GUDKOV, A.S.; KIYEVLENKO, Ye.Ya.; KONDRASHEV, S.N.; YERMAKOV, N.P., retsenzent; LAZ'KO, Ye.M., retsenzent; PETROV, V.P., retsenzent; TATARINOV, P.M., retsenzent; KHOTENK, M.M., retsenzent; MAKSIMOV, A.A., nauchn. red.; FEDYUK, V.I., nauchn. red.

[Fundamentals of prospecting for piezo-optic mineral deposits] Osnovy poiskov i razvedki mestorozhdenii p'ezo-opticheskikh mineralov; metodicheskoe rukovodstvo. Moskva, Gosgeoltekhizdat, 1963. 217 p. (MIRA 17:6)

SMIRNOV, V.I., akademik, red.; YERMAKOV, N.P., red.; DOLGOV, Yu.A., red.; SOKOLOV, G.A., red.; KHITAROV, N.I., red.

[Mineralogical thermometry and barometry] Mineralogicheskaia termometriia i barometriia. Moskva, Nauka, 1965. 327 p. (MIRA 18:5)

1. Akademiya nauk SSSR. Nauchnyy Sovet po rudoobrazovaniyu.

KOROLEV, Aleksey Vasil'yevich; SHEKHTMAN, Pavel Aleksandrovich; VOL'FSON, F.I., retsenzent; YERMAKOV, N.P., red.; SMIRNOVA, Z.A., ved. red.

[Structural conditions governing the distribution of postmagmatic ores] Strukturnye usloviia razmeshcheniia poslemagmaticheskikh rud. Moskva, Nedra, 1965. 506 p. (MIRA 18:4)

BOGDANOV, A.A., prof.; YERMAKOV, N.P.; KOPTEV-DVORNIKOV, V.S.; KHASHENINNIKOV, G.F.; LEONOV, G.P.; SMIRNOV, V.I. akad.

International Geological Congress in New Delhi. Vest. Mosk. un. Ser. 4: Geol. 20 no.3:3-16 My-Je '65. (MIRA 18:7)

LIDER, V.A.; PERVAGO, V.A., otv.red.; MOKRUSHIN, K.V., red.; YERMAKOV, N.P., red.; KOROL'KOV, A.A., red.; KOZHEVNIKOV, K.Ye., red.; NECHAYEV, P.V., red.; POYARKOV, M.A., red.; PURKIN, A.V., red.; SOBOLEV, I.D., red.; TARKHANEYEV, B.F., red.

[Geology of the Northern Sos'va brown coal basin.] Geologiia Severosos'vinskogo burougol'nogo basseina. Moskva, Nedra, 1964. 144p. (Materialy po geologii i poleznym iskopaemym Urala, no.11) (MIRA 18:4)

DOLGOV, Yu.A.; YERMAKOV, N.P.; LAZ'KO, Ye.M.

Scientific and organizational problems of studying inclusions of mineral forming solutions at the 22d session of the International Geological Congress in New Delhi (in December 1964). Geol. i geofiz. no.10:149-150 '65.

(MIRA 18:12)

YERMAKOV, N.P.

Nature of mineral inclusions, their diagnostics and classification. Vest. Mosk. un. Ser. 4: Geol. 20 no. 6:18-30 N-D '65 (MIRA 19:1)

1. Kafedra poleznykh iskopayemykh Moskovskogo gosudarstvennogo universiteta. Submitted March 1, 1965.

KREYTER, V.M.; KREYTER, D.S.; ARISTOV, V.V.; AZHGIREY, G.D.; REZVOY, D.P.; KOZYRENKO, V.N.; LAZ'KO, Ye.M.; RUSETSKAYA, G.G.; GALKIN, B.I.; YERMAKOV, N.P.; NEVSKIY, V.A.; VOZDVIZHENSKIY, B.I.; KULICHIKHIN, N.I.; POPOV, I.N.

Nikolai Vas'il'evich Baryshev, 1903-. Izv.vys.ucheb.zav.; geol. i razv. 6 no.5:95-96 My '63. (MIRA 18:4)

KULAGASHEV, A.I.; YERMAKOV, N.S.

Complex ore deposits in an effusive formation. Trudy VITR no.4:283-287 '61. (MIRA 14:9)

(Ore deposits)

YERMAKOV, N.V., kandidat ekonomicheskikh nauk.

What is the total meat production on state farms? Nauka i pered.op. v sel'khoz, 6 no.11:71-72 N '56. (MIRA 10:1)
(Meat) (State farms)

YERMAKOV, N.V., kandidat ekonomicheskikh nauk.

Livestock raising on state farms established on virgin land. Nauka i pered.op.v sel'khoz.7 no.1:60-61 Ja '57. (MLRA 10:2)
(Kokchetav Province--Stock and stockbreeding)

PROCESSES AND PROPERTIES INDEX

BC

a-4

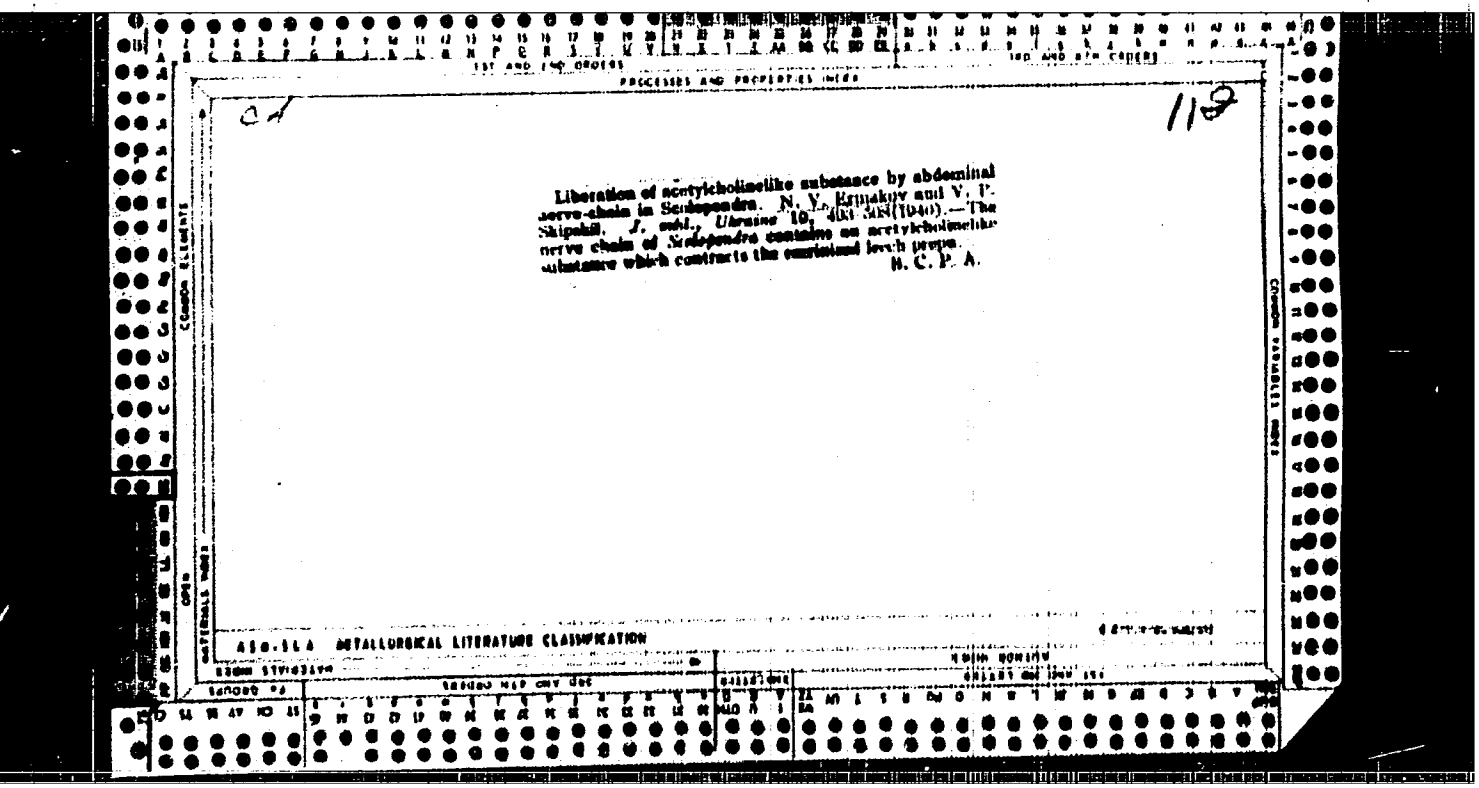
Thermoconductivity of skin in invertebrates. H. V. [illegible] ([illegible], [illegible], 19[illegible], 9, 43[illegible]—43[illegible]).—The [illegible] skin of invertebrates has a lower coeff. of internal thermoconductivity, which compensates for their [illegible] thickness. The crust of molluscs (dead tissue) has a much higher coeff. than living tissue. M. K.

ASB-SLA METALLURGICAL LITERATURE CLASSIFICATION

ERMAKOV, N. V.

"Evolution of the Protective Properties of Organisms" (p. 23) by Ermakov, N. V.

SO: Advances in Contemporary Biology, (Uspekhi Sovremennoi Biologii), Vol. X, No. 1 1939

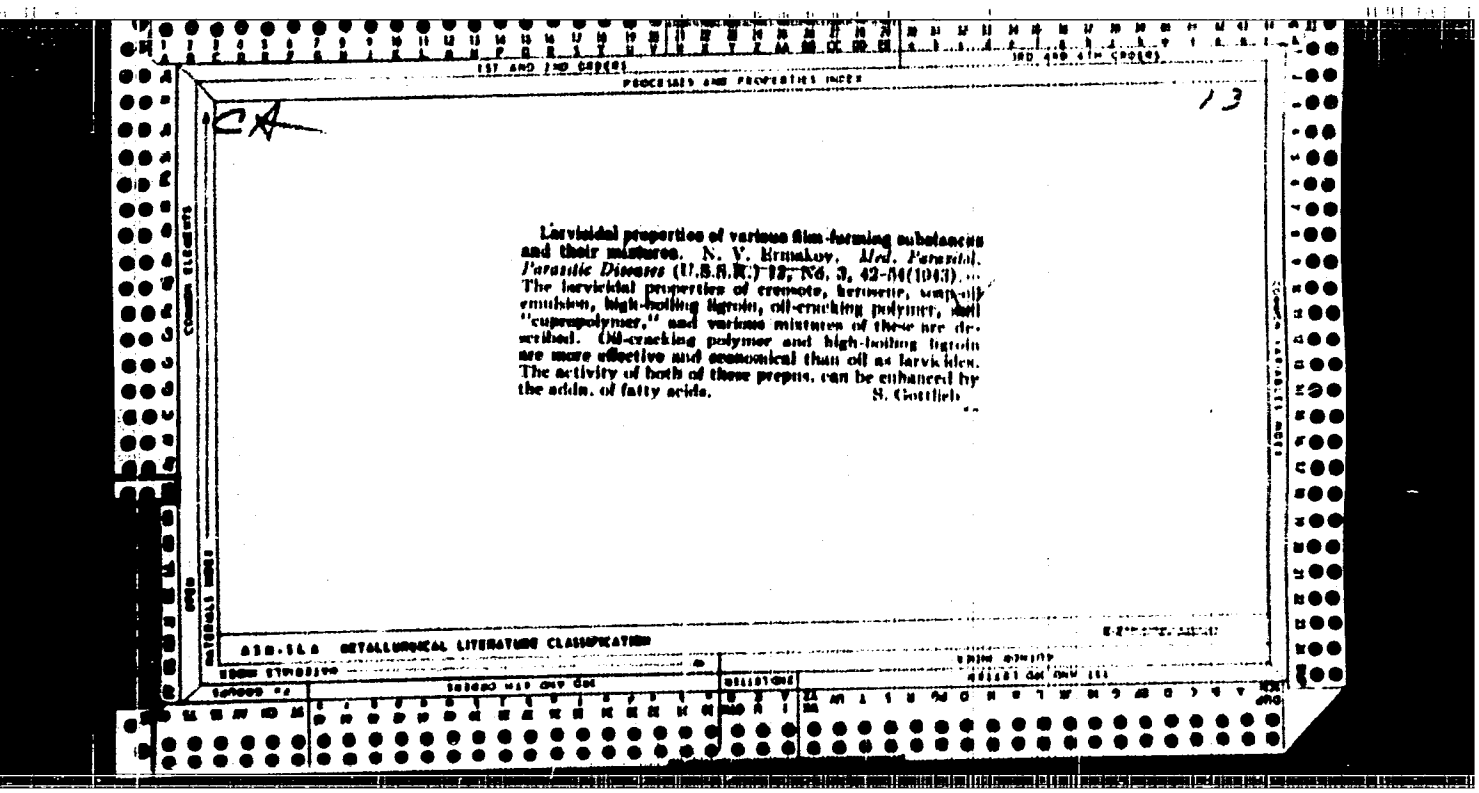


Liberation of acetylcholinelike substance by abdominal nerve-chain in Scolopendra. N. V. Kriukov and V. P. Skipskii. *J. evol., Ukraine* 10, 403-5(1940).—The nerve chain of *Scolopendra* contains an acetylcholinelike substance which contracts the excitomotor leech preps. H. C. P. A.

ERMAKOV, N. V.

"Chemical Mediation in Invertebrata." (p. 79) by N. V. Ermakov

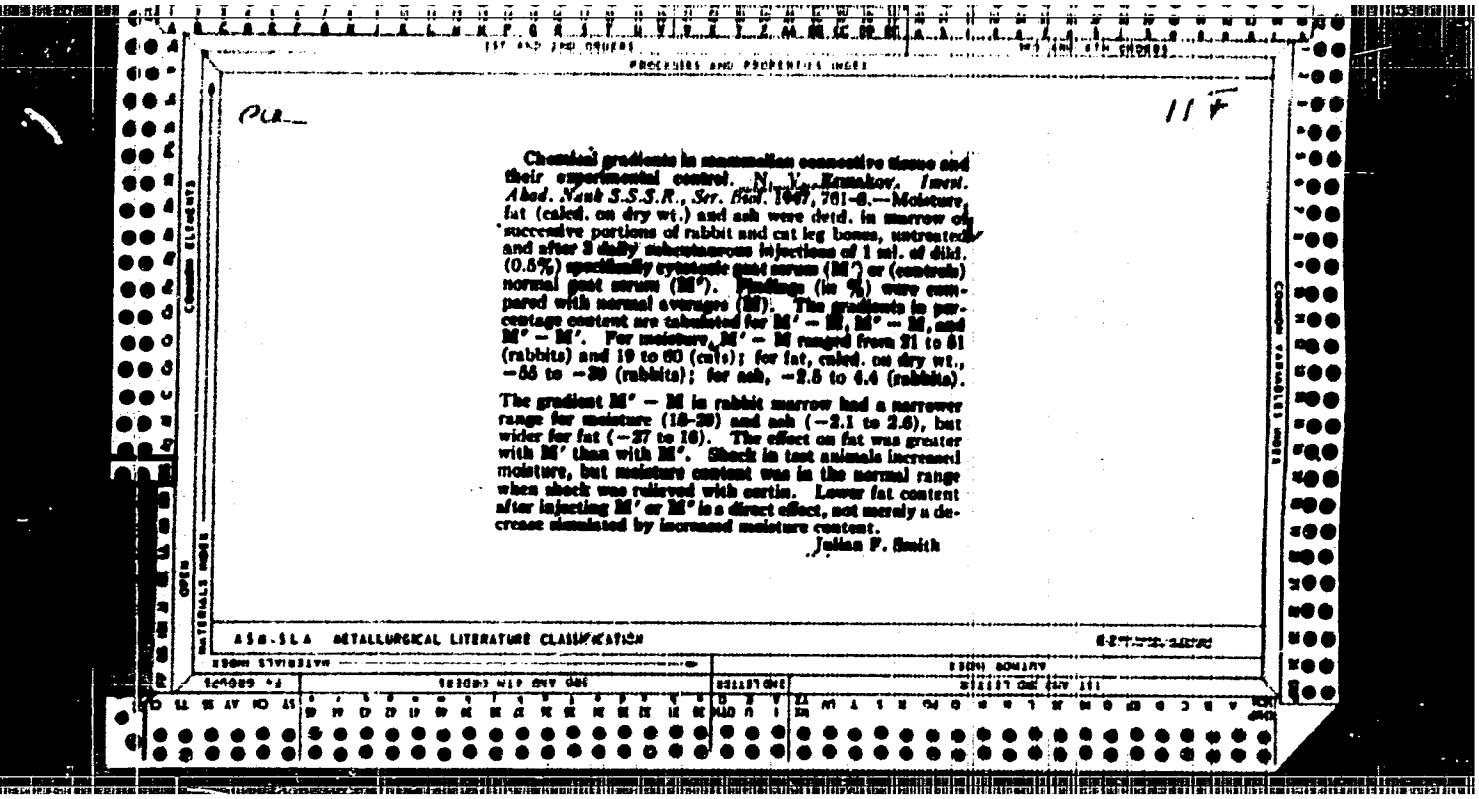
SO: Advances in Modern Biology (Uspekhi Sovremennoi Biologie) Vol. XIV, No. 1, 1941



CA

13

Larvicidal properties of various film-forming substances and their mixtures. N. V. Ermakov. *Med. Parasitol. Parasitic Diseases* (U.S.S.R.) 12, No. 3, 42-54(1943). The larvicidal properties of creosote, heavy oil, soap-oil emulsion, high-boiling lignin, oil-cracking polymer, and "copropolymer," and various mixtures of these are described. Oil-cracking polymer and high-boiling lignin are more effective and economical than oil as larvicides. The activity of both of these preps. can be enhanced by the addn. of fatty acids. S. Gottlieb



Chemical gradients in mammalian connective tissue and their experimental control. N. V. Ermakov. *Izvest. Akad. Nauk S.S.S.R., Ser. Biol.* 1947, 761–8.—Moisture, fat (calcd. on dry wt.) and ash were detd. in marrow of successive portions of rabbit and cat leg bones, untreated and after 3 daily subcutaneous injections of 1 ml. of dild. (0.5%) specifically cytotoxic goat serum (M′) or (controls) normal goat serum (M″). Findings (in %) were compared with normal averages (M). The gradients in percentage content are tabulated for M′ − M, M″ − M, and M′ − M″. For moisture, M′ − M ranged from 21 to 61 (rabbits) and 19 to 60 (cats); for fat, calcd. on dry wt., −55 to −20 (rabbits); for ash, −2.5 to 6.4 (rabbits).

The gradient M′ − M in rabbit marrow had a narrower range for moisture (15–20) and ash (−2.1 to 2.6), but wider for fat (−27 to 16). The effect on fat was greater with M′ than with M″. Shock in test animals increased moisture, but moisture content was in the normal range when shock was relieved with curtin. Lower fat content after injecting M′ or M″ is a direct effect, not merely a decrease stimulated by increased moisture content.

