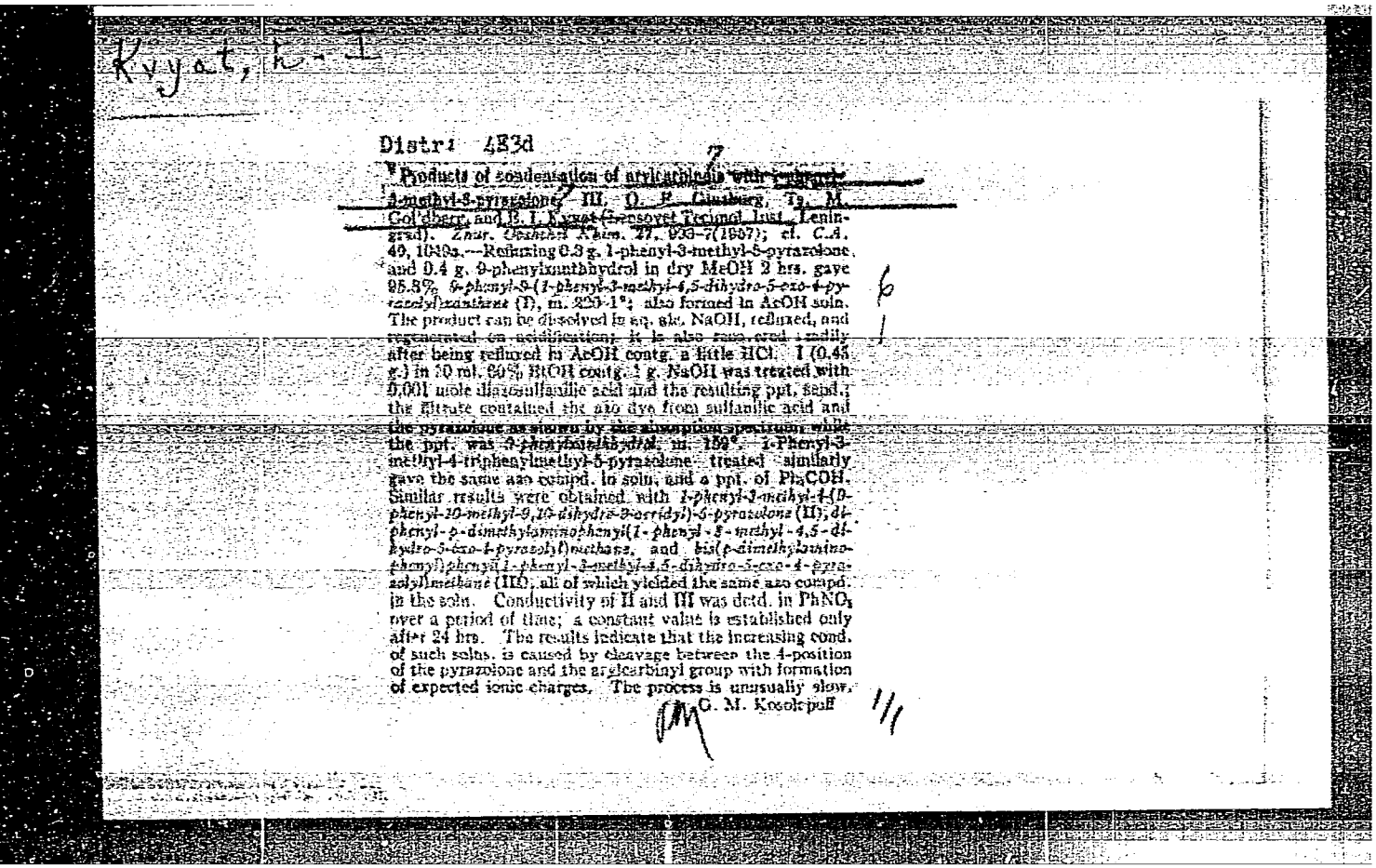

Kyyat, R. - 1

Distr: 4S3d

Products of condensation of arylcarbinols with 1-phenyl-3-methyl-5-pyrazolone. III. O. F. Ginsburg, Ya. M. Goldberg, and R. I. Kyyat (Leningrad Technol. Inst., Leningrad). *Zhur. Obshchei Khim.* 27, 939–7(1957); cf. *C.A.* 49, 10493a.—Refluxing 0.3 g. 1-phenyl-3-methyl-5-pyrazolone and 0.4 g. 9-phenylxanthydrol in dry MeOH 2 hrs. gave 95.5% *9-phenyl-9-(1-phenyl-3-methyl-4,5-dihydro-5-oxo-4-pyrazolyl)xanthene* (I), m. 253–4°; also formed in AcOH soln. The product can be dissolved in aq. alc. NaOH, refluxed, and regenerated on acidification; it is also removed readily after being refluxed in AcOH contg. a little HCl. I (0.45 g.) in 10 ml. 50% EtOH contg. 1 g. NaOH was treated with 0.001 mole diazosulfanilic acid and the resulting ppt. separated; the filtrate contained the azo dye from sulfanilic acid and the pyrazolone as shown by the absorption spectrum; while the ppt. was *9-phenylxanthydrol*, m. 150°. 1-Phenyl-3-methyl-4-triphenylmethyl-5-pyrazolone treated similarly gave the same azo compd. in soln. and a ppt. of $Ph_3COH$. Similar results were obtained with *1-phenyl-3-methyl-4-(9-phenyl-10-methyl-9,10-dihydro-9-acridyl)-5-pyrazolone* (II), *di-phenyl-p-dimethylaminophenyl(1-phenyl-3-methyl-4,5-dihydro-5-oxo-4-pyrazolyl)methane*, and *bis(p-dimethylamino-phenyl)phenyl(1-phenyl-3-methyl-4,5-dihydro-5-oxo-4-pyrazolyl)methane* (III), all of which yielded the same azo compd. in the soln. Conductivity of II and III was detd. in $PhNO_2$ over a period of time; a constant value is established only after 24 hrs. The results indicate that the increasing cond. of such solns. is caused by cleavage between the 4-position of the pyrazolone and the arylcarbinyl group with formation of expected ionic charges. The process is unusually slow.

G. M. Kosolapoff

KVYAT, E.I.

79-1-12/63

AUTHORS: Kvyat, E. I. , Ginzburg, O. F.

TITLE: Concerning the Problem of the Dissociation of Arylcarbinols and Some Other Compounds in Nitrobenzene. I. (K voprosu o dissotsiatsii arilkarbinolov i nekotorykh drugikh soyedineniy v nitrobenzole. I.)

PERIODICAL: Zhurnal Obshchey Khimii, 1958, Vol. 28, Nr 1, pp.51-58(USSR)

ABSTRACT: The authors wanted to determine some physico-chemical quantities which characterize the state of the methyl ethers of aminotriphenylcarbinols (formulae III and IV) and of the so-called amino bases of triphenylmethane dyes (V and VI) in which the central carbon atom is connected with the amino group, dissolved in nitrobenzene. On that occasion the electric conductivity and the optical density of these solutions were investigated. The hydrogen-iodide salts of the compounds (VII) and (VIII) in nitrobenzene solutions are strong electrolytes. On dilution the electric conductivity changes proportional with the dilution, the state of equilibrium immediately setting in. The dissociation of tris-(p-dimethylaminophenyl)

Concerning the Problem of the Dissociation of Arylcarbinols and Some Other Compounds in Nitrobenzene. I.

-carbinol, the methylether of tris-(p-dimethylaminophenyl) -carbinol- α -aniline-tris-(p-dimethylaminophenyl)-methane, bis-(p-dimethylaminophenyl)-phenylcarbinol, the methylether of tris-(p-dimethylaminophenyl)-phenylcarbinol and α-aniline--bis-(p-dimethylaminophenyl)-phenylmethane is intensified on dilution of the solutions, where their stage of dissociation was determined in different dilutions. The compounds of group (VII) dissociate less intensively than those of group (VIII). The equivalent conductivities of the cations of these groups and the anions OH, $OCH_3$ and $NHC_6H_5$ in nitrobenzene solutions were determined. The dissociation constants and the potential isobars in nitrobenzene solutions were determined for the hydrogen-iodide salts of groups (VII) and (VIII), of bis--(p-dimethylaminophenyl)-phenylcarbinol, of the methyl ether of bis-(p-dimethylaminophenyl)-phenylcarbinol and of α-aniline-bis-(p-dimethylaminophenyl)-phenylmethane. There are 8 tables, and 12 references, 5 of which are Slavic.



