SAL'NIKOV, I.S., general direktor tiagi i ranga.

[Electrification of railroad transportation in the fifth five-year plan] Elektrifikatsiia sheleznodorozhnogo transporta v piatoi piatiletke. Moskva, Izd-vo "Znanie," 1953. 31 p. (MLRA 6:8)
(Railroads--Electrification)

32(3) SOV/112-59-3-5069

Translation from: Referativnyy zhurnal. Elektrotekhnika, 1959, Nr 3, pp 108-109 (USSR)

AUTHOR: Sal'nikov, I. S.

TITLE: Railroad Electrification (Elektrifikatsiya zheleznykh dorog)

PERIODICAL: V sb.: Vopr. razvitiya zh.-d. transp. M., Transzheldorizdat, 1957, pp 16-39

ABSTRACT: A short historical sketch of railroad electrification in the USSR is presented. Data is submitted characterizing technical and economic effectiveness of the electric traction. It is noted that the electric-traction efficiency amounts to 16-18% when supplied by thermal stations; 24-28% when supplied by heating-and-electricity stations of high and superhigh steam parameters; 60% in case of hydroelectric generating stations. Major characteristics of electric-traction and steam-traction operations are compared for 2-track and 1-track lines. Cost of transportation is lower by 25-30% with electrical traction than with steam. The total length of electrified railroad in the USSR will take the

Card 1/2

SOV/112-59-3-5069

32(3)

Railroad Electrification

first place in the world by 1960. A characteristic feature of modern railroad electrification is the switching over from the electrification of individual sections to the electrification of main lines; this radically changes the operation of the most heavily loaded lines. Wide adoption of electrical traction will start a complex electrification of all railroad utilities. Simultaneously with electrification of 40,000 km of railroads, according to the "General Plan of Railroad Electrification," about 20% of rayon centers and 20% of kolkhozes will be electrified. Electrical-energy consumption for traction will grow from 13 billion kwh at the present time to 50 billion kwh in 1970. Important engineering and economic advantages of the 50-cycle single-phase system are noted. Considerations on modernization of the DC system and stepping up its efficiency are submitted. A number of major steps toward strengthening the power supply of the existing line sections must be taken. See also RZhE, 1957, 899.

V.A.K.

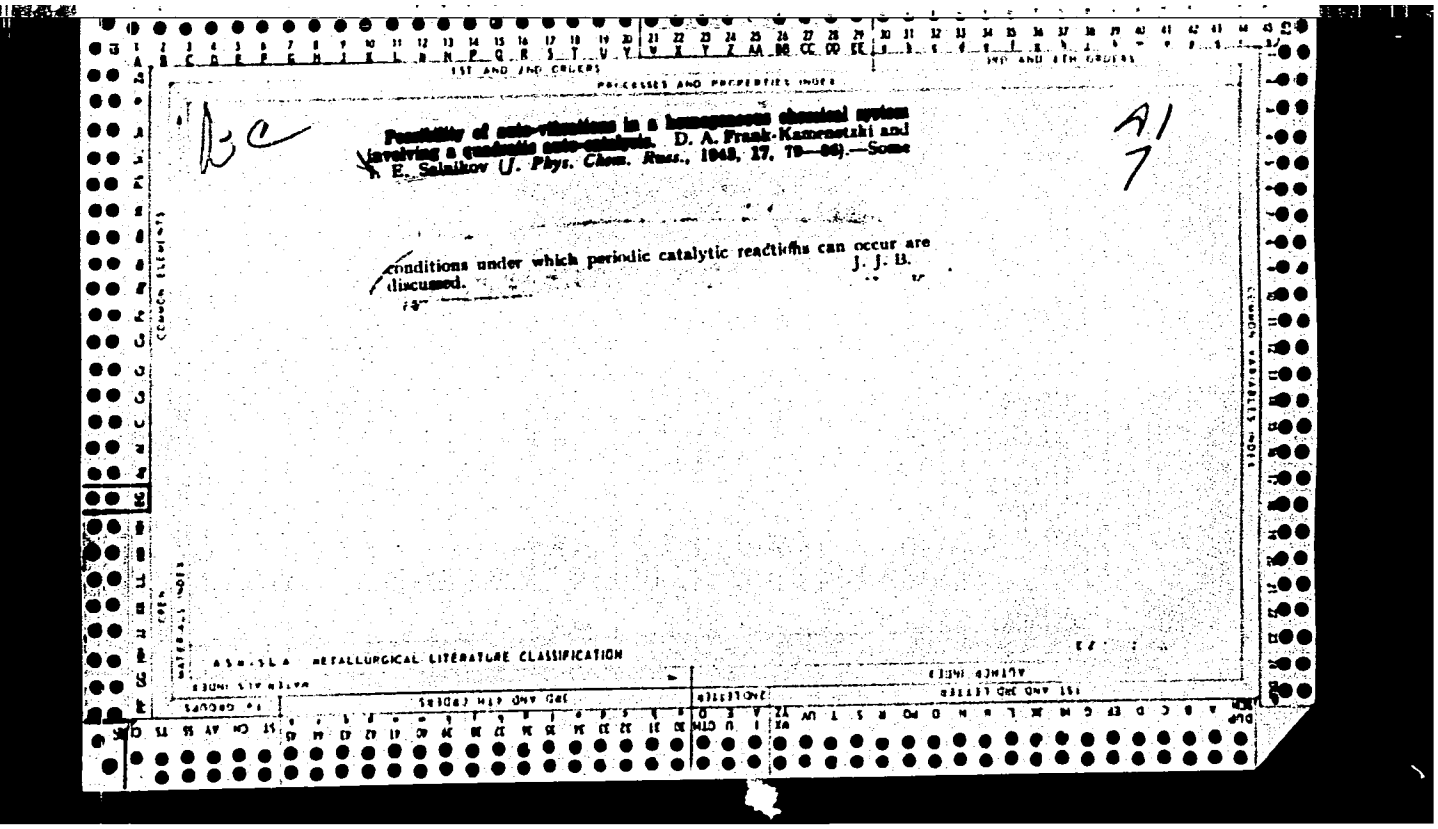
Card 2/2

PARFENOV, I.A., dotsent; SAL'NIKOV, I.S., dotsent

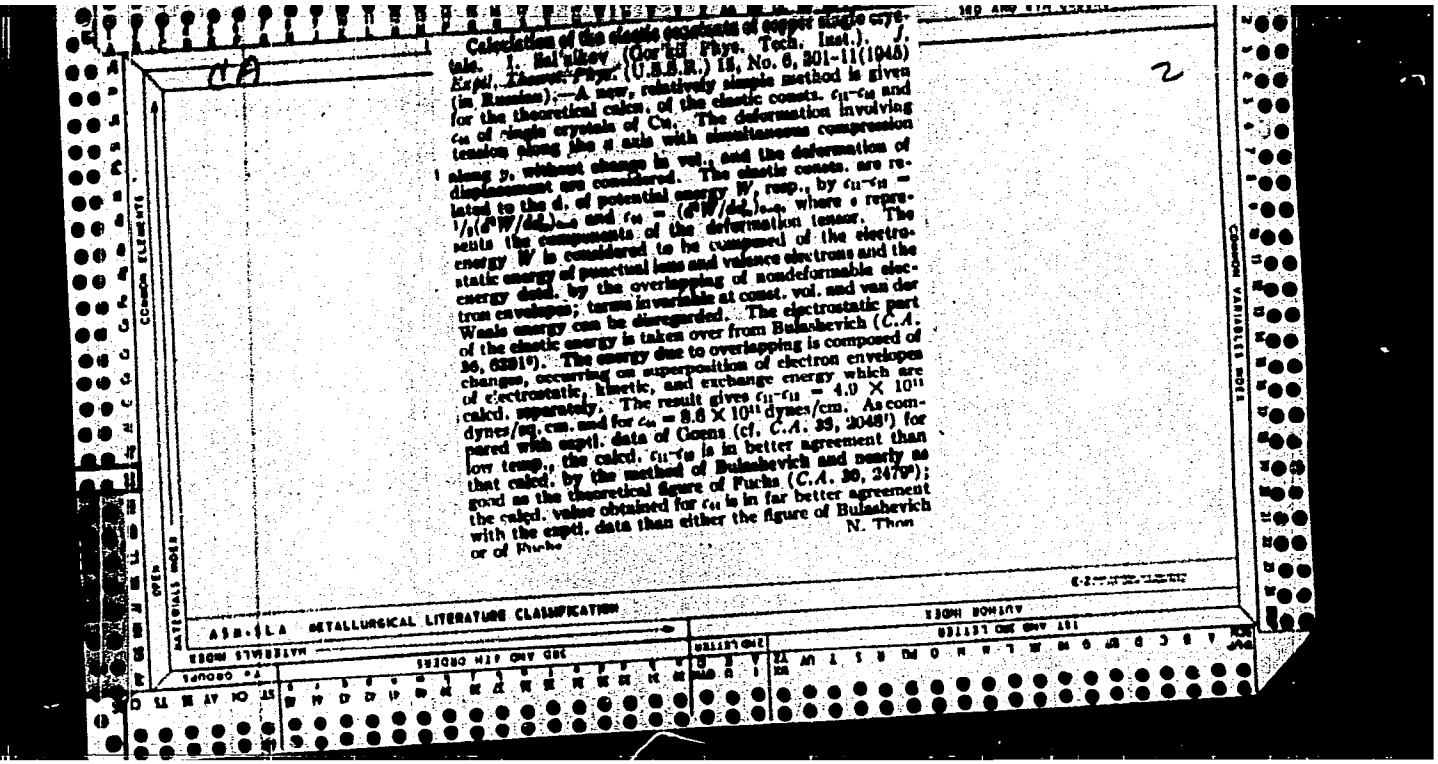
"Operation and maintenance of the rooling stock of electric railroads" by O.F. Gornov and others. Reviewed by I.A. Zhel.-dor.transp. 43 no.9:94-96 S '61. (MIRA 14:8)
(Electric railroads--Rolling stock)
(Gornov, O.F.)

