L 23636-65 EWT(m)/EWP(j) Pc-4 RM
ACCESSION NR: AP5002824 S/0191/65/000/001/0023/0027

AUTHOR: Militskova, Ye. A.; Viktorov, Ye. S.; Sokolov, A.D.; Kostikov, V.P.

TITLE: The die casting of polyformaldehyde

SOURCE: Plasticheskiye massy, no. 1, 1965, 23-27

TOPIC TAGS: polyformaldehyde, die casting melt index, impact toughness, bending strength, frost resistance, polymer crystal structure, mold stability, polymer inflammability, plastic casting

ABSTRACT: The authors investigated the conditions of die casting and the properties and fields of application of cast polyformaldehyde (PFA). The construction and outfitting of the die machine (heating cylinder, jet, die mold and temperature control) and the casting technique are described in detail. The die casting of PFA is possible only in a narrow temperature interval, 180-195C being most common. The stay of the material in the cylinder is calculated by formula; for a die machine with a plunger diameter of 40 mm and a 210C cylinder temperature, the time is 60 min. The optimum mold temperature (determined by article thickness) is 130C, the optimum casting pressure is 1200-1500 kgc/cm^2, and the duration of the casting cycle is about 10 sec./mm of article thickness. The casting temperature is dependent on the melt index of the PFA. Articles made from

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PFA are distinguished by their high impact toughness. An increase in the melt index produces a decrease in the impact toughness and bending strength. Frost resistance measurements show that the stability of PFA decreases at -40C, but still remains rather high. The crystal structure of PFA and its high melting point contribute to its mold stability at increased temperatures. PFA is stable in most inorganic and organic solvents and has a low inflammability. The physical-mechanical properties of PFA decline after recasting. Because of its high stability to wear, low coefficient of friction, dimensional and high-temperature mold stability, PFA can be used for the production of bearing, gears and latches. "V.P. Zhuravlev took part in designing the casting machine and L.A. Zavyalina took part in working out the casting conditions." Orig. art. has: 6 tables, 2 figures and 2 formulas.

ASSOCIATION: none

SUBMITTED: 00 ENCL: 00 SUB CODE: MT

NO REF SOV: 000 OTHER: 005

MILITSYN, Konstantin Nikitich, kandidat tekhnicheskikh nauk; LOVCHIKOV, Basiliy Semenovich, kandidat tkehnicheskikh nauk; SUVOROV, Artur Mikhaylovich, inzhener; OSOKIN, N.Ye., kandidat tekhnicheskikh nauk, retsenzent; PAVLOTSKIY, P.G., inshener, retsenzent; ARONSHTEYN, M.A., inshener, retsenzent; NOVIKOV, N.F., inshener, retsenzent; RZHEZNIKOV, V.S., redaktor; ARKHANGEL'SKAYA, M.S., redaktor izdatel'stva; EKKER, O.G., tekhnicheskiy redaktor

[Smelting and founding of nonferrous metals and alloys] Plavka i lit'e tsvetnykh metallov i splavov. Pod nauchnoi red. K.N.Militsyna. Moskva, Gos. nauchno-tekhn. izd-vo lit-ry po chernoi i tsvetnoi metallurgii, 1956. 662 p. (MLRA 10:2)

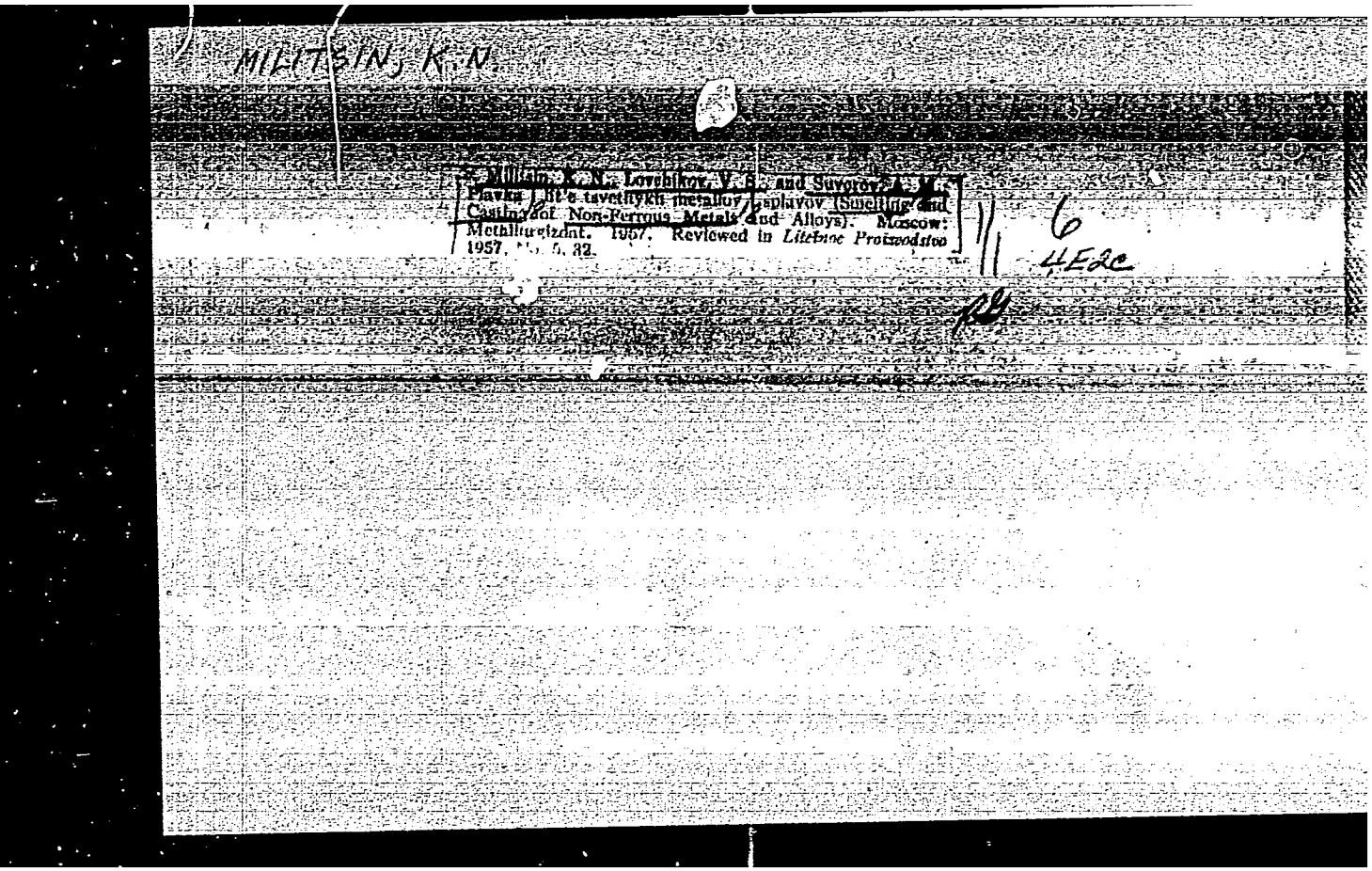
1. Kol'chuginskiy tekhnikum po obrabotke tsvetnykh metallov (for Osokin, Pavlotskiy, Aronshteyn, Novikov)
(Founding) (Smelting)
(Nonferrous metals--Metallurgy)

MILITSYN, K.N., kandidat tekhnicheskikh nauk.

Methods of studying gating systems. Lit.proizv. no.10:17-19 O '56. (MLRA 9:11)
(Founding)

MILITSYN, K.N., kandidat tekhnicheskikh nauk.

Casting feed. Lit.proizv. no.11:16-20 N '56. (MLRA 10:1)
(Aluminum founding)
(Crystallization)



MILITSIN, K. N.

Militsin, K. N., Lovchikov, V. S., and Suvorov, A. V. Plavka lit'e tavetlykh metallov i splavov [Smelting and Casting of Non-Ferrous Metals and Alloys]. Moscow: Metallurgizdat. 1957. Reviewed in *Liteinoe Proizvodstvo* 1957, No. 5, 32.

6
4E2c

MILITSYN, K. N.

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

Card 5/8

MILITSYN, K. N.

"Research on the Feeding of Castings."

Hydrodynamics of Molten Metals (Gidrodinamika rasplavlennykh metalov; trudy pervogo soveshchaniia po teorii liteinykh protsessov. Moskva, Izd-vo Akad. nauk SSSR, 1958, 257 pp.

(Proceedings of the First Conference on the Theory of Casting Processes)

Moscow Institute of Nonferrous Metals and Gold imeni M. I. Kalinin

MILITSYN, K.N., Doc Tech Sci--(diss) "Study of the [redacted] of crystallizing casting." Mos, 1958. 31 pp (Min of Higher Education USSR. Mos Order of Labor Red Banner Inst of Steel im I.V.Stalin), 150 copies (KL,45-58, 146)

MILITSYN, K.N.

PHASE I BOOK EXPLOITATION SOV/4343

Soveshchaniye po teorii liteynykh protsessov, 3d

Usadochnyye protsessy v metallakh; trudy soveshchaniya (Shrinkage Processes in Metals. Transactions of the Third Conference on the Theory of Casting Processes) Moscow, AN SSSR, 1960. 281 p. Errata slip inserted. 3,000 copies printed.

