ZYLKA, Romuald

The 6th Congress of the International Quarternary Association (INQUA)
Przegl geolog 10 no.2:84-87 F '62.

1. Instytut Geologiczny, Warszawa.

ZYLKA, Romuald

Naphtha and gas deposits in Canada. Przegl geol 9 no.8:437-440 Ag '61.

1. Instytut Geologiczny, Warszawa, ul. Rakowiecka 4.

KIJEWSKI, Waclaw, mgr inz.; NACZYNSKI, Jerzy, inz.; ZYLKO, Waclaw, mgr.

Problems and state of gas engineering in the German Democratic Republic as seen from certain centers. Gaz woda techn sanit 37 no.4/5:133-136 Ap-My '63.

1. Central Gas Engineering Laboratory, Warsaw.

ZYLKOWSKI, Tadeusz

Some aspects of the shipping activities on the Poland-Iceland route. Tech gosp morska 11 no.1:7-9 Ja '61.

1. Polska Zegluga Morska, Szczecin.

URBANSKI, Tadeusz; SKOWRONSKA-SERAFINOWA, Barbara; ŻYLOWSKI, Jerzy

Reactions of aromatic amines with syanoguanidine. IX. Naphthalamidine-urea and its reactions with amines. Rocz chemii 33 no.6:1377-1382 '59. (EEAI 9:9)

1. Katedra Tecnologii Organicznej II Politechniki, Warszawa i Zaklad Syntezy Lekow Instytutu Gruzlicy, Warszawa.
(Cyanoguanidine) (Amines)
(Naphthylamidinourea) (Aromatic compounds)

ZYLOWSKI, Jerzy, mgr inz.

Exporting Polish-made factories. Horyz techn 13 no.1:6-8 '65.

Z/032/60/010/08/006/033
E073/E535

AUTHOR: Zymák, V., Engineer

TITLE: Volumetric Efficiency of Radial Piston Pumps

PERIODICAL: Strojírenství, 1960, Vol 10, No 8, pp 577-583

ABSTRACT: A new method is proposed for calculating the volumetric efficiency of radial piston pumps which takes into consideration the eccentricity of the pistons in their cylinders as well as the eccentricity of the rotor on its spindle. The volumetric efficiency is expressed by an equation which contains terms for taking into consideration leakage and suction losses. The influence of the pressure and temperature on the deformation of the individual parts of the pump are also taken into consideration. The author derives formulae for determining the optimum pressure gradient, the one for which the temperature rise will be lowest. The use of the derived relations is illustrated on a practical example of calculating the volumetric losses in a radial pump with five 18 mm dia. pistons, 1500 r.p.m. with a throughput of 14.5 litres/min at a pressure of 250 atm., the peak pressure being up to 350 atm.; this

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Z/032/60/010/08/006/033
E073/E535

Volumetric Efficiency of Radial Piston Pumps

high pressure rotary pump has been designed and is being manufactured by the Lenin (Škoda) Works, Pilsen. In the conclusions it is stated that the suction losses cannot be expressed for the time being by a satisfactory mathematical formula and their magnitude can only be determined by practical tests. Reduction of these losses can be obtained by a suitable choice of the running speed, increase of the size of the suction canals and mainly by filling the spaces of the piston pump with the liquid to be transported by means of a low pressure auxiliary pump. The leakage losses can be reduced by reducing the tolerances to the minimum possible; in calculating these losses it is essential to take into consideration the eccentricity of the sealing components, the changes in the viscosity of the liquid and the changes in the play as a function of the pressure and temperature. In medium pressure pumps, and particularly in high pressure, pumps the increase in the sealing gaps as a result of the high pressure of the liquid has the greatest influence on the

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Z/032/60/010/08/006/033
E073/E535

Volumetric Efficiency of Radial Piston Pumps

leakage losses and, therefore, the respective components of the pump and also of the motor should have a high rigidity. Calculation of volumetric losses of pumps and hydraulic motors carried out on the assumption of a constant viscosity of the fluid and of zero eccentricity is incorrect even for low operating pressures and does not even provide an approximately accurate picture on the conditions pertaining in reality.
There are 8 figures and 6 references, 5 of which are Czech and 1 Soviet.

ASSOCIATION: Závody V. I. Lenina, Plzeň (V. I. Lenin Works, Pilsen)

Card 3/3

ZYL'YEV, L. M., BARDIN, I. P., OSTROUKHOV, M. Y. and KHODAK, L. S.

"Neue Auffassungen uber den Verbrennungsprozess des Kokes an den Windformen des Hochofens," Neue Hutte, No.4, 1956

Metallurgical Inst., AS USSR

ZYMA, Besim, docent dr.

Hazards of laryngeal stenosis. Shendet. pop. 23 no.5:16-20 '62.
(LARYNX)

ZYMA, Besim, doc. dr.

The hazard of toxic effects of streptomycin on the auditory system. Shendet pop 6: '62.
(STREPTOMYCIN TOXICOLOGY) (VESTIBULAR APPARATUS)

ZYMAK, V., inz.; KURKA, E.

Hydraulic drive of extruding presses. Strojirenstvi 13 no. 12: 901-908 D '63.

1. Zavody V. I. Lenina, Plzen.

[redacted], V., inz.

Dynamics of a heavy hydraulic unit with pressure accumulator drive. Strojirenstvi 14 no.11:812-819 N '64.

1. Zavody V.I.Lenina National Enterprise, Plzen.

TARAN, P., kand.tekhn.nauk; PRISTAVKA, A.; ZYMALEV, G.; SHALIMOV, A.; SEVAST'YANOV, V.

Speeding-up the rate of increase of labor productivity in the Dnepropetrovsk Economic region. Sots. trud 5 no.9:98-108 S '60. (MIRA 13:10)

1. Glavnyy inzh. tresta "Leninruda" (for Taran). 2. Zam.nachal'nika tekhnicheskogo otdela tresta "Leninruda" (for Pristavka). 3. Upravlyayushchiy trestom "Dzerzhinskruda" (for Zymalev). 4. Nachal'nik otdela organizatsii truda tresta "Dzerzhinskruda" (for Shalimov). 5. Zam. direktora po trudu i kadram zavoda im. Dzerzhinskogo (g.Denprodzerzhinsk) (for Sevast'yanov).

(Krivoy Rog Basin--Iron mines and mining--Labor productivity)
(Dneprodzerzhinsk--Steel industry)
(Socialist competition)

ZYMALEV, G.S.; IOFFE, Z.M.; PODKAMINNYY, G.F.

Economical operation at Dzerzhinskrud Trust mines. Gor.zhur. no.1:15-17 Ja '65. (MIRA 18:3)

1. Trest Dzerzhinskruda, Krivoy Rog.

ZYMALEV, G.S.; TIMCHENKO, O.G.

Improving the boring of deep holes in Krivoy Rog Basin mines. Gor. zhur. no.2:39-42 F '65. (MIRA 18:4)

1. Upravlyayushchiy trestom Dzerzhinskruda (for Zymalev).
2. Nachal'nik nauchno-issledovatel'skoy laboratorii tresta Dzerzhinskruda (for Timchenko).

ZYMALEV, G.S.

Improving systems of working at Ingulets Mining Administration mines. Met. i gornorud. prom. no.6:72-74 N-D '64.
(MIRA 18:3)

MALAKHOV, G.M., doktor tekhn. nauk; CHIRKOV, Yu.I., kand. tekhn. nauk; KUCHERYAVENKO, I.A., kand. tekhn. nauk; ZYMALEV, G.S.; KHIVRENKO, A.F.; NESTERENKO, V.V.

Introduction of new variants of the system of sublevel caving at "Dzerzhinskrud" Trust mines. Met. i gornorud. prom. no.2: 50-54 Mr-Ap '65. (MIRA 18:5)

ZYMALEV, G.S.; MAYDAN, D.S.

Labor productivity and cost of ore in the Krivoy Rog Basin. Met. i gornorud. prom. no.2:59-63 Mr-Ap '65. (MIRA 18:5)

ZINOV'YEV, V.N.; ZYMALEV, G.S.; ISKRENKO, I.V.

Working thin deposits at the Il'ich mine. Gor. zhur. no.4:23-26 Ap '65. (MIRA 18:5)

1. Trest Dzerzhinskruda, Krivoy Rog.

TITOV, V.D., gornyy inzhener; TARAN, P.N., gornyy inzhener; ZYMALEV, G.S., gornyy inzhener; OSTROUKHOV, A.I., gornyy inzhener; ALTSHULER, M.A., gornyy inzhener; BORZENKO, P.V., gornyy inzhener.

"Underground mining of ore and placer deposits" by R.P. Kaplunov and other. Reviewed by V.D. Titov and others. Gor.zhur.no.11:63-64 N '56. (MLRA 10:1)

(Mining engineering--Study and teaching)
(Kaplunov, R.P.)

ZYMALEV, G.S.

Economic advantages of doorless cars. Gor. zhur. no.6:32-33 Je '65. (MIRA 18:7)

1. Upravlyayushchiy trestom Dzerzhinskruda.

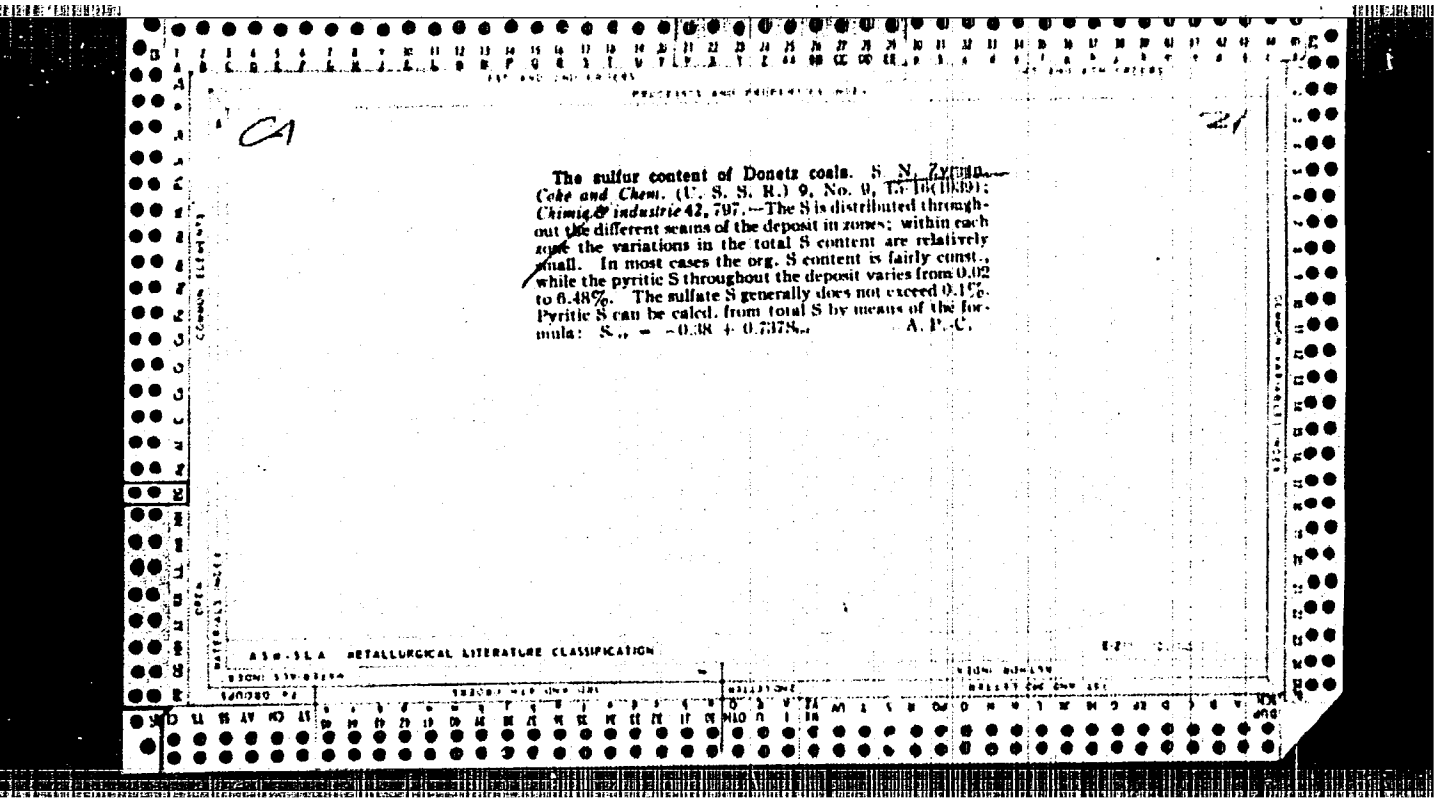
ZYMALEV, G.S., gornyy inzh.; IOFFE, Z.M., inzh.-ekonomist

Capital investments and capital yield in the ore dressing plants of the "Dzerzhinskruda" Trust. Gor. zhur. no.10:30-33 O '65.
(MIRA 18:11)

1. Trest Dzerzhinskruda, Krivoy Rog.

ZYMALEV, G.S.; MAYDAN, D.S.

