"APPROVED FOR RELEASE: 08/23/2000 CIA-RDP86-00513R001548210010-9

BOGOVSKIY, Pavel Aleksandrovich; KLENSKIY, K.S., red.; SEVAST'YANOV, A., red.; TOOMSALU, E., tekhn. red.

[Carcinogenic effect of products of Estonian oil shale] Kantserogennoe deistvie produktov pererabotki estonskogo slantsa. Tallinn, Akad. nauk Estonskoi SSR, 1961. 349, lii p. (MIRA 14:12)
(ESTONIA—OIL SHALES) (CARCINOGENS)

APPROVED FOR RELEASE: 08/23/2000 CIA-RDP86-00513R001548210010-9"

"APPROVED FOR RELEASE: 08/23/2000 CIA-RDP86-00513R001548210010-9

DVORNITSKIY, Georgiy Stepanovich. Prinimali uchastiye: DEMINA, N.V., inzh.; TALYZIN, M.D., kand.tekhn.nauk; MAZOV, Yu.A., kand. tekhn.nauk. CHINCHIRADZE, I.G., retsenzent; VESNOVSKIY, V.D., retsenzent; OKLOVA, L.A., red.; SEVAST'YANOV, A.G., red.; MEDVEDEV, L.Ya., tekhn.red.

[Twisting and rewinding of silk in the manufacture of synthetic fibers] Kruchenie i peremotka shelka v proizvodstve khimicheskikh volokon. Moskva, Gos.nauchno-tekhn.izd-vo lit-ry po legkoi promyshl., 1959. 189 p. (MIRA 13:8)
(Rayon) (Textile machinery)

APPROVED FOR RELEASE: 08/23/2000 CIA-RDP86-00513R001548210010-9"

"APPROVED FOR RELEASE: 08/23/2000 CIA-RDP86-00513R001548210010-9

NOVIKOV, Stepan Malakhiyevich; SLEPCHENKO, Aleksandr Gavrilovich; TIGAREV, Pavel Alekseyevich; SEVAST'YANOV, A.G., red.; KONOVALOVA, Ye.K., tekhn. red.

[Marine piston compressors] Korabel'nye porshnevye kompressory. Moskva, Voen. izd-vo M-va obor. SSSR, 1961. 197 p. (MIRA 14:10)
(Compressors) (Ships—Equipment and supplies)

APPROVED FOR RELEASE: 08/23/2000 CIA-RDP86-00513R001548210010-9"

"APPROVED FOR RELEASE: 08/23/2000 CIA-RDP86-00513R001548210010-9

The First All-Union Conference of Universities and Colleges on Radiochemistry SOV/55-59-3-29/32

Investigation of the Transformation of Solids; V.I.Spitsyn, K.B.Zaborenko, A.M.Babeshkin, M.A.Radicheva: Transformation of Heteropoly-compounds; K.B.Zaborenko, A.M.Babeshkin, I.V. Kovalenko: Geochemistry of Radium; K.B.Zaborenko, V.I. Korobkov: Microanalytical Determination of Uranium by Means of Nuclear Emulsions. An.N.Nesmeyanov, De Dyk-Man: Partial Vapor Pressure of Co in Alloys With Ni; Yu.A.Priselkov, Yu.A. Sapozhnikov, A.V.Tseplyayeva, V.V.Karelin: The Behavior of a Molecular Metal Beam in the High-frequency Field; I.V.Golubtsov, A.V.Lapitskiy, V.K.Shiryayev: Vapor Pressure of Niobium Dioxide; I.V.Golubtsov, Yu.A.Likhachev, Ye.K.Bakov: Various Constructions of the Scintillation Attachment to the Apparatus of the Type B. Kafedra analiticheskoy khimii (Chair of Analytical Chemistry): I.P.Alimarin, N.P.Borzenkova: Niobium 95 as a Radioactive Tracers; I.P.Alimarin, T.A.Belyavskaya, Mu Bin-ven': Sorption of Zr by Ion Exchangers; A.I.Busev, V.M. Byr'ko: The Use of Complex Pyrazolindithiocarbamates in Radiometry. Kafedra neorganicheskoy khimii (Chair of Inorganic Chemistry): Ye.A. Ippolitova, Yu.P.Simanov, L.M.Kovba, G.P. Polunina, I.A. Bereznikova: Uranates of Some Bivalent Metals;

Card 3/4

APPROVED FOR RELEASE: 08/23/2000 CIA-RDP86-00513R001548210010-9"

"APPROVED FOR RELEASE: 08/23/2000 CIA-RDP86-00513R001548210010-9

The First All-Union Conference of Universities and Colleges on Radiochemistry SOV/55-59-3-29/32

V.G.Knyagina, O.G., Nemkova: Uranium Compounds With Acids of Low-valence P; V.I. Spitsyn: The Influence of the Radioactive Radiation of Solids on Their Physico-chemical Properties; I.Ye.Mikhaylenko, V.I.Spitsyn: Isotope Exchange in the System $K_2SO_4 - SO_3$ at High Temperature. Kafedra khimicheskoy kinetiki (Chair of Chemical Kinetics): I.V.Berezin, V.L.Antonovskiy, N.F.Kazanskaya: Application of Tritium for the Purpose of Determining the Velocity Constants of the Separation of Organo-hydrogen Compounds. An.N.Nesmeyanov delivered a detailed lecture on the Methodology of Radiochemical Instruction at the chemical departments of universities.

Card 4/4

APPROVED FOR RELEASE: 08/23/2000 CIA-RDP86-00513R001548210010-9"

"APPROVED FOR RELEASE: 08/23/2000 CIA-RDP86-00513R001548210010-9

RUDENKO, N.P.; SEVAST'YANOV, A.I.

Preparation of the beryllium-7 radioactive isotope as a result of a secondary nuclear reaction in a nuclear reactor. Radiokhimiia 1 no.6:691-693 '59. (MIRA 13:4)
(Beryllium--Isotopes) (Lithium--Isotopes)

APPROVED FOR RELEASE: 08/23/2000 CIA-RDP86-00513R001548210010-9"

"APPROVED FOR RELEASE: 08/23/2000 CIA-RDP86-00513R001548210010-9

VASIL'YEV, S.S.; MIKHALEVA, T.N.; RUDENKO, N.P.; SEVAST'YANOV, A.I.; ZAZULIN, V.S.

Long-lived isotope Al^{26} in structural aluminum used in a nuclear reactor. Atom. energ. 11 no.4:401-403 O '61. (MIRA 14:9)
(Aluminum--Isotopes) (Nuclear reactors)

APPROVED FOR RELEASE: 08/23/2000 CIA-RDP86-00513R001548210010-9"

"APPROVED FOR RELEASE: 08/23/2000 CIA-RDP86-00513R001548210010-9

ABDENKO, Nikolay Pavlovich; SEVAST'YANOV, Aleksandr Ivanovich; KARPOVA, T.V., red.

[Radioactive beryllium isotopes Be^7 and B^{10}] Radioaktivnye izotopy berillia Be^7i Be^{10}. Moskva, Atomizdat, 1964. 22 p. (MIRA 17:6)

APPROVED FOR RELEASE: 08/23/2000 CIA-RDP86-00513R001548210010-9"

"APPROVED FOR RELEASE: 08/23/2000 CIA-RDP86-00513R001548210010-9

L 15177-66 EWT(m) DIAAP

ACC NR: AP6001143 SOURCE CODE: UR/0367/65/002/003/0402/0408

42
B

AUTHOR: Baskova, K. A.; Vasil'yev, S. S.; Rudenko, N. P.; Sevast'yanov, A. I.; Khamo-Leyla, M. A.; Shavtvalov, L. Ya.

ORG: Institute of Nuclear Physics, Moscow State University (Institut yadernoy fiziki Moskovskogo gosudarstvennogo universiteta)

TITLE: Investigation of the radiation of $_{48}Cd^{117}$

19, 44, 55

SOURCE: Yadernaya fizika, v. 2, no. 3, 1965, 402-408

TOPIC TAGS: cadmium, beta spectrum, half life, isotope separation, indium

ABSTRACT: Cd^{117} was obtained from the reaction Cd^{116} (d,p). As a result of the investigations conducted it is shown that the half-life of Cd^{117} is about three hours. The half-life of 50 min previously ascribed erroneously to Cd^{117} is, apparently, that of In^{116} obtained from the reaction Cd^{116} (d, 2n). The beta-spectrum of Cd^{117} (3 hr) was investigated on a beta-spectrometer with a magnetic lens. The upper boundaries of the partial beta-spectra have the energy of 670; 1290; 1800; and 2200 kev. The value of log ft proved to be equal to 4.9; 6.7; 6.9; and 7.6, respectively. The results presented, as well as the investigations of the $\beta\gamma$-coincidences made it possible to construct a decay scheme of Cd^{117} which differs substantially from that in the literature. Authors express their gratitude to Yu. A. Vorob'yev, V. S. Zazulin, N. S. Kirnichev, and M. R. Akhmed for assistance in the work. Orig. art. has: 7 figures and 1 table.

Card 1/1 SUB CODE: 20, 18 / SUBM DATE: 19Feb65 / ORIG REF: 001 / OTH REF: 012

APPROVED FOR RELEASE: 08/23/2000 CIA-RDP86-00513R001548210010-9"

"APPROVED FOR RELEASE: 08/23/2000 CIA-RDP86-00513R001548210010-9

SEVAST'YANOV, A.I.; RUDENKO, N.P.

Coprecipitation of the indicator amounts of beryllium with iron hydroxide. Vest. Mosk. un. Ser. 2: Khim. 20 no.1:22-24 Ja-F '65. (MIRA 18:3)

1. Laboratoriya radiokhimii Nauchno-issledovatel'skogo instituta yadernoy fiziki Moskovskogo universiteta.

APPROVED FOR RELEASE: 08/23/2000 CIA-RDP86-00513R001548210010-9"

"APPROVED FOR RELEASE: 08/23/2000 CIA-RDP86-00513R001548210010-9

L 63944-65 EWT(m) DIAAP DM

ACCESSION NR: AP5022496 UR/0089/65/018/006/0649/0650

27
B

AUTHOR: Rudenko, N. P.; Sevast'yanov, A. M.