SAL'NIKOV, Ivan Stepanovich, dots.; LOMONOSOV, Nikolay Matveyevich, kand. tekhn. nauk, dots.; PODOL'SKIY, L.R., inzh., retsenzent; KORSHUNOV, A.M., inzh., retsenzent; PERSKIY, G.M., inzh., retsenzent; SIDOROV, N.I., inzh., red.; MEDVEDEVA, M.A., tekhn. red.

[Organization of the management of electrified railroads]Organizatsiia khoziaistva elektrifitsirovannykh zheleznykh dorog. Moskva, Transzheldorizdat, 1962. 349 p. (MIRA 15:12)
(Railroads--Electrification)
(Electric railroads--Management)

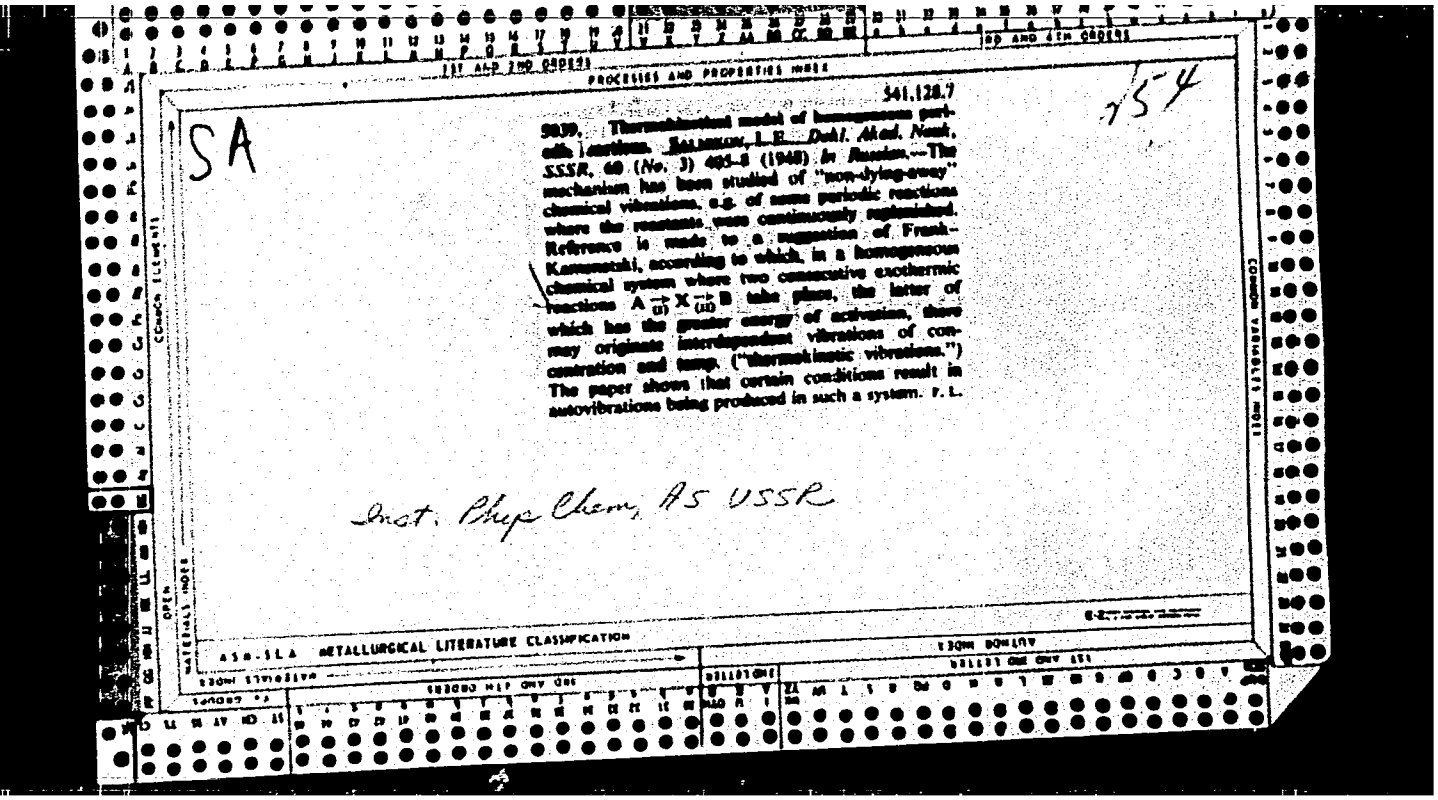


Possibility of auto-vibrations in a homogeneous chemical system involving a (radiatio auto-catalysis. D. A. Frank-Kamenetzki and E. Salnikov *U. Phys. Chem. Russ.*, 1948, 17, 79—86).—Some conditions under which periodic catalytic reactions can occur are discussed. J. J. B.



Calculation of the elastic constants of copper single crys-
tals. I. Bal'shev (Gor'kii Phys. Tech. Inst.). *J. Exptl. Theoret. Phys.* (U.S.S.R.) 18, No. 6, 501-11(1948) (in Russian).—A new, relatively simple method is given for the theoretical calcn. of the elastic consts. $c_{11}-c_{12}$ and c_{44} of single crystals of Cu. The deformation involving tension along the x axis with simultaneous compression along y, without change in vol., and the deformation of displacement are considered. The elastic consts. are re-lated to the d. of potential energy W, resp., by $c_{11}-c_{12} = 1/2(\partial^2 W/\partial\epsilon_{xx}^2)_{\epsilon=0}$ and $c_{44} = (\partial^2 W/\partial\epsilon_{xy}^2)_{\epsilon=0}$, where ϵ repre-sents the components of the deformation tensor. The energy W is considered to be composed of the electro-static energy of punctual ions and valence electrons and the energy detd. by the overlapping of nondeformable elec-tron envelopes; terms invariable at const. vol. and van der Waals energy can be disregarded. The electrostatic part of the elastic energy is taken over from Bulashevich (*C.A.* 36, 6591[9]). The energy due to overlapping is composed of changes, occurring on superposition of electron envelopes of electrostatic, kinetic, and exchange energy which are calcd. separately. The result gives $c_{11}-c_{12} = 4.0 \times 10^{11}$ dynes/sq. cm. and for $c_{44} = 8.8 \times 10^{11}$ dynes/cm. As com-pared with exptl. data of Goens (cf. *C.A.* 39, 2048[1]) for low temp., the calcd. $c_{11}-c_{12}$ is in better agreement than that calcd. by the method of Bulashevich and nearly as good as the theoretical figure of Fuchs (*C.A.* 30, 2479[9]); the calcd. value obtained for c_{44} is in far better agreement with the exptl. data than either the figure of Bulashevich or of Fuchs.

N. Thon



PROCESSES AND PROPERTIES INDEX

SA

541.128.7

5939. Thermokinetical model of homogeneous periodic reactions. Salganik, I. E. *Dokl. Akad. Nauk, SSSR*, 60 (No. 3) 405–8 (1948). *In Russian.*—The mechanism has been studied of "non-dying-away" chemical vibrations, e.g. of some periodic reactions where the reactants were continuously replenished. Reference is made to a suggestion of Frank–Kamenetskii, according to which, in a homogeneous chemical system where two consecutive exothermic reactions $A \xrightarrow{(1)} X \xrightarrow{(2)} B$ take place, the latter of which has the greater energy of activation, there may originate interdependent vibrations of concentration and temp. ("thermokinetic vibrations.") The paper shows that certain conditions result in autovibrations being produced in such a system. F. L.

Inst. Phys Chem, AS USSR

ASM-SLA METALLURGICAL LITERATURE CLASSIFICATION

SAL'NIKOV, I. YE. PA-77T5

USSR/Chemistry - Reaction Kinetics May 1948
Chemistry - Combustion

"The Problem of the Interpretation of the Critical Conditions of Chemical Kinetics," I. Ye. Sal'nikov, Inst Chem Phys, Acad Sci USSR, 3 pp

"Dok Ak Nauk SSSR" Vol LX, No 4

So-called critical conditions, when nature of a reaction alters sharply, are of fundamental importance in modern chain kinetics. Shows that basic aspects of a quantitative theory of differential equations, and of a nonlinear theory of fluctuation based on them, allow new interpretation of critical conditions. Refers to cold flame combustion. Submitted 18 Feb 1948.

77T5

SAL'NIKOV, I. YE.

