

KLAZ, Il'ya Semenovich; DUBOVIK, P., red.; KALECHYTS, G., tekhn. red.

[Anatol' Shabuniasou, a locomotive engineer] Mashynist Anatol'  
Shabuniasou; narys. Minsk, Dziarzh.vyd-va BSSR. Red. masava-  
palit.lit-ry, 1961. 30 p. (MIRA 15:1)  
(Locomotive engineers)

DUBOVIK, S.; ENVLISHVILI, P.V.; SHIRMAN, G.L.

Lens system with multiple reflecting mirrors. Zhur.nauch. i  
prikl.fot. i kin. 4 no.1:12-19 Ja-F '59. (MIRA 12:2)

1. Institut khimicheskoy fiziki AN SSSR.  
(Photography, High-speed) (Photographic optics)

DUBOVIK, R.A.

Comparing observations on currents made from drifting and anchored  
ships with observations at buoy stations. Meteor. i gidrol. no.10:  
50-53 0 '61. (MIRA 14:9)

(Ocean currents)

STAROBINETS, G.L. [Starobinets, H.L.], DUBOVIK, T.L.

Selectivity of anion exchange on highly basic ion-exchange resins.  
Vestsi AN BSSR. Ser. Fiz.-tekh. nav. no.2:48-52 '63. (MIRA 17:1)

STAROBINETS, G.I.; SEDNEV, M.P.; DUBOVIK, T.L.

Concentration and separation of small amounts of elements by eluent chromatography. Trudy Koz. anal. khim. 15:323-330 '65. (MIRA 18:7)

STAROBINETS, G.I.; CHIZHEVSKAYA, A.B.; DUBOVIK, T.L.

Entropy of ion exchange with negative hydration. Vestsi AN  
BSSR.Ser.khim.nau. no.2:110-111 '65.

(MIRA 18:12)

L 42175-66 EWP(j)/EWT(m) IJP(o) RM/DS

ACC NR: AR6014535

SOURCE CODE: UR/0081/65/000/019/S081/S081

AUTHORS: Starobinets, O. L.; Dubovik, T. L.

TITLE: Effect of the polymer structure upon selective properties of the derived ion exchanger ↑

SOURCE: Ref. zh. Khimiya, Abs. 193508

REF SOURCE: Sb. Oeterogen. reaktsii i reakts. sposobnost'. Minsk, Vyssh. shkola, 1964, 14-19

TOPIC TAGS: polymer structure, ion exchange resin, synthetic rubber, sulfonation

ABSTRACT: The preparation of ion exchange resins was undertaken by: 1) sulfonation with 98%  $H_2SO_4$  at 97--98°C of chloroprene rubber, stretched to the limit and maintained at this state for 2 months and of chloroprene rubber kept at 150°C for 3 days and cooled to -20°C for 1 month (annealed rubber); and 2) sulfonation with chlorosulfonic acid at -20°C of chloroprene rubber maintained in a stretched state. Exchange capacities for NaCl and NaOH and degree of swelling of all produced samples of ion exchangers were investigated. The selectivity of the equilibrium exchange of  $H^+--Li^+$ ,  $H^+--Na^+$ ,  $H^+--K^+$  on resins obtained by sulfonation of polymers with 98%  $H_2SO_4$  was also studied, as was the selectivity of the  $H^+--Na^+$  exchange on the resin obtained from stretched chloroprene rubber by sulfonation with chlorosulfonic acid.

Card 1/2

L 42175-66

ACC NR: AR6014535

It was shown that selectivity of ionic exchange is related to the structure of the polymer from which the exchanger was prepared. Selectivity is poorer in the case of uncrystallized exchanger. Of the ion exchange resins prepared by sulfonation of the stretched and of the annealed chloroprene rubber, the stretched exhibited better selectivity of exchange. Exchange selectivity of ion exchanger obtained by chlorosulfonic acid sulfonation of rubber maintained in a stretched state corresponds to all practical purposes, with the selectivity exhibited by exchange resin produced by  $H_2SO_4$  sulfonation of that rubber. M. Shamis [Translation of abstract]

SUB CODE: 11,07



L 10351-67 EWP(a)/EWT(d)/EWT(n)/EWP(h)/EWP(l)/EWP(o)/EWP(v)/EWP(t)/ETI IJP(c)

