"APPROVED FOR RELEASE: 08/23/2000 CIA-RDP86-00513R001548410017-0

SHALAYEV, N. G.

"The Photocolorimetric Analysis Technique in Bloodstain Age Estimation." Cand Med Sci, Gor'kiy State Medical Inst, Gor'kiy, 1954. (RZhBiolKhim, No 1, Jan 55)

Survey of Scientific and Technical Dissertations Defended at USSR Higher Educational Institutions (12)
SO: Sum. No. 556, 24 Jun 55

APPROVED FOR RELEASE: 08/23/2000 CIA-RDP86-00513R001548410017-0"

"APPROVED FOR RELEASE: 08/23/2000 CIA-RDP86-00513R001548410017-0

SHALAYEV, N.G.

Identification of slashing instruments in medicolegal practice. Sud.-med. ekspert. 4 no. 1:46-48 Ja-Mr '61. (MIRA 14:4)

1. Kafedra sudebnoy meditsiny (zav. - prof. A.I. Zakonov) Gor'kovskogo meditsinskogo instituta imeni S.M. Kirova.
(WOUNDS AND INJURIES—JURISPRUDENCE)

APPROVED FOR RELEASE: 08/23/2000 CIA-RDP86-00513R001548410017-0"

"APPROVED FOR RELEASE: 08/23/2000 CIA-RDP86-00513R001548410017-0

SHALAYEV, N.G., kand.med.nauk

Some methods for studying footwear in medicolegal expertise.
Sud.-med. ekspert. 4 no.4:27-32 O-N-D '61. (MIRA 14:12)

1. Kafedra sudebnoy meditsiny (zav. - prof. A.I.Zakonov) Gor'kovskogo meditsinskogo instituta imeni S.M.Kirova.
(MEDICAL JURISPRUDENCE)

APPROVED FOR RELEASE: 08/23/2000 CIA-RDP86-00513R001548410017-0"

"APPROVED FOR RELEASE: 08/23/2000 CIA-RDP86-00513R001548410017-0

SHALAYEV, N. N., and DOBATKIN, V. I.

"Local Recrystallization in Forged Parts of Aluminum Alloy AB," Tr. Mosk. aviats. tekhnol. i.-ta, No 23, 1954, pp 102-112

Forged parts of nearly similar shape were tested for mechanical properties and macrostructure of alloy and by X-ray analysis. At the same strength of alloy in the massive part, the crosspiece exhibited a strength varying within wide limits. An explanation is found in that the alloy either conserves the poured grain, or a course, elongated grain is formed as result of recrystallization. The crosspiece could be reinforced by reducing the pouring speed of the metal. (RZhFiz, No 7, 1955) SO: Sum.No. 713, 9 Nov 55

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"APPROVED FOR RELEASE: 08/23/2000 CIA-RDP86-00513R001548410017-0

BELOV, I.V.; OZHIGANOV, V.S.; SHALAYEV, P.B.

Equipment for dehydrating high-viscous mazuts. Izbor. i rats. 3 no. 4:9-10 Ap '58. (MIRA 11:7)

(Petroleum as fuel)

APPROVED FOR RELEASE: 08/23/2000 CIA-RDP86-00513R001548410017-0"

"APPROVED FOR RELEASE: 08/23/2000 CIA-RDP86-00513R001548410017-0

VASHLYAYEV, N.M. SHALAYEV, P.B.; SHALAYEV, N.B.

Increase in the operational reliability of exhaust fans. Prom. energ. 20 no.1:26-29 Ja '65. (MIRA 18:4)

APPROVED FOR RELEASE: 08/23/2000 CIA-RDP86-00513R001548410017-0"

"APPROVED FOR RELEASE: 08/23/2000 CIA-RDP86-00513R001548410017-0

SOV/133-58-8-27/30

AUTHORS: Belov, I.V., Ozhiganov, V.S. and Shalayev, P.B.

TITLE: An Installation for Dehydration of High-viscosity Fuel Oils (Ustanovka dlya obezvozhivaniya vysokovyazkikh mazutov)

PERIODICAL: Stal', 1958, Nr 8, pp 755 - 758 (USSR)

ABSTRACT: An experimental plant for dehydration of fuel oil designed by VNIIMT was erected and operated on the Verkh Isetskiy Works. Dehydration is based on evaporation principle using waste heat of flue gases from one of the open-hearth furnaces. The plant consists of tube pre-heater evaporator, condenser and separator (Figures 1 and 2). The designed plant output 5 t/h of completely dehydrated oil with the initial moisture content of 15%, the initial temperature of the waste gas 500 °C, its throughput 10 000 m^3/h, thus utilising about 30-35% of the waste heat. The plant is described in some detail. It is stated in the editorial note that the real solution of the problem is fitting the railway tanks with heating elements (indirect steam), but the above scheme can be used temporarily with advantage in some cases. There are 2 figures and 1 table.

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SOV/133-58-8-27/30

An Installation for Dehydration of High-viscosity Fuel Oils

ASSOCIATIONS: VNIIMT and Verkh-Isetskiy metallurgicheskiy zavod (Verkh-Isetskiy Metallurgical Works)

1. Fuel oils--Dehydration 2. Dehydrators--Design
3. Waste gases--Applications

Card 2/2

APPROVED FOR RELEASE: 08/23/2000 CIA-RDP86-00513R001548410017-0"

"APPROVED FOR RELEASE: 08/23/2000 CIA-RDP86-00513R001548410017-0

SHALAYEV, S.A., inzh., STUPNEV, G.K. inzh.

Loading devices used in lumbering in Sweden. Mekh. i avtom. proizv 14 no.5:47-49 My '60. (MIRA 14:3)
(Sweden- Lumbering- Machinery)

APPROVED FOR RELEASE: 08/23/2000 CIA-RDP86-00513R001548410017-0"

"APPROVED FOR RELEASE: 08/23/2000 CIA-RDP86-00513R001548410017-0

ZOTOV, G.A.; BEREZIN, V.P.; SHALAYEV, S.A.; KESSEL', I.V.; POLYANTSEV, V.A., red.

[Olenino Logging Camp] Oleninskii lesopromkhoz. Khimki, TSentr. nauchno-issl. in-t mekhanizatsii i energetiki lesnoi promyshl., 1962. 30 p. (MIRA 16:4)
(Olenino region--Lumbering)

APPROVED FOR RELEASE: 08/23/2000 CIA-RDP86-00513R001548410017-0"

"APPROVED FOR RELEASE: 08/23/2000 CIA-RDP86-00513R001548410017-0

STOGOV, Boris Nikolayevich, dots.; SIROTOV, Ivan Ivanovich, dots.; MASLENKOV, Fedor Nikolayevich, dots.; SHALAYEV, S.A., retsenzent; SULIMOV, A.N., red.; PITERMAN, Ye.L., red.izd-va; SHIBKOVA, R.Ye., tekhn. red.

[Technology, mechanization, and planning of the landings of lumbering enterprises]Tekhnologiia, mekhanizatsiia i proektirovanie nizhnikh skladov lesozagotovitel'nykh predpriiatii. Moskva, Goslesbumizdat, 1962. 414 p. (MIRA 15:11)

1. Direktor Oleninskogo lesopromyshlennogo khozyaystva TSentral'nogo nauchno-issledovatel'skogo instituta mekhanizatsii i energetiki lesnoy promyshlennosti (for Shalayev).
(Lumbering)

APPROVED FOR RELEASE: 08/23/2000 CIA-RDP86-00513R001548410017-0"

"APPROVED FOR RELEASE: 08/23/2000 CIA-RDP86-00513R001548410017-0

KUVAL'DIN, Boris Ivanovich, dots.; MOROZOV, Sergey Aleksandrovich, dots.; SHALAYEV, S.A., inzh., retsenzent; KORCHUNOV, N.G., prof., retsenzent; KUKLINOV, B.A., dots., retsenzent; MEN'SHUTKIN, Ya.G., dots., retsenzent; SYROMYATNIKOV, S.A., dots., red.; PITERMAN, Ye.L., red.izd-va; SHIBKOVA, R.Ye., tekhn. red.

[Planning logging truck roads] Proektirovanie lesovoznykh avtomobil'nykh dorog. Moskva, Goslesbumizdat, 1962. 331 p. (MIRA 16:7)

(Forest roads)

APPROVED FOR RELEASE: 08/23/2000 CIA-RDP86-00513R001548410017-0"

"APPROVED FOR RELEASE: 08/23/2000 CIA-RDP86-00513R001548410017-0

SHALAYEV, S.N.

Ways of speeding up the construction of pits and mines. Gor.zhur. no.2:3-5 F '63. (MIRA 16:2)

1. Direktor Gosudarstvennogo instituta po proyektirovaniyu gornykh predpriyatiy zhelezorudnoy i margantsevoy promyshlennosti i promyshlennosti nemetallicheskikh iskopayemykh.
(Mining engineering)

APPROVED FOR RELEASE: 08/23/2000 CIA-RDP86-00513R001548410017-0"

"APPROVED FOR RELEASE: 08/23/2000 CIA-RDP86-00513R001548410017-0

USSR/Geophysics - Electrical prospecting FD-2775

Card 1/1 Pub 45 - 9/13

Author : Shalayev, S. V.

Title : Determining the position of a conducting body in electrical prospecting

Periodical : Izv. AN SSSR, Ser. geofiz., Sep-Oct 1955, 468-474

Abstract : The author derives formulas for determining the potential in the lower half-space accrding to its values measured at the surface of the earth, on the assumption that the analytical extension of the potential is possible, i.e. that the potential is a harmonic function within the sphere S of radius r. The uniqueness of the extension of the potential into the lower half-space proceeds from the Stal theorem (L. N. Sretenskiy, Teoriya n'yutonovskogo potentsiala [Theory of Newtonian potentials], Moscow, OGIZ, 1946), according to which the harmonic function is uniquely determined by its values and by the values of its normal derivative on part of the surface. Three references: e.g. V. I. Smirnov, Kurs vysshey matematiki [Course of higher mathematics], 1952.

Institution : Leningrad Mining Institute

Submitted : March 11, 1953

APPROVED FOR RELEASE: 08/23/2000 CIA-RDP86-00513R001548410017-0"

"APPROVED FOR RELEASE: 08/23/2000 CIA-RDP86-00513R001548410017-0

20-3-13/52

AUTHOR: Shalayev, S. V.

