: statistical method of investigation by an electronic computer, experimental method, and calculation by a semiempirical method. The results based on 300 samples are quire representative. The life span of a single quantum for the heat exchanger was found to be 4 sec. and for the still-type pipe, it was 2 sec. Calculations were also made for other values of energy coefficients of net efficiency. The integral absorption capacity for the given models were determined experimentally by ferrosulfate dosimetry method. The satisfactory agreement of the results

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L 12421-63

ACCESSION NR: AP3001414

6

with all three methods confirms the validity of the program and the methods of calculation. A possibility exists for a tangible method of solution of the problem for an optimum construction of an apparatus and the optimum number and activity of the radiation source. "The authors express their gratitude to Voropayev, Yu. V., Ratov, A. B., Kasatkin, V. M., Kalmy*kova, Ye. D., and Shalyapin, N. K. for their help in conducting the experiments on the type K-60000 unit, as well as to Golenko, D. I. for a number of useful hints in programming this work. Orig. art. has: 2 tables, 2 graphs and 1 figure.

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

SUBMITTED: 03May62 DATE ACQ: 01Jul63 ENCL: 00

SUB CODE: 00 NO REF SOV: 008 OTHER: 000

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APPROVED FOR RELEASE: 06/09/2000 CIA-RDP86-00513R000206820017-5"

"APPROVED FOR RELEASE: 06/09/2000 CIA-RDP86-00513R000206820017-5

KARPOV, V.L.; BREGER, A.Kh.; YEROSHOV, M.Ye.; DROZDOV, V.Ye.; LISOV, G.N.; STOYENKO, S.G.; TORGOVITSKIY, D.M.; VAYNSHTEYN, B.I.; SYRKUS, N.P.

Large-scale radiation-chemistry plant with irradiator made from spent nuclear fuels. Atom. energ. 15 no.4:302-308 O '63. (MIRA 16:10)

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"APPROVED FOR RELEASE: 06/09/2000 CIA-RDP86-00513R000206820017-5

[illegible] EWP(m)/EWP(w)/EWP(c)/EWP(n)-2/EWA(d)/EWP(t)/EWP(b) [illegible]
[illegible] LSD/ASD(m)-3/AS(mp)-2/IJP(c) MJW/JD/JW/GS/[illegible]

ACCESSION NR. AT4048134 S/0000/63/000/000/0250/0257

AUTHOR: Vasil'yev, A.A., Gruzin, P.L., Zharov, Yu. D., Polikarpov, Yu. A., [illegible]kin, Yu. A., Breger, A. Kh., Gol'din, V.A.

TITLE: Effect of gamma and neutron irradiation on internal friction of copper

SOURCE: Vsesoyuznaya konferentsiya po relaksatsionny*m yavleniyam v metallakh i splavakh. 3d, Voronezh, 1962. Relaksatsionny*ye yavleniya v metallakh i splavakh (Relaxation phenomena in metals and alloys); trudy* konferentsii. Moscow, Metallurgizdat, 1963, 250-257

TOPIC TAGS: copper, internal friction, copper irradiation, gamma irradiation, neutron irradiation

ABSTRACT: The paper reports the results of studies on irradiation of copper by gamma rays from Co-60, as well as by Po-Be neutrons and in atomic piles. The maximum dose was 580 r/sec. The irradiated objects were placed in water-cooled vessels, and in some cases the temperature of the samples reached 80C. Common electrolytic copper and pure copper, grade V2, containing not over 5 x 10^{-4} Bi, Fe, Si, Mg, Mn, As, Ni, Sn, Pb, Sb and Zn were used in the tests. After annealing, the internal friction of all samples was found to depend on the amplitude. Even small deformations increase the

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"APPROVED FOR RELEASE: 06/09/2000 CIA-RDP86-00513R000206820017-5

ACCESSION NR: AP4012181 S/0191/64/000/002/0003/0006

AURHORS: Abkin, A. D.; Auer, A. L.; Breger, A. Kh.; Vaynshteyn, B. I.; Voropayev, Yu. V.; Gol'din, V. A.; Gromov, V. F.; Osipov, V. B.; Sy*rkus, N. P.; Ushakov, V. D.; Khomikovskiy, P. M.; Tsingister, V. A.; Chikin, Yu. A.

TITLE: Radiation polymerization of ethylene in enlarged laboratory apparatus.

SOURCE: Plasticheskiye massy*, no. 2, 1964, 3-6

TOPIC TAGS: ethylene, radiation polymerization, reactor design, reactor surface area, reaction rate, polymer yield, reactor temperature field

ABSTRACT: Radiation polymerization of ethylene was conducted in laboratory reactors of 1-2 liter capacity (fig. 1 & 2). Based on tolerances admitted in this work, it was found that the temperature field can be calculated with sufficient accuracy. Comparison of reaction rates and yield of ethylene polymer shows that these factors are independent of the specific surface of the reaction space. Thus

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"APPROVED FOR RELEASE: 06/09/2000 CIA-RDP86-00513R000206820017-5

ACCESSION NR: AP4012181

commercial scale apparatus can be designed by estimating the process rate and yield dependence on pressure, temperature and dosage rate without concern for specific surface area of the reactor. Orig. art. has: 1 Table and 5 Figures

ASSOCIATION: None

SUBMITTED: 00 DATE ACQ: 26Feb64 ENCL: 02

SUB CODE: MA NR REF SOV: 005 OTHER: 003

Card 2/4

APPROVED FOR RELEASE: 06/09/2000 CIA-RDP86-00513R000206820017-5"

"APPROVED FOR RELEASE: 06/09/2000 CIA-RDP86-00513R000206820017-5

ACCESSION NR: AP4017164 S/0138/64/000/002/0020/0023

AUTHORS: Khozak, V. K.; Vaynshteyn, B. I.; Krasnoshchekova, N. A.; Breger, A. Kh.; Kaplunov, M. Ya.; Syerkus, N. P.

TITLE: Design of a setup for radiation vulcanization of tires with the use of Co^{60} Gamma radiation

SOURCE: Kauchuk i rezina, no. 2, 1964, 20-23

TOPIC TAGS: radiation vulcanization, tire vulcanization, cobalt 60, Gamma radiation, biplanar radiator, efficiency

ABSTRACT: The authors have designed three variants of a setup to effect radiation vulcanization of tires (260-20 and 6.70-15) with Co^{60} Gamma radiation. The variants were: 1) a setup with one biplanar radiator of constant size (130 x 130 cm, 48 cm apart); 2) a setup with one biplanar radiator of different size for each (same as 1 for the 260-20 tire; 100 x 100 cm, 40 cm apart for the 6.70-15 tire); and 3) a setup with two biplanar radiators of constant size for each (the size of 1 for the 260-20 tire; the size of the second radiator in 2 for the 6.70-15 tire). The efficiency of each variant was computed according to the formula $\eta = \frac{100\, W_{abs}^{min}\, \phi}{W_o}$

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ACCESSION NR: AP4017164

where W_0 = the power of the gamma-ray source and $W_{abs}^{min} = P_{min}vd$ (P_{min} is the minimal absorbed radiation dose, v is the volume of the irradiated object, and d is the density of the irradiated object). The efficiency of all three variants for the 260-20 tire proved to be 2.8. For the 6.70-15 tire, the efficiency of the first variant was 0.7, for the second and third, 1.3. The authors' computations have shown that for the duration of vulcanization adopted (22 hours for the 260-20 tire and 19 hours for the 6.70-15 tire), it was necessary to have a radiator with a total activity of $\sim 10^6$ gram-equivalents of radium. The use of a press form of aluminum alloy with walls no thicker than 15 mm permitted the productivity of the setup (with the activity indicated) to be almost doubled. Orig. art. has: 1 figure, 1 table, and 2 formulas.

ASSOCIATION: Nauchno-issledovatel'skiy fiziko-khimicheskiy institut im. L. Ya. Karpova (Scientific Research Physical-Chemical Institute); Nauchno-issledovatel'skiy institut shinnoy promyshlennosti (Scientific Research Institute of the Tire Industry)

SUBMITTED: 00 DATE ACQ: 23Mar64 ENCL: 00

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

Card 2/2

APPROVED FOR RELEASE: 06/09/2000 CIA-RDP86-00513R000206820017-5"

"APPROVED FOR RELEASE: 06/09/2000 CIA-RDP86-00513R000206820017-5

IVANOV, V.S.; SUKHIKH, T.A.; MEDVEDEV, Yu.V.; BREGER, A.Kh.; OSIPOV, V.B.; GOL'DIN, V.A.

Studies in radiation polymerization. Part 3: Radiation polymerization of piperylene in the channel complexon of urea. Vysokom. soed. 6 no. 5:782-780 My '64. (MIRA 17:6)

1. Leningradskiy gosudarstvennyy univeritet i Fiziko-khimicheskiy institut imeni Karpova, Leningrad.

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"APPROVED FOR RELEASE: 06/09/2000 CIA-RDP86-00513R000206820017-5

KHOZAK, V.K.; VAYNSHTEYN, B.I.; KRASNOSHCHEKOVA, N.A.; BREGER, A.Kh.; KAPLUNOV, M.Ya.; SYRKUS, N.P.

