CHUKHROV, F.V.

Geological excursion of the participants of the 21st session of the International Geological Congress to ore deposits in southern and central Norway. Geol. rud. mestorozh. no.1:105-112 Ja-F '61. (MIRA 14:4)

1. Institut geologii rudnykh mestorozhdenii, petrografii, mineralogii i geokhimii AN SSSR.
(Norway--Ore deposits) (Geology--Congresses)

CHUKHROV, F.V.; SENDEROVA, V.M.; YANCHENKO, M.T.

Leand and copper contents in bismuthine from Northern Koundar deposits. Trudy Min. muz. no.11:205-210 '61. (MIRA 16:7)

(Kounrad region--Bismuthite)

AFANAS'YEV, G.D.; BARSANOV, G.P.; VLASOV, K.A.; KORZHINSKIY, D.S.; MIRCHINK, M.F.; NALIVKIN, D.V.; PAVLOVSKIY, Ye.V.; PEYVE, A.V.; SMIRNOV, V.I.; STRAKHOV, N.M.; CHUKHROV, F.V.; SHCHERBAKOV, D.I.; YABLOKOV, V.S.

Oleg Dmitrievich Levitskii; obituary. Izv.AN SSSR.Ser.geol. 26 no.6:110-111 Je '61. (MIRA 14:6)
(Levitskii, Oleg Dmitrievich, 1909-1961)

ABDULLAYEV, Kh.M.; ALYAVDIN, V.F.; AMIRASLANOV, A.A.; ANIKEYEV, N.P.; ARAPOV, Yu.A.; BARSANOV, G.P.; BELYAYEVSKIY, N.A.; BOKIY, G.P.; BORODAYEVSKAYA, M.B.; GOVOROV, I.N.; GODLEVSKIY, M.N.; SHCHEGLOV, A.D.; SHAKHOV, F.N.; SHILO, N.A.; YARMOLYUK, V.A.; DRABKIN, I.Ye.; YEROFEYEV, B.N.; YERSHOV, A.D.; IVANKIN, P.F.; ITSIKSON, M.I.; KARPOVA, Ye.D.; KASHIN, S.A.; KASHKAY, M.A.; KORZHINSKIY, D.S.; KOSOV, B.M.; KOTLYAR, V.N.; KREYTER, V.M.; KUZNETSOV, V.A.; LUGOV, S.F.; MAGAK'YAN, I.G.; MATERIKOV, M.P.; OBRUCHTSOV, M.M.; PAVLOV, Ye.S.; SATPAYEV, K.I.; SMIRNOV, V.I.; SOBOLEV, V.S.; SOKOLOV, G.A.; STRAKHOV, N.M.; TATARINOV, I.M.; KHRUSHCHOV, N.A.; TSAREGRADSKIY, V.A.; CHUKHROV, F.V.

In memory of Oleg Dmitrievich Levitskii; obituary. Sov.geol. 4 no.5:156-158 My '61. (MIRA 14:6)
(Levitskii, Oleg Dmitrievich, 1909-1961)

CHUKHROV, F.V.

Zinciferous oligonite from Sherlovaya Gora. Dokl.AN SSSR 138 no.2: 429-430 My '61. (MIRA 14:5)

1. Insitut geologii rudnykh mestorozhdeniy, petrografii, mineralogii i geokhimii Akademii nauk SSSR. Chlen-korrespondent AN SSSR.
(Sherlovaya Gora--Oligonite) (Zinc)

PANKOV, V.P.; CHUKHROV, F.V.

Mineralogy of the Manka gold-tellurium ore deposit of the southern Altai. Min. sbor. no.16:195-209 '62. (MIRA 16:10)

1. Institut geologii rudnykh mestorozhdeniy, petrografii, mineralogii i geokhimii AN SSSR.
(Altai Mountains—Gold ores)
(Altai Mountains—Tellurium)

CHUKHROV, F.V.; SHLAYN, L.B.

Alterations of the composition during the greisenization of granites in the Kounrad massif. Izv. AN SSSR. Ser.geol. 27 no.9:27-47 S '62. (MIRA 15:9)

1. Institut geologii rudnykh mestorozhdeniy, petrografii, mineralogii i geokhimii AN SSSR, Moskva.
(Kounrad region--Greisen) (Kounrad region--Granite)

AFANAS'YEV, G.D.; BARSANOV, G.P.; VLASOV, K.A.; KORZHINSKIY, D.S.; MIRCHINK, M.F.; PAVLOVSKIY, Ye.V.; PEYVE, A.V.; SMIRNOV, V.I.; CHUKHROV, F.V.; SHCHERBAKOV, D.I.; YABLOKOV, V.S.

In memory of Kh.M.Abdullaev. Izv. AN SSSR. Ser.geol. 27 no.9: 117-118 S '62. (MIRA 15:9)
(Abdullaev, Khabib Mukhamedovich, 1912 (?)-1962)

CHUKHROV, F. V.

Third Session of the International Mineralogical Association.
Izv. AN SSSR Ser. geol. 27 no.10:121-124 O '62.
(MIRA 15:10)

(Mineralogical societies)

CHUKHROV, F.V.

Third Session of the International Mineralogical Association.
Vest.AN SSSR 32 no.8:99-101 Ag '62. (MIRA 15:8)

1. Chlen-korrespondent AN SSSR.
(Mineralogy—Congresses)

CHUKHROV, F. V.; BONSHTEDT-KUPLETSKAYA, E. M.

Apropos of the review of volume 1 "Minerals"; a reference book by A. A. Kukharenko, V. A. Frank-Kamenetskii, I. I. Shafranovskii. Zap. Vses. min. ob-va 91 no.4:498-502 '62. (MIRA 15:10)

(Minerals) (Kukharenko, A. A.)
(Frank-Kamenetskii, V. A.) (Shafranovskii, I. I.)

CHUKHROV, F. V.; BERKHINA, S. I.; YERMILOVA, L. P.; MOLEVA, V. A.

"Allophanes from some deposits of the U.S.S.R. ."

Report submitted for the International Clay Conference, Stockholm, Sweden, 12-16 Aug 63.

CHUKHROV, F.V., otv. red.; BONSHTEDT-KUPLETSKAYA, E.M., doktor geol.-min. nauk, otv. red. [illegible], I.G., red.izd-va; POLYAKOVA, T.V., tekhn. red.

[Minerals; a manual] Mineraly; spravochnik. Moskva, Izd-vo AN SSSR. Vol.2. No.1. [Halides] Galogenidy. 1963. 295 p. (MIRA 17:1)

1. Akademiya nauk SSSR. Institut geologii rudnykh mestorozhdeniy, petrografii, mineralogii i geokhimii. 2. Chlen-korrespondent AN SSSR (for Chukhrov).

CHUKHROV, F.V.; MOLEVA, V.A.; BERKHIN, S.I.

Mixture of zinc montmorillonite and halloysite from the Maykain deposit. Kora vyvetr. no.5:3-6 '63. (MIRA 16:7)

1. Institut geologii rudnykh mestorozhdeniy, petrografii, mineralogii i geokhimii AN SSSR.
(Pavlodar Province—Montmorillonite)
(Pavlodar Province—Halloysite)

CHUKHROV, F.V.; BERKHIN, S.I.; MOLEVA, V.A.

Opalization of clay minerals in the oxidation zone of deposits in the steppes of Kazakhstan. Kora vyvetr. no.5:17-23 '63. (MIRA 16:7)

1. Institut geologii rudnykh mestorozhdeniy, petrografii, mineralogii i geokhimii AN SSSR.

(Kazakhstan—Clay)
(Kazakhstan—Opals)

CHUKHROV, F.V.; BERKHIN, S.I.; YERMILOVA, L.P.

Clay minerals of the Akmaya deposit. Kora vyvetr. no.6:3-12 '63.
(MIRA 17:9)

1. Institut geologii rudnykh mestorozhdeniy, petrografii, mineralogii i geokhimii AN SSSR.

CHUKHROV, F.V.

Possible influence of vadose waters on the mineralization of some hydrothermal deposits. Geol. rud. mestorozh. 6 no.1:3-14 Ja-F '64. (MIRA 17:11)

1. Institut geologii rudnykh mestorozhdeniy, petrografii, mineralogii i geokhimii AN SSSR.

CHUKHROV, F.V.; BERKHIN, S.I.; YERMILOVA, L.P.; MOLEVA, V.A.; RUDNITSKAYA, Ye.S.

