KHITAROV, N.I.

Information on the last experimental investigations in the field of abyssal processes. Geokhimiia no.5:471-472 '62. (MIRA 15:7)
(Geology)

KHITAROV, M.I.

"About water and basaltic magna."

[illegible] presented at the 12th General Assembly of the [illegible], July 1960.

N. I. KHITAROV (USSR)

"Physico-chemical peculiarities of deep zones of the Earth crust according to some experimental data.

Report presented at the Conference on Chemistry of the Earth's Crust, Moscow, 14-19 Mar 63.

VINOGRADOV, A.P., akademik, otv. red.; BARANOV, V.I., red.; BARSUKOV, V.L., red.; BEUS, A.A., red.; VALYASHKO, M.G., red.; GERASIMOVSKIY, V.I., red.; KORZHINSKIY, D.S., red.; RONOV, A.B., red.; TUGARINOV, A.I., red.; KHITAROV, N.I., red.; SHCHERBINA, V.V., red.; TARASOV, L.S., red. izd-va; DOROKHINA, I.N., tekhn. red.

[Chemistry of the earth's crust]Khimiia zemnoi kory; trudy. Moskva, Izd-vo Akad.nauk. Vol.1. 1963. 430 p. (MIRA 16:3)

1. Geokhimicheskaya konferentsiya, posvyashchennaya stoletiyu so dnya rozhdeniya akademika V.I.Vernadskogo, Moscow, 1963. (Geochemistry)

KHITAROV, N.I.; RYZHENKO, B.N.; LEBEDEV, Ye.B.

Determination of the electric conductivity of the solutions of sodium carbonate and bicarbonate under hydrothermal conditions. Geokhimiia no.1:41-47 Ja '63. (MIRA 16:9)

1. Vernadsky Institute of Geochemistry and Analytical Chemistry, Academy of Sciences, U.S.S.R., Moscow.
(Sodium carbonate—Electric properties)

KHITAROV, N.I.; PUGIN, V.A.; CHZHAO BIN [Chao Ping] (Kitayskaya Narodnaya Respublika); SLUTSKIY, A.B.

Interrelations of andalusite, cyanite, and sillimanite under the conditions of moderate temperatures and pressures. Geokhimiia no.3:219-228 Mr '63. (MIRA 16:9)

1. Vernadsky Institute of Geochemistry and Analytical Chemistry, Academy of Sciences, U.S.S.R., Moscow.
(Andalusite) (Sillimanite) (Cyanite)

KHITAROV, N.I.; KADIK, A.A.; LEBEDEV, Ye.B.

Estimation of the thermal effect of water separation from melts of acid composition based on the albite-water system. Geokhimiia no.7:619-630 Jl '63. (MIRA 16:9)

1. Vernadsky Institute of Geochemistry and Analytical Chemistry, Academy of Sciences, U.S.S.R., Moscow.
(Thermochemistry) (Albite) (Water)

L 23618-65 EWT(1) GW/WLK

AT3002637 S/0000/64/002/000/0016/0040

[illegible]rov, M. L.

TITLE: Characteristics of the deep zones of the earth's crust based on certain experimental data

SOURCE: Geokhimicheskaya konferentsiya. Khimiya zemnoy kory. Moscow, 1964. Khimiya zemnoy kory (Chemistry of the earth's crust) [illegible] konferentsii. v. 2. Moskva, 1964, 16-40

TOPIC TAGS: earth crust, sedimentary rock, continental crust, Conrad discontinuity, thermal gradient

ABSTRACT: The alternation of sedimentary rocks by remelting is examined with pressure, depth, temperature at start of melting, and water content. [illegible] increase of pressure with depth of the sediments noticeably affects the drop [illegible] melting temperature but only to a certain level which is determined by water content in the material. After comparing the geological, [illegible] and experimental data, the author concluded that the process of [illegible] a major role in elimination of the material nonhomogeneity of the

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L 23648-65

ACCESSION NR: AT5002637

...crust and that the most probable values of the geothermal gradient ... exceed 12-15 deg/km. The ... in their nature, should be correlated to the particular high temperature conditions that prevailed during the initial period of the geological history. At certain levels, appreciable evolution of heat could have occurred in local areas of the crust owing to separation of the volatile part of the magmatic melt. Orig. art. has: 2 figures

ASSOCIATION: Institut geokhimii i analiticheskoy khimii im. V. I. Vernadskogo ... chemistry and analytical chemistry ...

... ENCL: ... SUB CODE: ES

... OTHER: 002

SMIRNOV, V.I., akademik, red.; YERMAKOV, N.P., red.; DOLGOV, Yu.A., red.; SOKOLOV, G.A., red.; KHITAROV, N.I., red.

[Mineralogical thermometry and barometry] Mineralogicheskaia termometriia i barometriia. Moskva, Nauka, 1965. 327 p. (MIRA 18:5)

1. Akademiya nauk SSSR. Nauchnyy Sovet po rudoobrazovaniyu.

LEONIDOV, V.Ya.; BARSKIY, Yu.P.; KHITAROV, N.I.

Determination of the heat capacity of kyanite and quartz by the method of thermal analysis. Geokhimiia no.5:414-419 My '64. (MIRA 18:7)

1. Vernadsky Institute of Geochemistry and Analytical Chemistry, Academy of Sciences, U.S.S.R. and Scientific Research Institute of Building Ceramics, Moscow.

KHITAROV, N.I., red.; KADIK, A.A., red.

[Geochemical studies under conditions of increased pressures and temperatures] Geokhimicheskie issledovaniia v oblasti povyshennykh davlenii i temperatur; sbornik statei. Moskva, Nauka, 1965. 201 p. (MIRA 18:9)

1. Akademiya nauk SSSR. Institut geokhimii i analiticheskoy khimii. 2. Chlen-korrespondent AN SSSR (for Khitarov).

KHITAROV, N.I., ARUTYUNYAN, L.A.; RYZHENKO, B.N.

Effect of hydrosulfide on the migration of molybdenum in the form of a silicomolybdenum complex under conditions of increased temperatures. Geokhimiia no.3:269-272 Mr '65. (MIRA 18:7)

1. V.I. Vernadsky Institute of Geochemistry and Analytical Chemistry, Academy of Sciences of the U.S.S.R., Moscow.

KADIK, A.A.; KHITAROV, N.I.

Effect of pressure on the masstransfer between a magmatic melt and the water of external media. Geokhimiia no.5:507-518 My. '65. (MIRA 18:9)

1. Institut geolkhimii i analiticheskoy khimii imeni Vernadskogo AN SSSR, Moskva.

KHITAROV, N.I.

Information about new experimental studies in the field of abyssal processes. Geokhimiia no.6:578-581 Je '64. (MIRA 18:7)

KHITAROV, N.I.; SLUTSKIY, A.B.

Effect of pressure on the melting temperatures of albite and basalt according to data of electroconductivity measurement. Geokhimiia no. 12:1395-1403 D '65 (MIRA 19:1)

1. Institut geokhimii i analiticheskoy k' mii imeni V.I. Vernadskogo AN SSSR, Moskva. Submitted August 25, 1965.

ACC NR: AP7003016 SOURCE CODE: UR/0007/66/000/009/1132/1140

AUTHOR: Khitarov, N. I.

ORG: none

TITLE: Information on recent experimental work on deep-seated processes

SOURCE: Geokhimiya, no. 9, 1966, 1132-1140

TOPIC TAGS: mineralogy, petrology, thermodynamics

ABSTRACT: The papers presented at the annual symposium on deep-seated processes can be subdivided into the following five sections: 1 - physicochemical characteristics of natural processes under conditions of elevated temperatures and pressures taking place in the presence of water; 2 - synthesis of minerals under hydrothermal conditions; 3 - research on water-free melts; 4 - instruments and methods; 5 - properties of materials and transformation at high temperatures and pressures and summaries of research conducted at certain institutes. The lectures which fall in the fifth section of "properties of materials and transformations under high pressures and temperatures" are summarized below.

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ACC NR: AP7003016

The annual symposium of experimentalists, whose work is associated with deep-seated processes, was held on 15—16 February 1966 at the Institute of Geochemistry and Analytical Chemistry im. V. I. Vernadskiy, Academy of Sciences USSR. The symposium dealt with the research performed in 1965 and ongoing investigations. Some of the scientific research institutions which participated in the symposium were: Institute of Geochemistry and Analytical Chemistry AS USSR (GEOKhI), Institute of Physics of the Earth AS USSR (IFZ), Institute of Physics of High Pressures AS USSR (IFVD), Institute of General and Inorganic Chemistry AS USSR (IONKh), All-Union Scientific Research Institute for the Synthesis of Mineral Raw Materials (VNIISIMS), Moscow State University (MGU), All-Union Scientific Research Institute of Geology (VSEGEI), Institute of Geology and Geophysics, Siberian Branch AS USSR (IGG), Institute of Geology of Mineral Deposits, Petrography, Mineralogy and Geochemistry AS USSR (IGEM), All-Union Institute of Mineral Raw Materials (VIMS), Institute of Crystallography AS USSR (IK), State Institute of Nitrogen Industry AS USSR (GIAP), Institute of Geochemistry, Siberian Branch AS USSR (IGS), Institute of Mineralogy, Geochemistry and Crystallography of Rare Elements AS USSR (IMGRE), the Moscow All-Union Scientific Research Institute of Physiotechnical and Radiotechnical Measurements

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(VNIIFTRI) and the Siberian Branch in Novosibirsk, Kharkov Agricultural Institute im. Dokuchayev, Institute of Inorganic Chemistry, Siberian Branch AS USSR (IONKhS), and Institute of Geological Sciences AS Kazakh SSR.

