L 04277-67 EWT(m)

ACC NR: AP6013273 (A) SOURCE CODE: UR/0413/66/000/008/0074/0074

19

B

AUTHORS: Zverev, I. N.; Chernyshov, A. N.

ORG: none

TITLE: A method for producing concrete slabs and similar products subject to electric heating. Class 37, No. 180781

SOURCE: Izobreteniya, promyshlennyye obraztsy, tovarnyye znaki, no. 8, 1966, 74

TOPIC TAGS: concrete, reinforced concrete, heating

ABSTRACT: This Author Certificate presents a method for producing concrete slabs and similar products subject to electric heating between parallel electrodes, with the current passing in the direction of the slab's thickness (see Fig. 1). To manufacture reinforced products and to increase simultaneously the effectiveness of the electric heating, the reinforcement is composed of compounded sections, the separate portions of which are interconnected by dielectric rods.

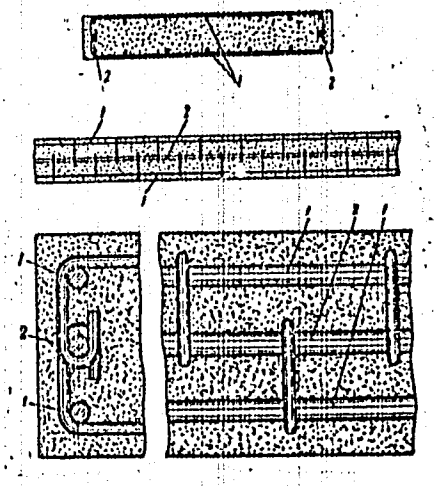
UDC: 691.87-427:666.98.035.5.04

Card 1/2

L 04277-67

ACC NR: AP6013273

Fig. 1. 1 - reinforcement rods;
2 - dielectric rods



Orig. art. has: 1 figure.

SUB CODE: 13/ SUBM DATE: 15May64

Card 2/2

APPROVED FOR RELEASE: Thursday, September 26, 2002 CIA-RDP86-00513R002065710005-5

KUZNETSOV, Mikhail Yakovlevich; SEVORTSOV, Aleksey Anatol'yevich; SKOBLIAKOV, Nikolay Nikolayevich; ZOBNIN, B.F., kandidat tekhnicheskikh nauk, retsenzent; BORETSKIY, A.A., dotsent, otvetstvennyy redaktor; VOLFYANSKIY, L.M., inzhener, redaktor; GINZBURG, M.R., inzhener, redaktor; DEMAKOV, A.F., inzhener, redaktor; ZAKHAROV, B.P., inzhener, redaktor; ZVEREV, K.M., inzhener, redaktor; KOKOVINA, A.S., inzhener, redaktor; NESTEROV, B.A., inzhener, redaktor; RAZUMOVA, M.S., inzhener, redaktor; SIDORENKO, R.A., inzhener, redaktor; ROZENBERG, I.A., kandidat tekhnicheskikh nauk, redaktor; DUGINA, N.A., tekhnicheskiy redaktor

[Foundry worker's handbook] Spravochnik rabochego-liteishchika. Izd. 2-oe, dop. i perer. Moskva, Gos. nauchno-tekhn. izd-vo mashinostroit. lit-ry, 1956. 634 p. (MLRA 10:4)
(Founding)

APPROVED FOR RELEASE: Thursday, September 26, 2002 CIA-RDP86-00513R002065710005-5"

ZVEREV, I. N.

Rasprostranenie vozmushchenii v viazkouprugom i viazko-plasticheskom sterzhne. (Prikladnaia matermatika i mekhanika, 1950, v. 14, p. 295-302)

Title tr.: The propagation of a disturbance in a visco-elastic and visco-plastic bar.

QA801. P7 1950

SO: Aeronautical Sciences and Aviation in the Soviet Union, Library of Congress, 1955.

ACC NR: AP6007908 SOURCE CODE: UR/0149/66/000/001/0116/0118

AUTHOR: Mal'tsev, M. V.; Morozov, L. N.; Zverev, K. P.; Yefremov, Yu. N.

ORG: none

TITLE: Oxidation of beryllium in air at high temperature

SOURCE: IVUZ. Tsvetnaya metallurgiya, no. 1, 1966, 116-118

TOPIC TAGS: beryllium, beryllium oxidation, oxidation kinetics

ABSTRACT: Disk-shaped beryllium specimens, 16 mm in diameter and 5 mm thick, cut from hot-compacted and extruded beryllium bars which were vacuum annealed at 850C for 2 hr, were tested for oxidation behavior at 300, 400, 600, 800, 900, 950, or 1000C for 0.5, 1, 5, 10, 30, 60, or 120 min. Visual examination revealed no changes in the surface of tested specimens after 120-min testing at temperatures up to 400C; the surface darkened slightly after testing at 600C, and lost brightness after testing at 800C. A thick white layer easily separated from the surface was formed within 5 min at 100C. The weight gain (see Fig. 1) in the first period of testing is

 UDC: 669.725:669.094.3

APPROVED FOR RELEASE: Thursday, September 26, 2002 CIA-RDP86-00513R0020657100005-5

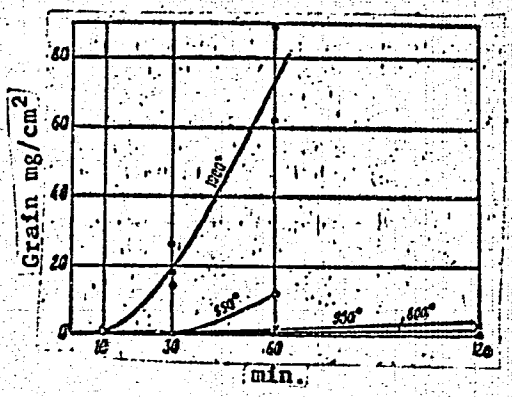


Fig. 1. Effect of temperature and heating time on beryllium oxidation

insignificant because the first oxide film formed protects against oxidation up to 600C. Electron-diffraction analysis showed that no oxide film forms on specimens tested at 300C for 2 hr. Beginning with 400C, an oxide film begins to form. The oxide and the beryllium monoxide have a hexagonal lattice with parameters a = 2.694 Å and c = 4.392 A. The oxide formed at 600, 800, or 1000C has a coarse-grained structure; the grain size increases with increasing temperature and holding time. Orig. art. has: 2 figures. [AZ]

SUB CODE: 11,07 SUBM DATE: 20Oct64/ OTH REF: 002/ ATD PRESS: 4222

Card 2/2

USSR/Hydrology 1947
Oceanography

"Determination of Gold in Matzesta Waters," K. S. Zverev, V. M. Levchenko, Ye. I. Miller, 3 pp

"Gidrokhim Materialy" Vol XIII

Establishes content of gold in fresh waters diluting Matzesta waters, under subterranean conditions, on basis of investigations carried out.

LC 54159

Determination of gold in Matsesta waters K. S. Averev, V. M. Levchenko, and E. I. Miller. *Gidrokhim. Materialy* 13, 258–68 (1947). On the basis of investigations made, the content of Au in fresh waters [illegible] ding. Matsesta waters under subterranean conditions was established.

Gladys S. Macy

APPROVED FOR RELEASE: Thursday, September 26, 2002 CIA-RDP86-00513R002065710005-5

CA

20

Artificial stones. V. V. Arshinov, L. V. Zvarev, and G. A. Rashin. U.S.S.R. 67,156, Oct. 31, 1946. A facing stone having a uniform and dense structure is cast from a mixt. of quartz sand, dolomite, limestone or marble, and fluorite or apatite fused at approx. 1350°. A sample charge is quartz sand 63.9, dolomite 39.5, crushed marble 28.8, and fluorite 3.0 kg.

M. Hosch

ASM-SLA METALLURGICAL LITERATURE CLASSIFICATION

LAZARENSKIY, Boris Nikolayevich; TUMKOV, Vladimir Pavlovich; ZVEREV, K.M., inzh., retsenzent; KRESHCHANOVSKIY, M.S., kand.tekhn.nauk, retsenzent; TALANOV, P.I., prof., red.; SIROTIN, A.I., inzh., red.izd-va; EL'KIND, V.D., tekhn.red.

[Technology of preparing steel castings] Tekhnologiia izgotovleniia stal'nykh otlivok. Moskva, Gos. nauchno-tekhn. izd-vo mashinostroit. lit-ry, 1958. 255 p. (MIRA 11:4)
(Steel castings)

ZVEREV, I.V.; [illegible]

APPROVED FOR RELEASE: Thursday, September 26, 2002 CIA-RDP86-00513R002065710005-5"

"Peat briquetting in the USSR."

Report submitted for the 2nd International Peat Congress, Leningrad, 15-22 Aug 63.

VOITOLOVSKII, Viktor Nikolayevich; ZVEREV, Leonid Grigor'yevich;
AZAROV, E.K., red.; PRESNOVA, V.A., tekhn. red.

[Profit of an industrial enterprise] Rentabel'nost' promyshlennogo predpriiatiia. Leningrad, Lenizdat, 1961. 28 p.
(MIRA 15:2)

(Leningrad--Industrial management) (Finance)

GOROZHANINOV, N.Ye.; ZVEREV, L.I.

Crane tracks free of joints in plants of a metallurgical combine. Stal' 21 no.5:477-478 My '61. (MIRA 14:5)

1. Nauchno-issledovatel'skiy institut po stroitel'stvu v g.Sverdlovske Akademii stroitel'stva i arkhitektury SSSR i Nizhne-Tagil'skiy metallurgicheskiy kombinat.
(Metallurgical plants--Equipment and supplies)
(Cranes, derricks, etc.)

GOROZHANINOV, N.Ye., kand. tekhn. nauk; GARYAYEV, A.L., inzh.; ZVEREV, L.I., inzh.

Submerged melt welding of the rails of crane tracks. Svar. proizv. no.9:35 S '65. (MIRA 18:9)

1. Ural'skiy "Promstroyniiproyekt" (for Gorozhaninov).
2. Magnitogorskiy metallurgicheskiy kombinat (for Garyayev).
3. Nizhne-Tagil'skiy metallurgicheskiy kombinat (for Zverev).

84619

S/181/60/002/010/049/051
B019/B056

24.7700 (1043,1143,1559)

AUTHORS: Zverev, L. P., Noskov, M. M., and Shur, M. Ya.

TITLE: On the Contour of the Exciton Absorption Bands in Cuprous Oxide

PERIODICAL: Fizika tverdogo tela, 1960, Vol. 2, No. 10, pp. 2643 - 2646

TEXT: In the introduction the results obtained by investigations of the optical properties of crystals, especially of the absorption spectra, are discussed. Among others, E. I. Rashba, A. S. Davydov, and Ye. F. Gross are mentioned. The authors of the present paper experimentally investigated the contour of the second band of the yellow series of exciton absorption bands and of thin cuprous oxide single crystals at temperatures of from 4.2 - 190°K. The measurements were carried out on a diffraction spectograph of the type АФС-4 (DFS-4) with high dispersion and photoelectric recording. The three samples investigated had a thickness of 9, 30, and 110 μ, respectively, and were produced from thin copper foils by oxidation in air at 1030°C. The contours of the exciton

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84619

On the Contour of the Exciton Absorption Bands in Cuprous Oxide

S/181/60/002/010/049/051
B019/B056

absorption bands (n = 2) in all three samples investigated showed good agreement. The maximum absorption coefficient was measured at 77.3°K as amounting roughly to 180 cm^{-1}. The temperature dependence of the exciton absorption line width is graphically represented in Fig. 1, and from the contour of the absorption line showed in Fig. 2 the good agreement of the measured results with those obtained from the formula (1) given by Toyozawa (Ref.3) for the absorption coefficient may be recognized. Thus, the opinion expressed by Toyozawa that the broadening of the exciton absorption lands is caused by the exciton-phonon interaction, is confirmed. Furthermore, it is also confirmed that the lifetime of the photoexcitons at temperatures below 55°K is principally determined by zero-vibrations of the lattice. From the good agreement between the experimental data with the theory, the conclusion may be drawn that only the acoustic branch of the lattice-vibration spectrum plays an essential part in exciton-phonon interaction. The authors thank N. V. Volkenshteyn for his assistance in the experiments and G. G. Taluts for discussing the results obtained. There are 2 figures and 10 references: 5 Soviet, 4 US, and 1 German.

Card 2/3

ZVEREV, L.P.; NOSKOV, M.M.; SHUR, M.Ia.

Photomagnetoelectric effect and zone structure in copper oxide.
Fiz.tver.tela 3 no.11:3556-3558 N '61. (MIRA 14:10)

1. Ural'skiy gosudarstvennyy universitet im. A.M.Gor'kogo, Sverdlovsk.
(Photomagnetic effect) (Copper oxide)

24.2600

SOV/139-59-2-6/30

AUTHORS: Zverev, L.P., Noskov, M.M. and Shur, M.Ya.

TITLE: The Effects of an Electric Field on the Spectral Response Curve for Photoconductivity in Cuprous Oxide

PERIODICAL: Izvestiya vysshikh uchebnykh zavedeniy, Fizika, 1959, Nr 2, pp 39-42 (USSR)

ABSTRACT: Polycrystalline Cu_2O is used at 77°K in this work. The spectral response is examined at high dispersion (6 Å/mm) with a grating spectrograph and the absorption spectra are also recorded. Only two field strengths (300 and 6000 V/cm) are used. Fig 1 shows spectral response curves (uncorrected for the energy distribution in the exciting spectrum); the wavelength scale is in mμ; Fig 2 shows a small region at higher resolution. Fig 3 shows the effect of the field for one specimen; curve I relates to 300 V/cm and curve II to 6000 V/cm. The first exciton line occurs in absorption at 612.53 mμ but it can be detected only in thick specimens; it is not seen in Fig 4b. (Fig 4a is merely Fig 3 on a larger scale.) Figure 4c is at the top right and relates to 6000 V/cm; Fig 4b is at the bottom right (300 V/cm). The second and third exciton lines lie at 579.2 and 575.6 mμ respectively

Card 1/2

9,4178 (1035,1114,1482)

30808
S/181/61/003/011/056/056
B109/B102

AUTHORS: Zverev, L. P., Noskov, M. M., and Shur, M. Ya.

TITLE: Photomagnetoelectric effect and band structure in cuprous oxide

PERIODICAL: Fizika tverdogo tela, v. 3, no. 11, 1961, 3556-3558

TEXT: Owing to the lack of an appropriate monochromatic light source the spectral behavior of the photomagnetoelectric effect (PME) could so far not be sufficiently studied. These difficulties could be overcome by using a ДРК-3 (DRK-3) lamp with strong monochromators (pass band 15 to 40 Å). The measurements were made with 150-300-micron thick cuprous oxide platelets at 77°K in 25-koe fields between 4000 and 7000 Å. In this case the dark conductivity was much lower than photoconductivity. Fig. 1 shows the measurement results which clearly indicate three spectral ranges: (1) No PME occurs above 5800 Å. This can be explained by the fact that electrons are produced in the polaron state. As compared to the free electrons their mobility is lower and their diffusion length is shorter. (2)

Photomagnetoelectric effect and band ...

Between 5800 and 4900 Å the PME is due to the production of free carriers. Its monotonic rise is determined by the dispersion of the absorption coefficient and the quantum yield of the internal photoeffect. (3) Below 4900 Å the behavior of the PME corresponds to the wavelength dependence of the PME near the fundamental absorption edge, which is typical of semiconductors. This phenomenon is connected with the abrupt increase of the diffusion length, in this case determined by the electron parameters, and suggests the existence of a new band-to-band transition in which electrons with other diffusion characteristics are produced. The conduction band splitting in Cu_2O was suspected already by S. A. Moskalenko (FTT, 2, 1755, 1960). Also the data by I. Pastrnyak, P. A. Titov (FTT, 3, 861, 1961), I. Pastrnyak (FTT, 1, 971, 1959), A. L. Rvachev (ZhTF, 28, 45, 1958), and N. B. Gornyy (ZhETF, 35, 281, 1958) speak in favor of this assumption. The authors thank I. M. Tsidil'kovskiy for discussions. There are 1 figure and 9 references: 7 Soviet and 2 non-Soviet. The two references to English-language publications read as follows: I. Kikoni, M. Noskov. Nature, 131, 725, 1933; W. Gartner. Phys. Rev., 105, 823, 1957.

30808
S/181/61/003/011/056/056
Photomagnetoelectric effect and band ... B109/B102

ASSOCIATION: Ural'skiy gosudarstvennyy universitet im. A. M. Gor'kogo Sverdlovsk (Ural State University imeni A. M. Gor'kiy Sverdlovsk)

SUBMITTED: August 25, 1961

Fig. 1. Spectral dependence of the photoconductivity (6) and of the short-circuit current of the PME (a,b) for Cu_2O.

Legend: (1) I_{sc} short-circuit current; σ_{ph}, photoconductivity in arbitrary units; b is the first part of curve a on an enlarged scale.

