"APPROVED FOR RELEASE: 06/14/2000 CIA-RDP86-00513R032932910015-6

SHTURMAN, Aleksandr Abramovich; BEZUGLYY, Vasiliy Danilovich; MATS, Liya Naumovna; AL'PERIN, G.R., red.; GRIGOR'YEVA, I.S., red. izd-va; BOL'SHAKOV, V.A., tekhn. red.

[Use of AST-T self-solidifying plastic in the manufacture of machinery]Samotverdeiushchaia plastmassa AST-T v mashinostroenii. Leningrad, 1961. 29 p. (Leningradskii dom nauchno-tekhnicheskoi propagandy. Seriia: Sinteticheskie materialy, no.14) (MIRA 15:8)

(Plastics)

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S/081/62/000/016/025/043
B168/B186

AUTHORS: Bezuglyy, V. D., Mats, L. N., Shturman, A. A.

TITLE: A cold-hardening composition based on ACT (AST) acrylates

PERIODICAL: Referativnyy zhurnal. Khimiya, no. 16, 1962, 519, abstract 16P38 (In collection: Plastmassy v mashinostr. i priborostr. Kiyev, Gostekhizdat USSR, 1961, 105-112)

TEXT: The conditions of low-temperature polymerization of methylmetacrylate (I) were worked out for the production of cold-hardening compositions based on acrylate. The following were found to be most suitable: filler - finely divided emulsion of polymethylmetacrylate (PMMA), with a ratio PMMA : I = 10 : 4-5, initiator - a redox system [benzoyl peroxide (II) 0.4 %, dimethylaniline (III) 2 %], temperature 28-35°C, initiation time 10-11 min. The effects on initiation velocity of the quantity of II and III, temperature, polar solvent admixtures and acids were investigated. It was shown that negligible quantities of polar solvents (water, alcohol etc.) and acids (formic, metacrylic etc.) increase the initiation velocity. On the basis of the results obtained the following formulations

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S/061/62/000/016/025/043
B168/B186

A cold-hardening composition...

were worked out for compositions to be used in medicine - marks AST (reducing agent dimethylparatoluidine, which increases the light stability of plastics) and in industry - marks АСТ-Т (AST-T) (in parts by weight): powder 2 (emulsion of PMMA 97, II 1.5, ZnO 1.5), liquid 1 (I 97 and III 3). In order to improve its adhesive properties the plastic AST-T was modified with epoxy resins. Constitution of the resultant composition АСТ-ТЭ (AST-TE) (in parts by weight): powder 2 (PMMA 9, II 2, and ZnO 1.5) and liquid 1, containing 7 epoxy resin ЭД-5 (ED-5) or ЭД-6 (ED-6), I 70, metacrylic acid 20 and III 3. The physical, mechanical and electrical properties of articles made from AST-T compositions are given. [Abstracter's note: Complete translation.]

Card 2/2

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"APPROVED FOR RELEASE: 06/14/2000 CIA-RDP86-00513R032932910015-6

S/653/61/000/000/012/051
I007/I242

AUTHORS: Shturman, A.A., Bezuglyy, V.D., and Mats, L.N.

TITLE: The application of self-hardening ACT-T (AST-T) plastics in machinery construction

SOURCE: Plastmassy v mashinostoyenii i priborostroyenii. Pervaya resp. nauch.-tekh. konfer. po vopr. prim. plastmass v mashinostr. i priborostr., Kiev, 1959. Kiev, Gostekhizdat, 1961, 113-125

TEXT: A new self-hardening plastic of the ACT-T (AST-T) type, containing acrylic acid and 10 to 40% ЭД-6(ED-6) epoxy resin is used to repair casting defects, in the manufacture of casting patterns supporting ribs for large-size wooden patterns, molding templates, for the production of semi-permanent press-molds in the lost-wax casting process, and in forging. A new electroconductive plastic of the

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S/653/61/000/000/012/051
I007/I242

The application of cold-hardening...

same type has shown good results. AST-T self-hardenizing plastics do not contain toxic hardeners and their production cycle is much shorter. They harden at room temperature and have the technological advantage of responding to a low pressure. There is 1 table.

Card 2/2

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"APPROVED FOR RELEASE: 06/14/2000 CIA-RDP86-00513R032932910015-6

S/653/61/000/000/011/051
I060/I242

AUTHORS: Bezuglyy, V.D., Mats, L.N., and Shturman, A.A.

TITLE: A cold-hardened composition based on ACT (AST) acrylates

SOURCE: Plastmassy v mashinostoyenii i priborostroyenii. Pervaya resp. nauch.-tekh. konfer. po vopr. prim. plastmass v mashinostr. i priborostr., Kiev, 1959. Kiev, Gostekhizdat, 1961. 105-112

TEXT: This work investigates the chemical aspect of the polymerization process at low temperatures and the general properties of a cold-hardened acrylico composition. It lists a few compounds obtained through the application of the oxidation-reduction system for modification of technological properties of polymers. The following compounds are now being used in dentistry: 1) AST-1A, a liquid con-

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I060/I242

A cold-hardened composition...

taining 98% methyl methacrylate and 2% dimethylparatoluidine, and a powder containing 0.9-1.0% benzoyl peroxide; 2) AST-2A a liquid containing 99% methyl methacrylate and 1% dimethylparatoluidine, mixed in equal proportions, with a liquid containing 80% methyl methacrylate and 20% methacrylic acid. A similar AST-T composition used in industry. It consists of a powder containing 97% polymethyl methacrylate emulsion, 1.5% benzoyl peroxide, 1.5% zinc oxide, and of a liquid containing 97% methyl methacrylate and 3% dimethylaniline. Its adhesive properties can be improved by adding epoxide resins. There are 6 tables.

Card 2/2

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"APPROVED FOR RELEASE: 06/14/2000 CIA-RDP86-00513R032932910015-6

MATS, M.D.

Diseases of the nervous system during the 1957 influenza pandemia. Vrach. delo no.1:83 '59. (MIRA 12:4)

1. Po materialam 1-y gorodskoy klinicheskoy bol'nitsy imeni V.I. Lenina g. Khar'kova.
(INFLUENZA) (NERVOUS SYSTEM--DISEASES)

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"APPROVED FOR RELEASE: 06/14/2000 CIA-RDP86-00513R032932910015-6

MATS, M.D.

Some data on the state of the nervous system in opisthorchosis. Sov. med. 23 no.3:89-90 Mr '59. (MIRA 12:4)

1. Iz Bol'she-Pisarevskoy rayonnoy bol'nitsy (glavnyy vrach I.S. Lipenko) Sumskoy oblasti.
(TREMATODE INFECTIONS, physiol.
opisthorchosis, NS funct. (Rus))
(NERVOUS SYSTEM, in var. dis.
opisthorchosis (Rus))

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"APPROVED FOR RELEASE: 06/14/2000 CIA-RDP86-00513R032932910015-6

MATS, M.D. (Khar'kov)

Blood pressure in cerebral concussion. Vop.neirokhir. 23 no.4:24-26 Jl-Ag '59. (MIRA 12:10)

1. Nervnoye otdeleniye 1-y Gorodskoy klinicheskoy bol'nitsy imeni V.I.Lenina.
(BRAIN, wds. & inj.
concussion, blood pressure changes (Rus))
(BLOOD PRESSURE, in var. dis
brain concussion (Rus))

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"APPROVED FOR RELEASE: 06/14/2000 CIA-RDP86-00513R032932910015-6

DERMAN, Ye.S.; MATS, M.D.

Thrombosis of the basilar artery. Zhur. nerv. i psikh. 60 no. 12:1616-1618 '60. (MIRA 14:4)

1. Nervnoye otdeleniye (zav. Ye.S. Derman) 1-y Gorodskoy klinicheskoy bol'nitsy imeni V.I. Lenina (glavnyy vrach A.G. Garn'ye), Khar'kov.

(BASILAR ARTERY—DISEASES)

APPROVED FOR RELEASE: 06/14/2000 CIA-RDP86-00513R032932910015-6"

"APPROVED FOR RELEASE: 06/14/2000 CIA-RDP86-00513R032932910015-6

MATS, M.D.

Combined vascular pathology in apoplexy of the brain. Vrach. delo no.4:86-88 Ap '61. (MIRA 14:6)

1. Nervnoye otdeleniye (zav. - Ye.S. Derman) Pervoy gorodskoy klinicheskoy bol'nitsy imeni V.I.Lenina g. Khar'kova, nauchnyy konsul'tant - zasluzhennyy deyatel' nauki, prof. L.B.Litvak.
(BRAIN--DISEASES)

APPROVED FOR RELEASE: 06/14/2000 CIA-RDP86-00513R032932910015-6"

"APPROVED FOR RELEASE: 06/14/2000 CIA-RDP86-00513R032932910015-6

MATS, M.D. (Khar'kov)

Neurological syndrome in hemorrhagic vasculitis. Klin.med. no.9:150-152 '62. (MIRA 15:12)

1. Iz nervnogo otdeleniya (zav. Ye.S. Derman) i gorodskoy klinicheskoy bol'nitsy imeni V.I. Lenina (glavnyy vrach A.G. Garn'ye).
(PURPURA (PATHOLOGY)) (NERVOUS SYSTEM—DISEASES)

APPROVED FOR RELEASE: 06/14/2000 CIA-RDP86-00513R032932910015-6"

"APPROVED FOR RELEASE: 06/14/2000 CIA-RDP86-00513R032932910015-6

PIRMAYTIS, M.Ya. [Pirmaitis, M.]; MATS, P.Ye.; TSEYTLIN, D.A.

New developments in the organization of wholesale trade fairs. Kozh.-obuv. prom. 5 no.11:9-12 N '63. (MIRA 17:1)

APPROVED FOR RELEASE: 06/14/2000 CIA-RDP86-00513R032932910015-6"

"APPROVED FOR RELEASE: 06/14/2000 CIA-RDP86-00513R032932910015-6

MATS, S.Kh., zasluzhennyy vrach BSSR

Treatment of pannus trachomatosus by perirrhaphy. Zdrav. Bel. 7 no.12: 40-42 D '61. (MIRA 15:2)

1. Zaveduyushchiy glaznym otdeleniyem Mogilevskoy oblastnoy bol'nitsy.
(CORNEA DISEASES) (CONJUNCTIVITIS, GRANULAR)

APPROVED FOR RELEASE: 06/14/2000 CIA-RDP86-00513R032932910015-6"

"APPROVED FOR RELEASE: 06/14/2000 CIA-RDP86-00513R032932910015-6

MATS, V.D.; YEGOROVA, O.P.; BABKIN, A.K.

