ROLSKI, Stanislaw; ZDUNSKA, Alina; POPKO, Alina

Studies on L-leucine hydrochloride compounds. Acta pol. pharm. 20 no.2:141-145 '63.

1. Z Katedry Chemii Farmaceutycznej Akademii Medycznej w Warszawie Kierownik: prof. dr St. Rolski.
(LEUCINE) (CHEMISTRY, PHARMACEUTICAL)

124-1957-2-1560D

Translation from: Referativnyy zhurnal, Mekhanika, 1957, Nr 2, p 16 (USSR)

AUTHOR: Popko, I.N.

TITLE: Some Problems on the Theory of the Movement of Materials Inside the Rotating Cylinders of Agricultural Machinery (Nekotoryye voprosy teorii dvizheniya materiala vo vrashchayushchikhsya tsilindrakh sel'skokhozyaystvennykh mashin)

ABSTRACT: Bibliographic entry on the Author's dissertation for the degree of Candidate of Technical Sciences, presented to the Chelyabin. in-t mekhan. i elektrifik. s.-kh.(Chelyabinsk Institute for the Mechanization and Electrification of Agriculture), Chelyabinsk, 1956

ASSOCIATION: Chelyabin. in-t mekhan. i elektrifik. s. kh. (Chelyabinsk Institute for the Mechanization and Electrification of Agriculture), Chelyabinsk,

1. Agriculture--Equipment 2. Dynamics 3. Materials--Motion

Card 1/1

POPKO, Jerzy, inz.

Address of Jerzy Popko on behalf of the Ministry of Agriculture. Przegl geod 35 no.7:274 Jl'63.

1. Assistant Secretary of Agriculture, Warsaw.

IOPKO, L. F.

"Computation and Design of Direct-Current Compensators." Cand Tech Sci, L'vov Polytechnical Inst, L'vov, 1953. (RZhFiz, Sep 54)

SO: Sum 432, 29 Mar 55

POPKO, L.P.

Conference on Compensation Measurement Methods. Izm. tekh. no.2:61 Mr-Ap '55. (MLRA 8:9)
(Mensuration--Congresses)

POPKO, L. P.

AID P - 2026

Subject : USSR/Electricity

Card 1/1 Pub. 27 - 30/31

Author : Popko, L. P., Kand. of Tech. Sci.

Title : A conference on compensation measurement methods

Periodical : Elektrichestvo, 4, 87, Ap 1955

Abstract : The conference took place in Lvov on January 17 to 20, 1955. Several reports were discussed. The author gives a list of topics and reporters.

Institution: None

Submitted : No date

POPKO, P.

Patriotic education in school. Voen. znan. 40 no.9:29-30 S '64. (MIRA 17:12)

1. Predsedatel' Volgogradskogo oblastnogo komiteta Vsesoyuznogo dobrovol'nogo obshchestva sodeystviya armii, aviatsii i flotu.

POPKO, V.N., inzh.

Properties of steamed and autoclaved concrete having a lime-slag binder from acid granulated blast-furnace slag. Sbor. trud. Sverd. nauch.-issl. inst. po stroi. no.10:6-33 '63.

(MIRA 17:10)

POPKO, V.N., inzh.; PETUKHOVA, V.V., inzh.; GRIGOR'YEV, Yu.M., inzh.

Lightweight concrete on a base of round algoporites. Sbor. trud. Sverd. nauch.-issl. inst. po stroi. no.10:93-108 '63.
(MIRA 17:10)

POPKO, V.N., inzh.

Effect of hydrothermal treatment on the properties of concrete made with lime and slag cement. Bet. i zhel-bet. no.11:497-501 N '61. (MIRA 16:8)

(Concrete--Testing)

POPKO, V.N., inzh.; BEN'YAMINOVICH, I.M., inzh.; BEREZIN, N.N., inzh.; GRIGOR'YEV, Yu.M., inzh.

Manufacture of large reinforced concrete elements made with a lime-slag binder. Bet. i zhel.-bet. 9 no.2:60-63 F '63. (MIRA 16:5)

(Precast concrete--Testing) (Binding materials)

S/081/61/000/021/055/094
B110/B101

AUTHORS: Khokhlov, D. G., Popko, V. N., Sabinin, Yu. A., Petukhova, V. V.

TITLE: Production of agloporite from finely disperse power plant ashes and of agloporite-base light concrete

PERIODICAL: Referativnyy zhurnal. Khimiya, no. 21, 1961, 314, abstract 21K328 (Stroit. materialy, no. 2, 1961, 12-16)

TEXT: The surface of pulverulent brine granulated to a size of 10-20 mm, was covered with a thin layer of coal dust fuel. Subsequently, the granules were fired on an agglomeration machine. The following was studied: ash obtained by burning coal from Ekibastuz and Chelyabinsk. In order to lower the sintering temperature, up to 10% of clay and up to 10-15% of nickel slag were added to the charge prior to the formation of lumps. The ash readily formed lumps when wetted in pure state and also when containing additions of slag and clay. The humidity content was 24-30%. The humid granules were sufficiently compact, transportable, and capable of keeping pulverulent fuel on their surfaces (3-6% of the

Card 1/2

weight of the dry granules). Calcining was made at high rates. This guaranteed a high productivity of the plant and good agloporite qualities. The cooled material was pulverized, sieved into various fractions and then used to produce agloporite concrete. [Abstracter's note: Complete translation.]

Card 2/2

KHOKHLOV, D.G., kand.tekhn.nauk; POPKO, V.N., inzh.; SABININ, Yu.A. inzh.; PETUKHOVA, V.V., inzh.

Using fine-dispersed cinders from electric power stations in making agloporites and agloporite-base lightweight concretes. Stroi.mat. 7 no.2:12-16 F '61. (MIRA 14:3)
(Lightweight concrete) (Aggregates(Building materials)

KHOKHLOV, D.G., kand.tekhn.nauk; POPKO, V.P., inzh.; SABININ, Yu.A., inzh.; PETUKHOVA, V.V., inzh.

Gravel-shaped agloporite of ashes from the Krasnogorsk and Argayash thermal electric plants and lightweight concretes made from it. Sbor.trud.VNIIMSM no.6:25-37 '62. (MIRA 15:12)

1. Sverdlovskiy sovet narodnogo khozyaystva.
(Ash (Technology)) (Lightweight concrete)

POPKO, Yu.M.

Role of mock-ups and stands in improving the polytechnic training of physics teachers. Uch.zap.Mosk.gor.ped.inst. 85:85-90 '58.
(MIRA 14:10)

(Physics--Study and teaching)

POPKO, Yu. M.

A-5

USSR/General Section - Problems of Teaching.

Abs Jour : Ref Zhur - Fizika, No 4, 1957, 8249

Author : Yu.M. Popko
Inst :
Title : Practical Curriculum in Physics in the Pedagogical Higher Institutions.

Orig Pub : Yeh. zap. Mosk. goz. ped. in-ta, 1955 (1956), 50, 97-117

Abstract : Notice is taken of many substantial shortcomings in the planning of the prectical courses in the pedagogical institutes, namely that the set of projects in the physical practical course does not correspond to the purposes of preparation of the physics teacher relative to physical experiments; the planning does not take into account the need for systematically teaching of the future physics teacher the correct use of measuring apparatus, electric circuit elements, and other instruments on the basis of their technical characteristics. Work that follows the

Card 1/3

Abs Jour : Referat Zhur - Fizika, No 4, 1957, 8249

traditionally compiled descriptions has the character of a recipe, and this redices the independence of the student during the working process, and consequently the student does not obtain enough scientific and practical skills. In the Moscow Municipal Pedagogical Institute there was introduced in 1949 an improvement in the planning of the physical practical course, in which the entire work in the physics laboratory in the pedagogical higher institutions insures preparation of the physics teacher for the performance of physical experiments. All the work done in the physical practical course is divided into preparatory and all-inclusive. In the preparatory work one studies the fundamental methods of measurements, used in the given branch of physics, and a systematic investigation is made of the construction of measurement apparatus and of its operating conditions. The all-inclusive works are based on projects connected with the establishment or verification

of some law of physics, with the study of the physical phenomena that illustrates the contents of the lecture course in physics. In the performance of all-inclusive work the student should independently employ the knowledge acquired during the time of performing the introductory work in the field of physics measurements, choose the proper apparatus, set up the apparatus, choose suitable conditions for the performance of the measurements, present an independently-developed plan of work, etc. Preliminary preparation to the work has become a requirement for the practical course. The students are permitted to work only after preparing a preliminary report.

