"APPROVED FOR RELEASE: 08/31/2001 CIA-RDP86-00513R001550320013-1

L 10882-66 EWT(m) RM

ACC NR: AP5028259 SOURCE CODE: UR/0189/65/000/004/0092/0093

AUTHOR: Shvachkin, Yu. P.; Berestenko, M. K.; Boltyanskaya, E. I.

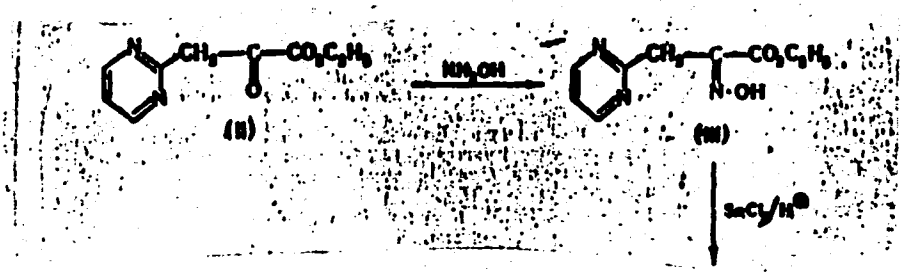
ORG: Department of Organic Chemistry, Moscow State University (Kafedra organicheskoy khimii Moskovskogo universiteta)

TITLE: New pyrimidine analog of phenylalanine

SOURCE: Moscow. Universitet. Vestnik. Seriya 2. Khimiya, no. 4, 1965, 92-93

TOPIC TAGS: alanine, amino acid, pyrimidine

ABSTRACT: The following synthetic paths are given:



 UDC: 547.91/99

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L 10882-66

ACC NR: AP5028259

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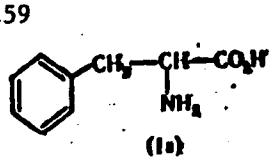
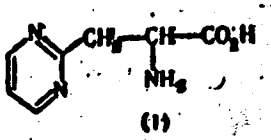


(Ia)



(I)

The starting material used was ethyl β-(2-pyrimidyl)pyruvate (II), which reacted with hydroxylamine to form ethyl α-oximino-β-(2-pyrimidyl)propionate (III). The latter is then reacted with stannous chloride in an acid medium; this single step accomplishes the reduction of the ketoxime fragment and the saponification of the ester group, and yields β-(2-pyrimidyl)alanine (I). This new pyrimidyl amino acid has very definite amphoteric properties. Authors thank Prof. M. A. Prokof'yev for his interest and attention to this work, and are also deeply grateful to A. P. Skoldinov for the tetraethoxypropane which he kindly supplied. Orig. art. has: 1 figure.

SUB CODE: 07 / SUBM DATE: 11Jan65 / ORIG REF: 001 / OTH REF: 004

jw

Card 2/2

APPROVED FOR RELEASE: 08/31/2001 CIA-RDP86-00513R001550320013-1"

"APPROVED FOR RELEASE: 08/31/2001 CIA-RDP86-00513R001550320013-1

BELINKIN, A.A.; BUKANOV, V.A.; ZOTIKOV, S.L.; KATULIN, V.A.; SHVACHKINA, A.F.

Substitution of plastic materials for metals. Med. prom. 15 no.1: 54-55 Ja '61. (MIRA 14:1)

1. Leningradskiy ordena Lenina mediko-instrumental'nyy zavod "Krasnogvardeyets."
(DRUG INDUSTRY)

APPROVED FOR RELEASE: 08/31/2001 CIA-RDP86-00513R001550320013-1"

"APPROVED FOR RELEASE: 08/31/2001 CIA-RDP86-00513R001550320013-1

SHVACHKO, I., inzh.

Let's mechanize operations in quarries serving several collective farms. Sil'.bud. 10 no.1:16-17 Ja 60. (MIRA 13:5)
(Ukraine--Quarries and quarrying--Equipment and supplies)

APPROVED FOR RELEASE: 08/31/2001 CIA-RDP86-00513R001550320013-1"

"APPROVED FOR RELEASE: 08/31/2001 CIA-RDP86-00513R001550320013-1

BELOV, V.Ye.; BILENKO, A.I.; SHVACHKO, M.S.; BRAILOVSKII, N.G., inzhener, redaktor; KHITROV, P.A., tekhnicheskiy redaktor

[Unit method of repairing freight cars] Uzlovoi metod remonta gruzovykh vagonov; opyt vagonnogo depo stantsii Likhobory-Moskovsko-Okruzhnoi dorogi. Moskva, Gos. transp. zhel-dor. izd-vo, 1954. 54 p. (MLRA 8:6)
(Railroads--Freight-cars)

APPROVED FOR RELEASE: 08/31/2001 CIA-RDP86-00513R001550320013-1"

"APPROVED FOR RELEASE: 08/31/2001 CIA-RDP86-00513R001550320013-1

[redacted] in planning airport operation. Grazhd.av. 14 no.7:31
(MLRA 10:9)

[redacted] planovogo otdela aeroporta.
(Airports)

APPROVED FOR RELEASE: 08/31/2001 CIA-RDP86-00513R001550320013-1"

"APPROVED FOR RELEASE: 08/31/2001 CIA-RDP86-00513R001550320013-1

SHVACHKO, P.

This is vital and useful. Izobr.i rats. no.12:32-33 D '60.
(MIRA 13:12)

1. Sekretar' Ukrainskogo respublikanskogo soveta Vsesoyuznogo obshchestva izobretateley i ratsionalizatorov, Kiyev.
(Ukraine--Coal mines and mining--Technological innovations)

APPROVED FOR RELEASE: 08/31/2001 CIA-RDP86-00513R001550320013-1"

"APPROVED FOR RELEASE: 08/31/2001 CIA-RDP86-00513R001550320013-1

SHVACHKO, P.P.

Conference of inventors and efficiency promoters. Tekst.prom. 20 no.3:90-92 Mr '60. (MIRA 14:5)

1. Sekretar' Ukrainskogo respublikanskogo soveta Vsesoyuznogo obshchestva izobretateley i ratsionalizatorov.
(Textile industry—Technological innovations)

APPROVED FOR RELEASE: 08/31/2001 CIA-RDP86-00513R001550320013-1"

"APPROVED FOR RELEASE: 08/31/2001 CIA-RDP86-00513R001550320013-1

ACC NR: AR7004107 (N) SOURCE CODE: UR/0169/66/000/012/V025/V025

AUTHOR: Shvachko, R. F.

TITLE: Fluctuations in sound and random inhomogenities in the ocean

SOURCE: Ref. zh. Geofizika, Abs. 12V147

REF SOURCE: Sb. 2-y Mezhdunar. okeanogr. kongress, 1966. Tezisy dokl. M., Nauka, 1966, 420-421

TOPIC TAGS: refractive index, ocean acoustics, acoustics, oceanography, turbulent mixing, sound signal fluctuation, two thirds law, random inhomogeneity

ABSTRACT: One possible application of acoustics in oceanography rests on the relationship between fluctuations in sound and random variations in sound velocity, which are usually caused by temperature fluctuations in the ocean. These temperature fluctuations, in turn, are due to turbulent processes in the ocean. Thus, a relationship is established between the turbulence parameters and the statistical characteristics of an acoustical signal passing through a turbulent medium with random inhomogeneities in sound velocity c (refraction index $n=c'/c$).

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"APPROVED FOR RELEASE: 08/31/2001 CIA-RDP86-00513R001550320013-1

ACC NR: AR7004107

A study of this relationship in the Atlantic Ocean was made in 1961—1964 by the scientific research vessels of the Soviet Academy of Sciences, "Sergey Vavilov" and "Petr Lebedev". As a rule, recordings of the fluctuations in the amplitude of a pulsed sound signal (which had been reflected from the ocean surface) were made at the same time as direct measurements of fluctuations of the index of refraction. These measurements were made using a practically inertialess instrument which measured small deviations (up to 10^{-6}) of the index of refraction from the mean value (equal to one), using a microphasometric method of measuring the sound velocity of 2-mc frequency over a base several centimeters long. Slower fluctuations of the index of refraction were measured with a velocity meter based on the "sing-around" principle. Its sensitivity for a measurement time of one sec is $5 \cdot 10^{-6}$. In order to make the transition from fluctuations of the index of refraction to temperature fluctuations, sensitivity values expressed in units of the refraction index should be multiplied by 500°. Both the direct and indirect measurements which were made (based on the statistical characteristics of amplitude fluctuations in the acoustical signal) showed that Kolmogorov-Obukhov's "law of two-thirds" for local isotropic turbulence, $D_n(\rho)=[n(\vec{\rho}_1)-n(\vec{\rho}_2)]^2=Cn^2\rho^{2/3}$, is true for the structural function $D_n(\rho)$ of fluctuations in the coefficient of refraction. Here, Cn is the so-called structural constant, and $\rho=|\vec{\rho}_1-\vec{\rho}_2|$ is the distance between measurement points; the arrows in the equation indicate

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averaged values of the set (or in time). This law is true within a scale range from l_0 to L_0. If the internal scale l_0 is determined by minimum dimensions of the inhomogeneities which could exist for reasons of energy dissipation (in the ocean $l_0 \sim 1$ cm), then the external scale L_0 is determined by the characteristic dimensions of the mechanism of turbulence excitation. Measurements in the upper mixed layer of the ocean (at depths of 20—40 m) showed that an excitation mechanism exists which is capable of causing inhomogeneities with an outer scale L_0 ranging from several decimeters to several meters, with the magnitude of the structural constant $C_n \approx 10^{-6}$ $м^{-1/3}$. Results obtained in processing amplitude fluctuations in 25 kcps signals (wavelength $\lambda = 6$ см) showed that when the distance L between the emitter and receiver equals several hundred meters, with the condition $\sqrt{\lambda L} \gg L_0$ prevailing, the transverse radius of the correlation of sound amplitude fluctuations, following from theoretical considerations, coincides in order of magnitude with the external dimensions of inhomogeneities L_0, and the mean square value V relative to amplitude fluctuations agrees well with the theoretical relationship:

$$V = 3C_n\lambda^{-1}L^{5/6}L^{1/2}. \qquad (1)$$

Measurements of sound fluctuations at great depths (150—250 m), as well as direct measurements of fluctuations in the refraction index at depths up to 1500 m,

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showed that the "law of two-thirds" was observed to apply to dimensions up to an order of several tens and hundreds of meters with a structural constant value of $C_n \approx 10^{-5}\ м^{-1/3}$. Under these conditions, at a frequency of 3 kcps (wavelength $\lambda = 0{,}5\ м$) and distances to several kilometers, when the condition $\sqrt{\lambda L} \ll L_0$ prevails, the transverse radius of correlation of sound amplitude fluctuations coincides in order of magnitude with $\sqrt{\lambda L}$, and the mean square value of relative amplitude fluctuations follows the relationship:

$$V = C_n^2 \lambda^{-7/12} L^{11/12}. \qquad (2)$$

Thus, as may be seen from expressions (1) and (2), the C_n and L_0 parameters of turbulent oceanic mixing may be calculated from the measures mean quadratic values of relative amplitude fluctuations in the sound signal and values of the transverse radius of the correlation of these fluctuations.. [Translation of abstract]

[SP]

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ACCESSION NR: AP3005625 S/0046/63/009/003/0347/0350

AUTHOR: Shvachko, R. F.

TITLE: Acoustic fluctuations in upper oceanic layers and their connection to random media nonhomogeneity

SOURCE: Akusticheskiy zhurnal, v. 9, no. 3, 1963, 347-350

TOPIC TAGS: acoustic fluctuation, random nonhomogeneity, ocean layer, refractive index, pulse frequency, correlation function

ABSTRACT: Results of an experimental investigation in sound level fluctuations in upper layers of the ocean have been reported. The experiments were done in May 1961 in the northern Atlantic, 200 miles south of Porcupine Bank. Pulse frequencies were at 10 and 25 kc, duration 1 msec, and recurrence period 400 msec. The transducer immersion depth was 40 m in an upper layer 80 m thick. Fluctuations in the refractive index D were within the limits 10^{-6} to 2×10^{-4}. The normalized refractive index is plotted against $\rho = |r_2 - r_1|$. The experimental points show a

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ACCESSION NR: AP3005625

good agreement with the predicted 2/3 law for D_n versus ρ. Furthermore, the transverse radius of correlation function level coincides well with the nonhomogeneity radius of the refractive index a = 1.4 to 1.5 m, as seen in a plot of normalized structure of refractive index fluctuations at the 25-kc frequency for six distances. "The author is grateful to Yu. M. Moskovenko for helping in the experiments and data reduction." Orig. art. has: 3 formulas and 3 figures.

