On the Maximum Possible Sensitivity of a Selective Optico-Acoustic Receiver

higher absorption of infrared radiation; it suffered from the disadvantage of a comparatively large time constant. The heat losses in both chambers were primarily due to thermal conduction and the radiation losses were very small. It is possible to increase the chamber sensitivity quite considerably by increasing its dimensions, filling it with gas at low pressure and using multiple passage of radiation through the chamber. Then absorption of radiation should be of the same order as in one of the chambers described above but the sensitivity should be higher. Moreover, under such conditions the thermal conduction and radiation losses will be of comparable magnitude. This is important since in the case of non-selective receivers the optimum chamber dimensions are obtained when the conduction and the radiation losses are equal; this may also be true for selective receivers. Acknowledgment is made to Professor M.L. Veyngerov for his guidance. There are 7 figures and 22 references, 17 of which are Soviet and 5 English.

SUBMITTED: May 5, 1959

VINOGRADOVA, L. M., Cand of Med Sci -- (diss) "Contents of Lead and Other Microelements in the Blood of Workers Coming in Contact with Lead in Industry," Minsk, 1959, 16 pp (MInsk State Medical Institute) (KL, 5-60, 129)

USSR

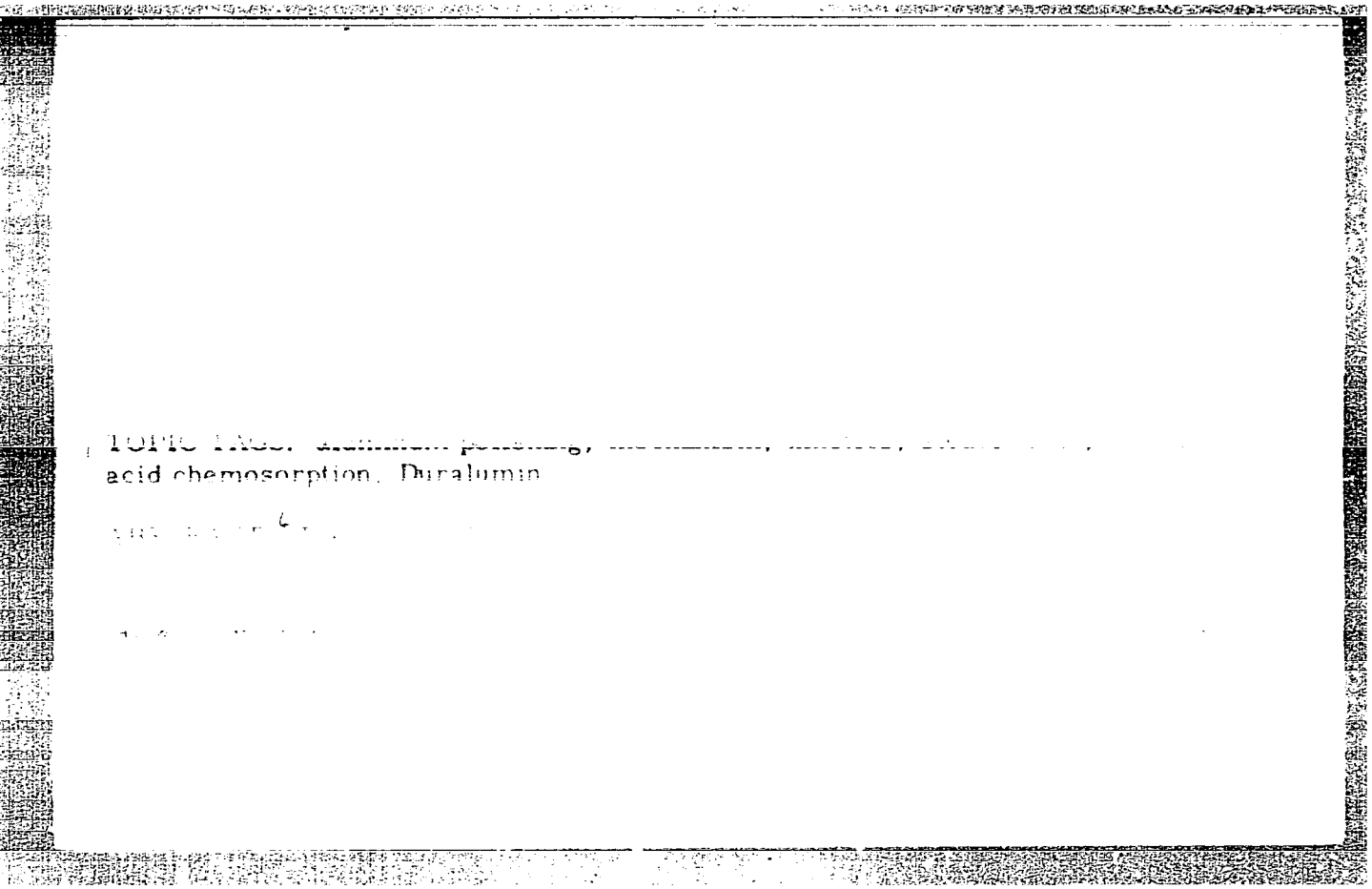
Study of structure and properties of cellulose and its esters. II. The properties of galactan and cellulose and their esters. L. M. Vinogradova, A. A. Konkin, and Z. A. Rogovin (Moscow Textile Inst.). *Zhur. Prikład. Khim.* 27, 1302–6(1954); cf. *C.A.* 49, 4537c.—The influence of the OH group at C atom 4 on the properties of cellulose (I) and galactan (II) of about the same mol. wt. and the same degree of polymerization (100 and 120, resp.) was studied. II was obtained from the pectins of the seeds of *Lupinus albus* by a modified method of Hirst, *et al.* (*C.A.* 42, 1203e). The properties were as follows: I was insol. in H_2O and its heat of swelling in 96% EtOH was 7.0 cal./mol.; II was sol. and its heat of swelling was 10.9 cal./mol., the H_2O absorption at 25° of II was 40–50% higher than that of I; acetylation of II was completed in 0.5 hr., that of I in 5.5 hrs.; the trinitrate of I was completely sol. in Me_2CO, that of II only 4.5% sol. The trinitrates were prepd. at 0° with a mixt. contg. HNO_3 45, H_3PO_4, and P_2O_5 10 wt. %.

I. B.

3I

BRUK, A.I.; VINOGRADOVA, L.M.; VYAKHIREV, D.A.

Theoretical calculation of certain parameters in gas-chromatographic separation. Trudy po khim.i khim.tekh. no.1:99-101 '63. (MIRA 17:12)



acid chemosorption, Duralumin

VESELOVSKIY, V.S., doktor tekhn. nauk, prof., otv. red.; ALEKSEYEVA, N.D.; VINOGRADOVA, L.I.; ORLEANSKAYA, G.L.; TERPOGOSOVA, Ye.A.

[Spontaneous combustion of industrial materials] Samovozgoranie promyshlennykh materialov. Moskva, Izd-vo "Nauka," 1964. 245 p. (MIRA 17:6)

VINOGRADOVA, L.P.; KOVALEVA, A.P. (Leningrad)

Initial results of the certification of physicians in Leningrad.
Sov. zdrav. 21 no.6:41-44 '62. (MIRA 15:5)

1. Iz Leningradskogo gorodskogo otdela zdravookhraneniya.
(LENINGRAD—PHYSICIANS)

VINOGRADOVA, L.P.; RUDENKO, B.A.; ZAV'YALOV, S.I.

β-Dicarbonyl compounds. Report No.17: Interaction of 2-acylcycloalkanones with hydrogen peroxide. Izv.AN SSSR.Otd. khim.nauk no.8:1436-1441 Ag '62. (MIRA 15:8)

1. Institut organicheskoy khimii im. N.D.Zelinskogo AN SSSR.
(Carbonyl compounds) (Hydrogen peroxide)

VESELOVSKIY, V.S., prof., doktor tekhn.nauk; ORLEANSKAYA, G.L., kand.tekhn.-nauk; VINOGRADOVA, L.P.

Kinetics of spontaneous heating of coal lost in underground mines. Nauch. soob. Inst. gor. dela 4:45-53 '60. (MIRA 15:1)
(Combustion, Spontaneous) (Coal mines and mining)

ZAKHARKIN, L.I.; VINOGRADOVA, L.P.; KORNEVA, V.V.; ZAV'YALOV, S.I.

Synthesis of brassylic and 1,12-dodecanedicarboxylic acids. Izv.AN SSSR.Otd.khim.nauk no.7:1309-1311 Jl '62. (MIRA 15:7)

1. Institut elementoorganicheskikh soyedineniy AN SSSR i Institut organicheskoy khimii im. N.D.Zelinskogo AN SSSR.
(Tridecanedioic acid) (Tetracecanedioic acid)

VINOGRADOVA, L.P.; ZAV'YALOV, S.I.

β-Dicarbonyl compounds. Report No.19: Preparation of pimelic acid from 2-formylcyclohexanone. Izv.AN SSSR Otd.khim.nauk no.5:866-870 My '63. (MIRA 16:8)

1. Institut organicheskoy khimii im. N.D.Zelinskogo AN SSSR.
(Pimelic acid) (Cyclohexanone)

VINOGRADOVA, L.P., red.; ARTYUKHIN, V.A., red. izd-va; MODEL', B.I., tekhn. red.

[Catalog of spare parts of IaAZ-214, IaAZ-219, IaAZ-221 and IaAZ-222 motortrucks] Katalog zapasnykh detalei avtomobilei IaAZ-214, IaAZ-219, IaAZ-221 i IaAZ-222. Moskva, Gos.nauchno-tekhn. izd-vo mashinostroit. lit-ry, 1961. 457 p. (MIRA 14:7)

1. Yaroslavskiy avtomobil'nyy zavod, Yaroslavl'.
(Motortrucks—Equipment and supplies)

VINOGRADOVA, L.P.; ZAV'YALOV, S.I.

Reaction between 2-formylcyclohexanone cyclohexylenamine and hydrogen peroxide. Zhur.ob.khim. 33 no.2:704 F '63. (MIRA 16:2)

1. Institut organicheskoy khimii imeni N.D.Zelinskogo AN SSSR.
(Cyclohexanone) (Cyclohexylamine) (Hydrogen peroxide)

VINOGRADOVA, L.P.; ZAV'YALOV, S.I.

Reaction of 2-formylcyclohexanone with hydrogen peroxide. Zhur. ob. khim. 30 no.12:4110 D '60. (MIRA 13:12)

1. Institut organicheskoy khimii Akademii nauk SSSR.
(Cyclohexanecarboxaldehyde) (Hydrogen peroxide)

BARB'YE, M. [Barbier, M.]; VINOGRADOVA, L.P.; ZAV'YALOV, S.I.

Application of the chromatographic plate method to β-dicarbonyl compounds. Izv. AN SSSR. Otd. khim. nauk no. 1:162-163 Ja '61. (MIRA 14:2)

1. Institut fiziko-khimicheskoy biologii, Parizh i Institut organicheskoy khimii im. N.D. Zelinskogo AN SSSR.
(Carbonyl compounds) (Chromatographic analysis)

VINOGRADOVA, L.P.; KOGAN, G.A.; ZAV'YALOV, S.I.