The specific heats of andalusite and sillimanite at temperatures up to 1200°C were measured by the thermal-analysis method. The specific heat of serpentine at temperatures between 100 and 500° C was determined for the first time. The specific heats of granite, basalt, peridotite (52-% serpentization), and serpentinite containing 92-% serpentine were also determined. Results of the measurements show that, at the temperatures investigated, the specific heats of ultrabasic rocks are abnormally high owing to the presence of serpentine. The heat of dehydration of serpentine measured by thermal analysis was in agreement with that computed from thermodynamic data (V. Ya. Leonidov, GEOKhI).

A new modification of titanium dioxide (T_2O_2II), which is metastable under normal conditions, was obtained as a result of an investigation of the stability of rutile under high pressures (40 to 120 kbar) and temperatures (400 to 1500° C). The methods used were such as to

take into account the presence of water acting as a mineralizing agent in the operating chamber during the entire experiment. As a result of the investigation of the TiO_2 II modification, it was established that the new phase has the structure of the α-Pb_2O type (orthorhombic cell, space group D_{rh}^{14} = Pbcn) with the lattice constants of the unit cell A = 4.531 ± 0.001 Å, b = 5.496 ± 0.001 Å, c = 4.900 ± 0.001 Å. The x-ray density is equal to 4.35 g/cm^3; the increase in density at polymorphic transformation is equal to 3%. An inverse transition into the common form of rutile was accomplished by heating the TiO_2 II powder at 600° C for four hours (N. A. Bendelian, S. V. Popova, L. F. Vereshchagin, IFVD).

Methods for the investigation of elastic and electrical properties of rocks under high pressures have been developed in the section on the physical properties of rocks of the Institute of Physics of the Earth, Academy of Sciences USSR. In investigating the velocities of longitudinal and shear elastic waves, as well as the electrical resistivity and dielectric constant of the rock samples, under the pressure of several thousands kg/cm^2, apparatus with nitrogen gas as the pressure-transmitting medium are used. A hydrostatic hydraulic apparatus is used in experiments performed under pressures up to 10 kbar. At

pressures up to 40 kbar, the velocities of elastic waves can be determined at quasi-hydrostatic pressures, where the samples in thin lead envelopes are placed into a chamber of a piston-in-cylinder apparatus. The electrical properties of thin wafers are investigated under pressures up to 40 kbar and temperatures up to 600° C (M. P. Volarovich, IFZ).

Alkali-basalt and andesite-basalt glasses have been obtained from a quenched melt held for 2 hours at a temperature of 1300° C and pressures of 1, 5, 10, 15, and 25 kbar. During the experiments the melt absorbed water given off by a talc-pyrophyllite pressure-transmitting medium at high temperatures. Maximum water content of the melt was 4%. Absorption of water resulted in the increase of n and d of the glasses. The presence of OH and H_2O in the melt and the increase in the importance of hydroxyl at increasing pressures was inferred from the infrared observations (Yu. S. Genshaft, V. V. Nasedkin, Yu. N. Ryabinin, IFZ).

Phase diagrams of sulfur, selenium, and iodine at pressures up to 45,000–50,000 kg/cm^2 and temperatures up to 700°C were investigated. The melting curves of these substances were de-

ACC NR: AP7003016

termined at pressures up to 10,000 kg/cm^2 in a hydrostatic externally heated bomb and in a sealed capsule. The pressure was measured with great accuracy by means of a manganin manometer. The melting was determined from the change in the volume of the substance. Phase diagrams at pressures in excess of 10,000 kg/cm^2 were determined in a cube anvil device. Calibration was made from the discontinuities in electrical resistivity of Bi and Tl. The melting curve of sulfur has a peak at 16,000 kg/cm^2 and 310°C and a triple point at 19,000 kg/cm^2 and 290°C. The presence of a new phase transition in sulfur at 20°C and 23,000 kg/cm^2 was determined from the compressibility of the sample. Under a pressure of 40,000 kg/cm^2, the sulfur melted at 450°C. A maximum of the melting curve of Se was observed at 50,000 kg/cm^2 and 690°C. These data agree with those of C. Susse and R. Epain (60,000 kg/cm^2 and 640°C). The melting curve of iodine at pressures up to 48,000 kg/cm^2 and a temperature of 650°C increased monotonically with increasing pressure (Ye. Yu. Tonkov, I. Ye. Paukov, D. S. Marinskiy, VNIIFTRI).

The electrical conductivity of quartz and basalt was investigate at high pressures and temperatures. The data for quartz obtained in

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a wide range of temperatures confirm the presence of a minimum in the resistance—pressure curve. With increasing temperatures the minimum is shifted toward lower pressures. Owing to the exponential dependence of electrical conductivity on temperature, an accurate measurement of the temperature, and especially of its gradient in the sample, is of great importance. The errors in the measurement of the temperature caused by the loss of heat through the thermocouple were evaluated by comparing the difference in measurements obtained using three Pt—PtRh thermocouples of different diameters, with their junctions in the high-pressure chamber. Results of measurement have shown that, at T = 1, 200°C and P = 28,000 atm, the error for thermocouples with d = 0.3 mm was 40°C (A. B. Slutskiy, GEKhI).

Alkali igneous rocks from the Kola Peninsula, having high electrical conductivity and low activation energy under atmospheric conditions, exhibit a change in electrical resistivity of one—two orders of magnitude at pressures up to 20,000 kg/cm^2 and temperatures up to 700°C. The electrical resistivity of alkali rocks decreases less rapidly with increasing nepheline content and a decreasing aegirite content, and vice versa. With an increase in pressure, the appearance of a new type of electrical conductivity is

shifted toward the lower temperatures. In addition to an increase in electrical resistivity when the pressure is increased from the atmospheric pressure to 20,000 kg/cm^2, the activation energy also decreases from 0.76 to 0.42 ev, and the pre-exponential factor decreases from 10^{-4} to 6×10^{-4} ohm^{-1}cm^{-1}. Thus, in alkali rocks the decrease in electrical resistivity with pressure is the result of a decrease in the width of the forbidden band. Thus, when computing the distribution of temperatures with depth from electrical conductivity, it is necessary to take into account the effect of pressure on the electric conductivity of rocks (A. T. Bondarenko, IFZ).

In the carbon—nickel system, a new phase of carbon penetration into nickel may be obtained at pressures of 15—20 kbar and temperatures of the order of 1,500°C. The new phase is represented by elongated laminated crystals about 0.1-mm long, and consists of 12% C and 88% Ni. This product is easily soluble in hydrochloric and nitric acids and is easily oxidized by atmospheric oxygen at 500°C. Its specific gravity is 10 g/cm^3. The new phase has a face-centered cubic lattice with the lattice constant a = 3.533 ± 0.005 Å. These investigations indicate the possibility of existence of a nickel carbide compound (Ni_4C_3). (I. V. Nikol'skaya, Ya. A. Kalashnikov, Ye. M. Feklichev, L. F. Vereshchagin, IFVD).

APPROVED FOR RELEASE: 09/17/2001 CIA-RDP86-00513R000722020010-7"

Experiments on alkali basalts at high temperatures and pressures between 5—10 kbar in the presence of water have shown that the order of crystallization of the minerals with decreasing temperature is as follows: magnetite, monoclinal pyroxene, plagioclase, garnet, and biotite. In the range of pressures of 20—25 kbar, the order of crystallization is as follows: magnetite, monoclinal pyroxene, garnet, and amphibole. A simultaneous crystallization of plagioclase and garnet has been observed at a pressure of about 15 kbar. Abrupt changes in temperature and pressure are instrumental in causing considerable fractionation of the crystallizing melt. As a result of this, it is possible to obtain more acidic derivatives, corresponding to diorite, grandodiorite, and garnet (Yu. S. Genshaft, V. V. Nasedkin, Yu. N. Ryabinin, V. P. Petrov, IFZ, IGEM).

At temperatures up to 670°C, two types of variations of electrical resistivity versus pressure were observed in quartz, microcline, nepheline, and aegirite as pressure was increased up to a maximum of 20,000 kg/cm^2. A 50% decrease in electrical resistivity of quartz monocrystals was noted when the pressure along its optical axis was changed.

A reversible minimum which shifted toward the lower pressures at higher temperatures was observed in measurements performed in nepheline along the optical axis, in quartz perpendicular to the optical axis, and in microcline along the cleavage. Only increasing resistivity was observed in nepheline at 670°C. Evidently, the increase in resistivity with pressure is associated with a decrease in mobility of charge carriers (E. Y. Parkhomenko, A. M. Bondarenko, IFZ).

