"APPROVED FOR RELEASE: 06/06/2000 CIA-RDP86-00513R000103110020-3

Bakhulin, M.D.

USSR / Cultivated Plants. General Problems L-1

Abs Jour : Ref Zhur - Biol., No 6, March 1957, No 22650

Author : Bakhulin, M.D.

Inst : Not given

Title : Agricultural Evaluation of Swamps Patterned on the Kulikovo-Yakhromsk Plain Swamp.

Orig Pub : Tr. konferentsii po melior. i osvoeniyu bolotnykh i zabolochennykh pochv, 1955 g., Minsk, AN BSSR, 1956, 450-456.

Abstract : A method for swamp evaluation is described and establishment of basic types of treatment by profiling the turf deposits according to their botanical composition, pH characteristics and the composition of the turf ash content in the direction of greatest changes in soil variations.

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BAKHULIN, M.D., kand.sel'skokhoz.nauk

Effect of the self-heating of peat on the mobility of the nitrogen it contains. Torf.prom. 37 no.3:36-37 '60. (MIRA 13:9)
(Peat) (Nitrogen)

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BAKHULIN, M.D., kand.sel'skokhozyaystvennykh nauk, dotsent

Efficient utilization of peat bogs in agriculture. Izv. TSKhA no.6: 44-61 '60. (MIRA 13:12)

(Peat)

Bakhulin, M.D.

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"APPROVED FOR RELEASE: 06/06/2000 CIA-RDP86-00513R000103110020-3

Bakhulin, PA

USSR/Optics - Spectroscopy

K-6

Abs Jour : Referat Zhur - Fizika, No 5, 1957, 13022

Author : Bakhulin, P.A., Rakov, A.V.

Inst : Physics Institute, Academy of Sciences, USSR, Moscow.

Title : Investigation of the Width of Raman Lines at a Function of the Aggregate State of the Substance.

Orig Pub : Dokl. AN SSSR, 1955, 105, No 1, 54-56

Abstract : A study was made of the width of the Raman lines in n-dichlorbenzol and in benzol in liquid and crystalline states. The Raman spectrum of benzol was taken at 18° for liquid phase and at -5° for the crystalline phase. The spectrum of n-dichlorbenzol for the liquid phase was taken at 65°, and that of the crystalline phase at 20°. A detailed description of the experimental procedure is given. When the substance is changed from liquid to the solid state,

Card 1/2

molecules (Sobel'man, Izv. AN SSSR, ser. phys., 1953, 17, No 5, 554).

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"APPROVED FOR RELEASE: 06/06/2000 CIA-RDP86-00513R000103110020-3

BAKHUN, M. I.

Partly gas-heated limekilns with long-flame coal combustion chambers. Stroi. mat. 4 no. 7:7-9 Jl '58. (MIRA 11:7)
(Limekilns)

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"APPROVED FOR RELEASE: 06/06/2000 CIA-RDP86-00513R000103110020-3

BAKHUN, M.T.

Partly gas-fired limekilns with slate combustion chambers.
Stroi.mat. 5 no.12:25-26 D '59. (MIRA 13:3)
(Limekilns)

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"APPROVED FOR RELEASE: 06/06/2000 CIA-RDP86-00513R000103110020-3

BAKHUR, G. I., Mbr. Khar'kov Medical Inst., Docent, Clinic Children's Surgery

"A Case of Septic Thrombosis of the Intersititial Breast," Khirurgiya, No. 3, 1948.

APPROVED FOR RELEASE: 06/06/2000 CIA-RDP86-00513R000103110020-3

"APPROVED FOR RELEASE: 06/06/2000 CIA-RDP86-00513R000103110020-3

TERNER, Ya.M.; BAKHUR, V.T.

Letters to the editor. Zhur. nevr. i psikh. 55 no.1:77-78 Ja '55.
(EPILEPSY) (NEUROSES) (MLRA 8:2)

APPROVED FOR RELEASE: 06/06/2000 CIA-RDP86-00513R000103110020-3

"APPROVED FOR RELEASE: 06/06/2000 CIA-RDP86-00513R000103110020-3

BAKHUR, V.T. (L'vov)

Neuroses. Zhur.nevr.i psikh. 55 no.5:378-379 '55. (MLRA 8:7)
(NEUROSES)

APPROVED FOR RELEASE: 06/06/2000 CIA-RDP86-00513R000103110020-3

"APPROVED FOR RELEASE: 06/06/2000 CIA-RDP86-00513R000103110020-3

OKHRIMENKO, N. N., BAKHUR, V.T. (L'vov)

Cerebrospinal fluid examination by stages in the diagnosis of cerebral tumors. Vop.neirokhir. 20 no.3:37-39 My-Je '56. (MIRA 9:8)

(BRAIN, neoplasms
diag., CSF exam. in stages)
(CEREBROSPINAL FLUID, in various dis.
brain tumors, exam. in stages)

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"APPROVED FOR RELEASE: 06/06/2000 CIA-RDP86-00513R000103110020-3

BAKHUR, V.T. (Leningrad)

Some question on the localization of functions. Zhur.nevr. i psikh. 56 no.12:967-968 '56. (MLRA 10:2)

(CEREBRAL CORTEX, physiol.
localization of special funct., comparison of both hemispheres)

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"APPROVED FOR RELEASE: 06/06/2000 CIA-RDP86-00513R000103110020-3

BAKHUR, V.T.

Practical value of chronaximetry. Zhur.nevr. i psikh. Supplement: 42 '57. (MIRA 11:1)
(CHRONAXIA)

APPROVED FOR RELEASE: 06/06/2000 CIA-RDP86-00513R000103110020-3

"APPROVED FOR RELEASE: 06/06/2000 CIA-RDP86-00513R000103110020-3

BAKHUR, V.T.

Clinical aspects and pathogenesis of Bülf's intentional spasm.
Vrach.delo no.2:201 F '60. (MIRA 13:6)
(SPASM)

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"APPROVED FOR RELEASE: 06/06/2000 CIA-RDP86-00513R000103110020-3

BAKHUR, V.T.; ANOSHENKOV, T.I. (L'vov)

Pathogenesis of paroxysmal paralysis. Zhur.nevr.i psikh. 60 no.9:1106-1110 '60. (MIRA 14:1)

(PARALYSIS, SPASTIC)

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"APPROVED FOR RELEASE: 06/06/2000 CIA-RDP86-00513R000103110020-3

BAKHUR, V.T.

Various forms of obsessional neurosis., Vrach. delo no.6:137-138 Je '61. (MIRA 15:1)

1. L'vovskiy voyennyy gospital'.
(OBSESSIONS)

APPROVED FOR RELEASE: 06/06/2000 CIA-RDP86-00513R000103110020-3

"APPROVED FOR RELEASE: 06/06/2000 CIA-RDP86-00513R000103110020-3

BARBUR, V.T. (L'vov)

Functional state of the adrenal cortex in neurotic patients. Zhur. nevr. i psikh. 62 no.5:723-727 '62. (MIRA 15:6)
(NEUROSES) (STEROIDS)
(ADRENAL GLANDS)

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"APPROVED FOR RELEASE: 06/06/2000 CIA-RDP86-00513R000103110020-3

BAKHUR, V.T. (L'vov)

Hypophysical and adrenal system in neurasthenias and hysterias. Zhur. nevr. i psikh. vol. 64 no.5:735-741 '64. (MIRA 17:7)

APPROVED FOR RELEASE: 06/06/2000 CIA-RDP86-00513R000103110020-3

"APPROVED FOR RELEASE: 06/06/2000 CIA-RDP86-00513R000103110020-3

BAKHURDZHIEV, Iv.

Drafting of technological material balances. Izv Inst khim BAN no.8:147-152 '61.

APPROVED FOR RELEASE: 06/06/2000 CIA-RDP86-00513R000103110020-3

"APPROVED FOR RELEASE: 06/06/2000 CIA-RDP86-00513R000103110020-3

Ivan Mikhaylovich

(Deceased)

USSR/Mines and Mining
Mining Methods

Apr 1948

"Movement of Ores Under the Influence of Mining Exploitation," Prof I. M. Bakhurin, Corr Mem, Acad Sci USSR, Leningrad Mining Inst, 1 p

"Gor Zhur" No 4

Bakhurin is recognized authority on the movement of ores by exploitation of mines. His subject book discusses the movement of ore as an object of study, surveyor's observations of the movement of the surface and of the movement of the ore in the mine.

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"APPROVED FOR RELEASE: 06/06/2000 CIA-RDP86-00513R000103110020-3

BAKHURIN, Ivan Mikhaylovich [deceased]; SAMSONOVA, M.T., red.; GARINA, T.D., tekhn. red.