ASSOCIATION: Akusticheskiy institut AN SSSR Moscow (Acoustics Institute AN SSSR)

SUBMITTED: 25Nov62 DATE ACQ: 27Aug63 ENCL: 00

SUB CODE: GP NO REF SOV: 005 OTHER: 001

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APPROVED FOR RELEASE: 08/31/2001 CIA-RDP86-00513R001550320013-1"

"APPROVED FOR RELEASE: 08/31/2001 CIA-RDP86-00513R001550320013-1

FOGEL', Ya.M.; NADYKTO, B.T.; SHVACHKO, V.I.; RYBALKO, V.F.; KOROBCHANSKAYA, I.Ye.

Catalytic oxidation of ammonia on platinum studied by the method of secondary ionic emission. Dokl. AN SSSR 155 no.1:171-174 Mr '64. (MIRA 17:4)

1. Khar'kovskiy gosudarstvennyy universitet im. A.M.Gor'kogo. Predstavleno akademikom A.N.Frumkinym.

APPROVED FOR RELEASE: 08/31/2001 CIA-RDP86-00513R001550320013-1"

"APPROVED FOR RELEASE: 08/31/2001 CIA-RDP86-00513R001550320013-1

FOGEL', Ya.M.; NADYKTO, B.T.; RYBALKO, V.F.; SHVACHKO, V.I.; KOROBCHANSKAYA, I.Ye.

Study of the catalytic oxidation of ammonia on platinum by the secondary ion emission method. Kin. i kat. 5 no.3:496-504 My-Je '64. (MIRA 17:11)

1. Khar'kovskiy gosudatstvennyy universitet imeni Gor'kogo.

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L 23051-65 EWG(j)/EWT(m)/EPF(c)/EPR/EWP(t)/EWP(b) Pr-4/Ps-4 IJP(c)
JD

ACCESSION NR: AP4047980 S/0076/64/038/010/2397/2402

AUTHOR: Fogel', Ya. M.(Khar'kov); Nadykto, B. T.(Khar'kov); Shvachko, V. I. (Kar'kov); Rybalko, V. F. (Khar'kov)

TITLE: Secondary ion emission investigation of the state of oxygen adsorbed on a silver surface

SOURCE: Zhurnal fizicheskoy khimii, v. 38, no. 10, 1964, 2397-2402

TOPIC TAGS: secondary oxygen ion emission, oxidation mechanism, silver oxidation catalyst, negative oxygen ion, positive oxygen ion

ABSTRACT: In order to study the mechanism of the oxidation process on a metallic catalyst (silver catalyst used in ethylene oxidation) the state of the oxygen adsorbed on the surface was determined. The mass spectra of the secondary positive and negative ions formed by bombarding a silver ribbon with a primary beam of argon ions in an oxygen atmosphere were studied. The dependence of the intensity of the mass spectral lines on the oxygen pressure and the ribbon temperature was determined. In the 20-500C range the oxygen adsorbed on the silver surface was partly atomic and partly molecular, and some of the molecular oxy-

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ACCESSION NR: AP4047980

2

gen was in the state of a negative molecular ion O_2^-. The state of the charge of the atomic oxygen was not determined. At temperatures above 300C the effect of the oxides on the silver surface on the secondary emission of oxygen ions was insignificant; the latter were formed only from oxygen adsorbed on the silver surface. Below 300C the surface oxides could be involved in the secondary emission of oxygen ions, but apparently to only a small extent. Thus if the oxygen in the surface oxides on the silver plays a significant role in catalytic oxidation reactions, the activity of the silver catalyst will drop at temperatures above 300C. "In conclusion we wish to sincerely thank prof. A. K. Val'ter for constant advice and interest in the work." Orig. art. has: 3 figures and 3 equations.

ASSOCIATION: Khar'kovskiy gosudarstvenny*y universitet im. A. M. Gor'kogo (Kharkov State University)

SUBMITTED: 17Oct63 ENCL: 00

SUB CODE: GC, NP NO REF SOV: 005 OTHER: 002

Card 2/2

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"APPROVED FOR RELEASE: 08/31/2001 CIA-RDP86-00513R001550320013-1

L 46183-65 EWT(1)/EWT(m)/EPA(sp)-2/EPF(c)/EWA(d)/EPA(w)-2/EEC(t)/EWP(t)/EWP(b) Pab-10/Pr-4/Peb IJP(c) JD/WW/WB/AT UR/0020/65/161/004/0886/0888

ACCESSION NR: AP5010839

AUTHOR: Shvachko, V. I.; Nadykto, B. T.; Fogel', Ya. M.; Garger, K. S.; Kondrat'yev, V. N.

TITLE: The use of secondary ion emission for investigation of corrosion processes on the surface of steel

SOURCE: AN SSSR. Doklady, v. 161, no. 4, 1965, 886-888

TOPIC TAGS: secondary emission, steel surface oxidation, iron pentacarbonyl, ferric oxide, ferrous hydroxide, argon ion beam, steel corrosion

ABSTRACT: The article presents preliminary results of a study of the processes occurring on the surface of steel during heating in a vacuum (5×10^{-6} mm Hg) and in oxygen (1×10^{-4} mm Hg), carried out with the aid of secondary ionic emission. The source of secondary ion emission was a steel strip 20 × 4 × 0.1 mm containing (in %) 0.39% C, 0.45% Mn, 0.28% Cr, 0.016% P and <0.01% Si. The primary beam was made up of Ar^+ ions accelerated to 20 kev. Curves for the intensity of the various secondary ions versus the temperature of the steel strip are given. The formation

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of ferric oxide on the steel surface is due to oxygen in the residual gas. However at oxygen pressures higher than $2 \cdot 10^{-5}$ mm Hg there is no increase in the intensity of the $Fe_2O_3^+$ ion beam, and therefore no increase in the oxide coating on the steel surface. In the 20-500° range, the rate of decomposition of ferric oxide increases with temperature more rapidly than the rate of oxide formation, which reduces the oxide coating. In the 500-800° range this situation is reversed and the oxide coating increases. The formation of $Fe(OH)_2$ is considered in relation to the pressure of water vapor. The coating of the surface with $Fe(CO)_5$ increases monotonically above 200°. A definite part in the mechanism of formation of iron pentacarbonyl is played by the carbon present in the steel; the oxidation of carbon may constitute the first stage of formation of the pentacarbonyl. If such is the case, the formation and evaporation of $Fe(CO)_5$ should lead to the decarburization of steel. "We consider it our pleasant duty to thank Prof. A. K. Val'ter for a steady interest in this work." Orig. art. has: 3 figures.

ASSOCIATION: Khar'kovskiy gosudarstvennyy universitet im. A. M. Gor'kogo (Kharkov State University)

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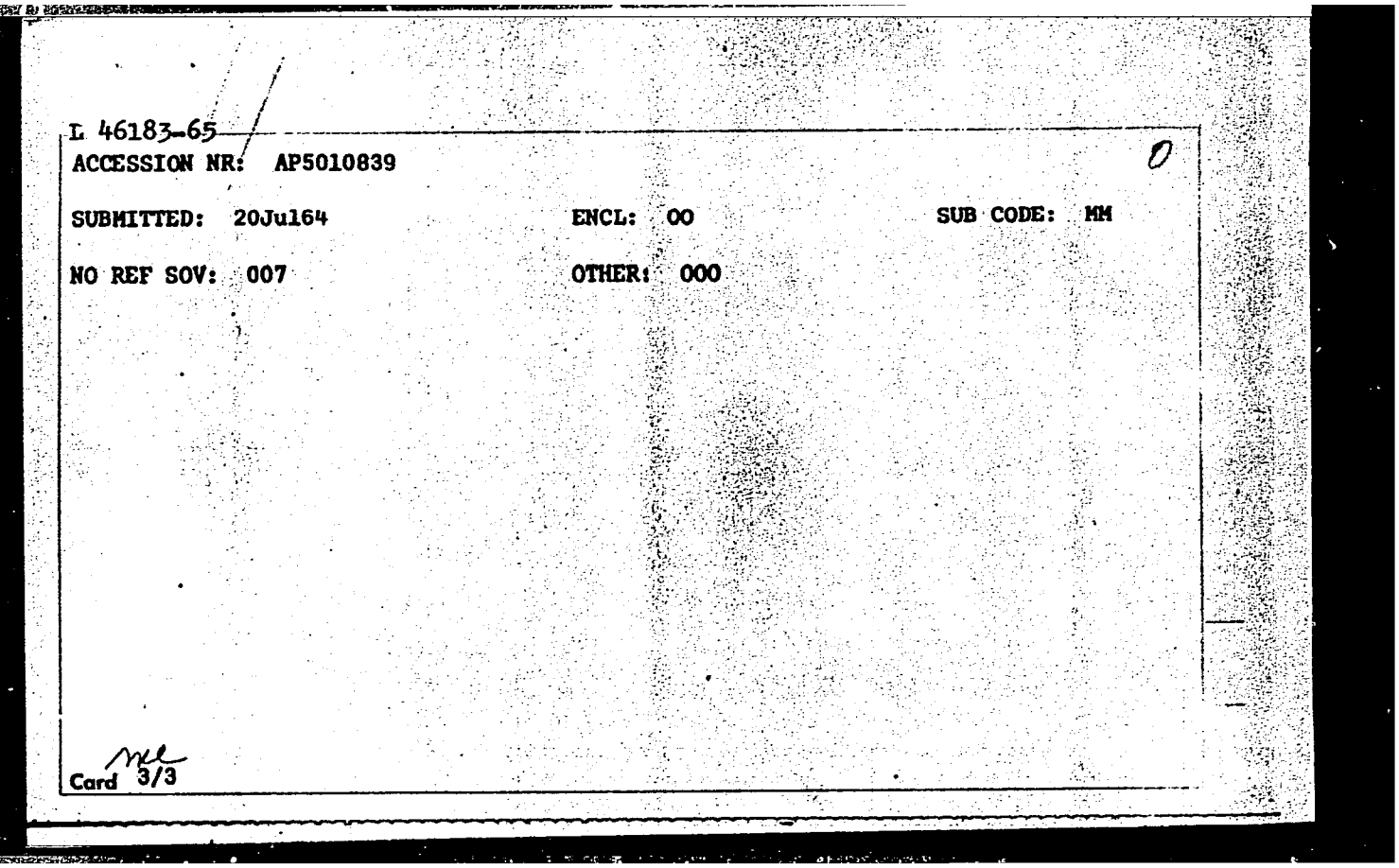

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ACCESSION NR: AP5010839 0

SUBMITTED: 20Jul64 ENCL: 00 SUB CODE: MM

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Card 3/3

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"APPROVED FOR RELEASE: 08/31/2001 CIA-RDP86-00513R001550320013-1

L 58872-65 EPF(c)/EPF(n)-2/EPR/EWG(j)/EPA(w)-2/EWT(l)/EWT(m)/EWP(b)/EPA(sp)-2/EWP(t) Pr-4/Ps-4/Pu-4/Peb IJP(c) AT/JD/JG

ACCESSION NR: AP5017281 UR/0181/65/007/007/1944/1951

AUTHOR: Shvachko, V. I.; Nadykto, B. T.; Fogel', Ya. M.; Vasyutinskiy, B. M.; Kartmazov, G. N.

TITLE: Using secondary ion-ionic emission for studying the interaction of oxygen with the surface of niobium

SOURCE: Fizika tverdogo tela, v. 7, no. 7, 1965, 1944-1951

TOPIC TAGS: ion emission, niobium, oxidation

ABSTRACT: The method of secondary ion-ionic emission was used to investigate the composition of oxides which form on the surface of niobium when it interacts with oxygen. It was established that in the temperature range from 20 to 1200°C the following oxides form on the surface of niobium which is in an oxygen atmosphere at a pressure of approximately 10^{-4} mm of mercury: NbO, NbO_2, Nb_2O_3, and Nb_2O_5. In the temperature interval from 1200 to 2000°C the surface of Nb contains only NbO and Nb_2O_3. The corrosion wear of Nb results from the formation and subsequent evaporation of NbO starts at 1400°C and then increases very rapidly with temperature. In the 20-800°C temperature range NbO_2 undergoes decomposition according to the reaction $NbO_2 \rightarrow NbO + O$ with the desorption of oxygen into a gaseous phase. "In conclu-

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ACCESSION NR: AP5017281 2

sion, we are sincerely grateful to A. K. Val'ter for his constant interest in the work." Orig. art. has: 4 figures.