Design of a system for radiation vulcanization of tires by means of γ rays of Co^{60}. Kauch. i rez. 23 no.2:20-23 F '64. (MIRA 17:3)

1. Nauchno-issledovatel'skiy fiziko-khimicheskiy institut im. L.Ya. Karpova i Nauchno-issledovatel'skiy institut shinnoy promyshlennosti.

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"APPROVED FOR RELEASE: 06/09/2000 CIA-RDP86-00513R000206820017-5

ACCESSION NR: AP4037271 S/0190/64/006/005/0782/0786

AUTHORS: Ivanov, V. S.; Sukhikh, T. A.; Medvedev, Yu. V.; Breger, A. Kh.; Osipov, V. B.; Gol'din, V. A.

TITLE: Studies in radiation polymerization. 3. Radiation polymerization of piperylene in channel complexes of urea

SOURCE: Vy*sokomolekulyarny*ye soyedineniya, v. 6, no. 5, 1964, 782-786

TOPIC TAGS: piperylene polymerization, urea clathrate complex, endocytic clathrate component, channel polymerization, tube structure, trans piperylene polymer

ABSTRACT: Urea clathrate complexes with piperylene as endocytic component were prepared by mixing 1 gm urea with 0.001— 0.1 ml methanol, cooling in a glass ampule to -78C, and adding 1-3.7 moles of cooled piperylene per mole of urea. The polymerization of piperylene was achieved by γ -irradiation with Co^{60}. Parallel studies on block-polymerization of piperylene were conducted at -78C with irradiation doses of 30 Mrad. After 2 to 6 weeks at -78 to -45C, the residual piperylene monomer was removed by means of a vacuum pump. The urea was then dissolved in 10% acetone, leaving polymers whose specific viscosity, degree of unsaturation, and

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ACCESSION NR: AP4037271

infrared spectra were recorded. It was found that in channel polymerization an optimal yield of the polymer (66%) was obtained at a methanol content of 0.001 ml per 1 gm urea and at a molar ratio of the monomer to urea of 1:(3.5-3.7). The yield was considerably higher than in block polymerization. The infrared spectra of the channel polypiperylene in CCl_4 revealed the presence of only the 1,4-transconfiguration (at 968 cm^{-1}), while the block-polymerized polymer contained the trans- as well as the cis form. Orig. art. has: 2 tables and 1 chart.

ASSOCIATION: Leningradskiy gosudarstvenny*y universitet (Leningrad State University); Fiziko-khimicheskiy institut im. L. Ya. Karpova (Physicochemical Institute)

SUBMITTED: 07May63 DATE ACQ. 09Jun64 ENCL: 00

SUB CODE: MT NO REF SOV: 005 OTHER: 010

Card 2/2

APPROVED FOR RELEASE: 06/09/2000 CIA-RDP86-00513R000206820017-5"

"APPROVED FOR RELEASE: 06/09/2000 CIA-RDP86-00513R000206820017-5

SOBOL', N.V.; PETUSHKOV, A.A.; BREGER, A.Kh.

Foundations for airing standards in working chambers of high-power gamma irradiation plants. Atom energ. 16 no.3:262-264 Mr '64. (MIRA 17:3)

APPROVED FOR RELEASE: 06/09/2000 CIA-RDP86-00513R000206820017-5"

"APPROVED FOR RELEASE: 06/09/2000 CIA-RDP86-00513R000206820017-5

SHALASHOV, V.A.; Prinimali uchastiye: BREGER, A.Kh.; ZHUKOV, A.A.; GOL'DIN, V.A.; OSIPOV, V.B.

Effect of preirradiation on the structure and thermal decomposition of cementite. Zhur. fiz. khim. 38 no.2:485-488 F '64. (MIRA 17:8)

1. Institut tekstil'nogo mashinostroyeniya.

APPROVED FOR RELEASE: 06/09/2000 CIA-RDP86-00513R000206820017-5"

"APPROVED FOR RELEASE: 06/09/2000 CIA-RDP86-00513R000206820017-5

AVERBUKH, B.S.; ABRAMOVA, L.V.; BREGER, A.KH.; VAYNSHTEYN, B.I.; GOL'DIN, V.A.; KOCHESHKOV, K.A.; SYRKUS, N.P.; SHALYAPIN, N.K.; SHEVERDINA, N.I.

Determination of the optimum conditions for the reaction of radiation-chemical synthesis of dibutyltin dibromide. Zhur. fiz. khim. 38 no.10: 2445-2448 O '64. (MIRA 18:2)

1. Fiziko-khimicheskiy institut imeni L.Ya. Karpova.

APPROVED FOR RELEASE: 06/09/2000 CIA-RDP86-00513R000206820017-5"

"APPROVED FOR RELEASE: 06/09/2000 CIA-RDP86-00513R000206820017-5

SHALASHOV, V.A.; Prinimali uchastiye: BREGER, A.Kh.; ZHUKOV, A.A.; GOL'DIN, V.A.; TOMAS, V.K.

Effect of irradiation on the structure and tendency to thermal decomposition of chromium cementite. Zhur.fiz.khim. 38 no.11: 2735-2737 N '64. (MIRA 18:2)

APPROVED FOR RELEASE: 06/09/2000 CIA-RDP86-00513R000206820017-5"

"APPROVED FOR RELEASE: 06/09/2000 CIA-RDP86-00513R000206820017-5

L 42419-65 EWG(j)/EWT(m)/EPF(c)/EPR/EWP(t)/EWP(b) Pr-4/Ps-4 IJP(c) JD
ACCESSION NR: AP5008775 S/0240/65/000/003/0042/0048

AUTHOR: Sobol', N. V.; Breger, A. Kh., Petushkov, A. A.

TITLE: Materials used for calculating air exchange in rooms with powerful gamma-radiation units

SOURCE: Gigiyena i sanitariya, no. 3, 1965, 42-48

TOPIC TAGS: gamma radiation, air exchange, radiation environment

ABSTRACT: The formation of ozone and nitrogen oxides is the basic permanent factor which must be considered when calculating air exchange during irradiation. The authors give experimental data collected during the calculation of air exchange in rooms used for powerful Co^{60} units (K-6000, GURKh-40000, TsNIIKOP). The air was analyzed for ozone content as well as nitrogen oxides and nitrogen dioxide. After irradiation under conditions which permitted no air exchange, the amount of nitrogen dioxide in the total oxides present in the irradiated air ranged from 36 to 83%. The deviation from the average nitrogen dioxide concentration was as much as 50% in individual cases, but for the total content of nitrogen oxides it did not exceed 5%. Hence, the authors determined only the total content of nitrogen oxides.

Card 1/2

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"APPROVED FOR RELEASE: 06/09/2000 CIA-RDP86-00513R000206820017-5

L 42419-65

ACCESSION NR: AP5008775

2

Equations derived from theoretical calculations and nomograms were used to determine the air flow and air exchange rate in irradiation chambers and these were related to the size of the room and the activity of the irradiation unit. The validity of the equations was confirmed experimentally. Orig. art. has: 6 figures, 2 tables.

ASSOCIATION: Institut gigiyeny truda i profzabolevaniy AMN SSSR (Institute of Industrial Hygiene and Occupational Diseases, AMN SSSR); Fiziko-khimicheskiy institut im. L. Ya. Karpova, Moscow (Institute of Physical Chemistry)

SUBMITTED: 15Apr64 ENCL: 00 SUB CODE: NP

NO REF SOV: 009 OTHER: 000

llc

Card 2/2

APPROVED FOR RELEASE: 06/09/2000 CIA-RDP86-00513R000206820017-5"

"APPROVED FOR RELEASE: 06/09/2000 CIA-RDP86-00513R000206820017-5

L 7875-66 EWT(m)/EPF(c)/EWP(j)/EWA(h)/EWA(1) RM

ACC NR: AP5025035 SOURCE CODE: UR/0286/65/000/016/0084/0084

AUTHORS: Medvedev, Yu. V.; Ivanov, V. S.; Ivanova, L. I.; Breger, A. Kh.; Osipov, V. B.; Gol'din, V. A.

ORG: none

TITLE: Method for obtaining polychloroprene. Class 39, No. 173947

SOURCE: Byulleten' izobreteniy i tovarnykh znakov, no. 16, 1965, 84

TOPIC TAGS: rubber, chloroprene, polychloroprene, polymer, polymerization

ABSTRACT: This Author Certificate presents a method for obtaining polychloroprene by polymerization of chloroprene under the influence of γ-radiation. To regulate the molecular weight and structure of the polymer, the polymerization is carried out in the presence of amine and phenol type stabilizers.

SUB CODE: 07/ SUBM DATE: 12Feb62

nw

Card 1/1 UDC: 678.765.2.002.2

APPROVED FOR RELEASE: 06/09/2000 CIA-RDP86-00513R000206820017-5"

"APPROVED FOR RELEASE: 06/09/2000 CIA-RDP86-00513R000206820017-5

MAKHLIS, F.A.; BREGER, A.Kh.

Use of the gamma-radiation method in calculating the efficiency of radiation apparatus with planar irradiators. Atom. energ. 19 no.2:193-196 Ag '65. (MIRA 18:9)

APPROVED FOR RELEASE: 06/09/2000 CIA-RDP86-00513R000206820017-5"

"APPROVED FOR RELEASE: 06/09/2000 CIA-RDP86-00513R000206820017-5

TERENT'YEV, B.M.; EL'TEKOV, V.A.; BREGER, A.Kh.