ACC NR: AP6015356 (N) WH/WJ/JD SOURCE CODE: UR/0226/66/000/005/0107/0110

AUTHORS: Dubovik, T. V.; Struk, L. I. 53

ORG: Institute for the Problems of Materials Science, AN UkrSSR (Institut problem materialovedeniya AN UkrSSR)

TITLE: Boron carbonitride electric insulation tubes for protection of metal thermocouples 14

SOURCE: Poroshkovaya metallurgiya, no. 5, 1966, 107-110

TOPIC TAGS: boron compound, boron carbonitride, insulating material, thermocouple

ABSTRACT: After discussion of the deficiencies of various oxides for use as high temperature insulators, the high temperature properties of boron carbonitride are presented (resistivity:  $10^{14}$  ohm-cm at 20C,  $10^{14}$  ohm-cm at 2000C, etc). The high temperature corrosion resistance of boron carbonitride in various environments is discussed, and temperature operating ranges are recommended. A method for extruding single- and double-channel insulator tubes for thermocouples from a powdered mixture of boron nitride and carbide (1:1 by weight) is described. Boron carbonitride tubes 2.3--4.5 mm in outside diameter, 0.3--0.8 mm in inside diameter, and up to 200 mm long have been successfully extruded by this method and (after firing at 500--1900C in a reaction mixture) have been used as thermocouple insulators at temperatures of 1500--2500C. Orig. art. has: 1 figure and 2 tables.

Card 1/1m SUB CODE: 13/ SUBM DATE: 30Nov65/ ORIG REF: 005/ OTH REF: 002

36128

S/137/62/000/003/061/191

A006/A101

21.2110  
15.2240AUTHORS: Verkhoglyadova, T. S., Dubovik, T. V., Samsónov, G. V.

TITLE: Nitration of transition metal powders with the formation of nitride phases

PERIODICAL: Referativnyy zhurnal, Metallurgiya, no. 3, 1962, 40, abstract 30277  
("Poroshk. metallurgiya", 1961, no. 4, 9 - 20, English summary)TEXT: The authors studied kinetics of nitration of Ti, Zr, V, Nb, Ta, Mo, Cr and Re powders at 500 - 1,200°C. On the basis of X-ray and chemical analyses of the compounds obtained, the optimum nitration conditions were established. The constants of the rate and activation energy of nitration were calculated from kinetics of overweight of the reaction products. For nitrides of Ti and Zr, V(VN), Nb(NbN), Ta(TaN), Cr(Cr<sub>2</sub>N), the optimum nitration temperature is 1,200°C; for V<sub>3</sub>N, Nb<sub>2</sub>N, Ta<sub>2</sub>N, CrN it is 900°C; for Mo<sub>2</sub>N - 700°C and for Re<sub>3</sub>N it is 300 - 350°C.

[Abstracter's note: Complete translation]

R. Andriyevskiy

Card 1/1

35711

S/136/62/000/003/003/008

E021/E435

18-12-10

AUTHORS: Samsonov, G.V., Dubovik, T.V.

TITLE: Technology for preparation of aluminium nitride and the possibilities of its commercial use

PERIODICAL: Tsvetnyye metally, no.3, 1962, 56-61

TEXT: The aim of the present work was to establish the optimum conditions for preparing aluminium nitride powder. The initial materials were aluminium powder ПА-4 (PA-4) with particle size 0.1 to 0.25 mm, aluminium powder ПАК-4 (PAK-4) with particle size less than 0.042 mm, purified nitrogen containing a trace of oxygen, and ammonia. The apparatus, described in detail previously, enabled material to be nitrized by passing nitrogen over a boat containing the material. Experiments at 700 to 1200°C showed that after up to 240 minutes, nickel and zirconium boride did not react with the powders of aluminium nitride. The boats were therefore made from these materials. The rate of heating has to be low enough to prevent fusion of the aluminium because, if fusion occurs, the surface area of the reaction is decreased and the aluminium is more likely to react with the material of the  
Card 1/3 X

Technology for preparation ...

