PROKHOROV, V.M.; CHAY DYAN'-IN [Ch'ai Tien-ying]

Diffusion of cesium-137 in the soil. Radiokhimiia 5 no.5:639-642 '63. (MIRA 17:3)

PROKHOROV, V.M.; NARKEVICH, F.V.

Use of a neurovegetative blockade in the surgical treatment of goiter. Zdrav. bel. 8 no.1:38-41 Ja '62. (MIRA 15:3)

1. Iz gospital'noy khirurgicheskoy kliniki (zaveduyushchiy - dotsent I.M. Stel'mashonok) Minskogo meditsinskogo instituta.
(GOITER)
(ARTIFICIAL HIBERNATION)

L 01202-67 EWT(m)

ACC NR: AP6035638 SOURCE CODE: UR/0089/66/020/005/0448/0449

AUTHOR: Prokhorov, V. M.

ORG: none

TITLE: Computation of radioactive isotope concentration in an enclosed tank during isotope adsorption by the bottom layer

SOURCE: Atomnaya energiya, v. 20, no. 5, 1966, 448-449

TOPIC TAGS: radioactive contamination, radioisotope

ABSTRACT: The adsorption of radioactive isotopes by the bottom layer of a tank was described by a kinetic equation obtained from natural conditions and applied to the concentration of isotopes in water. A more accurate description of radioactive contamination at the bottom was obtained by determining the rate of isotopic diffusion at the tank's surface layer. Adsorption curves for the case of single and of constant influx are presented. Orig. art. has: 7 formulas and 2 figures. [NA]

SUB CODE: 18 / SUBM DATE: 01 Nov 65 / ORIG REF: 003

Card 1/1

UDC: 621.039.7:628.515

0922 0040

AGARKOV, G.M.; LOBACHEV, A.G.; PROKHOROV, V.N.

Single-nozzle pouring of slag. Stal' 22 no.1:17-18 Ja '62. (MIRA 14:12)

1. Chelyabinskiy metallurgicheskiy zavod.
(Blast furnaces--Equipment and supplies)
(Slag)

GERSHANOK, R.A., inzh.; PROKHOROV, V.N., inzh.; LUSHCHIK, B.A., inzh.

Block segmented prestressed concrete trusses lacking struts and with a span of up to 36 m. Prom. stroi. 40 [i.e. 41] no.4: 17-24 Ap '63. (MIRA 16:3)

1. Proyektnyy institut No.1 Gosstroya SSSR (for Gershanok). 2. Leningradskoye otdeleniye Vsesoyuznogo gosudarstvennogo proyektnogo instituta stroitel'stva elektrostantsiy (for Prokhorov). 3. Trest Sevenergostroy (for Lushchik). (Trusses) (Prestressed concrete)

LUBENETS, I.A.; LUKIN, P.G.; GAVRILYUK, L.Ya.; PROKHOROV, V.N.

Results of the use of natural gas in blast furnaces. Metallurg 10 no.9:5-7 S '65. (MIRA 18:9)

1. Chelyabinskiy metallurgicheskiy zavod.

VYATKIN, N.B., inzh.; LUKIN, P.G., inzh.; POPOV, Yu.A., inzh.; NEKIPELOV, S.P., inzh.; SHAPOSHNIKOV, A.K., inzh.; PROKHOROV, V.N., inzh.

Making pig iron with an oxygen-enriched blow. Stal' 23 no.4:293-296 Ap '63. (MIRA 16:4)
(Cast iron—Metallurgy) (Oxygen—Industrial applications)

NIKITIN, S.O.; PROKHOROV, V.N.; VASYUKINA, P.M.; BAKAYEV, S.M.

Drying the base and heating the layers of rolled roofing materials in carrying out roofing work during winter. Rats. i izobr. predl. v stroi. no.2:87-90 '57. (MIRA 11:1)
(Drying apparatus) (Roofing--Cold weather conditions)

GAVRILYUK, L.Ya.; PROKHOROV, V.N.

Reducing the sulfur content in cast iron by increasing the number of tappings. Stal' 24 no.8:678-680 Ag '64. (MIRA 17:9)

FOMIN, A.A.; VISHNYAKOV, B.S.; PROKHOROV, V.P.; KHAYEV, V.M.; SHVEDSKIY, A.I.; ORLIN, A.S., doktor tekhn. nauk, prof., retsenzent; VASIL'YEVA, N.G., inzh., red.

[Modern tractor diesel engines; atlas of designs] Sovremennye traktornye dizeli; atlas konstruktsii. Moskva, Mashgiz, 1963. 232 p. (MIRA 16:12)
(Tractors--Engines)

PROKHOROV, V.P. (Kazan', ul. B. Krasnaya, d.23, kv.6)

Obliterating atherosclerosis and obliterating endarteritis. Nov. khir.arkh. no.5:116 S-O '59. (MIRA 13:3)

1. Kazanskiy nauchno-issledovatel'skiy institut ortopedii i travmatologii.

(ARTERIOSCLEROSIS) (ARTERIES--DISEASES)

GATILIN, Nikolay Fedorovich, prof.; PROKHOROV, V.P., retsenzent; PRITYKINA, L.A., red.; KISINA, Ye.I., tekhn.red.

[Planning and designing of bakeries] Proektirovanie khlebozavodov. Moskva, Pishchepromizdat, 1960. 427 p. (MIRA 14:1)

1. Moskovskiy tekhnologicheskiy institut pishchevoy promyshlennosti (for Gatilin). 2. Glavnyy inzh. Gipropishcheproma (for Prokhorov). (Bakers and bakeries)

BEDNYAKOV, N.V.; KARCHEVSKIY, M.M.; NIKOL'SKIY, A.N.; PROKHOROV, V.P.

[Hydraulic engineering for land improvement on the Tatar collective farms] Vodno-meliorativnoe stroitel'stvo v kolkhozakh Tatarii. Kazan', Tatgosizdat, 1952. 126 p. (MLRA 9:8)
(Tatar A.S.S.R.--Hydraulic engineering)

SOLOMAKHA, G.P., kand.tekhn.nauk; BLYAKHMAN, L.I., kand.tekhn.nauk; PROKHOROV, V.P., inzh.

Column apparatus for the decarbonization of cyclohexylamine carbonate solutions. Khim. mashinostr. no. 6:4-5 N-D '62. (MIRA 17:9)

FAN-YUNG, Aleksandr Fedorovich ; PROKHOROV, V.R., retsenzent; GATILIN, N.F., retsenzent; BELOUSOV, D.P., retsenzent; KHMEL'NITSKAYA, A.Z., red.; SATAROVA, A.M., tekhn. red.

[Design and planning of canning plants] Proektirovanie konservnykh zavodov. Moskva, Pishchepromizdat, 1963. 271 p. (MIRA 16:10)

(Canning industry)
(Factories--Design and construction)

PROKHOROV, V.R.

Standard design for canning factories. Kons.i ov.prom. 15 no.5:6-10 My '60. (MIRA 13:9)

1. Gipropishcheprom. (Canning industry)

PROKHOROV, Vasiliy Romanovich; GULYAYEV, V.N., inzh., retsenzent;
PRITYKINA, L.A., red.

[Manufacture of food products from potato and corn] Proiz-
vodstvo pishchevykh produktov iz kartofelia i kukuruzy.
Moskva, Pishchevaia promyshlennost', 1965. 307 p.
(MIRA 18:10)

L 08453-67 EWP(e)/EWT(m)/EWP(t)/ETI/EWP(k) IJP(c) JD

ACC NR: AP6030896 SOURCE CODE: UR/0080/66/039/008/1693/1696

AUTHOR: Mel'nikova, M. K.; Prokhorov, V. M.

ORG: Agrophysical Scientific Research Institute (Agrofizicheskiy nauchno-issledovatel'skiy institut)

TITLE: Effect of a wetting agent on the adsorption and desorption of Sr^{90} by the soil

SOURCE: Zhurnal prikladnoy khimii, v. 39, no. 8, 1966, 1693-1696

TOPIC TAGS: radiostrontium, adsorption, desorption, sorption, surface active agent

ABSTRACT: In connection with the extensive industrial use of surfactants, their effect on the adsorption of radioisotopes, in particular, the harmful Sr^{90} nuclide, was studied. The common detergent OP-7 (polyethylene glycol of octylphenol with 7 ethylene glycol groups) was chosen for the experiments. The adsorption of Sr^{90} was investigated under static conditons, and the desorption under dynamic conditions by washing the columns containing the soil with various solutions. It was found that the desorption of Sr^{90} under the influence of $Ca(NO_3)_2$ and Trilon B solutions is improved by the presence of OP-7. At a high salt concentration of the washing solution, the effect of adding OP-7 is less pronounced. The distribution coefficient of Sr^{90} in moist soil in the presence of OP-7 either increases or retains its previous value. The data obtained may prove useful in increasing the effectiveness of desorbing solutions in the regeneration of mineral sorbents used for absorbing microquantities of ions, or in

Card 1/2 UDC: 532.696.1+541.183

L 08453-67

ACC NR: AP6030896

increasing their adsorption by these sorbents. Orig. art. has: 3 tables.

SUB CODE: 07/ SUBM DATE: 24Feb64/ ORIG REF: 002

Card 2/2

PROKHOROV, Ye.

Pickup action of steel vibrators. Radio no.10:53-55 O '65.
(MIRA 18:12)

PROKHOROV, V.S.

Age and growth rate of the capelin [Mallotus villosus villosus (Muller)] of the Barents Sea. Vop. ikht. 3 no.2:405-408 '63. (MIRA 16:7)

1. Laboratoriya donnykh ryb Polyarnogo nauchno-issledovatel'skogo instituta rybnogo khozyaystva i okeanografii (PINRO), Murmansk.
(Barents Sea—Smelts)

CHUBRIKOV, L.G.; SIROTIN, M.I.; SUYAROV, D.I.; Prinimali uchastiye:
KAYURIN, V.P.; PROKHOROV, V.S.