Sponsoring Agency: Akademiya nauk SSSR. Institut mashinovedeniya. Komissiya po tekhnologii mashinostroyeniya.

Resp. Ed.: B.B. Gulyayev, Doctor of Technical Sciences, Professor; Ed. of Publishing House: V.S. Rzheznikov; Tech. Ed.: T.V. Polyakova.

PURPOSE: This collection of articles is intended for scientific workers, engineers, technicians of scientific research institutes and industrial plants, and for faculty members of schools of higher education.

COVERAGE: The collection contains technical papers presented at the Third Conference on the Theory of Casting Processes, organized by Liteynaya sektsiya Komissii po tekhnologii mashinostroyeniya Instituta mashinovedeniya AN SSSR (Casting Section of the Commission for Machine-Building Technology of the Institute of Science of Machines, Academy of Sciences USSR) and by Institut metallurgii imeni Baykova AN SSSR (Institute of Metallurgy imeni A.A. Baykov, Academy of Sciences USSR). The most serious defects in castings, ingots, and welds as a result of metal shrinkage are reviewed. Factors contributing to the formation of shrinkage cavities, porosity, cracks, fissures, distortion, and internal stresses are analyzed along with measures taken to prevent and remedy them. The hydrodynamics of molten metals and the process of solidification of metals are discussed. Also presented are resolutions adopted at the Conference with regard to the problem of shrinkage in metals. No personalities are mentioned. Most papers are accompanied by bibliographic references, the majority of which are Soviet.

TABLE OF CONTENTS:

Card 4/6

S/128/60/000/003/004/007
A105/A133

AUTHOR: Militsyn, K. N.

TITLE: The effect of the composition and heat treatment of metallic melts on the feeding of castings

PERIODICAL: Liteynoye proizvodstvo, no. 3, 1960, 19-24

TEXT: Commercial metal in the cast state does not possess more than 1 - 4%, and modified by alloying, not more than 4 - 15% of the theoretically possible strength properties. The stronger the metal, the less measures are necessary to achieve optimum qualities. Therefore, the basic aim of smelters is to achieve a dense metal by uninterrupted, normal feeding of the cast in the process of crystallization. Normal feeding means here the compensation of volumetric shrinkage of every crystallizing volume at the expense of following crystallizing volumes. As there is no literature concerning this problem, tests were carried out with aluminum-silicon metals and alloys. The melts were prepared in an electric furnace in chamotte-graphite crucibles. First, at 10% superheating, the melts were produced and poured into a cast-iron ingot mold. Small bars were thus obtained which were tested as to their

Card 1/3

The effect of the composition and...

chemical composition, mechanical properties, gas content, volumetric shrinkage, density, porosity and micro- and macrostructure. During the shrinkage and feeding tests only so much metal and alloy were melted as was necessary for one casting only. The superheating temperature holding time and casting conditions were controlled. Pouring was carried out at 1, 10, 20, 30 and 50% superheating over temperature of the beginning of crystallization of metal and alloy. The tests were carried out with cylindrical specimens of simple shape. The alloy was enriched by radioactive 0.001 - 0.005% Ca^{45} and Zn^{65}. After cooling, the casting was weighed and cut into two longitudinal sections A templet 3.5 mm thick was cut out of one half and after grinding and washing with spirit and ether it was exposed on a photographic film. The negatives were measured with a photometer and, according to the results of these measurements, lines of an equal intensity of blackening were drawn which were identical with the same quantity of feeding metal from the shrinkage head. After this the templets were tested on porosity and mechanical properties. The precrystallization state of the melts depends on their purity. The content of impurities in various commercial metals and alloys varies over a wide range. Besides, commercial alloys contain a variety of oxides, carbides, sulphides and hydrates. Because of this, the structure and properties of al-

loys affect the crystallization. The harmful effect of impurities on the crystallization can be reduced by binding them with wetting admixtures, removing them by refining or by increasing the cooling rate. Radiographic inspections proved that with the increase of impurities the feeding of metal becomes less concentrated. The investigation showed that admixtures which were artificially added to the melts deteriorate feeding to a greater extent than natural impurities; besides, a maximum reduction in mechanical properties is shown by pure metals, whereas contaminated alloys show smaller degree of deteriation. The effect of various degrees of gas-absorption upon the feeding is described. The more impurities and the greater the gas saturation, the worse becomes the feeding. With increased gas-absorption the concentration of feeding weakens and the distribution of the melt over the casting volume becomes non-uniform. The greatest decrease in mechanical properties was observed in castings in the case of a contaminated charge. The effect of superheating and holding time on the feeding of castings is shown. The more impurities in the alloy, the more effective is superheating, ranging between 20% for pure metals and 30% for contaminated ones. The more impurities in the alloy, the higher must be superheating to ensure a maximum of density and a minimum of porosity. There are 16 figures and 1 Soviet-bloc reference.

Card 3/3

MILITSYN, K. N., Doc Tech Sci -- "Theoretical ~~fundamentals~~ principles of the feeding process of castings." Mos, 1961. (Min of Higher and Sec Spec Ed RSFSR. Krasnoyarsk Inst of Non-ferrous Metals im M. I. Kalinin) (KL, 8-61, 239)

MILITSYN, K.N.

Effect of inoculation on the feeding of castings. Lit. proizv. no.3:28-30 Mr '61. (MIRA 14:6)
(Nonferrous metals--Founding)

S/149/61/000/005/004/008
A006/A101

AUTHOR: Militsyn, K. N.

TITLE: Methods of determining volumetric shrinkage of metals and alloys in the liquid and solidifying states

PERIODICAL: Izvestiya vysshikh uchebnykh zavedeniy, Tsvetnaya metallurgiya, no.5, 1961, 156-164

TEXT: Information is presented on existing method of determining volume shrinkage of metals and alloys during casting, which are: a) the method of hydrostatic weighing; 2) the pycnometric method, and 3) the method of non-feed casting. The latter is widely used in foundry practice because of its simplicity, although the true volume of filling the hollow of the mold cannot be determined. The author proposes a new method of determining volume shrinkage which is simple, but free of the aforementioned deficiency. The metal loss in the casting is refilled from the feed head during the liquid state and solidification. The amount of metal consumed for feeding the casting is characteristic of the shrinkage during these processes. In the case of incomplete compensation of shrinkage there will be shrinkage porosity. Then the full shrinkage of the casting will be

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Methods of determining volumetric ...

equal to the metal consumption from the feed head to compensate shrinkage plus the porosity of the casting. This is expressed by the following formula:

$$\Delta V = \frac{Q_3 - Q_n}{d_3} + \Pi = \frac{q}{d_3} + \Pi,$$

where Q_3 is the weight of metal cast into the feed head; Q_n is the feed head weight; q is the metal consumption to compensate the shrinkage of the casting; d_3 is the density of the metal to be cast and Π is the porosity of the casting in %. The relative shrinkage of the casting in liquid state in % to the weight of the casting is

$$\varepsilon_v = \frac{\Delta V}{V_{liq}} 100 + \Pi = \frac{qd_3}{d_3 Q_o} 100 + \Pi = \frac{q}{Q_o} 100 + \Pi,$$

where V_{liq} is the volume and Q_o the weight of the casting. The method can be applied in two variants: a) the hollow of the mold is filled through the foundry system b) it is filled through the feed head with the aid of a funnel. For fuller compensation and to eliminate the effect of dissolved gases, super-atmospheric pressure can be applied onto the feed head during solidification. The described method is less labor-consuming than previous ways and ensures

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satisfactory accuracy; determination of the volume of the mold, the casting and the cast metal is not required. The information includes a method for determining the porosity of experimental castings. There are 3 tables, 5 figures and 18 references: 5 Soviet-bloc and 13 non-Soviet-bloc.

ASSOCIATIONS: Moskovskiy aviatsionnyy institut (Moscow Aviation Institute); Kafedra tekhnologii metallov (Department of Metal Technology)

SUBMITTED: October 5, 1961

31238
S/149/61/000/006/003/003
A006/A101

18.8100

AUTHOR: Militsyn, K. N.