S/136/62/000/003/003/008  
E021/E435

boat. The optimum rate of heating without fusion taking place was found to be 6 to 7 °C/min for the 0.1 to 0.25 mm powder and 10°C/min or lower for the 0.042 mm powder. The optimum conditions for nitriding were found by a series of experiments in a current of nitrogen for 15 to 240 minutes and in a current of ammonia for 2 hours at 500 to 1200°C. The results showed that there is relatively full nitriding of the finer powder at 700°C but the coarser powder requires a temperature of 1100 to 1200°C. From the results the following scheme for production of aluminium nitride was put forward.. PAK-4 powder is nitrided at 800°C for 1 hour with a rate of increase of temperature up to 800°C of 10°C/min. The prepared product is thoroughly mixed and a repeated nitriding is carried out at 1200°C for 30 to 60 minutes (with a temperature increase of 40°C/min). This gives a powder of accurate stoichiometric composition. A commercial powder with about 33% nitrogen content can be prepared by a single nitriding process at 1200°C (with rate of temperature increase 10°C/min). Components of aluminium nitride with 12 to 16% porosity can be prepared by sintering, after pressing, nitride powder or nitride

Card 2/3

Technology for preparation ...

S/136/62/000/003/003/008  
E021/E435

powder containing 5 to 10% aluminium powder in nitrogen at 1800 to 2000°C. Components with zero porosity can be prepared by hot pressing the nitride powder at 2000 to 2100°C. There are 5 tables.

Card 3/3

X

L 2099-65 EMT(m)/EPT(c)/EPT(n)-2/EPR/EPF(j)/EWP(k)/EPA(bb)-2/EWP(q)/EWP(t)

Pc-4/PT-4/Pr-4/Pa-4/Pu-4 JD/JG/AT/EM/WH

ACCESSION NR: AP4029211

8/0226/64/000/002/0099/0102

45  
44

AUTHOR: Semsonov, G. V.; Dubovik, T. V.

TITLE: Technique of manufacturing ~~refractory parts~~ <sup>27</sup> from aluminum nitride <sup>27</sup>

SOURCE: Poroshkovaya metallurgiya, no. 2, 1964, <sup>27</sup>99-102 <sup>27</sup>

TOPIC TAGS: refractory part, refractory, aluminum nitride, aluminum nitride compacting, sintering, aluminum nitride sintering, aluminum nitride extrusion

ABSTRACT: A technique is developed for the manufacture of parts from aluminum nitride by compacting or extrusion of aluminum nitride powder mixed with a plasticizer (a solution of synthetic rubber in gasoline for compacting and a solution of bakelite in alcohol for extrusion of tubes and bars). This is followed by sintering in nitrogen at 1900 + 50 C; machining if necessary is done prior to sintering. The sintered parts had a melting temperature above 2400 C, a coefficient of thermal expansion of  $5.5 \times 10^{-6}$ , a resistivity of the order of  $10^{12}$  ohm-cm, and a microhardness of the order of 39200 MN/m<sup>2</sup>. Flow sheets for the production of parts, bars, and tubes are presented. Porosity is rather high (12-16%). Articles of simple shape can be made by hot compacting aluminum nitride powder (without plasticizer). Such articles have an almost theoretical density.

Card 1/2

L 2099-65  
ACCESSION NR: AP4029211

ASSOCIATION: Institut problem materialovedeniya AN SSSR (Institute for Problems  
in the Science of Materials, AN SSSR)

SUBMITTED: 15Apr65

ENCL: 00

SUB CODE: MM, IC

NO REF SOV: 004

CITER: 000

Card 2/2

ACCESSION NR: AP4043769

S/0080/64/037/008/1828/1830

AUTHOR: Debovik, T. V.; Polishchuk, V.S.; Samsonov, G. V.

TITLE: Derivation of magnesium nitride

SOURCE: Zhurnal prikladnoy khimii, v. 37, no. 8, 1964, 1828-1830

TOPIC TAGS: magnesium, nitride, nitration agent, ammonia, nitrogen

ABSTRACT: The authors conduct a technological study of conditions for obtaining magnesium nitride using nitrogen and ammonia as nitration agents. The initial material consisted of magnesium chips measuring 0.1-0.2 mm. Nitration took place in porcelain vessels placed in a quartz reactor. Nitration was conducted at temperatures from 200 to 1000°C over a period of 15 minutes to 4 hours for each temperature. The results of the experiment showed that nitration begins during the distillation of nitrogen through magnesium over a period of 30 minutes at 250°C. Nitration reaches its peak at 800°C over a period of 4 hours. At higher temperatures the nitrogen content drops sharply. The authors concluded that attempts to nitrate magnesium with ammonia have yielded much poorer results, which is apparently related to the fact that magnesium nitride converts easily into hydride and

Card 1/2



ACCESSION NR: AP4043769

visa versa. Orig. art. has: 2 figures and 1 table.

