L 2125-66

ACCESSION NR: AP5025363

that a likely criterion for the appearance of superconductivity along the domain boundaries is the presence of a single domain extending between the two surfaces of the sample. Orig. art. has: 20 formulas. [CS]

ASSOCIATION: none

SUBMITTED: 25Mar65 ENCL: 00 SUB CODE: EM

NO REF SOV: 007 OTHER: 001 ATD PRESS: 4117

Card 2/2

L 26638-66 EWT(1)/T/EWA(h) IJP(c) AT

ACC NR: AP5025362 SOURCE CODE: UR/0181/65/007/010/2902/2906

AUTHOR: Kopayev, Yu. V.

ORG: None

TITLE: Calculation of Coulomb interaction of electrons and holes in contact with degenerated n- and p-type semiconductors

SOURCE: Fizika tverdogo tela, v. 7, no. 10, 1965, 2902-2906

TOPIC TAGS: electron hole, Coulomb interaction, semiconducting material, excitation spectrum, pair production, crystal structure

ABSTRACT: The model of an isotropic semi-metal at a low temperature was unstable in relation to the formation of pairs from electrons in one zone with the holes in another, taking into account their Coulomb interaction. It has been shown that the contact area of degenerated n- and p-type semiconductors possess a similar feature, i.e., in the electron excitation spectrum in degenerated n- and p-type semiconductors, a hole develops which exponentially decreases upon removal from the contact surface. Upon contact of degenerated n- and p-type semiconductors, instability, due to Coulomb interaction of electrons and holes with sides opposite from the contact, developed in the ground state in relation to electron

Card 1/2

L 26638-66

ACC NR: AP5025362

hole pair formation. From contact, parameter Δ decreased exponentially on both sides. Δ decreased with an increase in difference in concentrations of electrons and holes. With the difference in concentrations somewhat more critical, the initial system appeared stable. There was a possibility of forming a pair with a nonzero pulse close to the critical difference in concentrations which would lead to electron crystal structure formation in the contact surface. I am grateful to L. V. Keldy*sh for his constant help in the work. Orig. art. has: 18 equations.

SUB CODE: 20 / SUBM DATE: 25Mar65/ ORIG REF: 005

Card 2/2

L 21233-66 EWT(d)/EWT(l)/EPF(n)-2 IJP(c) WW/GG
ACC NR: AP6003791 SOURCE CODE: UR/0181/66/008/001/0223/0230

AUTHOR: Kopayev, Yu. V.

ORG: none

TITLE: On the phase transition from a semimetal to a dielectric

SOURCE: Fizika tverdogo tela, v. 8, no. 1, 1966, 223-230

TOPIC TAGS: semiconductor theory, valence band, conduction band, phase transition, excited state, anisotropic medium

ABSTRACT: It is shown that in the case of a semimetal for which the extremal points of both the valence and the conduction band coincide in momentum space, but whose effective masses are different, the temperature of the transition from the semimetal to the dielectric is determined not by the magnitude of the gap on the Fermi surface, but by the minimum distance between the branch of the positive and negative excitations. This distance can be much smaller than the gap if the difference between the effective masses of the two bands of the semimetal is large. This minimum distance determines all the thermo-

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L 21233-66
ACC NR: AP6003791

dynamic properties of the system in the dielectric phase. Near the Curie point, the gap tends to zero in a manner similar to that in a semiconductor. A study of a semimetal with weak anisotropy, using a model in which one of the Fermi surfaces is a sphere with scalar mass m, and the other surface is an ellipsoid of revolution with the longitudinal mass coinciding with m and a transverse mass different little from m, shows that the gap decreases with increasing anisotropy energy, and vanishes when the anisotropy energy becomes equal to the gap for the isotropic semimetal. At large anisotropy the state of the semimetal is stable down to absolute zero. The influence of the anisotropy becomes weaker when account is taken of the scattering of the carriers by a non-paramagnetic non-ionized impurity. In the case of an ionized impurity, the effect vanishes because the concentrations of the interacting carriers in both bands are no longer equal. The author is grateful to L. V. Keldysh for a discussion of the results. Orig. art. has: 47 formulas.

SUB CODE: 20/ SUBM DATE: 07Jul65/ ORIG REF: 004/ OTH REF: 001

Card 2/2

KOPAYEVA, T.

Our Spartakiada. Voen. znan. 40 no.8:32-33 Ag '64.
(MIRA 17:11)

1. Predsedatel' komiteta pervichnoy organizatsii Vsesoyuznogo dobrovol'nogo obshchestva sodeystviya armii, aviatsii i flotu metallurgicheskogo kombinata imeni V.I. Lenina.

KOPAYEVA, T.

Parachute canopies in the Tagil sky. Kryl. rod. 15 no.9:4-6 S '64. (MIRA 18:1)

1. Predsedatel' komiteta Vsesoyuznogo dobrovol'nogo obshchestva sodeystviya armii, aviatsii i flotu Metallurgicheskogo kombinata, Nizhniy Tagil, Sverdlovskoy oblasti.

KOPAYEVICH, L.P.

KOPAYEVICH, L.P.

Tectonics and the origin of the Sarykamysh Depression. Trudy VAGT no.2:118-127 '56. (MLRA 10:5)
(Sarykamysh Depression--Geology, Structural)

KOPAYEVICH, L.P.

New data on the stratigraphy and tectonics of the middle Usboy Valley. Trudy VAGT no.2:128-135 '56. (MLRA 10:5)
(Usboy Valley--Geology, Stratigraphic)

KOPAYEVICH, L.P.

Structural position of the Stanovoy Range and distribution of some minerals in its boundaries. Trudy VAGT no.8:95-97 '62.
(MIRA 15:11)

(Stanovoy Range--Geology, Structural)
(Stanovoy Range--Ore deposits)

KOPAYEVICH, L.P.

New data on the stratigraphy of the basement and upper part of the Archean cross section in the southern margin of the Aldan Shield. Geol. i geofiz. no.6:117-119 '64.
(MIRA 18:11)

1. Vsesoyuznyy aerogeologicheskiy trest, Moskva.

KOPAYEVICH, L.P.; KAZMIN, Yu.B.

Tectonics of the Stanovoy Range. Geol.i geofiz. no.1:37-46 '63.
(MIRA 16:4)

1. Vsesoyuznyy aerogeologicheskiy trest, Moskva.
(Stanovoy Range—Geology, Structural)

NEYELOV, A.N.; GLEBOVITSKIY, V.A.; KATS, A.G.; KOPAYEVICH, L.V.; SEDOVA, I.S.

Southwestern boundary and age of the Aldan Shield. Geol. i geofiz. no.11: 52-59 '62. (MIRA 16:3)

1. Laboratoriya geologii dokembriya AN SSSR, Leningrad.
(Aldan Plateau—Geology)

PHASE I BOOK EXPLOITATION 342

Mitsengendler, Iosif Solomonovich

Stendovaya obrabotka krupnykh detaley; iz opyta Uralmashzavoda (Machining of Large Parts on a Platform; Experience of the Ural Machine Plant) Moscow, Mashgiz, 1956. 41 p. 3,000 copies printed (Obmen tekhnicheskim opytom).

Reviewers: Kopaygorenko, V.M., Engineer, and Bakulin, M.V., Engineer; Tech. Ed: Duzina, N.A.

PURPOSE: This booklet is intended for engineering and technical personnel of machine-building plants.

COVERAGE: The author describes a progressive method of machining large parts. The method employed at the Ural Machine-Building Plant is based on the use of machine tools assembled from standardized components and technological processes of serial production. The machined part is a steel casting of a rolling-mill frame weighing 78 metric tons, with dimensions of 23.4 ft x 11.6 ft x 6.2 ft. Application of the new methods results in completion of the

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JAG/MTL
May 29,1958

KOPAYGORENKO, VASILIY MAKAREVICH

BAKULIN, Mikhail Venediktovich; KOPAYGORENKO, Vasiliy Makarevich; SHABASHOV, S.P., kandidat tekhnicheskikh nauk, retsenzent; DUGINA, N.A., tekhnicheskiy redaktor.

[Planning the application of new techniques to every machine tool; according to the practices of the Ural machinery plant] Planirovanie vnedreniia novoi tekhniki na kazhdom stanke; po opytu Uralmashzaveda. Moskva, Gos.nauchno-tekhn.izd-vo mashinostroit.lit-ry, 1956. 42 p. (MIRA 10:4)

(Machine tools)

KOPAYGORENKO, V.M.

Turn table with 100-ton carrying capacity. Biul.tekh.ekon. inform. no.5:41-44 '61. (MIRA 14:6)
(Machine tools)

AID P - 4303

Subject : USSR/Engineering

Card 1/1 Pub. 128 - 3/26

Authors : Bakulin, M. V. and V. M. Kopaygorenko

Title : Examples of adjusting the design of construction details to a technologically-resonable machining.

Periodical : Vest. mash., 36 #3, p. 17-19, Mr 1956

Abstract : The authors give numerous examples from the shops of the Ural Machine Plant (Uralmash-zavod) showing how relatively small changes in the design of machine details can make a great time- and money-saving difference in their machining. Diagrams.

Institution : None

Submitted : No date

21895
S/193/61/000/005/005/006
A004/A104

1.1100

AUTHOR: Kopaygorenko, V. M.

TITLE: Turntable of 100 tons load capacity

PERIODICAL: Byulleten' tekhniko-ekonomicheskoy informatsii, no. 5, 1961, 41-44

TEXT: To facilitate setting and adjusting of large-size parts for machining on boring machines the Uralmashzavod Plant, on the suggestion of the head of the Large Unit Mechanical Shop, I. S. Mitsengendler, has developed and fabricated turntables of 100 tons load capacity. The lower part of the turntable is positioned perpendicular to the machine bed and mounted on 24 adjustable shoes fixed to the plate by bolts. The table is adjusted with the aid of supports and fixed to the plate by 12 bolts. The middle part of the table travels on the four bedways of the lower part. Rapid travel is provided for the rough adjusting of parts, slow travel for advancing the part to the tools. Accurate adjustment of the part is effected by push buttons. The turntable is driven by the main electromotro via the gear box. Longitudinal displacement is effected by a lead screw with nut, rotation by a pair of cylindrical gears and a worm pair. The setting of the table at a definite angle is carried out by a graduated disk,

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Turntable of 100 tons load capacity

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A004/A104

electromotor - 28 kw; hydraulically adjustable relief of the swivelling part of the turntable - from 0 to 90 tons; operating pressure in the hydraulic system - 60 kg/cm^2. If parts of smaller dimensions are machined it is possible to adjust on the turntable simultaneously several parts. The author states that the utilization of turntables with big load capacities makes it possible to increase the utilization coefficient of boring machines by 20% concerning machine time, to raise the utilization coefficient of the machine capacity by increasing the cutting conditions since the parts can be machined with a reduced spindle boom, and to increase the labor productivity by 25-35% by the reduction in setting and adjusting time of the part. There is 1 figure and 1 table.