TITLE: Experimental determination of volumetric shrinkage in liquid state and during solidifying of metals and alloys of the aluminum-zinc and aluminum-silicon systems

PERIODICAL: Izvestiya vysshikh uchebnykh zavedeniy, Tsvetnaya metallurgiya, no. 6, 1961, 99 - 110

TEXT: To complete literature data the author studied volumetric shrinkage in liquid and solidifying state of Al-Zn and Al-Si alloys. The volumetric shrinkage during solidifying was determined with the aid of the "feed-casting" method described in reference 1:(K. N. Militsyn, Izv. VUZ, Tsvetnaya metallurgiya, no. 5, 1961). Not less than 3 castings were made of each metal and alloy; density and porosity of the castings were tested. Results are given in tables and graphs. It was found that changes in shrinkage observed during solidifying of Al-Zn alloys are not subjected to the rule of additivity. When adding to one of the pure components another one, shrinkage increases slightly at first and then decreases slowly; a distinct regularity of changes is not observed. Shrinkage during soli-

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Experimental determination of volumetric...

difying of Al-Si alloys varies, depending on composition, approximately as in Al-Zn alloys. Mean porosity of experimental castings is 0 to 0.1% and the degree of compensation of volumetric shrinkage from the feed head varies within 100 to 96.2%. In liquid state volumetric shrinkage was calculated by deducing solidification shrinkage from total shrinkage. It was found that shrinkage of liquid Al-Zn metals and alloys, depending on the casting temperature, increases sharply during superheating up to 10% and then more smoothly. A similar dependence of volumetric shrinkage on superheating temperatures was stated for liquid Al-Si alloys. Thus the factor of volumetric expansion of liquid metals and melts has higher numerical values near melting temperatures and during low superheating, than at high superheating temperatures. This is, in the author's opinion, due to the more ordered structure of metal melts at high superheating temperatures. Highest volumetric shrinkage in liquid state was observed with pure aluminum; that of zinc was considerably less. The shrinkage of aluminum base alloys in this state is below that of pure Al but exceeds that of pure Zn. Zinc base alloys show about the same volumetric shrinkage in liquid state as zinc. Porosity and density of the castings were almost equal in several points of the volume; mechanical properties were similar. The maximum difference was not over 16% for tensile strength and 39% for

Card 2/3

Experimental determination of volumetric...

relative elongation. Mechanical properties are only slightly affected by superheating during casting. There are 3 tables, 5 figures and 7 references: 4 Soviet-bloc and 3 non-Soviet-bloc. The reference to the most recent English-language publication reads as follows: W. E. Googdich, Trans. Faraday Soc. vol. 25, 531 (1929).

ASSOCIATION: Moskovskiy aviatsionnyy institut (Moscow Aviation Institute). Kafedra tekhnologii metallov (Department of Metal Technology)

SUBMITTED: October 5, 1960

Card 3/3

S/136/62/000/006/002/005
E021/E435

AUTHORS: Gnezdilov, I.A., Militsyn, K.N.

TITLE: The influence of small additions of magnesium, aluminium, titanium, silver and manganese on the fluidity of nickel

PERIODICAL: Tsvetnyye metally, no.6, 1962, 70-74

TEXT: The fluidity was investigated using apparatus due to Yu.A.Nekhendzi and A.M.Samarin and a U-shaped test sample. The apparatus provides a change in direction (180°) and a change in cross section (from 9 to 6 mm diameter) of a moving stream of the liquid alloy. The fluidity is measured by the height of metal in the arm of the U-tube with the smaller cross-section. A lined furnace enables a 2 kg charge to be melted in 40 to 45 min and heated to 1600 - 1650°C; argon can be fed into the furnace. The molted metal is poured through a funnel, maintaining a constant pressure head in all the experiments. The temperature of the metal was measured by a platinum - platinum/rhodium thermocouple. The temperature of the U-shaped

stainless steel mould was measured by a contact thermocouple. First, the effect of melt temperature was investigated; as the temperature increased from 1500 to 1700°C there was a linear increase in the metal filled length of the smaller arm of the mould from about 20 to 200 mm. Then, the effect of small additions of various elements was studied using a melt temperature of 1600°C. The length filled by an alloy containing 0.025% Mg was 82 to 90 mm. With increase in Mg content there was a decrease in the length filled, to 12 - 20 mm at 0.15% Mg. Increasing the aluminium content from 0.025 to 0.15% resulted in a decrease from 107 - 115 to 0 - 30 mm. Increasing the titanium content from 0.025 to 0.15% resulted in an increase from 102 - 110 to 198 - 200 mm. Increasing the silicon content caused an increase from 98 - 112 to 200 - 205 mm. Finally, an increase in manganese content from 0.025 to 0.15% caused a decrease from 87 - 100 to 30 - 40 mm. There are 2 figures and 2 tables.

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MILITSYN, K.N.

L 10307-63 EWP(q)/EWT(m)/BDS--AFFTC/ASD--
JD/HW-2
ACCESSION NR: AP3000202 S/0136/63/000/005/0059/0063

58

AUTHOR: Gnezdilov, I. A.; Militsyn, K. N.

TITLE: Influence of modification working of a nickel melt on the quality of the ingot

27

SOURCE: Tsvetnyye metally, no. 5, 1963, 59-63

TOPIC TAGS: modification working, silicon, aluminum, titanium, nickel ingot, Tamman furnace

ABSTRACT: The present study was made to remedy the lack of data concerning the influence of modificators such as silicon, aluminum, and titanium on nickel ingots. 200 g of fine, brand NO nickel (GOST 849-56) was melted in a Tamman furnace for 20 min at 1600C in a magnesite crucible, in an argon atmosphere, fed through a titanium pipe at a pressure of 0.2 atm. Temperature was measured by a platinum-platinorhodium thermocouple with interchangeable silica cup, immersed in the metal. Modificators wrapped in nickel foil were introduced in amount 0.025 - 0.05 - 0.075 - 0.1%. After melting, the crucible was allowed to cool slowly in the furnace. The ingots were cut longitudinally in two halves, treated with concentrated nitric acid, and a crystal count was made. The author concludes that: 1) Aluminum and titanium have

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L 10307-63
ACCESSION NR: AP3000202

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a great modification ability with regard to nickel. Hundredths of a percent of aluminum and titanium were found to sharply reduce grain size and eliminate cracks, give structural homogeneity, and improve mechanical properties. 2) The introduction of magnesium, silicon, and manganese produces insignificant changes in nickel ingot. Orig. art. has: 6 figures.

ASSOCIATION: none

SUBMITTED: 00 DATE ACQD: 14Jun63 ENCL: 00

SUB CODE: ML NO REF SOV: 010 OTHER: 000

Card 2/2

L 33316-65 EWT(m)/EWP(w)/EWA(d)/EPR/T/EWP(t)/EWP(b)/EWA(c) Pad/Pe-4 IJP(c)
JD/HW

ACCESSION NR: AP5003376 S/0136/65/000/001/0080/0084

31
27
B

AUTHOR: Gnezdilov, I.A.; Militsyn, K.N.

TITLE: The quality of semicontinuously cast nickel ingots

38 27

SOURCE: Tsvetnyye metally, no. 1, 1965, 80-84

TOPIC TAGS: cast nickel, continuously cast nickel, semicontinuous casting, nickel ingot quality, intercrystalline crack

ABSTRACT: The present system of nickel casting in water-cooled molds results in up to 35% geometric and other rejects when the ingots are converted into strip. To improve

eliminate the possibility of intercrystalline cracks. The gas content

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L 33316-65

ACCESSION NR: AP5003376

cast ingots is lower than that in ingots cast in water-chilled molds. Mechanical properties of both types are compared. "The gas analysis was carried out by S.I. Meshcha- [illegible] melting method on apparatus of the

"Giprotsvetmetobrabotka" Institute, [illegible]

ASSOCIATION: none

SUBMITTED: 00 ENCL: 00 SUB CODE: MM

NO REF SOV: 001 OTHER: 000

Card 2/2

MILITSYN, V.A.(Moscow)

Role of therapeutic methods using apparatus in compound spa therapy. Vop.kurlfizioter. i lech.fiz.kul't no.3:44-48 Jl-S '55. (MLRA 8:8)

(HEALTH RESORTS,
complex ther.,role of phys.ther. with appar.)
(PHYSICAL THERAPY,
in complex ther. in health resorts, role of appar.)

MILITSYN, V.A.

MILITSYN, V.A., prof.

Principal landmarks in the development of physical therapy in the U.S.S.R. during the past 40 years. Sov.med. 21 no.10:68-80 O '57. (MIRA 11:1)