[Course in mine surveying; advanced part]Kurs marksheiderskogo dela; spetsial'naia chast'. Izd.2. Moskva, Vysshaia shkola, 1962. 493 p. (MIRA 15:10)

(Mine surveying)

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"APPROVED FOR RELEASE: 06/06/2000 CIA-RDP86-00513R000103110020-3

BAKHURIN, K.I., kand.tekhn.nauk

Question of the strength of scraper-conveyer chains. Vop. rud. transp. no.2:118-122 1967. (MIRA 14:5)

1. Dnepropetrovskiy gornyy institut.
(Conveying machinery)
(Chains)

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"APPROVED FOR RELEASE: 06/06/2000 CIA-RDP86-00513R000103110020-3

VASIL'YEV, Nikolay Vasil'yevich, dotsent, kand.tekhn.nauk; POLYAKOV, N.S., prof., retsenzent; SHTOKMAN, I.G., prof., doktor tekhn.nauk, retsenzent; BAKHURIN, K.I., kand.tekhn.nauk, retsenzent; KUZNETSOV, B.A., dotsent, kand.tekhn.nauk, retsenzent; BILICHENKO, N.Ya., dotsent, kand.tekhn.nauk, retsenzent; RENGEVICH, A.A., dotsent, kand.tekhn.nauk, retsenzent; KOZLOVSKIY, S.I., dotsent, kand. tekhn.nauk, retsenzent; YEVNEVICH, A.V., dotsent, kand.tekhn.nauk, otv.red.; GARBER, T.N., red.izd-va; SHKLYAR, S.Ya., tekhn.red.

[Transportation and storage in ore dressing and briquetting plants] Transport i sklady na obogatitel'nykh i briketnykh fabrikakh. Moskva, Gos.nauchno-tekhn.izd-vo lit-ry po gornomu delu, 1959. 341 p. (MIRA 13:2)

1. Zaveduyushchiy kafedroy rudnichnogo transporta Dnepropetrovskogo gornogo instituta, chlen-korrespondent AN USSR (for Polyakov). 2. Kafedra rudnichnogo transporta Dnepropetrovskogo gornogo instituta (for Shtokman, Bakhurin, Kuznetsov, Bilichenko, Rengevich). 3. Kafedra rudnichnogo transporta Moskovskogo gornogo instituta (for Yevnevich).

(Ore dressing) (Ore handling) (Conveying machinery)

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"APPROVED FOR RELEASE: 06/06/2000 CIA-RDP86-00513R000103110020-3

BAKHURIN, K.I., kand.tekhn.nauk; KOVTUN, V.S., insh.

Making conveyer-scraper chain link models of epoxy resins. Izv.vys.ucheb.zav.; gor.zhur. no.3:84-87 '59. (MIRA 13:4)

1. Dnepropetrovskiy ordena Trudovogo Krasnogo Znameni gornyy institut imeni Artema. Rekomendovana kafedroy rudnichnogo transporta.
(Models and modelmaking) (Conveying machinery--Models)

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"APPROVED FOR RELEASE: 06/06/2000 CIA-RDP86-00513R000103110020-3

VOLOTKOVSKIY, S.A., doktor tekhn.nauk; BAKHURIN, N.N., kand.tekhn.nauk; PETRENKO, G.G., inzh.

Technical and economic comparison of the efficiency of using cars with a closed and a dumping body in the Krivoy Rog Basin. Vop. rud. transp. no.6:356-360 '62. (MIRA 15:8)

1. Dnepropetrovskiy gornyy institut (for Volotkovskiy, Bakhurin). 2. Shakhta "Novaya", rudoupravleniya im. Rozy Lyuksemburg (for Petrenko).

(Krivoy Rog Basin—Mine railroads—Cars)

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SOV/137-58-9-20060

Translation from: Referativnyy zhurnal, Metallurgiya, 1958, Nr 9, p 279 (USSR)

AUTHORS: Bykov, R.S., Bakhurina, Z.N.

TITLE: Ductility and the Softening of Magnesium Alloys (Plastichnost' i razuprochneniye magniyevykh splavov)

PERIODICAL: V sb.: Legkiye splavy. Nr 1. Moscow, 1958, pp 410-422

ABSTRACT: A determination is made of the technical ductility (TD) of a number of standard industrial Mg alloys (A): MA2, MA3, MA8, VM17, and VM65-1, in the hot extruded condition. The TD of these alloys was evaluated by tests for compression, torque, a_k, and tension. A characteristic feature of the TD diagrams is uneven change in the mechanical characteristics of the A with increase in temperature of deformation, and failure of maximums in the curves of these characteristics to coincide when different testing methods are used. The decisive significance of the strain rate upon the value of TD in the working of Mg A is noted. MA8 and VM17 are less sensitive to differences in strain rates and present high TD over a wide interval of temperatures in hot working. The temperature intervals of forging, stamping, and other types of pressworking of A are

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SOV/137-58-9-20060

Ductility and the Softening of Magnesium Alloys

established. Tensile tests of specimens previously heated to 200, 250, 300, 350, 400, 450, and 500°C for 2, 4, 6, 8, 10, and 12 hours are made in order to study the softening of these A in the process of heating prior to deformation. The nature of the change in the strength of the A with increase in temperature to which heating is carried differs with the material. Intensive softening of the A as the length of heating time continues is observed at 400° and above. The softening of Mg A is essentially related to processes of recrystallization, which are primarily limited to recrystallization due to treatment. In order to assure maximum ductility in the metal, the duration of heating of extruded billets in the furnace at the given temperature of heating must be 1-2 hours. A further increase in heating time will increase softening of the metal and is therefore not recommended. Optimum conditions for the heating of billets for pressworking of the Mg A investigated are established.

1. Magnesium alloys--Mechanical properties 2. Magnesium alloys --Analysis

E.K.

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BURDZOLA, N.L., kandidat tekhnicheskikh nauk; BAKHURKIN, K.A., kandidat tekhnicheskikh nauk, nauchnyy redaktor; SAPOROV, P.V., redaktor; PERSON, M.N., tekhnicheskiy redaktor; MEDVEDEV, L.N., tekhnicheskiy redaktor.

[New designs of water conduits and tunnels for hydraulic engineering] Novye konstruktsii gidrotekhnicheskikh vodovodov i tunnelei. Moskva, Gos. izd-vo lit-ry po stroitel'stvu i arkhitekture, 1954. 102 p. (MLRA 7:9)
(Water pipes) (Tunnels)

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"APPROVED FOR RELEASE: 06/06/2000 CIA-RDP86-00513R000103110020-3

BAKHUROV, S. I.

"Influence of the Conditions of the Hardening Process on Frost Resistance of Slag Concrete," Stroi. prom., 30, No.2, 1952

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"APPROVED FOR RELEASE: 06/06/2000 CIA-RDP86-00513R000103110020-3

KARPOV, V.I.; BAKHUROV, V.G.

Precipitation of uranyl phosphates. Zhur. neorg. khim. 7 no.8:1842-1845 Ag '62. (MIRA 16:6)

(Uranium phosphate)

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PROCESSES AND PROPERTIES INDEX

Driers in soda factories. V. O. MARKHLOV. J. Chem. Ind. (Russia) 6, 694-8 (1929).—One of the main points of weakness of the usual soda process is the low efficiency of the driers which show a heat utilization for evapn. purposes of only 45 60%. The performance of the drier can be improved by replacing by a centrifuge the continuous filter which feeds the $NaHCO_3$ into the drier, and shortening the rotary drier itself. A complete heat and material balance is calcd. for an av. plant. A. C. ZACULIN

ASM-SLA METALLURGICAL LITERATURE CLASSIFICATION

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CA

Combustion of flotation tailings in roasting furnaces of contact sulfuric acid plants V. G. Bakhurov. *Rabochii Khim.* 1933, No. 5, 4-5; *Chimie & Industrie* 31, 502. The use of such tailings contg. 2.4% H_2O in admixt. with an equal amt. of pyrites is quite feasible, and even seems advisable. When used in this proportion, the total charge of pyrites can be increased 15-20%, and at the same time the coeff. of utilization of the S is increased with a corresponding decrease in the S content of the ash. The efficiency of the furnace increases from 0.85 to 0.95. When the proportion of tailings to pyrites is increased to 2.8:1 and the H_2O content of the tailings to 5%, the operation and control of the furnace become exceedingly delicate. A H_2O content of 6.7% is prohibitive. A. Papineau-Couture