Card 3/3

BLINOVA, V.N.; DEMIDOV, A.A.; KOLIN, Ya.S.; MAKUSHKIN, Ya.G.; MYZIN, L.M.; PERMYAKOV, N.P.; PONEDILKO, A.I.; BOROVIK, Z.G.; YEFREMOV, I.A.; KOPAYGORODSKIY, A.B.; MARINOV, A.M.; NEKHOROSHKOVA, O.I.; POKROVSKIY, A.F.; ROMANOVSKIY, A.A.; RASSADNIKOV, Ye.I., red.; SAVEL'YEV, V.I., red.; FRIDKIN, A.M., tekhn.red.

[Electric power in the Urals during the past 40 years] Energetika Urala za 40 let. Moskva, Gos. energ. izd-vo, 1958. 141 p.
(MIRA 11:5)

(Ural Mountain region--Electric power)

AUTHOR: Kopaygorodskiy, Ye. M. 307/ 50-58-7-9/20

TITLE: Results Obtained by Analyses of the Current Structure in the District of Apsheron in the Caspian Sea (Rezul'taty analiza struktury techeniy v Apsheronskom rayone Kaspiyskogo morya)

PERIODICAL: Meteorologiya i gidrologiya, 1958, Nr 7, pp.39-41 (USSR)

ABSTRACT: The author investigated the results obtained by measurements of the current velocity by means of a marine anemometer and an anemograph by Alekseyev. By means of these apparatus the current velocities were recorded in the district of Apsheron of the Caspian Sea in different horizons, at points with a depth of from 10 - 50 m. The analysis of the main part of the observations made under different weather conditions showed that the current velocities are very different with respect to time. In individual cases it changes several times within 5 minutes. Thus the results of a single observation are to a considerable extent chance results. The amplitudes of the fluctuation were calculated for evaluating the possible short-time deviations from the average value. 1680 measurements were taken into account for this purpose. The fluctuation

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Results Obtained by Analyses of the Current Structure in the District of Apsheron in the Caspian Sea

coefficient was obtained from the equation $K = v/v_{sr}$. The influence of the depth and of the horizon on the current fluctuations is the object of special investigations. In general the dependence of the stability of the current on the average velocity of the current is obvious. With the increase of the average velocity the current becomes more stable and fluctuations are reduced. However, the quantities measured by means of the hydrometer may deviate as well from the average value in the case of a considerable velocity of the current. It must be emphasized that a reduction of the fluctuation coefficient can be observed also in marine regions with greater depth. Greater fluctuations were observed in littoral regions as well as on the open sea. On the strength of these data it is difficult for the hydrologist to gain a correct conception of the distribution of the currents in space and time. The author finally concludes that the method of measuring marine currents used at present is inadequate and must be re-formed. There is 1 figure.

KOPAYGORODSKIY, Ye.M.

Automatic stations on pile foundations. Trudy TSIP no.142:108-110 '65. (MIRA 18:10)

KOPCA, J.

Propagating the state plan in the shops. p. 49.
SKLAR A KERAMIK, Prague, Vol. 6, no. 3, Mar. 1956.

SO: Monthly List of East European Accessions, (EEAL), LC, Vol. 5, No. 6 June 1956, Uncl.

KOPCA, Jozef

Prospects of the leather and shoe industry development.
Kozarstvi 14 no.9:249-250 Ag '64.

1. Deputy Minister of Consumer Goods Industry, Prague.

RUMANIA

KOPCEV, I.; KOTEV,G.; MILEV, M.; KIFOV, R.; and IANKOV, B., [Affiliations not given], Peoples Republic of Bulgaria.

"Some Problems in the Treatment of Infected Wounds Caused by Chemical Weapons in Modern Warfare."

Bucharest, Revista Sanitara Militara, Vol 16, Special No., 1965; pp 164-168

Abstract: Exhortatory introduction about the crimes of "American Imperialists and their Satellites" in South Vietnam; report on studies on 20 dogs with experimental wounds infected with yperite (20 milligrams per kilogram) and 15 with Soman. The first aid in such cases is discussed in some detail.

1/1

1/1

P.T.A.
KOPCEWICZ, T.

Math. & Natural Science

661 551.50/57 : 661.93

Kopcewicz T. **Physics of the Atmosphere. Part 1 Aerology. Part 2 Aerography Methods and Technique.**

„Fizyka atmosfery" Cz. 1. „Aerologia", Cz. 2. „O metodach i technice pomiarów meteorologicznych". Warszawa, 1948, P. Tow. Geofiz. 8°, pp 496, 105 figs

Introductory definitions and conceptions. Thermo-hydrostatic compounds for dry and moist air. Vapour and products of its condensation in atmosphere. Principles of aerological sounding and method of evaluation of results. Fundamental knowledge of thermodynamics of the atmosphere. Radiation in the atmosphere. Control and observation of surface conditions. Meteorographs and radiometeorographs and method of calibrating them. The technique of aerological soundings. Measuring the wind force in upper regions.

KOPCEWICZ, T.

Meteorological Abst. Vol. 4 No. 2 Feb. 1953 Bibliography on Turbulent Exchange

4B-224

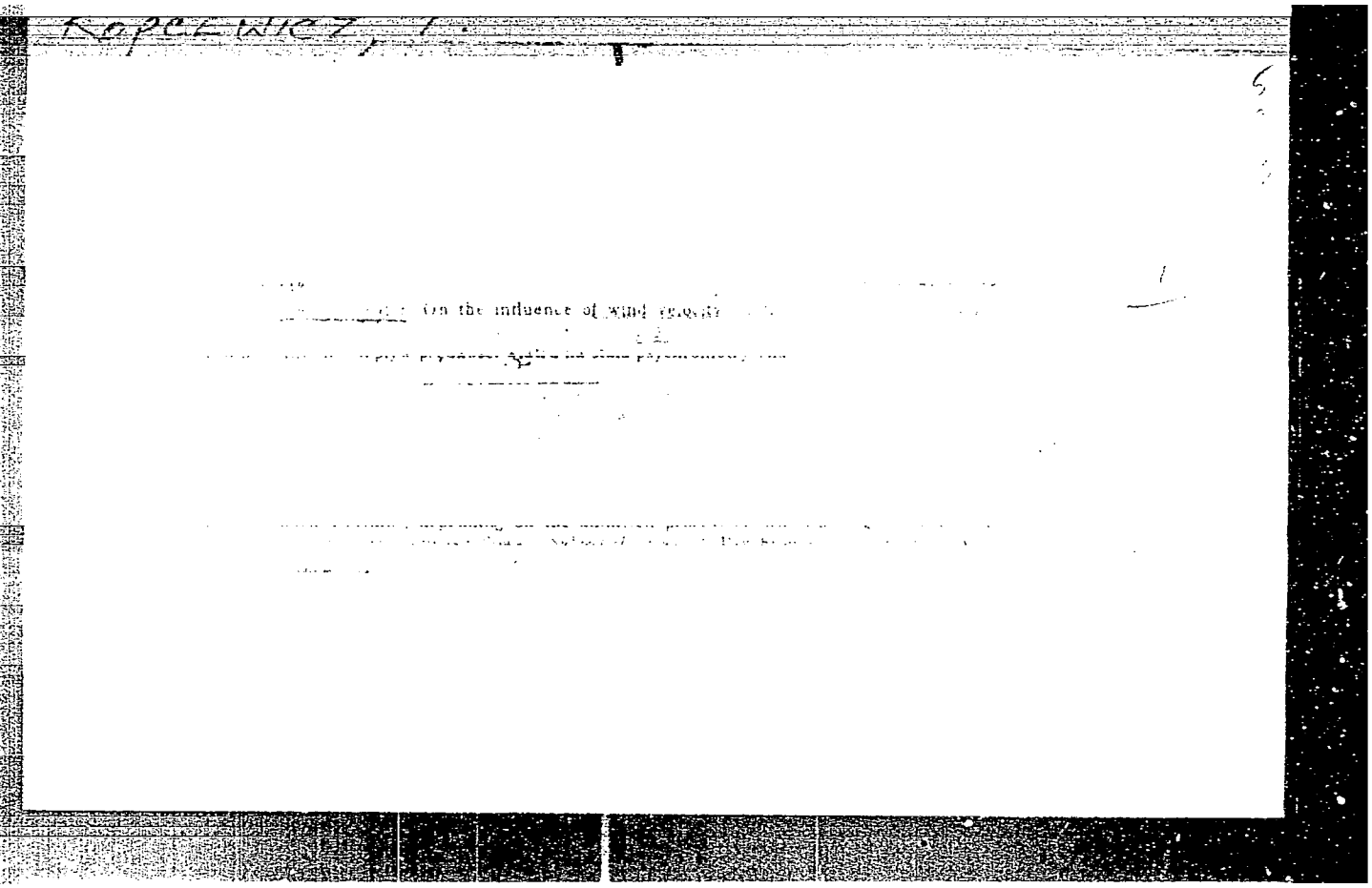
551.511:551.554

Kopcewicz, T., O wplywie lepkosci turbulencyjnej powietrza na pionowy rozklad wiatru w trciowej warstwie atmosfery Ziemi. /Influence of eddy viscosity on the vertical distribution of wind in the frictional layer of the earth's atmosphere./ Poland. Panstwowy Instytut Hydrologiczno-Meteorologiczny. Wiadomosci Sluzby Hydrologicznej i Meteorologicznej, 3(1):5-42, 1950. 6 figs., 6 tables, eqs. DWB--A highly theoretical paper in which some of the well-known theories (ERTEL, SIEBER-MÖLLER, BRUNT, PRANDTL, ROSSBY, etc.) are summarized. The author discusses the equations of motion, and investigates the movement of air in the frictional layer, comparing the theory with results of observations of wind direction and velocity as a function of altitude. Subject Headings: 1. Friction layer 2. Wind deviation 3. Ekman's spiral.--A.M.F.

KOSMICZ, T.

"On two new types of universal anemographs" In English. (p.7.) ACTA GEOPHYSICA POLONICA (Polska Akademia Nauk. Komitet Geofizyki) Warszawa. Vol. 1, no. 1, 1953.

SO: East European Accessions List, Vol 3, No 8, Aug 1954



KOPCZYNICZ, T.

"Concerning the Method of 5-Day Weather Forecasting for Poland," Review of Hydrology & Meteorology, No. 3-4, Yearbook 1953, p. 74.

"Experimental confirmation of the theory of day and night changes (Sq) in terrestrial magnetism."
Postepy Fizyki, Warsaw, Vol 4, No 4, 1953, p. 490

SO: Eastern European Accessions List, Vol 3, No 10, Oct 1954, Lib. of Congress

KOPCEWICZ, T.

Method of 5-day weather forecasting for Poland; a summary, p. 74. (PRZEGLAD METEOROLOGICZNY I HYDROLOGICZNY, Warszawa, Vol. 6, no. 3/4, 1953.)

SO: Monthly List of East European Accessions, (EEAL), LC, Vol. 4, No. 6, Jun. 1955, Uncl.