PA 38/49T4

USSR/Chemistry - Reactions, Theories of Mar 49

"Theory of the Periodic Course of Homogeneous Chemical Reactions: II, A Thermokinetic Auto-Oscillatory Model," I. Ye. Sal'nikov, Inst of Chem Phys, Acad Sci USSR, Moscow, 14 pp

"Zhur Fiz Khimii" Vol XXIII, No 3

Studies, by nonlinear theory of oscillations, equations of a model of a homogeneous chemical system in which two consecutive exothermic reactions occur. Energy of activation and heat effect of latter exceed corresponding values for former. Makes qualitative study of action of

38/49T4

USSR/Chemistry - Reactions, Theories of Mar 49
(Contd)

phase trajectories in separation part of phase level after some simplifying suppositions for three cases differing by the mechanism of the first reaction. Among fields into which range of coefficients is divided is the field which corresponds to stable boundary cycles, thus indicating possibility of so-called thermo-kinetic auto-oscillations -- continuous oscillations of concentration and temperature. Submitted 7 Jun 48.

Critical comments - B-32,43, 10 May 51

38/49T4

SAL'NIKOV, I.Ye.; VOL'TER, B.V.

Operating conditions in a chemical flow reactor when an exothermal monomolecular reaction is taking place. Dokl. AN SSSR 152 no.1: 171-174 S '63. (MIRA 16:9)

1. Gor'kovskiy institut inzhenerov vodnogo transporta i TSentral'nyy nauchno-issledovatel'skiy institut kompleksnoy avtomatizatsii. Predstavleno akademikom V.N.Kondrat'yevym.

(Chemical reactors)

SOKOLOVSKIY, V.D., Marshal Sovetskogo Soyuza; BELYAYEV, A.I., polkovnik; GASTILOVICH, A.I., doktor voyennykh nauk, prof. general-polkovnik; DENISENKO, V.K., polkovnik; ZAV'YALOV, I.G., general-mayor; KOLECHITSKIY, V.V., general-mayor; LARIONOV, V.V., kand. voyennykh nauk polkovnik; NYRKOV, G.M., polkovnik; PAROT'KIN, I.V., kand. voyennykh nauk polkovnik; PROKHOROV, A.A., general-mayor; POPOV, A.S., polkovnik; SAL'NIKOV, K.I., polkovnik; SHIMANSKIY, A.N., polkovnik; CHEREDNICHENKO, M.I., general-mayor; SHCHEGOLEV, A.I., polkovnik; MOROZOV, B.N., polkovnik, red.; KONOVALOVA, Ye.K., tekhn. red.

[Military strategy] Voennaia strategiia; Izd.2., ispr. i dop. Moskva, Voenizdat, 1963. 503 p. (MIRA 16:10)
(Strategy)

SAL'NIKOV, K.S.

RUMYANTSEV, A.V., inzh.; ZHITINETS, M.P., inzh.; SAL'NIKOV, K.S., inzh.

Method of copying and measuring a standard workpiece used in machining conoid surfaces. Vest. mash. 37 no.8:52-56 Ag '57. (MIRA 10:9)
(Milling machines)

SAL'NIKOV, K.V.

Drevneishie pamiatniki istorii Urala
(Ancient memorials of the history of the Urals).
Sverdlovsk, Oblastnoe izd-vo, 1952. 160 p.

SO: Monthly List of Russian Accessions, Vol. 6, No. 1, April 1953

SAL'NIKOV, L.; TOVSHTEYN, K.

Lowering operation costs at grain receiving stations and flour and feed mills of Odessa Province. Muk-elev.prom. 25 no.1:11 Ja '59. (MIRA 12:3)

1. Odesskoye oblastnoye upravleniye khleboproduktov.
(Odessa Province--Grain trade)

SAL'NIKOV, L.P., aspirant

Means for washing and disinfecting the equipment of the "herringbone" arrangement for milking parlors. - Izv. TSKHA no.4:149-157 '63.
(MIRA 17:1)

SAL'NIKOV, M.D.; ORLOVA, G.V.

Work of the Kamen'-on-Ob' interdistrict veterinary bacteriological laboratory of the Altai Territory. Veterinariia 34 no.8:9-12 Ag '57. (MIRA 10:9)

1. Starchiy veterinarnyy vrach veterinarnogo otdela upravleniya sel'skogo khozyaystva Altayskogo kraya (for Sal'nikov). 2. Starshiy nauchnyy sotrudnik Nauchno-issledovatel'skoy veterinarnoy stantsii (for Orlov).
(Altai Territory--Veterinary laboratories)

SAL'NIKOV, M.G.

Connection between instruction in drawing and the industrial practice of students. Uch.zap.Penz.gos.ped.inst. no.7:30-37 '62. (MIRA 16:7)

(Mechanical drawing--Study and teaching)

SAL'NIKOV, M.L., inzh. (Tashkent)

Irrigation from a subsurface irrigation network by means of flexible pipes and mobile sprinklers. Gidr. i mel. 15 no.7:25-28 Jl '63. (MIRA 16:8)

SAL'NIKOV, M. N.

58/49T76

USSR/Medicine - Malaria Comtosa Jan 49
Medicine - Malaria, Therapy

"Treatment of Malaria Comtosa," Maj M. N. Sal'nikov, Med Corps, 4 pp

"Klin Med Vol XXVII, No 1

Quinine is used as basic treatment of pernicious forms of malaria, and its extensive use will produce a substantial decrease in mortality rate. Use of small doses of quinine for malaria comtosa is ineffective. Intravenous injection of 5 ml of a 10% quinine solution is compulsory for this form of malaria. Subsequent doses of 1 - 1.5 g

58/49T76

USSR/Medicine - Malaria Jan 49
Comtosa (Contd)

of quinine must be injected subcutaneously every 6 - 10 hours.

58/49T76

SAL'NIKOV, M.N.

USSR/Pharmacology. Pharmacognosy. Toxicology - Toxicology. T-11

Abs Jour : Referat Zhur - Biologiya, No 16, 1957, 71988

Author : Sal'nikov, M.N.
Inst :
Title : The Clinical Picture and Treatment of Sea Scorpion Bites.

Orig Pub : Vracheb. Delo, 1956, No 8, 865-866

Abstract : A case of wounds produced by a Trachinus draco bites is described. After a few minutes at the site of sting foot a pain and burning sensation appeared spreading to the shin. Hyperpnea and cardiac pain appeared; the foot began to redden and swell. The patient received a turniquet on the shin for 2 hours, and an alcohol dressing was placed on the foot. 40% of glucose with ascorbic acid was administered intravenously; a 1:5000 solution of potassium-manganate and, a table-spoonfull 7-8 times daily and 0.1 g of ascorbic acid 3 times daily was administered internally. Promedole was given once. After 2 days the pains subsided; the swelling disappeared after 7 days.

Card 1/1 - 109 -

VAYS, Kh. G.; SAL'NIKOV, M. N. (Odessa)

Errors in the diagnosis of sporadic cases of hemorrhagic encephalitis. Klin. med. 40 no.7:113-114 Jl '62. (MIRA 15:7)

1. Iz 1-y Odesskoy infektsionnoy bol'nitsy (glavnyy vrach L. T. Zhidovlenko)

(ENCEPHALITIS) (HEMORRHAGIC DISEASES)

SAL'NIKOV, M.P.

Automatic float valve for water-discharge pipes of a closed irrigation system. Izv. AN Uz. SSR. Ser. tekh. nauk 7 no.6: 67-72 '63. (MIRA 17:6)

1. Institut vodnykh problem i gidrotekhniki AN UzSSR.

SAL'NIKOV, M.P.

Methods for designing a water meter with sectional diaphragm for an irrigation pumping station. Vop. gidr. no.16:34-46 '63. (MIRA 17:11)

SAL'NIKOV, M.P., inzh. (Tashkent)

Water meter for irrigation pumping stations. Gidr. i mel. 17 no.6:41-44 Je '65. (MIRA 18:7)

PAVLOV, Petr Iosifovich; SAL'NIKOV, M.Ye. [Sal'nykov, M.IE.], kand.bilog. nauk, otv.red.; BRAGINSKIY, L.P. [Brahins'kyi, L.P.], red.izd-va; MIL'OKHIN, I.D., tekhn.red.

[Clupeid fishes of the genus Alosa in the northwestern part of the Black Sea] Oseledts'ovi rodu Alosa pivnichno-zakhidnoi chastyny Chornoho moria. Kyiv, Vyd-vo Akad.nauk URSR, 1959. 251 p. (MIRA 13:1)

(Black Sea--Shad)

SAL'NIKOV, M.Ye. [Sal'nykov, M.IE.]

Expedition of the Institute of Hydrobiology to study the migration of fish in the Danube. Dop.AN URSR no.3:404-406 '60. (MIRA 13:7)

(Danube River--Fishes--Migration)

SAL'NIKOV, M.Ye. [Sal'nykov, M.IE.]