TITLE: An Experiment in Computing the Potential Function in the Lower Half--Plane From Its Values Measured on the Surface of the Earth (Opyt vychisleniya potentsial'noy funktsii v nizhney poluploskosti pdyeye znacheniyam , zamerennym na poverkhnosti zemli)

PERIODICAL: Doklady AN SSSR, 1957, Vol. 117, Nr 3, pp. 403 - 406 (USSR)

ABSTRACT: In gravitation- and in magnetic prospecting the computation mentioned in the title is usually carried out by means of an approximation formula derived from the theorem for the mean value of a harmonic function: $u(0,0) \approx (u(\Delta,0) + u(-\Delta,0) + u(0,\Delta) + u(0,-\Delta))$ /4. Herefore also a formula developed by Rainbow (Renbou) (reference 1) can be used. This Rainbow formula can be derived by means of an integral mentioned here. In the case of a horizontal circular cylinder (which creates a certain here given force of gravity anomaly on the earth), a correction term ΔI permits the computation of the relative error. The Rainbow formula can be used only at a distance from the body for the computation of the potential function. In order to improve the existing methods of computing the potential function on the lower half-plane it might be suggested not to compute the potential itself, but a certain function (w)

Card 1/2

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"APPROVED FOR RELEASE: 08/23/2000 CIA-RDP86-00513R001548410017-0

SHALAYEV, S.V.

Use of functions of a complex variable in the geological interpretation of gravitational and magnetic data. Trudy Inst.geol. i geofiz. Sib.otd. AN SSSR no.1:3-13 '60. (MIRA 15:2)
(Prospecting--Geophysical methods)

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"APPROVED FOR RELEASE: 08/23/2000 CIA-RDP86-00513R001548410017-0

88857

S/044/60/000/007/011/058
C111/C222

16.3800

AUTHOR: Shalayev, S.V.

TITLE: Application of the analytic continuation of the potential function into the lower halfplane in geophysics

PERIODICAL: Referativnyy zhurnal. Matematika, no.7, 1960, 77-78 . Abstract no.7540. Zap.Leningr.gorn.in-ta, 1959, 36, no.2, 131-151

TEXT: In the lower halfplane $z<0$ of the complex plane $\tau = x+iz$ there lies the region D which is filled with masses of constant density; $U(x,z)$ is the logarithmic potential of these masses. In geophysics, $U(x,z)$ must be calculated in the lower halfplane from the values of this function or of one of its derivatives on the line $z = 0$ (surface of the earth). The analytic expressions for $U(x,z)$ converge badly in the neighborhood of the body D since in the interior of D there lie the singularities of the function $U(x,z)$ continued to the interior. The author proposes, instead of the potential $U(x,z)$, to use the analytic continuation of the function $\phi[W(\tau)]$ into the lower halfplane, where $\mathrm{Re}\, W(\tau) = U(x,z)$, while the function $\phi(W)$ is chosen so that $\phi[W(\tau)]$ has no singularities in the singular points of $W(\tau)$. For the calculation of $\phi[W(iz)]$ for $z<0$ the author obtains the formula

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88857

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C111/C222

Application of the analytic....

$$\Phi[W(iz)]+\Phi[W(-iz)]=\frac{2}{\pi}e^{-Bz^2}\int_0^\infty ch\omega z d\omega \int_{-\infty}^{\infty}\Phi[W(x)]e^{-Bx^2}\cos\omega x dx, \quad (1)$$

$B>0$, $\Phi[W(-iz)]$ is determined by the solution of the Dirichlet problem for the upper halfplane. Some approximation formulas are given for the calculation of the integral (1). If the region D is bounded by a polygon with a finite number of terms then $W_{xxz}(\tau)$ is a rational function with poles in the corner points of the boundary of D. In this case it is convenient to continue $1/W_{xxz}$ analytically. If the boundary of D has only two corner points then $1/W_{xxz}$ is a quadratic trinomial. For this case the author elaborates a numerical-graphical scheme for the determination of the coordinates of the corner points from the values of one of the second derivatives (U_{xx} or U_{xz}) of the potential on the line $z = 0$.

Reviewer's remark: Beside of the case of rational $W(\tau)$ the author gives no hint how the function $\Phi[W(\tau)]$ can be chosen so that it cancels the singularities of $W(\tau)$.

[Abstracter's note: The above text is a full translation of the original Soviet abstract.]

Card 2/2

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"APPROVED FOR RELEASE: 08/23/2000 CIA-RDP86-00513R001548410017-0

29364
S/169/61/000/006/[illegible]
A005/A150

Application of functions of a complex ...

(where $\tau = x + iz$ is the complex variable, $\tau_k = x_k + iz_k$ are the angular points of the prism and A_k, c_k and d_k are complex constants) and reduced to the solution of a system of linear equations for determination of constants c_k and d_k and the solution of the n-degree equation $c_n\tau^n + c_{n-1}\tau^{n-1} + \ldots + c_1 = 0$ for determination of the coordinates of the [illegible] points of the prisma.

V. Levitayn

[Abstractor's note: Complete translation.]

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"APPROVED FOR RELEASE: 08/23/2000 CIA-RDP86-00513R001548410017-0

$$E_2 = \frac{\partial H/\partial x}{\left(\frac{\partial H}{\partial x}\right)^2 + \left(\frac{\partial Z}{\partial x}\right)^2}; \quad F_2 = \frac{\partial Z/\partial x}{\left(\frac{\partial H}{\partial x}\right)^2 + \left(\frac{\partial Z}{\partial x}\right)^2}$$

are polynomials of the first or second degree. The material and the imaginary parts of the radicals of these polynomials correspond to the coordinates of the angular points of the sought objects. A program of computation on the electron digital machine "Ural" has been prepared to fulfill all the necessary calculations. /Abstracter's note: Complete translation./

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"APPROVED FOR RELEASE: 08/23/2000 CIA-RDP86-00513R001548410017-0

S/169/62/000/009/020/120
D228/D307

AUTHORS: Troshkov, G. A. and Shalayev, S. V.

TITLE: Application of the Fourier conversion for solving the inverse problem of gravity and magnetic prospecting

PERIODICAL: Referativnyy zhurnal, Geofizika, no. 9, 1962, 25, abstract 9A159 (In. collection: Prikl. geofizika, no. 30, M., 1961, 162-178)

TEXT: The authors examine the possibility of using the Fourier type conversion

$$f(x) = \frac{1}{2\pi}\int_{-\infty}^{\infty} S(\omega)e^{-i\omega x}d\omega$$

and

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$$S(\omega) = \int_{-\infty}^{\infty} f(x)e^{i\omega x}dx$$

for preliminarily transforming initial curves for the purpose of the quantitative geologic interpretation of gravity and magnetic data. Here f(x) is the material or complex function, satisfying the conditions that guarantee the convergence of the integrals; $S(\omega)$ is the Fourier conversion of the function f(x); and ω is the material variable. Expressions of the Fourier conversions $S(\omega)$ are derived for two-dimensional bodies, whose vertical and transverse sections are bounded by an arbitrarily broken line with an infinite number of links (beds, scarps, and other angularly shaped bodies). A method of determining a disturbing body's position from the Fourier conversion is given on the grounds of the correlations obtained. Some specific cases are considered: a thick bed, a thin bed, and a vertical scarp. Special pallets, guaranteeing the cal-

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"APPROVED FOR RELEASE: 08/23/2000 CIA-RDP86-00513R001548410017-0

culation of the Fourier conversion $S(\omega)$, are given. A practical example of the determination of the disturbing body's depth (from the curve Z_a) is cited by way of illustration. In it the value, calculated for the depth with an accuracy of up to 6.6%, coincides with the data of drilling. It is pointed out that the method described was carried out over 50 magnetic and gravity anomalies. /Abstracter's note: Complete translation./

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"APPROVED FOR RELEASE: 08/23/2000 CIA-RDP86-00513R001548410017-0

SHALAYEV, S.V.

Quantitative geological interpretation of complex magnetic anomalies on electronic digital computers. Prikl. geofiz. no.31: 193-203 '61. (MIRA 15:3)
(Magnetic prospecting) (Electronic digital computers)

APPROVED FOR RELEASE: 08/23/2000 CIA-RDP86-00513R001548410017-0"

"APPROVED FOR RELEASE: 08/23/2000 CIA-RDP86-00513R001548410017-0

SHALAYEV, S.V.

Using special points of potential fields in interpretating geophysical data. Prikl. geofiz. no.33:132-154 '62. (MIRA 15:10)

(Magnetic prospecting) (Gravity prospecting)

APPROVED FOR RELEASE: 08/23/2000 CIA-RDP86-00513R001548410017-0"

"APPROVED FOR RELEASE: 08/23/2000 CIA-RDP86-00513R001548410017-0

SHALAYEV, S.V.

Linear programming in determining the position of geological bodies. Zap. LGI 46 no.2:51-62 '63. (MIRA 17:6)

APPROVED FOR RELEASE: 08/23/2000 CIA-RDP86-00513R001548410017-0"

"APPROVED FOR RELEASE: 08/23/2000 CIA-RDP86-00513R001548410017-0

SHALAYEV, S.V.

Approximation by rational fractions of curves given in the shape of graphs. Vop. matem. geofiz. no.3:131-138 '64. (MIRA 18:2)

APPROVED FOR RELEASE: 08/23/2000 CIA-RDP86-00513R001548410017-0"

"APPROVED FOR RELEASE: 08/23/2000 CIA-RDP86-00513R001548410017-0

SHAPATEV, S.V.

[illegible]ing linear programming in geophysics. Sovet. i geofiz. no.5:87-93 (MIRA 18:8)
'65.

1. Leningradskiy gornyy institut.

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"APPROVED FOR RELEASE: 08/23/2000 CIA-RDP86-00513R001548410017-0

ACC NR: AT6034912 SOURCE CODE: UR/2834/66/050/002/0053/0068

AUTHOR: Shalayev, S. V.