ASSOCIATION: Khar'kovskiy gosudarstvennyy universitet im. A. M. Gor'kogo (Kharkov State University)

SUBMITTED: 27Nov64 ENCL: 00 SUB CODE: GC, MM

NO REF SOV: 003 OTHER: 001

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APPROVED FOR RELEASE: 08/31/2001 CIA-RDP86-00513R001550320013-1"

"APPROVED FOR RELEASE: 08/31/2001 CIA-RDP86-00513R001550320013-1

SHVACHKO, V.I.; NADYKTO, B.T.; FOGEL', Ya.M.; GARBER, K.S.

Corrosion processes on the surface of steel studied by the method of secondary ionic emission. Dokl. AN SSSR 161 no.4: 886-888 Ap '65. (MIRA 18:5)

1. Khar'kovskiy gosudarstvennyy universitet im. A.M.Gor'kogo. Submitted October 6, 1964.

APPROVED FOR RELEASE: 08/31/2001 CIA-RDP86-00513R001550320013-1"

"APPROVED FOR RELEASE: 08/31/2001 CIA-RDP86-00513R001550320013-1

FOGEL', Ya.M.; NADYKTO, B.T.; SHVACHKO, V.I.; RYBALKO, V.F.; KOROBCHANSKAYA, I.Ye.

Use of the secondary ion emission method for investigating catalytic reactions between ammonia and nitric oxide, and the decomposition of nitric oxide on platinum. Kin. i kat. 5 no.5:942-944 S-O '64. (MIRA 17:12)

1. Khar'kovskiy gosudarstvennyy universitet imeni Gor'kogo.

APPROVED FOR RELEASE: 08/31/2001 CIA-RDP86-00513R001550320013-1"

"APPROVED FOR RELEASE: 08/31/2001 CIA-RDP86-00513R001550320013-1

ACCESSION NR: AP4009624 S/0293/63/001/003/0414/0435

AUTHOR: Vakhnin, V. M.; Skuridin, G. A.; Shvachunov, I. N.

TITLE: The movement of charged particles in the field of a magnetic dipole, considering energy dissipation

SOURCE: Kosmicheskiye issledovaniya, v. 1, no. 3, 1963, 414-435

TOPIC TAGS: magnetic dipole, magnetism, charged particle, charged particle motion, magnetic field, energy dissipation

ABSTRACT: The authors have analyzed the movement of charged particles in a magnetic field by the phase plane method both in a conservative approximation and with consideration of losses of their kinetic energy due to radiation, thus providing a qualitative picture of the influence of kinetic energy losses on the particle trajectory. These losses were considered in the form of small dissipation perturbations of the conservative approximation. The authors succeeded in demonstrating the existence of certain critical trajectories, at which particle seizure by the magnetic field occurs at arbitrarily small energy losses. (It is obvious that at small, but finite, energy losses, seizure may also occur in the case of other trajectories, close to critical.) The phase plane method was found to be particularly convenient when studying the movement of the particle in a complex

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"APPROVED FOR RELEASE: 08/31/2001 CIA-RDP86-00513R001550320013-1

ACCESSION NR: AP4009624

field, containing a dipolar and homogeneous (external) component. The authors considered conservative approximations and their dissipation perturbations for three idealized situations: a) magnetic dipole with no external magnetic field present; b) magnetic dipole in space with uniform magnetic field parallel to the magnetization vector of the dipole's magnetic field and located in its equatorial plane; and c) magnetic dipole in space with uniform magnetic field antiparallel to the magnetization vector of the dipole's magnetic field and located in its equatorial plane. The analysis was conducted in the magnetic plane of the dipole. In the first case (movement of a charged particle in the field of a magnetic dipole in the absence of an external magnetic field), the differential equation for the "phase trajectory" of the motion of the charged particle was discussed. Following this, "isoclines" and a "field of directions" were constructed in the phase plane in a conservative approximation. Phase trajectory behavior was considered at large and small values of u and w, as well as the trajectories of charged particles in a magnetic field which correspond to the phase trajectories, both with and without consideration of energy dissipation. With few exceptions, this treatment was also followed in the case of the other two ideal hypotheses. Orig. art. has: 19 figures and 43 formulas.

ASSOCIATION: none

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"APPROVED FOR RELEASE: 08/31/2001 CIA-RDP86-00513R001550320013-1

L 6654-65 EWT(m) DIAAP/BSD/ASD(p)-3/SSD/AFMDC/ASD(a)-5/AFWL/AEDCA/
ESD(t)
ACCESSION NR: AP4046780 S/0293/64/002/005/0773/0778

53
52

AUTHOR: Vakhnin, V. M.; I. N. Shvachunov 19

TITLE: Possibility of the trapping of charged particles by the field of a magnetic dipole accompanied by energy loss in radiation

SOURCE: Kosmicheskiye issledovaniya, v. 2, no. 5, 1964, 773-778

TOPIC TAGS: charged particle, magnetic dipole, particle trapping

ABSTRACT: The investigation of the possibility of trapping of charged particles by the field of a magnetic dipole, made earlier for a planar (two-dimensional) movement, is extended in this article to the case of arbitrary three-dimensional movement of a particle. The authors use the phase trajectories method in four-dimensional phase space. It is shown that "critical trajectories" and the possibility of trapping also exist in three-dimensional movement. The authors have derived the following system of differential equations for describing the phase trajectories of a charged particle in four-dimensional phase space

$$\frac{du}{dw} = \frac{w}{u}\psi^2 + \frac{w}{u}\cos^2\theta + 2\frac{u}{w} - 2u\psi\operatorname{tg}\theta \mp \frac{1}{wu}\left[\cos^2\theta + \left(\frac{u}{w}\right)^2 - 2\frac{u}{w}\operatorname{tg}\theta\psi\right]\left[\cos^2\theta + \left(\frac{u}{w}\right)^2 + \psi^2\right]^{1/2}, \quad (1)$$

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$$\frac{d\psi}{dw} = -\frac{\sin\theta\cos\theta + 2\psi^2\operatorname{tg}\theta}{u} + \frac{1}{uw^2}\left[\frac{u}{w}\psi - 2\sin\theta\cos\theta - 2\psi^2\operatorname{tg}\theta\right]\left[\cos^2\theta + \left(\frac{u}{w}\right)^2 + \psi^2\right]^{1/2}. \quad (2)$$

$$\frac{d\theta}{dw} = \frac{d\theta}{d\varphi}\frac{d\varphi}{dw} = \frac{\psi}{u}. \quad (3)$$

The minus sign before the brackets in (1) corresponds to segments of trajectories with positive curvature; a plus sign corresponds to segments of trajectories with negative curvature. The equation for the projections of trajectories in four-dimensional phase space in the plane (θ, ψ) can be derived from (2) and (3):

$$\frac{d\psi}{d\theta} = 2\psi\operatorname{tg}\theta - \frac{\sin\theta\cos\theta}{\psi} + \frac{1}{w^2\psi}\left[\frac{u}{w}\psi - 2\sin\theta\cos\theta - 2\psi^2\operatorname{tg}\theta\right]\times \quad (4)$$
$$\times\left[\cos^2\theta + \left(\frac{u}{w}\right)^2 + \psi^2\right]^{1/2},$$

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ACCESSION NR: AP4046780

where w = const, u = const. Special cases are considered. It is shown that a point characterizing the motion of a charged particle along a path close to critical, as a result of energy loss by the particle in radiation, can intersect the three-dimensional hypersurfaces of separatrices and change from an "untrapped" to a "trapped" path. The process of intersection of the separatrices is similar to the two-dimensional case described earlier (V. M. Vakhnin and G. A. Skuridin, Dokl. AN SSSR, 135, 1960; V. M. Vakhnin, G. A. Skuridin and I. N. Shvachunov, Kosmich. issled., 1, No. 3, 414, 1963). The results in this paper were first reported at the Fourth All-Union Conference on Magnetohydrodynamics, Riga, June 1964. Orig. art. has: 30 formulas.

ASSOCIATION: None

SUMBITTED: 14Mar64 ENCL: 00 SUB CODE: EM,NP

NO REF SOV: 006 OTHER: 000

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APPROVED FOR RELEASE: 08/31/2001 CIA-RDP86-00513R001550320013-1"

"APPROVED FOR RELEASE: 08/31/2001 CIA-RDP86-00513R001550320013-1

L 49441-65 EWT(1)/EWG(v)/FCC/EEC-4/EEC(t)/EWA(h) Po-4/Pe-5/Pq-4/Pae-2/Peb/
Pi-4 GW

ACCESSION NR: AP5009654 UR/0293/65/003/002/0336/0340

AUTHOR: Pletnev, V. D.; Shuridin, G. A.; Shalimov, V. P.; Shvachunov, I. N. 44 B

TITLE: Dynamics of the geomagnetic trap and the origin of radiation belts

SOURCE: Kosmicheskiye issledovaniya, v. 3, no. 2, 1965, 336-340

TOPIC TAGS: magnetosphere, solar wind, geomagnetic field, magnetic storm, force line, proton belt, electron belt

ABSTRACT: The boundary of the magnetosphere created by the interaction between the solar wind and the geomagnetic field reaches a distance of 10 terrestrial radii on the day side of the earth. Electric currents on the boundary increase the magnetic field there. On the night side the magnetosphere is very extended. A particle may pass through the boundary of the magnetosphere because of a radial drift of the particle in an asymmetric magnetic field. The physical processes are studied in a magnetic field from parallels ±70°. The regions permitting and prohibiting particle motion are determined.

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ACCESSION NR: AP5009654

following Stormer's theory. Boundary currents diminish the magnetic field at neutral points. This effect shows up in the beginning of a magnetic storm. The combination of the current field and the dipole serves to straighten the force lines in the magnetosphere and stretch them towards the solar wind. The proton belt is nearer the earth than the electron belt. Orig. art. has: 3 figures and 2 formulas. [EG]

ASSOCIATION: none

SUBMITTED: 31Dec64 ENCL: 00 SUB CODE: AA, ES

NO REF SOV: 004 OTHER: 011 ATD PRESS: 3245

Card 2/2

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"APPROVED FOR RELEASE: 08/31/2001 CIA-RDP86-00513R001550320013-1

L 65296-65 EWT(1)/FCC/EWA(h) GW

ACCESSION NR: AP5020992 UR/0203/65/005/004/0626/0644

550.388.2

AUTHORS: Pletnev, V. D.; Skuridin, G. A.; Shalimov, V. P.; Shvachunov, I. N.

TITLE: Dynamics of the geomagnetic trap and the origin of earth's radiation belts

SOURCE: Geomagnetizm i aeronomiya, v. 5, no. 4, 1965, 626-644

TOPIC TAGS: magnetic field, Van Allen belt, magnetic trap, geomagnetic field, charged particle concentration, magnetic storm, solar burst

ABSTRACT: The interaction of solar corpuscular streams with the geomagnetic field is discussed with explanations about the formation of the earth's magnetosphere and the mechanism of charged particle penetration into the magnetosphere. The scalar potential of the geomagnetic field inside the earth's magnetosphere is expressed in spherical harmonics, and the solar particle stream--geomagnetic field interaction is described by the model shown in Fig. 1 on the Enclosure. In order to analyze the possibility of particle penetration into the magnetosphere, the following equation is solved numerically

$$\frac{\rho}{r^3} - \alpha\rho + \frac{2\gamma}{\rho} = \pm 1$$

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L 65296-65

ACCESSION NR: AP5020992

24

where γ is the Störmer integration constant,

$$\alpha = \frac{M_0}{2M_0 r_0^3},$$

and M is the magnetic moment of the earth's dipole. It is shown that the only particle penetration occurs in the vicinity of the neutral points AA', in the diurnal side of the magnetosphere. This penetration creates gradient and radius of curvature drift of charged particles, resulting in the formation of magnetic field neutral layers and a plasma wake in the equatorial plane in the night side. Data are reported from the Electron-2 artificial satellite in support of this argument. These trapped particles are shown to be responsible for auroral phenomena and magnetic storms. The inverse phase of the magnetic storm is connected with the sharp drop in solar particle emission at the magnetosphere boundary and a decay in trapped particle drift currents on the geomagnetic trap boundaries. This magnetic decay causes particle drifts into the magnetic trap with a corresponding particle acceleration. This explains the experimental observation of increased intensity of high-energy particle flow in the outer regions of the trap during the reverse phase of magnetic storms. "The authors express their gratitude to Sh. Sh. Dolginov, Ye. G. Yeroshenko, L. N. Zhuzgov, O. L. Vaysberg, K. I. Gringauz, K. Z. Khokhlov, I. A. Savenko, and B. I. Savin for providing the experimental results and evaluating

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ACCESSION NR: AP5020992

24

this work. The authors thank also Ya. L. Al'pert, B. A. Tverskiy, B. V. Chirikov, V. I. Volosov, V. I. Krasovskiy, Ya. I. Gal'perin, V. V. Temnyy, and other colleagues for taking part in evaluating this work and also L. A. Kazenova for reviewing this material and for formulating this paper." Orig. art. has: 22 formulas, 14 figures, and 1 table.