TITLE: Certain possible methods for producing radioactive isotopes 19

SOURCE: Atomnaya energiya, v. 18, no. 6, 1965, 649-650

TOPIC TAGS: radioisotope, boron, lithium, beryllium, magnesium, aluminum

ABSTRACT: Production of ^{7}Be, ^{28}Mg, and ^{26}Al in nuclear reactors as a result of secondary reactions of $^{6}Li(t,2n)^{7}Be$, $^{26}Mg(t,p)^{28}Mg$, and $^{24}Mg(t,n)^{26}Al$ is described. The ampoules containing metallic lithium or lithium compounds(for preparing ^{7}B) and lithium with magnesium (for preparing ^{26}Al and ^{28}Mg) were irradiated by integral neutron flux (10^{20} neutr/cm^2 for ^{26}Al and ^{7}Be and 6.5×10^{16} neutr/cm^2 for ^{28}Mg). The spectrum is given of gamma emission from irradiated Li-Mg recorded in a 50 channel amplitude analyzer. Another method of production of ^{10}Be and ^{26}Al

Card 1/2

APPROVED FOR RELEASE: 08/23/2000 CIA-RDP86-00513R001548210010-9"

"APPROVED FOR RELEASE: 08/23/2000 CIA-RDP86-00513R001548210010-9

L 63944-65

ACCESSION NR: AP5022496

by irradiation of Be, B, Mg, and Al by fast neutrons and for boron and magnesium by thermal neutrons is described. The identification of ^{10}Be was achieved by beta emission energy. Orig. art. has: 2 graphs, 1 table.

ASSOCIATION: none

SUBMITTED: 02Jul64 ENCL: 00 SUB CODE: NP

NR REF SOV: 006 OTHER: 004 NA

Card 2/2

APPROVED FOR RELEASE: 08/23/2000 CIA-RDP86-00513R001548210010-9"

"APPROVED FOR RELEASE: 08/23/2000 CIA-RDP86-00513R001548210010-9

SEVASTYANOV, A.V., kand. tekhn. nauk; SIVKO, V.I., inzh.

Effect of the depth of workings on stress distribution in the underlying rock of a seam being mined. Izv. vys. ucheb. zav.; gor. zhur. 8 no.7:43-47 '65. (MIRA 18:9)

1. Dnepropetrovskiy ordena Trudovogo Krasnogo Znameni gornyy institut imeni Artema. Rekomendovana kafedroy podzemnoy razrabotki poleznykh iskopayemykh.

APPROVED FOR RELEASE: 08/23/2000 CIA-RDP86-00513R001548210010-9"

"APPROVED FOR RELEASE: 08/23/2000 CIA-RDP86-00513R001548210010-9

SEVASTYANOV, B. A.

Sevast'yanov, B. A. On the theory of branching random processes. Doklady Akad. Nauk SSSR (N.S.) 59, 1407–1410 (1948). (Russian)

On considère des particules de types $T_1, \cdots, T_n$. On désigne par $P_k^{(\alpha)}(t)$, $t=1, 2, \cdots$, la probabilité qu'une particule de type T_k se transforme, après t générations, en $\alpha_1, \cdots, \alpha_n$ particules de types respectifs $T_1, \cdots, T_n$. Donc $F_k(t; x) = \sum_\alpha P_k^{(\alpha)}(t) x_1^{\alpha_1} \cdots x_n^{\alpha_n}$ est la t-ème itérée $f_k^{(t)}(x)$ de $f_k(x) = F_k(1; x)$. La probabilité de dégénérescence du processus commencé avec une particule de type T_k est: (a) $P_k^{(0, \cdots, 0)}(t)$ à la t-ème génération, (b) $P_k = \lim_{t\to\infty} P_k^{(0, \cdots, 0)}(t)$ à une génération quelconque. Le processus sera dit dégénérescent si tous les $P_k = 1$. Comme les P_k vérifient le système d'équations $x_k = f_k(x_1, \cdots, x_n)$, $k=1, \cdots, n$, on sera dans ce cas si la seule solution dans le cube $0 \leqq x_k \leqq 1$ est tous les $x_k = 1$.

Soit $A_{ik}(t)$ l'espérance mathématique du nombre de particules du type T_k, à la t-ème génération, si le processus a commencé avec une particule du type T_i. Ces expressions vérifient le système

$$x_i(t+1) = \sum_{j=1}^{n} a_{ij} x_j(t), \qquad i=1, \cdots, n,$$

où $a_{ij} = A_{ij}$, avec les données initiales $x_i(0) = \delta_{ik}$. Sa solution est de la forme

$$x_i(t) = \sum_{j=1}^{n} \varphi_{ij}(t) \lambda_j^{(t)}, \qquad i=1, \cdots, n,$$

où λ_j est racine caractéristique de $A = \|a_{ik}\|$, de multiplicité r, et $\varphi_{ij}(t)$ un polynôme de degré non supérieur à $r-1$.

A tout indice k on fait correspondre la classe $S^{(k)} = A_k \cap B_k$, avec $x_i \epsilon A_k$ lorsque $f_k^{(t)}$ dépend de x_k pour un certain t et $x_j \epsilon B_k$ lorsque $f_k^{(t)}$ dépend de x_j pour un certain t. Si $S^{(k)}$ est vide, T_k est dit spécial. L'ensemble de types se décompose en classes disjointes et en types spéciaux. Une classe est finale s'il existe, presque-sûrement, dans toute génération d'une particule de cette classe une particule de la même classe. L'on a, en supposant que les $f_k(x)$ possèdent des dérivées secondes finies en $(1, 1, \cdots, 1)$, le théorème suivant: pour qu'un processus soit dégénérescent, il faut et il suffit que (i) il n'y ait pas des classes finales, (ii) tous les $|\lambda_j| \leqq 1$.

M. Loève (Berkeley, Calif.).

Source: Mathematical Reviews, Vol 9 No. 8

APPROVED FOR RELEASE: 08/23/2000 CIA-RDP86-00513R001548210010-9"

"APPROVED FOR RELEASE: 08/23/2000 CIA-RDP86-00513R001548210010-9

SEVAST'YANOV, B. A.

PA 196T74

USSR/Mathematics - Probability, Stochastic Processes Nov/Dec 51

"Theory of Branching Stochastic Processes," B. A. Sevast'yanov

"Uspekh Matemat Nauk" Vol VI, No 6, (46), pp 47-99

Surveys all the main publications in the field of stochastic processes (cf. N. Arley, "On the Theory of Stochastic Processes and Their Application to the Theory of Cosmic Radiations," New York, 1943.). Claims A. N. Kolmogorov and N. A. Dmitriyev were 1st in this field (1937 - 1947).

196T74

APPROVED FOR RELEASE: 08/23/2000 CIA-RDP86-00513R001548210010-9"

"APPROVED FOR RELEASE: 08/23/2000 CIA-RDP86-00513R001548210010-9

USSR/Mathematics - Stochastics

Card 1/1

Author : Zolotarev, V. M.

Title : A problem from the theory of branching random processes

Periodical : Usp. mat. nauk, 9, No 2(60), 147-156, 1954

Abstract : Treats a process representing a particular case of the so-called branching random processes, which were discussed in detail by B. A. Sevast'yanov in his article "Theory of branching random processes," Usp. mat. nauk, 6, No 6, 47-99, 1951. The described process is that of a set of particles of one type varying randomly with the course of time according to the following law: in an interval of time (t, t+dt) each of the particles independently of the others decays into k particles with probability $p_k dt + o(dt)$, disappears with probability $p_0 dt + o(dt)$, and does not undergo change with probability $1 + p_1 dt + o(dt)$.

Submitted : October 15, 1953

APPROVED FOR RELEASE: 08/23/2000 CIA-RDP86-00513R001548210010-9"

"APPROVED FOR RELEASE: 08/23/2000 CIA-RDP86-00513R001548210010-9

SEVAST'YANOV, B.A.; SIRAZHDINOV, S.Kh.

Mathematical statistics and industrial production control. Priroda 44 no.8:28-34 Ag '55. (MIRA 8:10)
(Production control)

APPROVED FOR RELEASE: 08/23/2000 CIA-RDP86-00513R001548210010-9"

"APPROVED FOR RELEASE: 08/23/2000 CIA-RDP86-00513R001548210010-9

SEVAST'YANOV, B.A. (Moskva)

An ergodic theorem for Markov's processes and its application to telephone systems with refusals [with summary in English]. Teor.veroiat.i ee prim. 2 no.1:106-116 '57. (MIRA 10:7)
(Probabilities) (Telephone, Automatic)

APPROVED FOR RELEASE: 08/23/2000 CIA-RDP86-00513R001548210010-9"

"APPROVED FOR RELEASE: 08/23/2000 CIA-RDP86-00513R001548210010-9

Sevast'yanov, B.A.

52-3-3/9

AUTHOR: Sevast'yanov, B. A.

TITLE: Limit Theorems for Branching Stochastic Processes of Special Form. (Predel'nyye teoremy dlya vetvyashchikhsya sluchaynykh protsessov spetsial'nogo vida.)

PERIODICAL: Teoriya Veroyatnostey i Yeye Primeneniya, 1957, Vol.II, Nr.3. pp.339-348. (USSR)

ABSTRACT: The following system of generating particles is considered. Each particle which exists at a given moment independently of its origin and age and independently of the history of other particles with probability $\delta_{k1} + p_k \Delta t + o(\Delta t)$ becomes in the time interval $\Delta t \to 0$, k particles. In addition, independently of the presence of any number of other particles with probability $\delta_{k0} + q_k \Delta t + o(\Delta t)$ in the time interval $\Delta t \to 0$ there arise k particles. The symbol δ_{ij} is equal to 1 if $i = j$, and 0 if $i \neq j$. Clearly p_k and q_k must satisfy the equations

Card 1/5

APPROVED FOR RELEASE: 08/23/2000 CIA-RDP86-00513R001548210010-9"

"APPROVED FOR RELEASE: 08/23/2000 CIA-RDP86-00513R001548210010-9

52-3-3/9

Limit Theorems for Branching Stochastic Processes of Special Form.

Theorem 1. If $a_1 < 0$, $a_2 < \infty$ then limits

$$\lim_{t \to \infty} P\left\{\mu_t = k\right\} = P_k, \quad k = 0, 1, 2, \ldots$$

exist, and probability-generating function

$$F(x) = \sum_{k=0}^{\infty} P_k x^k$$ is defined by $$F(x) = e^{x \int_1^1 \frac{g(y)}{f(y)} dy}$$

Theorem 2. If $a_1 = 0$ and $b_1 > 0$, c_1, $a_2 > 0$, b_2 are finite, then the limit relation

Card 3/5

APPROVED FOR RELEASE: 08/23/2000 CIA-RDP86-00513R001548210010-9"

"APPROVED FOR RELEASE: 08/23/2000 CIA-RDP86-00513R001548210010-9

52-3-3/9

Limit Theorems for Branching Stochastic Processes of Special Form.

SUBMITTED: April 25, 1957.

AVAILABLE: Library of Congress.

Card 5/5

APPROVED FOR RELEASE: 08/23/2000 CIA-RDP86-00513R001548210010-9"

"APPROVED FOR RELEASE: 08/23/2000 CIA-RDP86-00513R001548210010-9

SEVASTYANOV, B. A.

"Branching Random Processes for Particles Diffusing in a Bounded Region with An Absorbing Boundary."

paper submitted at International Congress Mathematicians, Edinburgh, 14 - 21 Aug 58.