Investigating reduction conditions on plate mills at the Asha metallurgical plant. Trudy Inst.met.UFAN SSSR no.9:27-33 '62.
(MIRA 16:10)

PROKHOROV, V. S.

35847. Raschetu konstant ravnovesiya reaktsiy po polnomu uravneniyu nernsta. V. SB: Teoriya i praktisk rudnoy elektrotermii. Sverdlovsk-moskva, 1948, s. 19-20

SO: Letopis' Zhurnal'nykh Statey, Vol. 39, Moskva, 1949

AVERKO-ANTONOVICH, L.A.; KIRPICHNIKOV, P.A.; ZARETSKIY, Ya.S.; FRIDLAND, V.M.; PROKHOROV, V.S.; RASPOPOVA, L.V.; Prinimala uchastiye: ZUBKOVA, T.P.

Production of colored thiokol sealing materials. Kauch. i rez. 24 no.9:20-23 '65. (MIRA 18:10)

1. Kazanskiy khimiko-tekhnologicheskiy institut imeni S.M.Kirova.

L 2923-66 EWT(d)/EWP(1) IJP(c) BB/GG

AM4048667 BOOK EXPLOITATION UR/ 35 B+1

44 Drozdov, Yevgeniy Afanas'yevich (Candidate of Technical Sciences, Docent);
44 Prokhorov, Vadim Ivanovich (Candidate of Technical Sciences, Docent);
44 Pyatibratov, Aleksandr Petrovich (Candidate of Technical Sciences, Docent)

Principles of computer engineering (Osnovy vychislitel'noy tekhniki) 2nd. ed., rev., Moscow, Voyenizdat Min-va obor. SSSR, 1964. 463 p. illus., biblio. 27,000 copies printed. Editor: L. A. Ierlykin; Technical editor: A. N. Mednikova; Proofreader: R. V. Borunova

TOPIC TAGS: computer control, computer input device, computer output device, computer logic, computer memory, electronic digital computer

PURPOSE AND COVERAGE: This book was intended for officers studying the technology of digital computers; it may be used also by engineers and technicians dealing with digital computers. The fundamentals of the construction of electronic digital computers are outlined, and the principles of programming for these computers are analyzed. This edition, as compared with the first edition, contains up-to-date material on elements, subassemblies, and individual structures of these

Card 1/2

L 2923-66
AM4048667

machines, and the terminology and definitions have been refined and clarified.

TABLE OF CONTENTS:

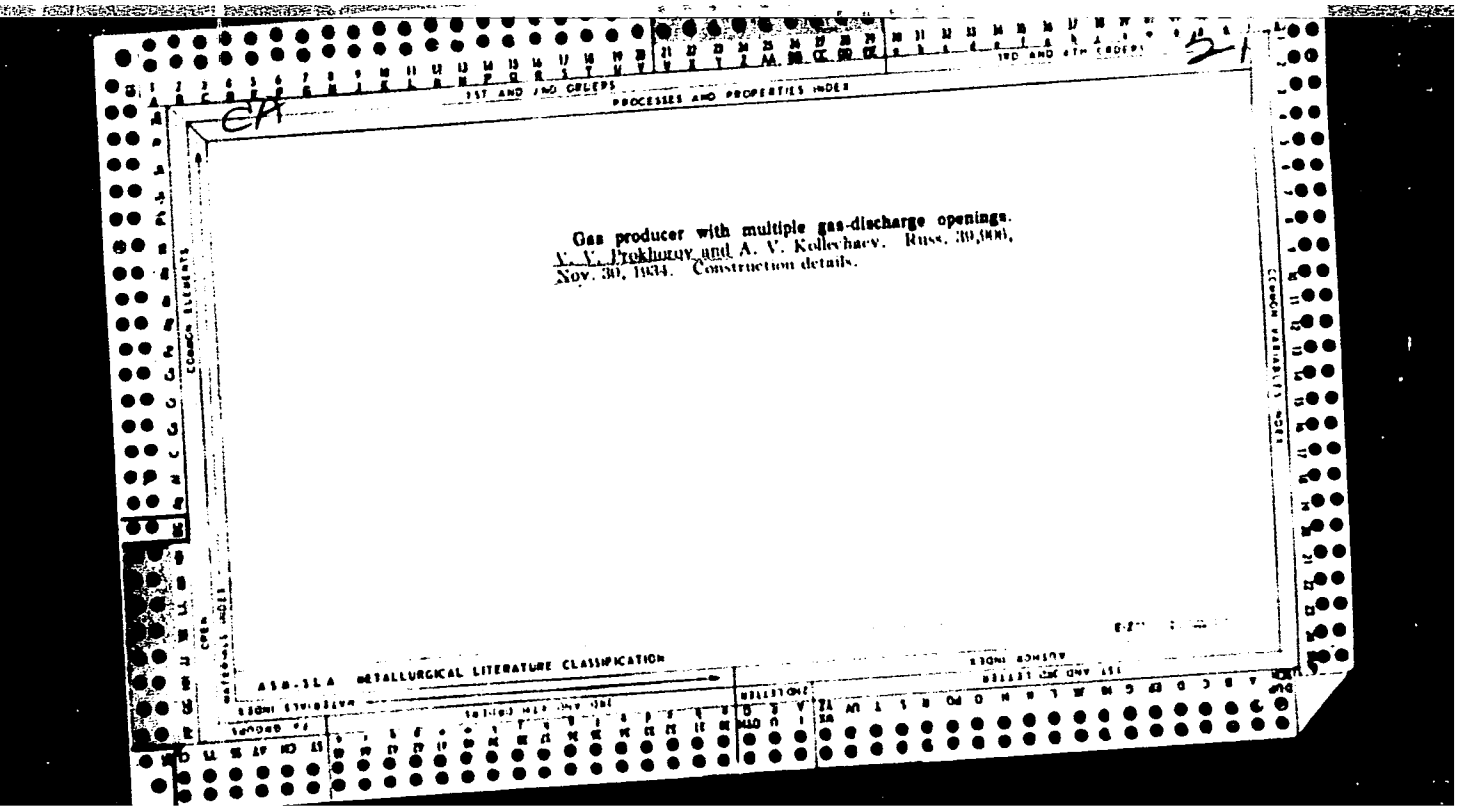
SUB CODE: DP SUBMITTED: 2Jun64 NR REF SOV: 023

OTHER: 002 DATE ACQ: 20Jul64

Card 2/2

KUDRYAVITSKIY, Isaak Borisovich; IGNATENKO, Illarion Mefodiyevich; PROKHOROV, Viktor Vasil'yevich; BEREZKIN, Yu.I., red.; SOSINOVICH, A.I., tekhn. red.

[The struggle of workers in Gomel' Government for the reconstruction of the national economy in 1921-1925] Trudiashchiesia Gomel'skoi gubernii v bor'be za vosstanovlenie narodnogo khoziaistva, 1921-1925 gg. Pod red. I.Ignatenko. Minsk, Izd-vo Belgosuniversiteta im. V.I.Lenina, 1961. 77 p. (MIRA 15:1)
(Gomel' Government--Reconstruction)



PROCESSES AND PROPERTIES INDEX

Gas producer with multiple gas-discharge openings. V. V. Prokhorov and A. V. Kollechaev. Russ. 39,(88), Nov. 30, 1934. Construction details.

ASB-SLA METALLURGICAL LITERATURE CLASSIFICATION

PROKHOROV, Yu. [illegible]

"Certain works of recent years in the field of Limit theorems of Probability theory,"
A.N. Kolmogorov
Vest Mos Univ, Ser Fiziko-mat i Yest Nauk, No 7, pp 19-30

Mentions his and B.V. Gnedenko's Predel'nyye raspredeleniya dlya summ nezavisimykh sluchaynykh velichin (Limit Distributions for Sums of Independent Random Quantities, 1949. Refers to related works of: A.L. Dobrushin (Izv An SSSR, 17, 1953); Yu. V. Prokhorov (Usp Mat Nauk, 8, No 3, 1953; DAN SSSR 83, 1952); D.G. Meyzler, O.S. Parasyuk, and E. L. Ivachova (DAN SSSR, 80, 1951; Ukr mat Zhur, 7-20, 1949); E. L. Ivachova (Trudy Inst Mat i Mekh An Uzbek SSR, No 10 Part 1, 1953); Yu. V. Linnik and N.A. Sapogov (Izv AN SSSR, 13, 1949); S. Kh. Sirazhdinov (DAN SSSR, 84, 1952).

PROKHOROV, Y. A., STEKLOVSKIY, V. M., CHERNOV. L. A., LEYPUNSKIY, A. I.,
KUZENTSOV. V. A., ARTYKHOV, G. V., MIGILHER, A. I.

"Experimental studies of some of the physical features of Beryllium-moderated intermedate reactors."

Report submitted for the IAEA Seminar on the Physics of East and Intermediate Reactors, Vienna, 3-11 Aug 1961

Acad. Sci. USSR Moscow

APPROVED FOR RELEASE: 06/15/2000 CIA-RDP86-00513R001343120018-8"

PETRIKOV, N. (Saransk); RESHETNIKOV, V.; SOKOLOV, N.; SUKATOV, I.; PROKHOROV, Ya.