β-Dicarbonyl compounds. Report No.20: Interaction of 2-formylcyclohexanone enamines with hydrogen peroxide. Izv. AN SSSR. Ser. khim. no.6:1054-1060 Je '64. (MIRA 17:11)

1. Institut organicheskoy khimii im. N.D. Zelinskogo AN SSSR.

VINOGRADOVA, L.P.; ZAV'YALOV, S.I.

Conversion of 2-methylaminomethylenecyclohexanone to pimelic acid. Zhur.ob.khim. 32 no.8:2744 Ag '62. (MIRA 15:9)

1. Institut organicheskoy khimii imeni N.D. Zelinskogo AN SSSR.
(Cyclohexanone) (Pimelic acid)

ZAV'YALOV, S.I.; VINOGRADOVA, L.P.

β-Dicarbonyl compounds. Report No.10: Distinct characteristics in the chemical behavior of aliphatic and cyclic β-dicarbonyl compounds. Izv. AN SSSR. Otd.khim.nauk no.9:1640-1645 S '61. (MIRA 14:9)

1. Institut organicheskoy khimii im. N.D.Zelinskogo AN SSSR.
(Carbonyl compounds)

VESELOVSKIY, Vsevolod Stepanovich; ORLEANSKAYA, Galina Leonidovna; TERPOGOSOVA, Yevgeniya Aleksandrovna; VINOGRADOVA, Lidiya Pavlovna; ALEKSEYEVA, Nataliya Dmitriyevna

[Scientific principles of combatting the spontaneous combustion of coal] Nauchnye osnovy bor'by s samovozgoraniem uglei. Moskva, Nauka, 1964. 50 p. (MIRA 18:2)

VINOGRADOVA, L.P.; ZAV'YALOV, S.I.

β-Dicarbonyl compounds. Report No.11: Reaction of 2-acylcyclo-alkanes with hydrogen peroxide. Izv.AN SSSR.Otd.khim.nauk no.11: 2050-2054 N '61. (MIRA 14:11)

1. Institut organicheskoy khimii im. N.D.Zelinskogo AN SSSR.
(Carbonyl compounds) (Hydrogen peroxide)

SOV/137-59-3-7132

Translation from: Referativnyy zhurnal. Metallurgiya, 1959, Nr 3, p 314 (USSR)

AUTHOR: Vinogradova, L. P.

TITLE: Corrosion Inhibitors (Ingibitory korrozii)

PERIODICAL: Byul. tekhn. inform. Sovnarkhoz Kurskogo ekon. adm. r-na, 1958, Nr 4, pp 31-32

ABSTRACT: A brief description is given of acid-etching inhibitors. A more detailed account is made on the use of Na benzoate for protection of steel and iron articles in solutions and antifreezes. The concentration of Na benzoate in distillate recommended for ground steel is 0.01% and for machined steel 1 - 1.5%. In using Na benzoate for impregnating packing materials its minimum concentration in wax paper should be 4.25% and in plain paper 5%. In 5% NaCl solution diethylamine used in a mixture with NH_3 is most effective for protection of oil and gas tanks.

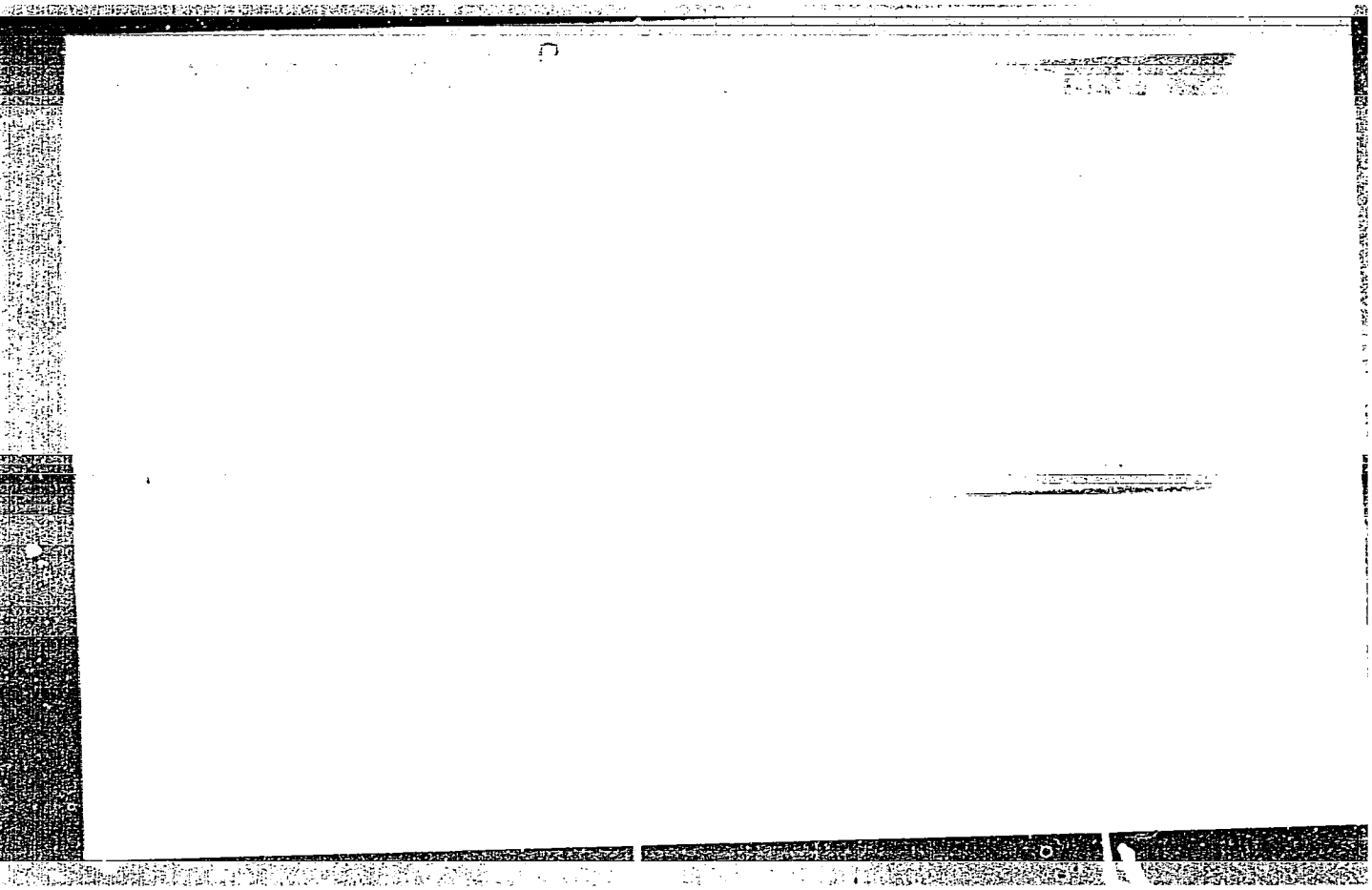
S. G.

Card 1/1

VINOGRADOVA, L. P.

VINOGRADOVA, L. P. --"Basic Factors Causing Spontaneous Combustion of Coal in the Mines of the Prokop'yevsk-Kiselevsk Region of the Kuznetsk Basin." Acad Sci USSR. Inst of Mining. Moscow, 1955. (Dissertation for the Degree of Candidate in Technical Science).

SO Knizhanay letopis'
No 2, 1956



APPROVED FOR RELEASE: 09/01/2001 CIA-RDP86-00513R001859920020-5"

VESELOVSKIY, V.S.; ORLEANSKAYA, G.L.; VINOGRADOVA, L.P.

The theory of spontaneous ignition of coal. Trudy Inst.gor.dela (MLRA 9:3)
no.2:160-165 '55.
(Mine fires) (Combustion, Spontaneous)

VINOGRADOVA, L.P.

Use of [illegible] inhibitors in the pickling of steel [illegible]. Trudy Kursk. ped. in-ta. no.11:125-133 '55. (MLA 14:1)

1. Kafedra khimii [illegible] pedagogicheskogo instituta.
(Steel--[illegible]) (Radioisotopes--Industrial application)

ZAV'YALOV, S.I.; VASIL'YEV, A.F.; VINOGRADOVA, L.P.

Chemistry of dihydroresorcinol. Report No.5: Reactions of cyclic β-dicarbonyl compounds with hydrogen peroxide in an alkaline medium. Izv.AN SSSR.Otd.khim.nauk no.5:849-853 My '61. (MIRA 14:5)

1. Institut organicheskoy khimii im. N.D.Zelinskogo AN SSSR.
(Resorcinol) (Hydrogen peroxide)

VINOGRADOVA, L.P.

Importance of the arterial blood supply of the caput femoris and the femoral neck. Sbor. nauch. trud. GIDUV no. 14:39-42 58. (MIRA 13:10)

1. Kafedra operativnoy khirurgii gosudarstvennogo instituta dlya usovershenstvovaniya vrachy (zav. prof. A.P. Nadein).
(FEMORAL ARTERY)

S/062/60/000/009/020/021
B023/B064

AUTHORS: 1. Reutov, O. A. and Beletskaya, I. P.; 2) Reutov, O. A. and Lovtsova, A. N.; 3. Vinogradova, L. P. and Zav'yalov, S.I.

TITLE: 1. Electrophilic and Radical Substitution of Iodine for the Mercury Atom in Organo-mercury Salts. 2. Introduction of Dichloro Carbene Into the Metal - Haloid Binding. 3. Interaction of 2-Formyl Cycloalkanones With Hydrogen Peroxide

PERIODICAL: Izvestiya Akademii nauk SSSR. Otdeleniye khimicheskikh nauk, 1960, No. 9, pp. 1716-1717

TEXT: 1. In the course of their studies of the mechanism of the electrophilic substitution on the saturated carbon atom, the authors investigated the reaction of the organo-mercury salts: ethyl ester of α-bromo mercury phenyl acetic acid (I) and the benzyl mercury bromide (II) with iodine. The electrophilic substitution of the mercury atom was carried out under the action of iodine in cadmium iodide solution. The reaction took place in aqueous dioxan: $R - HgBr + I_2 \xrightarrow{CdI_2} R - I + HgBr\,I$.