Possibilities of reducing losses and depletion of ores in the Krivoy Rog Basin. Met. i gornorud. prom. no.4:54-56 Jl-Ag '65. (MIRA 18:10)



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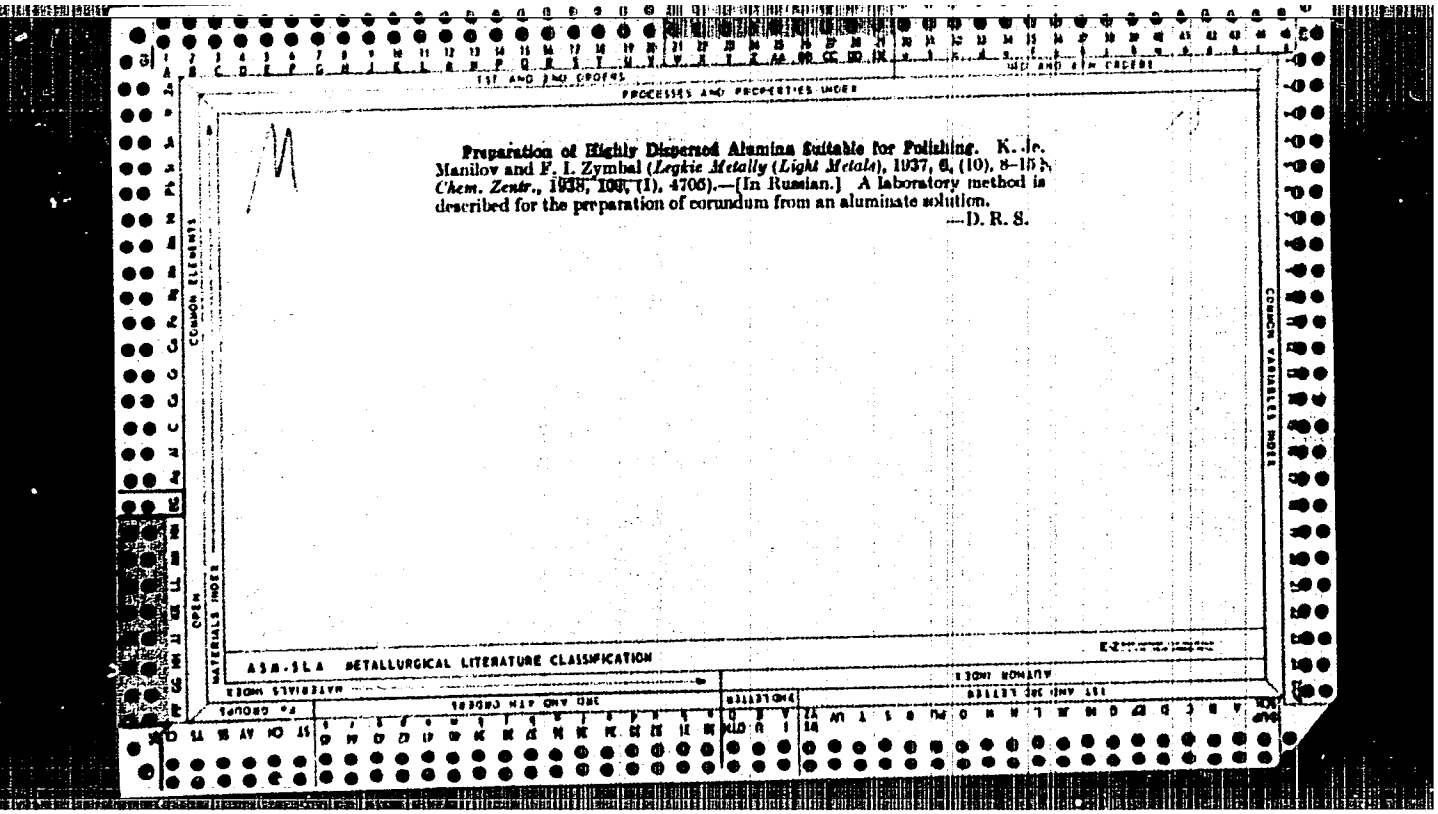
21

The sulfur content of Donetz coals. S. N. Zyrina. *Coke and Chem.* (U. S. S. R.) 9, No. 9, 13-16(1939); *Chimie & industrie* 42, 797.—The S is distributed throughout the different seams of the deposit in zones; within each zone the variations in the total S content are relatively small. In most cases the org. S content is fairly const., while the pyritic S throughout the deposit varies from 0.02 to 6.48%. The sulfate S generally does not exceed 0.1%. Pyritic S can be calcd. from total S by means of the formula: $S_p = -0.38 + 0.737S_t$. A. P.-C.

A38-51A METALLURGICAL LITERATURE CLASSIFICATION



Preparation of Highly Dispersed Alumina Suitable for Polishing. K. Ic. Manilov and F. I. Zymbal (*Legkie Metally* (*Light Metals*), 1937, 6, (10), 8–15; *Chem. Zentr.*, 1938, 109, (1), 4705).—[In Russian.] A laboratory method is described for the preparation of corundum from an aluminate solution.

—D. R. S.

ZYMALEV, G.S., gornyy inzh.; KHIVRENKO, A.F., gornyy inzh.; RED'KO, I.A., gornyy inzh.; DYMCHUK, G.K., gornyy inzh.

Ways of reducing expenditures for mine ventilation. Gor. zhur. no. 12:10-13 D '65. (MIRA 18:12)

ZYMALEV, G.S.

Analysis of the change in the cost of ore mining. Gor. zhur. no.11:7-10 N '64. (MIRA 18:2)

1. Upravlyayushchiy trestom Dzerzhinskruda.

ZIMAN, S.M. [Zyman, S.M.]

Some interesting and rare plants from the vicinity of the village of Yasinya in Transcarpathian Province. Ukr. bot. zhur. 21 no.4: 102-104 '64.
(MIRA 17:11)

1. Srednyaya shkola, Yasinya, Zakarpatskoy oblasti.

ZYMEK-GIERMANSKA, Teresa

Notes on controlling prolonged uterine hemorrhages with the aid of Primosiston. Ginek. pol. no.4:565-568 '62.

1. Z II Kliniki Poloznictwa i Chorob Kobiecych AM we Wroclawiu Kierownik: prof. dr K. Jablonski.
(UTERINE HEMORRHAGE) (HYDROXYPROGESTERONE)
(ESTRADIOL)

ZYMEK-GIERMANSKA, Teresa

Vaginal foreign bodies in young girls. Pol. tyg. lek. 17 no.31:1222-1225 30 Jl '62.

1. Z II Kliniki Poloznictwa i Chorob Kobiecych AM we Wroclawiu; kierownik: prof. dr med. Kazimierz Jablonski.
(VAGINA)

ZYMEK-GIERMANSKA, Teresa

Unusual topography of fallopian tubes in the roentgenographic picture. Ginek. pol. 33 no.6:851-860 '62.

1. Z II Poloznictwa i Chorob Kobiecych AM w Wroclawiu. Kierownik: prof. dr K. Jablonski.
(FALLOPIAN TUBES) (STERILITY FEMALE)

DZIOBA, Andrzej; ZYMEK-GIERMANSKA, Teresa

Estimation of the value of histopathological examination of scrapings from the surface of erosion of the vaginal part of the uterus for an early diagnosis of cancer. Gin. polska 28 no.1:39-45 Jan-Feb 57.

1. Z II Kliniki Poloznictwa i Chorob Kobiecych A.M. we Wroclawiu Kierownik: prof. dr. K. Jablonski. Doc. Dr. Andrzje Dzioba, Wroclaw, Al. Kollataja 32 m. 6.

(UTERUS NEOPLASMS, diag.
histopathol. exam. of scrapings from surface of erosion from portio vaginalis, value in early diag. (Pol))
(CERVIX, UTERINE, dis.
erosion of portio vaginalis, value of histopathol. exam. of scrapings from surface in early diag. of uterine cancer (Pol))

ZYMEK-GIERMANSKA, Teresa; SWARD, Jozef

Attempted gestanone therapy of imminent and habitual abortions. Wiad. lek. 18 no.18:1447-1450 15 S '65.

1. Z II Kliniki Poloznictwa i Chorob Kobiecych AM we Wroclawiu (Kierownik: prof. dr. med. K. Jablonski).

STECKI, Konrad, mgr inz.; ZYMELKA, Franciszek, mgr.

Mechanical production of etched stencils. Przegl. geod. 36 no.2:46-48 F'64

ZYMIRSKI, Andrzej

I drove in the Nürburgring. Motor 11 no.28:14 15 Jl '62.

ZYMIRSKI, A.

Some remarks on difficulties in the traffic of Warsaw.
Motor 11 no.30:3 29 Jl '62.

ZYMIRSKI, A.

Back from abroad; some notes on the traffic in Warsaw.
Motor 11 no.29:3 22 Jl '62.

Zymirski, A.: Rusiniak, S.

"Our impressions from the Six-Day Race." p. 788

SVET MOTORU. (Svaz pro spolupraci s armadou) Praha, Czechoslovakia, Vol. 9, no. 25/26, Dec., 1955.

Monthly List of East European Accessions (EEAI) LC, Vol. 8, No. 9, Sept. 1959

Uncl.

ZYMNY E.

Poland/Analytical Chemistry - Analysis of Inorganic Substances, G-2

Abst Journal: Referat Zhur - Khimiya, No 1, 1957, 1246

Author: Zymny, E.

Institution: None

Title: Titrimetric Determination of Silicon Dioxide in Cement

Original Periodical: Cement. Wapno. Gips, 1956, Vol 12, No 6, 152-153 (published in Polish)

Abstract: See Referat Zhur - Khimiya, 1956, 1154

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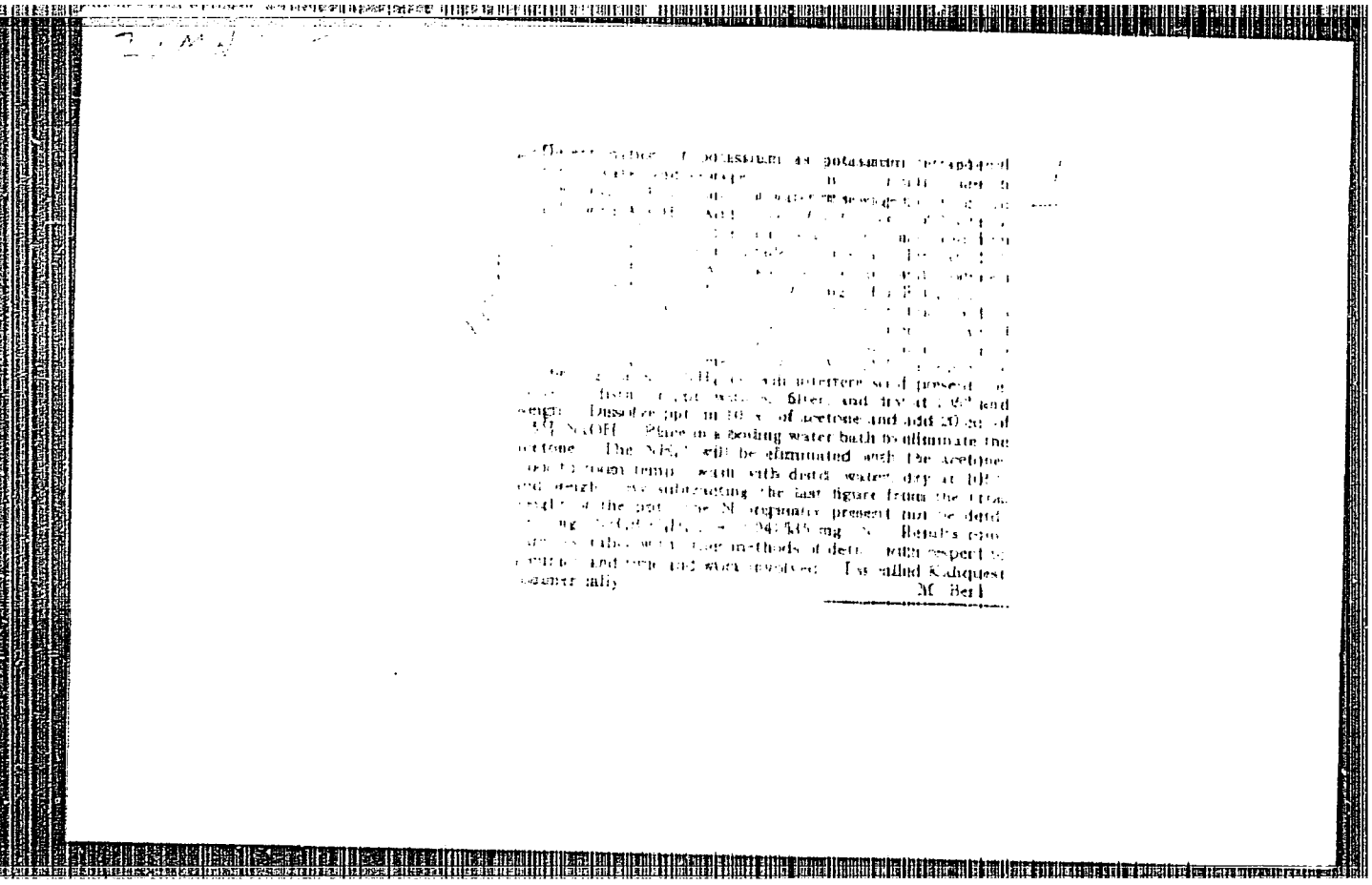