The appendix contains a description of one preliminary project (measurement of length) and one all-inclusive project (plotting temperature characteristics of a carbon and of a metallic resistance.)

POPKO, Yuriy Mikhaylovich, kand.pedagog.nauk; KNYAZEVA, Lora Aleksandrovna, kand.pedagog.nauk; VOLKOVA, Z.V., prof., nauchnyy red.; DROZHZHIN, Yu.N., red.; SMIRNOV, G.I., tekhn.red.

[Physics laboratory manual; textbook for students of the physics and mathematics faculties of pedagogical institutes] Rukovodstvo k praktikumu po fizike; uchebnoe posobie dlia studentov fiziko-matematicheskikh fakul'tetov pedagogicheskikh institutov. Pod red. Z.V.Volkovoi. Moskva, Gos.uchebno-pedagog.izd-vo M-va prosv. RSFSR, 1959. 442 p. (MIRA 13:1)

1. Sotrudniki kafedry obshchey fiziki Moskovskogo gorodskogo pedagogicheskogo instituta (for Popko, Knyazeva).
(Physics--Laboratory manuals)

VISHNYAKOV, N.; POPKOV, A.

Prevent meat losses. Mias. ind. SSSR 30 no.3:24-25 '59.
(MIRA 12:9)

(Meat industry)

BURESH, Ivan, d-r; POPOV, Al[redacted]

Ophisaurus apodus, an interesting reptile of the Black Sea Littoral. Prir i znanie 16 no.8:10-13 O '63.

KURKIN, L., shlifoval'shchik, deputat Verkhovnogo Soveta SSST; YEMEL'YANOVA-SHCHUKINA, K., Geroy Sotsialisticheskogo Truda; POPKOV, A.; BITKOV, V.

An honorary title must be earned. Sov.profsoiuzy 17 no.10:17-18 My '61. (MIRA 14:5)

1. Instrumental'nyy tsekh Moskovskogo avtomobil'nogo zavoda imeni Likhacheva (for Kurkin). 2. Brigadir brigady kommunisticheskogo truda liteynogo tsekha no.3 Moskovskogo avtomobil'nogo zavoda imeni Likhacheva (for Yemel'yanova-Shchukina). 3. Master smeny kommunisticheskogo truda remontno-mekhanicheskogo tsekha Moskovskogo avtomobil'nogo zavoda imeni Likhacheva (for Popkov). 4. Predsedatel' zavkoma Moskovskogo avtomobil'nogo zavoda imeni Likhacheva (for Bitkov).

(Moscow—Automobile industry) (Socialist competition)

POPKOV, A.A.

BERG, A.I., glav. red.; TRAPEZNIKOV, V.A., glav. red.; BERKOVICH, D.M., zaml glav. red.; LERNER, A.Ya., doktor tekhn. nauk, prof., zam. glav. red.; AVEN, O.I., red.; AGEYKIN, D.I., red.; kand. tekhn. nauk, dots., red.; AYZERMAN, M.A., red.; VENIKOV, V.A., doktor tekhn. nauk, prof., red.; VORONOV, A.A., doktor tekhn. nauk, prof., red.; GAVRILOV, M.A., doktor tekhn. nauk, prof., red.; ZERNOV, D.V., red.; IL'IN, V.A., doktor tekhn. nauk, prof., red.; KITOV, A.I., kand. tekhn. nauk, red.; KOGAN, B.YA., doktor tekhn. nauk, red.; KOSTOUSOV, A.I., red.; KRINITSKIY, N.A., kand. fiz.-mat. nauk red.; LEVIN, G.A., prof. red.; LOZINSKIY, M.G., doktor tekhn. nauk, red.; LOSSIYEVSKIY, V.L., red.; MAKSAREV, Yu.Ye., red.; MASLOV, A.A., dots., red.; POPKOV, A.A., red.; RAKOVSKIY, M.Ye., red.; ROZENBERG, L.D., doktor tekhn. nauk, prof., red.; SOTSKOV, B.S., red.; TIMOFEYEV, P.V., red.; USHAKOV, V.B., doktor tekhn. nauk, red.; FEL'DBAUM, A.A., doktor tekhn. nauk, prof., red.; FROLOV, V.S., red.; KHARKEVICH, A.A., red.; KHRAMOY, A.V., kand. tekhn. nauk, red.; TSYPKIN, Ya.Z., doktor tekhn. nauk, prof., red.; CHELYUSTKIN, A.B., kand. tekhn. nauk, red.; SHREYDER, Yu.A., kand. fiz.-mat. nauk, dots., red.; BOCHAROVA, M.D., kand. tekhn. nauk, starshiy nauchnyy red.; DELONE, N.N., inzh., nauchnyy red.; BARANOV, V.I., nauchnyy red.; PAVLOVA, T.I., tekhn. red.

(Continued on next card)

BERG, A.I.--- (continued). Card 2.

[Industrial electronics and automation of production processes]Avtomatizatsiia proizvodstva i promyshlennaia elektronika. Glav. red. A.I.Berg i V.A.Trapeznikov. Moskva, Gos.nauchn. izd-vo "Sovetskaia Entsiklopediia." Vol.1. A - I. 1962. 524 p. (MIRA 15:10)

1. Chlen-korrespondent Akademii nauk SSSR (for Sotskov, Kharkevich, Zernov, Timofeyev, Popkov).

(Automatic control) (Electronic control)

3(9)

AUTHOR: Popkov, A. A.

SOV/50-59-7-7/20

TITLE: The Floods in Leningrad and Their Forecast (Leningradskiye navodneniya i ikh predskazaniye)

PERIODICAL: Meteorologiya i gidrologiya, 1959, Nr 7, pp 33-35 (USSR)

ABSTRACT: Observations have shown that a displacement of the cyclone to the east causes a rise of the wave in the Gulf of Finland. Under the influence of the reduction of cross section from the "neck" of the Gulf to Leningrad, the wave increases by 3.75 on an average. The rise of the wave also depends on the rate of displacement of the cyclone or of the atmospheric front. It is shown that the length of the wave in the Gulf of Finland is caused by the following circumstances: 1) Reduction of cross section of the Gulf from the "neck" to Leningrad. This is considered by an empiric coefficient k = 3.75. 2) Height of the resulting wave. This is determined by the isobaric slope of the atmosphere between Kaliningrad and Khanko. 3) Synchronous motion of the baric system and of the free wave. 4) Barometric tedencies above the crest and foot of the long wave.- The formula for computing the rise of the water level

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at floods in Leningrad is indicated. Figure 3 shows a diagram. It compares the water levels computed with the real water levels at floods.- It is pointed out that the most frequent practical error in the forecast of floods is caused by a wrong consideration of the velocity of the cyclone or of the front.- Finally, the importance of the seich for the floods in Leningrad is pointed out. The wave disturbance produced at the "neck" of the Gulf of Finland can be regarded as a standing wave if there is an important retardation of the cyclone motion, because the further rise of the water level in the Gulf occurs simultaneously. The relations suggested here for forecasting the floods in Leningrad can be used in case of a sufficiently accurate forecast of the synoptic situation. The earliness of forecast is 8-10 hours. The mean error in the forecast of the water level is ±20 cm. There are 3 figures.