ORG: none

TITLE: Mathematical programming in geophysics

SOURCE: Leningrad. Gornyy institut. Zapiski, v. 50, no. 2, 1966. Matematicheskiye metody v geologii (Mathematical methods in geology), 53-68

TOPIC TAGS: linear programming, earth science, geophysics, mathematical programming, geology, magnetic field

ABSTRACT: The fundamentals of a method for approximating analytical expressions of geophysical fields by rational fractions and certain other expressions are presented. The problem may be paraphrased as follows: anomalies of vertical Z or horizontal H components of distortion of the magnetic field for real geologic objects are not expressed by polynomials. The rational fractions proposed by S. V. Shalayev (Prikladnaya geofizika, 31, 1961; and 33, 1962) make use of polynomials for certain special cases of simple bodies. The vertical component Z of a system of simple strata may be expressed by the analytic expression

$$Z = \sum_{k=1}^{r} 2I_k\varepsilon_k \frac{-(x-x_k)\sin\beta_k + h_k\cos\beta_k}{(x-x_k)^2+h_k^2} + A = \sum_{k=1}^{r} \frac{P_k x + Q_k}{(x-x_k)^2+h_k^2} + A,$$

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ACC NR: AT6034912

proposed by A. A. Logachev (Kurs magnitorazvedki. Gostoptekhizdat, 1962), where x_k and h_k are rectangular coordinates of the upper selvage of the kth simple stratum; x is the horizontal axis; h - vertical, directed downward; I_k - the absolute value of the vector of magnetization of the stratum; ε_k - the true potential of the stratum; r - the number of strata; A - constant background; and P_k, Q_k are given by

$$p_k = -2I_k\varepsilon_k \sin\beta_k;$$
$$Q_k = 2I_k\varepsilon_k (x_k \sin\beta_k + h_k \cos\beta_k).$$

This formulation shows that the problem of determining occurrence elements of a system of simple strata may be stated in the following manner: It is necessary to determine parameters x_k, h_k, P_k, Q_k, and r of the rational fraction (above) according to values $Z_s = Z(x_s)$ defined at a finite number of points of a rectangular profile with abscissas x_s. With this type of arrangement, β_k and the product of magnetization I_k may be found as

$$\left.\begin{aligned} \operatorname{tg}\beta_k &= -\frac{M_k}{N_k} \\ I_k\varepsilon_k &= \frac{1}{2h_k}\sqrt{M_k^2+N_k^2} \end{aligned}\right\},$$

where $M_k = h_k P_k$; $N_k = x_k P_k + Q_k$. The author presents a linear programming solution to supplementary problems which are part of the analytic approach. The linear

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ACC NR: AT6034912

programming algorithm makes use of relationships demonstrated by G. Sh. Rubinshteyn (O ravnomernom priblizhenii nepreryvnykh funktsiy. Uspekhi matem. nauk, t. 15, 3, 1960). Discussions of examples and computations on a Ural-2 computer are presented. Orig. art. has: 4 figures and 67 equations.

SUB CODE: 08, 12/ SUBM DATE: none/ ORIG REF: 009/ OTH REF: 002

Card 3/3

APPROVED FOR RELEASE: 08/23/2000 CIA-RDP86-00513R001548410017-0"

"APPROVED FOR RELEASE: 08/23/2000 CIA-RDP86-00513R001548410017-0

SHALAYEV, V.D., inzh.

Stress distribution in the center of deformation during reduction without tension. Trudy MVTU no.111:162-169 '64.

Changes in the thickness of tube billets during reduction and expansion. Ibid.:170-179 (MIRA 17:9)

APPROVED FOR RELEASE: 08/23/2000 CIA-RDP86-00513R001548410017-0"

"APPROVED FOR RELEASE: 08/23/2000 CIA-RDP86-00513R001548410017-0

SHALAYEV, V. F.

Farm animals Moskva, Akademiia pedagog. nauk RSFSR, 1950. 31 p. (Zaochnaia metodicheskaia konsul'tatsiia)

APPROVED FOR RELEASE: 08/23/2000 CIA-RDP86-00513R001548410017-0"

"APPROVED FOR RELEASE: 08/23/2000 CIA-RDP86-00513R001548410017-0

SHALAYEV, V. F.

Methodology of teaching natural sciences Izd. 2, Perer. Moskva, Gos. uch.-pedagog. izd-vo, 1952. 285 p. (54-21195)

QH315.S5 1952

APPROVED FOR RELEASE: 08/23/2000 CIA-RDP86-00513R001548410017-0"

"APPROVED FOR RELEASE: 08/23/2000 CIA-RDP86-00513R001548410017-0

SHALAYEV, V.F.

Prepodavanie biologii v svete zadach politekhnicheskogo obucheniia. Materialy v pomoshch' uchiteliu (Teaching biology in the light of the problems of practical application; materials to help the teacher). Moskva, Akad. ped. nauk RSFSR, 1953. 40 p. (Akad. ped. nauk RSFSR. In-t metodov obucheniia).

SO: Monthly List of Russian Accessions, Vol. 7, No. 5, August 1954

APPROVED FOR RELEASE: 08/23/2000 CIA-RDP86-00513R001548410017-0"

"APPROVED FOR RELEASE: 08/23/2000 CIA-RDP86-00513R001548410017-0

SHALAYEV, V.F. [author]; FLORENSKAYA, M.A., prepodavatel' metodiki yestyestvoznaniya [reviewer].

Textbook on methodology in natural history ("Methodology of teaching natural sciences." V.F.Shalaev. Reviewed by M.A.Florenskaia). Est.v shkole no.5: 86-90 S-O '53. (MLRA 6:8)

1. Gosudarstvennyy pedagogicheskiy institut Komi ASSR (for Florenskaya).
(Natural history--Study and teaching) (Shalaev, V.F.)

APPROVED FOR RELEASE: 08/23/2000 CIA-RDP86-00513R001548410017-0"

"APPROVED FOR RELEASE: 08/23/2000 CIA-RDP86-00513R001548410017-0

SHALAYEV, V.F.

[Teaching biology in connection with the aims of applied science education] Prepodavanie biologii v svete zadach politekhnicheskogo obucheniia. 2-e izd. Moskva, Akad. ped.nauk RSFSR, 1954. 80 p. (MLRA 7:11D)

APPROVED FOR RELEASE: 08/23/2000 CIA-RDP86-00513R001548410017-0"

"APPROVED FOR RELEASE: 08/23/2000 CIA-RDP86-00513R001548410017-0

SHALAYEV, V.F.; RYBAKOVA, N.T., redaktor; RYBIN, I.V., tekhnicheskiy redaktor

[Methodology of teaching natural history; a textbook for teachers' institutes] Metodika prepodavaniia estestvoznaniia; uchebnik dlia uchitel'skikh institutov. Izd. 3-e. Moskva, Gos. uchebno-pedagog. izd-vo Ministerstva prosveshcheniia RSFSR, 1954. 285 p. (MLRA 8:4)
(Natural history--Study and teaching)

APPROVED FOR RELEASE: 08/23/2000 CIA-RDP86-00513R001548410017-0"

"APPROVED FOR RELEASE: 08/23/2000 CIA-RDP86-00513R001548410017-0

SHALAYEV, V. F.

5971. SHALAYEV, V. F. I. RYKOV, N. A. - Zoologiya, uchebnik dlya 6-7-go klassov sred. shkoly. 2-ye izd., s 5-go rus. nukus- samarkand, karaklnakgiz, 1954. 304s. s ill., 4 L ill. 23sm. 5.000 ekz. 4 R. 25 K. V per-na karakalnak, yaz- (55-671) 59(075)

SO: Knizhnaya Letopis', Vol. 1, 1955

APPROVED FOR RELEASE: 08/23/2000 CIA-RDP86-00513R001548410017-0"

"APPROVED FOR RELEASE: 08/23/2000 CIA-RDP86-00513R001548410017-0

SHALAYEV, V.F.

Role and significance of the study of farm animals in a zoology course. Est. v shkole no.1:34-40 Ja-F '55. (MLRA 8:3)

1. Institut metodov obucheniya Akademii pedagogicheskikh nauk RSFSR.
(Zoology, Economic—Study and teaching)

APPROVED FOR RELEASE: 08/23/2000 CIA-RDP86-00513R001548410017-0"

"APPROVED FOR RELEASE: 08/23/2000 CIA-RDP86-00513R001548410017-0

SHALAYEV, V.F.; PADALKO, N.V.; MEL'NIKOV, M.I.; PETRISHINA, O.L.; PROFERANSOVA, N.V., redaktor; SOKOLOVA, P.Ya., tekhnicheskiy redaktor

[General science instruction in connection with the bilogy course] Politekhnicheskoe obuchenie v sviazi s kursom biologii. Pod obshchei red. V.F.Shalaeva. Moskva, Izd-vo Akademii pedagog. nauk RSFSR, 1956. 174 p. (MLRA 10:2)

(Biology--Study and teaching)

APPROVED FOR RELEASE: 08/23/2000 CIA-RDP86-00513R001548410017-0"

"APPROVED FOR RELEASE: 08/23/2000 CIA-RDP86-00513R001548410017-0

SHALAYEV, V.F., kandidat pedagogicheskikh nauk.

The periodical "IUnyi naturalist". Est. v shkole no.4:95-96 Jl-Ag '56. (MIRA 9:9)

1. Institut metodov obucheniya Akademii pedagogicheskikh nauk RSFSR.
(Nature study--Periodicals)

APPROVED FOR RELEASE: 08/23/2000 CIA-RDP86-00513R001548410017-0"

"APPROVED FOR RELEASE: 08/23/2000 CIA-RDP86-00513R001548410017-0

SHALAYEV, V.F., kandidat pedagogicheskikh nauk.

Practical student projects tied in with the study of zoology. Est. v shkole no.5:41-47 S-O '56. (MIRA 9:10)

1. Institut metodov obycheniya Akademii pedagogicheskikh nauk RSFSR.
(Zoology--Study and teaching)

APPROVED FOR RELEASE: 08/23/2000 CIA-RDP86-00513R001548410017-0"

"APPROVED FOR RELEASE: 08/23/2000 CIA-RDP86-00513R001548410017-0

SHALAYEV, V.F.

SHALAYEV, V.F., kandidat pedagogicheskikh nauk.

Biology teaching methods in the light of the tasks of polytechnical education. Biol.v shkole no.1:10-19 Ja-F '57. (MLRA 10:5)

1.Institut metodov obucheniya Akademii pedagogicheskikh nauk RSFSR.

(Biology--Study and teaching)

APPROVED FOR RELEASE: 08/23/2000 CIA-RDP86-00513R001548410017-0"

"APPROVED FOR RELEASE: 08/23/2000 CIA-RDP86-00513R001548410017-0

SHALAYEV, V.F., kandidat pedagogicheskikh nauk.