Absorption of gamma radiation from a point source in macrosystems. Atom. energ. 19 no.2:196-199 Ag '65. (MIRA 18:9)

APPROVED FOR RELEASE: 06/09/2000 CIA-RDP86-00513R000206820017-5"

"APPROVED FOR RELEASE: 06/09/2000 CIA-RDP86-00513R000206820017-5

SOBOL', N.V.; PETUSHKOV, A.A.; BREGER, A.Kh.

Calculation of fresh air requirements in rooms housing high-power gamma-ray sources. Atom. energ. 19 no.2:201 Ag '65. (MIRA 18:9)

APPROVED FOR RELEASE: 06/09/2000 CIA-RDP86-00513R000206820017-5"

"APPROVED FOR RELEASE: 06/09/2000 CIA-RDP86-00513R000206820017-5

L 10798-66 EWP(e)/EWT(m)/EPF(n)-2/EWA(d)/T/EWP(t)/EWP(z)/EWP(b)/EWA(h)/EWA(c)
ACC NR: AT5023786 JD/WW/GG/GS/WH SOURCE CODE: UR/0000/62/000/000/0081/0099

AUTHOR: Pronman, I. M.; Shalashov, V. A.; Breger, A. Kh.

ORG: none

TITLE: Decomposition of the carbide phase of iron-carbon alloys and the phase transformations in white cast iron under the action of nuclear irradiations

SOURCE: Soveshchaniye po probleme Deystviye yadernykh izlucheniy na materialy. Moscow, 1960. Deystviye yadernykh izlucheniy na materialy (The effect of nuclear radiation on materials); doklady soveshchaniya. Moscow, Izd-vo AN SSSR, 1962, 81-99

TOPIC TAGS: white cast iron, cementite, cast iron neutron irradiation, cementite neutron irradiation, cast iron electron irradiation, cementite electron irradiation, cementite gamma irradiation

ABSTRACT: White cast iron containing about 45% cementite (Fe_3C) and pure cementite electrolytically precipitated from white cast iron were irradiated with a neutron flux of 10^{12} n/cm^2·sec, fast electrons, and gamma rays and vacuum annealed at a temperature varying from 650—1050C. The neutron irradiation dose for cementite and cast iron was 0.2—5 x 10^{16} n/cm^2 and the irradiation temperature did not exceed 65C. Prolonged high-temperature annealing produced no structural changes in unirradiated cementite, but in irradiated cementite, annealing at lower temperatures for a shorter time resulted in a phase transformation. For example, annealing for 2 hours at 650C, i.e., below the austenitic transformation temperature, led to an

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ACC NR: AT5023786

appreciable decomposition of irradiated cementite and to the liberation of 66% of the total amount of iron. The iron nuclei, formed as a result of neutron irradiation during annealing at temperatures below the austenitic region crystallized into α-iron, and those formed at temperatures corresponding to the austenite region, into γ-iron. Regardless of the amount of liberated iron, carbon crystallized into graphite only above 1000C. Thus, neutron irradiation of cementite even at a low flux (of the order of 10^{16} n/cm^2) led to the formation of iron and graphite nuclei. It is probable that larger irradiation doses can also lead to the crystallization of of the new phases directly during irradiation. Neutron irradiation had no direct effect on the microstructure of white cast iron, and its effect became apparent only after subsequent annealing. Annealing brought about a complete phase transformation with the formation of ferrite and graphite in irradiated cast iron, and only fragmentation of cementite crystals in unirradiated cast iron. Irradiation with fast electrons (energy 1.6—1.8 Mev, current 30—35 μamp, dose $\sim 10^{19}$ Mev/cm^2) in air at 100 and 130C produced surface oxidation of isolated cementite, but at -150C it produced no effect. However, irradiation in a vacuum at 600C for 2 hours resulted in almost complete decomposition and graphitization of cementite. Electron irradiation in air at 100C increased the hardness and electric conductivity of white cast iron. With increasing temperature, the hardness and electric conductivity decreased significantly, and irradiation in air or vacuum at 650—700C brought about complete phase transformation of white cast iron with the formation of ferrite and spheroidized graphite. Gamma-ray irradiation with a dose of about 1000 r/sec at 140C brought about no phase transformation in cementite, probably because of the low intensity and small irradiation dose. Orig. art. has: 14 figures and 5 tables. [MS]

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"APPROVED FOR RELEASE: 06/09/2000 CIA-RDP86-00513R000206820017-5

L 10798-66

ACC NR: AT5023786

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Card 2/3

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L 10798-66

ACC NR: AT5023786

SUB CODE: 13, 20 SUBM DATE: 18Aug62/ ORIG REF: 015/ OTH REF: 004

Card 3/3

APPROVED FOR RELEASE: 06/09/2000 CIA-RDP86-00513R000206820017-5"

"APPROVED FOR RELEASE: 06/09/2000 CIA-RDP86-00513R000206820017-5

L 14677-66 EWT(m) DIAAP DM
ACC NR: AP6008261 SOURCE CODE: UR/0089/65/019/002/0196/0199

AUTHOR: Terent'yev, B. M.; El'tekov, V. A.; Breger, A. Kh.

ORG: none

TITLE: Absorption of gamma ray energy by point sources in macrosystems

SOURCE: Atomnaya energiya, v. 19, no. 2, 1965, 196-199

TOPIC TAGS: gamma ray absorption, radiation source, Monte Carlo method, cobalt, cesium, isotope, radiation instrument

ABSTRACT: The efficiency of radiochemical devices was analyzed considering η the ratio of gamma radiation absorbed in the reactive volume of the device to the γ energy emitted by radiation source. The η value for two radiochemical devices was computed by the volume integration method and by the Monte Carlo method. Calculations for the first model consisted of a sphere R filled with a water-equivalent substance and ^{60}Co and ^{137}Cs point sources. Data derived by Monte Carlo method coincided with 1 to 2%, indicating negligible reverse scattering from the medium. The macrosystem of cylindrical configuration with a point γ source was taken as the

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"APPROVED FOR RELEASE: 06/09/2000 CIA-RDP86-00513R000206820017-5

L 14677-66
ACC NR: AP6008261

second model. The results of the Monte Carlo calculations of the γ-radiation efficiency of a water-equivalent finite dimension cylinder (5 to 60 cm in radius and 5 to 200 cm in height) was plotted for various source distributions. The results of the calculations for finite cylinders made by the method of integration and Monte Carlo method were in good agreement at the quantum energy $E_0 = 1.25$ Mev. Tabulated data are given also for the efficiency of macrosystems (cylinder-point source) calculated by various methods at 0.65 Mev energy. The results showed that the derived integration and asymptotic formulas can be used for practical computations. Orig. art. has: 2 figures, 3 formulas, and 1 table. [NA]

SUB CODE: 18, 20 / SUBM DATE: 20Aug64 / ORIG REF: 005 / OTH REF: 001

Card 2/2

APPROVED FOR RELEASE: 06/09/2000 CIA-RDP86-00513R000206820017-5"

"APPROVED FOR RELEASE: 06/09/2000 CIA-RDP86-00513R000206820017-5

L 14676-66 EWT(m) DIAAP

ACC NR: AP6008260 SOURCE CODE: UR/0089/65/019/002/0193/0196

AUTHOR: Makhlis, F. A.; Breger, A. Kh.

ORG: none

55
B

TITLE: Method for computing efficiency coefficient of radiation apparatus with plane gamma sources

19

SOURCE: Atomnaya energiya, v. 19, no. 2, 1965, 193-196

TOPIC TAGS: radiation detector, cobalt, isotope, Monte Carlo method, gamma radiation, radiation dosimeter, gamma quantum

ABSTRACT: A method is described for computing the efficiency of the radiation detector (i.e., the ratio of the energy absorbed by γ-irradiated object to the energy generated at the same time by the source) at various plane dimensions of the source and object. The method utilized the γ method, used for computing problems in radiation protection physics and radio-chemical devices, and the Monte-Carlo method for estimating the energy distribution from ^{60}Co point source in water. In addition a ferrosulfate dosimeter was used for measuring the absorbed doses inside rectangular vessels filled with water and aluminum and iron blocks. A

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L 14676-66

ACC NR: AP6008260

monoenergetic point source of γ quanta coinciding with one of the vertices of a rectangular object and a linear source erected so that two points coincide with two vertices of the irradiated rectangular object are analyzed. Orig. art. has: 3 figures, 5 formulas, and 2 tables. [NA]

SUB CODE: 18 / SUBM DATE: 28Jul64 / ORIG REF: 009 / OTH REF: 002

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APPROVED FOR RELEASE: 06/09/2000 CIA-RDP86-00513R000206820017-5"

"APPROVED FOR RELEASE: 06/09/2000 CIA-RDP86-00513R000206820017-5

L 14678-66 EWT(m)/EPF(n)-2 DIAAP

ACC NR: AP6008262 SOURCE CODE: UR/0089/65/019/002/0201/0201

AUTHOR: Sobol', N. V.; Petushkov, A. A.; Breger, A. Kh.