Card 3/4 3

"APPROVED FOR RELEASE: Thursday, September 26, 2002 CIA-RDP86-00513R002065710005-5"

Viscosity of molten titanium slags. M. P. Volarovich and L. V. Zverev. *Domez* 1934, No. 5, 22-9.—The method developed by Volarovich (cf. *C. A.* 27, 4925) and consisting of a cylinder rotating in the liquid medium was used in a series of expts. to det. viscosity of high-Ti slags. Two samples of Ti and 1 sample of ordinary slag from the Novo-Tagilsk blast furnace were tested and the results compared. The samples analyzed: Ti slag No. 1, 18.47 SiO_2, 12.64 Al_2O_3, 32.26 TiO_2, 14.70 CaO, 9.92 MgO, 3.80 FeO, 5.40 MnO, 2.55 Na_2O and 0.38% S; Ti slag No. 2, 20.00 SiO_2, 15.63 Al_2O_3, 31.52 TiO_2, 13.46 CaO, 10.61 MgO, 2.29 FeO, 5.24 MnO, 2.12 Na_2O and 0.45% S; ordinary slag, 31.53 SiO_2, 15.90 Al_2O_3, 46.30 CaO, 1.29 FeO, 1.38% MnO, MgO not detd. The results of measurements, in abs. units of viscosity, are: for Ti slag No. 1, < 6, < 6, < 6, 6, 112.5 and 1870 for temps. 1375°, 1290°, 1270°, 1255°, 1250° and 1245°, resp.; for Ti slag No. 2, < 7, < 7, < 7, < 7, 7, 92.5, 187.5 and 49 for temps. 1400°, 1370°, 1325°, 1270°, 1250°, 1225°, 1225° and 1215°, resp.; for ordinary slag, 9.0, 10.5, 24.4 and 210 for 1404°, 1390°, 1378° and 1340°, resp. This last slag crystd. at 1340°. Further investigation at higher temp. up to 1550-1600° is contemplated. S. L. M.

ASM-SLA METALLURGICAL LITERATURE CLASSIFICATION

APPROVED FOR RELEASE: Thursday, September 26, 2002 CIA-RDP86-00513R002065710005-5"

9

Use of burned limestone in the blast furnace. I. V. Shmanenkov and L. V. Zverev. *Mineral Sur'y* 9, No. 10, 16-19(1934).—The calcns. show that the consumption of coke can be reduced 15–20% by the use of burned limestone by the process of Baumgartner, *C. A.* 28, 5011⁸; French pat. 640,678. Chas. Blanc

Ca

9

Viscosity of welding slags. I. V. Zaitsev and D. I. Kaufman. *Metallurg* 12, No. [illegible] (1937). The viscosity of 23 typical slags was detd. between 1100° and 1400°. TiO_2 reduced the viscosity of acid slags.
H. W. Rathmann

A58-11A METALLURGICAL LITERATURE CLASSIFICATION

CA

Viscosity of titanium-containing slags. L. V. Zvereva. *Akad. Nauk S.S.S.R., Otdel. Tekh. Nauk, Inst. Mashinovedeniya, Sovershchanie Vysshosti Zhidkostei i Kolloid. Rastvorov* (*Conference on Viscosity of Liquids and Colloidal Solns.*) 1, 271-7(1941)(in Russian).—Slags rich in TiO_2, 10% and up to 36%, occur in the extn. of iron from titanomagnetite ores. Contrary to often-expressed views, the TiO_2 content does not give rise to abnormally high viscosity. With a modified Volarovich high-temp. viscometer, with coaxial cylinders (outer cylinder 40 mm. diam., inner 20 mm. diam., height 30 mm.), the lower limit of accuracy could be brought to 1 poise; measurements on acidic slags showed the viscosity to be a function of the SiO_2 content. There is only an insignificant variation up to about 35% SiO_2; from that interval on, further increase in SiO_2 is accompanied by a sharp rise in viscosity, e.g., up to about 35% SiO_2, 1-1.5 poises; at 40% and 45% SiO_2, resp., 3 and 10 poises. Slags with less than 35% SiO_2 are rather cryst. in character, those richer in SiO_2 are typical glasses. Partial replacement of SiO_2 by TiO_2 results in substantial lowering of the viscosity, example: 47.86% SiO_2, no TiO_2, 21 poises at 1400°; with 12% SiO_2 replaced by TiO_2, 1.2 poises; a slag contg. 65% SiO_2 + TiO_2, in approx. equal proportions, at 1400°, 1.1 poises; the same slag with 65% SiO_2 and no TiO_2 would be altogether nonfluid at that temp. This is easily explained by the specifically vitrifying effect of SiO_2. Nine typical TiO_2-contg. slags were measured in an app. based on damping of oscillations, and suitable for viscosities of the order of tenths of a poise. Examples (contents of TiO_2, SiO_2, Al_2O_3, CaO, MgO, resp.): (I) 27.00, 21.30, 18.40, 21.50, 11.20; (II) 20.30, 22.80, 19.35, 16.45, 11.90; (III) 20.70, 16.20, 13.80, 40.90, 8.40; viscosities: I, at 1340°, 1370°, 1450°, resp., 2.2, 0.4, 0.2 poise; II, at 1410°, 1425°, 1525°, resp., 3.0, 0.9, 0.3; III, at 1400°, 1550°, resp., 2.7, 0.15. All curves have the typical shape of viscosity curves of crystallizing melts, with a very small viscosity gradient above a certain temp. and sharp rise of the viscosity below that temp. All slags show very low viscosities, of the order of tenths of a poise, above that temp. It is not clear as yet how far this temp. of beginning "thickening" corresponds to the temp. of actual crystn.

N. Thon

A.S.M.-S.L.A. METALLURGICAL LITERATURE CLASSIFICATION

APPROVED FOR RELEASE: Thursday, September 26, 2002 CIA-RDP86-00513R002065710005-5"

ZVEREV, I. V.

Geography and Geology

Requirements of industry as to the quality of mineral raw materials. Handbook for geologists--Moskva, Gos. izd-vo geologicheskoi lit-ry Komiteta po delam geologii pri SNK SSSR, No. 24, Manganese, 1947.

Monthly List of Russian Accessions, Library of Congress, October, 1952. UNCLASSIFIED.

APPROVED FOR RELEASE: Thursday, September 26, 2002 CIA-RDP86-00513R002065710005-5"

ZVARYKIN, L V

"Cast white stone [illegible]

[illegible] and after 30 30 min at 200 [illegible] becomes a [illegible] viscosity [illegible] glass [illegible] liquid [illegible]

[illegible] natural glass. The stone contains very few [illegible] 0.5–0.8 mm in diam. Factors which influence the [illegible] of the crystals and the degree of crystallinity are discussed.

A. P. Kotlegr[illegible]

CHERNYAK, Abram Samuilovich; IVANOVSKIY, M.D., prof., retsenzent; ZVEREV, L.V., kand. tekhn. nauk, otv. red.

[Chemical dressing of ores] Khimicheskoe obogashchenie rud. Moskva, Nedra, 1965. 201 p. (MIRA 18:9)

ACC NR: AT7007280 (N) SOURCE CODE: UR/3249/66/000/013/0027/0034

AUTHORS: Zverev, L. V.; Petrova, N. V.; Murali, G. N.; Makarova, N. P.

ORG: none

TITLE: The use of water-soluble amines in treating tantalum-niobium materials

SOURCE: Moscow. Vsesoyuznyy nauchno-issledovatel'skiy institut mineral'nogo syr'ya. Mineral'noye syr'ye, no. 13, 1966. Obogashcheniye i pererabotka mineral'nogo syr'ya (Concentration and processing of minerals), 27-34

TOPIC TAGS: metallurgy, tantalum compound, niobium compound, amine

ABSTRACT: The authors have found that the use of oxalic acid or hydrogen peroxide in forming Ta and Nb complexes is unsatisfactory because of instability and other factors. The use of water-soluble amines is suggested. The present paper outlines the optimal conditions for leaching Nb and Ta from sulfate cake by using as complexing agents methylamine, monoethanolamine, and triethanolamine. Columbite concentrates were used in the test. The technique found to be most satisfactory is the following: one part (by weight) of the concentrate is added to 2.5--3 parts of H_2SO_4, and the mix is held for two hours at 350C. The material is then washed with water and treated with methylamine for 30 minutes at 40C. The Nb and Ta are now in solution and may be removed. Neutralization with a weak mineral acid precipitates Nb and Ta pentoxides

ACC NR: AT7007280

(with a purity of 99%). After the precipitate is filtered off, the amine may be regenerated by addition of CaO, which combines with the sulfate radical to form $CaSO_4$. This may be removed, and the pure amine is ready for re-use in the process. Orig. art. has: 8 figures and 6 tables.

SUB CODE: 11/ SUBM DATE: none/ ORIG REF: 006/ OTH REF: 002

Card 2/2

ZVEREV, L.V.; YELFIMOV, I.I.

Chlorination of circonium in the melt of chlorides. Min.syr'e no.9: 16-24 '63. (MIRA 17:10)

ZVEREV, L.V.; PETROVA, N.V.; MURAL', G.N.

Extraction of niobium by trictylamine from sulfuric acid solutions.
Min.syr'e no.9:25-31 '63. (MIRA 17:10)

MILOVANOV, G.N.; CHERNOSVITOV, Yu.L.; GINZBURG, A.I., nauchnyy red.; YERSHOV, A.D., glavnyy red.; ZVEREV, L.V., red.; ZUBAREV, N.N., red.; KREYTER, V.M., red.; MOKROUSOV, V.A., red.; SOLOV'YEV, D.V., red.; KHRUSHCHOV, N.A., red.; SHMANENKOV, I.V., red.; IZRAILEVA, G.A., red.izd-va; IVANOVA, A.G., tekhn.red.

[Industry's requirements as to the quality of mineral raw material; handbook for geologists] Trebovaniia promyshlennosti k kachestvu mineral'nogo syr'ia; spravochnik dlia geologov. Moskva, Gos.nauchno-tekhn.izd-vo lit-ry po geol. i okhrane nedr. No.51. [Rare earth elements] Redkozemel'nye elementy. Izd.2., perer. 1959. 58 p. (MIRA 12:12)

1. Moscow. Vsesoyuznyy nauchno-issledovatel'skiy institut mineral'nogo syr'ya.

(Rare earths)

ZVEREV, L.V.; KONTOROVICH, G.I.; CHERNYSHEV, G.B., nauchnyy red.; STOLYAROV, A.G., red.izd-va; BYKOVA, V.V., tekhn. red.

[Industry's requirements as to the quality of mineral raw materials]Trebovaniia promyshlennosti k kachestvu mineral'nogo syr'ia; spravochnik dlia geologov. Izd.2., perer. Moskva, Gosgeoltekhizdat. No.24. [Manganese]Marganets. 1960. 57 p. (MIRA 16:3)

1. Moscow. Vsesoyuznyy nauchno-issledovatel'skiy institut mineral'nogo syr'ia.

(Manganese)

ZVEREV, L.V.; SMIRNOVA, N.N.; FILIPPOVSKAYA, T.B.

Solubility of rock-forming silicate minerals in sulfuric acid solutions. Min.syr'e no.4:134-147 '62. (MIRA 16:4)
(Silicates) (Sulfuric acid)

BENESLAVSKIY, S.I.; GORETSKIY, Yu.K.[deceased]; ZVEREV, L.V.; SOSHNIKOVA, M.S., nauchnyy red.; GRISHINA, T.B., red. izd-va; BYKOVA, V.V., tekhn. red.

[Industry's requirements as to the quality of mineral raw materials] Trebovaniia promyshlennosti k kachestvu mineral'nogo syr'ia; spravochnik dlia geologov. Moskva, Gosgeoltekhizdat. No.35. [Aluminum] Aliuminii. 1962. 59 p. (MIRA 15:7)

1. Moscow. Vsesoyuznyy nauchnyy nauchno-issledovatel'skiy institut mineral'nogo syr'ya.

(Aluminum)

GLAZKOVSKIY, A.A.; KRUTOV, G.A., nauchnyy red.; ZVEREV, L.V., nauchnyy red.; MATIS, T.I., red. izd-va; BYKOVA, V.V., tekhn. red.

[Industry's requirements as to the quality of mineral raw materials] Trebovaniia promyshlennosti k kachestvu mineral'nogo syr'ia; spravochnik dlia geologov. Moskva, Gos. nauchno-tekhn. izd-vo lit-ry po geol. i okhrane nedr. No.55.[Cobalt] Kobal't. Nauch. red. G.A.Krutov i L.V.Zverev. Izd.2., perer. 1961. 49 p. (MIRA 15:2)

1. Moscow. Vsesoyuznyy nauchno-issledovatel'skiy institut mineral'nogo syr'ya.

(Cobalt)

VASIL'YEV, P.V.; YERSHOV, A.D., glavnyy red.; CHERNOSVITOV, Yu.L., zam. glavnogo red.; SHMANENKOV, I.V., zam.glavnogo red.; KALMYKOV, G.S., nauchnyy red.; GINZBURG, A.I., red.; ZVEREV, L.V., red.; ZUBAREV, N.N., red.; KREYTER, V.M., red.; MOKROUSOV, V.A., red.; SOLOV'YEV, D.V., red.; KHRUSHCHOV, N.A., red.; FEDOROVA, L.N., red.izd-va; IVANOVA, A.G., tekhn.red.

[Industry's requirements as to quality in mineral raw materials; a handbook for geologists] Trebovaniia promyshlennosti k kachestvu mineral'nogo syr'ia; spravochnik dlia geologov. Izd.2., perer. Moskva, Gos.nauchno-tekhn.izd-vo lit-ry po geol. i okhrane nedr. No.66. [Coal] Ugol'. Nauchn.red.G.S.Kalmykov. 1960. 110 p. (MIRA 14:6)

1. Moscow. Vsesoyuznyy nauchno-issledovatel'skiy institut mineral'nogo syr'ya.

(Coal)

VINOGRADOV, S.S.; ZUBAREV, N.N., nauchnyy red.; YERSHOV, A.D., glav. red.; CHERNOSVITOV, Yu.L., zam. glav. red.; SHMANENKOV, I.V., zam. glav. red.; GINZBURG, A.I., red.; ZVEREV, L.V., red.; MOKROUSOV, V.A., red.; SOLOV'YEV, D.V., red.; TROYANOV, A.T., red.; KHRUSHCHOV, N.A., red.; LYUBCHENKO, Ye.K., red. izd-va; BYKOVA, V.V., tekhn.red.

[Industry's requirements as to the quality of mineral raw materials] Trebovaniia promyshlennosti k kachestvu mineral'nogo syr'ia; spravochnik dlia geologov. Izd.2., perer. Moskva, Gos. nauchno-tekhn. izd-vo lit-ry po geologii i okhrane nedr. No.10[Limestones]Izvestniaki. Nauch. red. N.N.Zubarev. 1961. 61 p.
(MIRA 14:10)

1. Moscow. Vsesoyuznyy nauchno-issledovatel'skiy institut mineral'nogo syr'ya.

(Limestone)

BUTKEVICH, T.V.; YERSHOV, A.D., glav. red.; CHERNOSVITOV, Yu.L., zamestitel' glav. red.; SHMANENKOV, I.V., zamestitel' glav. red.; GINZBURG, A.I., red.; ZVEREV, L.V., red.; ZUBAREV, N.N., red.; MOKROUSOV, V.A., red.; SOLOV'YEV, D.V., red.; TROYANOV, A.T., red.; KHRUSHCHEV, N.A., red.; STEPANOV, I.S., nauchnyy red.; ROZHKOVA, L.G., red. izd-va; IYERUSALIMSKAYA, Ye.S., tekhn. red.

[Industry's requirements as to the quality of mineral raw materials; handbook for geologists] Trebovaniia promyshlennosti k kachestvu mineral'nogo syr'ia; spravochnik dlia geologov. Izd. 2., perer. Moskva, Gos. nauchno-tekhn. izd-vo lit- ry po geol. i okhrane nedr. No. 43. [Tungsten] Vol'fram. 1960. 61 p. (MIRA 14:5)

1. Moscow. Vsesoyuznyy nauchno-issledovatel'skiy institut mineral'nogo syr"ya.

(Tungsten)

SHMANENKOV, I.V., red.; ZVEREV, L.V., red.; KOVALENKO, O.V., red.; SOKOLOV, I.Yu., red.; EYGELES, M.A., red.; Prinyali uchastiye: BASMANOV, V.A., red.; KAMINSKAYA, L.S., red.; KOTS, G.A., red.; LEVIUSH, I.T., red.; MOKROUSOV, V.A., red.; PODKOSOV, L.G., red.; ROZHKOVA, Ye.V.; SOLOV'YEV, D.V., red.; FEDOROV, F.N., red.; FINKEL'SHTEYN, I.D.; KHONINA, O.I., red.; GRISHINA, T.B., red. izd-va; GUROVA, O.A., tekhn. red.

[Studies on the dressing and industrial processing of minerals] Issledovaniia po obogashcheniiu i tekhnologii poleznykh iskopaemykh. Moskva, Gos. nauchno-tekhn. izd-vo lit-ry po geol. i okhrane nedr, 1961. 131 p. (MIRA 14:7)

1. Russia(1923- U.S.S.R.) Ministerstvo geologii i okhrany nedr. 2. Vsesoyuznyy nauchno-issledovatel'skiy institut mineral'nogo syr'ya (for Eygeles, Leviush)

(Ores)

PETROVSKAYA, N.V.; KLIMENKO, N.G.; GINZBURG, A.I., nauchnyy red.; YERSHOV, A.D., glavnyy red.; CHERNOSVITOV, Yu.L., zam. glavnogo red.; SHMANENKOV, I.V., zam.glavnogo red.; ZVEREV, L.V., red.; ZUBAREV, N.N., red.; KREYTER, V.M., red.; MOKROUSOV, V.A., red.; SOLOV'YEV, D.V., red.; KHRUSHCHOV, N.A., red.; STOMEROV, A.G., red.izd-va; IVANOVA, A.G., tekhn.red.

[Industrial requirements for the quality of mineral raw materials; handbook for geologists] Trebovaniia promyshlennosti k kachestvu mineral'nogo syr'ia; spravochnik dlia geologov. Izd.2., perer. Moskva, Gos.nauchno-tekhn.izd-vo lit-ry po geol. i okhrane nedr. No.71. [Selenium and tellurium] Selen i tellur. Nauchn.red. A.I. Ginzburg. 1960. 45 p. (MIRA 14:1)

1. Moscow. Vsesoyuznyy nauchno-issledovatel'skiy institut mineral'nogo syr'ya.
(Selenium ores) (Tellurium ores)

RAMZES, B.Ya.; ZUBAREV, N.N.; CHERNOSVITOV, Yu.L., nauchnyy red.; YERSHOV, A.D., glavnyy red.; SHMANENKOV, I.V., zam.glavnogo red.; GINZBURG, A.I., red.; ZVEREV, L.V., red.; KREYTER, V.M., red.; MOKROUSOV, V.A. red.; SOLOV'YEV, D.V., red.; KHRUSHCHOV, N.A., red.; IZRAILEVA, G.A., red.izd-va; BYKOVA, V.V., tekhn.red.