Card 1/4

1. Electrophilic and Radical Substitution of Iodine for the Mercury Atom in Organo-mercury Salts. 2. Introduction of Dichloro Carbene Into the Metal - Haloid Binding. 3. Interaction of 2-Formyl Cycloalkanones With Hydrogen Peroxide

S/062/60/000/009/020/021
B023/B064

In case (I) the reaction proceeds rapidly, in case (II) much slower. The reaction kinetics of (II) with iodine was spectrophotometrically recorded and examined by the titration method. The reaction proceeds rapidly in the presence of CdI_2, i.e., photochemically by the radical mechanism. The reaction of (I) with iodine in the absence of CdI_2 (radical reaction) is of first order with respect to iodine and of zeroth order with respect to the organo-mercury salt. The kinetics was spectrophotometrically recorded. Finally, a very important effect of the structural factor upon the rate of the electrophilic and radical substitution of the iodine atom for the mercury atom on saturated carbon was determined. 2. The authors found that the dichloro carbene forming in the benzene medium under the action of tertiary potassium butylate upon chloroform, is capable of linking itself into the mercury - chlorine binding under the formation of trichloro methyl mercury compounds. Sublimate reacts with dichloro carbene under the formation of trichloro methyl mercury chloride (melting point 180°).

Card 2/4

1. Electrophilic and Radical Substitution of Iodine for the Mercury Atom in Organo-mercury Salts. 2. Introduction of Dichloro Carbene Into the Metal - Haloid Binding. 3. Interaction of 2-Formyl Cycloalkanones With Hydrogen Peroxide

S/062/60/000/009/020/021
B023/B064

Found: Hg 56.83%. Calculated: Hg 56.60%. Phenyl mercury chloride forms trichloro methyl phenyl mercury (melting point 113.5-114°). Trans-β-chloro vinyl mercury chloride forms trichloro methyl-trans-β-chloro vinyl mercury (melting point 80-81°). Found 53.06%. Calculated: 52.72%. The latter compound is converted under the action of chlorine or bromine into trichloro methyl mercury chloride or trichloro methyl mercury bromide, respectively. At present, the authors are investigating the possibility of synthesizing trichloro methyl organometallic compounds of other metals with dichloro carbene. 3. The authors found that under the action of hydrogen peroxide at low temperatures 2-formyl cyclopentanone and 2-formyl cyclohexanone undergo an oxidative splitting and yield adipic and pimelic acid, respectively. This rare reaction of 2-formyl cycloalkanones may be used for the production of a variety of dicarboxylic acids, beginning with the cyclic ketones. There are 2 Soviet references.

Card 3/4

1. Electrophilic and Radical Substitution of Iodine for the Mercury Atom in Organo-mercury Salts. 2. Introduction of Dichloro Carbene Into the Metal - Haloid Binding. 3. Interaction of 2-Formyl Cycloalkanones With Hydrogen Peroxide

S/062/60/000/009/020/021
B023/B064

ASSOCIATION: Moskovskiy gosudarstvennyy universitet im. M.V. Lomonosova (Moscow State University imeni M. V. Lomonosov), (Reutov, O.A., Beletskaya, I. P., Lovtsova, A. N.), Institut organicheskoy khimii im. N. D. Zelinskogo Akademii nauk SSSR (Institute of Organic Chemistry imeni N. D. Zelinskiy of the Academy of Sciences USSR) (Vinogradova, L. P. and Zav'yalov, S.I.)

SUBMITTED: 1. May 23, 1960; 2. June 9, 1960; 3. June 13, 1960

Card 4/4

VINOGRADOVA, L.P.; ZAV'YALOV, S.I.

β-Dicarbonyl compounds. Report No.9: Reaction between β-dicarbonyl compounds and hydrogen peroxide. Izv. AN SSSR. Otd.khim.nauk no.8:1482-1486 Ag '61. (MIRA 14:8)

1. Institut organicheskoy khimii im. N.D. Zelinskogo AN SSSR.
(Carbonyl compounds)
(Hydrogen peroxide)

CHECHURINA, Ye.N.; BENENSON, N.M.; VINOGRADOVA, L.S.

Measurement of the coercive force of materials. Zav. lab. 29 no.6:722-724 '63. (MIRA 16:6)

1. Leningradskiy gosudarstvennyy zavod "Radist" i Vsesoyuznyy nauchno-issledovatel'skiy institut metrologii imeni Mendeleyeva.

(Materials—Magnetic properties)

VINOGRADOVA, L.V.; MAKAROVA, T.S.; RUTMAN, D.S.; POLUBOYARINOV, D.N.; POPIL'SKIY, R.Ya.; SEROVA, G.A.

Production of sinteted ceramic from magnesium oxide. Ogneupory 26 no.3:123-124 '61. (MIRA 14:4)

1. Polol'skiy zavod ogneuporpykh izdeliy (for Vinogradova, Makarova, Rutman). 2. Khimiko-tekhnologicheskiy institut im. Mendeleyeva (for Poluboyarinov, Popil'skiy, Serova).
(Sintering) (Magnesium oxide)

EPA(w)-2/T/EWP(t)/EWP(b) Pab-10/Pf-4/Ps-4/Pt-7/Pu-4 IJP(c)/EWA(d)/EPR/

WB/WH UR/0131/65/000/004/0042/0044

ACCESSION NR: AP5010417

AUTHOR: Luzgin, V.P.; Frolov, A.G.; Vishkarev, A.F.; Yavoyskiy, V.I.; Vinogradova, L.V.; Rutman, D.S.

TITLE: Nature of the conductivity of MgO and alumina

SOURCE: Ogneupory, no. 4, 1965, 42-44

TOPIC TAGS: metal oxide conductivity, magnesium oxide, alumina, high temperature conductivity, sintered magnesia, [illegible] control

ABSTRACT: To determine the nature of the conductivity of the solid oxides MgO and [illegible] MgO and sintered [illegible] was found to be only 3 [illegible] at 1600C and 44 [illegible] the case of MgO, its conductivity [illegible] On the basis of the galvanic [illegible]

Card 1/3

L 51075-65
ACCESSION NR: AP5010417

for determining the oxidizability of liquid metal in the course of melting, discharge,

oxygen content. Orig

ASSOCIATION: [illegible]

SUBMITTED: 00

NO REF SOV: 008

OTHER:

Card 2/3

ACC NR: AT6036925 SOURCE CODE: UR/0000/66/000/000/0021/0039

AUTHORS: Rutman, D. S.; Vinogradova, L. V.; Makarova, T. S.

ORG: none

TITLE: Advancements in the technology of pure oxide ceramics under industrial conditions

SOURCE: Nauchno-tekhnicheskoye obshchestvo chernoy metallurgii. Moskovskoye pravleniye. Vysokoogneupornyye materialy (High refractory materials). Moscow, Izd-vo Metallurgiya, 21-39

TOPIC TAGS: oxide ceramic, refractory oxide, corundum refractory, magnesium oxide, refractory product

ABSTRACT: Fundamentals of the industrial technology of ceramic products made of pure oxides are presented. The developments in aluminum, magnesium, and zirconium oxide product technology, described by D. S. Rutman and L. V. Vinogradova (Trudy NTO ChM, t. 27, 1961, 142--147) and D. S. Rutman and Ye. R. Skuye (Issledovaniye v oblasti glubinnykh protsessov. Izd. AN SSSR, 1962, 228--238), at the Podolsk Plant of Refractory Products are summarized, and further advancements in these fields are reported. Practical production methods for corundum articles with maximum durability and minimal flaws attainable at optimal firing temperature, and methods for chemical

Card 1/2

ACC NR: AT6036925

enrichment and strengthening of water-based castings are described. Possible means for producing zirconium dioxide articles without prior stabilization of the material, conditions for the stabilization process, and the effect of the raw zirconium dioxide quality upon the production technology and properties of the products are discussed. Production of magnesium oxide articles has been investigated for the possibilities of MgO dispersion without subsequent chemical enrichment, and the conditions for molding the products by using aqueous suspensions with minimal hydration are described. Mass production of refractory ceramic products such as crucibles, pipes, pyrometric equipment, etc is explained. Orig. art. has: 7 tables.

SUB CODE: 11/ SUBM DATE: 02Nov65/ ORIG REF: 020/ OTH REF: 002

Card 2/2

ACC NR: AT6036927 SOURCE CODE: UR/0000/66/000/000/0054/0062

AUTHORS: Serova, G. A.; Komissarova, N. M.; Vinogradova, L. V.; Makarova, T. S.

ORG: none

TITLE: Periclase refractories based on technical magnesium oxide

SOURCE: Nauchno-tekhnicheskoye obshchestvo chernoy metallurgii. Moskovskoye pravleniye. Vysokoogneupornyye materialy (Highly refractory materials), Moscow, Izd-vo Metallurgiya, 1966, 54-62

TOPIC TAGS: magnesium oxide, refractory oxide, high temperature ceramic material, refractory product, aluminum oxide

ABSTRACT: Results are reported from the study of production and properties of periclase refractories made of technical 98% MgO in the form of grains of sintered briquets. Sintered briquetting material was crushed, freed of iron impurities, and sieved. A fraction of < 0.5 mm was ground to obtain grain size < 0.06 mm, which was pressed into cylinders 36 mm in diameter and 50 mm high. The specimens were fired at 1730C for 1 or 4 hours. The porosity of the samples was 17—19%; they maintained a constant volume at 1800C and possessed a higher thermal stability than products made of sintered MgO. Introducing $\sim$ 8% of Al_2O_3 increased considerably the thermal stability (two to four times the number of thermal cycles). These

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ACC NR: AT6036927

studies culminated in initiating production (at the Podolsk Plant) of periclase refractories with granular structure and a maximum content of MgO, designed to serve as high-temperature lining materials and melting crucibles. Orig. art. has: 4 tables.

SUB CODE: 11/ SUBM DATE: 02Nov65/ ORIG REF: 013

Card 2/2

ACC NR: AT6036929 SOURCE CODE: UR/0000/66/000/000/0072/0081

AUTHORS: Rutman, D. S.; Vinogradova, L. V.; Makarova, T. S.

ORG: none

TITLE: High-temperature protective ceramic sheathing for thermocouples

SOURCE: Nauchno-tekhnicheskoye obshchestvo chernoy metallurgii. Moskovskoye pravleniye. Vysokoogneupornyye materialy (Highly refractory materials). Moscow, Izd-vo Metallurgiya, 1966, 72-81

TOPIC TAGS: refractory product, refractory oxide, refractory coating, thermocouple

ABSTRACT: This paper is a short survey of the development and research work carried out since 1958 in the Podolsk Refractories Plant (Podol'skiy zavod ogneupornykh izdeliy) with the aim of producing high-temperature protective sheathing for thermocouples. It is desired to manufacture: 1) protective thermocouple ca[illegible] mixture of alumina and metalloceramic additives; 2) protective th[illegible] made from alumina, zirconium dioxide, and magnesium oxide; 3) protective ceramic sheathing for thermoelectric materials made from aluminum and magnesium oxides. The chemical composition of the various ceramic materials and the mechanical stability and electrical resistivity of the ceramic sheathing are shown in graphs and tables (see Fig. 1). On the basis of the experimental results, ceramic high-temperature

Card 1/2

ACC NR: AT6036929

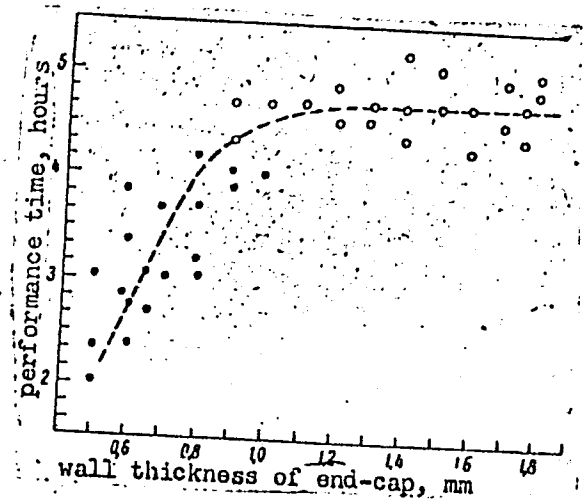

Fig. 1. Dependence of stability of refractory end-caps for thermocouples on the wall thickness of caps. Open circles, end-cap intact; shaded circles, end-cap destroyed

protective thermocouple sheaths are being mass-produced at the Podolsk Refractories Plant. Orig. art. has: 4 tables and 2 graphs.