Phosphorite finds in the upper Protezoic deposits of the western Baikal region. Dokl. AN SSSR 110 no.2:264-266 S '56. (MLRA 9:12)

1. Irkutskoye geologicheskoye upravleniye Ministerstva geologii i okhrany nedr SSSR. Predstavleno akademikom N.S. Shatskim.
(Baikal region--Phosphorites)

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"APPROVED FOR RELEASE: 06/14/2000 CIA-RDP86-00513R032932910015-6

TKALICH, S.M.; MINEYEV, I.K., glavnyy red.; RYABENKO, V.Ye., zam. glavnogo red.; TUMOL'SKIY, L.M., zam. glavnogo red.; KUR'YANOV, F.K., otv. zav vypusk; BASSOLITSYN, Ye.P., red.; BLINNIKOV, I.I., red.; DAUKSHO, Yu.Ye., red.; DZINKAS, Yu.K., red.; ZHARKOV, M.A., red.; ZAVALISHIN, M.A., red.; MANDEL'BAUM, M.M., red.; MATS, V.D., red.; MALETOV, P.I. red.; NOMOKONOVA, N., red.; NOSEK, A.V., red.; SERD, A.I., red.; SEMENYUK, V.D., red.; TAYEVSKIY, V.M., red.; TIKHONOV, V.L., red.; TROFIMUK, I.N., red.; TOMILOVSKAYA, M.V., red.; FOMIN, N.I., red.; SHAMES, P.I., red.; TROSHANIN, Ye.I., tekhn. red.

[Biogeochemical anomalies and their interpretation.] Biogeokhimicheskie anomalii i ikh interpretatsiia. Irkutsk, 1961. 39 p. (Materialy po geologii i poleznym iskopaemym Irkutskoi oblasti no.3). (MIRA 17:1)

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"APPROVED FOR RELEASE: 06/14/2000 CIA-RDP86-00513R032932910015-6

L 55941-65
ACCESSION NR: AP5018501 UR/0020/64/159/003/0680/0681

[illegible]

[illegible] the state of [illegible]

[illegible]

TOPIC TAGS: experiment animal, morphology, neurology, nervous system

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"APPROVED FOR RELEASE: 06/14/2000 CIA-RDP86-00513R032932910015-6

L 55911-65

ACCESSION NR: AP5018501

ASSOCIATION: Institut vysshey nervnoy deyatel'nosti i neyrofiziologii Akademii nauk SSSR (Institute of Higher Nervous Activity and Neurophysiology, Academy of Sciences SSSR)

SUBMITTED: 05Apr64 ENCL: 00 SUB CODE: LS

NO REF SOV: 004 OTHER: 010 ATD PRS

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"APPROVED FOR RELEASE: 06/14/2000 CIA-RDP86-00513R032932910015-6

ALEKSANDROVSKAYA, M.M.; GEYNISMAN, Yu.Ya.; MATS, V.N.

Glial-neuronal relations during intensified functioning of the neurons according to morphological research data. Zhur. nevr. i psikh. 65 no.2:161-167 '65. (MIRA 18:9)

1. Laboratoriya morfologii TSentral'noy nervnoy sistemy (zaveduyushchiy - prof. M.M. Aleksandrovskaya) Instituta vysshey nervnoy deyatel'nosti i neyrofiziologii (direktor - prof. E.A. Asratyan) AN SSSR, Moskva.

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"APPROVED FOR RELEASE: 06/14/2000 CIA-RDP86-00513R032932910015-6

MATS, Ya, inzh.-podpolkovnik

Technical competitions. Voen.sviaz. 16 no.4:21 Ap '58.
(MIRA 11:4)
(Electric engineering--Study and teaching)

APPROVED FOR RELEASE: 06/14/2000 CIA-RDP86-00513R032932910015-6"

"APPROVED FOR RELEASE: 06/14/2000 CIA-RDP86-00513R032932910015-6

MOLLE, L.Ya., kandidat meditsinskikh nauk (Riga); LAZAREVA, N.S. (Riga); MATS, Ye.I. (Riga)

Veldman's test in Botkin's disease. Klin.med. 32 no.3:81 Mr '54. (MLRA 7:5)

(Hepatitis, Infectious)

APPROVED FOR RELEASE: 06/14/2000 CIA-RDP86-00513R032932910015-6"

"APPROVED FOR RELEASE: 06/14/2000 CIA-RDP86-00513R032932910015-6

MATS, Yu.N.

Role of organizational methodological units in the further improvement of medical care. Zdrav.Bel. 7 no.11:42-44 N '61. (MIRA 15:11)

1. Iz Grodnenskoy oblastnoy bol'nitsy (glavnyy vrach - zasluzhennyy vrach BSSR S.G.Dulayev).
(GRODNO PROVINCE—PUBLIC HEALTH ADMINISTRATION)

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"APPROVED FOR RELEASE: 06/14/2000 CIA-RDP86-00513R032932910015-6

MATS, Z. Z.

MATS, Z. Z.: "Investigation of the heat discharge of the internal-combustion engines of locomotives, on the basis of indicator diagrams". Khar'kov, 1955. Min Railways. Khar'kov Inst of Railroad Transport Engineers imeni S. M. Kirov. (Dissertations for the degree of Candidate of Technical Science.)

SO: Knizhnaya Letopis' No. 50 10 December 1955. Moscow.

APPROVED FOR RELEASE: 06/14/2000 CIA-RDP86-00513R032932910015-6"

"APPROVED FOR RELEASE: 06/14/2000 CIA-RDP86-00513R032932910015-6

MATS, Z.Z., kand.tekhn.nauk; SALISHCHEV, L.N., insh.; FAYN, M.A., insh.

Supercharger units of the 9DR00 motor and their testing.
Energomashinostroenie 6 no.7:40-43 Jl '60.
(MIRA 13:7)
(Diesel engines--Superchargers)

APPROVED FOR RELEASE: 06/14/2000 CIA-RDP86-00513R032932910015-6"

"APPROVED FOR RELEASE: 06/14/2000 CIA-RDP86-00513R032932910015-6

MATS, Z. Z., kand. tekhn. nauk

Investigating heat emission in diesel locomotive engines. Vest. mash. 40 no.11:44-50 N '60. (MIRA 13:10)
(Diesel locomotives--Engines)

APPROVED FOR RELEASE: 06/14/2000 CIA-RDP86-00513R032932910015-6"

"APPROVED FOR RELEASE: 06/14/2000 CIA-RDP86-00513R032932910015-6

STRUNGE, B.N., inzh. (g.Khar'kov); MATS, Z.Z., inzh. (g.Khar'kov)

Increasing the economic efficiency of 2D100 diesel locomotive motors. Zhel.dor.transp. 42 no.6:42-43 Je '60. (MIRA 13:7)
(Diesel locomotives)

APPROVED FOR RELEASE: 06/14/2000 CIA-RDP86-00513R032932910015-6"

"APPROVED FOR RELEASE: 06/14/2000 CIA-RDP86-00513R032932910015-6

MATS, Z.Z., kand.tekhn.nauk

Study of the heat emission of diesel locomotive engines by means of the indicator diagrams. Teplovoz.i sud.dvig. no.3: 65-83 '62. (MIRA 16:2)

(Diesel locomotives)

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"APPROVED FOR RELEASE: 06/14/2000 CIA-RDP86-00513R032932910015-6

ACC NR: AP6021816 (A) SOURCE CODE: UR/0413/66/000/012/0109/0109

INVENTOR: Sinenko, N. P.; Mats, Z. Z.; Fayn, M. A.; Skazhennik, A. M.; Pavlov, V. A.; Rubinfayn, L. Ye.

ORG: None

TITLE: A unit for sealing turbine compressor bearings. Class 46, No. 182957 [announced by the Kharkov Transport Machine Building Plant im. V. A. Malyshev (Khar'kovskiy zavod transportnogo mashinostroyeniya)]

SOURCE: Izobreteniya, promyshlennyye obraztsy, tovarnyye znaki, no. 12, 1966, 109

TOPIC TAGS: sealing device, turbine compressor, journal bearing

ABSTRACT: This Author's Certificate introduces a unit for sealing turbine compressor bearings used in diesel engine blower systems. This unit contains labyrinth packings with air seals fed by compressed air from the turbine compressor shell. Oil is kept out of the turbine compressor during idling and low-load operation by connecting the air seals to the locomotive braking system which is coupled by an electromagnetic valve interlocked with the locomotive control system.

Card 1/2 UDC: 621.515.5-762:62;621.436.052

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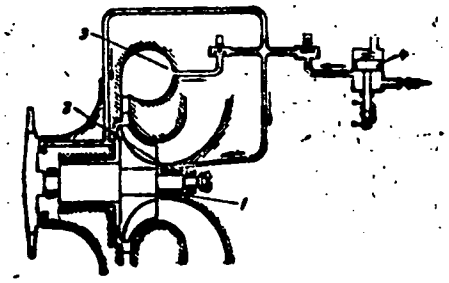
ACC NR: AP6021816



1—labyrinth packings; 2—air seals; 3—compressor shell; 4—electromagnetic valve

SUB CODE: 13/ SUBM DATE: 12Jun65

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"APPROVED FOR RELEASE: 06/14/2000 CIA-RDP86-00513R032932910015-6

MATS-ROSSINSKAYA, V. S., Master Med Sci —(diss) "The role of the central nervous system in the anaphylaxis mechanism." (Experimental research). Khar'kov, 1957, 14 pp. (Khar'kov State Med Inst), 250 copies.

(KL, No 40, 1957, p.95)

APPROVED FOR RELEASE: 06/14/2000 CIA-RDP86-00513R032932910015-6"

"APPROVED FOR RELEASE: 06/14/2000 CIA-RDP86-00513R032932910015-6

MATS-ROSSINSKAYA, V.S.