[Industrial specifications for the quality of raw minerals; handbook for geologists] Trebovaniia promyshlennosti k kachestvu mineral'nogo syr'ia; spravochnik dlia geologov. Izd.2., perer. Moskva, Gos.nauchno-tekhn.izd-vo lit-ry po geologii i okhrane nedr. No.2. [Quartz sand] Pesok kvartsevyi. Nauchn.red.IU.L.Chernosvitov. 1955. 55 p. (MIRA 13:7)

1. Moscow. Vsesoyuznyy nauchno-issledovatel'skiy institut mineral'nogo syr'ya.

(Sand)

BORZUNOV, V.M.; PETROV, V.P., nauchnyy red.; YERSHOV, A.D., glavnyy red.; CHERNOSVITOV, Yu.L., zam.glavnogo red.; SHMANENKOV, I.V., zam. glavnogo red.; GINZBURG, A.I., red.; ZVERKV, L.V., red.; ZUBAREV, N.N., red.; KREYTER, V.M., red.; MOKROUSOV, V.A., red.; SOLOV'YEV, D.V., red.; KHRUSHCHOV, N.A., red.; STOLYAROV, A.G., red.izd-va; IVANOVA, A.G., tekhn.red.

[Industry's requirements as to the quality of mineral raw materials; handbook for geologists] Trebovaniia promyshlennosti k kachestvu mineral'nogo syr'ia; spravochnik dlia geologov. Izd.2., perer. Moskva, Gos.nauchno-tekhn.izd-vo lit-ry po geol. i okhrane nedr. No.12. [Feldspars] Polevoshpatovoe syr'e. Nauchn.red. V.P.Petrov. 1960. 25 p. (MIRA 13:9)

1. Moscow. Vsesoyuznyy nauchno-issledovatel'skiy institut mineral'nogo syr'ya.

(Feldspar)

STEPANOV, I.S.; CHERNOSVITOV, Yu.L., nauchnyy red.; YERSHOV, A.D., glavnyy red.; GINZBURG, A.I., red.; ZYKHEV, L.V., red.; ZUBAREV, N.N., red.; KREYTER, V.M., red.; MOKROUSOV, V.A., red.; SOLOV'YEV, D.V., red.; KHRUSHCHOV, N.A., red.; SHMANENKOV, I.V., red.; STOLYAROV, A.G., red.; IVANOVA, A.G., tekhn.red.

[Industrial requirements as to the quality of mineral raw materials; handbook for geologists] Trebovaniia promyshlennosti k kachestvu mineral'nogo syr'ia; spravochnik dlia geologov. Izd.2., perer. Moskva, Gos.nauchno-tekhn.izd-vo lit-ry po geol. i okhrane nedr. No.46. [Rubidium and cesium] Rubidii i tsezii. Nauchn.red. IU.L. Chernosvitov. 1960. 33 p. (MIRA 14:2)

1. Moscow. Vsesoyuznyy nauchno-issledovatel'skiy institut mineral'nogo syr'ya.
(Rubidium) (Cesium)

VESELOVSKIY, V.S.; BERLING, N.I., nauchnyy red.; YERSHOV, A.D., glavnyy red.; CHERNOSVITOV, Yu.L., zam.glavnogo red.; SHMANENKOV, I.V., zam. glavnogo red.; GINZBURG, A.I., red.; ZVEREV, L.V., red.; ZUBAREV, N.N., red.; KREYTER, V.M., red.; MOKROUSOV, V.A., red.; SOLOV'YEV, D.V., red.; KHRUSHCHOV, N.A., red.; STOLYAROV, A.G., red.izd-va; IVANOVA, A.G., tekhn.red.

[Industry's requirements as to the quality of mineral raw materials; handbook for geologists] Trebovaniia promyshlennosti k kacheatvu mineral'nogo syr'ia; spravochnik dlia geologov. Izd.2., perer. Moskva, Gos.nauchno-tekhn.izd-vo lit-ry po geol. i okhrane nedr. No.3. [Graphite] Grafit. Nauchn.red. N.I.Berling. 1960. 44 p. (MIRA 13:9)

1. Moscow. Vsesoyuznyy nauchno-issledovatel'skiy institut mineral'nogo syr'ya.
(Graphite)

CHERNOSVITOV, Yu.L.; KONSTANTINOV, M.M., nauchnyy red.; YERSHOV, A.D., glavnyy red.; SHMANENKOV, I.V., zam.glavnogo red.; GINZBURG, A.I., red.; ZVEREV, L.V., red.; KREYTER, V.M., red.; MOKROUSOV, V.A., red.; SOLOV'YEV, D.V., red.; KHRUSHCHOV, N.A., red.; NEKRASOVA, N.B., red.izd-va; IVANOVA, A.G., tekhn.red.

[Industrial requirements for the quality of raw minerals; handbook for geologists] Trebovaniia promyshlennosti k kachestvu mineral'nogo syr'ia; spravochnik dlia geologov. Moskva, Gos.nauchno-tekhn. izd-vo lit-ry po geol. i okhrane nedr. No.67. [Uranium] Uran. Nauchn. red.M.M.Konstantinov. Izd.2., perer. 1959. 65 p. (MIRA 13:1)

1. Moscow. Vsesoyuznyy nauchno-issledovatel'skiy institut mineral'nogo syr'ya.

(Uranium)

AUTHORS: Zverev, L.V., Petrova, N.V.

TITLE: A New Method for the Determination of Lead Sulphides in Ores (Novyy metod opredeleniya sul'fidnogo olova v rudakh).

PERIODICAL: Zavodskaya Laboratoriya, 1957, Vol. 23, Nr 12, pp. 1403-1405 (USSR)

ABSTRACT: The methods hitherto published in the USSR mentioned above are based upon the property of the lead sulphides of dissolving in acids, whilst lead oxides remain undissolved. The methods developed by Hirsch, Dolinivo)Dobrovol'skiy (Klimenko) and Sidorkin are compared with one another and eventually all three are declared to be faulty in this paper. As is stated here, practical results can be obtained in this case by the application of chlorine (gas), by dissolving the chlorinated lead sulphides in carbon tetrachloride with a slight addition of elementary sulphur and the lead oxide here remaining unchromed and undissolved. In the further course of the work it is, however, recommended to replace chroming in this case by bromination, which is supposed to facilitate the process of analyzation considerably. The process of analyzation is described and the results are shown in a table. Another table compares the results obtained according to the methods by Hirsch, Dolinovo-Dobrovol'skiy

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with the method suggested here. Examples: at a 20,03% content of Sn in quartz ore: 1,92% dissolved and 18,15% undissolved was obtained in case I; 2,07% dissolved and 17,96% undissolved was obtained in case II; 0,015% sulphide with 20,00% oxide of Sn was obtained in case III (according to the method suggested). There are 2 tables and 6 Slavic references.

ASSOCIATION: All-Union Institute for Mineral Raw Materials (Vsesoyuznyy institut mineral'nogo syr'ya).

AVAILABLE: Library of Congress

Card 2/2 1. Ores-Lead sulfides-Determination

SHMANENKOV, I.V.; TITOV, V.I.; RUSANOV, A.K.; ROZHKOVA, Ye.V.; EYGELES, M.A.; ZVEREV, L.V.

All-Union conference on laboratory methods of studying ores and minerals of rare and trace elements. Sov. geol. no.61:158-166 '57. (MIRA 11:4)

1. Vsesoyuznyy institut mineral'nogo syr'ya.
(Mineralogy--Congresses)

137-58-5-9289

Translation from: Referativnyy zhurnal, Metallurgiya, 1958, Nr 5, p 72 (USSR)

AUTHOR: Zverev, L. V.

TITLE: Speiss Smelting of Lean Cobalt Ores (Plavka bednykh kobal'tovykh rud na shpeyzu)

PERIODICAL: Byul. Tsentr. in-t inform. M-va tsvetn metallurgii SSSR, 1957, Nr 6, pp 15-16

ABSTRACT: A method of speiss smelting of lean Co ores at increased temperatures, in a mildly reducing atmosphere, and on slags with small Fe content was investigated under laboratory conditions. The loss of Co in the slags is a direct and well-defined function of the degree of Fe transition into the slag. By employing speiss smelting followed up by two stages of concentration smelting of ore, in which the Co/Fe ratio is equal to 0.065, it is possible to obtain a speiss product in which this ratio is equal to 2.14. Co losses in the waste slags are less than 10%. The smelting was conducted at a temperature of 1420-1500°C. An addition of CaF_2 (3%) improves the progress of the process by lowering the viscosity of slags. Results of laboratory smelting of ores with various Co content are shown. G.S.

Card 1/1

1. Cobalt ores--Processing 2. Slags--Properties

ZVEREV, M.; POPOVA, Z.V., red.; GIRICHEV, V., tekh. red.

[Alma-Ata nature calendar] Kalendar' Alma-Atinskoi prirody. Alma-Ata, Kazakhskoe gos. izd-vo khudozh. lit-ry, 1955. 15 p.
(Alma-Ata Province--Nature) (MIRA 11:8)

APPROVED FOR RELEASE: Thursday, September 26, 2002 CIA-RDP86-00513R002065710005-5"

Science

Traveling animals; series "For the young reader". Irkutsk, Irkutskoe obl. gos. izd-vo, 1951.

Monthly List of Russian Accessions, Library of Congress, November, 1952. UNCLASSIFIED.

ZVEREV, M.

Ingratitude. Vokrug sveta no.12:49 D '55. (MIRA 9:4)
(Hunting)

ZVEREV, M., inzhener; KALAFATOV, P., inzhener.

Narrow-range loading units. Mast. ugl. 5 no.9:24-25 S '56.
(Coal mining machinery) (MLRA 9:10)

APPROVED FOR RELEASE: Thursday, September 26, 2002 CIA-RDP86-00513R002065710005-5"

Geography & Geology

In the upper reaches of the Tom River.
Bibliotechka shkol'nika kraeveda. Novosibirsk,
Novosib. obl. gos. izdatel'stvo, 1951.

Monthly List of Russian Accessions, Library of Congress,
October, 1952. UNCLASSIFIED.

ZVEREV, M.; NIKOL'SKIY, P.

Naturalist's notes. IUn. nat. no.8:37-38 Ag '58. (MIRA 11:9)
(Kazakhstan--Birds--Habits and behavior)
(Animals, Habits and behavior of)

ZVEREV, M.

"Chemistry and technology of the production of nitron fibers" by A.B.Pakshver, B.E.Geller. Reviewed by M.Zverev. Khim.volok. no.6: 77-78 '61. (MIRA 14:12)

(Textile fibers, Synthetic) (Acrylonitrile polymers)
(Pakshver, A.B.) (Geller, B.E.)

DOROKHINA, I.; ZVEREV, M.

Development of processes for obtaining fibers from polypropylene.
Khim.volok. no.5:77-78 '61. (MIRA 14:10)
(Textile fibers, Synthetic) (Polypropylene)

ZVEREV, M.

It changed from night to day. IUn. nat. no.1:36-37 Ja '62.
(MIRA 15:1)

(Foxes)

ZVEREV, M. D.

Zverev, M. D.- "Problem of the running speed of certain animals," Trudy Almaat. gos. zapovednik , Issue 7, 1948, p. 153

SO: U-4934, 29 Oct 53, (Letopis 'Zhurnal 'nykh Statey, No. 16, 1949).

ZVEREV, M. D.

Zverev, M. D.- "The problem of feeding the Tyan'-Shan titmouse," Trudy Almaat. gos. zapovednika, Issue, 7, 1948,

SO: U-4934, 29 Oct 53, (Letopis 'Zhurnal 'nykh Statey, No. 16, 1949).

ZVEREV, N. D.

Birds of Prey

Is the sense of smell edveloped in predatory birds? Priroda. 41 No. 7, 1952.

Monthly List of Russian Accessions. Library of Congress. November 1952. UNCLASSIFIED

ZVEREV, M.D., chlen.
APPROVED FOR RELEASE: Thursday, September 26, 2002 CIA-RDP86-00513R002065710005-5"

Errors in biology in children's science-fiction. Est. v shkole no.3:84-89 My-Je '53. (MLRA 6:5)

1. Soyuz sovetskikh pisateley SSSR (Alma Ata). (Biology--Juvenile literature).

PRIGORIEVSKOE, Konstantin Nikolayevich; ZVEREV, M.P., redaktor; MELESHKO, K.L., redaktor; ZLOBIN, M.V., tekhnicheskiy redaktor

[Along desert paths] Tropami pustyni. Alma-Ata, Karakhskoe gos. izd-vo, 1956. 103 p. (MLRA 10:2)
(Bet-Pak-Dala--Description and travel)

ZVEREV, Maksim Dmitriyevich; RUDENSKAYA, L.V., redaktor; SAKHAROVA, N.V., tekhnicheskiy redaktor; KOZLOVSKAYA, M.D., tekhnicheskiy redaktor

[Birds and animals of our country; for extracurricular reading in secondary schools] O ptitsakh i zveriakh nashei rodiny; dlia vneklassnogo chteniia uchashchikhsia srednei shkoly. Moskva, Gos. uchebno-pedagog. izd-vo Ministerstva prosveshcheniia RSFSR, 1956. 172 p. (MLRA 9:7)

(Russia--Birds) (Russia--Mammals)

ZVEREV, M.D.

Observations on the fall migration of birds in southeastern Transbaikalia. Ornitologiia no.6:470-471 '63.
(MIRA 17:6)

RASHEK, V.L.; RASHEK, V.A.; ZVEREV, M.D., otv. red.; SUVOROVA, R.I., red.; ROROKINA, Z.P., tekhn. red.

[Barsa-Kel'mes State Preserve] Gosudarstvennyi zapovednik "Ostrov Barsa-Kel'mes." Alma-Ata, Izd-vo AN KazSSR, 1963. 90 p. (MIRA 17:3)

ZVEREV, M.D.

Ecology of the Tien Shan black grouse (Trans-Ili Ala-Tau).
Ornitologiia no.5:208-210 '62. (MIRA 16:2)
(Trans-Ili Ala-Tau--Black grouse)

ZVEREV, Maksim Dmitriyevich; MARKOV, N.G., red.; TSYPPO, R.V., tekhn.red.

[Birds and animals of our country; supplementary reading for secondary school students] O ptitsakh i zveriakh nashei rodiny; dlia vneklassnogo chteniia uchashchikhsia srednei shkoly. Izd.2. Moskva, Gos.uchebno-pedagog.izd-vo M-va prosv.RSFSR, 1960. 174 p. (MIRA 13:10)

(Animals, Habits and behavior of)

G-2

Abs Jour : Ref Zhur - Biol., No. 8, 1958, No 33942

Author : Bondarova, V. I., Zvorov, M. D.

Inst : Not given

Title : Exporimontal Infoction of Foxes and Jackals by Costodo Multiceps Multiceps. -- Eksperimontalnoo zarazhonio lisits i shakalov tsostodoy Multiceps multiceps.

Orig Pub : Tr. In-ta zool. AN KazSSR, 1957, 7, 237-240.

Abstract : In fooding larvocystocoenure (?) vesicles from a sheep-brain to 3 jackals, 4 foxes, 3 pups and one badgor, semi-riponed M. multiceps were found in 2 jackals, 2 pups, and one young fox. The epizootological significance of jackals in spreading sheep coenurosis and coenurosis of large hornod cattle is distinguishod from foxes, the role of which is evidently insignificant.

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ZVEREV, M.F., inzhener-mekhanik

Narrow range unit with the UMK-1 cutter-loader. Ugol' Ukr. Vol.3 no.5:32-34 My '59. (MIRA 12:9)
(Coal mining machinery)

ZVEREV, M.I.

Standard and durability. Standartizatsiia 29 no.9: 61-62 S '65. (MIRA 18:12)

ZVEREV, M.K.

Population census of foreign cities and large urban communities having more than 500,000 population. Vop.geog. no.38:232-245 '56. (MLRA 9:9)

(Population--Statistics)

ZVETEV, M.K.

Some features of the territorial structure of the Saxonian industry (German Democratic Republic). Vest. Mosk. un. Ser. 5: Geog. 20 no.6:77-79 N-D '65. (MIRA 19:1)

L 44599-66 EWT(1)/EWT(m)/EEC(k)-2/T/EWP(k)/EWP(b)/EWT(a) IJP(c) WG/JD/AT

ACC NR: AP6030950 SOURCE CODE: UR/0181/66/008/009/2547/2548

AUTHOR: Bogdankevich, O. V.; Zverev, M. M.; Pechenov, A. N.; Sysoyev, L. A.

ORG: Physics Institute im. P. N. Lebedev, AN SSSR, Moscow (Fizicheskiy institut AN SSSR)

TITLE: Recombination radiation of ZnS single crystals excited by fast electrons

SOURCE: Fizika tverdogo tela, v. 8, no. 9. 1966, 2547-2548

TOPIC TAGS: solid state laser, zinc sulfide, ultraviolet laser, recombination radiation, electron beam pumping, ELECTRON BEAM

ABSTRACT: Laser action was reported in electron-beam-pumped ZnS single crystals with a large forbidden gap. High-purity hexagonal ZnS specimens were soldered with indium to a copper heat sink kept at liquid N temperature (except in the case of some experiments conducted at room temperature). The electron beam was focused on the polished surface of the specimen at right angles to the two polished ends. The emission recorded by a ZMR-3 monochromator and an FEU-18A photomultiplier was observed in the direction perpendicular to the incident beam. Recombination radiation was observed in the ultraviolet region when ZnS was excited by a pulsed beam of 50-kv electrons at current densities up to 6 amp·cm^{-2}. At increased current densities (6 amp·cm^{-2} and up) and 80K, emission of a line (14 Å wide) at 3300 Å was predominant. The shapes of the light and current pulses were coincident, which would seem to indicate that the life-

ACC NR: AP6030950

time of nonequilibrium carriers did not exceed 10^{-7} sec. A 3-Å displacement in the intensity maximum of the 3300-Å line in the long-wave direction was observed at increased current densities and was attributed to the overheating of specimens. Orig. art. has: 3 figures. [YK]

SUB CODE: 20/ SUBM DATE: 20Dec65/ ORIG REF: 003/ ATD PRESS: 5078

ACC NR: AP7003904 SOURCE CODE: GE/0030/67/019/001/K005/K006

AUTHOR: Bogdankevich, O.V.; Zverev, M.M.; Krasilnikov, A.I.; Pechenov, A.N.