KOPCEWICZ, TEODOR

2

6.7-140

Kopcewicz, Teodor, Méthode de prévision météorologique de 5 jours pour la Pologne. [Method of 5-day meteorological forecasting for Poland.] *Acta Geophysica Polonica*, Warsaw, 2(1):18-54, 1954. 10 figs., 2 tables, 17 refs. DLC—Presents detailed description of new and important modifications introduced during recent years in synoptic method of 5-7 day meteorological forecasting and their application to geographical conditions of Poland. Suggests possibility of practical utilization of mathematical, physical, statistical and synoptic methods of forecasting based on results of the Rossby school. Develops the kinematic method of meteorological forecasting and shows its application to conditions in Poland. Finally, the author classifies weather situations according to five patterns based on the zonal circulation index and describes the types of weather in Poland for each of these cases. *Subject Headings:* 1. Synoptic forecasting. 2. Forecasting techniques 3. Poland.—*A.M.P.*

551.509.31

KOPCENICZ, T.

"A. B. Dobrowolski's 50 Years of Scientific Activities", P. 115, (ACTA GEOPHYSICA POLONICA, Vol. 2, No. 3, 1954, Warsaw, Poland)

SO: Monthly List of East European Accessions (EEAL), LC, Vol. 4, No. 3, March 1955, Uncl.

KOTCEWICZ, T.

Relation between the distribution of air temperature and the velocity of horizontal and stationary whirlwind. In French. p. 11. (Acta Geophysica Polonica, Vol. 5, no. 1, 1957. Poland)

SO: Monthly List of East European Accessions (EEAL) LC, Vol. 6, no. 7, July 1957. Uncl.

POL/26-7-2-11/18

3(1),21(1,8)

AUTHOR: Kopcewicz, Teodor

TITLE: Meteorological Problems Connected With the Development of Nuclear Research

PERIODICAL: Acta geophysica polonica, 1959, Vol 7, Nr 2, pp 217-229 (POL)

ABSTRACT: World wide progress in the field of nuclear research has led to the development of one of the most direct methods of observing the motion of the atmosphere on different scales. Depending on the quantity and the manner of introduction of the radioactive substances into the atmosphere and on their disintegration period one may consider the behaviour of the polluted space or area, its mean motion and size as a function of time, and also investigate the concentration of the pollution substances as a function of both vertical and horizontal atmospheric equilibrium. The size of the polluted space and also its height vary according to the power of the source. Hence, this makes it possible to study the various aforementioned phenomena on

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POL/26-7-2-11/18

Meteorological Problems Connected With the Development of Nuclear Research

contaminating materials in the immediate vicinity of reactors: that in order to be able to assess rapidly the meteorological characteristics of the vicinity of a reactor, the findings of each nuclear establishment's meteorological station be correlated with the findings of local meteorological stations which carry out long-range observations: finally, that each nuclear establishment be equipped to receive full synoptic materia and that facilities be made available for the elaboration of local weather maps or for obtaining such maps with the help of facsimile apparatus. In the second part of the article, the author discusses certain large scale meteorological problems connected with atmospheric pollution resulting from nuclear explosions. The author gives Richardson's and Sutton's formulae for air contaminant concentration as a function of time and height in the atmosphere, for the distance of the point of maximum concentration from the source of contamination, for maximum concentration

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P/026/62/010/004/001/001
D207/D308

AUTHOR: Kopcewicz, Teodor

TITLE: An attempt to explain temporary variations in ground air-layer pollution in Central Europe by radioactive substances deriving from nuclear explosions

PERIODICAL: Acta Geophysica Polonica, v. 10, no. 4, 1962, 299-334

TEXT: An analysis is given of the results of ground-level radioactive pollution measurements carried out during the period October 1958-July 1959 at five Central European stations: Mol, Riso, Berlin, Vienna and Legionowo (Poland). Two types of radioactive pollution are distinguished: transient and long-term, the latter being defined as lasting at least several days. Assuming that pollution is due to radioactive dust which entered the warm troposphere from the cold stratosphere through gaps in the tropopause during non-tropical cyclones, meteorological conditions are given for the occurrence of transient and long-term pollution and two examples of

Card 1/2

KOPCEWICZ, Teodor

Influence of the meteorological conditions on the concentration of radioactive aerosol in ground airlayers. Przegl geofiz 9 no.1:3-24 '64.

1. Department of Physics of the Atmospher, University, Warsaw.

POLAND

KOPCEWICZ, T.

Department of Physics of the Atmosphere, University of Warsaw (Katedra Fizyki Atmosfery, UW), Warsaw.

Warsaw, Acta Geophysica Polonica, No 2, April-June 1965, pp 75-84

"On a certain method for investigating the influence of meteorological constitution on the mean contamination of the air of the earth's surface with radioactive dusts."

KOPCHAK, M.N.

Unit for welding flanges. Suggested by M.N.Kopchak. Rats. i izobr. predl. v stroi. no.15:28-30 '60. (MIRA 13:9)

1. Po materialam tresta Promtekhmontazh-1 Slavyanskogo upravleniya No.7 Ukrglavprommontazha Ministerstva stroitel'stva USSR, g. Khar'kov.
(Flanges) (Electric welding-- Equipment and supplies)

SOV/136-58-5-6/22

AUTHORS: Averchenkov, D.O., Vartanyan, A.M., Kopchenko, D.S.

TITLE: Introduction of Electrothermy at the Ust'-Kamenogorsk Lead-zinc Combine (Vnedreniye elektrotermii na Ust'-Kamenogorskom svintsovo-tsinkovom kombinate)

PERIODICAL: Tsvetnyye Metally, 1958, 31, Nr 5, pp 35 - 38 (USSR)

ABSTRACT: The authors discuss a recent article by V.N. Kostin in Tsvetnyye Metally, 1958, Nr 1, in which the greater application of electrothermic methods in lead and zinc production is mentioned. They list some disadvantages of shaft-furnace smelting and state the importance of developing new methods for Soviet lead-smelting works, a favourable factor being the increasing availability of cheap hydro-electric power. Electric heating of settlers was substituted for oil heating at the Ust'-Kamenogorsk Lead-zinc Combine in 1953 without altering dimensions (length, width and depth - 7 100, 2 960 and 660 mm, respectively), but experience and joint work by works and VNIItsvetmet personnel led to reconstruction with the volume reduced from 13 to 8 m^3. After listing conditions for successful operation of such stationary settlers, the authors describe

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Introduction of Electrothermy at the Ust'-Kamenogorsk Lead-zinc Combine

the smelting of silver-containing dross in an electric furnace under an artificial slag layer (30% Na_2O, 30% CaO, 40% SiO_2): tabulated compositions show that this method gives a higher recovery of noble metals into the silver-lead than with retort distillation. This work was also carried out by the same organisations and the collaborator is continuing to improve the method and to convert the 150-ton refining kettles to electric heating. The authors outline the present electric kettle-heating method with nichrome strip resistance heaters and urge the development of induction heating for higher efficiency. They agree with Kostin on the need for special design staffs in existing institutes with proper equipment for the rapid development of electrothermic methods. They do not agree with his suggested scheme for converting the Ust'-Kamenogorsk Lead Works to electric smelting as data are lacking; they would prefer the Giprotsvetmet to design a new, separate works. They urge the rapid completion

SOV/136-59-1-9/24

AUTHORS: Averchenkov D.O., Kopchenko D.S., Pron'kin V.F., Sidorovskiy V.A., Kershanskiy I.I. and Ovcharenko V.P.

TITLE: Introduction of an Electrothermic Method of Distilling Zinc from Silver Crust at the Ust'-Kamenogorskiy Lead Works (Vnedreniye elektrotermicheskogo sposoba distillyatsii tsinka iz serebristoy peny na Ust'-Kamenogorskom svintsovom zavode)

PERIODICAL: Tsvetnyye Metally, 1959, 32 Nr 1, pp 33-40 (USSR)

ABSTRACT: The authors point out that as continuous desilvering of lead is not used in the USSR, methods of crust enrichment are being sought. A system (Ref 7) in which fusion under carnalite is followed by vacuum distillation has proved unsatisfactory while that successfully used in Bulgaria (Ref 8) is not applicable to Soviet crusts. Based on enlarged laboratory and pilot plant work at the VNIITsvetmet in 1956-1957 (Ref 9) an experimental production unit based on electrothermic zinc-distillation was built at the Ust'-Kamenogorskiy lead works and has operated from November 1957 to the present. The authors give the results obtained and describe the plant.

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Introduction of an Electrothermic Method of Distilling Zinc from Silver Crust at the Ust'-Kamenogorskiy Lead Works

I.P. Volkov, N.V. Kungurov, K.B. Boztayev, D.R. Demurin and others from the works and V.P. Kuur, F.A. Mardamshin, Yu.K. Medel'tsov, A.I. Tkachenko and V.P. Shchurchkov of VNIITsvetmet, participated. The electro-thermic installation (Fig 1) consisting of an electric furnace, oxidation chamber and dust catchers, was designed by the design department of the UKSTsK under the direction of A.V. Bratchik. The works and VNIITsvetmet laboratories performed necessary chemical analyses. The 3-phase 300-kVA furnace has a hearth bottom area of 2 m^2 and an effective height of 1.8 m. Fig 2 shows a vertical section through the furnace. The normal tapping hole is situated 140 mm above the bottom. The furnace is charged with an Irtyshskiy medeplavil'nyy zavod (Irtysh copper-smelting works) type feeder (Fig 3). Power is supplied by two type EPOM-250/6 transformers with a total rating of 500 kVA. The electrodes are graphitized and 200 mm in

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diameter. Distillations of zinc were effected at 1150-1300°C, giving lead bullion (sent for cupellation), dust (discharged periodically and sent to the zinc works) and

Introduction of an Electrothermic Method of Distilling Zinc from Silver Crust at the Ust'-Kamenogorskiy Lead Works

gases. All materials were weighed, gas flows were measured and, during runs for establishing materials balances, gas analyses were periodically carried out. In such runs a crust containing 64.35% lead, 25.8% zinc, 0.55% copper and 88407 g/ton silver of somewhat variable size-grading (Table 1 shows this for two samples) was used. The results (Table 2) of a 16-day run in 1957 show that 95% of the lead in the crust was transferred into the bullion which, the authors recommend, should be refined electrolytically. The products were almost exclusively lead bullion (which contains the major part of the noble metals) and distillate (71.3 and 35.2% respectively of the weight of crust taken). Losses, of lead, zinc and silver, were insignificant. The adoption of the electrothermic method at the works (Fig 4 shows the flowsheet) has led to a doubling of labour productivity and a 4.49% improvement in raw-materials utilization as well

SOV/136-59-1-9/24

Introduction of an Electrothermic Method of Distilling Zinc from Silver Crust at the Ust'-Kamenogorskiy Lead Works

as to improved working conditions in the cupellation department and great economies.
There are 4 figures, 2 tables and 9 references, 8 of which are Soviet and 1 English.

ASSOCIATIONS: Ust'-Kamenogorskiy svintsovo-tsinkovyy kombinat (Ust'-Kamenogorsk Lead-Zinc Combine) and VNIITsvetmet.

Card 4/4

SOV/136-59-5-9/21

AUTHORS: Vartanyan, A.M., and Kopchenko, D.S.