ASSOCIATION: none

SUBMITTED: 04Oct62

ENCL: 00

SUB CODE: IC, MT

NO REF SOV: 001--

OTHER: 009

Card 2/2

(A) E 11907-66  
Institute for the Study of Materials  
Institut problem

TITLE: Aluminum nitride coatings on graphite

SOURCE: Teorizika vysokikh temperatur, v. 3, no. 6, 1965, 040-042

The article studies the possibility of forming aluminum nitride coatings on graphite by the method of flame spraying of the...  
The consumption and pressure of the...  
of the sprayed layer and the strength of its bond with the graphite. The following parameters were found to be optimum:

Card 1/2

UDG: 546.171:546.621

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170 ALGEBRA/MIN: ALGON PRESSURE--1 ATM; Feeding speed of wire--0.5 m/s; 178/1

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LEVITIN, Isidor Borisovich; LEONT'YEV, Aleksandr Sergeyevich;  
MESSEYEV, V.F., sektor tekhn. nauk, retsentsent; BARSHTAY,  
M.M., Inzh., retsentsent; DUBOVIK, V.A., nauchnyy red.;  
GOLUBEVA, N.P., red.; FRUMKIN, P.S., tekhn. red.

[Lighting engineering on ships] Sudovaya svetotekhnika.  
Leningrad, Sudpromgiz, 1963. 300 p. (MIRA 16:5)  
(Electric lighting of ships)

DUBOVIK, Vladimir Afanas'yevich; VIGOVSKIY, Sergey Ivanovich;  
BAZILEVICH, Yevgeniy Vladimirovich; YEMEL'YANOV,  
Gennadiy Alekseyevich; ARTSENITSEN, S.I., otv. red.;  
KOKOSOV, L.V., red.; SHEFER, G.I., takhn. red.

[Frequency telegraphy] Chastotnoe telgrafirovanie. By V.A.  
Dubovik i dr. Moskva, Gos. izd-vo lit-ry po voprosam svyazi  
i radio, 1962. 349 p. (MIR 15:2)  
(Radiotelegraph) (Telegraph)

ALYAYEV, A.V. (Penzenskaya oblast'); ALEKSEYEV, V. (Yaroslavl');  
DUBOVYK, V.A. (Vinnitskaya oblast'); GUBA, S.G. (Vologodskaya  
oblast'); GOTMAN, E.G. (Pechora); RYBAKOV, L.M. (Yaroslavl')

Problems for school mathematical circles. Mat. v shkole no.3:  
88-89 My-Je '63. (MIRA 16:7)

(Mathematics—Problems, exercises, etc.)

*DUBOVIK, V.E.*

SMIRNOVA, L.I.; SERDEYNA, T.I.; MEN', M.L.; BONDARYUK, A.S.; KAGARLITSEAYA,  
E.A.; DUBOVIK, V.E.; TAROSH, A.P.; ALIEVSKAYA, O.E.

In memory of T.M. Stepanov. Khirurgiia no.4:91-92 Ap '53. (MLRA 6:6)  
(Stepanov, T.M., 1880-1951)

DUBOVIK, V.G.

Should we discontinue the construction of cabbage fermentation shops  
equipped with reinforced concrete vats. Kons. i ov. prom. 16 no. 4:23-24  
Ap '61. (MIRA 14:3)

1. Belprodproyekt. (Sauerkraut)



LIPAYEV, V.M. ; DOBOVIE, I.M.; DOBOVIE, V.I.; BUSOYEDOVA, N.M.

Rodents of the Argun River (Transbaikalia) flood lands. Izv.  
Irk.gos.nauka.-issl.prirodnochum.finst. 16:39-55 '57. (MIRA 13:7)

(ARGUN RIVER (TRANSBAIKALIA)--RODENTIA)

BUSOYEDOVA, N.M.; DUBOVIK, V.I.; DUBOVIK, I.M.; ZHOVYYI, I.F.;  
LIPAYEV, V.M.

Fleas of rodents in the flood-lands of the Argun River (Trans-  
baikalia). Izv. Irk. gos. nauch.-issl. protivochum. inst. 17:39-  
46 '58. (MIRA 13:7)

(ARGUN RIVER (TRANSBAIKALIA)--FLEAS)  
(PARASITES--RODENTIA)

TIMOFEEVA, L.A.; ZHOVYY, I.F.; KIKIPLOV, N.V.; BUSOYDOVA, N.M.;  
GOLOVACHEVA, V.Ya.; DUBOVIK, I.M.; DUBOVIK, Y.I.; ZHIVOLYAPINA,  
R.R.; LEONT'YEV, A.N.; PETUKHOVA, O.I.; TIMOFEEVA, A.A.; SHVEDKO, L.P.