International cooperation in studying and utilizing fish resources of the Danube. Dop.AN URSR no.10:1443-1445 '60. (MIRA 13:11)
(Danube River—Fishes)

YEMCHENKO, A.I. , otv. red.; TOPACHEVSKIY, O.V. [Topachevs'kyi, O.V.], doktor biol. nauk, glav. red.; ROLL, Ya.V., red.[deceased]; MOVCHAN, V.A., red.; VLADIMIROV, V.I.[Vladymyrov, V.I.], doktor biol. nauk, red.; VINOGRADOV, K.O.[Vynohradov, K.O.], doktor biol. nauk, red.; TSEYEB, Ya.Ya. doktor biol. nauk, red.; SAL'NIKOV, M.Ye [Sal'nykov, M.IE.], kand. biol. nauk, red.; ALMAZOV, O.M., kand. khim. nauk, red.; ZEROV, K.K., kand. biol. nauk, red.

[Some problems of the physiology of digestion and metabolism in fishes] Deiaki pytannia fiziologii tavlennia ta obminu rechovyn u ryb. Kyiv, Vyd-vo AN URSR, 1962. 115 p. (Its Pratsi) (MIRA 17:11)

1. Chlen-korrespondent AN Ukr.SSR (for Yemchenko, Roll, Movchan).

SAL'NIKOV, M.Ye.[Sal'nykov, M.IE.], kand. biol. nauk, otv. red.; ANDRIICHUK, M.D.[Andriichuk, M.D.], red.; BEREZOVSKAYA, D.N. [Berezovs'ka, D.N.], tekhn. red.

[Problems of putrefaction in the bodies of water of the Dnieper basin] Pytannia biologichnoi saprobnosti vodoim baseinu Dnipra. Kyiv, Vyd-vo AN URSR, 1963. 45 p. (MIRA 16:10)

1. Akademiya nauk URSR, Kiev. Instytut hidrobiologii.
(PUTREFACTION)
(DNIEPER VALLEY--WATER--MICROBIOLOGY)

SAL'NIKOV, M.IE.[Sal'nykov, M.IE.], kand. biol. nauk, otv. red.; ANDRIYCHUK, M.D.[Andriichuk, M.D.], red.; TURBANOVA, N.A., tekhn. red.

[Problems of the ecology and cenology of the aquatic organisms of the Dnieper River] Pytannia ekologii i tsenologii vodnykh organizmiv Dnipra. Kyiv, Vyd-vo AN Ukr. RSR, 1963. 40 p. (MIRA 16:11)

1. Akademiya nauk URSR. Kiev. Instytut hidrobiologii.
(Dnieper River--Hydrobiology)

TOPACHEVSKIY, O.V.[Topachevs'kyi, O.V.], glav. red.; MOVCHAN, V.A., red.; ALMAZOV, O.M., doktor geogr. nauk, red.; VLADIMIROV, V.I.[Vladymyrov, V.I., doktor biol. nauk, red.; VINOGRADOV, K.O.[Vynohradov, K.O.], doktor biol. nauk, red.; TSEYEB, Ya.Ya.[TSeeb, IA.IA.], doktor biol. nauk, red.; SAL'NIKOV, M.Ye.[Sal'nykov, M.IE.]. kand. biol. nauk, red.; ZEROV, K.K., kand. biol. nauk, red.

[Desna River within the boundaries of the Ukraine; sanitary-hydrobiological and hydrochemical characteristics] Desna v mezhakh Ukrainy; sanitarno-hidrobiologichna ta hidrokhimichna kharakterystyka. Kyiv, Vyd-vo "Naukova dumka," 1964. 158 p. (MIRA 17:7)

1. Akademiya nauk URSR. Kiev. Instytut hydrobiologii. 2. Chlen-korrespondent AN Ukr.SSR (for Topachevskiy). 3. Vsesoyuznya akademiya sel'skokhozyaystvennykh nauk imeni V.I.Lenina i chlen-korrespondent AN Ukr.SSR (for Movchan).

AL'NIKOV, N.A.

LOMANOV, A.M.; SAL'NIKOV, N.A.; CHURIN, S.N.

Constructing walls made of gypsum slabs with the aid of a moulding board. Rats. i izobr. predl. v stroi. no.96:3-6 '54. (MLRA 8:7)

1. Trest Mosgrazhdanugleshilstroy Ministerstva ugol'noy promyshlennosti. (Walls)

KALITINSKIY, V.I.; SAL'NIKOV, N.A.

Gantry crane with a load-lifting capacity of 0.3 tons. Rats. i izobr. predl. v strei. no.119:11-13 '55. (MLRA 9:7)
(Cranes, derricks, etc.)

SAL'NIKOV, N.A., podpolkovnik

Instructor is prepared and the lesson is interesting. Vest.Vozd. Fl. no.7:42-45 Jl '61. (MIRA 14:8)
(Russia--Air force--Officers)

SAL'NIKOV, N.D., inzh.; SHAGURIN, K.A., otv.red.; ZHUKOVA, V.I., inzh., red.; KLOPOVA, T.B., tekhn.red.

[Silvering and gilding by means of electropolishing] Serebrenie i zolochenie izdelii metodom elektronatiraniia. Leningrad, 1954. 3 p. (Informatsionno-tekhnicheskii listok, no.31 (604)).

(MIRA 14:6)

1. Leningradskiy Dom nauchno-tekhnicheskoy propagandy. 2. Glavnyy inzh. Leningradskogo Doma nauchno-tekhnicheskoy propagandy (for Shagurin). 3. Leningradskiy Dom nauchno-tekhnicheskoy propagandy (for Zhukova).

(Electrolytic polishing)

1. SAL'NIKOV, N.P.

2. USSR (600)

4. Veterinary Instruments and Apparatus

7. Movable canvas dipping bath. Dost.sel'khoz. no.5, 1952.

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

SAL'NIKOV, N. P.

Sheep

New sectional dipping tank for sheep.
Veterinariia 29 No. 4, 1952.

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

SAL'NIKOV, N.P.

Nicochlordan is a new remedy for ectoparasite control in fowls.
Ptitsevodstvo 9 no.1:29-30 Ja '59. (MIRA 12:1)
(Parasites--Poultry) (Insecticides)

SAL'NIKOV, N. Ye.

SAL'NIKOV, N. Ye. - "Biology of the Fin Whale and the Blue Whale of the Antartic." Sub 31 Oct 52, Moscow Technical Inst of the Fish Industry and Economy imeni A. I. Mikoyan. (Dissertation for the Degree of Candidate in Medical Sciences).

SO: Vechernaya Moskva January-December 1952

SAL'NIKOV, N.E.

USSR/Biology - Biology

Card 1/1 : Pub. 86 - 33/40

Authors : Sal'nikov, N. E., Cand. Biol. Sci.

Title : A rare seal of the Antarctic

Periodical : Priroda 43/4, page 117, Apr 1954

Abstract : An account is given of the capture, northwest of the southern Hawaiian islands, of two live seals of the variety known as Ommatophoca rossi. The habits and characteristics of these animals are described. Illustration.

Institution : .....

Submitted : .....

SAL'NIKOV, N.E.

USSR/Biology - Ichthyology

Card 1/1 Pub. 86 - 24/37

Authors : Sal'nikov, N. E., Cand. Biol. Sci.

Title : The anchovy in the Sea of Azov

Periodical : Priroda 43/10, 109-110, Oct 1954

Abstract : The habits of the anchovy in Russian waters are described and information is given about the migrations of this warm-water fish. An account of the Government's measures to protect the anchovy for industrial purposes is also given.

Institution : ...

Submitted : ...

SAL'NIKOV, N. Ye.

SAL'NIKOV, N.Ye.

Wintering places of the Manx shearwater (Puffinus puffinus yelkouan Acerbi) in the Black Sea and their relation to the distribution of anchovies. Vop.ikht. no.8:187-190 '57. (MLRA 10:8)

1.Institut gidrobiologii Akademii nauk USSR.
(Black Sea--Anchovies)
(Water birds)

SAL'NIKOV, N.YE

SAL'NIKOV, N.Ye.

Causes of the death of anchovies in the Sea of Azov. Vop. ikht.no.9: 129-132 '57. (MIRA 11:1)

1. Institut gidrobiologii Akademii nauk USSR.
(Azov, Sea of—Anchovies)

SAL'NIKOV, N.Ye. [Sal'nykov, M.IE.]

Recent data on the monk seal of the Black Sea. Nauk.zap.Od.biol.sta. no.1:113-126 '59. (MIRA 14:7)
(Black Sea--Seals (Animals))

SAL'NIKOV, N.Ye. [Sal'nykov, M.IE.]

Use of television in underwater biological investigations in the Black Sea. Nauk.zap.Od.biol.sta. no.1:127-139 '59. (MIRA 14:7)
(Black Sea--Hydrobiological research) (Television)

SAL'NIKOV, N.Ye.; SUKHOYVAN, P.G.

Clupeonella delicatula (Nordmann) in Kakhovka Reservoir. Zool. zhur. 38 no.9:1375-1382 S '59. (MIRA 13:1)

1. Institut gidrobiologii Akademii nauk Ukrainskoy SSR (Kiyev).
(Kakhovka reservoir--Herring)

SAL'NIKOV, N.Ye.

State of sturgeon stocks and fisheries in the Danube River.
Trudy Inst.gidrobiol.AN URSR no.36:166-182 '61. (MIRA 14:8)
(Danube River--Sturgeons)

SAL'NIKOV, N.Ye.