APPROVED FOR RELEASE: 08/23/2000 CIA-RDP86-00513R001548210010-9"

"APPROVED FOR RELEASE: 08/23/2000 CIA-RDP86-00513R001548210010-9

BARTLETT, M.S. [Bartlett, Maurice Stevenson], prof.; [redacted] B.A. [translator]; BUSHUYEV, L.P., red.; ARTEMOVA, Ye., ~~tekhn.~~ red.

[An introduction to stochastic processes] Vvedenie v teoriiu sluchainykh protsessov. Moskva, Izd-vo inostr.lit-ry, 1958. 384 p. Preface by B.A.Sevast'ianov. Translated from the English. (MIRA 12:9)
(Calculus of variations) (Statistics)

APPROVED FOR RELEASE: 08/23/2000 CIA-RDP86-00513R001548210010-9"

"APPROVED FOR RELEASE: 08/23/2000 CIA-RDP86-00513R001548210010-9

SOV/52-3-2-1/10

AUTHOR: Sevast'yanov, B. A.

TITLE: Branching Stochastic Processes for Particles Diffusing in a Restricted Domain with Absorbing Boundaries (Vetvyashchiyesya sluchaynyye protsessy dlya chastits, diffundiruyushchikh v ogranichennoy oblasti s pogloshchayushchimi granitsami)

PERIODICAL: Teoriya veroyatnostey i yeye primeneniya, 1958, Vol III, Nr 2 , pp 121-136 (USSR)

ABSTRACT: The theory of probability can be applied in the case of the diffusion of particles with the possibilities of them being absorbed inside a domain with absorbing boundaries. A procedure can be devised in order to solve this question and to define the number and the distribution of the residual particles being a product of a reaction. The fundamental equation of diffusion (1) can be solved if the conditions (2) to (4) are satisfied. Then the probability of the particles to be absorbed during the time t by the domain x will be $P(x, t)$. The density probability function $K(x, y)$ of the particles being transferred from the point x to the point y where it discontinues inside the domain G can be expressed by Eq.(5). When a particle remains inside the domain G the Eq.(6) can be used. The function $K(x, y)$ is continuous at $r = 1$. The real

Card 1/5

APPROVED FOR RELEASE: 08/23/2000 CIA-RDP86-00513R001548210010-9"

"APPROVED FOR RELEASE: 08/23/2000 CIA-RDP86-00513R001548210010-9

SOV/52-3-2-1/10

Branching Stochastic Processes for Particles Diffusing in a Restricted Domain with Absorbing Boundaries

integral of Eq.(6) causes $h(x)$ to be continuous along x. The particles of one type T can be considered as a general case of branching stochastic process of continuous type. They behave independently from one another inside the domain G with absorbing boundaries. Thus, a particle independently from its position during the time $\Delta t \to 0$ will be multiplied n times with the density probability p_n which can be expressed as a function (7) or, better as (8). . . If $P_n(x, t)$ is the probability of the descendants of a particle originated at the point x which, through t variations multiplies into n particles then the equations (9-11) can be applied. Similarly, in the case of the particles of the various types $T_1, T_2, \ldots T_n$ the equation (12) is obtained which can be expressed in the form (11) if some modifications are introduced. In the case of two types T and T_0 when one of them is the residual type, i.e. it does not change

Card 2/5

APPROVED FOR RELEASE: 08/23/2000 CIA-RDP86-00513R001548210010-9"

"APPROVED FOR RELEASE: 08/23/2000 CIA-RDP86-00513R001548210010-9

Branching Stochastic Processes for Particles Diffusing in a Restricted Domain with Absorbing Boundaries

nor is absorbed by the boundary, the probability $q_n(x, t)$ of the particle T remaining at the original point x after t variations which produce n particles of T_o type can be calculated from the Eq.(13). If $m(x, y, t)$ is the density of mathematical expectation of the number of particles at the point y after the time t, provided one of the particles started the process, then the differential expression Eq.(14) can be utilised (where $a = f'(1)$ and $f(z)$ is taken from the Formula (7)). This equation can be solved by Eqs.(15) and (16). As an example of the above, the domain G is expressed in the form of an integral $(0, \ell)$ with absorbing boundary $x = 0$, $x = \ell$. Then all the formulae can be considered as having real values. The solution is calculated from Eqs.(17) and (18). The probability of degeneration process $P_o(x, t)$ can be considered when no particle remains after a series of variations originated by an initial particle. This probability is always real (Eq.19). Therefore, if $z = 0$ is introduced into Eq.(11), the formulae (20) and (21) can be applied. The Eq.(21) will be true

APPROVED FOR RELEASE: 08/23/2000 CIA-RDP86-00513R001548210010-9"

"APPROVED FOR RELEASE: 08/23/2000 CIA-RDP86-00513R001548210010-9

Branching Stochastic Processes for Particles Diffusing in a Restricted Domain with Absorbing Boundaries

for $P_0(x) \equiv 1$ which describes the condition of degeneration. If $P_0(x) \neq 1$, the process will be non-degenerating. Thus, the following theorems can be stated: 1. If the equation (22) has $0 \leqslant n(x) \leqslant 1$, $n(x) \not\equiv 1$, the process will be non-degenerate and $P_0(x) \leqslant u(x)$. 2. By means of an expression (23) a limited set of the continuous function $|u(x)| \leqslant 1$ can be substituted into a compact set when $u_1(x) = 1$. 3. For the process to be non-degenerating an existence of a continuous, non-negative function $\alpha(x) \not\equiv 0$ which satisfies the condition Eq.(26) is essential. 4. In order that the process be degenerating it is necessary that the formula $a \leqslant D\lambda_1 = a_0$ is satisfied. 5. The integral equation (13) at $a \leqslant D\lambda_1$ has only one analytical solution when $|z| < 1$. 6. The solution of $\varphi(x, z)$ from Eq.(13) can be found analytically when

APPROVED FOR RELEASE: 08/23/2000 CIA-RDP86-00513R001548210010-9"

"APPROVED FOR RELEASE: 08/23/2000 CIA-RDP86-00513R001548210010-9

SOV/52-3-2-1/10

Branching Stochastic Processes for Particles Diffusing in a Restricted Domain with Absorbing Boundaries

$|z| < \varphi$, $\varphi > 1$. In the case of $z = 1$, the function $\varphi(x, z)$ becomes the series (31). 7. The above conditions for $n \to \infty$ can be satisfied by the formula (36). There are no figures and 8 Soviet references.

SUBMITTED: January 24, 1958.

Card 5/5

APPROVED FOR RELEASE: 08/23/2000 CIA-RDP86-00513R001548210010-9"

"APPROVED FOR RELEASE: 08/23/2000 CIA-RDP86-00513R001548210010-9

16(1) PHASE I BOOK EXPLOITATION SOV/2660

Vsesoyuznyy matematicheskiy s"yezd. 3rd, Moscow, 1956

Trudy. t. 4: Kratkoye soderzhaniye sektsionnykh dokladov. Doklady inostrannykh uchenykh (Transactions of the 3rd All-Union Mathematical Conference in Moscow. Vol. 4: Summary of Sectional Reports. Reports of Foreign Scientists) Moscow, Izd-vo AN SSSR, 1959. 247 p. 2,200 copies printed.

Sponsoring Agency: Akademiya nauk SSSR. Matematicheskiy institut.

Tech. Ed.: G.N. Shevchanko; Editorial Board: A.A. Abramov, V.G. Boltyanskiy, A.M. Vasil'yev, B.V. Medvedev, A.D. Myshkis, S.M. Nikol'skiy (Resp. Ed.), A.G. Postnikov, Yu. V. Prokhorov, K.A. Rybnikov, P. L. Ul'yanov, V.A. Uspenskiy, N.G. Chetayev, G. Ye. Shilov, and A.I. Shirshov.

PURPOSE: This book is intended for mathematicians and physicists.

COVERAGE: The book is Volume IV of the Transactions of the Third All-Union Mathematical Conference, held in June and July 1956. The book is divided into two main parts. The first part contains summaries of the papers presented by Soviet scientists at the Conference that were not included in the first two volumes. The second part contains the text of reports submitted to the editor by non-Soviet scientists. In those cases when the non-Soviet scientist did not submit a copy of his paper to the editor, the title of the paper is cited and, if the paper was printed in a previous volume, reference is made to the appropriate volume. The papers, both Soviet and non-Soviet, cover various topics in number theory, algebra, differential and integral equations, function theory, functional analysis, probability theory, topology, mathematical problems of mechanics and physics, computational mathematics, mathematical logic and the foundations of mathematics, and the history of mathematics.

Sevast'yanov, B.A. (Moscow). Erlang formulas in telephony with an arbitrary distribution law of the duration of conversation 68

Sinay, Ya.G. (Moscow). Distribution of the first positive sum in a sequence of independent random values 70

Chentsov, N.N. (Moscow). On the asymptotically best statistical values of a parameter 71

Section on Topology

Yegorov, V.I. (Moscow) and Yu. M. Smirnov (Moscow). On the metric dimension of sets 72

Yefremovich, V.A. (Ivanovo) and Ye. S. Tikhomirova (Ivanovo). Uniform homologies 72

Onishchik, A.L. (Moscow). Cohomologies of the space of paths on homogeneous spaces 72

Card 14/34

APPROVED FOR RELEASE: 08/23/2000 CIA-RDP86-00513R001548210010-9"

"APPROVED FOR RELEASE: 08/23/2000 CIA-RDP86-00513R001548210010-9

16(1),16(2)

AUTHOR: Sevast'yanov,B.A. SOV/52-4-2-1/13

TITLE: Transient Phenomena in Branching Stochastic Processes

PERIODICAL: Teoriya veroyatnostey i yeye primeneniya,1959,Vol 4,Nr 2, pp 121-135 (USSR)

ABSTRACT: The present paper contains the proofs for the results formulated in [Ref 1] on the behavior of branching stochastic processes in the neighborhood of critical parameter values. 4 theorems and 7 lemmas are given altogether. The author mentions B.A.Rogozin. There are 7 Soviet references.

SUBMITTED: December 25, 1958

Card 1/1

APPROVED FOR RELEASE: 08/23/2000 CIA-RDP86-00513R001548210010-9"

"APPROVED FOR RELEASE: 08/23/2000 CIA-RDP86-00513R001548210010-9

25765
S/058/61/006/003/001/006
C111/C222

24.4500

AUTHOR: Sevast'yanov, B.A.