ORG: none

53
B

TITLE: Air-exchange calculation in rooms for high-power gamma units

19,55

SOURCE: Atomnaya energiya, v. 19, no. 2, 1965, 201

TOPIC TAGS: radiation chemistry, nitrogen oxide, ozone, explosive gas, gamma radiation, ventilation engineering, radiation shielding

ABSTRACT: Correlations were made of various data on radiochemical yields and permissible doses of nitrogen oxides and ozone formation and toxicity. The possibility of explosive gas accumulations in case of mixed shielding and water shielding of the source was analyzed, and it is suggested that regular ventilation of the room excludes the danger of explosive gas accumulations. Orig. art. has: 3 formulas. [NA]

SUB CODE: 18, 07 / SUBM DATE: 24Nov64 / ORIG REF: 007

Card 1/1 UDC: 697.92: 539.122

APPROVED FOR RELEASE: 06/09/2000 CIA-RDP86-00513R000206820017-5"

"APPROVED FOR RELEASE: 06/09/2000 CIA-RDP86-00513R000206820017-5

L 30776-66 EWP(j)/EWT(m)/ETC(f) GG/RM/DS

ACC NR: AP6022136 SOURCE CODE: UR/0080/65/038/012/2662/2665

AUTHOR: Kocherginskaya, L. L.; Rozenblyum, N. D.; Stasyuk, Kh. A.; Zhitkova, L. G.; Breger, A. Kh.

ORG: none

32
B

TITLE: Obtaining ion-exchange membranes by the pre-irradiation method

SOURCE: Zhurnal prikladnoy khimii, v. 38, no. 12, 1965, 2662-2665

TOPIC TAGS: phosphorylation, ion exchange membrane, gamma irradiation, sulfonation

ABSTRACT: To verify the possibilities of the pre-irradiation method, polyelefin films were irradiated on a unit used for radiation-chemical research with Co^{60} gamma-radiation source (dose strength -- 0.15 megarad/hour) in the presence of atmospheric oxygen. The peroxide group content in irradiated films was determined by an iodometric method. It was established that the peroxide group content at room temperature does not vary over a period of two to three months. Grafting of the monomer was carried out in air at an elevated temperature outside the irradiated zone. For introduction of ionogenic groups, the grafted films underwent sulfonation, saponification, or phosphorylation. It was found that the presence of an oxidation inhibitor

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L 30776-66

ACC NR: AP6022136

in the polyolefin films, introduced during their manufacture, does not affect rate of monomer grafting (the monomers were purified by agitation with 20% NaOH, rinsed with distilled water, dried over calcium chloride, and distilled at reduced pressure). Conditions were selected for radiation grafting by the pre-irradiation method, with styrene and acrylonitrile in the ratio of 85:15, from an 80% solution of this mixture in methanol. Orig. art. has: 3 figures and 2 tables. [JPRS]

SUB CODE: 07 / SUBM DATE: 10Dec63 / ORIG REF: 002 / OTH REF: 005

Card 2/2 JS

APPROVED FOR RELEASE: 06/09/2000 CIA-RDP86-00513R000206820017-5"

"APPROVED FOR RELEASE: 06/09/2000 CIA-RDP86-00513R000206820017-5

L 06456-67 EWT(m)/EWP(j) IJP(c) GG/RM

ACC NR: AP6024546 (A) SOURCE CODE: UR/0089/66/021/001/0064/0066

AUTHOR: Berlyant, S. M.; Drozdov, V. Ye.; Finkel', E. E.; Orlenko, P. A.; Suroyegin, L. M.; Breger, A. Kh.; Karpov, V. L.; Zorin, V. A.

ORG: none

TITLE: Large-scale radiation cross linking of polyethylene insulation of cable products

SOURCE: Atomnaya energiya, v. 21, no. 1, 1966, 64-66

TOPIC TAGS: radiation chemistry, polyethylene, polymer cross linking, insulated wire, electric cable/ KP gamma ray apparatus

ABSTRACT: In view of the many advantages resulting from the use of irradiated thermally stabilized polyethylene as insulation in cables, the authors describe apparatus developed for the irradiation of such insulation, for use in geophysical cables for very deep well drilling (o.d. 6.5 mm, length ~9 km, weight ~380 kg, volume ~ 400 l), capable of withstanding temperatures up to 200C and pressures higher than 300 atm. The entire cable was wound on a drum and exposed to γ radiation from Co^{60} (total activity 180,000 g-equivalent of radium) from the KP-200 apparatus. Measures taken to ensure uniformity of the gamma radiation, which is an essential factor in the success of the operation, are described. The required dose was 140 Mrad (±10%). At a dose intensity of 63 r/sec and an irradiation time of 610 hr, the productivity of the apparatus was 0.7 kg/hr and the efficiency ~13%. The authors thank G. N. Lisov

Card 1/2 UDC: 621.039.55: 541.15

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L 06456-67

ACC NR: AP6024546

5

for participating in the development of the apparatus, and M. Ye. Yeroshov, M. D. Larionov, L. K. Topil'skiy, Yu. D. Kozlov, and the late N. A. Kuznetsov for help with the experiments. Orig. art. has: 3 figures.

SUB CODE: 07, 20/ SUBM DATE: 16Oct65/ ORIG REF: 007

Card 2/2

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"APPROVED FOR RELEASE: 06/09/2000 CIA-RDP86-00513R000206820017-5

flüssigem Wasserstoff. Sie wurde als Summe der im Sammelgefäß anfallenden und der aus ihm verdampfenden Wasserstoffmenge bestimmt. Letztere Größe ergab sich auf Grund der Verdampfungswärme des flüssigen Wasserstoffs und der Wärmebelastung. Die Kurve 2 charakterisiert somit das Kälteleistungsvermögen des Verflüssigers.

Praktische Bedeutung kommt nur dem Teil der Kurve zu, der Wärmebelastungen unter 15 W entspricht, bei denen bereits keine Ansammlung von flüssigem Wasserstoff im Sammelgefäß mehr eintritt. Somit beträgt die maximale Kälteleistung des Verflüssigers bei einem Druck von 60 at etwa 4 l flüssigen Wasserstoff je h, bei Umrechnung auf den Betrieb mit einem Kompressor von 10 m³/h Fördertleistung dagegen 2,5 l Flüssigkeit/h. Die maximale Verdampfungsgeschwindigkeit der Anlage beträgt, wie oben erwähnt, 2 l/h. Demzufolge reicht zu ihrer Versorgung ein Kompressor mit einer Leistung von 10 m³/h bei 60 at aus. Der typisierte Luftkompressor KR2L der nicht größer als die Vorrakuumpumpe 2DVR-1 ist und der bei geringer Abänderung zur Kompression von Wasserstoff eingesetzt werden kann, wenn diese gewünschten Daten auf.

Zusammenfassung

Die Gesamtleistung aller Aggregate der beschriebenen Pumpe mit einer Sauggeschwindigkeit von 3,7 · 10⁶ l/s und der für den Betrieb des Verflüssigers bei der Wasserstoffverflüssigung erforderliche Elektroenergieverbrauch beträgt ≈13 kW, unter Berücksichtigung des zur Kühlung des Schirms benötigten Stickstoffs dagegen 17 kW. Sie ist geringer als die von Öldiffusionspumpen entsprechender Sauggeschwindigkeit benötigte Leistung.

Einen gewissen Mangel der Kondensationspumpen bildet einstweilen die relative Kompliziertheit ihrer Wartung, da man die Arbeitsweise des Verflüssigers und Kompressors ständig beobachten muß.

Zum Schluß danken die Verfasser B. P. Batrakov und V. I. Simonov für ihre Unterstützung bei den Messungen.

Eingegangen am 11. 2. 1958

Literatur

[1] R. G. Lazarev, K. S. Borovik, M. P. Fedorova, N. M. Cin, Chr. ds. J. II (1957), H. 2, S. 173.

[2] K. S. Borovik, R. G. Lazarev, M. P. Fedorova, N. M. Cin, Chr. ds. J. II (1957), H. 1, S. 66.

(Übersetzt und bearbeitet von Dipl.-Math. G. Eberstein, Leipzig)

Bestrahlungskreisläufe mit einem Kernreaktor als Strahlenquelle[1])

J. S. Rjabchik, A. Ch. Bader

Dies ist [1] behandelte Problem des Bestrahlungskreislaufs mit einem Radioisotop im Arbeitsstoff wird auf den Fall mehrerer radioaktiver Isotope mit aktiven Folgeprodukten verallgemeinert. Bei der Untersuchung der berücksichtigten Dimensionierung des Kreislaufs und der je Dimensionierungseinheit erforderlichen Elemente werden für vorausbestimmte, die Arbeitsstoffe gewonnene Elemente erwarten sich Indizien und neue Lagerungen als weiter gültig.

Insbesondere ergab sich für einen Bestrahlungskreislauf mit einem spaltbaren Isotop als Arbeitsstoff (sogenannter „Urankreislauf") bei im übrigen gleichen Bedingungen eine wesentlich geringere spezifische Leistung als für den Kreislauf mit metallischen Indizien oder anderen Lagerungen. Als Spezialfall des „Urankreislaufs" wird der Verwendung von nicht vollständig angereicherten Brennstoffelementen für Bestrahlungszwecke untersucht. Dabei wird festgestellt, daß die Dimensionierung der Anlage 2–4mal größer als die einer Bestrahlungsanlage mit einer vollständig angereicherten Brennstoffelemente sein kann.