Julian F. Smith

OA

Surface tension of film-forming larvicides and their mixtures. N. V. Krushev. *Med. Parasitol. Parasitic Diseases* (U.S.S.R.) 16, No. 4, 69-74(1947); cf. *C.A.* 39, 3379.—The surface tension of films of petroleum, kerosene, naphtha, creosote, and soap-oil emulsion decreases during the first hr. after formation, whereas that of oil-cracking polymer, tar oil, Cupropolymer and Flitskil increases. There is no correlation with larvicidal action, reaction with the water, the size of film, or the abs. value of the surface tension. Mixts. of the larvicides do not behave quantitatively like the sum of the components.

H. L. Williams

ASM-SLA METALLURGICAL LITERATURE CLASSIFICATION

1. ERMAKOV, N. V.(Prof.)

2. USSR (600)

4. Reflexes

7. I. P. Pavlov's theory on the relationship of reflex to environment in higher organisms. Medych. zhur. 21, No. 5, 1951.

9. Monthly List of Russian Accessions, Library of Congress, April 1953, Uncl.

ERMAKOV, N. V.

"Physiological Function and Physiological Rest." (p. 218-32) by N.V. Ermakov

SO: Progress of Contemporary Biology (Uspekhi Sovremennoi Biologii) 1952, Vol. XXXIII, No. 2

YERMAKOV, N. V.

A. P. VISHNYAKOV, D. S. DOBROVOL'SKIY, N. V. YERMAKOV and S. E. TUKACHINSKIY

"Electrophoretic Determination of Protein Fractions on Paper," Doklady Akad. Nauk USSR 87: 1035-1038, No. 6, 1952.

This paper gives a fairly good review of the subject, including numerous important papers by investigators throughout the world. Little originality and some ingenuity are shown; only meager data are given. The authors, so far as we can ascertain, are inexperienced in this field.

IX

LEVASHOV, A.A.; YERMAKOV, B.V.; DRYAGIN, S.V.; SIDORENKO, B.V.

Experience with the use of VIEV (All-Union Institute of Experimental Veterinary Science) vaccine (G.M. Bash'ian vaccine) against infectious anemia in horses. Veterinariia 30 no.3:20-24 Mr '53. (MLRA 6:3)

YERMAKOV, N.V.; DYADYUSHA, G.G.

Role of innervation in rhythmic function of the skeletal muscle. Fiziol. zh. SSSR 39 no. 1:89-95 Jan-Feb 1953. (CIML 24:2)

1. Department of Physiology of the Institute of Experimental Biology and Pathology imeni Academician A. A. Bogomolets, Kiev.

YERMAKOV, N. V.

"Some General Principles of Reactions of Living Systems to Irritants," Usp. Sovrem. Biol., 38, No.1, pp 39-57, 1954

Translation M-709, 24 Aug 55

YERMAKOV, N. V.

[illegible] N. V. and [illegible] N. P.

Dept. of Physiol., 'Bacteriyata' Inst. of Exp. Biology and Pathol., Kiev. "Effect of various factors on fibrillation of the skeletal muscle in a solution of barium chloride" FIZIOL.ZHUR.SSSR 1954, 40/2 (181-187) Tables 5 Illus. 2 (Russian text)

The rate of fibrillation produced by immersion of the frog gastrocnemius muscle in $BaCl_2$ solution, is increased in the early phases after denervation (up to 5 days) and tenotomy (up to 8 days). The latent period from immersion to the beginning of fibrillation decreases with the concentration from M/8 to M/512 $BaCl_2$, but the amplitude and frequency of the fibrillation is lower at the weaker concentrations from M/64 to M/512. This is in part an osmotic effect, since addition of glucose to M/64 $BaCl_2$ to equal the osmotic pressure of M/16 $BaCl_2$ has much the same effect as increase of the $Ba\ Cl_2$ concentration. Increase of temperature to 30°C. (from 30 min. to 22 hr.) lengthens the latent period. Adrenaline in a concentration of 10^{-7} to 10^{-5} shortens the latent period in preparations with long latent period in the control muscles, while it lengthens the latent period in preparations with short latent period.

Simonson - Minneapolis

SO: Excerpta Medica Section II Vol 7 N. 12

FD-1344

USSR/Medicine - Physiology

Card 1/1 : Pub. 33-22/25

Author : Yermakov, N. V.

Title : Method of automatic recording of urination in animals under conditions of their complete isolation

Periodical : Fiziol. zhur. 40, 4, 501-503, Jul/Aug 1954

Abstract : A method of automatic recording of urination has been developed by the author of this article. To collect the urine more easily the ureter was drawn into the skin surface. The experimental animal was completely isolated from the experimenter. A diagram of electric apparatus for continual recording of urination is shown on page 502. Successful application of a permanent fistula to the bladder was originally made by Pavlov and made possible systematic experiments in the fields of normal and pathological physiology of urination. Successful assimilation of autotransplanted kidney stimulated further interest in these fields. Diagram. Graph. Four Soviet references.

Institution : Institute of Physiology, Academy of Sciences Ukrainian SSR, Kiev

Submitted : April 20, 1953

VISHNYAKOV, A.P. [Vishniakou, A.P.]; YERMAKOV, N.V. [Ermakou, N.V.];
TUKACHINSKIY, S.Ye. [Tukachynskii, S.E.]

Electrophoresis of proteins on filter paper. Vestsi AN BSSR.
Ser. fiz.-tekhn.nav. No.2:76-83 '58. (MIRA 11:10)
(Proteins) (Electrophoresis)

DASHKEVICH, I.O.; D'YAKOV, S.I.; YERMAKOV, N.V.; IVANOVA, M.T.; MAYBORODA, G.M.

Staining Salmonella typhosa with fluorescent antibodies. Zhur. mikrobiol.epid. i immun. 30 no.1:97-102 Ja '58. (MIRA 12:3)

1. Iz Voyenno-meditsinskoy ordena Lenina akademii imeni Kirova.
(SALMONELLA TYPHOSA,
stain. by fluorescent antibodies (Rus))
(ANTIBODIES,
fluorescent antibodies, stain. of Salmonella typhosa (Rus))

DASHKEVICH, I.O.; D'YAKOV, S.I.; YERMAKOV, N.V.; IVANOVA, M.T.; OSIPOVA, I.V.

Use of an indirect fluorescent antibody method in species- and type-specific of certain pathogenic bacteria. Zhur.mikrobiol.epod. i immun. 31 no.11:43-49 N '60. (MIRA 14:6)

1. Iz Voyenno-meditsinskoy ordena Lenina akademii imeni Kirova.
(ANTIGENS AND ANTIBODIES) (SERUM DIAGNOSIS)

MIKHAYLOV, Ivan Fedorovich; D'YAKOV, Sergey Ivanovich. Prinimali uchastiye: DASHKEVICH, I.O.; YERMAKOV, N.V.; IVANOVA, M.T.; LI LI; OSIPOVA, I.V.; MAYBORODA, G.M.; USPENSKIY, V.I., red.; ZUYEVA, N.K., tekhn. red.

[Fluorescence microscopy; application in medical microbiology] Liuminestsentnaia mikroskopiia; primenenie v meditsinskoi mikrobiologii. Moskva, Medgiz, 1961. 222 p. (MIRA 15:1)
(FLUORESCENCE MICROSCOPY) (MICROBIOLOGY)

YERMAKOV, N.V., prof. (Kiyev)

Establishment of the form of mammalian erythrocytes. Probl.gemat. i perel.krovi no.9:27-30 '62. (MIRA 15:12)
(ERYTHROCYTES)

NOSKOV, F.S.; BOLDASOV, V.K.; GOL'DIN, R.B.; YERMAKOV, N.V.; VOLKOVA, L.A.

Contrast method of immunofluorescent discovery of adenoviruses in the kidney cell culture of guinea pigs. Vop. virus. 10 no.5:613-614 S-O '65. (MIRA 18:11)

1. Voyenno-meditsinskaya ordena Lenina akademiya imeni S.M. Kirova, Leningrad.

L 27116-66 EWT(1)/T JK

ACC NR: AP6004869 (N) SOURCE CODE: UR/0402/65/000/005/0613/0614

AUTHOR: Noskov, F. S.; Boldasov, V. K.; Gol'din, R. B.; Yermakov, N. V.; Volkova, L. A.

ORG: Military Medical Academy im. S. M. Kirov, Order of Lenin, Leningrad (Voyennomeditsinskaya ordena Lenina akademiya)

TITLE: Contrast medium for immunofluorescent detection of adenoviruses in cell cultures of guinea pig kidneys

SOURCE: Voprosy virusologii, no. 5, 1965, 613-614

TOPIC TAGS: virus disease, animal disease, experiment animal, ~~rabbit, diagnostic instrument~~ serum, cytology, antigen, microscopy

ABSTRACT: Bovine serum albumin labeled with sulforhodamine B fluoride was tested as a contrast medium for adenovirus type 4 infected guinea pig kidney cells stained with fluorescein. The infected cells were exposed to the specific rabbit immune globulin, then added with fluorescein isothiocyanate at a rate of 10 mg fluorochrome per 1 g protein. The phosphate buffered serum albumin was first conjugated with freshly synthesized sulforhodamine B fluoride in an alkaline medium, then purified. The fixated adenovirus preparations were treated

Card 1/2 UDC: 576.858.5.093.3.073.4

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ACC NR: AP6004869

with the mixture of conjugates for 20 minutes, then studied under the luminescent microscope. Normal cells were brick red, the protoplasm lighter than the nucleus; the infected nuclei had a specific green color with bright green sparkling enclosures. Upon single step processing of the preparations, the specific interaction of virus antigen-antibody was not inhibited by the presence of the labeled albumin. The physicochemical absorption of labeled albumin on cells led to nonspecific staining of the backgroud (cells containing no virus antibodies) which did not depress specific fluorescence. This method also permits the detection of single infected cells. Its use is recommended. "The sulforhodamine B fluoride was placed at our disposal by Prof. I. S. Ioffe whom we wish to thank for his courtesy". Orig. art. has: none.

SUB CODE: 06/ SUBM DATE: 26Nov64/ OTH REF: 006

Card 2/2

AUTHOR: Yermakov, N.Ye. SOV/115-58-1-11/50

TITLE: Checking Measuring Heads on the IZM Measuring Machine (Poverka izmeritel'nykh golovok na izmeritel'noy mashine IZM)

PERIODICAL: Izmeritel'naya Tekhnika, 1958, Nr 1, p 22 (USSR)

ABSTRACT: This short article describes the method of checking measuring heads with 1 and 2 microns divisions by way of comparison with the readings of the telescope caliper tube of the machine IZM. There is 1 diagram.

1. Gages--Performance 2. Gages--Testing equipment

Card 1/1

SOV/115-58-5-8/36

AUTHOR: Yermakov, N.Ye.

TITLE: Production Check of Setting Measures for Screw Micrometers (Proizvoditel'naya poverka ustanovochnykh mer k rez'bovym mikrometram)

PERIODICAL: Izmeritel'naya tekhnika, 1958, Nr 5, pp 17-18 (USSR)

ABSTRACT: The author suggests a new method of checking the screw setting measures on the IZV-1 vertical linear measuring unit with the help of an additional table and a special end piece. The measuring process is as follows: the screw inserts are fixed in the fitting holes of the table and the end piece. The instrument column is lowered until the measuring surfaces of the screw inserts are in complete contact. The scale is then set at zero. Then the column is raised, the gauge to be checked is placed between the inserts, and after a pause, so that the gauge temperature can adjust itself to that of the device, a reading is taken of the dial on the device. This method has been checked in the

Card 1/2

SOV/115-58-5-8/36

Production Check of Setting Measures for Screw Micrometers

Leningrad Control and Checking Laboratory at VNIIM and was highly evaluated. There are 2 diagrams.

Card 2/2

ACC NR: AP6030156 (A) SOURCE CODE: UR/0120/66/000/004/0195/0196

AUTHOR: Abov, Yu. G.; Bulgakov, M. I.; Gul'ko, A. D.; Yermakov, O. N.; Krupchitskiy, P. A.; Oratovskiy, Yu. A.; Trostin, S. S.

ORG: Institute of Theoretical and Experimental Physics, GKAE, Moscow (Institut teoreticheskoy i eksperimental'noy fiziki GKAE)

TITLE: Production of polarized beams of thermal neutrons by means of a pile of cobalt mirrors

SOURCE: Pribory i tekhnika eksperimenta, no. 4, 1966, 195-196

TOPIC TAGS: neutron beam, thermal neutron, nuclear research reactor, cobalt, neutron polarization, collimator

ABSTRACT: A unit for the production of polarized neutron beams needed for experimental purposes is described. The unit, shown below, consists of a collimator and a pile of cobalt mirrors. The collimator, consisting of 10 convergent slits separated by vertical steel plates, is placed in the horizontal channel of a reactor. Each of the cobalt mirrors is backed by glass and the length of each mirror is made up of three separate units 350 x 125 x 3 mm^3 in size. The top and bottom ends of the mirrors are fitted into 10 slots bored through the connecting strips and clamped with wedge clamps so that each mirror has a corresponding slit in the collimator.

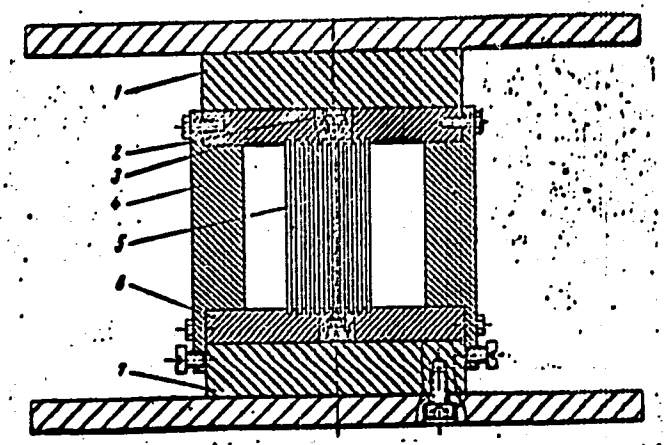
Card 1/3 UDC: 539.1.078.539.125.5

ACC NR: AP6030156

The pile of mirrors is set into an electromagnet. The mean angle of beam incidence on a corresponding mirror is 7.5' and all neutron beams reflected by the mirrors converge at a distance of 4.5 m from the pile of mirrors. The incident and reflected beams are separated by means of a sliding screen system made of boron carbide situated near the target. The flow of polarized neutrons on a specimen with an area of 100 x 10 mm^2 amounted to 3 x 10^7 neutrons/sec. The degree of neutron beam polarization amounted to — 90%, and the polarization efficiency of 95%. The authors thank V. A. Beketov and N. S. Shatlovskaya for making the cobalt mirrors, Yu. Ya. Garrison for assembling the pile of mirrors, and A. I. Savushkin, V. K. Risgukhin, O. M. Svetlov, and I. L. Karpikhin for helping with the measurements. Orig. art. has: 1 figure.

Card 2/3

ACC NR: AP6030156



1. upper magnetic pole, 2. wedge clamp, 3. upper connecting strip, 4. side wall (brass), 5. cobalt mirror, 6. lower connecting strip, 7. lower magnetic pole

SUB CODE: 20, 18/ SUBM DATE: 31Jul65/ ORIG REF: 001/ OTH REF: 002

Card 3/3

87367

S/120/60/000/004/006/028
E032/E414

21.2100

AUTHORS: Abov, Yu.G., Beketov, V.A., Gul'ko, A.D., Yermakov, O.N., Krupchitskiy, P.A., Taran, Yu.V. and Shatlovskaya, N.S.

TITLE: Production of Polarized Neutrons by Reflection From a Cobalt Mirror

PERIODICAL: Pribory i tekhnika eksperimenta, 1960, No.4, pp.51-55

TEXT: The method of obtaining polarized thermal neutrons by reflection from magnetic mirrors was described by Hughes and Burgy (Ref.1) and Akhiyezer and Pomeranchuk (Ref.2). In order to obtain neutrons with practically a single spin state it is necessary that the component of the induction B which is parallel to the surface of the mirror should be greater than a certain minimum value. When this condition is satisfied practically all the reflected neutrons will have spins parallel to B. In the case of pure cobalt it can be shown, using the data of Shull and Wollan (Ref.3), that $B \geq 11200$ gauss. Strictly speaking, this is the condition for the quantity $B - H$ where H is the magnetic field in the gap of the magnet. According to Bozort (Ref.4) the saturation value of $B - H$ is 17900 gauss. As a result, the condition for complete polarization of neutrons reflected from a

87367
S/120/60/000/004/006/028
E032/E414

Production of Polarized Neutrons by Reflection From a Cobalt Mirror

magnetized mirror of pure cobalt can be written down in the form

$$(B - H) \geqslant 63\% \ (B - H)_s \qquad (1)$$

The present authors have used these ideas to produce polarized neutrons. The apparatus employed is shown schematically in Fig.2. A narrow vertical neutron beam was formed by a collimator which was 1.2 m long and had a rectangular slot of 110 x 3 mm. The neutron flux at the exit of the collimator was 4 x 10^7 neutrons/cm^2 sec. The cobalt mirror-polarizer was fixed between the magnet poles. The magnet-mirror system could be adjusted to the required position and in order to obtain a definite separation between the direct and the reflected beams a special brass screen, which could be adjusted with the aid of a micrometer screw, was provided. The cobalt mirrors employed were 100 mm x 500 mm x 40 μ. The cobalt was deposited electrolytically on a 5 mm thick copper plate. The analysing mirror was held in another magnet and was also adjustable.

Card 2/4

67367
S/120/60/000/004/006/028
E032/E414

Production of Polarized Neutrons by Reflection From a Cobalt Mirror

In order to separate the beams reflected from the first and second mirrors, special cadmium and copper screens placed in front of the second mirror were employed. The neutrons were recorded by a high-efficiency multi-wire proportional counter filled with B^{10}-enriched BF_3. A cadmium slit, 1.5 mm wide and 60 mm long, was placed in front of the counter. It was found that the degree of polarization obtained with an angle of incidence of 8 minutes was 75 ± 2%. 100% Polarizations were obtained at greater angles of incidence. Mirrors made of an alloy of cobalt and 7% iron were also investigated but the maximum polarizations obtained did not exceed 60%. In the case of the pure cobalt mirrors, the flux of polarized neutrons at θ = 8 min was 3×10^5 neutrons/cm^2 sec at the centre of the beam, the half-width of the beam being 8 mm and the height 100mm (magnetic field in polarizer magnet = 600 Oe). The total intensity was 2×10^6 neutrons/sec. Acknowledgments are expressed to Yu.Ya.Garrison, A.K.Dubasov, N.M.Regentov and A.I.Savushkin for their assistance and to T.B.Nova for valuable advice. There are 4 figures, 1 table and 9 references: 3 Soviet

Card 3/4

S/120/60/000/004/006/028
E032/E414

Production of Polarized Neutrons by Reflection From a Cobalt Mirror and 6 non-Soviet (3 of which are translated into Russian).