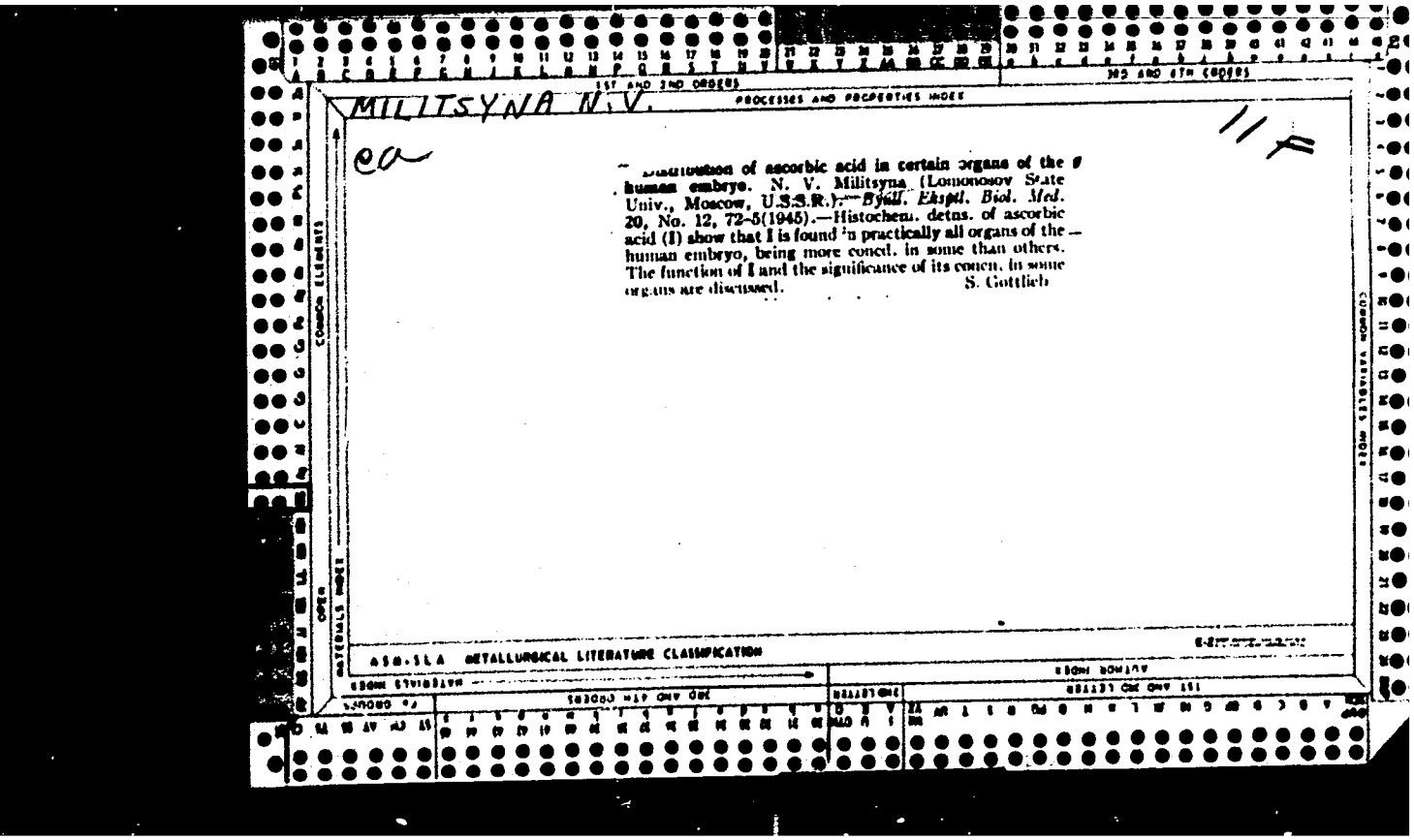
1. Iz kafedry fizicheskoy meditsiny TSentral'nogo instituta usovershenstvovaniya vrachey.

(PHYSICAL THERAPY in Russia)

STAROBINSKIY, I.M., prof.; OBROSOV, A.N., prof.; KANEVSKIY, G.L., prof.; MILITSYN, V.A., prof.; PARFENOV, A.P., prof.

Resolution of the All-Union Methodological Conference on Problems in the Teaching of Physical Therapy in the Medical Institutes and in the Institutes for Advanced Training of Physicians (Leningrad, January 27-28, 1961). Vop. kur., fizioter. i lech. fiz. kul't. 26 no.4:373-376 Jl-Ag '61. (MIRA 15:1)

1. Chlen-korrespondent AMN SSSR (for Obrosov).
(PHYSICAL THERAPY--STUDY AND TEACHING)



MILITSYNA N.V.

ca

11 F

Distribution of ascorbic acid in certain organs of the human embryo. N. V. Militsyna (Lomonosov State Univ., Moscow, U.S.S.R.). *Byull. Eksptl. Biol. Med.* 20, No. 12, 72-5(1945).—Histochem. detns. of ascorbic acid (I) show that I is found in practically all organs of the human embryo, being more concd. in some than others. The function of I and the significance of its concn. in some organs are discussed. S. Gottlieb

ASM-SLA METALLURGICAL LITERATURE CLASSIFICATION

MILITSYNA, N. V., CAND BIO SCI, "MORPHOLOGICAL AND CERTAIN HISTOCHEMICAL VARIATIONS IN THE ADRENAL CORTEX UNDER ACTIONS upon THE CEREBRAL CORTEX AND UNDER HYPOPHYSECTOMY." MOSCOW, 1961. (SECOND MOSCOW STATE MED INST IMENI N. I. PIROGOV). (KL-DV, 11-61, 215).

MILIUNIENE, A.

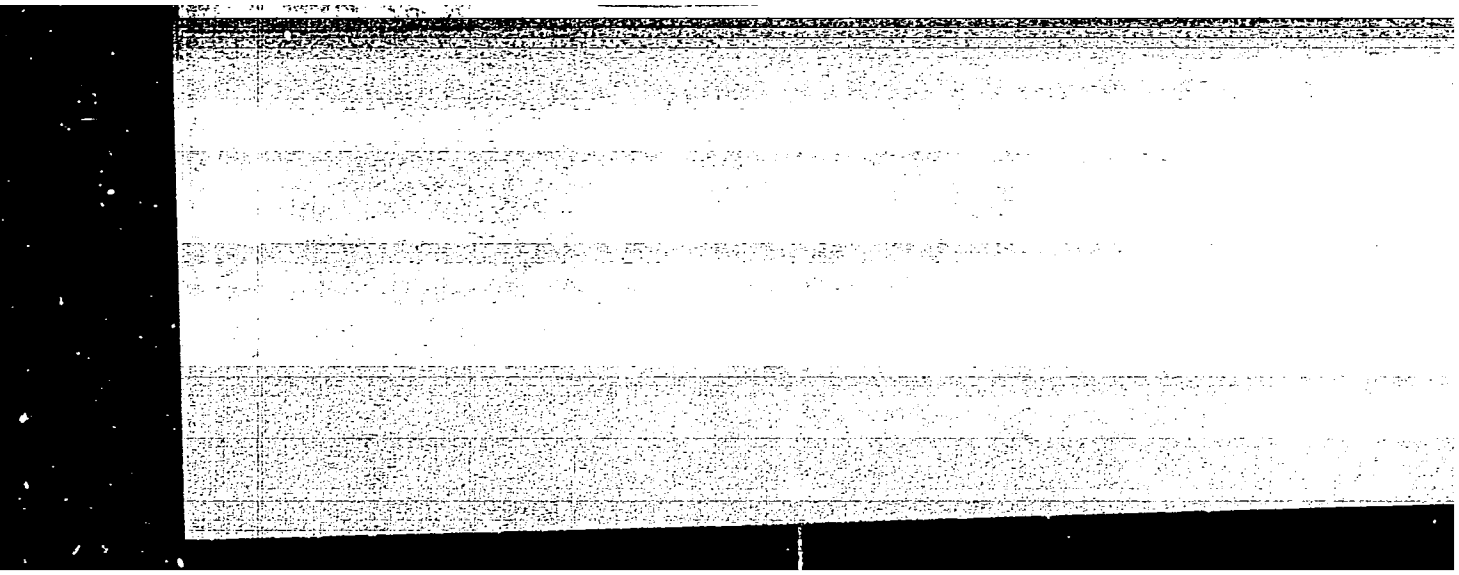
Planning oral hygiene among children in Vilnius. Sveik. apsaug. no.7: 36-40 '62.

1. Vilniaus Jungtines vaiku ligonines vaiku poliklinikos stomatologinis kabinetas. Vedeja -- A. Miliuniene.
(DENTAL HYGIENE)

MILOSLIN, M

Reduction of viscosity of mud fluids treated with loading materials. A. Milostin, I. Kioski, G. Hochmann and I. Dumitrescu (Lucr. Inst. Petrol Gaze, Bucharest, 1956 [1957], 2, 19—35).—Methods of reducing the viscosity of drilling muds loaded with heavy minerals (e.g., barytes), using Na hexametaphosphate, Na pyrophosphate, quebracho and Ca lignosulphonate, are described, and details of a series of tests are tabulated and interpreted graphically. (From English summary.) J. S. C.

4



MILIUTIN, A., ing.

Drilling problems concerning deep wells. Petrol si gaze 14 no.3:119-125 Ja '63.

MIHAESCU, T.; MILIUTIN,A.; CIUCA, V.; NASTASE, N.

Apparatus of measure and control of characteristic parameters of functioning of drilling turbines. Petrol si gaze 15 no.8: 454-459 Ag'64

STOIANOV, N., ing.; MIHAESCU, T., ing.; MILIUTIN, A., ing.

Tubing of the intermediate column in a deep well. Petrol si gaze 14 no.10:490-494 0'63.

TEFT, A.L. [Tseft, A.L.]; VASILIEVA, V.A. [Vasil'yeva, V.A.]; MILIUTINA, N.A. [Milyutina, N.A.]

Bleaching of the Dzhezkazgan compound ores in the sulfuric acid containing salts of trivalent iron. Note II. Analele metalurgie 16 no.3:80-91 Jl-S '62.

MILIUTINA, S. ; SERGEEVA, V.

Effect of heat treatment on the nature of holocellulose fibers of spruce wood. p. 69.

BIOLOGICHESKAIA NAUKA; SELSKOMU I LESNOMU KHOZIAISTVU. (Latvijas PSR Zinatnu akademija. BiologijasZinatnu nodala) Riga, Latvia, No. 16, 1958. In Russian.

Monthly list of East European Accessions (EEAI), LC, Vol. 8, No. 8, August 1959.
Uncla.