POPOV, A.F.; PUSHKIN, D.L.; ANTIPIN, L.M.; MAL'KOV, S.V.

Airtight centrifuge for removing finely dispersed solid impurities from liquids. Khim. prom. no.5:389-390 My '63. (MIRA 16:8)

POPKOV, A.G.

Letter to the editors. Lit. proizv. no.1:48 Ja '62. (MIRA 16:8)

(Founding)

POZDNEYEV, M.L., starshiy nauchnyy sotr.; POPKOV, A.G., mladshiy nauchnyy sotr.; SHPOLYANSKIY, B.Yu.; VERBITSKIY, I.I., starshiy nauchnyy sotr.,otv. za vypusk; MYAKUSHKO, V.P., red.izd-va; SHIBKOVA, R.Ye., tekhn. red.

[Technological processes in the reconditioning (repair) of worn-out parts of the ZIL-157 motortruck] Tekhnologicheskie protsessy vosstanovleniia (remonta) iznoshennykh detalei avtomobilia ZIL-157. Moskva, Goslesbumizdat. Pt.2. [Chassis except engine] Shassi, krome dvigatelia. 1962. 342 p.

1. Khimki. TSentral'nyy nauchno-issledovatel'skiy institut mekhanizatsii i energetiki lesnoy promyshlennosti. 2. Rukovoditel' laboratorii tipovoy tekhnologii remonta mashin i organizatsii remontnykh predpriyatiy TSentral'nogo nauchno-issledovatel'skogo instituta mekhanizatsii i energetiki lesnoy promyshlennosti (for Shpolyanskiy).
(Motortrucks--Maintenance and repair)

RESHETNIKOV, N.S., dots.; POZDNEYEV, M.L., starshiy nauchnyy sotr.; POPKOV, A.G., mlad. nauchnyy sotr.; CHERNYSHOV, G.V., mladshiy nauchnyy sotr.; VERBITSKIY, I.I., otv. za vypusk; IOFINOVA, TS.B., red.izd-va; SHIBKOVA, R.Ye., tekhn. red.

[Specifications for checking and sorting parts of MAZ-200 and MAZ-501 motortrucks]Tekhnicheskie usloviia na kontrol' i sortirovku (razbrakovku) detalei avtomobilei MAZ-200 i MAZ-501. Moskva, Goslesbumizdat. Pt.2.[Chassis of the MAZ-200 motortruck (except the engine)] Shassii avtomobilia MAZ-200 (krome dvigatelia). 1962. 214 p. (MIRA 16:3)

1. Khimki. TSentral'nyy nauchno-issledovatel'skiy institut mekhanizatsii i energetiki lesnoy promyshlennosti.
(Motortrucks--Maintenance and repair)

POZDNEYEV, M.M., st. nauchn. sotr.; POPKOV, A.G., inzh.-konstruktor; RESHETNIKOV, N.S., dots.; KLEBANOV, M.Ya., otv. za vypusk; MYAKUSHKO, V.P., red. izd-va; BACHURINA, A.M., tekhn. red.

[Technological processes of the reconditioning of worn-out parts of the MAZ-200 and MAZ-501 motortrucks] Tekhnologicheskie protsessy vosstanovleniia (remonta) iznoshennykh detalei avtomobilei MAZ-200 i MAZ-501. Moskva, Goslesbumizdat, Pt.1.[Parts of the IaAZ-204A engine] Detali dvigatelia IaAZ-204A. 1963. 226 p. (MIRA 16:7)

1. Khimki. TSentral'nyy nauchno-issledovatel'skiy institut mekhanizatsii i energetiki lesnoy promyshlennosti.
(Motortrucks--Engines)

1. POPKOV, A. G.

2. USSR (600)

4. Popkov, Andrei Grigor'evich

7. Sixieth birthday of agronomist-forester. Les i step' 14 No. 11, 1952.

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

POZDNEYEV, M.L., starshiy nauchnyy sotr.; POPKOV, A.G., mladshiy nauchnyy sotr.; CHERNYSHOV, G.V., mladshiy nauchnyy sotr.; SHPOLYANSKIY, B.Yu.; VERBITSKIY, I.I., starshiy nauchnyy sotrudnik, otv. za vypusk; IOFINOVA, TS.B., red. izd-va; GRECHISHCHEVA, V.I., tekhn. red.

[Album of designs of details of repair dimensions and additional parts (attachments) of the "Druzhba-60" gasoline engine saw]Al'bom chertezhei detalei remontnykh razmerov i dopolnitel'nykh detalei (nasadkov) benzinomotornoi pily "Druzhba-60." Moskva, Goslesbumizdat, 1962. 14 p. (MIRA 15:12)

1. Khimki.TSentral'nyy nauchno-issledovatel'skiy institut mekhanizatsii i energetiki lesnoy promyshlennosti. 2. Rukovoditel' laboratorii tipovoy tekhnologii remonta mashin i organizatsii remontnykh predpriyatiy TSentral'nogo nauchno-issledovatel'skogo instituta mekhanizatsii i energetiki lesnoy promyshlennosti. (Saws)

POPKOV, A.I.

The safety regulations must be reviewed. Elek. i tepl. tiaga no.6: 36 Je '57. (MLRA 10:8)

1. Nachal'nik distantsii kontaktnoy seti, stantsiya Kalachinskaya, Omskaya doroga.

(Railroads--Safety measures)

L 38486-66 EWT(d)/EWT(m)/T/EWP(v)/EWP(t)/ETI/EWP(k)/EWP(h)/EWP(i) RC/HM/JD

ACC NR: AP6019428 (A) SOURCE CODE: UR/0135/66/000/006/0018/0020

AUTHOR: Patskevich, I. R. (Candidate of technical sciences); Popkov, A. M. (Engineer)

ORG: Chelyabinsk Polytechnic Institute (Chelyabinskiy politekhnicheskiy institut)

TITLE: Determination of the static characteristics of a system for the automatic control of the welding process with short circuiting of the arc

SOURCE: Svarochnoye proizvodstvo, no. 6, 1966, 18-20

TOPIC TAGS: automatic welding, automatic control design, arc welding

ABSTRACT: The article presents experimental and theoretical material on the determination of the characteristics of a system for the automatic control of processes of automatic welding and beading, with systematic short circuiting of the arc gap, and with vibrating and non-vibrating electrodes. The process of welding and beading with short circuiting of the arc is accompanied by changes in the voltage and the current in the circuit. Therefore, the characteristics are constructed with respect to the average voltage between the electrode and the piece, called the

Card 1/2 UDC: 621.791.753.01

working voltage U_p, and the working current I_p. For construction and analysis of the characteristics being studied, use is made of formulas derived in earlier work for the melting rate of an electrode wire. Using the formulas:

$$U_p = \frac{1}{2}\left[U_{x.x} + \sqrt{U_{x.x}^2 - 4000 k_1 r_0 U_{x.x}^{3/4} d_0^{5/3} (k_0 + k_1 v)}\right]$$

and

$$I_p = \frac{U_{x.x} - U_p}{r_0}$$

the authors construct the static characteristics of an automatic control system for the welding process with a non-vibrating electrode. The results are shown in a figure. A similar treatment is given for the case of a vibrating electrode. Orig. art. has: 6 figures.

SUB CODE: 11/ SUBM DATE: none/ ORIG REF: 010/ OTH REF: 001

PATSKEVICH, I.R., kand. tekhn. nauk; POPKOV, A.M., inzh.