ORG: Physical Institute, Academy of Sciences of the USSR, Moscow

TITLE: Laser emission in electron-beam-excited ZnSe

SOURCE: Physica status solidi, v. 19, no. 1, 1967, K5-K6

TOPIC TAGS: semiconductor laser, electron beam, ~~pumped laser~~, zinc compound, selenide, LASER EMISSION, LASER PUMPING

ABSTRACT:

Laser action in electron-beam-pumped ZnSe at 4600 Å was observed experimentally. The ZnSe crystals were prepared under high-pressure, gas-phase reaction and subsequent crystallization. The samples were 3 [sic] x 0.5 x 0.8 mm, and the spacing between the cavity mirrors was 0.8 mm. The operating temperature was 100K, rising to 150K during pumping. The experimental samples were pumped by 150-nanosec 45—150 keV electron pulses. Red-light emission was observed at small current densities; blue-line emission at 4570 Å was observed at current densities greater than several amp/cm^2.

"APPROVED FOR RELEASE: Thursday, September 26, 2002 CIA-RDP86-00513R002065710005-5"

ACC NR: AP7003904

Further increases in the current density (threshold value 20 amp/cm^2) resulted in a sharp rise in the line (4600 Å) intensity (by a factor of 10), a sharp narrowing of its width (from 70 to 11 Å), and a directional effect. Although the mode structure was not resolved, various radiative directions, with a 7° beam aperture, could be identified. The results indicate that the large threshold densities may be caused by the crystal inhomogeneity and/or a high spontaneous recombination cross section. [JM]

SUB CODE: 20/ SUBM DATE: 21Nov66/ ORIG REF: 002/ OTH REF: 001/
ATD PRESS: 5114

Card 2/2

ZVEREVA, M.N.; ORLOV, V.V.

Separation of zinc and tin IV by means of an anion exchange resin.
Vest. LGU 14 no.22:152 '59. (MIRA 12:11)
(Zinc--Analysis) (Tin--Analysis) (Ion exchange)

APPROVED FOR RELEASE: Thursday, September 26, 2002 CIA-RDP86-00513R002065710005-5

S/020/63/149/001/017/023
B101/B144

AUTHORS: Zverev, M. P., Ruchinskiy, S. P., Zubov, P. I.

TITLE: Dependence of the heat effects occurring on polymer dissolution on the nature of the solvent

PERIODICAL: Akademiya nauk SSSR. Doklady, v. 149, no. 1, 1963, 128 - 130

TEXT: The dissolution heat of СКС-30А (SKS-30A) divinyl styrene copolymer and СКН-26 (SKN-26) divinyl nitrile copolymer was determined together with the contraction Δv of the solution in ditolyl methane, dicumyl methane, dibutyl sebacinate, and dibutyl phthalate. The equation $\ldots = -E_{11} - E_{22} + 2E_{12}$ (1) where E_{11}, E_{22}, E_{12} respectively denote the interaction of the molecules of the solvent, the polymer and the solvent plus polymer was found to be wrong. The nonpolar SKS-30A showed high heat effects in solvents with high dipole moment, the polar SKN-26 showed high heat effects in the weakly polar ditolyl methane and lesser heat effects in strongly polar solvents. Therefrom it is concluded that E_{11} (1) must be supplemented by a member E'_{22} taking account of the energy of the local bonds forming between the macromolecule links in the solution:

Card 1/2

APPROVED FOR RELEASE: Thursday, September 26, 2002 CIA-RDP86-00513R002065710005-5"

$\Delta = -E_{11} - E_{22} + 2E_{12} + E'_{22}$ (2). The bond between the links is manifest, e.g., from the contraction of SKN-26 solution in solvents with high dipole moment corresponding to coiling of the macromolecules. In SKS-30A, the [illegible] viscosity decreases when the dipole moment of the solvent increases. The effect of the plasticizer on the flow point is discussed. Addition of ditolyl methane, dibutyl sebacinate or dibutyl phthalate reduces [illegible] the flow point of SKS-30A. Small additions (1.5 %) of [illegible] increase the flow point, greater additions reduce it. [illegible] important [illegible] plasticizing of polymers and for [illegible]. There are 1 figure and 2 tables.

ASSOCIATION: Moskovskiy institut tonkoy khimicheskoy tekhnologii im. M. V. Lomonosova (Moscow Institute of Fine Chemical Technology imeni M. V. Lomonosov); Institut fizicheskoy khimii Akademii nauk SSSR (Institute of Physical Chemistry of the Academy of Sciences USSR)

PRESENTED: August 20, 1962, by V. A. Kargin, Academician

SUBMITTED: August 20, 1962

L 17481-63 EWP(j)/EWT(m)/BDS AFFTC/ASD Pc-4 RM

ACCESSION NR: AP3004759 S/0183/63/000/004/0018/0020

AUTHORS: Michurina, G. A.; Zverev, M. P.; Bychkov, R. A.; Klimenkov, Y. S. 60

TITLE: Formulation of polypropylene fibers from a polymer solution 15

SOURCE: Khimicheskiye volokna, no. 4, 1963, 18-20

TOPIC TAGS: polypropylene, polymer

ABSTRACT: Authors studied several polypropylene properties in solution, their dependence upon the structure of the compound and the temperatures which are within the limits of fiber formulation. The dependence of viscosity in the polymer-solvent system upon the temperature and the intensity of the shift has also been studied. High-boiling hydrocarbons with boiling points between 200 and 250C were used as solvents. Various polymeric structures were separated by the method described by I. Natta et al (J. Am. Chem. Soc., 77, 1955, 1708). It was found that the polypropylene solutions or atactic and stereoblock-copolymer structures become fluid at various shift intensities and temperatures. The viscosity of the system changes very little between 20 and 80C. However, it increases sharply with further increase in temperature, reaching a maximum at 120C. The crystalline structure of the polymer is destroyed between 150 and 160C. The

Card 1/2

APPROVED FOR RELEASE: Thursday, September 26, 2002 CIA-RDP86-00513R002065710005-5"

L 17481-63

ACCESSION NR: AP3004759

results show that formulation of fibers from solutions of isotactic polymers can be accomplished only at temperatures close to the melting point of the polymer. The presence of solvent in the polypropylene fibers at the moment of extrusion results in the production of fibers with better physical and mechanical properties. Orig. art. has: 4 figures.

ASSOCIATION: VNIIV (All-Union scientific research institute for synthetic fibers)

SUBMITTED: 21Jul62 DATE ACQ: 20Aug63 ENCL: 00

SUB CODE: CH NO REF SOV: 004 OTHER: 003

Card 2/2

87769

11.2230
15.9200 2109,2209,1526

S/069/60/022/006/006/008
B013/B066

AUTHORS: Zverev, M. P. and Zubov, P. I.

TITLE: Interaction of Plasticizers With Fillers

PERIODICAL: Kolloidnyy zhurnal, 1960, Vol. 22, No. 6, pp. 756-757

TEXT: In the present letter to the editor the authors report on the determination of the wetting heat of carbon black with plasticizers of different polarity. The following fillers were used: gas-channel black with a specific surface of 110 m^2 and 4.8% oxygen content, and gas-channel black without oxygen-containing groups with a specific surface of 100 m^2, which was annealed at 900°C in the hydrogen current. The wetting heat was measured on an adiabatic calorimeter (Ref. 2). The table gives the values of the wetting heat obtained. The evolution of heat occurring during the wetting of gas-channel black with molecules of polar plasticizers (dibutyl sebacate, dibutyl phthalate) is about twice as high (0.055 cal/m^2) as in the wetting with molecules of non-polar plasticizers (0.035 cal/m^2). As a result, the surface of the gas-channel black becomes

Card 1/2

hydrophobic by the incorporation of polar plasticizers. As was shown in Ref. 1, the sorption of macromolecules of divinyl styrene rubber on the surface of the filler is thus increased. It was further found that the evolution of heat during the wetting of fillers which contain no functional groups is practically independent of the dipole moment of the plasticizer. It may be assumed from the data obtained, that the better mechanical properties of filled divinyl styrene rubbers in the presence of polar plasticizers are due to the screening of functional groups of carbon black by polar molecules of the plasticizer. According to the authors, this fact might be of interest in connection with the problem of obtaining oil-filled divinyl styrene rubbers. N. V. Mikhaylov and E. Z. Faynberg are thanked for assistance in the thermochemical experiments. There are 1 table and 2 Soviet references.

ASSOCIATION: Institut fizicheskoy khimii AN SSSR (Institute of Physical Chemistry AS USSR). Institut tonkoy khimicheskoy tekhnologii im. M. V. Lomonosova, Moskva (Institute of Fine Chemical Technology imeni M. V. Lomonosov, Moscow)

SUBMITTED: May 17, 1960

BONDARENKO, V.M.; ZVEREV, M.P.; KLIMENKOV, V.S.; BEREZKINA, T.A.; GERSHANOVICH, Yu.G.

Fiber formation from polypropylene. Khim. volok. no.6:10-13 '65. (MIRA 18:12)

1. Vsesoyuznyy nauchno-issledovatel'skiy institut iskusstvennogo volokna (for Bondarenko, Zverev, Klimenkov). 2. Kurskiy kombinat (for Berezkina, Gershanovich).

ZVEREV, M.P.; RUCHINSKIY, S.P.; ZUBOV, P.I.

Thermal effect produced by the solution of polymers as dependent on the nature of the solvent. Dokl.AN SSSR 149 no.1:128-130 Mr '63. (MIRA 16:2)

1. Moskovskiy institut tonkoy khimicheskoy tekhnologii im. M.V.Lomonosova i Institut fizicheskoy khimii AN SSSR. Predstavleno akademikom V.A.Karginym.

(Polymers) (Heat of solution) (Plasticizers)

APPROVED FOR RELEASE: Thursday, September 26, 2002 CIA-RDP86-00513R002065710005-5"

ACCESSION NR: AP4039348 S/0183/64/000/003/0015/0019

AUTHOR: Zverev, M. P.; By*chkov, R. A.; Kostina, T. F.; Klimenkov, V. S.

TITLE: Modification of polypropylene fiber properties.

SOURCE: Khimicheskiye volokna, no. 3, 1964, 15-19

TOPIC TAGS: polypropylene fiber, polypropylene polystyrene fiber, polypropylene polystyrene compatibility, IR spectra, deformation, mechanical strength, polymer amorphisation, structure breakdown, relative elongation, isotactic polypropylene, isotactic polystyrene, steric hindrance, structure mobility

ABSTRACT: The compatibility and properties of fibers made of mixtures of polypropylene and polystyrene were investigated. The densities of the polymer mixtures and the contraction were determined. IR spectra were critically examined and thermomechanical properties (deformation, strength) were determined. Increasing the amount of polystyrene in polypropylene caused partial amorphization of the polymers. The two polymers are not microcompatible, as shown by IR data and the presence of 2 melting regions in mixtures containing over 12 weight% polystyrene. The positive value of the amount of contraction is not a criteria for determining

microcompatibility. It is proposed that the geometric dimensions of the macromolecules of the initial polymers and the different dimensions of the secondary structures affect the amount of specific volume contraction. The formation of defects in the secondary structure of polystyrene is greater than in polypropylene; a small amount of the latter in polystyrene causes contraction of the polystyrene. Addition of small amounts of polystyrene caused the polypropylene structure to break down. Increasing the amount of polystyrene in polypropylene reduced the relative elongation and the mechanical strength of the latter due to the microheterogeneity of the system and the increased hardness of the polypropylene structure. Mixtures of isotactic polypropylene and polystyrene have satisfactory physical-mechanical properties if the amount of polystyrene does not exceed 12%. The energy of activation of creep increased with increase in polystyrene content; this was explained by steric hindrances created by the polystyrene which impede the mobility of the polypropylene structure. "In conclusion we consider it our obligation to thank K. S. Minsker for supplying us the isotactic polystyrene." Orig. art. has: 7 figures and 2 tables.

ASSOCIATION: None

ACCESSION NR: AP4039348

SUBMITTED: 11Apr63 ENCL: 00

SUB CODE: OC NO REF SOV: 008 OTHER: 003

Card 3/3

S/190/60/002/011/005/027
B004/B060

AUTHORS: Zverev, M. P., Klimenkov, V. S., Kostina, T. F.

TITLE: Dependence of the Thermomechanical Properties of Polypropylene on Its Structural Composition. II

PERIODICAL: Vysokomolekulyarnyye soyedineniya, 1960, Vol. 2, No. 11, pp. 1620 - 1624

TEXT: The authors dealt with the problem of the interaction between atactic and isotactic macromolecules of polypropylene. In the article under consideration, they report on the effect of fractional composition on strength relative prolongation, and modulus of elasticity of polypropylene at 30°C. Specimens prepared by Etlis and Minsker, with a molecular weight of 120,000, were used for the tests. The atactic fraction was either extracted by means of ether or by means of heptane. A three-dimensional copolymer was obtained in the latter case, whose molecules were found to consist of atactic and isotactic links. The production of fibers of different fractional compositions has already been described by the authors in Ref. 3. Fibers elongated by 300% at 30 - 100°C were

Dependence of the Thermomechanical Properties of Polypropylene on Its Structural Composition. II

S/190/60/002/011/005/027
B004/B060

transition from the vitrified to the high-elastic state. V. A. Kargin, T. I. Sogolova, and N. V. Mikhaylov are mentioned. There are 3 figures and 12 references: 8 Soviet, 3 US, and 1 Italian.

ASSOCIATION: Vsesoyuznyy nauchno-issledovatel'skiy institut iskusstvennogo volokna (All-Union Scientific Research Institute of Synthetic Fibers)

SUBMITTED: April 14, 1960

Card 3/3

investigated here; they consisted 1) of isotactic polypropylene, 2) of 93% isotactic and 7% atactic polypropylene, 3) of 93% isotactic polypropylene and 7% three-dimensional copolymer. The authors reached the following conclusions: 1) Due to recrystallization and orientation, the fiber stability increases with the temperature at which the fibers were elongated. 2) The modulus of elasticity shows a maximum of fibers elongated between 100° and 110°C. The different values of the modulus of elasticity at different polypropylene compositions are explained by the fact that on stretching there occurs, besides re-crystallization, also a translation of crystals without appreciable deformation, so that the atactic structures in-between have an elasticizing effect. The modulus of elasticity of fibers stretched at 100°C was examined between -40° and +120°C, and it was found that a) in the range -40° to -20°C, viz. in the vitrified state, the modulus of elasticity is not dependent on the fractional composition; b) on the transition to the high-elastic state, the modulus of elasticity varies in dependence on the fractional composition, the fibers with atactic fraction exhibiting greater changes. Crystallinity can be estimated on the basis of these effects on the

ZVERIV, M.P.; BARASH, A.L.; ZUBOV, P.I.

Heats of precipitation of polyacrylonitrile from solutions.
Vysokom. soed. 6 no.6:1012-1015 Je '64 (MIRA 18:2)

1. Moskovskiy institut tonkoy khimicheskoy tekhnologii imeni Lomonosova.

KLIMENKO, V.S.; ZVEREV, M.P.; OKUZDEV, V.A.; BONDARENKO, V.M.; MICHURINA, G.A.

Synthetic fibers based on isotactic polypropylene. Khim.volok. no.4:19-22 '59. (MIRA 13:2)

1. Vsesoyuznyy nauchno-issledovatel'skiy institut iskusstvennogo volokna.

(Textile fibers, Synthetic)
(Propene)

ZVEREV, M.P.; ZUBOV, P.I.

The structure of gels. Part 9. The effect of the nature of the plasticizer on the physico-mechanical properties of divinylstyrene rubber. Koll.zhur. 19 no.2:201-203 Mr-Ap '57. (MLRA 10:5)

1.Fiziko-khimicheskiy institut im. L.Ya. Karpova.
(Styrene) (Rubber, Synthetic)

UR/

ACC NR: AM6033433 Monograph

Konkin, Aleksandr Arsen'yevich; Zverev, Mikhail Petrovich

Polyolefin fibers (Poliolefinovyye volokna) Moscow. Izd-vo "Khimiya", 1966. 278 p. illus., biblio., index. 3700 copies printed.

TOPIC TAGS: conjugated polyolefin hydrocarbon, synthetic fiber, fiber

PURPOSE AND COVERAGE: This book is intended for scientific and engineering workers in the synthetic fiber industry and in associated branches of industry concerned with synthetic fibers. It can also be used as a textbook by students of chemical-engineering and textile institutes of higher education. The book discusses the basic principles for synthesizing polyolefins (polypropylene and polyethylene) and their most important properties, and describes the effect on the process for producing polyolefin fibers. Also described are the rheological characteristics of polymer melts, the fiber-formation processes and the drawing and thermal fixing of the thread. The properties, means of modification, and possible fields of polyolefin fiber application are examined. Chapters I, II, IV and V were written by M. P. Zverev, and the introduction, Chapters III, VI, and VII by A.A. Konkin. The authors express gratitude to Doctor of Technical Sciences K. Ye. Perepelkin, Candidate of Technical Sciences T. V. Druzhinina and A. Ya. Malin, and to A. R. Gantmakher for their helpful advice. There are 395 references 219 of which are Soviet.