Experimental data were used in computing the relationship between density and the velocities of elastic longitudinal waves in rocks from central Kazakhstan. Correlation curves were obtained under atmospheric conditions, as well as under pressures of 1, 4, 6, and 10 kbar. A linear relationship between the velocities of longitudinal waves and the bulk density was observed for all pressures. The correlation factors vary from 0.85 to 0.89. The coefficients of the linear equation depend on the value of the confining pressure. The constant term was negative but rapidly approached zero at higher pressures. With increased pressures the slope of the curves tended asymptotically to a constant value of 2.42 at pressures in excess of 10 kbar (M. P. Volarovich, A. K. Kurskeyev, I. S. Tomashevskaya, I. L. Tuzova, B. M. Urazayev, IFV, GINKaz).

ACC NR: AP7003016

The decarbonization process under high lithostatic pressures was investigated using smithsonite and magnesium dioxide (inert substance). Comparison of the differential heating curves obtained at atmospheric pressure, at 1800 atm, and at 10,000 atm shows a decrease in the endothermic peaks on the thermograms and shifting of the initial inflection point toward higher temperatures, as the pressures are increased. These changes were attributed mainly to an increase in the specific heat with increasing pressures, as well as to a decrease in the disassociation reaction rate. Additional experiments lead to the conclusion that the decrease in the disassociation reaction rate under pressure occurs in the areas of grain contact. Under a pressure of 10,000 atm, the disassociation reaction does not proceed to the end even in the presence of large overheating. At the same time, the pressure of CO_2 considerably in excess of the load pressure may occur in the pores adjacent to the undecomposed grains. An approximate thermodynamic evaluation of the influence of pressure on the heat effect was performed. It was determined that the maximum possible decrease of the thermal effect at 10,000 atm can reach 15% (G. T. Ostapenko, VNIISIMS).

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using a piston gage. The experiments have shown that for cesium $\Delta V \to 0$. The results of experiments with cesium can be represented by the following equation for the change in volume:

$$\Delta V = 0.0125 - 0.066 \log \left(\frac{T}{302.9}\right);$$

for the melting curve,

$$T^{\circ}(K) = 302.9 + 19.5 \times 10^{-3} \times P + 0.593 \times 10^{-6} \times P^2.$$

Correspondingly, for mercury,

$$\Delta V \left(\frac{cm^3}{g}\right) = 0.00253 - 0.00205 \times \log \left(\frac{T}{234.29}\right);$$

$$P = 38.993 \left[\left(\frac{T}{234.29}\right)^{1.177} - 1\right]$$

(V. S. Bogdanov, VNIIFTRI).

The interrelationship between elastic and electrical properties of rocks was investigated by conducting simultaneous measurement of longitudinal waves and electrical resistivity in samples of moist porous sedimentary rocks under high hydrostatic pressures up to 3000 kg/cm^2. Carbonaceous rocks and sandstones with porosities between 6 and 20% and moisture content between 1.8 and 15% were investigated. It was established that the velocity of elastic waves

ACC NR: AP7003016

and the electrical resistivity had their smallest values in samples with the highest porosity. With increasing pressures the velocity in such samples increased considerably, while the electrical resistivity increased only slightly. The small increase in electrical resistivity with pressure was attributed to the high moisture content of the highly porous rocks (M. P. Volarovich, Ye. I. Bayuk, K. A. Valeyev, IFZ).

Spectral investigations at high pressures were conducted in an apparatus, which includes a 30-ton hydraulic press, a high-pressure chamber, an optical system with a mirror illuminator, a monochromator and photoelectric device. The phase transformations of the first and second kind were studied in benzene and ammonium chloride. Crystallization of certain fluids ($CHCL_3$, C_6H_6 and its derivatives) under compression and the effect of pressure on the dynamics of the crystalline lattices of C_6H_6 and NH_4Cl were investigated, and a relationship was established between the changes in frequencies of lattice vibrations of the optical branch and the lattice constants of the crystals. The effect of pressure on the frequencies of intrinsic vibrations of the NH_4^+ cation in NH_4Cl was investigated

[FSB: v. 2, no. 11]

SUB CODE: 08, 20 / SUBM DATE: none

Card 14/14

KHITARYAN, M.G., uchitel'

Psychological training of students for farm work. Biol.v shkole no.6:59-62 N-D '59. (MIRA 13:3)

1. Srednyaya shkola No.78 g.Novosibirska.
(Agriculture--Study and teaching)

KHITENKOV, G. G.

Horses

Russian draft horses. Konevodstvo 22 No. 7, 1952.

9. Monthly List of Russian Accessions, Library of Congress, September 1953, Uncl.

KHITENKOV, G. G.

(Kustanay breed of horses) Moskva, Gos. izd-vo sel'khoz. lit-ry, 1953. 93 p. (54-20472)

SF290.K8K5

1. KHITENKOV, G. G.

2. USSR (600)

4. Horse Breeding

7. Breeding work with the new Kustany breed. Konevodstvo 23 no. 1 1953.

9. Monthly List of Russian Accessions, Library of Congress, ~~April~~ 1953, Uncl.

1. KHITENKOV, G.G.

2. USSR (600)

4. Horse Breeding

7. Theoretical principles and practical application of methods in crossbreeding of horses, Konevodstvo 23 no. 4, 1953.

9. Monthly List of Russian Accessions, Library of Congress, APRIL 1953, Uncl.

KHITENKOV, Grigoriy Georgiyevich.

All-Union Sci Res Inst of Horse-Breeding. Academic degree of Doctor of Agricultural Sciences, based on his defense, 24 December 1954, in the Council of the Moscow Veterinary Academy, of his dissertation entitled: "Experiment in the Improvement of Saddle Horses in the USSR."

Academic degree and/or title: Doctor of Sciences

SO: Decisions of VAK, List no. 15, 25 June 55, Byulleten' MVO SSSR, No. 15, Aug 56, Moscow, pp. 5-24, Uncl. JPRS/NY-537

KHITENKO, G.G., doktor sel'skokhozyaystvennykh nauk.

Russian horse breeds. Priroda 45 no.6:49-58 Je '56. (MLRA 9:8)
(Horse breeding)

USSR/Farm Animals - Horses

Q

Abs Jour : Ref Zhur - Biol., No 15, 1958, 69244

Author : Khitenkov, G.
Inst :
Title : Achievements of Soviet Hippology During 40 Years.

Orig Pub : Konevodstvo, 1957, No 11, 9-15

Abstract : No abstract

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KHITENKOV, G.G.

ROGOZIN, G.M.; TSYMKOV, M.Yu., kand. sel'skokhozyaystvennykh nauk; LOBANOVA, A.A., kand. sel'skokhozyaystvennykh nauk; MUMIANTSEVA, T.V.; TRUDOLYUBOV, B.A., kand. sel'skokhozyaystvennykh nauk; KUDRYAVTSEV, P.N., doktor sel'skokhozyaystvennykh nauk; LITOVCHENKO, G.R., kand. sel'skokhozyaystvennykh nauk; KOLOBOV, G.M.; IOFFE, M.Sh.; KHITENKOV, G.G., doktor sel'skokhozyaystvennykh nauk; BADIR'YAN, G.G., doktor sel'skokhozyaystvennykh nauk; IVANOVA, A.A.; MAKAROV, A.P.; ALTAYSKIY, I.P.; SPIRIDONOV, A.L., kand. sel'skokhozyaystvennykh nauk; ZHUYKOV, G.G.; BANNIKOV, N.A., red.; IVANOVA, A.N., red.; ZUBRILINA, Z.P., tekhn. red.

[Economics and organization of stockbreeding on collective farms] Ekonomika i organizatsiia zhivotnovodstva v kolkhozakh. Moskva, Gos. izd-vo sel'khoz. lit-ry, 1958. 550 p. (MIRA 11:7)
(Stock and stockbreeding)

USSR/Farm Animals. Horses.

Abs Jour: Ref Zhur-Biol.,No 20, 1958, 92531.

Author : Khitenkov, G. G.
Inst :
Title : Horse Breeding in German Democratic Republic.

Orig Pub: Konevodstvo, 1958, No 1, 40-45.

Abstract: No abstract.

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KHITENKOV, G.G.; BUDENNYY, S.M.; BYRDINA, A.S., red.; SMIRNOVA, Ye.A., tekhn.red.

[The book of horses; use and care of the horse] Kniga o loshadi; ispol'zovanie loshadi i ukhod za neiu. Moskva, (los.izd-vo sel'khoz. lit-ry. Vol.IV. 1959. 317 p.
(Horses) (MIRA 12:10)

BUDENNYY, S.M.; KHITRENKOV, G.G.; ROMANOVICH, Ye.F., red.; FEDOTOVA, A.F., tekhn.red.