SUB CODE: 11, 13, 09 SUBM DATE: 02Nov65/ ORIG REF: 006

Card 2/2

ACC NR: AT6036937 SOURCE CODE: UR/0000/66/000/000/0153/0158

AUTHORS: Guzman, I. Ya.; Pankratova, V. S.; Makarova, T. S.; Vinogradova, L. V.; Logacheva, N. S.

ORG: none

TITLE: The influence of some technological parameters on the manufacture and properties of cellular carborundum light-weight refractories

SOURCE: Nauchno-tekhnicheskoye obshchestvo chernoy metallurgii. Moskovskoye pravleniye. Vysokoogneupornyye materialy (Highly refractory materials). Moscow, Izd-vo Metallurgiya, 1966, 153-158

TOPIC TAGS: carborundum, silicon carbide, silicon, refractory product

ABSTRACT: A method for obtaining light-weight, cellular carborundum refractories made of β-SiC, Si_2ON_2, and SiO_2 is described. This investigation supplements the results of I. Ya. Guzman and V. S. Morozova (Ogneupory, 1963, No. 12, 558). The method consists of the adding an intimate mixture of SiC + Si to an aqueous HCl solution and of subsequent firing in carbon-containing media in a CO + N_2 atmosphere. The effects of the silicon composition and grain size of the mixture, pH of suspension, and the firing temperature on the properties of the finished product were investigated. The experimental results are tabulated. It was found that the best results were

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ACC NR: AT6036937

obtained at pH 3--4, a moisture content of suspension of 40%, and an Si content of 40%. The optimum firing temperature was found to be 1300--1400C. On the basis of the above results, a pilot project for the manufacture of refractory bricks has been initiated at the Podolsk Refractories Plant. Orig. art. has: 5 tables.

SUB CODE: 11/ SUBM DATE: 02Nov65/ ORIG REF: 002

Card 2/2

LUZGIN, V.P.; FROLOV, A.G.; VISHKAREV, A.F.; YAVOYSKIY, V.I.; VINOGRADOVA, L.V.; RUTMAN, D.S.

Character of the conductivity of MgO and Al_2O_3. Ogneupory 30 no.4:42-44 '65. (MIRA 18:6)

1. Moskovskiy institut stali i splavov (for Luzgin, Frolov, Vishkarev, Yavoyskiy). 2. Podol'skiy zavod ogneupornykh izdeliy (for Vinogradova, Rutman).

GEVORGYAN, B.A.; KATSMAN, Yu.V.; LIMONOV, G.Ye.; SAMKOV, V.S.; KATKOV, V.P.; VINOGRADOVA, L.V.; MAMYKINA, A.D.; POPOV, G.I.; DOROKHOV, A.A.; FALEYEV, G.A., inzh., retsenzent; BOGATAYA, L.M., red.; ZARSHCHIKOVA, L.N., tekhn. red.

[Press method for meat boning and deveining] Obvalka i zhilovka miasa pressovaniem. [By] B.A.Gevorgian i dr. Moskva, Pishchepromizdat, 1963. 31 p. (MIRA 16:8)
(Meat industry--Equipment and supplies) (Sausages)

24739

21.2110
15.2230

S/131/61/000/007/001/003
B105/B206

AUTHORS: Rutman, D.S., Vinogradova, L.V., Makarova, T.S., Kalliga, G.P., Kolbasova, V.A., Shal'nov, Ye.I.

TITLE: Improvement of the technology of zirconium products for casting from aqueous suspensions of the pre-stabilizei ZrO_2

PERIODICAL: Ogneupory, no. 7, 1961, 301-302

TEXT: Experiments are described here which were conducted at the Podol'skiy zavod ogneupornykh izdeliy (Podol'sk Plant of Refractory Products) to investigate the possibility of avoiding the previous grinding of zirconium dioxide and, thus, shorten the technology of zirconium products. Industrial zirconium dioxide with a content of 97.5% $ZrO_2 + HfO_2$ and chemically pure calcium carbonate were used for the experiment. A mixture of 93% ZrO_2 and 7% CaO was prepared. Briquets were pressed from it at a pressure of 500 kg/cm^2 and burned at temperatures of 1600°C and 1700°C respectively. The microscopic and X-ray structural analysis showed a stabilization degree of 93-95% of ZrO_2 in the briquets. The effect of the pH of the

Card 1/3

Improvement of the technology ...

medium on the viscosity index of the crude zirconium mass was also tested. The particles are characterized by high values of the ζ potential, which cause the stability of the crude mass. With the parameters mentioned, an experimental batch of crucibles with a content up to 300 cm^3 was cast. The characteristic values of the blanks and of the products burned for 9 hr at 1600°C are compared in the table with the characteristic values for previous grinding of ZrO_2 and rinsing before stabilization. The duration of the production cycle is shortened by about ten days and grinding and rinsing of ZrO_2 previous to preparation for stabilization are omitted. The use of stabilized ZrO_2 without previous grinding showed that the sintering ability of the material was slightly improved. There are 1 figure and 1 table.

ASSOCIATION: Podol'skiy zavod ogneupornykh izdeliy (Podol'sk Plant of Refractory Products) D.S. Rutman, L.V. Vinogradova, T.S. Makarova; Khimiko-tekhnologicheskiy institut im. Mendeleyeva (Chemical-technological Institute imeni Mendeleyev) G.P. Kalliga, V.A. Kolbasova, Ye.I. Shal'nov.

24739
S/131/61/000/007/001/003
B105/B206

Improvement of the technology

Legend to Table 1: 1) Preparation method for zirconium products, 2) weight of unit volume of the blanks, g/cm^3; 3) burned products; 4) weight of unit volume, g/cm^3; 5) water absorption, %; 6) shrinkage, %; a) casting from stabilized ZrO_2 without previous grinding of the initial materials; b) casting from stabilized ZrO_2 (usual process)

Table

1 Метод изготовления циркониевых изделий	2 Объемный вес сырца, г/см³	3 Обожженные изделия: 4 Объемный вес, г/см³	5 водопоглощение, %	6 усадка, %
а Литье из стабилизированной ZrO_2 без предварительного помола исходных материалов	3,1	5,3	0,3	16,0
б Литье из стабилизированной ZrO_2 (обычная технология)	2,8—3,1*	5,4	0,0	17—20

Card 3/3

IVANOV, B.V. [deceased]; RUTMAN, D.S.; VINOGRADOVA, L.V.

Role of quartz in kaolin refractory products. Trudy IGEM 42:51-57 '60. (MIRA 13:7)
(Quartz) (Kaolin) (Refractory materials)

89691
S/131/61/000/003/001/001
B105/B206

15.2000 1454, 1153, 1155

AUTHORS: Vinogradova, L. V., Makarova, T. S., Rutman, D. S., Poluboyarinov, D. N., Popil'skiy, R. Ya., Serova, G. A.

TITLE: Manufacture of sintered ceramics from magnesium oxide

PERIODICAL: Ogneupory, no. 3, 1961, 123-124

TEXT: This article describes the process of manufacturing thin-walled, sintered crucibles and shield tubes for thermocouples from magnesium oxide. This process was elaborated at the Podol'skiy zavod ogneupornykh izdeliy (Podol'sk Plant for Refractories) jointly with the kafedra keramiki (Department of Ceramics) of the Khimiko-tekhnologicheskiy institut im. Mendeleyeva (Institute of Chemical Technology imeni Mendeleyev). The crucibles are intended for metal smelting. The initial material was commercial magnesium oxide with a content of ~98% MgO, the preparation of which (firing temperature and mode of crushing) was worked out according to previous studies. Commercial magnesium in powdery form is first fired in molds at 1300°C and then finely ground in a vibrating mill by means of steel balls. The powder was plasticized by

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means of paraffin with an addition of oleic acid. The shaping of crucibles and shield tubes for thermocouples from magnesium oxide by the "freezing-on" method permits the manufacture of products with a wall thickness of 5-0.3 mm. After partial burning out of the paraffin at a temperature of about 200°C, the products were fired in a regenerative medium (H_2) at 1700°C in an electric furnace with a molybdenum coil. The firing time was 5 to 6 hr (2 hr in the high-temperature zone). After sintering, the average weight by volume of the products was 3.36 to 3.38 g/cm^3, and their apparent porosity 0 to 0.4%; the white products showed good translucence. Pyrometric ceramics produced from magnesium oxide in the form of shield tubes for thermocouples and capillary tubes, permits temperature measurement up to more than 2000°C. The relatively simple process permits the manufacture of products for use at high temperatures, the waste being very small. There are 1 figure and 1 Soviet-bloc reference.

89691

Manufacture of sintered ceramics ... S/131/61/000/003/001/001
B105/B206

ASSOCIATION: Podol'skiy zavod ogneupornykh izdeliy (Podol'sk Plant for Refractories) Vinogradova, L. V., Makarova, T. S., Rutman, D. S.; Khimiko-tekhnologicheskiy institut im. Mendeleyeva (Institute of Chemical Technology imeni Mendeleyev) Poluboyarinov, D. N., Popil'skiy, R. Ya., Serova, G. A.