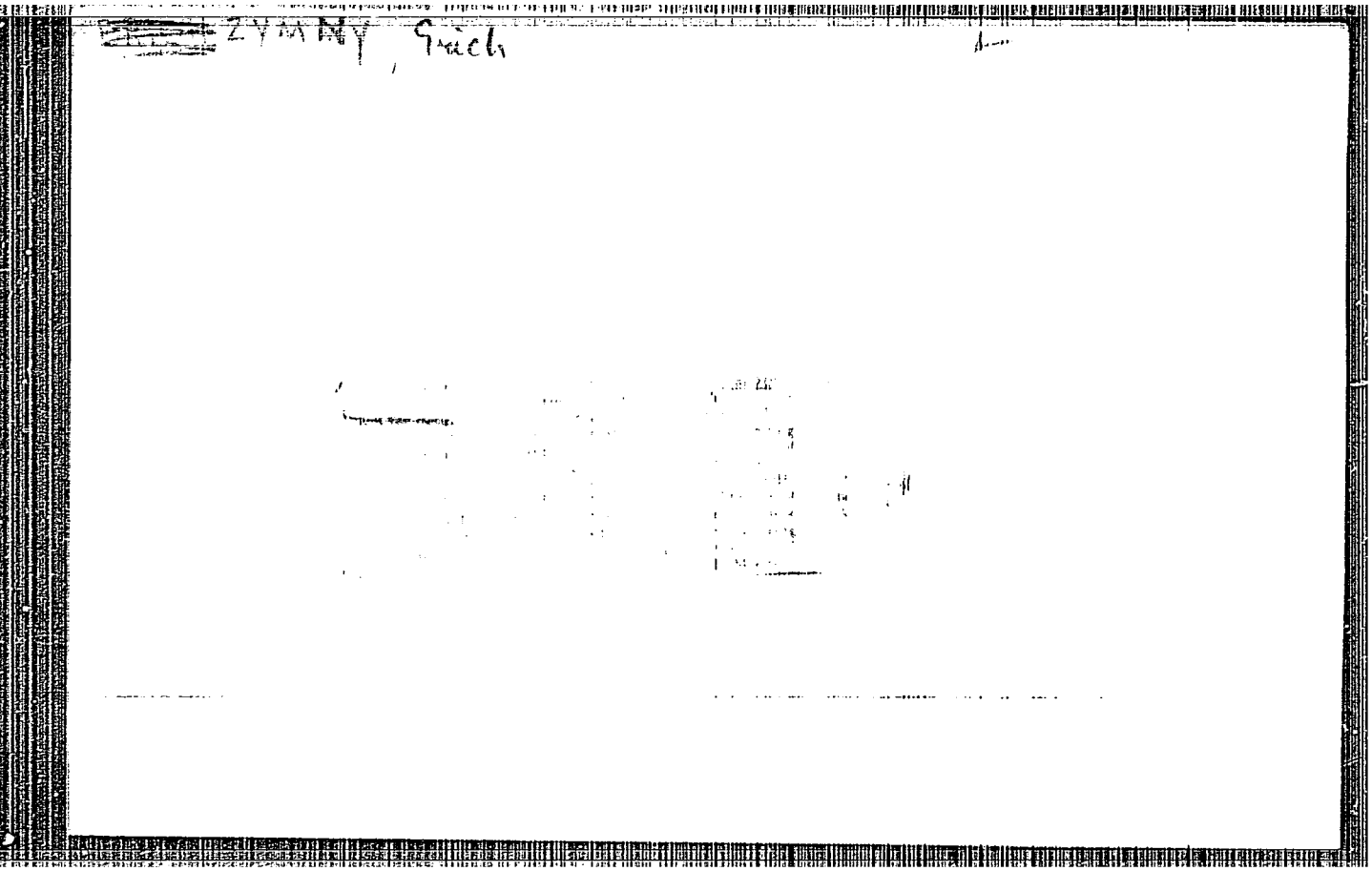
Zymny, E.

Determination of potassium in water and effluents as potassium tetraphenylborate tetraphenyl. *Z. Zymny* (*Przem. Chem.*, 1955, 6, 317–320).— The sample is concentrated and acidified by acetic acid, and K is ppted. by adding aq. $NaB(C_6H_5)_4$ ("kalquest"). The ppte. $KB(C_6H_5)_4$ (I) is determined either gravimetrically after drying at 120° or volumetrically by 0·1N-$AgNO_3$. Li, Na, Ca, Ba, and Sr do not interfere, but Rb, Cs, and NH_4 are ppted. If K and NH_4 are both present, the mixed ppt. is weighed, and, after driving off the NH_3 with aq. NaOH, the residual I is again collected and weighed. (C. Abstr., C., 1958, 337.)

A. R. PEARSON.

ZYMNY, ERICH

Chemical-pharmaceutical analyses with a simple colorimeter. Erich Zymny. Pharm Ztg 99, 120 (1954).
The construction of a simple visual colorimeter is described.
Edward H Sheets



ACCESSION NR: AP4040935 S/0185/64/009/006/0659/0663

AUTHOR: Alf'orov, Zh. I. (Alferov, Zh. I.); Zy*mogorova, N. S. (Zimogorova, N. S.); Samol'yanov, O. M. (Samol'yanov, A. M.); Trukan, M. K.

TITLE: Photoelectric properties of heterojunctions in some semiconductors

SOURCE: Ukrayins'ky*y fizy*chny*y zhurnal, v. 9, no. 6, 1964, 659-663

TOPIC TAGS: epitaxial film, epitaxial layer, heterojunction, nonrectifying current contact

ABSTRACT: Applying the gas-transport method and using iodine as a transport agent, films of GaAs on GaP, GaP, and Ge on GaAs were prepared to obtain p—n heterojunctions. The transporting material was doped to produce a conductivity of a type opposite to that of the base. Furthermore, a method for obtaining nonrectifying contacts carrying current to the epitaxial layers of Ge, GaAs, and GaP was developed. The current-voltage characteristics of the heterojunctions and their dependence on temperatures were measured. It was

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ACCESSION NR: AP4040935

found that there are two exponential parts in the forward branch of the characteristics. The dependence of the voltage on the temperature in the forward direction is linear. The spectral distribution of photosensitivity has a characteristic shape with two maximums and is determined by both substances of the pair. The forbidden gap of the substance with a larger width of the band can be determined by the maximum in the shortwave region of the spectrum. The red limit of photosensitivity can be determined by the width of the forbidden gap of the substance with a smaller width of the band. Orig. art. has: 6 figures and 4 formulas.

ASSOCIATION: Fizy*ko-tekhnichny*y insty*tut im. A. F. Yoffe AN SRSR, Leningrad (Physicotechnical Institute, AN SSSR)

SUBMITTED: 20Jan64 / ATD PRESS: 3056 ENCL: 00

SUB CODE: EC, EM NO REF SOV: 009 OTHER: 001

Card 2/2

Distr: 4E2c/4E2b(e)

Apparatus for chrome plating of tool and machine parts. I-II. E. Zymorski (Inst. Mech. Przyzyjnej, Warsaw). *Metalloberfläche* 13, 50-9, 88-90(1959). A. M. Pommier

ZYMOVETS, Viktor Naumovich; STOROZHUK, O.O.; LUPKO, A.Ya., red.; GULENKO, O.I.[Hulenko, O.I.], tekhn. red.

[Production concentration on collective farms and its economic efficiency] Kontsentratsiia vyrobnytstva v kolhispakh i ii ekonomichna efektyvnist'. Kyiv, Derzhsil'-hospvydav URSR, 1962. 82 p. (MIRA 16:12)
(Ukraine--Collective farms--Management)

ACC NR: AP7004974 SOURCE CODE: UR/0048/66/030/009/1463/1466

AUTHOR: Vlasenko, N.A.; Zyn'o,S.A.

ORG: none

TITLE: Polarization effects in electroluminescent ZnS:Mn films /Report, Fourteenth All-Union Conference on Luminescence (Crystal Phosphors) held at Riga, 16-23 Sept. 1965/

SOURCE: AN SSSR. Izvestiya. Seriya fizicheskaya, v.30, no.9, 1966, 1463-1466

TOPIC TAGS: electroluminescence, zinc sulfide, manganese, electric polarization, LUMINOPHOR

ABSTRACT: The authors have investigated polarization effects in 0.25 micron thick films of a ZnS:Mn electroluminophor between SnO_2 and Al electrodes. The metallic electrode was separated from the luminophor by a 100-150 Å thick layer of SiO. It was found that when a steady voltage is applied to such a cell it becomes polarized and the luminescence intensity rapidly drops by a factor of about 100. The polarized condition persisted for several hours when the cell was short circuited, but the cell could be restored to the unpolarized condition by irradiation with photons having energies between 1.6 and 3 eV. When to a polarized cell there was applied a voltage of the same sign as the polarizing voltage there resulted only weak luminescence, but when a voltage of the opposite sign was applied, the initial luminescence flash was brighter than that from an unpolarized cell. The luminescence intensity (both of the initial flash and in the steady state) was higher when the aluminum electrode was the

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ACC NR: AP7004974

anode when it was the cathode, and the duration of the polarizing and depolarizing processes also depended somewhat on the polarity. The presence of moisture reduced the polarization and accelerated the depolarizing process. It is hypothesized that the polarization is due to accumulation of free carriers at the luminophor-electrode boundary as a result of entrapment of electrons in deep traps. The ratio of the polarization field to the polarizing field was evaluated as the ratio $(V_2 - V_1)/V_2$, where V_1 is the initial polarizing voltage and V_2 is the voltage of the same sign that must be applied to the polarized cell to produce an initial flash of the same intensity as the flash produced by application of V_1 to the unpolarized cell. This ratio was found to be about 0.35 and to vary little with the magnitude and sign of the polarizing voltage. The polarization effects provide a simple explanation for a number of experimental facts, including: 1) the low brightness achieved by application of successive pulses of the same sign; 2) the strong influence of a test pulse of opposite sign on the brightness produced by the following ten to twenty exciting pulses; 3) the differences in the slopes of the voltage-brightness characteristics for different types of excitation; and 4) the transition phenomena that occur when successive pulses of alternating sign are applied to the unexcited phosphor. Orig. art. has: 1 formula, 2 figures and 1 table.

SUB CODE: 20 SUBM DATE: none ORIG. REF: 002 OTH REF: 001

Card 2/2

ACC NR: AP7004975 SOURCE CODE: UR/0048/66/030/009/1467/1469

AUTHOR: Vlasenko,N.A.; Zyn'o,S.A.