ASSOCIATION: none

SUBMITTED: 06Apr65 ENCL: 01 SUB CODE: ES, AA

NO REF SOV: 026 OTHER: 012

Card 3/4

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ACCESSION NR: AP5020992 ENCLOSURE: 01

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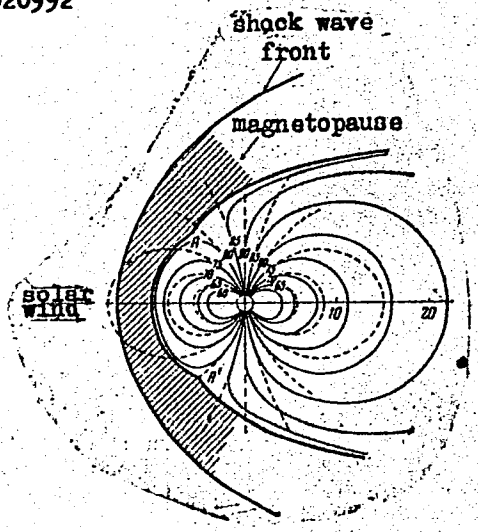

Fig. 1

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L 3494-66 EWT(1)/EWP(m)/FS(v)-3/FCC/EWA(d)/EWA(h) GW

ACCESSION NR: AP5024184 UR/0384/65/000/004/0012/0022

AUTHORS: Skuridin, G. A. (Doctor of physico-mathematical sciences); Pletnev, V. D. (Candidate of physico-mathematical sciences); Shalimov, V. P.; Shvachunov, I. N.

TITLE: Solar wind, magnetosphere, and Van Allen belts of the earth

SOURCE: Zemlya i vselennaya, no. 4, 1965, 12-22

TOPIC TAGS: solar wind, Van Allen belt, magnetosphere, high energy electron, magnetic field, magnetic trap

ABSTRACT: The structure of the earth's Van Allen belts was studied in some detail. In order to understand the trapping of charged particles by the earth's magnetic field the fundamental principles of orbit theory are reviewed and the significance of adiabatic invariants discussed. Using a model for the magnetosphere, the various charged particle drifts are analyzed in nonhomogeneous magnetic field traps. It is shown that the Van Allen belts are divided into inner and outer zones with altitudes at the equator ranging from 600 km in the western hemisphere to 1600 km in the eastern hemisphere. This discrepancy is due to the inhomogeneity

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ACCESSION NR: AP5024184

in the earth's magnetic field. In the inner zone, electrons possess the highest energies (600 kev for 10^8 particles/cm^2/sec). The outer zone has two maxima, the first of which occurs at three earth radii with proton energies of 150 kev to 4.5 Mev. The second maximum occurs at 4.5 earth radii with 40 kev electrons. During magnetic storms, the trapping field strength increases because of compression of lines of force. As a consequence of this, particle energy increases and the location of energy maxima move closer to the earth's surface. The interaction of cosmic rays with the terrestrial atmosphere generates yet a third type of particle--the neutron, which eventually decays into a proton and an electron. Although this decay contributes to the number of trapped particles in the Van Allen belts, it does not explain the overall charged particle injection process into the magnetic traps. To explain this phenomenon, a new hypothesis is presented where charged particle injection is associated with a betatron acceleration during the reverse phase of a magnetic storm. Orig. art. has: 16 figures.

ASSOCIATION: none

SUBMITTED: 00 ENCL: 00 SUB CODE: ES

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L 61001-65 EWT(1)/EWG(v)/ECC/EEC-4/EWA(h) Po-4/Pe-5/Pq-4/Pae-2/Peb/Pi-4 GW

ACCESSION NR: AP5018435 UR/0384/65/000/003/0018/0026 49 B

AUTHOR: Skuridin, G. A. (Doctor of physico-mathematical sciences); Pletnev, V. D. (Candidate of physico-mathematical sciences); Shalimov, V. P.; Shvachunov, I. N.

TITLE: Solar wind, magnetosphere, and the Earth's radiation belt 12 12

SOURCE: Zemlya i Vselennaya, no. 3, 1965, 18-26

TOPIC TAGS: solar wind, earth magnetosphere, magnetic storm generation, geomagnetic field perturbation, aurora

ABSTRACT: This is the first part of a study in which, on the basis of experimental data from Soviet and US satellites, the authors advance the hypothesis that all the complex geophysical effects such as the aurora polaris, magnetic storms, dynamics of the radiation belt, and the dynamics of the geomagnetic field, are basically determined by the interaction of the solar corpuscular flows with the Earth's magnetic field. A survey is made of the available experimental and theoretical data on the solar wind and the Earth's magnetosphere. Orig. art. has: 7 formulas and 9 figures.

ASSOCIATION: None

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L 65296-65 EWT(1)/FCC/EWA(h) GW
ACCESSION NR: AP5020992 UR/0203/65/005/004/0626/0644
550.388.2

AUTHORS: Pletnev, V. D.; Skuridin, G. A.; Shalimov, V. P.; Shvachunov, I. N.

TITLE: Dynamics of the geomagnetic trap and the origin of earth's radiation belts

SOURCE: Geomagnetizm i aeronomiya, v. 5, no. 4, 1965, 626-644

TOPIC TAGS: magnetic field, Van Allen belt, magnetic trap, geomagnetic field, charged particle concentration, magnetic storm, solar burst

ABSTRACT: The interaction of solar corpuscular streams with the geomagnetic field is discussed with explanations about the formation of the earth's magnetosphere and the mechanism of charged particle penetration into the magnetosphere. The scalar potential of the geomagnetic field inside the earth's magnetosphere is expressed in spherical harmonics, and the solar particle stream--geomagnetic field interaction is described by the model shown in Fig. 1 on the Enclosure. In order to analyse the possibility of particle penetration into the magnetosphere, the following equation is solved numerically

$$\frac{\rho}{r^3} - \alpha\rho + \frac{2\gamma}{\rho} = \pm 1$$

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ACCESSION NR: AP5020992

where γ is the Störmer integration constant, $\gamma = \frac{M_1}{2M_0 r_0^2}$,

and M is the magnetic moment of the earth's dipole. It is shown that the only particle penetration occurs in the vicinity of the neutral points AA', in the diurnal side of the magnetosphere. This penetration creates gradient and radius of curvature drift of charged particles, resulting in the formation of magnetic field neutral layers and a plasma wake in the equatorial plane in the night side. Data are reported from the Electron-2 artificial satellite in support of this argument. These trapped particles are shown to be responsible for auroral phenomena and magnetic storms. The inverse phase of the magnetic storm is connected with the sharp drop in solar particle emission at the magnetosphere boundary and a decay in trapped particle drift currents on the geomagnetic trap boundaries. This magnetic decay causes particle drifts into the magnetic trap with a corresponding particle acceleration. This explains the experimental observation of increased intensity of high-energy particle flow in the outer regions of the trap during the reverse phase of magnetic storms. "The authors express their gratitude to Sh. Sh. Dolginov, Ye. G. Yeroshenko, L. N. Zhuzgov, O. L. Vaysberg, K. I. Gringauz, K. Z. Khokhlov, I. A. Savenko, and B. I. Savin for providing the experimental results and evaluating

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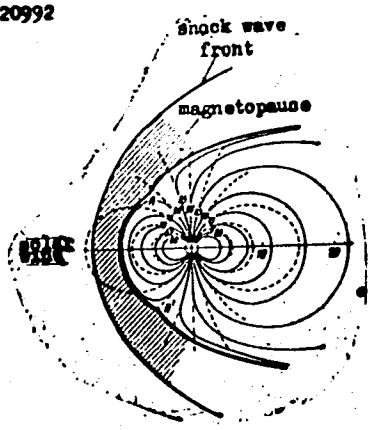

Fig. 1

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L 1281-66 EWT(1)/FCC/EWA(h) GS/GW

ACCESSION NR: AT5023599 UR/0000/65/000/000/0285/0314

AUTHOR: Pletnev, V. D.; Skuridin, G. A.; Shalimov, V. P.; Shvachunov, I. N.

TITLE: How solar particles break through into the earth's magnetosphere, the mechanisms by which these particles are captured and accelerated, and the part played by these processes in the dynamics of the geomagnetic trap

SOURCE: Vsesoyuznaya konferentsiya po fizike kosmicheskogo prostranstva. Moscow, 1965. Issledovaniya kosmicheskogo prostranstva (Space research); trudy konferentsii. Moscow, Izd-vo Nauka, 1965, 285-314

TOPIC TAGS: geomagnetic field, solar wind, solar radiation, geomagnetism, charged particle, particle motion, magnetic storm

ABSTRACT: The authors consider the interrelationship between geophysical phenomena which take place in outer space in the vicinity of our planet with regard to the dynamics of the geomagnetic trap. The classical Störmer method is used for analyzing the motion of charged particles in the magnetospheric field. It is found that solar particles cannot break through into the magnetosphere in the central region on the daylight side even in the initial phase of a magnetic storm, but that these particles

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easily penetrate deeply into the geomagnetic trap during the main phase of such a storm. A theory is proposed for penetration of the magnetosphere by charged particles in the vicinity of neutral points. It is found that since there is no magnetic reflection in this case, particles with a constant positive velocity can penetrate the magnetosphere, the greatest probability being for particles moving in the plane $x = 0$. The distribution of drift currents is determined for particles inside the magnetosphere. Experimental data are given which confirm the theory proposed in this paper for penetration of the magnetosphere by charged particles. "The authors take this opportunity to express their gratitude to Sh. Sh. Dolginov, Ye. G. Yeroshenko, L. N. Zhuzgov, K. I. Gringauz, O. L. Vaysberg, I. A. Savenko and B. I. Savin for the experimental data given in this paper, and also for discussing the proposed theory. The authors are also grateful to Ya. L. Al'pert, B. R. Chirikov, M. Z. Khokhlov, B. A. Tverskiy, V. I. Krasovskiy, Yu. I. Gal'perin, V. V. Temnyy and others who took part in discussing this work while it was being prepared for the press. The authors also thank L. A. Kazenova for her great assistance in analyzing the materials and in the final layout of the article." Orig. art. has: 8 figures, 2 tables, 24 formulas. [14]

ASSOCIATION: none

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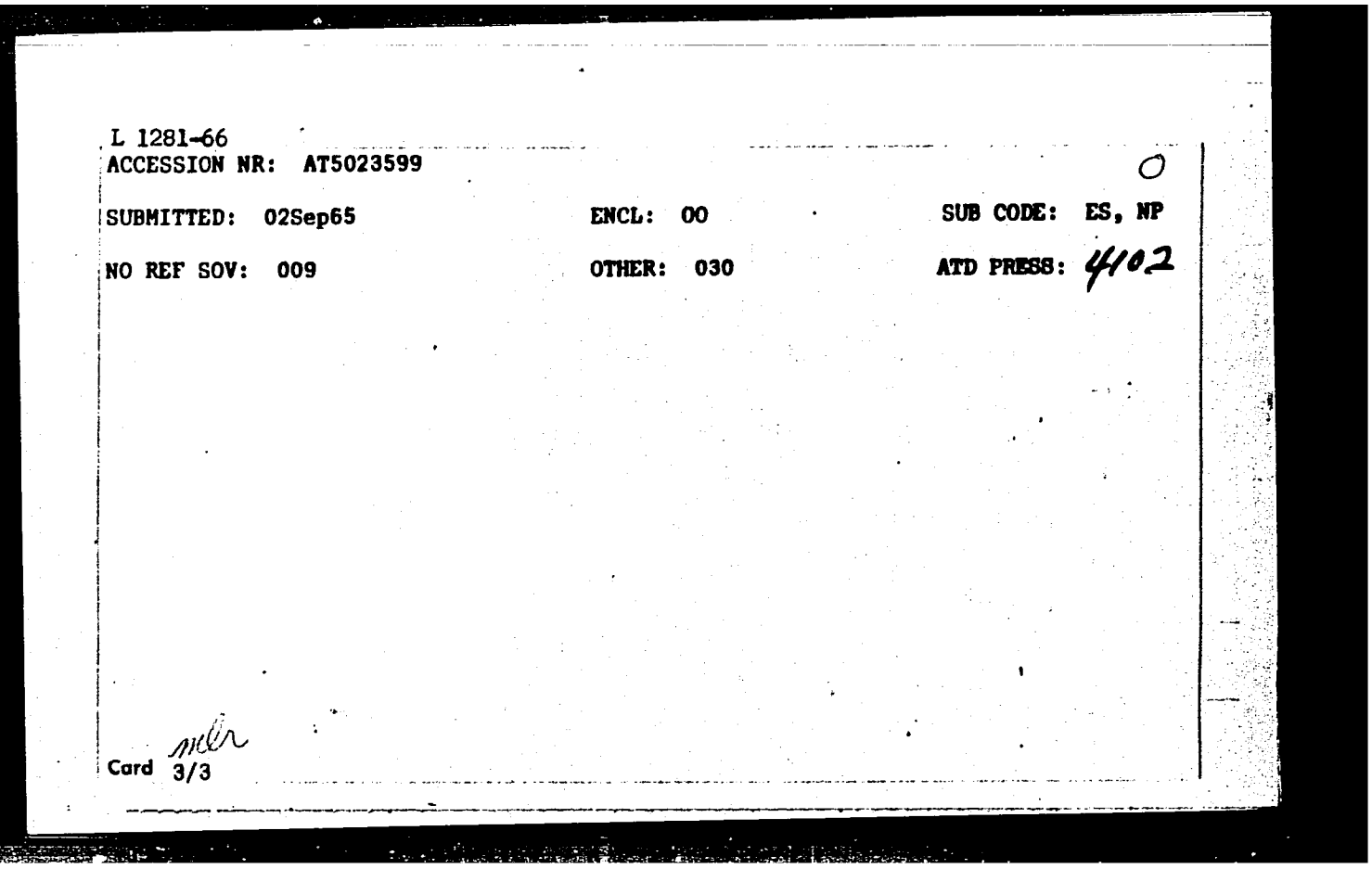

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ACCESSION NR: AT5023599 O

SUBMITTED: 02Sep65 ENCL: 00 SUB CODE: ES, NP

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"APPROVED FOR RELEASE: 08/31/2001 CIA-RDP86-00513R001550320013-1

YUSHKIN, V.V.; KHUDYAKOV, O.F.; SHVADCHAK, R.S.