MILIVIDOV, I.I., fel'dsher (Bol'shiye Yal'chiki Chuvashskoy ASSR)

Health education in the village. Fel'd. i akush. 21 no.5:42 My '56.
(MLRA 9:8)

(PUBLIC HEALTH, RURAL)

MILIVIDOVA, N.V.

2004. Isolation of individual hydrocarbons from paraffin cracking distillate. II. isolation of N alkanes and I alkanes with 5 to 11 carbon atoms. Tilicheev, M.D. and Milividova, N.V. (Zhur. Priklad, Khim, (J. Appl. Chem.), 1949, vol. 22, 611-624; see abstr. in chem abstr. 1949, vol. 43, 8124.)

Immediate source clipping

L 20279-65 EWT(m)/T/EWP(t)/EWP(b) Pa-4 IJP(c)/AFWL/ASD(a)-5/ESD(t) JD

ACCESSION NR: AP5000691 S/0181/64/006/012/3736/3738

AUTHOR: Milividskiy, M. G.; Voronkov, V. V.

TITLE: Cellular structure in silicon

SOURCE: Fizika tverdogo tela, v. 6, no. 12, 1964, 3736-3738

TOPIC TAGS: silicon, single crystal, crystal structure, dendrite, impurity concentration

ABSTRACT: The cellular structure of the crystallization front, obtained when the impurity concentration was sufficiently high, was investigated for Si single crystals heavily doped with Al, Sb, As and P and grown by the Czochralski method along the [111] direction. The impurity concentration (measured by the Hall effect in front of the cells) necessary for the appearance of cells was

$$c_0 = D\frac{QK}{kT_n^2(1-K)^2}\frac{g}{l}$$

Card 1/2

L 20279-65
ACCESSION NR: AP5000691

where D is diffusion coefficient of the impurity in the melt; f is the growth rate; $g = (\varkappa_1 g_1 + \varkappa_2 g_2)/(\varkappa_1 + \varkappa_2)$; $\varkappa_1$ and $\varkappa_2$ are the thermal conductivities in the melt and solid, respectively; g_1 and g_2 are the temperature gradients in the melt and solid, respectively; other symbols are defined in V. V. Voronkov's earlier paper (FTT, v. 6, 2984, 1964). For f = 1.3 mm/min, c_s was 6.8×10^{19} cm^{-3} and the cell width was 220μ. The results confirmed the linear relationship between c_s and g/f. From the known values of c_s, the diffusion coefficients of Al, Sb, As and P in the melt were found to be 3×10^{-4}, 10^{-4}, 6×10^{-5} and 5×10^{-5} cm^2/sec, respectively. Increase of the impurity concentration, above c_s, produced dendritic structure at 2.2×10^{20} cm^{-3} for f = 1.3 mm/min. Orig. art. has: 2 figures and 2 formulas.

ASSOCIATION: Gosudarstvenny*y nauchno-issledovatel'skiy i proyektny*y institut edkometallicheskoy promy*shlennosti, Moskva (State Scientific Research and Design Institute of the Rare-Metal Industry)

SUBMITTED: 17Jun64 ENCL: 00

SUB CODE:IC,SS NR REF SOV: 005 OTHER: 006

Card 2/2

MILIVOJE, Katic

Exchange of experience of Yugoslav mechanical data processing specialists in Hungary. Vasut 14 no.6:7-8 Je '64.

1. Head, Mechanical Data Processing Office of the Yugoslav Railways, Belgrade.

MILIVOJEVIC, Bogoljub, ing.

Graphical determination of the amplitude and conditions of oscillation in oscillators. Telekomunikacije 10 no.4:22-24 O '61.

(Oscillators, Electric)

MILIVOJEVIC, Dragoljub

Efforts of the Federal Institute for Studying Labor productivity.
Tesla no.13/14:27 S-O '55.

MILIVOJEVIC, M.; KICEVAC, Z.

Making testing sections from beton with added Darex-AEA and Mischoel-VR preparations. p. 329.

PUT I SAOBRACAJ. (Drustvo za puteve Srbije)
Beograd, Yugoslavia. Vol. 4, no. 7/10, July/Oct. 1958.

Monthly List of East European Accessions (EEAI) LC, Vol. 8, no. 8, Aug. 1959.

Uncl.

MILIVOJEVIC, M.; KICEVAC, Z.

Construction of a branch of the Smederevo Road to lead to the Vinca Institute with special reference to the quality of the work. p. 335.

PUT I SAOBRACAJ. (Drustvo za puteve Srbije)
Beograd, Yugoslavia. Vol. 4, no. 7/10, July/Oct. 1958.

Monthly List of East European Accessions (EEAI) LC, Vol. 8, no. 8, Aug. 1959.

Uncl.

MILIVOJEVIC, M.

VUKSIC, Lj.; ARSIC, B.; MEL, D.; MORELJ, M.; GERBEC, M.; MILOVANOVIC, M.; STOJKOVIC, Lj.; MIRKOVIC, M.; MILIVOJEVIC, M.

Isolation of Coxiella burnetti from stable dust. Higijena, Beogr. 8 no.4:240-245 1956.

1. Katedra za Higijenu i epidemiologiju VMA. Virusolosko odeljenje Higijenskog instituta NRS, Beograd.

(COXIELLA BURNETTI,
isolation from stable dust (Ser))

(DUST,
isolation of Coxiella burnetti from stable dust (Ser))

MILIVOJEVIC, Miodrag, ing. (Beograd); STANKOVIC, Dusan, ing. (Beograd)

Labor productivity in experiments with high-yielding wheat in 1958-1959. Produktivnost 3 no.3:187-200 Mr '61.

MILIVOJEVIC, S.

Yugoslavia (430)

Agriculture - Plant and Animal Industry

The labor councils and executive committees of the state-owned agricultural properties. p 17. SOCIALISTICKA POLJOPRIVREDA, Vol 2, No 6, June 1951.

East European Accessions List, Library of Congress, Vol 1, No 14, Dec 1952. UNCLASSIFIED

L 39747-66 EWT(1)/EWT(m)/EWP(t) IJP(c) AT/JD/GD-2

ACC NR: AR6005196 SOURCE CODE: UR/0058/65/000/009/D007/D007

SOURCE: Ref. zh. Fizika, Abs. 9D52

AUTHORS: Kushnir, R. M.; Kolosyuk, H. M.; Miliyanchuk, A. V.; Palyukh, B. M.

TITLE: Resonance charge exchange of cadmium ions

REF SOURCE: Rezonansna perezaryadka ioniv kadmiyu. Visnyk L'vivs'k. un-tu. Ser. fiz. L'viv, 1964, 81-82

TOPIC TAGS: cadmium, ion neutralization, charge exchange, resonance scattering, scattering cross section

TRANSLATION: The authors measured the effective cross section of the resonance charge exchange of Cd ions in the ion-energy interval 25--400 ev. The measurements were made by the method of decelerating fields and by the method of drawing out the slow ions. The experimental curve Q = f(E) agrees well with the theoretical curve of Firsov.

SUB CODE: 20

Card 1/1

L 64740-65 - EWT(1)/EPA(s)-2/EWT(m)/T/EWP(t)/EWP(b) IJP(c) JD/JG

ACCESSION NR: AP5015447 UR/0185/65/010/006/0687/0689

AUTHORS: Bilen'kyy, B.F.; Miliyanchuk, M.V.; Pashkovs'kyy, M.V.

TITLE: Study of optical properties of thin films of red mercury sulfide

SOURCE: Ukrayins'kyy fizychnyy zhurnal, v. 10, no. 6, 1965, 687-689

TOPIC TAGS: mercury compound, thin film, optic property, absorption spectrum

ABSTRACT: Thin films of α-HgS were obtained by thermal sputtering of single crystals of α-HgS onto glass substrates. The films were transparent, reddish-orange and uniform in thickness and color. The transmission and absorption spectra of such a film (0.53 nm thick) are presented. The main absorption edge is the same as that of α-HgS crystals and shifts to lower wavelengths on cooling. The dis-

α-HgS crystals and shifts to lower wavelengths on cooling. The dispersion curve of the index of refraction of a thin film of α-HgS is

Card 1/2

L 64740-65

ACCESSION NR: AP5015447

presented. On heating the films changed color irreversibly, becoming darker above a certain temperature. Optical and x-ray studies revealed that this is due to a partial transformation to the β modification. Heating leads initially only to a shift of the absorption edge to longer wavelengths with an eventual change in the absorption edge and the appearance of a β-HgS absorption edge. On cooling, after previous heating to 500C, the film retains its black color and has at room temperature a β-HgS absorption edge at 1.7 nm. The spectra were obtained on an SF-4 spectrophotometer and on an IKS-12 spectrometer. The authors express their gratitude to I. V.

spectrometer. The authors express their gratitude to I. V. Savits'kyy (Savitskiy) for growing the α-HgS single crystals." Orig. art. has: 3 figures.