ASSOCIATIONS: Institut teoreticheskoy i eksperimental'noy fiziki AN SSSR (Institute of Theoretical and Experimental Physics AS USSR) all authors except Yu.V.Taran; Ob"yedinennyy institut yadernykh issledovaniy (Joint Institute for Nuclear Studies) Yu.V.Taran

SUBMITTED: April 9, 1960

Fig. 2

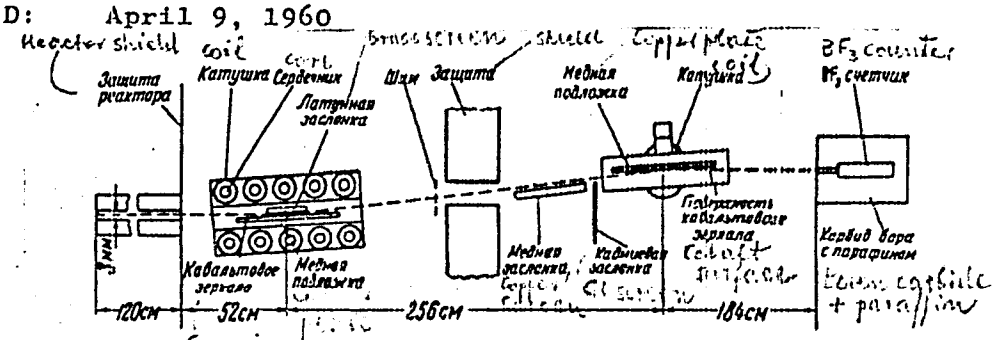


Рис. 2. Схема установки

Card 4/4

ACC NR: AP6030156 (A) SOURCE CODE: UR/0120/66/000/004/0195/0196

AUTHOR: Abov, Yu. G.; Bulgakov, M. I.; Gul'ko, A. D.; Yermakov, O. N.; Krupchitskiy P. A.; Oratovskiy, Yu. A.; Trostin, S. S.

ORG: Institute of Theoretical and Experimental Physics, GKAE, Moscow (Institut teoreticheskoy i eksperimental'noy fisiki GKAE)

TITLE: Production of polarized beams of thermal neutrons by means of a pile of cobalt mirrors

SOURCE: Pribory i tekhnika eksperimenta, no. 4, 1966, 195-196

TOPIC TAGS: neutron beam, thermal neutron, nuclear research reactor, cobalt, neutron polarization, collimator

ABSTRACT: A unit for the production of polarized neutron beams needed for experimental purposes is described. The unit, shown below, consists of a collimator and a pile of cobalt mirrors. The collimator, consisting of 10 convergent slits separated by vertical steel plates, is placed in the horizontal channel of a reactor. Each of the cobalt mirrors is backed by glass and the length of each mirror is made up of three separate units 350 x 125 x 3 mm^3 in size. The top and bottom ends of the mirrors are fitted into 10 slots bored through the connecting strips and clamped with wedge clamps so that each mirror has a corresponding slit in the collimator.

Card 1/3

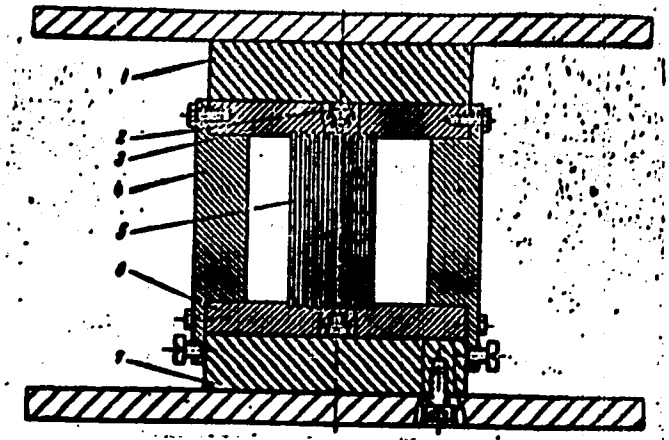
UDC: 539.1.078.539.125.5

ACC NR: AP6030156

The pile of mirrors is set into an electromagnet. The mean angle of beam incidence on a corresponding mirror is 7.5' and all neutron beams reflected by the mirrors converge at a distance of 4.5 m from the pile of mirrors. The incident and reflected beams are separated by means of a sliding screen system made of boron carbide situated near the target. The flow of polarized neutrons on a specimen with an area of 100 x 10 mm^2 amounted to 3 x 10^7 neutrons/sec. The degree of neutron beam polarization amounted to — 90%, and the polarization efficiency of 95%. The authors thank V. A. Beketov and N. S, Shatlovskaya for making the cobalt mirrors, Yu. Ya. Garrison for assembling the pile of mirrors, and A. I. Savushkin, V. K. Risukhin, O. M. Svetlov, and I. L. Karpikhin for helping with the measurements. Orig. art. has: 1 figure.

Card 2/3

ACC NR: AP6030156



1. upper magnetic pole, 2. wedge clamp, 3. upper connecting strip, 4. side wall (brass), 5. cobalt mirror, 6. lower connecting strip, 7. lower magnetic pole

SUB CODE: 20, 18/ SUBM DATE: 31Jul65/ ORIG REF: 001/ OTH REF: 002

Card 3/3

42314-66 EWT(m)

ACC NR: AP6024675 SOURCE CODE: UR/0070/66/011/004/0695/0698

AUTHOR: Abov, Yu. G.; Aleshko-Ozhevskiy, O. P.; Yermakov, O. N.; Yamzin, I. I.

53
50
B

ORG: Institute of Crystallography, AN SSSR (Institut kristallografii AN SSSR)

TITLE: The generation of a beam of polarized monochromatic neutrons

19

SOURCE: Kristallografiya, v. 11, no. 4, 1966, 695-698

TOPIC TAGS: neutron beam, ~~reactor neutron~~, neutron polarization, nuclear reactor component, neutron reaction, thermal neutron, magnetic property

ABSTRACT: In recent years, investigations of magnetic properties of a substance have made extensive use of polarized thermal neutrons. Heretofore, the Soviet Union had only installations on which the polarized neutrons were generated by reflection from a magnetized cobalt mirror. However, many problems require a polarized beam of monochromatic neutrons. In this article, the authors describe an assembly developed at the ITEF GK IAE jointly with the Institute of Crystallography, AN SSSR (Institut kristallografii AN SSSR). The circuit of the installation is shown in Fig. 1. There is sometimes a need to have a beam of neutrons with an opposite polarization. The authors used the radiofrequency method for the reorientation of spin orientation. A value of 0.98 ± 0.02 was obtained for the spin reorientation probability.

Card 1/3 UDC: 548.7

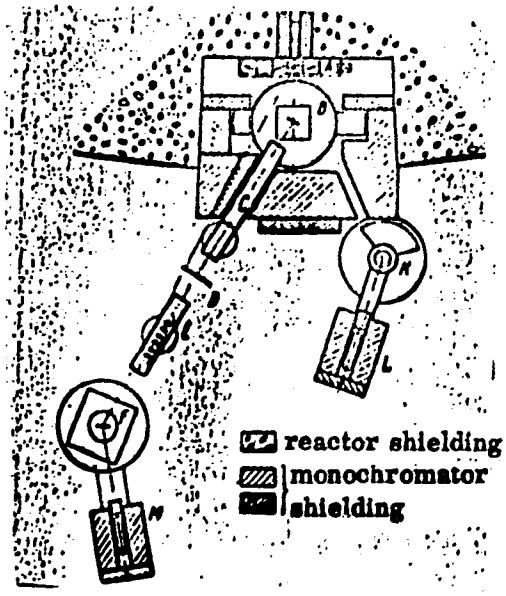


Fig. 1. Circuit of an assembly of two diffraction meters on a reactor channel.

A - stage of replaceable monochromators
B - magnet of the crystal-polarizer
C - first section of the driving field
D - diaphragm, or "shim"
E - second section of the driving field with a radiofrequency coil
F - magnet of the analyzer crystal
K, L - small diffraction meter
M - neutron detector of the large diffraction meter

L 42814-66

ACC NR: AP6024675

3

Measurements of the polarization and of the probability of its reorientation in the center and at the edge of the beam (± 15 mm from the center) agreed. The authors express their sincere gratitude to V. A. Lyubimtsev, P. M. Shishkin, and S. F. Dubinin for assistance in making the measurements and assuring the operation of the equipment. Orig. art. has: 4 figures and 2 formulas. [26]

SUB CODE: 18/ SUBM DATE: 14Nov64/ ORIG REF: 006/ OTH REF: 005/ ATD PRESS: 5067

Card 3/3

YERMAKOV, P.

Technology

(Worker's protection in ferrous metallurgy). (Moskva) Profizdat, 1951.

Monthly List of Russian Accessions, Library of Congress, November 1952. UNCLASSIFIED

STAKHANOV, T., tekhnik, Geroy Sotsialisticheskogo Truda; YERMAKOV, P.; MONAKHOV, M., brigadir stroitel'noy brigady; VITKENE, S., Geroy Sotsialisticheskogo Truda

Let's use progressive practices of the All-Union Agricultural Exhibition. Sel'stroi. 9 no.6:3-4 S '54.
(MIRA 13:2)

1. Kolkhoz imeni Krasnykh partisan, Verkhne-Ural'skogo rayona, Chelyabinskoy oblasti (for Stakhanov). 2. Zamestitel' predsedatelya kolkhoza Lenina, Suzunskogo rayona, Novosibirskoy oblasti (for Yermakov). 3. Kolkhoz "Bol'shevik Leninskogo rayona, Moskovskoy oblasti (for Monakhov). 4. Zaveduyushchaya svinovodcheskoy fermoy kolkhoza "Gegushes Pirmoyi," Pakruoyskogo rayona, Litovskoy SSR (for Vitkene).
(Moscow--Farm buildings--Exhibitions)

YERMAKOV, P.

Promote the activity of all sections. MTO 2 no.1:46-47 Ja '60. (MIRA 13:5)

(Moscow Province--Agricultural research)

YERMAKOV, P., dots.

High goal. Okhr. truda i sots. strakh. 3 no.8:17-18 Ag '60.
(MIRA 13:9)

1. Magnitogorskiy gorno-metallurgicheskiy institut, glavnyy tekhnicheskiy inspektor Chelyabinskogo oblsovprofa.
(Magnitogorsk--Steel industry--Hygienic aspects)

YERMAKOV, P., dotsent

Attention, new workshops are being taken over. Okhr.truda i sots. strakh. 5 no.4:11-12 Ap '62. (MIRA 15:4)

1. Magnitogorskiy gornometallurgicheskiy institut.
(Factories--Design and construction) (Industrial hygiene)

YERMAKOV, Prokopiy Dement'yevich; KOLEGOV, Aleksandr Yermolayevich; [illegible]; SHUMKOV, V.I., redaktor; TSYMBALIST, N.N., redaktor izdatel'stva; ZEF, Ye.M., tekhnicheskiy redaktor

[Safety engineering in the work of metallurgical plants] Organizatsiia raboty po tekhnike bezopasnosti na metallurgicheskom zavode. Sverdlovsk, Gos.nauchno-tekhn.izd-vo lit-ry po chernoi i tsvetnoi metallurgii, Sverdlovskoe otd-nie, 1957. 135 p. (MIRA 10:11)
(Metallurgical plants--Safety measures)

YERMAKOV, P.D., inzh.

Improving working conditions in stock houses. Bezop.truda v prom. 5 no.4:14-16 Ap '61. (MIRA 14:3)

1. Glavnyy tekhnicheskiy inspektor Chelyabinskogo oblsovprofa.
(Blast furnaces—Safety measures)

YERMAKOV, P.D., dotsent

Testing air heaters of blast furnaces. Bezop.truda v prom. 6 no.2:28-29 F '62. (MIRA 15:2)

1. Magnitogorskiy metallurgicheskiy institut.
(Blast furnaces—Equipment and supplies—Testing)

YERMAKOV, P.D.

Great contribution toward industrial safety. Metallurg 7 no.1:38 Ja '62. (MIRA 15:1)

1. Glavnyy tekhnicheskiy inspektor Oblprofsoveta v g. Magnitogorske.
(Blast furnaces--Safety measures)

YERMAKOV, P.D.; VORONKOV, V.V.

Normalizing labor conditions in the repair of smoke stacks.
Stal' 22 no.10:947-950 O'62. (MIRA 15:10)

1. Magnitogorskiy gornometallurgicheskiy institut i Magnitogorskiy metallurgicheskiy kombinat.
(Flues—Maintenance and repair)
(Iron and steel plants—Safety measures)

1(0); 19(0) PHASE I BOOK EXPLOITATION SOV/3269

Glukhov, M.K., M.M. Danilevskiy, P.G. Yermakov, V.B. Yemel'yanenko, V.M. Lozovoy-Shevchenko, P.F. Plyachenko, V.I. Sekachev, and A.A. Shukayev.

Voyenno-vozdushnyye sily (Air Force) Moscow, Voyen. izd-vo M-va obor. SSSR, 1959. 202 p. (Series: Biblioteka ofitsera) No. of copies printed not given.

General Ed.: M.K. Glukhov, Docent, General-Major of the Air Force; Eds.: A.S. Mirnyy, Colonel, and N.P. Gordeyev, Colonel, (ret.); Tech. Ed.: M.A. Strel'nikova.

PURPOSE: The book is intended for military personnel. It will be of interest to all those interested in the role of air power in modern warfare.

COVERAGE: The book surveys the history of the Soviet Air Force and discusses its organizational set-up, types of aircraft, combat characteristics, tasks, and armament. The role of aviation in modern military strategy is analyzed and the cooperation necessary between air, ground, and naval forces defined. Future prospects of development of Soviet aviation are outlined. Some attention is paid to the development and possible use of nuclear weapons by the Air Force and in anti-aircraft defense. Photos and specifications of the

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following Soviet aircraft are given: AN-10 turboprop transport aircraft, Tu-110 transport jet, Mi-6 turboprop helicopter, Yak-24 two-engined helicopter, Mi-4 helicopter, Tu-104 turbojet transport aircraft, Il-14 transport aircraft, ANT-35 (Pe-35) transport aircraft, MiG-15bis fighter, Tu-14 bomber, Be-6 bomber, Il-28 bomber, Pe-2 bomber, DB-3F (Il-4) bomber, Il-10 fighter, La-5 fighter, and the Yak-3 fighter. There are 40 Soviet references.

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AVAILABLE: Library of Congress

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2-29-60

KUTUKOV, A.I.,red.; GARKALENKO, K.I.,red.;GORBACHEV, I.V.,red.; YERMAKOV, P.I.,red.;OVSYANNIKOV, Yu.N.,red.;PILYUGIN, B.A.,red.;RODIONOV, I.S.,red.;RODIONOV, A.N.,red.;SKREBRIN, I.Ya.,red.; GUSEV, M.S., red. izd-va,;PROZOROVSKAYA, V.L.,tekhn. red.; SABITOV, A.,tekhn.red.

[Uniform safety rules for geological surveying; compulsory for all ministries, economic councils,departments, organizations, and enterprises conducting geological studies] Edinye pravila bezopasnosti pri geologorazvedochnykh rabotakh; obiazatel'ny dlia vsekh ministerstv, sovnarkhozov, vedomstv, organizatsii i predpriiatii, vedushchikh geologicheskie raboty. Moskva, Ugletekhizdat, 1958. 102 p.(MIRA 11:12)

1. Russia(1923- U.S.S.R.) Komitet po nadzoru za bezopasnym vedeniyem rabot v promyshlennosti i gornomu nadzoru.
(Geological surveys)

YERMAKOV, P.I.

AUTHOR: None Given SOV/6-58-6-17/21

TITLE: Chronicle (Khronika)

PERIODICAL: Geodeziya i kartografiya, 1958, Nr 6, pp. 76-76 (USSR)

ABSTRACT: From April 21 - 22, 1958 the Conference on Labor Protection and Accident Prevention took place in Moscow. It was attended by: the chief-engineers of the aerial surveying institutes, accident prevention engineers, chairmen of the committees of worker's groups, factory and plant committees and regional organizations and of the trade unions in the enterprises and organizations of the Central Bureau of Surveying and Cartography at the Ministry for the Interior of the USSR (Glavnoye upravleniye geodezii i kartografii MVD SSSR). Besides there were present: leading collaborators of the Ministry of the Interior of the USSR (GUGK) (Ministerstvo vnutrennykh del SSSR) of the Central Committee of the Trade Union of Workers in Geological Prospecting (Profsoyuz rabochikh geologorazvedochnykh rabot), of the Technical Inspection of the Trade Union Executive Committees (Tekhnicheskaya inspektsiya sovetov profsoyuzov), of the Ministry of Health (RSFSR) (Ministerstvo zdravookhraneniya RSFSR) and of the Trade Union

Card 1/3

Central Committee (Profsoyuznyy aktiv). The following lectures were held: G. K. Zubakov, Deputy Director of the GUGK MVD SSSR: "On the Stage of Labor Protection and Accident Prevention in the Organizations and Institutions of the GUGK in 1956-1957 and the Measures Taken for Improving the Working Conditions and Decreasing Traumatic Accidents in Enterprises". The Director of the Department for Labor Protection at the TsK (Profsoyuza rabochikh geologorazvedochnykh rabot), P. I. Yermakov spoke about"The Tasks of the Trade Union Organizations in the Enterprises and Cartographic Institutes of the GUGK for Improving Labor Protection, Accident Prevention and Industrial Sanitary Service and for Decreasing the Traumatic Accidents in the Enterprises and the Falling Ill of Workers". Other lectures were held by: the Chief Engineers of a number of aerial surveying enterprises, cartographic institutes and of the Works of Aerial Surveying Instruments. - The purpose of the conference was to check the execution of the orders given by the XX-th Party Congress of the CP USSR concerning the further improvement of labor protection and accident prevention within the system of the Central Office of Surveying and Cartography. It was found that for these purposes great means are expended; at the

Chronicle

SOV/ 6-58-6-17/21

same time deficiencies were discovered. Measures were worked out to remove the latter.

1. Labor--Safety measures 2. Accidents

Card 3/3

YERMAKOV, Petr Ivanovich; ZAGORSKIY, G., red.; YAKOVLEVA, Ye., tekhn. red.

[Corn is a profitable crop] Kukuruza - vygodnaia kul'tura. Moskva, Mosk. rabochii, 1961. 27 p. (MIRA 15:8)
(Moscow Province--Corn (Maize))

ACCESSION NR: AT4043332 S/2572/64/000/010/0137/0147

AUTHOR: Gokhfel'd, D. A. (Candidate of technical sciences); Yermakov, P.I. (Engineer)

TITLE: Adaptability of thick-walled spherical vessels to the recurrent effects of a temperature field.

SOURCE: Raschety* na prochnost'; teoreticheskiye i eksperimental'ny*ye issledovaniya prochnosti mashinostroitel'ny*kh konstruktsiy. Sbornik statey, no. 10, 1964, 137-147

TOPIC TAGS: recurrent temperature field, stressed hollow sphere, hollow sphere, hollow sphere adaptability, yield point, elastic state area, adaptability diagram, variable pressure adaptability problem, variable temperature adaptability problem, hollow sphere

ABSTRACT: The report presents an analysis of the adaptability of a hollow sphere stressed by internal pressure and subjected to recurrent thermal influences exerted by the working medium it contains. Heating and cooling are assumed to proceed at a relatively slow rate, hence thermal shock is not considered. The solution considers the effect of temperature on yield point, other physical and mechanical characteristics being assumed constant in view of their relatively insignificant change with temperature. Operating with dimensionless magnitudes and relating stresses, in part, to values for yield point at normal temperatures, the authors develop basic equations for internal pressure stresses, temperature distribution

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ACCESSION NR: AT4043332

function, thermal stresses and total stresses, and evolve expressions for a series of planes within coordinates p, q and m (p = stress parameter, q = temperature field parameter, m = a parameter to which self-compensating initial stresses are proportional) which circumscribe the area of elastic states. Finally, they construct an adaptability diagram and examine problems in relation to constant or varying pressure and temperature. Orig. art. has: 5 graphs and 18 equations.