Investigation of the gas potential of the gas condensate pools of the Bitkov field. Gaz. delo no.12:11-13 '63. (MIRA 17:10)

1. Vsesoyuznyy nauchno-issledovatel'skiy institut prirodnogo gaza i Ivano-Frankovskaya tsentral'naya nauchno-issledovatel'skaya laboratoriya.

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LEVI, S.M.; KOCHNEVA, S.N.; SHVADCHENKO, L.P.

Investigating the hardening of emulsion layers. Part 1: Strength and swelling properties of hardened emulsion layers. Zhur. nauch. i prikl. fot. i kin. 9 no.1:51-53 Ja-F'64. (MIRA 17:2)

1. Vsesoyuznyy nauchno-issledovatel'skiy kinofotinstitut (NIKFI).

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"APPROVED FOR RELEASE: 08/31/2001 CIA-RDP86-00513R001550320013-1

SMIRNOV, O.K.; LEVI, S.M.; Prinimali uchastiye: PSHENOVA, M.G.; IVANCHIKOVA, A.F.; KOCHNEVA, S.N.; STEPANOVA, T.K.; SHVALCHENKO, L.P.; VERBAKH, K.O.

Relation between the structure of surface-active substances and their adsorptive capacity. Part 2: Esters of sulfo-succinic and sulfopropionic acid (Na-salts). Koll. zhur. 26 no.3:350-355 My-Je '64. (MIRA 17:9)

1. Nauchno-issledovatel'skiy kino-fotoinstitut i Institut organicheskikh poluproduktov i krasiteley, Moskva.

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ACC NR: AT6029516 (A) SOURCE CODE: UR/3180/66/011/000/0063/0073

AUTHOR: Levi, S. M.; Shvadchenko, L. P.; Kochneva, S. N.

16
B+1

ORG: none

TITLE: Study of the mechanism of hardening of emulsion layers

SOURCE: AN SSSR. Komissiya po khimii fotograficheskikh protsessov. Uspekhi nauchnoy fotografii, v. 11, 1966. Khimiya fotograficheskikh emul'siy. Strukturnyye svoystva fotograficheskikh sloyev (Chemistry of photographic emulsions. Structural properties of photographic films), 63-73

TOPIC TAGS: photographic emulsion, gelatin, gel

ABSTRACT: In a study of hardening of photographic emulsions, use was made of 5 and 10% solutions and gels and xerogels of gelatin, photographic emulsions obtained on these gelatins, and a series of hardeners including formaldehyde, glyoxal, chromium acetate, 1,3,5-triacryloylhexahydro-1,3,5-triazine, 1,3-diacryloyl-1,3,5-triacryloylhexahydro-5β-chloropropionyltriazine, and a mixture of diglycide chloropropylenehydrin and triglycide propylenehydrin esters of glycerin. The physicomechanical properties of the emulsions were determined before and after hardening. Swelling of hardened emulsion layers was found to be associated with a reversal of the hardening process, manifested in a change of their rheological properties: the strength and elasticity and (to a slight degree) the temperature of creeping of the emulsion decrease.

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ACC NR: AT6029516

The kinetics of swelling are affected by the electrolytes, particularly sulfite, sodium hydroxide and ammonia. The presence of these electrolytes in the hardening solutions causes a marked reversal of the hardening process. After drying, a swelled emulsion layer regains a part of its strength, but the latter does not reach its original value. The degree of hardening depends on the quantity of bridge linkages formed, but the allowed degree of hardening is limited by the influence of the hardener on the development speed and photographic properties of the emulsion. Orig. art. has: 7 figures and 10 tables.

SUB CODE: 14/ SUBM DATE: none/ ORIG REF: 003/ OTH REF: 001

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"APPROVED FOR RELEASE: 08/31/2001 CIA-RDP86-00513R001550320013-1

SHVAG, Lidiya Andreyevna

Fundamental Rontgenological Symptioms of Osseous Pathology Concernin g (infitsirovannykh) Injuries of the Long Tubular Bones. (after a firearm fracture)

Dissertation for candidate of a Medical Science degree. 1st (Gor.) Clinic for the Sick, and Chair of Hospital Surgery (head, Prof. N.I. Krauze) Saratov Medical Institute, 1948

APPROVED FOR RELEASE: 08/31/2001 CIA-RDP86-00513R001550320013-1"

"APPROVED FOR RELEASE: 08/31/2001 CIA-RDP86-00513R001550320013-1

SHVAGER, T.G.; ROZENTSVEYG, P.E.

Study of the active substances of the club moss Lycopodium selago.
Trudy Len. khim.-farm. inst., no.17:214-222 '64. (MIRA 18:1)

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"APPROVED FOR RELEASE: 08/31/2001 CIA-RDP86-00513R001550320013-1

SHVAGER, I.G. [Shvaber, I.H.]; ROZENTSVEYG, P.E.

Separation of Lycopodium selago alkaloids and their medicinal forms. Farmatsev.zhur. 19 no.1:49-51 '64. (MIRA 18:5)

1. Leningradskiy khimiko-farmatsevticheskiy institut.

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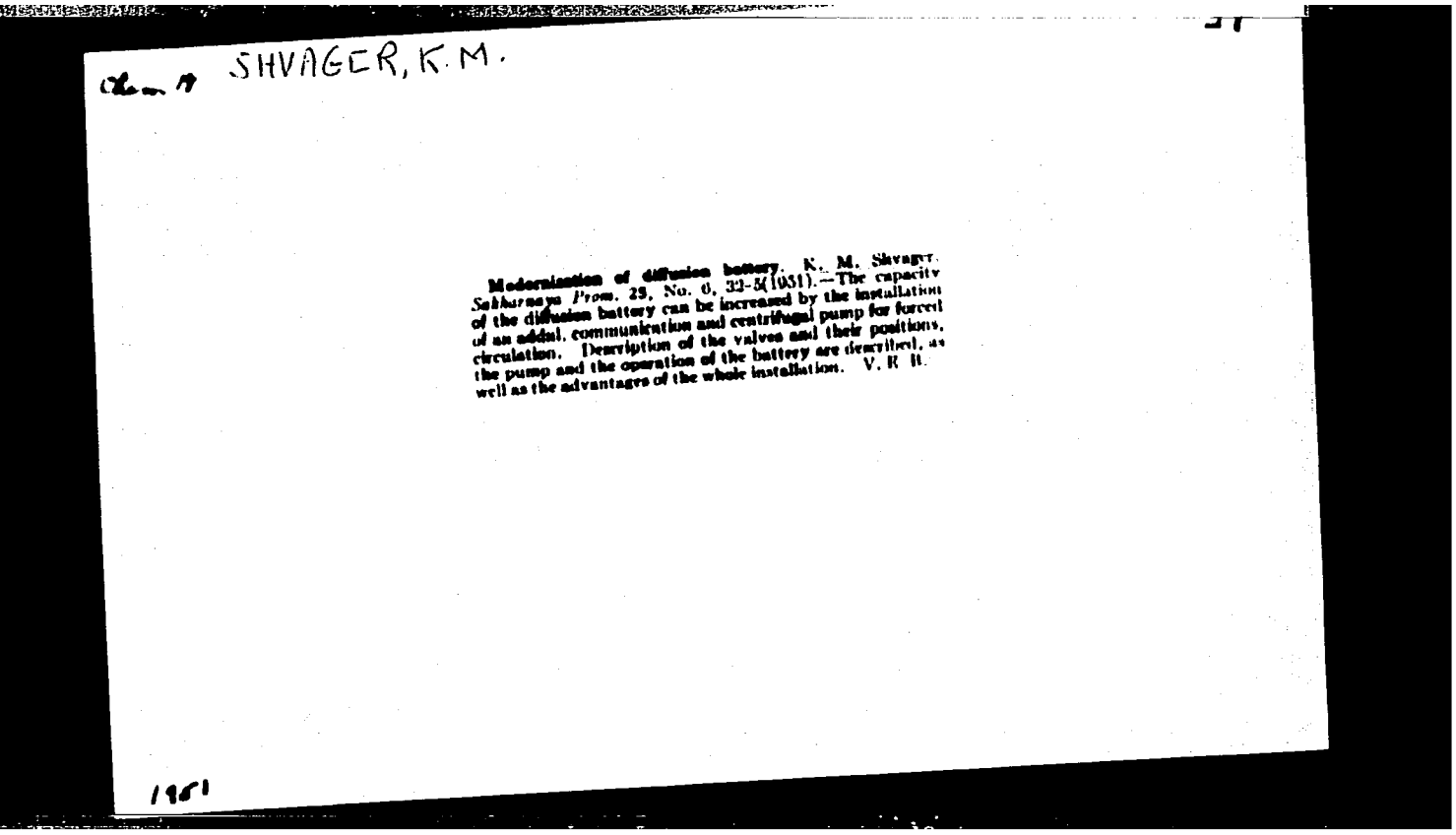

Chem SHVAGER, K.M.

Modernization of diffusion battery. K. M. Shvager. *Sakharnaya Prom.* 29, No. 6, 32-5(1955).—The capacity of the diffusion battery can be increased by the installation of an addnl. communication and centrifugal pump for forced circulation. Description of the valves and their positions, the pump and the operation of the battery are described, as well as the advantages of the whole installation. V. R. H.

1951

APPROVED FOR RELEASE: 08/31/2001 CIA-RDP86-00513R001550320013-1"

"APPROVED FOR RELEASE: 08/31/2001 CIA-RDP86-00513R001550320013-1

SHVAGER, K.M.

Greater attention should be given to the separation sections of sugar factories. Sakh. prom. 33 no.11:11-12 N '59 (MIRA 13:3)

1. Uzinskiy sakharnyy zavod.
(Sugar manufacture)

APPROVED FOR RELEASE: 08/31/2001 CIA-RDP86-00513R001550320013-1"

"APPROVED FOR RELEASE: 08/31/2001 CIA-RDP86-00513R001550320013-1

86-9-29/36

AUTHORS: Yargin, E. A., Major, Komarovskikh, M. A., Snr. Lt., and Shvagin, V. A., Lt.