Fishery characteristics of the lower reaches of the Danube River and coastal waters near its mouth. Trudy Inst.gidrobiol.AN URSR no.36:274-311 '61. (MIRA 14:8)
(Danube Delta region--Fisheries)

MEL'NIKOV, G.B.; SAL'NIKOV, N.Ye.

Development of the fishing industry and fishery management and tasks of the biological science in the light of the resolutions of the 22d Congress of the CPSU. Zool. zhur. 41 no.12:1771-1782 D '62. (MIRA 16:3)

1. Department of Ichthyology and Hydrobiology, State University of Dniepropetrovsk, and Institute of Hydrobiology, Academy of Sciences of the Ukrainian S.S.R., Kiyev.
(Fisheries)

SAL'NIKOV, N.Ye.

Effect of living conditions on the formation of the fish population and the distribution of fishes in Kakhovka Reservoir. Vop. ekol. 5:193-195 '62. (MIRA 16:6)

1. Institut gidrobiologii AN UkrSSR, Kiyev.
(Kakhovka Reservoir--Fishes)

SAL'NIKOV, N.Ye.; KULIK, Zh.V.

Materials on the ichthyofauna of bays of the sea margin of the Kiliya Delta of the Danube River. Uch. zap. Kish. un. 62 no.1: 43-52 '62. (MIRA 16:7)

1. Institut gidrobiologii AN UkrSSR.
(Danube Delta--Fishes)

AID P - 5389

Subject : USSR/Engineering

Card 1/1 Pub. 103 - 19/28

Authors : Rostovtsev, N. E., and O. A. Sal'nikov

Title : Centrifugal chucks

Periodical : Stan. i instr., 9, 33-34, S 1956

Abstract : The authors give a brief description of three different types of gripping jaws, the draw-in chuck attachments designed and used by them in turret lathes. In addition they describe the centrifugal chuck attachment for heavy work on turret lathes. The latter chuck was designed by N. P. Kugutov, engineer of the Irbit Motocycle Plant. Three drawings.

Institution : As above

Submitted : No date

BAZHENOV, I.A.; SAL'NIKOV, O.A.

Improving the front support of the spindle in the 1112-1136 automatic lathes. Stan.i instr.27 no.11:33 N '56. (MLRA 10:1)
(Lathes) (Bearings (Machinery))

SAL'NIKOV, O.A.

SAL'NIKOV, O.A., inzhener.

Soldering with silver solders in salt bath. Vest.mash.36 no.12:74-75 D '56. (MLRA 10:2)

(Solder and soldering)

SAL'NIKOV, O. A., Cand of Phys-Math Sci -- (diss) "Angular distribution of nonflexibile and elastically dispersible neutrons with energy of E_0-2, 54 Mev on nuclei of chrome, iron, and lead." Moscow, 1957, 16 pp (Main Administration for the Utilization of Atomic Energy under the Council of Ministers USSR. Physics Institute), 115 copies (KL, 35-57, 105)

SAL'NIKOV, O.A.

89-8-4/26

AUTHOR SAL'NIKOV, O.A.

TITLE Angular Distribution of 2,34 MeV Neutrons, Scattered Elastically and Inelastically by Chromium, Iron and Lead
(Uglovoye raspredeleniye uprugo i neuprugo rasseyannykh neytronov s energiyey 2,34 MeV na yadrakh Cr, Fe, Pb. Russian)

PERIODICAL Atomnaya Energiya, 1957, Vol 3, Nr 8, pp 106 - 111 (U.S.S.R.)

ABSTRACT The following measurements were carried out:

a) Cross section of elastic scattering b: (E_n = 2,34 MeV)

	Cr	Fe	Pb
30°	10,2 ± 1,1	6,2 ± 0,8	20,4 ± 1,7
45°	6,3 ± 0,5	2,9 ± 0,3	7,7 ± 0,7
60°	1,9 ± 0,3	1,4 ± 0,2	2,6 ± 0,4
90°	1,3 ± 0,1	2,0 ± 0,3	4,3 ± 0,5
105°	1,8 ± 0,2	-	3,6 ± 0,4
135°	1,6 ± 0,2	1,4 ± 0,2	2,4 ± 0,2

Card 1/2

89-8-4/26

Angular Distribution of 2,34 MeV Neutrons, Scattered Elastically and Inelastically by Chromium, Iron and Lead

b) Cross section of unelastic scattering. (E_n = 2,34 MeV)

Fe 0,90 ± 0,07 b

Cr 0,93 ± 0,08 b

0,53 MeV level of Pb 0,80 ± 0,08 b

0,805 to 0,890 MeV level of Pb 1,08 ± 0,10 b

The angular distribution of the neutrons unelastically scattered by Fe, Cr, and the 0,53 MeV level of Pb is isotropic, whereas it is anisotropic for the not resolved levels 0,805-0,890 MeV in Pb (With 1 table, 7 illustrations, and 3 Slavic references).

ASSOCIATION Not given
PRESENTED BY
SUBMITTED 13.2.1957
AVAILABLE Library of Congress

Card 2/2

SALNIKOV, O. A., UKRAINTSEV, F. I., USACHEV, L. N., LEYPUNSKIY, A. I., KAZACHKOVSKIY, O. D., ABRAMOV, A. I., ALEKDANDROV, Y. A. ARISTARKHOV, N. N., BONDARENKO, I. I., KRASNOYAROV, N. Y., MOROZOV, V. N., NIKOLAYEV, N.N., PONKHASIK, M. S., SMIRENKIN, G. N., STAVISSKIY, Y. Y.,

P hysical charactistics of the BR-5 reactor

report submitted for the IAEA Seminar on the Physics of Fast and Intermediate Reactors, Vienna, 3-11 August 1961
(report Presented by G. I. Marchuk)

Acad, Sci. USSR, Moscow

32997
S/641/61/000/000/024/033
B108/B102

26.2245

AUTHORS: Lovchikova, G. N., Sal'nikov, O. A.

TITLE: Inelastic scattering cross sections of 2.5-Mev neutrons

SOURCE: Krupchitskiy, P. A., ed. Neytronnaya fizika; sbornik statey. Moscow, 1961, 294 - 297

TEXT: The cross sections for 2.5-Mev neutrons obtained in a $D(d,n)He^3$ reaction and inelastically scattered from various elements were studied with the transmission method. The detector, a threshold ionization chamber with U^{238} or Np^{237} on one electrode, was placed inside the spherical specimen. The ratio of the number of counts with the scatterer to that without scatterer was measured. The inelastic neutron scattering cross sections were calculated with the aid of these ratios. The inelastic scattering cross section of K was not observed. The cross section of Na determined with U^{238} detector was 0.34 ± 0.07 barns. It is caused chiefly by the excited 2070 kev level. The cross sections for molybdenum were 0.46 ± 0.03 and 1.36 ± 0.04 barns, respectively, for Np^{237} and U^{238}

Card 1/2

detectors. The corresponding values of barium were 0.77 ± 0.10 and 1.47 ± 0.16 barns. In strontium, the only level (1.85-Mev) is excited by the 2.5-Mev neutrons. The cross sections of strontium were 0.32 ± 0.15 and 1.10 ± 0.13 barns, respectively, for Np^{237} and U^{238}. Comparison with the results of other authors has shown that the results presented are applicable. The authors thank A. I. Leypunskiy, Member of the AS UkrSSR and I. I. Bondarenko, Doctor of Physical and Mathematical Sciences, V. P. Kharin, and B. V. Devkin for their interest and help. There are 1 table and 3 non-Soviet references. The three references to English-language publications read as follows: Bethe H. A., Beyster J. R., Carter R. E. J. Nucl. Energy, 3, 207 (1956); Hughes D. J., Schwartz R. B. Neutron Cross Sections, BNL, N. Y., 1958; Feschbach H., Weisskopf V. F. Phys. Rev., 76, 1550 (1949).

29541
S/089/61/011/005/006/017
B102/B101

26.2245

AUTHORS: Lovchikova, G. N., Sal'nikov, O. A.

TITLE: Inelastic interaction cross sections of fission neutrons

PERIODICAL: Atomnaya energiya, v. 11, no. 5, 1961, 442 - 443

TEXT: An aluminum container filled with mixed uranium oxides enriched in U^{235} up to 75% and exposed to the thermal neutron flux of a reactor served as a fission neutron source. The neutrons were recorded by a multi-electrode U^{238}-fission chamber. The effective threshold of this detector for fission neutrons was found to be at 1.4 Mev. A natural isotope mixture was used as a scatterer. It was of spherical shape with an inner diameter of 90 mm. $T = N_2/N_1$ was measured for several elements. N_1 denotes the number of counts without scatterer and N_2 that with scatterer. This ratio is determined by all processes which reduce number or energy of the neutrons. Inelastic interactions play the principal role. For energies between 1 and 14 Mev, their cross sections amount to 1 - 10 mb.

Card 1/3

Inelastic interaction cross...

Transmission cross section and inelastic scattering cross section were calculated by a method published in Ref. 2 (see below). The usual corrections were found to be much below experimental error limits, and were therefore not taken into account. The neutron background was measured but was of no effect because of the high fission threshold of U^{238}. The table gives the results of measurements. Except those for iron, the data had not been published before.