ASM-SLA METALLURGICAL LITERATURE CLASSIFICATION

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The effective coefficient of heat conductivity of contact masses. A. G. Bakhurov and G. K. Boreskov. *J. Applied Chem.* (U.S.S.R.) 20, 721-38(1947)(in Russian). (1) Heat transfer in layers of granular catalysts, in a direction perpendicular to that of the gas stream, is the sum of the heat transfers due to convection, thermal cond. and radiation. Theoretically, for a model consisting of packed spheres of diam. δ, in a stream of gas of sp. wt. γ (kg./cu.m.) and heat capacity C_p (kcal.), flowing at the linear velocity w, the effective coeff. of heat convection $\lambda_c = 640\,w\delta C_p\gamma$ (kcal./m./hr./degree). For nonspherical elements and disordered packing the proportionality should still hold, only the numerical factor is different. Similarly, for regularly packed spheres, the effective coeff. of heat cond. proper is found $\lambda_k = 2\pi\lambda_g\varphi(\lambda_m/\lambda_g)$ where the subscripts m and g refer to the grain material and the gas, resp., and φ is a function which as a first approx., can be identified with the log. The radiative heat transfer is proportional to T^3 (abs. temp.), and, at given T, increases with the diam. of the grains. (2) Expts. were made in a vertical chamber, divided into 2 halves by a vertical partition. Radiative heat transfer was eliminated by the low temp. (35°) of the expts. To det. the convective component, the air stream entering one half of the chamber was tagged with 0.2% SO_2; its spread (in terms of the ratio of the momentary and the initial concn., c/c_0), in the horizontal direction, across the packing was detd. analytically and mapped as a function of the distance x from the partition. The packings used were: Fe filings, steel balls (7.9-8.6 and 13-14.6 mm.), porcelain balls and rings, crushed porcelain, glass rods (diam. 4.5-5.3 mm., length 7.8-16.6 mm.), glass tubes, zeolite pellets, and catalyst grains (diam. 3.7, length 7.7 mm.). The plots of c/c_0 against x are identical (and reversed) for the left and right-hand halves of the app.; the area F enclosed between the curve and the vertical axis representing the position of the partition, gives the amt. of substance transferred from one half to the other. At const. w = 0.32 m./sec., increase of the height h of the packing (zeolite pellets) from 140 to 400 mm., corresponding to an increase of the time of contact τ from 0.4 to 1.2 sec., increased F markedly. Threefold variation of w having had no effect on F, and τ being inversely proportional to w (at const. h), it follows that λ_c is directly proportional to w. At const. w and h, variation of the diam. of spherical elements (from 3 to 18.8 mm.) resulted in an increase of F. Under identical conditions, Raschig rings gave the greatest F, then (in the order of decreasing F), spheres, pellets, crushed fragments and filings; for glass tubes, F is considerably greater than for rods. The total coeff. of heat transfer ($\lambda_c + \lambda_k$) was detd. by local temp. measurements (τ = 0.05°) from 25 to 25 mm., one vertical half of the chamber receiving a preheated air stream. The shape of the heat transfer curves is the same as that of the substance transfer, and the variation with τ, the diam. and shape of the packing elements are the same. In most cases the two curves coincide very nearly, except in the case of metallic packing where F for the heat transfer is, at all h, considerably broader. Consequently, except in the case of metallic packings, heat transfer by convection is predominant, and thermal cond. secondary. (3) F is shown analytically to be a certain function of the dimensionless criterion $D\tau/a^2$, where D = effective coeff. of diffusion, a = distance from the partition; hence, from the exptl. curves one can det. D and $\lambda_c = DC_p\gamma$. At const. w, these magnitudes are found to be proportional to the "equiv. diam." δ_e of the grains, defined as the diam. of spheres of which a no. equal to that of the grains of the given material fills the same vol. The general ex-

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pressions are $D = kwh$ and $\lambda_c = kwh_c(c_p)$; for massive grains, $k = 575$. In the case of rings and tubes, k attains much higher values, thus, for porcelain rings, $k = 1030$, and for glass tubes, $k = 1490$; this can be shown, analytically, to be the result of addnl. lateral motion of the gas through oblique channels in rings or tubes; the calcd. k are quite close to the exptl. values. (4) The thermal-cond. component λ_t of the total heat transfer amounts, in the case of steel balls in air at 20°, to 0.25 kcal. in. hr. degree, for porcelain balls, to 0.09; for all the other materials exanid., λ_t is too small to be detd. (5) Numerical calcns. are given for a few industrial catalysts; under industrial conditions, one finds for a vanadium catalyst for SO_2, λ (total) = 0.57 kcal. in. hr. degree, an NH_3 catalyst λ = 15.80, a MeOH synthesis catalyst, λ = 23.03; the preponderance of convection is illustrated by λ_c = 0.34, 15.2, and 22.6, resp. (6) For these 3 processes, the temp. distribution over the cross-section of the catalyst was calcd. as a function of the diam. of the reaction tube. Overheating of the central part can be counteracted by increasing w and the size of the grains, and, more effectively, by using ring shaped or tubular catalyst grains or by dilg. the catalyst with thin walled tubes. N. Thon

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L 3138-66 EWT(m)/EPF(c)/ETC/EPF(n)-2/EWG(m)/EWP(t)/EWP(b) IJP(c) JD/WW/JG

AM5022854 BOOK EXPLOITATION 29 27 B+1 UR/ 621.039.7

Bakhurov, Vasiliy Gerasimovich; Lutsenko, Inna Kirillovna; Shashkina, Nadezhda Nikolayevna

Radioactive wastes 19 from uranium 27 plants (Radioaktivnyye otkhody uranovykh zavodov) Moscow, Atomizdat, 1965. 150 p. illus., biblio. 2500 copies printed

TOPIC TAGS: radioactive waste disposal, radioactive contamination, uranium, radioactive waste storage

PURPOSE AND COVERAGE: This book is intended for engineering and technical personnel concerned with radioactive wastes from uranium processing plants. The characteristics of radioactive industrial wastes, methods for their removal from uranium processing plants, waste storage, effect of wastes on their surroundings, methods for analyzing small amounts of radioactive substances, and some procedures to purify and decontaminate wastes are covered. Some foreign sources were used for the material on the purification and decontamination of wastes and on uranium processing plants.

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Introduction and Chs. 4, 6, 7, and 8 were written by V. G. Bakhurov, Chs. 1, 2, and 3, by I. K. Lutsenko, and Chs. 5 and 9, by N. N. Shashkina. The authors thank B. S. Kolychev and B. V. Nevskiy.

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Ch. I. Brief characteristics of uranium raw material and a flow diagram of its processing -- 8

Ch. II. Characteristics of wastes -- 13

Ch. III. Procedure for waste removal and waste storage. Storage of tailings -- 19

Ch. IV. Effect of radioactive wastes on their surroundings -- 26

Ch. V. Radioactive contamination control -- 41

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Ch. VI. Physical and chemical bases of waste purification and decontamination processes -- 49

Ch. VII. Methods for purifying and decontaminating wastes by removing radioactive substances -- 68

Ch. VIII. Purification of nonradioactive admixtures -- 99

Ch. IX. Methods for analyzing small amounts of radioactive elements -- 120

Bibliography -- 145

SUB CODE: NP SUBMITTED: 14Apr65 NO REF SOV: 106

OTHER: 040

Card 3/3

APPROVED FOR RELEASE: 06/06/2000 CIA-RDP86-00513R000103110020-3"

"APPROVED FOR RELEASE: 06/06/2000 CIA-RDP86-00513R000103110020-3

L 01064-66 EWT(m)/EPF(c)/EPF(n)-2/EWG(m)/EWP(t)/EWP(b) IJP(c) JD/WW/JG/DM

ACCESSION NR: AP5014540 UR/0089/65/018/005/0487/0491
621.039.714:546.432 28 25 B

AUTHOR: Tyutrina, A. P.; Zhagin, B. P.; Bakhurov, V. G.

TITLE: Removal of radium from liquid wastes by sorption with manganese dioxide

SOURCE: Atomnaya energiya, v. 18, no. 5, 1965, 487-491

TOPIC TAGS: uranium processing, radioactive waste, radioactive decontamination, manganese dioxide, pyrolusite

ABSTRACT: In view of the radioactive contamination of the liquid waste products of the hydrometallurgical processing of uranium raw material, the authors consider the possibility of using amorphous manganese dioxide and pyrolusite to remove the radium from this waste. The sorbent was prepared from air-dried sawdust impregnated with potassium permanganate and manganese chloride at various compositions and values of pH and the radium-sorption ability was measured. The sorption was effective both under static and dynamic conditions. It is concluded that synthetic manganese dioxide deposited on sawdust, or columns of suspended layers of pyrolusite can be used as effective sorbents. The spent pyrolusite can furthermore be used to oxidize uranium during the stage of ore stripping. Mixtures of sawdust with powdered pyrolusite of various grain sizes were also tested. "The authors

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ACCESSION NR: AP5014540

3

thank S. V. Golovin, V. A. Gorinov, and A. I. Shustov for help with the work."
Orig. art. has: 4 figures and 4 tables.