APPROVED FOR RELEASE: 06/19/2000 CIA-RDP86-00513R000928320007-0"

79-1-12/63

Concerning the Problem of the Dissociation of Arylcarbinols and Some Other Compounds in Nitrobenzene. I.

ASSOCIATION: Leningrad Technological Institute imeni Lensoyet (Leningradskiy tekhnologicheskiy institut im. Lensoveta)

SUBMITTED: December 8, 1956

AVAILABLE: Library of Congress

Card 3/3 1. Methyl esters 2. Nitrobenzene 3. Chemistry-Mathematical analysis

AUTHOR: Kvyat, E. I. SOV/79-28-8-54/66

TITLE: Problems Concerning the Dissociation of the Aryl Carbinols and Several Other Compounds in Nitrobenzene. II (K voprosu o dissotsiatsii arilkarbinolov i nekotorykh drugikh soyedineniy v nitrobenzole. II)

PERIODICAL: Zhurnal obshchey khimii, 1958, Vol. 28, Nr 8, pp. 2260-2262 (USSR).

ABSTRACT: In continuation of previous work (Ref 1) the author investigated the dissociation of the acridine derivatives using the electrical conductivity method. The acridines studied were iodo-9-phenyl-10-methylacridine (Formula I), 9-phenyl-10-methyl-9-oxy-9,10-dihydroacridine (II), and the methyl ether of the latter (III). It was found that all these compounds dissociate in nitrobenzene solution, and that this dissociation gives rise to the 9-phenyl--10-methylacridinium cation (I'), according to the mechanism given in the paper. Table I shows that the electrical conductivity of compound (I) does not change over a year's

Card 1/3

Problems Concerning the Dissociation of the Aryl Carbinols and Several Other Compounds in Nitrobenzene.II

time. The iodo-9-phenyl-10-methylacridinium behaves in nitrobenzene as a strong electrolyte. The electrical conductivity changes nearly in proportion to the dilution. The dissociation occurs immediately. The dissociation of the 9-phenyl-10-methyl-9-oxy- 9,10—dihydroacridine and its methyl ether in nitrobenzene occurs gradually and increases with the dilution. The highest electric equivalent conductivity in nitrobenzene solution was determined for iodo-9-phenyl-10-methylacridinium, 9-phenyl-10-methyl-9-oxy-9,10-dihydroacridine and its methyl ether, and the 9-phenyl-10-methylacridinium cation. The dissociation power for the acridine derivatives in nitrobenzene was calculated at different dilutions, and the dissociation constant of the iodo-9-phenyl-10-methylacridinium was determined. There are 2 tables and 4 references, 3 of which are Soviet.

Card 2/3

Problems Concerning the Dissociation of the Aryl Carbinols and Several Other Compounds in Nitrobenzene.II SOV/79-28-8-54/66

ASSOCIATION: Leningradskiy tekhnologicheskiy institut imeni Lensoveta (Leningrad Technological Institute imeni Lensovet)

SUBMITTED: July 11, 1957.

Card 3/3

KVYAT, E. I.

PHASE I BOOK EXPLOITATION SOV/3557

Kratkiy spravochnik fiziko-khimicheskikh velichin (Short Handbook of Physical and Chemical Values) 3rd ed., enl. Leningrad, Goskhimizdat, 1959. 122 p. 50,000 copies printed.

Compilers: N. M. Baron, E. I. Kvyat, Ye. A. Podgornaya, A. M. Ponomareva, A. A. Ravdel', and Z. N. Timofeyeva; Ed. (Title page): K. P. Mishchenko and A. A. Ravdel'; Ed. (Inside book): N. K. Lobina; Tech. Eds.: S. S. Levin and T. A. Fomkina.

PURPOSE: This book is intended for students at schools of higher education and tekhnikums, aspirants, and teachers.

COVERAGE: This handbook contains tables on the most important physical and chemical values used in physical chemistry laboratory work and for various calculations in physics and chemistry. In this third edition of the handbook important changes have been included in the tables for radioactivity and nuclear reaction, thermodynamic values, empirical data and ratios for calculating thermodynamic values, and photochemical reactions. The remaining tables have been revised and slightly enlarged. The tables for radioactivity, nuclear

Card 1/12

reaction, and protection from radioactive radiation were revised and enlarged under the direction of I. A. Vasil'yev and the editorship of K. A. Petrzhak. The handbook contains a four-place legarithm scale. There are 82 references: 51 Soviet, 28 English, 3 German.

TABLE OF CONTENTS:

MISHCHENKO, K.P.; PONOMAREVA, A.M.; RAVDEL', A.A.; BARON, N.M.; YEGOROV, I.M.; KVYAT, E.I.; VOLOVA, Ye.D.; MARKOVICH, V.G.; SEMENOV, G.I.; MARGOLIS, V.N., SMORODINA, T.P.; YAVORSKIY, I.V. Prinimal uchastiye FRANK-KAMENETSKIY, V.A.; TOMARCHENKO, S.L., red.; LEVIN, S.S., tekhn. red.

[Practical work in physical chemistry] Prakticheskie raboty po fizicheskoi khimii. Izd.2., perer. Leningrad, Gos. nauchno-tekhn. izd-vo khim. lit-ry, 1961. 374 p. (MIRA 15:2)
(Chemistry, Physical and theoretical--Laboratory manuals)

GINZBURG, O.F.; KVYAT, E.I.; IDLIS, G.S.

Dyes with antipyrine rings. Part 8: Rate of conversion of dyes to carbinol compounds. Zhur.ob.khim. 32 no.8:2633-2637 Ag '62. (MIRA 15:9)

1. Leningradskiy tekhnologicheskiy institut imeni Lensoveta.
(Dyes and dyeing) (Antipyrine) (Alcohols)

1. KVYAT, Kh. D.

2. USSR (600)

4. Prospecting - Geophysical Methods - Ishanbazarskoye

7. Report on the experimental electric geophysical exploration of 1944 in the region of the Ishan-Bazarskoye uplift. (Abstract) Izv. Glav. upr. geol.fon. No. 2 1947.

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

KVYAT, K.M.

DERKACH, V.S.; BELAYA, O.S.; BULATSEL', A.M.; KVYAT, K.M.; TURMAN, Ye.P.; KRAMMER, Ye.V.; ZVYAGINTSEVA, A.M.

Effectiveness of combined antibiotic therapy for chronic dysentery. Zhur.mikrobiol.epid.i immun. no.3:54-59 Mr '55. (MLRA 8:7)

1. Iz mikrobiologicheskogo otdela (zav. prof. V.S.Derkach) Khar'kovskogo instituta vaktsin i syvorotok (dir. kandidat biologicheskikh nauk G.P.Cherkas) i profil'nykh yasley Kar'kova.

(DYSENTERY, BACILLARY, therapy,
antibiotics, combined ther.)
(ANTIBIOTICS, therapy,
dysentery, combined ther.)

KVYATKEVICH, I. K

23382 Blizhayshiye Zadachi Mekhanizatsii Kozhevennogo Proizvodstva. Degkaya Prom-st', 1949, No. 6, c. 8-9.

SO: LETOPIS NO. 31, 1949

KVYATKEVICH, I.K.; KAPUSTIN, I.I.: KOBYLKIN, A.F.

Mechanizing the feeding of skins into screw conveyer apparatuses. Leg. prom. [16] no.11:12-15 N '56. (MLRA 10:1)
(Tanning) (Loading and unloading)

MAMATKIN, Boris Aleksandrovich; VOLKOV, V.A., retsenzent; PUSHKIN, P.S., retsenzent; KVIATKEVICH, L.K., retsenzent; MASLOV, I.G., redaktor; DMITRIYEVA, N.I., tekhnicheskiy redaktor.

[Mechanization and assembly-line production of leather goods] Mekhanizatsiia i konveierizatsiia kozhevennogo proizvodstva. Moskva, Gos.nauchno-tekhn.izd-vo M-va legkoi promyshl.SSSR, 1957. 310 p. (MIRA 10:11)

(Leather industry)

KVYATKEVICH, I.K., kandidat tekhnicheskikh nauk; LEVASHOVA, Ye.P., kandidat tekhnicheskikh nauk.

Design and pperation of multisectional apparatuses for leather processing. Leg.prom. 17 no.4:19-21 Ap '57. (MLRA 10:4)
(Tanning)

KVYATKEVICH, I.K., kand.tekhn.nauk

Over-all mechanization and automation of technological processes in leather production. Izv. vys. ucheb. zav.; tekh. leg. prom. no.1:20-31 '58. (MIRA 11:6)

1.Vsesoyuznyy zaochnyy institut tekstil'noy i legkoy promyshlennosti. (Leather industry)

ARBUZOV, S.V.; KVYATKEVICH, I.K.; MIKAELYAN, I.I.