Allophanes. Izv. AN SSSR. Ser. geol. 29 no.4:3-19 Ap'64. (MIRA 17:5)

1. Institut geologii rudnykh mestorozhdeniy, petrografii, mineralogii i geokhimii AN SSSR, Moskva.

CHUKHROV, F.V.; SHANIN, L.L.; YERMILOVA, L.P.

Possibility of the absolute age determination of manganese minerals containing potassium. Izv. AN SSSR. Ser. geol. 30 no.2:3-6 F '65. (MIRA 18:4)

1. Institut geologii rudnykh mestorozhdeniy, petrografii, mineralogii i geokhimii AN SSSR, Moskva.

CHUKHROV, F.V.; GENKIN, A.D.; SOBOLEVA, S.V.; BASOVA, G.V.

Smythite from iron ore sediments in the Kerch Peninsula. Lit. i pol. iskop. no.2:60-69 Mr-Ap '65. (MIRA 18:6)

1. Institut geologii rudnykh mestorozhdeniy, mineralogii, petrografii i geokhimii, Moskva.

CHUKHROV, F.V.

Role of colloids in ore formation. Sov. geol. 8 no.2:3-15 F '65. (MIRA 18:12)

SHCHERBAKOV, D.I., akademik; CHUKHROV, F.V.; VOL'FSON, F.I., doktor geol.-min. nauk; LUKIN, L.I.

Scientific work of Academician Iosif Fedorovich Grigor'ev. Izv. AN SSSR. Ser.geol. 30 no.11:110-114 N '65. (MIRA 18:12)

1. Chlen-korrespondent AN SSSR (for Chukhrov).

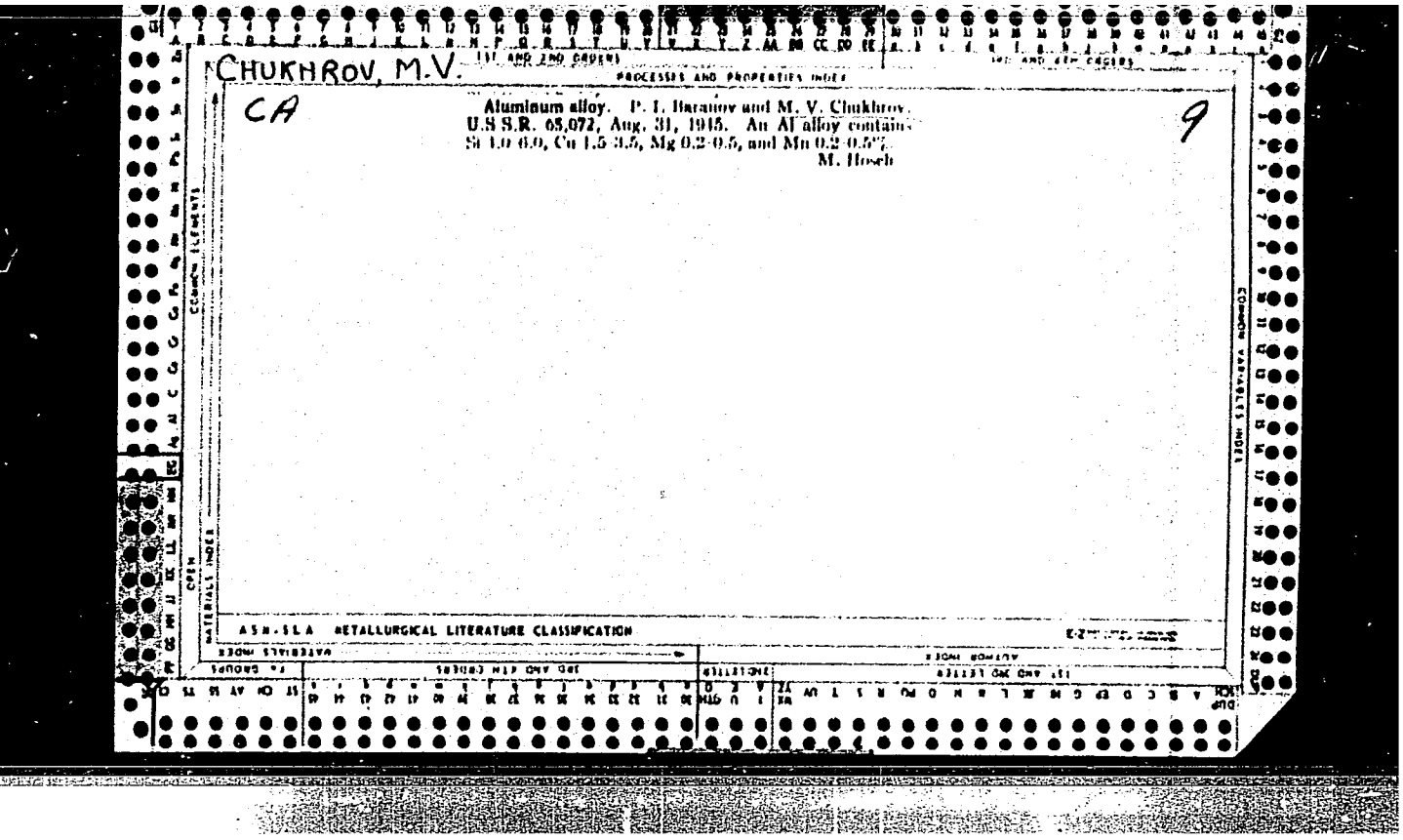
CHUKHROV, F.V.; RUDNITSKAYA, Ye.S.; MOLEVA, V.A.; YERMILOVA, L.P.

Phosphate allophanes. Izv. AN SSSR. Ser. geol. 30 no.3: 51-57 Mr '65. (MIRA 18:3)

1. Institut geologii rudnykh mestorozhdeniy, petrografii, mineralogii i geokhimii AN SSSR, Moskva.

CHUKHROV, M.V.; VYATKIN, I.P.; SOKOLOV, V.V.

Continuous horizontal casting of magnesium. TSvet. met. 36 no.12:60-64 D '63. (MIRA 17:2)



CHUKHROV, M.V.

CA

9

Aluminum alloy. P. I. Baranov and M. V. Chukhrov. U.S.S.R. 65,072, Aug. 31, 1945. An Al alloy contains Si 1.0-6.0, Cu 1.5-3.5, Mg 0.2-0.5, and Mn 0.2-0.5%. M. Hosch

ASM-SLA METALLURGICAL LITERATURE CLASSIFICATION

CHUKHROV, MATVEY VASIL'YEVICH

FRIDLYANDER, Iosif Naumovich, redaktor; CHUKHROV, Matvey Vasil'yevich, redaktor; LAGOVSKAYA, M.S., redaktor; ROZHIN, V.P., tekhnicheskiy redaktor

[Metallurgical principles of founding light alloys] Metallurgicheskie osnovy lit'ia legkikh splavov; sbornik statei. Moskva, Gos. izd-vo obor. promyshl., 1957. 442 p. (MLRA 10:7)
(Founding) (Alloys)

Chukhrov, M.V.

137-1958-1-523

Translation from: Referativnyy zhurnal, Metallurgiya, 1958, Nr 1, p 83 (USSR)

AUTHORS: Chukhrov, M.V., Sokolova, A.I.

TITLE: A Study of the Process of Crystallization and the Properties of Large Ingots of VM65-1 Alloy (Izucheniye protsessa kristallizatsii i svoystv krupnykh slitkov splava VM65-1)

PERIODICAL: V sb.: Metallurg. osnovy lit'ya legkikh splavov. Moscow, Oborongiz, 1957, pp 47-55

ABSTRACT: The major parameters of semi-continuous casting of a round ingot of this Mg alloy 530 mm in diameter for the production of blanks of large cross-section have been established. A crystallizer was used with delivery of water onto the ingot through a hole drilled at a 10° angle to the axis of the ingot. Test ingots were cast at speeds of 3, 3.6, and 4 cm/min. It was found that an increase in casting speed made for a reduction of the quantity of segregations per ingot. At a casting rate of 3.6 cm/min, thermal analysis of the crystallization and cooling of the ingot was done with the aid of chromel-aluminum thermocouples. It was found that the center of the ingot cools more uniformly than the outside. Ingots of 530 mm diameter presented the same equiaxial and fine-

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137-1958-1-523

A Study of the Process of Crystallization (cont.)

grained structure as those of 370 mm diameter, and had the same mechanical properties.