TITLE: The extinction conditions for branching processes with diffusion

PERIODICAL: Teoriya veroyatnostey i yeye primeneniye, v.6, no.3, 1961, 276-286

TEXT: The result of (Ref. 2: Sevast'yanov, B.A. Vetvyashchiyesya sluchaynyye protsessy dlya chastits, diffundirnyushchikh v ogranichennoy oblasti s poglashchayushchimi granitsami [Branching random processes for particles diffusing in a bounded region with absorbing boundaries] Teoriya veroyat. i yeye primen., III, 2(1958), 121-136) is generalized to branching processes with several types of particles. The author uses the notations and notions of (Ref. 2) and states as the basic result (theorem 8) : It is necessary and sufficient for the extinction of branching processes with several types of particles diffusing in a multi-dimensional bounded domain with absorbing boundaries that for every $\delta > 0$ it holds : $m_{ij}(x,y,t) = O(e^{\gamma t})$ for $t \to \infty$, where $m_{ij}(x,y,t)$ denotes

Card 1/3

APPROVED FOR RELEASE: 08/23/2000 CIA-RDP86-00513R001548210010-9"

"APPROVED FOR RELEASE: 08/23/2000 CIA-RDP86-00513R001548210010-9

25765

S/052/61/006/003/001/006
C111/C222

The extinction conditions for ...

the density (with respect to y) of the mean number of particles of the type T_j if in the initial moment in the point $x \in G$ there was a particle of the type T_i ; G is an r-dimensional open region with an absorbing boundary Γ . Beside of this principal result the paper contains a number of further similar assertions on the considered branching process. Let e.g. D_i be the coefficient of diffusion of the particles of the type T_i , and let a_{ij} be the mean number of particles of the type T_j originating in the time $\Delta t \to 0$ from one particle of the type T_i . Then it holds the theorem 7 : It is necessary and sufficient for the extinction of a process that the real parts of all characteristic roots of the matrix $\| a_{ij} - \delta_{ij} D_i \lambda_1 \|$ are not positive, where λ_1 is the is the least eigenvalue of the equation

$$\Delta v + \lambda v = 0 , \quad v|_{x \in \Gamma} = 0 . \tag{4}$$

Some uncorrectnesses in (Ref. 2) which do not take effect to the results of

Card 2/3

APPROVED FOR RELEASE: 08/23/2000 CIA-RDP86-00513R001548210010-9"

"APPROVED FOR RELEASE: 08/23/2000 CIA-RDP86-00513R001548210010-9

SEVAST'YANOV, B. A.

"Limit theorems for branching stochastic processes with diffusion"

report submitted at the Intl Colf of Mathematics, Stockholm, Sweden, 15-22 Aug 62

APPROVED FOR RELEASE: 08/23/2000 CIA-RDP86-00513R001548210010-9"

"APPROVED FOR RELEASE: 08/23/2000 CIA-RDP86-00513R001548210010-9

SEVAST'YANOV, B.A. (Moskva)

Problem of the effect of bin capacity on the average out-of-service time of an automatic machine tool line. Teor. veroiat. i ee prim. 7 no.4:438-447 '62. (MIRA 15:11)

(Queueing theory) (Automatic control)

APPROVED FOR RELEASE: 08/23/2000 CIA-RDP86-00513R001548210010-9"

"APPROVED FOR RELEASE: 08/23/2000 CIA-RDP86-00513R001548210010-9

SEVAST'YANOV, B.A.

Transactions of the Sixth Conference (Cont.) SOV/6371

26. Sarmanov, O. V., and V. K. Zakharov. Change of the Spectrum of a Stochastic Matrix Upon Enlargement 153

27. Sarymsakov, T. A. On One General Theorem Regarding Fixed Points, and Its Connections With Ergodic Theorems 155

28. Sevast'yanov, B. A. Limit Theorems for Branching Processes With Diffusion 157

29. Skorokhod, A. V. On Stochastic Differential Equations 159

30. Stratonovich, R. L. On the Infinitesimal Operator of a Markov Process (Published after Ye. B. Dynkin's Report "Survey of Some Trends in the Theory of Markov Processes") 169

31. Freydlin, M. I. Application of K. Ito's Stochastic Equations to the Investigation of the Second Boundary-Value Problem 173

Transactions of the 6th Conf. on Probability Theory and Mathematical Statistics and of the Symposium on Distributions in Infinite-Dimensional Spaces held in Vil'nyus, 5-10 Sep '60. Vil'nyus Gospolitizdat Lit SSR, 1962. 493 p. 2500 copies printed

APPROVED FOR RELEASE: 08/23/2000 CIA-RDP86-00513R001548210010-9"

"APPROVED FOR RELEASE: 08/23/2000 CIA-RDP86-00513R001548210010-9

SEVAST'YANOV, B.A.; CHIST'YAKOV, V.P. (Moskva)

Asymptotic normality in the classical problem of pellets.
Teor. veroiat. i ee prim. 9 no.2:223-237 '64 (MIRA 17:7)

APPROVED FOR RELEASE: 08/23/2000 CIA-RDP86-00513R001548210010-9"

"APPROVED FOR RELEASE: 08/23/2000 CIA-RDP86-00513R001548210010-9

SEVASTYANOV, B.A.; CHRISTYAKOV, V.P.

Letter to the editor. Teor. veroiat. i ee prim. 7 no.3:568 '62.
(MIRA 17:10)

APPROVED FOR RELEASE: 08/23/2000 CIA-RDP86-00513R001548210010-9"

"APPROVED FOR RELEASE: 08/23/2000 CIA-RDP86-00513R001548210010-9

L 36973-65 EWT(m) Peb DIAAP

ACCESSION NR: AP5000564 S/0052/64/009/004/0577/0594

8

AUTHOR: Sevast'yanov, B. A. (Moscow)

B

TITLE: Age-dependent branching processes

SOURCE: Teoriya veroyatnostey i yeye primeneniya, v. 9, no. 4, 1964, 577-594

TOPIC TAGS: branching process, age dependent branching process, critical particle decay, particle transmutation, particle multiplication

19

ABSTRACT: Consider n types $T_1, T_2, \ldots T_n$ of particles and assume that each particle of type T_i has a random lifetime with distribution $T_i(t)$. At the end of its life, each particle of type T_i decays into some family of particles of types $T_1, T_2, \ldots T_n$, where the conditional probability for conversion of a particle of type T_i (under the condition that conversion occurs when the particle reaches growth u) into a family consisting of α_j particles of type T_j, $j = 1, 2, \ldots n$, is $p_i(u)$, where $\alpha = (\alpha_1, \alpha_2, \ldots, \alpha_n)$ is a vector with non-negative integral components. The author finds conditions for degeneration of such a process (i.e., a situation in which the

Card 1/2

APPROVED FOR RELEASE: 08/23/2000 CIA-RDP86-00513R001548210010-9"

"APPROVED FOR RELEASE: 08/23/2000 CIA-RDP86-00513R001548210010-9

L 36973-65
ACCESSION NR: AP5000564

0

probability of the number of particles going to zero prior to some time t is one), finds limiting probabilities for certain cases, studies the asymptotic behavior of the probability for continuation of the process, and derives the limiting distribution for the most interesting case, the so-called critical case. Orig. art. has: 60 equations.

ASSOCIATION: None

SUBMITTED: 18Feb64 ENCL: 00 SUB CODE: NP

NR REF SOV: 005 OTHER: 003

Card 2/2 Bo

APPROVED FOR RELEASE: 08/23/2000 CIA-RDP86-00513R001548210010-9"

"APPROVED FOR RELEASE: 08/23/2000 CIA-RDP86-00513R001548210010-9

S/052/62/007/004/002/003
B172/B112

AUTHOR: Sevast'yanov, B. A. (Moscow)

TITLE: How bunker capacity influences the average standstill time of an automatic machine tool line

PERIODICAL: Teoriya veroyatnostey i yeye primeneniya, v. 7, no. 4, 1962, 438 - 447

TEXT: Standstills in the operation of an automatic machine tool line can largely be avoided by introducing bunkers between the machine tools, in which the pieces can be collected. The disrepair of one machine tool does not then bring the line to a standstill, provided that the following bunker contains a sufficient stock of pieces. P and $\overline{\Pi}$ denote the probability that a machine tool line comes to standstill, with and without bunker, respectively. Several simplifying conditions are established for calculating P and $\overline{\Pi}$. An exact solution can then be got for a machine tool line consisting of two machine tools and one bunker. For complex lines an approximation method is suggested in which the exact result of the simple case is used. Finally, conditions are given on which the

Card 1/2

APPROVED FOR RELEASE: 08/23/2000 CIA-RDP86-00513R001548210010-9"

"APPROVED FOR RELEASE: 08/23/2000 CIA-RDP86-00513R001548210010-9

How bunker capacity influences the ... S/052/62/007/004/002/003
B172/B112

Π-to-P ratio reaches a minimum. There is 1 figure.

SUBMITTED: March 28, 1961

Card 2/2

APPROVED FOR RELEASE: 08/23/2000 CIA-RDP86-00513R001548210010-9"

"APPROVED FOR RELEASE: 08/23/2000 CIA-RDP86-00513R001548210010-9

SEVAST'YANOV, B. F.

USSR/Engineering Mar 1948
Machines, Milling
Screw Threads

"Complex Thread Milling Cutter." G. S. Ratushev, Engr, B. F. Sevast'yanov, 2 pp

"Stanki i Instrument" No 3

Describes complex thread milling cutter head with adjustable teeth.

PA76T27

APPROVED FOR RELEASE: 08/23/2000 CIA-RDP86-00513R001548210010-9"

"APPROVED FOR RELEASE: 08/23/2000 CIA-RDP86-00513R001548210010-9

a

5

Apparatus for Determination of Variation of Wall Thickness of Tubes. (In Russian.) G. S. Ratushev and B. F. Sevastyanov. *Stanki i Instrument* (Machine Tools and Equipment), v. 20, Sept. 1949, p. 26.

Mechanical gaging apparatus.

(S14)

METALLURGICAL LITERATURE CLASSIFICATION

APPROVED FOR RELEASE: 08/23/2000 CIA-RDP86-00513R001548210010-9"

"APPROVED FOR RELEASE: 08/23/2000 CIA-RDP86-00513R001548210010-9

SEVAST'YANOV, B.F.

Modernizing bench vises. Izobr. i rats. no.8:23-25 Ag '58.
(Vises) (MIRA 11:9)

APPROVED FOR RELEASE: 08/23/2000 CIA-RDP86-00513R001548210010-9"

"APPROVED FOR RELEASE: 08/23/2000 CIA-RDP86-00513R001548210010-9

SEVAST'YANOV, B.F.

Modernizing bench vises. Stan.i instr. 29 no.11:36-37 N '58.
(Vises) (MIRA 11:11)

APPROVED FOR RELEASE: 08/23/2000 CIA-RDP86-00513R001548210010-9"

"APPROVED FOR RELEASE: 08/23/2000 CIA-RDP86-00513R001548210010-9

SEVAST'YANOV, B.F.