Searching for new methods and means for staking chrome tanned skins. Leg.prom. 18 no.10:41-42 O '58. (MIRA 11:11)
(Tanning)

KVYATKEVICH, I.K., kand.tekhn.nauk; LEVASHOVA, Ye.P., kand.tekhn.nauk

Mechanization and automatization in leather manufacture.
Nauch.-issl. trudy TSNIKP no. 30:107-114 '59. (MIRA 14:5)
(Leather industry--Equipment and supplies)
(Automatic control)

ARBUZOV, S.V.; KVYATKEVICH, I.K.; MAZUROVA, Z.N.

Contact method for drying chrome leather. Kozh.-obuv.prom. 2 no.10:27-28 O '60. (MIRA 13:11)
(Leather--Drying)

KVYATKEVICH, I.K., kand.tekhn.nauk, dotsent; ARBUZOV, S.V., kand.tekhn.nauk;
Prinimali uchastiye: KRASIKOVA, Z.N.; NASYROVA, Sh.I.;
SOLOV'YEV, N.S.; SHILOVA, Z.F.; ZAYTSEVA, L.V.; KOROTKOVA, L.N.;
KONYLKIN, A.F.; GLAMAZDA, V.P.; LOZHKINA, V.T.

New simplified method of leather drying and moisturizing.
Izv.vys.ucheb.zav.; tekh.leg.prom. 3:43-58 '62. (MIRA 15:6)

1. Vsesoyuznyy zaochnyy institut tekstil'noy i legkoy promyshlennosti (for Kvyatkevich). 2. TSentral'nyy nauchno-issledovatel'skiy institut kozhevenno-obuvnoy promyshlennosti (for Arbuzov). Rekomendovana kafedroy mashin i avtomatov Vsesoyuznogo zaochnogo instituta tekstil'noy i legkoy promyshlennosti.

(Leather--Drying)

KVYATKEVICH,

KVYATKEVICHM I.K., kand. tekhn. nauk, dotsent

Assembly-line systems for the manufacture of chrome leather from pigskins, and the potentialities for an increase of production capacity and labor productivity. Izv. vys. ucheb. zav.; tekh. leg. prom. no.2:152-167 '63. (MIRA 16:10)

1. Vsesoyuznyy zaochnyy institut tekstil'noy i legkoy promyshlennosti. Rekomendovana kafedroy proyektirovaniya mashin i avtomatov.

KVYATKEVICH, I.K., kand. tekhn. nauk, dotsent

Production lines for chrome leather made from pigskins and potentials for increasing their operative capacity and the labor productivity. Izv. vys. ucheb. zav.; tekh. leg. prom. no.3:132-142 '63. (MIRA 16:7)

1. Vsesoyuznyy zaochnyy institut tekstil'noy i legkoy promyshlennosti. Rekomendovana kafedroy proyektirovaniya mashin i avtomatov.

(Leather industry)
(Assembly-line methods)

KVYATKEVICH, I.K., kand. tekhn. nauk, dotsent

Semiautomatic lines for the manufacture of chrome leather from pigskins and potentials for increasing production capacity and labor productivity. Izv. vys. ucheb. zav.; tekh. leg. prom. no.4:160-170 '63. (MIRA 16:10)

1. Vsesoyuznyy zaochnyy institut tekstil'noy i legkoy promyshlennosti. Rekomendovana kafedroy proyektirovaniya mashin i avtomatov.

KVYATKEVICH, I.K., kand. tekhn. nauk, dotsent

Semiautomatic production line for the manufacture of leather from pigskins and potentials for increasing capacity and labor productivity. Izv. vys. ucheb. zav.; tekh. leg. prom. no.5: 98-105 '63. (MIRA 16:12)

1. Vsesoyuznyy zaochnyy institut tekstil'noy i legkoy promyshlennosti. Rekomendovana kafedroy proyektirovaniya mashin i avtomatov.

KRUL', Vladislav [Krol, Władysław], doktor med.; KVYATKOVSK, Yevgeniy[Kwiatkowski, Eugeniusz, translator]; TOKHOVICH, Leon [Tochowicz, Leon], nauchn. red.; CHAPUTA, Antoni[Czaputa, Antoni], red.

[Handbook; the departments and institutes of the Medical Academy in Krakow. On the sexcentenary of Jagielle University and the Medical Academy in Krakow. Translated from the Polish] Spravochnik: kafedry i instituty Meditsinskoi Akademii v Krakove. K shestisotletiiu IAgellonskogo Universiteta i Meditsinskoi Akademii v Krakove. Krakow, [Panstwowe wyd-wo naukowe oddzial w Krakowie] 1964. 98 p. (MIRA 18:1)

1. Kafedra i Klinika Vnutrennikh bolezney Meditsinskoy akademii, Krakov (for Krul').

KVYATKOVSKAYA, A. N. Dr. Med. Sci.

Dissertation: "Biochemical Indexes of Metabolism Disorders During Infectious Jaundice in Children." Second Moscow State Medical Inst. imeni I. V. Stalin 10 Nov 47.

SO: Vechernaya Moskva, Nov, 1947 (Project #17836)

KVYATKOVSKAYA, A.N.

Liver function in normal and pathologic states. Pediatriia, Moskva No.3: 3-10 May-June 51. (CIML 21:4)

1. Doctor Medical Sciences. 2. Moscow.

KVYATKOVSKAYA, A.N., prof.; EDEL'MAN, Z.I.

Cortisone dosage in treating rheumatic fever in children on the basis of clinical and biochemical studies. Pediatriia 37 no.8: 56-63 Ag '59. (MIRA 13:1)

1. Iz kliniki detskogo revmatizma Pediatricheskogo instituta Ministerstva zdravookhraneniya RSFSR (direktor - kand.med.nauk A.P. Chernikova).

(RHEUMATIC FEVER, therapy)
(CORTISONE, pharmacology)

KVIATKOVSKAYA, A.N.; KAYNOVA, A.S.; MIKHAYLOVA, I.N.

Disorders of tyrosin metabolism in collagen diseases. Report No.1. Terap.arkh. no.7:58-65 Jl '62. (MIRA 15:8)

1. Iz kliniko-biokhimicheskoy laboratorii (zav. - prof. A.N. Kvyatkovskaya) Instituta revmatizma AMN SSSR (dir. - deystvitel'nyy chlen AMN SSSR prof. A.I. Nesterov).
(COLLAGEN DISEASES) (TYROSIN IN THE BODY)

KUYAT'KOVSKIY, A.N.; ONAYEV, I.A.; TSEPT, A.I.; SHAUKENBAYEVA, Z.T.; GOPLAKO, M.Kh.

Change in the composition of slag and matte as dependent on a partial pressure of sulfurous acid anhydride in the gaseous phase. Izv. AN Kazakh. SSR.Ser.khim. nauk 15 no.2:51-58 Ap-Je '65. (MIRA 18:9)

BOKSHCHANIN, Yuriy Richardovich, kand. tekhn. nauk; KVYATKOVSKAYA, A.P., otv. red.; PAL'MINA, N., tekhn. red.

[Ways of expanding the processing and use of larch wood] Puti rasshireniia perabotki i potrebleniia listvennitsy. Sverdlovskoe obl. upr. nauchno-tekhn. ob-va bumazhnoi i derevoobrabatyvaiushchei promyshl., 1962. 107 p. (MIRA 16:4)

(Larch) (Wood-using industries)

KVYATKOVSKAYA, G.A.

137-1957-12-24609

Translation from: Referativnyy zhurnal, Metallurgiya, 1957, Nr 12, p 237 (USSR)

AUTHORS: Fortunatov, A. V., Kvyatkovskaya, G. A.