TITLE: The Experimental Use of Oxygen in Lead Smelting Shaft Furnaces (Opyt primeneniya kisloroda pri shakhtnoy svintsovoy plavke)

PERIODICAL: Tsvetnyye metally, 1959, Nr 5, pp 46-49 (USSR)

ABSTRACT: The results of using oxygen-enriched air in shaft furnaces on the Ust-Kamenogorsk Lead-Zinc Kombinat are given. Fig 1 shows the high-power oxygen plant. Oxygen is fed from a gas holder to the air-blast plant, under pressure. Individual pipes with automatically controlled valves, which can regulate the oxygen content, feed the enriched air to the shaft furnaces. Fig 2 shows the influence of oxygen content on production using a constant blast volume - 34 m^3/m^2. An increase in O content to 26.5% leads to a 27% increase in production. Fig 3 shows the influence of O content on the volume of blast required to maintain constant production. Increase in O content to 26.5% gives a decrease in enriched air volume of 34% with a corresponding decrease in volume of exhaust gases. The mean temperature of the "goose neck" on the air blast in

Card 1/3

The Experimental Use of Oxygen in Lead Smelting Shaft Furnaces

April 1958 was 286 °C (reaching 600-800° on individual days). Using an enriched air mixture the temperature (in November 1958) was 120-130° and for long periods was only 60-80°. The use of enriched air also results in a decrease in dust content of exhaust gases from 2-2.5 to 1.5-1.7 g/hm^3. There is a decrease in coke consumption of 13.4% due to an increase in efficiency. In the first four months of 1958 the Pb content of the slag was 2.05%. After using enriched air, the Pb content fell to 1.21% (in November 1958). Because of this decrease and the decrease in dust content of exhaust gases, there was an increase in production of crude lead of 1%. Thus, considering the increase in production, the decrease in coke consumption and the decrease in the Pb lost in the slag and the gases, the economic effect is over 5 million roubles per year. The better working conditions also

SOV/136-59-5-9/21
The Experimental Use of Oxygen in Lead Smelting Shaft Furnaces

led to a decrease in the chance of lead poisoning.
There are 3 figures and 1 Soviet reference.

ASSOCIATION: UKSTsK

Card 3/3

14(6) SOV/91-59-3-6/22

AUTHOR: Kopchenov, O.V., Engineer

TITLE: A Combined Connecting System of a Steam Cooler (Kombinirovannaya skhema vklyucheniya parookhladitelya)

PERIODICAL: Energetik, 1959, vol. 7, Nr 3, pp 13-16 (USSR)

ABSTRACT: The author discusses the efficiency of the 3 principal systems for feeding the water from the steam cooler, used for regulating the temperature of superheated steam, to the boiler, i.e.: to the inlet of the economizer, to the intermediate junction of the economizer, and to the boiler drum (in drum-type boilers). He summarizes that none of these systems is economically perfect and states that the most common is the system in which the water is fed to the inlet of the economizer. This system was modified by the author on two type BKZ75-39FB boilers in Vil'nyusskaya TETS

Card 1/2

(Vil'nyus TETS) in 1957, who placed a shunt in the system permitting interchangeable feed of water from the steam cooler to the inlet or to the intermediate junction of the economizer. The modified system has been so far successfully operating. There are 2 graphs and 2 block diagrams.

Card 2/2

KOPCHENOV, O.V., inzh.

Dynamics of a shaft mill. Teploenergetika 8 no.9:36-39 S '61.
(MIRA 14:8)

1. Litovskiy Sovet Narodnogo Khozyaystva.
(Coal, Pulverized) (Crushing machinery)

KOPCHENOV, O.V., inzh.

Dynamics of an impact mill in wet fuel grinding operation.
Teploenergetika 10 no.8:40-43 Ag '63. (MIRA 16:8)

1. Glavnoye Upravleniye energetiki i elektrifikatsii pri Sovete Ministrov Litovskoy SSR.
(Milling machinery)

KOPCHENOV, V.

LASHCHUK, I.; KHAYMOVICH, A.; MARKIN, I.; KOPCHENOV, V.

The best construction workers. Stroitel' no.11:6 N '57.
(MIRA 10:12)

1.Brigadir kompleksnoy brigady santekhnikov, Stroyupravleniye No. 74, Orel.
(Construction workers)

KOPCHENOV, V. (g.Zyryanovsk, Vostochno-Kazakhstanskoy oblasti);
POTAPOVA, Z.; SHINZHIRBAYEVA, Urzhan

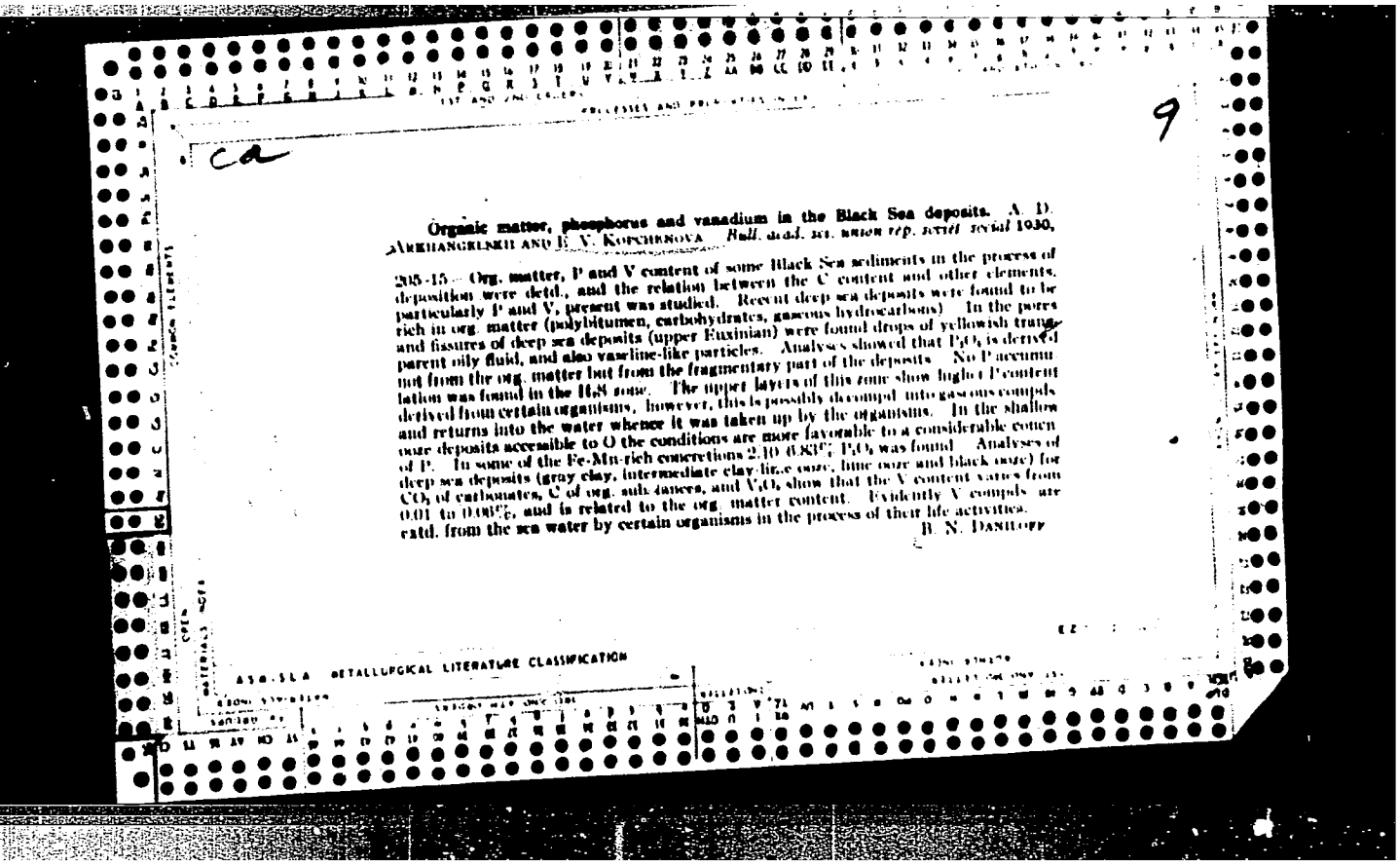
Good news from women's councils. Rabotnitsa 40 no.3:25 Mr '62.
(MIRA 16:2)

1. Chlen ulichnogo komiteta goroda Ivanovo (for Potapova).
2. Zaveduyushchaya rayonnym otdelom kul'tury sela Saryagach, Yuzhno-Kazakhstanskoy oblasti (for Shinzhirbayeva).
(Women--Societies, etc.)

KOPCHENOV, V.D.

Evaluation of the solution to a variational problem. Dop.
AN URSR no.2:153-156 '65. (MIRA 18:2)

1. Moskovskiy lesotekhnicheskiy institut.



Ca

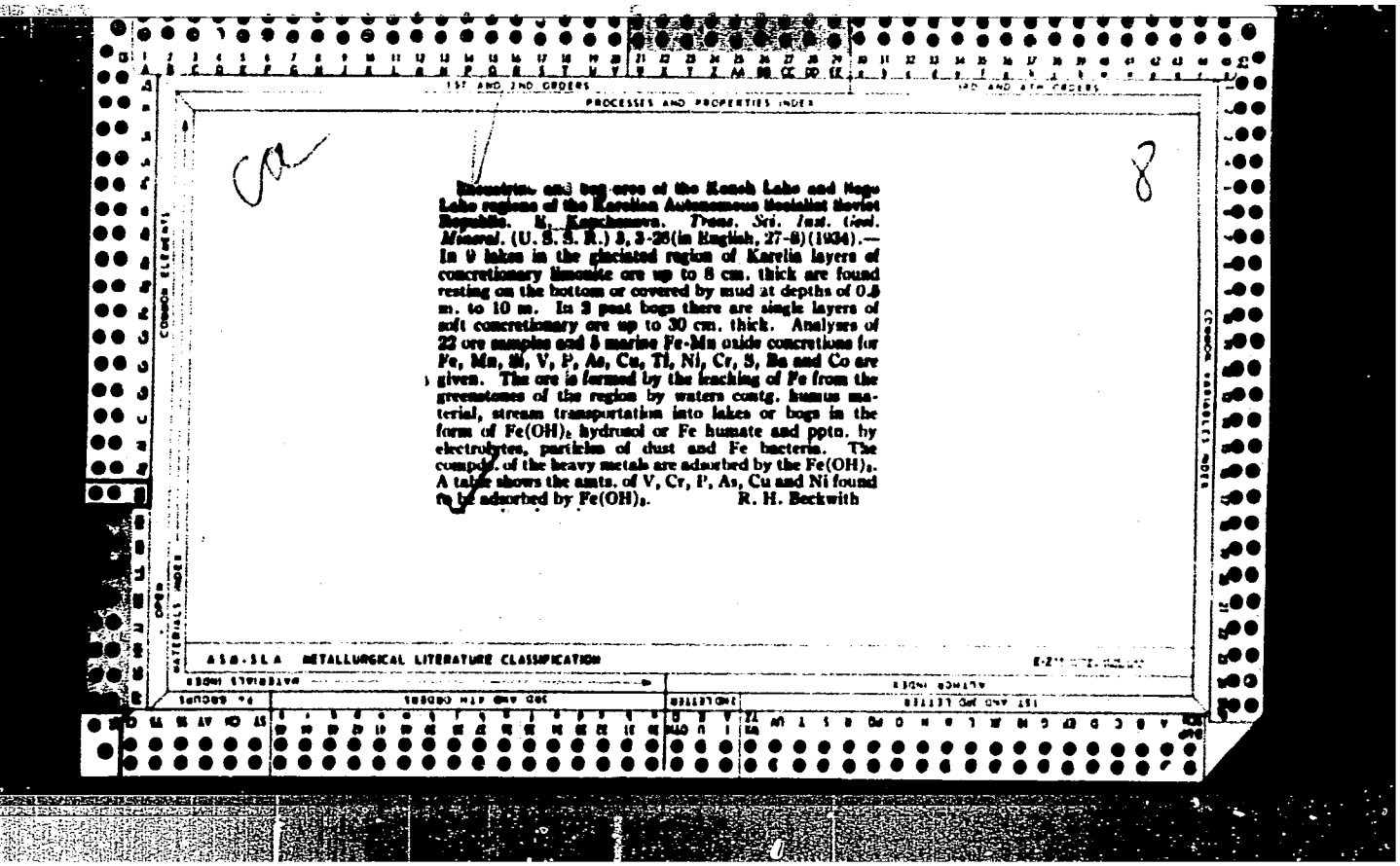
9

Organic matter, phosphorus and vanadium in the Black Sea deposits. A. D. Arkhangelskii and B. V. Korchinova. *Bull. acad. sci. union rep. soviet social* 1930,