Modernizing bench vises. Mashinostroitel' no.10:14-16 O '59.
(MIRA 13:2)

(Vises)

APPROVED FOR RELEASE: 08/23/2000 CIA-RDP86-00513R001548210010-9"

"APPROVED FOR RELEASE: 08/23/2000 CIA-RDP86-00513R001548210010-9

SEVAST'YANOV, B.F.

Competition for best shop and section for introducing into industry the knowledge obtained from scientific and technological information. NTI no.10:15-16 '63. (MIRA 17:1)

APPROVED FOR RELEASE: 08/23/2000 CIA-RDP86-00513R001548210010-9"

"APPROVED FOR RELEASE: 08/23/2000 CIA-RDP86-00513R001548210010-9

SEVAST'YANOV, B.A. (Moscow)

Age-dependent branching processes. Teor. veroiat. i ee prim. 9 no.4:577-594 '64. (MIRA 17:12)

APPROVED FOR RELEASE: 08/23/2000 CIA-RDP86-00513R001548210010-9"

"APPROVED FOR RELEASE: 08/23/2000 CIA-RDP86-00513R001548210010-9

S/120/60/000/005/041/051
E032/E314

AUTHORS: Sevast'yanov, B.K. and Kharakhash'yan, E.G.

TITLE: Torsional Magnetic Balance with DC Compensation of the Displacement of the Specimen

PERIODICAL: Pribory i tekhnika eksperimenta, 1960, No. 5, pp. 135 - 137

TEXT: A description is given of a torsional balance for the range 10^{-4} - 10 dyne cm. The balance can be used to determine the magnetic moments in a wide temperature range, right down to helium temperatures. The balance is shown schematically in Fig. 1. The aluminium frame 8 is suspended on a thin phosphor bronze wire having an elastic constant of 3×10^{-2} dyne.cm/rad. The aluminium frame carries two coils, namely, a compensation and a calibration coil. These coils consist of 50 turns of 0.1 dia. wire of type ПЭ (PE). It also carries a plane mirror 6 and a glass rod, to which the specimen 12 is attached. At the lower end, the glass rod is kept in position by the quartz filament 18 (10 μ in diameter). The latter filament is kept taut by the phosphor

Card 1/3

APPROVED FOR RELEASE: 08/23/2000 CIA-RDP86-00513R001548210010-9"

"APPROVED FOR RELEASE: 08/23/2000 CIA-RDP86-00513R001548210010-9

S/120/60/000/005/041/051
E032/E314

Torsional Magnetic Balance with DC Compensation of the Displacement of the Specimen

bronze spring 13 . The compensating and calibrating currents are supplied to the coils by special leads in the form of silver foils (25 x 0.5 mm^2). The phosphor bronze filament serves as a common current lead for the two coils. The suspended system can be assembled and adjusted outside the glass container tube 4 . The plane mirror carried by the aluminium frame is illuminated through a rectangular slit so that, in the absence of a couple acting on the specimen, one-half of the reflected image falls on one cell and the other on another cell, the two cells being connected to a DC amplifier, as shown in Fig. 2. The magnetic field applied to the specimen 12 is produced by the external electromagnet 15 , while the calibrating and compensating coils are in the field of the permanent magnet 10 .

Card 2/3

APPROVED FOR RELEASE: 08/23/2000 CIA-RDP86-00513R001548210010-9"

"APPROVED FOR RELEASE: 08/23/2000 CIA-RDP86-00513R001548210010-9

S/120/60/000/005/041/051
E032/E314

Torsional Magnetic Balance with DC Compensation of the Displacement of the Specimen

Acknowledgments are expressed to N.Ye. Alekseyevskiy for constant interest in this work and to S.G. Obruchnikov for constructing the instrument.

There are 3 figures and 5 references: 3 Soviet and 2 English.

ASSOCIATION: Fizicheskiy fakul'tet MGU
(Physics Department of MGU)

SUBMITTED: June 24, 1959

Card 3/3

APPROVED FOR RELEASE: 08/23/2000 CIA-RDP86-00513R001548210010-9"

"APPROVED FOR RELEASE: 08/23/2000 CIA-RDP86-00513R001548210010-9

S/120/60/000/005/042/051
E032/E314

AUTHOR: Sevast'yanov, B.K.

TITLE: Torsional Magnetic Balance with an AC Compensation of the Displacement of the Specimen

PERIODICAL: Pribory i tekhnika eksperimenta, 1960, No. 5, pp. 137 - 139

TEXT: The balance can be used to measure magnetic moments in a wide temperature interval right down to helium temperatures. The orientation of the specimen in the magnetic field can be controlled to within 5×10^{-5} rad. Fringe fields have no effect on the accuracy and measurements in the range 5×10^{-5} to 4 dyne.cm are possible. The compensation is achieved by using the couple acting on an aluminium ring in an alternating magnetic field. The instrument is shown schematically in Fig. 1. Two pairs of coils 8 are arranged so that the field vectors due to each pair are mutually perpendicular. The aluminium ring 7 is placed so that its plane contains the resultant field. Any change in the ratio of the currents in the two pairs of coils gives rise to a

Card 1/3

APPROVED FOR RELEASE: 08/23/2000 CIA-RDP86-00513R001548210010-9"

"APPROVED FOR RELEASE: 08/23/2000 CIA-RDP86-00513R001548210010-9

S/120/60/000/005/042/051
E032/E314

Torsional Magnetic Balance with an AC Compensation of the Displacement of the Specimen

rotation of the ring. The ring is suspended from a quartz filament 3 and the zero can be adjusted by rotating the brass insert 1. The ring is followed by the damping aluminium cylinder 9, which is placed in the field of the electromagnet 10. The specimen 12 is attached to the glass rod 1 (1 mm in diameter). The specimen is magnetised by the field produced by the electromagnet 13. The position of the specimen is determined with the aid of the circuit shown in Fig. 2. The plane mirror 4 is illuminated through a rectangular slit and the reflected image is focused on two photocells so that the illumination at each photo cell is the same. The currents in the coils L_1 - L_4 then have the same amplitude and the compensating moment is zero. Any torsional moment applied to the system displaces the light spot so that the current amplitudes are no longer equal and the aluminium ring experiences a couple tending to return it to the original position. The balance may be calibrated by

Card 2/3

APPROVED FOR RELEASE: 08/23/2000 CIA-RDP86-00513R001548210010-9"

"APPROVED FOR RELEASE: 08/23/2000 CIA-RDP86-00513R001548210010-9

S/120/60/000/005/042/051
E032/E314

Torsional Magnetic Balance with an AC Compensation of the Displacement of the Specimen

feeding an alternating current into the damping electromagnet 10 , in addition to the DC. One half of each polepiece of the electromagnet is covered by a copper shim, so that a rotating magnetic field which deflects the damping cylinder 9 is produced. The absolute value of the calibration moment can be determined if the elastic constant of the suspension is known. Acknowledgments are expressed to N.Ye. Alekseyevskiy for valuable suggestions and to L.F. Budnichenko for cooperation. There are 2 figures and 5 references: 4 Soviet and 1 English.

ASSOCIATION: Fizicheskiy fakul'tet MGU (Physics Department of MGU)

SUBMITTED: June 24, 1959

Card 3/3

APPROVED FOR RELEASE: 08/23/2000 CIA-RDP86-00513R001548210010-9"

"APPROVED FOR RELEASE: 08/23/2000 CIA-RDP86-00513R001548210010-9

SEVAST'YANOV, B.K.

Increasing the sensitivity of magnetometers with feedback. Prib. i tekh. eksp. 6 no.1:152-155 Ja-F '61. (MIRA 14:9)

1. Institut kristallografii AN SSSR.
(Magnetometer)

APPROVED FOR RELEASE: 08/23/2000 CIA-RDP86-00513R001548210010-9"

"APPROVED FOR RELEASE: 08/23/2000 CIA-RDP86-00513R001548210010-9

89203

S/056/61/040/001/009/037
B102/B204

24.2140 (1072,1055,1395)

AUTHOR: Sevast'yanov, B. K.

TITLE: Magnetic properties of thin superconductive tin and indium films

PERIODICAL: Zhurnal eksperimental'noy i teoreticheskoy fiziki, v. 40, no. 1, 1961, 52-63

TEXT: For the theory of superconductivity, the study of the magnetic properties of very thin superconducting layers is of great interest, but such studies were, however, carried out because they entail considerable difficulties. One single publication is known to the author, in which a film of $3.7 \cdot 10^{-5}$ cm had been studied. For the purpose of determining the magnetic moment perpendicular to the film, the author determined the torsion moment at very low angles ($\varphi \approx 10^{-3} - 10^{-4}$ rad): $K = \frac{1}{2}(\chi_{\parallel} - \chi_{\perp}) v H^2 \sin 2\varphi$, where $\chi_{\parallel}$ and $\chi_{\perp}$ are the magnetic susceptibility of the film in the parallel and perpendicular H-field respectively, v is the volume of the layer. K-determination was carried out according to a method suggested by N. Ye. Alekseyevskiy

Card 1/7

APPROVED FOR RELEASE: 08/23/2000 CIA-RDP86-00513R001548210010-9"

"APPROVED FOR RELEASE: 08/23/2000 CIA-RDP86-00513R001548210010-9

89203
S/056/61/040/001/009/037
B102/B204

Magnetic properties of ...

by means of a torsion balance. The experimental arrangement is schematically shown in Fig. 1. The accuracy of film adjustment in a H-field could attain $5 \cdot 10^{-5}$ rad, the scales was able to measure torsional moments within the range of $5 \cdot 10^{-5}$ - 4 dyn.cm. The earth-magnetic field was compensated with an accuracy of about ~1%; temperature determination was carried out according to helium vapor pressure. The films were produced from 99.995 and 99.992% pure tin or indium respectively by vacuum evaporation on a helium-cooled backing. Optically polished quartz plates served as brackings; the evaporation rate was about $\sim 10^{-5}$ cm^3/min, in some cases it was increased to 10^{-2} - 10^{-3} cm^3/min, in order to investigate the action of this film structure upon the magnetic properties. The thicknesses of the films produced in this manner were between $4 \cdot 10^{-3}$ and $2 \cdot 10^{-6}$ cm. Fot these films, the temperature- and thickness dependence of $M_\perp$ was studied. The experimental results are shown in form of 11 diagrams. Thus, Figs. 3 and 5 for tin and indium respectively show the magnetization curves $M_\perp^*(H)$ with $M_\perp^* = M_\perp/D^3 \sin\varphi$, D is the diameter of the plates, upon which the film was during those K-measurement. The experimental results turned out to be in good agreement with the formula $M_\perp = (1/12\pi)HD^3 \sin\varphi$. A temperature dependence of $M_\perp$ could be found only with films having a thickness of the order

Card 2/7

APPROVED FOR RELEASE: 08/23/2000 CIA-RDP86-00513R001548210010-9"