TITLE: On the Problem of Electro-polishing of Copper in Phosphoric Acid. Report Nr IV. A Study of Surface Quality of Electro-Polished Copper by the Method of Diffused Reflection of Light (K voprosu ob elektropolirovke medi v fosfornoy kislote. Soobshcheniye IV. Izucheniye kachestva elektropolirovannoy poverkhnosti medi metodom diffuznogo otrazheniya sveta)

PERIODICAL: Uch. zap. Saratovsk. un-t, 1956, Vol 43, pp 39-46

ABSTRACT: Electro-polishing (EP) of Cu of the M-1 grade was conducted under various conditions in $H_3PO_4$ solutions of different concentration. It was established that the Cu ions accumulating in the solution do not affect the quality of EP, and that the concentration of $H_3PO_4$ remains practically unaltered during the process. The process of leveling of the surface occurs during electroglazing (EP accompanied by the liberation of $O_2$), but not during EP. Under constant voltage the quality of the electro-polished surface improves with the duration of the process. The amount of metal collected from the surface being processed is

Card 1/2

On the Problem of Electro-polishing of Copper in Phosphoric Acid

directly proportional to the duration of the EP, providing the voltage remains constant. The Authors introduce the concept of submicrorelief, i.e., the relief of the sides of lines which are the predominantly oriented traces of the finishing operations performed on the surface of the metal. The leveling of the submicrorelief, the process which increases the "gloss" of the surface, occurs during the EP process and is not accompanied by the liberation of $O_2$. An electro-glossed surface is duller but smoother, since the micro-relief is then being leveled off. The intensity of the specular reflection is an indication of the surface gloss, while the fraction of the diffused reflected light is an indication of its smoothness. For the report Nr III see RZhKhim, 1956, Nr 14, 43857.

V.G.

1. Copper-Electrolytic polishing-Test results 2. Electrolytic polishing

Card 2/2

KVYATKOVSKAYA, G.F.; LAPSHIN, V.V.

Effect of the technological parameters of molding under pressure and consecutive thermal treatment on the density of low-pressure polyethylene. Plast.massy no.3:26-29 '64.
(MIRA 17:3)

BR

ACCESSION NR: AP4028549 S/0191/64/000/004/0030/0033

AUTHORS: Kvyatkovskaya, G. F.; Lapshin, V. V.

TITLE: Effect of the technological parameters in the process of molding under pressure and subsequent heat treatment on the mechanical properties of low pressure polyethylene

SOURCE: Plasticheskiye massy*, no. 4, 1964, 30-33

TOPIC TAGS: polyethylene, low pressure polyethylene, molding, pressure molding, heat treatment, mechanical property, annealing, density, density mechanical property relationship, tensile strength, quality control, orientation, yield strength, brittleness, elongation, cooling rate, process parameter

ABSTRACT: The effects of the basic technological parameters of molding and heat treatment on the density of low pressure polyethylene were studied. The relationship between density and the mechanical properties was investigated as a means of evaluating the quality of the molded articles. The tensile strength of low pressure polyethylene depends basically on its degree of orientation, which

Card 1/3

ACCESSION NR: AP4028549

in turn depends on the molding temperature. Tensile strength increases with lowering of the cylinder temperature and on holding under pressure for a limited time. The yield strength of low pressure polyethylene depends on its density. Factors conducive to crystallinity, i.e., molding at high temperatures and annealing at temperatures up to 100C increase yield strength. Strong samples with good deformation properties or brittle samples not capable of further deformation can be obtained by changing the density of low pressure polyethylene (by changing parameters of molding under pressure and heat treatment conditions). The yield strength of low pressure polyethylene is a straight line function of its density which permits the use of density determination for controlling the quality of molded articles. Heat treatment significantly increases the strength of cast articles. However, to prevent brittleness, annealing temperature should be kept below 100C and heating over two hours should be avoided. Uniform cooling is required to attain uniform density. Orig. art. has: 5 figures.

ASSOCIATION: None

Card 2/3

ACCESSION NR: AP4028549

SUBMITTED: 00 DATE ACQ: 28Apr64 ENCL: 00

SUB CODE: MA NR REF SOV: 003 OTHER: 001

Card 3/3

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S/076/60/034/01/006/044
B010/B014

5 (4)

AUTHORS: Komarov, V. A., Chernikova, Ye. A., Kvyatkovskaya, G. R., Piganova, Ye. A. (Leningrad)

TITLE: The Effect of the Admixture of Some Oxides to Aluminum Oxide Upon the Catalytic Properties of the Latter in the Decomposition of Isopropyl Alcohol

PERIODICAL: Zhurnal fizicheskoy khimii, 1960, Vol 34, Nr 1, pp 43 - 45 (USSR)

ABSTRACT: In this paper the authors investigated the effect of various oxide admixtures upon the catalytic properties of aluminum oxide. The admixtures and their concentrations were chosen in such a manner that their addition could effect an extension of the lattice of the basic oxide. The investigation of the oxide preparations as catalysts comprised the determination of the initial reaction temperature at the beginning of gas formation (Ref 3) and the performance of experiments at different temperatures and volume rates. Results are compiled in tables 1 and 2. Herefrom it follows that the initial temperature hardly depends on the presence of admixtures. The decomposition rate of isopropyl alcohol is somewhat influenced by 1 mole% of the admixtures, and is increased according to their character and experi-

Card 1/2

The Effect of the Admixture of Some Oxides to Aluminum Oxide Upon the Catalytic Properties of the Latter in the Decomposition of Isopropyl Alcohol

S/076/60/034/01/006/044
B010/B014

mental temperature. The selectivity of aluminum oxide is not affected by the addition of 1 mole% of the admixtures. Its activity is slightly increased during the catalytic dehydration of isopropyl alcohol. A comparison of table 1 with table 2 shows that there is no close relation between the effect of the admixtures upon the catalytic activity of $Al_2O_3$ and the structure of the respective preparations. A comparison of the dehydration kinetics of isopropyl alcohol on aluminum-oxide preparations with different content of admixtures shows the following: Admixtures increase the activation energy of the reaction and simultaneously increase the factor of the exponential function, or they reduce the activation energy together with the factor of the exponential function. The data obtained in this paper confirm S. Z. Roginskiy's assumptions concerning the modifying action of admixtures (Ref 5). G. M. Zhabrova is also mentioned in this paper. There are 2 tables and 6 references, 4 of which are Soviet.

SUBMITTED: April 23, 1958

Card 2/2

5(1), 18(7) SOV/32-25-4-55/71

AUTHORS: Kvyatkovskaya, G. V., Vyalov, N. N.

TITLE: Attachment to the "Reichert" Microscope for Automatically Shifting Ground Sections (Prisposobleniye k mikroskopu "Reykhert" dlya avtomaticheskogo peredvizheniya shlifov)

PERIODICAL: Zavodskaya Laboratoriya, 1959, Vol 25, Nr 4, p 495 (USSR)

ABSTRACT: An apparatus was developed which renders it possible to shift automatically ground sections under the microscope so that 1200 fields, i.e. a sample surface of 15 × 65 mm may be viewed successively. The apparatus (Fig) is mounted with the stage of the microscope and consists basically of a small device operated by an electric motor. The shifting of the ground section is done by means of two pairs of worm threads transmitting the rotation of the electric motor via a cog wheel. As soon as the section has shifted by 15 mm a lengthwise shift by 0.8 mm follows, etc. The apparatus described has already been used for five years in the metallographic laboratory of the Kuznetsk Metallurgical Kombinat. There is 1 figure.

Card 1/2

Attachment to the "Reichert" Microscope for Automatically Shifting Ground Sections SOV/32-25-4-55/71

ASSOCIATION: Kuznetskiy metallurgicheskiy kombinat (Kuznetsk Metallurgical Kombinat )

Card 2/2

S/133/62/000/012/012/012
A054/A127

AUTHOR: Kvyatkovskaya, G.V., Engineer

TITLE: CXJI (SKhL) grade steel, reduced with an increased amount of titanium

PERIODICAL: Stal', no. 12, 1962, 1121 - 1,122

TEXT: At the Kuznetskiy metallurgicheskiy kombinat (Kuznetsk Metallurgical Combine) tests were carried out to produce SKhL grade steel with a higher titanium content. The conventional (A) and experimental (B) steel compositions were (by %):

| | C | Mn | Si | Cr | Cu | Ti | Ni | P | S |
|---|---|---|---|---|---|---|---|---|---|
| A: | 0.11 | 0.65 | 1.00 | 0.75 | 0.55 | traces. | 0.65 | 0.04 | 0.04 |
| B: | 0.11 | 0.69 | 0.94 | 0.81 | 0.43 | 0.01 | 0.56 | 0.031 | 0.035 |

2 kg of ferrotitanium per 1 ton of liquid steel were added to the conventional grade and 3 kg/ton to the experimental grade. Both steels were rolled into strips 7 - 10 mm thick and subjected to the normal mechanical tests, yielding the following results:

Card 1/3

SKhL grade steel, reduced with an increased ....

| | $\sigma_s$, kg/mm$^2$ | $\sigma_B$, kg/mm$^2$ | $\delta$, % | $H_B$ |
|---|---|---|---|---|
| A | 39.7 | 55.0 | 22.7 | 168 |
| B | 48.5 | 63.8 | 18.4 | 187 |

The above results show that the test steel had a higher hardness and a lower ductility. After annealing for 5 h in the 100 - 700°C range, the mechanical properties of the conventional grade had improved slightly, while those of the test grade were unchanged. Structural investigations with an optical microscope did not reveal any difference between the two grades. However, examination with an electron microscope showed the test steel to have an acicular structure with a well-defined orientation after rolling. In the conventional steel (when heated to 400°C) the intergranular boundaries become thicker, take up the shape of double lines, clearly marking the grains. The test steel structure did not change when annealed at 100 - 500°C. When annealed at 600 and 700°C, the two grades became identical in structure (ferrite and granular pearlite). The acicular structure increases the strength, but decreases the toughness and ductility of the steel. Therefore, in reducing the SKhL grade, not more than 2 kg/ton Ti should be used, to prevent the formation of an acicular structure and its effects.