Contributions to agriculture. Mest.prom.i khud.promys. 3 no.7:8-9 Jl '62. (MIRA 15:8)

1. Zamestitel' ministra mestnoy promyshlennosti Mordovskoy ASSR (for Petrikov). 2. Nachal'nik Tul'skogo oblastnogo upravleniya mestnoy promyshlennosti (for Reshetnikov). 3. Nachal'nik tekhnicheskogo otdela Lomonosovskogo instrumental'no-mekhanicheskogo zavoda, g. Lomonosov, Leningradskoy obl. (for Sokolov). 4. Direktor Perovskogo opytnogo zavoda No.1, g. Perovo, Moskovskoy obl. (for Sukatov). 5. Nachal'nik upravleniya toplivnoy promyshlennosti i mestnykh stroymaterialov Ispolnitel'nogo komiteta Moskovskogo Soveta deputatov trudyashchikhsya (for Prokhorov).
(Agricultural machinery) (Farm buildings) (Socialist competition)

AUTHOR: Prokhorov, Ye., and Yurchenko, D.

TITLE: Indoor Public-Address Systems (Zvukofikatsiya pomeshcheniy)

PERIODICAL: Radio, 1957, Nr 3, pp 47-50 (USSR)

ABSTRACT: Public-address systems in rooms and halls find increasingly wide application. For good performance of a public-address system, high-quality equipment, accurate observance of technical requirements, and allowance for acoustic pecularities of the hall are necessary. Practical problems of choice and placement of equipment in a hall are discussed in the article. Microphones with uniform frequency response are desirable as they are less liable to acoustic feedback. Also, a directional pattern and a low sensitivity are desirable. Although the Soviet-make electrodynamic type SDM microphone can function under widely variable temperature, humidity and mechanical-shock conditions, it is hardly suitable for indoor usage as its frequency response is irregular within 200-3,000 cps, it has an omnidirectional characteristic, and an 0.25 mv/bar sensitivity. Other electrodynamic microphones, e.g., MD-30, may have better characteristics, but they are still unsuitable for indoor service. Band

Indoor Public-Address Systems

microphones ML-10 and ML-10B have a much better frequency response. They have a figure-eight directional characteristic and are not so sensitive as the electrodynamic types. Their tendency to accentuate lower frequencies can be easily corrected in the amplifier section. The most suitable for indoor public-address application is the 10-A-1 microphone, which has a cardiod directional characteristic and an adequate frequency response. The performance characteristics of a capacitor-type microphone are high and a large section of its frequency response is uniform; however, it requires a special pre-amplifier. Piezoelectric microphones have not been widely used because they are shock-sensitive, adversely affected by temperature changes and high humidity, and have a poor directivity. Carbon microphones are not used since they are hardly suitable for a high-quality amplification. Thus, the best microphone for indoor public-address systems is a band unidirectional microphone (i.e., 10-1-A). A public-address amplifier should meet the following specifications: two separate inputs, a 6-7 kc transmission band with 2-4 db variation, 1.5-2% distortion, and separate controls for higher and lower frequencies. Its output power should be between 10 and 50 watts. Regrettably, the Soviet radio industry does not

Indoor Public-Address Systems

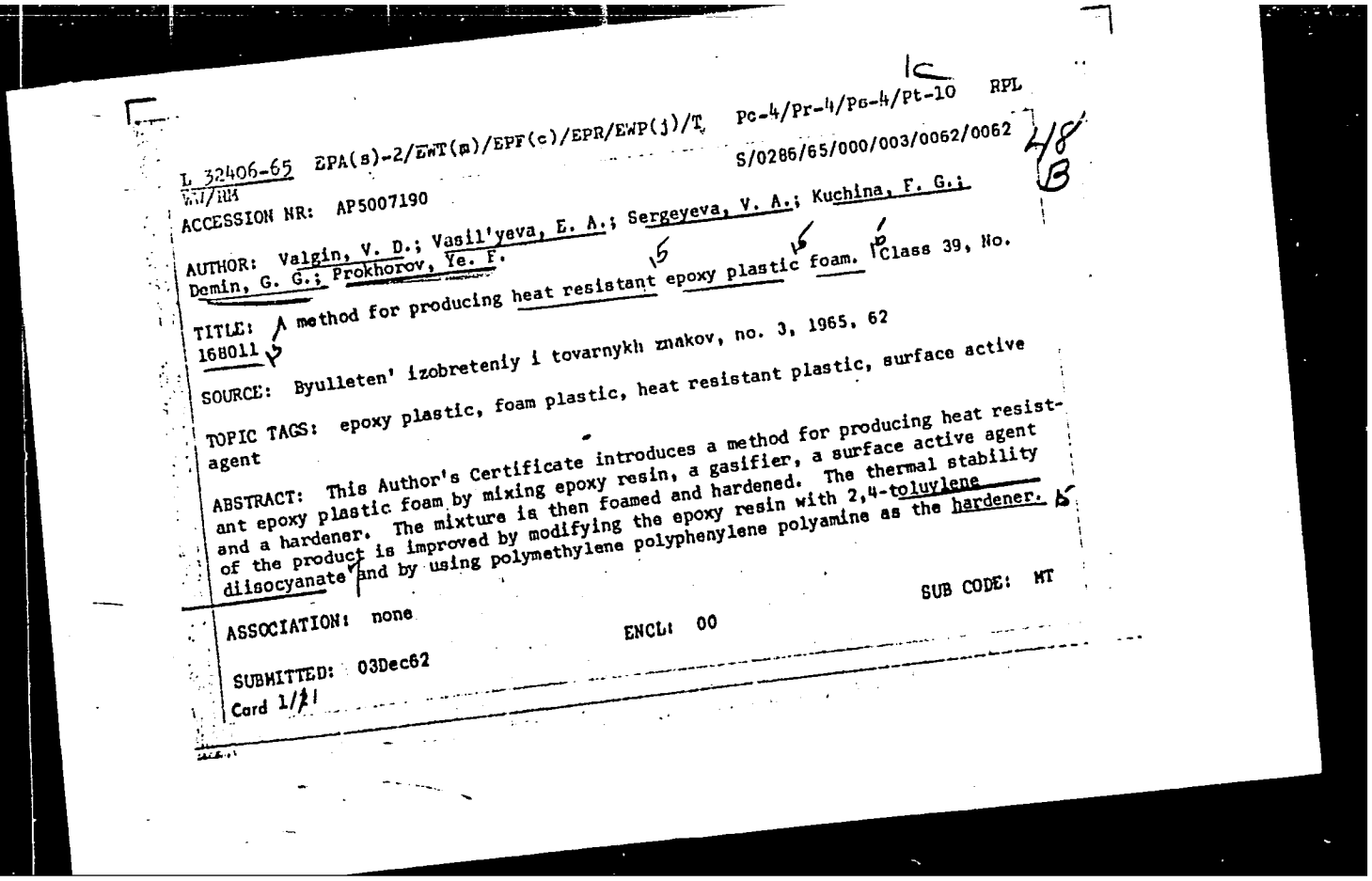
manufacture 10, 20, and 30-watt amplifiers. Flat frequency response and a low distortion factor are important for public-address loudspeakers. Type R-10 10-watt horn loudspeakers have a rather poor performance. They are hardly applicable for indoor public-address systems. The frequency response of an R-10 horn loudspeaker has an irregularity of about 20 db within 250-4,000 cps band. Harmonic content is about 10% at 400 cps. Speech reproduced by this loudspeaker is unpleasant in character and has a poor intelligibility. Correctly deployed diffuser-type loudspeakers are much better. A diffuser-type 10-GD-4 10-watt loudspeaker has 15 db irregularity within 70-7,500 cps and 4% harmonic content at 400 cps. For a higher-quality speech and less chance of acoustic feedback, an underloaded diffuser-type loudspeaker and an underloaded amplifier should be used. Placement of microphones and loud-speakers in a hall is the most complicated problem. An incorrect placement can adversely affect the results despite the use of high-quality equipment. Maximum loudness should be combined with uniformity of the sound field. As early as 1936, Professor N. A. Garbuzov found that a horizontal displacement of the sound source is detected by the listener with much higher accuracy than

Indoor Public-Address Systems

a vertical displacement of the same source. It has been found experimentally that a five-meter horizontal displacement of the sound source is detected by the human ear as a break between the visual and oral perceptions of the individual. Locating a loudspeaker above the orator is recommended as the best placement. In the Bol'shoy Zal of the Conservatory (the "Large Hall" of the Conservatory), the loudspeaker was installed above the orator, and a very good sound was obtained within the entire volume of 17,000 m^3 of the hall. (Abstractor's note: Both Moscow and Leningrad Conservatories have "Large Halls.") No break between visual and oral perceptions was observed. In some cases, the loudspeaker can be installed on the floor at an angle directing the sound waves upward. Frequent on-the-spot checking of sound in the hall is recommended during the operation of a public-address system. For open-stage program microphones, a response of 70-7,000 cps and a distortion factor of 1% at 400 cps are recommended.
There are seven figures in the article.

PROKHOROV, Ye.; YURCHENKO, D.

Public address systems for meeting rooms. Radio no.3:47-50 Mr '57. (MLRA 10:5)
(Public address systems)



L 32406-65 EPA(s)-2/EWT(m)/EPF(c)/EPR/EWP(j)/T Pc-4/Pr-4/Ps-4/Pt-10 RPL
WW/RM S/0286/65/000/003/0062/0062
ACCESSION NR: AP5007190

AUTHOR: Valgin, V. D.; Vasil'yeva, E. A.; Sergeyeva, V. A.; Kuchina, F. G.; Demin, G. G.; Prokhorov, Ye. F.

TITLE: A method for producing heat resistant epoxy plastic foam. Class 39, No. 168011

SOURCE: Byulleten' izobreteniy i tovarnykh znakov, no. 3, 1965, 62

TOPIC TAGS: epoxy plastic, foam plastic, heat resistant plastic, surface active agent

ABSTRACT: This Author's Certificate introduces a method for producing heat resistant epoxy plastic foam by mixing epoxy resin, a gasifier, a surface active agent and a hardener. The mixture is then foamed and hardened. The thermal stability of the product is improved by modifying the epoxy resin with 2,4-toluylene diisocyanate and by using polymethylene polyphenylene polyamine as the hardener.