ASSOCIATION: none

SUBMITTED: 00 ENCL: 00

SUB CODE: IE NO REF SOV: 004 OTHER: 001

Card 2/2

MUSTEL', Pavel Ivanovich; DYATLOV, V.I., inzh., retsenzent; YEGOROV, P.I., inzh., retsenzent; ZAYTSEV, A.P., otv. red.

[Principles of safety engineering and fire fighting technology in prospecting] Osnovy tekhniki bezopasnosti i protivopozharnoi tekhniki pri geologorazvedochnykh rabotakh. Moskva, Nedra, 1964. 183 p. (MIRA 17:11)

L 7762-66 EPA/EWT(m)/EWP(w)/EWP(f)/EPF(n)-2/EWA(d)/EWP(v)/T-2/EWP(t)/EWP(k)/
ACC NR: AT5024284 EWP(z)/EWP(b)/ETC(m) SOURCE CODE: UR/0000/65/000/000/0233/0240
MJW/JD/WW/EM/GS

AUTHOR: Yermakov, P. I. (Chelyabinsk)

ORG: none

TITLE: Thermal stability of gas turbine blades under the action of multiple thermal changes

SOURCE: Nauchnoye soveshchaniye po teplovym napryazheniyam v elementakh konstruktsiy, 5th, Kiev. Teplovyye napryazheniya v elementakh konstruktsiy (Thermal stresses in construction elements); doklady nauchnogo soveshchaniya, no. 5. Kiev, Naukova dumka, 1965, 233-240

TOPIC TAGS: gas turbine engine, turbine blade, turbine design, thermal stress, plastic flow/ EI765 alloy

ABSTRACT: An attempt is made to estimate the thermal stability of a free turbine blade and to evaluate irreversible dimensional changes. The kinetics of plastic deformation are based on linearly-elastic and fully-plastic assumptions without considering creep and relaxation. The deformations along the blade axis are assumed

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as $$e = a + bx + cy$$

(x in the direction of the chord) which gives the stress in the elastic portion of the blade as $$\sigma = E(a+bx+cy) - \alpha ET - E\varepsilon_p$$

(where $T = T(x,y,t)$ - temperature; t = time; $\varepsilon_p = \varepsilon_p(x,y,t)$ - plastic deformation prior to instant under consideration). Using the equations of equilibrium

$$\int_F \sigma dF = N; \quad \int_F \sigma x dF = M_y; \quad \int_F \sigma y dF = M_x$$

and $\sigma = \sigma_s$ (in the plastic regions), a set of three integral equations is obtained in terms of a, b, and c. Assuming $M_x = 0$, $c = 0$, and temperature variations only along a principal axis of inertia, these equations are solved for a and b

$$a = \frac{1}{A}\left[\int_{F_0 f} Ex^2 dF \left(\int_{F_0 f} \alpha ET dF + \int_{F_{yn}} E\varepsilon_n dF - \int_{F_{yn}} \sigma_s dF + N\right) - \right.$$
$$\left. - \int_{F_{yn}} Ex dF \left(\int_{F_{yn}} \alpha ET x dF + \int_{F_{yn}} E\varepsilon_n x dF - \int_{F_{yn}} \sigma_s x dF + M_y\right)\right] :$$

Card 2/3

$$b=\frac{1}{\Delta}\left[\int_{F_{yn}} EdF\left(\int_{F_{yn}}\alpha ETxdF+\int_{F_{yn}}Ee_n xdF-\int_{F_n}\sigma_z xdF+M_y\right)-\right.$$
$$\left.-\int_{F_{yn}} ExdF\left(\int_{F_{yn}}\alpha ETdF+\int_{F_{yn}}Ee_n dF-\int_{F_n}\sigma_z dF+N\right)\right],$$
$$\Delta=\int_{F_{el}} EdF\cdot\int_{F_{el}} Ex^2dF-\left(\int_{F_{el}} ExdF\right)^2.$$

These equations can be solved by a method of successive approximations to obtain the boundaries between the elastic and plastic regions. As an example, the solution was obtained for a turbine blade made of EI-765 alloy in a 1000C gas flow. The blade was divided into 26 equal strips (2-mm wide), and the plastic deformations were calculated by successive approximations. The number of cycles-to-failure was then calculated from the Koffin equation $\sqrt[m]{N}\cdot\Delta e_n=C$.

It was found that the results agreed well with experimental results obtained on these blades at the AN UkrSSR (calculated cycles-to-failure 39 versus 35 experimentally). Orig. art. has: 2 tables, 2 figures, and 8 formulas.

SUB CODE: PR/ SUBM DATE: 14May65/ ORIG REF: 010
Card 3/3 nw

YERMAKOV, P.M.; APRODOV, V.A.; YEFREMOV, Yu.K.; ROMASHOVA, A.T.; ZHERDENKO, O.N.; SOROKIN, V.V.; KHODETSKIY, V.G.

Basic points of the seven-year-plan for the development and activities of the Museum of Earth Science. Zhizn' Zem. no.1: 243-261 '61. (MIRA 15:6)

(Moscow--Geographical museums)

GOKHFEL'D, D.A.; YERMAKOV, P.I. (Chelyabinsk)

Adaptability of thick-walled tubes under nonuniform heating. PMTF no.3:107-110 My-Je '63. (MIRA 16:9)
(Plasticity) (Thermal stresses)

ACCESSION NO: AP3002814

S/0207/63/000/003/0107/0110

AUTHORS: Gokhfel'd, D. A. (Chelyabinsk); Yermakov, P. I. (Chelyabinsk)

TITLE: Limits of application of thick-walled nonuniformly heated pipes

SOURCE: Zhurnal prikladnoy mekhaniki i tekhnicheskoy fiziki, no. 3, 1963, 107-110

TOPIC TAGS: thick walled pipe, pipe strength, tube strength, heated thick walled pipe, high temperature pipe application

ABSTRACT: Based upon the stress distribution in a thick-walled pipe and a temperature distribution $t = t_b + t_1 \frac{\ln \rho}{\ln k}$, $(t_1 = t_a - t_b)$, the total stress distribution due to pressure and temperature was derived as

$$\sigma_r = p\left(1 - \frac{1}{\rho}\right) + (m - q)\left(1 - \frac{1}{\rho} + \delta \ln \rho\right),$$

$$\sigma_\theta = p\left(1 + \frac{1}{\rho}\right) + (m - q)\left[1 + \frac{1}{\rho} + \delta(2 + \ln \rho)\right]$$

$$\sigma_z = p + 2(m - q)[1 + \delta(1 + \ln \rho)]$$

where $\left(q = t_1^0 \frac{k}{1-k},\ t_1^0 = \frac{\alpha E t_1}{2\sigma_s(1-\nu)},\ \delta = \frac{1-k}{k \ln k}\right)$.

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ACCESSION NO: AP3002814

Assuming that the yield stress remains constant until $t \leq t_b$ and decreases linearly beyond this temperature, the Mises criterion leads to $\lambda = \frac{2(1-\nu)\sigma_{t_b}}{aK}$

$$(\sigma_r - \sigma_\theta)^2 + (\sigma_\theta - \sigma_z)^2 + (\sigma_z - \sigma_r)^2 = 2(1 - \lambda q \delta \ln \rho)^2 .$$

Combining the above equations, the equation of the surface under which the pipe does not fail was derived. This surface was found to have the shape of an elliptic cone. The cutside radius of the pipe forms a cylinder in the m-p-q coordinate system so that all actual possible conditions under which the pipe does not fail lie in the volume formed by the intersection of the cone and the cylinder. Orig. art. has: 3 figures and 15 formulas.

ASSOCIATION: none

SUBMITTED: 24Dec62 DATE ACQ: 16Jul63 ENCL: 00

SUB CODE: ML, JE NO REF SOV: 006 OTHER: 000

Card 2/2

GOKHFEL'D, D.A., kand. tekhn. nauk; YERMAKOV, P.I., inzh.

Adaptability of thick-walled spherical vessels under repeated action of a thermal field. Rasch.na proch. no.10:137-147 '64. (MIRA 18:1)

YERMAKOV, P.P.

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

Abs Jour: Referat. Zh.-Biol., No. 9, 1957, 35598

Author : Nikitin, V.N.; Butskaia, V.D.; Vorobeva, T.M.; Ermakov, P.P.; Kovtun, N.E.

Title : The Influence of Acidophil Milk (Acidophilin) and Streptomycin on the Growth of Laboratory Animals

Orig Pub: Uch. zap. Kharkovskogo un-ta, 1956, 68, 275-279

Abstract: In 2 series of experiments with mature white rats (55 animals) and 4 series of experiments with white rats at the age of 1 month (45 animals), an increase in the weight of the body was noted when there was added to a rich ration 10 milliliters of acidophilin and 20 units of streptomycin

Card 1/2

Chair Physiol of Man & Animals, Sci Res Inst. Biol. & Biol Faculty, Khar'kov State Univ. im A.M. Gor'kiy

Abs Jour: Referat. Zh.-Biol., No. 9, 1957, 35582

for every gram of body weight. The greatest effect was obtained in the younger rats with the addition of streptomycin.

YERMAKOV, P.V.; RAVIKOVICH, P.I.; FUKS, I.I.

Founding machine parts in shell molds. Tekst.prom. 16 no.5:50-52 My '56. (MLRA 9:8)

(Shell molding (Founding))

NIKONOROV, N.M.; MARSOV, A.V.; YERMAKOV, P.Ye.; KAL'MANOVICH, S.L., kand. tekhn. nauk, red.; KUREPINA, G.N., red.izd-va; SPERANSKAYA, O.V., tekhn. red.

[Handbook on laboratory weighing instruments and weights] Spravochnik po laboratornym vesam i giriam. Moskva, Mashgiz, 1963. 191 p. (MIRA 16:12)
(Laboratories--Equipment and supplies)
(Weights and measures)

YERMAKOV, S.

It is necessary to build modern combines. Mias.ind.SSSR 31 no.5:25-26 '60. (MIRA 13:9)

1. Stalinskiy sovnarkhoz.
(Packing houses)

YERMAKOV, S., inzh.

An integrated brigade is a progressive form of work organization. Rech. transp. 22 no.5:35-36 My '63. (MIRA 16:8)

(Inland water transportation—Employees)
(Ships—Maintenance and repair)

1. YERMAKOV, S. F.

2. USSR (600)

4. Technology

7. Practical manual for the standardizer of loading and unloading work. Moskva, Rechizdat, 1951.

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

YERMAKOV, S.F.

DESYATKOV, Mikhail Ivanovich; SEMIN, Ivan Dmitriyevich [deceased]; BRUSHLINSKIY, G.A., retsenzent; YERMAKOV, S.F., redaktor; LOBANOV, Ye.M., redaktor; KRASNAYA, A.K., tekhnicheskiy redaktor

[Handbook for the establishment of work norms in machine shops; small series and unit production] Spravochnik normirovshchika mekhanicheskogo tsekha; melkoseriinoe i edinichnoe proizvodstvo. Moskva, Izd-vo "Morskoi transport," Pt.1. [Turning and facing] Tokarnye i rastochnye raboty. 1955. 430 p. [Microfilm] (MLRA 8:2)
(Machine-shop practice)

YERMAKOV, S.F., inzhener.

Increased labor productivity is the most imortant factor of better wages for workers. Rech.transp. 14 no.12:10-13 D '55. (MLRA 9:3)

(Wages) (Inland water transportation)

YERMAKOV, Serafim Fedorovich; KUZ'MIN, N.I., retsenzent; KUMASHOV, A.S., retsenzent; BAYTIN, A.Ya., dotsent, kandidat tekhnicheskikh nauk, redaktor; BERLIN, K.Z., redaktor izdatel'stva; BOGICHEVA, M.N., tekhnicheskiy redaktor

[Work organization and technical norms in ship-repairing enterprises] Organizatsiia truda i tekhnicheskoe normirovanie na sudoremontnykh predpriiatiiakh. Pod obshchei red. A.IA. Baitina. Moskva, Izd-vo "Rechnoi transport," 1956. 273 p. (MLRA 10:1)
(Ships--Maintenance and repair)

YERMAKOV, Serafim Fedorovich

ORGANIZATSIYA TRUDA I TEKHNICHESKOYE NORMIROVANIYE NA SUDOREMONTNYKH PREPRIYATIYAKH (ORGANIZATION OF LABOR AND ESTABLISHMENT OF A SYSTEM OF TECHNICAL NORMS IN SHIP-REPAIR ENTERPRISES) POD RED. A.YA. BAYTINA. MOSKVA, "RECHNOY TRANSPORT", 1956. 273 p. ILLUS., DIAGRS., TABLES. BIBLIOGRAPHY: P.273

YERMAKOV, S. F.

Increasing labor productivity is an important factor for increased wages. Rech. transp. 15 no.10:26-27 O '56. (MLRA 10:2)

(Inland water transportation--Employees)
(Wages)

GABINSKIY, V.I., insh.; YERMAKOV, S.F., insh.

Change-over to the shortened workday in the Moscow shipbuilding and ship repair plant. Rech. transp. 17 no.8:18-20 Ag '58.
(MIRA 11:10)

(Moscow--Shipyards) (Hours of labor)

PROKHOROV, S.I. , prof., doktor ekon. nauk; BIBIK, L.F., ekonomist;
ERMAKOV, S.F., insh.

Useful beginning ("Economic aspects of inland water transportation" by V.S. Protasov, P.P. Sidorov. Reviewed by S.I. Prokhorov, L.F. Bibik, S.F. Ermakov). Rech.transp. 18 no.2:56-3 of cover F '59.
(MIRA 12:4)

(Inland water transportation)
(Protasov, V.S.) (Sidorov, P. P.)

YERMAKOV, Serafim Fedorovich; SIDOROV, P.P., red.; ARKHIPOV, Ye.Ye., retsenzent; LOBANOV, Ye.M., red. izd-va; BODROVA, V.A., tekhn. red.

[Guide to the establishment of norms for loading and unloading operations] Posobie normirovshchiku pogruzochno-razgruzochnykh rabot. Moskva, Izd-vo "Rechnoi transport," 1961. 136 p. (MIRA 14:7)

(Loading and unloading)

GABINSKIY, Viktor Isaakovich; YERMAKOV, Serafim Fedorovich; OKOL'NIKOV, A.S., retsenzent; SAMOKHOTKIN, I.M., red.; KAN, P.M., red. izd-va; BODROVA, V.A., tekhn. red.

[Organization of wages at machinery manufacturing shipbuilding and ship-repairing enterprises] Organizatsiia zarabotnoi platy na predpriiatiiakh mashinostroeniia, sudostroeniia i sudoremonta. Moskva, Izd-vo "Rechnoi transport," 1962. 228 p. (MIRA 15:6)
(Wages--Machinery industry) (Wages--Shipbuilding)

YERMAKOV, S.M.

16(1) PHASE I BOOK EXPLOITATION SOV/2217

Akademiya nauk SSSR. Matematicheskiy institut imeni V. A. Steklova

Raboty po priblizhennomu analizu (Works on Approximate Analysis) Moscow, AN SSSR, 1959. 391 p. (Its: Trudy, tom. 53) Errata slip inserted. 2,200 copies printed.

Ed.: L. V. Kantorovich, Corresponding Member, USSR Academy of Sciences, Professor; Resp. Ed.: I. G. Petrovskiy, Academician; Deputy Resp. Ed.: S. M. Nikol'skiy, Professor; Ed of Publishing House: N. K. Zaychik; Tech. Ed.: R. A. Arons.

PURPOSE: This book is intended for professional mathematicians interested in approximation methods.

COVERAGE: The book contains a collection of works in the field of approximate computations completed at the Leningrad Branch of the Mathematics Institute imeni V. A. Steklov of the Academy of Sciences, USSR, from 1953 to 1958. All the works contained in this book are published in full for the first time. The theoretical study of approximation methods conceptually related to the

Card 1/3

application of methods of functional analysis has a significant place in the book. In addition, the book contains groups of works on the following subjects: 1) approximate methods of solving the boundary value problems of mathematical physics, 2) numerical methods in the theory of functions, 3) numerical methods of linear algebra, and 4) numerical computation of an indefinite integral. The editor thanks the following people: V. I. Krylov, V. N. Faddeyeva, and V. P. Il'in, scientific workers at the Institute, for editing the articles; Ye. A. Meynik, T. P. Akimova, K. Ya. Alfer'yeva and G. A. Gaber, workers at the Institute's laboratory, for computing the tables; Professor S. M. Lozinskiy for his critical review of many of the works; A. A. Dorodnitsinyy and his colleagues for reviewing the works published; Professors D. K. Faddeyev and Yu. Ye. Alenitsyn for final review of the book.

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GUDKOV, A.S.; KIYEVLENKO, Ye.Ya.; KONDRASHEV, S.N.; YERMAKOV, N.P., retsenzent; LAZ'KO, Ye.M., retsenzent; PETROV, V.P., retsenzent; TATARINOV, P.M., retsenzent; KHOTENK, M.M., retsenzent; MAKSIMOV, A.A., nauchn. red.; FEDYUK, V.I., nauchn. red.

[Fundamentals of prospecting for piezo-optic mineral deposits] Osnovy poiskov i razvedki mestorozhdenii p'ezo-opticheskikh mineralov; metodicheskoe rukovodstvo. Moskva, Gosgeoltekhizdat, 1963. 217 p. (MIRA 17:6)

SMIRNOV, V.I., akademik, red.; YERMAKOV, N.P., red.; DOLGOV, Yu.A., red.; SOKOLOV, G.A., red.; KHITAROV, N.I., red.

[Mineralogical thermometry and barometry] Mineralogicheskaia termometriia i barometriia. Moskva, Nauka, 1965. 327 p. (MIRA 18:5)

1. Akademiya nauk SSSR. Nauchnyy Sovet po rudoobrazovaniyu.

KOROLEV, Aleksey Vasil'yevich; SHEKHTMAN, Pavel Aleksandrovich; VOL'FSON, F.I., retsenzent; YERMAKOV, N.P., red.; SMIRNOVA, Z.A., ved. red.

[Structural conditions governing the distribution of postmagmatic ores] Strukturnye usloviia razmeshcheniia poslemagmaticheskikh rud. Moskva, Nedra, 1965. 506 p. (MIRA 18:4)

BOGDANOV, A.A., prof.; YERMAKOV, N.P.; KOPTEV-DVORNIKOV, V.S.; KHASHENINNIKOV, G.F.; LEONOV, G.P.; SMIRNOV, V.I. akad.