Table

element	number of atoms per cm^3, $\times 10^{20}$	σ_{transm}, barn	T	$\sigma_{inel.}$, barn
Na	254.3	2.0	0.037	0.47±0.08
K	133.1	2.3	0.981	0.47±0.11
Sr	180.0	3.1	0.950	0.93±0.08
Ba	163.7	3.8	0.933	1.36±0.10
Mo	639.9	3.0	0.727	1.54±0.03
Nb	176.7	3.2	0.883	1.44±0.08
Fe	845.8	2.2	0.807	0.73±0.04

There are 1 table and 2 references: 1 Soviet and 1 non-Soviet. The

Card 2/3

Inelastic interaction cross...

reference to the English-language publication reads as follows: Ref. 2: H. Bethe, J. Beyster, Carter. J. Nucl. Energy, 3, 207 (1956); 3, 273 (1956); 4, 3 (1957); 4, 147 (1957).

SUBMITTED: May 27, 1961

Card 3/3

SAL'NIKOV, O.A.

13

21406
S/089/61/011/006/002/014
B102/B138

21.1000

AUTHORS: Leypunskiy, A. I., Abramov, A. I., Aleksandrov, Yu. A., Anikin, G. V., Bondarenko, I. I., Guseynov, A. G., Ivanov, V. I., Kazachkovskiy, O. D., Kuznetsov, V. F., Kuz'minov, B. D., Morozov, V. N., Nikolayev, M. N., Sal'nikov, O. A., Smirenkin, G. N., Soldatov, A. S., Usachev, L. N., Yutkin, M. G.

TITLE: Investigation of the BR-5 (BR-5) fast reactor (spatial and energy distributions of neutrons)

PERIODICAL: Atomnaya energiya, v. 11, no. 6, 1961, 498 - 505

TEXT: The fast research reactor BR-5 and its experimental equipment is described in brief and some of its neutron spectra are given and discussed. The following data are given: fuel - plutonium oxide; coolant - sodium; reflector - thin layer of natural uranium plus thick layer of nickel; power - 5000 kw. The reactor has many vertical and horizontal holes for technical and physical studies and is well supplied with experimental equipment. Leypunskiy gave a detailed description of the BR-5 reactor at

Card 1/6

13

Investigation of the...

the Second Geneva Conference (1958). Inside the core the neutrons have energies of more than 100 kev which they lose almost completely in passage through reflector and shield. In the outer layers of the shield, their mean energy does not exceed some tens of ev. In the kev range (E_n>50 kev) spectra were measured for the most important beams and channels. For the other cases, they were determined from threshold reactions. The soft part of the spectrum within the reflector was determined from the spatial distribution of neutrons with E_n<5 ev, recorded with gold resonance indicators. The total neutron flux was determined only at the points where the Pu^{239} fission cross section was constant. Direct neutron spectrum measurements were carried out in a vertical (OK-70) and a horizontal (B-3) channel using (He^3+Ar)-filled ionization chamber in the first case and the neutron transmission method with n-hexane in the second. The neutron spectrum of the horizontal channel was also determined by photoemulsions. From the rates of indicator and fission reactions $Au^{197}(n,\gamma)$, $U^{235}(n,f)$ $Pu^{239}(n,f)$, $Th^{232}(n,f)$, $Na^{23}(n,\gamma)$ $Cu^{63}(n,\gamma)$, and $Al^{27}(n,\alpha)$ the abrupt

Card 2/3

Investigation of the...

drop in neutron energy in the Ni reflector was determined, and the activity caused by resonance neutrons (E_n = 4.9 ev). The fast neutron flux ($E_n > 1.4$ Mev) in the core center was found to be $(2.4 \pm 0.2) \cdot 10^{14}$, and total flux was $(8.2 \pm 0.3) \cdot 10^{14}$. Experimental results were verified by energy-group calculations (18 groups). Good agreement between theory and experiment was also found for the channel spectra. The authors thank D. S. Pinkhasik, N. N. Aristarkhov, and the reactor personnel for assistance. There are 10 figures, 2 tables, and 2 Soviet references.

SUBMITTED: August 17, 1961

Table 1. Reaction cross sections in the core center.

Legend: (1) Reaction; (2) experiment; (3) σ calculated, given in barns.

Fig. 7. Neutron transmission spectrum (n-hexane) for the horizontal channel B-3.

Card 3/3

ANIKIN, Nikolay Aleksandrovich; DROBYSHEVSKAYA, Nadezhda Ivanovna; DUDINOV, Vladimir Alekseyevich; KON'KOV, Arkadiy Sergeyevich; KONYUKHOV, Sergey Mikhaylovich; MESHCHERINOV, Fedor Ivanovich; POLETSKIY, Aleksandr Timofeyevich; POLYAKOV, Gleb Maksimovich; SAL'NIKOV, Oleg Alekseyevich; CHERNOBAY, Dmitriy Gavrilovich; GAVRILOV, P.G., kand. tekhn.nauk, retsenzent; NEFED'YEV, G.N., kand. fiz.-mat. nauk; SOKOLOV, V.M., kand. fiz.-mat. nauk; SOKOLOVSKIY, V.I., kand. tekhn. nauk; RUDIN, S.N., inzh.; EYDINOV, M.S., kand. tekhn. nauk; DUBITSKIY, G.M., doktor tekhn. nauk, red.; ZAKHAROV, B.P., inzh., red.; KONOVALOV, V.N., kand. tekhn. nauk, red.; PERETS, V.B., kand. tekhn. nauk, red.; ROZENBERG, I.A., kand. ekonom. nauk, red.; STEPANOV, V.V., kand. tekhn. nauk, red.; SUSTAVOV, M.I., inzh., red.; SHABASHOV, S.P., kand. tekhn. nauk, red.; DUGINA, N.A., tekhn. red.

[Handbook for inventors and innovators]Spravochnik dlia izobretatelia i ratsionalizatora . [By] N.A.Anikin i dr. Izd.3., ispr. i dop. Moskva, Mashgiz, 1962. 791 p. (MIRA 16:1)
(Technological innovations—Mechanical engineering)

S/903/62/000/000/022/044
B102/B234

AUTHORS: Popov, V. I., Sal'nikov, O. A., Sluchevskaya, V. M.

TITLE: Scattered neutron spectra in the case of initial energies of 3 Mev

SOURCE: Yadernyye reaktsii pri malykh i srednikh energiyakh; trudy Vtoroy Vsesoyuznoy konferentsii, iyul' 1960 g. Ed. by A. S. Davydov and others. Moscow, Izd-vo AN SSSR, 1962, 256-260

TEXT: The energy spectra of 3-Mev neutrons inelastically scattered from several metals used in reactor construction were measured in order to obtain information on the behavior of neutrons in core and shield. The measurements were made in annular geometry in the case of 60° scattering. An H_2+Ar filled ionization chamber served as detector; this and the experimental arrangement is described in Atomnaya energiya 3, 498, 1957. A deuteron-bombarded heavy-ice target served as neutron source; the pulses from the chamber were analyzed by means of a 128-channel pulse-height analyzer. Besides the spectra of neutrons scattered through 60° from Na, Si, Pb and Bi also the source spectrum was measured in the direction of the deuteron

Card 1/2

S/903/62/000/000/022/044
B102/B234

Scattered neutron spectra in the...

beam. The nuclear levels excited and the mean scattering cross sections were determined from the energy distributions measured (cf. Table). For Na in the range $2.45 \leqslant E_n \leqslant 4.00$ Mev also the excitation curve was constructed, under the assumption that inelastic scattering in this range is isotropic within error limits; σ_{in} drops linearly with increasing E_n. There are 5 figures and 1 table.

ASSOCIATION: Fiziko-energeticheskiy institut Gosudarstvennogo Komiteta Soveta Ministrov SSSR po ispol'zovaniyu atomnoy energii (Physics and Power Engineering Institute of the State Committee of the Council of Ministers of USSR on the Utilization of Atomic Energy)

Element	Nucl. level energy, Mev	σ, mb/srad
Na	0,46	40±4
Si	1,8	45±4
Pb	0,6—1,1	34±7
	1,5—2,0	51±5
Bi	0,9	44±7
	1,8	44±5

Card 2/2

L 13528-63 BDS

ACCESSION NR: AP3002758 S/0121/63/000/006/0018/0019

56

AUTHOR: Sal'nikov, O. A.; Likhtenshteyn, I. I.

TITLE: Programming of machines with pulse-spacing system of preset control

SOURCE: Stanki i instrument, no. 6, 1963, 18-19

TOPIC TAGS: preset control, metalworking machine, pulse-spacing system, code converter, automatic computer

ABSTRACT: Techniques were developed at Sverdlovskiy proyektno-tekhnologicheskiy institut (Sverdlovsk Design and Planning Technological Institute) to modernize universal and specialized metalworking machines by introducing the preset control system. Modernized machines performed accurately and dependably. This was especially true when the pulse-spacing system of the ENIMC preset control was applied. Programs for machines were computed and recorded by special equipment at the Institute. The recording was done on the code converter LKP-01F, the recording panel PZK, the reproduction panel PRS-1-58, the control desk and the punching mechanism PP-2. The authors describe all improvements and adjustments used to eliminate the shortcomings of this equipment. The computing and recording

Card 1/2

L 13528-63

ACCESSION NR: AP3002758

of the program took a total of 55-60 hours, with half of this time spent on keyboard automatic computers of the "Mercedes" and "Rheinmetal" type. It is concluded that the processing of data by keyboard operated automatic computers is often economical and expedient. Orig. art. has: 2 figures.