UDC: 677.494.742.2/.3

Card 1/2

ACC NR: AM6033433

TABLE OF CONTENTS (Abridged)

SUB CODE: 07,11/ SUBM DATE: 28May66/ ORIG REF: 188/ OTH REF: 176/

Card 2/2

ZVEREV, M.P.; MARGARITOVA, M.F.

Polymerization of isoprene with styrene. Ukr.khim.zhur. 24 no.5: 626-628 '58. (MIRA 12:1)

1. Dnepropetrovskiy khimiko-tekhnologicheskiy institut imeni Dzerzhinskogo, Moskovskiy institut tonkoy khimicheskoy tekhnologii imeni Lomonosova.
(Isoprene) (Styrene) (Polymerization)

L 04277-67 EWT(m)

ACC NR: AP6013273 (A) SOURCE CODE: UR/0413/66/000/008/0074/0074

19

B

AUTHORS: Zverev, I. N.; Chernyshov, A. N.

ORG: none

TITLE: A method for producing concrete slabs and similar products subject to electric heating. Class 37, No. 180781

SOURCE: Izobreteniya, promyshlennyye obraztsy, tovarnyye znaki, no. 8, 1966, 74

TOPIC TAGS: concrete, reinforced concrete, heating

ABSTRACT: This Author Certificate presents a method for producing concrete slabs and similar products subject to electric heating between parallel electrodes, with the current passing in the direction of the slab's thickness (see Fig. 1). To manufacture reinforced products and to increase simultaneously the effectiveness of the electric heating, the reinforcement is composed of compounded sections, the separate portions of which are interconnected by dielectric rods.

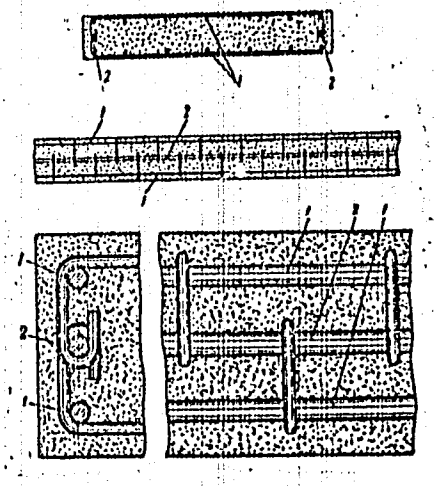
UDC: 691.87-427:666.98.035.5.04

Card 1/2

L 04277-67

ACC NR: AP6013273

Fig. 1. 1 - reinforcement rods;
2 - dielectric rods



Orig. art. has: 1 figure.

SUB CODE: 13/ SUBM DATE: 15May64

Card 2/2

APPROVED FOR RELEASE: Thursday, September 26, 2002 CIA-RDP86-00513R002065710005-5

KUZNETSOV, Mikhail Yakovlevich; SEVORTSOV, Aleksey Anatol'yevich; SKOBLIAKOV, Nikolay Nikolayevich; ZOBNIN, B.F., kandidat tekhnicheskikh nauk, retsenzent; BORETSKIY, A.A., dotsent, otvetstvennyy redaktor; VOLFYANSKIY, L.M., inzhener, redaktor; GINZBURG, M.R., inzhener, redaktor; DEMAKOV, A.F., inzhener, redaktor; ZAKHAROV, B.P., inzhener, redaktor; ZVEREV, K.M., inzhener, redaktor; KOKOVINA, A.S., inzhener, redaktor; NESTEROV, B.A., inzhener, redaktor; RAZUMOVA, M.S., inzhener, redaktor; SIDORENKO, R.A., inzhener, redaktor; ROZENBERG, I.A., kandidat tekhnicheskikh nauk, redaktor; DUGINA, N.A., tekhnicheskiy redaktor

[Foundry worker's handbook] Spravochnik rabochego-liteishchika. Izd. 2-oe, dop. i perer. Moskva, Gos. nauchno-tekhn. izd-vo mashinostroit. lit-ry, 1956. 634 p. (MLRA 10:4)
(Founding)

APPROVED FOR RELEASE: Thursday, September 26, 2002 CIA-RDP86-00513R002065710005-5"

ZVEREV, I. N.

Rasprostranenie vozmushchenii v viazkouprugom i viazko-plasticheskom sterzhne. (Prikladnaia matermatika i mekhanika, 1950, v. 14, p. 295-302)

Title tr.: The propagation of a disturbance in a visco-elastic and visco-plastic bar.

QA801. P7 1950

SO: Aeronautical Sciences and Aviation in the Soviet Union, Library of Congress, 1955.

ACC NR: AP6007908 SOURCE CODE: UR/0149/66/000/001/0116/0118

AUTHOR: Mal'tsev, M. V.; Morozov, L. N.; Zverev, K. P.; Yefremov, Yu. N.

ORG: none

TITLE: Oxidation of beryllium in air at high temperature

SOURCE: IVUZ. Tsvetnaya metallurgiya, no. 1, 1966, 116-118

TOPIC TAGS: beryllium, beryllium oxidation, oxidation kinetics

ABSTRACT: Disk-shaped beryllium specimens, 16 mm in diameter and 5 mm thick, cut from hot-compacted and extruded beryllium bars which were vacuum annealed at 850C for 2 hr, were tested for oxidation behavior at 300, 400, 600, 800, 900, 950, or 1000C for 0.5, 1, 5, 10, 30, 60, or 120 min. Visual examination revealed no changes in the surface of tested specimens after 120-min testing at temperatures up to 400C; the surface darkened slightly after testing at 600C, and lost brightness after testing at 800C. A thick white layer easily separated from the surface was formed within 5 min at 100C. The weight gain (see Fig. 1) in the first period of testing is

 UDC: 669.725:669.094.3

APPROVED FOR RELEASE: Thursday, September 26, 2002 CIA-RDP86-00513R0020657100005-5

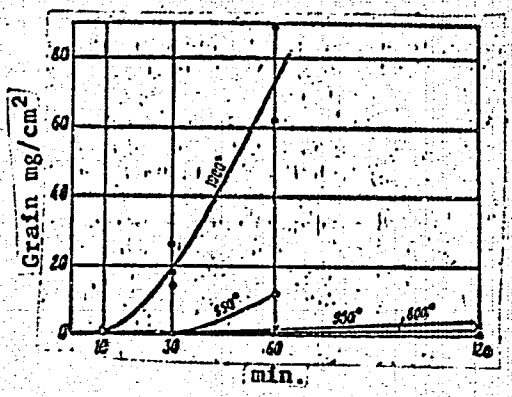


Fig. 1. Effect of temperature and heating time on beryllium oxidation

insignificant because the first oxide film formed protects against oxidation up to 600C. Electron-diffraction analysis showed that no oxide film forms on specimens tested at 300C for 2 hr. Beginning with 400C, an oxide film begins to form. The oxide and the beryllium monoxide have a hexagonal lattice with parameters a = 2.694 Å and c = 4.392 A. The oxide formed at 600, 800, or 1000C has a coarse-grained structure; the grain size increases with increasing temperature and holding time. Orig. art. has: 2 figures. [AZ]

SUB CODE: 11,07 SUBM DATE: 20Oct64/ OTH REF: 002/ ATD PRESS: 4222

Card 2/2

USSR/Hydrology 1947
Oceanography

"Determination of Gold in Matzesta Waters," K. S. Zverev, V. M. Levchenko, Ye. I. Miller, 3 pp

"Gidrokhim Materialy" Vol XIII

Establishes content of gold in fresh waters diluting Matzesta waters, under subterranean conditions, on basis of investigations carried out.

LC 54159

Determination of gold in Matsesta waters K. S. Averev, V. M. Levchenko, and E. I. Miller. *Gidrokhim. Materialy* 13, 258–68 (1947). On the basis of investigations made, the content of Au in fresh waters [illegible] ding. Matsesta waters under subterranean conditions was established.

Gladys S. Macy

APPROVED FOR RELEASE: Thursday, September 26, 2002 CIA-RDP86-00513R002065710005-5

CA

20

Artificial stones. V. V. Arshinov, L. V. Zvarev, and G. A. Rashin. U.S.S.R. 67,156, Oct. 31, 1946. A facing stone having a uniform and dense structure is cast from a mixt. of quartz sand, dolomite, limestone or marble, and fluorite or apatite fused at approx. 1350°. A sample charge is quartz sand 63.9, dolomite 39.5, crushed marble 28.8, and fluorite 3.0 kg.

M. Hosch

ASM-SLA METALLURGICAL LITERATURE CLASSIFICATION

LAZARENSKIY, Boris Nikolayevich; TUMKOV, Vladimir Pavlovich; ZVEREV, K.M., inzh., retsenzent; KRESHCHANOVSKIY, M.S., kand.tekhn.nauk, retsenzent; TALANOV, P.I., prof., red.; SIROTIN, A.I., inzh., red.izd-va; EL'KIND, V.D., tekhn.red.

[Technology of preparing steel castings] Tekhnologiia izgotovleniia stal'nykh otlivok. Moskva, Gos. nauchno-tekhn. izd-vo mashinostroit. lit-ry, 1958. 255 p. (MIRA 11:4)
(Steel castings)

ZVEREV, I.; SARUKOV, S.

"APPROVED FOR RELEASE: Thursday, September 26, 2002 CIA-RDP86-00513R002065710005-5"

"Peat briquetting in the USSR."

Report submitted for the 2nd International Peat Congress, Leningrad, 15-22 Aug 63.

VOITOLOVSKII, Viktor Nikolayevich; ZVEREV, Leonid Grigor'yevich;
AZAROV, E.K., red.; PRESNOVA, V.A., tekhn. red.

[Profit of an industrial enterprise] Rentabel'nost' promyshlennogo predpriiatiia. Leningrad, Lenizdat, 1961. 28 p.
(MIRA 15:2)

(Leningrad--Industrial management) (Finance)

GOROZHANINOV, N.Ye.; ZVEREV, L.I.

Crane tracks free of joints in plants of a metallurgical combine. Stal' 21 no.5:477-478 My '61. (MIRA 14:5)

1. Nauchno-issledovatel'skiy institut po stroitel'stvu v g.Sverdlovske Akademii stroitel'stva i arkhitektury SSSR i Nizhne-Tagil'skiy metallurgicheskiy kombinat.
(Metallurgical plants--Equipment and supplies)
(Cranes, derricks, etc.)

GOROZHANINOV, N.Ye., kand. tekhn. nauk; GARYAYEV, A.L., inzh.; ZVEREV, L.I., inzh.

Submerged melt welding of the rails of crane tracks. Svar. proizv. no.9:35 S '65. (MIRA 18:9)

1. Ural'skiy "Promstroyniiproyekt" (for Gorozhaninov).
2. Magnitogorskiy metallurgicheskiy kombinat (for Garyayev).
3. Nizhne-Tagil'skiy metallurgicheskiy kombinat (for Zverev).

84619

S/181/60/002/010/049/051
B019/B056

24.7700 (1043,1143,1559)

AUTHORS: Zverev, L. P., Noskov, M. M., and Shur, M. Ya.

TITLE: On the Contour of the Exciton Absorption Bands in Cuprous Oxide

PERIODICAL: Fizika tverdogo tela, 1960, Vol. 2, No. 10, pp. 2643 - 2646

TEXT: In the introduction the results obtained by investigations of the optical properties of crystals, especially of the absorption spectra, are discussed. Among others, E. I. Rashba, A. S. Davydov, and Ye. F. Gross are mentioned. The authors of the present paper experimentally investigated the contour of the second band of the yellow series of exciton absorption bands and of thin cuprous oxide single crystals at temperatures of from 4.2 - 190°K. The measurements were carried out on a diffraction spectograph of the type АФС-4 (DFS-4) with high dispersion and photoelectric recording. The three samples investigated had a thickness of 9, 30, and 110 μ, respectively, and were produced from thin copper foils by oxidation in air at 1030°C. The contours of the exciton

Card 1/3

84619

On the Contour of the Exciton Absorption Bands in Cuprous Oxide

S/181/60/002/010/049/051
B019/B056

absorption bands (n = 2) in all three samples investigated showed good agreement. The maximum absorption coefficient was measured at 77.3°K as amounting roughly to 180 cm^{-1}. The temperature dependence of the exciton absorption line width is graphically represented in Fig. 1, and from the contour of the absorption line showed in Fig. 2 the good agreement of the measured results with those obtained from the formula (1) given by Toyozawa (Ref.3) for the absorption coefficient may be recognized. Thus, the opinion expressed by Toyozawa that the broadening of the exciton absorption lands is caused by the exciton-phonon interaction, is confirmed. Furthermore, it is also confirmed that the lifetime of the photoexcitons at temperatures below 55°K is principally determined by zero-vibrations of the lattice. From the good agreement between the experimental data with the theory, the conclusion may be drawn that only the acoustic branch of the lattice-vibration spectrum plays an essential part in exciton-phonon interaction. The authors thank N. V. Volkenshteyn for his assistance in the experiments and G. G. Taluts for discussing the results obtained. There are 2 figures and 10 references: 5 Soviet, 4 US, and 1 German.

Card 2/3

ZVEREV, L.P.; NOSKOV, M.M.; SHUR, M.Ia.

Photomagnetoelectric effect and zone structure in copper oxide.
Fiz.tver.tela 3 no.11:3556-3558 N '61. (MIRA 14:10)

1. Ural'skiy gosudarstvennyy universitet im. A.M.Gor'kogo, Sverdlovsk.
(Photomagnetic effect) (Copper oxide)

24.2600

SOV/139-59-2-6/30

AUTHORS: Zverev, L.P., Noskov, M.M. and Shur, M.Ya.

TITLE: The Effects of an Electric Field on the Spectral Response Curve for Photoconductivity in Cuprous Oxide

PERIODICAL: Izvestiya vysshikh uchebnykh zavedeniy, Fizika, 1959, Nr 2, pp 39-42 (USSR)

ABSTRACT: Polycrystalline Cu_2O is used at 77°K in this work. The spectral response is examined at high dispersion (6 Å/mm) with a grating spectrograph and the absorption spectra are also recorded. Only two field strengths (300 and 6000 V/cm) are used. Fig 1 shows spectral response curves (uncorrected for the energy distribution in the exciting spectrum); the wavelength scale is in mμ; Fig 2 shows a small region at higher resolution. Fig 3 shows the effect of the field for one specimen; curve I relates to 300 V/cm and curve II to 6000 V/cm. The first exciton line occurs in absorption at 612.53 mμ but it can be detected only in thick specimens; it is not seen in Fig 4b. (Fig 4a is merely Fig 3 on a larger scale.) Figure 4c is at the top right and relates to 6000 V/cm; Fig 4b is at the bottom right (300 V/cm). The second and third exciton lines lie at 579.2 and 575.6 mμ respectively

Card 1/2

9,4178 (1035,1114,1482)

30808
S/181/61/003/011/056/056
B109/B102

AUTHORS: Zverev, L. P., Noskov, M. M., and Shur, M. Ya.

TITLE: Photomagnetoelectric effect and band structure in cuprous oxide

PERIODICAL: Fizika tverdogo tela, v. 3, no. 11, 1961, 3556-3558

TEXT: Owing to the lack of an appropriate monochromatic light source the spectral behavior of the photomagnetoelectric effect (PME) could so far not be sufficiently studied. These difficulties could be overcome by using a ДРК-3 (DRK-3) lamp with strong monochromators (pass band 15 to 40 Å). The measurements were made with 150-300-micron thick cuprous oxide platelets at 77°K in 25-koe fields between 4000 and 7000 Å. In this case the dark conductivity was much lower than photoconductivity. Fig. 1 shows the measurement results which clearly indicate three spectral ranges: (1) No PME occurs above 5800 Å. This can be explained by the fact that electrons are produced in the polaron state. As compared to the free electrons their mobility is lower and their diffusion length is shorter. (2)

Photomagnetoelectric effect and band ...

Between 5800 and 4900 Å the PME is due to the production of free carriers. Its monotonic rise is determined by the dispersion of the absorption coefficient and the quantum yield of the internal photoeffect. (3) Below 4900 Å the behavior of the PME corresponds to the wavelength dependence of the PME near the fundamental absorption edge, which is typical of semiconductors. This phenomenon is connected with the abrupt increase of the diffusion length, in this case determined by the electron parameters, and suggests the existence of a new band-to-band transition in which electrons with other diffusion characteristics are produced. The conduction band splitting in Cu_2O was suspected already by S. A. Moskalenko (FTT, 2, 1755, 1960). Also the data by I. Pastrnyak, P. A. Titov (FTT, 3, 861, 1961), I. Pastrnyak (FTT, 1, 971, 1959), A. L. Rvachev (ZhTF, 28, 45, 1958), and N. B. Gornyy (ZhETF, 35, 281, 1958) speak in favor of this assumption. The authors thank I. M. Tsidil'kovskiy for discussions. There are 1 figure and 9 references: 7 Soviet and 2 non-Soviet. The two references to English-language publications read as follows: I. Kikoni, M. Noskov. Nature, 131, 725, 1933; W. Gartner. Phys. Rev., 105, 823, 1957.

30808
S/181/61/003/011/056/056
Photomagnetoelectric effect and band ... B109/B102

ASSOCIATION: Ural'skiy gosudarstvennyy universitet im. A. M. Gor'kogo Sverdlovsk (Ural State University imeni A. M. Gor'kiy Sverdlovsk)

SUBMITTED: August 25, 1961

Fig. 1. Spectral dependence of the photoconductivity (6) and of the short-circuit current of the PME (a,b) for Cu_2O.

Legend: (1) I_{sc} short-circuit current; σ_{ph}, photoconductivity in arbitrary units; b is the first part of curve a on an enlarged scale.