Einleitung

In der Arbeit [1] wurde ein Bestrahlungskreislauf mit einem Arbeitsstoff untersucht, in dem auch nur ein radioaktives Isotop ohne aktive Folgeprodukte bilden konnte.[2]) Es sind jedoch allgemeinere Fälle denkbar. Zunächst können sich bei der Bestrahlung mehrere Radioisotope bilden. Zweitens können die Folgeprodukte dieser primären Radioisotope wiederum radioaktiv sein. Drittens können sowohl die primären Radioisotope als auch die radioaktiven und stabilen Zerfallsprodukte aktiviert werden und damit neue Radioisotope entstehen. Schließlich kann sich im Arbeitsstoff insbesondere ein spaltbares Isotop befinden (sogenannter „Urankreislauf"). Demnach kann durch die Aktivierung im Reaktor ein recht kompliziertes Isotopengemisch entstehen, dessen Komponenten entweder voneinander unabhängig sind oder genealogisch miteinander zusammenhängen. Die Berechnung eines derartigen Kreislaufes mit von Zyklus zu Zyklus verschiedenen f_g, f_B und f_E ist schwierig und kaum zweckmäßig.[3]) Wir beschränken uns deshalb hier auf die Untersuchung von Kreisläufen mit konstanten f_g, f_B und f_E.

Kreislauf mit konstanten f_g, f_B und f_E

Offenbar ist die Gesamtleistung eines solchen Kreislaufs gleich der Summe der den einzelnen γ-Strahlern entsprechenden Dosisleistungen.

Liegt eine radioaktive Familie (Zerfallsreihe) vor, so wird die dem n-ten Isotop der Reihe entsprechende

[1]) Bl. C. Podyasm, A. X. Sperrp, [illegible] сверхтяжелых реакторов [illegible] Atomnaja Energija, 3, 7 (1956), H. 2, S. 129.

[2]) Während sich Arbeit [1] im Druck befindet, wurde eine von Bericht von R. Graham L. Projekt eines Bestrahlungskreislaufs" auf der Konferenz für Kernforschung und Kerntechnik, Chicago, März 1956, bekannt, in dem ein Teil der von uns in [1] behandelten Fragen untersucht wird. Das Resultat (Gesamtes stimmen mit den Resultaten der entsprechenden Teile unserer Arbeit [1] überein.

[3]) Zu den Berechnungen vgl. [1].

BREGER, A. R.

Eingg 25. Juli 58

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"APPROVED FOR RELEASE: 06/09/2000 CIA-RDP86-00513R000206820017-5

25(1) PHASE I BOOK EXPLOITATION SOV/1613

Breger, I. D.

Spravochnik instrumental'shchika dlya masterov i kvalifitsirovannykh rabochikh instrumental'nykh tsekhov (Tool Maker's Handbook for Foremen and Skilled Workers of Tool-Makers' Shops) Minsk, Gosizdat USSR, 1958. 385 p. 15,000 copies printed.

Ed.: P. Golubtsova; Tech. Ed.: A. Trukhanova.

PURPOSE: This book is intended for foremen and skilled tool makers engaged in the small-lot production of cutting tools.

COVERAGE: The manual contains information about tolerances, interoperational allowances, work conditions, and the economic aspects of machining accuracy in industrial operations. The author describes and recommends certain proven methods for setting up and servicing equipment used in tool making. Grades of steel used in Soviet plants for tool making are presented in a number of tables. The author states that this book contains a great deal of general information indispensable to machine shop foremen in their daily work. No personalities are mentioned. There are 12 Soviet references.

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APPROVED FOR RELEASE: 06/09/2000 CIA-RDP86-00513R000206820017-5"

"APPROVED FOR RELEASE: 06/09/2000 CIA-RDP86-00513R000206820017-5

BREGER, Isaak Davidovich; BEZRUKOVA, N., red.; STEPANOVA, N., tekhn.red.

[Handbook on metal-cutting tools; for foremen and advanced workers of cutting-tool shops] Spravochnik instrumental'shchika; dlia masterov i kvalifitsirovannykh rabochikh instrumental'nykh tsekhov. Izd.2., perer. i dop. Minsk, Gos.izd-vo BSSR. Red. nauchno-tekhn.lit-ry, 1961. 475 p. (MIRA 15:5)
(Metal-cutting tools)

APPROVED FOR RELEASE: 06/09/2000 CIA-RDP86-00513R000206820017-5"

"APPROVED FOR RELEASE: 06/09/2000 CIA-RDP86-00513R000206820017-5

BREGMAN, I. G.

X-ray therapy with soft rays of skin diseases. Vest. derm. i ven. 36 no.7:38-42 Jl '62. (MIRA 15:7)

1. Iz kliniki kozhnykh i venericheskikh bolezney (zav. - prof. M. V. Borzov) Kishinevskogo gosudarstvennogo meditsinskogo instituta, Respublikanskoy klinicheskoy bol'nitsy (glavnyy vrach Yu. B. Kasperskiy) i kafedry rentgenologii i radiologii (zav. - dotsent A. P. Burlakov).

(SKIN--DISEASES) (X RAYS--THERAPEUTIC USE)

APPROVED FOR RELEASE: 06/09/2000 CIA-RDP86-00513R000206820017-5"

"APPROVED FOR RELEASE: 06/09/2000 CIA-RDP86-00513R000206820017-5

BREGER, M. A.

Resins. M. A. Breger. [illegible] 41,099, Jan. 31, 1945. Alc. ext. of hops, after distn. of the solvent, is oxidized with air at 120-30°.

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"APPROVED FOR RELEASE: 06/09/2000 CIA-RDP86-00513R000206820017-5

BREGER, M. A.

BREGER, M. A. - "Medical Treatment and Prophylaxis of Scarlet Fever by Means of Penicillin." Sub 7 Feb 52, Acad Med Sci USSR. (Dissertation for the Degree of Candidate in Medical Sciences).

SO: Vechernaya Moskva January-December 1952

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"APPROVED FOR RELEASE: 06/09/2000 CIA-RDP86-00513R000206820017-5

BREGER, M.A.

USSR / Pharmacology, Toxicology, Chemotherapeutic Agents U-7

Abs Jour : Ref. Zh. Biol., No 2, 1958, No 8121

Author : Breger, M. A., Balyn'I. K.

Inst :

Title : Plasma Protein-Bound Penicillin

Orig Pub : V. Sb.: Antibiotiki, Eksperim. Klinich. izuch. M., 1956, 242-244

Abstract : Various amounts of potassium salts of crystalline penicillin retained their original activity after a four-hour incubation in human serum (1:20 dilution) at room temperature. By placing penicillin and 20% serum in semipermeable bags, it was determined by dialysis that, on the average, 45.6% of the penicillin became bound to the serum proteins, chiefly to the albumins; with an increase

Card : 1/2

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"APPROVED FOR RELEASE: 06/09/2000 CIA-RDP86-00513R000206820017-5

BREGER, M.A.

USSR/Microbiology - Antibiosis and Symbiosis, Antibiotics. F-2

Abs Jour : Ref Zhur - Biol., No 4, 1958, 14725

Author : Breger, M.A.
Inst :
Title : An Objective Method for Determining the Activity of Tetracyclines.

Orig Pub : Antibiotiki, 1956, 1, No 2, 11-14

Abstract : A simple objective method for determining antibiotics of the tetracycline group in solutions and blood serum with a photoelectrocolorimeter. The method is suggested for use in laboratories and clinics.

Card 1/1

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"APPROVED FOR RELEASE: 06/09/2000 CIA-RDP86-00513R000206820017-5

USSR/Microbiology. Antibiosis and Symbiosis. Antibiotics F-2

Abs Jour : Ref Zhur-Biologiya, No 1, 1957, 548

Abstract : the tested biological fluid is sufficient. The pH of 7.0 is determined by 10% NaoH. The medium does not require sterilization and can be kept at room temperature. Determination is on the basis of the change in the color of the medium; phenol red is the indicator. Bacterium proteus OX_{19} is the test culture. A series of dilutions of the tested biological fluid and a series of dilutions of the standard antibiotic are prepared. Each series consists of 11 experimental and 1 control dilutions. In order to calculate the concentrations of the antibiotic and the tested fluid it is necessary to

Card 2/3

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"APPROVED FOR RELEASE: 06/09/2000 CIA-RDP86-00513R000206820017-5

USSR/Microbiology. Antibiosis and Symbiosis F-2
Antibiotics

Abs Jour : Ref Zhur-Biologiya, No 1, 1957, 548

Abstract : multiply the minimal concentration of the standard antibiotic which arrests the growth of Bacterium proteus OX_{19} by the maximal dilution of the tested biological fluid which has an action similar to that of the antibiotic. The described method makes it possible, by the utilization of small volumes of the fluids, and in nonsterile conditions, to determine the concentration of antibiotics of the tetracycline group within 4 to 4½ hours.

Card 3/3

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"APPROVED FOR RELEASE: 06/09/2000 CIA-RDP86-00513R000206820017-5

BREGER, M.A.