1. Magnesium alloys--Casting--Test results 2. Magnesium alloys--Properties 3. Magnesium alloys--Crystallization V.G.

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Chukhrov, M.V.

137-1958-2-2693

Translation from: Referativnyy zhurnal, Metallurgiya, 1958, Nr 2, p 71 (USSR)

AUTHORS: Chukhrov, M.V., Anikina, A.D.

TITLE: An Experimental Study of Some of the Physicochemical Processes Which Occur During Preparation of Alloy VM65-1 (Opytnoye issledovaniye nekotorykh fiziko-khimicheskikh protsessov pri prigotovlenii splava VM65-1)

PERIODICAL: V sb.: Metallurg. osnovy lit'ya legkikh splavov. Moscow, Oborongiz, 1957, pp 56-62

ABSTRACT: A study was made of new methods of introducing K_2ZrF_6 (mixed with NaCl, KCl, CaF_2, LiF in varying proportions); tests were also made of the fluxing qualities of carnallite, a substance which lowers surface tension more than do the fluxes in current use. The alloy was prepared as follows: Zn was introduced into the molten Mg at 720°, after which the melt was superheated to 900-920°; then K_2ZrF_6 was added (at the same temperature) in a quantity equal to 4.5 percent of the total weight of the charge. Two salts of K_2ZrF_6 were used; both had a high Al content (0.5 and 1.55 percent). When 4.5 percent K_2ZrF_6 salt containing 1.55 percent Al

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137-1958-2-2693

An Experimental Study of Some of the Physicochemical Processes (cont.)

was added to a 5 kg heat, it was possible that the intermetallic compound Zr_3Al would combine with 35 g of the Zr, i.e., with almost 50 percent of the total quantity of Zr added to the alloy. When a K_2ZrF_6 salt containing 0.5 percent Al was added to a VM65-1 alloy, Zr losses through formation of the intermetallic compound Zr_3Al amounted to 16 percent, but when the Al content of the salt was 0.05 percent the losses amounted to 0.6 percent. Hence, in preparing the alloy it was necessary to use a K_2ZrF_6 salt with the smallest possible Al, Si, and Mn contents. Experiments conducted to evolve methods of adding K_2ZrF_6 to alloy VM65-1 under laboratory conditions revealed the possibility of increasing the Zr content of the alloy by adding the K_2ZrF_6 mixed with LiF and by using carnallite as a flux.

G.S.

1. Alloys--Preparation 2. Physicochemical processes--Determination

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SOV/137-58-8-17946

Translation from: Referativnyy zhurnal, Metallurgiya, 1958, Nr 8, p 249 (USSR)

AUTHOR: Chukhrov, M. V.

TITLE: Structure and Properties of Ingots of Magnesium Alloys (Struktura i svoystva slitkov iz magniyevykh splavov)

PERIODICAL: V sb.: Metallurg. osnovy lit'ya legkikh splavov. Moscow, Oborongiz. 1957, pp 88-139

ABSTRACT: An examination of the structure and properties of magnesium ingots (MI) produced by various methods of casting. Homogeneous structure could not be obtained when the metal was cast in thin-walled, water-cooled molds in which the heat was carried away through the walls. Axial porosity resulted in ingots in which the heat was carried away radially. Owing to the formation of cracks in the vicinity of the axis, the diameter of MI obtained could not be greater than 370 mm. MI obtained by means of semicontinuous casting are characterized by more uniform hardness and by equal density of the metal in the axial and peripheral zones. The mechanical properties of MI in longitudinal and transverse directions are also more uniform in this instance. In the case of MI obtained by the method of immersion, parallel growth of crystals, after a

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Structure and Properties of Ingots of Magnesium Alloys

period of setting, proceeds from the bottom toward the top of the ingot. Prior to immersion, the mold is set out in a furnace, a procedure which removes impurities from the metal but produces a coarser structure. No significant differences in density were observed throughout the cross section of the MI. Maximum and minimum values of σ_b were observed at 730° and 690°C, respectively. MI with columnar structure exhibit anisotropic properties (in the case of MA3, the values of σ_b were 20-23 and 10 kg/mm^2 in the longitudinal and transverse directions, respectively).

G. M.

1. Magnesium alloys—Casting 2. Castings—Physical properties 3. Castings—Structural analysis
4. Magnesium alloys—Test results

CHUKHROV, M.V.

LOKTIONOVA, N.A.; CHUKHROV, M.V. [redacted]

Light alloys. Priroda 46 no.5:39-48 My '57. (MLRA 10:6)

1. Vsesoyuznyy nauchno-issledovatel'skiy institut aviatsionnykh materialov.
(Aluminum alloys) (Magnesium alloys)

SOV/137-58-12-24353

Translation from: Referativnyy zhurnal. Metallurgiya, 1958, Nr 12, p 59 (USSR)

AUTHOR: Chukhrov, M. V.

TITLE: Manufacture of Magnesium-alloy Ingots (Proizvodstvo slitkov iz magniyevykh splavov)

PERIODICAL: V sb.: Legkiye splavy. Nr 1, Moscow, 1958, pp 298-310

ABSTRACT: The preparation of the alloys (A) and of castings made thereof are described. Certain physicochemical properties of Mg, determining the technology of C production, and in particular the oxidation potential of Mg melts and the influence of a number of substances thereon, are examined. Brief descriptions are offered of types of furnaces for the melting of A, and the advantages and shortcomings of each are indicated. The principal technological parameters for the production of A of the following systems are presented: Mg-Mn, Mg-Al-Zn, and Mg-Zn-Zr. The principles involved in the casting of Mg-C ingots are set forth. A continuous casting method is described with a discussion of its merits and shortcomings. The design of casting machines and the peculiarities of Mg-C castings due to physicochemical properties of the melt are set forth. L. P.

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CHUKHROV, M. V.

Solidification of Metals; ([redacted]) Trans. of 2nd Conf. on [redacted] Theory of Foundry Processes(56); Moscow, Mashgiz, 1958, 532pp.

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AVAILABLE: Library of Congress

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2-24-59

78-3-3-45/47

AUTHOR: Chukhrov, M. V.

TITLE: Discussion of Lectures
(Obsuzhdeniye dokladov)

PERIODICAL: Zhurnal Neorganicheskoy Khimii, 1958, Vol. 3, Nr 3, pp. 819-820 (USSR)

ABSTRACT: M. V. Chukhrov said that at this congress the phase diagrams of new materials had been discussed which form a basis for the working of alloys on titanium basis. At the same time he criticized that only one single lecture by M. S. Mirgalovskaya had dealt with the systems on a magnesium basis. The researchers started from the effect of zirconium on magnesium and it was intended to add this element in greatest possible quantities to magnesium alloys. The values shown in the lecture seem to make useless an investigation above a certain limit (10,6 % zirconium). The second part of the lecture dealt with the system magnesium-manganese-aluminum. The values shown made it possible to solve the problems connected with the liquation processes in the production of alloys of the type MA-8, MA-2, MA-3 etc. The interactions between magnesium and

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manganese were illuminated in such a way that it will be possible to technical institutes and - enterprises to tackle more efficiently the elaboration of the production technology of the corresponding alloys. The speaker further criticizes that work in the field of phase diagrams of light metals is not carried on sufficiently. At present one must content oneself with phase diagrams published abroad. It is, however, known that these diagrams are based on raw materials not corresponding to those in the Soviet Union. On the other hand everybody sees that the investigation of the phase diagrams of aluminum and magnesium with rare-earth metals will have good prospects. The published Bibliography of Soviet Scientific Publications on the investigation of the phase diagrams of metal systems (under the direction of I. I. Kornilov) inspite of some deficiencies is a very useful work and could be published at a larger scale. There was still another book published, however, already some time ago by D. A. Petrov. Since then science made, however, great progress and it would be about time to create a complex work which could be used at home and abroad at scientific research

Discussion of Lectures

78-3-3-45/47

institutes. It is also necessary that papers on phase diagrams are regularly published in periodicals.