ASSOCIATION: none

SUBMITTED: 13May64 ENCL: 00 SUB CODE: NP

NR REF SOV: 002 OTHER: 001

Card 2/2 BP

APPROVED FOR RELEASE: 06/06/2000 CIA-RDP86-00513R000103110020-3"

"APPROVED FOR RELEASE: 06/06/2000 CIA-RDP86-00513R000103110020-3

BAKHUROVA, S.I., kandidat tekhnicheskikh nauk.

Making slag concrete products using activated slag as a base. Rats. i izobr. predl. v stroi. no.130:19-22 '56. (MLRA 9:9)
(Slag concrete)

APPROVED FOR RELEASE: 06/06/2000 CIA-RDP86-00513R000103110020-3

"APPROVED FOR RELEASE: 06/06/2000 CIA-RDP86-00513R000103110020-3

BAKHUSOV, N. K.

"Rules for the Storage of Solid Radioactive Wastes," Med. Radiol., No.2, 1957. A report given at the Republic Session of Hygiene Scientific Research Institutes, 19-24 Nov, 1956 at the Inst. im. Erisman.

APPROVED FOR RELEASE: 06/06/2000 CIA-RDP86-00513R000103110020-3"

"APPROVED FOR RELEASE: 06/06/2000 CIA-RDP86-00513R000103110020-3

137-58-1-2186

Translation from: Referativnyy zhurnal, Metallurgiya, 1958, Nr 1, p 296 (USSR)

AUTHOR: Bakhusov, N. K.

TITLE: Improving Working Conditions in Gamma-ray Flaw Detection (Ozdorovleniye usloviy truda pri gamma-defektoskopii)

PERIODICAL: Tr. Yubileyn. nauchn. sessii, posvyashch. 30-letney deyatsti Gos. n.-i. in-ta gigiyeny truda i profzabolevaniy. Leningrad, 1957, pp 43-49

ABSTRACT: Measures to improve working conditions are described.

Ye. L.

1. Industry—Employee relations 2. Gamma ray analysis—Safety measures

Card 1/1

APPROVED FOR RELEASE: 06/06/2000 CIA-RDP86-00513R000103110020-3"

"APPROVED FOR RELEASE: 06/06/2000 CIA-RDP86-00513R000103110020-3

GIRSHFEL'D, V.Ya., kand.tekhn.nauk; KNYAZEV, A.M., kand.tekhn.nauk; BAKHUSOV, V.N., inzh.

Diagram of cycles for the T-100-130 turbine plant. Teplonergetika 9 no.10:88-91 O '62. (MIRA 15:9)
(Sverdlovsk--Turbines--Design and construction)

APPROVED FOR RELEASE: 06/06/2000 CIA-RDP86-00513R000103110020-3"

"APPROVED FOR RELEASE: 06/06/2000 CIA-RDP86-00513R000103110020-3

GIRSHFEL'D, V.Ya., kand. tekhn. nauk; BAKHUSOV, V.N., inzh.

Method for calculating the variable modes of operation of the thermal network of a turbine system with two central heating steam takeoffs. Izv. vys. ucheb. zav.; energ. 7 no.2:45-51 F '64. (MIRA 17:3)

1. Moskovskiy ordena Lenina energeticheskiy institut. Predstavlena kafedroy teplovykh elektrostantsiy.

APPROVED FOR RELEASE: 06/06/2000 CIA-RDP86-00513R000103110020-3"

"APPROVED FOR RELEASE: 06/06/2000 CIA-RDP86-00513R000103110020-3

GIRSHFEL'D, V.Ya., kand. tekhn. nauk; BAKHUSOV, V.N., inzh.

Effect of the capacity of the regeneration system on the accelerating capability of a turbine unit. Teploenergetika 11 no.8:74-77 Ag '64. (MIRA 18:7)

1. Moskovskiy energeticheskiy institut.

APPROVED FOR RELEASE: 06/06/2000 CIA-RDP86-00513R000103110020-3"

"APPROVED FOR RELEASE: 06/06/2000 CIA-RDP86-00513R000103110020-3

RYZHKINA, V.Ya., red.; KERTSELLI, L.I., red.; BAKHUSOVA, V.N., red.

[Thermal electric-power plant; study charts] Teplovaia elektricheskaia stantsiia; uchebnye tablitsy. n.p. Gosenergoizdat, 1963. 20 fold. plates in portfolio. (MIRA 16:11)
(Electric power plants—Tables, diagrams, etc.)

APPROVED FOR RELEASE: 06/06/2000 CIA-RDP86-00513R000103110020-3"

"APPROVED FOR RELEASE: 06/06/2000 CIA-RDP86-00513R000103110020-3

GIRSHFEL'D, V.Ya., kand. tekhn. nauk; BAKHUSOV, V.N., inzh.;
KNYAZEV, A.M., kand. tekhn. nauk

Optimum value of α in a heat and electric power plant.
Teploenergetika 11 no.5:18-21 My'64. (MIRA 17:5)

1. Moskovskiy energeticheskiy institut.

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"APPROVED FOR RELEASE: 06/06/2000 CIA-RDP86-00513R000103110020-3

GURDZHNIDZE, R.V.; BAKHUTASHVILI, V.I.

Effect of mechanical receptor stimulation of the normal and operated stomach on the number of leucocytes and leucocytal formula. Soob.AN Grus.SSSR 16 no.3:243-248 '55. (MLRA 9:7)

1.Akademiya nauk Gruzinskoy SSR, Institut eksperimental'noy i klinicheskoy khirurgii i gematologii, Tbilisi. Predstavleno deystvitel'nym chlenom Akademii K.D.Kristavi.
(STOMACH) (LEUCOCYTES)

APPROVED FOR RELEASE: 06/06/2000 CIA-RDP86-00513R000103110020-3"

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BARBUTAKVILI, V. I.

" Toxoplasmosis in Obstetrics"

Voprosy toksoplazmoza, report theses of a conference on toxoplasmosis, Moscow, 3-5 April 1961, publ. by Inst Epidemiology and Microbiology im. N. F. Gamaleya, Acad. Med. Sci USSR, Moscow, 1961, 6 pp.

APPROVED FOR RELEASE: 06/06/2000 CIA-RDP86-00513R000103110020-3"

"APPROVED FOR RELEASE: 06/06/2000 CIA-RDP86-00513R000103110020-3

PONOMAREV, V.N.; BAKHVALOV, A.N.

Theory of the interpretation of an internal magnetic field for bodies of ellipsoidal shape. Trudy Inst.geofiz.UFAN SSSR no.3:111-124 '65. (MIRA 18:8)

APPROVED FOR RELEASE: 06/06/2000 CIA-RDP86-00513R000103110020-3"

"APPROVED FOR RELEASE: 06/06/2000 CIA-RDP86-00513R000103110020-3

ACCESSION NR: AP4030338 S/0049/64/000/003/0360/0369

AUTHORS: Ponomarev, V. N.; Bakhvalov, A. N.

TITLE: The use of measurements on internal magnetic field to determine the attitude of tabular bodies

SOURCE: AN SSSR. Izv. Ser. geofiz., no. 3, 1964, 360-369

TOPIC TAGS: magnetic field, magnetic susceptibility, borehole investigation, geophysical method

ABSTRACT: The authors show the relationships among components of the internal field of a body, the vertical and horizontal components, the dip angle of a tabular body, and the magnetic susceptibility. From these, nomograms are plotted for different values of susceptibility, for different strikes and dips of the body, and for variations in magnetizing field. By means of these nomograms (which are given in the paper), it is possible to determine the attitude of a tabular body by knowing three mutually perpendicular components of the internal magnetic field or by knowing the vertical component and the magnetic susceptibility. In the latter determination, however, it is necessary to know the strike of the body for unique

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ACCESSION NR: AP4030338

definition of dip, or else to know the dip for determination of strike. The measurements are generally made in a borehole, but such a hole drilled through strongly magnetic rocks gives rise to a secondary magnetic field, which substantially distorts the value and direction of the field within the body. The authors derive equations that permit computations free from the effect of the hole, and they illustrate their results by applying the method to a specific example. Orig. art. has: 7 figures and 38 formulas.

ASSOCIATION: Akademiya nauk SSSR, Ural'skiy filial Institut geofiziki (Academy of Sciences SSSR, Ural Branch, Institute of Geophysics)

SUBMITTED: 26Apr63 DATE ACQ: 29Apr64 ENCL: 00

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

Card 2/2

APPROVED FOR RELEASE: 06/06/2000 CIA-RDP86-00513R000103110020-3"

"APPROVED FOR RELEASE: 06/06/2000 CIA-RDP86-00513R000103110020-3

PONOMAREV, V.N.; BAKHVALOV, A.N.