[Book of the horse; breeding in horse raising and on the stud farm] Kniga o loshadi; plemennaia rabota v konevodstve i konnozavodstve. Moskva, Gos.izd-vo sel'khoz.lit-ry, 1959. 443 p. (MIRA 13:4)

(Horse breeding)

IVANOVA, Z.I., kandidat veterinarnykh nauk; KHITRENKOVA, L.P., mladshiy nauchnyy sotrudnik.

Amino-atabrine treatment of monieziasis in sheep. Veterinariia 30 no.11:58 N '53. (MLRA 6:11)

1. Gosudarstvennyy nauchno-kontrol'nyy institut veterinarnykh prepartov Ministerstva sel'skogo khozyaystva i zagotovok SSSR.

KHITENKOVA, L.P.

IVANOVA, Z.I.; KHITENKOVA, L.P.

Treatment of Moniezia infection in sheep with aminoacrichine. Farm. i tokn. 17 no.3:50-51 My-Je '54. (MLRA 7:8)

1. Gosudarstvennyy nauchno-kontrol'nyy institut veterinarnykh preparatov.

(SHEEP, diseases,
*Moniezia infect., ther., aminoquinacrine)
(TAPEWORMS,
*Moniezia, infect. in sheep, ther., aminoquinacrine)

KHITENKOVA, L.P.

USSR / Diseases of Farm Animals. Diseases Caused by Helminths R-2

Abs Jour: Ref Zhur-Biol., No 2, 1958, 7341

Author : Z. I. Ivanova, L. P. Khitenkova
Inst : Not Given
Title : Tests of the Anthelmintic Properties of Atebrin and Amino-Atebrin

Orig Pub: Tr. Gos. nauchno-kontrol'n. in-ta po vet-preparatam, 1956, 6, 302-311

Abstract: Amino-atebrin has a definite vermifugal action in the treatment of "moniezia" of lambs in doses of 0.2 grams per kilogram, the effectiveness of its action on pre-imaginal forms of "moniezia" was 42.6 percent in imaginal 69 percent. A study of "formo" dynamics of I indicated that it is not retained in the blood for long and

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31

Abs Jour: Ref Zhur-Biol., No 2, 1958, 7341

Abstract: settles in the liver, spleen, and kidneys. A high

KHITENKOVA, L.P., mladshiy nauchnyy sotrudnik

Azidine against Hemosporidia infection in sheep. Veterinariia 40 no.3:29 Mr '63. (MIRA 17:1)

1. Gosudarstvennyy nauchno-kontrol'nyy institut veterinarnykh preparatov.

KHITENKOVA, L.P., mladshiy nauchnyy sotrudnik

Testing azidin in large-scale experiments in Hemosporidia infection of sheep. Veterinariia 41 no.5:65 My '64.

(MIRA 18:3)

1. Gosudarstvennyy nauchno-kontrol'nyy institut veterinarnykh preparatov.

KHITEREH, M.Ya., inzh.

Replacement of copper windings with aluminum ones in low power motors. Elektrotekhnika 36 no.3:13-14 Mr '65.

(MIRA 18:6)

S/064/61/000/007/004/005
B124/B206

AUTHORS: Chekhov, O. S., Anokhin, V. N., Shekun, B. N., Khiterer, R.Z.

TITLE: Investigation of hydrodynamic processes in a pseudo-diluted solid-particle layer under high pressure

PERIODICAL: Khimicheskaya promyshlennost', no. 7, 1961, 48 - 50

TEXT: The hydrodynamics of pseudo-diluted solid-particle layers were investigated at 1-300 kg/cm^2 and 25-30°C with a stoichiometric gas mixture used for the synthesis of ammonia. Coke particles of good electrical conductivity and metallic needle- and lamella-shaped filings were used as solid phase. The critical rate velocity of the gas mixture and the height of the pseudo-diluted solid-particle layer during the process were determined. The gas mixture was purified of steam, oil droplets and other impurities, and ducted into a vertical, cylindrical high-pressure column with an inner diameter of 25 mm which contained the solid-particle layer. The mixture was then throttled to atmospheric pressure and its consumption was measured with a rheometer. The transition of the solid-particle layer into the pseudo-diluted state, which corresponded to the critical gas

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velocity, was brought about by closing the circuit. Above the solid-particle layer there was an electric contact which touched the layer after the beginning of the expansion and thus closed the circuit. The second electric contact was connected to the housing of the high-pressure column. For the determination of the height of the pseudo-diluted solid-particle layers, the distance of the upper surface of the stationary layer from the electric contact in the high-pressure column was varied. The determination results obtained during opening were practically equal to those obtained during closing of the circuit. The experimental results obtained for the critical gas velocities were treated according to the method proposed in Ref. 1 (A. I. Rychkov, N. A. Shakhova, IFZh, No. 9, 92 (1959)) for determining the critical gas velocities at various temperatures and atmospheric pressure (Ref. 2: O. M. Todes, A. K. Bondareva, Khim. nauka i prom., 2, No. 2 (1957)). First, the critical gas velocity ω_{cr} (in m/sec) at atmospheric pressure was determined experimentally, this value being a function of the mean particle diameter d_{mean} and the density of the particles, under absolutely equal conditions. From the known value ω_{cr}, the equivalent diameter d_e of the pores in the layer (in m) was calculated

from the equation $d_e^2 - (0.8\omega_{cr}^2 \cdot \gamma_g \cdot l/\Delta P \cdot \varepsilon_o^2 g)\, d_e - (73\nu\omega_{cr} \cdot \gamma_g \cdot l/\Delta P \varepsilon_o g) = 0$ (1), where ω_{cr} is the gas velocity related to the total column diameter, γ_g the density of the gas, l the height of the stationary solid-particle layer, ΔP the pressure difference, ε_o the porosity of the stationary solid-particle layer, g the gravitational acceleration and ν the kinematic viscosity of the gas. The critical velocity of the gas at any pressure was determined from the equivalent diameter by the following equations: 1) for laminar conditions at $Re < 15$ and $Ar(1-\varepsilon_o) < 1100$: $Re = 0.0137Ar(1-\varepsilon_o)$ (2); 2) for transition conditions at $15 < Re < 150$ and $1100 < Ar(1-\varepsilon_o) < 28.2 \cdot 10^3$: $Re = 0.101 \left[Ar(1-\varepsilon_o)\right]^{0.714}$ (3); 3) for turbulent conditions at $150 < Re < 1000$ and $28.2 \cdot 10^3 < Ar(1-\varepsilon_o) < 83 \cdot 10^4$: $Re = 0.512 \left[Ar(1-\varepsilon_o)\right]^{0.556}$ (4); under the given conditions, Reynolds' criterion is $Re = \omega_{cr} \cdot d_e/\nu \cdot \varepsilon_o$ (5), and Archimedes' criterion $Ar = (gd_e^3/\nu^2) \cdot \left[(\gamma_p - \gamma_g)/\gamma_g\right]$ (6), where γ_p denotes the apparent density of the solid particles. Fig. 1 shows the

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experimental results obtained with coke and bronze particles, in the coordinates pressure - critical velocity; likewise, the curves of Eqs. (2), (3) and (4) are recorded with parameters corresponding to experimental conditions. Fig. 2 shows the results obtained in experiments with coke, bronze and aluminum particles, in the coordinates Ar - Re. Eqs. (7) and (8): $Re' = Ar' / \left\{ 150 \left[(1-\varepsilon_0)/\varepsilon_0^3 \right] + \sqrt{(1.75/\varepsilon_0^3) Ar'} \right\}$ (7) or $Ar' = 150 \left[(1-\varepsilon_0)/\varepsilon_0^3 \right] Re' + 1.75 (1/\varepsilon_0^3)(Re')^2$ (8), where $Re' = (\omega_{cr} d/\nu)$ and $Ar' = (gd^3/\nu^2) \left[(\gamma_p - \gamma_g)/\gamma_g \right]$, allow the calculation of the pseudo-dilution rate, accurate to 20%. Fig. 3 shows the experimental data for coke particles with a mean diameter of 1.5 mm at various pressures, plotted in the coordinates gas velocity W - relative height of the pseudo-diluted layer $H_{rel} = H/H_0$ (H is the height of the pseudo-diluted layer and H_0 that of the stationary layer), and Fig. 4 the results obtained in experiments with coke particles of 0.24 and 0.83 mm diameter plotted in the logarithmic coordinates Ar' - Re'. The results for the relative height of the pseudo-diluted layers which determine their porosity, may be calculated with an accuracy of 10% from the equation (see Ref. 3: V. D. Goroshko, R. B. Rozenbaum,

Investigation of... S/064/61/000/007/004/005
B124/B206

O. M. Todes, Izv. vyssh. uch. zav., Neft' Gaz, No. 1 (1958)

$\varepsilon = \left[18Re' + 0.36(Re')^2\right]^{0.21}/Ar'$ (9). The gas velocity at constant degree of expansion of the pseudo-diluted layer is proportional to the critical velocity at $Ar' > 10^4$, which corresponds to the turbulent range. There are 4 figures and 3 Soviet-bloc references.

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CHEKHOV, O.S.; ANOSHIN, V.N.; SHEKOV, B.N.; KHITERER, R.Z.