ASSOCIATION: Vsesoyuznyy nauchno-issledovatel'skiy institut aviatsionnykh materialov, Moskva
(Moscow, All-Union Research Institute for Airplane Materials)

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CHUKHROV, M.V.

SOV/3505

Handbook on Machine-Building (Cont.)

Spravochnik po mashinostroitel'nym materialam v chetyrekh tomakh, tom 2: Tsvetnyye metally i ikh splavy (Handbook on Machine-Building Materials in 4 volumes, v. 2: Nonferrous Metals and Alloys) Moscow, Mashgiz, 1959. 639pp.

28107
S/577/60/000/000/002/006
E021/E435

18.1245 2408

AUTHOR: Chukhrov, M.V., Candidate of Technical Sciences

TITLE: Some technical peculiarities of preparing magnesium alloys containing rare elements

SOURCE: Vsesoyuznoye nauchno-tekhnicheskoye soveshchaniye po tekhnologii fasonnogo lit'ya iz splavov tsvetnykh metallov. Moscow. 1958. Tekhnologiya fassonogo lit'ya iz splavov; trudy soveshchaniya. Moscow, Mashgiz, 1960. 31-37

TEXT: The high strength at room and elevated temperatures of magnesium alloys containing cerium or neodymium, especially if zirconium is present as a grain refiner, is noted. The technology of preparation of such alloys presents many difficulties. Neodymium has a greater affinity for oxygen than magnesium and this must be remembered in calculating the charge. Many elements (neodymium, cerium, lithium, calcium) have a higher affinity for chlorine than magnesium. Since magnesium chloride is the basic constituent of the flux used in melting magnesium, this also complicates the procedure. It is very difficult to

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BM 65-1 (VM 65-1) alloy were obtained with mixtures of potassium fluozirconate with 3 to 12% calcium fluoride or 5 to 12% magnesium fluoride. Further experiments were carried out with additions of fluorides and chlorides of alkali and alkali-earth metals. The best results were obtained with 66% K_2ZrF_6 + 8% LiF + 26% LiCl or 66% K_2ZrF_6 + 8% CaF_2 + 26% LiCl, which gave 40 and 47% alloying efficiency respectively. The second salt was preferred since lithium fluoride is more expensive than calcium fluoride. Alloying can be carried out at 800°C. With increase in salt addition, an increase in zirconium content in the alloy is obtained. The maximum zirconium content (0.8%) was obtained with a 10% salt addition at 800 to 850°C. A satisfactory zirconium content is obtained with a 7.5% addition at 800°C. V.V.Krymov, V.V.Tikhonova and V.K.Fedorova worked out an alternative method of introducing zirconium by the so-called slag-master alloy prepared by fusing 50% potassium fluozirconate, 20 to 25% carnallite and 25% magnesium. A.A.Lebedev and A.D.Anikina took part in the tests. There are 5 tables and 7 references: 2 Soviet and 2 non-Soviet. The two references to English language publications

L 19754-63 EWP(k)/EWT(l)/EWP(q)/EWT(m)/EWP(B)/BDS AFFTC/ASD/ESD-3/IJP(C)

ACCESSION NR: AT3001943 Pf-4 JD S/2912/62/000/000/0410/0419

AUTHORS: Chukhrov, M. V.; Sokolova, A. I.; Oreshnikov, Z. A.; Milyayev, B. F.; Gur'yev, I. I.; Bondarev, B. I.; Lukovnikov, Yu. D.

TITLE: Study of the effect of an electromagnetic field on the crystallization of light alloys

SOURCE: Kristallizatsiya i fazovyye perekhody. Minsk, Izd-vo AN BSSR, 1962, 410-419.

TOPIC TAGS: crystal, crystallization, crystallography, light, alloy, electromagnetic, field, magnetohydrodynamics, electromagnetohydrodynamics, electrodynamic, macrostructure, Al, Mg, A-00, MA-8, microstructure, strength characteristics, mechanical properties.

ABSTRACT: The paper describes an experimental investigation of a special effect of an electromagnetic field, namely, that of the electrodynamic forces created thereby, on the crystallization of metallic fusion. The effect comprises the e.m.f. and the electrical current that arise in a fusion bath above which a single-phase a.c. inductor is placed. The interaction of the electromagnetic fields of the inductor current and the current in the fusion produces electrodynamic forces which

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impel the fusion to move. Tests were performed with Al of A-00 grade. The fused Al was poured at 710°C into stationary 165x540 mm molds, 50, 100, 150, and 200 mm high. The a.c. inductor was placed 20, 40, 60, and 80 mm above the surface of the fusion in the mold. Macrostructure investigations showed the refinement of the grains of the ingots. An especially refined structure was found in ingots 50 mm high. A removal of the inductor from the surface of the fusion of 60 to 80 mm resulted in some reduction of the refining effect. Analogous results were also obtained in tests with the Mg alloy Mark MA-8 (2% Mn, 0.3% Ce). Additional tests were made with semicontinuous casting of planar ingots of the same cross section and of the same two light metals. The principal effects investigated were the effect of the power fed to the inductor, the T and rate of pouring, and the height of the crystallizer on the grain-refinement effect. Al casting was performed in a crystallizer 170 and 270 mm at 690 and 710° at a rate of 7.5 and 9 cm/min. Ma ingots were cast in the same crystallizers and one 200 mm high, at T of 730 and 740°C and a casting rate of 5 to 6 cm/min. The presence of the electromagnetic field resulted in a stirring effect, and appreciable improvement of the grain structure was obtained (macroscopic photographs in orig. art.). The most powerful grain-structure-refining effect is observed at low casting T's and in the least high crystallizers. A T analysis performed by means of submerged Chromel-Alumel thermocouples showed a more uniform T distribution and decreased T

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ACCESSION NR: AT3001943

gradients upon the application of the electromagnetic field in the MA-8 alloy. Tabulated data on the mechanical properties of the MA-8 alloy cast under various conditions show a better uniformity of structure and more elevated values of the ultimate strength and elongation under the effect of the electromagnetic field. MA-8 ingots with the more uniform structure could be rolled without any risk of the formation of surficial microfissures. It is postulated that industrial equipments may have the inductors placed around the crystallizer to facilitate the work of the casting personnel. Orig. art. has 8 figures and 1 table.

ASSOCIATION: none

SUBMITTED: 00 DATE ACQ: 16Apr63 ENCL: 00

SUB CODE: CH, PH, MA, EL NO REF SOV: 000 OTHER: 000

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45229

S/806/62/000/003/014/018

AUTHORS: Chukhrov, M. V., Lukovnikov, Yu. D.

TITLE: Structure and properties of magnesium-thorium-alloy castings obtained by the immersion method.

SOURCE: Akademiya nauk SSSR. Institut metallurgii. Issledovaniye splavov tsvetnykh metallov, no.3, 1962, 163-168.

TEXT: Four alloys, Mg-3.5Th, Mg-2.5Th-0.6Mn, Mg-3.6Th-1.8Mn, and Mg-3.8Th-0.8Zr, were tested. The methods of preparation are detailed. Upon introduction of the Th and final flux refining, the alloys were held at 730-750° for some 10 min and were poured into a mold preheated to a dark red glow. The melt is then held in the mold for 0.5 to 1.0 hr at 700-730°C, and the mold was then immersed into a tank with running water at 11 cm/min. Liquation of Th according to specific gravity is observed in every instance, so that the bottom of the ingot is more Th-rich. Similarly appreciable liquation of Th according to specific gravity is observed in the Mg-Th-Zr alloy. Some liquation of small additions of Fe is also observed. The degree of Fe and Zr liquation increases with holding time. Mn liquation was not observed. The specimen-sampling geometry of the ingot is depicted, also the macrostructure of typical ingots; the Mg-Th-Zr alloy exhibits the finest-grain structure. The structure of the other 3 alloys is columnar. Thus it is concluded that the addition of Th to Mg and to alloys of the Mg-Mn system, within the range of concentrations tested, does not result in a comminution of the structure. No substantial difference in the size

Card 1/2

CHUKHROV M.V

PHASE I BOOK EXPLOITATION SOV/6478

Al'tman, Morits Borisovich, Aleksandr Aleksandrovich Lebedev, and Matvey Vasil'yevich Chukhrov

Plavka i lit'ye splavov tsvetnykh metallov; metallurgicheskiye osnovy (Melting and Casting of Nonferrous Metal Alloys; Metallurgical Principles) Moscow, Metallurgizdat, 1963. 523 p. Errata slip inserted. 4400 copies printed.