205-15.—Org. matter, P and V content of some Black Sea sediments in the process of deposition were detd., and the relation between the C content and other elements, particularly P and V, present was studied. Recent deep sea deposits were found to be rich in org. matter (polybitumen, carbohydrates, gaseous hydrocarbons). In the pores and fissures of deep sea deposits (upper Euxinian) were found drops of yellowish transparent oily fluid, and also vaseline-like particles. Analyses showed that P_2O_5 is derived not from the org. matter but from the fragmentary part of the deposits. No P accumulation was found in the H_2S zone. The upper layers of this zone show higher P content derived from certain organisms, however, this is possibly decompd. into gaseous compds and returns into the water whence it was taken up by the organisms. In the shallow zone deposits accessible to O the conditions are more favorable to a considerable concn of P. In some of the Fe-Mn-rich concretions 2.10 0.83% P_2O_5 was found. Analyses of deep sea deposits (gray clay, intermediate clay-like ooze, lime ooze and black ooze) for CO_2 of carbonates, C of org. substances, and V_2O_5 show that the V content varies from 0.01 to 0.08%, and is related to the org. matter content. Evidently V compds. are ratd. from the sea water by certain organisms in the process of their life activities.

B. N. Dantsoff

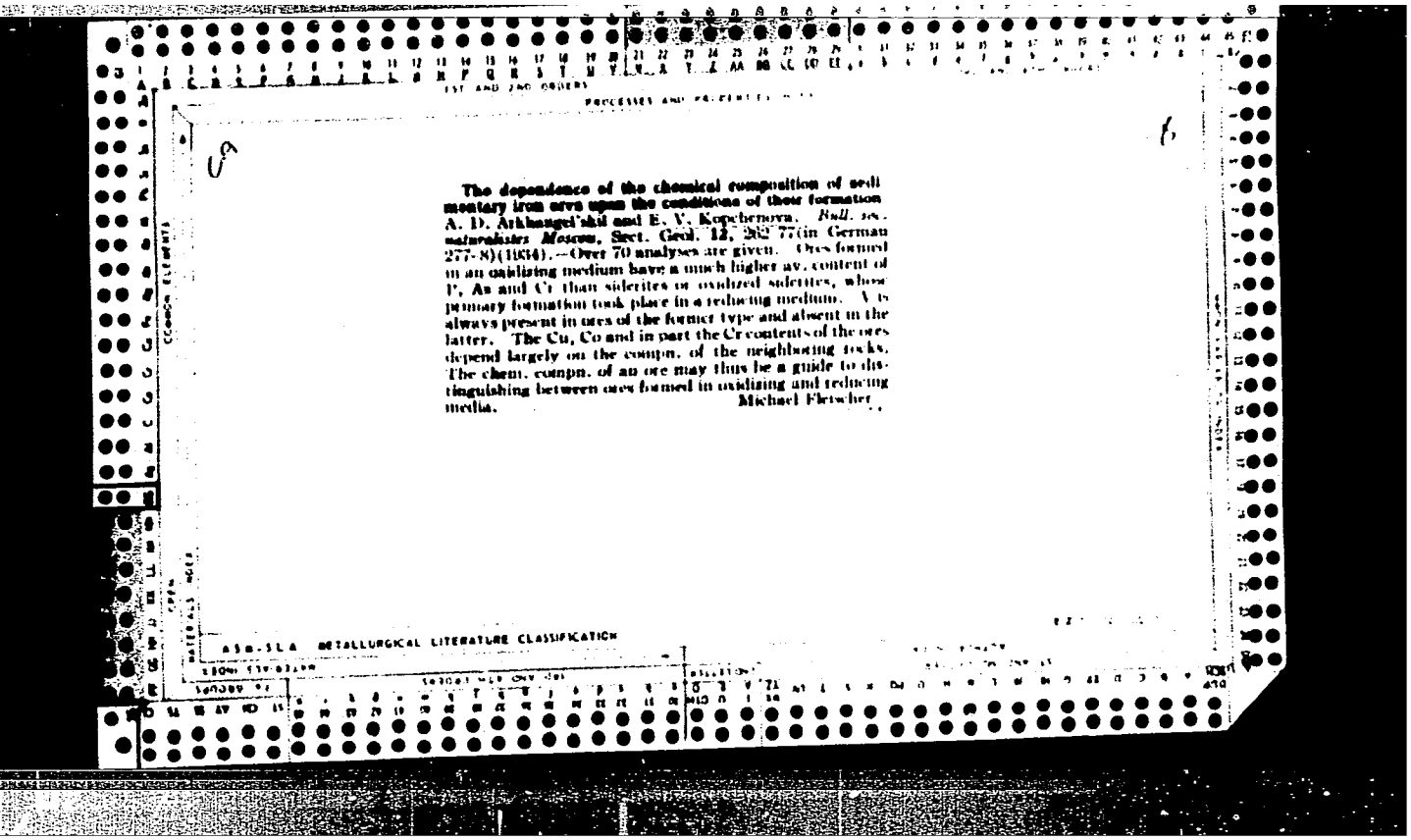
A5a-5La METALLURGICAL LITERATURE CLASSIFICATION



PROCESSES AND PROPERTIES INDEX

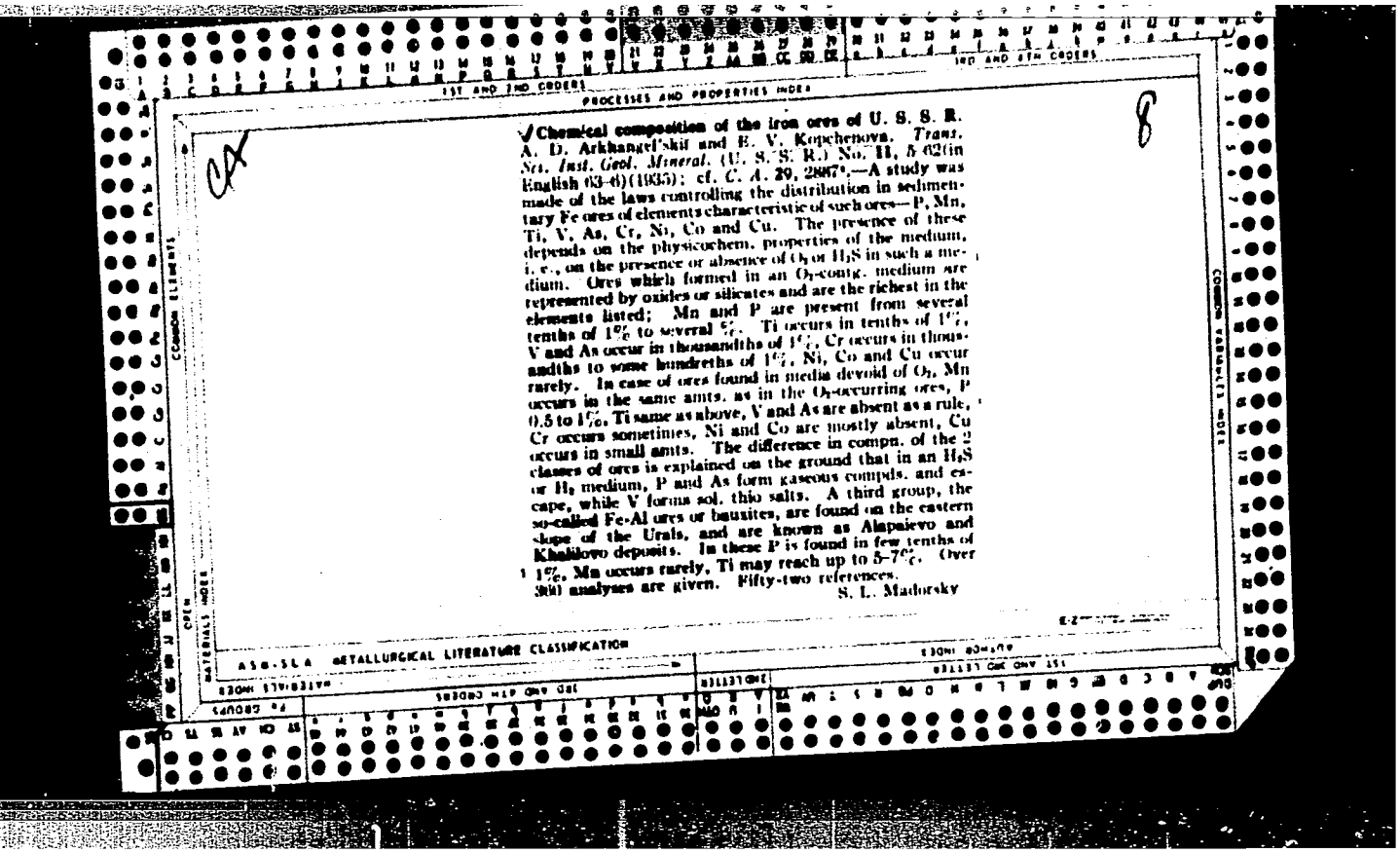
Limonite and bog ores of the Kenoh Lake and Nuga Lake regions of the Karelian Autonomous Socialist Soviet Republic. K. Kapchenova. *Trans. Sci. Inst. Geol. Mineral.* (U. S. S. R.) 3, 3-26 (in English, 27-8) (1934).—In 9 lakes in the glaciated region of Karelia layers of concretionary limonite ore up to 8 cm. thick are found resting on the bottom or covered by mud at depths of 0.5 m. to 10 m. In 2 peat bogs there are single layers of soft concretionary ore up to 30 cm. thick. Analyses of 22 ore samples and 5 marine Fe-Mn oxide concretions for Fe, Mn, Si, V, P, As, Cu, Ti, Ni, Cr, S, Ba and Co are given. The ore is formed by the leaching of Fe from the greenstones of the region by waters contg. humus material, stream transportation into lakes or bogs in the form of $Fe(OH)_3$ hydrosol or Fe humate and pptn. by electrolytes, particles of dust and Fe bacteria. The compds. of the heavy metals are adsorbed by the $Fe(OH)_3$. A table shows the amts. of V, Cr, P, As, Cu and Ni found to be adsorbed by $Fe(OH)_3$. R. H. Beckwith