Card 2/3

SKhL grade steel, reduced with an increased ....

S/133/62/000/012/012/012
A054/A127

There are 2 figures.

ASSOCIATION: Kuznetskiy metallurgicheskiy kombinat (Kuznetsk Metallurgical Combine)

Card 3/3

KVYATKOVSKAYA, G.V., inzh.

Electron microscopy for the investigation of the microstructure of 08kp steel hardened from the rolling heat. Metalloved. i term. obr. met. no.1:53-54 Ja '63. (MIRA 16:2)

1. Kuznetskiy metallurgicheskiy kombinat.
(Steel--Metallography) (Electron microscopy)

KVYATKOVSKAYA, K.K., kand. tekhn. nauk; SEVER YEVA, G.A., inzh.

Study of the clay of Krasnoyarsk Territory for the purpose of using it in the manufacture of sanitary ware. Trudy GIISteklokeramiki no.24:3-18 '64. (MIRA 18:7)

KVYATKOVSKAYA, K.K.; SAVEL'YEVA, S.A.

Developing the optimal technology of manufacturing chamott[illegible] faience for the Kirov "Stroifaians" Plant. Trudy NIIStrokeramiki no.24:48-58 '64. (MIRA 18:7)

KVYATKOVSKAYA, K.K., inzh.

The role of anions in the liquefaction of types of clay. Trudy NIIStroikeramiki no.16:15-29 '60. (MIRA 15:2)
(Anions)
(Clay—Testing)

KVYATKOVSKAYA, K.K.; CHERNOV, V.A., prof, [deceased]

Thinning clays by using electrolytes. Stek. i ker. 18 no.2:29-33 F '61. (MIRA 14:3)
(Clay) (Electrolytes)

FEDOROVA, T. Kh., kand. tekhn nauk; KVYATKOVSKAYA, K. K., inzh.;
SAFRONOVA, Z. N., inzh.

Using the SM-462 conveyor for casting wash basins at the Lobnia Plant. Trudy NIIStroikeramiki no. 19:66-74 '62. (MIRA 17:5)

KVYATKOVSKAYA, K.K., kand. tekhn. nauk

Local raw materials for proposed ceramic combines. Stek. i ker. 22 no.4:17-20 Ap '65. (MIRA 18:5)

1. Gosudarstvennyy nauchno-issledovatel'skiy institut stroitel'noy keramiki.

KVIATKOVSKAYA, K.K., kand.tekhn.nauk

Sanitary and structural ceramics from clays of the Yevsino and Ob deposits. Trudy NIIStroikeramiki no.21:21-31 '63. (MIRA 17:2)

MATVEYEVA, F.A., kand. tekhn. nauk, otv. red.; MELEKHOVA, T.F., nauchn. sotr., zam. otv. red.; KVYATKOVSKAYA, K.K., kand. tekhn. nauk, red.; KOSHLYAK, L.L., kand. tekhn. nauk, red.; PLEKHANOVA, Ye.A., nauchn. sotr., red.; SNITSARENKO, A.A., red.

[Prospects of the development of the ceramic industries of Siberia and of the Far East; materials] Perspektivy razvitiia keramicheskoi promyshlennosti Sibiri i Dal'nego Vostoka; materialy. Novosibirsk, Red.-izd. otdel Sibirskogo otd-niia AN SSSR, 1964. 183 p. (MIRA 17:11)

1. Soveshchaniye po khimii i tekhnologii keramiki i perspektivam razvitiya keramicheskoy promyshlennosti Sibiri i Dal'nego Vostoka. Novosibirsk, 1962. 2. Khimiko-metallurgicheskiy institut Sibirskogo otdeleniya AN SSSR (for Matveyeva). 3. Gosudarstvennyy nauchno-issledovatel'skiy institut stroitel'noy keramiki (for Kvyatkovskaya, Koshlyak).

BELOSTOTSKAYA, N.S., kand. tekhn. nauk; KVYATKOVSKAYA, K.K., kand. tekhn. nauk

Control of sandy plastic clays in the preparation of ceramic bodies. Stek. i ker. 22 no.2:18-21 F '65. (MIRA 18:3)

1. Gosudarstvennyy nauchno-issledovatel'skiy institut stroitel'noy keramiki Gosstroya SSSR.

L 45939-66 EWT(m)/T WE/GD

ACC NR: AT6020586 SOURCE CODE: UR/0000/65/000/000/0029/0035

AUTHOR: Rudakova, N. Ya.; Sheremeta, B. K.; Ostrovskaya, Z. N.; Kvyatkovskaya, T. A.

ORG: UkrNIIgiproneft

TITLE: Comparative dewaxing of diesel distillates of Dolina and Bitki petroleum for the purpose of obtaining low-melting waxes suitable for oxidation to synthetic fatty acids and synthetic fatty alcohols

SOURCE: Neftepererabotka i neftekhimiya (Petroleum refining and petroleum chemistry). Kiev, Naukova dumka, 1965, 29-35

TOPIC TAGS: dewaxing, diesel fuel, fatty acid, acetone, benzene

ABSTRACT: Diesel distillates of Dolina and Bitki petroleum were dewaxed by three methods: a low-temperature process involving the use of selective solvents (mixtures of acetone and benzene and also methyl ethyl ketone and benzene), a low-temperature process without solvents at a cooling temperature down to -20°C, and treatment with crystalline carbamide. The two types of petroleum were found to be very similar in physicochemical properties and content of diesel fractions. The 240-350°C fraction is best suited for producing low-melting paraffin waxes to be oxidized to synthetic fatty alcohols. Dewaxing with selective solvents, aimed at producing low-melting waxes, should be carried out in two stages, i. e., dewaxing of diesel distillates and deoiling of the wax cake. The optimum solvent is a mixture of 80% acetone and 20% benzene.

Card 1/2

L 45939-66
ACC NR: AT6020586

Mixing of dewaxed 240-350°C and 200-240°C fractions produces diesel fuels with solidification points of -26 to 28°C which meet the GOST requirements for DS diesel fuels. It is concluded that the method of low-temperature selective dewaxing of diesel fuels is the most suitable for adoption by Ukrainian petroleum refineries in the immediate future for purposes of petrochemical synthesis and production of cold diesel fuels. Orig. art. has: 5 tables.

SUB CODE: 11/ SUBM DATE: 01Dec65/ ORIG REF: 001

Card 2/2

ACCESSION NR: AP4026849 S/0065/64/000/004/0022/0026

AUTHORS: Rudakova, N.Ya.; Sheremeta, B.K.; Kvyatkovskaya, T.A.; Kolosyuk, R.G.

TITLE: Extension of raw material resources for paraffins based on Ukrainian paraffinic petroleums.

SOURCE: Khimiya i tekhnologiya topliv i masel, no. 4, 1964, 22-26

TOPIC TAGS: paraffinic petroleum, Ukrainian petroleum, paraffin production, low melting paraffin, raw material resource, diesel fuel distillate, vacuum gas oil distillate, selective solvent, extraction, carbamide process, deparaffination

ABSTRACT: Studies were made to confirm the possibility of producting in Ukrainian petroleum processing plants low melting paraffins from distillates from diesel fuels, vacuum gas oil and filtrates, and run-off from the manufacture of paraffins by filter pressing and sweating. The low melting paraffins may be obtained by extraction with selective solvents or with carbamides. Mixtures of benzene with acetone, dichloroethane or methylethylketone were investigated

Card 1/2

ACCESSION NR: AP4026849

as selective solvents; a 40:60 benzene:acetone mixture to be used in a 3:1 ratio for diesel fuel and 5:1 for the filtrates and run-off was found most effective. The products obtained by the two methods have different physical chemical properties due to the more extensive extraction of paraffins with the carbamide process (10.78% separation as compared to 5.77% for selective solvents). Presently 4-4.5% solid paraffins, based on the petroleum, are extracted. The production of lubricating oils based on these deparaffinated fractions can be arranged. Considering the power and technological equipment in Ukrainian petroleum processing plants, deparaffination of the paraffin in the distillates using selective solvents is more realistic and promising than by using the carbamide method. "Experimental work was carried out with the participation of Z.N. Stanitsk, E.A. Germash, S.I. Oleksin." Orig. art. has: 4 tables.