"APPROVED FOR RELEASE: 08/23/2000 CIA-RDP86-00513R001548210010-9

of 10^{-6} cm. In all the reaches, where $M_{\perp}(H)$ was not linear, a hysteresis was found in the magnetic field, of the typical kind as shown in Fig. 8. This is the case, when $H \ll H_c$ and also when $D/d \leq 10^3$ and $\varphi < 10^{-3}$ rad. It was further found that the magnetic properties of the film depend essentially on the structure of its surface. Thus, films with a very smooth mirror-like surface at $d > 3 \cdot 10^{-6}$ cm show no temperature dependence of the slope of the $M_{\perp}(H)$ curves, films with a granulated surface, also at $d > 1 \cdot 10^{-5}$ cm, however did. In the linear part of these curves no hysteresis could be observed. From the $M_{\perp}(H)$-curves, the critical field strengths H_c were determined for the films; according to

$$H_c/H_{cm} = 2\sqrt{6}\,(\delta/d) \text{ if } d \ll \delta, \text{ and according to}$$

$$H_c/H_{cm} = 1 + \delta/d, \text{ if } d \gg \delta.$$

δ is the penetration depth of the field into the film ($\delta = \frac{1}{2}\,\delta_0\sqrt{T_c/\Delta T}$, H_{cm} is the critical field of a massive specimen). These formulas are by L. D. Landau and V. L. Ginzburg. The results show that also in fields $\ll H_c$, also in relative thick films and with $\varphi \approx 10^{-4}$ rad zones of normal phase

APPROVED FOR RELEASE: 08/23/2000 CIA-RDP86-00513R001548210010-9"

"APPROVED FOR RELEASE: 08/23/2000 CIA-RDP86-00513R001548210010-9

89203
S/056/61/040/001/009/037
B102/B204

Magnetic properties of ...

occur. The author finally thanks Professor N. Ye. Alekseevskiy, G. F. Zharkov, Yu. V. Sharvin, and Professor A. I. Shal'nikov for their interest, advice and discussions, V. A. Sokolina and E. G. Kharakash'yan for their help. There are 12 figures and 15 references: 11 Soviet-bloc and 4 non-Soviet-bloc.

ASSOCIATION: Moskovskiy gosudarstvennyy universitet (Moscow State University)

SUBMITTED: July 23, 1960

Card 4/7

APPROVED FOR RELEASE: 08/23/2000 CIA-RDP86-00513R001548210010-9"

"APPROVED FOR RELEASE: 08/23/2000 CIA-RDP86-00513R001548210010-9

24,5600

37867
S/056/62/042/005/011/050
B104/B102

AUTHORS: Sevast'yanov, B. K., Sokolina, V. A.

TITLE: The magnetic moment of superconducting films

PERIODICAL: Zhurnal eksperimental'noy i teoreticheskoy fiziki, v. 42, no. 5, 1962, 1212-1218

TEXT: The temperature dependence of the magnetic moment $M_\perp$ perpendicular to the surface of the superconducting layer was determined in tin films of $(3\cdot3)\cdot10^{-6}$ and $(5\cdot5)\cdot10^{-6}$ cm^2 area and 10^{-5}-10^{-6} cm thickness. $M_\perp$ was measured using a magnetic torsion balance with electrodynamic compensation system. The films were condensed in vacuo ($< 2\cdot10^{-6}$ mm Hg) onto polished quartz plates cooled by liquid nitrogen. The quartz base was covered with an electrolytic net as used for making preparations in electron microscopy. $M_\perp$ depends not only on the film thickness but also on its other dimensions. $M_\perp$ increases with increasing $x = \pi dD/16\,\delta^2$, and reaches the value $M_\perp^0$ of a massive superconducting film at about $x = 30$. d is the film thickness, D the diameter of the film covered area, δ the penetration depth of the magnetic field. The experimental results are well described

Card 1/2

APPROVED FOR RELEASE: 08/23/2000 CIA-RDP86-00513R001548210010-9"

"APPROVED FOR RELEASE: 08/23/2000 CIA-RDP86-00513R001548210010-9

by a formula developed by G. F. Zharkov (ZhETF, present issue, p. 1397). This formula was obtained for local interaction between the field and the superconduction current. Near the critical point, tin is a London-type superconductor. There are 7 figures.

ASSOCIATION: Institut kristallografii Akademii nauk SSSR (Institute of Crystallography of the Academy of Sciences USSR). Moskovskiy gosudarstvennyy universitet (Moscow State University)

SUBMITTED: January 3, 1962

APPROVED FOR RELEASE: 08/23/2000 CIA-RDP86-00513R001548210010-9"

"APPROVED FOR RELEASE: 08/23/2000 CIA-RDP86-00513R001548210010-9

ACCESSION NR: AP4042371 S/0056/64/047/001/0073/0079

AUTHORS: Sevast'yanov, B. K; Baybakov, V. I.

TITLE: Anisotropy of magnetic susceptibility of ruby at helium temperatures

SOURCE: Zh. eksper. i teor. fiz., v. 47, no. 1, 1964, 73-79

TOPIC TAGS: magnetic susceptibility, anisotropy, synthetic crystal, ruby, chromium, corundum

ABSTRACT: By measuring the torque acting on single-crystal ruby samples in a homogeneous magnetic field at helium temperatures, the authors determined the anisotropy of the magnetic susceptibility of artificial single-crystal ruby with Cr^{3+} concentrations from 0.016 to 1.1% by weight. The measurements were made with a magnetic torsion balance described earlier (B. K. Sevast'yanov, PTE, No. 5, 137, 1960) and subsequently improved. The samples were in the form of

APPROVED FOR RELEASE: 08/23/2000 CIA-RDP86-00513R001548210010-9"

"APPROVED FOR RELEASE: 08/23/2000 CIA-RDP86-00513R001548210010-9

ACCESSION NR: AP4042371

flat rectangular plates 0.5 mm thick and 0.523 cm^2 in area. The concentration of the Cr^{3+} isomorphic ions in the corundum lattice was calculated from the temperature dependence of the anisotropy of the magnetic susceptibility. The concentrations of the Cr^{3+} determined by chemical, magnetic, and optical measurements were compared. A proportionality was found between the optically and magnetically determined concentrations. Since the chemical analysis includes not only the isomorphic ions but all the chromium in the specimen, the value obtained by chemical means systematically exceeds that obtained by magnetic measurements. "The authors are grateful to Doctor N. A. Brilliantov, who suggested the investigation of magnetic properties of ruby, to Professor A. I. Shal'nikov for an opportunity to work at the Cryogenic Division of MGU, to Professor N. Ye. Alekseyevskiy for reading the manuscript and for valuable remarks, and to G. I. Kosourov and G. M. Zverev for a discussion of the work." Orig. art. has: 4 figures and 1 table.

APPROVED FOR RELEASE: 08/23/2000 CIA-RDP86-00513R001548210010-9"

"APPROVED FOR RELEASE: 08/23/2000 CIA-RDP86-00513R001548210010-9

ACCESSION NR: AP4042371

ASSOCIATION: Institut kristallografii Akademii nauk SSSR (Institute of Crystallography, Academy of Sciences SSSR); Moskovskiy gosudarstvenny*y universitet (Moscow State University)

SUBMITTED: 11Feb64 ENCL: 03

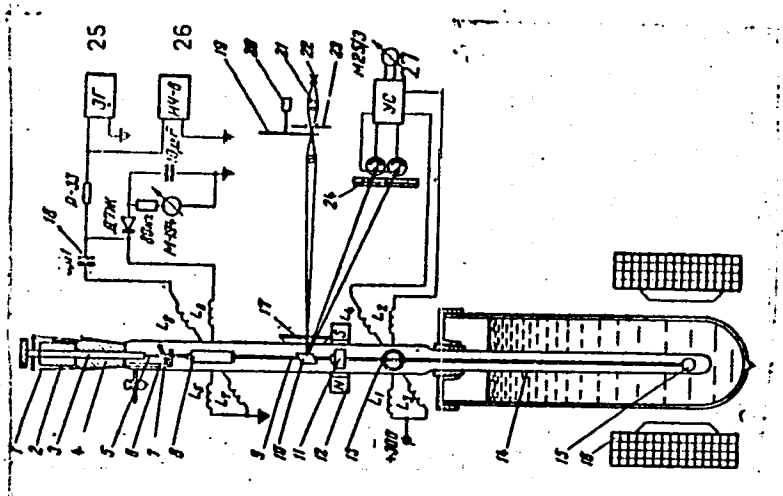
SUB CODE: EM, SS NR REF SOV: 004 OTHER: 008

Card 3/6

APPROVED FOR RELEASE: 08/23/2000 CIA-RDP86-00513R001548210010-9"

"APPROVED FOR RELEASE: 08/23/2000 CIA-RDP86-00513R001548210010-9

ACCESSION NR: AP4042371 ENCLOSURE: 01



(continued in enclosure #2)

Card 4/6

APPROVED FOR RELEASE: 08/23/2000 CIA-RDP86-00513R001548210010-9"

"APPROVED FOR RELEASE: 08/23/2000 CIA-RDP86-00513R001548210010-9

ACCESSION NR: AP4042371 ENCLOSURE: 02

Block diagram of magnetic balance: 1 - frame of bellows, 2 - bellows, 3 -catch rod, 4 - brass ground joint, 5 - phosphor-bronze filament, 6 - support of catch, 7 - catch, 8 - aluminum cylinder, 9 - quartz rod, 10 - mirror, 11 - damper cylinder, 12 - dc magnet, 13 - aluminum ring, 14 - glass tube, 15 - sample, 16 - electromagnet, 17 - optical window, 18 - phase shifting capacitor, 19 - modulator disc, 20 - modulator motor, 21, 22 - illuminator, 23 - diaphragm, 24 - photocell scale, 25 - audio generator, 26 - frequency meter, 27 - amplifier

(continuation of enclosure #1)

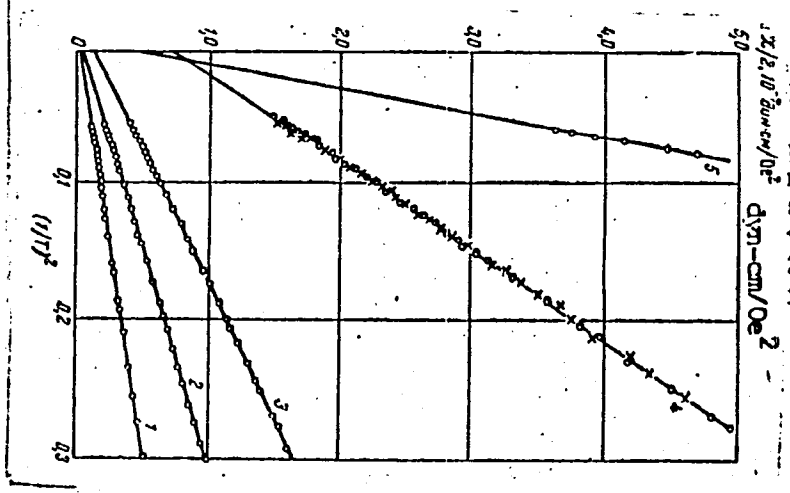
Card 5/6

APPROVED FOR RELEASE: 08/23/2000 CIA-RDP86-00513R001548210010-9"

"APPROVED FOR RELEASE: 08/23/2000 CIA-RDP86-00513R001548210010-9

ACCESSION NR: AP4042371

ENCLOSURE: 03



Dependence of the anisotropy factor $\Delta\chi$ on $(1/T)^2$. Curve plotted at ϕ = 15° on sample no. 5. curve 4 measured on sample no. 4 at two values of the field, + - -5kOe and o - 2.6 kOe. Curves 1--3 are for asmples 1--3, respectively.