ASM-SLA METALLURGICAL LITERATURE CLASSIFICATION



The dependence of the chemical composition of sedimentary iron ores upon the conditions of their formation. A. D. Arkhangel'skii and E. V. Kopchenova. *Bull. soc. naturalistes Moscou, Sect. Geol.* 12, 262-77 (in German 277-8) (1934).—Over 70 analyses are given. Ores formed in an oxidizing medium have a much higher av. content of P, As and Cr than siderites or oxidized siderites, whose primary formation took place in a reducing medium. V is always present in ores of the former type and absent in the latter. The Cu, Co and in part the Cr contents of the ores depend largely on the compn. of the neighboring rocks. The chem. compn. of an ore may thus be a guide to distinguishing between ores formed in oxidizing and reducing media.
Michael Fleischer

ASM-SLA METALLURGICAL LITERATURE CLASSIFICATION



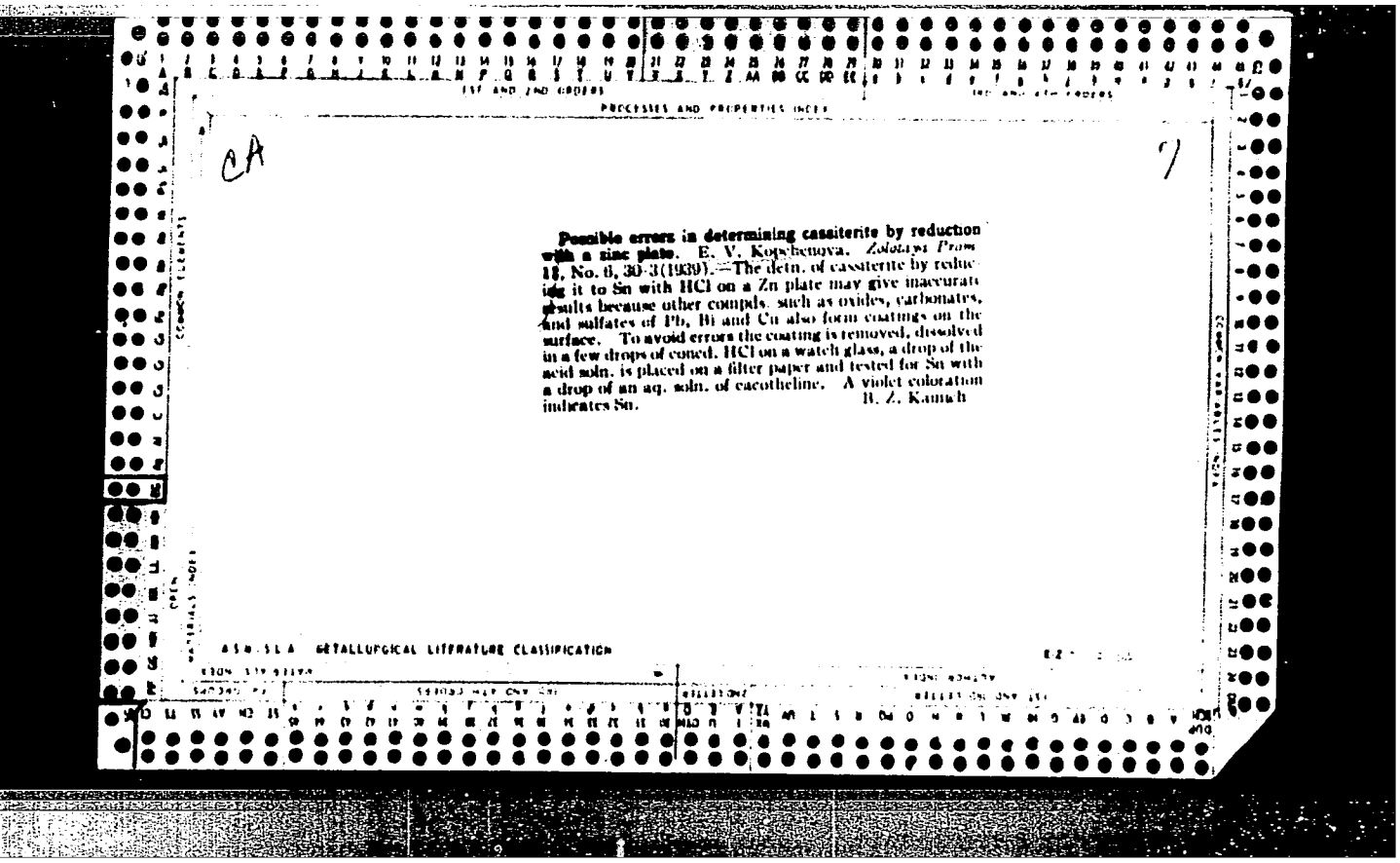
PROCESSES AND PROPERTIES INDEX

8

Chemical composition of the iron ores of U. S. S. R. A. D. Arkhangel'skii and E. V. Kopchenova. *Trans. Sci. Inst. Geol. Mineral.* (U. S. S. R.) No. 11, 5-62(in English 63-4)(1935); cf. *C. A.* 29, 2887⁹.—A study was made of the laws controlling the distribution in sedimentary Fe ores of elements characteristic of such ores—P, Mn, Ti, V, As, Cr, Ni, Co and Cu. The presence of these depends on the physicochem. properties of the medium, i. e., on the presence or absence of O_2 or H_2S in such a medium. Ores which formed in an O_2-contg. medium are represented by oxides or silicates and are the richest in the elements listed; Mn and P are present from several tenths of 1% to several %. Ti occurs in tenths of 1%, V and As occur in thousandths of 1%, Cr occurs in thousandths to some hundredths of 1%, Ni, Co and Cu occur rarely. In case of ores found in media devoid of O_2, Mn occurs in the same amts. as in the O_2-occurring ores, P 0.5 to 1%, Ti same as above, V and As are absent as a rule, Cr occurs sometimes, Ni and Co are mostly absent, Cu occurs in small amts. The difference in compn. of the 2 classes of ores is explained on the ground that in an H_2S or H_2 medium, P and As form gaseous compds. and escape, while V forms sol. thio salts. A third group, the so-called Fe-Al ores or bauxites, are found on the eastern slope of the Urals, and are known as Alapaievo and Khalilovo deposits. In these P is found in few tenths of 1%, Mn occurs rarely, Ti may reach up to 5-7%. Over 300 analyses are given. Fifty-two references.

S. L. Madorsky

METALLURGICAL LITERATURE CLASSIFICATION



CA 7

Possible errors in determining cassiterite by reduction with a zinc plate. E. V. Kopchenova. *Zolotaya Prom* 13, No. 8, 30-3(1939).—The detn. of cassiterite by reducing it to Sn with HCl on a Zn plate may give inaccurate results because other compds. such as oxides, carbonates, and sulfates of Pb, Bi and Cu also form coatings on the surface. To avoid errors the coating is removed, dissolved in a few drops of concd. HCl on a watch glass, a drop of the acid soln. is placed on a filter paper and tested for Sn with a drop of an aq. soln. of cacotheline. A violet coloration indicates Sn.
B. Z. Kamash

ASM-SLA METALLURGICAL LITERATURE CLASSIFICATION

1ST AND 2ND ORDERS

PROCESSES AND PROPERTIES INDEX

CA

7

A field method for the determination of free alumina in gibbsite bauxites. B. V. Kuzhleinova and V. N. Karyukhina. *Zavodskaya Lab.* 11, 301-2(1945). Add 30 ml. of 50% NaOH soln. to 3 g. of the fine-ground bauxite in an Fe crucible, mix the soln. with an Fe rod, heat to boiling, boil for 30 min., cool the crucible, transfer the contents to a 100-ml. flask, dil. with water to the mark, and let stand for several hrs. for a complete sepn. of the ppt. Transfer 30 ml. of the clear soln. to a flask for titration, and acidify with concd. HCl (a voluminous white ppt. of $Al(OH)_3$ is formed during the addn. of acid which dissolves on further addn. of the acid). Add 5 drops of 0.1% alc. soln. of 2,6-dinitrophenol to the clear, colorless or slightly yellow soln. and titrate with standard NaOH soln. until a bright-yellow color appears and a turbidity is formed. Observe the buret readings at the end of the titration of free acid and beginning of the titration of Al, add 2 drops of 1% alc. phenolphthalein soln., and titrate until a stable pink color appears (the titration is accompanied by a sepn. of $Al(OH)_3$ ppt.). W. R. H.

ASA-SLA METALLURGICAL LITERATURE CLASSIFICATION

KOPCHENOVA, Ye.V.

Field method of ore slime analysis. Sov.geol. no.21:13-37 '47.
(Ores--Sampling and estimation) (MLRA 8:8)

KOPCHENOVA, YE. V.

1948

USSR/Minerals
Bauxite
Ore Dressing

"The Methods of Separating Finely Dispersed Minerals From the Bauxites of the Kamensk Region (Ural)," Ye. V. Kopchenova, V. N. Karyukina, VIMS, 7 pp

"Sovet Geolog" No 29

Discusses methods employed in separation of and surveying for finely dispersed minerals. Describes finely dispersed components of Kamenskiy region bauxite deposits.

69T85

KOPCHENOVA, YE. V.

USSR/Cosmochemistry - Geochemistry. Hydrochemistry, D

Abst Journal: Referat Zhur - Khimiya, No 19, 1956, 61314

Author: Kopchenova, Ye. V., Skvortsova, K. V.