ORG: none

TITLE: Investigation of the characteristics of low-voltage electroluminescent ZnS:Mn films under pulse excitation /Report, Fourteenth All-Union Conference on Luminescence (Crystal Phosphors) held at Riga, 16-23 Sept. 1965/

SOURCE: AN SSSR. Izvestiya. Seriya fizicheskaya, v. 30, no.9, 1966, 1467-1469

TOPIC TAGS: electroluminescence, zinc sulfide, manganese, time constant, pulse rate, optic brightness

ABSTRACT: The authors have investigated the pulsed characteristics of thin electroluminescent ZnS:Mn films produced by the two-stage technique of N.A.Vlasenko and Yu.A.Popkov (Optika i spektroskopiya, 8, 81 (1960)) in order to assess the technical possibilities of these low-voltage electroluminophors. It was found that on application of a 0.1 to 1.0 millisec square pulse the brightness would rise exponentially with a time constant of about 0.3 millisec for the duration of the pulse and would then decay exponentially with a time constant of 1.2 millisec. Experiments with an equivalent circuit showed that these time constants are much longer than the RC constants of the cell. It is hypothesized that the long time constants are associated with the long lifetime of the excited state of the Mn^{2+} ions, with carrier entrapment processes, and with polarization effects. It was not possible to achieve a brightness exceeding 5 to 10 nit with excitation by pulses of the same sign, but brightnesses several orders of magnitude higher could be obtained by excitation with pulses of

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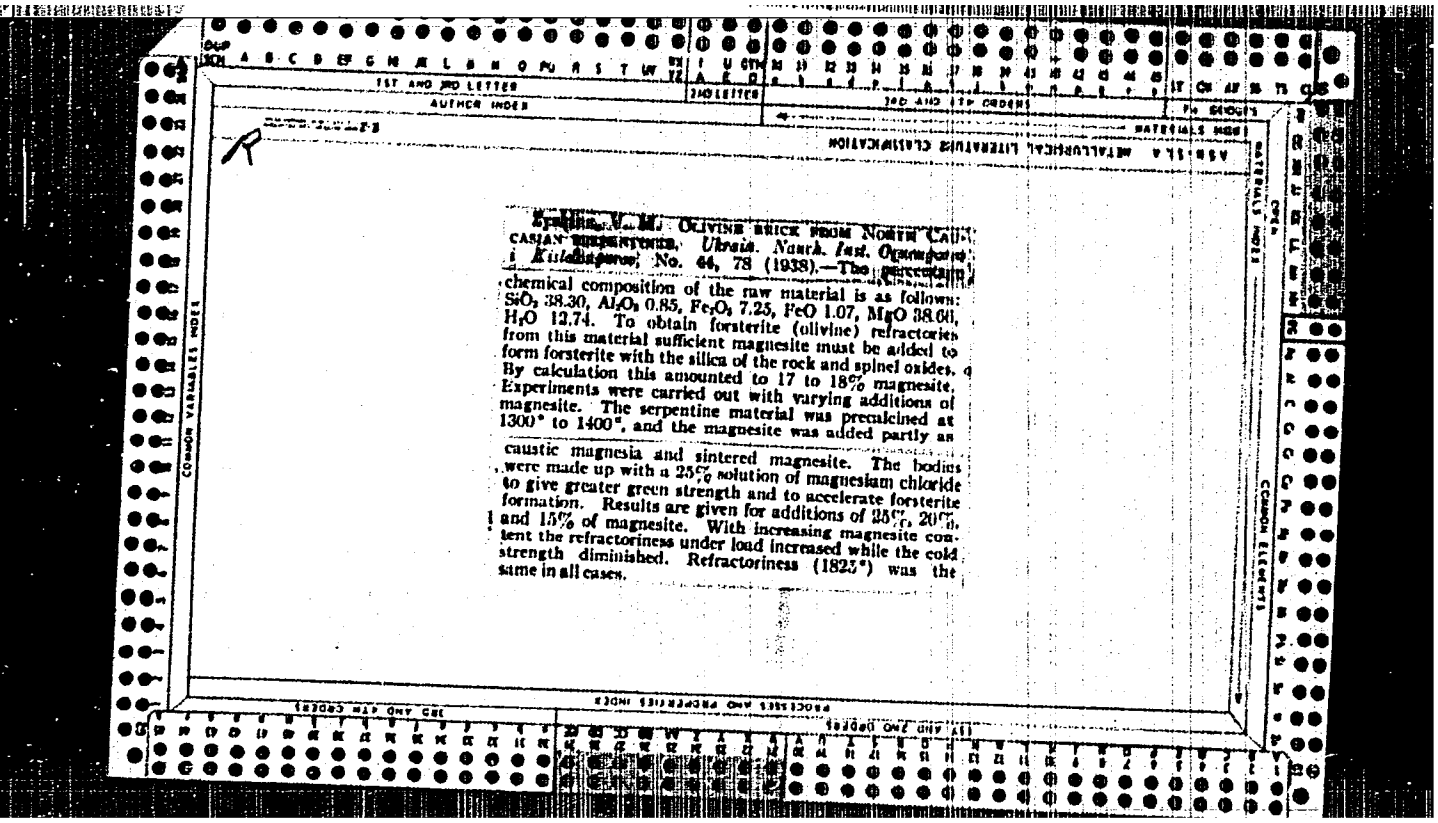
ACC NR: AP7004975

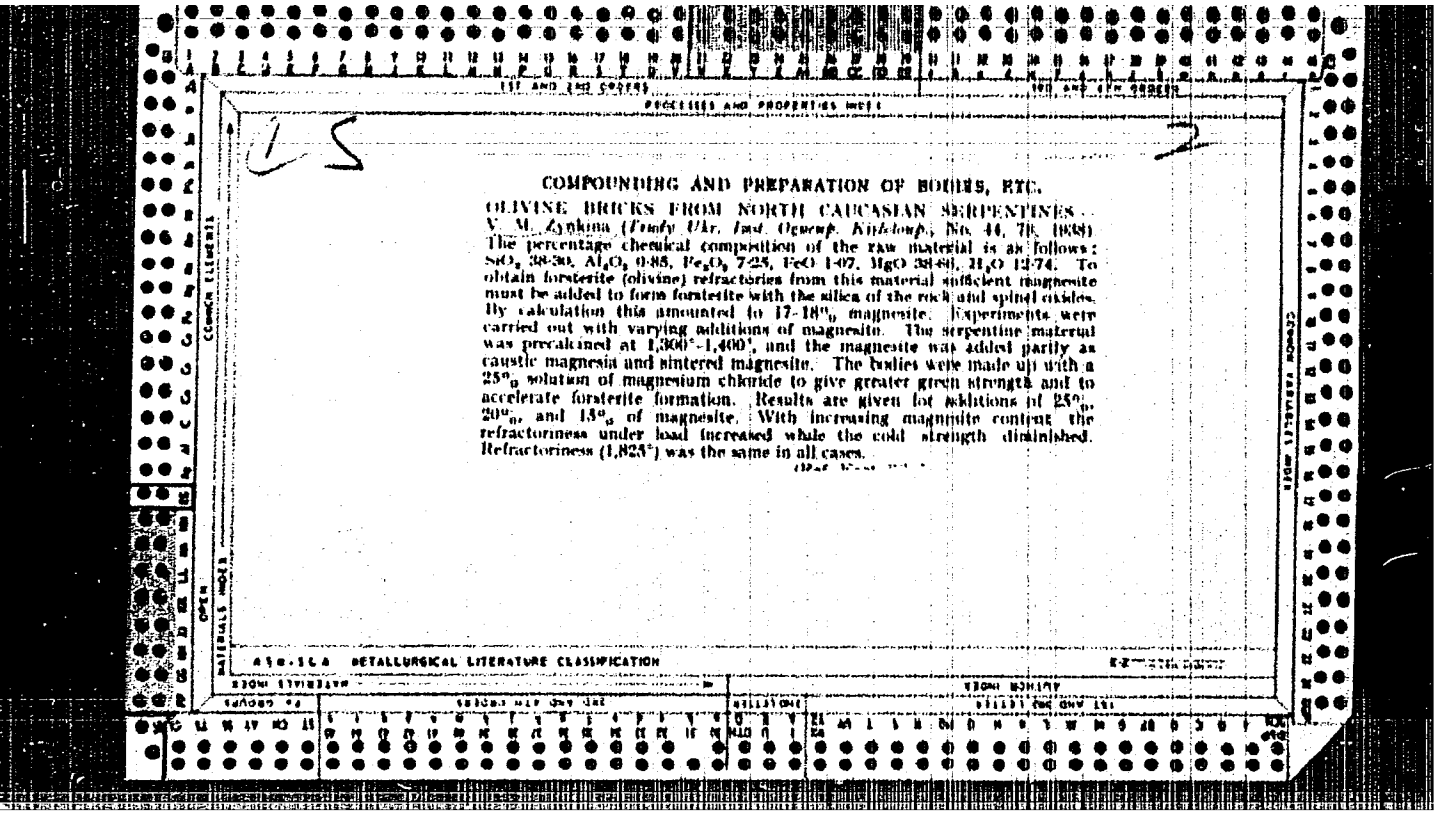
alternating sign. The brightness increased linearly with the pulse repetition rate for rates between 20 and 1000 Hz and was proportional to the 8-th to 10-th power of the pulse height for brightnesses below 20 nit. The dependence of the brightness on the pulse duration for fixed height and repetition rate was more complex. It was found that brightnesses of 10 to 20 nit could be achieved with 10 to 50 microsec pulses of heights below 30 V and repetition rates from;100 to 300 Hz. It is concluded that the investigated electroluminophors are suitable for use in sign indicators, matrix indicator screens, and other devices that do not require a duty factor higher than 0.001. Orig. art. has: 3 figures.

SUB CODE: 20 SUBM DATE: none ORIG. REF: 002 OTH REF: 001

Card 2/2



[illegible], V. M. OLIVINE BRICK FROM NORTH CAUCASIAN SERPENTINITES. *Ukrain. Nauch. Inst. Ogneuporov i Kislotaporov*, No. 44, 78 (1938).—The [illegible] chemical composition of the raw material is as follows: SiO_2 38.30, Al_2O_3 0.85, Fe_2O_3 7.25, FeO 1.07, MgO 38.60, H_2O 12.74. To obtain forsterite (olivine) refractories from this material sufficient magnesite must be added to form forsterite with the silica of the rock and spinel oxides. By calculation this amounted to 17 to 18% magnesite. Experiments were carried out with varying additions of magnesite. The serpentine material was precalcined at 1300° to 1400°, and the magnesite was added partly as caustic magnesia and sintered magnesite. The bodies were made up with a 25% solution of magnesium chloride to give greater green strength and to accelerate forsterite formation. Results are given for additions of 25%, 20%, and 15% of magnesite. With increasing magnesite content the refractoriness under load increased while the cold strength diminished. Refractoriness (1825°) was the same in all cases.



COMPOUNDING AND PREPARATION OF BODIES, ETC.

OLIVINE BRICKS FROM NORTH CAUCASIAN SERPENTINES. V. M. Zyukina (*Trudy Ukr. Inst. Ogneup. Kharkova*), No. 44, 78 (1938)

The percentage chemical composition of the raw material is as follows: SiO_2 38-39, Al_2O_3 0-85, Fe_2O_3 7-25, FeO 1-07, MgO 38-60, H_2O 12-74. To obtain forsterite (olivine) refractories from this material sufficient magnesite must be added to form forsterite with the silica of the rock and spinel oxides. By calculation this amounted to 17-18% magnesite. Experiments were carried out with varying additions of magnesite. The serpentine material was precalcined at 1,300°-1,400°, and the magnesite was added partly as caustic magnesia and sintered magnesite. The bodies were made up with a 25% solution of magnesium chloride to give greater green strength and to accelerate forsterite formation. Results are given for additions of 25%, 20%, and 15% of magnesite. With increasing magnesite content the refractoriness under load increased while the cold strength diminished. Refractoriness (1,825°) was the same in all cases.

ZINKINA, V. M.

Zynkina, V. M. OLIVINE BRICK FROM NORTH CAUCASIAN SERPENTINES. *Ogneupory* [illegible] *i Keramika*, No. 44, 78 (1938).—The percentage chemical composition of the raw material is as follows: SiO_2 38.30, Al_2O_3 0.35, Fe_2O_3 7.25, FeO 1.07, MgO 38.08, H_2O 12.74. To obtain forsterite (olivine) refractories from this material sufficient magnesite must be added to form forsterite with the silica of the rock and spinel oxides. By calculation this amounted to 17 to 13% magnesite. Experiments were carried out with varying additions of magnesite. The serpentine material was precalcined at 1300° to 1400°, and the magnesite was added partly as caustic magnesia and sintered magnesite. The bodies were made up with a 25% solution of magnesium chloride to give greater green strength and to accelerate forsterite formation. Results are given for additions of 25%, 20%, and 15% of magnesite. With increasing magnesite content the refractoriness under load increased while the cold strength diminished. Refractoriness (1925°) was the same in all cases.