X

Card 3/3

S/661/61/000/006/078/081
D287/D302

AUTHORS: Korolev, A. Ya. and Vinogradova, L. V., Moscow

TITLE: Investigations into imparting hydrophobic properties to silicate glasses

SOURCE: Khimiya i prakticheskoye primeneniye kremneorganicheskikh soyedineniy; trudy konferentsii, no. 6: Doklady, diskussii, resheniye. II Vses. konfer. po khimii i prakt. prim. kremneorg. soyed., Len. 1958. Leningrad, Izd-vo AN SSSR, 1961, 338-341

TEXT: These investigations were carried out within the framework of developing special chemical compounds for improving the transparency of airplane windscreens when flying in rainy weather. Three types of hydrophobing agents were tested: Methyl trichlorosilane, dimethyl dichlorosilane and trimethyl chlorosilane; the last-named compound was most effective, methyl trichlorosilane was least satisfactory. Two types of interaction were observed on treating glass with dimethyl dichlorosilane: Formation of a chemically bound coat-

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Investigations into imparting ...

ing and formation of polymers which can be washed off from the surface. It was found that the type of organosilicon compound influenced only to a slight degree the wetting angle of the glass, but that the hydrophobic properties changed considerably during prolonged impact of H_2O. During uninterrupted, prolonged rain the hydrophobic properties of the glass disappeared. It was discovered that hydrophilic laminae are formed on the surface of the organosilicon coatings. The hydrophobic characteristics were restored by wiping the glass with a wetted cotton wool swab. The different characteristics of the individual organosilicon compounds are discussed. However, none of the compounds was entirely satisfactory as they did not retain their hydrophobic characteristics after 12 hours rain. Further experiments led to the use of 2-layer coatings consisting of an organosilicon base layer and an organic top coating of ceresine, polyethylene, polyisobutylene and petroleum wax. This type of coating increased the protective properties by 100%. The author stated, in reply to a question during the discussion, by N. N. Suykovskaya (GOI, Leningrad), that the laboratory experiments had been

Car

Card 2/3

RUTMAN, D.S.; VINOGRADOVA, L.V.; KRASOTIN, K.A.; MIN'KOV, D.B.

Heat-resistant, high-alumina ladle brick and stopper tubes made of mullite-corundum. Ogneupory 22 no.12:546-549 '57. (MIRA 12:3)

1. Podol'skiy zavod ogneuporov.
(Refractory materials)

RUTMAN, D.S.; POLUBOYARINOV, D.N.; VINOGRADOVA, L.V.; POPIL'SKIY, R.Ya.; MIN'KOV, D.V.

Production of corundum refractories at the Shcherbinka plant. Ogneupory 19 no.4:237-238 '54. (MIRA 11:9)
(Shcherbinka (Moscow Province)-Refractories industry)
(Corundum)

VINOGRADOVA, L. V.

AUTHORS: Rutman, D.S., Vinogradova, L.V., Krasotin, K.A., Min'kov, D.B. 131-12-4/9

TITLE: Refractories in the Hands of the User (Ogneupory u potrebitelya). Refractory Highly Aluminous Bricks for Ladles and Arresting Tubes Made of a Substance Composed of Mullite and Corundum (Termostoykiy vysokoglinozemistyy kovshevoy kirpich i stopornyye trubki mullito-korundovogo sostava)

PERIODICAL: Ogneupory, 1957, Nr 12, pp. 546-549 (USSR)

ABSTRACT: According to a working method developed sets of ladle bricks and arresting tubes manufactured by the industry were tested in practice. The durability of these bricks was found to be 50% greater than that of ordinary fireclay bricks. Furthermore, the manufacture and practical testing of a set of refractory highly aluminous ladle bricks made of a mullite-corundum composition is described in detail, in which steel of different melts was cast. In conclusion it is stated that:

1.) The ladles lined by highly aluminous bricks are able to stand 18 melts instead of the average of 11.8 in the case of ordinary fireclay bricks, and that with these bricks no cracking or

Card 1/2

Refractories in the Hands of the User. Refractory Highly Aluminous Bricks for Ladles and Arresting Tubes Made of a Substance Composed of Mullite and Corundum

shearing damage was found to occur.
2.) These bricks are highly resistant against slag.
Some industrially produced sets of arresting tubes were also manufactured, which is described in detail. They were tested in practice under the most difficult conditions (vacuum casting) and showed highly satisfactory results. There are 5 Slavic references.

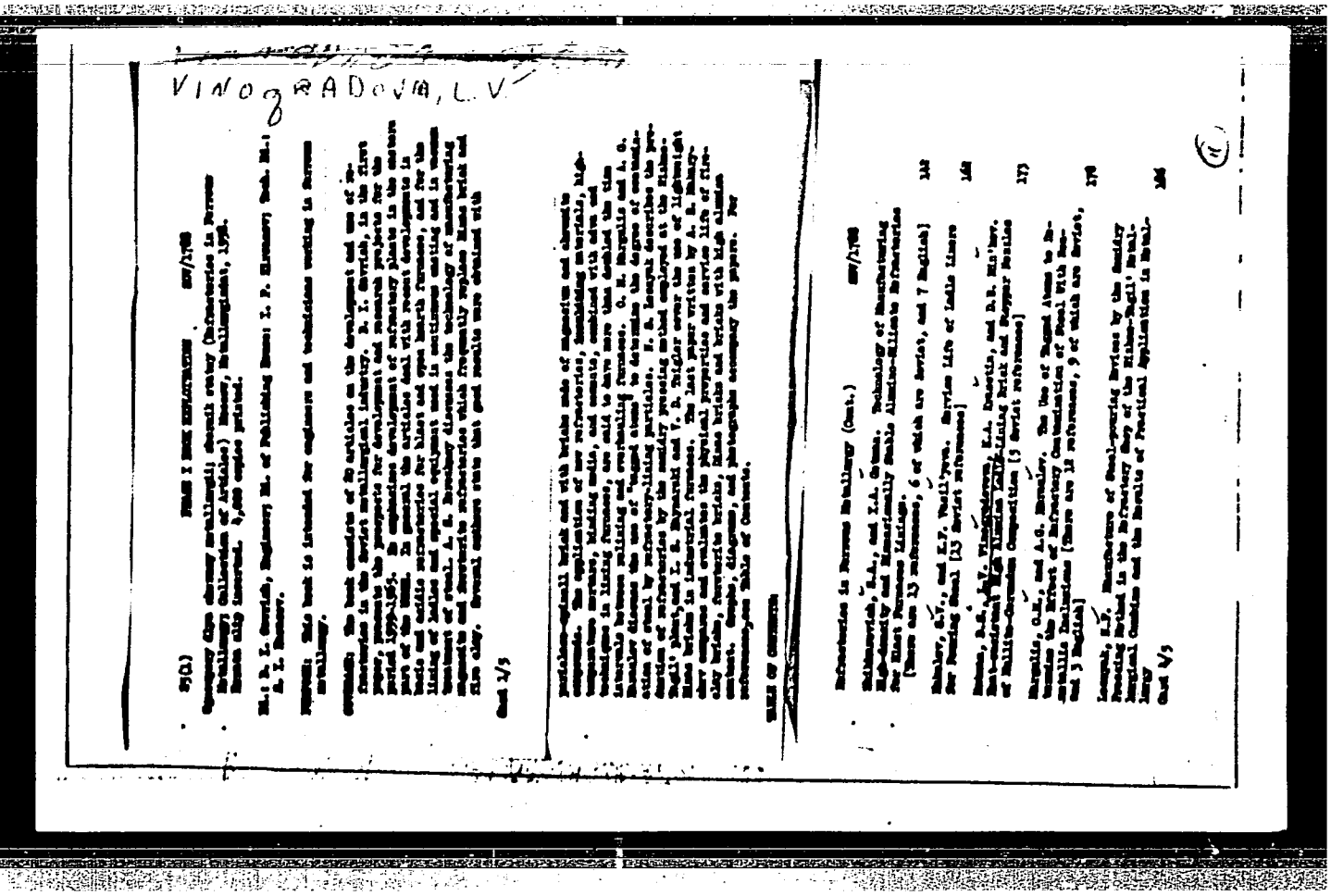
ASSOCIATION: Podol'sk Plant for Refractories (Podol'skiy zavod ogneuporov)

AVAILABLE: Library of Congress

Card 2/2

RUTMAN, D.S., inzh.; VINOGRADOVA, L.V.

Improving the quality of high-alumina refractories. Ogneupory 19 no. 3:105-113 '54. (MIRA 11:8)
(Refractory materials--Quality control)
(Alumina)



VINOGRADOVA, L.V.

VINOGRADOVA, L.V.

AUTHORS: Rutman, M.Sh., Min'kov, D.B., Vinogradova, L.V. 131-3-4/16

TITLE: The Pressing of Glass Beams on a Hydraulic Press (Pressovaniye steklobrus'yev na gidravlicheskom presse)

PERIODICAL: Ogneupory, 1958, Vol 23, Nr 3, pp 106-108 (USSR)

ABSTRACT: A hydraulic press was installed at the Podol'sk Plant, on which beams of kaolin- and highly aluminous fire clay have been pressed for some time. The press concerned is a vertical press with four columns and a pressure of 900 t, diameter of plunger: 625 mm, and a stroke of 985 mm. The liquid is pressed into the cylinder by means of a 3-plunger pump, the output being 25 l per minute, and maximum pressure 300 atmospheres excess pressure. The mass is weighed before pressing and is conveyed into the mold by means of a device which was designed by P.V. Shabanov and N.M.Semenov, calculating engineers of the above plant, and which is described in short by the authors. Before introducing the substance, the mold is coated with an emulsion consisting of 90% petroleum, 5% stearin and 5% soap. Pressing is carried out in three stages: at 40, 120 - 160 and 260-280 atmospheres excess pressure, the maximum specific

Card 1/2

The Pressing of Glass Beams on a Hydraulic Press

pressure amounting to 370-400 kg/cm^2. The products are ejected from the mold by a special device, while the process of removing them from the press and placing them upon the lorries is carried out by means of a lifting device (fig. 1), which was developed and produced by P.F. Podshivalov, calculating engineer of the above plant, and which is described in detail. The kaolin- and highly aluminous fire clay for glass beams is obtained by burning briquettes from revolving furnaces. The characteristic of the mass may be seen from table 1. The output of the press amounts to 38 beams per shift ($\sim$5 t), the press being operated by 2 men. By pressing it was possible to improve the quality of the beams, which is shown by fig.2 and table 2, where a comparison is drawn with a ramming method. The physical values of the burned beams are shown in table 3. There are 2 figures and 3 tables.

ASSOCIATION: Podol'sk Plant for Refractories (Podol'skiy zavod ogneupornykh izdeliy)

AVAILABLE: Library of Congress

Card 2/2 1. Hydraulic presses-Design 2. Hydraulic presses-USSR
3. Refractory materials-Processing

15(2)
AUTHORS: Margulis, O. M., Romanchenko, K. G., Rutman, D. S., Vinogradova, L. V. SOV/131-59-4-4/16

TITLE: The Terminal Pieces of Immersion Thermocouples (Nakonechniki dlya termopar pogruzheniya)

PERIODICAL: Ogneupory, 1959, Nr 4, pp 157-161 (USSR)

ABSTRACT: Immersion thermocouples with terminal pieces of quartz can be used only one time up to a temperature of 1600°. The platinum - platinum-rhodium thermocouples are further rapidly worn out. In the Podol'sk plant of refractories experiments with terminal pieces of technical alumina are carried out, the technology devised by UNIIO serving as a basis (Fig 1). A set of 500 terminal pieces was tested in the works "Elektrostal'" by representatives of manufacturers and consumers, of the Ukrainian and All-Union Institutes of Refractories, and the Tsentral'naya laboratoriya avtomatiki Ministerstva stroitel'stva RSFSR (Central Laboratory of Automation of the Ministry of Building of the RSFSR). The laboratory of the Podol'sk works performed petrographical investigations in which N. V. Gul'ko assisted (Ref 1, Figs 2 and 3). The influence of burning and of an addition of 1% TiO_2 was investigated. The results are

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given in the table and the typical cuts in figure 4. Conclusions: The increased thermal stability of terminal pieces of technical alumina is guaranteed by the presence of two corundum crystal types: fine isometric and coarse prismatic.