ASSOCIATION: L'vivskyy derzhuniversytet im. Iv. Franka [L'vovskiy gosuniversitet im. I. Franko] (L'vov State University)

SUBMITTED: 20Jan65 ENCL: 00 SUB CODE: SS, OP

NR REF SOV: 010 OTHER: 006

Card 2/2

MILLIYANCHUK, Vasiliy Stepanovich (L'vov State Univ imeni Iv. Franko) awarded sci degree of Doc Physico-Math Sci for 20 Jun 57 defense of dissertation: "Influence of non-homogeneous intermolecular fields on atomic spectra" at the Council, Mos State Univ imeni Lomonosov; Prot No 1, 11 Jan 58.

(BMVO, 6-58, 10)

MILIYEVSKIY, I.

Flanges out of strip steel for gravity and suction tubes. Muk.-elev.prom.20 no.11:9 N '54. (MLRA 8:3)

1. Ministerstvo stroitel'stva SSSR.
(Flanges) (Conveying machinery)

MILIYEVSKIY, L.I.; MATVEYENKO, I.V.

Redesign of box dryers for cores. Lit. proizv. no.9:43 S '64.
(MIRA 18:10)

MILJAK, R.

Damages caused by the wind in the Crna gora Nevesinjska forest stand in 1958. p. 241.

NARODNI SUMAR. (Drustvo sumarskih inzenjera i tehnicara Bosne i Hercegovine) Sarajevo, Yugoslavia. Vol. 13, no. 5/6, 1959.

Monthly List of East European Accessions (EEAI) LC Vol. 9, no. 2, Feb. 1960.

Uncl.

MILJAN-JARIC, Iva, ing. (Zagreb)

Improvements of the system for voltage regulation of the synchronous generators in the analog computers. Avtomatika 3 no.4:258-266 Ag '62.

MILJANIC, Miko, prof.dr; BORISAVLJEVIC, Dusan

Differential diagnosis of duodenal diverticula. Med.pregl.,Novi Sad 7 no.6:449-455 1954.

1. Gradska bolnica, Vrsac.
(DUODENUM, diverticula, differ.diag.)

MILJANIC, Milos, dr.

The problem of the utilization of natural radioactivity for therapeutic purposes. Med. glas. 16 no.3:120-123 Mr '62.

1. Balneo-klimatoloski institut NRS (Direktor: doc. dr V. Godic)

(RADIOACTIVITY) (BALNEOLOGY)

S

ZECEVIC, Ilijana; KARAKUSEVIC, Milica; KONSTANTINOVIC, Ivan; MILJANIC, Milos

Effect of drinking of Bukovicka Banja mineral water on the renal elimination of water and electrolytes. Srpski arh. celok. lek. 90 no.9:833-838 S '62.

1. Balneo-klimatoloski institut NR Srbije u Beogradu Direktor: doc. dr. Vlastimir Godis.
(WATER ELECTROLYTE BALANCE)
(MINERAL WATERS) (DIURESIS)

S

MILJANIC, P., dr., ing.; VUCKOVIC, V., ing.; OBRADOVIC, I., dr., ing.

Device for frequency and voltage transformation and control. Elektroprivreda 14 no.7/8:339-346 Jl-Ag '61.

1. Institut "Nikola Tesla", Beograd.

MITRAKOVIC, B.;DESPOTOVIC, S.; MILJANIC, P.; SKENDZIC, D.; VOLCKOV,I.

Activities of the Nikola Tesla Electrotechnical Institute in 1962. Elektroprivreda 16 no.10:506-519 0'63.

MILJEVIĆ, Đorđe

Development of the economic system of the Federal People's Republic of Yugoslavia. Beograd, Znanje, 1954. 259 p.

MILJEVIC, S.

Measuring very low capacitance. p. 151. RADIOMATER (Savez radiomatera Jugoslavije) Beograd. Vol. 10, no. 6, June 1956

SOURCE: East Europe Accession Lists (EEAL), Library of Congress, Vol. 5, no. 11, Nov. 1956

MILJKOVIC, A UAM

MILJKOVIC, A.

Short review of the present status of the biological war problems.
Higijena, Beogr. 8 no.4:308-315 1956.

1. Mikrobioloski institut-katedre za higijenu i epidemiologiju Vojne medicinske akademije, Beograd.
(BIOLOGICAL WARFARE,
modern aspects (Ser))

MILJKOVIC, ADAM

MILJKOVIC, Adam, Pukovnik Prof., dr.

Possibilities of biological warfare in future wars. Voj. san. pregl. Beogr. 13 no.11-12:596-598 Nov-Dec 56.

(BIOLOGICAL WARFARE
probability in future wars (Ser))

31

MILJKOVIC, Adam, sanitetski pukovnik, prof. dr.

Method of teaching military bacteriology in military medical schools. Vojnosanit Pregl. 20 no.11:715-718 N '63.

MILJKOVIC, A.

12

PHASE I BOOK EXPLOITATION YUG/5509

Grubor, Ljubo, pub.

Atomska biološka hemiska oružja i zaštita; zbirka članaka (Atomic, Biological, and Chemical Weapons and Protection Against Them; Collection of Articles) Zagreb, EPOHA, 1960. 426 p. No. of copies printed not given.

Authors of articles: Pavle Savić, Academician, Milorad Ristić, Engineer, Milorad Mladjenović, Doctor, Nenad Railić, Engineer, Milovan Vidmar, Engineer, Dragutin Milhofer, Engineer, Srđan Hajduković, Doctor, Velimir Vouk, Doctor, Adam Miljković, Doctor, Čedomil Šebetić, Doctor, Milivoje Perišić, Doctor, Svetolik Railić, Engineer, Miljko Đurić, Engineer and Kazimir Baryla, Doctor.

PURPOSE: This collection of articles is intended for the general reader as well as for personnel in scientific research and similar organizations.

COVERAGE: The book contains 16 articles dealing with general problems of atomic, biological, and chemical warfare weapons and defense methods. The following topics are discussed: nuclear power, reactors, nuclear explosions [including their peaceful applications], nuclear weapons, radiological detection and dosimetry, some problems of the effect of nuclear radiation on the organism and of internal contamination by radioactive isotopes, problems of germ and chemical warfare, and the use of combat poisons. The Foreword was written by Major General Rade Bulat. References follow most of the articles.

TABLE OF CONTENTS:

* [Djuric and Đuric are spelling variations; both forms are found in the book]

MILJKOVIC,E.

Consolidation works on the Borisa Kovacevic Hydroelectric Plant in Bogatici. p. 103.
(Elektroprivreda. Vol. 10, no. 2, Feb. 1957, Yugoslavia)

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

MILJKOVIC, E.

MILJKOVIC, E. The construction of a reinforced-concrete pipeline across the Piva River near the Jajce I Hydroelectric Plant. p. 636.

Vol. 9, no. 11/12, Nov./Dec.1956
ELEKTROPRIVERDA
TECHNOLOGY
Beograd

So: East European Accession, Vol. 6, no. 3, March 1957

MILJKOVIC, Emin, ing. (Saloma Albabarija 6, Sarajevo)

Joining the supply tunnel of the Jajce Hydroelectric Plant I with a natural lake under constant level. Vodoprivreda Jug 2 no.4/5: 153-159 '59. (EEAI 9:10)

1. "Elektroprojekt," Sarajevo.
(Bosnia and Hercegovina--Hydroelectric-power stations)

MILJKOVIC, M.

Characteristics of equipment for the maintenance of a constant temperature, p. 643

TEHNIKA (Savez inzenjera i tehincara Jugoslavije) Beograd, Yugoslavia.
Vol. 14, no. 4, Apr 1959

Monthly List of East European Accession EEAI LC, Vol. 8, no. 6, June 1959
Uncla.

Y/0001/64/000/004/0703/0709

ACCESSION NR: AP4023175

AUTHOR: Miljkovic, Miodrag (Engineer)

TITLE: Quartz crystal units and components containing them

SOURCE: Tehnika, no. 4, 1964, 703-709

TOPIC TAGS: quartz crystal, quartz crystal component, Yugoslav electronics, component materials, crystal filter, quartz crystal frequency range, crystal oscillator

ABSTRACT: The article reviews the post-war history of production of industrial and natural quartz crystal components in Yugoslavia. It treats the relation between foreign and domestic consumption of these components produced in Yugoslavia, the production capacity, problems of finding good natural quartz, and Yugoslav production costs. Crystal filters and crystal oscillators receive special attention. In 1958 the frequency of quartz crystal units produced in Yugoslavia ranged from 3000 to 10,000 kc; by 1963 this range was 4 kc to 50 Mc; by 1965 it is expected to be 1 kc to 125 Mc. Orig. art. has: 4 tables and 10 figures.

Card 1/2

ACCESSION NR: AP4023175

ASSOCIATION: Institut za automatiku i telekomunikacije "Mihailo Pupin", Belgrade (Institute for Automation and Telecommunications)

SUBMITTED: 10Dec63	DATE ACQ: 10Apr64	ENCL: 00
SUB CODE: MA, GE	NO REF SOV: 000	OTHER: 000

Card 2/2

POPOVIC, Sreten; BAJEC, Dusan; DAJA, Milutin; MILJKOVIC, Petar

Surgically cured bilateral incarcerated hernia in a premature infant. Srpski arh. celok. lek. 90 no.4:469-473 Ap '62.