Zynkina, V. M., OLIVINE BRICK FROM NORTH CAUCASIAN SERPENTINITES. *Ukrain. Nauch. Issl. Ogneupory* 1 *Kislouporov*, No. 44, 78 (1938).—The percentage chemical composition of the raw material is as follows: SiO_2 39.30, Al_2O_3 0.85, Fe_2O_3 7.25, FeO 1.07, MgO 38.66, H_2O 12.74. To obtain forsterite (olivine) refractories from this material sufficient magnesite must be added to form forsterite with the silica of the rock and spinel oxides. By calculation this amounted to 17 to 18% magnesite. Experiments were carried out with varying additions of magnesite. The serpentine material was precalcined at 1300° to 1400°, and the magnesite was added partly as caustic magnesia and sintered magnesite. The bodies were made up with a 25% solution of magnesium chloride to give greater green strength and to accelerate forsterite formation. Results are given for additions of 25%, 20%, and 15% of magnesite. With increasing magnesite content the refractoriness under load increased while the cold strength diminished. Refractoriness (1935°) was the same in all cases.

ACC NR: AP6007901 SOURCE CODE: UR/0368/66/005/001/0067/0072

AUTHOR: Vlasenko, N. A.; Zyn'o, S. A.

ORG: none

TITLE: Investigation of characteristics of low-voltage electro-luminescent ZnS-Mn films under pulsed excitation

SOURCE: Zhurnal prikladnoy spektroskopii, v. 5, no. 1, 1966, 67-72

TOPIC TAGS: zinc sulfide optic material, electroluminescence, light excitation, optic brightness

ABSTRACT: Inasmuch as in most practical applications electro-luminescent films are used under pulsed excitation conditions, the authors determine the brightness waves, the time constant of luminescence buildup and attenuation, and the dependence of the average brightness of low-voltage ZnS-Mn films on the duration of the voltage pulse, the frequency, amplitude, and polarity in the case of rectangular pulses. The ZnS.Mn film was produced by a method described earlier (Opt. i spektr. v. 8, 81, 1960) and placed between a transparent electrode (SnO_2 or In_2O_3) and an aluminum electrode, the latter being separated from the ZnS.Mn by an insulating SiO layer. The tests were made on unit cells ranging in area from 0.5 to 10^{-3} cm^2. A flash of brightness was observed when a unipolar pulse was first applied to the sample, or when the polarity of

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the pulses was reversed. The average brightness of the electroluminescence was found to increase appreciably on going from unipolar exciting pulses to alternating pulses. The use of alternating pulses made it possible to obtain an average brightness not lower than 15 -- 20 nit at a pulse amplitude ≥ 30 V, pulse duration ≥ 20 μsec, and a repetition frequency > 200 cps. An equivalent circuit of the electro-luminescent cell is used to explain the kinetics of the electro-luminescence and the values of the equivalent-circuit parameters are evaluated. The electro-luminescence buildup time was approximately 4×10^{-4} sec, and the decay time was 1.2×10^{-3} sec. The values were much larger than the time constant of the equivalent circuit, from which it is deduced that the growth time of the electro-luminescence in the films is connected with the duration of the excited state of the Mn^{2+} ion, and not with the capture of the carriers. It is concluded that the phosphor ZnS.Mn can be successfully used in many electro-luminescent devices which do not require very large off-duty cycles (in different character-display matrix screens etc.). The authors thank V. I. Kislyuk and I. Yu. Shabliy for help with the experiment and Doctor of Physical-Mathematical Sciences M. P. Lisitsa for interest in the work and a discussion of the results. Orig. art. has: 4 figures and 4 formulas

SUB CODE: 20/ SUBM DATE: 18Feb65/ ORIG REF: 002/ OTH REF: 001

CELLER, Witold; ZYGMUNSKI, Jozef

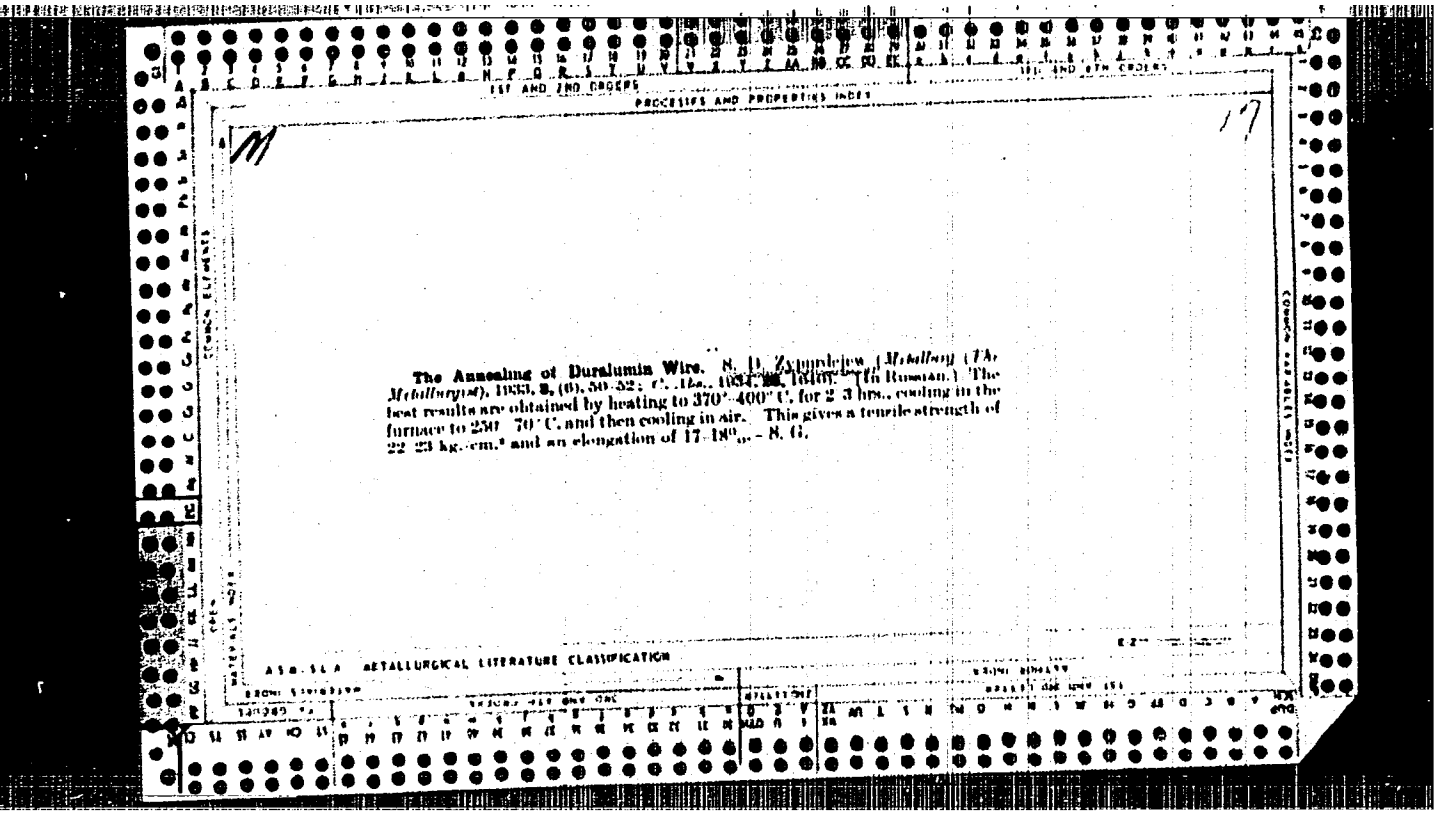
Semicommercial studies on the obtaining of synthetic xylenes. Przem chem 41 no.10:578-582 O '62.

1. Zaklad Syntezy Kontaktowej i Zaklad Technologiczny, Instytyt Chemii Ogolnej, Warszawa.

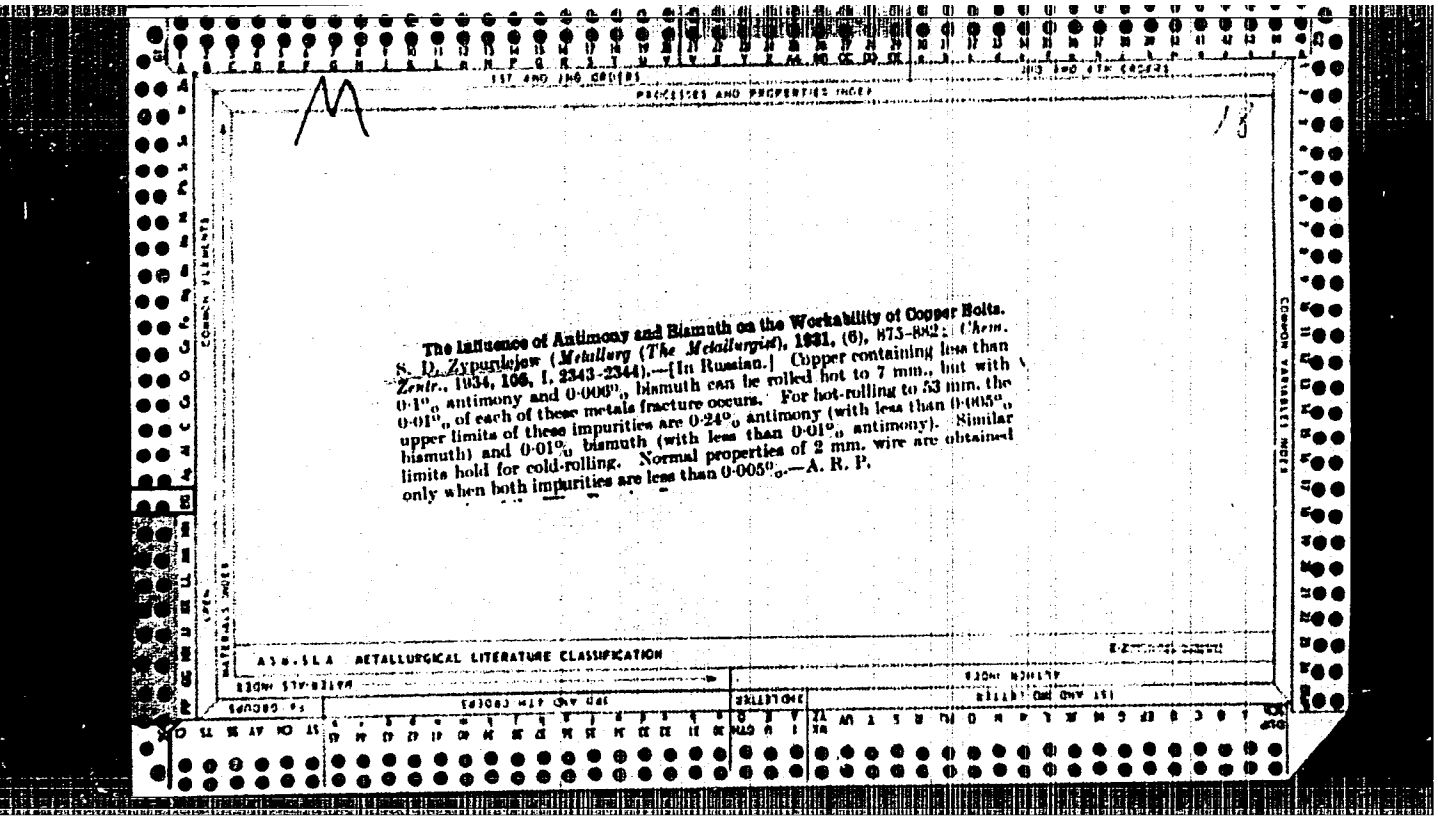
RATYNSKI, W.; TURKIEWICZ, J.; ZYPRANSKI, P.