Further the technology of production of this corundum crystallization is given and recommended to all works producing refractories in order to supply metallurgical plants with suitable terminal pieces for thermocouples. There are 4 figures, 1 table, and 5 references, 4 of which are Soviet.

ASSOCIATION: Ukrainskiy nauchno-issledovatel'skiy institut ogneuporov (Ukrainian Scientific Research Institute of Refractories), Podol'skiy zavod ogneupornykh izdeliy (Podol'skiy Works for Refractories)

VINOGRADOVA, L.V.; RUTMAN, D.S.; POLUBOYARINOV, D.N.; POPIL'SKIY, R.Ya.

Experimental products production of heat resistant mullite-corundum at the Podolsk Refractories Plant. Ogneupory 21 no.4:178-179 '56. (MLRA 9:8)

1. Podol'skiy zavod (for Vinogradova, Popil'skiy); 2. Moskovskiy khimiko-tekhnologicheskiy institut imeni D.I. Mendeleyeva (for Poluboyarinov, Popil'skiy).

(Podolsk--Refractory materials)

VINOGRADOVA, L. V.

Refractory Materials

Production of Steel pouring equipment from a mixture of grogs - D. S. Rutman and others.

Ogneupary 17 No. 1, 1952
Sherbinskiy Zavod Ogneuporov

SO: Monthly List of Russian Accessions, Library of Congress, _____ 1953, Uncl.

RUTMAN, D. S.; [illegible]

Refractory Materials

Production of Steel [illegible]ring equipment from a mixture of frogs - D. S. Rutman and others. Ogneupory 17, No. 1, 1952.
Sherbinskiy Zavod Ogneuporov

SO: Monthly List of Russian Accessions, Library of Congress, [illegible] 1952 1953, Uncl.

GITTSIGRAT, Ernest Ernestovich; PINKEVICH, Al'bert Al'bertovich; VINOGRADOVA, Larisa Vasil'yevna; UTKIN, I.A., doktor tekhn. nauk, prof., red.; REYKHERT, L.A., red. red.; YASHCHURZHINSKAYA, A.B., tekhn. red.

[English-Russian dictionary on exploration drilling] Anglo-russkii terminologicheskii slovar' po geologopoiskovomu bureniiu. Pod red. I.A.Utkina. Leningrad, Gostoptekhizdat, 1963. 318 p. (MIRA 16:12)
(English language--Dictionaries--Russian)
(Boring--Dictionaries)

L 46317-66 EWP(e)/EWT(m)/T/EWP(t)/ETI/EWP(k) IJP(c) JD/JG/DJ

ACC NR: AP6030183 SOURCE CODE: UR/0131/66/000/005/0027/0029

AUTHOR: Ivanov, Ye. G.; Filippov, A. F.; Min'kov, D. B.; Makarova, T. S.; Vinogradova, L. V.

ORG: [Ivanov; Filippov] Moscow Institute of Steel and Alloys (Moskovskiy institut stali i splavov); [Min'kov; Makarova; Vinogradova] Podol'sk Refractories Plant (Podol'skiy zavod ogneupornykh izdeliy)

TITLE: Melting crucibles made from cerium dioxide

SOURCE: Ogneupory, no. 5, 1966, 27-29

TOPIC TAGS: powder metallurgy, metallurgic furnace

ABSTRACT: The authors describe the manufacture of CeO_2 melting crucibles by powder metallurgy and slip casting. Cerium dioxide powder with grains measuring 5-15 μ in diameter was mixed with 6-8% binder based on 95% paraffin and 5% oleic acid. A steel mold was used which was prelubricated with a thin layer of oleic acid. Pressing was done at a pressure of 200 kg/cm^2. The crucible was then slowly heated for 10-12 hours to 1200°C and final sintering was done in a resistance furnace at 1500-1600°C. Water suspensions of cerium dioxide were used for slip casting. The slip had a pH of 4-5 and a moisture content of 58-60%. The suspension was allowed to stand for at least 24 hours before casting. After removal from the mold, the crucibles were heated to 1700-1750°C at a rate of 30-40 deg/hr and held at the final

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Card 1/2

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ACC NR: AP6030183

temperature for 6-9 hours. The apparent density (volumetric weight) of the crucibles was 6.6-6.4 g/cm^3 and the apparent porosity was less than 1%. A comparison of the calculated and residual cerium concentrations in alloys melted in CeO_2 and La_2O_3 crucibles shows satisfactory retention of Ce in cerium dioxide crucibles during melting. Metallographic analysis of nickel-cerium alloys melted in CeO_2 crucibles in a vacuum shows that the purity of the metal is comparable to the purity of nickel melted in alumina crucibles with hydrogen treatment. Orig. art. has: 1 figure and 1 table. [JPRS: 36,774]

SUB CODE: 11, 13 / SUBM DATE: none / ORIG REF: 003 / OTH REF: 001

Card 2/2 egh

VINOGRADOVA, L. YA.

OZHIGOV, Ye.P.; RAFIYENKO, M.A.; VINOGRADOVA, L. Ya.

Qualitative determination of the fluorine ion in minerals and ores by grinding. Soob. DVFAN SSSR no.7:62-64 '55. (MLRA 10:4)
(Fluorine)

KAZITSYNA, L.A.; KIKOT', B.S.; VINOGRADOVA, L.Ye.; REUTOV, O.A., akademik

Products of interaction between quinone diazides and metal halides. Dokl. AN SSSR 158 no.6:1369-1372 O '64.
(MIRA 17:12)

1. Moskovskiy gosudarstvennyy universitet.

ARTSYBYSHEV, N.A.; BELOGORSKAYA, N.I.; VINOGRADOVA, L.Yu.; GALANIN, D.D.; GUR'YEVA, V.V.; ZVORYKIN, B.S.; ZORE, V.A.; LIVENTSEV, N.M.; MENSHUTIN, N.F.; MINCHENKOV, Ye.Ya.; POKROVSKIY, A.A.; REZNIKOV, L.I.; SAKHAROV, D.I.; TIKHONOVA, Z.I.; KHLEBODAROV, S.F.; SHEYMAN, M.I.; YUS'KOVICH, V.F.

Professor S.A. Artsybyshev; obituary. Fiz. v shkole 18 no.1:95-96 Ja-F '58. (MIRA 11:1)

(Artsybyshev, Sergei Aleksandrovich, 1887-1957)

AZOS, S.; AREF'YEV, A.; ARTAMONOV, I.; BABINA, I.; BERGOVSKIY, V.; BLOZHKO, V.; BRAVERMAN, A.; BYKHOVSKIY, Yu.; VINOGRADOVA, M.; GALANKINA, Ye.; GIL'DENGERSH, F.; GLOBA, T.; GREYVER, N.; GORDON, G.; GUL'DIN, I.; GULYAYEVA, Ye.; GUSHCHINA, I.; DAVYDOVSKAYA, Yu.; DAMSKAYA, G.; DERKACHEV, D.; YEVDOKIMOVA, A.; YEGUNOV, V.; ZABELYSHINSKIY, I.; ZAYDENBERG, B.; AZMOSHNIKOV, I.; ITKINA, S.; KARCHEVSKIY, V.; KLUSHIN, D.; KUVINOV, Ye.; KUZNETSOVA, G.; KURSHAKOV, I.; LAKERNIK, M.; LEYZEROVICH, G.; LISOVSKIY, D.; LOSKUTOV, F.; MALEVSKIY, Yu.; MASLYANITSKIY, I.; MAYANTS, A.; MILLER, L.; MITROFANOV, S.; MIKHAYLOV, A.; MYAKINENKOV, I.; NIKITINA, I.; NOVIN, R.; OGNEV, D.; OL'KHOV, N.; OSIPOVA, T.; OSTRONOV, M.; PAKHOMOVA, G.; PETKER, S.; PLAKSIN, I.; PLETENEVA, N.; POPOV, V.; PRESS, Yu.; PROKOF'YEVA, Ye.; PUGHKOV, S.; REZKOVA, F.; RUMYANTSEV, M.; SAKHAROV, I.; SOBOL', S.; SPIVAKOV, Ya.; STRIGIN, I.; SPIRIDONOVA, V.; TIMKO, Ye.; TITOV, S.; TROITSKIY, A.; TOLOKONNIKOV, K.; TROFIMOVA, A.; FEDOROV, V.; CHIZHIKOV, D.; SHEYN, Ya.; YUKHTANOV, D.

Roman Lazarevich Veller; on obituary. TSvet. met. 31 no.5:78-79 My '58. (MIRA 11:6)

(Veller, Roman Lazarevich, 1897-1958)

VINOGRADOVA, M.

Peresadka Khriascha U Cheloveka (Transplanting of Human Cartilege) (Paper edition)