Hydrodynamic processes in a fluidized bed of solid particles under high pressure. Khim. prom. no.7:492-494 Jl '61. (MIRA 14:7)

(Fluidization)

CHEKHOV, O.S.; KHITERER, R.Z.

Certain problems involved in the synthesis of ammonia in a fluid-bed reactor. Khim.prom. no.4:277-281 Ap '62. (MIRA 15:5)

1. Moskovskiy institut khimicheskogo mashinostroyeniya.
(Ammonia) (Fluidization)

KAZAKOVA, Ye.A.; KHITERER, R.Z.

Generalization of the experimental data on hydrodynamics of a fluidized bed under pressure. Khim.prom. no.11:798-801 N '62. (MIRA 16:2)

(Fluidization) (Hydrodynamics)

KHITEROVICH, M. I.

Evaporation, Clay

Effect of sulfite-alcohol slops on accelerating evaporation in clay drying. P. P. Budnikov, M. I. Khiterovich, O. S. Blokh., Dokl. AN SSSR, 82, no. 1, 1952.

SO: Monthly List of Russian Accessions, Library of Congress, April 1952 ~~1953~~, Uncl.

KHITEV, P.P

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PHASE I BOOK EXPLOITATION SOV/5592

Vsesoyuznoye soveshchaniye po vnedreniyu radioaktivnykh izotopov i yadernykh izlucheniy v narodnom khozyaystve SSSR. Riga, 1960.

Radioaktivnyye izotopy i yadernyye izlucheniya v narodnom khozyaystve SSSR; trudy Vsesoyuznogo soveshchaniya 12 - 16 aprelya 1960 g. g. Riga, v 4 tomakh. t. 4: Poiski, razvedka i razrabotka poleznykh iskopayemykh (Radioactive Isotopes and Nuclear Radiation in the National Economy of the USSR; Transactions on the Symposium Held in Riga, April 12 - 16, 1960, in 4 volumes. v. 4: Prospecting, Surveying, and Mining of Mineral Deposits) Moscow, Gostoptekhizdat, 1961. 284 p. 3,640 copies printed.

Sponsoring Agency: Gosudarstvennyy nauchno-tekhnicheskiy komitet Soveta Ministrov SSSR. Gosudarstvennyy komitet Soveta Ministrov SSSR po ispol'zovaniyu atomnoy energii

Eds. (Title page): N. A. Petrov, L. I. Petrenko, and P. S. Savitskiy; ed. of this volume: M. A. Speranskiy; Scientific ed.: M. A. Speranskiy; Executive Eds.: N. N. Kuz'mina and A. G. Ionel';

Card 1/11

Radioactive Isotopes and Nuclear (Cont.) SOV/5592

Tech. Ed.: A. S. Polosina.

PURPOSE : The book is intended for engineers and technicians dealing with the problems involved in the application of radioactive isotopes and nuclear radiation.

COVERAGE: This collection of 39 articles is Vol. 4 of the Transactions of the All-Union Conference of the Introduction of Radioactive Isotopes and Nuclear Reactions in the National Economy of the USSR. The Conference was called by the Gosudarstvennyy nauchno-tekhnicheskiy komitet Soveta Ministrov SSSR (State Scientific-Technical Committee of the Council of Ministers of the USSR), Academy of Sciences USSR, Gosplan SSSR (State Planning Committee of the Council of Ministers of the USSR), Gosudarstvennyy komitet Soveta Ministrov SSSR po avtomatizatsii i mashinostroyeniyu (State Committee of the Council of Ministers of the USSR for Automation and Machine Building), and the Council of Ministers of the Latvian SSR. The reports summarized in this publication deal with the advantages, prospects, and

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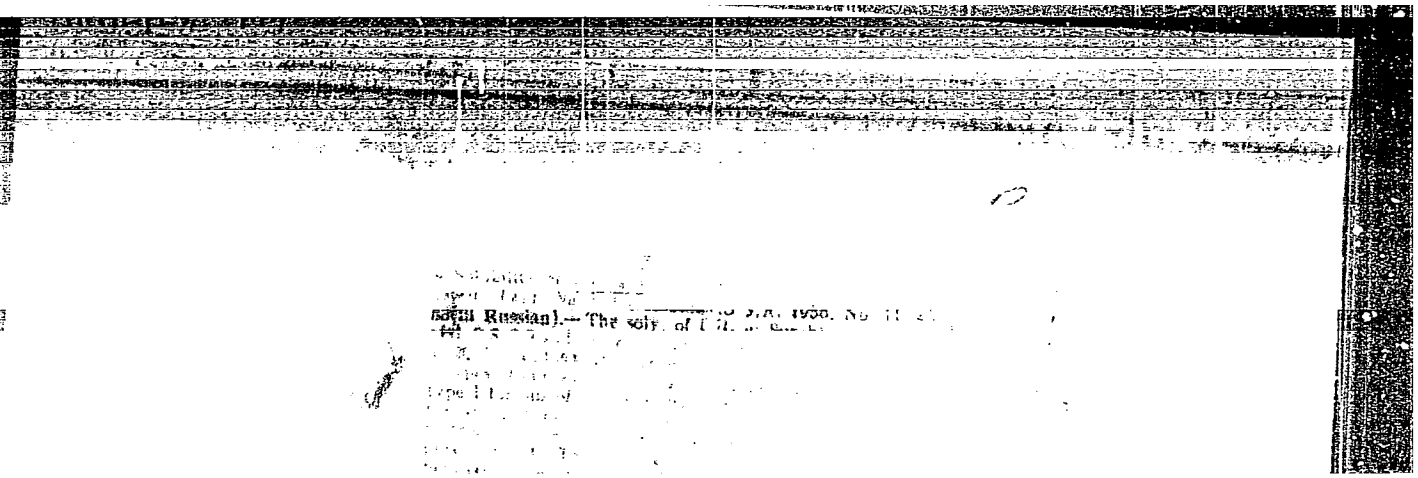
development of radioactive methods used in prospecting, surveying, and mining of ores. Individual reports present the results of the latest scientific research on the development and improvement of the theory, methodology, and technology of radiometric investigations. Application of radioactive methods in the field of engineering geology, hydrology, and the control of ore enrichment processes is analyzed. No personalities are mentioned. There are no references.

TABLE OF CONTENTS:

OCHKUR, A.P.; SOKOLOV, M.M.; BOL'SHAKOV, A.Yu.; KHITEV, P.P.

Possibility of determining the nature of selective logging anomalies. Uch.zap.IGU no.303:274-277 '62. (MIRA 15:11)
(Radioactive prospecting)



KHITEYEV, A.M.

Solubility of ethane and propane in petroleum. Dokl.AN Azerb.SSR 12 no.12:923-934 '56. (MLRA 10:8)

1.Predstavleno akademikom Akademii nauk Azerbaydzhanskoy SSR V.S. Gutyrey.

(Ethane) (Propane) (Petroleum) (Solubility)

KHITEYEV, A.M.

Mercuryless installation for studying the solubility of gases and determining the volumetric coefficients of petroleum. Dokl. AN Azerb. SSR 13 no.2:117-122 '57. (MLRA 10:7)

1. Predstavleno akademikom AN Azerbaydzhanskoy SSR V.S. Gutyray. (Petroleum industry--Equipment and supplies) (Gases) (Solubility)

KHITEYEV, A.M.

USSR/Chemical Technology - Chemical Products and Their Application. Treatment of Natural Gases and Petroleum. Motor and Jet Fuels. Lubricants. I-8

Abs Jour : Ref Zhur - Khimiya, No 1, 1958, 2533

Author : Khiteyev, A.M.

Inst : Academy of Sciences Azerbaydzhan SSR

Title : Relative Solubility of Individual Components of Hydrocarbon Gases in Petroleum.

Orig Pub : Dokl. AN AzerbSSR, 1957, 13, No 3, 253-258

Abstract : A study of the solubility of methane (I), ethane (II) and propane (III) in Surukhanskaya petroleum. Solubility ratio I:II:III is, respectively: at 66° and 5 atmospheres 1:2.84:19.30, at 15 atmospheres 1:3.78:40.42, at 84° and 5 atmospheres 1:3.13:5.0 and at 15 atmospheres 1:3.55:13, i.e., it decreases with rising temperature and increases

Card 1/2

USSR/Chemical Technology - Chemical Products and Their Application. Treatment of Natural Gases and Petroleum. Motor and Jet Fuels. Lubricants. I-8

Abs Jour : Ref Zhur - Khimiya, No 1, 1958, 2533

TSATURYANTS, A.B.; KHITEYEV, A.M.; MURADOV, A.A.

Studying methods of the production of condensate pools to be used in the Karadag field. Trudy AzNII DN no.9:223-228 '60.
(MIRA 14:5)
(Karadag region—Condensate oil wells)

KHITEYEV, A.M.

Distribution constant of methane, ethane, and propane in the systems petroleum — individual component of hydrocarbon gas. Trudy KF VNII no.5:52-60 '61. (MIRA 14:10)
(Hydrocarbons) (Petroleum--Analysis)

KHITEYEV, A.M.