Effect of various methods for the sensitization of the nervous system on the development and course of anaphylactic shock. Vrach. delo no.4:353-355 Ap '57. (MLRA 10:7)

1. Kafedra patologicheskoy fisiologii (zav. - prof. N.N.Trankvilitati) Stalinskogo meditsinskogo instituta.
(ANTIGENS AND ANTIBODIES) (ANAPHYLAXIS)
(NERVOUS SYSTEM)

APPROVED FOR RELEASE: 06/14/2000 CIA-RDP86-00513R032932910015-6"

"APPROVED FOR RELEASE: 06/14/2000 CIA-RDP86-00513R032932910015-6

MATS-ROSSINSKAYA, V.S. [Mats-Rosyns'ka, V.S.]

Role of the central nervous system in the mechanism of anaphylaxis. Fiziol.zhur. Ukr. 4 no.5:704-705 S-O '58 (MIRA 11:11)

1. Stalinskiy meditsinskiy institut, kafedra patologicheskoy fiziologii
(ANAPHYLAXIS)
(ANESTHESIA)

APPROVED FOR RELEASE: 06/14/2000 CIA-RDP86-00513R032932910015-6"

"APPROVED FOR RELEASE: 06/14/2000 CIA-RDP86-00513R032932910015-6

MATSABERIDZE, B.S.

Diagnosis of atherosclerosis of the aorta by the piezosphygmographic method. Trudy Inst. klin. i eksper. kard. AN Gruz. SSR 8:61-65 '63. (MIRA 17:7)

1. Institut kardiologii AN GruzSSR, Tbilisi.

APPROVED FOR RELEASE: 06/14/2000 CIA-RDP86-00513R032932910015-6"

"APPROVED FOR RELEASE: 06/14/2000 CIA-RDP86-00513R032932910015-6

MATSABERIDZE, G.V.

New trematode Lecithodendrium skrjabini nov. sp. found in bats. Soob. AN Gruz. SSR 31 no. 3:695-698 S '63. (MIRA 17:7)

1. Institut zoologii AN GruzSSR. Predstavleno akademikom N.N.Ketskhoveli.

APPROVED FOR RELEASE: 06/14/2000 CIA-RDP86-00513R032932910015-6"

"APPROVED FOR RELEASE: 06/14/2000 CIA-RDP86-00513R032932910015-6

MATSABERIDZE, I.

Labor productivity and potentialities for its increase in Georgian Ferrous Metallurgy. Trudy GPI [Gruz.] no.4:145-177 '62 (MIRA 17:8)

APPROVED FOR RELEASE: 06/14/2000 CIA-RDP86-00513R032932910015-6"

"APPROVED FOR RELEASE: 06/14/2000 CIA-RDP86-00513R032932910015-6

рестика Цхалтубских минеральных вод и условия их обогащения радоном 1957.

Защ. 1957, 29.6.

850. Беручьян Сатеник Абгаровна. Применение органических оснований для разделения металлов. 1948. 76 с., илл.

Защ. 1948, 26.6.

851. Ганжавурдян Клара Авксентьевна. Потенциометрическое определение цинка в латуни. 1944. 142 с. [4] Вкл. л., диагр. (Тр. ТГУ, т. 30а, 1947).

Защ. 1944, 3.7.

852. Гогоришвили Платон В. Исследование из области явления таяния. 1938. 64 с. (Инст. химии ГФАН СССР).

Защ. 1938, 25. 9.

853. Головатый Р. Н. К вопросу о реактивной способности твердого топлива и методах ее определения. 1938. 76 с., с илл. (Сталинский мед. институт).

Защ. 1938, 10.4.

854. Джапаридзе Матвей Георгиевич. Влияние сернистой кислоты на проявляющие вещества и на процесс проявления (новосеребряющее, восстанавливающее и дезуаррующее действие). 1945. 105 с., с фото св.

Защ. 1947, 31.5.

855. Долидзе Кетевана Александровна. Синтез, исследование и каталитическое гидрирование тетрабутилбутилиденола и дибутилацетилена картиола. 1948. 91 [3] с., табл.

Защ. 1948, 5.6.

856. Квандия А. А. Получение натрий вольфрамовых бронз и их свойства. 1938. 51 с., илл. (Инст. химии Груз. ФАН СССР).

Защ. 1938, 10.4.

857. Квантарадзе Худоверди Шахбаз Оглы. Получение карбоновых кислот путем окисления воздухом углеводородов, выделенных селективными сольвентами из нефтяных дистиллятов. Баку 1939. 140 с. (Азерб. пед. инст.).

Защ. 1940, 11.5.

858. Качухашвили Софья Ивановна. Изучение реакции образования ферроцианида серебра и смешанных его солей с ферроцианидами щелочных металлов. 1955. V, 163 с., 54 илл. (Груз. политехн. инст.).

Защ. 1956, 23.6.

859. Кобиашвили Варвара Иосифовна. Ванадий, молибден и вольфрам в минеральных объектах некоторых районов Грузии. 1956.

Защ. 1957, 20.4.

860. Кулибегов Микаил Рагим Оглы. Синтез и исследование полимеров простых эфиров диметилвинилола. Баку, 1949, 167 с. (Азерб. гос. ун-т.).

Защ. 1950, 23.12.

861. Кулиев Халиф Нарим Оглы. Алкилирование нафталина при помощи изопропилбромида нормального гептилбромида децилбромида (третичн.) додецилхлорида (третичн.) под влиянием безводного хлористого алюминия. 1939. 79 с., табл.

Защ. 1940, 11.5.

862. Киреева Эдита Аршаковна. Методика химического анализа и химическая характеристика вод, связанных с молибденово-медными месторождениями Армении. Ереван. 1955. (Инст. геологии АН Арм. ССР).

Защ. 1956, 23.5.

863. Мадзиерадзе Тамара Георгиевна. Отделение шеелита и талита от вольфрама с помощью органических реактивов. 1954. 173 с. (Груз. инст. цветн. сырья).

Защ. 1956, 29.5.

864. Мехтиев Султан Джафарович. Получение третичных из при-

Dissertation for degree of Candidate Chemical Sciences

Def. at Tbilisi State U.

APPROVED FOR RELEASE: 06/14/2000 CIA-RDP86-00513R032932910015-6"

"APPROVED FOR RELEASE: 06/14/2000 CIA-RDP86-00513R032932910015-6

S/081/62/000/009/042/075
B166/B144

AUTHORS: Matsaberidze, T. G., Voytsekhovskaya, N. F.

TITLE: Contribution to the problem of developing a flow sheet for extracting boric acid from datolites using organic bases and ion-exchange resins. Communication I. Optimum conditions for decomposition of the datolites; study in the field of coagulation of silicic acid

PERIODICAL: Referativnyy zhurnal. Khimiya, no. 9, 1962, 382, abstract 9K43 (Tr. Kavkazsk. in-ta mineral'n. syr'ya, no. 1 (3), 1960, 141-148)

TEXT: Optimum conditions for the decomposition of datolite concentrate were found to be H_2SO_4 amounting to 80% of the stoichiometric norm related to the CaO contained in the ore or concentrate; process temperature 80°C; stirring time 30 min; initial liquid/solid ratio = 4 : 1. Consumption coefficients are calculated. Producing 1 ton of boric acid requires 11.66 tons of concentrate with a B_2O_3 content of 4.91% and 2.83 tons of

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S/081/62/000/009/042/075
B166/B144

Contribution to the problem ...

H_2SO_4. It is shown possible to use organic bases (pyridine) which enable colloidal SiO_2 to be removed by aluminum hydroxide from the solutions obtained after decomposition of the datolite concentrate. With decreasing liquid/solid ratio, the amount of silicic acid obtained by using aluminum hydroxide increases. The maximum increase takes place at a liquid/solid ratio of 3 : 1; with this ratio ~92.2% of the silicic acid is removed from solution. [Abstracter's note: Complete translation.]

Card 2/2

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"APPROVED FOR RELEASE: 06/14/2000 CIA-RDP86-00513R032932910015-6

MATSABERDIZE, V.M.

Superficial dermatomycoses in the Abkhazian A.S.S.R. in 1948-1954
Vest.derm. i ven. 32 no.4:73-74 Jl-Ag '58 (MIRA 11:10)

1. Iz Abkhazskogo respublikanskogo kozhno-venerologicheskogo dispansera (glavnyy vrach V.M. Matsaberdize).
(FUNGUS DISEASES, epidemiol.
skin. in Russia (Rus))
(SKIN DISEASES, epidemiol.
fungus dis. in Russia (Rus))

APPROVED FOR RELEASE: 06/14/2000 CIA-RDP86-00513R032932910015-6"

"APPROVED FOR RELEASE: 06/14/2000 CIA-RDP86-00513R032932910015-6

MATSABERIDZE, V.M.

Culture and epidemiological characteristics of surface dermatomycosis in the Abkhazian A.S.S.R. Sbor. trud. Med. nauch. ob-vo Abkh. 2:205-211 '59. (MIRA 14:10)

1. Iz Abkhazskogo respublikanskogo kozhno-venerologicheskogo dispansera (glavnyy vrach V.M.Matsaberidze).
(ABKHAZIA—DERMATOMYCOSIS)

APPROVED FOR RELEASE: 06/14/2000 CIA-RDP86-00513R032932910015-6"

"APPROVED FOR RELEASE: 06/14/2000 CIA-RDP86-00513R032932910015-6

MATSBERIDZE, V.M.

Unusual case of refractory syphilis. Vest. derm. i ven. 34 no.7: 65-66 '60. (MIRA 13:12)

(SYPHILIS)

APPROVED FOR RELEASE: 06/14/2000 CIA-RDP86-00513R032932910015-6"

"APPROVED FOR RELEASE: 06/14/2000 CIA-RDP86-00513R032932910015-6

MATSABERIDZE, V.M.

Clinical aspects of surface dermatomycosis in the Abhazian A.S.S.R. Sbor. trud. Med. nauch. ob-vo Abkh. 2:213-218 '59. (MIRA 14:10)

1. Iz Abkhasskogo respublikanskogo kozhno-venerologicheskogo dispansera (glavnyy vrach V.M.Matsaberidze).
(ABKHAZIA--DERMATOMYCOSIS)

APPROVED FOR RELEASE: 06/14/2000 CIA-RDP86-00513R032932910015-6"

"APPROVED FOR RELEASE: 06/14/2000 CIA-RDP86-00513R032932910015-6

MATSABERIDZE, V. S.