Melting characteristics of an electrode wire during automatic hard facing with a weaving arc. Svar. proizv. no.2:11-14 F '65. (MIRA 18:3)

1. Chelyabinskiy politekhnicheskiy institut.

MAL'TSEV, Boris Vasil'yevich; POPKOV, A.N., red.

[Copper smelter] Medeplavil'shchik. Moskva, Metallurgiia, 1965. 139 p. (MIRA 18:9)

YEVDOKIMENKO, A.I.; YELYAKOV, I.I.; POLYVYANNYY, I.R.; AGAPOV, Yu.A.; KALNIN, Ye.I.; POPKOV, A.N.; KOVGAN, P.A.; OVCHARENKO, V.V.; SUL'CHINSKIY, V.V.

Natural gas and hot blowing in shaft furnace lead smelting. TSvet. met. 38 no.7:28-35 Jl '65. (MIRA 18:8)

POPKOV, A.N.

Periesophageal phlegmon in the cervical region. Vest.oto-rin. 16 no.5:79 S-O '54. (MLRA 7:12)

1. Iz gorodskoy TSentral'noy bol'nitsy imeni Pirogova (g. Kuybyshev)
(NECK, diseases,
phlegmon, peri-esophageal)
(PHLEGMON,
periesophageal cervical)

TARABAR, V.I., inzh.-podpolkovnik; POPKOV, A.N., inzh.-podpolkovnik; KOSOROTOV, B.V., inzh.-polkovnik, red.; KONOVALOVA, Ye.K., tekhn.red.

[Maintenance of ZIL-150, ZIL-164, ZIL-151 and ZIL-157 motortrucks; handbook] Tekhnicheskoe obsluzhivanie avtomobilei ZIL-150, ZIL-164, ZIL-151 i ZIL-157; rukovodstvo. Moskva, Voen.izd-vo M-va obor.SSSR, 1960. 119 p. (MIRA 14:2)

1. Russia (1923- U.S.S.R.) Ministerstvo oborony.
(Motortrucks--Maintenance and repair)

VANYUKOV, A.V.; UTKIN, N.I.; MALEVSKIY, A.Yu.; POPKOV, A.N.

Chromium behavior in the treatment of oxidized nickel ores.
Sbor. nauch. trud. GINTSVETMET no.33:51-66 '60. (MIRA 15:3)
(Nickel--Metallurgy) (Chromium)

TARABARA, V.I., inzh.-podpolkovnik; POPKOV, A.N., inzh.-podpolkovnik; GORYACHEV, V.T., red.; CHAPAYEVA, R.I., tekhn. red.

[Maintenance of the ZIL-150, ZIL-164, ZIL-151 and ZIL-157 motortrucks]Tekhnicheskoe obsluzhivanie avtomobilei ZIL-150, ZIL-164, ZIL-151 i ZIL-157; rukovodstvo. Moskva, Voen.izd-vo M-va obor.SSSR, 1962. 125 p. (MIRA 16:2)

1. Russia (1923- U.S.S.R.)Ministerstvo oborony. (Motortrucks--Maintenance and repair)

VANYUKOV, A.V. (Moskva); POPKOV, A.N. (Moskva); ZAYTSEV, V.Ia. (Moskva)

Determining the density and molar volume of silicate and metal sulfide melts. Izv. AN SSSR. Met. i gor. delo no.5:92-97 S-O '64.
(MIRA 18:1)

VANYUKOV, A.V.; POPKOV, A.N.

Studying surface properties and densities of metal sulfide and silicate melts. Izv. vys. ucheb. zav.; tsvet. met. 4 no.4:63-70 '61. (MIRA 14:8)

1. Krasnoyarskiy institut tsvetnykh metallov, kafedra metallurgi tyazhelykh tsvetnykh metallov.
(Surface tension) (Liquid metals)

SMIRNOV, A.S.; SINEV, L.A.; VANYUKOV, A.V.; POPKOV, A.N.

Reducing magnetite in converter slag for the purpose of depleting them of valuable metal. TSvet. met. 36 no.7:25-29 Jl '63. (MIRA 16:8)

(Slag--Analysis)

POPKOV, A.N.; VANYUKOV, A.V.

Interphase tension on the boundary between matte and slag and the loss of metal with waste slags in the form of matte buttons. Izv. vys. ucheb. zav.; tsvet. met. 4 no.6:26-32 '61. (MIRA 14:12)

1. Krasnoyarskiy institut tsvetnykh metallov, kafedra metallurgii tyazhelykh tsvetnykh metallov.
(Nonferrous metals--Metallurgy)
(Surface tension)

G. Svodtseva

[Abstracter's note: Complete translation]

Card 1/1

Popkov, A.P.

USSR/Chemistry - Physical chemistry

Card 1/2 Pub. 40 - 3/27

Authors : Popkov, A. P., and Vagramyan, A. T.

Title : Electrode processes during deposition and solution of Ag in cyanide solutions

Periodical : Izv. AN SSSR. Otd. khim. nauk 6, 966-971, Nov-Dec 1954

Abstract : Certain processes occuring on a silver electrode during polarization with alternating and pulse currents are discussed. A simple method was developed for the study of nonstationary electrode processes which take place within short time intervals. It is shown that the cathode and anode polarizations during the deposition and solution of Ag in cyanide solutions are basically concentrational.

Institution : Acad. of Sc., USSR, Institute of Physical Chemistry

Submitted : April 3, 1954

Periodical : Izv. AN SSSR. Otd. khim. nauk 6, 966-971, Nov-Dec 1954

Card 2/2 Pub. 40 - 3/27

Abstract : The rate of the electrochemical deposition reaction was determined by the concentration of the discharged ions adsorbed on the surface of the cathode. A sharp reduction in polarization was observed during the change in the current direction because the electrical field during a cathode impulse is directed against the adsorption forces. Eight references: 7 USSR and 1 USA (1931-1952). Diagram; graphs.

POPKOV, A. P.
USSR/Chemistry

Card 1/1

Authors : Vagramyan, A. T., and Popkov, A. P.

Title : The Theory of Electrolytic Rectifiers.

Periodical : Zhur. Fiz. Khim. Vol. 28, Ed. 4, 752-756, Apr 1954

Abstract : Studies of the speed of deposition of nickel in a nickel sulfate during the alternate (cathode and anode) polarization of electrodes. Also mentioned is the rectification of A. C. current during its flow through a $Ni/NiSO_4/Ni$ system. Three references; table; graphs.

Institution : Institute of Physical Chemistry of the AS of the USSR, Moscow.

Submitted : August 24, 1953

POPKOV, A. P.

POPKOV, A. P.: "A study of electro-polishing of silver and zinc". Moscow, 1955. Acad Sci USSR. Inst. of Physical Chemistry. (Dissertations for the degree of Candidate of Chemical Sciences.)

SO: Knizhnaya Letopis' No. 50 10 December 1955. Moscow.

POPKOV, A. P.

USSR/Chemistry-Physical Chemistry

Card 1/1 Pub. 22 - 28/59

Authors : Vagramyan, A. T., and Popkov, A. P.

Title : Electropolishing of silver

Periodical : Dok. AN SSSR 102/2, 297-300, May 11, 1955

Abstract : A new method allowing simultaneous registration of changes in the electrode polarization and luster occurring directly in the process of electro-polishing of metals, is described. The mechanism of smoothing during electrolytic polishing of silver is explained. The change in luster of the electrode surface was found to be closely connected with the speed and nature of the individual electropolishing processes. The basic facter aiding the smoothing and consequently increasing the luster of the polished surface is the formation and solution of Ag_2O which is realized through brief connection and disconnection of the current. Graphs; diagram.