Phase equilibrium of petroleum-hydrocarbon gas systems. Trudy KF VNII no.11:112-120 '63.
(MIRA 17:3)

KHITEYEV, A. M.

Approximate method for calculating certain thermodynamic parameters of gas condensate systems. Gaz. delo no. 11:6-9 '63. (MIRA 17:5)

1. Krasnodarskiy filial Vsesoyuznogo neftegazovogo nauchno-issledovatel'skogo instituta.

KHITEYEV, A.M.

Influence of the gas factor on the thermodynamic parameters of gas-condensate mixtures from fields of the Kushchevskiy type. Gaz. delo no.6/7:27-30 '63. (MIRA 17:10)

1. Krasnodarskiy filial Vsesoyuznogo neftegazovogo nauchno-issledovatel'skogo instituta.

KHITEYEV, A.M.

Determining the losses of condensate in a bed using non-mercurial devices. Gaz. delo no.9:6-8 '64. (MIRA 17:11)

1. Krasnodarskiy filial Vsesoyuznogo neftegazovogo nauchno-issledovatel'skogo instituta.

SOKOLOV, M.M.; KLEVTSOV, P.P.; FEDOROV, A.A.; KHITEYEV, P.P.

Separate determination of uranium, thorium, and potassium in natural occurrence using a scintillation gamma-spectrometer. Vop.rud.geofiz. no.4:48-57 '64. (MIRA 18:1)

ACCESSION NR: AP4019335 S/0152/64/000/002/0049/0054

AUTHOR: Alkhazov, T. G.; Belen'kiy, M. S.; Motyakova, R. I.; Khiteyeva, V.M.

TITLE: A study of catalytic butylene oxidation into divinyl

SOURCE: IVUZ. Neft' i gaz, no. 2, 1964, 49-54

TOPIC TAGS: butylene fast oxidation, catalytic butylene oxidation, divinyl, butylene, CO_2

ABSTRACT: The new methods of oxidizing dehydrogenation of olefines at high rates is the subject of some U.S.A. and British patents. Notwithstanding general interest, very little is known about these processes. The purpose of the authors was a detailed study of how various parameters influence butylene oxidation by air. They undertook tests over a fixed catalyst bed (catalyst not specified). Other conditions were: temperature 450-500C, volumetric velocity reduced to room conditions 1800-9000 hr^{-1}, butylene/air ratio 1:6 to 1:1. In the gaseous reaction products, only divinyl, carbon dioxide and unreacted butylene were found (traces of carbon monoxide and nitrogen enriched air). At a volume-

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ACCESSION NR: AP4019335

tric velocity of 9000 hr^{-1}, the increase of butylene content by 3.8x results in decreased butylene oxidation into divinyl and carbon dioxide (at 450C), with the proportion of decrease being 5.4 and 2.1, respectively. Changes in the initial composition have a different influence on complete and soft oxidation. The maximum productivity is achieved at a volumetric velocity of 9000 hr^{-1}, a temperature of 550C, and butylene/air ratio 1:2. The yield is then 1.6 kg divinyl over one liter of catalyst. The ratio of divinyl/CO_2 yield is then 10 which is the maximum achieved during these tests. Increasing the temperature results in a higher percentage of oxidation and higher effectiveness of the catalyst. This trend continues until the oxygen content reaches a certain minimum when the reaction slows down and secondary reactions (polymerization) set in. Orig. art. has: 4 figures, 1 table.

ASSOCIATION: Azerbaydzhanskiy institut nefti i khimii im. M. Azizbekova (Azerbaidzhan Petroleum and Chemical Institute)

SUBMITTED: 22Nov63 DATE ACQ: 27Mar64 ENCL: 00

SUB CODE: CH NO REF SOV: 003 OTHER: 005

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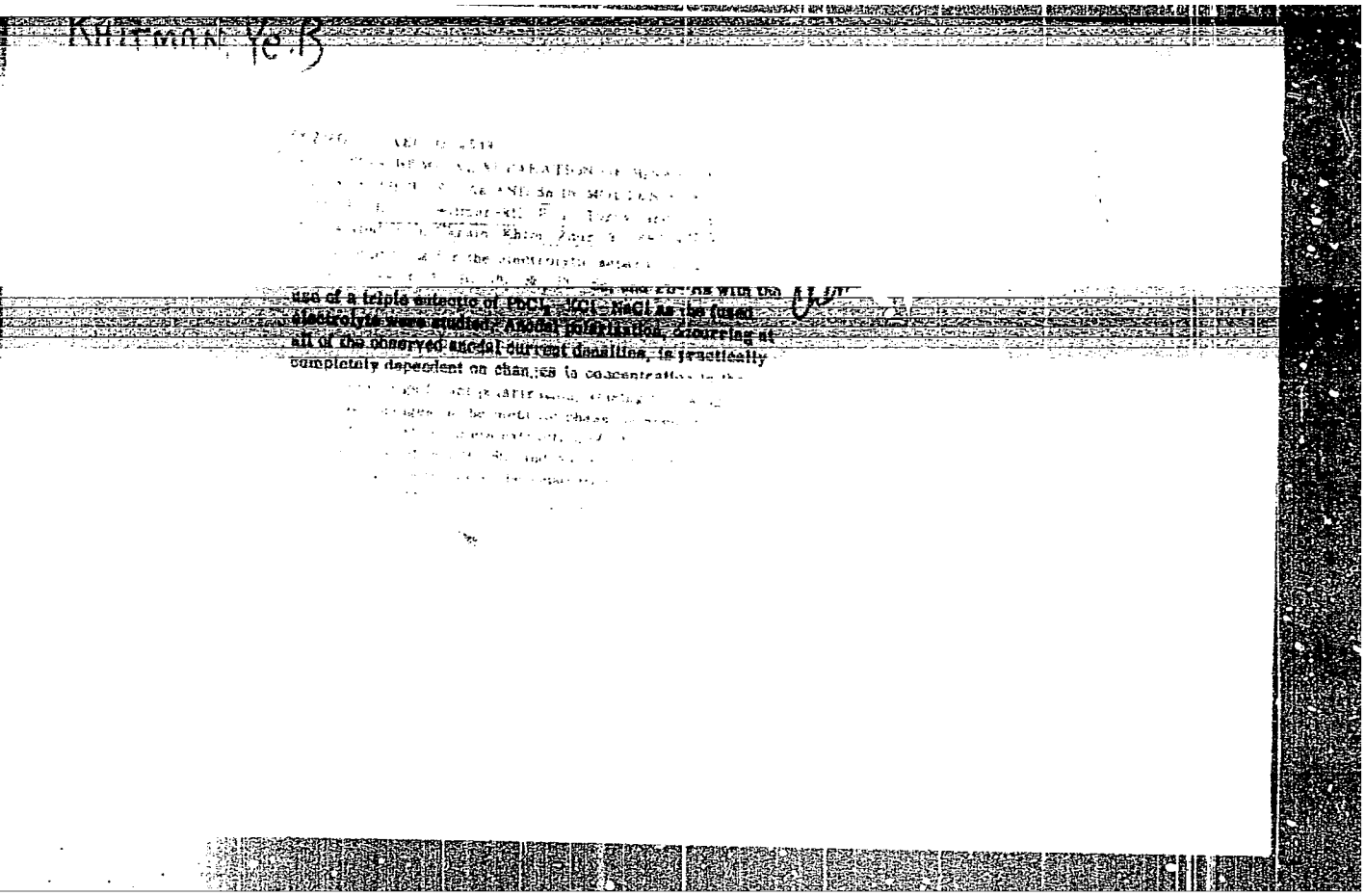

use of a triple eutectic of KCl - LiCl - NaCl as the fused
electrolyte were studied. Anodic polarization, occurring at
all of the observed anodic current densities, is practically
completely dependent on changes in concentration

KHITOV, Ivan

Modern standard dwelling house and its furnishing in Czechoslovakia. Durvomebel prom 5 no.4:15-19 Jl-Ag '62.

1. NIDMP. Chlen na Redaktsionnata kolegiia, "Durvoobrabotvashta i mebelna promishlenost".

KHITOV, Ivan

Use of plastic mass in furniture industries. Durvombel prom 6 no.4:18-20 Jl-Ag '63.

1. NIPK[redacted], chlen na Redaktsionnata kolegiia, "Durvoobrabotvashta i mebelna promishlenost".

KADANOV, Dimitur, prof. d-r.; MUTAFOV, Stefan, St., d-r; KHITOV, Ivan Nikolov; ANDREEV, Liuben Savov, arkh.