Determining the spatial position of magnetic ore bodies.
Razved. i okh. nedr. 30 no.5:31-34 My '64. (MIRA 17:10)

1. Ural'skiy filial AN SSSR.

APPROVED FOR RELEASE: 06/06/2000 CIA-RDP86-00513R000103110020-3"

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BAKHVALOV, A.P.; SHRAGO, Z.Kh.; ZHITOMIRSKAYA, L.M.; ISHKOVA, A.K., red.; MAMONTOVA, N.N., tekhn.red.

[Coin mechanisms of vending machines] Monetnye mekhanizmy torgovykh avtomatov. Moskva, Gos.izd-vo torg.lit-ry, 1960. 79 p. (MIRA 13:12)

(Vending machines)

APPROVED FOR RELEASE: 06/06/2000 CIA-RDP86-00513R000103110020-3"

"APPROVED FOR RELEASE: 06/06/2000 CIA-RDP86-00513R000103110020-3

UNCLASSIFIED

4

Investigation of copper cyanide baths of Watts type. [illegible] Chem. (U. S. S. R.) 14, 20-5 (1941). CuCN was prepd. by mixing solns. of NaCN and $CuSO_4 \cdot 5H_2O$, heating the mixt. until $(CN)_2$ evolution ceased, washing the ppted. CuCN with H_2O and shaking with 0.1 N H_2SO_4 to dissolve Cu carbonate, the washed and dried CuCN was then introduced into a soln. of NaCN the carbonates were removed by ppton with $Ba(CN)_2$, yielding the stock soln. CuCN 80 g./l., free NaCN 0.0 g./l., Na_2CO_3 2.1 g./l. The study included the use of various concns. of K Na tartrate, Na_2CO_3 and NaOH. The tartrate has almost no influence on the cathode polarization, but acts as a depassivator for the Cu anode, i.e., it permits the use of higher c. d. without strong passivity of the anode and strong oxidation of the CN ions. Electrolyte contg. 10 g./l. of tartrate showed that concns. of Na_2CO_3 up to 10 g./l. do not affect cathode polarization and lower the degree of anode passivity; with carbonate concns. higher than that, the anode polarization is unchanged. Increased NaOH concn. in solns. using 10 g./l. tartrate and 30 g./l. practically has no influence on cathode polarization but increases anode polarization. The cathode current efficiency is noticeably decreased with increased concn. of tartrate, and is less noticeably increased by increased concn. of NaOH and Na_2CO_3. The quality of the cathode deposit is poorer in solns. contg. K Na tartrate, but is almost satisfactory in solns. contg. tartrate, NaOH and Na_2CO_3. The best bath compn. was found to be: CuCN 60, free NaCN 0, K NaC4H4O6 60, Na_2CO_3 30, NaOH 0.1, 0.3 g./l. This bath yields good deposits at c. d. of 2.0-2.5 amp./sq. dm. with current yield of 70-75% at 60°. The permissible anode c. d. is 1.1-1.5 amp./sq. dm., when strong passivity of anodes and oxidation of CN ions are avoided.

G. M. Koenigsdorff

METALLURGICAL LITERATURE CLASSIFICATION

APPROVED FOR RELEASE: 06/06/2000 CIA-RDP86-00513R000103110020-3"

"APPROVED FOR RELEASE: 06/06/2000 CIA-RDP86-00513R000103110020-3

CA

4

Anodic behavior of tin in stannic electrolytes. G. F. Bokhvalov. *J. Applied Chem.* (U. S. S. R.) 14, 469-74 (in German, 474)(1941).—The passivity of the Sn anode is const. and anodic solution proceeds with a current efficiency of nearly 100% within certain current-density limits if to begin with the anode is immersed in the soln. under current. An increase in free NaOH concn. leads to an increase in the limits of c. d. at which the anode is passivated by immersion in the soln. under current. The current efficiency decreases sharply with increase in c. d. and with increase in concn. of free NaOH. The passivity of the Sn anode on immersion in the soln. under current is due to the formation of a protective film of Sn hydroxide and Sn oxide. The constancy of the degree of passivity of the anode within certain limits of c. d. is a function of the speed of anode soln. and rate of growth of the passive film during electrolysis. Sn can be plated continuously from a Na stannate bath, preserving the high quality of the plate without introducing oxidizers or using insol. anodes. But this requires the application of preliminary passivation of the Sn anodes by immersing in the plating soln. while under current. Passivation depends upon the content of free alkali in the soln. Best results were obtained with Sn 16.1 g./l. and free NaOH 26.4 g./l. The c. d. at the anode during passivation is 0.75-1.0 amp./sq. dm. At 70°, without agitation, the anodic and cathodic current efficiencies are 85-87%. 6 references. A. A. B.

ASB-SLA METALLURGICAL LITERATURE CLASSIFICATION

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"APPROVED FOR RELEASE: 06/06/2000 CIA-RDP86-00513R000103110020-3

PROCESSES AND PROPERTIES INDEX

BAKHVALOV, G. T.

20

BAKHVALOV, G. T. and A. V. TURKOVSKAYA. "Korrozya i Zashchita Metallov." Moscow, 1947: Metallurgizdat. (Price 26 roubles)

ASM-SLA METALLURGICAL LITERATURE CLASSIFICATION

APPROVED FOR RELEASE: 06/06/2000 CIA-RDP86-00513R000103110020-3"

"APPROVED FOR RELEASE: 06/06/2000 CIA-RDP86-00513R000103110020-3

BAKHVALOV, G. T.

USSR/Engineering Jan 1948
Porosity
Steel, Chromium

"Effect of Porosity on the Rust Resistance of Chrome-Plated Decorative Steel," Docent G. T. Bakhvalov, Candidate Tech Sci, Mem, Soc of Galvanizers, VSNITO, 4½ pp

"Vest Inzher i Tekh" No 1

Tests to determine the effect of the thickness of chrome plate on the anticorrosive characteristics of decorative steel. Steel having four layers of lead, lead, nickel, and chrome of various thicknesses used showed that steel plated with total thickness of 38 μ

62T11

USSR/Engineering (Contd) Jan 1948

without porosity after mechanical buffing resisted the corrosive effects of sodium chloride mist, permitting conclusion that this type of plating would protect steel even under most difficult operating conditions.

62T11

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"APPROVED FOR RELEASE: 06/06/2000 CIA-RDP86-00513R000103110020-3

BAKHVALOV, G. T. ed. and others

Zashchitnye pokrytiia metallov v mashinostroenii. Moskva, Mashgiz, 1949. 171 p. illus.

Bibliography: p. 169-[170].

Protective coating of metals in mechanical engineering.

DLC: TN690.B25

SO: Manufacturing and Mechanical Engineering in the Soviet Union, Library of Congress, 1953.

APPROVED FOR RELEASE: 06/06/2000 CIA-RDP86-00513R000103110020-3"

"APPROVED FOR RELEASE: 06/06/2000 CIA-RDP86-00513R000103110020-3

Bakhvalov, G. T. and Turkovskaya, A. V. Rukovodstvo k laboratornym rabotam po korrozii i gal'vanostegii (Handbook for Laboratory Work on Corrosion and Electroplating) Moscow Gosudarst. Nauch. Tekh. Izdatel'stvo Lit. Chernoi i Tsvetnoi Met. 1952. 236 pp.

APPROVED FOR RELEASE: 06/06/2000 CIA-RDP86-00513R000103110020-3"

"APPROVED FOR RELEASE: 06/06/2000 CIA-RDP86-00513R000103110020-3

[illegible]

G. [illegible], [illegible], and V. P.. Labutin, [illegible] (Handbook [illegible]), Metallurgizdat.

The book presents methods of effecting a metal coating by galvanization, methods of protection against phosphate corrosion, oxidation, and chemical staining, and contains a generalization of experience of leading galvanization shops in the use of mechanized equipment and in the automatization of individual processes. The bases of projected galvanization shops are included.

The handbook is intended for technical-engineering workers of galvanization shops, metal corrosion laboratory researchers, for planned organizations, and for technical institute students specializing in the anticorrosion protection of metals.

SO: Sovetskiye knigi (Soviet books), No. 107, 1953, Moscow, (U-6472)

APPROVED FOR RELEASE: 06/06/2000 CIA-RDP86-00513R000103110020-3

"APPROVED FOR RELEASE: 06/06/2000 CIA-RDP86-00513R000103110020-3

BAKHVALOV, Grigoriy Tikhonovich; BIRKGAN, Leopol'd Nikolayevich; LABUTIN, Valentin Petrovich; FOMIN, N.V., redaktor; KAMAYEVA, O.M., redaktor; LAYNER, V.I., professor, doktor, retsenzent; KUPTSOV, I.I., inzhener, retsenzent; VAYNSHTEYN, Ye.B., tekhnicheskiy redaktor.