Search for plague and other epizootic diseases in Transbaikalian  
plague focus. Report No.2. Izv.Irk.gos.nauch.--issl.protivochn.  
inst. 15:3-17 '57. (MIRA 13:7)

(TRANSBAIKALIA--RODENTIA--DISEASES AND PESTS)

A reaction of the tower...

DUBOVIK, V. I.

DUBOVIK, V. I. --"Kinetics of Enzymatic Action of Crystalline Catalase."  
\*(Dissertations For Degrees In Science and Engineering Defended  
at USSR Higher Educational Institutions)(29) Acad Sci  
Belorussian SSR, Department of Physicomathematical and  
Technical Sciences, Minsk, 1955

SO: Knishnaya Letopis' No 29, 16 July 1955

\* For the Degree of Candidate in Chemical Sciences

*Du BOVIK, V. I.*

TIMOFYEVA, L.A.; ZHOVIY, I.Y.; MEKIPBLOV, E.V.; BUSOYIMOVA, N.M.;  
GOLOVACHEVA, V.Ya.; DUBOVIK, I.M.; JUBONIK, Y.I.; ZHIVOLYAPINA, R.R.;  
LEMP'YEV, A.N.; PETUKHOVA, O.S.; TIMOFYAYA, A.A.; SHVED'KO, L.P.

Results of examining rodents in Transbaikalian steppes for pathogenic  
microflora. Tes.i dokl.konf.Irk.goe.nauch.-issl.protivochnu.inst.  
no.1:78-39 '55. (MIRA 11:3)  
(TRANSBAIKALIA--RODENTIA) (MICROORGANISMS, PATHOGENIC)

*DUBOVIK, V. I.*

YERAFYEV, B.V.; DUBOVIK, V.I.

Activation energy in the process of thermal inactivation of  
crystallised catalase extracted from the liver of oxen. Vestsi  
AN BSSR.Ser.fis.-tekh.nav.no.3:31-36 '56. (MIRA 10:1)  
(Catalase) (Liver extract) (Activity coefficients)

DUBOVIK, V.M., st. prepodav.; MAMIN, A.U., kand. geol.-miner. nauk, dots.; OTTO, P.I.; RUMYANTSEVA, A.Ya., kand. geogr. nauk, ispolnyayushchiy obyazannosti dots.; SEREGIN, I.A., st. inzh.; MOSKALEV, A.F.; KOLESNIKOV, B.P., prof., doktor biol. nauk, rektor; OKOROKOV, V.I., kand. biol. nauk, dots.; KLIMENKO, B.A.; STARIKOVA, L.A., assistant; SHUMILOVA, V.Ya., assistant; MAKSIMOVA, Ye.A., dots.; KIRIN, F.Ye., kand. geogr. nauk, dots.; KUZNETSOVA, A.V., red.; MATVEYEV, S.M., red.; MOROZOV, V.K., red.; MELNIKOVSKIY, I.M., red.; TYAZHEL'NIKOV, Ye.M., red.

[Nature of Chelyabinsk Province] Priroda Cheliabinskoi oblasti. Cheliabinsk, Ural'skoe knizhnoe izd-vo, 1964. 241 p. (MIRA 18:7)

1. Kafedra geografii Chelyabinskogo pedagogicheskogo instituta (for Dubovik, Mamin, Ruyantseva, Kirin).
2. Nachal'nik geologicheskogo otdela Chelyabinskogo geologorazvedchnogo tresta (for Otto).
3. Chelyabinskaya gidrologicheskaya stantsiya (for Seregin).
4. Nachal'nik pochtvennoy partii Chelyabinskoy zemleustroitel'noy ekspeditsii (for Moskalev).
5. Institut biologii Ural'skogo filiala AN SSSR (for Kolesnikov).
6. Kafedra zoologii Chelyabinskogo pedagogicheskogo instituta (for Okorokov, Starikova, Shumilova).
7. Chelyabinskiy rybnyy trest (for Klimenko).



104001156

REF ID: A66487/002/003/0487/0495

LUDOVIK, V. M.