Potential scattering of neutrons for Fe, Co, Ni, Cu, Zn, Se. Bul Ac Pol mat 8 no.2:117-118 '60. (EEAI 9:12)

1. Institute of Experimental Physics, Warsaw University and Institute for Nuclear Research, Polish Academy of Sciences. Presented by A.Soltan.
(Neutrons) (Iron) (Cobalt) (Selenium)
(Nickel) (Copper) (Zinc)



The Annealing of Duralumin Wire. S. I. Zvyagintsev. (*Metallurg* (*Metallurgist*), 1933, **8**, (6), 50–52; *C.*, 1934, **28**, 1611. (In Russian.) The best results are obtained by heating to 370°–400° C. for 2–3 hrs., cooling in the furnace to 250–270° C. and then cooling in air. This gives a tensile strength of 22–23 kg./cm.² and an elongation of 17–18%. – S. G.



The Influence of Antimony and Bismuth on the Workability of Copper Bolts. S. D. Zyputejew (*Metallurg* (*The Metallurgist*), **1931**, (6), 873-882; *Chem. Zentr.*, 1934, **105**, I, 2343-2344).—[In Russian.] Copper containing less than 0·1% antimony and 0·009% bismuth can be rolled hot to 7 mm., but with 0·01% of each of these metals fracture occurs. For hot-rolling to 53 mm. the upper limits of these impurities are 0·24% antimony (with less than 0·005% bismuth) and 0·01% bismuth (with less than 0·01% antimony). Similar limits hold for cold-rolling. Normal properties of 2 mm. wire are obtained only when both impurities are less than 0·005%.—A. R. P.

ZYRIANOVA, T. I.

"Benzantronyl-sulphamic acid." Ioffe, I. S., Zyrianova, T. I. and Seslavin, V. R. (p. 965)

SO: Journal of General Chemistry (Zhurnal Obshchei Khimii) 1944, Volume 14, no. 9-10.

POPOV, Aleksandr Ivanovich, prof.; ZYRIN, A.A., red.; ZHUKOVA, Ye.G., tekhn.red.

[Introduction to mathematical logic] Vvedenie v matematicheskuiu logiku. Leningrad, Izd-vo Leningr.univ., 1959. 104 p. (MIRA 12:9)

(Logic, Symbolic and mathematical)

EVLIYA, Chelebi [Evliya, Efendi]; ZHELTYAKOV, A.D.; TVERTINOVA, A.S. [translator]; VEKILOV, A.P. [translator]; GARBUZOVA, V.S. [translator]; GRIGOR'YEV, A.P. [translator]; ZYRIN, A.A. [translator]; IVANOVA, R.D. [translator]; IVANOV, S.N. [translator] Prinimali uchastiye: KYAMILEV, Kh. [translator]; MASHTAKOVA, Ye.I. [translator]; GRUNINA, E.A., red. izd-va; KUZ'MIN, I.F., tekhn. red.

[A travel book (excerpts from the work of a 17th century Turkish traveler); translation and commentary] Kniga puteshestviia (izvlecheniia iz sochineniia turetskogo puteshestvennika XVII veka); perevod i kommentarii. Moskva, Izd-vo vostochnoi lit-ry. (Pamiatniki literatury narodov Vostoka: Perevody, no.6) No.1. [Moldavia and the Ukraine] Zemli Moldavii i Ukrainy. 1961. 337 p. (MIRA 14:12)

1. Vostochnyy fakul'tet Leningradskogo Gosudarstvennogo universiteta (for all except Kyamilev, Mashtakova, Grunina, Kuz'min).
2. Institut narodov Azii AN SSSR (for Kyamilev , Mashtakova).
(Elviya, Efendi, ca. 1611- ca. 1682)
(Moldavia—Description and travel)
(Ukraine—Description and travel)

L 18055-66 EWT(1)/EWT(m)/ETC(f)/EWG(m)/T/EWP(t)/EWA(h) IJP(c)
ACC NR: AT6006176 JD/JG/GS/AT SOURCE CODE: UR/0000/65/000/000/0295/0300

AUTHOR: Tresvyatskiy, S. G.; Zyrin, A. V.; Maksimenko, S. A.

ORG: none

TITLE: Certain electrophysical properties of semiconductors based on oxides of metals with changeable valence

SOURCE: Khimicheskaya svyaz' v poluprovodnikakh i tverdykh telakh (Chemical bond in semiconductors and solids). Minsk, Nauka i tekhnika, 1965, 295-300

TOPIC TAGS: semiconductor, rare earth element, thermoelectric property, lanthanum compound, neodymium compound, chromium compound, thermal emf

ABSTRACT: The temperature dependence of the coefficient of thermoelectric force (α, in microvolts/degree) was measured for a series of strontium and calcium doped lanthanum and neodymium chromites. The doping of these Perovskite-type chromites raises the valence of a portion of the chromium atoms to six according to the scheme:

$$(1-3x)\,NdCrO_3 + 3x\,SrO + \frac{3}{2}\,x\,Cr_2O_3 \rightarrow (Nd^{3+}_{1-3x}\,Sr^{2+}_{3x}\,Cr^{3+}_{1-x}\,Cr^{6+}_{x})\,O_3 + \frac{3}{4}\,x\,O_2.$$

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where $x \leq 0.05$. This is reflected in a hole-type semiconductivity in the doped chromites. The electrical conductivity of the chromite samples was measured potentiometrically by a 500 kc volt-ammeter using alternating current. For each sample, the temperature (400-1000°K) and the potential difference (which is proportional to the logarithm of sample's electrical conductivity) were recorded simultaneously. The coefficient of thermal emf (α) was calculated using the temperature difference between two ends of the sample. The temperature dependence of the thermal emf coefficient, temperature dependence of specific electric resistivity, and the dependence of α on the temperature logarithm are graphed for several doped chromites. Orig. art. has: 3 figures, 3 formulas.

SUB CODE: 20 SUBM DATE: 31May65/ ORIG REF: 001/ OTH REF: 003

Card 2/2 SAV

L 21302-66 EWP(e)/EWT(m)/EWA(d)/EWP(t) IJP(c) JD

ACC NR: AP6007292 SOURCE CODE: UR/0226/66/000/002/0092/0096

AUTHOR: Danilenko, V. A.; Zyrin, A. V.

ORG: Institute of Problems of Metal Science AN UkrSSR (Institut problem materialovedeniya AN UkrSSR)

TITLE: Study of the properties of sintered ferromagnetic materials by the eddy current method

SOURCE: Poroshkovaya metallurgiya, no. 2, 1966, 92-96

TOPIC TAGS: ferromagnetic material, sintering, eddy current, magnetic permeability, resonance voltage, specific consuctivity, copper compound

ABSTRACT: The authors studied the possibility of applying the eddy current method to the investigation of the surface layers of conducting ferromagnetic materials. A theoretical dependence of the resonance voltage on the specific conductivity and magnetic permeability of the material is obtained. The regularity obtained was verified on sintered samples of two compositions: Cu-Mo and Fe-Cu-Mo. The experimental data agree qualitatively with the theoretical calculations. Orig. art. has: 4 figures and 10 formulas. [Author's abstract.]

SUB CODE: 11/ SUBM DATE: 06Oct65/ ORIG REF: 006/

Card 1/1

ZYRIN, A.V.; TUL'CHINSKIY, L.N.

Peculiarities of the magnetic measurement of ferrate parameters with a rectangular hysteresis loop. Trudy inst. Kom.stand.mer i izm. prib no.64:270-277 '62. (MIRA 16:5)
(Magnetic measurements)

ZYRIN, G.

"Start Television Receiver," by G. Zyrin, Radio, No 11, Nov 56, pp 21-24

This article describes the construction and performance characteristics of the Start TV receiving set recently designed at one of the Moscow radio engineering plants.

This set is built with 18 miniature tubes and a rectangular 220X290-mm Type 35LK2B picture tube. It is designed for broadcast reception on 5 TV channels and 64- to 73-Mc frequency-modulation radio programs. Its sensitivity is about 200 micro-volts, and the scanning line is 450-500. The set is designed for 110-, 127-, and 220-ac power supply and consumes about 140 w. The intermediate audio frequency is 27.75 Mc and the video is 34.25 Mc. The plate potential of the frame scan generator tube is 500-600 v.

Sum 1219

ZYRIN, G., inzh.; YEFIMENKOV, R., inzh.; KHRUSTALEV, G., inzh.

"IUnost'" television receiver. Radio no.1:21-25 Ja '66.
(MIRA 19:1)

S/112/59/000/012/092/097
A052/A001

Translation from: Referativnyy zhurnal, Elektrotekhnika, 1959, No. 12, p. 274, # 25844

AUTHORS: Sevast'yanov, N.S., Zyrin, G.P.

TITLE: On Possibilities of Application of Ultrasonic Oscillations in Foundries

PERIODICAL: Tr. Omskogo mashinostroit. in-ta, 1958, No. 2, pp. 139-145

TEXT: An ultrasonic treatment of zinc melt was carried out on a 400-kilocycle frequency. Quartz was used as an emitter. The experiments have shown that the hardness of irradiated samples is 1.5 times that of untreated ones. In an ultrasonic treated sample there are no acicular crystals. The authors maintain that by using magnetostrictive emitters (and, consequently, lower frequencies) still better results will be achieved.

M.G.S.

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

Card 1/1

ZYRIN, N.G.; ORLOV, D.S.

Methods of determining the activity of sodium ions in soils and soil solutions. Vest. Mosk. un. Ser. biol., pochv., geol., geog. 13 no. 1:71-80 '58. (MIRA 11:7)

1. Moskovskiy gosudarstvennyy universitet, Kafedra pochvovedeniya.
(Soils--Analysis)
(Sodium)

J

COUNTRY : USSR
CATEGORY : Soil Science/ Soil Genesis and Geography.

ABS. JOUR. : RZhBiol., No. 5 1959, No. 20013

AUTHOR : Dobrovolskiy, G.V.; Zyrin, N.G.
INST. : Moscow University
TITLE : Geographical Features and Conditions in Bottom Land Soils.

ORIG. PUB. : Vestn. Mosk. Un-ta ser. biol., pochvoved., geol., geogr., 1957, No.3, 129-135

ABSTRACT : The zonal characteristics of river bottom soil are produced by the close genetic connection between the composition of the river's alluvium, river and ground waters edging into the valley and the features of the soil cover on the river basin. Using the Vyatka, Koma, Belaya, Oka, Moskva and Khyaz'ma River bottom lands as an example, the problem of provincial differences within the bottomland soils of a single soil-climatic zone is discussed.

CARD: 1/2

2

ZYRIN, N.G.

The problem of the behavior of potassium in soils. Uchenye Zapiski Moskov. Gosudarstven. Univ. im. M.V. Lomonosova No.105, Pt. 2, 55-78 '46.
(CA 47 no.21:11624 '53)

ZYRIN, Nikolay Georgiyevich; ORLOV, Dmitriy Sergeyevich; VOROB'YEVA, Lyudmila Andreyevna; KOROBTSOVA, N.A., red.

[Reference and calculation tables for the physicochemical study of soils] Spravochnye i raschetnye tablitsy dlia fiziko-khimicheskikh metodov issledovaniia pochv. Moskva, Izd-vo Mosk. univ., 1965. 131 p. (MIRA 18:8)

ZYRIN, S. I Dr.

Metody i Organizatsiia Tekhnicheskogo Kontrolia na Predpriiatiiakh Sherstianoi Promyshlennosti (Methods and Organization of Technical Control in the Wool Industry)

180 p. 1.00

SO: Four Continent Book List, April 1954

38099. ZYRIN, S. G.

Mery predotvrashcheniya loska, obrazuyushchegosya v protsesse noski kostyumnykh kamvol'nykh tkaney. V. Sb: Nauch.-issled. trudy (Nauch.-issled. in-t sherstyanoy prom-sti). M-L, 1949, s. 109-35

ZYRIN, S. G.

Zyrin, S. G.- "Preventative measures for the elimination of floss resulting from the wear of worsted cloth suits," In the symposium: Nauch.-issled. trudy (Nauch.-issled. in-t sherst. prom-sti), Moscow-Leningrad, 1949, p. 109-35

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

ACC NR: AT6022255 SOURCE CODE: UR/0000/66/000/000/0048/0055

AUTHOR: Zyrin, S. S.; Karnaukh, O. I.; Petrov, D. M.