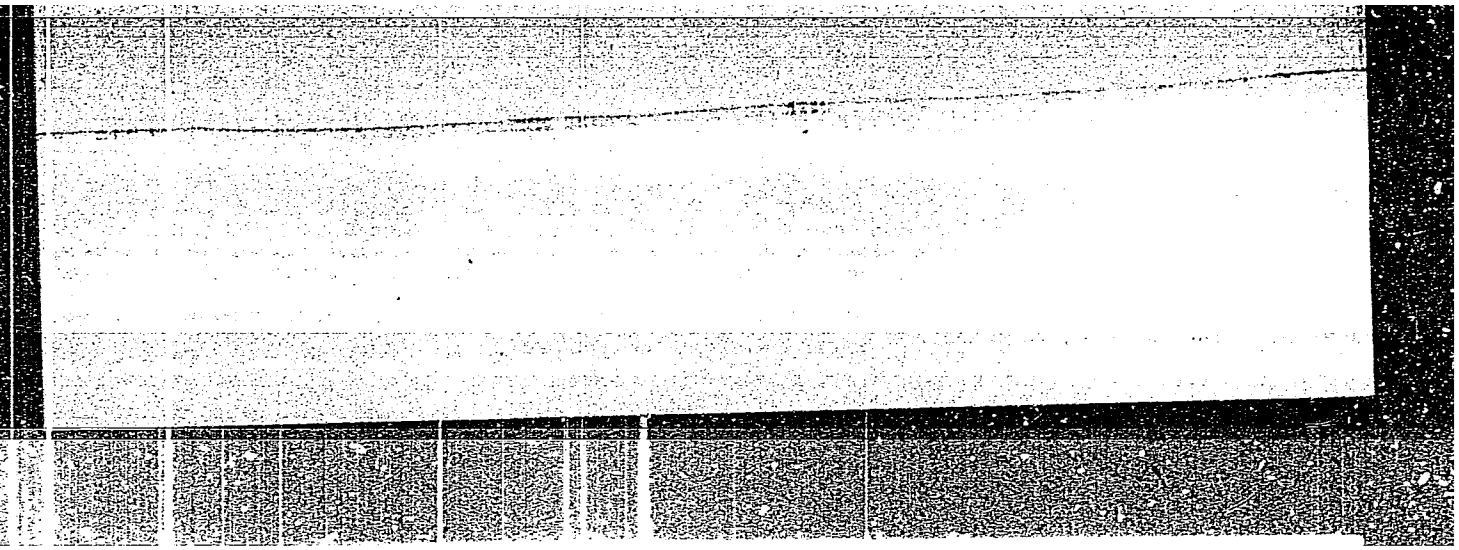
ASSOCIATION: none

SUBMITTED: 03Dec62 ENCL: 00 SUB CODE: MT

Card 1/1

PROKHOROV, S.A., inzh.

Accelerated start of the VPT-50-3 turbine with steam heated flanges and ts.v.d. pipe. Elek. stn. 34 no.8:15-19 Ag '63. (MIRA 16:11)



APPROVED FOR RELEASE: 06/15/2000 CIA-RDP86-00513R001343120018-8"

AUTHORS: Trubilov, M.A. (Cand.Tech.Sci.) SOV/96-58-12-9/18
Borevskiy, Ye.I. (Engineer)
Prokharov, S.A. (Engineer)

TITLE: Changes in the radial clearances in steam turbines during starting and operation. (Izmeneniye radialnykh zazorov v parovykh turbinakh pri puske i ekspluatatsii)

PERIODICAL: Teploenergetika, 1958, No.12, pp. 48-55 (USSR)

ABSTRACT: A good deal of damage has been caused by fouling of the rotors and glands during the starting and operation of steam turbines; it has usually been attributed to failure to observe the starting instructions. In 1955-56 the All-Union Thermo-Technical Institute made tests on one of the turbines to elucidate the reasons for gland wear. The radial clearances were measured simultaneously at four places round the shaft by means of impulse nozzles, as illustrated in Fig.1; the nozzles approached the cylindrical surface of the shaft and discharged air or steam at a rate which denoted the clearance. The general principles of this method of gauging were described in an article by Rubinshteyn and Trubilov in Teploenergetika No.7, 1958. The test results are presented graphically in Fig.2. It will be seen that in a turbine the main redistribution of clearances took place during erection, the main reason being that the lower part of the turbine casing is not sufficiently rigid. As the diaphragms are installed it bends downwards, and when the more rigid upper half of the casing is bolted down, the bottom half is pulled upwards and

Card 1/4

Changes in the radial clearances in steam turbines during SOV/96-58-12-9/18
erection, starting and operation.

more into line again. When the turbine is heated up at low speed and no-load, a temperature difference arises between the upper and lower parts of the cylinder, causing the cylinder to bend, which reduces the lower clearance by a further half millimetre. Thus, when the turbine was started from the cold, the radial clearances underneath the shaft were almost 1.2 mm less than the values measured during erection. Conditions would naturally be worse when the turbine is started up from the partly-cold condition when temperature differences are liable to be greater. Somewhat later similar investigations of the radial clearances were made on an [illegible] 50-MW turbine with initial steam conditions of 90 atm and 500°C. A sectional drawing of the machine is in Fig.3. The measuring nozzles were fixed to the diaphragm of the 11th stage, located at about the middle of the length of the high-pressure cylinder. In this turbine, changes in the clearances occurred mainly as a result of disturbances of centring of the diaphragm. In the previous turbine the diaphragms were lifted upwards relative to the rotor axis when the bolts were pulled down and during heating up at low speed; in the AEG machine, displacement of the diaphragms in both vertical and transverse directions mostly occurred during changes in the load on the turbine. It will be seen from the readings plotted in Fig.4, that the vertical displacements coincided with changes in

Card 2/4

Changes in the radial clearances in steam turbines during erection, starting and operation.

the load, whereas transverse displacement lagged behind load changes somewhat, as shown by the corresponding Fig.5. The reasons for the observed changes in the clearances are discussed at some length. Measurements of the clearances were also made on the forward-end gland of an LMZ 6-MW turbine. In this case the measuring controls were installed directly on the turbine casing, as shown in Fig.7. Eccentricity of the rotor observed in this gland during testing of the turbine is shown charted in Fig.8. As the speed rises the rotor lifts and is displaced to the right relative to the casing; as the load is taken up the rotor rises further, apparently due to temperature deformation of the cylinder. After full load was reached the rotor gradually fell, and after about three hours was some 0.1 mm below the initial position. The reasons for this are discussed. Thus these first tests to measure changes in the clearances during the starting and operation of three different types of turbine revealed a number of important causes of damage to glands. The most instructive of these was the inadequate rigidity of the lower half of the casing of the first turbine. A formula is given for calculating the thermal bending of the turbine casing; the validity of the formula was verified by measurements on the turbine. Two other causes of reduced clearances are considered, namely, expansion of blading and elliptical distortion of the cylinder. A systematic classification of the causes

Card 3/4

Changes in the radial clearances of steam turbines during erection, starting and operation.

SOV/96-58-12-9/18

of change in clearances is charted in Fig.10. Further investigations will be required to accumulate experimental data and to find ways of obviating the most dangerous of these effects during design and operation of turbines. There are 10 figures and 1 [illegible] references.

ASSOCIATION: All-Union Thermo-Technical Institute (Vsesoyuznyy Teplotekhnicheskiy Institut)

Card 4/4

AID P - 4231

Subject : USSR/Heat and Power Engineering

Card 1/1 Pub. 110 a - 12/15

Author : Prokhorov, S. A., Eng.

Title : Method for approximate determination of unit fuel consumption of large turbine units.

Periodical : Teploenergetika, 3, 56-58, Mr 1956

Abstract : A detailed report on the American method, supplemented by a mathematical analysis, for the determination of fuel consumption. Seven figures.

Institution : None

Submitted : No date

PROKHOROV, S.D.

"On the use of the principle of motion on an air cushion."

report presented at the 11th Annual Scientific Technical Conference on Ship Theory, organized by the Central Administration of the Scientific-Technical Society of the Shipbuilding Industry, 13-15 December 1960.

BABUSHKIN, Vul'f Davydovich; PROKHOROV, Sergey Petrovich; LOSEV, Feliks Ionovich; PREDKO, Aleksandr Georgiyevich. Prinimal uchastiye OSTAPENKO, T.V.

[Methods of calculating the general inrush of water into coal mines] Metody rascheta obshchego pritoka vody v shakhty ugol'nykh mestorozhdenii. [By] V.D.Babushkin i dr. Moskva, Izd-vo "Nedra," 1964. 122 p. (MIRA 17:6)

PROKHOROV, Stepan Ivanovich, prof.; KUDRYAVTSEV, S.P., red.; NAUMOV, K.M., tekhn. red.

[Principles of the economics of U.S.S.R. transportation and communication]Osnovy ekonomiki tranporta i sviazi SSSR; uchebnoe posobie. Moskva, Izd-vo VPSh i AON pri TsK KPSS, 1963. 136 p. (MIRA 17:1)

PROKHOROV, Stepan Ivanovich, doktor ekonom.nauk; YELISEYEV, A.I., red.; BRULIKOVSKAYA, R.G., tekhn.red.

[Machinery industry] Mashinostroenie. Gor'kii, Gor'kovskoe knizhnoe izd-vo, 1959. 38 p. (MIRA 13:3)
(Machinery industry)

PROKHOROV, S.I. , prof., doktor ekon, nauk; BIBIK, L.F., ekonomist;
YERMAKOV, S.F., inzh.

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.)

PROKHOROV, S.I.