International Geological Congress in New Delhi. Vest. Mosk. un. Ser. 4: Geol. 20 no.3:3-16 My-Je '65. (MIRA 18:7)

LIDER, V.A.; PERVAGO, V.A., otv.red.; MOKRUSHIN, K.V., red.; YERMAKOV, N.P., red.; KOROL'KOV, A.A., red.; KOZHEVNIKOV, K.Ye., red.; NECHAYEV, P.V., red.; POYARKOV, M.A., red.; PURKIN, A.V., red.; SOBOLEV, I.D., red.; TARKHANEYEV, B.F., red.

[Geology of the Northern Sos'va brown coal basin.] Geologiia Severosos'vinskogo burougol'nogo basseina. Moskva, Nedra, 1964. 144p. (Materialy po geologii i poleznym iskopaemym Urala, no.11) (MIRA 18:4)

DOLGOV, Yu.A.; YERMAKOV, N.P.; LAZ'KO, Ye.M.

Scientific and organizational problems of studying inclusions of mineral forming solutions at the 22d session of the International Geological Congress in New Delhi (in December 1964). Geol. i geofiz. no.10:149-150 '65.

(MIRA 18:12)

YERMAKOV, N.P.

Nature of mineral inclusions, their diagnostics and classification. Vest. Mosk. un. Ser. 4: Geol. 20 no. 6:18-30 N-D '65 (MIRA 19:1)

1. Kafedra poleznykh iskopayemykh Moskovskogo gosudarstvennogo universiteta. Submitted March 1, 1965.

KREYTER, V.M.; KREYTER, D.S.; ARISTOV, V.V.; AZHGIREY, G.D.; REZVOY, D.P.; KOZYRENKO, V.N.; LAZ'KO, Ye.M.; RUSETSKAYA, G.G.; GALKIN, B.I.; YERMAKOV, N.P.; NEVSKIY, V.A.; VOZDVIZHENSKIY, B.I.; KULICHIKHIN, N.I.; POPOV, I.N.

Nikolai Vas'il'evich Baryshev, 1903-. Izv.vys.ucheb.zav.; geol. i razv. 6 no.5:95-96 My '63. (MIRA 18:4)

KULAGASHEV, A.I.; YERMAKOV, N.S.

Complex ore deposits in an effusive formation. Trudy VITR no.4:283-287 '61. (MIRA 14:9)

(Ore deposits)

YERMAKOV, N.V., kandidat ekonomicheskikh nauk.

What is the total meat production on state farms? Nauka i pered.op. v sel'khoz, 6 no.11:71-72 N '56. (MIRA 10:1)
(Meat) (State farms)

YERMAKOV, N.V., kandidat ekonomicheskikh nauk.

Livestock raising on state farms established on virgin land. Nauka i pered.op.v sel'khoz.7 no.1:60-61 Ja '57. (MLRA 10:2)
(Kokchetav Province--Stock and stockbreeding)

1ST AND 2ND ORDERS

3RD AND 4TH ORDERS

PROCESSES AND PROPERTIES INDEX

BC

a-4

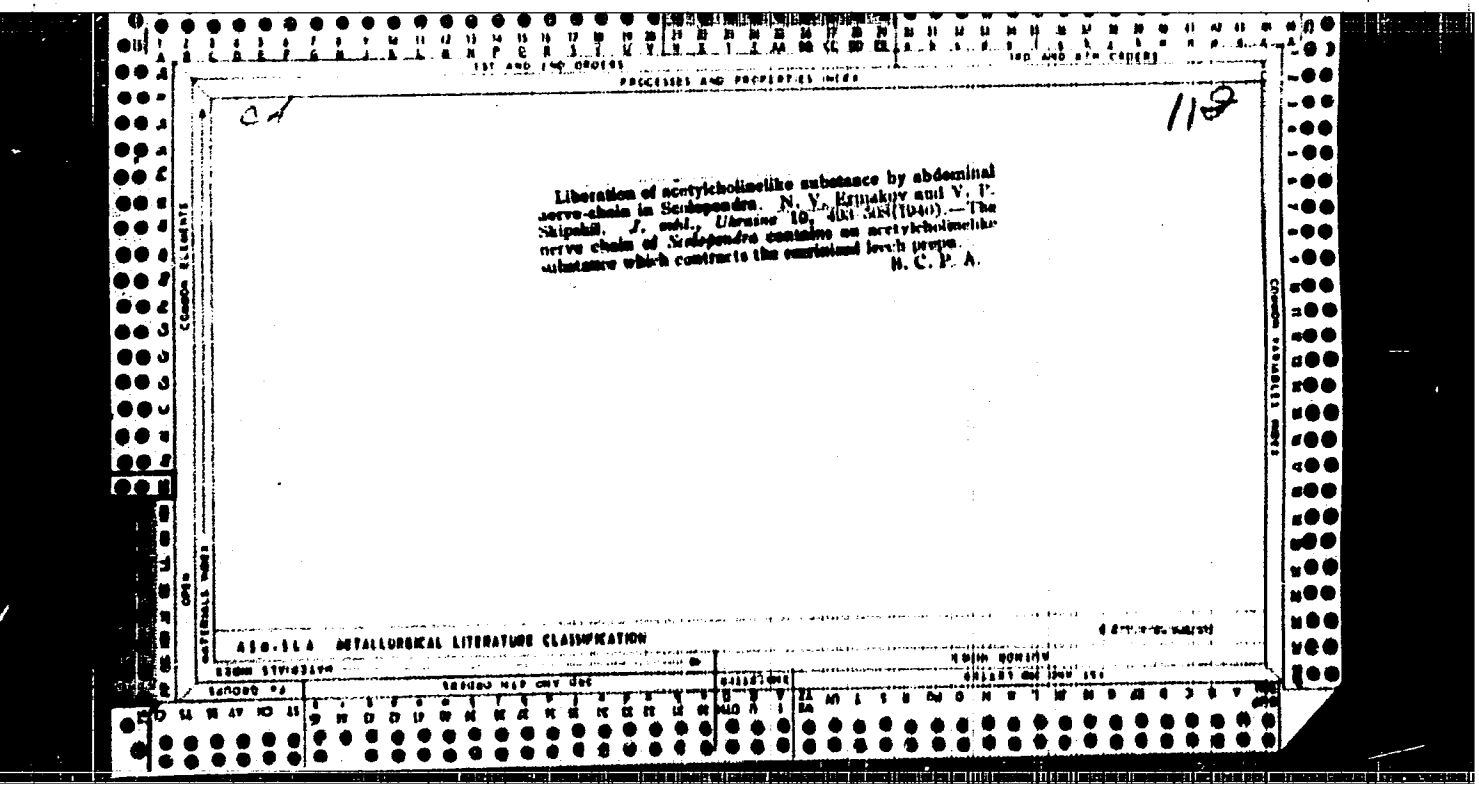
Thermoconductivity of skin in invertebrates. H. V. [illegible] [illegible], [illegible], [illegible], [illegible].—The [illegible] skin of invertebrates has a lower coeff. of internal thermoconductivity, which compensates for their [illegible] thickness. The cond. of necrotic (dead tissue) has a much higher coeff. than living tissue. M. K.

ASM-SLA METALLURGICAL LITERATURE CLASSIFICATION

ERMAKOV, N. V.

"Evolution of the Protective Properties of Organisms" (p. 23) by Ermakov, N. V.

SO: Advances in Contemporary Biology, (Uspekhi Sovremennoi Biologii), Vol. X, No. 1 1939

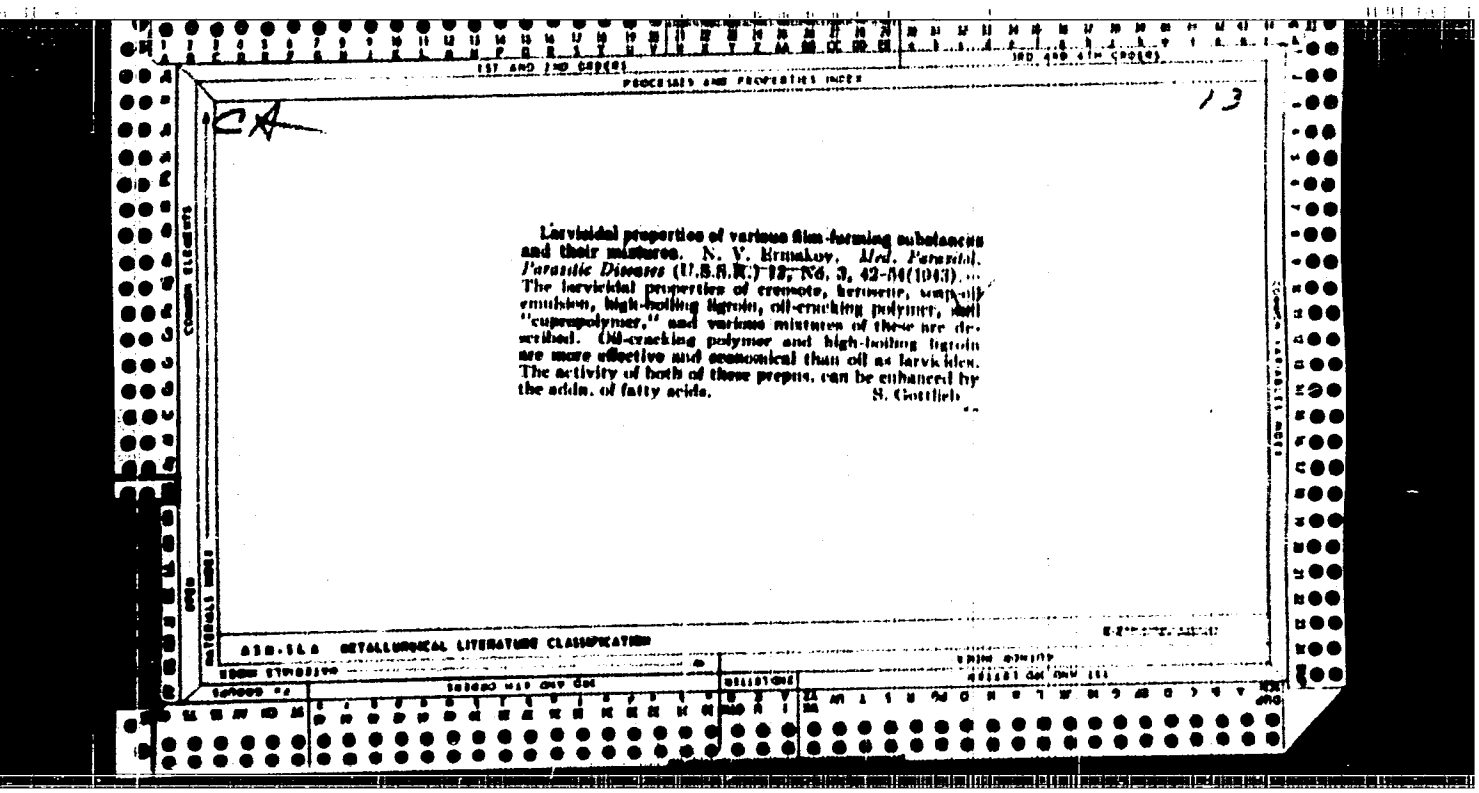


Liberation of acetylcholinelike substance by abdominal nerve-chain in Scolopendra. N. V. Krinskiy and V. P. Skipskii. *J. evol., Ukraine* 10, 403-5(1940).—The nerve chain of *Scolopendra* contains an acetylcholinelike substance which contracts the excitomotor leech preps. H. C. P. A.

ERMAKOV, N. V.

"Chemical Mediation in Invertebrata." (p. 79) by N. V. Ermakov

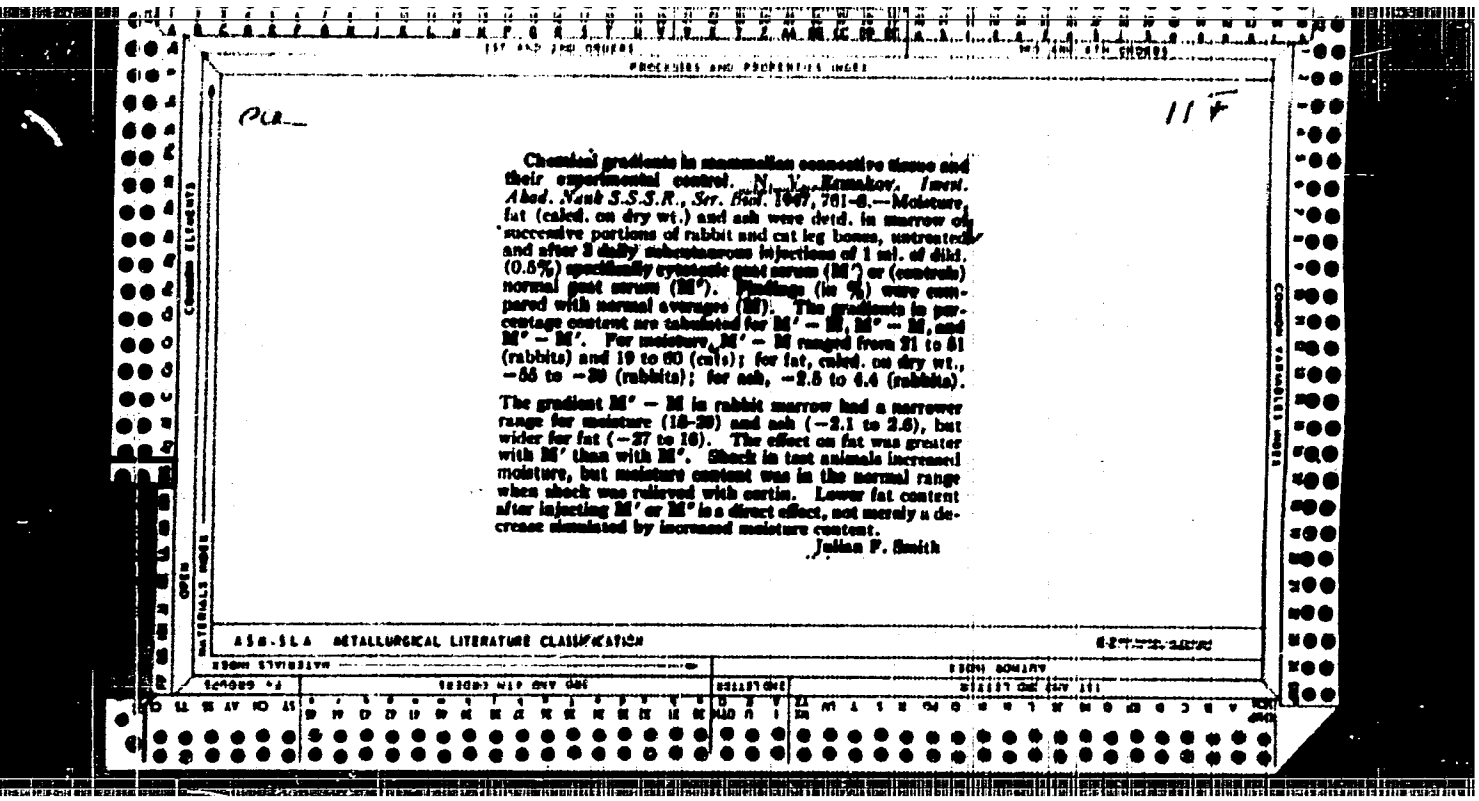
SO: Advances in Modern Biology (Uspekhi Sovremennoi Biologie) Vol. XIV, No. 1, 1941



CA

13

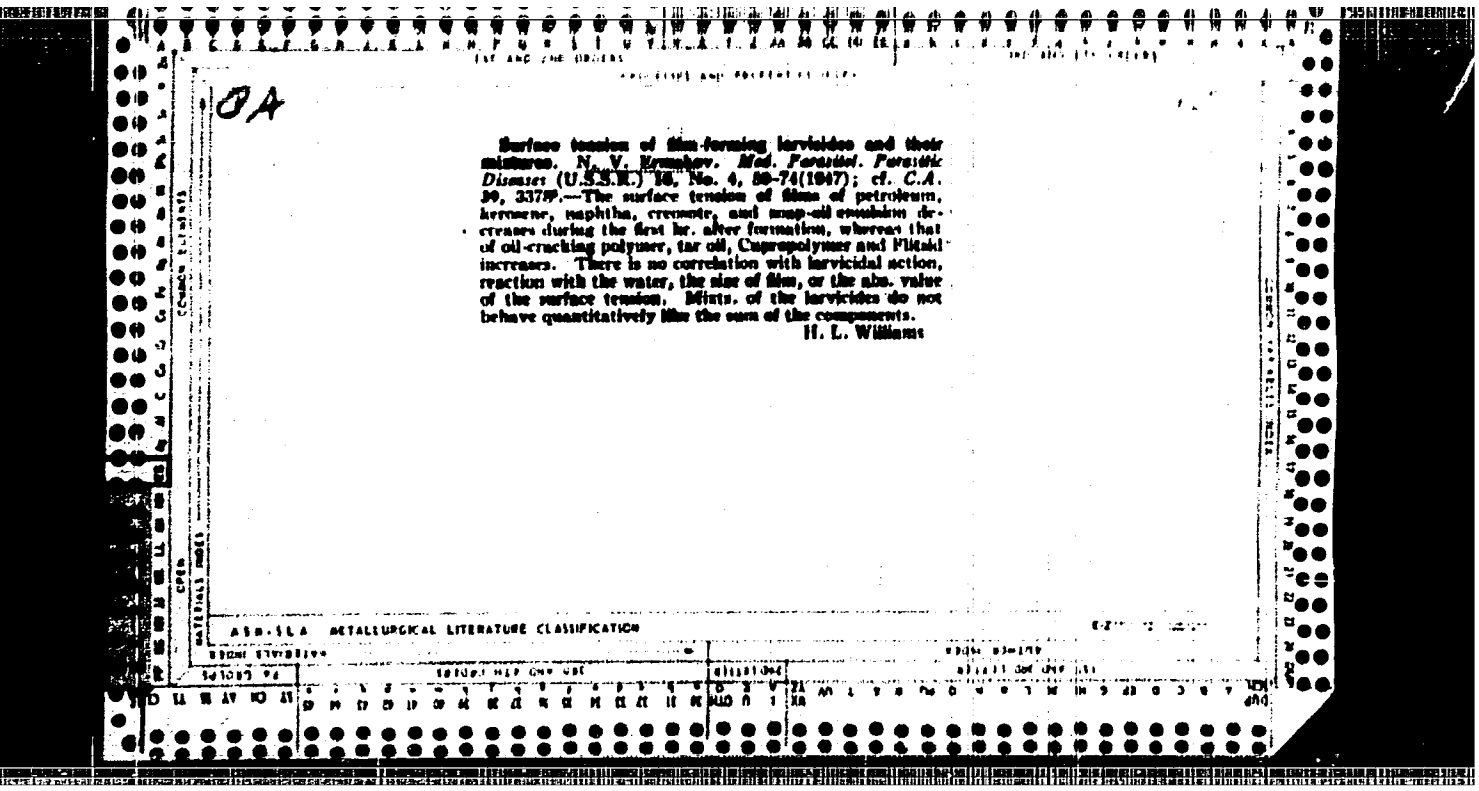
Larvicidal properties of various film-forming substances and their mixtures. N. V. Ermakov. *Med. Parasitol. Parasitic Diseases* (U.S.S.R.) 12, No. 3, 42-54(1943). The larvicidal properties of creosote, kerosene, soap-oil emulsion, high-boiling lignin, oil-cracking polymer, and "cuprospolymer," and various mixtures of these are described. Oil-cracking polymer and high-boiling lignin are more effective and economical than oil as larvicides. The activity of both of these preps. can be enhanced by the addn. of fatty acids. S. Gottlieb



Chemical gradients in mammalian connective tissue and their experimental control. N. V. Ermakov. *Izvest. Akad. Nauk S.S.S.R., Ser. Biol.* 1947, 781–8.—Moisture, fat (calcd. on dry wt.) and ash were detd. in marrow of successive portions of rabbit and cat leg bones, untreated and after 3 daily subcutaneous injections of 1 ml. of dild. (0.5%) specifically cytotoxic goat serum (M′) or (controls) normal goat serum (M″). Findings (in %) were compared with normal averages (M). The gradients in percentage content are tabulated for M′ − M, M″ − M, and M′ − M″. For moisture, M′ − M ranged from 21 to 61 (rabbits) and 19 to 60 (cats); for fat, calcd. on dry wt., −55 to −20 (rabbits); for ash, −2.5 to 6.4 (rabbits).