Ed. (Title page): A. T. Tumanov, Doctor of Technical Sciences, Honored Scientist and Technologist of the RSFSR; Ed. of Publishing House: O. M. Kamayeva; Tech. Ed.: Ye. B. Vaynshteyn.

PURPOSE: This book is intended for engineering personnel of metallurgical and metal-working plants and scientific research institutes. It may also be of interest to students at schools of higher education.

Card 1/10

COVERAGE: The book discusses basic principles of the theory and practice of melting, casting, and crystallizing nonferrous metals and alloys. The authors review problems of interaction between gases and metals, degassing, removal of solid nonmetallic inclusions, modification, segregation, and interaction between the metal and the mold; properties of the nonferrous metals and alloys; and methods of melting and casting ingots and parts made from aluminum, magnesium, copper, and other alloys. No personalities are mentioned. There are 275 references, mostly Soviet.

TABLE OF CONTENTS:

L 41764-65 EPR/EWP(z)/EWT(m)/EWP(b)/EWA(d)/EWP(t) Ps-4 IJP(c) MJW/JD

ACCESSION NR: AP4038809 S/0128/64/000/005/0016/0017

... proizvodstvo, no. ...

... casting, impurity, magnesi... ...

... To increase the purity of ingots made ... original ... This process ... furnace. Only one half ...

Card 1/2

L 41764-65
ACCESSION NR: AP4038809

ACCESSION NR: AT3013144 S/3018/63/000/000/0561/0571

AUTHOR: Minayev, P. F.; Chukrova, A. I.; Antonova, A. M.

TITLE: Functional, biochemical, and morphological changes in irradiated nervous tissue

SOURCE: Tret'ya Vsesoyuznaya konferentsiya po biokhimii nervnoy sistemy*. Sbornik dokladov, Yerevan, 1963, 561-571

TOPIC TAGS: irradiated nerve tissue, X-irradiation, cerebellum nerve tissue, nervous tissue radioresistance, protective substance, nembutal, hexonium, alinamine (thiamin-propyldisulfide), oxidative phosphorylation, oxidation process, cerebellum radiation damage, morphological change, preventive radiation treatment

ABSTRACT: Guinea pigs and dogs were treated with a complex of protective substances before irradiation to determine whether resistance of nervous tissue to ionizing radiation can be increased. The following substances were introduced parenterally into animals 30 min before irradiation of the cerebellum: 30 mg/kg nembutal, 2 mg/kg vitamin B_1 or alinamine (thiamin-propyldisulfide), 3 mg/kg hexonium. In some cases the protective substances were introduced

Card 1/3

ACCESSION NR: AT3013144

2 days earlier and repeated 30 min before irradiation. The cerebellum was irradiated locally with a 9000 r dose for guinea pigs and a 20,000 dose for dogs (RUM-3 unit, 112.5 r/min, focal length 23-24 cm). Animals were decapitated and brains were removed to investigate the oxidative phosphorylation process in the mitochondrions of the cerebellum. Histological investigations were also made. It was found that in control animals oxidative phosphorylation radiation damage is highest 2 days after irradiation at the same time that edema of the cerebellum develops and serious morphological changes take place in the cerebellum nerve cells. Cerebellum radiation damage including oxidative phosphorylation is sharply reduced in experimental animals treated with alinamine (thiamine-propyldisulfide) together with nembutal and hexonium before irradiation. It should be noted that alinamine, a vitamin B_1 derivative, penetrates the nerve cells better than vitamin B_1 and is more effective in increasing nerve cell radioresistance. Histological investigations reveal that morphological changes are reduced in irradiated nerve cells of animals treated with protective substances. Nerve tissue functions can be preserved by protecting nerve tissue oxidation processes from radiation. Results for treatment with a complex of protective substances suggest a

Card 2/3

ACCESSION NR: AT3013144

possible application in brain tumor X-ray therapy. Orig. art. has: 8 figures, 2 tables.

ASSOCIATION: Institut biologicheskoy fiziki AN SSSR, Moskva (Institute of Biological Physics, AN SSSR)

SUBMITTED: 00 DATE ACQ: 28Oct63 ENCL: 00

SUB CODE: AM NO REF SOV: 009 OTHER: 002

Card 3/3

MINAYEV, P.F.; LOGVINOVA, O.F.; MIRONOVA, A.P.; CHUKHROVA, A.I.

Change in the radiosensitivity of nerve tissue under the effect of arsenic compounds. Dokl. AN SSSR 155 no. 5:1209-1211 Ap '64. (MIRA 17:5)

1. Institut biologicheskoy fiziki AN SSSR. Predstavleno akademikom A.I.Oparinym.

AP5013694

[illegible], P. F.; Logvinova, [illegible] F.; Mironova, [illegible] Shubkova, A. [illegible]

TITLE: Increased radiosensitivity of the nervous system under the effect of fluoroacetate

B

SOURCE: AN SSSR. Doklady, v. 163, no. 1, 1965, 235-237

TOPIC TAGS: fluoroacetate, central nervous system, biological effect, radiosensitivity, gamma radiation, monofluoroacetate, cerebellum, dog

ABSTRACT: Previous research has indicated that high [illegible] impair the oxidation processes in nerve [illegible], the radiation resistance [illegible] which protect the oxidation [illegible] arsenic compounds, enzym [illegible] radiosensitivity of the nervous [illegible] effects of monofluoroacetate on the [illegible] in a series of reactions affecting the citric acid [illegible] tissues of

Card 1/3

L 63559-65

ACCESSION NR: AP5018094

fluoroacetate (5 µg in 0.5 ml) were injected into the cerebellomedullary cistern [illegible] before the cerebelium was irradiated by the [illegible] radiation [illegible] and thirty min after irradiation, the amounts of citric, pyrotartaric [illegible] gamma-amino-butyric acids in the tissues of the cerebellum were determined, [illegible] process of oxidative phosphorylation in isolated mitochondria was [illegible] sensitivity [illegible] nervous system increased under the effect [illegible] the functional state [illegible] of the poison [illegible] with doses of 5 and even 3 Kr. Large quantities of citric acid were found to have accumulated in the cerebellum — this relates to the disruption of the citric acid cycle. There is also an increase in pyrotartaric acid. The combined effect of the poisoning and irradiation raised the content of gamma-[illegible] were [illegible] was somewhat inhibited, utilization of inorganic phosphate was hardly disturbed. Post-irradiation disruption of the cerebellar functions were more severe after poisoning with both fluoroacetate and sodium arsenate. The disruption of the citric acid cycle is a major cause of the increased radiosensitivity of the nervous [illegible] caused by monofluoroacetate. The [illegible] a direct disturbance by the radi[illegible]

Card 2/3

L 42549-65
ACCESSION NR: AP5018094

for decarboxylating pyrotartaric acid or to the damage done to the citric acid cycle. Irradiation of the nervous system after poisoning with sodium arsenate and fluoroacetate significantly disrupts the pyruvateoxidase system and the citric acid cycle, two links of the metabolic processes responsible for the radiosensitivity of the nervous system. The experiments reported do not provide any explanation of the disruption of the oxidative phosphorylation process. [illegible] [illegible] [illegible]. [JB]

ASSOCIATION: Institut biologicheskoy fiziki Akademii nauk SSSR (Institute of Biophysics, Academy of Sciences, SSSR)

SUBMITTED: 24Sep64 ENCL: 00 SUB CODE: LS

NO REF SOV: 018 OTHER: 000 ATD PRESS: 4050

Card 3/3

MINAYEV, P.F.; CHUKHROVA, A.I.

Separation of brain proteins of paper electrophoresis. Ukr. biokhim. zhur. 33 no.3:431-435 '61. (MIRA 14:6)

1. Institut biologicheskoy fiziki AN SSSR, Moskva.
(PAPER ELECTROPHORESIS) (PROTEINS) (BRAIN)

CHUKHROVA A. I.