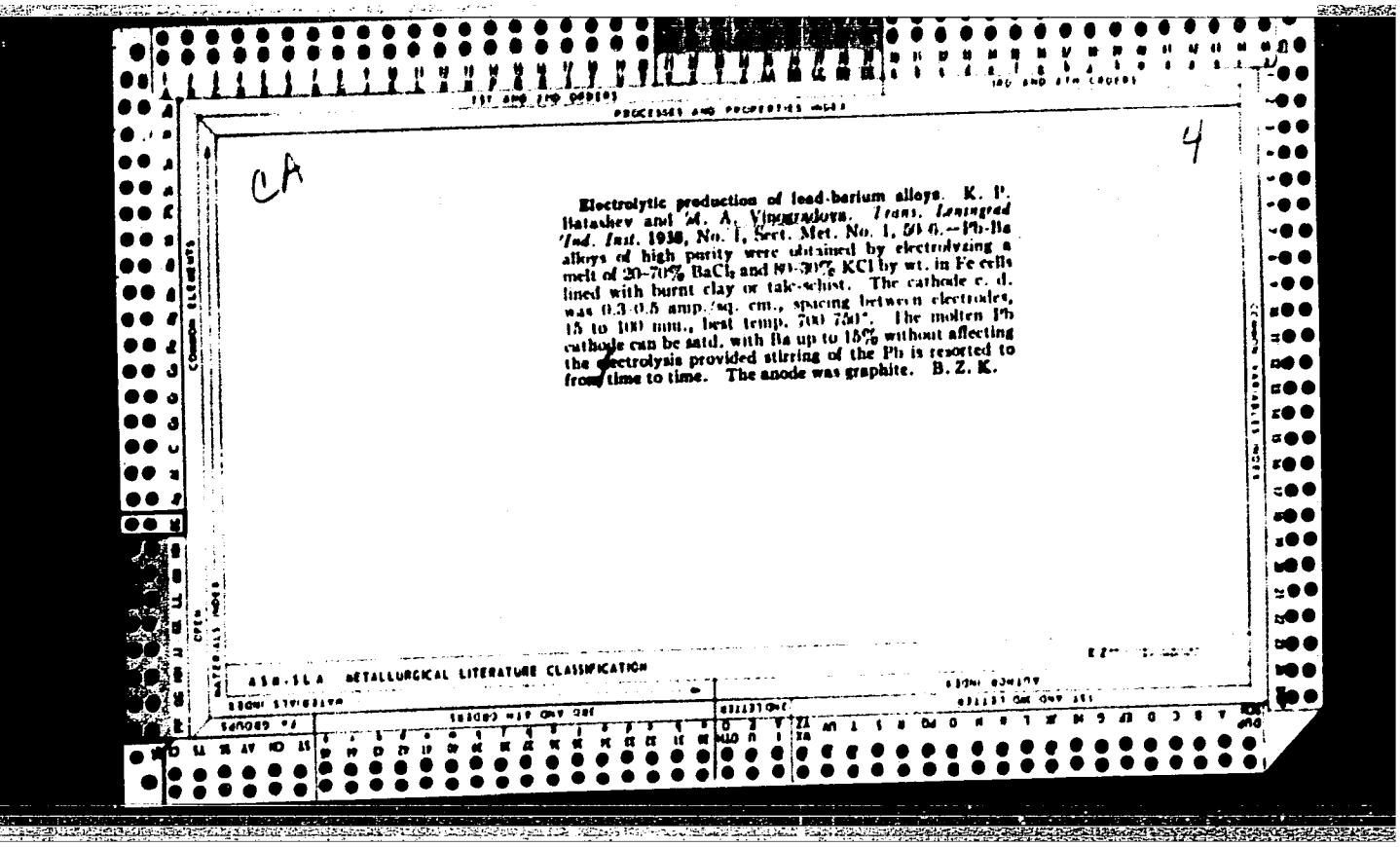
65 p. 50¢

SO: Four Continent Book List, April 1954

VINOGRADOVA, M.; GOLOLOBOV, M.; KOLEDINOVA, Ye.

Cost and distance of freight haulage. Avt. transp. 42 no.6: 37-39 Je'64 (MIRA 17:7)

1. Glavnoye upravleniye avtomobil'nogo transporta Moskovskogo gorodskogo Soveta deputatov trudyashchikhsya.



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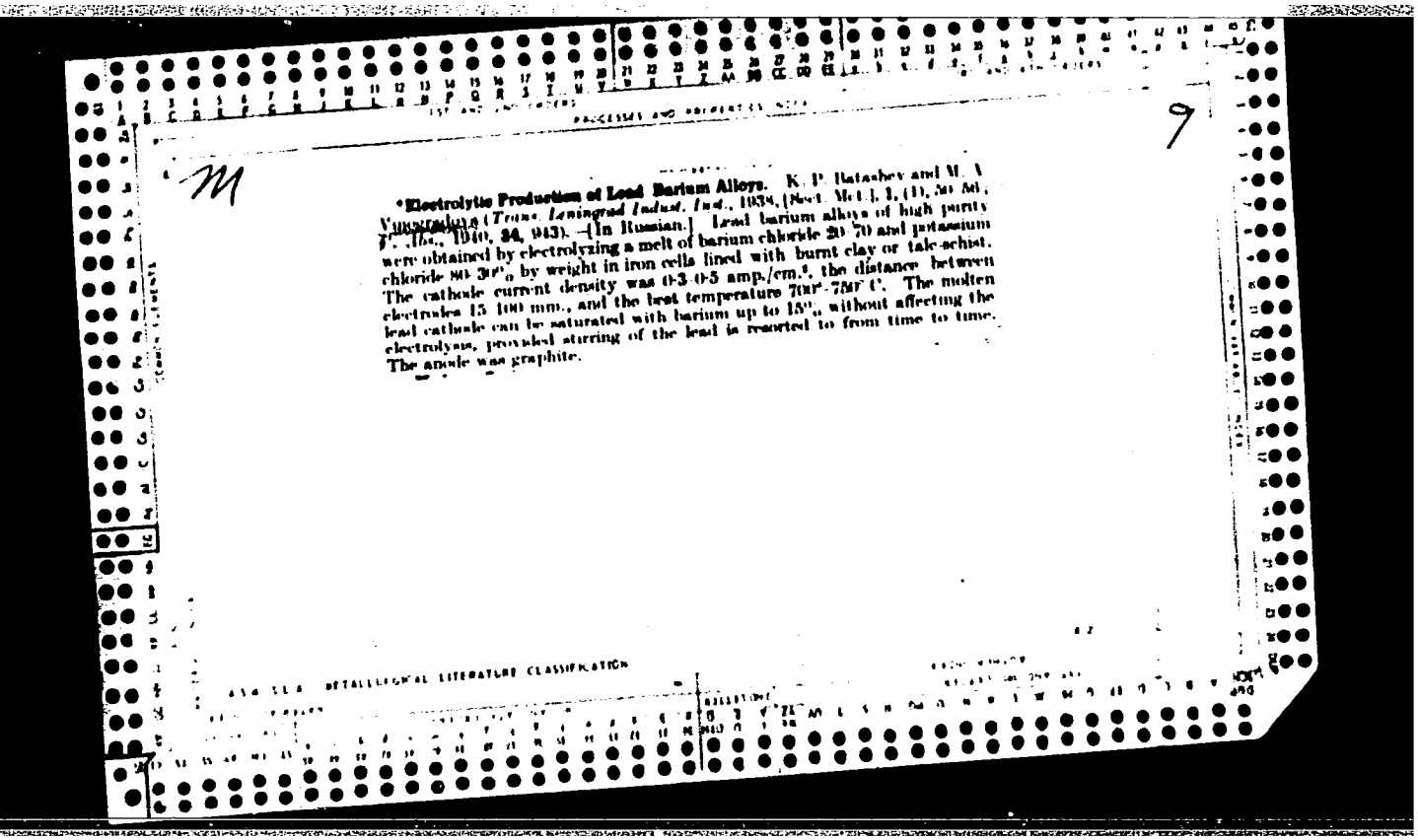
Electrolytic production of lead-barium alloys. K. P. Batashev and M. A. Vinogradova. *Trans. Leningrad Ind. Inst.* 1938, No. 1, Sect. Met. No. 1, 51-6.—Pb-Ba alloys of high purity were obtained by electrolyzing a melt of 20–70% $BaCl_2$ and 80–30% KCl by wt. in Fe cells lined with burnt clay or talc-schist. The cathode c. d. was 0.3–0.5 amp./sq. cm., spacing between electrodes, 15 to 100 mm., best temp. 700–750°. The molten Pb cathode can be satd. with Ba up to 15% without affecting the electrolysis provided stirring of the Pb is resorted to from time to time. The anode was graphite. B. Z. K.

ASM-SLA METALLURGICAL LITERATURE CLASSIFICATION



M

9

Electrolytic Production of Lead Barium Alloys. K. P. Batashev and M. A. Vinogradova (*Trans. Leningrad Indust. Inst.*, 1938, [Met. Met.] 1, (1), 30–36; *J. Chem. Phys.*, 1940, **34**, 943). [In Russian.] Lead barium alloys of high purity were obtained by electrolyzing a melt of barium chloride 20–70 and potassium chloride 80–30% by weight in iron cells lined with burnt clay or talc-schist. The cathode current density was 0·3–0·5 amp./cm.², the distance between electrodes 15–100 mm., and the best temperature 700°–750° C. The molten lead cathode can be saturated with barium up to 15% without affecting the electrolysis, provided stirring of the lead is resorted to from time to time. The anode was graphite.

A 14 S.L.A. METALLURGICAL LITERATURE CLASSIFICATION

VINOGRADOVA, M.A.

Removal of arsenic and chlorine in the process of sulfatizing lead dusts from shaft furnace smelting. TSvet.met. 27 no.5:46-52 S-O '54. (MIRA 10:10)

1. Gintsvetmet.
(Arsenic) (Chlorine) (Lead--Metallurgy)

Vinogradova, M.A.

137-58-5-9360

Translation from: Referativnyy zhurnal, Metallurgiya, 1958, Nr 5, p 80 (USSR)

AUTHOR: Vinogradova, M.A.

TITLE: Rational Methods of Processing Material Dust and Sublimates. A Critical Appraisal of Existing Technological Methods (O ratsional'nykh skhemakh pererabotki pyley i vozgonov. Kriticheskaya otsenka sushchestvuyushchikh tekhnologicheskikh skhem)

PERIODICAL: Tr. soveshchaniya po metallurgii tsinka, 1954. Moscow, Metallurgizdat, 1956, pp 113-121

ABSTRACT: On the strength of investigations and operational experience of plants processing dusts and sublimates from pyrometallurgical reduction of Zn and Pb concentrates, it was established that these products should be processed separately from the roasted Zn concentrate. It is proposed that oxides and sublimates be processed in accordance with a neutral leaching system followed by acidic leaching of the Pb cakes. Unroasted Pb dust from shaft furnace smelting should be sulfatized in order to remove As, Cl_2, and F_2 at the beginning of the process; the sulfatization products should be leached and valuable components should be separated from the solution. L.P.

Card 1/1

1. Lead-zinc ores--Processing 2. Arsenic--Spearation 3. Chlorine--Separation 4. Fluorine--Separation

VINOGRADOVA, M. A.

5

ZnS to the edge

H evolution take place. Because of the small H overvoltage

VINOGRADOVA, M.A.

137-58-5-9320

Translation from: Referativnyy zhurnal, Metallurgiya, 1958, Nr 5, p 76 (USSR)

AUTHOR: Vinogradova, M.A.

TITLE: Treatment of Sublimates Obtained by the Waelz Redox Process of Oxidized Lead-zinc Ores Which are Difficult to Concentrate (Pererabotka vozgonov, poluchennykh vel'tsevaniyem trudnoobogatimykh okislennykh svintsovo-tsinkovykh rud)

PERIODICAL: Sb. nauchn. tr. Gos. n.-i. in-t tsvetn. met., 1957, Nr 13, pp 160-170

ABSTRACT: The author describes a method for processing of As-rich sublimates by means of sulfatization (S); this system ensures the transfer of As and Sb into the gaseous phase. During leaching of the solid products of the sulfatization, the valuable components of the sublimates pass into solution and are then separated fractionally into independent products. The reactions between $Zn_3(AsO_4)_2$ and H_2SO_4 in the presence of sulfides were studied together with the reactions between $Pb_3(AsO_4)_2$ and H_2SO_4 in the presence of carbon.