Biology teaching and polytechnical education. Biol. v shkole no.3: 8-14 My-Je '57. (MLRA 10:6)

1. Institut metodov obucheniya Akademii pedagogicheskikh nauk RSFSR.
(Biology--Study and teaching)

APPROVED FOR RELEASE: 08/23/2000 CIA-RDP86-00513R001548410017-0"

"APPROVED FOR RELEASE: 08/23/2000 CIA-RDP86-00513R001548410017-0

VSESVYATSKIY, B.V., prof.; MEL'NIKOV, M.I., kand.ped.nauk; PREZENT, I.I.; SHALAYEV, V.F., kand.ped.nauk

Was V.V. Polovtsov a materialist? Biol. v shkole no.5:13-17 S-O '58. (MIRA 11:11)

1. Deystvitel'nyy chlen Vsesoyuznoy adademii sel'skohozyaystvennykh nauk im V.I. Lenina (for Prezent).
(Polovtsov, Valerian Viktorovich, 1862-1918)

APPROVED FOR RELEASE: 08/23/2000 CIA-RDP86-00513R001548410017-0"

"APPROVED FOR RELEASE: 08/23/2000 CIA-RDP86-00513R001548410017-0

SHALAYEV, V.F., kand.ped.nauk

"Biology study room in secondary schools" by S.A.Pavlovich. Reviewed by V.F.Shalaev. Biol. v shkole 6:82-83 N-D '58. (MIRA 11:11)

1. Institut metodov obucheniya Akademii ped.nauk RSFSR.
(Biology--Study and teaching) (Pavlovich, S.A.)

APPROVED FOR RELEASE: 08/23/2000 CIA-RDP86-00513R001548410017-0"

"APPROVED FOR RELEASE: 08/23/2000 CIA-RDP86-00513R001548410017-0

SHALAYEV, V.F., kand.ped.nauk

Biology course in the eight-year polytechnical school of general education. Biol. v shkole no.1:28-34 Ja-F '59. (MIRA 12:2)

1. Institut metodov obucheniya APN RSFSR.
(Biology--Study and teaching)

APPROVED FOR RELEASE: 08/23/2000 CIA-RDP86-00513R001548410017-0"

"APPROVED FOR RELEASE: 08/23/2000 CIA-RDP86-00513R001548410017-0

SHALAYEV, V.F., kand.pedagag.nauk

Connection of theory and practice in biology teaching is the basis for the acquisition of profound and thorough knowledge by students. Biol.v shkole no.6:15-21 N-D '59. (MIRA 13:3)

1. Institut metodov obucheniya Akademii pedagogicheskikh nauk RSFSR.
(Biology--Study and teaching)

APPROVED FOR RELEASE: 08/23/2000 CIA-RDP86-00513R001548410017-0"

"APPROVED FOR RELEASE: 08/23/2000 CIA-RDP86-00513R001548410017-0

SHALAYEV, V.F., kand.pedagog.nauk

"Biology teaching methods in secondary schools" by V.A. Tetiurev. Reviewed by V.F. Shalaev. Biol. v shkole no. 6:86-89 N-D '60. (MIRA 14:1)

1. Institut obshchego i politekhnicheskogo obrazovaniya Akademii pedagogicheskikh nauk RSFSR.
(Biology--Study and teaching) (Tetiurev, V.A.)

APPROVED FOR RELEASE: 08/23/2000 CIA-RDP86-00513R001548410017-0"

"APPROVED FOR RELEASE: 08/23/2000 CIA-RDP86-00513R001548410017-0

SHALAYEV, V.F., kand.pedagogicheskikh nauk

First zoology lessons in the sixth grade. Biol. v shkole no. 1:16-23 Ja-F '61. (MIRA 14:4)

1. Institut obshchego i politekhnicheskogo obrazovaniya Akademii pedagogicheskikh nauk RSFSR.
(Zoology—Study and teaching)

APPROVED FOR RELEASE: 08/23/2000 CIA-RDP86-00513R001548410017-0"

"APPROVED FOR RELEASE: 08/23/2000 CIA-RDP86-00513R001548410017-0

FEDOROVA, V.N.; SHALAYAEV, V.F.

Conducting experimental and practical work on agriculture in connection with the biology course. Biol. v shkole no.5:50-53 S-O '61. (MIRA 14:9)

1. Institut obshchego i politekhnicheskogo obrazovaniya Akademii pedagogicheskikh nauk RSFSR.
(Agriculture—Study and teaching)

APPROVED FOR RELEASE: 08/23/2000 CIA-RDP86-00513R001548410017-0"

"APPROVED FOR RELEASE: 08/23/2000 CIA-RDP86-00513R001548410017-0

SHALAYEV, V.F., kand.pedagogicheskikh nauk

Methodological instructions for the topic "Development of the animal world on earth." Biol. v shkole no.2:17-23 Mr-Ap '62. (MIRA 15:2)

1. Institut obshchego i politekhnicheskogo obrazovaniya Akademii pedagogicheskikh nauk RSFSR.
(Evolution--Study and teaching)

APPROVED FOR RELEASE: 08/23/2000 CIA-RDP86-00513R001548410017-0"

"APPROVED FOR RELEASE: 08/23/2000 CIA-RDP86-00513R001548410017-0

SHALAYEV, V.F.

Studying the topic "Changes in animals effected by man and the development of new breeds of farm animals" in schools. Biol. v shkole no.2:93-94 Mr-Ap '62. (MIRA 15:2)

1. Institut obshchego i politekhnicheskogo obrazovaniya Akademii pedagogicheskikh nauk RSFSR.
(Stock and stockbreeding--Study and teaching)

APPROVED FOR RELEASE: 08/23/2000 CIA-RDP86-00513R001548410017-0"

"APPROVED FOR RELEASE: 08/23/2000 CIA-RDP86-00513R001548410017-0

SHALAYEV, V.F.;RYKOV, N.A.

[Zoology; textbook for the seventh grade of secondary schools]Zoologiia; uchebnik dlia 7-go klassa srednei shkoly. Izd.6. Moskva, Gos.uchebno-pedagog.izd-vo, 1961. 231 p. (MIRA 15:9)

(Zoology)

APPROVED FOR RELEASE: 08/23/2000 CIA-RDP86-00513R001548410017-0"

"APPROVED FOR RELEASE: 08/23/2000 CIA-RDP86-00513R001548410017-0

SHAMAYEV, Vasiliy Feofilovich; GOGOLEVA, Yelena Dmitriyevna; KIVOTOV, Sergey Aleksandrovich; PROFERANSOVA, N.V., red.; TARASOVA, V.V., tekhn. red.

[Correlation between zoology lessons and practical work of students in rabbit husbandry]Vzaimosviaz' urokov zoologii s prakticheskimi rabotami uchashchikhsia po krolikovodstvu. Moskva, Izd-vo Akad. pedagog. nauk RSFSR, 1961. 52 p. (MIRA 15:10)

(Stock and stockbreeding—Study and teaching) (Rabbits)

APPROVED FOR RELEASE: 08/23/2000 CIA-RDP86-00513R001548410017-0"

"APPROVED FOR RELEASE: 08/23/2000 CIA-RDP86-00513R001548410017-0

S/124/63/000/003/004/065
D234/D308

AUTHOR: Shalayev, V. G.

TITLE: A cardioidal pendulum

PERIODICAL: Referativnyy zhurnal, Mekhanika, no. 3, 1963, 22, abstract 3A113 (Dokl. AN UzSSR, 1962, no. 6, 19-21 (summary in Uzb.))

TEXT: The author solves the problem of motion of a heavy material point along a cardioid with vertical axis of symmetry. An expression is obtained for the period of oscillations, and isochronism of small oscillations is shown. /Abstracter's note: Complete translation./

Card 1/1

APPROVED FOR RELEASE: 08/23/2000 CIA-RDP86-00513R001548410017-0"

"APPROVED FOR RELEASE: 08/23/2000 CIA-RDP86-00513R001548410017-0

L 6319-66 EWT(d) IJP(c)

ACC NR: AT5027501 SOURCE CODE: UR/3021/64/000/242/0009/0015

44,55 29 B+1

AUTHOR: Shalayev, V. G.

ORG: Tashkent State University im. V. I. Lenin (Tashkentskiy gosudarstvennyy universitet)

44,55

16,44,55

TITLE: Theory of integration of Chaplygin equations by the complete integral method

SOURCE: Tashkent. Universitet. Nauchnyye trudy, no. 242, 1964. Voprosy analiticheskoy mekhaniki i podzemnoy gidravliki (Problems in analytical mechanics and underground hydraulics), 9-15

TOPIC TAGS: differential equation

ABSTRACT: The author considers a mechanical system governed by

$$\dot{q}_\alpha = \frac{\partial H}{\partial p_\alpha}, \quad \dot{p}_\alpha = -\frac{\partial H}{\partial q_\alpha} - \sum_{\beta,\sigma=1}^{k} \sum_{\nu=k+1}^{n} \Theta_{\nu\sigma} \Omega_{\beta\nu\alpha} \frac{\partial H}{\partial p_\sigma} \frac{\partial H}{\partial p_\beta}; \quad (1)$$

$$(\alpha = 1, 2, \ldots, k),$$

where $H(q_1, \ldots, q_k, p_1, \ldots, p_k)$ is the Hamilton function

Card 1/2

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"APPROVED FOR RELEASE: 08/23/2000 CIA-RDP86-00513R001548410017-0

L 6319-66
ACC NR: AT5027501

$$\Omega_{\beta\nu\alpha} = \frac{\partial B_{\nu\beta}}{\partial q_\alpha} - \frac{\partial B_{\nu\alpha}}{\partial q_\beta}; \qquad (2)$$

$$\Theta_{\nu\sigma} = \frac{\partial^2 T_0}{\partial \dot{q}_\nu \partial \dot{q}_\sigma} + \sum_{\lambda=k+1}^{n} B_{\lambda\sigma} \frac{\partial^2 T_0}{\partial \dot{q}_\nu \partial \dot{q}_\lambda}$$

with connections characterizing nonholonomicity given by

$$\dot{q}_\nu = \sum_{\alpha=1}^{k} B_{\nu\alpha} \dot{q}_\alpha, \quad (\nu = k+1, \ k+2, \ \ldots, \ n). \qquad (3)$$

He studies the applicability of the complete integral method in connection with the theory of the Jacoby multiplier, establishing a theorem analogous to the classical one of Hamilton-Jacoby. He solves the Chaplygin problem differently from S. A. Chaplygin (Izbrannyye trudy po mekhanike i matematike, str. 426-433. GITTL Moskva, 1954) and answers the objections of M. I. Yefimov (K uravneniyam Chaplygina negolonomnykh mekhanicheskikh sistem. PMM, g. XVII, vyp. 6, 1953, str. 748-750) and N. A. Fufayev (Uravneniya Chaplygina i teorema o privodyashchem mnozhitele v sluchaye kvazikoordinat. PMM, t. XXV, vyp. 3, 1961, str. 385-390) relative to the Chaplygin problem. Orig. art. has: 47 formulas.