Sedoanthropometer, a device for anthropological measurement of sitting positions. Durvomebel prom 7 no.1:27-29 Ja-F'64

1. Chlen korespondent na Bulgarskata akademiia na naukite (for Kadanov).

SMELOVSKIY, V.P., dotsent; KHITOVA, A.G., assistent

Changes in the vessels of the urinary bladder in hemorrhoids.
Klem.prokt. no.2:81-86 '60. (MIRA 14:11)

1. Iz kafedry gospital'noy khirurgii, zaveduyushchiy kafedroy prof. A.M. Aminev i iz kafedry fakul'tetskoy khirurgii, zaveduyushchiy kafedroy prof. S.L. Libov.
(HEMORRHOIDS) (BLADDER--DISEASES)

KHITOVA, A.G., assistent

Etiology and treatment of hemorrhoids. Elem.prokt. no.2:86-89 '60. (MIRA 14:11)

(HEMORRHOIDS)

MISHCHENKO, N.M., inzh.; BERDICHEVSKIY, Ye.Ye., inzh.; TERMINOSYAN, N.S., inzh.; KURILOV, A.I., inzh.; POLYAKOV, M.M., inzh.; DEMIDOVICH, Ye.A., inzh.; PINDYURIN, N.I., inzh.; Prinimali uchastiye: MALINOVSKIY, V.G.; MOLCHANOV, I.V.; MASHISHINA, M.P.; YEMCHENKO, Ye.K.; CHEREDNICHENKO, A.A.; STEPANOV, V.A.; SKACHKOV, L.N. [deceased]; KOSHMAN, A.I.; SHCHEKLIN, V.V.; CHUBATYUK, Ye.G.; KHITOVA, Ye.Ye.; KOROBOVA, G.Z.; ROTMISTROVSKIY, B.M.; VEYSBEYN, A.D.

Increasing the efficiency of section tandem mills by the use of repeaters. Stal' 23 no.3:236-241 Mr '63. (MIRA 16:5)

1. Yenakiyevskiy metallurgicheskiy zavod.
(Rolling mills--Equipment and supplies)

STASHCHUK, Mikhail Fedorovich; SUPRYCHEV, Vladimir Andreyevich; KHITRAYA, Mariya Stepanovna; YURK, Yu.Yu., doktor geol.-miner. nauk, otv. red.; CHEKHOVICH, N.ya., red.

[Mineralogy, geochemistry, and conditions governing the formation of the bottom sediments of Sivash] Mineralogiia, geokhimiia i usloviia formirovaniia donnykh otlozhenii Sivasha. Kiev, Naukova dumka, 1964. 172 p.
(MIRA 18:1)

ACCESSION NR: AP4019471 S/0133/64/000/003/0228/0228

AUTHORS: Frantsev, V. P. (Engineer); Moshkevich, Ye. I. (Candidate of technical sciences); Khitrik, A. I. (Engineer)

TITLE: /Vliyaniye dobavok.../ The influence of rare earth elements and of their oxides on the properties of stainless steels (in collaboration with Giredmet)

SOURCE: Stal', no. 3, 1964, 228

TOPIC TAGS: stainless steel, stainless steel property, rare earth element, rare earths oxide, induction furnace IV 60, Mishima alloy, ferrocerium, lanthanum, cerium oxide, praseodymium, carbonitride inclusion, titanium, steel Kh18N10T, steel Kh17N13M2T

ABSTRACT: Mishima alloy, ferrocerium, lanthanum with cerium oxide, and lanthanum with praseodymium were added to experimental batches of stainless steels Kh18N10T, Kh23N18, and Kh17N13M2T melted in induction furnace IV-60 of 45-kg capacity. Addition of Mishima alloy to titanium steel lowered the amount of carbonitride inclusions. Plasticity of steel Kh18N10T and steel Kh17N13M2T was improved when 0.1% of Mishima alloy was added to the former and 0.15% to the latter. No change

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ACCESSION NR: AP4019471

of plasticity was noted when oxides of rare earth elements were added to steel.

ASSOCIATION: none

SUBMITTED: 00 DATE ACQ: 27Mar64 ENCL: 00

SUB CODE: ML NO REF SOV: 000 OTHER: 000

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S/0133/64/000/003/0233/0233

ACCESSION NR: AP4019479

AUTHORS: Frantsov, V. P. (Engineer); Moshkevich, Ye. I. (Candidate of technical sciences); Khitrik, A. I. (Engineer)

TITLE: /Issledovaniye.../ Investigating the possibility of rolling difficult to work steels in mill 550

SOURCE: Stal', no. 3, 1964, 233

TOPIC TAGS: steel rolling, steel Kh17N2, steel EI811, steel Kh18N12M2T, steel Kh23N18, steel EI481, steel heating, steel soaking

ABSTRACT: A successful process for rolling 180-mm square shapes of steels Kh17N2 and EI811 was perfected. For consistent production with clear, unscarred surfaces, the metal is heated to 1320C and soaked at 1300C for 40 minutes. A process for rolling 180-mm square shapes of steels Kh18N12M2T, 3T, Kh23N18, and EI481 was also developed.

ASSOCIATION: Elektrometallurgicheskiy zavod "Dneprospetsstal'" im. A. N. Kuz'mina

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KHASIN, G.A.; DAVIDYUK, V.N.; FRANTSOV, V.P., inzh.; KHITRIK, A.I., inzh.; MATVEYEV, Yu.M.; VARNAVSKIY, I.; RYSYUKOV, N.; ZHURAVLEV, S.

New developments in research. Stal' 24 no.10:880, 898, 909, 917, 930, 942, 946 O '64. (MIRA 17:12)

L 51302-65 EWT(m)/EWP(z)/EWP(b)/EWA(d)/EWP(t) JD/MJW
ACCESSION NR: AP5016416 UR/0133/64/000/010/945/945

AUTHOR: Frantsov, V.P. (Engineer); Khitrik, A.I. (Engineer)

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8

TITLE: Improvement in the reduction of steel 20Kh15N3MA

SOURCE: Stal', no. 10, 1964, 945

TOPIC TAGS: steel, metallurgic process/20Kh15N3MA steel

TRANSLATION: Steel 20Kh15N3MA (DI-1) was poured into round casts weighing 1 ton each after annealing and scalping were forged into bars and electrodes for electro-slag welding. In connection with the [illegible] weighing [illegible] pressed into electrodes [illegible] technology for reducing ingots on an 02) mill was as follows: raising the steel temperature in the heating compartment from 800°C at a maximum rate to 1200°C, soaking at this temperature for 3 minutes per cm of cross section, and rolling with reductions of 25-30 mm per pass.

ASSOCIATION: none

SUBMITTED: 00 ENCL: 00 SUB CODE: MM

NO REF SOV: 000 OTHER: 000 JPRS

Card 1/1

L 35335-66 EWT(m)/EWP(w)/T/EWP(t)/ETI IJP(c) JH/JD

ACC NR: AP6012771 SOURCE CODE: UR/0226/66/000/004/0051/0054

AUTHOR: Khitrik, A. S.

ORG: UkrNIIspetsstal', Zaporozh'ye

TITLE: Effect of heat treatment on the magnetic and electric properties of magnesium-aluminum superhigh-frequency ferrites

SOURCE: Poroshkovaya metallurgiya, no. 4, 1966, 51-54

TOPIC TAGS: magnesium aluminum ferrite, ferrite, heat treatment, magnetic property, electric property, saturation magnetization

ABSTRACT: The author presents a study of the temperature dependence of magnetization in the temperature range 120--560K and resistivity at 20C in a superhigh-frequency ferrite composition $MgAl_{0.3}Fe_{1.7}O_4$ before and after quenching in water at 1200C, as well as after subsequent annealing at 500 and 800C for five hr. The percentage of FeO was determined before and after quenching. It was shown that, as a result of quenching, the saturation magnetization increased approximately 2.4 times; the resistivity decreased by seven orders; the Curie point decreased by approximately 50C. Orig. art. has: 2 figures and 1 table. [Based on author's abstract] [AM]

SUB CODE: 11, 20/ SUBM DATE: 22Jul65/ ORIG REF: 003/ OTH REF:

Card 1/1

KHITRIK, G.M.; VORONTSOV, I.M.

Case of congenital hypoplastic anemia (panecytopenia) combined with nanism and hypoplasia of the kidneys. Vop. gemat. v pediat. no.3:190-193 '64. (MIRA 18:7)

KURACHEVA, N.A.; KHITRIK, G.M.; VORONTSOV, I.M.

Fanconi's congenital aplastic anemia. Vop. gemat. i pediat. no.3: 194-202 '64.

Diamond-Blackfan's congenital hypoplastic anemia. Ibid.:203-209 (MIRA 18:7)

KHITRIK, G.M.; VORONTSOV, I.M.

Clinical aspects of cytomegaly in infants. Sov. med. 26 no.2 72-78 F'63. (MIRA 16:6)

1. Iz kafedry gospital'noy pediatrii (zav. - deystvitel'nyy chlen AMN SSSR zasluzhennyy deyatel' nauki prof. A.F.Tur) Leningradskogo pediatricheskogo meditsinskogo instituta.
(VIRUS DISEASES) (PREGNANCY, COMPLICATIONS OF)
(INFANTS (NEWBORN) -- DISEASES)

KHITRIK, I. I.