ASSOCIATION: none

SUBMITTED: 00	DATE ACQ: 15Jul63	ENCL: 00
SUB CODE: 00	NO REF SOV: 000	OTHER: 000

Card 2/2

SAL'NIKOV, O.A.; SMETANIN, S.F.; LEVCHIK, Yu.E.

Program controlled milling machine. Stan.i instr. 34 no.4:40 Ap '63. (MIRA 16:3)

(Milling machines--Numerical control)

SAL'NIKOV, O.A.; LIKHTENSHTEYN, I.I.

Establishing programs for machine tools with pulse step-by-step program control system. Stan. i instr. 34 no.6:18-19 Je '63. (MIRA 16:7)

(Machine tools—Numerical control)

SAL'NIKOV, O.A.

Converting machine tools to programmed control. Stan. i instr. 34 no.11:10-11 N '63. (MIRA 16:12)

L 15698-65 ESD(dp)/ASD(a)-5/AFETR

ACCESSION NR: AP4047654 S/0121/64/000/010/0007/0008

AUTHOR: Sal'nikov, O. A. B

TITLE: Inaccuracies of process on machines with digitally programmed operation control

SOURCE: Stanki i instrument, no. 10, 1964, 7-8

TOPIC TAGS: cutting rate, control statistics, digital control system/ SF 02P mill, ChPU impulse system, DIET material

ABSTRACT: The author discussed experimental data on the accuracies of digitally programmed machine process control. Several manifestations of errors in metal cutting lathes were listed as emanating from errors in coding transformers and errors of interpolation in the impulse systems. Series-connected linear code transformers (LKP) are characterized by instantaneous deviations from the mean of up to 1.5 times the programmed impulse frequency. Errors frequently arise in the case of processing parts wherein cuts must be made at small angles relative to coordinate axes. Such errors are magnified in proportion to the slope $\Delta x/\Delta y$ in a rectangular coordinate system. The author describes tests for determining the limits of errors; an SF-02P mill with a ChPU step impulse system was used in cutting

Card 1/2

L 15698-65

ACCESSION NR: AP4047654

samples from D16T material. Sides cut at an angle of 45° in the rectangular system showed errors of -0.05 to -0.10 mm measured to the nearest 0.01 mm against the theoretical lengths. Further tests featured measurements of diameter variations in round milled specimens. Errors varied from +0.05 to -0.25 mm with specimens fed at a rate of 600 mm/min and from 0.00 to -0.2 mm for a rate of 300 mm/min. The author analyzes the results with respect to errors in code transmission versus other system errors. Orig. art. has: 1 figure.

ASSOCIATION: none

SUBMITTED: 00 ENCL: 00

SUB CODE: MM NO REF SOV: 000 OTHER: 000

Card 2/2

SAL'NIKOV, O.A.

Productivity of machine tools with pulse-stepped program control.
Stan.i instr. 35 no.9:9-10 S '64. (MIRA 17:10)

SAL'NIKOV, O.A.; LIKHTENSHTEYN, I.I.

Step-by-step electrohydraulic drive with an advancing motion.
Stan. i instr. 36 no.6:10-11 Je '65. (MIRA 18:8)

L 36074-66 EWT(m)/EWP(t)/ETI IJP(c) JD/JG
ACC NR: AT6015891 SOURCE CODE: UR/3158/65/000/030/0002/0018

AUTHOR: Sal'nikov, O. A.; Fetisov, N. I.; Lovchikova, G. N.; Kotel'nikova, G. V.; Anufriyenko, V. B.; Devkin, B. V.

ORG: Physico-energetic Institute (Fiziko-energeticheskiy institut)

TITLE: Nuclear level density and spectral distribution of inelastically scattered neutrons of 14.1 Mev initial energy

SOURCE: Obninsk. Fiziko-energeticheskiy institut. Doklady, FEI-30, 1965. Spektry neuprugo rasseyannykh neytronov s nachal'noy energiyey 14, 1 Mev i plotnost' yadernykh urovney, 2-18

TOPIC TAGS: neutron scattering, nuclear energy level, neutron spectrum, excitation energy, Fermi gas

ABSTRACT: The purpose of this work is to obtain a better representation of the functional dependence of the temperature of nuclei and the nuclear level density parameters on the mass number A, the reaction (n,n') and the neutron spectrum in the reaction $(n,2n)$. The measured values of the nuclear level density parameters a, a' and a'' are presented in tabular form. In addition, a table gives the calculated values of the temperature T_N and T_1, according to the Fermi model of the nucleus. The spectra of the secondary neutrons in the reaction $(n,2n)$ were calculated using the equation

Card 1/2

L 36074-66

ACC NR: AT6015891

$$N(E) = \text{const. } E \exp(-E/T_n)$$

All above measurements were evaluated for 14 target nuclei: Be, Na, Mg, S, K, Ca, Sr, Tn, Sb, J, Cs, Ce, Ta, Hg. Conclusion: (a) The linear dependence of $\ln(N/E)$ on E shows that the scattering represents 80% of the reaction with the formation of the compound nucleus. Further, the direct interaction plays an essential role in the case of neutrons with small transfer momentum in the scattering. (b) The observed change in the temperature of nuclei with the excitation energy agrees well with the Fermi gas model in the region from 2 to 10 Mev. The same applies to the temperature change with the mass number A. (c) An increase in the level density is observed as a function of the mass number A, except for nuclei near those with closed shells. Orig. art. has: 10 figures, 3 tables, 7 formulas.

SUB CODE: 20/ SUBM DATE: none/ ORIG REF: 004/ OTH REF: 013

Card 2/2

ANUFRIYENKO, V.B.; DEVKIN, B.V.; KOTEL'NIKOVA, G.V.; KULABUKHOV, Yu.S.; LOVCHIKOVA, G.N.; SAL'NIKOV, O.A.; TIMOKHIN, L.A.; TRUBNIKOV, V.R.; FETISOV, N.I.

Inelastic scattering of 14 Mev. neutrons and the nuclear level density. IAd. fiz. 2 no.5:826-838 N '65. (MIRA 18:12)

L 20720-66 EWT(1)/EWT(m)/ETC(m)-6 DIAAP/IJP(c) WW

ACC NR: AP6007812 SOURCE CODE: UR/0120/66/000/001/0053/0061

AUTHOR: Anufriyenko, V. B.; Devkin, B. V.; Ivanov, A. A. Kotel'nikova, G. V.; Kulabukhov, Yu. S.; Lovchikova, G. N.; Sal'nikov, O. A.; Timokhin, L. A.; Fetisov, N. I.

ORG: Institute of Physics and Power Engineering, GKAE (Fiziko-energeticheskiy institut GKAE)

TITLE: Neutron transit-time spectrometer

SOURCE: Pribory i tekhnika eksperimenta, no. 1, 1966, 53-61

TOPIC TAGS: spectrometer, neutron spectrometer

ABSTRACT: A new fast-neutron transit-time spectrometer is described which can measure a neutron spectrum from 100 kev to 14 Mev. Monochromatic 14-Mev neutrons are produced by a $T^3(d, n)He^4$ reaction; deuteron energy, 250 kev; deuteron-pulse duration, 7 nsec; beam interruption before acceleration is used (sketch supplied). The neutron detector and electronic equipment are briefly described. The spectrometer resolution determined from a δ-peak is 4 nsec/m; channel width, 2.12 nsec; integral nonlinearity, 0.25%. From a time-to-pulse-height converter, the signals are fed to a 256-channel analyzer. The resolution time is 8 nsec; transit base, 2 m; linear dynamic range, 400 nsec. The photomultiplier is equipped with a noise-elimination device, and the detector is well protected from the background noise,

Card 1/2 UDC: 539.1.078:539.125.5

L 20720-66

ACC NR: AP6007812

both features ensuring a high effect-tc-background ratio when 100-kev neutrons are measured. The spectrometer operation is illustrated by a spectrum of neutrons inelastically scattered by Mn."In conclusion, the authors wish to thank B. S. Novikovskiy and Ye. P. Ukraintseva for tending the accelerator operation, V. G. Zolotukhin for discussing the spectrometer efficiency, and N. S. Biryukov, M. D. Bityutskaya, V. A. Rumyantseva, A. M. Trufanov, and Ye. S. Chernichenko for their part in measurements and data processing." Orig. art. has: 9 figures and 3 formulas. [03]

SUB CODE: 18, 09 / SUBM DATE: 11Jan65 / ORIG REF: 004 / OTH REF 006/ ATD PRESS: 4223

Card 2/2

ACC NR: AR6035227 SOURCE CODE: UR/0372/66/000/008/G011/G011

AUTHOR: Kalashnikov, V. I.; Sal'nikov, O. A.; Lyakhovitskiy, Ye. M.