Institution : Acad. of Sc., USSR, Inst. of Phys. Chem.

Presented by : Academician P. A. Rebinder, December 3, 1954

Popkov, A.P.

E-5

Category : USSR/Solid State Physics - Phase transformation of solid bodies

Abs Jour : Ref Zhur - Fizika, No 1, 1957, No 1171

Author : Vagramyan, A.T., Popkov, A.P.
Title : On the Mechanism of Electric Polishing of Zinc

Orig Pub : Dokl. AN SSSR, 1955, 102, No 3, 547-549

Abstract : Simultaneous recording to the variation in the polarization in the brightness of the electrode directly in the electric polishing process was used to study the mechanism of electric polishing of zinc by pulse current (current density 1a/cm^2, polarization time 11 seconds, time of exposure without current 2.3 seconds) in 2n. $ZnSO_4 \cdot 7H_2O$. The surface of the zinc is smoothed by the formation of more saturated solution in the cavities of its surface, thus causing preferred solution of the projecting sections. Comparison of the electric polishing mechanism of zinc and that of silver shows that in the case of electric polishing the decisive reactions take place on the anode.

Card : 1/1

5(4) SOV/62-58-11-6/26

AUTHORS: Popkov, A.P., Gevorkyan, V.M., Vagramyan, A.T.

TITLE: Overvoltage During Electrodeposition of Antimony (Perenapryazheniye pri elektroosazhdenii sur'my)

PERIODICAL: Izvestiya Akademii nauk SSSR. Otdeleniye khimicheskikh nauk, 1958, Nr 11, pp 1310 - 1314 (USSR)

ABSTRACT: In the present paper the authors investigated polarization during the electrodeposition of antimony by means of a rapid method. This made it possible to consider the displacement of the equilibrium potential and to estimate more precisely the quantity of the overvoltage. Preliminary results have shown that in antimony tartaric acid solutions fine crystalline deposits with a current yield of practically 100 % can be obtained. In figure 1a a photo of an oscillogram with polarization curves can be seen which have been plotted by means of the rapid method. The more slowly the curve is plotted the more the equilibrium potential of the electrode is displaced in the positive direction. This is apparently in connection with the fact that a low current density as well as with values $i_k = 0$ an oxidation of the antimony surface takes place. Apparently the overvoltage quantity (η_{i_k})

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which is determined in relation to the steady potential (φ_{st}) will be highly different from the overvoltage quantity which is determined in relation to the equilibrium potential (φ_r). (φ_{st}) corresponds to the difference of the potentials between the auxiliary electrode and the stabilized value of the potential of the antimony electrode in the corresponding solution. (φ_r) corresponds to the potential value of the freshly deposited, active antimony surface. As may be seen (Fig 2) the beginning of the oxidation of antimony is not connected with the absolute value of the polarization quantity of the electrode. If, as could be observed in the experiments, the displacement of the equilibrium potential in the positive direction depends on the surface oxidation, oxidation in more acid solution would be bound to take place more slowly and consequently also the displacement of the equilibrium potential would be smaller. Figure 4 reveals the polarization curves in a more acid solution. Polarization curves in the case of electrodeposition of antimony from hydrochloric acid solutions were completely different (Fig 5). It can be seen from it that the rate of reduction of antimony in hydrochloric acid solutions is by

some orders of magnitude higher than that in tartaric acid.
There are 5 figures and 3 references, 2 of which are Soviet.

ASSOCIATION: Institut fizicheskoy khimii Akademii nauk SSSR
(Institute of Physical Chemistry Academy of Sciences,USSR)

SUBMITTED: May 15, 1957

AUTHORS: Vagramyan, A. T., Popkov, A. P. SOV/76-32-9-5/46

TITLE: The Number of Crystals Formed in the Alternating Current Deposition of Silver (Chislo kristallov, obrazuyushchikhsya pri elektroosazhdenii serebra tokom peremennogo napravleniya)

PERIODICAL: Zhurnal fizicheskoy khimii, 1958, Vol 32 , Nr 9, pp 1963 - 1966 (USSR)

ABSTRACT: The authors studied the deposition of silver from solutions of 2n $AgNO_3$ and 2n KNO_3, and 4n $AgNO_3$ + 2n KNO_3. The number of crystals which had formed on the surface of the electrodes was determined under the microscope. This number increases with the voltage; this direct relationship is represented in diagrams (Figs 1,2, and 3). Silver and Platinum electrodes were used. The preceding anodic polarization yielded many more crystals at the cathode than did the polarization of the cathode with direct current. This phenomenon did not occur at the insoluble platinum electrode. Probably the number of crystals increases by virtue of the fact that the number of active centers on the surface of the electrode increases, since sharp points and tiny crystals tend to be

Card 1/2

dissolved preferably. There are 4 figures and 6 references, 6 of which are Soviet.

ASSOCIATION: Akademiya nauk SSSR, Institut fizicheskoy khimii, Moskva (AS USSR, Moscow, Institute of Physical Chemistry)

SUBMITTED: March 26, 1957

POPKOV, A.P.; SADOVSKAYA, N.P.

Comparative characteristics of the throwing power of zinc plating electrolytes. Zashch. met. 1 no.5:543-545 S-O '65. (MIRA 18:9)

POPKOV, A.P.; GORBACHEV, A.S.; KOROLEV, Yu.N.

Electrophoretic coatings. Zashch.met. 1 no.4:374-379 Jl-Ag '65.
(MIRA 18:8)

LAPATUKHIN, V.S. (Moskva); POPKOV, A.P., (Moskva)

Cathodic polarization of zinc in phosphating solutions studied with the aid of rapidly taken polarization curves. Zhur. fiz. khim. 36 no.1:111-118 Ja '62. (MIRA 16:8)

1. Nauchno-issledovatel'skiy institut poligraficheskoy promyshlennosti.
(Zinc) (Phosphate coating)
(Polarization (Electricity))

S/076/61/035/007/001/019
B127/B208

AUTHORS: Kuznetsova V. N., Popkov A. P., Uvarov L. A., Vagramyan A. T.

TITLE: Polarization during electrodeposition of iron group metals. I. Steady-state potential and overvoltage of iron deposition

PERIODICAL: Zhurnal fizicheskoy khimii, v. 35, no. 7, 1961, 1406 - 1410

TEXT: The authors studied deposition and dissolution of iron in 1 N $FeSO_4$ solution at 25°C. The electrodeposited iron was found to dissolve in these solutions in the absence of polarizing current, particularly in a more acid solution. In this case (pH 1.5-2.5) the rate i_c of the spontaneous dissolution rapidly decreases with increasing pH(i_c = 0.4ma/cm^2 at pH 1.5). On further change of the pH from 2.5 to 3.5 the rate of spontaneous dissolution is reduced more slowly (i_c = 0.065ma/cm^2 at pH = 3). The following reactions take place at the electrode surface: $H^+ + e \leftrightarrow \frac{1}{2} H_2$, $\frac{1}{2} H_2 \rightarrow H^+ + e$, $Fe^{2+} + 2e \rightarrow Fe$, $Fe \rightarrow Fe^{2+} + 2e$. The reaction rates are denoted by F_1, F_2, F_3,