PROKHOROV, S.I., kand.ekon.nauk

River junction at Gorkiy on the 40th anniversary of the October Revolution. Rech.transp.16 no.11:24-25 N '57. (MIRA 10:12)
(Gorkiy--Harbors) (Volga River--Inland water transportation)

PROKHOROV, Stepan Ivanovich, kand. ekon. nauk; PONOMARENKO, A.D., red.; BRULIKOVSKAYA, R.G., tekhn. red.

[Essays on the economics of the machinery industry in the Gor'kovskoye District] Ocherki ekonomiki mashinostrotel'noi promyshlennosti Gor'kovskogo raiona. [Gor'kii] Gor'kovskoe knizhnoe izd-vo, 1957. 195 p. (MIRA 11:10)
(Gor'kovskoye District--Machinery industry)

Prokhorov, S.I.

3-58-2-9/33

AUTHOR: Prokhorov, S.I., Dotsent, Candidate of Economic Sciences

TITLE: A Reliable Method for a Creative Study of Economic Problems (Nadezhnyy metod tvorcheskogo izucheniya ekonomicheskikh problem)

PERIODICAL: Vestnik Vysshey Shkoly, 1958, # 2, pp 45-48 (USSR)

ABSTRACT: The article deals with the liaison between industry and the Chair of Political Economy of Gor'kiy University, with the scientific-research work of the vuz chair instructors and with the help given by the chairs to the Sovnarkhoz. While the exact form of this liaison is not yet fully developed, some favorable results have already been obtained.

The chair's research workers have participated in resolving problems of industrial specialization at the Gor'kovskiy radiozavod imeni V.I. Lenina (Gor'kiy Radio Plant imeni V.I. Lenin), furthered participated at the Gor'kovskiy avtomobil'nyy zavod (Gor'kiy Automobile Plant) in working out projects for the mechanization and automation of industry, etc.

Recently, instructors participated in devising a project for establishing an Institute of Technique, Technology and Economics of Industry at the Sovnarkhoz, in introducing new

Card 1/2

A Reliable Method for a Creative Study of Economic Sciences

forms of wages at industrial enterprises and in writing articles on Sovnarkhoz activity. As a result of this cooperation with industry, much material is produced which can be utilized in lectures and seminar exercises.

ASSOCIATION: Gor'kovskiy gosudarstvennyy universitet imeni N.I. Lobachevskogo (Gor'kiy State University im.N.I. Lobachevskiy)

AVAILABLE: Library of Congress

BARYSHEVA, A.A., red.; ORFANOV, I.K., red.; [illegible], S.I., red.; TRUBE, L.L., red.; GARALINA, L.F., red.

[The Volga-Vyatka Region; economic and geographical survey] Volgo-Viatskii raion; ekonomiko-geograficheskii obzor. Gor'kii, Volgo-Viatskoe knizhnoe izd-vo, 1964. 285 p. (MIRA 18:3)

PROKHOROV, S.I., doktor ekonom.nauk, prof.

"Development and distribution of the machinery industry in the U.S.S.R." by A.G.Omarovskii. Reviewed by S.I.Prokhorov. Vest.-mashinostr. 43 no.5:84-85 My '63. (MIRA 16:5)
(Machinery industry) (Omarovskii, A.G.)

PROKHOROV, S.I., kandidat ekonomicheskikh nauk.

Problems of the Gorky waterway junction. Rech. transp. 15 no.9:6-10 S '56. (MLRA 10:2)

(Gorky--Harbors)
(Inland water transportation)

PHASE I BOOK EXPLOITATION SOV/4112

Prokhorov, Stepan Ivanovich, Doctor of Economics

Mashinostroyeniye (Machine Building) [Gor'kiy] Gor'kovskoye knizhnoye izd-vo, 1959. 38 p. Errata slip inserted. 3,000 copies printed.

Ed.: A.I. Yeliseyev; Tech. Ed.: R.G. Brulikovskaya.

PURPOSE: This booklet is intended for the general reader.

COVERAGE: The booklet presents an account of economic achievements in the machine industry of the Gor'kovskiy rayon. The importance of the Gor'kiy machine industry and its significance in the Soviet national economy are emphasized. Comparative percentage figures citing growth and output are presented. No personalities are mentioned. There are no references.

TABLE OF CONTENTS:

Card 1/2

AVAILABLE: Library of Congress (HC337.G57P7)

Card 2/2

AC/pw/gmp
8-18-60

MALOVA, Mariya Nikolayevna; PROKHOROV, Stepan Ivanovich; GUREVICH, Sh.M., red.; LOBANOV, Ye.M., red.

[Business accounting in parts for river transportation] Vnutriportovyi khozlaistvennyi raschet na rechnom transporte. Moskva, Transport, 1965. 61 p. (MIRA 18:7)

PROKHOROV, Stepan Ivanovich

[Industry and transportation in Gorkiy Province, 1917-1957] Promyshlennost' i transport Gor'kovskoi oblasti, 1917-1957. Gor'kovskoe knizhnoe izd-vo, 1958. 187 p. (MIRA 12:5) (Gorkiy Province--Transportation) (Gorkiy Province--Industries)

PROKHOROV, S. L. (Engineer)

"The Utilization of Slit Cavities for Insulating Concrete Walls." Cand Tech Sci, Sci-Res Inst of Construction Engineering, Acad Sci USSR, 17 Dec 54. (VM, 8 Dec 54)

Survey of Scientific and Technical Dissertations Defended at USSR Higher Educational Institutions (12)

SO: SUM No. 556, 24 Jun 55

PROKHOROV, S.O.

PROKHOROV, S.O., voyennyy letchik pervogo klassa, mayor.

Landing a bomber at night on an unlit landing strip. Vest. Vozd.Fl. 40 no.6:46-48 Je '57. (MLRA 10:8)

(Landing aids (Aeronautics))
(Airplanes--Landing)

PAVLOV, I.N. [deceased]; PROKHOROV, S.P.; SKVORTSOV, G.G.; LOSEV, F.I.; Prinimali uchastiye: ROMANOVSKAYA, L.I.; KISSIN, I.G.; KULIBABA, F.V.; FILIPPOVA, B.S., red.; IVANOVA, A.G., tekhn.red.

[Iron ore deposits in the Kursk Magnetic Anomaly from the point of view of hydrogeology and engineering geology] Gidrogeologicheskie i inzhenerno-geologicheskie usloviia zhelezorudnykh mestorozhdenii Kurskoi magnitnoi anomalii. Moskva, Gos.nauchno-tekhn.izd-vo lit-ry po geol. i okhrane nedr, 1959. 271 p. (MIRA 13:3)

(Kursk Magnetic Anomaly--Iron ores)

AID Nr. 984-6 6 June

EPR SPECTRUM AND SPIN-LATTICE RELAXATION OF Cr^{3+} AND Fe^{3+} IONS IN $ZnWO_4$ SINGLE CRYSTALS (USSR)

Yemel'yanova, Ye. N., N. V. Karlov, A. A. Manenkov, V. A. Milyayev, A. M. Prokhorov, S. P. Smirnov, and A. V. Shirokov. Zhurnal eksperimental'noy i teoreticheskoy fiziki, v. 44, no. 3, Mar 1963, 868-869.

S/056/63/044/003/016/053

The EPR of Cr^{3+} and Fe^{3+} ions in $ZnWO_4$ single crystals in equal concentrations of ~ 0.1% has been studied in the 1.6 to 300°K range at frequencies from 9.4 to 15 Gc. Constants of the spin Hamiltonian describing the Cr^{3+}

Card 1/2

AID Nr. 984-6 6 June

EPR SPECTRUM AND SPIN-LATTICE (Cont.) S/056/63/044/003/016/053

spectrum were obtained, and the spin-lattice relaxation time (T_1) of the Cr^{3+} ion was determined by the pulse saturation method at a frequency of 9.4 Gc for the transition M = + 1/2 ⟷ - 1/2. The relaxation time of the Cr^{3+} ion was 1.1 msec at 4.2°K and 5.3 msec at 1.6°K, satisfying the relationship $T_1 = 1.15(\exp(\delta/kT)-1)\cdot 10^{-3}$ sec, with the parameter δ/k equalling 2.8°K. This relationship is explained as due to direct resonance processes under the assumptions that transition between lower levels M = ± 1/2 is forbidden and that the relaxation is accomplished through the upper level M = 3/2 located at a distance δ from M = 1/2. The spin-lattice relaxation time of the Fe^{3+} ions obtained by the same method was 75 μ sec at 4.2°K and 180 μsec at 1.6°K, satisfying the relationship $T_1 \sim 1/T$ within this temperature range. Crystals containing only Fe^{3+} ions (in a concentration of ~ 0.3%) had a relaxation time of 85 ± 5 μ sec at 1.6°K and were shown to contain two nonequivalent groups of ions. Crystals containing both Fe^{3+} and Cr^{3+} ions did not show the presence of two Fe^{3+} ion systems. [BB]

Card 2/2

PROKHOROV, S.P.

132-58-6-8/13

AUTHORS: Prokhorov, S.P. and Skvortsov, G.G.