MINAYEV, P. F.; CNUKHROVA, A. I.

Soluble protein content of irradiated nervous tissue. Radiobiologiia 2 no.3:450-454 '62. (MIRA 15:7)

1. Institut biologicheskoy fiziki AN SSSR, Moskva.

(RADIATION—PHYSIOLOGICAL EFFECT) (BRAIN)
(PROTEINS IN THE BODY)

CHUKHROVA,N.; KOMIZERKO,K.

Meteorites in the collection of the Museum of Geology and Mineralogy of the Timiriazev Academy of Agriculture in Moscow. Meteoritika no.12:106-111 '55. (MIRA 8:10)
(Moscow--Meteorites)

GORELIK, A.M., kand.tekhn.nauk; CHUKHROVA, A.N., inzh.

New units for testing soil. Transp. stroi. 10 no.11:44-45 N '60.
(MIRA 13:11)

(Soil mechanics)

41701
S/032/62/028/011/008/015
B104/B102

11.9400

AUTHORS: Sinitsyn, V. V., Kalashnikov, V. P., Baybakova, L. L., Smolokotina, Z. G. and Chukhrova, A. V.

TITLE: Method of estimating the oxidizability of lubricating greases

PERIODICAL: Zavodskaya laboratoriya, v. 28, no. 11, 1962, 1352 - 1354

TEXT: Following thorough consideration of the optimum quantity of grease whose oxidizability is to be determined, its optimum temperature, and optimum oxidation time, the following procedure is suggested using results published in Soviet and non-Soviet papers (F. T. Wright, H. A. Mills, Proc. ASTM, 38, II (1938)): 1.7 - 1.9 g of grease is put into a small cup of electrolytic copper, or a slice of grease (1 ± 0.05 mm thick, 50 mm diameter) is applied to a glass plate by means of a template. The small cup or the glass plate are then enclosed in a Petri cup and are kept in a thermostat at a certain temperature for 5 - 200 hrs. Before and after the test, the acid number of the grease is determined according to ГОСТ 6707-57 (GOST 6707-57). The index of oxidation of the acid is defined as being the difference between the acid numbers before and after the test. Temper-

Card 1/2

ature and time of the experiment are fixed according to the mode of application of the grease. The high stability of ЦИАТИМ-201 (TsIATIM-201), ЦИАТИМ-202 (TsIATIM-202), and 1-Л3 (1-L3) is due to the content of diphenyls, that of ЦИАТИМ -203 (TsIATIM-203) and ЯНЗ-2 (YaNZ-2) to the content of sulfurous compounds, and that of ЦИАТИМ-203 (TsIATIM-203) is due also to the additional content of triphenyl phosphate. ЦИАТИМ-221 (TsIATIM-221) practically does not oxidize, because of the high stability of polysiloxanes. There are 2 figures and 1 table.

ASSOCIATION: Moskovskiy zavod "Neftegaz" (Moscow "Neftegaz" Plant)

CHUKHROVA, T.I.

Using cellophane in machine wrapping. Ref. nauch. rab. VKNII no.1: 118-120 '57. (MIRA 11:3)

(Cellophane) (Confectionery)

CHUKHROVA, V.A.; MINAKOVA, Ye.I.

Peculiarities of the electric activity of the brain and its changes during treatment of rheumatic chorea. Pediatriia no.2:28-35 F '57. (MIRA 10:10)

1. Iz Instituta nevrologii AMN SSSR (dir. - deystvitel'nyy chlen AMN SSSR prof. N.V.Konovalov)

(CHOREA) (ELECTROENCEPHALOGRAPHY)

USSR/Human and Animal Physiology (Normal and Pathological). T
Nervous System. Human Electroencephalogram.

Abs Jour: Ref Zhur-Biol., No 17, 1958, 80009.

Author : Konovalov, N.V.; Zhirmunskaya, Ye, A.; Chukhrova, V.A.
Inst : INSTITUT N[redacted] NEVROLOGII, AMN SSSR, MOSKVA.
Title : Electric Activity of the Brain During Hepatolenticular Degeneration.

Orig Pub: Zh. nevropatol. i psikhiatrii, 1957, 57, No 5, 584-590.

Abstract: In patients with hepatolenticular degeneration, various pathological electric activity was noted, depending on the seriousness of the illness. Paroxysmal activity was observed during hyperkinesis in patients without epileptic attacks. In 7 of 28 patients, no decline of the EEG from normal was found.

Card : 1/1

CHUKHROV, V.A.

Theoretical cycle of a gas turbine with a continuous combustion compressed gas rotor generator. Nauch.-tekh. inform. biul. LPI no.10:68-82 '58. (MIRA 14:3)

(Gas turbines)

CHUKHROVA, V.A.

Change in the biopotentials of the brain in various diseases of the nervous system with subcortical localization of the pathological process. Zhur.nevr.i psikh. 59 no.11:1352-1358 '59. (MIRA 13:3)

1. Institut nevrologii (dir. - prof. N.V. Konovalov) AMN SSSR, Moskva.
(ELECTROENCEPHALOGRAPHY)
(NERVOUS SYSTEM diseases)

CHUKHROVA, V. A., Cand Med Sci -- (diss) "Variation of the electrical activity of the brain in some diseases of the central nervous system with a primarily subcortical localization of the pathological process." Moscow, 1960. 12 pp; (Academy of Medical Sciences); 200 copies; price not given; (KL, 25-60, 141)

CHUKHROVA, V.A.; VERESHCHAGIN, N.V.; DZHIBLADZE, D.N.

Change in the electrical activity of the brain in lesions of the large cerebral vessels (carotid and vertebral arteries. Zhur.nevr.i psikh. 62 no.8:1181-1188 Ag '62. (MIRA 15:12)

1. Institut nevrologii (dir. - prof. N.V.Konovalov) AMN SSSR, Moskva.
(CAROTID ARTERY--DISEASES) (VERTEBRAL ARTERY--DISEASES)
(ELECTROENCEPHALOGRAPHY)

CHUKHROVA, V.A.; KONCHAKOVA, M.I.

Changes in the electric activity of the brain of rheumatic patients who have suffered disorders of cerebral circulation. Vop.revm. 2 no.3:40-48 Jl-S '62. (MIRA 16:2)

1. Iz Instituta nevrologii (dir. - deystvitel'nyy chlen AMN SSSR prof. N.V. Konovalov) AMN SSSR, Moskva.
(RHEUMATIC HEART DISEASE) (ELECTROENCEPHALOGRAPHY)
(CEREBROVASCULAR DISEASE)

CHUKHROVA, V.A.; ZARETSKAYA, I.Kh.

Changes in the electric activity of the brain in lesions of the middle cerebral artery. Zhur. nevr. i psikh. 64 no.10: 1451-1455 '64. (MIRA 17:11)

1. Institut nevrologii (direktor - prof. N.V. Konovalov) AMN SSSR, Moskva.

CHUKHROVA, V.A.

Changes in the electric activity of the brain following surgery for stenoses and thromboses of the carotid arteries. Zhur. nevr. i psikh. 65 no.10:1493-1497 '65. (MIRA 18:10)

1. Institut nevrologii (direktor - prof. N.V.Konovalov) AMN SSSR, Moskva.

POPOVA, L.M.; SIDOROVSKAYA, M.D.; CHUKHROVA, V.A.

Effect of changes in the gaseous content in blood on the electric activity of respiratory muscles and brain in patients having been a long time under artificial respiration. Zhur. nevr. i psikh. 65 no.12:1810-1817 '65. (MIRA 19:1)

1. Institut nevrologii (direktor - prof. N.V. Konovalov) AMN SSSR, Moskva. Submitted July 29, 1964.

CHUKHRUKIDZE, N.K. (Tbilisi)

Asymptotic formulae for Legendre functions. Zhur. vych. mat. i mat. fiz. 5 no.4:742-744 Jl-Ag '65. (MIRA 18:8)

CHURSINA, L., inzh.; CHUKHVICHEV, A., inzh.