Comparative study of chemotherapeutic activity of antibiotics from the tetracycline group. Antibiotiki, Moskva 9 no.2:9-11 Mar-Apr 56 (MLRA 9:3)

1. Otdel eksperimental'noy khimoterapii (zav.-chlen-korrespondent AMN SSSR prof. Kh.Kh. Planel'yes) Instituta farmakologii, eksperimental'noy khimioterapii i khimioprofilaktiki AMN SSSR.
(TETRACYCLINE, eff.
on exper. pneumococcal infect. in rats)
(PNEUMOCOCCAL INFECTIONS, exper.
eff. of tetracycline in rats)

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"APPROVED FOR RELEASE: 06/09/2000 CIA-RDP86-00513R000206820017-5

Med

Rapid micromethod for assay of antibiotics of the tetracycline group (biomycin, cyclomycin, and riomycin) in biological fluids. G. Ya. Kivman, M. A. Breger, and I. R. Balyn (Acad. Med. Sci., Moscow). ~~*Bull. Exptl. Biol. and Med.*~~ (U.S.S.R.) 41, No. 1, 93-4(1956)(English translation); *Byull. Eksptl. Biol. i Med.* 41, No. 1, 78-9(1956).—A micromethod has been developed for the rapid assay of antibiotics of the tetracycline group: biomycin (I) (aureomycin, chlorotetracycline), cyclomycin (II) (deschlorobiomycin, acromycin, tetracycline), and riomycin (III) (terramycin, hydroxytetracycline). This method is based on work of Schneierson (*Proc. Soc. Exp. Biol. Med.* 74, No. 1, 105-108 (1951)) modified to be carried out in 4.5 hrs. on 0.2 ml. biol. fluid under nonsterile conditions. Compn. of the culture medium: phenol red, 0.005%, 10 ml., Na_2HPO_4, 1.9 g., KH_2PO_4, 1.82 g., urea, 4.0 g., distd. H_2O, 190 ml., brought to pH 7.0 with 10% NaOH. No sterilization is required. *B. proteus* OX_{19} (IV) is grown for 6 hrs. on the usual beef-peptone broth or on agar with pH 7.1-7.3. Before use, the culture is dild. with urea medium to 40 million bacteria per ml. of medium (by optical standard). This diln. factor is important. Procedure: 2 series of 12 test tubes each are used. IV (0.2 ml.) dild. according to the standard is put in each tube. The unknown (0.2 ml.) is added to the 1st tube of the 1st series, mixed, and 0.2 ml. is transferred to the 2nd test tube, etc. until the 11th test tube, from which 0.2 ml. liquid is poured off. This last serves as a control. The same dilns. are carried out in the test tubes of the 2nd series, adding 0.2 ml. of a standard soln. of the antibiotic under investigation to the first test tube. The tubes are incubated at 37° for 4-4.5 hrs., then the results are read. In each series, the last tube with unchanged color is considered. This gives the concn. of the standard antibiotic that inhibited the growth. Sensitivity of IV to standard solns. of tetracyclines is: I 0.38, II 0.95-1.15, III 0.95-1.15 γ/ml.

Blaine K. Bernstein

Dept. Exptl. Chemotherapy
Inst. Pharmacology,
Exptl. Chemotherapy
+ Chemicoprophylaxis,
AMS, USSR

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"APPROVED FOR RELEASE: 06/09/2000 CIA-RDP86-00513R000206820017-5

BREGER, M.A. (Cand. of Med. Sci.)

"On the Question of Combining Penicillin With Plasma Proteins,"

p. 242 Ministry of Health USSR Proceedings of the Second All-Union Conference on Antibiotics, 31 May - 9 June 1957. p. 405, Moscow, Medgiz, 1957.

APPROVED FOR RELEASE: 06/09/2000 CIA-RDP86-00513R000206820017-5"

"APPROVED FOR RELEASE: 06/09/2000 CIA-RDP86-00513R000206820017-5

BREGER, M.A. (Cand. of Med. Sci.); BALYN', I.R.; ERTUGANOVA, Z.A. (Cand. of Med. Sci.); KALININA, N.A.: KIVMAN, G. Ya. (Cand. of Med. Sci.); IVANOVA, G.A. (Cand. of Vet. Sci.)

"Tetracyclin,"

p. 214 Ministry of Health USSR Proceedings of the Second All-Union Conference on Antibiotics, 31 May - 9 June 1957. p. 405, Moscow, Medgiz, 1957.

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"APPROVED FOR RELEASE: 06/09/2000 CIA-RDP86-00513R000206820017-5

BREGER, M.A.

USSR/Pharmacology. Toxicology. Chemotherapeutic Preparations. Anti-Tuberculous Remedies. V

Abs Jour: Ref. Zhur. - Biol., No 22, 1958, 102925

Author : Breger, M.A.; Stukalova, B.Ya.; Mitrofanov, V.S.

Inst : -

Title : A Study of the Bacteriostatic and Chemotherapeutic Action of the New Preparation Cycloserine.

Orig Pub: Byul. eksperim. biol. i med., 1958, 45, No.3, 77-80

Abstract: The new chemotherapeutic preparation d,l-cycloserine (I) was tested in experiments in vitro and in vivo. I is active in respect to grampositive and gramnegative bacteria; among them the paratyphoid group of bacteria and various types of dysentery bacteria. On tuberculosis bacteria, I acts more weakly than phthyvazide, PAS and streptomycin. I is active in respect to

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"APPROVED FOR RELEASE: 06/09/2000 CIA-RDP86-00513R000206820017-5

USSR/Pharmacology. Toxicology. Chemotherapeutic Preparations. Anti-Tuberculous Remedies. V

Abs Jour: Ref. Zhur. - Biol., No 22, 1958, 102925

freshly-isolated strains of the human type, resistant to the above-mentioned antituberculous preparations. In treatment of experimental tuberculosis of guinea pigs, I is ineffective. I in a dose of 30 mg (per guinea pig weighing 100-150 g) in the course of 100 days did not induce toxic manifestations in the animals.

Card 2/2

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"APPROVED FOR RELEASE: 06/09/2000 CIA-RDP86-00513R000206820017-5

CHERNUKH, A.M., BREGER, M.A., BALYN', I.R.

Studies on the bacteriostatic and therapeutic properties of the antituberculosis drug 1314 and of its hydrochloride derivative [with summary in English]. Biul.eksp.biol. i med. 46 no.10: 34-37 O '58 (MIRA 11:11)

1. Iz otdela eksperimental'noy khimioterapii (zav. - doktor meditsinskikh nauk A.M. Chernukh) Instituta farmakologii i khimioterapii (dir. - deystvitel'nyy chlen AMN SSSR V.V. Zakusov) AMN SSSR, Moskva. Predstavlena deystvitel'nym chlenom AMN SSSR V.V. Zakusovym.
(NICOTINIC ACID ISOMERS, eff.
α-ethylthioisonicotinamide, on various bact. (Rus))

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"APPROVED FOR RELEASE: 06/09/2000 CIA-RDP86-00513R000206820017-5

BREGER, M. A.

"Binding of chemicotherapeutic substances by the proteins of the fluids of the organism."

report submitted at the 13th All-Union Congress of Hygienists, Epidemiologists and Infectionists, 1959.

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"APPROVED FOR RELEASE: 06/09/2000 CIA-RDP86-00513R000206820017-5

STEPANYAN, E.S., kand.med.nauk; BREGER, M.A., starshiy nauchnyy sotrudnik; BOLYN', I.R.

Concentration of cycloserine in the blood and its excretion. Probl. tub. 38 no.3:89-94 '60. (MIRA 14:5)

1. Iz Instituta tuberkuleza AMN SSSR (dir. Z.A.Lebedeva) i Instituta farmakologii AMN SSSR (dir. V.V.Zakusov).
(ISOXAZOLIDINONE) (TUBERCULOSIS)

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"APPROVED FOR RELEASE: 06/09/2000 CIA-RDP86-00513R000206820017-5

BREGER, M.A.

Biological activity of cycloserine and some of its analogues and homologues. Antibiotiki 6 no.9:26-29 S '61. (MIRA 15:2)

1. Otdel khimioterapii (zaveduyushchiy - prof. A.M.Chernukh) Instituta farmakologii i khimioterapii AMN SSSR.
(CYCLOSERINE)

APPROVED FOR RELEASE: 06/09/2000 CIA-RDP86-00513R000206820017-5"

"APPROVED FOR RELEASE: 06/09/2000 CIA-RDP86-00513R000206820017-5

BREGER, M.A.

Use of a new antituberculosis preparation--Thianide (1314 Th)--in combination with streptomycin or phthivazide. Biul. eksp. biol. i med. 53 no.4:75-78 Ap '62. (MIRA 15:4)

1. Iz otdela khimioterapii (zav. - prof. A.M.Chernukh) Instituta farmakologii i khimioterapii (dir. - deystvitel'nyy chlen AMN SSSR V.V.Zakusov) AMN SSSR, Moskva. Predstavlena deystvitel'nym chlenom AMN SSSR V.V.Zakusovym.

(AMIDES) (STREPTOMYCIN) (PHTHIVAZIDE)
(ISONICOTINIC ACID)

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"APPROVED FOR RELEASE: 06/09/2000 CIA-RDP86-00513R000206820017-5

BREGER, M.A.; CHERNUKH, A.M.

Experimental study of diambutol, a new antituberculosis preparation. Biul. eksp. biol. i med. 55 / i.e. 56/ no.1:55-57 0'63 (MIRA 17:8)

1. Iz otdela eksperimental'noy khimioterapii [illegible] - prof. A.M. Chernukh) Instituta farmakologii i khimioterapii (dir.- deystvitel'nyy chlen AMN SSSR prof. V.V. Zakusov) AMN SSSR, Moskva. Predstavlen deystvitel'nym chlenom AMN SSSR V.V. Zakusovym.