TITLE: The Engineering and Geologic Features of Loose Rich Ores of the KMA and Questions of Their Further Study (Inzhenerno-geologicheskiye svoystva rykhlykh bogatykh rud KMA i voprosy ikh dal'neyshego izucheniya)

PERIODICAL: Razvedka i Okhrana Nedr, 1958, Nr 6, pp 49 - 53 (USSR)

ABSTRACT: The authors give a general description of the iron ore deposits discovered recently in the southern regions of the Kurskaya Magnitnaya Anomaliya (Kursk Magnetic Anomaly (KMA). These deposits are the most important in the world. Only the reserves of the Yakovlevo deposits are more important than those of the Krivoy Rog region. The magnitude of the deposits discovered earlier in the KMA region reaches 30-40 m deep, and they can be exploited by open-pit mining. The deposits in the southern part of the KMA are of a huge magnitude (200 to 300 m and more deep) and are covered by a very thick layer of sedimentary rocks containing large reserves of underground water. These deposits are composed of compact and loose ores in various proportions. The loose ores of the Yakovlevo deposits are in some places in-

Card 1/2

132-58-6-8/13

The Engineering and Geologic Features of Loose Rich Ores of the KMA and Questions of Their Further Study

terstratified by layers of compact ores which form a kind of skeleton for the loose ores. Drainage will take only few months. The presence of the skeleton in the loose ores will make them more resistant to water pressure. The authors give advice for a further study of these depcsits by boring exploratory holes and by laboratory examinations of the peculiar features of these ores. The experience obtained in the exploitation of the Krivoy Rod deposits must help in these operations. There are 2 graphs, 1 table and 3 Soviet references.

ASSOCIATION: VSEGINGEO

AVAILABLE: Library of Congress

Card 2/2 1. Ores-USSR 2. Geology 3. Iron-Deposits

BABUSHKIN, V.D.; PROKHOROV, S.P.

Evaluation of the total flow of water into mines of coal deposits. Razved. i okh. nedr 28 no.9:55-61 S '62. (MIRA 15:9)

1. Vsesoyuznyy nauchno-issledovatel'skiy institut gidrogeologii i inzhenernoy geologii.

(Mine water)

AMMOSOV, I.I., red.; BURTSEV, D.N., red.; GORYUNOV, S.V., red.; GUSEV, A.I., red.; KOROTKOV, G.V., red.; KOTLUKOV, V.A., red.; KUZNETSOV, I.A., red.; MIRONOV, K.V., red.; MOLCHANOV, I.I., red.; NEKIPELOV, V.Ye., red.; PONOMAREV, T.N., red.; POPOV, V.P., red.; PROKHOROV, S.P., red; SKROBOV, S.A., red.; TYZHNOV, A.V., red.; SHABAROV, N.V., red.; YAVORSKIY, V.I., red.; BOBRYSHEV, A.T., red. toma; VINOGRADOV, B.G., red. toma; VOLKOV, K.Yu., zam. red. toma; LUGOVOY, G.I., zam. red. toma; OGARKOV, V.S., red. toma; SIMONOV, A.V., red. toma; IZRAILEVA, G.A., red.izd-va; IVANOVA, A.G., tekhn. red.

[Geology of coal and combustible shale deposits in the U.S.S.R.]Geologiia mestorozhdenii uglia i goriuchikh slantsev SSSR. Glav.red.I.I.Ammosov i dr. Moskva, Gosgeoltekhizdat. Vol.2. [Moscow Basin and other coal deposits in central and eastern provinces of the European part of the U.S.S.R.]Podmoskovnyi bassein i drugie mestorozhdeniia uglia tsentral'nykh i vostochnykh oblastei Evropeiskoi chasti RSFSR. 1962. 569 p. maps. (MIRA 15:9)

1. Russia (1923- U.S.S.R.)Ministerstvo geologii i okhrany nedr.

(Coal geology)

PRONKHOROV, SERGEY PETROVICH.

N/5
622.5
.P9

METODICHESKOYE RUKOVODSTVO PO GIDROGEOLOGICHESKIM INZHENERNOGE LOGICHESKIM ISSLEDOVANIYAM, PRI RASVEDKE MESTOROZHDENIY TVERDYKH POLEZNYKH ISKOPAYEMYKH
METHODICAL HANDBOOK ON HYDROGEOLOGIC AND ENGINEERING-GEOLOGICAL STUDIES IN PROSPECTING FOR DEPOSITS OF HARD MINERAL RESOURCES, BY S.P. PETROVICH YE. G. KACHUGIN. MOSKVA, GOSGEOLTEKHIZDAT, 1955
230 P. DIAGRS., TABLES.
COVER TITLE: GIDROGEOLOGICHESKIYE ISSLEDOVANIYA PRI RAZVEDKE MESTOROZHDENIY.
AT HEAD OF TITLE: MOSCOW. VSESOYUZNYY NAUCHNO-ISSLEDOVATEL'SKIY INSTITUT GIDROGEOLOG INZHENERNOY GEOLOGII.
"LITERATURA": P. 223-228.

SKROBOV, S.A., glav. red.; TYZHNOV, A.V., zam. glav. red.; SHABAROV, N.V., zam. glav. red.; AMMOSOV, I.I., redaktor; red.; BURTSEV, D.N., red.; IVANOV, G.A., red.; KOROTKOV, G.V., red.; KOTLUKOV, V.A., red.; KUZNETSOV, I.A., red.; MIRONOV, K.V., redaktor; MOLCHANOV, I.I., redaktor; NEKIPELOV, V.Ye., red.; PONOMAREV, T.N., red.; POPOV, V.S., red.; PROKHOROV, S.P., red.; YAVORSKIY, V.I., red.; LAGUTINA, V.V., red. toma; LEVENSHTEYN, M.L., red. toma; SHIROKOV, A.Z., red. toma; IZRAILEVA, G.A., red.izd-va; KROTOVA, I.Ye., red. izd-va; IVANOVA, A.G., tekhn. red.

[Geology of coal and combustible shale in the U.S.S.R.]Geologiia mestorozhdenii uglia i goriuchikh slantsev SSSR. Glav. red. I.I. Ammosov i dr. Moskva, Gosgeoltekhizdat. Vol.1.[Coal basins and deposits in the south of the European part of the U.S.S.S.;;Donets Basin, Dnieper Basin, Lvov-Volyn' Basin, deposits of the western provinces of Moldavia and the Ukraine, White Russia, Transcaucasia and the Northern Caucasus] Ugol'nye basseiny i mestorozhdeniia iuga Evropeiskoi chasti SSSR; Donetskii bassein, Dneprovskii bassein, L'vovsko-Volynskii bassein, mestorozhdeniia zapadnykh oblastei Ukrainy i Moldavii, Belorussii, Severnogo Kavkaza i Zakavkaz'ia. 1963. 1210 p. (MIRA 17:3)

1. Russia (1923- U.S.S.R.) Gosudarstvennyy geologicheskiy komitet.

SKVORTSOV, G.G.; PROKHOROV, S.P.

Requirements for the study of mineral deposits from the point of view of engineering geology. Vop. gidrogeol. i inzh. geol. no. 18:154-175 '59. (MIRA 14:5)
(Ore deposits) (Engineering geology)

PROKHOROV, S.P.; SKVORTSOV, G.G.

Determining the degree and thickness of karst formation in geological prospecting operations. Razved.i okh.nedr 22 no.7: 55-59 Jl. '56. (MLRA 9:11)

1. Vsesoyuznyy Nauchno-issledovatel'skiy institut gidrogeologii i inzhenernoy geologii.
(Karst) (Prospecting)

PROKHOROV, S.P.; KACHUGIN, Ye.G.; MAKKAVEYEV, A.A., redaktor; ENTIN, M.L., redaktor; GUROVA, O.A., tekhnicheskiy redaktor.

[Methods guide for hydrogeological and engineering geological research in prospecting for hard mineral deposits] Metodicheskoe rukovodstvo po gidrogeologicheskim i inzhenerno-geologicheskim issledovaniiam pri razvedke mestorozhdenii tverdykh poleznykh iskopaemykh. Moskva, Gos.nauchno-tekhn.izd-vo lit-ry po geologii i okhrane nedr. 1955. 230 p. (MLRA 8:11)

(Prospecting--Geophysical methods)
(Geochemical prospecting)

PROKHOROV, S.V.

Restituting the influx of water in future mines of mineral deposits by the analogy method. Vop. gidrogeol. i inzh.geol. no.16:149-151 '58. (MIRA 12:11)

(Mining geology) (Water, Underground)

PROKHOROV, S.P.; SKVORTSOV, G.G.

Characteristics of loose rich ores in the Kursk Magnetic Anomaly and problems relative to their further study from the viewpoint of engineering geology. Razved. i okh. nedr 24 no.6:49-53 Je '58. (MIRA 11:12)

1.Vsesoyuznyy nauchno-issledovatel'skiy institut gidrogeologii i inzhenernoy geologii.
(Kursk Magnetic Anomaly--Ore deposits)
(Engineering geology)

RYABCHENKOV, A.S.; ANTONENKO, K.I.; TITOV, N.A.; CHAPOVSKIY, Ye.G.; CHURINOV, M.V.; KONOPLYANTSEV, A.Z.; VIKTOROV, S.V.; VOSTOKOVAYA, Ye.A.; SADOVSKIY, N.D.; KUDELIN, B.I.; OGIL'VI, N.A.; LUNGERSGAUZEN, G.F.; BRODSKIY, A.A.; SHCHERBAKOV, A.V.; POPOV, V.N.; YEMEL'YANOVA, Ye.P.; SOKOLOV, S.S.; BERSENEV, I.I.; GROSHIN, S.I.; MAKKAVEYEV, A.A.; MARINOV, N.A.; YEFIMOV, A.I.; ASSOVSKIY, G.N.; VLADIMIROV, A.G.[deceased]; PROKHOROV, S.P.; FILIPPOVA, B.S., red. izd-va; BYKOVA, V.V., tekhn. red.