ORG: none

TITLE: Changing the frequency of a klystron oscillator with multiresonator oscillatory system

SOURCE: Vsesoyuznaya nauchnaya sessiya, posvyashchennaya Dnyu radio. 22d, 1966. Sektsiya elektroniki. Doklady. Moscow, 1966, 48-55

TOPIC TAGS: klystron, multiresonator klystron, SHF oscillator

ABSTRACT: Two connected problems of frequency stability in a klystron oscillator are solved; on the basis of stability conditions, the oscillatory systems are analyzed, and design formulas for the multifrequency klystron oscillator are deduced. For the frequency-stability analysis, truncated equations describing a

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ACC NR: AT6022255

system with many degrees of freedom are used; supercritical couplings among n resonators (n "circuits" in an equivalent network) are assumed. The stability condition is described by: $G_{2s} > 2G_{2w}\frac{K_s}{K_w}$, where G_{2s}, G_{2w}, K_s, K_w are the conductances and feedback factors at spurious and working frequencies, respectively. Best practical results can be obtained from 3- and 5-resonator klystrons whose central natural frequency is used as a working frequency. Engineering formulas for a 3-resonator klystron are developed (tunable band, feedback factor, stabilization coefficient, optimal stationary conditions, output power). Orig. art. has: 4 figures and 13 formulas.

SUB CODE: 09 / SUBM DATE: 09Apr66 / ORIG REF: 003

Card 2/2

22180

S/048/61/025/004/029/048
B117/B212

24,3500

AUTHORS: Andreyev, I. S., Arzumanyan, G. B., and Zyrina, L. V.

TITLE: Various possibilities to stimulate electroluminescence properties of crystals

PERIODICAL: Izvestiya Akademii nauk SSSR. Seriya fizicheskaya, v. 25, no. 4, 1961, 520-522

TEXT: The present paper was read at the 9th Conference on Luminescence (crystal phosphors). The following test results are given: I. Investigating the effect of production conditions on the characteristic of ZnS-Cu electroluminophors resulted in: 1) The spectra of ZnS-Cu luminophors produced in media without HCl are somewhat shifted towards the short wave region compared to spectra of luminophors which have been produced in media with HCl; 2) the frequency dependence of the luminescence differs at a sinusoidal voltage for luminophors produced in different media; 3) not only the spectrum but also the frequency dependence will change if the annealing temperature is raised; 4) they will experience a similar change if the annealing time is changed. The optimum time is 2 hr;

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B117/B212

Various possibilities to...

5) solvents will have an important but variable effect on luminosity, spectrum and frequency dependence of the luminophors. II. The investigation of the electroluminescence of single crystals has yielded the following results in the field of four electrodes which were normal to each other and at a sinusoidal voltage: 1) Absence of anisotropy of the electroluminescence properties in the crystals investigated; 2) a great influence of the electrode contact on the luminosity and its waves, especially for the case where the luminescent bands are distributed unevenly over the crystal; 3) this effect is connected with the passage of current through the crystal; 4) the form of the luminosity wave may be explained on the assumption that the illumination does not occur simultaneously at each point of the crystal. III. The investigation of luminosity maxima during a Π shaped pulsating voltage applied to a capacitor (without dielectric) showed that: 1) If the potential of the transparent electrode is constantly above the second one, then the maxima of the "swelling" and "decreasing" will develop with the same rate as the voltage changes, i.e., within $\sim 10\ \mu$sec; 2) the drop rate of the luminosity is by one magnitude higher than that of the increase and it is somewhat higher for the swelling maximum than for that of the decreasing maximum;

Various possibilities to...

2) if the potential of the transparent electrode is constantly below that of the 2nd electrode the maxima of the swelling and decreasing will consist of two parts: in part one, as earlier, the luminosity will increase with the rate the voltage increases or decreases; in part two, this will be 1/2 ÷ 1/3 slower. The possibility to use electrolysis for the activation of ZnS luminophors has been investigated. ZnS powder has been put into a quartz container having electrodes of a wanted material then it has been annealed in nitrogen at very high temperatures (700 ÷ 1000°C) for a certain time while a current (0.4 ÷ 15 ma) has been sent through. The relative role of the electrolysis and the diffusion during the transfer of activating substance and during the activating process has been investigated with the help of tracer atoms. The tests have shown the prevailing role of the electrolysis. Besides, they led to the assumption that the electrolysis might not only determine the acceleration of the transfer of activating elements but also the type of the swelling or it might cause other changes in the phosphorus which are favorable for the electroluminescence. In order to check this assumption tests have been made with ZnS-$AgNo_3$ with the same silver concentration. This compound has been

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annealed under the same conditions as used for the production of phosphorus but without applying any current. Both luminophors showed a bright blue photoluminescence. The luminophor obtained by annealing did not show electroluminescence. The electroluminescence of the luminophors obtained by electrolysis is characterized by the following data:

Potential in volts	300	400	500	600	700	900
Luminosity in relative units	2	5.5	9.5	13	24	48

The data obtained show that it is possible to use this method for the production of electroluminophors. There are 2 Soviet-bloc references.

ASSOCIATION: Kafedra obshchey fiziki Sredneaziatskogo gos. universiteta im. V. I. Lenina (Department of General Physics of (Soviet) Central Asia State University imeni V. I. Lenin)

ZYRINA, L.V.; YAGUDAYEV, M.D.

Temperature dependence of the cathodic atomization of tungsten.
Trudy SAGU no.65:33-37 '55. (MLRA 9:5)
(Tungsten) (Ion beams)

ALIMOV, Sh.A.; ANDREYEV, I.S.; ZYRINA, L.V.

Characteristics of the preparation of ZnS - Cu electroluminophors. Izv. AN Uz. SSR. Ser. fiz.-mat. nauk no.4:52-56 '61. (MIRA 14:9)

1. Tashkentskiy gosuniversitet imeni V.I.Lenina.
(Luminescent substances) (Zinc sulfide)

ANDREYEV, I.S.; ZYRINA, L.V.; ARZUMAN'YAN, G.B.

Electrolysis as a method for the activation of electroluminophors. Izv. AN Uz. SSR. Ser. fiz.-mat. nauk no.4:83-87 '61. (MIRA 14:9)

1. Tashkentskiy gosuniversitet imeni V.I.Lenina.
(Luminescent substances) (Electrolysis)

SUVOROV, A.S.; ZYRNE YON; SHIDOVICH, Ye.V.

Laboratory apparatus with a powder-catalyst fluidized bed. Neftepar. i neftekhim. no.6:16-17 '64. (MIRA 17:9)

1. Moskovskiy ordena Trudovogo Krasnogo Znameni institut neftekhimicheskoy i gazovoy promyshlennosti im. akad. Grubkina.

SOKOL, Stanislaw; ZYROMSKA, Monika; MORZYCKA, Maria.

Brain abscess in a 15-month-old child. Polski tygod.lek. 11 no.2: 74-78 9 Jan 56.

1. Z II Kliniki Chirurgicznej: kier: prof. dr K.Debicki, z Kliniki Neurologicznej; kier: prof. dr Z.Majewska i z Instytut Medycyny Morskiej i Tropikalnej A.M. w Gdansku; kier: prof. dr J.Morzycki. Gdansk-Wrzeszcz, ul. Debinki 7, II Klinika Chirurgiczna A.M.

(BRAIN, abscess
in child)
(ABSCESS
brain, in child)

NIELUBSZYC, Stanislaw; CYNOWSKI, Lucjan; ZYROMSKA, Monika

Arteritis nodosa. Polskie arch. med. wewn. 26 no.6:949-956 1956.

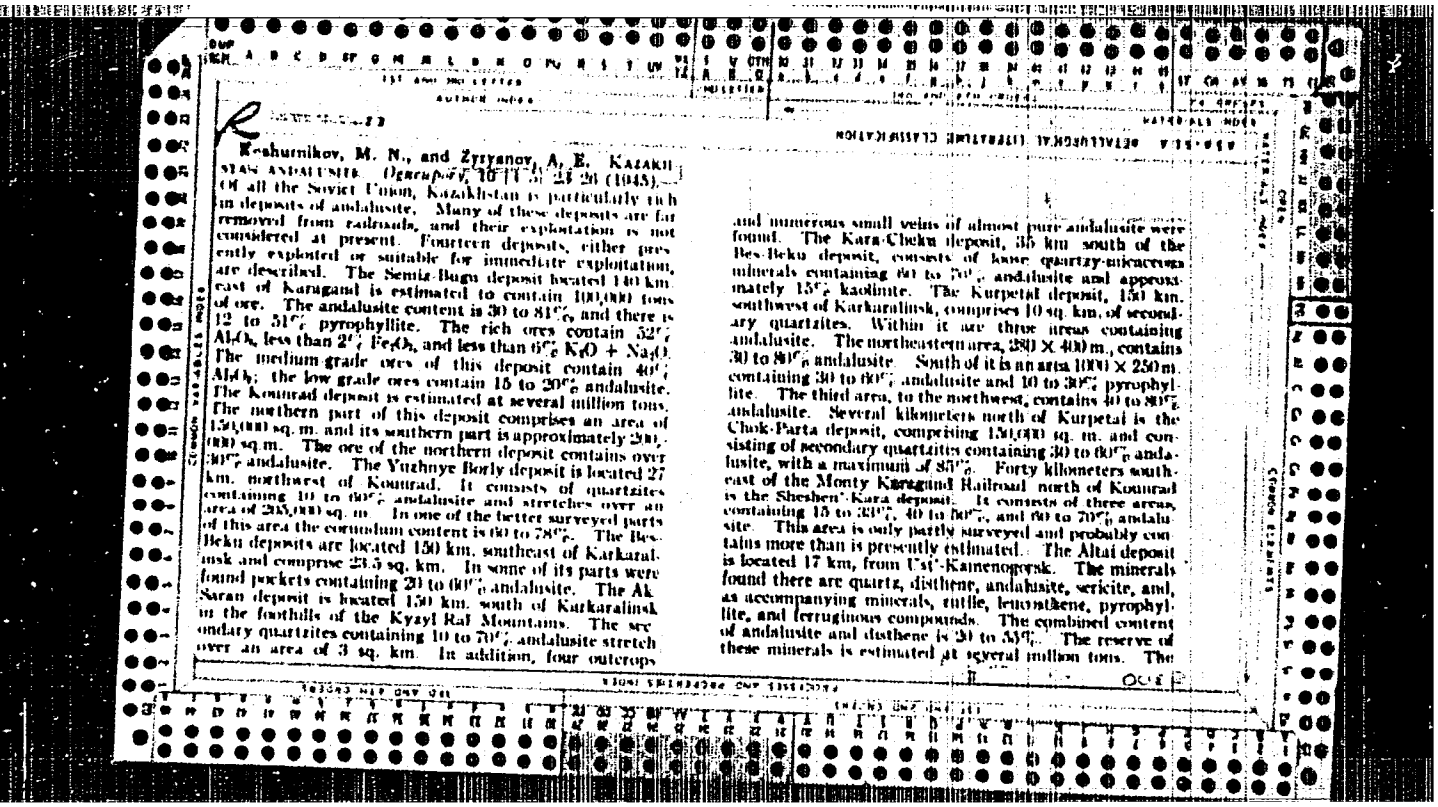
1. Z III Klin. Chorob Wewn. A.M. w Gdansku, Kier. prof. dr. med. J. Penson, Z Zakladu Anatomii Patolog. A.M. w Gdansku, Kier. Prof. dr. nauk med. W. Czarnocki, Z Kliniki Neurolog. A.M. w Gdansku, Kier. Prof. dr. med. Z. Majewska, Gdansk, ul. Sluza 9/10. III Klinika Chorob Wewn. A.M.G.

(PERIARTERITIS NODOSA, case reports, (Pol))

ZYROWA, E.