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F_4. The equation for the steady state is then: $F_1 + F_3 = F_2 + F_4$. The potential of the Fe electrode being more negative than that of hydrogen, the ionization rate F_2 of H_2 may be neglected. Assuming that the discharge rate F_3 of the Fe ions be much less than that of the H^+, F_1, one may write $F_1 = F_4$, i.e., the charge of the electrode is compensated by the discharge of the H^+ ions. The change of dissolution in the presence of 1N $Al_2(SO_4)_3$ was also studied. At pH = 1.5-3.5 the rate of dissolution increases in this case. (pH = 1.5, i_c = 0.52 ma/cm^2, pH = 3, i_c = 0.31 ma/cm^2). This is due to SO_4^{--} absorption on the electrode which accelerates the ionization of the metal atoms. In the presence of aluminum sulfate the polarization of the anode is decreased by 35mv. With rising temperature of the electrolyte the rate of spontaneous dissolution increases, particularly in the presence of aluminum sulfate. At a temperature rise from 25 to 60°C at pH = 1.5 the rate increases to the 7.5-fold, in the presence of aluminum sulfate to the 22-fold. At low pH the steady-state potential changes quickly with a

change in pH, at a higher pH this change is less significant. At low pH the dependence may be expressed by the following formula:

$$\varphi_{st} = A + \frac{RT}{(\alpha + \beta) F} \ln [H^+]$$

At higher pH the potential is shifted more to the negative side. In an oxygen-free inert atmosphere the deviation of the steady-state potential from the rule, expressed by the formula, decreases. At higher pH the steady-state potential is shifted toward the positive side under the influence of aluminum sulfate. The potential of the Fe electrode is irreversible in sulfuric acid solution and is determined by a number of processes. It is therefore impossible to determine the overvoltage by the steady-state potential. The deposition potential was determined relative to a saturated calomel electrode. With increasing pH the deposition potential of Fe is shifted toward the negative side. At a given current density and increasing pH the overvoltage of the deposition has more positive values, except in very acid solutions. The determination of overvoltage by the steady-state potential thus seems to be incorrect and gives contradictory results. There are 5 figures and 6 Soviet references.

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S/076/61/035/007/002/019
B127/B208

AUTHORS: Vagramyan, A. T., Kuznetsova, V. N., Popkov, A. P., Savostin, V. A., Uvarov, L. A.

TITLE: Polarization during electrodeposition of iron group metals II. Electrodeposition of iron

PERIODICAL: Zhurnal fizicheskoy khimii, v. 35, no. 7, 1961, 1411 - 1415

TEXT: The authors investigated the electrolytic deposition of iron from solutions of 1 N $FeSO_4$, and 1 N $FeSO_4$ + 1 N $Al_2(SO_4)_3$ at a current density of 20 ma/cm^2. The yield of metal relative to the current changes only little with a change in current density, and increases rapidly with increasing pH in the range 1.5-2.5. By changing the pH by one unit the yield increases from 20 to 90%. At a further pH increase the yield increases but slightly. On aluminum sulfate addition the yield is only 45% at the optimum pH. All curves showing the dependence of the potential of the iron electrode on the pH pass a maximum at pH 2.0-2.2. The maximum of the polarization curves is 60 - 65% of the maximum metal yield. At low pH the current is consumed for hydrogen reduction and liberation. In the descending branch of the curve

the current is consumed for the metal deposition. The discharge of hydrogen ions is promoted in that part of the curve which corresponds to hydrogen liberation, the reduction of the metal ions in that part of the curve which corresponds to metal deposition. The curves are exactly explained in the papers by A. N. Frumkin, Zh. fiz. khimii, 31, 1875, 1957, Z. Phys. Chim., 207, 321, 1957, and I. A. Bagotskaya, Dokl. AN SSSR, 107, 843, 1956. 110, 397, 1956. Apparently hydrogen deposition is facilitated on an electrode coated by hydrogen. This is confirmed by the paper by M. Smyalovskiy saying that there is a relationship between the hydrogen overvoltage and the tendency of the cathode metal toward supersaturation with hydrogen. The following reactions are assumed to take place at the hydrogen-coated electrode: $H_3O^+ + H_{ads} + e \longrightarrow H_2 + H_2O$ and $H_3O^+ + e \longrightarrow H_{ads} + H_2O$. The rate of the first is higher than that of the latter. The increased metal reduction with decreased rate of hydrogen deposition is probably due to the fact that the metal deposition at a surface saturated with hydrogen is far more difficult than at a hydrogen-free electrode surface. pH 3.0-3.5 is most suitable for the metal deposition. The retardation of the metal ion reduction is probably related to an adsorption of foreign particles, hydroxides and others, which are deposited on the surface of the

POPKOV, A.P.; KLIMASENKO, N.L.; VAGRAMYAN, A.T.

Polarization in the electrodeposition of nickel, cobalt, and iron on a solid and liquid cathode. Zhur. fiz. khim. 34 no.8:1741-1744 Ag '60. (MIRA 13:9)

1. Akademiya nauk SSSR, Institut fizicheskoy khimii.
(Iron plating) (Nickel plating) (Cobalt)
(Polarizarion (Electricity))

VAGRAMYAN, A.T.; POPKOV, A.P.

Overvoltage arising during the electrodeposition and solution of metals. Izv.AN SSSR Otd.khim.nauk no.5:816-820 My '60. (MIRA 13:6)

1. Institut fizicheskoy khimii Akademii nauk SSSR.
(Overvoltage) (Electroplating)

KOBYSHEV, F.K.; BOGACHEV, N.I.; POPOV, A.V.

New work organization. Neft. khoz. 40 no.8:28-30 Ag '62. (MIRA 17:2)

POPKOV, A.V., tokar'-novator; PETROV, M.I., inzh.

Lathe operator and efficiency promoter. Mashinostroitel' no.9:30-32 S '58. (MIRA 11:10)

(Lathes)

KHMEL'NIKOV, Pavel Semenovich. Prinimal uchastiye: POPKOV, A.V.. MAL'TSEV, P.K., nauchnyy red.; POLYAKOV, I.I., red.; KONTOROVICH, A.I., tekhn.red.

[Fundamentals in heat engineering and marine power installations] Osnovy teplotekhniki i sudovye energeticheskie ustanovki. Leningrad, Gos.soiuznoe izd-vo sudostroit.promyshl., 1959. 311 p. (MIRA 12:10)

(Marine engineering)

POPKOV, Anatoliy Vasil'yevich; VERETE, A.G., inzh., retsenzent; RUKAVISHNIKOV, I.V., inzh., retsenzent; SOFRONOV, Ye.P., nauchn. red.; VASIL'YEVA, N.N., red.; NIKITINA, R.D., red.; ERASTOVA, N.V., tekhn. red.

[Fundamentals of hydrodynamics] Osnovy termodinamiki. Leningrad, "Sudostroenie," 1964. 181 p. (MIRA 17:3)

POPKOV, A. Ya., kand.tekhn.nauk

Using electrically welded steel pipes in interior sanitary-engineering system. Mont.i spets.rab.v stroi. 22 no.6:29-31 Je '60. (MIRA 13:7)

1. Vsesoyuznyy nauchno-issledovatel'skiy institut gidrotekhnicheskikh i sanitarno-tekhnicheskikh rabot.
(Pipe, Steel)

POPKOV, A.Ya., kand.tekhn.nauk

Laying water pipes in loess soils. Nov.tekh.mont.i spets.rab.v stroi. 21 no.11:24-25 N '59. (MIRA 13:2)

1. Vsesoyuznyy nauchno-issledovatel'skiy institut gidrotekhnicheskikh i sanitarno-tekhnicheskikh rabot.
(Water pipes) (Loess)

ACCESSION NR: AT 4016001 S/2625/63/000/015/0165/0175

AUTHOR: Mirskiy, Ya. V.; Mitrofanov, M. G.; Popkov, B. M.; Ruchko, L. F.; Bolotov, L. T.; Mezhlumova, A. I.