ASSOCIATION: UkrNII

SUBMITTED: 00

DATE ACQ: 28Apr64 ENCL: 00

SUB CODE: FL NR REF SOV: 004 OTHER: 000

Card 2/2

UKLONSKIY, A.S.; GLUSHCHENKO, V.M.; KRAYNOVA, L.P.; KVYATKOVSKAYA, V.V., red.

[Isotope composition of waters in Uzbekistan] Izotopnyi sostav vod Uzbekistana. Tashkent, Izd-vo "Nauka" UzSSE, 1965. 80 p. (MIRA 18:3)

BOGDANOV, O.P., kand. biol. nauk, otv. red.; SPEKTOR, L.Ye., red.; KVYATKOVSKAYA, V.V., red.

[Ecology and economic significance of vertebrates in southern Uzbekistan (the Surkhandar'ya basin)] Ekologiia i khoziaistvennoe znachenie pozvonochnykh zhivotnykh iuga Uzbekistana (bassein Surkhandar'i). Tashkent, Nauka UzSSR, 1964. 157 p. (MIRA 18:12)

1. Akademiya nauk Uzbekskoy SSR, Tashkent. Institut zoologii i parazitologii.

ZAKIROV, K.Z.; MOTKHIN, I.N.; CHEVRENIDI, S.Kh.; GRANITOV, I.I., prof., otv. red.; KVYATKOVSKAYA, V.V., red.

[Soaproot of Turkestan; its biology and the methods of introducing it into culture] Turkestanskii myl'nyi koren'; voprosy biologii i puti vvedeniia v kul'turu. Tashkent, Izd-vo "Nauka" UzSSR, 1965. 107 p. (MIRA 18:10)

BASKAKOV, M.P.; BABAYEV, A.G., doktor geol.-miner. nauk, prof., otv. red.; KVYATKOVSKAYA, V.V., red.

[Analysis of the sedimentary formations in the plain part of Uzbekistan] Fatsial'no-geokhimicheskii i mineralogicheskii analiz osadochnykh formatsii ravninnogo Uzbekistana. Tashkent, Izd-vo "Nauka" Uzbekskoi SSR, 1964. 140 p. (MIRA 17:6)

GAN, E.I.; YAKIMOV, V.V., doktor sel'khoz. nauk, prof., otv. red.; KOSHCHENKO, Z.V., red; KVYATKOVSKAYA, V.V., red.

[Botflies of sheep, goats, and horses in Uzbekistan; anatomy, biology, and measures for control] Ovody melkogo rogatogo skota i loshadey Uzbekistana; anatomiia, biologiia, mery bor'by. Tashkent, Izd-vo "Nauka" UzSSR, 1964. 226 p. (51-1 18:1)

GLADYSHEVSKAYA, T.N.; KVYATKOVSKAYA, Ye.S.; SOBCHUK, B.A.

Quantitative spectrophotometric determination of hemoglobin in Soret's spectrum [with summary in English]. Ukr.biokhim.zhur. 29 no.3:371-374 '57. (MIRA 10:9)

1. Kafedra biokhimii L'vovskogo meditsinskogo gosudarstvennogo institute.
(HEMOGLOBIN--SPECTRA)

KVYATKOVSKAYA, Ya. S.: Master Biol Sci (diss) -- "The effect of xanthopterin on the growth of tumors and on hematopoiesis". L'vov, 1958. 11 pp (Min Agric USSR, L'vov Zoovet Inst), 200 copies (KL, No 6, 1959, 129)

KVYTAKOVSKAYA, Ya.S. [Kviatkovs'ka IA.S.]

Effect of xanthopterin and the by-products of its synthesis on the growth of Crocker's sarcoma and hemopoiesis [with summary in English] Ukr.biokhim.shur. 30 no.4:561-568 '58 (MIRA 11:9)

1. Kafedra biokhimii L'vovskogo gosudarstvennogo meditsinskogo instituta.
(XANTHOPTERIN)
(TUMORS)
(BLOOD--ANALYSIS AND CHEMISTRY)
(PORPHYROPTERIN)

GEL'FMAN, A.Ya.; KVYATKOVSKAYA, Ye.F.; LUZAN, R.G.; SKOROBOGATOV, B.S.

Some electrophysical properties of polyvinyl alcohol and its chelate compounds. Vysokom. soed. 5 no.10:1534-1537 O '63. (MIRA 17:1)

1. Vsesoyuznyy nauchno-issledovatel'skiy institut monokristallov.

KVYATKOVSKAYA, Ye.M.

Clinical aspects of isolated tuberculosis of the thyroid gland. Probl. endokr. gormonoter. 9 no.4:93-98 Jl-Ag'63
(MIRA 17:1)

1. Iz endokrinologicheskogo otdeleniya Klinicheskoy ordena Lenina bol'nitsy imeni S.P. Botkina (glavnyy vrach Yu.G. Antonov, nauchnyy rukovoditel' - zasluzhennyy deyatel' nauki prof. N.A. Shereshevskiy [deceased]).

Kvyatkovskaya, Ye. V.

AID P - 2122

Subject : USSR/Engineering

Card 1/1 Pub. 35 - 11/20

Author : Kvyatkovskaya, Ye. V. and Yecheyistov, Yu. A.

Title : Studying operations of adjustable-blade hydraulic turbines with closed draft tube gate

Periodical: Gidr. stroi., no.3, 30-33, 1955

Abstract : This report is a mathematical analysis of tests made with various hydraulic turbines of the adjustable blade type equipped with a gate at the outlet of the draft tube. Results showed that a fast closing of the gate produces the raising of the rotor, the pressure in the draft tube exceeds the pressure in the spiral chamber, and the rpm in turbines should be determined considering a number of additional factors.

Institution: None

Submitted : No date

KVYATKOVSKAYA, Ye. V.
Min Higher Education USSR. Moscow Order of Labor Red Banner Construction Engineering Inst imeni V. V. Kuybyshev.

KVYATKOVSKAYA, Ye. V. - "The operation of axial hydroturbines in starting and pumping." Min Higher Education USSR. Moscow Order of Labor Red Banner Construction Engineering Inst imeni V, V. Kuybyshev. Moscow, 1956.
(Dissertation for the Degree of Candidate in Technical Sciences.)

SO: Knizhnaya Letopis', No. 13, 1956

112-57-8-16362

Translation from: Referativnyy zhurnal, Elektrotekhnika, 1957, Nr 8, p 49 (USSR)

AUTHOR: Yecheistov, Yu. A., and Kvyatkovskaya, Ye. V.

TITLE: Operation of Kaplan Hydroturbines With Closed High-Speed Shutter in Suction Pipe (Rabota povorotnolopastnykh gidroturbin pri zakrytii bystrodeysvuyushchego zatvora v otsasyvayushchey trube)

PERIODICAL: Tr. Mosk. inzh. str. in-ta (Transactions of the Moscow Civil Engineering Institute), 1956, pp 93-110

ABSTRACT: High-speed shutters in suction pipes are used to prevent runaway of a hydrogenerator set. However, actual experience with these shutters revealed a possibility of unfavorable phenomena such as a considerable pressure rise in the suction pipe and lifting of the turbine rotor caused by the reversal of the axial force on it. In a laboratory of the Chair of Utilization of Hydropower, MISI imeni Kuybyshev, studies of the phenomena occurring when the shutters are closed were conducted (on a model turbine with a 180-mm rotor diameter); an application of a graphical method of calculating turbine operation was tried. The above studies consisted of two stages: (1) operation of the turbine-

Card 1/3

Operation of Kaplan Hydroturbines With Closed High-Speed Shutter in Suction Pipe

generator set under steady-state conditions at various positions of the shutter; (2) dynamic phenomena accompanying the closing of the shutter, with continuous oscillographic recording of the torque, axial force, rpm, pressure in the suction pipe, and shutter travel. In static tests, torque and axial force were determined as functions of rpms at various positions of the shutter. The results of these tests were used for graphical calculation of conditions produced by the closure of the shutter. A juxtaposition was made between the results of the above graphical calculation and the results of later dynamic tests conducted on the same model and with the same initial parameters. The graphical method is based on the application of finite differences by means of breaking up of the process into time elements. In the course of calculations, the head is considered constant and the time characteristic of closing the shutter known. An example of calculations is given for the turbine of 9-meter diameter, 57-Mw capacity with 18-meter head. In those cases where experimental data for various positions of the shutter are unavailable, use of approximate characteristics is recommended. Torque characteristics for a higher speed range are assumed linear; the flow through the opening of the gate is calculated from a formula;

Operation of Kaplan Hydroturbines With Closed High-Speed Shutter in Suction Pipe

head differential at the gate is taken into account. An example of calculations for such a case is also presented. A comparison is also given of the above findings (torque, axial force, drop, maximum rpms) with a graphic calculation according to the authors' recommendations. The discrepancy with the results of graphic calculation is insignificant. A comparison of the results of dynamic tests with those of graphic calculation reveals a fairly good agreement between them, except at the point of extreme values of torque and axial force (deviation about 50%), which could have been caused by the peculiarities of the experimental installation. The above method of calculation will be verified during the coming tests at an actual hydroelectric station. Bibliography: Three items.