SUB CODE: MA, ME/ SUBM DATE: none/ ORIG REF: 009

Card 2/2

APPROVED FOR RELEASE: 08/23/2000 CIA-RDP86-00513R001548410017-0"

"APPROVED FOR RELEASE: 08/23/2000 CIA-RDP86-00513R001548410017-0

L 18724-63 EWT(1)/FCC(w)/BDS AFFTC/ASD/IJP(C)

ACCESSION NR: AR3006426 S/0124/63/000/008/A012/A012

SOURCE: RZh. Mekhanika, Abs. 8A66

54

AUTHOR: Shalayev, V. G.

TITLE: Integration of the equations of motion of holonomic mechanical systems in ignorable (excess) coordinates with a resistance proportional to the momentum

CITED SOURCE: Nauchn. tr. Tashkentsk. un-t, vy*p. 209, 1962, 48-59

TOPIC TAGS: Equation of motion, holonomic system, Hamilton-Jacobi theory, motion

TRANSLATION: A mechanical system, described by the so-called ignorable coordinates, which moves under the influence of a resistance force proportional to the momentum is considered. By direct calculation, (without substitution of the unknown variable) the Hamilton-Jacobi theorem for this system is formulated. I. L. Khmelevskiy

DATE ACQ: 28Aug63 SUB CODE: PH, MM ENCL: 00

Card 1/1

APPROVED FOR RELEASE: 08/23/2000 CIA-RDP86-00513R001548410017-0"

"APPROVED FOR RELEASE: 08/23/2000 CIA-RDP86-00513R001548410017-0

ACCESSION NR: AR4034720 S/0124/64/000/003/A009/A010

SOURCE: Ref. zh. Mekhan., Abs. 3A66

AUTHOR: Shalayev, V. G.

TITLE: The applicability of the whittaker method for the dynamic equations of Maggi

CITED SOURCE: Nauchn. tr. Tashkentsk. un-t, vy*p. 222, 1963, 73-78

TOPIC TAGS: Maggi form equation, nonholonomic mechanical system, Whittaker method

TRANSLATION: The equations of motion of non holonomic mechanical systems in the Maggi form are studied. It is presumed that the equations allow for the integral of energy. It is shown by the Whittaker method that just as soon as there is even one generalized speed among the kinematic parameters of the system, then with the use of the energy integral, the number of equations of motion can be decreased to one, in which case the new equation will as before have the appearance of a Maggi /Madzhi/ equation.

DATE ACQ: 02Apr64 SUB CODE: AI, MM ENCL: 00

Card 1/1

APPROVED FOR RELEASE: 08/23/2000 CIA-RDP86-00513R001548410017-0"

"APPROVED FOR RELEASE: 08/23/2000 CIA-RDP86-00513R001548410017-0

L 47155-66 EWT(d) IJP(c)

ACC NR: AR6000693 SOURCE CODE: UR/0124/65/000/009/A005/A005

28
B

AUTHOR: Shalayev, V. G.

16

TITLE: On the theory of integration of Chaplygin equations by the complete integral method

SOURCE: Ref. zh. Mekhanika, Abs. 9A43

REF SOURCE: Nauchn. tr. Tashkentsk. un-t, vyp. 242, 1964, 9-15

TOPIC TAGS: Hamilton equation, Hamiltonian Jacobi equation, mechanics, MOTION EQUATION

ABSTRACT: The problem of applying the complete integral method to the equations of motion of nonholonomic mechanical systems of the Chaplygin type is considered. A theorem is formulated, analogous to the Jacobi theorem, on the connection between the complete integral of the Hamilton-Jacobi equation and the general solution of the canonical system of equations of motion. The obtained results are illustrated with an example of a Chaplygin problem. V. I. Kirgetov [Translation of abstract]

SUB CODE: 20

Card 1/1 egh

APPROVED FOR RELEASE: 08/23/2000 CIA-RDP86-00513R001548410017-0"

"APPROVED FOR RELEASE: 08/23/2000 CIA-RDP86-00513R001548410017-0

ACC NR: AP7005134 SOURCE CODE: UR/0126/66/022/004/0598/0605

AUTHOR: Pavlov, V. A.; Shalayev, V. I.; Shmatov, V. T.

ORG: Institute of Metal Physics, AN SSSR (Institut fiziki metallov AN SSSR)

TITLE: Radiometallographic examination of the substructure of aluminum during creep

SOURCE: Fizika metallov i metallovedeniye, v. 22, no. 4, 1966, 598-605

TOPIC TAGS: x ray tube, x ray investigation, metal grain structure, creep / BSV x-ray tube

ABSTRACT: There exists a region of deformation in which the shear mechanism of plastic deformation during creep combines with the diffusion processes of recovery, and the course of plastic deformation during the steady-state stage of creep in this region is best described by Weertman's theory (J. Appl. Phys., 1955, 26, 1213; 1957, 28, 362). According to Weertman, during the steady-state stage of creep the nonconservative movement of dislocations at right angles to the slip plane represents the mechanism regulating the dynamic equilibrium between the processes of hardening and recovery. Then creep is accompanied by the appearance of a substructure whose development can be experimentally traced. Hence the authors, using Weertman's models as the basis, calculated and compared with experimental findings the development and behavior of elements of the substructure of individual grains of

 UDC: 539.376:548.73

APPROVED FOR RELEASE: 08/23/2000 CIA-RDP86-00513R001548410017-0"

"APPROVED FOR RELEASE: 08/23/2000 CIA-RDP86-00513R001548410017-0

ACC NR: AP7005134

99.99% pure Al as a function of the degree of deformation during creep. Specimens of Al were forged, rolled at room temperature, recrystallization-annealed at 500°C for 1 hr, and subjected to creep tests by means of uniaxial stretching at 350°C. The parameters of the grain substructure (angle α of random orientation within the grain, length L of fragment, angle φ between fragments) were determined with the aid of a BSV x-ray tube by the back-reflection method. It is thus established that the angle α of random mutual orientation of fragments linearly increases with the degree of deformation of the specimen. An analysis of the reflections (331) and (420) of the individual fragments into which the grain disintegrates in the process of creep reveals that once the steady-state stage of creep is reached (degree of deformation $\simeq$ 5%) the fragments become virtually stabilized in size; the linear increase in α occurs during the steady-state stage of creep, during which the fragments do not change in size, and is due to the increase in dislocation density. Orig. art. has: 6 figures, 12 formulas.

SUB CODE: 20/ SUBM DATE: 19Oct65/ ORIG REF: 011/ OTH: 007

Card 2/2

APPROVED FOR RELEASE: 08/23/2000 CIA-RDP86-00513R001548410017-0"

"APPROVED FOR RELEASE: 08/23/2000 CIA-RDP86-00513R001548410017-0

Determination of the Grain Orientation With Electron Microscopic Photographs of Pickling Patterns SOV/32-25-6-18/53

pyramid surfaces. The surfaces are not entirely even; they exhibit a stepped configuration, the step faces being cube planes. It is stated on the strength of this observation that the determination of grain orientation is thereby rendered more difficult and may be made with a slighter error only in the case when 2 or 3 surfaces of the pickling patterns exhibit similar inclination angles with respect to the sample surface. The electron microscopic photographs shown were taken by V. I. Syutkina. There are 2 figures and 3 references, 1 of which is Soviet.

ASSOCIATION: Institut fiziki metallov Akademii nauk SSSR (Institute of Metal Physics of the Academy of Sciences, USSR)

Card 2/2

APPROVED FOR RELEASE: 08/23/2000 CIA-RDP86-00513R001548410017-0"

"APPROVED FOR RELEASE: 08/23/2000 CIA-RDP86-00513R001548410017-0

SHALAYEV, V.V.

Using reinforced concrete blocks for the construction of blooming mill soaking pits. Metallurg no.8:28-29 Ag '56. (MLRA 9:10)

1.Nachal'nik obzhimnogo tsekha Novo-Tagil'skogo metallurgicheskogo zavoda.
(Rolling mills) (Reinforced concrete construction)

APPROVED FOR RELEASE: 08/23/2000 CIA-RDP86-00513R001548410017-0"

"APPROVED FOR RELEASE: 08/23/2000 CIA-RDP86-00513R001548410017-0

NOSOV, G.L., inzh.; KITAYEV, B.I., dokotr tekhn.nauk, prof.; BURKSER, V.Ye., inzh.; RYABOKON', N.K., inzh.; SHALAYEV, V.V., inzh.

Improving the performance of soaking pits. Stal' 20 no. 12:1141-1145 D '60 (MIRA 13:12)

(Furnaces, Heating)
(Rolling mills--Equipment and supplies)

APPROVED FOR RELEASE: 08/23/2000 CIA-RDP86-00513R001548410017-0"

"APPROVED FOR RELEASE: 08/23/2000 CIA-RDP86-00513R001548410017-0

SHALAYEV, V.V.; BURKSER, V.Ye.; BORODIN, P.P.; D'YACHKOV, P.N.; PURGIN, A.K.; BOL'SHAKOV, I.P.

Testing dinas concrete blocks in blooming mill soaking pits. Ogneupory 27 no.6:264-269 '62. (MIRA 15:5)

1. Nizhne-Tagil'skiy metallurgicheskiy kombinat (for Shalayev, Burkser, Borodin). 2. Vostochnyy institut ogneuporov (for D'yachkov, Purgin, Bol'shakov).
(Firebrick) (Refractory concrete) (Furnaces, Heating)

APPROVED FOR RELEASE: 08/23/2000 CIA-RDP86-00513R001548410017-0"

"APPROVED FOR RELEASE: 08/23/2000 CIA-RDP86-00513R001548410017-0

SHALAYEV, Viktor Vasil'yevich; KALININ, Aleksandr Ivanovich; KOLBIN, Anatoliy Ivanovich; MEREKIN, Boris Vasil'yevich; FEYGIN, Geshel' Davidovich; VINOKUROV, Izrail Yakovlevich; SKAKUN, Vladimir Vasil'yevich; KAPUSTIN, Arkadiy Ivanovich; MOGILEVSKIY, David Markovich; ALEKSEYEVA, Tat'yana Alekseyevna; BABAYLOV, Finopent Ivanovich; SKRYABIN, N.P., red.; KRYZHOVA, M.L., red.izd-va; KOROL', V.P., tekhn. red.

[Improving procedures and equipment in shape rolling mills] Sovershenstvovanie tekhnologii i oborudovaniia v sortoprokatnom tsekhe. Sverdlovsk, Metallurgizdat, 1963. 163 p. (MIRA 16:1)

(Rolling (Metalwork))--Equipment and supplies)

APPROVED FOR RELEASE: 08/23/2000 CIA-RDP86-00513R001548410017-0"

"APPROVED FOR RELEASE: 08/23/2000 CIA-RDP86-00513R001548410017-0

POPOV, A.A., inzh.; FAYZULIN, A.M., inzh.; MALININ, V.A., inzh.; CHEREPANOV, N.R., inzh.; SHALAYEV, V.V., inzh.