TITLE: Development of the technology for the industrial preparation of molecular sieves

SOURCE: Groznyy. Neftyanoy nauchno-issledovatel'skiy institut. Trudy*, no. 15, 1963. Tekhnologiya pererabotki nefti i gaza. Neftekhimiya (Technology of processing petroleum and gas. Petroleum chemistry), 165-175

TOPIC TAGS: adsorbent, zeolite, molecular sieve, hydrogel, aluminosilicate

ABSTRACT: The characteristics and industrial production of adsorbent synthetic zeolites having good molecular-sieve properties have been investigated, using microgranular sodium zeolite with cubic crystals of 0.1 to several microns on a side. The results show that the properties of zeolites are affected by the following factors: method of preparation and composition of the hydrogel, temperature and duration of crystallization, concentration of the gel-forming solutions, stirring of the hydrogel, ion-exchange conditions, washing of the crystals, and granulation and hardening of the zeolites. Zeolites of the structural type designated as Type I (Type A in the West) are of great interest. A

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ACCESSION NR: AT 4016001

study of the adsorptive properties of sodium and calcium zeolites showed that the adsorptive properties of zeolites crystallized from hydrogels of the same composition, but by different methods, are very similar. The best method of preparation is to mix solutions of sodium aluminate and sodium silicate. A stable Type I zeolite can be made from hydrogels for which the molar ratio $SiO_2:Al_2O_3$ is < 2. When this ratio approaches 3, a zeolite of Type II results. Hydrogels crystallize at a satisfactory rate at 75-100C. The effect on the crystal size of the concentration of gel-forming solution and the stirring rate (2 hours at 90C) and the effect of the crystallization time on the adsorptive properties and crystal size of zeolites (crystallization without stirring at 90C) were also investigated and the data tabulated. A new apparatus for preparing zeolites is described in detail and illustrated. In the preparation of the test samples, the yield was 68-74% of the theoretical. These zeolites with their pronounced molecular sieve properties, obtained under industrial conditions, made it possible to crystallize large amounts of aluminosilica hydrogels in large-sized apparatus. Orig. art. has: 1 figure and 6 tables.

ASSOCIATION: Neftyanoy nauchno-issledovatel'skiy institut, Grozny*y (Petroleum Scientific Research Institute)

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ACCESSION NR: AT4016001

SUBMITTED: 00	DATE ACQ: 31Jan64	ENCL: 00
SUB CODE: FP, IC	NO REF SOV: 010	OTHER: 001

Card 3/3

MIRSKIY, Ya.V.; MITROFANOV, M.G.; POPKOV, B.M.; RUCHKO, L.F.; BOLOTOV, L.T.; MEZHLUMOVA, A.I.

Developing the technology of the plant process for obtaining molecular sieves. Trudy GrozNII no. 15:165-174 '63.
(MIRA 17:5)

POPKOV, B.M.

128

PHASE I BOOK EXPLOITATION SOV/6246

Soveshchaniye po tseolitam. 1st, Leningrad, 1961.

Sinteticheskiye tseolity; polucheniye, issledovaniye i primeneniye (Synthetic Zeolites: Production, Investigation, and Use). Moscow, Izd-vo AN SSSR, 1962. 286 p. (Series: Its: Doklady) Errata slip inserted. 2500 copies printed.

Sponsoring Agency: Akademiya nauk SSSR. Otdeleniye khimicheskikh nauk. Komissiya po tseolitam.

Resp. Eds.: M. M. Dubinin, Academician and V. V. Serpinskiy, Doctor of Chemical Sciences; Ed.: Ye. G. Zhukovskaya; Tech. Ed.: S. P. Golub'.

PURPOSE: This book is intended for scientists and engineers engaged in the production of synthetic zeolites (molecular sieves), and for chemists in general.

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Synthetic Zeolites: (Cont.) SOV/6246

COVERAGE: The book is a collection of reports presented at the First Conference on Zeolites, held in Leningrad 16 through 19 March 1961 at the Leningrad Technological Institute imeni Lensovet, and is purportedly the first monograph on this subject. The reports are grouped into 3 subject areas: 1) theoretical problems of adsorption on various types of zeolites and methods for their investigation, 2) the production of zeolites, and 3) application of zeolites. No personalities are mentioned. References follow individual articles.

TABLE OF CONTENTS:

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Synthetic Zeolites: (Cont.) SOV/6246

Card ~~1/32~~ 3/3

MININ, Nikolay Dmitriyevich; POPKOV, Boris Ivanovich; KOLOMIYTSEV, A.D., otvetstvennyy redaktor; NADEINSKAYA, A.A., tekhnicheskiy redaktor

[Gamma ray relays for the automatization in the coal industry] Gamma-rele dlia avtomatizatsii v ugol'noi promyshlennosti. Moskva, Ugletekhizdat, 1956. 63 p. (MLRA 9:7)
(Gamma rays--Industrial application)
(Coal mining machinery)

POPOV, D., gvardii polkovnik, Geroy Sovetskogo Soyuza

Squad in an attack; an aid to the young officer. Voen. vest. 43 no.12: 38-42 D '63. (MIRA 17:2)

ACCESSION NR: AP4020061 S/0186/64/006/001/0117/0119

AUTHORS: Iokhel'son, S. V.; Popov, D. K.

TITLE: Radiochemical determination of antimony-125 in soils

SOURCE: Radiokhimiya, v. 6, no. 1, 1964, 117-119

TOPIC TAGS: radiochemical determination, antimony 125, soil, fallout, nuclear weapons testing, antimony, uranium, radiation fallout, radioactive fallout

ABSTRACT: As a result of global fallout, soil is contaminated by radioactive isotope fragments including antimony-125. Despite the low isotope yield during fission, its contribution to the general β and γ-activity of a mixture of fragment products increases with its age reaching 7.5% in 4 years in the case of fission of ^{238}U (n_{14}).(K. Low, R. Bjornerstedt, Arciv for Fysik, 13, 7, 85 (1958)), (K. Low, R. Bjornerstedt, Arciv for Fysik, 16, 28, 293 (1959)). In a series of samples of soils and vegetative cover, taken in 1960, 2 years after suspension of nuclear weapons testing, ^{125}Sb is detected with the aid of γ-spectrometrical analysis. A schematic is given for

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ACCESSION NR: AP4020061

radiochemical determination of antimony-125 in soil samples which contain a mixture of old fragment products at least 3 years old. Orig. art. has: 2 figures, 1 table

ASSOCIATION: None

SUBMITTED: 15Aug62 DATE ACQ: 31Mar64 ENCL: 00

SUB CODE: NS, PH NR REF SOV: 002 OTHER: 003

Card 2/2

POPKOV, D.L.

Use of the IS-60 test set in the inspection of high-voltage lines. Avtom., telem.i sviaz' 6 no.8:36-37 Ag '62. (MIRA 15:8)

1. Nachal'nik laboratorii signalizatsii i svyazi Yugo-Vostochnoy dorogi.
(Railroads--Signaling--Block system) (Railroads--Electric equipment)

POPOV, F.S., inzh.; BURKATSKIY, A.P., tekhnik; LEVINSKIY, O.I., inzh.; VERB, A.N., inzh.

Concerning T.P. Musatov's article "Hand hoists." Energetik 10 no.9:29-32 S '62. (MIRA 17:1)

POPKOV, G.

Light electric pointing device. Stroitel' no.2:20 F '59.
(MIRA 12:5)
(Building--Tools and implements)

POPOV, G.I.

Age of the suprasarmatian continental series of the western Kopet-Dag. Izv. AN Turk. SSR.Ser. fiz.-tekh., khim. i geol. nauk no.4:84-93 '63.

1. Institut geologii AN Turkmenskoy SSR.

S/058/63/000/003/006/104
A160/A101

AUTHORS: Makarov, Yu. A., Matveyev, V. V., Popkov, G. K., Prikhodchenko, N.N., Stremin, V. I.