Earth roadbed in regions with a formation of ice coverings on roads. Avt. dor. 28 no.9:32 S '65. (MIRA 18:10)

L 00552-66

ACCESSION NR: AP5018821 UR/0354/65/000/007/0060/0063
65.011.54

AUTHORS: Valdayskiy, N. P. (Chief engineer); Chukichev, A. N. (Senior design engineer)

TITLE: Universal attachment system for hauling tractor TDT-75

SOURCE: Lesnoye khozyaystvo, no. 7, 1965, 60-63

TOPIC TAGS: tractor attachment, forestry machinery, equipment mounting/ TDT 75 tractor, TDT 60 tractor, NZ 60 attachment

ABSTRACT: A universal attachment system NZ-60 (see Fig. 1 on the Enclosure) for use with tractor TDT-75 was developed at LenNIILKh. The system consists of the following basic components: stationary bracket 1 (attached to the tractor by bars 20), central drawbar 6 (adjustable length with interchangeable connector 4), movable frame 12 (connected through 17 to the actuating cylinder or winch of the tractor and through chains 18 to the lower drawbars), and movable frame 14 (which provides vertical freedom for the lower drawbars 13 with interchangeable connectors 25). For single-point connection to the tractor, the central drawbar is removed and the lower drawbars are separated by adjustable rod 29, forming a triangle

Card 1/3

ACCESSION NR: AP5018821

which can swing up to 55° vertically and up to 35° in the horizontal plane. For two-point connection in the horizontal direction the central drawbar is again removed and the lower drawbars are used, while for vertical two-point connection the lower drawbars are joined in the center and the central drawbar serves as the second connection. For three-point connection all three drawbars are used. The attachment (which can also be used with tractor TDT-60) has the following characteristics: weight 550 kg, 2600 mm long, 1300 wide, 1500 high, maximum height of connection 1600 mm, lifting capacity 4000 kg. Orig. art. has: 3 figures.

ASSOCIATION: LenNIILKh

SUBMITTED: 00 ENCL: 01 SUB CODE: IE

NO REF SOV: 000 OTHER: 000

L 00552-66

ACCESSION NR: AP5018821

ENCLOSURE: 01

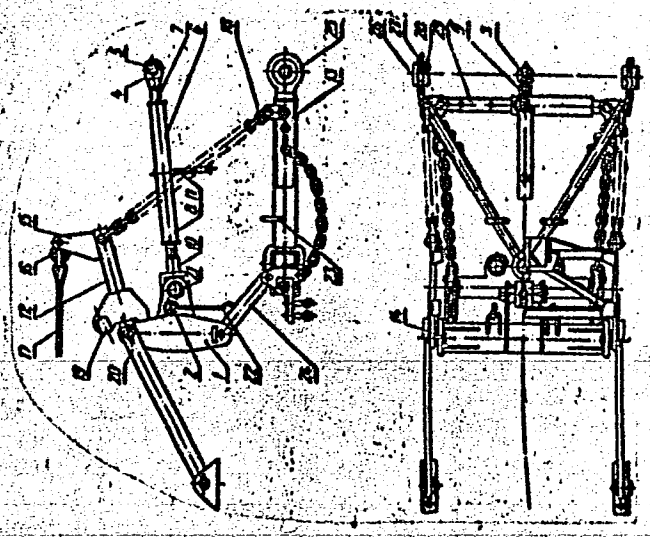

Fig. 1. Universal attachment NZ-60

Card 3/3

(CHUKICHEV, Ivan Pavlovich)

CHUKICHEV, I. P.
CHUKICHEVA-FEDOROVA, M.. N.; DALIATOV, V. A.; CHUKICHEV, I. P.

Parenteral Injection of "Proto-acid" ("Caseinic Acid") - Preliminary Report

Trudui Lab. Izucheniyu Belka Belkovogo Obmena Organizme, #1, 1931 pp 68-74
(Works of the Lab. for the Study of Protein Albuminous Exchange in an Organism
[or Protein Metabolism as same Lab was called later]

The pathological changes accompanying the parenteral injection of a protein are due to the physical condition (degree of dispersion) of the protein and not to the fact that it is "foreign" to the organism. Rabbits tolerate the intravenous injection of "proto-acid" ("caseinic acid") in large quantities, without evincing any pathological changes. In the course of 5 minutes to 1 hour, it is possible to introduce an amount of "proto-acid" equal to 1/3 or 1/2 of the blood protein of the animal. The injected protein is not excreted in the urine, but is retained in the organism. M. Cohen

Patelle card

CHUKICHEV, I.P.

1ST AND 2ND ORDERS

PROCESSES AND PROPERTIES INDEX

CA 11 G

Action of extremely minute amounts of protein ("caseinic acid") on the blood pressure. I. P. Chukichev and D. Iordanskii. *Trudui Lab. Izucheniyu Belka Belkovogo Obmena Organizme* No. 3, 21-2(1932).—The expts. were performed on cats and dogs. Injections of casein in concns. of 10^{-8} to 10^{-11} normal (a soln. of 1220 g. of casein in 1 l. is regarded as a normal soln. (cf. Perov, *C. A.* 29, 6612[4])) bring about a rise in the blood pressure. In contrast to adrenaline, the effect is observed for a long time, from 15 to 40 mins., after which the blood pressure returns to normal. H. Cohen

ASM-SLA METALLURGICAL LITERATURE CLASSIFICATION

(Chukichev, Ivan Pavlovich)
CHUKICHEV, I. P.

Problema belka v fiziologii
"The Problem of Protein in Physiology" Selkhozgiz, 1935 (book)

Report on the Research Work of the All-Union Institute of Experimental Medicine imeni A. M. Gor'kiy for 1933-1937, People's Commissariat of Health, "Medgiz" Moscow-Leningrad, 1939
book page 366
U-3060, p 1/742

(CHUKICHEV, Ivan Pavlovich)

CHUKICHEV, I. P.

"Sympathetic Trophism in Physiology"

Arkhiv Biologicheskikh Nauk (Archives of Biological Sciences), Vol. 46, #1, 1937

(CHUKICHEV, Ivan Pavlovich)

CHUKICHEV, I. P. Professor - editor

Sympathetic Neurotrophism in Physiology and Clinical Practice
Re results of sympathomimetin therapy - a collection of Transacations of VIEM(All-Union Inst Experimental Med. im. Gor'ki
"Medgiz", 1940

U-3060, p 506

CHUKICHEV, I. P.

USSR.

Enzyme-chemical nature of the action of sympathomimetin and its active fraction. I. P. Chukichev. *Uspekhi Sovremennoi Biol.* 29, 104–237(1950); *Chem. Zentr.* 1951, I, 3374–5.—Sympathomimetin activates the proteolytic, lipolytic, and amylolytic enzymes of the digestive tract, increases the effectiveness of the phagocytic reaction of the leucocytes, stimulates the multiplication of yeast cells and yeast fermentation, promotes growth processes (e.g., growth of bacteria, of higher plants and germination of seeds), accelerates the development of insects, the metamorphosis of tadpoles, etc., increases the basal metabolic rate, and stimulates the hunger activation of enzymes (e.g., after histamine intoxication with complete cessation of the processes of physiol. hunger). A very active concentrate of the effective principles of sympathomimetin was prepd. and it was shown that its activity was not related to its purine or cystine contents.

M. G. Moore

CHUKICHEV, I.P.

General considerations on theoretical positions of I. P. Pavlov's and N.E. Vvedenskii - A.A.Ukhtomskii's theories. Zh. vyssheĭ nerv. deiatĭ 3 no.2:279-295 Mar-Apr 1953. (CIML 24:4)

1. Moscow.

CHUKICHEV, I. P.

USSR/Human and Animal Physiology - Metabolism. V-2

Abs Jour : Ref Zhur - Biol., No 2, 1958, 8335

Author : I.P. Chukichev
Inst :
Title : The Physiological Action of the Products of Complete Cleavage of Proteins.

Orig Pub : Tr. Konferentsii po proiz-vu i uspol'zovaniya aminokislot v med., M., MGU, 1956, 20-24

Abstract : A review of the work of the author and co-workers on the problem of the oligodynamic action of proteins, seen by parenteral injection of negligible amounts of highly dilute solutions of proteins or the products of their complete hydrolysis, which can produce a number of physiological reactions in an organism; these the author has unified in the concept of a "symptom complex of physiological hunger". The hypothesis is advanced that proteins in high dilutions undergo cleavage, and the products of protein disintegration

Card 1/2

CHUKICHEV, I.P.