[Handbook of an electroplater] Spravochnik gal'vanostega. Izd. 2-e, perer. i dop. Moskva, Gos.nauchno-tekhn.izd-vo lit-ry po chernoi i tsvetnoi metallurgii, 1954. 650 p. (MIRA 8:4)
(Electroplating)

APPROVED FOR RELEASE: 06/06/2000 CIA-RDP86-00513R000103110020-3

"APPROVED FOR RELEASE: 06/06/2000 CIA-RDP86-00513R000103110020-3

BAKHVALOV, G. T.,

"Author's Abstract of the Dissertation Paper on the Subject of "Electrodeposition of Metals in Periodically Changing Direction of Current" Submitted in Application for the Scholastic Degree of Doctor of Technical Sciences." (Dissertation for Degree of Doctor of Technical Sciences) Min Higher Education USSR, Moscow Inst of Non-Ferrous Metals and Gold imeni M. I. Kalinin, Moscow, 1955

SO: M-1036 28 Mar 56

APPROVED FOR RELEASE: 06/06/2000 CIA-RDP86-00513R000103110020-3"

"APPROVED FOR RELEASE: 06/06/2000 CIA-RDP86-00513R000103110020-3

AKIMOVA, K.I.; BAZHENOV, M.F.; BAKHVALOV, G.T.; BEZKLUBENKO, N.P.; BERMAN, S.I.; BOGDANOV, Ye.S.; BODYAKO, M.N.; BOYKO, B.B.; VINOGRADOV, S.V.; GAGEN-TORN, K.V.; GLEK, T.P.; GOREV, K.V.; GRADUSOV, P.I.; GUSHCHINA, T.N.; YEMEL'YANOV, A.K.; YESIKOV, M.P.; ZDZYARSKIY, A.V.; ZAKHAROV, M.V.; ZAKHAROVA, M.I.; KARCHEVSKIY, V.A.; KOMAROV, A.M.; KORZHENKO, O.T.; LAYNER, V.I.; MAL'TSEV, M.V.; MILLER, L.Ye.; MILOVANOV, A.I.; MIRONOV, S.S.; NIKONOROVA, N.A.; OL'KHOV, N.P.; OSIPOVA, T.V.; OSOKIN, N.Ye.; PERLIN, I.L.; PLAKSIN, I.N.; PROKOF'YEV, A.D.; RUMYANTSEV, M.V.; SEVERDENKO, V.P.; SEREDIN, P.I.; SMIRYAGIN, A.P.; SPASSKIY, A.G.; TITOV, P.S.; TURKOVSKAYA, A.V.; SHAKHNAZAROV, A.K.; SHPICHINETSKIY, Ye.S.; YURKSHTOVICH, N.A.; YUSHKOV, A.V.; YANUSHEVICH, L.V.

Sergei Ivanovich Gubkin. TSvet.met. 28 no.6:60-61 N-D '55. (MIRA 10:11)
(Gubkin, Sergei Ivanovich, 1898-1955)

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"APPROVED FOR RELEASE: 06/06/2000 CIA-RDP86-00513R000103110020-3

PHASE I BOOK EXPLOITATION 344

Shchigolev, Petr Vasil'yevich, Candidate of Chemical Sciences.

Khimicheskaya polirovka metallov; stenogramma lektsii (Chemical Polishing of Metals; Stenographic Transcription of a Lecture) Moscow, 1957. 24 p. 5,000 copies printed.

Sponsoring agencies: Obshchestvo po rasprostraneniyu politicheskikh i nauchnykh znaniy RSFSR, and the Moskovskiy dom nauchno-tekhnicheskoy propagandy im. F. E. Dzerzhinskogo.

Ed.: Bakhvalov, G. T.; Tech. Ed.: Sukhareva, R. A.

PURPOSE: The book is intended for readers interested in the treatment of metals on an elementary level.

COVERAGE: The book is a popular survey of recent work conducted in non-Soviet countries on chemical polishing of metals, namely: aluminum, copper, nickel, iron, cadmium, zinc, silver, lead, magnesium, zirconium, beryllium, germanium, and tantalum. The author refers to U. S. and Japanese patents as sources giving the composition of various electrolytes used in chemical polishing. However, in no case are the patents identified by number, inventor, or title. A detailed description is given of the

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"APPROVED FOR RELEASE: 06/06/2000 CIA-RDP86-00513R000103110020-3

"Alupol" and "Erftwerk" polishing methods used in the manufacture of aluminum reflectors. Fig. 1, p. 8, shows the relationship of the thickness of the removed aluminum (99.99 %) layer to temperature and treating time in the "Erftwerk" bath. Fig. 2, p. 8, shows the relationship of the coefficient of light reflection by aluminum to its purity. Fig. 3, p. 9, illustrates the relationship of the coefficient of light reflection by Al-Mg alloys to the purity of the initial aluminum, the Mg-content, and the thickness of the anodic film. Fig. 4, p. 9, illustrates the effect of the thickness of the anodic film on the reflecting power of Al (99.99%) chemically polished in the "Alupol IV" and "Alupol V" baths. Fig. 5, p.10, shows the effect of the degree of purity of initial Al, the Fe-content, and the thickness of the anodic film on the coefficient of light reflection by Al-Mg alloys (for the "Erftwerk" bath). Coefficients of light reflection by Al and its alloys after 5-min. treating time in the bath: H_3PO_4, (d=1.75), 700 cc; HNO_3 (d=1.41) -- 100 cc; citric acid ($C_6H_8O_7$), 200 g, at bath temperature of 85°C are compiled in Table 1, p.10. Best results were obtained by using pure Al (99.99%). Fig. 6, p. 11, shows the relationship of the reflecting power of different metallic surfaces to the wave-length of incident light. Fig. 7, p.12, shows variations of the reflecting power of different metallic surfaces in relation to the testing time under atmospheric conditions. Fig. 8, p. 13 shows the relationship of various metallic surfaces to heating temperature. Fig. 9, p. 15, shows the relationship of the rate of solution

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of Л63 brass to the H_2O- content of the bath: 10 vol.% HNO_3 (d=1.5); 60 vol% H_3PO_4 (d=1.75); 30 vol% $(CH_3COO)_2$. (Bath temperature: 20°C; treating time: 10 min.) Fig. 10, p.16, shows the relationship of the H_2O-content of the bath to the quantity of nitrous acid (HNO_2) formed during the chemical polishing of brass. (Bath composition: 10 vol.% HNO_3, d=1.5; 60 vol.% H_3PO_4, d=1.75; 30 vol.% $(CH_3CO)_2O$; treating time: 10 min.; temperature: 20°C; surface of the brass sample: 20 cm^2.) Fig. 11, p.16 illustrates variations in the viscosity of the bath in relation to the quantity of dissolved brass. (Composition of the bath: 15 vol.%HNO_3; 55 vol.% H_3PO_4; 30 vol.% H_2O. Bath temperature: 20°C.) Fig. 12, p.17, shows the variations in electric conductivity of the bath in relation to its H_2O-content. (Composition of the bath: 10 vol.% HNO_3, d=1.48; 60 vol.% H_3PO_4; d=1.75; 30 vol.% $(CH_3COO)_2$. Bath temperature: 25°C.) Fig. 13, p.17, shows variations in the rate of solution of

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Л 63 brass in relation to treatment time and bath composition. Table 2, p. 18, shows the composition of baths used in chemical polishing of copper and its alloys (brass, nickel silver, and bronze. Fig. 14, p.20, shows the rate of solution of steels in relationship to treating time. Fig. 15, p. 24, shows the rate of solution of Zr in relation to the bath temperature. The chemical polishing of Cu and its alloys, and of Ni, Fe and steel, Cd, Zn, Ag, Pb, Mg, Zr, Be, Ge, Ta is discussed briefly but adequately. Bath composition, treating time, and bath temperature are given though no references to the sources are made. There are 15 figures, 2 tables, no references.

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Chemical Polishing of Metals; Stenographic Transcription of a Lecture 344

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"APPROVED FOR RELEASE: 06/06/2000 CIA-RDP86-00513R000103110020-3

18(5) PHASE I BOOK EXPLOITATION SOV/1729

Bakhvalov, Grigoriy Tikhonovich, Candidate of Technical Sciences, and Nikolay Vasil'yevich Rumyantsev, Engineer

Elektroliticheskoye pokrytiye metalla pri reversivnom toke; stenogramma lektsii (Electrolytic Plating of Metals Using Reverse Current; Transcript of a Lecture) Moscow, Moskovskiy dom nauchno-tekhnicheskoy propagandy imeni F.E. Dzherzhinskogo, 1957. 45 p. 5,000 copies printed.

Sponsoring Agency: Obshchestvo po rasprostraneniyu politicheskikh i nauchnykh znaniy RSFSR.

Ed.: B.Ya. Temkina; Tech. Ed.: R.A. Sukhareva.

PURPOSE: These two lectures were intended for technicians, engineers, and scientists in the field of electroplating and electroforming.