Card 6/6

APPROVED FOR RELEASE: 08/23/2000 CIA-RDP86-00513R001548210010-9"

"APPROVED FOR RELEASE: 08/23/2000 CIA-RDP86-00513R001548210010-9

SEVAST'YANOV, B.K.; BAYBAKOV, V.I.

Anisotropy of the magnetic susceptibility of ruby at helium temperatures. Zhur. eksp. i teor. fiz. 47 no.1:73-79 Jl '64. (MIRA 17:9)

1. Institut kristallografii AN SSSR i Moskovskiy gosudarstvennyy universitet.

APPROVED FOR RELEASE: 08/23/2000 CIA-RDP86-00513R001548210010-9"

"APPROVED FOR RELEASE: 08/23/2000 CIA-RDP86-00513R001548210010-9

L 08510-67 EWT(m)/EWP(e)/EWI IJP(c) JD/JG

ACC NR: AP6030714 SOURCE CODE: UR/0368/66/005/002/0172/0177

AUTHOR: Bashuk, R. P.; Gritsenko, M. M.; Grum-Grzhimaylo, S. V.; Zverev, G. M.; Sevast'yanov, B. K.; Kharitonova, L. M.

ORG: none

TITLE: Comparison of different methods for determining chromium concentration in ruby

SOURCE: Zhurnal prikladnoy spektroskopii, v. 5, no. 2, 1966, 172-177

TOPIC TAGS: chromium, ruby, optical absorption, magnetic measurement

ABSTRACT: Chemical, magnetic, optical, and radiospectroscopic methods are described for determining the chromium concentration in ruby. The limitations and possibilities of these methods are compared. The factor for converting the optical absorption value into concentration is determined from magnetic measurements; it si equal to 0.29. Orig. art. has: 4 figures, 5 formulas, and 1 table. [Based on authors' abstract] [NT]

SUB CODE: 03/ SUBM DATE: 09Aug65/ ORIG REF: 009/ OTH REF: 004/

Card 1/1 UDC: 535.89

APPROVED FOR RELEASE: 08/23/2000 CIA-RDP86-00513R001548210010-9"

"APPROVED FOR RELEASE: 08/23/2000 CIA-RDP86-00513R001548210010-9

SEVAST'YANOV, D.V.

Length of the life of the mite Tyrophagus noxius. A. Zachv. Zool. zhur. 40 no.3:461-462 Mr '61. (MIRA 14:3)

1. Department of Invertebrate Zoology, Odessa State University. (Mites)

APPROVED FOR RELEASE: 08/23/2000 CIA-RDP86-00513R001548210010-9"

"APPROVED FOR RELEASE: 08/23/2000 CIA-RDP86-00513R001548210010-9

SEVAST'YANOV, E.S.; LEVKIS, D.L.

Differential capacity measurement on liquid and solid mercury in methanol. Elektrokhimiia 1 no.2:239-241 F '65. (MIRA 18:6)

1. Institut elektrokhimii AN SSSR.

APPROVED FOR RELEASE: 08/23/2000 CIA-RDP86-00513R001548210010-9"

"APPROVED FOR RELEASE: 08/23/2000 CIA-RDP86-00513R001548210010-9

SEVAST'YANOV, E.S.; GORBANEV, A.I.; KESSLER, Yu.M. (Moscow)

Apparatus for measuring electric conductivity. Zhur. fiz. khim. 36 no.3:644-645 Mr '62. (MIRA 17:8)

1. Institut elektrokhimii AN SSSR.

APPROVED FOR RELEASE: 08/23/2000 CIA-RDP86-00513R001548210010-9"

"APPROVED FOR RELEASE: 08/23/2000 CIA-RDP86-00513R001548210010-9

KUZNETSOV, Yu., master sporta; SEVAST'YANOV, E., master sporta

Convergence in a free fall. Kryl.rod. 14 no.9:32-34 S '63. (MIRA 16:9)

(Parachuting)

APPROVED FOR RELEASE: 08/23/2000 CIA-RDP86-00513R001548210010-9"

"APPROVED FOR RELEASE: 08/23/2000 CIA-RDP86-00513R001548210010-9

IEYKIS, D.I.; SEVAST'YANOV, E.S.

Measurement of differential capacitance on solid and liquid electrodes. Dokl. AN SSSR. 144 no.6:1320-1323 Je '62. (MIRA 15:6)

1. Institut elektrokhimii Akademii nauk SSSR. Predstavleno akad. A.N.Frumkinym.

(Electrodes)

APPROVED FOR RELEASE: 08/23/2000 CIA-RDP86-00513R001548210010-9"

"APPROVED FOR RELEASE: 08/23/2000 CIA-RDP86-00513R001548210010-9

SEVAST'YANOV, E.S.; LEYKIS, D.I.

Adsorption of hexyl alcohol on solid metals. Izv. AN SSSR. Ser.khim. no.3:450-453 Mr '64. (MIRA 17:4)

1. Institut elektrokhimii AN SSSR.

APPROVED FOR RELEASE: 08/23/2000 CIA-RDP86-00513R001548210010-9"

"APPROVED FOR RELEASE: 08/23/2000 CIA-RDP86-00513R001548210010-9

LEYKIS, D.I.; SEVAST'YANOV, E.S.; KNOTS, L.L.

Change in the impedance components of an electrode with change of alternating current frequency. Zhur. fiz. khim. 38 no.7:1833-1837 Jl '64. (MIRA 18:3)

1. Institut elektrokhimii AN SSSR.

APPROVED FOR RELEASE: 08/23/2000 CIA-RDP86-00513R001548210010-9"

"APPROVED FOR RELEASE: 08/23/2000 CIA-RDP86-00513R001548210010-9

SEVAST'YANOV, G.A.

Cold sheet bending for corrugated bulkheads. Sudostroenie 25 no.8:56 Ag '59. (MIRA 13:2)
(Bulkheads (Naval architecture)) (Sheet steel-Cold working)

APPROVED FOR RELEASE: 08/23/2000 CIA-RDP86-00513R001548210010-9"

"APPROVED FOR RELEASE: 08/23/2000 CIA-RDP86-00513R001548210010-9

SEVAST'YANOV, G.N.

Materials on the feeding of woodpeckers in Archangel Province [with summary in English]. Zool. zhur. 38 no.4:589-595 Ap '59. (MIRA 12:5)

1. Leningrad Wood Processing Academy.
(Archangel Province--Woodpeckers) (Birds--Food)

APPROVED FOR RELEASE: 08/23/2000 CIA-RDP86-00513R001548210010-9"

"APPROVED FOR RELEASE: 08/23/2000 CIA-RDP86-00513R001548210010-9

PAROVSHCHIKOV, V. Ya.; SEVAST'YANOV, G.N.

Materials on the distribution and biology of owls in Archangel Province. Ornitologiia no.3:122-130 '60. (MIRA 14:6)
(Archangel Province--Owls)

APPROVED FOR RELEASE: 08/23/2000 CIA-RDP86-00513R001548210010-9"

"APPROVED FOR RELEASE: 08/23/2000 CIA-RDP86-00513R001548210010-9

SEVAST'YANOV, G.N.

Composition and stations of titmouse flocks. Zool. zhur. 40 no.12: 1899 D '61. (MIRA 15:3)

1. Forest Technical Academy of Leningrad.
(Karpogory District--Titmice)

APPROVED FOR RELEASE: 08/23/2000 CIA-RDP86-00513R001548210010-9"

"APPROVED FOR RELEASE: 08/23/2000 CIA-RDP86-00513R001548210010-9

SEVAST'YANOV, G.N.

Distribution of nesting cavities in the Archangel taiga.
Ornitologiia no.5:86-91 '62. (MIRA 16:2)
(Archangel Province--Birds--Eggs and nests)

APPROVED FOR RELEASE: 08/23/2000 CIA-RDP86-00513R001548210010-9"

"APPROVED FOR RELEASE: 08/23/2000 CIA-RDP86-00513R001548210010-9

SEVAST'YANOV, G.N.

Feeding habits of horned owl in Archangel Province. Ornitologiia no.6:481 '63. (MIRA 17:6)

APPROVED FOR RELEASE: 08/23/2000 CIA-RDP86-00513R001548210010-9"

"APPROVED FOR RELEASE: 08/23/2000 CIA-RDP86-00513R001548210010-9

LOPATIN, K.I., kandidat tekhnicheskikh nauk; ASKINAZI, Z.M., inzhener; BLINER, L.G., inzhener; PETROV, Ye.M., inzhener; LOSEVA, T.K.; SEVAST'YANOV, I.F.

Purification of water gas by triethanolamine. Masl.-zhir.prom.22 no.4:12-13 '56. (MIRA 9:9)

1.Leningradskiy khimiko-farmatsevticheskiy institut (for Lopatin). 2.Leningradskiy zavod "Salolin" (for Askinazi, Bliner, Petrov, Sevast'yanov).
(Water gas) (Ethanol)

APPROVED FOR RELEASE: 08/23/2000 CIA-RDP86-00513R001548210010-9"

"APPROVED FOR RELEASE: 08/23/2000 CIA-RDP86-00513R001548210010-9

LITVIN, Stepan Gavrilovich [Lytvyn, S.H.], kand. sel'khoz. nauk; SEVAST'YANOV, I.G. [Sevast'ianov, I.H.], kand. sel'khoz. nauk, otv. red.; GURENKO, V.A. [Hurenko, V.A.], red.; MATVIICHUK, O.A., tekhn. red.