[Methodological manual on hydrogeological surveying at the scales of 1:1,000,000 - 1:500,000 and 1:200,000 - 1:100,000]Metodicheskoe rukovodstvo po gidrogeologicheskoi s"emke masshtabov 1:1000 000 - 1:5000 000 i 1:200 000 - 1:100000. Pod obshchei red. A.A.Makkaveeva i A.S.Riabchenkova. Moskva, Gos. nauchno-tekhn. izd-vo lit-ry po geol. i okhrane nedr, 1961. 318 p. (MIRA 15:3)

1. Russia (1923- U.S.S.R.) Ministerstvo geologii i okhrany nedr. (Water, Underground) (Geological surveys)

AL'TOVSKIY, M.Ye.; CHAPOVSKIY, Ye.G.; BABUSHKIN, V.D.; BINDEMAN, N.N.; LAPTEV, F.F.[deceased]; SOKOLOV, I.Yu.; CHALISHCHEV, A.M.[deceased]; PROKHOROV, S.P.; TOKAREV, A.N.; KOROTEYEV, A.P.; ABRAMOV, S.K.; KONOPLYANTSEV, A.A., red.; PRIKLONSKIY, V.A., red.[deceased]; SPITSYN, N.I., red.; MARINOV, N.A., red.; KULICHIKHIN, N.I., red.; GARMONOV, I.V., red.; LYUBCHENKO, Ye.K., red. izd-va; POTAPOV, V.S., red. izd-va; GUROVA, O.A., tekhn. red.

[Hydrogeologist's handbook] Spravochnik gidrogeologa. Pod obshchei red. M.E.Al'tovskogo. Moskva, osteoltekhizdat, 1962. 615 p. (MIRA 15:7)

(Water, Underground)

ANTIPIN, V.I.; BUDANOV, N.D.; KOTLUKOV, V.A.; LEYBOSHITS, A.M.; PROKHOROV, S.P.,, kand.geol.-miner.nauk; SIRMAN, A.P.; FALOVSKIY, A.A.; SHTEYN, M.A.; BASKOV, Ye.A.; BOGATKOV, Ye.A.; GANEYEVA, M.M.; ZARUBINSKIY, Ya.I.; IL'INA, Ye.V.; KATSIYAYEV, S.K.; KOMPANIYETS, N.G.; NELYUBOV, L.P.; PONOMAREV, A.I.; REZNICHENKO, V.T.; RULEV, N.A.; TSELIGOROVA, A.I.; ALSTER, R.K.; SHVETSOV, P.F.; VYKHODTSEV, A.P.; KOTOVA, A.I.; KASHKOVSKIY, G.N.; LOSEV, F.I.; ROMANOVSKAYA, L.I.; PROKHOROV, S.P.; MATVEYEV, A.K., dots., retsenzent; CHEL'TSOV, M.I., inzh., retsenzent; KUDASHOV, A.I., otv. red.; PETRYAKOVA, Ye.P., red. izd-va; IL'INSKAYA, G.M., tekhn. red.

[State of flooding and conditions for the exploitation of coal-bearing areas in the U.S.S.R.] Obvodnennost' i usloviia ekspluatatsii mestorozhdenii ugol'nykh raionov. Pod nauchn. red. S.P.Prokhorova. Moskva, Gosgortekhizdat, 1962. 243 p. (MIRA 15:7)

1. Moscow. Vsesoyuznyy nauchno-issledovatel'skiy institut gidrogeologii i inzhenernoy geologii. 2. Kafedra geologii i geokhimii goryuchikh iskopayemykh Moskovskogo Gosudarstvennogo universiteta (for Matveyev).
(Coal geology) (Mine water)

ANTIPIN, V.I.; BUDANOV, N.D.; KOTLUKOV, V.A.; LEYBOSHITS, A.M.; PROKHOROV, S.P., kand.geol.-miner.nauk; SIRMAN, A.P.; FALOVSKIY, A.A.; SHTEYN, M.A.; BASKOV, Ye.A.; BOGATKOV, Ye.A.; GANEYEVA, M.M.; ZARUBINSKIY, Ya.I.; IL'INA, Ye.V.; KATSIYAYEV, S.K.; KOMPANIYETS, N.G.; NELYUBOV, L.P.; PONOMAREV, A.I.; REZNICHENKO, V.T.; RULEV, N.A.; TSELIGOROVA, A.I.; ALSTER, R.K.; SHVETSOV, P.F.; VYKHODTSEV, A.P.; KOTOVA, A.I.; KASHKOVSKIY, G.N.; LOSEV, F.I.; ROMANOVSKAYA, L.I.; PROKHOROV, S.P.; MATVEYEV, A.K., dots., retsenzent; CHEL'TSOV, M.I., inzh., retsenzent; KUDASHOV, A.I., otv. red.; PETRYAKOVA, Ye.P., red. izd-va; IL'INSKAYA, G.M., tekhn. red.

[State of flooding and conditions for the exploitation of coal-bearing areas in the U.S.S.R.] Obvodnennost' i usloviia ekspluatatsii mestorozhdenii ugol'nykh raionov. Pod nauchn. red. S.P.Prokhorova. Moskva, Gosgortekhizdat, 1962. 243 p. (MIRA 15:7)

1. Moscow. Vsesoyuznyy nauchno-issledovatel'skiy institut gidrogeologii i inzhenernoy geologii. 2. Kafedra geologii i geokhimii goryuchikh iskopayemykh Moskovskogo Gosudarstvennogo universiteta (for Matveyev).
(Coal geology) (Mine water)

SKVORTSOV, Grigoriy Grigor'yevich, starshiy nauchnyy sotr.;
ROMANOVSKAYA, Lidiya Ivanovna, mladshiy nauchnyy sotr.;
POPOV, I.V., retsenzentl DUBROVKIN, V.L., retsenzent;
PROKHOROV, S.P., retsenzent; KONOPLYANTSEV, A.A.,
retsenzent; GRISHINA, T.B., red. izd-va; BYKOVA, V.V.,
tekhn. red.

[Geological engineering observations in constructing and exploiting open-pit mines; methodological instructions] Inzhenerno-geologicheskie nabliudeniia pri stroitel'stve i ekspluatatsii kar'erov; metodicheskie ukazaniia. Moskva, Gosgeoltekhizdat, 1962. 58 p. (MIRA 15:10)
(Engineering geology) (Strip mining)

BABUSHKIN, V. D.; PROKHOROV, S. P.; SAAR, A. A.

"On recharge of artesian aquifers as a result of water release from clay layers"
Presented at the Symposium on Methods of Evaluating Resources of Underground Water with Emphasis on Arid Zone Problems, Athens 11-20 Oct 1961

PROKHOROV, S. P.

"Tasks and Method of Hydro_geological Investigations Dur[illegible] Prospecting for Deposits of Hard Minerals," Razvedka i Okhrana [illegible]dr, No. [illegible], pp 38-45, 1954

SO: [illegible]-31[illegible], [illegible] Sep 55

PROKHOROV, S.P.

MUKHIN, Yu.V.; PROKHOROV, S.P., redaktor.

[Hydrogeological observations in core drilling] Gidrogeologicheskie nabliudeniia pri kolonkovom burenii. Moskva, Gos. izd-vo geol. lit-ry, 1954. 81 p. (MLRA 7:4)

(Borings) (Water, Underground)

L 2280-66 EWP(e)/EWT(m)/EPF(c)/EWP(i)/EPF(n)-2/EWP(b)/EWA(h) WW/DM/WH
ACCESSION NR: AP5016924 UR/0089/65/018/006/0573/0578
539.172.12:539.125.5

AUTHOR: Kon'shin, V. A.; Matusevich, Ye. S.; Prokhorov, S. S. 34 27

TITLE: Fluxes of secondary neutrons produced by 600 Mev protons in shields

SOURCE: Atomnaya energiya, v. 18, no. 6, 1965, 573-578

TOPIC TAGS: reactor shielding, neutron distribution, neutron flux, neutron interaction, neutron shielding, proton bombardment, proton interaction

ABSTRACT: The spatial and energy distributions of secondary neutrons in graphite and nickel blocks were measured with the aid of a set of threshold and resonance indicators. The measurements were carried out with the OIYaI synchrocyclotron. The diameter of the beam striking the blocks was 3 cm. The absolute values of the neutron flux in an infinite plate were obtained for a plane unidirectional source of protons. The energy distribution of the secondary neutrons in the interval 2.5×10^{-8}...6.6×10^{2} Mev was broken up into seven intervals for the graphite and six for nickel, in such a way that the bulk of the activity of each indicator was due to neutrons belonging to one group. The dose behind a flat shield of nickel or graphite was also determined as a function of the thickness of the shield. The neutron flux distribution exhibited a maximum close to the center of the shielding

Card 1/2

L 2280-66

ACCESSION NR: AP5016924

7

block. The radiation dose was practically independent of the thickness of the shield in the case of graphite, and decreased with thickness in the case of nickel. The results are discussed briefly. "The authors thank S. G. Tsypin and G. N. Flerov for continuous interest and support, Yu. P. Kumekin and V. Stoletov for help with work on the accelerator, I. Yu. Levenberg for measuring the absolute activities of the aluminum foils, and V. P. Dzhelepov for the opportunity to work with the OIYaI synchrocyclotron." Orig. art. has: 6 figures.

ASSOCIATION: none

SUBMITTED: 03Jul64 ENCL: 00 SUB CODE: NP

NR REF SOV: 009 OTHER: 007

Card 2/2 DP

L 05045-67 EWP(e)/EWT(m)/EWP(t)/ETI IJP(c) JD/WW/HW/JR/GD/WH

ACC NR: AT6027942 SOURCE CODE: UR/0000/66/000/000/0226/0235

42
40
B+1

AUTHOR: Kon'shin, V. A.; Matusevich, Ye. S.; Prokhorov, S. S.