COVERAGE: G.T. Bakhvalov explains the theory of the method of reverse current in electroplating. He describes the

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advantages of this method, and the successful results obtained in experimental applications and in practice in Soviet industrial plants. The authors supply data on various electroplating processes as well as the composition of various electrolytes and instructions on proper timing and temperatures of these processes.
N.V. Rumyantsev explains the installation for reverse current electroplating and supplies general layout diagrams and circuit diagrams. The most practical methods of automatic control of this process are indicated. There are 7 references, 6 of which are Soviet and 1 English.

TABLE OF CONTENTS: None given [the book is subdivided as follows:]

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APPROVED FOR RELEASE: 06/06/2000 CIA-RDP86-00513R000103110020-3"

"APPROVED FOR RELEASE: 06/06/2000 CIA-RDP86-00513R000103110020-3

BAKHVALOV, G.T.

Electrolytic deposition of tin under the effect of reverse currents. Izv.vys. ucheb. zav.; tsvet. met. no.3:136-141 '58. (MIRA 11:11)

1. Moskovskiy institut tsvetnykh metallov i zolota. Kafedra elektrokhimii i korrozii.

(Tin plating)

APPROVED FOR RELEASE: 06/06/2000 CIA-RDP86-00513R000103110020-3"

"APPROVED FOR RELEASE: 06/06/2000 CIA-RDP86-00513R000103110020-3

18(0); 25(1) PHASE I BOOK EXPLOITATION SOV/3076

Bakhvalov, Grigoriy Tikhonovich, and Anna Vasil'yevna Turkovskaya

Korroziya i zashchita metallov (Corrosion and Protection of Metals) 2d ed., rev. and enl. Moscow, Metallurgizdat, 1959. 310 p. Errata slip inserted. 11,200 copies printed.

Reviewers: P.I. Terekhov, Candidate of Technical Sciences; I.Ya. Klinov, Doctor of Technical Sciences, Professor; and Ye.M. Zaretskiy, Docent; Ed.: A.N. Chernov; Ed. of Publishing House: O.M. Kamayeva; Tech. Ed.: Ye.B. Vaynshteyn.

PURPOSE: This textbook is intended for students of schools of higher technical education who are not specializing in the study of the corrosion and protection of metals. It may also be useful to technical personnel.

COVERAGE: The book deals with processes of metal corrosion in different media and methods of protecting metals from corrosion. The results of scientific research and industrial developments

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in the field of anticorrosion protection are discussed. The automation of electroplating processes and other processes of decorative and protective treatment is described. Illustrative drawings and diagrams are presented. No personalities are mentioned. There are 61 references, all Soviet.

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"APPROVED FOR RELEASE: 06/06/2000 CIA-RDP86-00513R000103110020-3

S/137/62/000/007/066/072
A160/A101

AUTHOR: Bakhvalov, G. T.

TITLE: The effect of current reversing and other factors on the internal stresses in electrodeposited layers

PERIODICAL: Referativnyy zhurnal, Metallurgiya, no. 7, 1962, 96, abstract 71647 ("Sb. nauchn. tr. In-t tsvetn. met. im. M. I. Kalinina", 1960, 33, 388 - 395)

TEXT: Investigated was the effect of various factors on the internal stresses during the electrodeposition of Cu and Zn in cyanogen electrolytes and during the deposition of Ni in sulfuric acid electrolytes. During the electrodeposition of the metal with reversible current, the ratio of the durations of the cathode and anode processes was assumed to equal, for each period of reversing, 9 : 1 in case the anode process lasted 1.0 sec. The thickness of the obtained layer was 5 μ. Cu-layers, deposited with reversible current, are characterized, regardless of the temperature of the electrolyte, by lesser internal stresses in relation to layers obtained during a one-direction current flow. When increasing the concen-

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tration of the cupric cyanide in the copper-plating electrolyte, the internal stresses in the deposits also increase. The density of the deposits obtained in case $D_c > 1$ a/dm^2 sharply decreases. When increasing the concentration of the free CN in the electrolyte the internal stresses in the layers decrease. Contrary to existing opinion, the internal stresses in Zn layers, obtained from alkali-cyanogen electrolytes, are small. A change of D_c has no effect on the magnitude of the internal stresses in Zn layers. The Ni-layers are characteristic by the fact that, when changing D_c, the internal stresses pass through the maximum. The maximum corresponds to the D_c at which the least porous layers usually develop under the given conditions.

Ye. Layner

[Abstracter's note: Complete translation]

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"APPROVED FOR RELEASE: 06/06/2000 CIA-RDP86-00513R000103110020-3

KOROVIN, Nikolay Vasil'yevich; BAKHVALOV, G.T., doktor tekhn.nauk, retsenzent; ZARETSKIY, Ye.M., kand.tekhn.nauk, retsenzent; ARKHANGEL'SKAYA, M.S., red.izd-va; KARASEV, A.I., tekhn.red.

[New coatings and electrolytes in electroplating] Novye pokrytiia i elektrolity v gal'vanotekhnike. Moskva, Metallurgizdat, 1962. 134 p. (MIRA 15:5)

(Electroplating) (Electrolytes)

APPROVED FOR RELEASE: 06/06/2000 CIA-RDP86-00513R000103110020-3

"APPROVED FOR RELEASE: 06/06/2000 CIA-RDP86-00513R000103110020-3

GINBERG, Aleksandr Mironovich; BAKHVALOV, G.T., doktor tekhn. nauk, retsenzent; GRUYEV, I.D., nauchnyy red.; VASIL'YEVA, N.N., red.; TSAL, R.K., tekhn. red.

[Technology of electroplating and electroforming]Tekhnologiia gal'vanotekhniki. Leningrad, Sudpromgiz, 1962. 279 p. (MIRA 15:10)

(Electroplating) (Electroforming)

APPROVED FOR RELEASE: 06/06/2000 CIA-RDP86-00513R000103110020-3

"APPROVED FOR RELEASE: 06/06/2000 CIA-RDP86-00513R000103110020-3

BAKHVALOV, G.T., prof.

Electrodeposition of metals by alternating current. Zhur. VKHO 8 no.5:516-523 '63. (MIRA 17:1)

APPROVED FOR RELEASE: 06/06/2000 CIA-RDP86-00513R000103110020-3

"APPROVED FOR RELEASE: 06/06/2000 CIA-RDP86-00513R000103110020-3

BAKHVALOV, Grigoriy Tikhonovich

[Protection of metals from corrosion] Zashchita metallov ot korrozii. Moskva, Metallurgiia, 1964. 288 p.
(MIRA 17:9)

APPROVED FOR RELEASE: 06/06/2000 CIA-RDP86-00513R000103110020-3

"APPROVED FOR RELEASE: 06/06/2000 CIA-RDP86-00513R000103110020-3

BAKHVALOV, Grigoriy Tikhonovich; TURKOVSKAYA, Anna Vasil'yevna

[Guide to laboratory work on the corrosion of metals and electroplating] Rukovodstvo k laboratornym rabotam po korrozii metallov i gal'vanostegii. Izd.2., dop. Moskva, Metallurgiia, 1965. 183 p. (MIRA 18:3)

APPROVED FOR RELEASE: 06/06/2000 CIA-RDP86-00513R000103110020-3

"APPROVED FOR RELEASE: 06/06/2000 CIA-RDP86-00513R000103110020-3

ACCESSION NR: AP5017742 UR/0365/65/001/004/0370/0373
621.357.9

AUTHOR: Korlova, G. V.; Bakhvalov, G. T.

[illegible] platinum-rhodium [illegible]

SOURCE: Zashchita metallov, v. 1, [illegible]

TOPIC TAGS: cis-dinitrodiamine electrolyte, platinum containing alloy, rhodium containing alloy, electrochemical [illegible], [illegible] strength, current density, sodium nitrite, coating

ABSTRACT: So far the mechanism of the codeposition of platinum and rhodium from cis-dinitrodiamine electrolyte has remained relatively uninvestigated, so that this codeposition has been [illegible] performed. To fill this gap, the authors investigated the effect of [illegible] concentration of metals in a cis-dinitrodiamine electrolyte [illegible] platinum in the form of $[Pt(NH_3)_4](NO_3)_2$, rhodium in the form [illegible], sodium nitrite and ammonia. The alloy was deposited on copper foil, the electrolysis being performed with the aid of insoluble platinum anodes. Analysis of the electrolyte for

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[illegible]

[illegible] was perf[illegible] [illegible] pH of the hydrate-formation of Pt and Rh. Cathode residue was analyzed by [illegible] photocolorimetric method and [illegible] a potentiometer. The cohesion between the Pt-Rh coating and the base (copper), and also nickel, steel, and bronze, was tested by [illegible] specimens, extrusion, and prolonged (up to 100 hr) heating at 600-700°C, and was found to be adequate. It was established that the Rh content of the alloy increases with increasing Rh concentration in the electrolyte and with increasing current density, decreases with increasing pH and temperature of the electrolyte, [illegible] in the presence [illegible] concentration [illegible] [illegible] increases with the increase [illegible] but falls when pH rises [illegible] electrolyte and the current density increases. The adhesion between the [illegible] coating and the base metal is adequate and the coatings are of satisfactory quality. Orig. art. has 5 figures.