B.E.G.

Card 3/3

KVYATKOVSKIY, A.N.; YESIN, O.A.; ABDEYEV, M.A.; KHAN, O.A.

Thermodynamics of the direct and indirect reduction of melted lead oxides. Vest.AN Kazakh.SSR 16 no.2:19-25 F '60. (MIRA 13:6)
(Reduction, Electrolytic) (Lead oxides)

KVYATKOVSKIY, A.N.; YESIN, O.A.; ABDEYEV, M.A. (Ust'kamenogorsk)

Determination of the isobaric potential of the direct reduction of liquid lead oxide by the electromative force method. Zhur. fiz. khim. 34 no. 11:2463-2466 N '60. (MIRA 14:1)

1. Akademiya nauk KazSSR, Altayskiy gorno-metallurgicheskiy institut.
(Lead oxide) (Electromotive force)

S/137/61/000/011/001/123
A060/A101

AUTHORS: Kim, G. V., Ponomarev, V. D., Abdeyev, M. A., Kvyatkovskiy, A. N.

TITLE: Determination of the thermodynamic characteristics of zinc in the zinc-lead system at low concentrations

PERIODICAL: Referativnyy zhurnal, Metallurgiya, no. 11, 1961, 3, abstract 11A21 ("KazSSR Fylym Akad. khabarlary, Izv. AN KazSSR. Ser. metallurgii, obogashcheniya i ogneuporov", 1961, no. 1 (10), 20-25 (Kazakh. summary)

TEXT: The activity of Zn in Zn-Pb alloys was determined by the method of measuring the e.m.f. of concentration circuits of the type: $\overline{Zn}$, electrolyte, $Zn^{2+} \mid Zn + Pb^{+}$. A mixture of chlorides of K, Na, Li, and Zn was used as the electrolite. Alloys with Zn content: 0.01; 0.05; 0.1; 0.3; 0.5% were investigated. It was established that the activity isotherms (between 500 and 800°C) have a sharply expressed positive deviation from the law of ideal mixtures. The entropy of the mixture and the partial enthalpy remain without change between the limits of 500-800°C for one and the same alloy. They depend only upon the alloy composition. The formation of Zn-Pb alloys is accompanied by an endothermic

Card 1/2

Determination of the thermodynamic ...

effect. A linear dependence is demonstrated between the logarithm of partial pressure of Zn vapor (in the Zn-Pb alloy) and the temperature. The positive deviation from the law of ideal solutions and the slight endothermic effect of the mixture favor the distillation separation of Pb-Zn alloys.

T. Kolesnikova

[Abstracter's note: Complete translation]

KVYATKOVSKIY, A.N.; YESIN, O.A.; ABDEYEV, M.A.; KHAN, O.A.

Possibility of reducing lead losses in slags by electrochemical methods. Izv. AN SSSR. Otd. tekh. nauk. Met. i topl. no.2:43-48 Mr-Ap '61. (MIRA 14:4)
(Lead--Electrometallurgy)

KVYATKOVSKIY, A.N.; YESIN, O.A.; SIZOV, Yu.M.; ARDEYEV, M.A.

Reducing copper losses in lead production slags by electrochemical methods. Izv.AN SSSR. Otd.tekh.nauk. Met.i topl. no.4:40-43 Jl-Ag '62. (MIRA 15:8)
(Copper) (Electrocapillary phenomena)

KVYATKOVSKIY, A.N.; SIZOV, Yu.M.; YESIN, O.A.; ABDEYEV, M.A.

Electrochemical extraction of copper from slag with the fuming process equipment of the lead industry. Trudy Alt. GMNII AN Kazakh. SSR 14: 52-58 '63. (MIRA 16:9)
(Lead industry—By-products) (Copper—Electrometallurgy)

KIM, G.V.; KVYATKOVSKIY, A.N.; ABDEYEV, M.A.; GOLOVKO, V.V.

Vacuum treatment of blister copper. Trudy Alt. GMNII AN Kazakh. SSR 14:86-89 '63. (MIRA 16:9)
(Copper--Metallurgy) (Vacuum metallurgy)

FROST, Andrey Vladimirovich, prof. [deceased]. Prinimali uchastiye: BUSHMAKIN, I.N.; VVEDENSKIY, A.A.; GRYAZNOV, V.M.; DEMENT'YEVA, M.I.: DINTSES, A.I.; DOBRONRAVOV, R.K.; ZHARKOVA, V.R.; ZHERKO, A.V.; IPAT'YEV, V.N.; KVYATKOVSKIY, D.A.; KOROBOV, V.V.; MOOR, V.G.; NEMTSOV, M.S.; RAKOVSKIY, A.V.; REMIZ, Ye.K.; RUDKOVSKIY, D.M.; RYSAKOV, M.V.; SEREBRYAKOVA, Ye.K.; STEPUKHOVICH, A.D.; STRIGALEVA, N.V.; TATEVSKIY, V.M.; TILICHEYEV, M.D.; TRIFEL', A.G.: FROST, O.I.; SHILYAYEVA, L.V.; SHCHEKIN, V.V.. DOLGOPOLOV, N.N., sostavitel'; GERASIMOV, Ya.I., otv.red.; SMIRNOVA, I.V., red.; TOPCHIYEVA, K.V.; YASTREBOV, V.V., red.; KONDRASHKOVA, S.F., red. izd-va; LAZAREVA, L.V., tekhn.red.

[Selected scientific works] Izbrannye nauchnye trudy. Moskva, Izd-vo Mosk.univ., 1960. 512 p. (MIRA 13:5)

1. Chlen-korrespondent AN SSSR (for Gerasimov).
(Chemistry, Physical and theoretical)

KVYATKOVSKIY, E. (Gdan'sk, Pol'skaya Narodnaya Respublika)

Possibilities of using molecular compounds of hydrogen sulfide and hydroquinone ("clathrate") in school experiments. Khim. v shkole 17 no.1:83-84 Ja-F '62. (MIRA 15:1)
(Hydroquinone)
(Hydrogen sulfide)

KVYATKOVSKIY, N.V., inzhener (Berdyaush)

For insulated rail joints. Put' i put. khoz. no.3:29 Mr '57.
(MIRA 10:5)

1. Berdyaushskaya distantsiya puti Yuzhno-Ural'skoy dorogi.
(Railroads--Rails)

KVYATKOVSKIY, R.K., inzh.

Eliminating structural defects in AB-8 type of mobile electric power plant. Transp. stroi. 14 no.3:30 Mr '64. (MIRA 17:6)

KVYATKOVSKIY, V., dots.

Planning permanent field stations. Sel'. stroi. 9 no.3:19-20 My-Je '54. (MIRA 13:2)

1. Moskovskiy institut inzhenrov zemleustroystva.
(Farm buildings)

KVYATKOVSKIY, V. A., mashinist

Concerning the lighting of the high-voltage chamber. Elek. i tepl. tiaga 6 no.9:46 S '62. (MIRA 15:10)

1. Depo Chop.

(Diesel locomotives—Repairing)

KVYATKOVSKIY, V. M.

KVYATKOVSKIY, V. M. -- "Investigation of the Joint Performance of a Converter and a Simple Electric Power System under Existing Work Routine." Min Higher Education USSR, Leningrad Polytechnical Institute imeni M. I. Kalinin, Leningrad, 1956. (Dissertation for the Degree of Candidate of Technical Sciences)

SO: Knizhnaya Letopis' No 43, October 1956, Moscow

KVYATKOVSKIY, V. M.