Improving boring and blasting operations in open pits. Vzryv. delo no.51/8:143-149 '63. (MIRA 16:6)

(Boring) (Blasting)

APPROVED FOR RELEASE: 08/23/2000 CIA-RDP86-00513R001548410017-0"

"APPROVED FOR RELEASE: 08/23/2000 CIA-RDP86-00513R001548410017-0

SHALAYEV, YU.V.

Curve of growth and excitation temperature for Arcturus derived from observations of CrI lines. Astron.tsir. no.211:16-17 My '60. (MIRA 13:10)

1. Gosudarstvennyy astronomicheskiy institut im. Shternberga. (Stars)

APPROVED FOR RELEASE: 08/23/2000 CIA-RDP86-00513R001548410017-0"

"APPROVED FOR RELEASE: 08/23/2000 CIA-RDP86-00513R001548410017-0

30824
[illegible]
[illegible]

3,1540

AUTHOR: Shalayev, Yu.V.

TITLE: Helium emission in the solar chromosphere

PERIODICAL: Astronomicheskiy zhurnal, v.38, no.5, 1961, 997-998

TEXT: The population of helium levels in the chromosphere up to [illegible] calculated for a height of 3000 km and different temperature values. In the calculations the following were taken into consideration: spontaneous transitions from the upper levels to the lower levels, excitation by radiation, excitation by electron impact, recombination at the various levels (applying the formula of C. G. Cillie and D. H. Menzel (Ref.2: Harvard Observ. Circ., No.410, 1935)) and the resulting ionization (Ref.3: E. H. Bohm, J. Astrophys., 35, 179, 1955). In view of the fact that singlet and triplet helium systems do not combine, orthohelium was considered as being an element with the ionization potential of 4.7 V, and the level 2^3S was considered [illegible] the basic level. For parahelium the population was calculated for the following three cases: T_{rad} = 12000°C, T_e = 15000°C;

4

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"APPROVED FOR RELEASE: 08/23/2000 CIA-RDP86-00513R001548410017-0

ACCESSION NR: AP4041565 S/0293/64/002/003/0414/0432

AUTHOR: Ivanov, Yu. N.; Tokarev, V. V.; Shalayev, Yu. V.

TITLE: Optimum trajectories and parameters of space vehicles with limited-power engines

SOURCE: Kosmicheskiye issledovaniya, v. 2, no. 3, 1964, 414-432

TOPIC TAGS: optimum trajectory, interplanetary trajectory, optimum interplanetary trajectory, space vehicle weight, space vehicle weight parameter

ABSTRACT: A plane problem of the round-trip flight of a cosmic vehicle from the gravitational field of the earth to that of another planet is discussed. This problem of transportation of a maximum load (in variational formulation) consists of determining the optimum trajectories and optimum control of the acceleration vector due to thrust, and of the selection of the optimum weight parameters of vehicle components. The trajectory of such a flight consists of the following sections: 1) acceleration and take-off from an orbit around the earth in the terrestrial gravitational field; 2) flight

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ACCESSION NR: AP4041565

in the central field of the sun; 3) deceleration in the gravitational field of the planet and entering some orbit around it; 4) acceleration and take-off from that orbit; 5) return flight; and 6) deceleration and entering some orbit around the earth. The results of the calculation of optimum trajectories of the flight to an external planet (Mars) and internal planet (Venus) are given, as well as the data on the optimum acceleration and deceleration sections of the trajectories, and on the negligible effect of the gravitational fields of planets during flight between their orbits. For the sake of simplicity it is assumed that the orbits of planets are circular and coplanar. Orig. art. has: 17 figures, 5 tables, and 40 formulas.

ASSOCIATION: none

SUBMITTED: 21Aug63 ATD PRESS: 3055 ENCL: 00

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

Card 2/2

APPROVED FOR RELEASE: 08/23/2000 CIA-RDP86-00513R001548410017-0"

"APPROVED FOR RELEASE: 08/23/2000 CIA-RDP86-00513R001548410017-0

ACCESSION NR: AP4041566 S/0293/64/002/003/0433/0440

AUTHOR: Ivanov, Yu. N.; Shalayev, Yu. V.

TITLE: Method of steepest descent applied to determining interorbital trajectories with limited-power engines

SOURCE: Kosmicheskiye issledovaniya, v. 2, no. 3, 1964, 433-440

TOPIC TAGS: space trajectory, steepest descent method, interorbital trajectory, limitedpower engine, optimum round trip flight

ABSTRACT: Two methods are discussed for solving the variational plane-flight problem of a space vehicle equipped with a limited-power engine between coplanar circular orbits in a central gravitational field: 1) Ritz's method, with determination of the coefficients by the steepest-descent method; and 2) the method of functional steepest descent. The selection of optimum flight trajectories and optimum regimes of operation of an ideal engine of limited power is reduced to the determination of the minimum extremals of the functional

$$J = \int_0^T a^2 dt,$$

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ACCESSION NR: AP4041566

where a is the acceleration due to reactive thrust and T is the time of motion. The character of the convergence of the functional J in both methods of solution is shown in diagrams, and the much shorter time of calculation on electronic digital computers by the second method is pointed out. The conditions for optimum round-trip flight (with return on the initial orbit) for cases of "symmetrical" and "asymmetrical" return flights are also examined. Orig. art. has: 9 figures and 12 formulas.

ASSOCIATION: none

SUBMITTED: 21Aug63 ATD PRESS: 3059 ENCL: 00

SUB CODE: SV NO REF SOV: 006 OTHER: 005

Card 2/2

APPROVED FOR RELEASE: 08/23/2000 CIA-RDP86-00513R001548410017-0"

"APPROVED FOR RELEASE: 08/23/2000 CIA-RDP86-00513R001548410017-0

IVANOV, Yu.N.; TOKAREV, V.V.; SHALAYEV, Yu.V.

Optimal trajectories and iptimal parameters of cosmic apparatus with motors of limited power. Kosm. issl. 2 no.3:414-432 My-Je '64. (MIRA 17:7)

APPROVED FOR RELEASE: 08/23/2000 CIA-RDP86-00513R001548410017-0"

"APPROVED FOR RELEASE: 08/23/2000 CIA-RDP86-00513R001548410017-0

IVANOV, Yu.N.; SHALAYEV, Yu.V.

Use of the steepest descent method in the calculation of intercorbital trajectories in the case of motors of limited power. Kosm. issl. 2 no.3:433-440 My-Je '64. (MIRA 17:7)

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L 15218-66 EWT(1)/EWP(m)/ES(v)-3/EWA(d) GW

ACC NR: AP5026048 SOURCE CODE: UR/0293/65/003/005/0687/0693

79
78
B

AUTHORS: Ivanov, Yu. N.; Shalayev, Yu. V.

ORG: none

TITLE: Optimum precession of the plane of a circular orbit by a transverse force 12,44

SOURCE: Kosmicheskiye issledovaniya, v. 3, no. 5, 1965, 687-693

TOPIC TAGS: artificial satellite orbit, circular orbit, vehicle engine, propulsion thrust, variational problem, Hamilton equation, linear differential equation

ABSTRACT: This paper is devoted to determining the optimum laws for thrust action in the maneuver of turning the plane of a circular orbit. The case of small angles is examined, and linear equations are then studied and solved analytically. Variational problems are formulated for ideal engines and uncontrollable engines. The differential equations of motion and boundary conditions describing the dynamic maneuver are:

$$\dot{\mathbf{r}} = \mathbf{v}, \quad \dot{\mathbf{v}} = a\mathbf{e} + \mathbf{R}(\mathbf{r}, t),$$
$$\mathbf{r}(0) = \mathbf{r}_0, \quad \mathbf{v}(0) = \mathbf{v}_0,$$
$$\mathbf{r}(T) = \mathbf{r}_1, \quad \mathbf{v}(T) = \mathbf{v}_1.$$

for an ideal engine of limited power. Differential equations describing the maneuver in question are derived: $\dot{\chi} = ae \sin(t - \Omega_1)$, $\dot{\omega} = ae \cos(t - \Omega_1)$,

$$\chi(0) = 0, \quad \omega(0) = 0,$$
$$\chi(T) = 0, \quad \omega(T) = i_1,$$

UDC: 629.191.519.3

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ACC NR: AP5026048

The variational problems for the two types of engines are formulated under the assumption that the modulus of reactive acceleration "a" reaches a maximum when crossing the nodal line, and that the control functional J_1 is not a function of the position of the nodal line. For an arbitrary angle Ω_1 that differs from Ω_1^*, the laws of e(t) and $\delta(t)$:

I. for $-T_M/4s \leqslant \Omega_1 \leqslant T_M/4s$

$$\begin{aligned} &e=+1, \quad \delta=1 \quad \text{when} \quad 0 \leqslant t \leqslant t_1, \quad t_1=\Omega_1+T_M/4s, \\ &e=-1, \quad \delta=1 \quad \text{when} \quad t_2 \leqslant t \leqslant t_1+\pi, \quad t_2=\pi+\Omega_1-T_M/4s, \\ &e=+1, \quad \delta=1 \quad \text{when} \quad t_2+\pi \leqslant t \leqslant t_1+2\pi, \\ &\ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots \\ &e=(-1)^{m-1}, \quad \delta=1 \quad \text{when} \quad t_2+(m-2)\pi \leqslant t \leqslant t_1+(m-1)\pi, \end{aligned}$$

II. for $T_M'/4s \leqslant \Omega_1 \leqslant \pi - T_M/4s$

$$\begin{aligned} &e=+1, \quad \delta=1 \text{ when} \quad t_1 \leqslant t \leqslant t_2, \quad t_1=\Omega_1-T_M/4s, \\ &e=-1, \quad \delta=1 \text{ when} \quad t_1+\pi \leqslant t \leqslant t_2+\pi, \quad t_2=\Omega_1+T_M/4s, \\ &e=+1, \quad \delta=1 \text{ when} \quad t_1+2\pi \leqslant t \leqslant t_2+2\pi, \qquad (3.21) \\ &\ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots \\ &e=(-1)^{m-1}, \quad \delta=1 \text{ when} \quad t_1+(m-1)\pi \leqslant t \leqslant t_2+(m-1)\pi, \\ &\ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots \end{aligned}$$

The authors thank D. Ye. Okhotsimskiy for valuable advice and attention. Orig. art. has: 43 formulas.