The gradient M′ − M in rabbit marrow had a narrower range for moisture (15–20) and ash (−2.1 to 2.6), but wider for fat (−27 to 16). The effect on fat was greater with M′ than with M″. Shock in test animals increased moisture, but moisture content was in the normal range when shock was relieved with curtin. Lower fat content after injecting M′ or M″ is a direct effect, not merely a decrease simulated by increased moisture content.

Julian P. Smith



9A

Surface tension of film-forming larvicides and their mixtures. N. V. Krasnov. *Med. Parasitol. Parasitic Diseases* (U.S.S.R.) 16, No. 4, 69-74(1947); cf. *C.A.* 39, 3377f.—The surface tension of films of petroleum, kerosene, naphtha, creosote, and soap-oil emulsion decreases during the first hr. after formation, whereas that of oil-cracking polymer, tar oil, Caprapolymer and Filtrol increases. There is no correlation with larvicidal action, reaction with the water, the size of film, or the abs. value of the surface tension. Mixts. of the larvicides do not behave quantitatively like the sum of the components.

H. L. Williams

ASB-SLA METALLURGICAL LITERATURE CLASSIFICATION

1. ERMAKOV, N. V.(Prof.)

2. USSR (600)

4. Reflexes

7. I. P. Pavlov's theory on the relationship of reflex to environment in higher organisms. Medych. zhur. 21, No. 5, 1951.

9. Monthly List of Russian Accessions, Library of Congress, April 1953, Uncl.

ERMAKOV, N. V.

"Physiological Function and Physiological Rest." (p. 218-32) by N.V. Ermakov

SO: Progress of Contemporary Biology (Uspekhi Sovremennoi Biologii) 1952, Vol. XXXIII, No. 2

YERMAKOV, N. V.

A. P. VISHNYAKOV, D. S. DOBROVOL'SKIY, N. V. YERMAKOV and S. E. TUKACHINSKIY

"Electrophoretic Determination of Protein Fractions on Paper," Doklady Akad. Nauk USSR 87: 1035-1038, No. 6, 1952.

This paper gives a fairly good review of the subject, including numerous important papers by investigators throughout the world. Little originality and some ingenuity are shown; only meager data are given. The authors, so far as we can ascertain, are inexperienced in this field.

IX

LEVASHOV, A.A.; YERMAKOV, B.V.; DRYAGIN, S.V.; SIDORENKO, B.V.

Experience with the use of VIEV (All-Union Institute of Experimental Veterinary Science) vaccine (G.M. Bash'ian vaccine) against infectious anemia in horses. Veterinariia 30 no.3:20-24 Mr '53. (MLRA 6:3)

YERMAKOV, N.V.; DYADYUSHA, G.G.

Role of innervation in rhythmic function of the skeletal muscle. Fiziol. zh. SSSR 39 no. 1:89-95 Jan-Feb 1953. (CIML 24:2)

1. Department of Physiology of the Institute of Experimental Biology and Pathology imeni Academician A. A. Bogomolets, Kiev.

YERMAKOV, N. V.

"Some General Principles of Reactions of Living Systems to Irritants," Usp. Sovrem. Biol., 38, No.1, pp 39-57, 1954

Translation M-709, 24 Aug 55

YERMAKOV, N. V.

[illegible] N. V. and [illegible] N. P.

Dept. of Physiol., 'Bacteriophage' Inst. of Exp. Biology and Pathol., Kiev. "Effect of various factors on fibrillation of the skeletal muscle in a solution of barium chloride" FIZIOL.ZHUR.SSSR 1954, 40/2 (181-187) Tables 5 Illus. 2 (Russian text)

The rate of fibrillation produced by immersion of the frog gastrocnemius muscle in $BaCl_2$ solution, is increased in the early phases after denervation (up to 5 days) and tenotomy (up to 8 days). The latent period from immersion to the beginning of fibrillation decreases with the concentration from M/8 to M/512 $BaCl_2$, but the amplitude and frequency of the fibrillation is lower at the weaker concentrations from M/64 to M/512. This is in part an osmotic effect, since addition of glucose to M/64 $BaCl_2$ to equal the osmotic pressure of M/1 $BaCl_2$ has much the same effect as increase of the $BaCl_2$ concentration. Increase of temperature to 30°C. (from 30 min. to 22 hr.) lengthens the latent period. Adrenaline in a concentration of 10^{-7} to 10^{-5} shortens the latent period in preparations with long latent period in the control muscles, while it lengthens the latent period in preparations with short latent period.

Simonson - Minneapolis

SO: Excerpta Medica Section II Vol 7 N. 12

FD-1344

USSR/Medicine - Physiology

Card 1/1 : Pub. 33-22/25

Author : Yermakov, N. V.

Title : Method of automatic recording of urination in animals under conditions of their complete isolation

Periodical : Fiziol. zhur. 40, 4, 501-503, Jul/Aug 1954

Abstract : A method of automatic recording of urination has been developed by the author of this article. To collect the urine more easily the ureter was drawn into the skin surface. The experimental animal was completely isolated from the experimenter. A diagram of electric apparatus for continual recording of urination is shown on page 502. Successful application of a permanent fistula to the bladder was originally made by Pavlov and made possible systematic experiments in the fields of normal and pathological physiology of urination. Successful assimilation of autotransplanted kidney stimulated further interest in these fields. Diagram. Graph. Four Soviet references.

Institution : Institute of Physiology, Academy of Sciences Ukrainian SSR, Kiev

Submitted : April 20, 1953

VISHNYAKOV, A.P. [Vishniakou, A.P.]; YERMAKOV, N.V. [Ermakou, N.V.];
TUKACHINSKIY, S.Ye. [Tukachynskii, S.E.]

Electrophoresis of proteins on filter paper. Vestsi AN BSSR.
Ser. fiz.-tekhn.nav. No.2:76-83 '58. (MIRA 11:10)
(Proteins) (Electrophoresis)

DASHKEVICH, I.O.; D'YAKOV, S.I.; YERMAKOV, N.V.; IVANOVA, M.T.; MAYBORODA, G.M.

Staining Salmonella typhosa with fluorescent antibodies. Zhur. mikrobiol.epid. i immun. 30 no.1:97-102 Ja '58. (MIRA 12:3)

1. Iz Voyenno-meditsinskoy ordena Lenina akademii imeni Kirova.
(SALMONELLA TYPHOSA,
stain. by fluorescent antibodies (Rus))
(ANTIBODIES,
fluorescent antibodies, stain. of Salmonella typhosa (Rus))

DASHKEVICH, I.O.; D'YAKOV, S.I.; YERMAKOV, N.V.; IVANOVA, M.T.; OSIPOVA, I.V.

Use of an indirect fluorescent antibody method in species- and type-specific of certain pathogenic bacteria. Zhur.mikrobiol.epod. i immun. 31 no.11:43-49 N '60. (MIRA 14:6)

1. Iz Voyenno-meditsinskoy ordena Lenina akademii imeni Kirova.
(ANTIGENS AND ANTIBODIES) (SERUM DIAGNOSIS)

MIKHAYLOV, Ivan Fedorovich; D'YAKOV, Sergey Ivanovich. Prinimali uchastiye: DASHKEVICH, I.O.; YERMAKOV, N.V.; IVANOVA, M.T.; LI LI; OSIPOVA, I.V.; MAYBORODA, G.M.; USPENSKIY, V.I., red.; ZUYEVA, N.K., tekhn. red.

[Fluorescence microscopy; application in medical microbiology] Liuminestsentnaia mikroskopiia; primenenie v meditsinskoi mikrobiologii. Moskva, Medgiz, 1961. 222 p. (MIRA 15:1)
(FLUORESCENCE MICROSCOPY) (MICROBIOLOGY)

YERMAKOV, N.V., prof. (Kiyev)

Establishment of the form of mammalian erythrocytes. Probl.gemat. i perel.krovi no.9:27-30 '62. (MIRA 15:12)
(ERYTHROCYTES)

NOSKOV, F.S.; BOLDASOV, V.K.; GOL'DIN, R.B.; YERMAKOV, N.V.; VOLKOVA, L.A.

Contrast method of immunofluorescent discovery of adenoviruses in the kidney cell culture of guinea pigs. Vop. virus. 10 no.5:613-614 S-O '65. (MIRA 18:11)

1. Voyenno-meditsinskaya ordena Lenina akademiya imeni S.M. Kirova, Leningrad.

L 27116-66 EWT(1)/T JK

ACC NR: AP6004869 (N) SOURCE CODE: UR/0402/65/000/005/0613/0614

AUTHOR: Noskov, F. S.; Boldasov, V. K.; Gol'din, R. B.; Yermakov, N. V.; Volkova, L. A.

ORG: Military Medical Academy im. S. M. Kirov, Order of Lenin, Leningrad (Voyennomeditsinskaya ordena Lenina akademiya)

TITLE: Contrast medium for immunofluorescent detection of adenoviruses in cell cultures of guinea pig kidneys

SOURCE: Voprosy virusologii, no. 5, 1965, 613-614

TOPIC TAGS: virus disease, animal disease, experiment animal, ~~rabbit, diagnostic instrument~~ serum, cytology, antigen, microscopy

ABSTRACT: Bovine serum albumin labeled with sulforhodamine B fluoride was tested as a contrast medium for adenovirus type 4 infected guinea pig kidney cells stained with fluorescein. The infected cells were exposed to the specific rabbit immune globulin, then added with fluorescein isothiocyanate at a rate of 10 mg fluorochrome per 1 g protein. The phosphate buffered serum albumin was first conjugated with freshly synthesized sulforhodamine B fluoride in an alkaline medium, then purified. The fixated adenovirus preparations were treated

Card 1/2 UDC: 576.858.5.093.3.073.4

L 27116-66

ACC NR: AP6004869

with the mixture of conjugates for 20 minutes, then studied under the luminescent microscope. Normal cells were brick red, the protoplasm lighter than the nucleus; the infected nuclei had a specific green color with bright green sparkling enclosures. Upon single step processing of the preparations, the specific interaction of virus antigen-antibody was not inhibited by the presence of the labeled albumin. The physicochemical absorption of labeled albumin on cells led to nonspecific staining of the backgroud (cells containing no virus antibodies) which did not depress specific fluorescence. This method also permits the detection of single infected cells. Its use is recommended. "The sulforhodamine B fluoride was placed at our disposal by Prof. I. S. Ioffe whom we wish to thank for his courtesy". Orig. art. has: none.

SUB CODE: 06/ SUBM DATE: 26Nov64/ OTH REF: 006

Card 2/2

AUTHOR: Yermakov, N.Ye. SOV/115-58-1-11/50

TITLE: Checking Measuring Heads on the IZM Measuring Machine (Poverka izmeritel'nykh golovok na izmeritel'noy mashine IZM)

PERIODICAL: Izmeritel'naya Tekhnika, 1958, Nr 1, p 22 (USSR)

ABSTRACT: This short article describes the method of checking measuring heads with 1 and 2 microns divisions by way of comparison with the readings of the telescope caliper tube of the machine IZM. There is 1 diagram.

1. Gages--Performance 2. Gages--Testing equipment

Card 1/1

SOV/115-58-5-8/36

AUTHOR: Yermakov, N.Ye.

TITLE: Production Check of Setting Measures for Screw Micrometers (Proizvoditel'naya poverka ustanovochnykh mer k rez'bovym mikrometram)

PERIODICAL: Izmeritel'naya tekhnika, 1958, Nr 5, pp 17-18 (USSR)

ABSTRACT: The author suggests a new method of checking the screw setting measures on the IZV-1 vertical linear measuring unit with the help of an additional table and a special end piece. The measuring process is as follows: the screw inserts are fixed in the fitting holes of the table and the end piece. The instrument column is lowered until the measuring surfaces of the screw inserts are in complete contact. The scale is then set at zero. Then the column is raised, the gauge to be checked is placed between the inserts, and after a pause, so that the gauge temperature can adjust itself to that of the device, a reading is taken of the dial on the device. This method has been checked in the

Card 1/2

SOV/115-58-5-8/36

Production Check of Setting Measures for Screw Micrometers

Leningrad Control and Checking Laboratory at VNIIM and was highly evaluated. There are 2 diagrams.

Card 2/2

ACC NR: AP6030156 (A) SOURCE CODE: UR/0120/66/000/004/0195/0196

AUTHOR: Abov, Yu. G.; Bulgakov, M. I.; Gul'ko, A. D.; Yermakov, O. N.; Krupchitskiy, P. A.; Oratovskiy, Yu. A.; Trostin, S. S.

ORG: Institute of Theoretical and Experimental Physics, GKAE, Moscow (Institut teoreticheskoy i eksperimental'noy fiziki GKAE)

TITLE: Production of polarized beams of thermal neutrons by means of a pile of cobalt mirrors

SOURCE: Pribory i tekhnika eksperimenta, no. 4, 1966, 195-196

TOPIC TAGS: neutron beam, thermal neutron, nuclear research reactor, cobalt, neutron polarization, collimator

ABSTRACT: A unit for the production of polarized neutron beams needed for experimental purposes is described. The unit, shown below, consists of a collimator and a pile of cobalt mirrors. The collimator, consisting of 10 convergent slits separated by vertical steel plates, is placed in the horizontal channel of a reactor. Each of the cobalt mirrors is backed by glass and the length of each mirror is made up of three separate units 350 x 125 x 3 mm^3 in size. The top and bottom ends of the mirrors are fitted into 10 slots bored through the connecting strips and clamped with wedge clamps so that each mirror has a corresponding slit in the collimator.

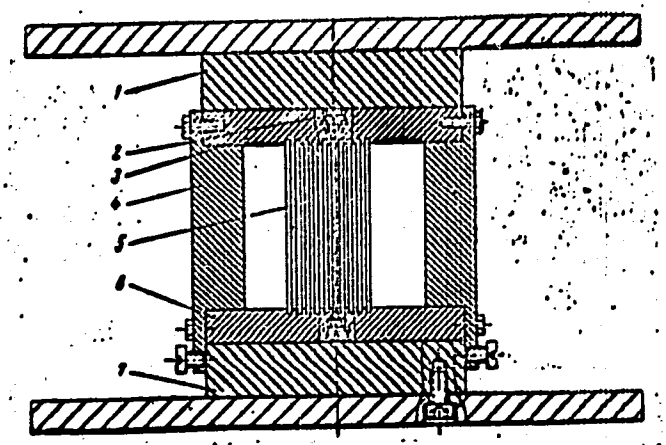
Card 1/3 UDC: 539.1.078.539.125.5

ACC NR: AP6030156

The pile of mirrors is set into an electromagnet. The mean angle of beam incidence on a corresponding mirror is 7.5' and all neutron beams reflected by the mirrors converge at a distance of 4.5 m from the pile of mirrors. The incident and reflected beams are separated by means of a sliding screen system made of boron carbide situated near the target. The flow of polarized neutrons on a specimen with an area of 100 x 10 mm^2 amounted to 3 x 10^7 neutrons/sec. The degree of neutron beam polarization amounted to — 90%, and the polarization efficiency of 95%. The authors thank V. A. Beketov and N. S. Shatlovskaya for making the cobalt mirrors, Yu. Ya. Garrison for assembling the pile of mirrors, and A. I. Savushkin, V. K. Risgukhin, O. M. Svetlov, and I. L. Karpikhin for helping with the measurements. Orig. art. has: 1 figure.

Card 2/3

ACC NR: AP6030156



1. upper magnetic pole, 2. wedge clamp, 3. upper connecting strip, 4. side wall (brass), 5. cobalt mirror, 6. lower connecting strip, 7. lower magnetic pole

SUB CODE: 20, 18/ SUBM DATE: 31Jul65/ ORIG REF: 001/ OTH REF: 002

Card 3/3

87367

S/120/60/000/004/006/028
E032/E414

21.2100

AUTHORS: Abov, Yu.G., Beketov, V.A., Gul'ko, A.D., Yermakov, O.N., Krupchitskiy, P.A., Taran, Yu.V. and Shatlovskaya, N.S.

TITLE: Production of Polarized Neutrons by Reflection From a Cobalt Mirror

PERIODICAL: Pribory i tekhnika eksperimenta, 1960, No.4, pp.51-55

TEXT: The method of obtaining polarized thermal neutrons by reflection from magnetic mirrors was described by Hughes and Burgy (Ref.1) and Akhiyezer and Pomeranchuk (Ref.2). In order to obtain neutrons with practically a single spin state it is necessary that the component of the induction B which is parallel to the surface of the mirror should be greater than a certain minimum value. When this condition is satisfied practically all the reflected neutrons will have spins parallel to B. In the case of pure cobalt it can be shown, using the data of Shull and Wollan (Ref.3), that $B \geq 11200$ gauss. Strictly speaking, this is the condition for the quantity $B - H$ where H is the magnetic field in the gap of the magnet. According to Bozort (Ref.4) the saturation value of $B - H$ is 17900 gauss. As a result, the condition for complete polarization of neutrons reflected from a

87367
S/120/60/000/004/006/028
E032/E414

Production of Polarized Neutrons by Reflection From a Cobalt Mirror

magnetized mirror of pure cobalt can be written down in the form

$$(B - H) \geqslant 63\% \ (B - H)_s \qquad (1)$$

The present authors have used these ideas to produce polarized neutrons. The apparatus employed is shown schematically in Fig.2. A narrow vertical neutron beam was formed by a collimator which was 1.2 m long and had a rectangular slot of 110 x 3 mm. The neutron flux at the exit of the collimator was 4 x 10^7 neutrons/cm^2 sec. The cobalt mirror-polarizer was fixed between the magnet poles. The magnet-mirror system could be adjusted to the required position and in order to obtain a definite separation between the direct and the reflected beams a special brass screen, which could be adjusted with the aid of a micrometer screw, was provided. The cobalt mirrors employed were 100 mm x 500 mm x 40 μ. The cobalt was deposited electrolytically on a 5 mm thick copper plate. The analysing mirror was held in another magnet and was also adjustable.