ORG: None

TITLE: Energy and spatial distribution of a stream of secondary neutrons produced by protons with an energy of 660 Mev in blocks of graphite and nickel

15 27

SOURCE: Voprosy fiziki zashchity reaktorov (Problems in physics of reactor shielding); sbornik statey, no. 2. Moscow, Atomizdat, 1966, 226-235

16 19

TOPIC TAGS: proton, neutron, neutron energy distribution, radiative capture

ABSTRACT: The authors study the spatial and energy distribution of neutrons in thick (i. e. comparable with the ionization path of the primary 660 Mev protons) blocks of graphite and nickel. The neutrons in the blocks were produced by interaction of a monodirectional point beam of protons with the block material. The experiments were done on the synchrocyclotron at the OIYaI. The following indicators were used for measuring the spatial and energy distribution of the number of neutrons produced by reactions between the protons and the nuclei of the target: $In^{115}(n, \gamma)In^{116}$; $U^{238}(n, \gamma)U^{239}$; $Cu^{63}(n, \gamma)Cu^{64}$; $Al^{27}(n, \alpha)Na^{24}$; $P^{31}(n, p)Si^{31}$; $Mg^{24}(n, p)Na^{24}$; $C^{12}(^{n, 2n}_{p, pn})C^{11}$. The efficiency of β-radiation was determined for each indicator as a basis for finding the absolute number of captures. The number of captures per gram weight of the indicators (In, U, Cu, Al, Mg, P) was

Card 1/3

L 05045-67

ACC NR: AT6027942

measured and normalized to a single incident proton. The measurements were made with respect to radius r with center on the axis of symmetry of the proton beam. Curves are given showing the number of captures N as a function of r for indium, phosphorous, magnesium and aluminum indicators in nickel. The number of captures A from a plane monodirectional source of protons is determined by integrating the function $N(r)$ with respect to target area, i. e.

$$A = 2\pi \int_0^{\infty} N(r) r dr.$$

Figures are given showing A as a function of distance from the forward face of the nickel block for In, P, Al, Mg, U and Cu. Figures are also given for a graphite block showing $N(r) \cdot r$ as a function of thickness Z for indium and phosphorous indicators. Curves are given showing the number of captures from a plane monodirectional source as a function of the distance Z from the forward wall of a graphite block 120 cm thick for all indicators except carbon. Tables are given showing the neutron fluxes in various energy regions for both graphite and nickel. The neutron intensities are graphed as a function of thickness for both materials and it is shown that neutrons with energies below 4.65 kev are predominantly responsible for the neutron flux in graphite. A graphite block 120 cm thick shows a ratio of neutrons below this energy to those above of about 3.5 along the axis of symmetry. This ratio is 0.3 for a nickel block which is apparently due to the large absorption cross section in nickel at low neutron energies. Graphite and nickel show a difference in neutron fluxes below 4.65 kev by a factor of 30 while they differ by a factor of only 3 for neutron energies above 4.65 kev. The

Card 2/3

ACC NR: AT6027942

2

spatial distribution of the neutrons has a maximum at half the thickness of the block with symmetric distribution in graphite. The asymmetric distribution in nickel is due to the effect of neutron production by the primary beam. The energy spectrum is softer in graphite than in nickel. Graphite shows a considerable neutron leakage for the energy group below 10^{-6} Mev. In conclusion the authors thank Doctor of physical and mathematical sciences S. G. Tsypin and Professor I. I. Bondarenko (deceased) for interest in the work and discussion of the results. Orig. art. has: 8 figures, 2 tables.

SUB CODE: 20/ SUBM DATE: 12Jan66/ ORIG REF: 006/ OTH REF: 003

Card 3/3 pla

L 05383-67 EWP(e)/EWT(m)/EWP(t)/ETI LIP(c) JD/WW/HW/JR/GD/WH

ACC NR: AT6027944 SOURCE CODE: UR/0000/66/000/000/0239/0244

AUTHOR: Kon'shin, V. A.; Matusevich, Ye. S.; Prokhorov, S. S.

ORG: None

TITLE: Dose of secondary neutrons produced by protons with an energy of 660 Mev behind flat shielding of nickel, copper, aluminum and graphite

SOURCE: Voprosy fiziki zashchity reaktorov (Problems in physics of reactor shielding); sbornik statey, no. 2. Moscow, Atomizdat, 1966, 239-244

TOPIC TAGS: radiation shielding, neutron energy distribution, nucleon interaction

ABSTRACT: The authors measure the flux and energy distribution of secondary neutrons escaping from plane layers of graphite, aluminum, nickel and copper with a thickness of 26 g/cm^2 (approximately 10% of the ionization path of the primary protons). The experiments were done on the synchrocyclotron at the OIYaI. The beam of protons incident on the target was monitored by the reaction $Al^{27}(p,3pn)Na^{24}$ with a cross section of (11±0.5) mbarn at a proton energy of 660 Mev. The following indicators were used for measuring the number and energy distribution of the neutrons produced by reaction of the protons with target nuclei: $P^{31}(n,p)Si^{31}$; $Al^{27}(n,\alpha)Na^{24}$; $Mg^{24}(n,p)Na^{24}$ with absolute registration of β-particles from decay of Si^{31} and Na^{24}. Tables are given showing

Card 1/2

L 05383-67

ACC NR: AT6027944

2

neutron fluxes in various energy groups for interaction of 660 Mev protons with target nuclei behind a graphite target and in front of and behind copper, nickel and aluminum targets, and for the doses produced by neutrons behind targets made from these four materials with an incident stream of protons. In conclusion the authors thank Doctor of physical and mathematical sciences S. G. Tsypin and Professor I. I. Bondarenko (deceased) for consultation and interest in the work. Orig. art. has: 2 figures, 2 tables.

SUB CODE: 18/ SUBM DATE: 12Jan66/ ORIG REF: 005/ OTH REF: 008

Card 2/2

PROKHOROV, S.T.

Preparation of powder specimens for electron microscope inspection. Zav. lab. 27 no. 12:1496 '61. (MIRA 15:1)

1. Vsesoyuznyy nauchno-issledovatel'skiy alyuminiyevo-magniyevyy institut.

(Powder metallurgy) (Electron microscopy)

GALITSKIY, N.V.; PROKHOROV, S.T.

Electron microscope study of solid chlorides from the dust chambers of titanium processing plants. Koll.zhur. 26 no.2:163-164 Mr-Ap '64. (MIRA 17:4)

1. Vsesoyuznyy alyuminiyevo-magniyevyy institut, Leningrad.

NI, L.P.; ROMANOV, L.G.; PROKHOROV, S.T.; PONOMAREV, V.D.

Alkaline hydroaluminosilicates formed by desilication of aluminate solutions. Zhur. prikl. khim. 37 no.8:1671-1676 Ag '64.

SOV/136-59-5-16/21

AUTHORS: Potapova, T.A., and Prokhorov, S.T.

TITLE: Use of Radioactive Indicators in Studying the Distribution and Behaviour of Admixtures in the Production of Alloys (Ispol'zovaniye radioaktivnykh indikatorov dlya izucheniya raspredeleniya i povedeniya primesey pri proizvodstve splavov)

PERIODICAL: Tsvetnyye metally, 1959, Nr 5, pp 78-80 (USSR)

ABSTRACT: The radioactive isotopes Cr^{51}, Cu^{64}, Zn^{65}, Zr^{95} and W^{185} were used in the study of Al alloys. Two methods of radiation detection were used - ionization for control, and radiographic to investigate the distribution of the elements in the alloys. All the alloying elements except Cr were added as master alloys. Cr alloys were made by adding a mixture of equal parts of Cr oxide and cryolite to Al at 1000 °C. The intensity of radiation from 200 g samples was 25 m. curie for Cu^{64} and 5 m. curie for the remainder. The radiographic method measured β-radiation for all the alloys except those containing Zn^{65} although all the elements except Cr^{51} emit both β and γ radiation. The distribution of Zn in Al-Zn alloys was investigated in the cast state and after

Card 1/3

Use of Radioactive Indicators in Studying the Distribution and Behaviour of Admixtures in the Production of Alloys

tempering at 435 °C for 24 hours. It was uniform in both cases. Similar results were obtained for the distribution of Cr in Al-Zn-Mg-Cu alloys. Two alloys of the Al-Zn-Mg-Cu type containing approximately 2 and 0.2% Cu were examined for Cu distribution in the cast state, after homogenising at 430 °C for 17 hours, after hot rolling at 460 °C, after quenching from 470 °C, after heating at 430 °C and slow cooling in the furnace, and after quenching and ageing at 120 °C for 9 hours. On all the radiographs there was a uniform background with individual light spots. The Cu was shown to be in solid solution and not in the grain boundaries by magnifying to 100X. The light spots on the macro radiograph indicate local concentrations of Cu, the quantity and intensity being proportional to the Cu content, and decreasing after thermal and mechanical treatments. It was proposed that they were centres of corrosion in alloys containing more than 1% Cu. Alloys were therefore tested for two weeks in 3% aqueous solution of NaCl and 0.1% H_2O_2. Photographs of the surfaces were taken and compared with

Use of Radioactive Indicators in Studying the Distribution and Behaviour of Admixtures in the Production of Alloys

the radiographs. This confirmed that the local concentrations of Cu were indeed the centres of corrosion.

There are 1 figure and 5 references, of which 1 is English, 1 French, and 3 are Soviet.

PROKHOROV, S.V. (Kazan')

A certain transcendental equation. Stroi. mekh. i rasch. soor. 5 no.3:35 '63. (MIRA 16:6)

(Elastic plates and shells)

PROKHOROV, S. V., Cand of Tech Sci -- (diss) "Stability of a Cylindrical Wrapping in an Unequal Binding," Kazan', 1959, 12 pp (Kazan' Aviation Institute) (KL, 5-60, 127)

APPROVED FOR RELEASE: 06/15/2000 CIA-RDP86-00513R001343120018-8"

PROKHOROV, V.

PROKHOROV, V. Thirtieth anniversary of the approval of the first state standards in the USSR. p. 29.

Vol. 6, No. 8, Aug. 1956.
RATSIONALIZATSIIA.
TECHNOLOGY
Sofiia, Bulgaria

So: East European Accession, Vol. 6, No. 3, March 1957