"Certain Results of an Investigation of the Magnetic Field of the Kolkhid Lowlands." Cand Phys-Math Sci, Tbilisi U, Tbilisi, 1954. RZhGeol, Dec 54)

Survey of Scientific and Technical Dissertations Defended at USSR Higher Educational Institutions (12)
SO: Sum. No. 556 24 Jun 55

APPROVED FOR RELEASE: 06/14/2000 CIA-RDP86-00513R032932910015-6"

"APPROVED FOR RELEASE: 06/14/2000 CIA-RDP86-00513R032932910015-6

MATSABERIDZE, V.S.

Approximation computation method for a magnetic field of obliquely magnetized bodies of an arbitrary shape. Trudy Inst.geofiz.AN Gruz. SSR 13:5-19 '54. (MIRA 9:9)

(Magnetism, Terrestrial)

APPROVED FOR RELEASE: 06/14/2000 CIA-RDP86-00513R032932910015-6"

"APPROVED FOR RELEASE: 06/14/2000 CIA-RDP86-00513R032932910015-6

MATSABERIDZE, V. S.

Tbilisi State U.

[illegible] Тбилиси. 1953. 72 с., илл., 180 экз. (Горийский пед. инст.).

Зад. 1954, 2.3.

783. [illegible] 1961. 126 [illegible], [illegible] [4] [illegible] с., [illegible].

[illegible] 1962, 20.6.

Дашиев Владимир Муравьевич. Определение фигуры геоида для Кавказа по гравиметрическим данным. 1961. 126 с., илл., [4] вкл. л., карта.

Зад. 1962, 20.6.

* * *

784. Абас-Заде Абас Кули Ага Бала-Оглы. Исследование теплопроводности и теплоты испарения воды Каспийского моря. Баку. 1940. 87 с. [10] вкл. л., фиг.

Зад. 1941, 8.3.

785. Бартишевич Яся Федорович. К вопросу о точности измерения атмосферных осадков в горных условиях. 1954. 135 с.

Зад. 1955, 23.4.

786. Врасский Степан Борисович. Метод составления прогнозов осадков поверхности грунта под действием прилегающей нагрузки с учетом мощности его характеристики. 1943. 153,8 с., илл. л., чертеж.

Зад. 1943, 20.7.

787. Гобулия Валтаир Парнасович. Изучение электрического поля в земной коре для случая взаимно-перпендикулярных проводящих слоев. 1954. 40 с., 7 л., фиг., 48 экз. (Инст. геофиз. АН Груз. ССР).

Зад. 1956, 20.4.

788. Гигашвили Валентин Мераванович. Фены и связанные с ними особенности циркуляции воздуха по Грузии. 1948. 119 с., илл.

Зад. 1951, 111.

789. Гулиа Сергей Ушангович. Предвычисление перемещения и развития фронтов на основе теоретического метода проф. И. А. Кибеля. Лгд. 1941. 95 с.

Зад. 1945, 2.11.

790. Кацашвили Нина Алексеевна. Изменение характера суточных колебаний суточных амплитуд горизонтальной составляющей земного магнитного поля с высотой по данным для Тбилиси (Карсаан — Душети). 1956. 85 с., 20 илл. (Тб. гидрометеор. инст.).

Зад. 1956, 20.6.

791. Лошкидзе Василий Павлович. О движении вторичного центра действия атмосферы. 1946.

Зад. 1947, 23.1.

792. Мадат-Заде Аллабас Абас Кули Оглы. История шального Каспия. 1945. 122 с., с рис., 7 вкл. л., библ. (Изв. АН Азерб. ССР 1945, № 9).

Зад. 1946, 30.1.

793. Мегрелидзе Григорий Дмитриевич. Новый метод количественной интерпретации аномалий силы тяжести. 1955. 47 с., 50 илл.

Зад. 1956, 24.1.

794. Мацаберидзе Валериан Сильвестрович. Некоторые результаты исследования магнитного поля Кавказской минеральности. 1954. 96 [8] с. (Инст. геофизики АН Груз. ССР).

Зад. 1954, 20.6.

795. Мурусидзе Георгий Яковлевич. Опыт применения комбинированного метода сейсмической разведки для исследования глубинных структур Цхалтубской депрессии. 1955.

Зад. 1955, 17.6.

796. Пандзаева Сосо Калистратовна. Аэродинамические приемы прогноза погоды по обрезанной синоптической карте для Закавказья и Малой Азии. 1941.

Зад. 1941, 22.5.

Dissertation for degree of

Candidate Physico-Mathematical Sciences

APPROVED FOR RELEASE: 06/14/2000 CIA-RDP86-00513R032932910015-6"

"APPROVED FOR RELEASE: 06/14/2000 CIA-RDP86-00513R032932910015-6

MATSABERIDZE, V.S.

Magnetic field of the Colchis Lowland. Trudy Inst.geofis.AN Gruz.SSR 15:7-25 '56. (MLRA 10:7)
(Colchis--Magnetism, Terrestrial)

APPROVED FOR RELEASE: 06/14/2000 CIA-RDP86-00513R032932910015-6"

"APPROVED FOR RELEASE: 06/14/2000 CIA-RDP86-00513R032932910015-6

NODIA, M.Z.; BERISHVILI, G.P.; MATSABERIDZE, V.S.

Some results of investigating microterritorial and microtemporal secular variations of the earth's magnetic field in eastern Georgia. Trudy Inst.geofiz.AN Gruz.SSR 17:73-79 '56. (MIRA 13:4)

(Georgia--Magnetism, Terrestrial)

APPROVED FOR RELEASE: 06/14/2000 CIA-RDP86-00513R032932910015-6"

"APPROVED FOR RELEASE: 06/14/2000 CIA-RDP86-00513R032932910015-6

CHKHENKELI, Sh.M.; MATSABERIDZE, V.S.; TABAGUA, G.G.

Geophysical study of the Poladauri iron ore deposit [in Georgian with summary in Russian]. Trudy Inst. geofiz. AN Gruz. SSR 18:5-21 '60. (MIRA 13:10)

(Georgia--Prospecting--Geophysical methods)
(Iron ores)

APPROVED FOR RELEASE: 06/14/2000 CIA-RDP86-00513R032932910015-6"

"APPROVED FOR RELEASE: 06/14/2000 CIA-RDP86-00513R032932910015-6

CHKHENKELI, Sh. M.; MATSABERIDZE, V. S.; TABAGUA, G. G.

Some problems in the interpretation of geophysical data of the Paladauri iron ore deposit. Trudy Inst. geofis. AN Gruz. SSR 20:145-156 '62. (MIRA 16:1)

(Georgia—Prospecting—Geophysical methods)

APPROVED FOR RELEASE: 06/14/2000 CIA-RDP86-00513R032932910015-6"

"APPROVED FOR RELEASE: 06/14/2000 CIA-RDP86-00513R032932910015-6

ACC NR: AR6032354 SOURCE CODE: UR/0169/66/000/007/A042/A043

AUTHOR: Katsiashvili, N. A.; Matsaberidze, V. S.; Khocholava, G. M.

TITLE: Magneto-ionospheric disturbances correlated with anomalous absorption in the polar cap

SOURCE: Ref. zh. Geofizika, Abs. 7A254

REF SOURCE: Sb. Nekotoryye vopr. issled. elektromagnitn. polya Zemli. No. 1(23). Tbilisi, Metsniyereba, 1965, 52-61

TOPIC TAGS: ionospheric disturbance, geomagnetic disturbance, anomalous absorption, geomagnetic storm, polar cap absorption

ABSTRACT: Magneto-ionospheric disturbances correlated with anomalous absorption in the polar cap (AAPC) were studied on the basis of data for the International Geophysical Year obtained at the Dusheti Magnetic Observatory and at 12 Soviet Ionospheric stations. Their characteristics are compared with storms which are not correlated with AAPC. The following conclusions were reached: 1) Sc* type geomagnetic storms with a preliminary negative momentum (for Dusheti) have almost no correlation with AAPC; 2) the presence of the preliminary

Card 1/2 UDC: 550.338.2:550.385.4

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ACC NR: AR6032354

negative momentum is explained by the influence of the daily course of disturbed S_D variation; however, the Zinger hypothesis on the influence of hydromagnetic waves is not excluded from the investigation; 3) in the majority of cases, sharper and deeper subsidence into H is characteristic of geomagnetic storms which correlate with AAPC; this is explained by the high energy of fluxes which cause these storms; 4) the conclusion of Hokura that in the period of AAPC the state of the F2 layer is normal before the start of the geomagnetic storm, a fact indicates that the AAPC is of a local nature, is confirmed by numerous data; 5) the majority of ionospheric disturbances connected with AAPC are negative; 6) the amplitude of the F2 layer disturbances decreases, while the delay time in relation to the magnetic storm increases with a decrease in latitude, which demonstrates the corpuscular nature of the agent responsible for this phenomenon; 7) the delay time of the start of an ionospheric disturbance in relation to a magnetic storm depends on whether at the start of the storm the station is within or outside of the forbidden zone; 8) in the majority of cases, a lowering of f_oF2 is accompanied by a sharp increase in the $h'F$ layer, while at normal layer heights f_oF2 rises. I. Kovalevskiy. [Translation of abstract]

SUB CODE: 20, 04/

Card 2/2

APPROVED FOR RELEASE: 06/14/2000 CIA-RDP86-00513R032932910015-6"

"APPROVED FOR RELEASE: 06/14/2000 CIA-RDP86-00513R032932910015-6

CHERNYY, A.I.; MATSAK, N.M.; KUZNETSOVA, E.K.

Preparing a permutation index with the aid of a punched-card computer. NTI no.4:20-29 '64. (MIRA 17:6)

APPROVED FOR RELEASE: 06/14/2000 CIA-RDP86-00513R032932910015-6"

"APPROVED FOR RELEASE: 06/14/2000 CIA-RDP86-00513R032932910015-6

CHERNYY, A.I.; MATSAK, N M.; GASANOVA, T.G.