1. Klinika za decju hirurgiju Medicinskog fakulteta Universiteta u Beogradu Upravnik: prof. dr. Dimitrije Jovcic.
(HERNIA) (INFANT PREMATURE DISEASES)

[YUGOSLAVIA]

Dusan MAJIC, Milutin DJUJA and Petar MILJKOVIC, Pediatric Surgical Clinic of Medical Faculty (Klinika za decju hirurgiju Medicinskog fakulteta), Head (upravnik) Prof Dr Dimitrije JOVCIC, University of Belgrade.

"Pulmonary Hemangioma in a Child."

Belgrade, Srpski Arhiv za Celokupno Lekarstvo, Vol 90, No 7-8, July-Aug 1962; pp 763-766.

Abstract [German summary modified]: Asymptomatic pulmonary hemangioma found by mass radiographic screening was successfully excised in an 11-year-old girl. Histologic diagnosis was hemorrhagic pulmonary infarct. Excellent recovery.

1/1

YUGOSLAVIA

Dusan BAJEC and Petar MILJKOVIC, Pediatric Surgical Clinic of Medical Faculty of University (Klinika za decju hirurgiju Medicinskog fakulteta Univerziteta, Head (Upravnik) Prof Dr Dimitrije JOVCIC, Belgrade.

"Strangulation Ileus in Infants Caused by Congenital Bands."

Belgrade, Srpski Arhiv za Celokupno Lekarstvo, Vol 90, No 10, Oct 62; pp 967-971.

Abstract [German summary modified]: Cases in girl aged 7 weeks and boy aged 5 months; complete ileus and rectal hemorrhage main symptoms in both, laparotomy with incision or excision of bands was followed by uneventful recovery. Clinical details. One Yugoslav and 7 Western references.

1/1

TASOVAC, Borivoje; JAKOVLJEV, Dusan M.; MILJKOVIC, Petar B.

Ketosis with recurrent and acute appendicitis. Srpski arh. celok. lek. 91 no.5:527-530 My '63.

1. Pedijatrijska klinika Medicinskog fakulteta Univerziteta u Beogradu Upravnik: prof. dr Borivoje Tasovac Decja hirurska klinika Medicinskog fakulteta Univerziteta u Beogradu Upravnik: doc. dr Ilija Stojimirovic.
(ACIDOSIS) (APPENDICITIS)

S

MILJKOVIC V.

(32)

Belgrade, Veterinarski Glasnik, Vol 15, No 11, 1961

1. "Pulmonary Pathologic Changes in Lambs Vaccinated Against Dictyocaulosis" CJ. SOFRENOVIC, H. JOVANOVIC, A. [illegible] V. NEVENIC, K. [illegible] and H. [illegible]; Institute for the Application of Nuclear Energy in Agriculture, Veterinary Medicine and Forestry (Institut za primenu nuklearne energije u poljoprivredi, veterinarstvu i sumarstvu) Belgrade; pp 871-885 (English summary).

2. "About the Method of Preserving and Shipping Ovine Sperm" V. MILJKOVIC, [illegible] [illegible]OVIC, V. SINDJELIC and A. DAVIDOVIC; Obstetric and Artificial Insemination Clinic of the Veterinary Faculty (Klinika za porodiljstvo i vestacko osemenjavanje Veterinarskog fakulteta) Belgrade, and Artificial Insemination Center of the Veterinary Institute of the People's Republic of Serbija (Centar za V.O. Veterinarskog instituta NRS) Kanjaca; pp 885-891.

3. "Avitaminosis E As One Cause of Lamb Mortality on the Pester Highlands" B. VOJIC and Z. [illegible]; Veterinary Institute People's Republic of Serbia, Belgrade; pp 893-8.

4. "Identifying Bacteria in Organs of Dead Calves" [illegible] and H. STOJKOVIC; Microbiology Institute of the Veterinary Faculty, Belgrade; [illegible].

5. "Low-Temperature Resistance of the Scolex of Tenia hydatidigena in the Cysticercus" S. [illegible]; pp 903-4.

6. "Leptospirosis of Domestic Animals in Serbia" C. VICENTIJEVIC; Vet. Institute P.R. Serbia; pp 905-912.

7. "Temperature Course in Deep Layers of Bovine and Ovine Meats During Natural Cooling" D. [illegible]; Slaughterhouse (Klanica) Valjevo; pp 913-915.

8. "Animal Production Plan Demands Industrial Production of Meat and Eggs" M. ADIC; pp 917-922.

9. "Swine Losses in 1960" M. GEC; pp 923-925.

10. "Johne's Disease in Cattle" M. [illegible], B. MIHAJLOVIC, N. [illegible]LVIC, I. [illegible] and M. [illegible]; Institute of Microbiology (Institut za mikrobiologiju) and Inst. of Pathology (Inst. za patologiju) Veterinary Faculty, Belgrade; pp [illegible] ([illegible] summary)

YUGOSLAVIA

MILJKOVIC, V., et al., Birth and Artificial Insemination Clinic (Klinika za Porodiljstvo i Vestacko Osemenjavanje) of the Veterinary Faculty (Veterinarski Fakultet), Belgrade.

"The Artificial Insemination of Poultry."

Belgrade, Veterinarski Glasnik, Vol 17, No 3, 1963, pp 211-219.

Abstract: [Authors' German summary modified] The article offers a brief history of artificial insemination among poultry, describes the anatomy of domestic fowls, notes the increasing interest in the subject in Yugoslavia (particularly for the production of turkeys), and mentions ways and means of obtaining and preserving the sperm of the domestic cock.

Numerous photographs, diagrams, charts, tables; references to 18 recent works from Western Europe and the US.

1/1

YUGOSLAVIA

V. MILJKOVIC, N. MLADENOVIC, P. DRACA, G. MRVOS, V. JOVANOVIC, D. NIKODIJEVIC, V. STOJADINOVIC and A. DAVIDOVIC, Clinic for Reproduction Sterility and Artificial Insemination of Veterinary Faculty (Klinika za porodiljstvo, sterilitet i vestacko osemenjavanje Veterinarskog fakulteta) Belgrade.

"Ten Years of Artificial Insemination of Cattle in Serbia."

Belgrade, Veterinarski Glasnik, Vol 17, No 4, 1963; pp 315-322.

Abstract [German summary modified]: Gratified review of excellent results achieved with artificial insemination in Serbian and Yugoslav cattle. In Yugoslavia in 1961, 783,875 cows were inseminated by 608 bulls from 42 artificial insemination centers. Detailed statistical data by 7 breeds; 13 Serbian centers; many technical details and comments. One urgent need now is for a specialized national scientific journal dealing with bovine sterility and artificial insemination. Eighteen Yugoslav references.

1/1

YUGOSLAVIA

V. MILJKOVIC-[illegible] and [illegible], Institute [illegible] Technology of Animal [illegible], [illegible] i tehnologiju animalnih proizvoda [illegible]

"Effect of [illegible] Treatment [illegible] on Frequency [illegible] Human Infections in Cows."

Belgrade, Veterinarski glasnik, Vol [illegible], No 12, [illegible]

Abstract [German summary modified]: Among a total [illegible] large state farms where antibiotics are used routinely and [illegible] against mastitis, 132 had subclinical staphylococcal infection. [illegible] 788 cows from 7 farms with rare antibiotic use, [illegible] infected. Among [illegible] from privately owned small [illegible] with [illegible] rarity, only [illegible]. Over [illegible] of staphylococci [illegible] in the first (1311) group were resistant [illegible] while this percentage was under [illegible] 2 groups. [illegible], 3 Yugoslav and [illegible] Western references.

1/1

ESTONIA/Chemical Technology - Processing of Solid Fuels H.
(Naturally Deposited)

Abs Jour : Ref Zhur - Khimiya, No 16, 1958, 55108

Author : Fayngol'd, S.I., Mil'k, A.A.

Inst : Academy of Estonia

Title : Effect of the Relative Content of Organic Matter upon Semi-Coking of Shale (Counter-Current Gas Process).

Orig Pub : Izv. AN Est. SSR. Ser. tekhn.; fiz. matem. N., 1956, 5, No 1, 55-66

Abstract : A study was made concerning the effect of mineral matter content upon the semi-coking process from the standpoint of the smoke gases obtained from the combustion of semi-coke. An increased content of organic matter leads to a decrease in the yield of tar and gas, whereupon the

Card 1/2

MIL'K, A. A. Cand Tech Sci -- (diss) "Study of the effect of the qualitative characteristics of [redacted] shale upon the process of its heat treatment." Tallin, 1959. 24 pp with graphs (Acad Sci Estonian SSR. Department of Tech and Phys-Math Sci), 150 copies (KL, 43-59, 124)

GUBERGRITS, M.Ya., kand.tekhn.nauk; BRODSKAYA, B.Kh., kand.tekhn.nauk; MIL'K, A.A. [Milk, A.A.]; PAAL'MB, L.P. [Paalme, L.P.]