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67367
S/120/60/000/004/006/028
E032/E414

Production of Polarized Neutrons by Reflection From a Cobalt Mirror

In order to separate the beams reflected from the first and second mirrors, special cadmium and copper screens placed in front of the second mirror were employed. The neutrons were recorded by a high-efficiency multi-wire proportional counter filled with B^{10}-enriched BF_3. A cadmium slit, 1.5 mm wide and 60 mm long, was placed in front of the counter. It was found that the degree of polarization obtained with an angle of incidence of 8 minutes was 75 ± 2%. 100% Polarizations were obtained at greater angles of incidence. Mirrors made of an alloy of cobalt and 7% iron were also investigated but the maximum polarizations obtained did not exceed 60%. In the case of the pure cobalt mirrors, the flux of polarized neutrons at θ = 8 min was 3×10^5 neutrons/cm^2 sec at the centre of the beam, the half-width of the beam being 8 mm and the height 100mm (magnetic field in polarizer magnet = 600 Oe). The total intensity was 2×10^6 neutrons/sec. Acknowledgments are expressed to Yu.Ya.Garrison, A.K.Dubasov, N.M.Regentov and A.I.Savushkin for their assistance and to T.B.Nova for valuable advice. There are 4 figures, 1 table and 9 references: 3 Soviet

Card 3/4

S/120/60/000/004/006/028
E032/E414

Production of Polarized Neutrons by Reflection From a Cobalt Mirror and 6 non-Soviet (3 of which are translated into Russian).

ASSOCIATIONS: Institut teoreticheskoy i eksperimental'noy fiziki AN SSSR (Institute of Theoretical and Experimental Physics AS USSR) all authors except Yu.V.Taran; Ob"yedinennyy institut yadernykh issledovaniy (Joint Institute for Nuclear Studies) Yu.V.Taran

SUBMITTED: April 9, 1960

Fig. 2

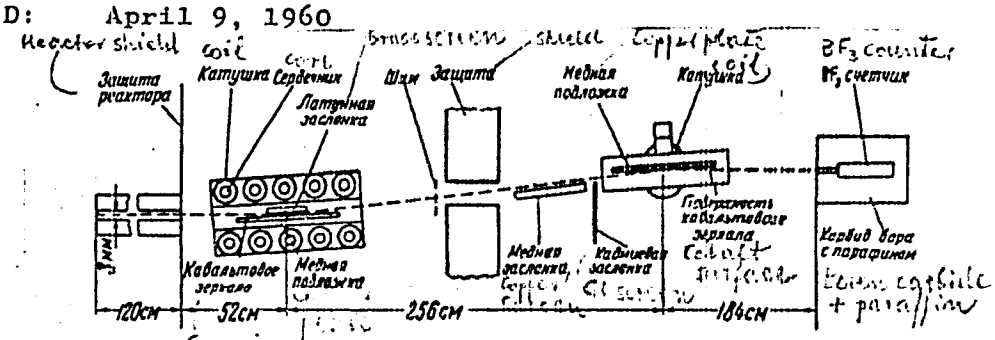


Рис. 2. Схема установки

Card 4/4

ACC NR: AP6030156 (A) SOURCE CODE: UR/0120/66/000/004/0195/0196

AUTHOR: Abov, Yu. G.; Bulgakov, M. I.; Gul'ko, A. D.; Yermakov, O. N.; Krupchitskiy P. A.; Oratovskiy, Yu. A.; Trostin, S. S.

ORG: Institute of Theoretical and Experimental Physics, GKAE, Moscow (Institut teoreticheskoy i eksperimental'noy fisiki GKAE)

TITLE: Production of polarized beams of thermal neutrons by means of a pile of cobalt mirrors

SOURCE: Pribory i tekhnika eksperimenta, no. 4, 1966, 195-196

TOPIC TAGS: neutron beam, thermal neutron, nuclear research reactor, cobalt, neutron polarization, collimator

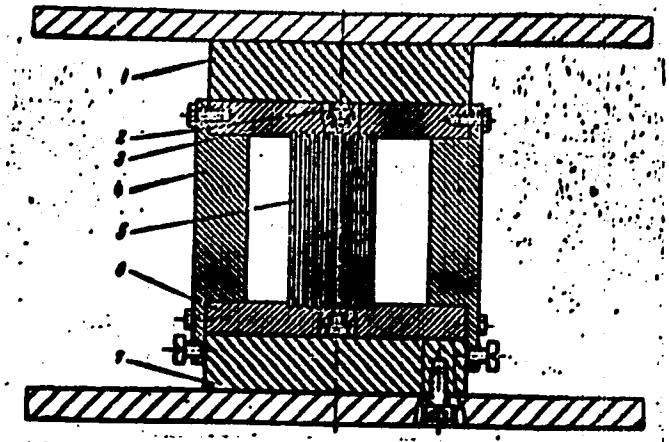
ABSTRACT: A unit for the production of polarized neutron beams needed for experimental purposes is described. The unit, shown below, consists of a collimator and a pile of cobalt mirrors. The collimator, consisting of 10 convergent slits separated by vertical steel plates, is placed in the horizontal channel of a reactor. Each of the cobalt mirrors is backed by glass and the length of each mirror is made up of three separate units 350 x 125 x 3 mm^3 in size. The top and bottom ends of the mirrors are fitted into 10 slots bored through the connecting strips and clamped with wedge clamps so that each mirror has a corresponding slit in the collimator.

Card 1/3

UDC: 539.1.078.539.125.5

The pile of mirrors is set into an electromagnet. The mean angle of beam incidence on a corresponding mirror is 7.5' and all neutron beams reflected by the mirrors converge at a distance of 4.5 m from the pile of mirrors. The incident and reflected beams are separated by means of a sliding screen system made of boron carbide situated near the target. The flow of polarized neutrons on a specimen with an area of 100 x 10 mm^2 amounted to 3 x 10^7 neutrons/sec. The degree of neutron beam polarization amounted to — 90%, and the polarization efficiency of 95%. The authors thank V. A. Beketov and N. S, Shatlovskaya for making the cobalt mirrors, Yu. Ya. Garrison for assembling the pile of mirrors, and A. I. Savushkin, V. K. Risukhin, O. M. Svetlov, and I. L. Karpikhin for helping with the measurements. Orig. art. has: 1 figure.

ACC NR: AP6030156



1. upper magnetic pole, 2. wedge clamp, 3. upper connecting strip, 4. side wall (brass), 5. cobalt mirror, 6. lower connecting strip, 7. lower magnetic pole

SUB CODE: 20, 18/ SUBM DATE: 31Jul65/ ORIG REF: 001/ OTH REF: 002

Card 3/3

42314-66 EWT(m)
ACC NR: AP6024675 SOURCE CODE: UR/0070/66/011/004/0695/0698

AUTHOR: Abov, Yu. G.; Aleshko-Ozhevskiy, O. P.; Yermakov, O. N.; Yamzin, I. I.

ORG: Institute of Crystallography, AN SSSR (Institut kristallografii AN SSSR)

53
50
B

TITLE: The generation of a beam of polarized monochromatic neutrons

19

SOURCE: Kristallografiya, v. 11, no. 4, 1966, 695-698

TOPIC TAGS: neutron beam, ~~reactor neutron~~, neutron polarization, nuclear reactor component, neutron reaction, thermal neutron, magnetic property

ABSTRACT: In recent years, investigations of magnetic properties of a substance have made extensive use of polarized thermal neutrons. Heretofore, the Soviet Union had only installations on which the polarized neutrons were generated by reflection from a magnetized cobalt mirror. However, many problems require a polarized beam of monochromatic neutrons. In this article, the authors describe an assembly developed at the ITEF GK IAE jointly with the Institute of Crystallography, AN SSSR (Institut kristallografii AN SSSR). The circuit of the installation is shown in Fig. 1. There is sometimes a need to have a beam of neutrons with an opposite polarization. The authors used the radiofrequency method for the reorientation of spin orientation. A value of 0.98 ± 0.02 was obtained for the spin reorientation probability.

Card 1/3 UDC: 548.7

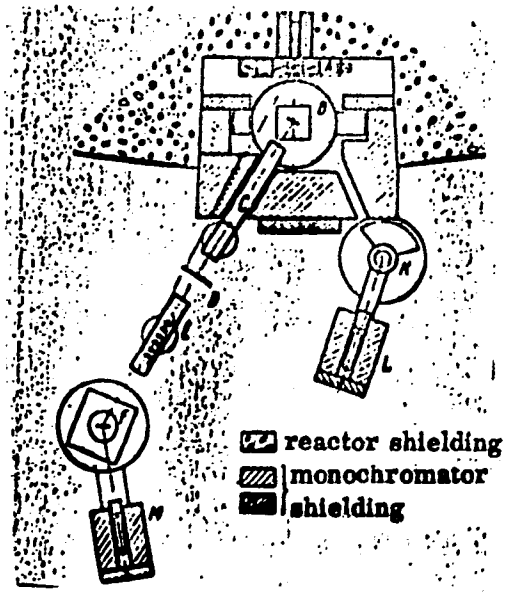


Fig. 1. Circuit of an assembly of two diffraction meters on a reactor channel.

A - stage of replaceable monochromators
B - magnet of the crystal-polarizer
C - first section of the driving field
D - diaphragm, or "shim"
E - second section of the driving field with a radiofrequency coil
F - magnet of the analyzer crystal
K, L - small diffraction meter
M - neutron detector of the large diffraction meter

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ACC NR: AP6024675

3

Measurements of the polarization and of the probability of its reorientation in the center and at the edge of the beam (± 15 mm from the center) agreed. The authors express their sincere gratitude to V. A. Lyubimtsev, P. M. Shishkin, and S. F. Dubinin for assistance in making the measurements and assuring the operation of the equipment. Orig. art. has: 4 figures and 2 formulas. [26]

SUB CODE: 18/ SUBM DATE: 14Nov64/ ORIG REF: 006/ OTH REF: 005/ ATD PRESS: 5067

Card 3/3

YERMAKOV, P.

Technology

(Worker's protection in ferrous metallurgy). (Moskva) Profizdat, 1951.

Monthly List of Russian Accessions, Library of Congress, November 1952. UNCLASSIFIED

STAKHANOV, T., tekhnik, Geroy Sotsialisticheskogo Truda; YERMAKOV, P.; MONAKHOV, M., brigadir stroitel'noy brigady; VITKENE, S., Geroy Sotsialisticheskogo Truda

Let's use progressive practices of the All-Union Agricultural Exhibition. Sel'stroi. 9 no.6:3-4 S '54.
(MIRA 13:2)

1. Kolkhoz imeni Krasnykh partisan, Verkhne-Ural'skogo rayona, Chelyabinskoy oblasti (for Stakhanov). 2. Zamestitel' predsedatelya kolkhoza Lenina, Susunskogo rayona, Novosibirskoy oblasti (for Yermakov). 3. Kolkhoz "Bol'shevik Leninskogo rayona, Moskovskoy oblasti (for Monakhov). 4. Zaveduyushchaya svinovodcheskoy fermoy kolkhoza "Gegushes Pirmoyi," Pakruoyskogo rayona, Litovskoy SSR (for Vitkene).
(Moscow--Farm buildings--Exhibitions)

YERMAKOV, P.

Promote the activity of all sections. MTO 2 no.1:46-47 Ja '60. (MIRA 13:5)

(Moscow Province--Agricultural research)

YERMAKOV, P., dots.

High goal. Okhr. truda i sots. strakh. 3 no.8:17-18 Ag '60.
(MIRA 13:9)

1. Magnitogorskiy gorno-metallurgicheskiy institut, glavnyy tekhnicheskiy inspektor Chelyabinskogo oblsovprofa.
(Magnitogorsk--Steel industry--Hygienic aspects)

YERMAKOV, P., dotsent

Attention, new workshops are being taken over. Okhr.truda i sots. strakh. 5 no.4:11-12 Ap '62. (MIRA 15:4)

1. Magnitogorskiy gornometallurgicheskiy institut.
(Factories--Design and construction) (Industrial hygiene)

YERMAKOV, Prokopiy Dement'yevich; KOLEGOV, Aleksandr Yermolayevich; [illegible]; SHUMKOV, V.I., redaktor; TSYMBALIST, N.N., redaktor izdatel'stva; ZHF, Ye.M., tekhnicheskiy redaktor

[Safety engineering in the work of metallurgical plants] Organizatsiia raboty po tekhnike bezopasnosti na metallurgicheskom zavode. Sverdlovsk, Gos.nauchno-tekhn.izd-vo lit-ry po chernoi i tsvetnoi metallurgii, Sverdlovskoe otd-nie, 1957. 135 p. (MIRA 10:11)
(Metallurgical plants--Safety measures)

YERMAKOV, P.D., inzh.

Improving working conditions in stock houses. Bezop.truda v prom. 5 no.4:14-16 Ap '61. (MIRA 14:3)

1. Glavnyy tekhnicheskiy inspektor Chelyabinskogo oblsovprofa.
(Blast furnaces—Safety measures)

YERMAKOV, P.D., dotsent

Testing air heaters of blast furnaces. Bezop.truda v prom. 6 no.2:28-29 F '62. (MIRA 15:2)

1. Magnitogorskiy metallurgicheskiy institut.
(Blast furnaces—Equipment and supplies—Testing)

YERMAKOV, P.D.

Great contribution toward industrial safety. Metallurg 7 no.1:38 Ja '62. (MIRA 15:1)

1. Glavnyy tekhnicheskiy inspektor Oblprofsoveta v g. Magnitogorske.
(Blast furnaces--Safety measures)

YERMAKOV, P.D.; VORONKOV, V.V.

Normalizing labor conditions in the repair of smoke stacks.
Stal' 22 no.10:947-950 O'62. (MIRA 15:10)

1. Magnitogorskiy gornometallurgicheskiy institut i Magnitogorskiy metallurgicheskiy kombinat.
(Flues—Maintenance and repair)
(Iron and steel plants—Safety measures)

1(0); 19(0) PHASE I BOOK EXPLOITATION SOV/3269

Glukhov, M.K., M.M. Danilevskiy, P.G. Yermakov, V.B. Yemel'yanenko, V.M. Lozovoy-Shevchenko, P.F. Plyachenko, V.I. Sekachev, and A.A. Shukayev.

Voyenno-vozdushnyye sily (Air Force) Moscow, Voyen. izd-vo M-va obor. SSSR, 1959. 202 p. (Series: Biblioteka ofitsera) No. of copies printed not given.

General Ed.: M.K. Glukhov, Docent, General-Major of the Air Force; Eds.: A.S. Mirnyy, Colonel, and N.P. Gordeyev, Colonel, (ret.); Tech. Ed.: M.A. Strel'nikova.

PURPOSE: The book is intended for military personnel. It will be of interest to all those interested in the role of air power in modern warfare.

COVERAGE: The book surveys the history of the Soviet Air Force and discusses its organizational set-up, types of aircraft, combat characteristics, tasks, and armament. The role of aviation in modern military strategy is analyzed and the cooperation necessary between air, ground, and naval forces defined. Future prospects of development of Soviet aviation are outlined. Some attention is paid to the development and possible use of nuclear weapons by the Air Force and in anti-aircraft defense. Photos and specifications of the

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following Soviet aircraft are given: AN-10 turboprop transport aircraft, Tu-110 transport jet, Mi-6 turboprop helicopter, Yak-24 two-engined helicopter, Mi-4 helicopter, Tu-104 turbojet transport aircraft, Il-14 transport aircraft, ANT-35 (Pe-35) transport aircraft, MiG-15bis fighter, Tu-14 bomber, Be-6 bomber, Il-28 bomber, Pe-2 bomber, DB-3F (Il-4) bomber, Il-10 fighter, La-5 fighter, and the Yak-3 fighter. There are 40 Soviet references.

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Air Force SOV/3269

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AVAILABLE: Library of Congress

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AC/jb
2-29-60

KUTUKOV, A.I.,red.; GARKALENKO, K.I.,red.;GORBACHEV, I.V.,red.; YERMAKOV, P.I.,red.;OVSYANNIKOV, Yu.N.,red.;PILYUGIN, B.A.,red.;RODIONOV, I.S.,red.;RODIONOV, A.N.,red.;SEREBRIN, I.Ya.,red.; GUSEV, M.S., red. izd-va,;PROZOROVSKAYA, V.L.,tekhn. red.; SABITOV, A.,tekhn.red.

[Uniform safety rules for geological surveying; compulsory for all ministries, economic councils,departments, organizations, and enterprises conducting geological studies] Edinye pravila bezopasnosti pri geologorazvedochnykh rabotakh; obiazatel'ny dlia vsekh ministerstv, sovnarkhozov, vedomstv, organizatsii i predpriiatii, vedushchikh geologicheskie raboty. Moskva, Ugletekhizdat, 1958. 102 p.(MIRA 11:12)

1. Russia(1923- U.S.S.R.) Komitet po nadzoru za bezopasnym vedeniyem rabot v promyshlennosti i gornomu nadzoru.
(Geological surveys)

YERMAKOV, P.I.

AUTHOR: None Given SOV/6-58-6-17/21

TITLE: Chronicle (Khronika)

PERIODICAL: Geodeziya i kartografiya, 1958, Nr 6, pp. 76-76 (USSR)

ABSTRACT: From April 21 - 22, 1958 the Conference on Labor Protection and Accident Prevention took place in Moscow. It was attended by: the chief-engineers of the aerial surveying institutes, accident prevention engineers, chairmen of the committees of worker's groups, factory and plant committees and regional organizations and of the trade unions in the enterprises and organizations of the Central Bureau of Surveying and Cartography at the Ministry for the Interior of the USSR (Glavnoye upravleniye geodezii i kartografii MVD SSSR). Besides there were present: leading collaborators of the Ministry of the Interior of the USSR (GUGK) (Ministerstvo vnutrennykh del SSSR) of the Central Committee of the Trade Union of Workers in Geological Prospecting (Profsoyuz rabochikh geologorazvedochnykh rabot), of the Technical Inspection of the Trade Union Executive Committees (Tekhnicheskaya inspektsiya sovetov profsoyuzov), of the Ministry of Health (RSFSR) (Ministerstvo zdravookhraneniya RSFSR) and of the Trade Union

Card 1/3

Central Committee (Profsoyuznyy aktiv). The following lectures were held: G. K. Zubakov, Deputy Director of the GUGK MVD SSSR: "On the Stage of Labor Protection and Accident Prevention in the Organizations and Institutions of the GUGK in 1956-1957 and the Measures Taken for Improving the Working Conditions and Decreasing Traumatic Accidents in Enterprises". The Director of the Department for Labor Protection at the TsK (Profsoyuza rabochikh geologorazvedochnykh rabot), P. I. Yermakov spoke about"The Tasks of the Trade Union Organizations in the Enterprises and Cartographic Institutes of the GUGK for Improving Labor Protection, Accident Prevention and Industrial Sanitary Service and for Decreasing the Traumatic Accidents in the Enterprises and the Falling Ill of Workers". Other lectures were held by: the Chief Engineers of a number of aerial surveying enterprises, cartographic institutes and of the Works of Aerial Surveying Instruments. - The purpose of the conference was to check the execution of the orders given by the XX-th Party Congress of the CP USSR concerning the further improvement of labor protection and accident prevention within the system of the Central Office of Surveying and Cartography. It was found that for these purposes great means are expended; at the

Chronicle

SOV/ 6-58-6-17/21

same time deficiencies were discovered. Measures were worked out to remove the latter.