Card 3/4 3

APPROVED FOR RELEASE: Thursday, September 26, 2002 CIA-RDP86-00513R002065710005-5"

Viscosity of molten titanium slags. M. P. Volarovich and L. V. Zverev. *Domez* 1934, No. 5, 22-9.—The method developed by Volarovich (cf. *C. A.* 27, 4905) and consisting of a cylinder rotating in the liquid medium was used in a series of expts. to det. viscosity of high-Ti slags. Two samples of Ti and 1 sample of ordinary slag from the Novo-Tagilsk blast furnace were tested and the results compared. The samples analyzed: Ti slag No. 1, 18.47 SiO_2, 12.64 Al_2O_3, 32.26 TiO_2, 14.70 CaO, 9.92 MgO, 3.80 FeO, 5.40 MnO, 2.55 Na_2O and 0.58% S; Ti slag No. 2, 20.00 SiO_2, 15.63 Al_2O_3, 31.52 TiO_2, 13.46 CaO, 10.61 MgO, 2.29 FeO, 5.24 MnO, 2.12 Na_2O and 0.45% S; ordinary slag, 31.53 SiO_2, 15.90 Al_2O_3, 46.30 CaO, 1.29 FeO, 1.38% MnO, MgO not detd. The results of measurements, in abs. units of viscosity, are: for Ti slag No. 1, < 6, < 6, < 6, 6, 112.5 and 1870 for temps. 1375°, 1290°, 1270°, 1255°, 1250° and 1245°, resp.; for Ti slag No. 2, < 7, < 7, < 7, < 7, 7, 92.5, 182.5 and 49 for temps. 1400°, 1370°, 1325°, 1270°, 1230°, 1225°, 1225° and 1215°, resp.; for ordinary slag, 9.0, 10.5, 24.4 and 210 for 1404°, 1390°, 1378° and 1360°, resp. This last slag crystd. at 1340°. Further investigation at higher temp. up to 1550-1600° is contemplated. S. L. M.

APPROVED FOR RELEASE: Thursday, September 26, 2002 CIA-RDP86-00513R002065710005-5"

9

Use of burned limestone in the blast furnace. I. V. Shmanenkov and L. V. Zverev. *Mineral Sur'y* 9, No. 10, 16-19(1934).—The calcns. show that the consumption of coke can be reduced 15–20% by the use of burned limestone by the process of Baumgartner, *C. A.* 28, 5011⁸; French pat. 640,678. Chas. Blanc

Ca

9

Viscosity of welding slags. I. V. Zaitsev and D. I. Kaufman. *Metallurg* 12, No. [illegible] (1937). The viscosity of 23 typical slags was detd. between 1100° and 1400°. TiO_2 reduced the viscosity of acid slags.
H. W. Rathmann

A58-11A METALLURGICAL LITERATURE CLASSIFICATION

CA

Viscosity of titanium-containing slags. L. V. Zvereva. *Akad. Nauk S.S.S.R., Otdel. Tekh. Nauk, Inst. Mashinovedeniya, Sovershchanie Vysshosti Zhidkostei i Kolloid. Rastvorov* (*Conference on Viscosity of Liquids and Colloidal Solns.*) 1, 271-7(1941)(in Russian).—Slags rich in TiO_2, 10% and up to 36%, occur in the extn. of iron from titanomagnetite ores. Contrary to often-expressed views, the TiO_2 content does not give rise to abnormally high viscosity. With a modified Volarovich high-temp. viscometer, with coaxial cylinders (outer cylinder 40 mm. diam., inner 20 mm. diam., height 30 mm.), the lower limit of accuracy could be brought to 1 poise; measurements on acidic slags showed the viscosity to be a function of the SiO_2 content. There is only an insignificant variation up to about 35% SiO_2; from that interval on, further increase in SiO_2 is accompanied by a sharp rise in viscosity, e.g., up to about 35% SiO_2, 1-1.5 poises; at 40% and 45% SiO_2, resp., 3 and 10 poises. Slags with less than 35% SiO_2 are rather cryst. in character, those richer in SiO_2 are typical glasses. Partial replacement of SiO_2 by TiO_2 results in substantial lowering of the viscosity, example: 47.86% SiO_2, no TiO_2, 21 poises at 1400°; with 12% SiO_2 replaced by TiO_2, 1.2 poises; a slag contg. 65% SiO_2 + TiO_2, in approx. equal proportions, at 1400°, 1.1 poises; the same slag with 65% SiO_2 and no TiO_2 would be altogether nonfluid at that temp. This is easily explained by the specifically vitrifying effect of SiO_2. Nine typical TiO_2-contg. slags were measured in an app. based on damping of oscillations, and suitable for viscosities of the order of tenths of a poise. Examples (contents of TiO_2, SiO_2, Al_2O_3, CaO, MgO, resp.): (I) 27.00, 21.30, 18.40, 21.50, 11.20; (II) 20.30, 22.80, 19.35, 16.45, 11.90; (III) 20.70, 16.20, 13.80, 40.90, 8.40; viscosities: I, at 1340°, 1370°, 1450°, resp., 2.2, 0.4, 0.2 poise; II, at 1410°, 1425°, 1525°, resp., 3.0, 0.9, 0.3; III, at 1400°, 1550°, resp., 2.7, 0.15. All curves have the typical shape of viscosity curves of crystallizing melts, with a very small viscosity gradient above a certain temp. and sharp rise of the viscosity below that temp. All slags show very low viscosities, of the order of tenths of a poise, above that temp. It is not clear as yet how far this temp. of beginning "thickening" corresponds to the temp. of actual crystn.

N. Thon

A.S.M.-S.L.A. METALLURGICAL LITERATURE CLASSIFICATION

APPROVED FOR RELEASE: Thursday, September 26, 2002 CIA-RDP86-00513R002065710005-5"

ZVEREV, I. V.

Geography and Geology

Requirements of industry as to the quality of mineral raw materials. Handbook for geologists--Moskva, Gos. izd-vo geologicheskoi lit-ry Komiteta po delam geologii pri SNK SSSR, No. 24, Manganese, 1947.

Monthly List of Russian Accessions, Library of Congress, October, 1952. UNCLASSIFIED.

APPROVED FOR RELEASE: Thursday, September 26, 2002 CIA-RDP86-00513R002065710005-5"

ZVARYKIN, L V

"Cast white stone [illegible]

[illegible]

... 300° it becomes a ... and after 30-40 min at 250 ... viscosity ... poises ... liquid ...

[illegible]

... natural glass. ... The stone contains very few ... 0.5–0.2 mm in diam. ... Factors which influence the ... of the crystals and the degree of crystallinity are discussed.

A. P. Kotlo...

CHERNYAK, Abram Samuilovich; IVANOVSKIY, M.D., prof., retsenzent; ZVEREV, L.V., kand. tekhn. nauk, otv. red.

[Chemical dressing of ores] Khimicheskoe obogashchenie rud. Moskva, Nedra, 1965. 201 p. (MIRA 18:9)

ACC NR: AT7007280 (N) SOURCE CODE: UR/3249/66/000/013/0027/0034

AUTHORS: Zverev, L. V.; Petrova, N. V.; Murali, G. N.; Makarova, N. P.

ORG: none

TITLE: The use of water-soluble amines in treating tantalum-niobium materials

SOURCE: Moscow. Vsesoyuznyy nauchno-issledovatel'skiy institut mineral'nogo syr'ya. Mineral'noye syr'ye, no. 13, 1966. Obogashcheniye i pererabotka mineral'nogo syr'ya (Concentration and processing of minerals), 27-34

TOPIC TAGS: metallurgy, tantalum compound, niobium compound, amine

ABSTRACT: The authors have found that the use of oxalic acid or hydrogen peroxide in forming Ta and Nb complexes is unsatisfactory because of instability and other factors. The use of water-soluble amines is suggested. The present paper outlines the optimal conditions for leaching Nb and Ta from sulfate cake by using as complexing agents methylamine, monoethanolamine, and triethanolamine. Columbite concentrates were used in the test. The technique found to be most satisfactory is the following: one part (by weight) of the concentrate is added to 2.5--3 parts of H_2SO_4, and the mix is held for two hours at 350C. The material is then washed with water and treated with methylamine for 30 minutes at 40C. The Nb and Ta are now in solution and may be removed. Neutralization with a weak mineral acid precipitates Nb and Ta pentoxides

ACC NR: AT7007280

(with a purity of 99%). After the precipitate is filtered off, the amine may be regenerated by addition of CaO, which combines with the sulfate radical to form $CaSO_4$. This may be removed, and the pure amine is ready for re-use in the process. Orig. art. has: 8 figures and 6 tables.

SUB CODE: 11/ SUBM DATE: none/ ORIG REF: 006/ OTH REF: 002

Card 2/2

ZVEREV, L.V.; YELFIMOV, I.I.

Chlorination of circonium in the melt of chlorides. Min.syr'e no.9: 16-24 '63. (MIRA 17:10)

ZVEREV, L.V.; PETROVA, N.V.; MURAL', G.N.

Extraction of niobium by trictylamine from sulfuric acid solutions.
Min.syr'e no.9:25-31 '63. (MIRA 17:10)

MILOVANOV, G.N.; CHERNOSVITOV, Yu.L.; GINZBURG, A.I., nauchnyy red.; YERSHOV, A.D., glavnyy red.; ZVEREV, L.V., red.; ZUBAREV, N.N., red.; KREYTER, V.M., red.; MOKROUSOV, V.A., red.; SOLOV'YEV, D.V., red.; KHRUSHCHOV, N.A., red.; SHMANENKOV, I.V., red.; IZRAILEVA, G.A., red.izd-va; IVANOVA, A.G., tekhn.red.

[Industry's requirements as to the quality of mineral raw material; handbook for geologists] Trebovaniia promyshlennosti k kachestvu mineral'nogo syr'ia; spravochnik dlia geologov. Moskva, Gos.nauchno-tekhn.izd-vo lit-ry po geol. i okhrane nedr. No.51. [Rare earth elements] Redkozemel'nye elementy. Izd.2., perer. 1959. 58 p. (MIRA 12:12)

1. Moscow. Vsesoyuznyy nauchno-issledovatel'skiy institut mineral'nogo syr'ya.

(Rare earths)

ZVEREV, L.V.; KONTOROVICH, G.I.; CHERNYSHEV, G.B., nauchnyy red.; STOLYAROV, A.G., red.izd-va; BYKOVA, V.V., tekhn. red.

[Industry's requirements as to the quality of mineral raw materials]Trebovaniia promyshlennosti k kachestvu mineral'nogo syr'ia; spravochnik dlia geologov. Izd.2., perer. Moskva, Gosgeoltekhizdat. No.24. [Manganese]Marganets. 1960. 57 p. (MIRA 16:3)

1. Moscow. Vsesoyuznyy nauchno-issledovatel'skiy institut mineral'nogo syr'ia.

(Manganese)

ZVEREV, L.V.; SMIRNOVA, N.N.; FILIPPOVSKAYA, T.B.

Solubility of rock-forming silicate minerals in sulfuric acid solutions. Min.syr'e no.4:134-147 '62. (MIRA 16:4)
(Silicates) (Sulfuric acid)

BENESLAVSKIY, S.I.; GORETSKIY, Yu.K.[deceased]; ZVEREV, L.V.; SOSHNIKOVA, M.S., nauchnyy red.; GRISHINA, T.B., red. izd-va; BYKOVA, V.V., tekhn. red.

[Industry's requirements as to the quality of mineral raw materials] Trebovaniia promyshlennosti k kachestvu mineral'nogo syr'ia; spravochnik dlia geologov. Moskva, Gosgeoltekhizdat. No.35. [Aluminum] Aliuminii. 1962. 59 p. (MIRA 15:7)

1. Moscow. Vsesoyuznyy nauchnyy nauchno-issledovatel'skiy institut mineral'nogo syr'ya.

(Aluminum)

GLAZKOVSKIY, A.A.; KRUTOV, G.A., nauchnyy red.; ZVEREV, L.V., nauchnyy red.; MATIS, T.I., red. izd-va; BYKOVA, V.V., tekhn. red.

[Industry's requirements as to the quality of mineral raw materials] Trebovaniia promyshlennosti k kachestvu mineral'nogo syr'ia; spravochnik dlia geologov. Moskva, Gos. nauchno-tekhn. izd-vo lit-ry po geol. i okhrane nedr. No.55.[Cobalt] Kobal't. Nauch. red. G.A.Krutov i L.V.Zverev. Izd.2., perer. 1961. 49 p. (MIRA 15:2)

1. Moscow. Vsesoyuznyy nauchno-issledovatel'skiy institut mineral'nogo syr'ya.

(Cobalt)

VASIL'YEV, P.V.; YERSHOV, A.D., glavnyy red.; CHERNOSVITOV, Yu.L., zam. glavnogo red.; SHMANENKOV, I.V., zam.glavnogo red.; KALMYKOV, G.S., nauchnyy red.; GINZBURG, A.I., red.; ZVEREV, L.V., red.; ZUBAREV, N.N., red.; KREYTER, V.M., red.; MOKROUSOV, V.A., red.; SOLOV'YEV, D.V., red.; KHRUSHCHOV, N.A., red.; FEDOROVA, L.N., red.izd-va; IVANOVA, A.G., tekhn.red.

[Industry's requirements as to quality in mineral raw materials; a handbook for geologists] Trebovaniia promyshlennosti k kachestvu mineral'nogo syr'ia; spravochnik dlia geologov. Izd.2., perer. Moskva, Gos.nauchno-tekhn.izd-vo lit-ry po geol. i okhrane nedr. No.66. [Coal] Ugol'. Nauchn.red.G.S.Kalmykov. 1960. 110 p. (MIRA 14:6)

1. Moscow. Vsesoyuznyy nauchno-issledovatel'skiy institut mineral'nogo syr'ya.

(Coal)

VINOGRADOV, S.S.; ZUBAREV, N.N., nauchnyy red.; YERSHOV, A.D., glav. red.; CHERNOSVITOV, Yu.L., zam. glav. red.; SHMANENKOV, I.V., zam. glav. red.; GINZBURG, A.I., red.; ZVEREV, L.V., red.; MOKROUSOV, V.A., red.; SOLOV'YEV, D.V., red.; TROYANOV, A.T., red.; KHRUSHCHOV, N.A., red.; LYUBCHENKO, Ye.K., red. izd-va; BYKOVA, V.V., tekhn.red.

[Industry's requirements as to the quality of mineral raw materials] Trebovaniia promyshlennosti k kachestvu mineral'nogo syr'ia; spravochnik dlia geologov. Izd.2., perer. Moskva, Gos. nauchno-tekhn. izd-vo lit-ry po geologii i okhrane nedr. No.10[Limestones]Izvestniaki. Nauch. red. N.N.Zubarev. 1961. 61 p.
(MIRA 14:10)

1. Moscow. Vsesoyuznyy nauchno-issledovatel'skiy institut mineral'nogo syr'ya.

(Limestone)

BUTKEVICH, T.V.; YERSHOV, A.D., glav. red.; CHERNOSVITOV, Yu.L., zamestitel' glav. red.; SHMANENKOV, I.V., zamestitel' glav. red.; GINZBURG, A.I., red.; ZVEREV, L.V., red.; ZUBAREV, N.N., red.; MOKROUSOV, V.A., red.; SOLOV'YEV, D.V., red.; TROYANOV, A.T., red.; KHRUSHCHEV, N.A., red.; STEPANOV, I.S., nauchnyy red.; ROZHKOVA, L.G., red. izd-va; IYERUSALIMSKAYA, Ye.S., tekhn. red.

[Industry's requirements as to the quality of mineral raw materials; handbook for geologists] Trebovaniia promyshlennosti k kachestvu mineral'nogo syr'ia; spravochnik dlia geologov. Izd. 2., perer. Moskva, Gos. nauchno-tekhn. izd-vo lit- ry po geol. i okhrane nedr. No. 43. [Tungsten] Vol'fram. 1960. 61 p. (MIRA 14:5)

1. Moscow. Vsesoyuznyy nauchno-issledovatel'skiy institut mineral'nogo syr"ya.

(Tungsten)

SHMANENKOV, I.V., red.; ZVEREV, L.V., red.; KOVALENKO, O.V., red.; SOKOLOV, I.Yu., red.; EYGELES, M.A., red.; Prinyali uchastiye: BASMANOV, V.A., red.; KAMINSKAYA, L.S., red.; KOTS, G.A., red.; LEVIUSH, I.T., red.; MOKROUSOV, V.A., red.; PODKOSOV, L.G., red.; ROZHKOVA, Ye.V.; SOLOV'YEV, D.V., red.; FEDOROV, F.N., red.; FINKEL'SHTEYN, I.D.; KHONINA, O.I., red.; GRISHINA, T.B., red. izd-va; GUROVA, O.A., tekhn. red.

[Studies on the dressing and industrial processing of minerals] Issledovaniia po obogashcheniiu i tekhnologii poleznykh iskopaemykh. Moskva, Gos. nauchno-tekhn. izd-vo lit-ry po geol. i okhrane nedr, 1961. 131 p. (MIRA 14:7)

1. Russia(1923- U.S.S.R.) Ministerstvo geologii i okhrany nedr. 2. Vsesoyuznyy nauchno-issledovatel'skiy institut mineral'nogo syr'ya (for Eygeles, Leviush)

(Ores)

PETROVSKAYA, N.V.; KLIMENKO, N.G.; GINZBURG, A.I., nauchnyy red.; YERSHOV, A.D., glavnyy red.; CHERNOSVITOV, Yu.L., zam. glavnogo red.; SHMANENKOV, I.V., zam.glavnogo red.; ZVEREV, L.V., red.; ZUBAREV, N.N., red.; KREYTER, V.M., red.; MOKROUSOV, V.A., red.; SOLOV'YEV, D.V., red.; KHRUSHCHOV, N.A., red.; STOMEROV, A.G., red.izd-va; IVANOVA, A.G., tekhn.red.