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"APPROVED FOR RELEASE: 06/09/2000 CIA-RDP86-00513R000206820017-5

CA BREGETOVA, L.G. 110

Ascorbic acid content of cotton plant leaves. L. G. Bregetova (Stalinabad Botan. Inst.). *Botan. Zhur.* 36, 34-8(1951).—Cotton plant leaves (except lower 6) display periodicity of *ascorbic acid* content: a rise in daytime and a drop at night. The increase of ascorbic acid content with the height of the leaves on the plant is observed during fruit-bearing only in evening hours, while in morning and daytime a max. of ascorbic acid is found in the leaves of the 11th tier. The lower 6 leaves have little ascorbic acid and its content declines but slightly at night. The periodicity corresponds to temp. variations and intensity of sunlight; during the twilight periods a considerable increase of ascorbic acid is observed. The changes in ascorbic acid are inversely related to the H_2O content in rooted plants. Picked and wilting leaves show decline of ascorbic acid along with the loss of H_2O. G. M. Kosolapoff

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"APPROVED FOR RELEASE: 06/09/2000 CIA-RDP86-00513R000206820017-5

BREGETOVA, L. G. -- "Physiological Changes in Cotton Plants During Their Defoilation." Sub 16 Apr 52, Inst of Plant Physiology imeni K. A. Timiryazev, Acad Sci USSR. (Dissertation for the Degree of Candidate in Biological Sciences).

So: Vechernaya Moskva January-December 1952

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"APPROVED FOR RELEASE: 06/09/2000 CIA-RDP86-00513R000206820017-5

MATVEYEV, M.I.; OVCHINNIKOV, P.N., redaktor; BRIGHTOVA, L.G., redaktor; KOTSABENKO, Ye.G., redaktor; FROLOV, P., tekhnicheskiy redaktor.

[Water cycle of some arborescent plants in the mountainous part of Tajikistan] Vodnyi rezhim nakotorykh drevesnykh rasteniy gornogo Tadzhikistana. Stalinabad, Izd-vo Akademii nauk Tadzhikskoy SSR, 1953. 81 p. (Akademiia nauk Tadzhikskoi SSR, Stalinabad. Trudy, no. 10)
(Tajikistan--Plants--Transpiration) (Fruit trees) (MLRA 9:10)
(Nut trees)

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"APPROVED FOR RELEASE: 06/09/2000 CIA-RDP86-00513R000206820017-5

RAKITIN, Yu.V.; OVCHAROV, K.Ye.; BREGETOVA, L.G.

New chemicals for cotton defoliation. Fiziol.rast.2 no.2:177-181 Mr-Ap '55. (MLRA 8:10)

1. Institut fiziologii rasteniy imeni K.A.Timiryazeva Akademii nauk SSSR, Moscow
(Cotton) (Agricultural chemicals)

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"APPROVED FOR RELEASE: 06/09/2000 CIA-RDP86-00513R000206820017-5

BREGETOVA, L.G.

Method for determining ascorbic acid in colored plant extracts. Izv.Otd.est.nauk AN Tadzh.SSR no.11:85-88 '55. (MLRA 9:10)

1.Institut botaniki Akademii nauk Tadzhikskoy SSR.
(Ascorbic acid) (Cotton)

APPROVED FOR RELEASE: 06/09/2000 CIA-RDP86-00513R000206820017-5"

"APPROVED FOR RELEASE: 06/09/2000 CIA-RDP86-00513R000206820017-5

Bregetova, L. G.

SVESHNIKOVA, Valentina Mikhaylovna; BREGETOVA, L.G., otvetstvennyy redaktor; VINOGRADSKAYA, S.N., redaktor izdatel'stva; FROLOV, P.M., tekhnicheskiy redaktor.

[Osmotic pressure in Alpine plants] Osmoticheskoe davlenie u vysokogornykh rastenii. Stalinabad, Izd-vo Akademii nauk tadzhikskoi SSR. 1956. 54 p. (Trudy, vol. 45) (MLRA 10:4)
(Pamirs--Alpine flora)
(Osmosis)

APPROVED FOR RELEASE: 06/09/2000 CIA-RDP86-00513R000206820017-5"

"APPROVED FOR RELEASE: 06/09/2000 CIA-RDP86-00513R000206820017-5

NASYROV, Yusuf Saidovich; BREGETOVA, L.G., otv.red.; VINOGRADSKAYA, S.N., red.izd-va; FROLOV, I.M., tekhn.red.

[Photosynthesis and the yield of cotton] Fotosintez i urozhai khlopchatnika. Stalinabad. Izd-vo AN Tadzh.SSR. 1956. 122 p. (Akademiia nauk Tadzh.SSR, Stalinabad. Trudy, vol.60)

(Cotton growing) (Photosynthesis) (MIRA 12:6)

APPROVED FOR RELEASE: 06/09/2000 CIA-RDP86-00513R000206820017-5"

"APPROVED FOR RELEASE: 06/09/2000 CIA-RDP86-00513R000206820017-5

Magnesium chlorate as an effective defoliant for cotton. Yu. V. Rakitin, K. E. Ovcharov, and L. Bregetova. *Khlopkovodstvo* 6, No. 6, 32-5(1956).—A 30% soln. of $Mg(ClO_3)_2 \cdot 6H_2O$ (I) was studied for its defoliant properties in the cotton plant. Application of 6-7 kg. of I per ha. of cotton lowered the water content and the photosynthetic activity of the leaves. This change led to the more rapid removal of the leaves from the plant. Higher doses of I (9-10 kg./ha.) caused a marked disintegration of the physiological processes of the leaves to set in so quickly that they dried out and remained on the plant. I soln. was applied by airplane at the rate of 250 l./ha, or 0.6 kg./ha. of active ingredients and 88.4% of the leaves fell off after 9 days. I did not harm the cotton fiber. I and endotal both speeded up the opening of the cotton balls; ethylene was the most effective in this respect. Comparative tests of $CaCN_2$ and I as a defoliant showed the latter to be superior. M. D.

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"APPROVED FOR RELEASE: 06/09/2000 CIA-RDP86-00513R000206820017-5

I.

USSR/Physiology of Plants - Water Regime.

Abs Jour : Ref Zhur - Biol., No 15, 1958, 67833

Author : Bregetova, L.G.

Inst : Academy of Sciences TadzhSSR, Department of Natural Sciences (Institut botaniki)

Title : Changes in the Water Regime of the Cotton Plant During Artificial Removal of Leaves.

Orig Pub : Izv. Otd. yestvest. nauk AN TadzhSSR, 1957, No 18, 111-117

Abstract : Immediately after treatment with a magnesium chlorate defoliant the transpiration intensity of cotton increased, the water retaining capacity of the leaf fibers dropped, and the quantity of evaporated water increased (determined by the "withering" method). However, the total water content [ovodnennost'] of the fibers did not decline. With the increase in transpiration intensity the reduction in water content of the fibers of the treated plants was significantly

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"APPROVED FOR RELEASE: 06/09/2000 CIA-RDP86-00513R000206820017-5

BREGETOVA, L.G.

Comparative study on the heat resistance of protoplasm of sedges from low-grass semisavannas and mountain meadows. Izv. Otd.est.nauk AN Tadzh.SSR no.3:3-8 '58. (MIRA 13:4)

1. Botanicheskiy institut AN Tadzhikskoy SSR.
(Sedge) (Plants, Effect of temperature on)

APPROVED FOR RELEASE: 06/09/2000 CIA-RDP86-00513R000206820017-5"

"APPROVED FOR RELEASE: 06/09/2000 CIA-RDP86-00513R000206820017-5

BREGETOVA, L.G.; POPOLINA, T.G.

Localization of substances in tissues of semisavanna plants.
Trudy AN Tadzh SSR 97:251-278 '58. (MIRA 13:4)
(Tajikistan--Grasses)
(Plant cells and tissues)

APPROVED FOR RELEASE: 06/09/2000 CIA-RDP86-00513R000206820017-5"

"APPROVED FOR RELEASE: 06/09/2000 CIA-RDP86-00513R000206820017-5

BREGETOVA, L.G.; POPOVA, A.I.

Heat resistance of the protoplasm of the representatives of various types of herbaceous plants of Tajikistan. Trudy Otd. fiziol. i biofiz. rast. AN Tadzh. SSR 2:3-107 '62. (MIRA 16:4)
(Tajikistan--Grasses) (Plants, Effect of temperature on)
(Protoplasm)

APPROVED FOR RELEASE: 06/09/2000 CIA-RDP86-00513R000206820017-5"

"APPROVED FOR RELEASE: 06/09/2000 CIA-RDP86-00513R000206820017-5

BREGETOVA, L.G.; POPOVA, A.I.

Temperature balance of the leaves of plants in Tajikistan. Trudy Otd. fiziol. i biofiz. rast. AN Tadzh. SSSR no.3:29-40 '63. (MIRA 16:9)

APPROVED FOR RELEASE: 06/09/2000 CIA-RDP86-00513R000206820017-5"

"APPROVED FOR RELEASE: 06/09/2000 CIA-RDP86-00513R000206820017-5

BREGETOVA, N.G.