Technology of preparing a permutation index of headings with the aid of alphabetical punched-card machines. NTI no.8: 20-26 '64. (MIRA 17:12)

APPROVED FOR RELEASE: 06/14/2000 CIA-RDP86-00513R032932910015-6"

"APPROVED FOR RELEASE: 06/14/2000 CIA-RDP86-00513R032932910015-6

PROCESSES AND PROPERTIES INDEX

Elimination of nitric acid and nitrogen oxides from air for ventilation. V. G. Matsuk and K. A. Yudin. *Hig. Truda* 14, No. 5, 78-80(1936); *Chimie & industrie* 38, 475. After spraying the air to be purified with HNO_3 and cooling, it is passed through a gravel filter to remove fine suspended particles; it is then washed again with HNO_3 of about 30% concn. which is dild. as its concn. increases. It was observed more particularly that HNO_3 vapors are absorbed as well by H_2O as by 30% HNO_3. The washed air is passed through a second gravel filter.

A. Papineau-Couture

ASM SLA METALLURGICAL LITERATURE CLASSIFICATION

APPROVED FOR RELEASE: 06/14/2000 CIA-RDP86-00513R032932910015-6"

"APPROVED FOR RELEASE: 06/14/2000 CIA-RDP86-00513R032932910015-6

MATSAK, V. G.

FA 70T95

USSR/Medicine - Air, Impurities May 1948
Medicine - Hygiene and Sanitation, Industrial

"Control of Contamination of the Air by Lead From the Molten Surfaces of Type Metals," V. G. Matsak, Cen Sanitary Hygienic Lab, Moscow, 2½ pp

"Gig i San" Vol XIII, No 5

Gives results of studies conducted to determine the total amount of lead vapors released from the molten surface of type lead under industrial methods of melting this type metal.

70T95

APPROVED FOR RELEASE: 06/14/2000 CIA-RDP86-00513R032932910015-6"

"APPROVED FOR RELEASE: 06/14/2000 CIA-RDP86-00513R032932910015-6

MATSAK, V. G.

PA 171T 72

USSR/Medicine - Hygiene and Sanitation, Apr 50
Air, Impurities

"Equipment for Removing Dust and Smoke From the Air and the Field of Its Use," V. G. Matsak, Cen Sanitation and Hygiene Lab, Moscow

"Gig i San" No 4, pp 27-35

Considers most efficient methods of air purification for industrial hygiene and situations in which best applied. Discusses % of efficiency, amount of air which can be purified, size of particles removed, and reduction of dust concentration for each method. Four illustrations.

171T72

APPROVED FOR RELEASE: 06/14/2000 CIA-RDP86-00513R032932910015-6"

"APPROVED FOR RELEASE: 06/14/2000 CIA-RDP86-00513R032932910015-6

C. A.

13

Purification of air contaminated with vapors and gases. V. G. Matsak (Central Sanit. Hyg. Lab., Moscow). *Gigiena i Sanit.* 1950, No. 8, 20-7.—The principles and typical app. for various kinds of air purification are discussed and illustrated.

G. M. Kosolapoff

APPROVED FOR RELEASE: 06/14/2000 CIA-RDP86-00513R032932910015-6"

"APPROVED FOR RELEASE: 06/14/2000 CIA-RDP86-00513R032932910015-6

13

CA

Control of atmospheric dust in production of mineral wool. L. S. Romanov, V. G. Matsak, and I. S. Shereshevskaya (Moscow Sanit. Sta.). *Gigiena i Sanit.* 1952, No. 3, 14-18. —The silica-based dust problems are described in several typical plants. Production of dry mineral wool causes so much contamination that a recommendation for cessation of its production was made. Proper ventilation and respiration protective devices are urged, as is mechanization of handling and packing the product. Very much lower contamination is found in production of oiled mineral-wool products. G. M. Kosolapoff

APPROVED FOR RELEASE: 06/14/2000 CIA-RDP86-00513R032932910015-6"

"APPROVED FOR RELEASE: 06/14/2000 CIA-RDP86-00513R032932910015-6

MATSAK, V. G.

[illegible] for the collection of samples of dust, fog, and gases in air conduits. V. G. Matsak. Nauchn. Mal. 1952, No. 26, 88-96.—A special collection set-up is described and schematically illustrated; a graph showing the relation between rate of air current in the conduit and that of the collecting glass tubes of different diams. is presented. The methods used for the collection of test samples under a variety of practical conditions are fully described, nomograms for the calcs. of results are presented, and their application is explained. B. S. Levine

APPROVED FOR RELEASE: 06/14/2000 CIA-RDP86-00513R032932910015-6"

"APPROVED FOR RELEASE: 06/14/2000 CIA-RDP86-00513R032932910015-6

BRAMSBURG, F.S.; MATSAK, V.G.

Industrial hygiene in arsenic salts plants. Gig. sanit., Moskva no. 1:27 Jan 1953. (CIML 24:2)

1. Of Moscow Oblast Scientific-Research Sanitary-Hygienic Institute.

APPROVED FOR RELEASE: 06/14/2000 CIA-RDP86-00513R032932910015-6"

"APPROVED FOR RELEASE: 06/14/2000 CIA-RDP86-00513R032932910015-6

MATSAK, V.G.

Grinding and moving of loose materials and dust collection in industry. Gig. sanit., Moskva no. 1:28-34 Jan 1953. (CLML 24:2)

1. Of Moscow Oblast Scientific-Research Sanitary Hygienic Institute.

APPROVED FOR RELEASE: 06/14/2000 CIA-RDP86-00513R032932910015-6"

"APPROVED FOR RELEASE: 06/14/2000 CIA-RDP86-00513R032932910015-6

MATSAK, V. G.

AID P - 1417

Subject : USSR/Medicine

Card 1/1 Pub. 37 - 14/23

Author : Matsak, V. G., Kand. of Biol. Sci.

Title : Answer to I. A. Glushkov's review of the article "Methods of Selecting Samples for Detecting Dust, Fog and Gases in Air Ducts."

Periodical : Gig. i san., 1, 47-48, Ja 1955

Abstract : Glushkov's review was published in this journal, 1954, No.3, and Matsak's article in the symposium Novosti Meditsiny (News of Medicine), No.26. The author points out the reviewer's mistakes.

Institution: None

Submitted : Je 16, 1954

APPROVED FOR RELEASE: 06/14/2000 CIA-RDP86-00513R032932910015-6"

"APPROVED FOR RELEASE: 06/14/2000 CIA-RDP86-00513R032932910015-6

MATSAK, V.G., kandidat tekhnicheskikh nauk; ISAYEV, N.S., kandidat meditsinskikh nauk

Problem of dust control in Moscow Basin mines. Bor'ba s sil. 2: 199-201 '55. (MLRA 9:5)

1. Moskovskiy oblastnoy nauchno-issledovatel'skiy sanitarno-gigiyenicheskiy institut (for Isayev)
(MOSCOW BASIN--DUST--PREVENTION)

APPROVED FOR RELEASE: 06/14/2000 CIA-RDP86-00513R032932910015-6"

"APPROVED FOR RELEASE: 06/14/2000 CIA-RDP86-00513R032932910015-6

MATSAK, V.G.

Determining the buoyancy of vapor during the evaporation of substances in moving air. Ved. i san.tekh. no.7:13-19 O '55. (Evaporation) (MLRA 9:2)

APPROVED FOR RELEASE: 06/14/2000 CIA-RDP86-00513R032932910015-6"

"APPROVED FOR RELEASE: 06/14/2000 CIA-RDP86-00513R032932910015-6

KHOTSYANOV, L.K., professor; MATSAK, V.G., starshiy nauchnyy sotrudnik

Some remarks on sanitary standards in planning industrial plants (N 101-54). Gig. i san. 21 no.5:21-27 My '56. (MLRA 9:8)
(INDUSTRIAL HYGIENE,
sanit. standards in planning indust. plants in Russia (Rus))

APPROVED FOR RELEASE: 06/14/2000 CIA-RDP86-00513R032932910015-6"

"APPROVED FOR RELEASE: 06/14/2000 CIA-RDP86-00513R032932910015-6

MATSAK, V.G., kandidat tekhnicheskikh nauk; VOLKOVA, Z.A., kandidat meditsinskikh nauk

Case of group poisoning from chlorine. Gig. i san. 21 no.9:70-71 S '56. (MLRA 9:10)

1. Iz Instituta gigiyeny truda i professional'nykh zabolevaniy AMN SSSR.
(CHLORINE—TOXICOLOGY)

APPROVED FOR RELEASE: 06/14/2000 CIA-RDP86-00513R032932910015-6"

"APPROVED FOR RELEASE: 06/14/2000 CIA-RDP86-00513R032932910015-6

Name: MATSAK, Valentin Gavrilovich

Dissertation: Sanitary-hygienic significance of vapor pressure and the evaporation of various toxic substances and their mixtures

Degree: Doc Biol Sci

Affiliation: [Not indicated]

Defense Date, Place: 7 Dec 56, Council of the Department of Hygiene, Microbiology, and Epidemiology, Acad Med Sci USSR

Certification Date: 8 Jun 57

Source: BMVO 16/57

APPROVED FOR RELEASE: 06/14/2000 CIA-RDP86-00513R032932910015-6"

"APPROVED FOR RELEASE: 06/14/2000 CIA-RDP86-00513R032932910015-6

MATSAK

CZECHOSLOVAKIA/Chemical Technology - Safety and Sanitation. H.

Abs Jour : Ref Zhur - Khimiya, No 16, 1958, 54433

Author : Matsak

Inst : -

Title : A New Technique for Extinguishing Inflammable Materials in Reservoirs.

Orig Pub : Protipoz. techn., 1957, 5, No 11, 210-212

Abstract : The technique consists in generating a water mist screen at the base of the fire. The resulting water vapor decreases the oxygen concentration needed by the fire.

Card 1/1

APPROVED FOR RELEASE: 06/14/2000 CIA-RDP86-00513R032932910015-6"

"APPROVED FOR RELEASE: 06/14/2000 CIA-RDP86-00513R032932910015-6

MATSAK, V.G., kandidat biologicheskikh nauk

Elasticity of vapor and the evaporation of substances in moving air [with summary in English]. Gig. i san., 22 no.8:35-42 Ag '57. (MLRA 10:9)

1. Iz Instituta gigiyeny truda i professional'nykh zabolevaniy AMN SSSR i Moskovskogo oblastnogo nauchno-issledovatel'skogo sanitarno-gigiyenicheskogo instituta

(AIR POLLUTION
elasticity of vapor & evaporation of substances in moving air)

APPROVED FOR RELEASE: 06/14/2000 CIA-RDP86-00513R032932910015-6"

"APPROVED FOR RELEASE: 06/14/2000 CIA-RDP86-00513R032932910015-6

MATSAK, Valentin Gavrilovich; KHOTSYANOV, Lev Kipriyanovich; DITERIKHS, D.D., red.; ZAKHAROVA, A.I., tekhn.red.