Physical Institute Im. P. N. Lebedeva, Academy of Sciences USSR (Fizicheskiy institut)

Scattering of electrons by particles with high spin

relativistic electron scattering cross

Abstract text containing technical details and references, including the word 'magneto'.

ACC NR: AP5001155

FROM DATE: 11 MAR 65 TO DATE: 11 APR 65

C. A.  
DUBOVIK, YA. F.

15

A technique for the study of movement of reactions of double decomposition among water-soluble salts in the soil  
Ya. F. Dubovik. *Vestnik Akad. Nauk Kazakh. S.S.R.* 4  
No. 17 (22/23) 81-8 (1967).—Natural river water gives more satisfactory results (after suitable corrections for its own salt content) than does distd. water in soil extra. expts. It removes more Cl ions, but sulfates are removed more readily by distd. H<sub>2</sub>O. Progressive extra. of soil samples by wash waters from previous samples can be used as a means of following the mineral movements in the soil and the ion-exchanges that take place.  
G. M. Kosolapov

C. A.  
DUBOVIK, YA. F.

Technique of studying water-soluble salts in sandy soils  
Ya. F. Dubovik (Inst. Pochvovedeniya, Akad. Nauk  
Kazakh S. S. R.). *Vestnik Akad. Nauk Kazakh S. S. R.*,  
No. 4 (25), 23-6 (1947). For characterization of salts in  
salt-bearing soils it is suggested that 1:1 water-soil mixt.  
allowed to stand 1 hr. does not remove all the easily sol.  
alts; Na sulfates are retained twice as tenaciously as  
NaCl. Salts of moderate solub. are extd. to the extent of  
75%. The use of a 4:1 ext. ratio is recommended, with  
further leaching for complete removal of sol. sulfates. In  
lets. of sol. and mobile salts a 1:1 ratio is satisfactory.  
G. M. Kosolapoff

C 4  
ZUBOVIK, Ya F.

The role of biological assimilation of mineral salts in plant nutrition. Ya. F. Zubovik. Doklady Akad. Nauk S.S.S.R. 79, 827-81 (1960). Treatment of soils with either H<sub>2</sub>O or various nutrient salts, showed the effects of the activity of microflora in alteration of availability of various ions to the plants. Thus, in daytime Cl, sulfate and Ca tend to flow from the soil into the plant, while at night the reverse occurs. Bicarbonate ion behaves ambiguously. Mg rises constantly in the plant. Hence the absorption of salts by the soil, based in essence on microbial activity, effectively controls the access of the salts to the plants growing in the soil. Tomato plants were used for expts. G. M. Koshkoff

**ПУБЛИКАЦИЯ**

Soil temperature and the effectiveness of fertilizers in Chernozem :  
soils of northern Kazakhstan [with French summary in insert]. Pochvo-  
vedenie no.12:62-65 D '56. (MLA 10:2)

1. Karabalykaya selektsionnaya stantsiya.  
(Kazakhstan--Chernozem soils) (Fertilizers and manures)  
(Soil temperature)

BUBOVIK, Ye.P.

24(0); 5(4); 6(2) PHASE I BOOK EVALUATION 307/2215

Vsesoyuzny nauchno-issledovatel'skiy institut metrologii imeni D.I. Mendeleeva

Referaty nauchno-issledovatel'skikh rabot; sbornik No. 2 (Scientific Research Abstracts; Collection of Articles, Nr 2) Moscow, Standartgiz, 1958. 139 p. 1,000 copies printed.

Additional Sponsoring Agency: USSR, Komitet standartov, near i imenitel'nykh priborov.

M.: S. V. Bobatina; Tech. Ed.: K. A. Kondrat'yeva.

NOTE: These reports are intended for scientists, researchers, and engineers engaged in developing standards, measures, and pages for the various industries.