TITLE: Random-process analyzer for the investigation of automation systems

SOURCE: Ref. zh. Kibernetika, Abs. 8G65

REF SOURCE: Pribory i ustroystva sredstv avtomatiki i telemekhan. Resp. mezhved. nauchno.-tekhn. sb., vyp. 1, 1965, 8-15

TOPIC TAGS: random process, correlation function, autocorrelation function, extreme low frequency, analyzer, random process analyzer, dispersion, mathematical expectation, random process probability distribution

ABSTRACT: The ASP-1 random-process analyzer, developed at the El.-Simulation Laboratory of the Khar'kov Polytechnic Institute, is described and its technical characteristics are given. It is designed for calculating the basic statistical characteristics of extremely l-f stationary random processes recorded on a magnetic tape from an object or a model. The device makes it possible to record the following statistical characteristics: 1) the mutual-correlation function of two stationary random processes; 2) the autocorrelation function; 3) dispersion (RMS

UDC: 62-5.001.5

Card 1/2

ACC NR: AR6035227

deviation); 4) mathematical expectation; 5) the integral function of random-process probability distribution. With digital reading the calculation error is 2.5—3.5%. The special features of the performance of the basic and el.-mechanical unit are briefly described. The results of the experimental testing of the ASP-1's operation are given. There are five illustrations. [Translation of abstract] [DW]

SUB CODE: 09/13,12

Card 2/2

ACC NR: AP6013488 UR/0120/66/000/002/0022/0027

AUTHOR: Mogil'ner, A.I.; Sal'nikov, O.A.; Timokhin, L. A.

ORG: None

TITLE: A correlation method of energy spectra measurement of nuclear particles by their fly-by time

SOURCE: Pribory i tekhnika eksperimenta, no. 2, 1966, 22-27

TOPIC TAGS: neutron, neutron beam, neutron energy distribution, ~~spectrum measurement, correlation~~ neutron spectrum, ~~study, digital random sequence~~ generator

Abstract: This paper proposes and describes a correlation method for the measurement of the energy spectrum of neutrons. A new method was needed because of some basic drawbacks of the classical method, which causes a conflict between the spectroscope resolving and light-gathering power. In the approach to the new method, the spectroscope is considered as a linear system with a modulated neutron beam input and a velocity-of-counting detector output. On this basis, it is shown that by using an optimum pseudo-random digital modulation sequence, with its autocorrelation sequence approaching that of a white noise, cycled at a sufficiently slow repetition rate, the measurement of the crosscorrelation function between the velocity of counting (output) and the modulating signal produces the impulse response of the spectrometer. This impulse response is, however, approximately equal to the desired normalized time spectrum of the neu-

UDC: 539.121.64

Card 1/2

ACC NR: AP6013488

trons, multiplied by a constant. Thus no special measurement of the backgound noise is required. The generator of the backgound sequence, described in some detail, is based upon numerical techniques using the code shift register with linear constraints. It generates + 1 and - 1 sequences of random duration with periods of e.g $(2^d - 1)$ where d is an integer as large as 34. A statistical analysis of the method's precision is given. An experimental verification of the method was conducted on a nuclear heat generator at zero power which had an approximately Maxwell neutron spectrum. The correlation method was compared with the classical one. The correlation method was better than the classical one not only at high backgound noise, but also near the spectrum maxima. Authors thank S.I. Chubarov and L.A. Matalin for a discussion of results and valuable comments. Orig. art. has: 7 figures and 24 formulas.

SUB CODE: 20, [redacted] SUBM DATE: 24Jun65 ORIG REF: 002 OTH REF: 006

Card 2/2

SAL'NIKOV P.I.

4

PHY MC

On the Shape of Tungsten Crystals. A. M. Leshetnikov, P. I. Sal'nikov, and T. M. Tsarev (*Zhur. Tekhn. Fiziki*, 1955, 25, (3), 414–415).—[In Russian]. Various authors have claimed, on the basis of electron-microscopic observations, that the faces of grains of pure W were cube planes, irrespective of the origin and method of manufacture of the W. This is in disagreement with recognized theories of crystal growth, e.g. with that of Stranski and Suhrmann (*Ann. Physik*, 1947, [vi], 1, 153; *M.A.*, 17, 420), who forecasted that the equilibrium faces of W should be dodecahedral. R., S., and T. show by projection drawings of dodecahedra that this habit is the correct one, in agreement with their own electron micrographs.—A. F. B.

(2)

SAL'NIKOV, P.I.

Rainstorms and rainstorm parameters for the calculation of storm runoff in Transbaikalia. Zap. Zabaik. otd. Geog. ob-va SSSR no. 24:39-49 '64 (MIRA 19:1)

PARAMONOV, V.F.; SAL'NIKOV, P.M.

Testing gearboxes and feed mechanisms under loading. Stan. i instr. 36 no.6:26-27 Je '65. (MIRA 18:8)

SAL'NIKOV, S. A.

Metal Cutting

Drive in automatic device for oxygen cutting. Stan. i instr., 23, No. 5, 1952.

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

L 19694-65 EWT(1) Ba04t) ESD(t) GW

ACCESSION NR: AP4049471 S/0006/64/000/011/0060/0067

AUTHOR: Sal'nikov, S. Ye.

TITLE: Atlas of Kustanayskaya oblast'

SOURCE: Geodeziya i kartografiya, no. 11, 1964, 60-67

TOPIC TAGS: geography, map, rainfall, agriculture, economics

ABSTRACT: The importance of recent efforts in compilation and publication of geographic atlases in the SSSR is cited. Special emphasis was placed upon atlases of regions in the eastern parts of the Soviet Union, in particular, the Kustanayskaya oblast'. The main divisions of this atlas are: 1) natural features; 2) population; and 3) industry. The atlas contains 79 pages and 132 multicolored maps and figures. Map scales are 1:1 500 000, 1: 2 500 000, and 1: 3 000 000. Explanatory text and supplementary photographic illustrations are interspersed in the volume. The contents follow the sequence: introduction; natural conditions and resources; population; agriculture; industry; construction and transport; culture, public health, and living conditions. The first group of maps portrays the distribution of mineral resources and underground water; the second group deals with climate and surface water; the third with geographic land form, relief, soil,

Card 1/2

L 19694-65

ACCESSION NR: AP4049471

fertility, and wildlife. The author points out certain gaps in the data used to produce the maps. Emphasis is placed on the use of the atlas as an aid to comprehensive economic planning. The atlas is viewed as being comprehensive enough to afford a rather concise perspective of agriculture and stock-raising, but a better means for representing the economic importance of and products produced by separate sovkhoz and kolkhoz (collective) districts is recommended. Orig. art. has: 2 tables.

ASSOCIATION: none

SUBMITTED: 00 ENCL: 00

SUB CODE: ES, GO NO REF SOV: 002 OTHER: 000

Card 2/2

SAL'NIKOV, V.

Repeated use of water in washing motortrucks. Avt.transp. 43 no.11:28-29 N '65. (MIRA 18:12)

SAL'NIKOV, V.

Cotton Growing

Simple improvements for collective farm cotton dryers. Khlopkovodstvo no. 6, 1952.

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

SAL'NIKOV, V., inzh.; DOLGOV, V., inzh.; DUDNIKOV, V.; CHUVANOV, V.; VAL'KOV, K.

Exchange of experience. Avt.transp. 42 no.12:49-51 D '64. (MIRA 18:4)

SAL'NIKOV, V., inzh.

Reconstruction of a preventive maintenance station. Avt.transp. 43 no.3:21-22 Mr '65. (MIRA 18:5)

L 23158-66 EWT(1)/T JK

ACC NR: AP5023737 (A) SOURCE CODE: UR/0346/65/000/008/0107/0108

AUTHOR: Lavrent'yev, P. A.; Sal'nikov, V. G.; Anisin, S. D. 26 B

ORG: Kazan Veterinary Institute (Kazanskiy veterinarnyy institut)

TITLE: Use of bacteria for mosquito control

SOURCE: Veterinariya, no. 8, 1965, 107-108

TOPIC TAGS: insecticide, bacteria, entomology

ABSTRACT: With the growing resistance of bloodsucking insects to various chemical insecticides, the entomopathogenic effect of bacteria cultures on mosquito larva was investigated as a possible biological control method. In a series of experiments the effects of three spore cultures (Bac. thuringiensis berliner, Bac. dendrolimus Talalaev, and Bac. cereus var. galleriae Isakova), one bacterial preparation entobakterin-3 (based on Bac. cereus var. galleriae), and two nonspore cultures (Bact. prodigiosum and Pseudomonas pyocyaneum) on the larva of Aedes, Culex and Anopheles mosquitoes were studied with different concentrations of bacteria cultures per square centimeter of water surfaces and with water temperatures ranging from 16 to 28°. Findings show that under laboratory and natural conditions the three spore bacterial

Card 1/2 UDC: 619:614.449.57

L 23158-66

ACC NR: AP5023737

cultures and the bacterial preparation killed a high percentage of Aedes, Culex, and Anopheles larva at a water temperature of 24°. At lower water temperatures, the pathogenic effect of these bacterial cultures is reduced and can be completely absent. The nonspore bacterial cultures did not display any pathogenic effect on the mosquito larva under laboratory conditions and consequently were not tested under natural conditions. No conclusions are drawn at this time. Orig. art. has: None.

SUB CODE: 06/ SUBM DATE: none.

Card 2/2 PB