KVYATKOVSKIY, V.M., kand. tekhn. nauk; MEYERSON, Z.I., inzh.

Dry dosing and pneumatic delivery of caustic magnesite. Teploenergetika 4 no.12:57-61 D '57. (MLRA 10:11)

1. Vsesoyuznyy teplotekhnicheskiy institut i Kalininenergo.
(Feed-water purification)

KVYATKOVSKIY, V.M., inzhener; UKHIN, B.N., inzhener.

Device for dry batching and hydraulic feeding of caustic magnesite. Elek. sta. 28 no.5:69-71 My '57. (MLRA 10:6)
(Boilers) (Hoppers)

KVYATKOVSKIY V.

SYROMYATNIKOV, I.A., doktor tekhn. nauk, prof. (Moskva); BUCHIDZE, S.R., kand. tekhn. nauk (Tallin); ORLOVSKIY, A.V., prof.; POSSE, A.V., kand. tekhn. nauk; AKSEL'ROD, M.M., inzh.; GERTSIK, A.K., inzh.; GROYS, Ye.S., inzh.; KVYATKOVSKIY, V.M., inzh.

Outlook for d.c. power transmission in the Soviet Union. Elektrichestvo no.2:72-78 F '58. (MIRA 11:2)

1. Chelyabinskiy politekhnicheskiy institut (for Orlovskiy). 2. Nauchno-issledovatel'skiy institut postoyannogo toka (for Posse, Aksel'rod, Gertsik, Groys, Kvyatkovskiy).
(Electric power distribution--Direct current)

KVYATKOVSKIY, V. M.

96-1-15/31

AUTHORS: Kvyatkovskiy, V.M., Candidate of Technical Sciences and Zhivilova, L.M., Engineer.

TITLE: The pH Value and Conditions of Adding Lime During Magnesia Desilication of Water (Velichina pH i rezhim dozirovaniya izvesti pri magnezial'nom obeskremnivanii vody)

PERIODICAL: Teploenergetika, 1958, Vol.5, No.1, pp. 55 - 60 (USSR)

ABSTRACT: The authors suppose that in the process of magnesia desilication there is partial or total hydration of the magnesium oxide, to form an association of complex molecules. The magnesium hydroxide molecules are dissociated and part of the hydroxyl ions go into solution, causing the formation of a complex positive charged micelle, which is surrounded by a diffused layer of ions.

If this hypothesis is true, the pH value of the medium will greatly influence the efficiency of removal of silicic acid compounds: if the pH is too low, the sorbtion of silica compounds may be hindered by dissolution of magnesium oxide during interaction with bicarbonates in the feedwater: if it is too high, dissociation of magnesium hydroxide may be suppressed. As would be expected from these ideas, it has been found that the process of magnesia de-silication takes place best at pH

Cardl/3 value of about 10; this value is maintained by the use of lime.

The pH Value and Conditions of Adding Lime During Magnesia De-silication of Water.

The process of combined lime and magnesia de-silication has some special features which are discussed, and a chemical equation is given. The reactions that occur lead to dissolution of caustic magnesite whereby the hardness and alkalinity of the water are changed. The quality of the water and the proportion of lime used are related graphically in Fig. 2 to show that if insufficient lime is added the water is enriched with ions of magnesia. If the treated water contains a sufficient OH ion concentration, caustic magnesite is not dissolved and partial precipitation of magnesia is possible.
The water division of the Institute has investigated the best range of pH value at which to carry out magnesia de-silication. Tests under laboratory conditions were conducted with samples of untreated waters, the principal characteristics of which are given in Table 1. The results of the tests for several kinds of water are given in Fig. 3. For all the kinds of water the best de-silication is obtained over a narrow range of pH value, 10.1 to 10.3. The optimum value varies slightly from one water to another.

Card2/3 The results of calculations of magnesium ion concentrations as

functions of pH value are given as dotted lines in Fig. 3. The stability of treated water was studied; to increase its stability the water may in some cases be treated at higher values of pH, up to 10.4. In some cases, however, stable water cannot be obtained without impairing de-silication. Further tests in the laboratory and on full-scale plants showed that in such cases the de-silicated water can be made stable by increasing the dose of coagulent to 1 mg.equiv/litre. As shown in Table 2, this lowers the alkalinity and silica content. The dosage of lime should not be less than the alkalinity of the initial water and not greater than is required to effect lime treatment with the separation of magnesium hydroxide. There are 3 figures, 2 tables and 1 non-Slavic reference.

ASSOCIATION: VTI

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Card 3/3

SOV/96-58-9-13/21

AUTHORS: Kvyatkovskiy, V.M. (Candidate of Technical Science) and Ukhin, B.N. (Engineer)

TITLE: The use of Hydro-elevators to deliver Reagents to the Clarifiers of Water-purification Installations (Primeneniye gidro-elevatorov dlya podachi reagentov v osvetliteli vodoochistitel'nykh ustanovok)

PERIODICAL: Teploenergetika, 1958, Nr 9, pp 64 - 67 (USSR)

ABSTRACT: With the usual arrangement of preliminary water-purification plant, the water distributors and reagent measurement equipment are located on the fourth and third floors of the water-purification building. This makes the structure expensive and operation becomes complicated. The difficulty can be overcome by having the reagent measurement equipment near the ground floor. Measuring equipment that can work against a head of pressure is not yet being produced but operating conditions can be improved, even now. The layout of the preliminary water-treatment plant at a particular power station is then criticised. The original reagent measuring devices were unsatisfactory and were replaced by the device illustrated in Fig 1, which is used to measure the quantity of lime water. This type of measuring device is suitable when the plant is manually

Card 1/3

The Use of Hydro-elevators to deliver Reagents to the Clarifiers of Water-purification Installations

controlled. A number of other changes were made in the plant which made it easier to operate. However, the measurement of lime and coagulent was very laborious because the equipment was on a different floor from the control panels and communications between the two were poor. It was decided to apply hydraulic lifting to the lime and coagulent solutions. For this purpose the measuring equipment and storage tanks were moved to the first floor of the building near to the regular work-place. The construction of the hydro-elevators, illus-trated in Fig 2, permits of quick and easy replacement of working parts. All the working parts are made of stain-less steel; the coagulent solution is ejected by untreated water and the lime solution by clarified water. The new arrangement of the equipment is shown in Fig 3 and is described. The reagent delivery pipes are about 30 m long and each has an air separator. The new equipment has proved very reliable and less power is required for pumping solutions. The hydro-elevators have

The Use of Hydro-elevators to deliver Reagents to the Clarifiers of Water-purification Installations

to be cleaned out once or twice a month and the delivery pipes from the hydro elevators to the air separators require acid cleaning once every three months. These tasks take three and eight man-hours respectively. A possible method of automatic control of lime solution delivery is illustrated schematically in Fig 4. Installations of the type described have now been made at three power stations and their use is recommended.

There are 4 figures, 1 table, no literature references

ASSOCIATIONS: Vsesoyuznyy teplotekhnicheskiy institute (All-Union Thermo-Technical Institute) and Sverdlovenergo

1. Industrial plants--USSR 2. Water--Purification 3. Reagents --Transportation 4. Elevators--Applications

Card 3/3

AUTHOR: Kvyatkovskiy, V.M. (Cand.Tech.Sci.)
Baulina, A.I. (Engineer)

SOV/96-58-10-11/25

TITLE: The de-silication of water by the magnesite sorbent of the VODGEO Institute (Ob obeskremnivanii vody magnezitovym sorbentom instituta VODGEO)

PERIODICAL: Teploenergetika, 1958, No.10. pp. 46-51 (USSR)

ABSTRACT: The method of de-silicating water by filtration through a magnesite sorbent that was suggested by the VODGEO Institute was described in an article in Elektricheskiye Stantsii No.1, 1956. The authors of the method considered it possible to de-silicate the water either raw or after various stages of treatment. They stated that the silica content can be reduced to 0.3 - 0.5 mg/litre at a purification temperature of 40 - 50°C with a filtration rate through the beds of 10 m/hour. The process was tested experimentally at the All-Union Thermo-Technical Institute using magnesite sorbent obtained from VODGEO and also some prepared in the All-Union Thermo-Technical Institute. The tests were made in active pipework in the water treatment installation of two Heat and Electric Power Stations. Data about the quality of the input water and of the filtrate, and also the dates of starting and stopping the tests, are in Table.1. The water filtration conditions are recorded in Table.2. The tests were made in brass tubes of 18 - 22 mm internal diameter. At first

Card 1/4