[Hygienic significance of the rate of vaporization and of the vapor pressure of toxic substances used in industry] Gigienicheskoe znachenie skorosti isparenii i davleniia para toksicheskikh veshchestv, primeniaemykh v proizvodstve. Moskva, Gos.izd-vo med.lit-ry, 1959. 230 p. (MIRA 13:2)
(Industrial toxicology)

APPROVED FOR RELEASE: 06/14/2000 CIA-RDP86-00513R032932910015-6"

"APPROVED FOR RELEASE: 06/14/2000 CIA-RDP86-00513R032932910015-6

KHOTSIANOV, L.K.; MATSAK, V.G.; DITERIKHS, D.D.; ISAEV, N.S.; SUPONITSKIY, M.Ya., kand.med.nauk

"Hygienic principles of industrial ventilation and its operation" by L.K.Khotsianov and others. Gig.i san. 24 no.8:86-87 Ag '59. (MIRA 12:11)

(VENTILATION) (KHOTSIANOV, L.K.)

APPROVED FOR RELEASE: 06/14/2000 CIA-RDP86-00513R032932910015-6"

"APPROVED FOR RELEASE: 06/14/2000 CIA-RDP86-00513R032932910015-6

MATSAK, V.G., doktor biol. nauk

Review of A.N. [illegible] book [illegible] elements." Zhur. fiz. khim. [illegible]

APPROVED FOR RELEASE: 06/14/2000 CIA-RDP86-00513R032932910015-6"

"APPROVED FOR RELEASE: 06/14/2000 CIA-RDP86-00513R032932910015-6

1. BRANSBURG, F. S.: MATSAK, V. S.

2. USSR (600)

4. Industrial Hygiene

7. Improving industrial hygiene in the production of arsenic salts. [Abstract]. Gig i san., no. 1, 1953.

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

APPROVED FOR RELEASE: 06/14/2000 CIA-RDP86-00513R032932910015-6"

"APPROVED FOR RELEASE: 06/14/2000 CIA-RDP86-00513R032932910015-6

SMORODIN, Yefim Markovich; KOKANOV, Innokentiy Ivanovich;
MATSAKOV, G.S., red.

[Preparing and using plastics in construction] Izgotovlenie i primenenie plastmass v stroitel'stve. Kiev, Budivel'nyk, 1964. 21 p. (MIRA 18:1)

APPROVED FOR RELEASE: 06/14/2000 CIA-RDP86-00513R032932910015-6"

"APPROVED FOR RELEASE: 06/14/2000 CIA-RDP86-00513R032932910015-6

RYABTSEVA, Yuliya Vasil'yevna; MATSAKOV, G.S., red.

[Activated fire-resistant concrete] Zharostoykiy aktivizirovannyi beton. Kiev, Budivel'nyk, 1964. 62 p. (MIRA 18:2)

APPROVED FOR RELEASE: 06/14/2000 CIA-RDP86-00513R032932910015-6"

"APPROVED FOR RELEASE: 06/14/2000 CIA-RDP86-00513R032932910015-6

ZAIKA, Il'ya Nikitovich; DRABAN, Anna Zinov'yevna; KRAVTSOV, Igor' Alekseyevich; MAMAYCHUK, Nina Mikhaylovna; MATSAKOV, G.S., red.

[Accelerated drying of buildings under construction] Uskorennaia sushka stroiashchikhsia zdanii. Kiev, Budivel'nyk, 1965. 21 p. (MIRA 18:7)

APPROVED FOR RELEASE: 06/14/2000 CIA-RDP86-00513R032932910015-6"

"APPROVED FOR RELEASE: 06/14/2000 CIA-RDP86-00513R032932910015-6

MATSAKOV, L YA

PHASE I BOOK EXPLOITATION SOV/4012

Akademiya nauk Ukrainskoy SSR. Otdeleniye fiziko-matematicheskikh nauk. Sessiya po mirnomu ispol'zovaniyu atomnoy energii

Trudy (Transactions of the Session on Peaceful Uses of Atomic Energy). Kiyev, Izd-vo AN Ukrainskoy SSR, 1956. 186 p. 2,500 copies printed.

Resp. Ed.: M. V. Pasechnik, Doctor of Physics and Mathematics; Editorial Board: A. K. Val'ter, Academician, Academy of Sciences Ukrainskaya SSR, O.F. Bemets, Candidate of Physics and Mathematics, M. V. Pasechnik, Doctor of Physics and Mathematics; Ed. of Publishing House: T. K. Remennik; Tech. Ed.: S. P. Bakhlina.

PURPOSE: This collection of articles is intended for physicists and scientific personnel working in nuclear research.

COVERAGE: The articles in this collection discuss linear proton accelerators, electron accelerators, electrostatic accelerators, magnetron lenses, the interaction of charged particles and neutrons with nuclei, the applications of tagged atoms in physics research, and experimental methods. Some of the articles are descriptions of already existing nuclear installations and experimental apparatus. No personalities are mentioned. There is a bibliography of Soviet and non-Soviet sources at the end of most of the articles.

Bemets, O.F. Selective Spectrometer for Charged Particles 145

Gefman, V.I., V.D. Rovitskiy, and R.G. Ofengenden. Multichannel Time Analyzer 154

Ofengenden, R.G., L.D. Konenko, and V.G. Kotova. Multichannel Amplitude Analyzer With a Magnetic Drum Memory Unit 161

Afanas'yev, S.G., and V. Yu. Gonchar. Multichannel Amplitude Analyzer With Ultrasonic Memory and Scintillation Spectrometer 169

Galkin, S.A., D.A. Kichigin, and L. Ya. Matsakov. Using Nuclear and Electron Resonances in Measuring Wavelengths in the Microwave Band 180

Rudenko, E.S., V.N. Grigor'yev, D.G. Dolgopolov, and I.V. Bogoyavlenskiy. Change in the Isotopic Composition of Mercury in a DC Electric Field 183

APPROVED FOR RELEASE: 06/14/2000 CIA-RDP86-00513R032932910015-6"

"APPROVED FOR RELEASE: 06/14/2000 CIA-RDP86-00513R032932910015-6

L 11425-66 EWT(1)/EPF(c) IJP(c) WW/GG

ACCESSION NR: AP5021146 UR/0386/65/002/001/0030/0034

44,55

AUTHOR: Korolyuk, A. P.; Matsokov, L. Ya. 44,55

61
53
B

TITLE: New acoustic resonance in an oblique magnetic field

SOURCE: Zhurnal eksperimental'noy i teoreticheskoy fiziki. Pis'ma v redaktsiyu. Prilozheniye, v. 2, no. 1, 1965, 30-34

24,74,55

TOPIC TAGS: antimony, sound absorption, absorption coefficient, magnetic field, magnetic resonance, resonance absorption

ABSTRACT: Since earlier observations by one of the authors (Korolyuk, with A. A. Galkin and E. A. Kaner, DAN SSSR v. 134, 74, 1960) of resonant oscillations of the absorption coefficient were limited to magnetic fields perpendicular to the wave vector, and since the earlier theoretical analysis shows that resonance depends on the angle between the electron orbits on the Fermi surface and the magnetic field, the authors have measured this effect in antimony single crystals in an experimental set-up wherein the magnetic field vector could be rotated in the plane of the binary and trigonal axes. The samples for the measurements were grown in the form of disks approximately 1 mm thick with the normal along the binary axis, which coincided with the direction of the wave vector. Plots of the derivative of the absorption coefficient with respect to the magnetic field are shown in Fig. 1 of the

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L 1425-66

ACCESSION NR: AP5021146

9

Enclosure for two frequencies and for one of the orientations of the field. The results show that in weak fields the lines are sinusoidal, but with increasing field intensity they become narrower and assume a somewhat asymmetrical Lorentz shape. The oscillations have the same period in the reciprocal magnetic field. A change in the sound frequency shifts the corresponding resonance lines in proportion to the frequency. Variation of the magnetic field orientation discloses a pronounced anisotropy of the period, and new oscillating components, similar to beats, appear at certain field directions. The number of oscillations also changes with the field direction as a function of the reciprocal field. "We are grateful to E. A. Kaner 44,55 for useful discussions and to M. D. Belousov for help with the measurements." Orig. art. has: 3 figures and 3 formulas. 44,55 [02]

ASSOCIATION: Institut radiofiziki i elektroniki Akademii nauk UkrSSR (Institute of Radiophysics and Electronics, Academy of Sciences, UkrSSR) 44,55

SUBMITTED: 27Apr63 ENCL: 01 SUB CODE: SS, NP

NO REF SOV: 005 OTHER: 006 ATD PRESS: 4099

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"APPROVED FOR RELEASE: 06/14/2000 CIA-RDP86-00513R032932910015-6

L 14425-66

ACCESSION NR: AP5021146

ENCLOSURE: 01

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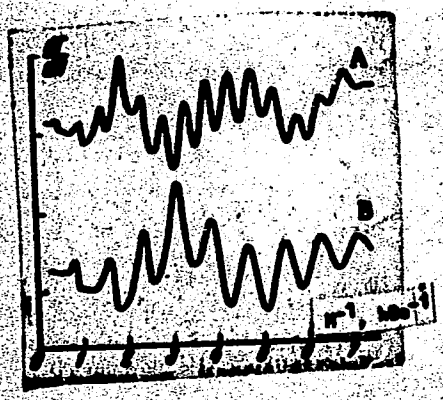

Fig. 1. Plot of the derivative of the longitudinal-sound absorption coefficient $d\Gamma/dH$ vs the reciprocal magnetic field. The angle between $\mathbf{k}$ and $\mathbf{H}$ is 25°, $\mathbf{k}$ is along the binary axis, $\mathbf{H}$ is in the plane of the binary and trigonal axes.

A – $\omega/2\pi = 5 \times 10^8$ cps;
B – $\omega/2\pi = 3 \times 10^8$ cps.