[Industrial requirements for the quality of mineral raw materials; handbook for geologists] Trebovaniia promyshlennosti k kachestvu mineral'nogo syr'ia; spravochnik dlia geologov. Izd.2., perer. Moskva, Gos.nauchno-tekhn.izd-vo lit-ry po geol. i okhrane nedr. No.71. [Selenium and tellurium] Selen i tellur. Nauchn.red. A.I. Ginzburg. 1960. 45 p. (MIRA 14:1)

1. Moscow. Vsesoyuznyy nauchno-issledovatel'skiy institut mineral'nogo syr'ya.
(Selenium ores) (Tellurium ores)

RAMZES, B.Ya.; ZUBAREV, N.N.; CHERNOSVITOV, Yu.L., nauchnyy red.; YERSHOV, A.D., glavnyy red.; SHMANENKOV, I.V., zam.glavnogo red.; GINZBURG, A.I., red.; ZVEREV, L.V., red.; KREYTER, V.M., red.; MOKROUSOV, V.A. red.; SOLOV'YEV, D.V., red.; KHRUSHCHOV, N.A., red.; IZRAILEVA, G.A., red.izd-va; BYKOVA, V.V., tekhn.red.

[Industrial specifications for the quality of raw minerals; handbook for geologists] Trebovaniia promyshlennosti k kachestvu mineral'nogo syr'ia; spravochnik dlia geologov. Izd.2., perer. Moskva, Gos.nauchno-tekhn.izd-vo lit-ry po geologii i okhrane nedr. No.2. [Quartz sand] Pesok kvartsevyi. Nauchn.red.IU.L.Chernosvitov. 1955. 55 p. (MIRA 13:7)

1. Moscow. Vsesoyuznyy nauchno-issledovatel'skiy institut mineral'nogo syr'ya.

(Sand)

BORZUNOV, V.M.; PETROV, V.P., nauchnyy red.; YERSHOV, A.D., glavnyy red.; CHERNOSVITOV, Yu.L., zam.glavnogo red.; SHMANENKOV, I.V., zam. glavnogo red.; GINZBURG, A.I., red.; ZVERKV, L.V., red.; ZUBAREV, N.N., red.; KREYTER, V.M., red.; MOKROUSOV, V.A., red.; SOLOV'YEV, D.V., red.; KHRUSHCHOV, N.A., red.; STOLYAROV, A.G., red.izd-va; IVANOVA, A.G., tekhn.red.

[Industry's requirements as to the quality of mineral raw materials; handbook for geologists] Trebovaniia promyshlennosti k kachestvu mineral'nogo syr'ia; spravochnik dlia geologov. Izd.2., perer. Moskva, Gos.nauchno-tekhn.izd-vo lit-ry po geol. i okhrane nedr. No.12. [Feldspars] Polevoshpatovoe syr'e. Nauchn.red. V.P.Petrov. 1960. 25 p. (MIRA 13:9)

1. Moscow. Vsesoyuznyy nauchno-issledovatel'skiy institut mineral'nogo syr'ya.

(Feldspar)

STEPANOV, I.S.; CHERNOSVITOV, Yu.L., nauchnyy red.; YERSHOV, A.D., glavnyy red.; GINZBURG, A.I., red.; ZYKHEV, L.V., red.; ZUBAREV, N.N., red.; KREYTER, V.M., red.; MOKROUSOV, V.A., red.; SOLOV'YEV, D.V., red.; KHRUSHCHOV, N.A., red.; SHMANENKOV, I.V., red.; STOLYAROV, A.G., red.; IVANOVA, A.G., tekhn.red.

[Industrial requirements as to the quality of mineral raw materials; handbook for geologists] Trebovaniia promyshlennosti k kachestvu mineral'nogo syr'ia; spravochnik dlia geologov. Izd.2., perer. Moskva, Gos.nauchno-tekhn.izd-vo lit-ry po geol. i okhrane nedr. No.46. [Rubidium and cesium] Rubidii i tsezii. Nauchn.red. IU.L. Chernosvitov. 1960. 33 p. (MIRA 14:2)

1. Moscow. Vsesoyuznyy nauchno-issledovatel'skiy institut mineral'nogo syr'ya.
(Rubidium) (Cesium)

VESELOVSKIY, V.S.; BERLING, N.I., nauchnyy red.; YERSHOV, A.D., glavnyy red.; CHERNOSVITOV, Yu.L., zam.glavnogo red.; SHMANENKOV, I.V., zam. glavnogo red.; GINZBURG, A.I., red.; ZVEREV, L.V., red.; ZUBAREV, N.N., red.; KREYTER, V.M., red.; MOKROUSOV, V.A., red.; SOLOV'YEV, D.V., red.; KHRUSHCHOV, N.A., red.; STOLYAROV, A.G., red.izd-va; IVANOVA, A.G., tekhn.red.

[Industry's requirements as to the quality of mineral raw materials; handbook for geologists] Trebovaniia promyshlennosti k kacheatvu mineral'nogo syr'ia; spravochnik dlia geologov. Izd.2., perer. Moskva, Gos.nauchno-tekhn.izd-vo lit-ry po geol. i okhrane nedr. No.3. [Graphite] Grafit. Nauchn.red. N.I.Berling. 1960. 44 p. (MIRA 13:9)

1. Moscow. Vsesoyuznyy nauchno-issledovatel'skiy institut mineral'nogo syr'ya.
(Graphite)

CHERNOSVITOV, Yu.L.; KONSTANTINOV, M.M., nauchnyy red.; YERSHOV, A.D., glavnyy red.; SHMANENKOV, I.V., zam.glavnogo red.; GINZBURG, A.I., red.; ZVEREV, L.V., red.; KREYTER, V.M., red.; MOKROUSOV, V.A., red.; SOLOV'YEV, D.V., red.; KHRUSHCHOV, N.A., red.; NEKRASOVA, N.B., red.izd-va; IVANOVA, A.G., tekhn.red.

[Industrial requirements for the quality of raw minerals; handbook for geologists] Trebovaniia promyshlennosti k kachestvu mineral'nogo syr'ia; spravochnik dlia geologov. Moskva, Gos.nauchno-tekhn. izd-vo lit-ry po geol. i okhrane nedr. No.67. [Uranium] Uran. Nauchn. red.M.M.Konstantinov. Izd.2., perer. 1959. 65 p. (MIRA 13:1)

1. Moscow. Vsesoyuznyy nauchno-issledovatel'skiy institut mineral'nogo syr'ya.

(Uranium)

AUTHORS: Zverev, L.V., Petrova, N.V.

TITLE: A New Method for the Determination of Lead Sulphides in Ores (Novyy metod opredeleniya sul'fidnogo olova v rudakh).

PERIODICAL: Zavodskaya Laboratoriya, 1957, Vol. 23, Nr 12, pp. 1403-1405 (USSR)

ABSTRACT: The methods hitherto published in the USSR mentioned above are based upon the property of the lead sulphides of dissolving in acids, whilst lead oxides remain undissolved. The methods developed by Hirsch, Dolinivo)Dobrovol'skiy (Klimenko) and Sidorkin are compared with one another and eventually all three are declared to be faulty in this paper. As is stated here, practical results can be obtained in this case by the application of chlorine (gas), by dissolving the chlorinated lead sulphides in carbon tetrachloride with a slight addition of elementary sulphur and the lead oxide here remaining unchromed and undissolved. In the further course of the work it is, however, recommended to replace chroming in this case by bromination, which is supposed to facilitate the process of analyzation considerably. The process of analyzation is described and the results are shown in a table. Another table compares the results obtained according to the methods by Hirsch, Dolinovo-Dobrovol'skiy

Card 1/2

with the method suggested here. Examples: at a 20,03% content of Sn in quartz ore: 1,92% dissolved and 18,15% undissolved was obtained in case I; 2,07% dissolved and 17,96% undissolved was obtained in case II; 0,015% sulphide with 20,00% oxide of Sn was obtained in case III (according to the method suggested). There are 2 tables and 6 Slavic references.

ASSOCIATION: All-Union Institute for Mineral Raw Materials (Vsesoyuznyy institut mineral'nogo syr'ya).

AVAILABLE: Library of Congress

Card 2/2 1. Ores-Lead sulfides-Determination

SHMANENKOV, I.V.; TITOV, V.I.; RUSANOV, A.K.; ROZHKOVA, Ye.V.; EYGELES, M.A.; ZVEREV, L.V.

All-Union conference on laboratory methods of studying ores and minerals of rare and trace elements. Sov. geol. no.61:158-166 '57. (MIRA 11:4)

1. Vsesoyuznyy institut mineral'nogo syr'ya.
(Mineralogy--Congresses)

137-58-5-9289

Translation from: Referativnyy zhurnal, Metallurgiya, 1958, Nr 5, p 72 (USSR)

AUTHOR: Zverev, L. V.

TITLE: Speiss Smelting of Lean Cobalt Ores (Plavka bednykh kobal'tovykh rud na shpeyzu)

PERIODICAL: Byul. Tsentr. in-t inform. M-va tsvetn metallurgii SSSR, 1957, Nr 6, pp 15-16

ABSTRACT: A method of speiss smelting of lean Co ores at increased temperatures, in a mildly reducing atmosphere, and on slags with small Fe content was investigated under laboratory conditions. The loss of Co in the slags is a direct and well-defined function of the degree of Fe transition into the slag. By employing speiss smelting followed up by two stages of concentration smelting of ore, in which the Co/Fe ratio is equal to 0.065, it is possible to obtain a speiss product in which this ratio is equal to 2.14. Co losses in the waste slags are less than 10%. The smelting was conducted at a temperature of 1420-1500°C. An addition of CaF_2 (3%) improves the progress of the process by lowering the viscosity of slags. Results of laboratory smelting of ores with various Co content are shown. G.S.

Card 1/1

1. Cobalt ores--Processing 2. Slags--Properties

ZVEREV, M.; POPOVA, Z.V., red.; GIRICHEV, V., tekh. red.

[Alma-Ata nature calendar] Kalendar' Alma-Atinskoi prirody. Alma-Ata, Kazakhskoe gos. izd-vo khudozh. lit-ry, 1955. 15 p.
(Alma-Ata Province--Nature) (MIRA 11:8)

APPROVED FOR RELEASE: Thursday, September 26, 2002 CIA-RDP86-00513R002065710005-5"

Science

Traveling animals; series "For the young reader". Irkutsk, Irkutskoe obl. gos. izd-vo, 1951.

Monthly List of Russian Accessions, Library of Congress, November, 1952. UNCLASSIFIED.

ZVEREV, M.

Ingratitude. Vokrug sveta no.12:49 D '55. (MIRA 9:4)
(Hunting)

ZVEREV, M., inzhener; KALAFATOV, P., inzhener.

Narrow-range loading units. Mast. ugl. 5 no.9:24-25 S '56.
(Coal mining machinery) (MLRA 9:10)

APPROVED FOR RELEASE: Thursday, September 26, 2002 CIA-RDP86-00513R002065710005-5"

Geography & Geology

In the upper reaches of the Tom River.
Bibliotechka shkol'nika kraeveda. Novosibirsk,
Novosib. obl. gos. izdatel'stvo, 1951.

Monthly List of Russian Accessions, Library of Congress,
October, 1952. UNCLASSIFIED.

ZVEREV, M.; NIKOL'SKIY, P.

Naturalist's notes. IUn. nat. no.8:37-38 Ag '58. (MIRA 11:9)
(Kazakhstan--Birds--Habits and behavior)
(Animals, Habits and behavior of)

ZVEREV, M.

"Chemistry and technology of the production of nitron fibers" by A.B.Pakshver, B.E.Geller. Reviewed by M.Zverev. Khim.volok. no.6: 77-78 '61. (MIRA 14:12)

(Textile fibers, Synthetic) (Acrylonitrile polymers)
(Pakshver, A.B.) (Geller, B.E.)

DOROKHINA, I.; ZVEREV, M.

Development of processes for obtaining fibers from polypropylene.
Khim.volok. no.5:77-78 '61. (MIRA 14:10)
(Textile fibers, Synthetic) (Polypropylene)

ZVEREV, M.

It changed from night to day. IUn. nat. no.1:36-37 Ja '62.
(MIRA 15:1)

(Foxes)

ZVEREV, M. D.

Zverev, M. D.- "Problem of the running speed of certain animals," Trudy Almaat. gos. zapovednik , Issue 7, 1948, p. 153

SO: U-4934, 29 Oct 53, (Letopis 'Zhurnal 'nykh Statey, No. 16, 1949).

ZVEREV, M. D.

Zverev, M. D.- "The problem of feeding the Tyan'-Shan titmouse," Trudy Almaat. gos. zapovednika, Issue, 7, 1948,

SO: U-4934, 29 Oct 53, (Letopis 'Zhurnal 'nykh Statey, No. 16, 1949).

ZVEREV, N. D.

Birds of Prey

Is the sense of smell edveloped in predatory birds? Priroda. 41 No. 7, 1952.

Monthly List of Russian Accessions. Library of Congress. November 1952. UNCLASSIFIED

ZVEREV, M.D., chlen.

APPROVED FOR RELEASE: Thursday, September 26, 2002 CIA-RDP86-00513R002065710005-5"

Errors in biology in children's science-fiction. Est. v shkole no.3:84-89 My-Je '53. (MLRA 6:5)

1. Soyuz sovetskikh pisateley SSSR (Alma Ata). (Biology--Juvenile literature).

PRIGORIEVSKOE, Konstantin Nikolayevich; ZVEREV, M.P., redaktor; MELESHKO, K.L., redaktor; ZLOBIN, M.V., tekhnicheskiy redaktor

[Along desert paths] Tropami pustyni. Alma-Ata, Karakhskoe gos. izd-vo, 1956. 103 p. (MLRA 10:2)
(Bet-Pak-Dala--Description and travel)

ZVEREV, Maksim Dmitriyevich; RUDENSKAYA, L.V., redaktor; SAKHAROVA, N.V., tekhnicheskiy redaktor; KOZLOVSKAYA, M.D., tekhnicheskiy redaktor

[Birds and animals of our country; for extracurricular reading in secondary schools] O ptitsakh i zveriakh nashei rodiny; dlia vneklassnogo chteniia uchashchikhsia srednei shkoly. Moskva, Gos. uchebno-pedagog. izd-vo Ministerstva prosveshcheniia RSFSR, 1956. 172 p. (MLRA 9:7)

(Russia--Birds) (Russia--Mammals)

ZVEREV, M.D.

Observations on the fall migration of birds in southeastern Transbaikalia. Ornitologiia no.6:470-471 '63.
(MIRA 17:6)

RASHEK, V.L.; RASHEK, V.A.; ZVEREV, M.D., otv. red.; SUVOROVA, R.I., red.; ROROKINA, Z.P., tekhn. red.

[Barsa-Kel'mes State Preserve] Gosudarstvennyi zapovednik "Ostrov Barsa-Kel'mes." Alma-Ata, Izd-vo AN KazSSR, 1963. 90 p. (MIRA 17:3)

ZVEREV, M.D.

Ecology of the Tien Shan black grouse (Trans-Ili Ala-Tau).
Ornitologiia no.5:208-210 '62. (MIRA 16:2)
(Trans-Ili Ala-Tau--Black grouse)

ZVEREV, Maksim Dmitriyevich; MARKOV, N.G., red.; TSYPPO, R.V., tekhn.red.

[Birds and animals of our country; supplementary reading for secondary school students] O ptitsakh i zveriakh nashei rodiny; dlia vneklassnogo chteniia uchashchikhsia srednei shkoly. Izd.2. Moskva, Gos.uchebno-pedagog.izd-vo M-va prosv.RSFSR, 1960. 174 p. (MIRA 13:10)

(Animals, Habits and behavior of)

APPROVED FOR RELEASE: Thursday, September 26, 2002 CIA-RDP86-00513R002065710005-5"

G-2

Abs Jour : Ref Zhur - Biol., No. 8, 1958, No 33942

Author : Bondarova, V. I., Zvorov, M. D.

Inst : Not given

Title : Experimental Infection of Foxes and Jackals by Cestode Multiceps Multiceps. -- Eksperimentalnoe zarazhenie lisits i shakalov tsestodoy Multiceps multiceps.

Orig Pub : Tr. In-ta zool. AN KazSSR, 1957, 7, 237-240.

Abstract : In feeding larvocystocoenure (?) vesicles from a sheep-brain to 3 jackals, 4 foxes, 3 pups and one badger, semi-ripened M. multiceps were found in 2 jackals, 2 pups, and one young fox. The epizootological significance of jackals in spreading sheep coenurosis and coenurosis of large horned cattle is distinguished from foxes, the role of which is evidently insignificant.

Card 1/1

ZVEREV, M.F., inzhener-mekhanik

Narrow range unit with the UMK-1 cutter-loader. Ugol' Ukr. Vol.3 no.5:32-34 My '59. (MIRA 12:9)
(Coal mining machinery)

ZVEREV, M.I.

Standard and durability. Standartizatsiia 29 no.9: 61-62 S '65. (MIRA 18:12)

ZVEREV, M.K.

Population census of foreign cities and large urban communities having more than 500,000 population. Vop.geog. no.38:232-245 '56. (MLRA 9:9)

(Population--Statistics)

ZVETEV, M.K.

Some features of the territorial structure of the Saxonian industry (German Democratic Republic). Vest. Mosk. un. Ser. 5: Geog. 20 no.6:77-79 N-D '65. (MIRA 19:1)

L 44599-66 EWT(1)/EWT(m)/EEC(k)-2/T/EWP(k)/EWP(t)/ETI IJP(c) WG/JD/AT

ACC NR: AP6030950 SOURCE CODE: UR/0181/66/008/009/2547/2548

AUTHOR: Bogdankevich, O. V.; Zverev, M. M.; Pechenov, A. N.; Sysoyev, L. A.