ASSOCIATION: Moskovskiy institut stali i splavov (Moscow Institute of Steel and Alloys)

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L 21544-66 EWT(m)/EWP(t) IJP(c) JD/HW/JG

ACC NR: AP6007909 SOURCE CODE: UR/0149/66/000/001/0148/0152

16
B

AUTHOR: Bakhvalov, G. T.; Layner, V. I.; Maslennikova, A. S.

ORG: Moscow Steel and Alloys Institute. Department of Metal Corrosion (Moskovskiy institut stali i splavov. Kafedra korrozii metallov)

TITLE: Heavy platinum plating of nickel and molybdenum

SOURCE: IVUZ. Tsvetnaya metallurgiya, no. 1, 1966, 148-152

TOPIC TAGS: platinum plating, nickel platinum plating, molybdenum platinum plating

ABSTRACT: Conditions of electroplating nickel and molybdenum with platinum to protect the former against gas corrosion at 600—800C or aggressive chemical media has been studied. The strongest bond between platinum and nickel was obtained when the nickel was thoroughly degreased and when the electro-deposition of platinum was performed with periodic reversal of current. Electrolysis without current reversal yielded coatings which were porous at thicknesses over 30 μ. Coatings obtained with reversed current with a cathodic and anodic period of 10 and 1.5 sec or 5 and 1.5 sec were 28 or 26 μ thick, and had no porosity. Platinum-plated nickel specimens were tested at 650C for 50 hr. Specimens which had a platinum layer at least 28 μ thick retained a strong bond between platinum and nickel. A strong bond between molybdenum

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ACC NR: AP6007909

and platinum could not be achieved. Therefore, molybdenum was first chromium plated, then nickel plated, and then platinum plated. The three-layer plating protected molybdenum against oxidation at temperatures up to 800C for up to 15 hr. Orig. art. has: 2 figures. [AZ]

SUB CODE: 11, 13/ SUBM DATE: 29Jun64/ ORIG REF: 002/ OTH REF: 004/ ATD PRESS: 4219

Card 2/2 BLG

APPROVED FOR RELEASE: 06/06/2000 CIA-RDP86-00513R000103110020-3"

"APPROVED FOR RELEASE: 06/06/2000 CIA-RDP86-00513R000103110020-3

BAKHVALOV, I., direktor; STEPANOV, V., zaveduyushchiy partkabinetom; KYUZIN, S., [illegible]vshchik-rastochnik; KSENOKRATOV, V., inzhener; KOZHEVNIKOVA, M., nachal'nik tokarno-otdelochnogo otdeleniya, laureat Stalinskoy premii; UL'YANOV, M., predsedatel' tsekhkoma sborochnogo tsekha; NAUMOV, A., brigadir komsomol'sko-molodezhnoy brigady; DUDKIN, I., dotsent, direktor; ZHUKOV, P., tokar'.

SMOS

[In a progressive plant; accounts of workers and technical engineering workers of the Moscow Order of the Red Banner of Labor Second State Bearing Plant] Na peredovom zavode; rasskazy rabochikh i inzhenerno-tekhnicheskikh rabotnikov Moskovskogo ordena Trudovogo Krasnogo Znameni 2-go Gosudarstvennogo podshipnikovogo zavoda. [Moskva] Profizdat, 1952. 94 p. (MLRA 6:5)

1. Moskovskiy ordena Trudovogo Krasnogo Znameni vtoroy Gosudarstvennyy podshipnikovyy zavod. 2. Vecherniy mashinostroitel'nyy institut (for Dudkin).
(Efficiency, Industrial)

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BAKIVALOV, I G

EPT
.B93002

REZERVY PROIZVODSTVA I IKH ISPOL'ZOVANIYE. MOSKVA, IZD-VO ZNANIYE, 1952.

21 P. (VSESOYUZNOYE OBSHCHESTVO PO RASPROSTRANENIYU POLITICHESKIKH I NAUCHNYKH ZNANIY. 1952, SERIYA 2, NO. 55)

RUSSIA

APPROVED FOR RELEASE: 06/06/2000 CIA-RDP86-00513R000103110020-3

"APPROVED FOR RELEASE: 06/06/2000 CIA-RDP86-00513R000103110020-3

L 07255-67 EWT(1)

ACC NR: AP6018633 SOURCE CODE: UR/0208/66/006/003/0521/0526

AUTHOR: Bakhvalov, N. S. (Moscow)

ORG: none

15
B

TITLE: The asymptotic behavior for small ε of the solution of the $u_t + (\varphi(u))_x = \varepsilon u_{xx}$ corresponding to the rarefaction wave

SOURCE: Zhurnal vychislitel'noy matematiki i matematicheskoy fiziki, v. 6, no. 3, 1966, 521-526

TOPIC TAGS: second order differential equation, partial differential equation, rarefaction wave, asymptotic solution

ABSTRACT: The main term representing the deviation of the solution of equation

$$v_t + (\varphi(v))_x = \varepsilon v_{xx} \qquad (1)$$

from the solution of equation

$$u_t + (\varphi(u))_x = 0 \qquad (2)$$

has been established. The initial conditions are

$$v(0, x) = u(0, x) = \begin{cases} b_1 \text{ for } x < 0, \\ b_2 \text{ for } x > 0. \end{cases} \qquad (3)$$

and it is assumed that $b_1 < b_2$ and $\phi''(y) \geq a > 0$ for $b_1 \leq y \leq b_2$. This means that

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ACC NR: AP6018633

u(t, x) has the form of a centered rarefaction wave, i.e.,

$$u(t,x) = \begin{cases} b_1 \text{ for } x/t \leq \varphi'(b_1), \\ q(x/t) \text{ for } \varphi'(b_1) \leq x/t \leq \varphi'(b_2), \\ b_2 \text{ for } \varphi'(b_2) \leq x/t, \end{cases} \quad (4)$$

where $\phi'(q(y)) = y$. The calculation assumes also that

$$\sup_{[b_1, b_2]} |\varphi^{(k)}(y)| < \infty, \quad k = 1, 2, 3, 4, 5. \quad (5)$$

Orig. art. has: 51 formulas.

SUB CODE: 12/ SUBM DATE: 11Oct65/ ORIG REF: 001/ OTH REF: 001

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"APPROVED FOR RELEASE: 06/06/2000 CIA-RDP86-00513R000103110020-3

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S/112/59/000/012/079/097
A052/A001

Translation from: Referativnyy zhurnal, Elektrotekhnika, 1959, No. 12, pp. 235-236, # 25538

AUTHOR: Bakhvalov, O.A.

TITLE: Errors of Phase-Pulse Measurements

PERIODICAL: Tr. Moskov. energ. in-ta, 1958, No. 31, pp. 69-92

TEXT: A phase error is considered which arises when a pulse signal with a h-f filling passes through nonidentical resonance amplifiers. As an indicator an ideal phase detector with a square-law characteristic is considered. The analysis is carried out for the case of a constant and a linear changing frequency of h-f filling. Diagrams making possible to determine the magnitude of the phase error from parameters of resonance amplifiers are given.

K.A.S.

Translator's note: This is the full translation of the original Russian abstract.

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"APPROVED FOR RELEASE: 06/06/2000 CIA-RDP86-00513R000103110020-3

Bakhvalov, S.B.

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S/020/60/133/02/02/068
C111/C222

AUTHOR: Bakhvalov, S.B.

TITLE: Some Geometric Properties of Normographic Equations

PERIODICAL: Doklady Akademii nauk SSSR, 1960, Vol. 133, No. 2, pp. 258-260

TEXT: Let $f(u,v)$ be defined in a neighborhood g of (u_0, v_0) and continuous with the derivatives of first and second order ;

$$\left.\frac{\partial f(u,v)}{\partial v}\right|_{\substack{u=u_0\\ v=v_0}} \neq 0 \text{ . Let}$$

$$(3)\quad \begin{vmatrix} A_1(u) & A_2(u) & A_3(u) \\ B_1(v) & B_2(v) & B_3(v) \\ C_1(w) & C_2(w) & C_3(w) \end{vmatrix} \neq 0 \text{ and } (4) \quad \begin{vmatrix} A_1(u) & A_2(u) & A_3(u) \\ B_1(v) & B_2(v) & B_3(v) \\ C_1(f(u,v)) & C_2(f(u,v)) & C_3(f(u,v)) \end{vmatrix} = 0$$

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