TITLE: A highly-sensitive scintillation thermal-neutron counter capable of operating in powerful gamma fields

PERIODICAL: Referativnyy zhurnal, Fizika, no. 3, 1963, 39, abstract 3A313 ("Sb. rabot po nekotorym vopr. dozimetrii i radiometrii ionizir. izlucheniy. No. 2. M., Gosatomizdat, 1961, 103 - 116)

TEXT: The main factors determining the dependence of the efficiency of scintillation thermal-neutron detectors on their parameters are analyzed. Investigated were detectors into which T-1 luminous compound (an alloy of boric anhydride with ZnS(Ag)) grains with an average diameter of 1 mm were introduced by pressing into the mixture polymethylmethacrylatic powder and methylmethalcrylate monomer. The thickness of the detector was 3, 5, 7 and 10 mm. The concentration of the T-1 grains changed from 100 to 1,000 mg/cm3. The γ-background of an order of 5 roentgen/hours was discriminated to a level of 0.1 - 1 pulse/sec. The maximum efficiency of recording thermal neutrons was obtained at

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S/058/63/000/003/006/104
A160/A101

a detector thickness of 3 mm and at a T-1 concentration of 600 mg/cm3. The maximum efficiency was ~10%. Hereby, the detector was composed of a mixture containing 31.9 g of the T-1 luminous compound, 42 g of polymethylmethacrylate powder, and 30 g of methylmethacrylate monomer. Since the duration of the pulses caused by the γ-rays equalled 1 μsec, and the length of the pulses caused by the neutrons equalled 2 - 3 μsec, it proved to be possible to somewhat increase the sensitivity of the detector to the thermal neutrons by using the delayed-self-coincidence circuit.

K. Aglintsev

[Abstracter's note: Complete translation]

ANUCHIN, M.A., kand.tekhn.nauk, dotsent; ANTONENKOV, O.D., kand.tekhn.nauk; POPKOV, G.I., inzh.; DUBININ, V.V., inzh.; NOSIKOV, S.M., inzh.

Movement of billets in free explosion forging. Izv.vys.ucheb.zav.; mashinostr. no.6:155-161 '63. (MIRA 16:10)

1. Moskovskoye vysshaye tekhnicheskoye uchilishche imeni Baumana.

L 32068-66 EWT(m)

ACC NR: AR6016160 SOURCE CODE: UR/0058/65/000/011/A050/A050

AUTHOR: Golovanov, N. A.; Kozodayeva, N. M.; Korotin, B. A.; Popkov, G. K. 39

TITLE: Measurement of the dose intensity of neutron radiation with a broad energy spectrum 19 B

SOURCE: Ref. zh. Fizika, Abs. 11A419

REF SOURCE: Tr. Soyuzn. n.-i. in-ta priborostr., vyp. 1, 1964, 36-43

TOPIC TAGS: neutron irradiation, neutron detection, fast neutron, thermal neutron, irradiation dosimetry, radiation instrument

ABSTRACT: The authors discuss the difficulty of constructin an "ideal" dosimetric instrument for neutron radiation in a wide energy range. Two methods of producing pickups with dosimetric characteristics in the energy range from 0.025 ev to 20 Mev are considered. The first is based on using a moderator of definite thickness, which ensures a definite dosimetric character of the variation of the sensitivity curve, and a thermal-neutron detector. Pickups based on this principle are arbitrarily called "isodose" pickups. The second method is based on using the characteristics of scintillation detectors for neutrons, namely the dependence of their sensitivity on the energy, which for a fixed ratio of the sensitivities of the fast- and intermediate-neutron detectors gives a satisfactory approximation of the dosimetric curve. The main shortcomings of these methods are indicated. A brief description is presented of the principle of combined dosimetric neutron detection, which is free

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L 32068-66

ACC NR: AR6016160

of many shortcomings inherent in the "isodose" pickup and the dispersion calibration, based on the method of scintillation dispersion detectors. The advantages of separated pickups over the "isodose," dispersion, and combination pickups are discussed. L. S. [Translation of abstract]

SUB CODE: 18

Card 2/2

66365

21.5300 SOV/120-59-5-8/46

AUTHORS: Matveyev, V.V., Popkov, G. K. and Sokolov, A. D.

TITLE: Determination of Some Photomultiplier and Scintillator Parameters

PERIODICAL: Pribory i tekhnika eksperimenta, 1959, Nr 5, pp 40-44 (USSR)

ABSTRACT: An apparatus is described for the rapid determination of some photomultiplier parameters and the selection of the most suitable supplies. The experimental counter head is shown schematically in Fig 2, in which 4 is the photomultiplier, 2 is the radioactive source, 1 is a cap for work with liquid scintillators and 6 is a demountable voltage divider. The cap includes a micrometer arrangement so that the distance from the source to the photocathode may be varied between 0 and 150 mm with an accuracy of 0.25 mm. The output of the photomultiplier is fed to a conventional kicksorter arrangement. A study was made of the effect of the source position, type of radiation, the supplies and the voltage distribution among the dynodes. The optimum results were obtained with solutions similar to those used by Brooks (Ref 10),

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L 47104-66 EWT(m)

ACC NR: AR6016490 SOURCE CODE: UR/0272/65/000/012/0106/0106

AUTHOR: Golovanov, N. A.; Kozodayeva, N. M.; Korotin, B. A.; Popkov, G. K.

47 B

19

TITLE: Measuring the dose rate of neutron radiation of the wide energy spectrum

SOURCE: Ref. zh. Metrologiya i izmeritel'naya tekhnika, Abs. 12.32.919

REF SOURCE: Tr. Soyuzn. n.-i. in-ta priborostr., vyp. 1, 1964, 36-43

TOPIC TAGS: radiation, neutron radiation, radiation dose rate, dosimeter, neutron detector

ABSTRACT: The difficulties were evaluated of designing an ideal dosimeter to measure the dose rate of neutron radiation over a wide energy range. Two methods were examined for designing a data transmitter with dosimetric characteristics in the energy range ranging from 0.025 ev to 20 Mev. The first method is based on the use of an inhibitor of a given width to insure the dosimetric character of the sensitivity curve and the thermal neutron detector. Transmitters,

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designed on this principle, are normally called "isodosic." The second method is based on the use of the characteristics of neutron scintillation detectors; the curves representing the dependencies between sensitivity and energy provide a satisfactory approximation of the dosimetric curve at a given ratio of the detector sensitivity to fast and intermediate neutrons. The main shortcomings of these methods are pointed out. The operational principle of a dosimetric combination neutron detector, with only a few shortcomings, intrinsic to an "isodosic" transmitter and a dispersion detector is briefly described. A method for applying separate transmitters with a common dosimetric scale, based on a method of dispersion scintillation detectors was suggested. The advantages of various transmitters over "isodosic", dispersion, and combination transmitters are discussed. [FM]
[Translation of abstract]

SUB CODE: 18/

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Card 2/2

POPOV, G.N.; NIFONTOV, B.I.; LOBANOV, D.P.; KULIKOV, A.V.; KALYUZHNAYA, T.P., red.

[Characteristics of the development of radioactive ore deposits] Osobennosti razrabotki mestorozhdenii radioaktivnykh rud. Moskva, Atomizdat, 1964. 218 p.
(MIRA 17:6)

MERSHAVKA, V.; POPKOV, I., mashinist kombayna; FIRSOV, K. mashinist kombayna

We will achieve our aims. Mast.ugl. 9 no.12:6 D '60. (MIRA 13:12)

1. Nachal'nik pervogo uchastka shakhty No.37 kombinata Karagandaugol' (for Mershavka).
(Karaganda Basin--Coal mines and mining--Labor productivity)