SUB CODE: 22/ SUBM DATE: 05Jun64/ SOV REF: 004/ OTH REF: 004

Card 2/2

APPROVED FOR RELEASE: 08/23/2000 CIA-RDP86-00513R001548410017-0"

"APPROVED FOR RELEASE: 08/23/2000 CIA-RDP86-00513R001548410017-0

BAKHRAKH, Ye.E.; KOROBKOVA, Ye.I.; SHALAYEVA, A.F.

Chemical nature and serological properties of the specific polysaccharide-containing fraction of the plague microbe. Izv.Irk.gos.nauch.-issl.protivochum.inst. 18:127-133 '58. (MIRA 13:7)

(POLYSACCHARIDES) (PASTEURELLA PESTIS)

APPROVED FOR RELEASE: 08/23/2000 CIA-RDP86-00513R001548410017-0"

"APPROVED FOR RELEASE: 08/23/2000 CIA-RDP86-00513R001548410017-0

SHALAYEVA, L. F.

USSR/Chemistry - Physical chemistry

Card 1/1 Pub. 22 - 33/51

Authors : Frisman, E. V., and Shalayeva, L. F.

Title : The connection between the molecular weight and characteristic viscosity for polydichlorostyrene in toluene

Periodical : Dok. AN SSSR 101/5, 907-909, Apr 11, 1955

Abstract : Studies were conducted to obtain a proper formula for determining the molecular weight of polydichlorostyrene according to viscosimetric measurements. The connection between molecular weight and viscosity characteristics of polydichlorostyrene in toluene was determined according to light diffusion measurements. It was established that the substitution of two hydrogen atoms by chlorine atoms does not effect the molecular chain flexibility in the polystyrene molecule. Other pertinent results are listed. Six references: 5 USA and 1 USSR (1943-1950). Table; graphs.

Institution : The A. A. Zhdanov State University, Leningrad

Presented by : Academician A. N. Terenin, November 1, 1954

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"APPROVED FOR RELEASE: 08/23/2000 CIA-RDP86-00513R001548410017-0

S/191/60/000/006/015/015
B004/B054

AUTHORS: Shalayeva, L. F., Domareva, N. M.

TITLE: Nephelometric Titration of Block Copolymer Solutions

PERIODICAL: Plasticheskiye massy, 1960, No. 6, pp. 68 - 71

TEXT: The authors used the nephelometric titration to solve the problem as to whether the block copolymer obtained from СКН-26 (SKN-26) rubber and copolymer styrene + СН-28 (SN-28) acrylonitrile constitutes a chemical compound or only a mixture. The optical scheme of the testing apparatus is shown in Fig. 1. The measurement was made in passing light by means of photocells the circuit of which is shown in Fig. 2. The authors investigated the dependence of the turbidity degree on the amount of precipitant added. The turbidity degree was expressed as the ratio between the turbidity measured and the maximum turbidity corresponding to complete precipitation. The authors mention the difficulties of finding a combination of solvent and precipitant at which no simultaneous precipitation of rubber and copolymer occurred. Experiments with dichloro ethane + methanol (Fig. 3), methyl acetate + methanol (Fig. 4),

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Nephelometric Titration of Block Copolymer Solutions

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B004/B054

cyclohexane + methanol (Fig. 5) were negative since the precipitation curves overlapped. Only in the case of acetone + methanol (Fig. 6), the precipitation of the rubber already occurred with an addition of 10-15% of methanol, that of the copolymer only with an addition of 34-45% of methanol. Fig. 7 shows the titration curves for the 0.02% solutions of rubber, copolymer, block copolymer, and a mechanical mixture of rubber + copolymer. The titration curve for the mechanical mixture shows a salient point corresponding to the complete precipitation of rubber and the beginning precipitation of the copolymer. The titration curve for the block copolymer shows no salient point, similarly to the curves for rubber and the copolymer. This proves that the block copolymer is a chemical compound. There are 7 figures and 6 references: 1 Soviet, 3 US, 1 Belgian, 1 British, and 1 German.

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"APPROVED FOR RELEASE: 08/23/2000 CIA-RDP86-00513R001548410017-0

SHALAYEVA, L.F.

Diffusion of dextran fractions in water. Vysokom. soed. 2 no.8:1137-1143 Ag '60. (MIRA 13:9)

1. Nauchno-issledovatel'skiy institut polimerizatsionnykh plastmass, Leningrad.

(Dextran)

APPROVED FOR RELEASE: 08/23/2000 CIA-RDP86-00513R001548410017-0"

"APPROVED FOR RELEASE: 08/23/2000 CIA-RDP86-00513R001548410017-0

SHALAYEVA, L.P.; DOMAREVA, N.M.

Polydispersity and extent of branching of high pressure polyethylene studied by the light scattering method. Plast.massy no.9:10-15 '61. (MIRA 15:1)

(Polyethylene) (Molecular weights)

APPROVED FOR RELEASE: 08/23/2000 CIA-RDP86-00513R001548410017-0"

"APPROVED FOR RELEASE: 08/23/2000 CIA-RDP86-00513R001548410017-0

S/191/62/000/006/001/016
B110/B138

AUTHORS: Shalayeva, L. F., Domareva, N. M.

TITLE: The effect of polydispersity and branching on the mechanical properties of high-density polyethylene

PERIODICAL: Plasticheskiye massy, no. 6, 1962, 3-4

TEXT: The polydispersity and branching of high-density polyethylene were compared with the tensile strength limit, yield stress, and breaking elongation. Materials tested were 30·10·0.13 mm films (working surface, 10·10 mm) of three samples (A, B, M) obtained by fractional precipitation. Branching increased in the order B, A, M. Investigation using a Schopper machine at 50 mm/min and room temperature for samples A, M, and B with a gel content of 0, 10 and 15%, respectively, gave tensile strength limits of 150, 145 and 115 kg/cm^2, respectively, breaking elongation of 515, 510, and 283%, respectively, and yield stresses of 95, 108, and 115 kg/cm^2, respectively. The tensile strength limit increases with molecular weight up to a certain value, after which it is no longer dependent. The maximum tensile strength limit increases with decreasing branching and is 175 kg/cm^2

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for M, 150 kg/cm^2 for A, and 130 kg/cm^2 for B. Similar results are obtained for the breaking elongation. The yield stress of the various fractions of M and A does not depend on the mean molecular weight and branching of the long chains. This confirms earlier views that the yield stress is governed by the branching of the short chains. Investigation of the insoluble fractions showed a tensile strength of 126-158 kg/cm^2 and a breaking elongation of 103-155 kg/cm^2 for B. The respective values for M were 132 and 100 kg/cm^2. Thus, the gel content of the high-density polyethylene did not reduce the strength, but did reduce the elasticity of the film. There are 4 figures and 2 tables.

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L 27787-65 EWT(m)/EPF(c)/T/EWP(j)/EPR Pc-4/Pr-4/Ps-4 RPL WW/RM

ACCESSION NR: AP5004307 S/0191/65/000/002/0009/0012

32

B

AUTHOR: Shalayeva, L. F.; Domareva, N. M.; Andreyeva, I. N.; Veselovskaya, L. N.; Nikolayeva, I. I.; Gol'denberg, A. L.

TITLE: Study of the polydispersity and structure of an ethylene-propylene copolymer

SOURCE: Plasticheskiye massy, no. 2, 1965, 9-12

TOPIC TAGS: ethylene copolymer, propylene copolymer, polyolefin synthesis, polymer structure, polydispersity, Ziegler catalyst, polymer fractionation, polymer molecular weight

ABSTRACT: Ethylene and propylene were solution-polymerized in the presence of a Ziegler catalyst in order to study the molecular weight distribution, composition and intrinsic viscosity of the copolymer and the mutual effects of molecular weight and viscosity. The monomers were polymerized at 4-5 atm. with triethylaluminum-titanium tetrachloride to form a copolymer containing 4-10 mol.% propylene, determined spectrographically from the methyl group concentrations. The intrinsic viscosity was measured in decalin solution on a capillary viscometer at 135C, the weight-average molecular weight was determined with an optical

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L 27787-65
ACCESSION NR: AP5004307

nephelometer at 140C in α-chloronaphthalene, and the polymer was fractionated by precipitation with the solvent-pair tetralin-triethylene glycol. The molecular weight distribution was shown to be similar to that of low pressure polyethylene and to be described satisfactorily by Tung's distribution functions (Journ. Polymer Science v. 24, 1957, 333). The molecular weight of the fractions decreased with increasing content of propylene links. Fractionation was shown to proceed both by copolymer composition and by molecular weight. The studied specimen did not indicate a direct dependence of molecular weight on intrinsic viscosity, and the latter parameter is not recommended for determining the molecular weight in this type of copolymer. Orig. art. has: 5 tables, 5 figures and 2 formulas.

ASSOCIATION: None

SUBMITTED: 00 ENCL: 00 SUB CODE: OC

NO REF SOV: 003 OTHER: 005

Card 2/2

APPROVED FOR RELEASE: 08/23/2000 CIA-RDP86-00513R001548410017-0"

"APPROVED FOR RELEASE: 08/23/2000 CIA-RDP86-00513R001548410017-0

L 45464-65 EPF(c)/EWP(j)/EWT(m) Pc-4/Pr-4 RM

ACCESSION NR: AP5009311 S/0191/65/000/004/0005/0010

AUTHORS: Shalayeva, L. E.; Karakhanov, I. A.; Veselovskaya, L. N.; Domareva, N. M.; Il'chenko, P. A.; Semenova, A. S.; Nikolayeva, I. I.