[Cultivation of oilseed plants in the Ukraine] Oliini kul'tury na Ukraini. Kyiv, 1961. 49 p. (Tovarystvo dlia poshyrennia politychnykh i naukovykh znan' Ukrains'koi RSR. Ser.5, no.12) (MIRA 14:11)
(Ukraine—Oilseed plants)

APPROVED FOR RELEASE: 08/23/2000 CIA-RDP86-00513R001548210010-9"

"APPROVED FOR RELEASE: 08/23/2000 CIA-RDP86-00513R001548210010-9

SEVAST'YANOV, I.I., Cand Agr Sci--(diss) " Most important methods of agricultural-engineering of winter rape in the forest-steppe regions of the UkSSR." Kiev, 1958. 13 pp (Ukr Acad of Agr Sci), 100 copies (KL,25-58,117)

-143-

APPROVED FOR RELEASE: 08/23/2000 CIA-RDP86-00513R001548210010-9"

"APPROVED FOR RELEASE: 08/23/2000 CIA-RDP86-00513R001548210010-9

SEVAST'YANOV, I.I., sotrudnik; SIL'VESTROVA, N.M., sotrudnik

New brushes for cleaning flats. Tekst.prom. 19 no.4:91 Ap '59. (MIRA 12:6)

1. TSentral'nyy nauchno-issledovatel'skiy institut izdeliy i zapasnykh detaliy k tekstil'nomu oborudovaniyu.
(Carding machines--Maintenance and repair)

APPROVED FOR RELEASE: 08/23/2000 CIA-RDP86-00513R001548210010-9"

"APPROVED FOR RELEASE: 08/23/2000 CIA-RDP86-00513R001548210010-9

SEVAST'YANOV, I.I.; PERVUKHINA, Z.S., starshiy nauchnyy sotrudnik

Basic trends in the development of all-metal fillet cards in the foreign technology of cotton spinning. Tekst. prom. 24 no.5:81 My '64. (MIRA 18:2)

1. Rukovoditel' laboratorii tsel'nometallicheskoy pil'chatoy lenty TSentral'nogo nauchno-issledovatel'skogo instituta vspomogatel'nykh izdeliy i zapasnykh detaley k tekstil'nomu oborudovaniyu (for Sevast'yanov). 2. TSentral'nyy nauchno-issledovatel'skiy institut vspomagatel'nykh izdeliy i zapaznykh detaley k tekstil'nomu oborudovaniyu (for Pervukhina).

APPROVED FOR RELEASE: 08/23/2000 CIA-RDP86-00513R001548210010-9"

"APPROVED FOR RELEASE: 08/23/2000 CIA-RDP86-00513R001548210010-9

SEVAST'YANOV, K.F., inzh.

Hardening of carbamide resins. Der. prom. 7 no.2:9-11 F '58. (MIRA 11:1)

1. TSentral'nyy nauchno-issledovatel'skiy institut fanery i mebeli.
(Gums and resins)

APPROVED FOR RELEASE: 08/23/2000 CIA-RDP86-00513R001548210010-9"

"APPROVED FOR RELEASE: 08/23/2000 CIA-RDP86-00513R001548210010-9

SEVAST'YANOV, K. F. Cand Tech Sci -- (diss) "A new method of produc~~tion of~~ ornamental finishing veneers." Len, 1959. 19 pp with illustrations (Min of Higher Education USSR. Len Order of Lenin Forestry Engineering Acad im S. M. Kirov), 150 copies (KL, 43-59, 125)

APPROVED FOR RELEASE: 08/23/2000 CIA-RDP86-00513R001548210010-9"

"APPROVED FOR RELEASE: 08/23/2000 CIA-RDP86-00513R001548210010-9

SOV/99-59-11-11/15

30(1)

AUTHOR: Sevast'yanov, K.I., Engineer (Pyatigorsk)

TITLE: The Use of Wave Damping Face on Earth Dams

PERIODICAL: Gidrotekhnika i melioratsiya, 1959, Nr 11, pp 51-52 (USSR)

ABSTRACT: This short item deals with the use of a wave damping face on the upstream side of an earth dam in the Sengileyev reservoir dam project in 1955. The reservoir was formed by filling the bed of the existing lake, 22 km^2 in area, using Kuban' river water from the Nevinnomysskiy canal; after filling, the water level will have risen 18 m and the surface area of the reservoir will increase to 41 km^2; the volume of the reservoir is 380 million cubic meters. Two types of upstream dam face were studied: 1) face with 1:2 gradient, reinforced with concrete on a sand-gravel base, and 2) face with a 1:15 gradient and no re-inforcement (Fig 1). Construction of the second type of face is described and illustrated (Fig 2). With this wave damping face wave action was considerably reduced, and the saving in concrete, gravel and stone resulted in

Card 1/2

APPROVED FOR RELEASE: 08/23/2000 CIA-RDP86-00513R001548210010-9"

"APPROVED FOR RELEASE: 08/23/2000 CIA-RDP86-00513R001548210010-9

a reduction in cost of 2.21 million rubles, or 31% (see table). Construction of such a dam at the reservoir site was begun in 1956, and put in operation in the summer of 1958. Filling of the reservoir was started in June 1957. Thus far, states the author, the upstream slope of the dam has held up very well. The use of such a wave damping dam face is recommended in some specific cases - where dam height is on the order of 8-9 m. In projecting wave damping faces for earth dams, states the author, the following materials were used: the article, "On the Extent of Reworking River Banks when Water Level Rises" by Ye. G. Kachugin in "Gidrotekhnicheskoye stroitel'stvo", 1951, Nr 12, the article "On Designing of the Upstream Face of Earth Dams Without reinforcement" by Ye.S. Tsaytts in "Gidrotekhnika i Melioratsiya", 1954, Nr 1, and Materials of the Gidrologicheskiy institut AN SSSR (Hydrological Institute of the Academy of Sciences of the USSR) on the subject of re-working reservoir banks. There are 2 drawings and 1 table.

APPROVED FOR RELEASE: 08/23/2000 CIA-RDP86-00513R001548210010-9"

"APPROVED FOR RELEASE: 08/23/2000 CIA-RDP86-00513R001548210010-9

GLIKI, N.V.; SEVAST'YANOV, L.G.

Refrigerating thermostating unit for laboratory investigations. Zav. lab. 27 no.1:106-108 '61. (MIRA 14:3)

1. Institut kristallografii Akademii nauk SSSR.
(Temperature regulators)

APPROVED FOR RELEASE: 08/23/2000 CIA-RDP86-00513R001548210010-9"

"APPROVED FOR RELEASE: 08/23/2000 CIA-RDP86-00513R001548210010-9

SEVAST'YANOV, M.A.

Sectional cutter for milling nipple seats in electrodes. Stan. i instr. 36 no.6:40-41 Je '65. (MIRA 18:8)

APPROVED FOR RELEASE: 08/23/2000 CIA-RDP86-00513R001548210010-9"

"APPROVED FOR RELEASE: 08/23/2000 CIA-RDP86-00513R001548210010-9

SEVAST'YANOV, M.I.; SEDYAKIN, N.I., red.; PANOVA, V.L., red.; LARIONOV, G.Ye., tekhn.red.

[Memorandum on safety rules for an electrician working on overhead lines] Pamiatka po tekhnike bezopasnosti elektromontera-montazhnika vozdushnykh linii elektroperedachi. Moskva, Gos.energ.izd-vo, 1960. 31 p. (MIRA 13:6)

1. Russia (1917- R.S.F.S.R.) Glavnoye upravleniye po proizvodstvu elektromontazhnykh rabot.
(Electric lines--Maintenance and repair)

APPROVED FOR RELEASE: 08/23/2000 CIA-RDP86-00513R001548210010-9"

"APPROVED FOR RELEASE: 08/23/2000 CIA-RDP86-00513R001548210010-9

SEVAST'YANOV, Mitrofan Ivanovich; VASIL'YEV, A.A., red.; DOLGOV, A.N., red.; YEZHKOV, V.V., red.; SMIRNOV, A.D., red.; USTINOV, P.I., red.; TUMANOV, B.V., red.; VORONIN, K.P., tekhn.red.

[Safety engineering in performing rigging operations in the installation of electric systems] Tekhnika bezopasnosti pri proizvodstve takelazhnykh rabot na montazhe energeticheskikh ustanovok. Moskva, Gos.energ.izd-vo, 1960. 55 p. (Biblioteka elektromontera, no.34) (MIRA 14:4)

(Electric engineering--Safety measures)

APPROVED FOR RELEASE: 08/23/2000 CIA-RDP86-00513R001548210010-9"

"APPROVED FOR RELEASE: 08/23/2000 CIA-RDP86-00513R001548210010-9

SEVAST'YANOV, M.I.; CHEKHOVSKAYA, T.P., red. izd-va; RUDAKOVA, N.I., tekhn. red.

[Guide on safety engineering for workers engaged in the manufacture of wood particle boards] Pamiatka po tekhnike bezopasnosti dlia rabochikh po izgotovleniiu drevesno-struzhechnykh plit. Moskva, Gos. izd-vo lit-ry po stroit., arkhit. i stroit. materialam, 1961. 13 p. (MIRA 14:12)
(Woodworking industries—Safety measures)

APPROVED FOR RELEASE: 08/23/2000 CIA-RDP86-00513R001548210010-9"

"APPROVED FOR RELEASE: 08/23/2000 CIA-RDP86-00513R001548210010-9

SEVAST'YANOV, Mitrofan Ivanovich; STESHENKO, N.N., red.; SHIROKOVA, M.M., tekhn. red.

[Placement of cables with voltages up to 35 kv. in industrial and public buildings] Prokladka kabelei napriazheniem do 35 kv. v promyshlennykh i grazhdanskikh zdaniiakh. Moskva, Gos.energ. izd-vo, 1961. 45 p. (Biblioteka elektromontera, no.54) (MIRA 14:12)
(Electric wiring, Interior) (Electric cables)

APPROVED FOR RELEASE: 08/23/2000 CIA-RDP86-00513R001548210010-9"

"APPROVED FOR RELEASE: 08/23/2000 CIA-RDP86-00513R001548210010-9

SHAGOV, Nikolay Petrovich; SEVAST'YANOV, M.I., ved. red.; VORONOVA, V.V., tekhn. red.

[Machinery and installations for the insulation of pipelines] Mashiny i ustanovki dlia izoliatsii magistral'nykh truboprovodov. Moskva, Gostoptekhizdat, 1962. 311 p. (MIRA 16:2)
(Pipelines—Corrosion)

APPROVED FOR RELEASE: 08/23/2000 CIA-RDP86-00513R001548210010-9"

"APPROVED FOR RELEASE: 08/23/2000 CIA-RDP86-00513R001548210010-9

LEYBO, Anatoliy Nikanorovich; KHESIN, Emmanuil Borisovich; CHERNYAK, Yakov Solomonovich; SEVAST'YANOV, M.I.; DOVZHUK, G.T.; SOLGANIK, G.Ya., ved. red.; VORONOVA, V.V., tekhn. red.

[Handbook for petroleum refinery mechanics] Spravochnik mekhanika neftepererabatyvaiushchego zavoda. Moskva, Gostoptekhizdat, 1963. 801 p. (MIRA 16:7)
(Petroleum--Refining)

APPROVED FOR RELEASE: 08/23/2000 CIA-RDP86-00513R001548210010-9"