Card 3/3 DP

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"APPROVED FOR RELEASE: 06/14/2000 CIA-RDP86-00513R032932910015-6

L 26156-66

ACC NR: AP5027038 SOURCE CODE: UR/0120/65/000/005/0217/0219

AUTHOR: Korolyuk, A. P.; Matsakov, L. Ya.

ORG: Institute of Radiophysics and Electronics, AN UkrSSR, Khar'kov (Institut radiofiziki i elektroniki AN UkrSSR)

TITLE: The stabilization and unfolding of magnetic fields by means of "driftless" amplifiers

SOURCE: Pribory i tekhnika eksperimenta, no. 5, 1965, 217-219

TOPIC TAGS: DC amplifier, magnetic field, magnetic field intensity, servosystem, voltage stabilizer, circuit design

ABSTRACT: The existing DC amplifiers used for the stabilization and unfolding of magnetic fields are often not sufficiently accurate because of their inherent drift of the zero and comparatively low amplification. In addition, they require large voltage drops across reference resistances. The article describes a new servosystem stabilizing the electromagnetic field with respect to a certain reference voltage with a relatively high degree of accuracy ($\sim 10^5$). The control voltage may originate from Hall sensors or from voltage drops across reference resistors. The device is also applicable to the unfolding of magnetic fields according to a certain given law (e.g., hyperbolic). Such requirements arise whenever the oscillations of various physical quantities have the same period in the reversed magnetic field. The author gives the block diagram of the device, the circuit diagram of the stabilization and unfolding device, the block for field unfolding, and the circuit for hyper-

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"APPROVED FOR RELEASE: 06/14/2000 CIA-RDP86-00513R032932910015-6

L 8616-66
ACC NR: AP5027038

bolic variation generation. The system's stability is sufficient for the recording of sharp nuclear resonance lines (see Fig. 1).

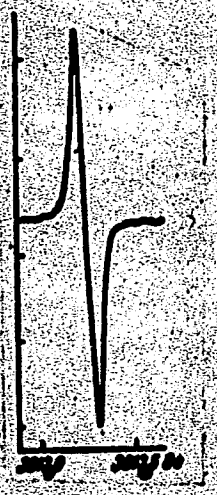

Fig. 1. The derivative of the proton resonance line recorded by magnetic induction DMI-2 device. Recording time - 45 sec.

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"APPROVED FOR RELEASE: 06/14/2000 CIA-RDP86-00513R032932910015-6

L 8616-66
ACC NR: AP5027038

During a 3 hour recording session the drift did not exceed the half-width of the line (~ 0.05 Oe). Orig. art. has: 3 formulas and 5 figures.

SUB CODE: IE,EC,EM / SUBM DATE: 02Jul64 / ORIG REF: 002

jrm

Card 3/3

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"APPROVED FOR RELEASE: 06/14/2000 CIA-RDP86-00513R032932910015-6

L 21576-66 EWT(1)/EPF(n)-2/ETC(m)-6 IJP(c) WW

ACC NR: AP6011495 SOURCE CODE: UR/0386/66/003/007/0291/0295

AUTHOR: Korolyuk, A. P.; Matsakov, I. Ya.

ORG: Institute of Radiophysics and Electronics, Academy of Sciences, UkrSSR (Institut radiofiziki i elektroniki Akademii nauk Ukrainskoy SSR)

TITLE: Doppler splitting of acoustic cyclotron resonance lines in an oblique magnetic field in antimony

SOURCE: Zhurnal eksperimental'noy i teoreticheskoy fiziki. Pis'ma v redaktsiyu. Prilozheniye, v. 3, no. 7, 1966, 291-295

TOPIC TAGS: acoustic resonance, cyclotron resonance, line splitting, Doppler effect, antimony, sound absorption, single crystal, magnetic field

ABSTRACT: This is a continuation of an earlier investigation of the sound absorption coefficient in antimony at helium temperatures and with the sound-wave and magnetic-field vectors not mutually perpendicular (Pis'ma ZhETF v. 2, 30, 1965), in which several new phenomena, and in particular oscillations on the extremal electron trajectories, were reported. It is shown in this article that a similar effect occurs at relatively low sound frequencies. To observe the effect the authors have grown single crystals of antimony, subjected to supplementary 20-fold zone recrystallization. Owing to the purification and to the lowering of the tem-

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L 21576-66

ACC NR: AP6011493

perature to 1.4°K, the electron mean free path time increased to such an extent, that even at a sound frequency 5.0×10^8 cps it was already possible to reach the region of acoustic cyclotron resonance (ACR). Measurements of the periods and of the splitting of the ACR lines in a magnetic field make it possible, in contrast to the case described earlier, to measure separately the cyclotron mass and the velocity of the electron on the extremal section. For the case of quadratic energy dispersion, a general expression is obtained for the angular dependence of the ACR periods on the extremal trajectories. Preliminary measurements were made of the angular dependence of the periods and the splitting of the ACR lines in the plane of the binary axes of antimony at 5.0×10^8 cps. Since it is not clear at present how good the quadratic approximation is for antimony, and whether the spectral constants used are reliable, the qualitative agreement between the calculated and measured quantities can be regarded as fully satisfactory. The obtained effective mass of the carriers $m^* = 0.15\ m_0$ is in sufficiently good agreement with the mass $m^* = 0.14\ m_0$ measured by the method of ordinary cyclotron resonance. The authors thank E. A. Kaner for fruitful discussions. Orig. art. has: 2 figures and 3 formulas.

SUB CODE: 20/ SUBM DATE: 10Feb66/ OREG REF: 002/ OTH REF: 003

Card 2/2 UVP

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"APPROVED FOR RELEASE: 06/14/2000 CIA-RDP86-00513R032932910015-6

44245

S/056/62/043/006/059/067
B141/B102

AUTHORS: Lazarev, B. G., Lazareva, L. S., Ovcharenko, O. N., Matsakova, A. A.

TITLE: Effect of universal compression on the temperature of the superconducting transition of Nb_3Sn

PERIODICAL: Zhurnal eksperimental'noy i teoreticheskoy fiziki, v. 43, no. 6(12), 1962, 2309-2310

TEXT: Nb_3Sn shows a very small isotopic effect, in which the critical temperature T_{cr} is not proportional to $M^{-1/2}$ but to $M^{-1/12}$. The pressure applied was 1730 kg/cm^2, which resulted in a decrease of T_{cr} by $(4.5 \pm 0.5)10^{-2}$ deg; i.e. $\partial T_{cr}/\partial p = -(2.5 \pm 0.3)\cdot 10^{-5}$ deg/atm. The pressure effect is of the same sign as in the majority of superconductors and of the same amount as in good superconductors, wherein T_{cr} is almost proportional to $M^{-1/2}$. $(\partial H_{cr}/\partial T)_{T_{cr}} = -15.5\cdot 10^3$ gauss/deg. Thus Nb_3Sn

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belongs to the alloyed type superconductors. When dT_{cr}/dp and dH_{cr}/dT are known, the jump of the thermal expansion coefficient and of specific heat during transition can be estimated. The values obtained, however, are too high so it is concluded that dT_{cr}/dp and dH_{cr}/dT hold only for very small Nb_3Sn volumes. The same applies to the other properties of this superconductor. For Nb_3Sn and similar superconductors the magnetic field must have very great depth of penetration. There is 1 figure.

ASSOCIATION: Fiziko-tekhnicheskiy institut Akademii nauk Ukrainskoy SSR (Physicotechnical Institute of the Academy of Sciences Ukrainskaya SSR)

SUBMITTED: September 12, 1962

APPROVED FOR RELEASE: 06/14/2000 CIA-RDP86-00513R032932910015-6"

"APPROVED FOR RELEASE: 06/14/2000 CIA-RDP86-00513R032932910015-6

KOGAN, V.S.; KRIVKO, A.I.; LAZAREV, B.G.; LAZAREVA, L.S.; MATSAKOVA, A.A.; OVCHARENKO, O.N.

Constitutional diagram of the system Nb - Sn. Fiz.met.i metalloved. 15 no.1:143-145 Ja '63. (MIRA 16:2)

1. Khar'kovskiy fiziko-tekhnicheskiy institut AN UkrSSR.
(Diffusion coatings) (Niobium-tin alloys)
(Phase rule and equilibrium)

APPROVED FOR RELEASE: 06/14/2000 CIA-RDP86-00513R032932910015-6"

"APPROVED FOR RELEASE: 06/14/2000 CIA-RDP86-00513R032932910015-6

ACCESSION NR: AP4009135 S/0056/63/045/006/2068/2069

AUTHOR: Lazarev, B. G.; Khorenko, V. K.; Korniyenko, L. A.; Krivko, A. I.; Matsakova, A. A.; Ovcharenko, O. N.

TITLE: On the layered and filamentlike structure of the superconducting alloys Nb-Zr and Nb-Ti

SOURCE: Zhurnal eksper. i teoret. fiziki, v. 45, no. 6, 1963, 2068-2069

TOPIC TAGS: superconducting alloy, niobium zirconium alloy, niobium titanium alloy, layered structure, filament structure, electron microscopic investigation, plastic deformation, critical magnetic field, solid solution, saturated solid solution, critical current density

ABSTRACT: Data are presented on electron-microscopic observations of thin films and filamentary systems of tracks in alloys of Nb with 25 at. % Zr and of Nb with 66 at. % Ti. Samples of the original alloy were compared with samples reduced in thickness by rolling from 2-5 mm to 0.05-0.5 mm at room temperature. When observed by

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ACCESSION NR: AP4009135

cathode etching, only a few undeformed samples showed a thin filamentlike precipitate structure, but the deformed samples showed the presence of a developed system of layers even at a magnification of 450. Under the electron microscope, sections cut at a very small angle ($\leq 3^{\circ}$ for Nb-Zr) showed more and more fine elements with increasing magnification. The alloy contains a whole set of layer thicknesses from several times ten Angstrom up, which are not uniformly distributed but come in packets. The conductivity drops to its initial value after annealing at 100°C. This demonstrates experimentally that the increase in the current density of the superconducting current (from 100-1000 to 20000-40000 A/sq.cm.) in the critical magnetic field is due to the developed system of precipitated layers and filaments.