TITLE: Polydispersion and structure of medium pressure polyethylene 15 24 B

SOURCE: Plasticheskiye massy, no. 4, 1965, 5-10

TOPIC TAGS: polyethylene, fractionation, dispersion characteristic, (Nickol fractionation method)/ URS 50 radiation device, NIIPP viscosimeter

ABSTRACT: The fusion viscosity of fractionated and unfractionated medium pressure polyethylene was studied along with molecular weight distributions and structural phenomena of various fractions. The polyethylene fractionation was carried out by the Nickol method. The ethylene was composed of:

C_2H_4	99.3—99.7 volume %
O_2	0.0028—0.0035
CO	0
CO_2	0
H_2O	0.07—0.12 g/m^3

Special test equipment included a URS-50 radiation device for measuring degrees of crystallization and an NIIPP machine for determining fusion viscosity. It was found

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L 45464-65

ACCESSION NR: AP5009311

that the degree of crystallization of the first fractions (the large molecular fractions) is a little lower than that of unfractionated polyethylene. Roentgen diffraction curves (2 β rotation) are given for several sample fractions. A study was made of turbidity characteristics of the polyethylene in nonane and tetralin solutions, and graphs were plotted showing the quantity $C/(\tau - \tau_0)$ versus C, where C is the solution concentration, τ is the solution turbidity, and τ_0 is the solvent turbidity. Additional measurements of the speed of displacement under stress at 190C were made for both the fractionated and unfractionated specimens. The authors found that: 1) the molecular weight distribution of medium pressure polyethylene can be described by Tung's equation (L. H. Tung, J. Polymer Sci., 24, 333, 1957); 2) there are indications of high macromolecular stiffness of medium pressure polyethylene; 3) the interlayer distance is independent of molecular weight; 4) the shape of the fusion flow curve depends on the polydispersion characteristics; and 5) the temperature coefficient of fusion viscosity of polyethylene weakly depends upon the molecular weight. Orig. art. has: 12 figures and 3 tables.

ASSOCIATION: none

SUBMITTED: 00 ENCL: 00 SUB CODE: MT

NO REF SOV: 003 OTHER: 012

Card 2/2

APPROVED FOR RELEASE: 08/23/2000 CIA-RDP86-00513R001548410017-0"

"APPROVED FOR RELEASE: 08/23/2000 CIA-RDP86-00513R001548410017-0

SHALAYEVA, N.M.

MATEKIN, P.V.; TURLYGINA, Ye.S.; SHALAYEVA, N.M.

Biology of protostrongylid larvae in sheep and goats in connection with the epizootology of the infection caused by Protostrongylus in Central Asia. Zool.zhur. 33 no.2:373-394 Mr-Ap '54. (MLRA 7:5)

1. Biologo-pochvennyy fakul'tet Moskovskogo gosudarstvennogo universiteta. (Soviet Central Asia--Nematoda) (Nematoda--Soviet Central Asia) (Parasites--Sheep) (Parasites--Goats)

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"APPROVED FOR RELEASE: 08/23/2000 CIA-RDP86-00513R001548410017-0

MOZGOVOY, A.A., POPOVA, T.I., SHALAYEVA, N.M., SHMYTOVA, G.Ya.

In defense of the specific independence of some ascarids parasitic in man and animals. Trudy Gel'm. lab. 10:153-165 '60. (MIRA 13:7)

(ASCARIDS AND ASCARIASIS)

APPROVED FOR RELEASE: 08/23/2000 CIA-RDP86-00513R001548410017-0"

"APPROVED FOR RELEASE: 08/23/2000 CIA-RDP86-00513R001548410017-0

SPASSKIY, A.A.; SHALAYEVA, N.M.

Discovery of Ctenotaenia marmotae (Frohlich, 1802) in marmots of the U.S.S.R. Trudy Gel'm.lab. 11:286-292 '61. (MIRA 15:12)
(Parasites--Marmots) (Ctenotaenia)

APPROVED FOR RELEASE: 08/23/2000 CIA-RDP86-00513R001548410017-0"

"APPROVED FOR RELEASE: 08/23/2000 CIA-RDP86-00513R001548410017-0

MATVEYEV, [illegible]

Some patterns in the distribution of helminthiases of farm animals in the forest-steppe landscape; the concept of the epizootiological chain. Zool. zhur. 43 no.7:965-974 '64. (MIRA 17:12)

1. Biological-Pedological Faculty, Moscow State University.

APPROVED FOR RELEASE: 08/23/2000 CIA-RDP86-00513R001548410017-0"

"APPROVED FOR RELEASE: 08/23/2000 CIA-RDP86-00513R001548410017-0

PANKRATOV, A.V.; AKHANSHCHIKOVA, [illegible]; [illegible]VA, [illegible]; KUZNETSOVA, T.V.

Reaction of tetrafluorohydrazine with potassium iodide aqueous solution. Zhur. neorg. khim. 9 n.[illegible]1517-1519 Je '63
(MIRA 1/[illegible])

APPROVED FOR RELEASE: 08/23/2000 CIA-RDP86-00513R001548410017-0"

"APPROVED FOR RELEASE: 08/23/2000 CIA-RDP86-00513R001548410017-0

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S/120/60/000/03/039/055
E032/E514

21.3200

AUTHORS: Bondar', A.D., Yemelyanov, A.S., Klyucharev, A.P., Lishenko, V. N. Medvanik, A.D. Nikolaychuk and O. Ye. Shalayeva

TITLE: Preparation of Metal Foils from Pure Isotopes

PERIODICAL: Pribory i tekhnika eksperimenta, 1960, No 3, pp 134-136

ABSTRACT: A summary is given of the various methods which can be used to prepare metal foils of Ni, Cu, Zn, Cd, Co, Mn, Fe, Ag, Cr, Pb, Be, Ge and Zr suitable for use as targets in nuclear scattering experiments. The authors have used three methods for obtaining thin (0.1-10μ) foils, namely, electrolytic deposition, direct evaporation in vacuum, and thermal dissociation. In any of these methods it is important to choose a suitable base which can then be removed, since the foils must frequently be used on their own. The apparatus used in the electrolytic method is shown in Fig 1. In the latter figure 1 is the anode (platinum), 2 is a perspex cylinder, 3 is a copper

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Preparation of Metal Foils from Pure Isotopes

packing, 4 is the cathode, 5 is a copper contact for the cathode and 6 is the base (perspex). This device was used to obtain free foils of Ni, Cu, Zn, Cd, Fe, Pb, Co, Mn, Ag and Cr. The first six of these were obtained both from naturally occurring elements and elements enriched with stable isotopes. The various electrolytes used to obtain the foils are shown in column 3 of the table on p 135. In order to obtain thin foils of Ge isotopes, available in samples of a few tens of mg, the graphite evaporator shown in Fig 2 was employed. The evaporator was mounted directly on the copper leads (2). A tantalum plate 0.1 mm thick was placed above the evaporator at a distance of about 3 cm. In this way a Ge layer 3 to 4 μ thick was obtained from 15 to 20 mg of the isotope. The film was separated from the base by bending the latter. In order to prevent damaging the Ge film, it was covered with a thin layer of varnish. In order to obtain thin foils of Be, a beryllium oxide heater was used, as described by Sinel'nikov in Ref 8. 1 to 2 μ thick Be foils could be

Card 2/3 obtained in this way. Zr foils 5 to 10 μ thick were

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Preparation of Metal Foils from Pure Isotopes

obtained by the thermal dissociation method. The sample was in the form of ZrI_4 placed in a special sealed ampoule. The compound was dissociated at a hot molybdenum base. The iodine was pumped off and removed by a cold trap, while the Zr was deposited on the molybdenum base. The molybdenum base was then dissolved in nitric acid. The amount of Zr necessary was 30 to 40 mg. The metal films obtained by the above methods were found to be stable during experiments with 5.5, 6.8 and 20 MeV protons. There are 2 figures, 1 table and 10 references, 6 of which are Soviet and 2 English.

ASSOCIATION: Fiziko-tekhnicheskiy institut AN UkrSSR (Physico-Technical Institute, Ac. Sci., UkrSSR)

SUBMITTED: May 22, 1959

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AUTHORS: Bondar', A. D., Yemlyaninov, A. S., Kiryucharev, A. P., Lishenko, L. G., Melyanik, V. N., Nikolayychuk, A. D., Shalayeva, O. Ye.

TITLE: The Production of Isotope Targets for Nuclear Research

PERIODICAL: Izvestiya Akademii nauk SSSR. Seriya fizicheskaya, 1960, Vol. 24, No. 7, pp. 929-933

TEXT: This article is the reproduction of a lecture delivered at the 10th All-Union Conference on Nuclear Spectroscopy held in Moscow from January 19 to 27, 1960. Methods of preparing foils from 16 elements are discussed. The authors used three methods for the preparation of free foils: electrolytic deposition, evaporation in vacuum by heating, and thermal dissociation. The principal characteristics of the three methods are briefly outlined. In the case of the electrolytic deposition, e.g., the selection of the right electrolyte is extremely important, the working conditions play a great part and so does the regeneration of the isotope. In the method of thermal dissociation, an important factor is the selection of the chemical compound

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and the temperature conditions, and as for the evaporation method, [illegible] and construction of the vaporizer are very important. Table 1 gives data for the preparation of foils from the elements Ni, Cu, Co, Zn, Cd, Mn, Fe, Ag, Cr, Sn by the electrolytic procedure, and specifies the compositions of electrolytes and the operational conditions in electrolysis. The lead foils were prepared by using 50 - 60 mg of lead, the electrolyte was [illegible] perchloric acid with an addition of gelatin. In order to obtain a homogeneous Pb deposition, the anode was rotated eccentrically. The preparation of Ge and Sn foils by the evaporation method has been described a number of times, but the large isotope losses have never been avoided. With a view to reducing these losses the authors made use of a graphite crucible (Fig. 2), out of which Ge and Sn were evaporated onto tantalum. The preparation of foils from other elements by this method is briefly dealt with. Foils of Zr, Ti, and Cr were prepared by thermal dissociation. This method involves the use of volatile compounds of these metals; the apparatus shown in Fig. 3 for the preparation of Zr and Ti iodides is accurately described. To prepare chromium iodide, the authors developed a new procedure. They prepared a paste-like silver chromium amalgam and thereon obtained chromium iodide sealed in an ampul with the device shown in Fig. 4 at a temperature

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of 300°C. The ampul was broken under toluene and the chromium iodide was poured into a crucible (Fig. 5) together with the toluene. The crucible was then evacuated in a vacuum chamber, the toluene was evaporated, and the iodide was then heated to 800°C. The evaporating iodide was passed over a heated base, where it decomposed. The chromium deposited on the base, while the iodine was intercepted. The targets prepared by the methods described exhibit good properties. There are 5 figures, 1 table, and 10 references: 9 Soviet and 1 US.

ASSOCIATION: Fiziko-tekhnicheskiy institut Akademii nauk USSR (Institute of Physics and Technology of the Academy of Sciences UkrSSR)

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BONDAR', A.D.; YEMLYANINOV, A.S.; KLYUCHAREV, A.P.; LISHENKO, L.G.; MEDYANIK, V.N.; NIKOLAYCHUK, A.D.; SHALAYEVA, O.Ye.

Preparing the targets from isotopes for nuclear studies. Izv.AN SSSR Ser.fiz. 24 no.7:929-933 Jl '60. (MIRA 13:7)

1. Fiziko-tekhnicheskiy institut Akademii nauk USSR.
(Isotopes) (Nuclear research)

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