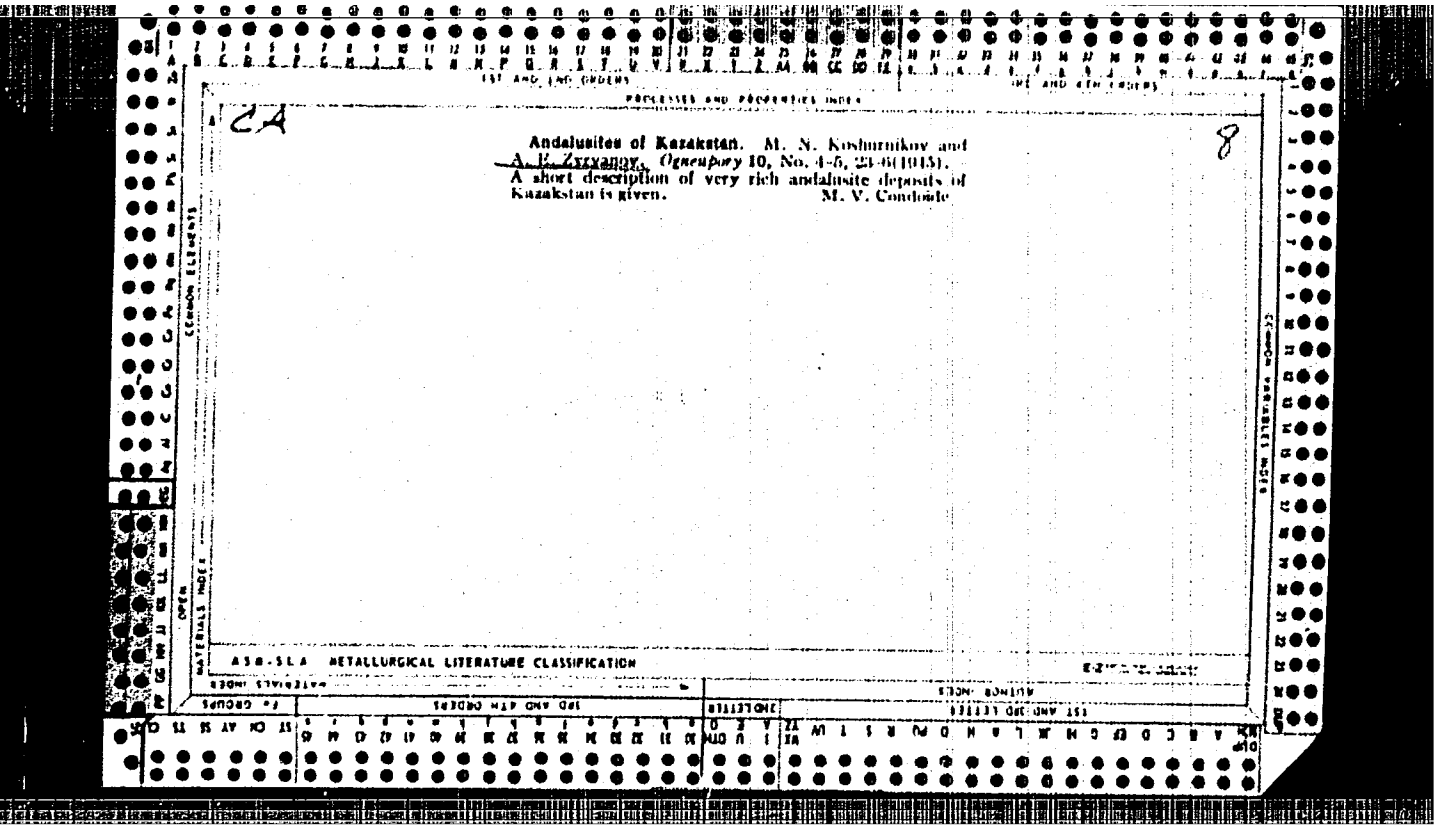
Work experience of the institute on principles of Marxism-Leninism at the medical academy in Warsaw. Zdrowie pub., Warsz. no.1:36-39 Jan-Feb 55.

1. Kierownik Zakladu Podstaw Marksizmu-Leninizmu, A. M. w Warszawie.
(EDUCATION, MEDICAL,
in Poland, teaching of Marxism-Leninism)



Koshurnikov, M. N., and Zyryanov, A. E. KAZAKH-STAN ANDALUSITE. *Ogneupory*, 10 [1] 23-26 (1945).—Of all the Soviet Union, Kazakhstan is particularly rich in deposits of andalusite. Many of these deposits are far removed from railroads, and their exploitation is not considered at present. Fourteen deposits, either presently exploited or suitable for immediate exploitation, are described. The Semiz-Bugu deposit located 140 km. east of Karaganda is estimated to contain 100,000 tons of ore. The andalusite content is 30 to 81%, and there is 12 to 51% pyrophyllite. The rich ores contain 52% Al_2O_3, less than 2% Fe_2O_3, and less than 6% $K_2O + Na_2O$. The medium grade ores of this deposit contain 40% Al_2O_3; the low grade ores contain 15 to 20% andalusite. The Kounrad deposit is estimated at several million tons. The northern part of this deposit comprises an area of 150,000 sq. m. and its southern part is approximately 200,000 sq. m. The ore of the northern deposit contains over 30% andalusite. The Yuzhnye Borly deposit is located 27 km. northwest of Kounrad. It consists of quartzites containing 10 to 60% andalusite and stretches over an area of 285,000 sq. m. In one of the better surveyed parts of this area the corundum content is 60 to 78%. The Bes-Beku deposits are located 150 km. southeast of Karkaralinsk and comprise 23.5 sq. km. In some of its parts were found pockets containing 20 to 60% andalusite. The Ak-Saran deposit is located 150 km. south of Karkaralinsk in the foothills of the Kyzyl Raf Mountains. The secondary quartzites containing 10 to 70% andalusite stretch over an area of 3 sq. km. In addition, four outcrops and numerous small veins of almost pure andalusite were found. The Kara-Cheku deposit, 35 km. south of the Bes-Beku deposit, consists of lense quartzy-micaceous minerals containing 60 to 70% andalusite and approximately 15% kaolinite. The Kurpetal deposit, 150 km. southwest of Karkaralinsk, comprises 10 sq. km. of secondary quartzites. Within it are three areas containing andalusite. The northeastern area, 280 × 400 m., contains 30 to 80% andalusite. South of it is an area 1000 × 250 m. containing 30 to 60% andalusite and 10 to 30% pyrophyllite. The third area, to the northwest, contains 40 to 80% andalusite. Several kilometers north of Kurpetal is the Chok-Parta deposit, comprising 150,000 sq. m. and consisting of secondary quartzites containing 30 to 60% andalusite, with a maximum of 85%. Forty kilometers southeast of the Monty Karaganda Railroad north of Kounrad is the Shesheri-Kara deposit. It consists of three areas, containing 15 to 20%, 40 to 50%, and 60 to 70% andalusite. This area is only partly surveyed and probably contains more than is presently estimated. The Altai deposit is located 17 km. from Ust'-Kamenogorsk. The minerals found there are quartz, disthene, andalusite, sericite, and, as accompanying minerals, rutile, leucoxthene, pyrophyllite, and ferruginous compounds. The combined content of andalusite and disthene is 20 to 35%. The reserve of these minerals is estimated at several million tons. The

difficulty presented in concentrating this ore is the presence of Ti and Fe. A concentrate containing 58% Al_2O_3 is a definite possibility. This deposit is a valuable raw-material source for the production of silumin and Al metal. The Kos-Kyzyl deposit, 97 km southeast of Kounrad, consists of two parts, one contains 10 to 40% and the other over 50% andalusite. The deposit "Massiv UP" is located 23 km. southeast of Bektau-Ata. Over a secondary quartzite area of 230,000 sq. m., 40 to 80% andalusite was found. In the deposit of Kazyl-Tas 25 km. south of Ak-Togai, were found four areas of secondary quartzites containing 10 to 35% andalusite enriched by 5 to 15% corundum and diaspore. In addition 30 to 50% alunite was also found. In the northern branches of the Bektau-Ata Mountains is the Telemes deposit covering an area of 270,000 sq. m. and containing 30 to 50% andalusite. The value of andalusite in the production of refractories is proved. It is used in the production of spark plugs, protective coatings in glassmelting pots, stoppers and linings for steel pouring ladles, refractories for cupolas, etc.



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Andalusites of Kazakstan. M. N. Koshurnikov and A. P. Zvryanov. *Ogneupory* 10, No. 4-5, 23-6(1945). A short description of very rich andalusite deposits of Kazakstan is given. M. V. Condoide

A.E.S.

Kazakhstan andalusite. M. N. Kompaniskov and A. E. Zvyagin. Open-pit, 1965, No. 4/5, pp. 23-26.—Of all the Soviet Union, Kazakhstan is particularly rich in deposits of andalusite. Many of these deposits are far removed from railroads, and their exploitation is not considered at present. Fourteen deposits, either presently exploited or suitable for immediate exploitation, are described. The Semiz-Bugu deposit located 140 km. east of Karaganda is estimated to contain 100,000 tons of ore. The andalusite content is 30 to 81%, and there is 12 to 51% pyrophyllite. The rich ores contain 52% Al_2O_3 less than 2% Fe_2O_3 and less than 6% $K_2O + Na_2O$. The medium-grade ore of this deposit contain 40% Al_2O_3; the low-grade ores contain 15 to 20% andalusite. The Kounrad deposit is estimated at several million tons. The northern part of this deposit comprises an area of 150,000 sq. m. and its southern part is approximately 200,000 sq. m. The ore of the northern deposit contains over 30% andalusite. The Yuzhnye Kurly deposit is located 27 km. northwest of Kounrad. It consists of quartzites containing 10 to 60% andalusite and stretches over an area of 255,000 sq. m. In one of the latter surveyed parts of this area the corundum content is 60 to 78%. The Bestekin deposits are located 150 km. southeast of Karkaralinsk and comprise 23.5 sq. km. In some of its parts were found pockets containing 50 to 60% andalusite. The Aksarin deposit is located 150 km. south of Karkaralinsk in the foothills of the Kyrgyl-Kul Mountains. The secondary quartzites containing 10 to 70% andalusite stretch over an area of 2 sq. km. In addition, four outcrops and numerous small veins of almost pure andalusite were found. The Kara-Chokin deposit, 25 km. south of the Ben-Bekin deposit, consists of loose quartz-micaceous minerals containing 60 to 70% andalusite and approximately 15% kyanite. The Karpetal deposit, 150 km. southwest of Karkaralinsk, comprises 10 sq. km. of secondary quartzites. Within it are three areas containing andalusite. The northeastern area, 250 × 400 m., contains 30 to 50% andalusite. South of it is an area 1000 × 250 m. containing 30 to 80% andalusite and 10 to 20% pyrophyllite. The third area, to the northwest, contains 40 to 80% andalusite. Several kilometers north of Karpetal is the Chok-Parta deposit comprising 150,000 sq. m. and consisting of secondary quartzites containing 30 to 60% andalusite, with a maximum of 85%. Forty kilometers southeast of the Monty Karaganda Railroad, north of Kounrad, is the Shoshen-Kara deposit. It consists of three areas containing 15 to 25%, 40 to 50%, and 60 to 70% andalusite. This area is only partly surveyed and probably contains more than is presently estimated. The Altal deposit is located 17 km. from Lak'-Kamenogorsk. The minerals found there are quartz, diathene, andalusite, sericite, and, as accompanying minerals, rutile, kaolinite, pyrophyllite, and ferruginous compounds. The contained

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content of andalusite and disthene is 20 to 55%. The reserve of these minerals is estimated at several million tons. The difficulty presented in concentrating this ore in the presence of Ti and Fe. A concentrate containing 55% Al_2O_3 is a definite possibility. This deposit is a valuable raw-material source for the production of silumin and Al metal. The Kos-Kyzyl deposit, 97 km. southeast of Kounrad, consists of two parts; one contains 10 to 40% and the other over 50% andalusite. The deposit "Massiv UP" is located 22 km. southeast of Bektau-Ata. Over a secondary quartzite area of 234,000 sq. m., 40 to 80% andalusite was found. In the deposit of Kazyl Tas, 25 km. south of Ak-Togal, were found four areas of secondary quartzites containing 10 to 85% andalusite enriched by 5 to 15% corundum and diaspore. In addition 30 to 50% alunite was also found. In the northern branches of the Bektau-Ata Mountains is the Telemes deposit covering an area of 270,000 sq. m. and containing 30 to 50% andalusite. The value of andalusite in the production of refractories is proved. It is used in the production of spark plugs, protective coatings in glassmelting pots, stoppers and linings for steel-pouring ladles, refractories for cupolas, etc.

M.Ho.

GRINDEL', N.M.; ZYRIN, N.G.

Method for determining the organophosphorus compounds and their dynamics in the plowing horizon of slightly cultivated turf-Podzolic soils. Pochvovedenie no. 12:17-27 D '65.
(MIRA 19:1)

1. Moskovskiy gosudarstvennyy universitet imeni M.V. Lomonosova.
Submitted July 31, 1964.

ZYRIN, N.G.; GRINDEL', N.M.

Seasonal dynamics of the oxidation-reduction potential and iron soluble in acids (Fe^{2} and Fe^{3}) in turf-Podzolic soils. Nauch. dokl.vys.shkoly; biol.nauki no.2:175-181 '63. (MIRA 16:4)

1. Rekomendovana kafedroy pochvovedeniya Moskovskogo gosudarstvennogo universiteta im. M.V.Lomonosova.
(OXIDATION-REDUCTION REACTION) (SOILS--IRON CONTENT) (PODZOL)