ASSOCIATION: Fiziko -tekhnicheskiy institut AN UkrSSR (Physicotechnical Institute, AN UkrSSR)

SUBMITTED: 27Aug63 DATE ACQ: 02Feb64 ENCL: 00

SUB CODE: PH, MA NO REF SOV: 007 OTHER: 003

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APPROVED FOR RELEASE: 06/14/2000 CIA-RDP86-00513R032932910015-6"

"APPROVED FOR RELEASE: 06/14/2000 CIA-RDP86-00513R032932910015-6

ACCESSION NR: AP4025914 S/0056/64/046/003/0831/0832

AUTHORS: D'yakov, I. G.; Lazarev, B. G.; Matsakova, A. A.; Ovcharenko, O. N.

TITLE: Critical magnetic fields of superconducting niobium films

SOURCE: Zhurnal eksperimental'noy i teoreticheskoy fiziki, v. 46, no. 3, 1964, 831-832

TOPIC TAGS: niobium, superconducting niobium, superconductivity, critical magnetic field, field depth of penetration, niobium film, superconducting niobium film, superconducting bulk niobium, critical superconducting temperature

ABSTRACT: Thin (20 and 50 micron) superconducting niobium films were produced by condensation on pyrex glass or on mica with silver contacts prepared beforehand. The results are of interest since they permit an estimate of the depth of penetration of the field in

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ACCESSION NR: AP4025914

niobium (~10^{-4} cm, about one order of magnitude higher than in "soft" superconductors) and show that the high critical fields in niobium alloys are due to thin superconducting paths in the alloys. The precautions taken to reduce the effect of gas impurities are briefly described. The critical field for the 50 micron film was about 25,000 Oe, about 10 times that for bulk niobium. The field for the 20 micron film is much higher but could not be measured with the available external magnetic field (22,000 Oe). The transitions temperatures for the 20 and 50 micron films were 6.5 and 7.5K respectively as against 9.1K for bulk niobium, indicating that the films were still not sufficiently pure. Orig. art. has: 1 figure.

ASSOCIATION: Fiziko-tekhnicheskiy institut AN UkrSSR (Physico-technical Institute, AN UkrSSR)

SUBMITTED: 27Aug63 DATE ACQ: 16Apr64 ENCL: 01

SUB CODE: PH NO REF SOV: 004 OTHER: 004

Card 2/2

APPROVED FOR RELEASE: 06/14/2000 CIA-RDP86-00513R032932910015-6"

"APPROVED FOR RELEASE: 06/14/2000 CIA-RDP86-00513R032932910015-6

L 32037-66 EWT(m)/T/EWP(t)/ETI IJP(c) JD/JG

ACC NR: AP6018939 SOURCE CODE: UR/0126/66/021/006/0828/0832

AUTHOR: Kogan, V. S.; Lazarev, B. G.; Matsakova, A. A.; Ovcharenko. O. N.; Yakimenko, L. F.

ORG: Physicotechnical Institute, AN UkrSSR (Fiziko-tekhnicheskiy institut AN UkrSSR)

TITLE: The width of the homogeneity region of intermetallic phases in the Nb-Sn and V-Ga systems

SOURCE: Fizika metallov i metallovedeniye, v. 21, no. 6, 1966, 828-832

TOPIC TAGS: superconducting compound, niobium alloy, binary alloy, tin containing alloy, vanadium alloy, gallium containing alloy, intermetallic compound, compound homogeneity region

ABSTRACT: Experiments have been made to determine the width of the homogeneity region of intermetallic phases formed in the Nb-Sn and V-Ga systems, i.e., systems whose components have widely different melting temperatures. Nb_3Sn and V_3Ga intermetallic compounds were obtained by diffusion of Nb_3Sn by holding an Nb specimen for several hours in molten tin at 1000C, and V_3Ga by holding a vanadium specimen wetted with gallium in a vacuum at about 1200C. X-ray diffraction patterns of the diffusion layer on vanadium showed that the surface layer contacting gallium and the inner layer adjacent to vanadium had equal lattice parameters, 4.819 ± 0.002 Å. The temperature of transition to the superconductivity state of V_3Ga was found to be

Card 1/2 UDC: 548.53

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L 32037-66

ACC NR: AP6018939

C

14.44K with a transition zone width of 0.2K. These data confirmed that the diffusion zone consisted only of V_3Ga compound of stoichiometric composition. Similar results were obtained for Nb_3Sn compound. The layers adjacent to Sn and Nb had the same lattice parameters, equal to 5.288 ± 0.001 Å, which showed that the homogeneity region of Nb_3Sn compound is also very narrow. A wide homogeneity region reported in some earlier works for the refractory metal-rich phases in alloys whose components have widely different melting temperatures is presumably a result of tested alloys being in nonequilibrium state owing to a low diffusion rate of these phases. Orig. art. has: 3 figures. [MS]

SUB CODE: 11/ SUBM DATE: 26Jul65/ ORIG REF: 004/ OTH REF: 005/ ATD PRESS 5019

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L 38537-66 EWT(m)/T/EWP(w)/EWP(t)/ETI IJP(c) JG/JD/GD

ACC NR: AT6014756 SOURCE CODE: UR/0000/65/000/000/0089/0090

AUTHORS: Lazarev, B. G.; Lazareva, L. S.; Matsakova, A. A.; Ovcharenko, O. N.

ORG: none

TITLE: The superconductivity of V_3Ga

SOURCE: Soveshchaniye po metallovedeniyu i metallofizike sverkhprovodnikov. 1st, 1964. Metallovedeniye i metallofizika sverkhprovodnikov (Metallography and physics of metals in superconductors); trudy soveshchaniya. Moscow, Izd-vo Nauka, 1965, 89-90

TOPIC TAGS: superconductivity, critical magnetic field, hydrostatic pressure, gallium compound, vanadium compound, intermetallic compound

ABSTRACT: The superconducting properties of the intermetallic compound V_3Ga are studied. The compound was prepared by arc smelting in an argon atmosphere. The specimens were in the form of wafers with a thickness of ~ 5 mm. The effect of hydrostatic pressure on the transition temperature was determined. The critical magnetic field as a function of temperature was also studied (see Fig. 1). The specific-heat discontinuity and the discontinuity of the thermal expansion coefficient could not be determined from the data of the work.

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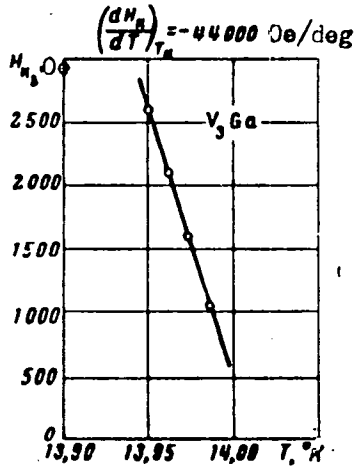
Fig. 1. Critical magnetic field H_k as a function of temperature near T_k for V_3Ga.



Orig. art. has: 2 graphs.

SUB CODE: 11,20/ SUBM DATE: 23Dec65/ ORIG REF: 005/ OTH REF: 003

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L 38546-66 EWT(m)/EWP(w)/T/EWP(t)/ETI IJP(c) JD/JG/GD

ACC NR: AT6014753 SOURCE CODE: UR/0000/65/000/000/0076/0082

AUTHORS: Kogan, V. S.; Krivko, A. I.; Lazarev, B. G.; Lazareva, L. S.; Matsakova, A. A.; Ovcharenko, O. N.

ORG: none

TITLE: The phase diagram of the niobium-tin system

SOURCE: Soveshchaniye po metallovedeniyu i metallofizike sverkhprovodnikov. 1st, 1964. Metallovedeniye i metallofizika sverkhprovodnikov (Metallography and physics of metals in superconductors); trudy soveshchaniya. Moscow, Izd-vo Nauka, 1965, 76-82

TOPIC TAGS: superconductivity, superconducting alloy, tin base alloy, niobium alloy, x ray analysis, spectrographic analysis, critical magnetic field, intermetallic compound, alloy phase diagram

ABSTRACT: This paper is a continuation of an earlier work by V. S. Kogan, A. I. Krivko, B. G. Lazarev, L. S. Lazareva, A. A. Matsakova, and O. N. Ovcharenko (FMM, 1963, 15, 143) in which it was found that specimens produced by holding niobium in molten tin at temperatures above and below 850C differed in their superconducting properties. The superconductivity transition temperature for specimens produced at 990C and 1250C is 18.0K and 18.1K, respectively (see Fig. 1). For diffusion layers formed at below 850C, the superconductivity transition temperature is reduced; the lower T_k, the lower the temperature of formation of the layer. For specimens

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ACC NR: AT6014753

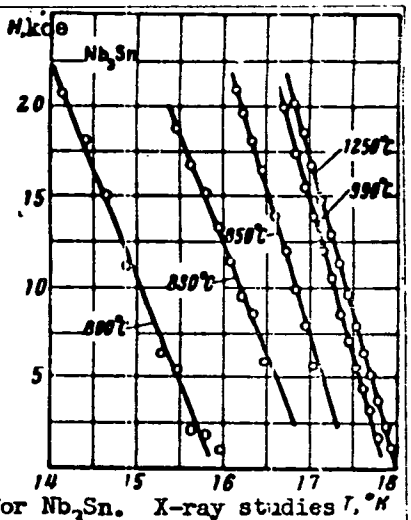

Fig. 1. Critical magnetic field H_k as a function of temperature for diffusion layers of Nb_3Sn obtained at temperatures of 800--1250C.

obtained at above 850C, T_k agrees with the known value for Nb_3Sn. X-ray studies confirmed that only the compound Nb_3Sn is formed when specimens are prepared at over 850C. For temperatures below 850C, the diffraction pattern shows that Nb_2Sn_3 is formed. It was concluded that in specimens prepared at temperatures below 850C there is present a very thin interlayer beneath the new phase. The formula NbSn is ascribed to the new compound. The superconductivity transition temperature of the NbSn was found to be 2.7K. In other papers the new compound has been given the

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formula $NbSn_2$ or Nb_2Sn_3. The authors thank L. N. Mosova for conducting the qualitative spectral analysis. Orig. art. has: 5 graphs, 1 table, and 1 photograph.

SUB CODE: 11, 20/ SUBM DATE: 23Dec65/ ORIG REF: 002/ OTH REF: 018

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