"New Substance for Protection Against Mosquitoes." D. I. Blagoveschtschenski, N.G. Bregetova, and A.S. Monchadski (Compt. rend. Acad. Sci. U.R.S.S., 1943, 40, 119-122). The d-a-pinene fraction of the oil of Juniperus seravtschanica is an efficient deterrent against mosquito attacks on man. It may be applied to protective netting either as the pure substance or as a mixture with lysol and H_2O.

P.G.M.

APPROVED FOR RELEASE: 06/09/2000 CIA-RDP86-00513R000206820017-5"

"APPROVED FOR RELEASE: 06/09/2000 CIA-RDP86-00513R000206820017-5

1ST AND 2ND ORDERS

PROCESSES AND PROPERTIES INDEX

3RD AND 4TH ORDERS

BREGETOVA, N. G.

14

Zoology Inst, Acad Sci USSR
Inst Zoology & Parasitology, Tadzhik Affiliate, Acad Sci USSR

New deterrent substances for protecting man against the attacks of mosquitoes. D. I. Blagoveshchenskii, N. G. Bregetova and A. S. Monchadskii. *Doklady Akad. Nauk S. S. S. R.* 40, 135-8(1943); *Compt. rend. acad. sci. U. R. S. S.* 40, 119-22(1943)(in English).—The *d*-α-pinene fraction of juniper oil, from *Juniperus sergeschanica*, either alone or dispersed in water with Lysol or naphthalysol is an effective mosquito repellent. Its application to mosquito netting greatly improves the latter's effectiveness.
J. W. Perry

COMMON ELEMENTS

OPEN

MATERIALS INDEX

ASM-SLA METALLURGICAL LITERATURE CLASSIFICATION

AUTHOR INDEX

1ST AND 2ND LETTER

2ND LETTER

3RD AND 4TH ORDERS

FM GROUPS

APPROVED FOR RELEASE: 06/09/2000 CIA-RDP86-00513R000206820017-5"

"APPROVED FOR RELEASE: 06/09/2000 CIA-RDP86-00513R000206820017-5

BREGETOVA, N. G.

"Activity of Attack by Aedes caspius caspius (Pallas) Edw. and pedes vexans Meig. on man in nature. Referaty, DBS, '44, pp 118-119.

APPROVED FOR RELEASE: 06/09/2000 CIA-RDP86-00513R000206820017-5"

"APPROVED FOR RELEASE: 06/09/2000 CIA-RDP86-00513R000206820017-5

BREGETOVA, Nina Georgiyevna

"Activity of Attack of Blood-Sucking Diptera on Man in Nature,"

Referaty, DBS, '45, pp 176-178

Candidate's Dissertation.

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30784. BREGETOVA, N. G.

Materialy po faune kleshchey sem. Haemogamasidae v SSSR. Parazitol. sbornik (Akad. nauk SSSR, Zool. in-t). XI, 1949, c. 161-85. --Bibliogr: s. 184-85.

"Materials on the fauna of ticks of the family haemogamasidae in the USSR"

Div. of Parasitology, Zoology Inst, Dept. Biol. Sci. AS USSR

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BREGETOVA, N G

30785. BREGETOVA, N. G. and VYSOTSKAYA, S. O.

Gamazovyye kleshchi (Gamasina, Parasitiformes) - Parazity obyknovennoy polevki (Microtus arvalis Pall.) i obitateliyeye gnezd v okrestnostyakh Leningrada. Parazitol. sbornik (Akad. nauk SSSR, Zool. in-t), XI, 1949, s. 186-200. -- Bibliogr: s. 199-200.

Div. parasitology, Zoology Inst, Acad. Sci. USSR, (ibid, p.161)

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BREGETOVA, N. G.

PA 3/50T5

USSR/Biology - Parasites
Ticks

1 Aug 49

"Parasitic Mites and Ticks of the Family Myonyssus (Gamasidae, Liponyssidae)," N. G. Bregetova, Zool Inst, Acad Sci USSR, 2½ pp

"Dok Ak Nauk SSSR" Vol LXVII, No 4, 451-53

In a collection of specimens made in 1946 by V. B. Dubinin and Z. M. Zhmayeva, and in a later collection by M. M. Belopol'skaya, in Primorskiy Kray a new species of the myonyssus family, Myonyssus dubinini Bregetova, Sp. Nov., was discovered and erroneously classified as genus Liponyssus. It is a parasite

[redacted]

3/50T5

USSR/Biology - Parasites (Contd)

1 Aug 49

of rodents and insectivora, so far found only in Primorskiy Kray. Submitted by Acad Ye. N. Pavlovskiy 26 May 49.

[redacted]

3/50T5

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BREGETOVA, N.G.

Parasitic mites in the nasal cavity of birds
Paraz. sbor. no.13, 1951

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BREGETOVA, N. G.

Agriculture

Collection and study of mites Gamazidae. Moskva Izd-vo Akademii nauk SSSR, 1952.

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

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"APPROVED FOR RELEASE: 06/09/2000 CIA-RDP86-00513R000206820017-5

DUBININ, V.B.; BREGETOVA, N.G.

Parasitic bloodsucking ticks and mites of vertebrate animals of Turkmenia. Trudy Zool.inst. 10:45-60 '52. (MLRA 7:4)
(Turkmenistan--Ticks) (Ticks--Turkmenistan) (Parasites--Vertebrates) (Mites)

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"APPROVED FOR RELEASE: 06/09/2000 CIA-RDP86-00513R000206820017-5

BREGETOVA, N.G.; KOLPAKOVA, S.A.

Gamasoidea, parasites of the water rat (Arvicola terrestris L.) and inhabitants of its nests in the Volga delta. Paraz.sbor. 14:56-70 '52. (MLRA 6:6)

1. Zoologicheskiy institut Akademii Nauk SSSR. Saratovskiy institut "Mikrob." (Parasites--Water rats) (Volga Delta--Mites)

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BREGETOVA, N.G.; NEL'ZINA, Ye.N.

Suslik mite Haemogamasus citelli Bregetova et Nelzina, Sp.Nov. (Gamasoidea, Haemogamasidae). Paraz.sbor. 14:71-74 '52. (MLRA 6:6)

1.Otdel parazitologii Zoologicheskogo instituta Akademii Nauk SSSR, Rostovskiy-na-Donu protivochumnyy institut. (Parasites--Suslik) (Mites)

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1. BREGETOVA, N. G.

2. USSR (600)

4. Ticks

7. New species of tick of the genus Haemolaelaps (Gamasoidae, Laelaptidae), which are parasites of rodents. Zool. zhur. 31 no. 6, 1952.

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

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"APPROVED FOR RELEASE: 06/09/2000 CIA-RDP86-00513R000206820017-5

BREGETOVA, N.G.

Mites of the genus Bdellonyssus Fonseca, 1941 (Gamasoidea, Liponyssidae). Trudy Zool.inst. 13:310-319 '53. (MLRA 7:5)
(Mites)

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"APPROVED FOR RELEASE: 06/09/2000 CIA-RDP86-00513R000206820017-5

BREGETOVA, N.G.

Gamasoid mites of the Far East. Paraz.sbor. 15:302-338 '53.
(MLRA 7:5)

1. Zoologicheskiy institut Akademii nauk SSSR.
(Far East--Mites) (Mites--Far East)

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"APPROVED FOR RELEASE: 06/09/2000 CIA-RDP86-00513R000206820017-5

BREGETOVA, N.G.

Gamasid ticks (Gamasoidea) along the central course of the Ural River. Trudy Zoolinst. 16:471-488 '54. (MLRA 8:6)
(Ural Valley--Ticks)

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"APPROVED FOR RELEASE: 06/09/2000 CIA-RDP86-00513R000206820017-5

BREGETOVA, N.G.

Diagnostics of the genera Androlaelaps, Haemolaelaps, and Hypoaspis (s.str.) with a description of a new species of the genus Androlaelaps Berlese (Gamasoidea, Laelaptidae). Trudy Zool.inst. 21:231-240 '55. (MLRA 9:5)

(Mites)

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BREGETOVA, N.G.

PAVLOVSKIY, Ye.N., akademik, redaktor; BYKHOVSKIY, B.Ye., redaktor; VINOGRADOV, B.S., redaktor; STRELKOV, A.A.; SHTAKEL'BERG, A.A., redaktor; BREGETOVA, N.G., redaktor; RADZIVILOVSKAYA, Z.A., redaktor; SMIRNOVA, A.V., tekhnicheskiy redaktor.

Mites of rodents in the U.S.S.R. Opr.po faune 59:3-458 '55. (MLRA 9:1)

1. Direktor Zoologicheskogo instituta AN SSSR (for Pavlovskiy)
(Mites) (Rodentia--Diseases and pests)

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BREGETOVA, N.G.; PAVLOVSKIY, Ye.N., akademik, redaktor; BYKHOVSKIY, B.Ye., redaktor; VINOGRADOV, B.S., redaktor; STRELKOV, A.A., redaktor; SHTAKEL'BERG, A.A., redaktor; MONCHADSKIY, A.S., redaktor; ZENDEL', M.Ye., tekhnicheskiy redaktor.

[Gamasid mites (Gamasoidea); short guide] Gamazovye kleshchi (Gamasoidea); kratkii opredelitel'. Moskva, Izd-vo Akademii nauk SSSR, 1956. 246 p. (Opredeliteli po faune SSSR, no.61) (MLRA 9:8)

1. Direktor zoologicheskiogo instituta AN SSSR (for Pavlovskiy)
(Mites)

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