TITLE: Aerial Radio-Operator Gunners Should be Excellent Masters of Radio Communication (Vozdushnyye strelki-radisty dolzhny otlichno vladet' radiosvyaz'yu)

PERIODICAL: Vestnik Vozdushnogo Flota, 1957, Nr 9, p. 84 (USSR)

ABSTRACT: A radio-operator gunner of a modern airplane should be fully acquainted with the operation of airborne radio equipment as well as the security and traffic regulations. Consequently, already in the beginning of flying exercises the students (radio-operators, navigators) should possess sufficient experience. According to the training plan, however, those flights begin relatively early, so that the students do not have the time to be sufficiently prepared to perform the first exercises of radio communication in flight. While training in the school, the total time used by the students operating within a radio network is about 4 hrs, with 25 accomplished communications (contacts), 15 of which were established in the air and 10 on the ground. That practical training is obviously too short for acquiring the necessary habits by the students. To raise the quality of training its reorganization is suggested by the authors. Namely, the basic habits in sufficient degree should be developed on the ground. To do that, it is necessary to introduce into the

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Aerial Radio-Operator Gunners Should be Excellent Masters of Radio Communication (Cont.)

program a definite number of hours entirely devoted to the operation of a real radio station within a ground radio network. Special trainers are not needed; instead, the radio equipment under study must be used. Some classrooms should be equipped with radio stations in a working order, which will form a radio network operated by the students. The exercises in many variants should be performed in accordance with the preliminary established schedule. In this way, the exercises which are at present performed in flight should be transferred to the classrooms and afterwards only be followed by the flying practice. Using the suggested methods of training in especially equipped classrooms, the students will be able to acquire in full the elements of operation of the equipment, establish and maintain telegraph and telephone radio communications, make entries in the airplane communication log, code and decode the radiograms, trouble clearings, etc. In addition, the work of a radio-operator in flight along an itinerary may be simulated during the exercises, i.e., radiocommunications established with the radio station of various assignment. Any form and level of radio interference

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Aerial Radio-Operator Gunners Should be Excellent Masters of Radio Communication (Cont.)

has to be created in the ground training radio networks, thus necessary habits of maintaining operations under complex conditions to be inculcated into the students. For instance, the most difficult elements of radio communication for the students is an aural reception of call signs without recording them and service abbreviations. The operational conditions pervailing in the training radio networks on the ground are very close to those encountered by radio-operator gunner in flight. For that reason the flying exercise which follows the ground training may be considered as a completion of the training in this field. The results, however, which may be obtained with the methods suggested by the authors will be higher then those gained to date.

AVAILABLE: Library of Congress

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APPROVED FOR RELEASE: 08/31/2001 CIA-RDP86-00513R001550320013-1"

"APPROVED FOR RELEASE: 08/31/2001 CIA-RDP86-00513R001550320013-1

VIKHTER, Yakov Isaakovich; MAK, Isaak L'vovich; SHVAGIREV, Mikhail Petrovich; PECHURO, S.S., nauchnyy redaktor; TYUTYUNIK, M.S., redaktor; PANOVA, L.Ya., tekhnicheskiy redaktor.

[Production of gypsum and gypsum construction elements] Proizvodstvo gipsa i gipsovykh stroitel'nykh detalei. Moskva, Gos. izd-vo lit-ry po stroit. materialam, 1954. 140 p. (MLRA 8:2)
(Gypsum) (Building materials)

APPROVED FOR RELEASE: 08/31/2001 CIA-RDP86-00513R001550320013-1"

"APPROVED FOR RELEASE: 08/31/2001 CIA-RDP86-00513R001550320013-1

SHVAGIREV, M.P., inzh.

Raising technical standards of the gypsum industry. Stroi. mat. 5 no.11:9-12 N '59. (MIRA 13:3)
(Gypsum)

APPROVED FOR RELEASE: 08/31/2001 CIA-RDP86-00513R001550320013-1"

"APPROVED FOR RELEASE: 08/31/2001 CIA-RDP86-00513R001550320013-1

BUDNIKOV, P.P.; ALEKPEROV, M.S.; BAKLANOV, G.M.; BOLDYREV, A.S.; BOS'KO, K.D.; VOLZHENSKIY, A.V.; GROKHOTOV, N.V.; ZHUKOV, A.V.; ZABAR, L.B.; KITAYEV, Ye.N.; KOSHKIN, V.G.; KRUPIN, A.A.; MUROMSKIY, P.G.; POPOV, A.N.; SUKHOTSKIY, S.F.; USPENSKIY, V.V.; KHINT, I.A.; SHVAGIREV, M.P.; YUSHKEVICH, M.O.

Conference on increasing the durability of corrugated roofing sheets. Stroi.mat. 8 no.1:p.3 of cover Ja '62. (MIRA 15:5)
(Roofing)

APPROVED FOR RELEASE: 08/31/2001 CIA-RDP86-00513R001550320013-1"

"APPROVED FOR RELEASE: 08/31/2001 CIA-RDP86-00513R001550320013-1

SHVAGIREV, M.P., inzh., red.; D'YACHKOV, G.D., inzh., red.; ROYAK, S.M., prof., red.; PETROVA, V.V., red.izd-va; RODIONOVA, V.M., tekhn. red.

[Construction specifications and regulations] Stroitel'nye normy i pravila. Moskva, Gosstroiizdat. Pt.1. Sec.V. ch.2. [Inorganic cementing materials and additives for concretes and mortars (SNiP I-V.2-62)] Viazhushchie materialy neorganicheskie i dobavki dlia betonov i rastvorov (SNiP I-V.2-62). 1962. 35 p. (MIRA 16:6)

1. Russia (1923- U.S.S.R.) Gosudarstvennyy komitet po delam stroitel'stva. 2. Gosstroy SSSR (for Shvagirev). 3. Mezhduvedomstvennaya komissiya po peresmotru stroitel'nykh norm i pravil (for D'yachkov). 4. Nauchno-issledovatel'skiy institut tsementnoy promyshlennosti Glavnogo upravleniya proyektnykh rabot Ministerstva stroitel'stva SSSR pri Gosudarstvennom komitete Soveta Ministrov SSSR po delam stroitel'stva (for Royak).
(Aggregates (Building materials)) (Concrete)

APPROVED FOR RELEASE: 08/31/2001 CIA-RDP86-00513R001550320013-1"

"APPROVED FOR RELEASE: 08/31/2001 CIA-RDP86-00513R001550320013-1

VEYNBERG, Kal'man Lipmanovich; GURFINKEL', Isaak Yevgen'yevich[deceased]; KOTLYAR, Abram Yevseyevich; NOL'KEN, Maksimilian Petrovich; ORLOV, Anatoliy Nikolayevich; KHERSONSKIY, Sergey Semenovich; SHKOL'NIKOV, Yakov Abramovich; BROMLEY, P.V., retsenzent; ZALIZNYAK, A.A., retsenzent; KISELEV, N.V., retsenzent; KLEGG, D.I., retsenzent; SHVAGIREV, Ya.D., retsenzent; DUKHOVNYY, F.N., red.; TRISHINA, L.A., tekhn. red.

[Equipment and mechanization of glass factories]Oborudovanie i mekhanizatsiia stekol'nykh zavodov. [By] K.L.Veinberg i dr. Moskva, Rostekhizdat, 1962. 451 p. diagrs. (MIRA 15:10)
(Glass--Equipment and supplies)

APPROVED FOR RELEASE: 08/31/2001 CIA-RDP86-00513R001550320013-1"

"APPROVED FOR RELEASE: 08/31/2001 CIA-RDP86-00513R001550320013-1

SHVAGLEV, Yu.Ya.

Washing and drying apparatus for flat instrument glass. Stek.i ker. 18 no.5:39 My '61. (MIRA 14:5)
(Glass manufacture)

APPROVED FOR RELEASE: 08/31/2001 CIA-RDP86-00513R001550320013-1"

"APPROVED FOR RELEASE: 08/31/2001 CIA-RDP86-00513R001550320013-1

BALEK, A.; GABESAM, L., inzh.; KHAVELKOVA, B., inzh.; STITSKEL, I., inzh.; SHVAGR, Ya., inzh.; TITERA, D., inzh. ZHDYARSKIY, M., doktor; SEMENOV, I.I. [translator]; KORMNOV, Yu.F., red.; SHAGALOV, G.L., red.; REZOUKHOVA, A.G., tekhn.red.

[Economic development of Czechoslovakia from 1948 through 1958] Ekonomicheskoe razvitie Chekhoslovakii, 1948-1958 gg. Red.IU.F. Kormnov. Moskva, Izd-vo inostr.lit-ry, 1959. 367 p. Translated from the Czech. (MIRA 13:4)

1. Gosudarstvennoye statisticheskoye upravleniye Chekhoslovakii (for Balek, Gabesam, Khavelkova, Stitskel, Shvagr, Titera, Zhdyarskiy). (Czechoslovakia--Economic conditions)

APPROVED FOR RELEASE: 08/31/2001 CIA-RDP86-00513R001550320013-1"

"APPROVED FOR RELEASE: 08/31/2001 CIA-RDP86-00513R001550320013-1

BUDAY, T. (Chekhoslovakiya); SHVAGROVSKIY, I. [Svagrovsky, I.] (Chekhoslovakiya)

Development of the Neogene in the Western Carpathians of Czechoslovakia. Mat.Karp.-Balk.assots. no.3:119-139 '60. (MIRA 14:12)
(Carpathian Mountains--Geology)

APPROVED FOR RELEASE: 08/31/2001 CIA-RDP86-00513R001550320013-1"

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L 42065-65 EWT(m)/EWG(m) RWH/RM

ACCESSION NR: AP5010917 UR/0286/65/000/007/0103/0103

AUTHORS: Bakhmann, R.; Kraus, U.; Royter, Kh.; Shvakhula, G.; Verneke, D.; Velend, V.; Vol'f, F.

TITLE: A method for obtaining anionites. Class 39, No. 169785

SOURCE: Byulleten' izobreteniy i tovarnykh znakov, no. 7, 1965, 103

TOPIC TAGS: anionite, monomer, polymer, vinyl, copolymerization, copolymer solubility, alkyl, organic solvent, amination

ABSTRACT: This Author Certificate presents a method for obtaining anionites by copolymerization of one or several monovinyl aromatic substances with one or several bonding agents. This is followed by introducing a haloid alkyl and by amination during which copolymerization is conducted in the medium of organic solvents in which monomers are soluble, while polymers are practically insoluble. To increase the thermal stability of the strong sorbents, the solvents are added in the amounts of 0.25-10% by weight of the monomers.

ASSOCIATION: none

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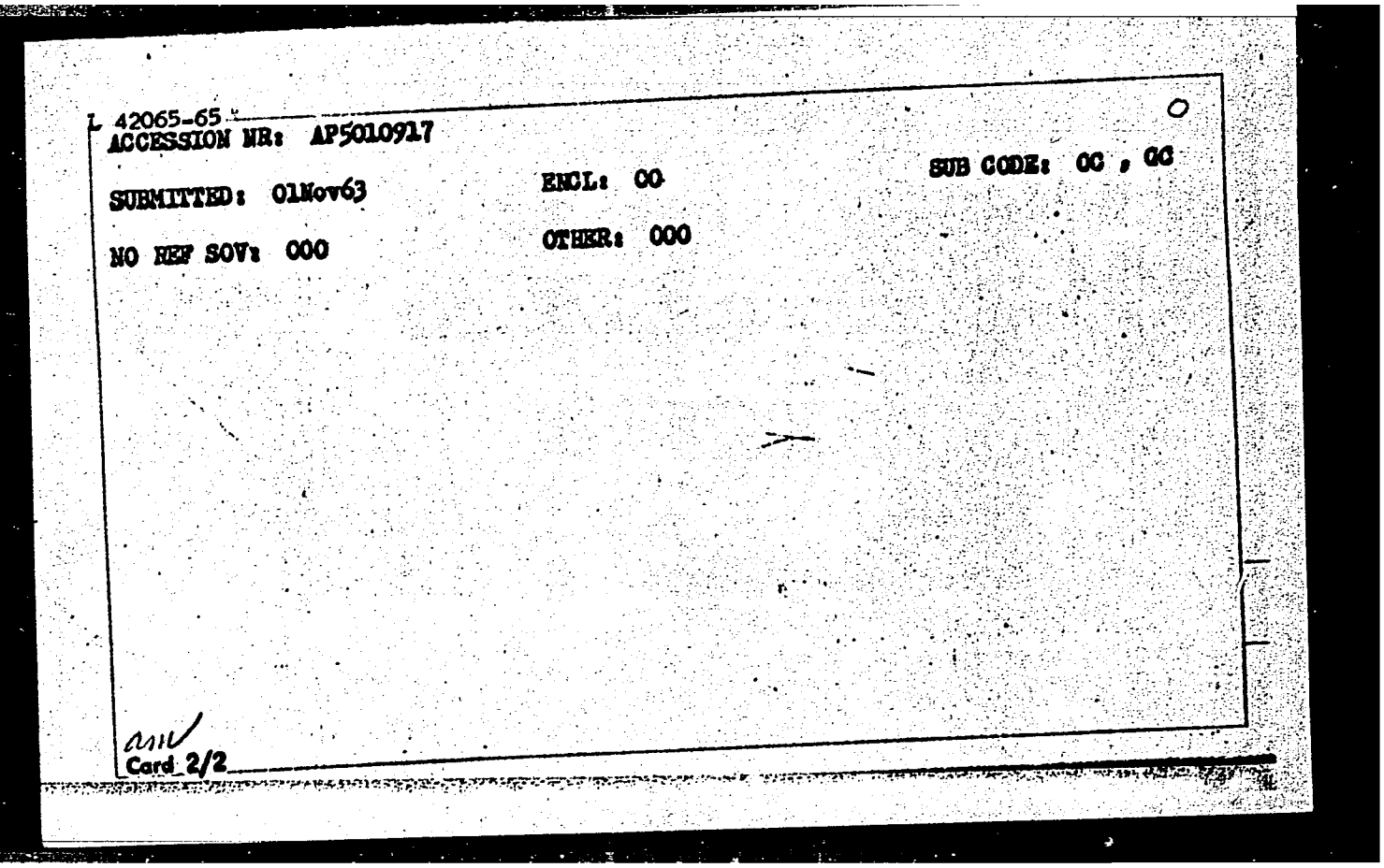

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ACCESSION NR: AP5010917

SUBMITTED: 01Nov63 ENCL: 00 SUB CODE: GC , GC

NO REF SOV: 000 OTHER: 000

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"APPROVED FOR RELEASE: 08/31/2001 CIA-RDP86-00513R001550320013-1

SHVAKHULOVA, KUSHKA

CZECHOSLOVAKIA/Microbiology. General Microbiology. F-1

Abs Jour: Ref. Zhur.-Biol., No 7, 1958, 28796.