ORG: Physics Institute im. P. N. Lebedev, AN SSSR, Moscow (Fizicheskiy institut AN SSSR)

TITLE: Recombination radiation of ZnS single crystals excited by fast electrons

SOURCE: Fizika tverdogo tela, v. 8, no. 9. 1966, 2547-2548

TOPIC TAGS: solid state laser, zinc sulfide, ultraviolet laser, recombination radiation, electron beam pumping, ELECTRON BEAM

ABSTRACT: Laser action was reported in electron-beam-pumped ZnS single crystals with a large forbidden gap. High-purity hexagonal ZnS specimens were soldered with indium to a copper heat sink kept at liquid N temperature (except in the case of some experiments conducted at room temperature). The electron beam was focused on the polished surface of the specimen at right angles to the two polished ends. The emission recorded by a ZMR-3 monochromator and an FEU-18A photomultiplier was observed in the direction perpendicular to the incident beam. Recombination radiation was observed in the ultraviolet region when ZnS was excited by a pulsed beam of 50-kv electrons at current densities up to 6 amp·cm^{-2}. At increased current densities (6 amp·cm^{-2} and up) and 80K, emission of a line (14 Å wide) at 3300 Å was predominant. The shapes of the light and current pulses were coincident, which would seem to indicate that the life-

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ACC NR: AP6030950

time of nonequilibrium carriers did not exceed 10^{-7} sec. A 3-Å displacement in the intensity maximum of the 3300-Å line in the long-wave direction was observed at increased current densities and was attributed to the overheating of specimens. Orig. art. has: 3 figures. [YK]

SUB CODE: 20/ SUBM DATE: 20Dec65/ ORIG REF: 003/ ATD PRESS: 5078

ACC NR: AP7003904 SOURCE CODE: GE/0030/67/019/001/K005/K006

AUTHOR: Bogdankevich, O.V.; Zverev, M.M.; Krasilnikov, A.I.; Pechenov, A.N.

ORG: Physical Institute, Academy of Sciences of the USSR, Moscow

TITLE: Laser emission in electron-beam-excited ZnSe

SOURCE: Physica status solidi, v. 19, no. 1, 1967, K5-K6

TOPIC TAGS: semiconductor laser, electron beam, ~~pumped laser~~, zinc compound, selenide, LASER EMISSION, LASER PUMPING

ABSTRACT:

Laser action in electron-beam-pumped ZnSe at 4600 Å was observed experimentally. The ZnSe crystals were prepared under high-pressure, gas-phase reaction and subsequent crystallization. The samples were 3 [sic] x 0.5 x 0.8 mm, and the spacing between the cavity mirrors was 0.8 mm. The operating temperature was 100K, rising to 150K during pumping. The experimental samples were pumped by 150-nanosec 45—150 keV electron pulses. Red-light emission was observed at small current densities; blue-line emission at 4570 Å was observed at current densities greater than several amp/cm^2.

"APPROVED FOR RELEASE: Thursday, September 26, 2002 CIA-RDP86-00513R002065710005-5"

ACC NR: AP7003904

Further increases in the current density (threshold value 20 amp/cm^2) resulted in a sharp rise in the line (4600 Å) intensity (by a factor of 10), a sharp narrowing of its width (from 70 to 11 Å), and a directional effect. Although the mode structure was not resolved, various radiative directions, with a 7° beam aperture, could be identified. The results indicate that the large threshold densities may be caused by the crystal inhomogeneity and/or a high spontaneous recombination cross section. [JM]

SUB CODE: 20/ SUBM DATE: 21Nov66/ ORIG REF: 002/ OTH REF: 001/
ATD PRESS: 5114

Card 2/2

ZVEREVA, M.N.; ORLOV, V.V.

Separation of zinc and tin IV by means of an anion exchange resin.
Vest. LGU 14 no.22:152 '59. (MIRA 12:11)
(Zinc--Analysis) (Tin--Analysis) (Ion exchange)

APPROVED FOR RELEASE: Thursday, September 26, 2002 CIA-RDP86-00513R002065710005-5

S/020/63/149/001/017/023
B101/B144

AUTHORS: Zverev, M. P., Ruchinskiy, S. P., Zubov, P. I.

TITLE: Dependence of the heat effects occurring on polymer dissolution on the nature of the solvent

PERIODICAL: Akademiya nauk SSSR. Doklady, v. 149, no. 1, 1963, 128 - 130

TEXT: The dissolution heat of СКС-30А (SKS-30A) divinyl styrene copolymer and СКН-26 (SKN-26) divinyl nitrile copolymer was determined together with the contraction Δv of the solution in ditolyl methane, dicumyl methane, dibutyl sebacinate, and dibutyl phthalate. The equation $\ldots = -E_{11} - E_{22} + 2E_{12}$ (1) where E_{11}, E_{22}, E_{12} respectively denote the interaction of the molecules of the solvent, the polymer and the solvent plus polymer was found to be wrong. The nonpolar SKS-30A showed high heat effects in solvents with high dipole moment, the polar SKN-26 showed high heat effects in the weakly polar ditolyl methane and lesser heat effects in strongly polar solvents. Therefrom it is concluded that E_{11} (1) must be supplemented by a member E'_{22} taking account of the energy of the local bonds forming between the macromolecule links in the solution:

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APPROVED FOR RELEASE: Thursday, September 26, 2002 CIA-RDP86-00513R002065710005-5"

$[illegible] = -E_{11} - E_{22} + 2E_{12} + E'_{22}$ (2). The bond between the links is manifest, e.g., from the contraction of SKN-26 solution in solvents with high dipole moment corresponding to [illegible] of the [illegible]. In SKS-30A, the [illegible] viscosity decreases when the dipole moment of the solvent increases. The effect of the plasticizer on the flow point is discussed. Addition of [illegible] methane, dibutyl sebacinate or dibutyl phthalate reduces [illegible] the flow point of SKS-30A. Small additions (1.5 %) of [illegible] increase the flow point, greater additions reduce it. [illegible] plasticizing of polymers and for [illegible]. There are 1 figure and 2 tables.

ASSOCIATION: Moskovskiy institut tonkoy khimicheskoy tekhnologii im. M. V. Lomonosova (Moscow Institute of Fine Chemical Technology imeni M. V. Lomonosov); Institut fizicheskoy khimii Akademii nauk SSSR (Institute of Physical Chemistry of the Academy of Sciences USSR)

PRESENTED: August 20, 1962, by V. A. Kargin, Academician

SUBMITTED: August 20, 1962

L 17481-63 EWP(j)/EWT(m)/BDS AFFTC/ASD Pc-4 RM

ACCESSION NR: AP3004759 S/0183/63/000/004/0018/0020

AUTHORS: Michurina, G. A.; Zverev, M. P.; Bychkov, R. A.; Klimenkov, Y. S. 60

TITLE: Formulation of polypropylene fibers from a polymer solution 15

SOURCE: Khimicheskiye volokna, no. 4, 1963, 18-20

TOPIC TAGS: polypropylene, polymer

ABSTRACT: Authors studied several polypropylene properties in solution, their dependence upon the structure of the compound and the temperatures which are within the limits of fiber formulation. The dependence of viscosity in the polymer-solvent system upon the temperature and the intensity of the shift has also been studied. High-boiling hydrocarbons with boiling points between 200 and 250C were used as solvents. Various polymeric structures were separated by the method described by I. Natta et al (J. Am. Chem. Soc., 77, 1955, 1708). It was found that the polypropylene solutions or atactic and stereoblock-copolymer structures become fluid at various shift intensities and temperatures. The viscosity of the system changes very little between 20 and 80C. However, it increases sharply with further increase in temperature, reaching a maximum at 120C. The crystalline structure of the polymer is destroyed between 150 and 160C. The

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APPROVED FOR RELEASE: Thursday, September 26, 2002 CIA-RDP86-00513R002065710005-5"

L 17481-63

ACCESSION NR: AP3004759

results show that formulation of fibers from solutions of isotactic polymers can be accomplished only at temperatures close to the melting point of the polymer. The presence of solvent in the polypropylene fibers at the moment of extrusion results in the production of fibers with better physical and mechanical properties. Orig. art. has: 4 figures.

ASSOCIATION: VNIIV (All-Union scientific research institute for synthetic fibers)

SUBMITTED: 21Jul62 DATE ACQ: 20Aug63 ENCL: 00

SUB CODE: CH NO REF SOV: 004 OTHER: 003

Card 2/2

87769

11.2230
15.9200 2109,2209,1526

S/069/60/022/006/006/008
B013/B066

AUTHORS: Zverev, M. P. and Zubov, P. I.

TITLE: Interaction of Plasticizers With Fillers

PERIODICAL: Kolloidnyy zhurnal, 1960, Vol. 22, No. 6, pp. 756-757

TEXT: In the present letter to the editor the authors report on the determination of the wetting heat of carbon black with plasticizers of different polarity. The following fillers were used: gas-channel black with a specific surface of 110 m^2 and 4.8% oxygen content, and gas-channel black without oxygen-containing groups with a specific surface of 100 m^2, which was annealed at 900°C in the hydrogen current. The wetting heat was measured on an adiabatic calorimeter (Ref. 2). The table gives the values of the wetting heat obtained. The evolution of heat occurring during the wetting of gas-channel black with molecules of polar plasticizers (dibutyl sebacate, dibutyl phthalate) is about twice as high (0.055 cal/m^2) as in the wetting with molecules of non-polar plasticizers (0.035 cal/m^2). As a result, the surface of the gas-channel black becomes

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hydrophobic by the incorporation of polar plasticizers. As was shown in Ref. 1, the sorption of macromolecules of divinyl styrene rubber on the surface of the filler is thus increased. It was further found that the evolution of heat during the wetting of fillers which contain no functional groups is practically independent of the dipole moment of the plasticizer. It may be assumed from the data obtained, that the better mechanical properties of filled divinyl styrene rubbers in the presence of polar plasticizers are due to the screening of functional groups of carbon black by polar molecules of the plasticizer. According to the authors, this fact might be of interest in connection with the problem of obtaining oil-filled divinyl styrene rubbers. N. V. Mikhaylov and E. Z. Faynberg are thanked for assistance in the thermochemical experiments. There are 1 table and 2 Soviet references.

ASSOCIATION: Institut fizicheskoy khimii AN SSSR (Institute of Physical Chemistry AS USSR). Institut tonkoy khimicheskoy tekhnologii im. M. V. Lomonosova, Moskva (Institute of Fine Chemical Technology imeni M. V. Lomonosov, Moscow)

SUBMITTED: May 17, 1960

BONDARENKO, V.M.; ZVEREV, M.P.; KLIMENKOV, V.S.; BEREZKINA, T.A.; GERSHANOVICH, Yu.G.

Fiber formation from polypropylene. Khim. volok. no.6:10-13 '65. (MIRA 18:12)

1. Vsesoyuznyy nauchno-issledovatel'skiy institut iskusstvennogo volokna (for Bondarenko, Zverev, Klimenkov). 2. Kurskiy kombinat (for Berezkina, Gershanovich).

ZVEREV, M.P.; RUCHINSKIY, S.P.; ZUBOV, P.I.

Thermal effect produced by the solution of polymers as dependent on the nature of the solvent. Dokl.AN SSSR 149 no.1:128-130 Mr '63. (MIRA 16:2)

1. Moskovskiy institut tonkoy khimicheskoy tekhnologii im. M.V.Lomonosova i Institut fizicheskoy khimii AN SSSR. Predstavleno akademikom V.A.Karginym.

(Polymers) (Heat of solution) (Plasticizers)

APPROVED FOR RELEASE: Thursday, September 26, 2002 CIA-RDP86-00513R002065710005-5"

ACCESSION NR: AP4039348 S/0183/64/000/003/0015/0019

AUTHOR: Zverev, M. P.; By*chkov, R. A.; Kostina, T. F.; Klimenkov, V. S.

TITLE: Modification of polypropylene fiber properties.

SOURCE: Khimicheskiye volokna, no. 3, 1964, 15-19

TOPIC TAGS: polypropylene fiber, polypropylene polystyrene fiber, polypropylene polystyrene compatibility, IR spectra, deformation, mechanical strength, polymer amorphisation, structure breakdown, relative elongation, isotactic polypropylene, isotactic polystyrene, steric hindrance, structure mobility

ABSTRACT: The compatibility and properties of fibers made of mixtures of polypropylene and polystyrene were investigated. The densities of the polymer mixtures and the contraction were determined. IR spectra were critically examined and thermomechanical properties (deformation, strength) were determined. Increasing the amount of polystyrene in polypropylene caused partial amorphization of the polymers. The two polymers are not microcompatible, as shown by IR data and the presence of 2 melting regions in mixtures containing over 12 weight% polystyrene. The positive value of the amount of contraction is not a criteria for determining

microcompatibility. It is proposed that the geometric dimensions of the macromolecules of the initial polymers and the different dimensions of the secondary structures affect the amount of specific volume contraction. The formation of defects in the secondary structure of polystyrene is greater than in polypropylene; a small amount of the latter in polystyrene causes contraction of the polystyrene. Addition of small amounts of polystyrene caused the polypropylene structure to break down. Increasing the amount of polystyrene in polypropylene reduced the relative elongation and the mechanical strength of the latter due to the microheterogeneity of the system and the increased hardness of the polypropylene structure. Mixtures of isotactic polypropylene and polystyrene have satisfactory physical-mechanical properties if the amount of polystyrene does not exceed 12%. The energy of activation of creep increased with increase in polystyrene content; this was explained by steric hindrances created by the polystyrene which impede the mobility of the polypropylene structure. "In conclusion we consider it our obligation to thank K. S. Minsker for supplying us the isotactic polystyrene." Orig. art. has: 7 figures and 2 tables.

ASSOCIATION: None

ACCESSION NR: AP4039348

SUBMITTED: 11Apr63 ENCL: 00

SUB CODE: OC NO REF SOV: 008 OTHER: 003

Card 3/3

S/190/60/002/011/005/027
B004/B060

AUTHORS: Zverev, M. P., Klimenkov, V. S., Kostina, T. F.

TITLE: Dependence of the Thermomechanical Properties of Polypropylene on Its Structural Composition. II

PERIODICAL: Vysokomolekulyarnyye soyedineniya, 1960, Vol. 2, No. 11, pp. 1620 - 1624

TEXT: The authors dealt with the problem of the interaction between atactic and isotactic macromolecules of polypropylene. In the article under consideration, they report on the effect of fractional composition on strength relative prolongation, and modulus of elasticity of polypropylene at 30°C. Specimens prepared by Etlis and Minsker, with a molecular weight of 120,000, were used for the tests. The atactic fraction was either extracted by means of ether or by means of heptane. A three-dimensional copolymer was obtained in the latter case, whose molecules were found to consist of atactic and isotactic links. The production of fibers of different fractional compositions has already been described by the authors in Ref. 3. Fibers elongated by 300% at 30 - 100°C were

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transition from the vitrified to the high-elastic state. V. A. Kargin, T. I. Sogolova, and N. V. Mikhaylov are mentioned. There are 3 figures and 12 references: 8 Soviet, 3 US, and 1 Italian.

ASSOCIATION: Vsesoyuznyy nauchno-issledovatel'skiy institut iskusstvennogo volokna (All-Union Scientific Research Institute of Synthetic Fibers)

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investigated here; they consisted 1) of isotactic polypropylene, 2) of 93% isotactic and 7% atactic polypropylene, 3) of 93% isotactic polypropylene and 7% three-dimensional copolymer. The authors reached the following conclusions: 1) Due to recrystallization and orientation, the fiber stability increases with the temperature at which the fibers were elongated. 2) The modulus of elasticity shows a maximum of fibers elongated between 100° and 110°C. The different values of the modulus of elasticity at different polypropylene compositions are explained by the fact that on stretching there occurs, besides re-crystallization, also a translation of crystals without appreciable deformation, so that the atactic structures in-between have an elasticizing effect. The modulus of elasticity of fibers stretched at 100°C was examined between -40° and +120°C, and it was found that a) in the range -40° to -20°C, viz. in the vitrified state, the modulus of elasticity is not dependent on the fractional composition; b) on the transition to the high-elastic state, the modulus of elasticity varies in dependence on the fractional composition, the fibers with atactic fraction exhibiting greater changes. Crystallinity can be estimated on the basis of these effects on the

ZVERIV, M.P.; BARASH, A.L.; ZUBOV, P.I.

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Vysokom. soed. 6 no.6:1012-1015 Je '64 (MIRA 18:2)

1. Moskovskiy institut tonkoy khimicheskoy tekhnologii imeni Lomonosova.

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(Propene)

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(Styrene) (Rubber, Synthetic)

UR/

ACC NR: AM6033433 Monograph

Konkin, Aleksandr Arsen'yevich; Zverev, Mikhail Petrovich

Polyolefin fibers (Poliolefinovyye volokna) Moscow. Izd-vo "Khimiya", 1966. 278 p. illus., biblio., index. 3700 copies printed.

TOPIC TAGS: conjugated polyolefin hydrocarbon, synthetic fiber, fiber

PURPOSE AND COVERAGE: This book is intended for scientific and engineering workers in the synthetic fiber industry and in associated branches of industry concerned with synthetic fibers. It can also be used as a textbook by students of chemical-engineering and textile institutes of higher education. The book discusses the basic principles for synthesizing polyolefins (polypropylene and polyethylene) and their most important properties, and describes the effect on the process for producing polyolefin fibers. Also described are the rheological characteristics of polymer melts, the fiber-formation processes and the drawing and thermal fixing of the thread. The properties, means of modification, and possible fields of polyolefin fiber application are examined. Chapters I, II, IV and V were written by M. P. Zverev, and the introduction, Chapters III, VI, and VII by A.A. Konkin. The authors express gratitude to Doctor of Technical Sciences K. Ye. Perepelkin, Candidate of Technical Sciences T. V. Druzhinina and A. Ya. Malin, and to A. R. Gantmakher for their helpful advice. There are 395 references 219 of which are Soviet.

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(Isoprene) (Styrene) (Polymerization)