KHITRIK, I. I. "Medical Physical Culture for Hypertension Diseases in Combination with Artificaial Hydrogen Sulfide Baths." Cand Med Sci, Central Inst for the Advanced Training of Physicians, 15 Jan 54. (Vechernyaya Moskva, 22 July 54)

SO: SUM 168, 22 July 1954

KHITRIK, I.I.

"Physical culture therapy combined with artificial hydrogen sulfide baths: in hypertension." Vop.kur.fizioter. i lech.fiz.kul't . no.1:81 Ja-Mr '55. (MLRA 8:8)

(Exercise therapy) (Baths, Medicated) (Hypertension)

KHITRIK, I.I.

Neurovascular reaction to exercise therapy in hypertension. Vop.kur. fizioter. i lech.fiz.kul't. 21 no.4:52-56 O-D '56. (MLRA 9:12)

1. Iz otdeleniya lechebnoy fizicheskoy kul'tury (zav. - prof. V.N. Moshkov) TSentral'nogo instituta kurortologii (dir. - kandidat meditsinskikh nauk G.N.Pospelova)
(HYPERTENSION) (EXERCISE THERAPY)

KHITRIK, I.I., kand.med.nauk

Exercise therapy in deforming spondylosis. Zdorov'e 6 no.5: 26-27 My '60. (MIRA 13:6)
(SPINE--DISEASES) (EXERCISE THERAPY)

BELAYA, N.A.; KHITRIK, I.I.

Problems of spa and climatological treatment and of medical physical training discussed at the Ukrainian Republican Conference on hypertension, arteriosclerosis, and coronary insufficiency. Vop. kur., fizioter. i lech.fiz.kul't. 27 no.1:89-90 '62. (MIRA 15:5)
(THERAPEUTICS, PHYSIOLOGICAL)
(CARDIOVASCULAR SYSTEM--DISEASES)

KRYACHKO, I.A., dots., otv. red.; MOSHKOV, V.N., prof., red.; LETUNOV, S.P., prof., red.; IONINA, A.V., dots., red.; MOTYLYANSKAYA, R.Ye., kand. med. nauk, red.; KUKOLEVSKIY, G.M., red.; KHITRIK, I.I., kand. med.nauk, red.; ASKEROV, A.A., kand. [redacted] red.; LYUDKOVSKAYA, N.I., tekhn. red.

[Physical culture and health] Fizicheskaia kul'tura i zdorov'e; trudy. Moskva, Medgiz, 1963. 375 p. (MIRA 16:7)

1. Vsesoyuznaya nauchno-prakticheskaya konferentsiya po vrachebnomu kontrolyu i lechebnoy fizicheskoy kul'ture. Moscow, 1961. 2. TSentral'nyy nauchno-issledovatel'skiy institut fizicheskoy kul'tury (for Letunov, Motylyanskaya). 3. Laboratoriya meditsinskogo kontrolya Gosudarstvennogo tsentral'nogo ordena Lenina instituta fizicheskoy kul'tury (for Kukolevskiy). 4. Chlen-korrespondent AMN SSSR i TSentral'nyy institut usovershenstvovaniya vrachey (for Moshkov). 5. TSentral'nyy institut kurortologii i fizioterapii (for Khitrik).

(SPORTS MEDICINE--CONGRESSES)

ACCESSION NR: AR4015546 S/0137/63/000/011/I028/I028

SOURCE: RZh. Metallurgiya, Abs. 11I193

AUTHOR: Khitrik, I.S.

TITLE: The aging of stainless austenitic steels containing boron

CITED SOURCE: Sb. Proiz-vo trub. Khar'kov, Metallurgizdat, vy*p. 8, 1962, 74-83

TOPIC TAGS: stainless steel, steel aging, boron (in) steel, austenitic steel

TRANSLATION: Austenitic steels of the 1Kh18N9, Kh18N11B, and 1Kh18N9T steels were studied for the effect of B on the changes in hardness and a_k during the aging process. The aging of Steels quenched from 1200° was carried out at 600, 700, and 800° for 1-100 hours. The presence of B in amounts of 0.003-0.085% in 1Kh18N9T retards dispersion hardening, weakening, and coagulation with high-temperature annealing. Electron-microscopic studies showed that the addition of 0.085% B in 1Kh18N9T alters the separation processes accompanying aging. The alloying of 1Kh18N9T with titanium, and especially with niobium, accelerates the aging process.

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ACCESSION NR: AR4015546

The aging of 1Kh18N9T poured in an Ar atmosphere is more active than that of the steel poured in the usual way. V. Kosikhin.

DATE ACQ: 09Dec63 SUB CODE: ML ENCL: 00

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S/137/63/000/002/004/034
A006/A101

AUTHOR: Khitrik, I. S.

TITLE: The effect of boron on the structure of initial crystallization, the content of gases and non-metallic impurities in stainless austenitic steels

PERIODICAL: Referativnyy zhurnal, Metallurgiya, no. 2,1963, 49 - 50, abstract 2V328 (In collection: "Proiz-vo trub", no. 7, Khar'kov, Metallurgizdat, 1962, 109 - 117)

TEXT: The author investigates the effect of B upon the structure of initial crystallization, the content of gases and non-metallic impurities in stainless austenitic steels 1X18H9 (1Kh18N9), 1X18H9T (1Kh18N9T) and X18H11B (Kh18N11B). Boron has a positive effect upon the structure of initial crystallization of these steels (it destroys the transcrystalline structure and refines the grains). The optimum B content, yielding a modifying effect, depends upon the composition of the steel. The 1Kh18N9 steel ingot had a coarse transcrystalline structure. Additions of 0.003 and 0.005% B did not considerably affect

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The effect of boron on the structure of...

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the crystallization nature of this steel. The addition of 0.09% B caused noticeable changes in its structure; the latter consisted mainly of equiaxial crystals. The introduction of B into 1Kh18N9T steel in amounts up to 0.009% did not change its microstructure. Only the addition of 0.085% B destroyed the transcrystalline zone which was observed on the periphery of the ingot. The addition of small B amounts (0.003%) in steel with Nb (grade Kh18N11B), changed its structure noticeably: the zone of transcrystallites was contracted, and a zone of equiaxial grains was formed. The introduction of 0.005% B to steel with Nb causes the disappearance of the transcrystalline zone; the whole ingot consists of fine equiaxial grains. A further increase of the B amount entails again transcrystallization. B raises the quality of forged 1Kh18N9T steel, reducing its proneness to the formation of "titanous porosity". B does almost not affect gas saturation of 1Kh18N9 steel. The presence of B in steel with Ti or Nb reduces sharply their gas saturation (in particular O and N). The admixture of 0.005% B in steel with Nb reduces gas saturation from 71.0 ml/100 g to 32.5 ml/100 g. The addition of B in an amount as high as 0.085% to steel with Ti, reduced the gas content by almost a factor of 4. Teeming of 1Kh18N9T steel under argon improves its quality; the gas content is reduced (by almost a factor of 4).

[Abstracter's note: Complete translation]

I. Kekalo

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S/137/63/000/001/015/019
A006/A101

AUTHOR: Khitrik, I. S.

TITLE: Mechanical properties and ductility of stainless austenitic steels in hot state depending upon their boron content

PERIODICAL: Referativnyy zhurnal, Metallurgiya, no. 1, 1963, 57, abstract 1I325 (In collection: "Proiz-vo trub", no. 7, Khar'kov, Metallurgizdat, 1962, 118 - 127)

TEXT: The author determined the effect of B upon the mechanical properties of stainless austenitic steels 1 X 18H 9 (1Kh18N9), 1 X 18H 9 T (1Kh18N9T) and X 18H 11 B (Kh18N11B) at hot treatment temperatures (900 - 1,275°C). Tests were carried out for rupture, a_k, torsion and piercing ability. The B content in the ingots was for steel 1Kh18N9 0.003; 0.005 and 0.090%; for 1Kh18N9T steel 0.003, 0.005, 0.006, 0.009, 0.030, and 0.085%; for Kh18N11B 0.003 and 0.005%. It was established that the indicated amounts of B did not considerably affect σ_b, but changed substantially δ and ψ (towards both higher and lower values). The nature of the B effect depends upon its added amount and the

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chemical composition of the steel. In the majority of cases the presence of B in amounts as high as 0.005% and more (depending on the steel grade) has a negative effect upon δ and ψ in the high-temperature range of the investigated interval. A decrease in δ over the whole temperature range investigated in case of B admixture, measured in hundredths of percent, is characteristic of steel with Ti (1Kh18N9T). The B admixture in 1Kh18N9 and 1Kh18N9T steels, in amounts as high as 0.005% and more, reduces sharply their a_k at temperatures over 1,150°C. The B admixture to Kh18N11B steel shifts the beginning of an abrupt a_k drop towards higher (at 0.003% B) or lower (at 0.005% B) temperatures. Technological steel tests for torsion and piercing ability show that B promotes an increase in ductility (in particular for 1Kh18N9T steel) in a narrow temperature range, above which it drops abruptly. The conclusion is drawn that the presence of narrow high-ductility ranges in steels with B has no considerable practical interest, since this property is hardly suitable for hot pressure working.

I. Kekalo

[Abstracter's note: Complete translation]