Author : Shvakhulova, Kushka.
Inst : Not given
Title : A Simple Apparatus for Cultivating Bacteria in a Circulating Medium.

Orig Pub: Prostoy apparat dlya vyrashchivaniya bakteriy v protochnoy srede.
Rozhl. tuberk. a nemocech plicnich, 1956, 16, No 9, 488-491.

Abstract: The apparatus consists of a reserve flask of the nutrient medium with a stop-cock , from which the medium flows by drops into the vessel for bacterial cultivation. This vessel has an opening for inoculation, an attachment for medium overflow in order to maintain a constant liquid

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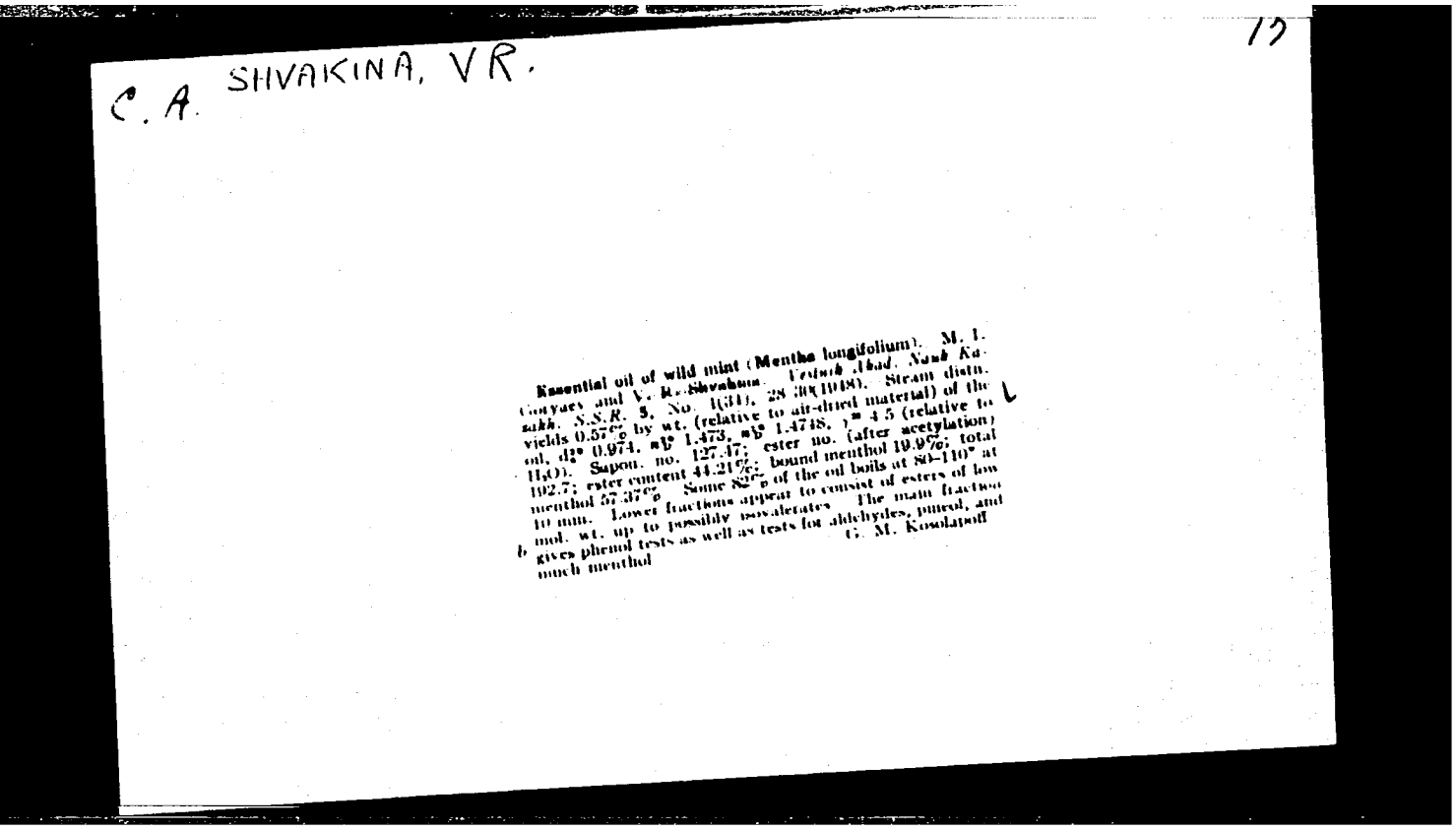

C. A. SHIVAKINA, V. R.

12

Essential oil of wild mint (Mentha longifolium). M. I. Goryaev and V. R. Shivakina. *Trudy Inst. Nauk Kazakh. S.S.R.* 5, No. 1(11), 28-30(1948). Steam distn. yields 0.57% by wt. (relative to air-dried material) of the oil, d_4^{20} 0.974, n_D^{20} 1.473, n_D^{20} 1.4748,). = 4.5 (relative to H_2O). Sapon. no. 127.47; ester no. (after acetylation) 192.7; ester content 44.21%; bound menthol 19.9%; total menthol 57.37%. Some 85% of the oil boils at 80–110° at 10 mm. Lower fractions appear to consist of esters of low mol. wt. up to possibly isovalerates. The main fraction gives phenol tests as well as tests for aldehydes, ketones, and much menthol

G. M. Kosolapoff

APPROVED FOR RELEASE: 08/31/2001 CIA-RDP86-00513R001550320013-1"

"APPROVED FOR RELEASE: 08/31/2001 CIA-RDP86-00513R001550320013-1

DVORNIKOV, A.G.; VASILEVSKAYA, A.Ye.; SHCHERBAKOV, V.P.; SHVAKOVA, A.A.

Mercury dispersion halos in the soils of the Nagol'no-Tarasovka and Mar'yevko-Dar'yevka complex metal deposits. Izv. AN SSSR. Ser.geol. 28 no.5:96-100 My '63. (MIRA 17:4)

1. Institut mineral'nykh resursov AN UkrSSR, Simferopol'.

APPROVED FOR RELEASE: 08/31/2001 CIA-RDP86-00513R001550320013-1"

"APPROVED FOR RELEASE: 08/31/2001 CIA-RDP86-00513R001550320013-1

COUNTRY USSR
CATEGORY Microbiology

ABS. JOUR. Ref Zhur-Biologiya, No.4, 1959, No, 14929

AUTHOR Pal'gov, A.A.; Dudukalova, R.V., Shvakova, G.A.
INST. Kazakh Affiliate Inst. of Veterinary Science, All-Union Acad. of Agric. Sciences
TITLE Serological Diagnostic Methods of Brucellosis in Large Cattle.

ORIG. PUB. Tr. In-ta vet. Kazakhsk. fil. VASKHNIL, 1957, 8, 23-26

ABSTRACT : A serological study for brucellosis was done on 14,382 samples of blood sera of large cattle. An agglutination reaction (AR) and Korol's modified reaction (MAR) were set up on part of the samples, and another part were tested by 3 reactions: AR, MAR, and CFR (complement fixation reaction). More positive and doubtful reacting sera were found with the CFR than with the AR. In addition CFR : was demonstrated in 11 to 23% of the reacting

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INST. :

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ORIG. PUB. :

ABSTRACT : animals. The authors consider that it is necessary to substantiate a standard AR with a modified one and suggest that it is not essential to replace the CFR with a modified AR. -- E.B. Gurbich

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CARD: 2/2

"APPROVED FOR RELEASE: 08/31/2001 CIA-RDP86-00513R001550320013-1

S/035/62/000/005/014/098
A055/A101

3,1220

AUTHORS: Bratiychuk, M.V., Shvalagin, I. V.

TITLE: Real precision of photographic observations of Artificial Earth Satellites by the station no. 055

PERIODICAL: Referativnyy zhurnal, Astronomiya i Geodeziya, no. 5, 1962, 16, abstract 5A129 ("Dokl. i soobshch. Uzhgorodsk. un-t. Ser. fiz.-matem. n.", 1961, no. 4, 63 - 65)

TEXT: At the Uzhgorod station, photographic observations of Artificial Earth Satellites are effected with the aid of the НАФА-3с (NAFA-3s) camera. The opening and closing moments of the shutter are fixed on the tape of the printing chronograph. The accurate processing of the photographs is carried out according to the methods of A. N. Deych and A. A. Kiselev. A УИМ-21 (UIM-21) is used as measuring machine. Investigations showed that the time-fixing apparatus guarantees a precision of 0.01 sec, which is obviously insufficient. Inasmuch as the real precision of the measurements with an UIM is 0.006 - 0.007 mm, the satellite's coordinates can really be obtained with a precision of 5 - 6",

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S/035/62/000/005/014/098
A055/A101

Real precision of...

whereas the time-error of 0.01 sec leads, at the satellite's speed of 1°/sec, to an error of 36". There are 5 references.

G. Panova

[Abstracter's note: Complete translation]

Card 2/2

APPROVED FOR RELEASE: 08/31/2001 CIA-RDP86-00513R001550320013-1"

"APPROVED FOR RELEASE: 08/31/2001 CIA-RDP86-00513R001550320013-1

BRATIYCHUK, M.V.; SHVALAGIN, I.V.

Estimation of the accuracy of artificial satellite coordinates determined with a KPP camera. Biul.sta.opt.nabl.isk.sput.Zem. no.25:13-15 '62. (MIRA 15:7)

1. Uzhgorodskaya stantsiya nablyudeniya iskusstvennykh sputnikov Zemli.

(Artificial satellites---Orbits)

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L 26645-65 EED(b)-3/EEC(k)-2/EWG(v)/EWA(c)/EWT(l)/FS(v)-3/T/FSF(h)/EWA(d)/FSS-2
Pe-5/P1-4/Pae-2 IJP(c) GW
ACCESSION NR: AT5002815 S/2816/64/000/038/0009/0013

55
33
Bt1

AUTHOR: Shvalagin, I. V.

TITLE: Investigation of a camera with a moving film

SOURCE: AN SSSR. Astronomicheskiy sovet. Byulleten' stantsiy opticheskogo nablyudeniya iskussetvennykh sputnikov Zemli, no. 38, 1964, 9-13

TOPIC TAGS: artificial earth satellite, satellite tracking, earth satellite observation, satellite observation station / NAFA-3c camera, KPP camera

ABSTRACT: In 1962, work was continued on the investigation of the KPP camera (camera with moving film) at the Uzhgorod artificial earth satellite observation station. This required obtaining series of simultaneous photographs with the NAFA-3c/25 camera. A total of more than 217 frames was available for study. The KPP camera is directed toward the highest position of a satellite trajectory whereas the NAFA-3c camera is used for photographing the entire satellite trajectory. However, in many cases, the satellite trail photographed at the highest position with the latter camera is weak or totally absent, making the supplementary use of the KPP camera highly desirable. This paper gives evaluations of the accuracy of

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satellite coordinates determined from films for the different cameras. Discrepancies are analyzed. In addition, a report is given on an attempt to use corundum needles for making fine scratches on the film which could be used as time marks. The scratches were investigated and it was found that the results were unacceptable; it is considered desirable to return to the use of the time scale as a reading line. In earlier studies a series of errors were investigated; this paper discusses an additional error introduced by nonperpendicularity of the aperture to the time scale. Also discussed is an unusual phenomenon encountered in photographing faint satellites with the KPP camera - a zigzag trail sometimes noted on the frames; investigation revealed that this is due to a change in the apparent velocity of the satellite. "The author wishes to thank M. V. Bratiychuk, station chief, for valuable advice". Orig. art. has: 3 formulas, 7 figures and 5 tables.