1. Labor--Safety measures 2. Accidents

Card 3/3

YERMAKOV, Petr Ivanovich; ZAGORSKIY, G., red.; YAKOVLEVA, Ye., tekhn. red.

[Corn is a profitable crop] Kukuruza - vygodnaia kul'tura. Moskva, Mosk. rabochii, 1961. 27 p. (MIRA 15:8)
(Moscow Province--Corn (Maize))

ACCESSION NR: AT4043332 S/2572/64/000/010/0137/0147

AUTHOR: Gokhfel'd, D. A. (Candidate of technical sciences); Yermakov, P.I. (Engineer)

TITLE: Adaptability of thick-walled spherical vessels to the recurrent effects of a temperature field.

SOURCE: Raschety* na prochnost'; teoreticheskiye i eksperimental'ny*ye issledovaniya prochnosti mashinostroitel'ny*kh konstruktsiy. Sbornik statey, no. 10, 1964, 137-147

TOPIC TAGS: recurrent temperature field, stressed hollow sphere, hollow sphere, hollow sphere adaptability, yield point, elastic state area, adaptability diagram, variable pressure adaptability problem, variable temperature adaptability problem, hollow sphere

ABSTRACT: The report presents an analysis of the adaptability of a hollow sphere stressed by internal pressure and subjected to recurrent thermal influences exerted by the working medium it contains. Heating and cooling are assumed to proceed at a relatively slow rate, hence thermal shock is not considered. The solution considers the effect of temperature on yield point, other physical and mechanical characteristics being assumed constant in view of their relatively insignificant change with temperature. Operating with dimensionless magnitudes and relating stresses, in part, to values for yield point at normal temperatures, the authors develop basic equations for internal pressure stresses, temperature distribution

Card 1/2

ACCESSION NR: AT4043332

function, thermal stresses and total stresses, and evolve expressions for a series of planes within coordinates p, q and m (p = stress parameter, q = temperature field parameter, m = a parameter to which self-compensating initial stresses are proportional) which circumscribe the area of elastic states. Finally, they construct an adaptability diagram and examine problems in relation to constant or varying pressure and temperature. Orig. art. has: 5 graphs and 18 equations.

ASSOCIATION: none

SUBMITTED: 00 ENCL: 00

SUB CODE: IE NO REF SOV: 004 OTHER: 001

Card 2/2

MUSTEL', Pavel Ivanovich; DYATLOV, V.I., inzh., retsenzent; YEGOROV, P.I., inzh., retsenzent; ZAYTSEV, A.P., otv. red.

[Principles of safety engineering and fire fighting technology in prospecting] Osnovy tekhniki bezopasnosti i protivopozharnoi tekhniki pri geologorazvedochnykh rabotakh. Moskva, Nedra, 1964. 183 p. (MIRA 17:11)

L 7762-66 EPA/EWT(m)/EWP(w)/EWP(f)/EPF(n)-2/EWA(d)/EWP(v)/T-2/EWP(t)/EWP(k)/
ACC NR: AT5024284 EWP(z)/EWP(b)/ETC(m) SOURCE CODE: UR/0000/65/000/000/0233/0240
MJW/JD/WW/EM/GS

AUTHOR: Yermakov, P. I. (Chelyabinsk)

ORG: none

TITLE: Thermal stability of gas turbine blades under the action of multiple thermal changes

SOURCE: Nauchnoye soveshchaniye po teplovym napryazheniyam v elementakh konstruktsiy. 5th, Kiev. Teplovyye napryazheniya v elementakh konstruktsiy (Thermal stresses in construction elements); doklady nauchnogo soveshchaniya, no. 5. Kiev, Naukova dumka, 1965, 233-240

TOPIC TAGS: gas turbine engine, turbine blade, turbine design, thermal stress, plastic flow/ EI765 alloy

ABSTRACT: An attempt is made to estimate the thermal stability of a free turbine blade and to evaluate irreversible dimensional changes. The kinetics of plastic deformation are based on linearly-elastic and fully-plastic assumptions without considering creep and relaxation. The deformations along the blade axis are assumed

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as $$e = a + bx + cy$$

(x in the direction of the chord) which gives the stress in the elastic portion of the blade as $$\sigma = E(a+bx+cy) - \alpha ET - E\varepsilon_p$$

(where $T = T(x,y,t)$ - temperature; t = time; $\varepsilon_p = \varepsilon_p(x,y,t)$ - plastic deformation prior to instant under consideration). Using the equations of equilibrium

$$\int_F \sigma dF = N; \quad \int_F \sigma x dF = M_y; \quad \int_F \sigma y dF = M_x$$

and $\sigma = \sigma_s$ (in the plastic regions), a set of three integral equations is obtained in terms of a, b, and c. Assuming $M_x = 0$, $c = 0$, and temperature variations only along a principal axis of inertia, these equations are solved for a and b

$$a = \frac{1}{A}\left[\int_{F_0 f} Ex^2 dF \left(\int_{F_0 f} \alpha ET dF + \int_{F_{yn}} E\varepsilon_n dF - \int_{F_{yn}} \sigma_s dF + N\right) - \right.$$
$$\left. - \int_{F_{yn}} Ex dF \left(\int_{F_{yn}} \alpha ET x dF + \int_{F_{yn}} E\varepsilon_n x dF - \int_{F_{yn}} \sigma_s x dF + M_y\right)\right] :$$

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$$b=\frac{1}{\Delta}\left[\int_{F_{yn}} EdF\left(\int_{F_{yn}} \alpha ET x dF+\int_{F_{yn}} E\varepsilon_n x dF-\int_{F_n} \sigma_z x dF+M_y\right)-\right.$$
$$\left.-\int_{F_{yn}} Ex dF\left(\int_{F_{yn}} \alpha ET dF+\int_{F_{yn}} E\varepsilon_n dF-\int_{F_n} \sigma_z dF+N\right)\right],$$
$$\Delta=\int_{F_{el}} EdF\cdot\int_{F_{el}} Ex^2 dF-\left(\int_{F_{el}} Ex dF\right)^2.$$

These equations can be solved by a method of successive approximations to obtain the boundaries between the elastic and plastic regions. As an example, the solution was obtained for a turbine blade made of EI-765 alloy in a 1000C gas flow. The blade was divided into 26 equal strips (2-mm wide), and the plastic deformations were calculated by successive approximations. The number of cycles-to-failure was then calculated from the Koffin equation $\sqrt[m]{N}\cdot\Delta\varepsilon_n=C$.

It was found that the results agreed well with experimental results obtained on these blades at the AN UkrSSR (calculated cycles-to-failure 39 versus 35 experimentally). Orig. art. has: 2 tables, 2 figures, and 8 formulas.

SUB CODE: PR/ SUBM DATE: 14May65/ ORIG REF: 010

Card 3/3 nw

YERMAKOV, P.M.; APRODOV, V.A.; YEFREMOV, Yu.K.; ROMASHOVA, A.T.; ZHERDENKO, O.N.; SOROKIN, V.V.; KHODETSKIY, V.G.

Basic points of the seven-year-plan for the development and activities of the Museum of Earth Science. Zhizn' Zem. no.1: 243-261 '61. (MIRA 15:6)

(Moscow--Geographical museums)

GOKHFEL'D, D.A.; YERMAKOV, P.I. (Chelyabinsk)

Adaptability of thick-walled tubes under nonuniform heating. PMTF no.3:107-110 My-Je '63. (MIRA 16:9)
(Plasticity) (Thermal stresses)

ACCESSION NO: AP3002814

S/0207/63/000/003/0107/0110

AUTHORS: Gokhfel'd, D. A. (Chelyabinsk); Yermakov, P. I. (Chelyabinsk)

TITLE: Limits of application of thick-walled nonuniformly heated pipes

SOURCE: Zhurnal prikladnoy mekhaniki i tekhnicheskoy fiziki, no. 3, 1963, 107-110

TOPIC TAGS: thick walled pipe, pipe strength, tube strength, heated thick walled pipe, high temperature pipe application

ABSTRACT: Based upon the stress distribution in a thick-walled pipe and a temperature distribution $t = t_b + t_1 \frac{\ln \rho}{\ln k}$, $(t_1 = t_a - t_b)$, the total stress distribution due to pressure and temperature was derived as

$$\sigma_r = p\left(1 - \frac{1}{\rho}\right) + (m - q)\left(1 - \frac{1}{\rho} + \delta \ln \rho\right),$$

$$\sigma_\theta = p\left(1 + \frac{1}{\rho}\right) + (m - q)\left[1 + \frac{1}{\rho} + \delta(2 + \ln \rho)\right]$$

$$\sigma_z = p + 2(m - q)[1 + \delta(1 + \ln \rho)]$$

where $\left(q = t_1^0 \frac{k}{1-k},\ t_1^0 = \frac{\alpha E t_1}{2\sigma_s(1-\nu)},\ \delta = \frac{1-k}{k \ln k}\right)$.

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ACCESSION NO: AP3002814

Assuming that the yield stress remains constant until $t \leq t_b$ and decreases linearly beyond this temperature, the Mises criterion leads to $\lambda = \frac{2(1-\nu)\sigma_{t_b}}{aK}$

$$(\sigma_r - \sigma_\theta)^2 + (\sigma_\theta - \sigma_z)^2 + (\sigma_z - \sigma_r)^2 = 2(1 - \lambda q \delta \ln \rho)^2 .$$

Combining the above equations, the equation of the surface under which the pipe does not fail was derived. This surface was found to have the shape of an elliptic cone. The cutside radius of the pipe forms a cylinder in the m-p-q coordinate system so that all actual possible conditions under which the pipe does not fail lie in the volume formed by the intersection of the cone and the cylinder. Orig. art. has: 3 figures and 15 formulas.

ASSOCIATION: none

SUBMITTED: 24Dec62 DATE ACQ: 16Jul63 ENCL: 00

SUB CODE: ML, JE NO REF SOV: 006 OTHER: 000

Card 2/2

GOKHFEL'D, D.A., kand. tekhn. nauk; YERMAKOV, P.I., inzh.

Adaptability of thick-walled spherical vessels under repeated action of a thermal field. Rasch.na proch. no.10:137-147 '64. (MIRA 18:1)

YERMAKOV, P.P.

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

Abs Jour: Referat. Zh.-Biol., No. 9, 1957, 35598

Author : Nikitin, V.N.; Butskaia, V.D.; Vorobeva, T.M.; Ermakov, P.P.; Kovtun, N.E.

Title : The Influence of Acidophil Milk (Acidophilin) and Streptomycin on the Growth of Laboratory Animals

Orig Pub: Uch. zap. Kharkovskogo un-ta, 1956, 68, 275-279

Abstract: In 2 series of experiments with mature white rats (55 animals) and 4 series of experiments with white rats at the age of 1 month (45 animals), an increase in the weight of the body was noted when there was added to a rich ration 10 milliliters of acidophilin and 20 units of streptomycin

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Chair Physiol of Man & Animals, Sci Res Inst. Biol. & Biol Faculty, Khar'kov State Univ. im A.M. Gor'kiy

Abs Jour: Referat. Zh.-Biol., No. 9, 1957, 35582

for every gram of body weight. The greatest effect was obtained in the younger rats with the addition of streptomycin.

YERMAKOV, P.V.; RAVIKOVICH, P.I.; FUKS, I.I.

Founding machine parts in shell molds. Tekst.prom. 16 no.5:50-52 My '56. (MLRA 9:8)

(Shell molding (Founding))

NIKONOROV, N.M.; MARSOV, A.V.; YERMAKOV, P.Ye.; KAL'MANOVICH, S.L., kand. tekhn. nauk, red.; KUREPINA, G.N., red.izd-va; SPERANSKAYA, O.V., tekhn. red.

[Handbook on laboratory weighing instruments and weights] Spravochnik po laboratornym vesam i giriam. Moskva, Mashgiz, 1963. 191 p. (MIRA 16:12)
(Laboratories--Equipment and supplies)
(Weights and measures)

YERMAKOV, S.

It is necessary to build modern combines. Mias.ind.SSSR 31 no.5:25-26 '60. (MIRA 13:9)

1. Stalinskiy sovnarkhoz.
(Packing houses)

YERMAKOV, S., inzh.

An integrated brigade is a progressive form of work organization. Rech. transp. 22 no.5:35-36 My '63. (MIRA 16:8)

(Inland water transportation—Employees)
(Ships—Maintenance and repair)

1. YERMAKOV, S. F.

2. USSR (600)

4. Technology

7. Practical manual for the standardizer of loading and unloading work. Moskva, Rechizdat, 1951.

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

YERMAKOV, S.F.

DESYATKOV, Mikhail Ivanovich; SEMIN, Ivan Dmitriyevich [deceased]; BRUSHLINSKIY, G.A., retsenzent; YERMAKOV, S.F., redaktor; LOBANOV, Ye.M., redaktor; KRASNAYA, A.K., tekhnicheskiy redaktor

[Handbook for the establishment of work norms in machine shops; small series and unit production] Spravochnik normirovshchika mekhanicheskogo tsekha; melkoseriinoe i edinichnoe proizvodstvo. Moskva, Izd-vo "Morskoi transport," Pt.1. [Turning and facing] Tokarnye i rastochnye raboty. 1955. 430 p. [Microfilm] (MLRA 8:2)
(Machine-shop practice)

YERMAKOV, S.F., inzhener.

Increased labor productivity is the most imortant factor of better wages for workers. Rech.transp. 14 no.12:10-13 D '55. (MLRA 9:3)

(Wages) (Inland water transportation)

YERMAKOV, Serafim Fedorovich; KUZ'MIN, N.I., retsenzent; KUMASHOV, A.S., retsenzent; BAYTIN, A.Ya., dotsent, kandidat tekhnicheskikh nauk, redaktor; BERLIN, K.Z., redaktor izdatel'stva; ZHGICHEVA, M.N., tekhnicheskiy redaktor

[Work organization and technical norms in ship-repairing enterprises] Organizatsiia truda i tekhnicheskoe normirovanie na sudoremontnykh predpriiatiiakh. Pod obshchei red. A.IA. Baitina. Moskva, Izd-vo "Rechnoi transport," 1956. 273 p. (MLRA 10:1)
(Ships--Maintenance and repair)

YERMAKOV, Serafim Fedorovich

ORGANIZATSIYA TRUDA I TEKHNICHESKOYE NORMIROVANIYE NA SUDOREMONTNYKH PREPRIYATIYAKH (ORGANIZATION OF LABOR AND ESTABLISHMENT OF A SYSTEM OF TECHNICAL NORMS IN SHIP-REPAIR ENTERPRISES) POD RED. A.YA. BAYTINA. MOSKVA, "RECHNOY TRANSPORT", 1956. 273 p. ILLUS., DIAGRS., TABLES. BIBLIOGRAPHY: P.273

YERMAKOV, S. F.

Increasing labor productivity is an important factor for increased wages. Rech. transp. 15 no.10:26-27 O '56. (MLRA 10:2)

(Inland water transportation--Employees)
(Wages)

GABINSKIY, V.I., insh.; YERMAKOV, S.F., insh.

Change-over to the shortened workday in the Moscow shipbuilding and ship repair plant. Rech. transp. 17 no.8:18-20 Ag '58. (MIRA 11:10)

(Moscow--Shipyards) (Hours of labor)

PROKHOROV, S.I. , prof., doktor ekon. nauk; BIBIK, L.F., ekonomist;
ERMAKOV, S.F., insh.

Useful beginning ("Economic aspects of inland water transportation" by V.S. Protasov, P.P. Sidorov. Reviewed by S.I. Prokhorov, L.F. Bibik, S.F. Ermakov). Rech.transp. 18 no.2:56-3 of cover F '59.
(MIRA 12:4)

(Inland water transportation)
(Protasov, V.S.) (Sidorov, P. P.)

YERMAKOV, Serafim Fedorovich; SIDOROV, P.P., red.; ARKHIPOV, Ye.Ye., retsenzent; LOBANOV, Ye.M., red. izd-va; BODROVA, V.A., tekhn. red.

[Guide to the establishment of norms for loading and unloading operations] Posobie normirovshchiku pogruzochno-razgruzochnykh rabot. Moskva, Izd-vo "Rechnoi transport," 1961. 136 p. (MIRA 14:7)

(Loading and unloading)

GABINSKIY, Viktor Isaakovich; YERMAKOV, Serafim Fedorovich; OKOL'NIKOV, A.S., retsenzent; SAMOKHOTKIN, I.M., red.; KAN, P.M., red. izd-va; BODROVA, V.A., tekhn. red.

[Organization of wages at machinery manufacturing shipbuilding and ship-repairing enterprises] Organizatsiia zarabotnoi platy na predpriiatiiakh mashinostroeniia, sudostroeniia i sudoremonta. Moskva, Izd-vo "Rechnoi transport," 1962. 228 p. (MIRA 15:6)
(Wages--Machinery industry) (Wages--Shipbuilding)

YERMAKOV, S.M.

16(1) PHASE I BOOK EXPLOITATION SOV/2217

Akademiya nauk SSSR. Matematicheskiy institut imeni V. A. Steklova

Raboty po priblizhennomu analizu (Works on Approximate Analysis) Moscow, AN SSSR, 1959. 391 p. (Its: Trudy, tom. 53) Errata slip inserted. 2,200 copies printed.

Ed.: L. V. Kantorovich, Corresponding Member, USSR Academy of Sciences, Professor; Resp. Ed.: I. G. Petrovskiy, Academician; Deputy Resp. Ed.: S. M. Nikol'skiy, Professor; Ed of Publishing House: N. K. Zaychik; Tech. Ed.: R. A. Arons.

PURPOSE: This book is intended for professional mathematicians interested in approximation methods.

COVERAGE: The book contains a collection of works in the field of approximate computations completed at the Leningrad Branch of the Mathematics Institute imeni V. A. Steklov of the Academy of Sciences, USSR, from 1953 to 1958. All the works contained in this book are published in full for the first time. The theoretical study of approximation methods conceptually related to the

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application of methods of functional analysis has a significant place in the book. In addition, the book contains groups of works on the following subjects: 1) approximate methods of solving the boundary value problems of mathematical physics, 2) numerical methods in the theory of functions, 3) numerical methods of linear algebra, and 4) numerical computation of an indefinite integral. The editor thanks the following people: V. I. Krylov, V. N. Faddeyeva, and V. P. Il'in, scientific workers at the Institute, for editing the articles; Ye. A. Meynik, T. P. Akimova, K. Ya. Alfer'yeva and G. A. Gaber, workers at the Institute's laboratory, for computing the tables; Professor S. M. Lozinskiy for his critical review of many of the works; A. A. Dorodnitsinyy and his colleagues for reviewing the works published; Professors D. K. Faddeyev and Yu. Ye. Alenitsyn for final review of the book.

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