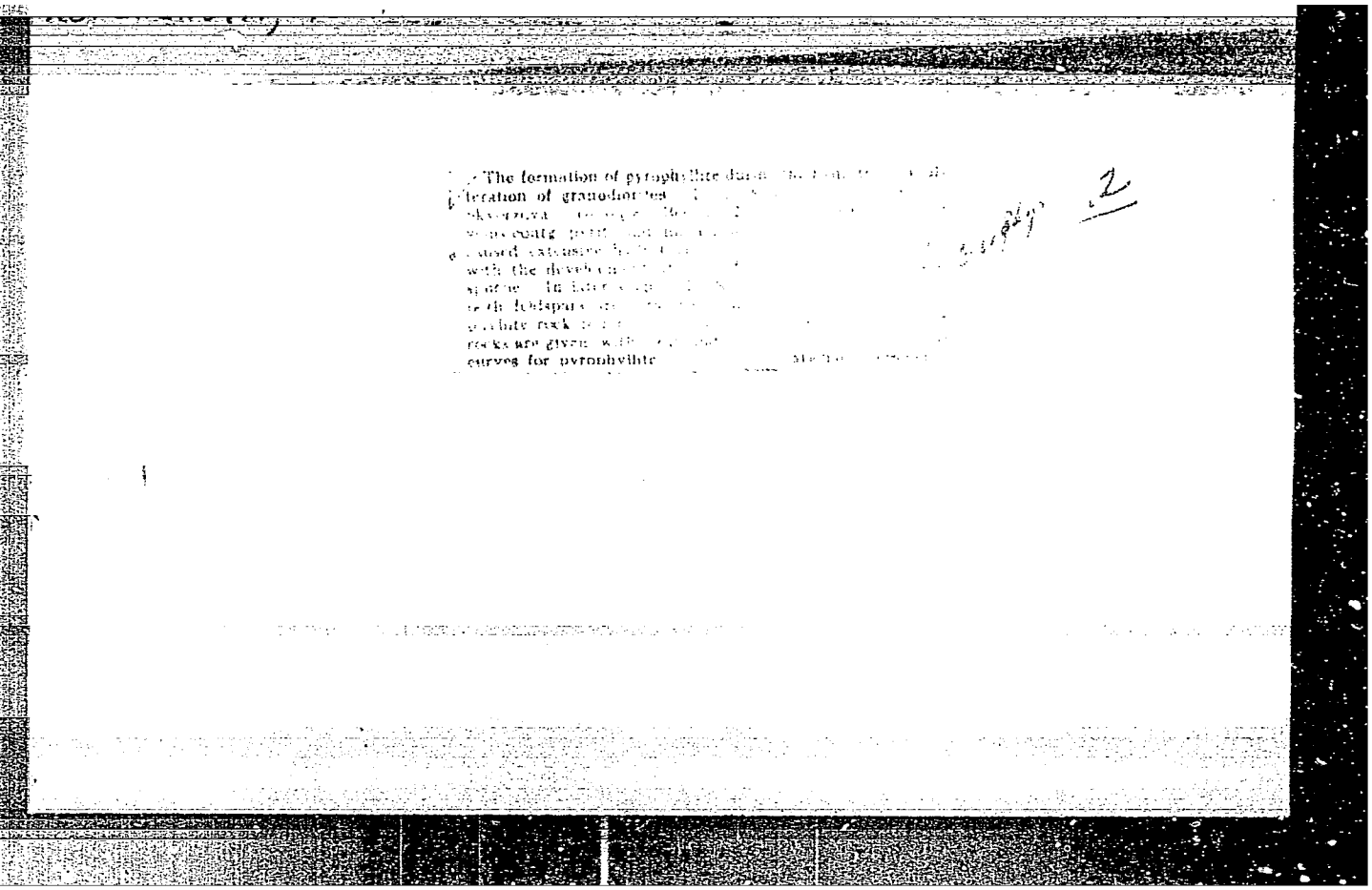
Institution: None

Title: On Formation of Pyrophyllite During Hydrothermal Change of Granodiorites

Original Periodical: Sb. Issledovaniye mineral'n. syr'ya, Moscow, Gosgeoltekhizdat, 1955, 124-133

Abstract: The zone of hydrothermal change of granodiorites in the proximity of quartz-sulfide veins of a nameless deposit consists of several consecutive stages of changes in the rocks crosswise to the trend of these veins: (1) initial stage -- replacement of hornblende and biotite by an aggregate of chlorite, carbonate, quartz and muscovite, (2) replacement of K-feldspar by albite, (3) redeposition of chlorite and carbonate in the form of thin streaks and replacement of feldspars by a quartz-sericite aggregate, (4) final

Card 1/2



The formation of pyrophyllite
[illegible]
curves for pyrophyllite

20-114-3-50/60

AUTHORS: Kopchenova, Ye. V., Skvortsova, K. V.

TITLE: Sodium Uranospinite (Natriyevyy uranospinit)

PERIODICAL: Doklady Akademii Nauk SSSR, 1957, Vol. 114, Nr 3, pp634-636 (USSR)

ABSTRACT: Under certain physical-chemical conditions the ion exchange reactions in the minerals of the group of the uranium micas take place without difficulty. They lead to the formation of new varieties of minerals. As result of his experiments M. Mroz synthesized uranospinite $Ca(UO_2)_2(AsO_4)_2 \cdot 8H_2O$ and its derivatives. In them, calcium is substituted by hydrogen, sodium or the ammonium group. So far, nobody has described minerals of this composition as occurring in nature. While investigating the oxidation zone of the uraninite -sulphide ore dressing, the authors of the paper under review discovered a new species of minerals, namely sodium uranospinite, approaching in its composition the synthetic mineral by M. Mroz. The paper goes on to describe the ore-bearing minerals, the original hydrothermal mineralization, and the minerals formed in this context; it also discusses crystallographic proper-

Card 1/2

SKVORTSOVA, K.V.; KOPCHENOVA, Ye.V.

Formation of allophane in hydrothermal conditions. Zap. Vses. min. ob-va 87 no.6:695-698 '58. (MIRA 12:3)
(Allophane)

3(8)

AUTHORS: Kopchenova, Ye. V., Skvortsova, K. V. SOV/20-123-1-43/56

TITLE: Collomorphous Molybdenite and Uranium-Molybdic Black Oxides in Uranium Deposits (O kollomorfnom molibdenite i urano-molibdenovykh chernyakh v mestorozhdeniyakh urana)

PERIODICAL: Doklady Akademii nauk SSSR, 1958, Vol 123, Nr 1, pp 159 - 162 (USSR)

ABSTRACT: The association of nasturan (pitchblende) and molybdenite in uranium deposits is so common that delimitation of types of complex molybdenite-uranium occurrences is possible. Further study of these can be of great interest. The composition of the ore minerals is here relatively monotonous. The close paragenetic relationship of nasturan and molybdenite is clearly expressed. The occurrence of the gangue minerals and their relations to the ore minerals is less [illegible]. The ore deposits of the siliceous, hydrothermally altered acid intrusions and extrusions are different than the deposits of the carbonate enriched, iron- and magnesium-rich tuffs. Nasturan and molybdenite are the most common minerals and form a close and constant association. Their transformation relationships are described in detail (Figs 1, 2). Collo-

Card 1/3

morphous molybdenite has hitherto been described by only 2 authors (Refs 2, 10). The collomorphous character of the molybdenite precipitate together with nasturan is a result of their contemporaneous precipitation out of a gel. An original precipitation of nasturan (which yet had no crystalline structure) and of molybdic sulfide of the geordisite type is probable. Then the minerals were separated as the amorphous sulfide crystallized as scale-like cryptocrystalline molybdenite and nasturan obtained a uraninite crystal structure. Geordisite, because of its high crystallization ability so seldom found in nature, has been adequately described (Ref 8) and later mentioned (Refs 6, 7, 9). It was shown (Ref 5) that molybdenite belongs to a sulfide group, which distinguishes itself by its slight solubility. For that reason it is relatively resistant under conditions of the oxidation zone. However, the aggregate of colloform molybdenite and nasturan precipitate is non-resistant and easily destroyed. The cryptocrystalline nature of the molybdenite greatly increases the surface area on which oxidizing solutions can react. This characteristic allows the molybdenum

to occur in minerals found in the hypergenic zone where it otherwise does not occur. Here it forms velvet-black or bluish-black powdered oxidation products which replace the primary minerals. The molybdenum and uranium content varies from pure molybdenum types through members containing both metals to pure uranium types. From analogy with uranium black oxides these spongy weathering products which have not yet been described, could be designated molybdenum and uranium-molybdic black oxides. These are thoroughly described and pictured (Fig 1); Table 2 shows the spectrographic analysis which discloses the great complexity of their constituents. The oxidation here caused no formation of secondary uranium and molybdenum minerals, while the weathering of the black oxides by more intensive oxidation is accompanied by separation and formation of new minerals, ilsemanite and uranosulfates. There are 2 figures, 2 tables, and 10 references, 5 of which are Soviet.

PRESENTED: June 13, 1958, by D. I. Shcherbakov, Academician,

SUBMITTED: June 9, 1958

Card 3/3

SKVORTSOVA, K.V.; KOPCHENOVA, Ye.V.; SILANT'YEVA, N.I.; SIDORENKO, G.A.; DARA, A.D.

Conditions governing the formation of umohoite in uranium-molybdenum deposits of the U.S.S.R. Geol.rud.mestorozh. no.5:53-63 S-O '61. (MIRA 14:9)

(Umohoite)

KOPCHENOVA, Ye.V.; SKVORTSOVA, K.V.; SILANT'YEVA, N.I.; SIDORENKO, G.A.; MIKHAYLOVA, L.V.

Mourite, a new supergene uranium-molybdenum mineral. Zap. Vses. min. ob-va 91 no.1:66-71 '62. (MIRA 15:3)
(Mourite)

KOPCHENOVA, Ye. V.; SIDORENKO, G. A.

Bearsite, an arsenic analogue of moraesite. Zap. Vses. min. ob-va 91 no.4:442-446 '62. (MIRA 15:10)

(Minerals) (Beryllium arsenate)

KOPCHENOVA, Ye.V.

"Mineralogy of placer deposits" by A.A.Kukharenko and "Atlas of placer minerals" by N.N. Trushkova, A.A.Kukharenko. Reviewed by E.V.Kopchenova. Sov. geol. 6 no.1:153-155 Ja '63.
(MIRA 16:6)

(Placer deposits) (Kukharenko, A.A.)
(Trushkova, N.N.)

KOPCHENOVA, Yu. K.

USSR/Chemistry - Hydrogen Determination
Chemistry - Grignard Reaction

May 47

"Determination of Active Hydrogen by Means of the Grignard Reagent in an Atmosphere of Carbon Dioxide, Part V: Determination of Moisture in Industrial Products," A. P. Terent'ev, D. G. Kadarer, Yu. K. Kopchenova, Laboratory of Organic Chemistry, Moscow State University, 4 pp

"Zhurnal Obshchey Khimii" Vol XVII, No 5

Article shows that the method of Terent'ev and Shchertakova may be used successfully for the determination of moisture in various substances and industrial [illegible] that do not react with methyl magnesium iodide. Examples of the determination of moisture in charcoal, clay, starch and benzene are included. Submitted 28 Apr 1946.

PA 30T6

KOPCHEV, Iv.

Plastic repair of the ligamentum collaterale fibulare in the ankle joint. Khirurgiia, Sofia 9 no.3:249-253 1956.

1. Institut za spetsializatsiia i usuvurshenstvuvane na lekarite, Soffiia klinika po ortopediia i travmatologiia. Direktor: prof. B. Boichev.
(ANKLE, surgery,
plastic repair of ligamentum collaterale fibulare (Bul))

Poisonings

BULGARIA

KOPCHEV, Iv., Docent, Colonel of the Medical Service, ANGELOV, A., KUNEV, K., and MINKOV, P., Lieutenant Colonels of the Medical Service; Chair of Military Field Surgery (Katedra po VPKh, Head Prof. G. Krustinov), Higher Military Medical Institute

"Study of the Effect of Blood Transfusion Upon Acute Poisoning with Dichlorodiethyl Sulfide"

Sofia, Voenno Meditsinsko Delo, Vol 21, No 5, Oct 66, pp 28-30

Abstract: Dogs were poisoned by subcutaneous injection of yperite in a dose of 20 mg/kg (LD_{100}) dissolved in olive oil. The animals that had been poisoned were given daily to the 5th day of survival a transfusion of 15 ml/kg glucose-citrate donor blood. The first transfusion was made 2 hours after the dogs had been poisoned. The blood transfusions prolonged the life of the poisoned dogs for a length of time reaching three days as compared with control animals, but did not prevent their death. Table, 11 references (8 Bulgarian, 3 Western). Russian summary. Manuscript received 30 Jul 66.