Effect of gas evacuation conditions on the output and composition of the product of thermal decomposition of Kukkersite-shale blocks. Podzem.gaz.ugl. no.4:25-29 '59. (MIRA 13:4)

(Estonia--Shale) (Coal gasification, Underground)

II

COUNTRY : POLAND
CATEGORY : Chemical Technology. Chemical Products and Their Uses. Part 1. General Problems
ABS. JOUR. : RZKhim., No. 1 1960, No. 1113

AUTHOR : Rozytkowski, J.; Milk, T.
INST. : -
TITLE : Interconnection Between the Chemical Industry and Various Branches of the National Economy (In Poland)
ORIG. PUB. : Przem. chem., 1958, 37, No 12, 757-759

ABSTRACT : The turnover of products between the chemical industry and other branches of the national economy in 1956, as well as the significance of the chemical industry in over-all Polish economy, has been examined.-- D. Yakesh

CARD: 1/1

MILK-ARUTIUNOV, A.I.

Roentgenodiagnosis of gastric and esophageal venous dilatation. Sovet. med. No.1:14-17 Jan 52. (CLML 21:4)

1. Of the Roentgen Division (Head--Honored Physician RSFSR S.V. Ivanova-Podobed), Moscow Municipal Scientific-Research Institute of First Aid imeni N.V. Sklifosovskiy).

MIL'KAMANOVICH K.A.

KOTKOVSKIY, A.P.; MIL'KAMANOVICH, K.A.; SASIM, A.S.; MAL', S.S.; KADACH, M.V.

Gasification of small lump peat of cylindrical form. Torf.prom. 31 no.6:21-23 '54. (MLRA 7:9)

1. Institut torfa AN BSSR.
(Peat)

M.L'KAMANOVICH, K.A.

SOK. DRY RESIDUE OF TAR WATERS OBTAINED DURING GASIFICATION (OF PEAT). Mil'kamanovich, K.A. (Vest. Akad. Navuk Belarus. SSR, Ser. fiz.-tekh. Navuk (J. Acad. Sci. White Russ. S.S.R., Ser. phys.-tech. Sci.), 1956, (3), 109-119; abstr. in Chem. Abstr., 1957, vol. 51, 12468). During gasification of peat, the amount of tar water (I) produced varies from 1.3-1.5 (recirculated water) to 15-25 (current water) cu.m/ton peat. Some of I contains 200-315 g of a dry condensed residue (II)/l., left after the steam distillation. A I specimen, d_4^{20} 1.105, containing II 315, total nitrogen compounds 16.9, ammonia 11.3, fatty acids 38.8 (as acetic acid), steam-distilled phenols 6.5, and non-volatile phenols 65.3 g. respectively, was treated at room temperature with various concentrations of ammonium sulphate (III), sodium chloride, sodium sulphate, ammonium chloride and copper sulphate. All salts caused the precipitation of II at a concentration ranging from 3.4/1 to 6.78% in the I:

[redacted] 99% respectively. C.A.

MIL'KAMANOVICH, K.A.; VERNER, V.S.

Chromatographic method for separating the solid residue of tar water from the thermal decomposition of peat. Dokl.AN BSSR 4 no.8:337-339 Ag '60. (MIRA 13:8)

1. Institut torfa AN BSSR. Predstavleno akad. AN BSSR B.V. Yerofeyevym.

(Chromatographic analysis) (Tar)

MILKAMANOVICH, K. A.; MENKH, V. A.; BUREYKO-KLESHCHOVA, I. F.; GRISHCHINSKAYA, L. L.

"Investigation of the process of the transfer of heat and matter in pyrolysis of sulfur mazut for its disulfuration."

report submitted for 2nd All-Union Conf on Heat & Mass Transfer, Minsk, 4-12 May 1964.

Inst of Heat & Mass Transfer, AS BSSR.

CP

Artificial crystal gliding. II. Nuclei of artificial gliding. A. V. Stepanov (Leningrad Phys.-Tech. Inst.). *Zhur. Eksptl. Teoret. Fiz.* 18, 741-9(1948); cf. *C.A.* 42, 6597f.—Strains applied on NaCl crystals in the direction [100], and perpendicular to the cleavage plane, bring about nuclei of gliding in the system (110)-[110] by local material displacement. These glidings are observed in polarized light on suitably oriented prisms by their anomalous opticoelastic birefringence. From the theory of elastic def mation of isotropic and anisotropic (cryst.) media, the fundamentally distinguishing characteristics of mech. deformation of a solid plate are deduced. For isotropic media, systems of circular isochromatic curves appear, while in NaCl, KCl, etc., the max. strains are observed along isochromatic curves of the fourth order, and the angle included between the direction of the applied force with the axes of anisotropy is an essential factor for the resulting optico-elastic phenomena. Since for KCl the ratio of Young's modulus in [100] to that in [111] is 3.2, for NaCl only 1.24, the elastic deformations are more easily verified in KCl. Gliding directions are characterized by a "concentration" of the deformations and indicated in the shape of the max. strain curves. The gliding mechanism itself is detd. by the local conditions of min. free energy which bring about the observed nucleation of the displacements. The fact that surprisingly low forces (e.g., 1 g. load on a diamond pointer of a Martens hardness tester) are sufficient for inducing the nucleation cannot yet be entirely explained from inner-crystal dynamics; the theory of the Hertz-Auerbach abs. hardness indicates, however, the order of magnitude of the applied forces for a given Young's modulus, and Poisson const. of the cryst. material in question. III. A. V. Stepanov and E. A. Mil'kamanovich. *Ibid.* 773-5.—On the (110) face of rock-salt prisms, as described in the preceding part, under a load of 50 g. a scratch is produced by the diamond pointer of a Martens hardness tester, oriented parallel [100] and perpendicular to the [110] elongation. After annealing the crystal for 10 hrs. at 650°, the extension in the [110] direction and the spontaneous gliding is observed at 200° between crossed nicols. The mechanism is that of (100)-[110] gliding, and the optical elastic limits are measured. With wetted (110) faces (cf. Ioffe, *et al.*, *C.A.* 18, 2447), the elastic limit is measured at room temp. to be 800 g./sq. mm. Particularly characteristic are the changes in the appearance of the gliding lamellae at different temps., starting from the scratch in side-view. At high temps. the "arrows" are sharp-outlined, indistinct at lower temps. The gliding mechanism is taking place in 2 distinct steps: (1) an activation and nucleation, (2) the growth of activation centers. Those centers which are formed at room temp. are unable to grow; they can, however, be developed and observed by temp. increase, and the interval of 20 to 30° is particularly efficient. The gliding lamellae appear pair-wise oriented on both sides of the scratch; the crystallographic meaning of the fields of max. tension in the neighborhood of the scratch is not sym., since the plane going through the scratch, and perpendicular to the crystal surface, is not a plane of symmetry of

the crystal. IV. A. V. Stepanov. *Ibid.* 770 9.—The pair-wise appearing gliding lamellae observed in polarized light are characterized by the opposite optical quality in the orientation of the index ellipsoid in the "rays" ("arrows") on both sides of the scratch from which they start. Multiple scratch systems (gratings) which bring about a corresponding grating of the nucleation centers, show distinct interference phenomena in polarized light which indicate the local max. and min. of intensity, as a function of max. and min. local tensions in the deformed crystal. This observation is important for an understanding of crystal recovering and recrystallization, in deformed crystals, also for the spontaneous formation of a new-formed crystal nucleus. The deformed crystal has anomalous phys.-chem. properties brought about by the disturbance of its regular structure; all the spontaneous rearrangements in the deformed crystal must be combined with local diffusion processes in the structure.

W. Eitel

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AUTHOR: Mil'kevich, O. L.

ORG: TsNIIS

TITLE: Production of glued wooden bridge structures

SOURCE: Transportnoye stroitel'stvo, no. 4, 1966, 24-26

TOPIC TAGS: highway bridge, prefabricated bridge, woodworking machinery, laminated material

ABSTRACT: The author discusses the development and use of glued laminated wood construction for the support sections of span structures in small and medium-sized automobile bridges. A test structure was developed by N. D. Pospelov and Ye. V. Tumas which economizes both on wood and metal fastenings. Such a structure requires 140 m^3 of laminated wood and 0.5 tons of metal forgings. A similar bridge structure made from board-nail trusses would require an outlay of 170 m^3 of milled and 58 m^3 of rough lumber, while the amount of forgings required would be at least 6.6 tons. The main stringer is one of the most complex members of the entire structure to produce. This girder is 1.33 m high and 16.76 m long. 43 boards are laminated in order to produce this girder, each board being 31 mm thick. The plates for the traveled part of the bridge are made from blocks, 1 m wide and 9 m

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long. These blocks are made from laminated boards varying in width from 12 to 14 cm. This is done intentionally to produce an irregular surface which adheres well to asphalt. Lamination operations of beams were mechanized by using an updated variant of a universal type screw press designed for gluing rectilinear structures and arches. Cold-setting KB-3[12] phenolformaldehyde glue[15] was used in all laminating processes. The first test bridge was built across the Dubna River in the Moscow region with three spans and 10-ton load capacity. A second bridge of 4 spans was built across the Kurlak River in the Voronezh Oblast. The use of laminated wood building materials is of great economic importance for those regions of the Soviet Union where wood is plentiful and delivery of prestressed concrete materials is both difficult and expensive. It is hoped that in the near future laminated wood bridge-building materials can be mass produced at mill sites in those regions where wooden bridge structures are most economical. Orig. art. has: 3 figures.

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