COVER: The volume contains 128 reports on standards of measure- ment and control. The reports were prepared by scientists of institutes of the Komitet standartov (Commission on Standards, pribyor pri Sovete Ministrov SSSR (Commission on Standards, Measures, and Measuring Instruments under the USSR Council of Ministers). The participating institutes are: VNIIM - Vsesoyuzny nauchno-issledovatel'skiy metrologi- cheskiy institut imeni D. I. Mendeleeva (All-Union Scientific Research Institute of Me- trology, imeni D. I. Mendeleeva) in Leningrad; Sverdlovsk branch (All-Union Scientific Research Institute of the Commission on Standards, Measures, and Measuring Instruments), created from NIIIMP - Moskovskiy gosudarstvennyy institut standartov i meritel'nykh priborov (Moscow State Institute of Standards and Measuring Instruments) October, 1957; Vsesoyuzny nauchno-issledovatel'skiy tsentr fiziko-tekhnicheskikh i radiotekhnicheskikh izmereniy (All-Union Scientific Research Institute of Physical, Technical and Radio-engineering Measurements) in Moscow; ENGIKIP - Energeticheskiy gosudarstvennyy institut imeni L. M. Lavrent'yeva (Dynamo State Institute of Energy and Measuring Instruments); and NIIIMP - Sevosto- (Soviet State Institute of Measure and Measuring Instru- ments). No personalities are mentioned. There are no references.

Lubenskiy, Ye.P., S. M. Goshina, and P. A. Sagan'ev (DGGIP). Apparatus for Checking Tube Voltmeters 101

Ryabovskiy, A. S., and Ye. P. Dubovik (VNIIM), and A. A. Chibrikov (Sverdlovsk Branch of VNIIM). Developing Methods for Standard Apparatus for Testing Direct-Current Transformers Type 1-50 Under Operating Conditions at 70 Kilovolts 102

Lisogub, M. J., Ya. I. Zaksman, and Ye. Ye. Bogatyrev (DGGIP). Developing and Studying Apparatus for Measuring Magnetic Fields by the Nuclear Magnetic Resonance Method 103

Kodnyy, M. M., A. Z. Yakalar, and A. I. Malomova (Sverdlovsk Branch of VNIIM). A Method of Measuring Hysteresis Losses and Eddy Currents in Dynamic Magnetization Card 20/27 104

RUMYANTSEV, A.S., kand. tekhn. nauk; DUBOVIK, Ye.P., starshiy tekhnik;  
GLAZENAP, M.S., dots.; GRIGOR'YEV, I.I., starshiy prepodavatel'

Differential method for determining leakage currents during  
electrolysis. Izv. vys. ucheb. zav.; prib. no. 3:26-29 '58.

(MIRA 12:2)

1. Vsesoyuznyy nauchno-issledovatel'skiy institut metrologii im.  
D.I. Mendeleeva (for Rumyantsev, Dubovik). 2. Leningradskiy  
elektrotekhnicheskii institut im. V.I. Ul'yanova (Lenina) (for  
Glazenap, Grigor'yev).  
(Electrolysis) (Electric currents, Leakage)



RUMYANTSEV, A.S.; CHUKHLANESV, A.A.; DUBOVIK, Ye.P.

Errors in the shunts used for the measurement of large  
currents. Trudy VNIIM no.38:76-85 '59. (MIRA 13:4)  
(Electric measurements)

KRYUK, I.F.; DUBCOVIK, Ye.V.

Physical properties of the gluten of the intermediate fractions of  
flour. Izv.vys.ucheb.zav.; pishch.tekh. no.1:69-70 '64.

(MIRA 17:4)

1. Belorusskiy gosudarstvennyy institut narodnogo khozyaystva  
imeni Kuybysheva, kafedra tovarovedeniya pishchevykh produktov.

USSR / Soil Science. Mineral Fertilizers.

J-4

Abs Jour: Ref Zhur-Biol., No 8, 1958, 34379.

Author : Dubovikh, Ya. F.

Inst : Not given.

Title : Influence of Soil Temperature on the Effectiveness of Fertilizers on the Chernozem Soils of K. Kazakhstan

Orig Pub: Pochvovedenie, 1956, No 12, 62-65.

Abstract: In the presence of a warm spring, nitric fertilizers are more effective than phosphates in the presence of a cool spring. The highest increase in yield of winter rye (1.5 c/ha) was secured by ammonium nitrate during the warm spring of the year 1951, and in case of super-phosphate (3.8 c/ha) - during the cool spring of 1949. During cool springs, the accumulation in soil of ammonium is observed; on the other hand, the process

Card 1/2

Dubovikov, Aleksey Nikolayevich, Ed.

Sovremennaya literatura; khrestomatiya dlya 10-~~go~~ klassa sredney shkoly (Contemporary literature; selection for 10<sup>th</sup> year class of the middle school)

Sostavili A. Dubovikov i ya. Severin.

Moskva, Uchebizdat, 1986

774 s.