[Unity of the theoretical positions of I.P.Pavlov, N.E.Vvedenskii and A.A.Ukhtomskii] O edinstve teoreticheskikh pozitsii, I.P.Pavlova, N.E.Vvedenskogo, A.A.Ukhtomskogo. Moskva, Sovetskaia nauka, 1956. 109 p. (MLRA 9:11)

(PHYSIOLOGY)

CHUKICHEV, Ivan Pavlovich; prof.; MAKARYCHEV, A.I., red.; KNAKNIN, M.T., tekhn.red.

[Sympathomimetic substances of protein origin] Simpatomimeticheskie veshchestva belkovogo proiskhozhdeniia. Moskva, Gos. izd-vo med.lit-ry Medgiz, 1958. 180 p. (MIRA 13:1)
(SYMPATHOMIMETIC SUBSTANCES) (PROTEINS)

CHUKICHEV, Ivan Pavlovich, prof.; REZNICHENKO, P.N., red.; ZAKHAROVA, A.I., tekhn. red.

[Human physiology] Fiziologiia cheloveka. Moskva, Medgiz, 1961. 397 p. (MIRA 14:12)

(PHYSIOLOGY)

CHUKICHEV, Ivan Pavlovich; REZNICHENKO, P.N., red.

[Human physiology] Fiziologiia cheloveka. 2. izd., ispr. i dop. Moskva, Meditsina, 1965. 463 p. (MIRA 18:6)

CHUKICHEV, M.V.

"The Structural Defects in Germanium Monocrystals Irradiated by Beta-Particles and Fast Neutrons and the Influence of these Defects on Electron-Hole Recombination," V.S. Vavilov, L.S. Smirnov, A.V. Spitsyn, V.M. Patskevich, M.V. Chukichev, Moscow, USSR

Paper submitted for presentation at the International Conference on Radioisotopes in Scientific Research, Paris 9-20 Sep 1957.

Acad. Sci. USSR, Moscow

CHUKICHEV, M.V.

USSR/Electricity - Semiconductors G-3

Abs Jour : Ref Zhur - Fizika, No 1, 1958, 1325

Author : Vavilov, V.S., Spetsyn, A.V., Smirnov, L.S., Chukichev, M.V.

Inst : Physics Institute, Academy of Sciences, USSR, Moscow

Title : Effect of Fast Neutron Irradiation on Recombination of Electrons and Holes in Germanium Crystals.

Orig Pub : Zh. eksperim. i teor . fiziki, 1957, 32, No 4, 702-705

Abstract : On the basis on the transverse cross sections for the interaction of fast neutrons with germanium nuclei, using the Snyder and Neufeld method (Referat Zhur Fizika, 1956, No 7, 19840, No 12, 35072), the authors calculate the number of germanium atoms, shifted from their lattice points as a result of scattering of fast neutrons. It was established experimentally that the irradiation of germanium

Card 1/3

CHUKICHEV, M.V.; VAVILOV, V.S.

Mean energy of the formation of pairs of nonequilibrium carriers in germanium irradiated by gamma rays from Co^{60}. Fiz. tver. tela 3 no. 3:935-942 Mr '61. (MIRA 14:5)

1. Fizicheskiy institut imeni P.N. Lebedeva AN SSSR, Moskva.
(Germanium) (Gamma rays)

S/181/61/003/005/025/042
B108/B209

9.4300 (1136, 1043, 1144)

AUTHORS: Chukichev, M. V. and Vavilov, V. S.

TITLE: Formation of lattice defects in silicon single crystals by irradiation with thermal neutrons in a nuclear reactor

PERIODICAL: Fizika tverdogo tela, v. 3, no. 5, 1961, 1522-1527

TEXT: The authors calculated and estimated the number of lattice defects formed in silicon by irradiation with thermal neutrons from the heavy-water reactor of the AS USSR. The mean number of dislocated atoms per captured thermal neutron is calculated from the mean energy of the recoil nucleus obtained by radiative capture. The recoil energy (in ev) transferred to the nucleus by gamma quanta is given by the formula $E_{rec} = \frac{537}{A}(h\nu)^2$ (1), where A is the atomic weight of the recoil nucleus, and $h\nu$ the energy of the gamma quanta (in Mev). The mean recoil energy averaged over all gamma transitions is found to be 780 ev. At such energies (elastic scattering), the mean number of dislocated atoms is given by

Card 1/3

Formation of lattice defects in ...

$\bar{\nu} = \frac{\bar{E}_{rec}}{2E_d}$ (2), where E_d is the threshold energy of displacement of Si atoms from lattice nodes into the interstice. On the basis of data from the exposure of Si to fast electrons, E_d may be assumed to have a value of 13 ev (Ref. 4: J. J. Loferski and P. Rappaport. Journ. of Appl. Phys., 30, 8, 1296, 1959). In this way, the authors calculated $\bar{\nu} = 29$ and found that about 20 displaced atoms are formed per 100 thermal neutrons inciding upon 1 cm^3 of silicon. The n-type samples were ultrasonically cut to small oblong plates. All the measurements were made at room temperature in a magnetic field of 4000 gauss. The thermal neutron flux was $8.7 \cdot 10^{12}$ neutrons/cm^2.sec. The integral radiation dose was $1 \cdot 10^{16}$ and $6.3 \cdot 10^{17}$ neutrons/cm^2, respectively, for the two sets of irradiated samples. In order to make a distinction between the action of thermal and that of fast neutrons, part of the samples were irradiated through an 0.5 mm thick cadmium screen. The experiments showed that approximately 4.5 conduction electrons are displaced per 100 neutrons impinging upon 1 cm^3

Formation of lattice defects in ...

of silicon. This number is about four times less than the number of displaced atoms as calculated by the formula $\bar{n}_d = (nvt)N\sigma\bar{\nu}$ (3), where (nvt) is the integral radiation dose (neutrons per cm^2), N the number of silicon atoms per cm^3, and σ the total cross section of radiative capture of thermal neutrons in Si. The authors thank B. M. Vul', Corresponding Member AS USSR, for a discussion of the results. There are 4 figures, 1 table, and 5 references: 2 Soviet-bloc and 3 non-Soviet-bloc.

ASSOCIATION: Moskovskiy khimiko-tekhnologicheskiy institut imeni D. I. Mendeleyeva (Moscow Institute of Chemical Technology imeni D. I. Mendeleyev). Fizicheskiy institut im. P. N. Lebedeva AN SSSR (Institute of Physics imeni P. N. Lebedev , AS USSR)

SUBMITTED: November 19, 1960

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L 11390-63 EWT(m)/BDS AFFTC/ASD

S/120/63/000/002/037/041

52

AUTHOR: Chukichev, M. V. and Zagorets, P. A.

TITLE: Using silicon alpha-particle counters 19 for measurements in solutions

PERIODICAL: Pribory i tekhnika eksperimenta, March-April 1963, v. 8, no. 2, 172-173

TEXT: The article describes the recently developed silicon alpha-particle detectors using a surface barrier and a p-n junction. These counters may be used to determine the concentration of alpha-active substances in solutions by measuring the intensity of alpha particles leaving the surface of such solutions. Test results are given and show that counter noise is 5 imp/min and that the instrument is capable of measuring a concentration of the order of $C_{U233} = 1.5 \cdot 10^{-6}$ g/cm^3. There are two figures

ASSOCIATION: Moskovskiy khimiko-tekhnologicheskiy institut (Moscow Chemical Technology Institute)

SUBMITTED: May 28, 1962

Card 1/1 ja/CA

ACCESSION NR: AP4047462 S/0120/64/000/005/0079/0080

[illegible], V. S.; Kolomenskaya, [illegible]

[illegible], M.V.

B

TITLE: Generation of minority carriers in silicon by fast electrons

SOURCE: Pribory* i tekhnika eksperimenta, no. 5, 1964, [illegible]

TOPIC TAGS: semiconductor research, silicon counter

ABSTRACT: The theoretical spatial distribution [illegible] Ya. Yurkov (ZhETF, [illegible]

Experimental [illegible] penetration, for ele[illegible] [illegible] experimental errors, the

Card 1/2

agreement with the theoretical curve. Orig. art. has: 2 figures.

[illegible] Moskovskiy gosudarstvennyy [illegible] State University)

NO REF SOV: 002

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