ASSOCIATION: Stantsiya No. 1055, Uzhgorodskiy universitet (Station No. 1055, Uzhgorod university)

SUBMITTED: 04May63 ENCL: 00 SUB CODE: AA,ES

NO REF SOV: 005 OTHER: 000

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APPROVED FOR RELEASE: 08/31/2001 CIA-RDP86-00513R001550320013-1"

"APPROVED FOR RELEASE: 08/31/2001 CIA-RDP86-00513R001550320013-1

GOL'DBERG, A.A.; SHVALAGIN, M.V.

Summation of certain series by means of the theory of residues. Ukr.mat.zhur. 13 no.2:217-220 '61. (MIRA 14:8)
(Congruences and residues)

APPROVED FOR RELEASE: 08/31/2001 CIA-RDP86-00513R001550320013-1"

"APPROVED FOR RELEASE: 08/31/2001 CIA-RDP86-00513R001550320013-1

SHVAL'B, M. G.

6245. Shval'b, M. G. Bibliograficheskaya pamyatka po biologii. Khar'kov, izd-vo khar'k. un-ta, 1954. 16s. 20sm. (M-vo vyssh. obrazovaniya SSSR. Khar'k. gos. un-t im. A. M. Gor'kogo. Tsentr. nauch. B-ka). 300 ekz. Bespl.-Ost. ukazan na aborote Tit. L. [55-1738] 016:57

SO: Knizhamya Letopis' 1,1955

APPROVED FOR RELEASE: 08/31/2001 CIA-RDP86-00513R001550320013-1"

"APPROVED FOR RELEASE: 08/31/2001 CIA-RDP86-00513R001550320013-1

SHVAIB, M.G.

Structure of the iris and regeneration of the lens in the lake frog (Rana ridibunda). Uch.zap. KHGU 51:103-117 '54. (MIRA 11:11)

(Regeneration (Biology)) (Eye) (Frogs)

APPROVED FOR RELEASE: 08/31/2001 CIA-RDP86-00513R001550320013-1"

"APPROVED FOR RELEASE: 08/31/2001 CIA-RDP86-00513R001550320013-1

SHVAL'B, P.G.

Anemia complicating a transpleural esophagofundal anastomosis. Khirurgiia 34 no.5:129-130 My '58 (MIRA 11:7)

1. Iz Ryazanskoy gorodskoy klinicheskoy bol'nitsy No.4 (glavnyy vrach N.I. Popov) i kafedry obshchey khirurgii Ryazanskogo meditsinskogo instituta imeni akda. I.P. Pavlova. (ispolnyayushchiy obyazannosti zav. - doktor med.nauk V.I. Astrakhan).

(ESOPHAGUS, surgery
transpleural esophago-fudal anastomosis in cardiospasm, postop. anemia (Rus))
(CARDIOSPASM, surgery
transpleural esophago-fundal anastomosis causing postop. anemia (Rus))
(ANEMIA, etiology & pathogenesis
transpleural esophago-fundal anastomosis for cardiospasm (Rus))
(STOMACH, surgery
transpleural esophago-fundal anastomosis for cardiospasm, postop. anmia (Rus))

APPROVED FOR RELEASE: 08/31/2001 CIA-RDP86-00513R001550320013-1"

"APPROVED FOR RELEASE: 08/31/2001 CIA-RDP86-00513R001550320013-1

ARTEMKINA, N.I. (Ryazan', Levo-Lybedskaya ul., d.20, kv.2); SHVAL'B, P.G.

Acute obstruction of the mesenterial vessels. Vest.khir. 83 no.8: 90-94 Ag '59. (MIRA 13:1)

1. Iz khirurgicheskogo otdeleniya (zav. - kand.med.nauk V.M. Borshtenbinder) Ryazanskoy gorodskoy klinicheskoy bol'nitsy No.4 (glavnyy vrach - N.I. Popov).
(THROMBOSIS)
(MESENTERY blood supply)

APPROVED FOR RELEASE: 08/31/2001 CIA-RDP86-00513R001550320013-1"

"APPROVED FOR RELEASE: 08/31/2001 CIA-RDP86-00513R001550320013-1

SHVAL'B, P.G. (Ryazan', ul. Yakhontova, d.34)

Use of corticosteroids for surgical patients; a review of Soviet and foreign literature. Vest. khir. 91 no.7:89-94 Jl'63 (MIRA 16:12)

1. Iz Ryazanskoy oblastnoy meditsinskoy biblioteki.

APPROVED FOR RELEASE: 08/31/2001 CIA-RDP86-00513R001550320013-1"

"APPROVED FOR RELEASE: 08/31/2001 CIA-RDP86-00513R001550320013-1

SHVAL'B, P.G.

Use of butadione in surgery in some inflammatory diseases. Nauch. trudy Riaz.med.inst. 18 no.2:184-191 '64. (MIRA 19:1)

1. Kafedra obshchey khirurgii (zav. - prof. Ye.G.Gurova) Ryazanskogo meditsinskogo instituta.

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SHVAL'B, P.G. (Ryazan', ul. Yakhontova, d.34)

Treatment of stenosing ligamentitis. Ortop., travm. i protez. 25 no.8:55-57 Ag '64. (MIRA 18:4)

1. Iz kafedry obshchey khirurgii (zav. - prof. Ye.G.Gurova) Ryazanskogo meditsinskogo instituta imeni Pavlova na baze Ryazanskoy gorodskoy klinicheskoy bol'nitsy No.4.

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KHARKEVICH, A.D.; SHVAL'B, V.P.

Analysis of switching circuits corresponding to nonparallel-sequential graphs. Probl.pered.inform. no.9:70-78 '61. (MIRA 14:7)
(Switching theory)

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S/044/62/000/006/109/127
B166/B112

AUTHOR: Shval'b, V. P.

TITLE: Recurrent formulas for computing the variance of the occupation time of a totally accessible beam

PERIODICAL: Referativnyy zhurnal. Matematika, no. 6, 1962, 63, abstract 6V324 (Sb. "Probl. peredachi informatsii". no. 9, M., AN SSSR, 1961, 83-86)

TEXT: G. P. Basharin (RZh Mat, 1961, 7V183) derived a formula for the variance σ_n^2 of the occupation time of all the lines of accessible beam (Erlang circuit). The author finds recurrent relations for computing the individual terms entering the formula for the variance σ_n^2 when the number of lines $n = 2, 3, \ldots$, which makes it possible to shorten the time required for calculating tables of σ_n^2 on electronic computers.

[Abstracter's note: Complete translation.]

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BASHARIN, G.P. (Moskva); SHVAL'B, V.P. (Moskva)

Use of the Monte Carlo method and electronic digital computers in simulating the action of switching circuits. Izv. AN SSSR. Otd. tekh. nauk. Energ. i avtom. no.3:143-153 My-Je '62. (MIRA 15:6)
(Switching theory) (Electric relays) (Electronic digital computers)

APPROVED FOR RELEASE: 08/31/2001 CIA-RDP86-00513R001550320013-1"

"APPROVED FOR RELEASE: 08/31/2001 CIA-RDP86-00513R001550320013-1

VDOVIN, A.A.; SHVAL'B, V.P.

Study of switching circuits in group selection operation using a statistical testing technique and an electronic digital computer. Probl.pered.inform. no.11:77-87 '62. (MIRA 16:1)
(Switching theory) (Electric networks)
(Electronic digital computers)

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"APPROVED FOR RELEASE: 08/31/2001 CIA-RDP86-00513R001550320013-1

S/562/62/000/011/006/008
E140/E135

AUTHOR: Shval'b, V.P.

TITLE: On the matrix of second moments of the waiting time distribution for a multiline system with a limited number of demands in the queue

SOURCE: Akademiya nauk SSSR. Institut problem peredachi informatsii. Problemy peredachi informatsii. no.11. 1962. Voprosy teorii pererabotki i raspredeleniya informatsii. 110-116.

TEXT: The system consists of n service lines and a memory for m - n demands. A demand arriving at the instant when there are m demands in the queue is lost. Under certain assumptions this system is described by an homogeneous Markov process. Formulae are obtained permitting recursive relations to be obtained for use in machine computation of tables.

SUBMITTED: February 15, 1961

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SHVAL'B, V.P.

Matrix of second moments of time distribution for a multiple line system with limited number of waiting parties. Probl. pered.inform. no.11:110-116 '62. (MIRA 16:1)
(Telecommunication) (Information theory)

APPROVED FOR RELEASE: 08/31/2001 CIA-RDP86-00513R001550320013-1"

"APPROVED FOR RELEASE: 08/31/2001 CIA-RDP86-00513R001550320013-1

SHVAL'B, V.P.

Transformation of a flow by means of sequent al diffusion.
Probl. pered. inform. no.17:106-111 '64.
(MIRA 17:11)

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L 24921-65 EWT(d) IJP(c)
ACCESSION NR: AT5001705 S/2945/64/000/017/0106/0111

AUTHOR: Shval'b, V. P.

TITLE: Transformation of a flow by means of sequential rarefaction

SOURCE: AN SSSR. Institut problem peredachi informatsii. Problemy peredachi informatsii, no. 17, 1964. Printsipy postroyeniya setey i sistem upravleniya (Principles of network construction and control systems), 106-111

TOPIC TAGS: Poisson distribution, Pearson distribution, branching process, statistical process, probability theory, flow transformation, control system, sequential rarefaction

ABSTRACT: A model of a recurrent flow of moments of receipt of calls is described and its applications discussed. Applications considered are: a system with reservation, a selfreducing system, a multiphase service, and a multibranch system with parallel branches. A sample determination of geometric distribution and Poisson flow is given. "The interpretation of the multiphase service was provided by A. D. Kharkevich." Orig. art. has: 27 formulas and 2 figures.

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L 24921-65
ACCESSION NR: AT5001705

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ASSOCIATION: Institut problem peredachi informatsii AN SSSR (Information transfer problems institute, AN SSSR)

SUBMITTED: 00 ENCL: 00 SUB CODE: IE, MM

NO REF SOV: 002 OTHER: 003

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SHVAL'BE, A.; LAPIN, V.

Bookshelf. Za rul. 21 no.8:29 Ag '63. (MIRA 16:11)

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SOBIYEVA, O.B.; SHVETSOVA, V.P.; LUTSENKO, L.A.; SHVAL'BE, A.L.

Influence of infusions of red pepper and mustard on the reflex phase of gastric secretion. Fiziol. zhur. 47 no.6:758-763 Je '61. (MIRA 15:1)

1. From the Department of Physiology Paedigogical Institute, Riazan.
(STOMACH--SECRETIONS) (CAPSICUM--PHYSIOLOGICAL EFFECT)
(MUSTARD--PHYSIOLOGICAL EFFECT)

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SHVALBE, K. P. In Latvian

SHVALBE, K. P. -- "New Agents for Preserving Wood under the Conditions Prevailing in the Latvian SSR." Latvian Agricultural Academy, 1949. In Latvian (Dissertation for the Degree of Candidate of Technical Sciences)

SO: Izvestiya Ak. Nauk Latviyskoy. SSR. No. 9, Sept., 1955

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"APPROVED FOR RELEASE: 08/31/2001 CIA-RDP86-00513R001550320013-1

SHVALBE, K. P.

20731. Shvalbe, K. Selen i ego soyedineniya dlya konservirovaniya dereva. Izvestiya Akad. Nauk Latv. SSR, 1949, No. 6, s. 101-15. --Na iatysh. yaz.--Rezyume na rus. yaz. --Bibliogr : 8 nazv.

SO: LETOPIS ZHURNAL STATEY - Vol. 28, Moskva, 1949.

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"APPROVED FOR RELEASE: 08/31/2001 CIA-RDP86-00513R001550320013-1

SHVALBE, K. P.

SHVALBE, K.P., kandidat tekhnicheskikh nauk; REYNIKOV, I.Ya.

Fungicidal properties of certain cadmium compounds. Mezsaimn.probl. inst.rak. no.6:83-93 '53. (MLRA 7:6)
(Fungicides) (Cadmium)

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PETUSHKOV, I.S., inzh.; SHVAL'BE, V.A., inzh.; DYMNIKOV, V.S., inzh.

Selecting a type of power for Kuznetsk Basin mines. Ugol' 40 no.11:10-12 '65. (MIRA 18:11)

1. Kuznetskiy nauchno-issledovatel'skiy ugol'nyy institut.

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