O. B.

Card 1/1

1. Lead-zinc ores--Processing 2. Zinc compounds--Chemical reactions 3. Sulfuric acid--Chemical reactions 4. Arsenic--Separation 5. Antimony--Separation

AUTHOR: Vinogradova, M.A. SOV/136-59-6-7/24

TITLE: Dust from Lead Manufacture as One of the Sources of Rare Elements (Pyli svintsovogo proizvodstva, kak odin iz istochnikov polucheniya rasseyannykh elementov)

PERIODICAL: Tsvetnyye metally, 1959, Nr 6, pp 39 - 41 (USSR)

ABSTRACT: The basic raw materials for the production of cadmium and rare elements are polymetallic sulphide ores which, apart from lead and zinc, contain Fe, Cu, Cd, As, Sb, Bi, Ag and Au, as well as the rare elements Tl, In, Ga, Ge, Se and Te (Table 1). A study of the behaviour of cadmium and rare elements in the flotation of Pb-Zn ores has shown that their distribution in the concentration product varies within very wide limits (Table 2). In the oxiding roasting process of zinc concentrates up to 86% Tl, 50% Se, 90% Te and 14% Cd are eliminated. In the hydrometallurgical retreatment of roasted concentrates, 68-93% In, 54-77% Ga, 67-87% Ge, 100% Se and Te go to the zinc waste. Some Tl and Cd go to the zinc cake but the bulk of Cd and Tl go to the Cu-Cd cake during cementation, In the Waelz processing of the zinc cake in the presence of a carbonaceous reducing

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Dust from Lead Manufacture as One of the Sources of Rare Elements

agent, the following are eliminated together with Pb and Zn: Cd (85-93%, Tl (90-100%), In (72-90%), Se (66-86%), Te (42-72%), Ga (33-47%), Ge (37-47%). On re-treatment of the Waelz oxides by the standard neutral method, In (77-85%), Ge (83-87%), Ga (57-60%), Se (85-88%), Te (83-97%), Tl (30-40%) and Cd (26-29%) go to the lead cake. Small amounts of Tl, In and Ge go to the iron cake, Tl (43-48%) and Cd (50-65%) go to the Cu-Cd cake. On re-treatment of these cakes, Cd is reduced to the metal , 70-80% Ta goes to the zinc solution, whereas 1.4-2.1% Ta goes to the chloride drosses. When the lead concentrates are agglomerated without addition of carbonaceous cinders, a considerable elimination of Ta (50-55%), Se (up to 32%), Tl (up to 29%) and Cd (10-17%) is observed. Ga, Ge and In are practically unaffected and remain in the agglomerate. In the reducing shaft melting, the bulk of Cd (77-80%) goes to dust together with a considerable portion of Tl, Te and Se. The remainder of these elements is distributed between slag, matte and crude lead. Up to 21% In goes to dust; the remainder goes to slag, matte and crude lead.

Dust from Lead Manufacture as One of the Sources of Rare Elements

Ga remains practically entirely in the slag. Most of the Ge goes to slag, the remainder to crude lead and dust (up to 4%). In the refining of crude lead, indium concentrates in the copper dross. The bulk of Se, Cd, Ge and part of the Te also goes to the copper dross. Thus, dust forming in the lead production contains approximately 73% Cd, 73% Tl, 50% Se, 49% Te and 17% In of the total of the above elements entering the lead concentrates and in the transformation of the lead cakes during agglomeration a further 11.0% Cd, 22% Tl, 33% Se, 34% Te and 9% In of the total elements entering the zinc concentrates go to dust. There are 2 tables.

ASSOCIATION: Gintsvetmet

VINOGRADOVA, M.A.; SHASHKOVA, M.N.

Studying the behavior of thallium in the process of the hydrolytic purification of solutions from iron and arsenic. TSvet. met. 33 no.8:58-61 Ag '60. (MIRA 13:8)

1. Gosudarstvennyy institut po tsvetnym metallam.
(Thallium) (Hydrometallurgy) (Zinc--Metallurgy)

MESHCHANINOVA, V.I.; VINOGRADOVA, M.A.; RABICHEVA, L.M.; BABINA, I.V.; NIKITINA, I.S.; SYROVEGINA, K.V.; MYZENKOV, F.A.

Developing a flow sheet for the dressing of zinc fluorite ores from the "Voznesenskoye" deposit and determining the behavior of fluorine in the process of zinc recovery from concentrates. Sbor. nauch. trud. Gintsvetmeta no.23: 165-181 '65. (MIRA 18:12)

GOL'DFARB, Ya.L.; KONDAKOVA, M.S.; KRASNYANSKAYA, E.A.; VINOGRADOVA, M.A.

Synthesis of condensed systems based on 3,4-bis-(Chlorcmethyl)-2,5-dimethylthiophene with eight-, ten-, and fifteen-membered rings. Izv. AN SSSR Ser. khim. no.12:2182-2187 D '64 (MIRA 18:1)

1. Institut organicheskoy khimii imeni N.D. Zelinskogo AN SSSR.

VINOGRADOVA, M.A. (Moskva)

Effect of the ovaries on the secretory function of the stomach. Klin. med. 41 no.6:59-65 Je '63.
(MIRA 17:1)

1. Iz kafedry propedevtiki vnutrennikh bolezney (zav. - deystvitel'nyy chlen AMN SSSR prof. V.Kh. Vasilenko) I Moskovskogo ordena Lenina meditsinskogo instituta imeni I.M. Sechenova.

MASLOVSKIY, M.F.; VINOGRADOVA, M.A.; ZABEREZHNYY, I.I.; NIKITINA, I.S.; PARETSKIY, V.M.

Fluidized bed drying of dust pulp at the Chimkent Lead Plant. Sbor. nauch. trud. Gintsvetmeta no.19:367-373 '62. (MIRA 16:7)

(Chimkent--Lead industry)
(Fluidization)

GOL'DFARB, Ya.L.; DANYUSHEVSKIY, Ya.L.; VINOGRADOVA, M.A.

Synthesis based on organolithium compounds of the furan series. Alkyl-(α-furyl) sulfides and some of their transformations. Dokl. AN SSSR 151 no.2:332-335 Jl '63. (MIRA 16:7)

1. Institut organicheskoy khimii im. N.D.Zelinskogo AN SSSR. Predstavleno akademikom B.A.Kazanskim.
(Lithium organic compounds)
(Furan)

S/137/62/000/003/055/191
A006/A101

AUTHOR: Vinogradova, M. A.

TITLE: Lead-zinc ores as a source for obtaining cadmium and dispersed elements

PERIODICAL: Referativnyy zhurnal, Metallurgiya, no. 3, 1962, 30, abstract 3G201 (V sb. "Issled. po obogashcheniyu i tekhnol. polezn. iskopayemykh", Moscow, Gosgeoltekhizdat, 1961, 131 - 133)

TEXT: As a result of investigations performed it was established that during the concentration of Pb-Zn-Cu ores, Cd and In are mainly transferred into the Zn-concentrate; Te is transferred into the Pb concentrate; Te and Se are distributed between pyrite Pb and Cu-concentrates; Ga is concentrated in tails. During metallurgical processing of Zn and Pb concentrates the basic sources for the extraction of Cd and dispersed metals are: a) Pb dusts, into which the following percentages are transferred from the concentrates: Cd 73, Tl 73, In 17, Se 50 and Te 49; b) slags, percentage transferred: Ge 67 - 90, Ge 63 - 90, In 46 - 63, Te 28 and Se 5. A technological system was developed for the complex processing of Pb-dusts by the method of sulfating. The system includes: 1) sulfating of dusts

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S/137/62/000/003/055/191
A006/A101

Lead-zinc ores as a source for...

with strong H_2SO_4; 2) leaching out of the product with subsequent fractional separation of In, Te, Tl, Cd and Zn out of the solution; 3) leaching-out of solid sulfating fractions with As_2O_3 separation and subsequent processing of the solid residue. This scheme assures the following extraction indices (in %): Cd 85, Zn (into vitriol) up to 85; Tl 78; In into 2 - 3% concentrate 76; Se 80; As into As_2O_3 75; Hg 80; Pb into cake 98; Te into 40% concentrate 50. Studies are also carried out concerning complex processing of sublimates from the processing of slags containing Zn, Pb, Sn, In and large amounts of As and Sb, with the production of $ZnSO_4$ and Pb-Sn-alloy.

G. Svodtseva

[Abstracter's note: Complete translation]

Card 2/2

S/137/62/000/001/022/237
A060/A101

AUTHORS: Vinogradova, M. A., Shashkova, M. N.

TITLE: Study of the distribution of cadmium and dispersed metals in the process of ore concentration and lead production at the Leninogorsk Polymetallic Combine

PERIODICAL: Referativnyy zhurnal, Metallurgiya, no. 1, 1962, 9, abstract 1072 ("Sb. tr. Gos. n.-i. int tsvetn. met.", 1959, no. 15, 562-576)

TEXT: At the combine an investigation was carried out as to the distribution of Cd, rare and dispersed metals in the process of concentrating Pb-Zn ores and the metallurgical processing of Pb concentrates. It was established that in the process of enrichment, Cd and Ga are transferred preeminently into the Zn concentrate, Tl, Hg, Se, and Ge - into the lead concentrate, Tl - into the pyrite, and considerable losses of these metals are incurred in the tails. The basic raw material for the metallurgical extraction of Cd and dispersed metals at the combine are dusts from the agglomeration and the smelting plants into which pass (in %): Hg 90 - 95, Cd 85, Tl 30, Te 51.4, Se 45, In 10.5. In, Tl, Ga, and Ge pass preeminently into the slag. Te is divided between the slag

Card 1/2

S/137/62/000/001/022/237
A060/A101

Study of the distribution ...

and matte, while Hg and Se are lost with the exhaust gases. At the present time, of the 8 rare and dispersed metals present in the local raw material only Cd and Tl are extracted on an industrial scale. Measures are indicated for increasing the extraction of Cd and Tl and for organizing the extraction of Se, Hg, In, and Te.

M. Lipets

[Abstracter's note: Complete translation]

Card 2/2

VINOGRADOVA, M.A.; SHASHKOVA, M.N.

Studying the distribution of cadmium and impregnated metals in the process of ore dressing and lead production at the Leninogorsk Complex, Ore Combine. Sbor. nauch. trud. GINTSVETMET, no.15:562-576 '59. (MIRA 14:4)
(Leninogorks--Nonferrous metals--Metallurgy)
(Ore dressing)

VINOGRADOVA, M.B.

On the formation of an extraordinary ray under conditions of full internal reflexion of an ordinary ray. Zhur.eksp.i teor.fiz. 17 no.8:711-712 '47. (MLRA 6:7)

1. Moskovskiy gosudarstvennyy universitet im. M.V.Lomonosova. (Electromagnetic theory)

VINOGRADOVA, M. B.

PA 10/49T72

USSR/Geophysics
Ionosphere
Polarization

May/Jun 48

"Transformation of One Type of Polarization and Ternary Splitting in the Propagation of Signals in the Ionosphere," M. B. Vinogradova, Sci Res Inst of Phys, Moscow State U, 5 pp

"Iz Ak Nauk SSSR, Ser Fiz" Vol XII, No 3

Reviews existing knowledge of subject. Discusses results of own experiments. (Zhur Eksper i Teoret Fiz, Vol XVII, p 711, 1947).

[redacted]

10/49T72