1/1

L 7062-00

ACC NR: AP6000936 SOURCE CODE: BU/0017/65/020/002/0019/0025

AUTHOR Kopchev, I. (Assistant professor, Colonel); Stoychev, A. (Assistant professor); Kunev, K. (Colonel)

14

B

ORG: none

TITLE: Amputation of the extremities in traumatic injuries of arteries

SOURCE: Voyenno-meditsinsko delo, no. 2, 1965, 19-25

TOPIC TAGS: injury, cardiovascular system, surgery, therapeutics

ABSTRACT: The authors propose new methods of amputating ischemic gangrenes in traumatic injuries of the large arterial vessels of the extremities. With the proposed method they have been able to save the knee joints of 14 patients and the articulatio cutibi in one, the amputation being made below those joints of 15 patients out of 18 and above the knee joints of three. Orig. art. has: 1 figure. [JPRS]

SUB CODE: 06 / SUBM DATE: none / ORIG REF: 004 / OTH REF: 004
SOV REF: 004

Card 1/1

0901 2136

29983-66 T JK

ACC NR: AP6020083 SOURCE CODE: BU/0017/65/020/004/0000/0

AUTHOR: Kopchev, I. (Colonel of the medical service); Kunev, K. (Lieutenant colonel of the medical service)

ORG: none

TITLE: Staphylococcal infection and traumatic hematoma of legs

SOURCE: Voenno-meditsinsko delo, v. 20, no. 4, 1965, 8-10

TOPIC TAGS: chemotherapy, antibiotic, sulfonamide, surgery, bacterial disease, human ailment

ABSTRACT: Review of general aspects of severe infections of legs, including hematoma and osteomyelitis, based on 1 case: need for bacterial sensitivity tests and specific chemotherapy or antibiotics or sulfonamides in addition to appropriate surgical treatment is stressed. Case history. [JPRS]

SUB CODE: 06 / SUBM DATE: none / ORIG REF: 004 / OTH REF: 004

..., Lt. Col.; Army

Card 1/2

...ko Delo, Vol 21, No 2, 1966, pp 21-25

...(author's Russian summary, modified): The problem of the rejection ...one homotransplants is discussed on the basis of 106 observed patients. Eleven of them showed a series of general and local reactions indicating the tendency of the organism to reject a biologically foreign body such as a homotransplant. A number of measures are proposed for improving the acceptance by the organism of a homotransplant, and the results of these measures are described. The problems of rejection by the organism and of biological incompatibility are investigated only from the clinical point of view. Nine Soviet-bloc references.

1/1

BULGARIA

Col. & Docent, Candidate of Medical Sciences Iv. KORCHEV, Major K. KURIEV and Lt. Col N. KOMCHEV

"Treatment of Clavicular Fractures."

Sofia, Voyeno Meditsinsko Delo, Vol 18, No 1, Feb 1963; pp 13-19.

Abstract [Russian Summary modified:] Of 362 patients with clavicular fracture treated in the traumatologic clinic of the Military Medical Academy 1958-1962, only 81 (~26.38%) were treated surgically, rest conservatively. Of surgical methods, intramedullary osteosynthesis is generally considered best. "Cerclage" [wire bracing?] is definitely pernicious despite its wide use at present in Bulgaria. Much clinical and statistical detail, authoritative polemical attitude. Six roentgenograms, 4 tables; no references.

1/1

KOPCHEV, Iv.; STOICHEV, A.; MIRCHEV, M.; CHEPILEV, G.; KUNEV, K.; ATANASOV, A.; PINKAS, M.; MERDZHANOV, As.

Combined radiation injuries. Khirurgiia 15 no.9/10:847-850 '62.

1. Is Visshiia voennomeditsinski institut.
(RADIATION INJURY)

KOPCHEV, Petur, inzh.

Defects in varnishing. Durvomebel prom 5 no.3:25-29 My-Je '62.

1. Durzhavno industrialn predpriiatie "23 dekemvri", Sofiia.

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Automatic detecting of fire in woodworking and furniture industries.
Durvomebel prom 6 no.1:26-27 Ja-F '63.

KOLACH, T.A., kand.tekhn.nauk, dotsent; KOPCHIKOV, I.A., insh.

Study of boiling in a thin film. Izv.vys.ucheb.zav.; energ. 8 no.10:50-55 O '65. (MIRA 18:10)

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ZAYTSEV, A.G.; FADEYEVA, V.S.; KOPCHIKOVA, N.V.

Method of studying the structure of polymeric and porous building materials. Sbor. trud. VNIINSM no.4:4-12 '61. (MIRA 15:2)

(Building materials)
(Electron microscope)

KOPCHINSKAYA, K.

POLAND/Chemical Technology - Dyeing and Chemical Processing of Textiles. H-34

Abs Jour : Ref Zhur - Khimiya, No 12, 1958, 42012

Author : Kopchinskaya, Khlynchak
Inst :
Title : A Rapid Method for the Determination of Fat in Fibers.

Orig Pub : Przem. wlokienniczy, 11, No 7, 338-340

Abstract : Complete details of the procedure and results are given on the determination of fat using a cold Soxlet ether extraction. The determination requires 30 minutes. Results are not less accurate than those obtained by a usual extraction. The atuhor explains that the slightly lower results are due to the fact that in the course of the usual extraction, a hydrolysis of soap always present on fibers, takes place.

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L 11219-66 EWT(d)/EWT(m)/EWP(v)/EWP(k)/EWP(h)/EWP(l) DIAAP
ACC NR: AP6005535 SOURCE CODE: UR/0089/66/020/001/0063/0065

AUTHOR: Klimentov, V. B.; Nechiporuk, V. A.; Kopchinskiy, G. A.; Yaroshevich, V. F.; Strutsinskiy, V. A.; Popov, V. D.; Nikonov, A. V.

ORG: none

46
B

TITLE: Test stand at the Institute of Physics AN UkrSSR

19

SOURCE: Atomnaya energiya, v. 20, no. 1, 1966, 63-65

TOPIC TAGS: nuclear engineering, nuclear reactor, reactor fuel element, test stand

ABSTRACT: A test stand for critical assemblies was put into operation at the Institute of Physics AN UkrSSR at the end of 1964. The installation uses assemblies of fuel elements of the VVR-M research reactor; the moderator is ordinary water; the side reflector is made from the beryllium reflectors of the VVR-M reactor. The stand is located in a separate building. The radioactive zone is separated from the control panel by one meter of concrete shielding. The installation is equipped with sensitive monitoring and measuring systems as well as with systems for automatic and remote control. All precautions have been taken to assure reliable nuclear

UDC: 621.039.572

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ACC NR: AP6005535

safety and automatic control of the critical assemblies. A dc amplifier is connected to a galvanometer for monitoring currents in the ionization chamber down to 10^{-12} amp. Two recording potentiometers and a pulse rate counter are used for monitoring the power level. The instruments give reliable readings below the subcritical power level. Automatic control of the process is possible during operation at a power of more than 0.03 w which corresponds to an average thermal neutron flux of about $0.4 \cdot 10^6$ neutrons/$cm^2 \cdot$sec. The automatic regulator consists of two KNK-56 ionization chambers connected in parallel, a potentiometric power controller with a high impedance input and a steel absorber, an electronic amplifier and an amplidyne. This automatic regulator is extremely convenient for operation with critical assemblies. It may be used for rapid compensation of a chain reaction at "zero" power levels and for calibration of control rods. The unit increases work safety and accuracy of holding a constant power level when detectors are activated. In addition to the steel absorber in the automatic regulator, chain reaction may be controlled by two or three boron remote control rods. An emergency signal automatically brings these rods together with three emergency safety rods into the radioactive zone of the assembly. All control and safety rods are moved by servo drives which are connected to selsyns and position indicators. Operational experience at

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KOPCINSKI, Edward, mgr. inz.

Investment economizing in communication constructions.
Przegl techn no.35:1-2 Ag '60.

KOPCHUGOV, V.A., kandidat tekhnicheskikh nauk.

Use of supporting reinforcing framework in reinforced-concrete beams. Stroi. prom. 31 no.10:23-28 O '53. (MLRA 6:11)
(Reinforced concrete)

KUREK, N.M., kandidat tekhnicheskikh nauk; SOKOLOV, N.M., kandidat tekhnicheskikh nauk; KOPCHUGOV, V.A., kandidat tekhnicheskikh nauk; ZAMORIN, P.K., kandidat tekhnicheskikh nauk; SOROCHAN, Ye.A., inzhener; GAROVNIKOV, V.I., inzhener, nauchnyy redaktor; BEGAK, B.A., redaktor izdatel'stva; GUSEVA, S.S., tekhnicheskiy redaktor

[Use of precast foundations in building construction] Primenenie sbornykh fundamentov v stroitel'stve zdanii. Moskva, Gos. izd-vo lit-ry po stroit. i arkhitekture, 1956. 77 p. (MLRA 10:1)
(Foundations)

AVAKOV, A.I., kandidat tekhnicheskikh nauk; KOPCHUGOV, V.A., kandidat tekhnicheskikh nauk.

Twenty-four meter prestressed reinforced concrete beam. Nov.tekh. i pered.op.v stroi. 18 no.7:3-6 Jl '56. (MLRA 9:9)
(Girders) (Prestressed concrete)

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"Simplified Methods of Checking Interurban Connection Lines." P. 110.
"Different Types of Frequency Transformers. Tr. from the Russian." P. 111.
(WIADOMOSCI TELEKOMUNIKACYJNE, Vol. 23, No. 5, May, 1954, Warszawa, Poland)

SO: Monthly List of East European Accessions. (EEAL), LC, Vol. 4,
No. 1, Jan. 1955 Uncl.

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A new way of fastening structural arches made of reinforced concrete.

p. 34 (Budownictwo Przemyslowe) Vol. 4, no. 1, Jan. 1955, Warszawa, Poland

SO: MONTHLY INDEX OF EAST EUROPEAN ACCESSIONS (EEAI) LC, VOL. 7, NO. 1, JAN. 1958

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Some types of short thin shells for roofs and their construction.

P. 95. (Inzynieria I Budownictwo. Vol. 14, no. 3, Mar. 1957, Warszawa, Poland)

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MINKO, G., Dr; KORCSANYI, I., Dr; LASZLO, M., Dr; Second Clinic of Internal Medicine (II. sz. Belgyogyaszati Klinika) (Director: HAMORI, A., Dr, Professor), and Second Clinic of Surgery (II. sz. Sebeszeti Klinika) (Director: KARLINGER, G. T., Dr, Professor), X-Ray Laboratory (Rontgen laboratorium), Pecs.

"X-Ray Diagnosis of the Primary Malignant Tumors of the Small Intestine."

Budapest, Magyar Radiologia, Vol 14, No 6, Dec 62, pp 334-341.

Abstract: [Authors' English summary] In the diagnosis of changes in the small intestine considerable progress has been made by improvements in X-ray apparatus, serial pictures, screen viewing, intensifiers, fractional dosage of contrast medium and pharmaco-radiographic examinations. Breaks in Kerckring-folds, lack of shadow due to tumors, rigidity and characteristic movements of the intestine are recognizable. Of 21 references, 9 are Hungarian, 12 western.

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