N/5  
887  
.D8

DUBOVIKOV, B.A.

Struggling for a perfect quality and high reliability of  
articles. Mashinostroitel' no.9:1-4 S '64.

(MIRA 17:10)

1. Pervyy zamestitel' predsedatelya Privolzhskogo soveta  
narodnogo khozyaystva.

DUBOVIKOV, B.A.

Protect new developments by standards. Standartizatsiia 28  
no.10:22-23 0 '64. (MIRA 17:12)

1. Pervyy zamestitel' predsedatelya Privolzhskogo soveta narodnogo  
khozaystva.

DUBOVIKOV, B.

Advanced experience should have the virtue of the law. Standartizatsiia  
29 no.1:3-5 Ja '65. (MIRA 1894)

1. Pervyy zamestitel' predsedatelya Privolzhskogo soyeta narodnogo  
khozyaystva.

DUBOVIKOV, I.K.

School of leading experience. Apt. dele 14 no.1:52-57  
Jr-7 '65. (MIRA 18:10)

1. Detskiy meditsinskiy institut imeni Gor'kogo.



REF ID: A1A8/ASD(a)-5/ABOC(a)/SSD 4711  
AP4047916 1496/1502

~~SECRET, H. S.~~

... in scattering of ...

... experimental ... 47.  
... 1962

... nuclear scattering ... momentum

... expressions are obtained for ...  
... of the quanta and for the ... in the  
... neutrino energy; is either ... larger  
... transfer at which an ... in the  
... nucleus takes place. ...  
...  $q_0$  = momentum transfer ...

NR494916

is approximately 1/10  
of 2186, 1961 for the  
... If  $\epsilon_1$  is the  
... out to be smaller than  
... other thanks V. B. Betegorin  
... for a discussion and  
... formulas.

Kuzenberg  
neutrino  
transfers  
other  
...  
...  
...

Moskovskiy fiziko-tekhnicheskii  
institute)

Moscow Physic

April

...

NR REP 507

NR: 504

AP5000153

KOZYKOV, M. S.

Reaction between polarized  
and single isobar

Experimental results  
1933-1936

Production polarized  
gamma nuclei

Processes considered are  
 $\pi + N \rightarrow \pi + N$   
 $\pi + N \rightarrow \pi + N$   
 $\pi + N \rightarrow \pi + N$   
is equal to the mass of

APPROVED FOR RELEASE: 08/25/2000

the same isobar. Process ... polarized ...  
 but since the polarization ... from its decay, the author ...  
 for meson with given polarization ... scalar particles. (The ...  
 discussion and valuable ...

Moskovskiy fiziko-tekhn. ... Institute)

May 64

NR REF 9-11

259

11941-66 ENY(5) DIAAP

ACC NO. AFB 00749

... analysis, can also be determined from the contribu-  
tion to the recoil baryon polarization ...  
... derived formulas are

ACC NO. AP6000789

... is grateful to Yu. A. Izrael for a discussion of the results and many important remarks. Orig. and ...

SUB CODE: 20/      SUBM DATE: 27865/      ORIG REF: 001/



SECRET



VECTOR RESON

SUB CODE: 20/ SUBM DATE: 27Dec65/ ORIG REF: 003/ OTH REF: 004

2/2 1327

SARANCHA, Ye.T.; DUBOVIKOVA, A.P.

Analysis of the products of the manufacture of isobutyl and n-butyl alcohol by means of liquid-gas chromatography. Zav. lab, 27  
no. 4:398-399 '61. (MIRA 14:4)

1. Lisichanskiy khimicheskiy kombinat.  
(Butyl alcohol)

DUBOVIKOVA, Yu. A.

DUBOVIKOVA, Yu. A. - "A study of the results of many years' use of active immunization against diphtheria in Moscow Oblast." Moscow, 1955. Min Health USSR. Central Inst for the Advanced Training of Physicians. (Dissertations for degree of Candidate of Medical Sciences.)

SO: Knizhnaya letopis', No 48. 26 November 1955. Moscow.

DUBOVIKOVA, Yu. A.

EXCERPTA MEDICA Sec.4 Vol.11/4 Med.Microb. etc. April 58

1055. A TRIAL OF DIPHTHERIA IMMUNIZATION BY MEANS OF A 3-INJECTION TECHNIQUE IN THE MOSCOW PROVINCE (Russian text) - Dubovikova Yu. A. - NAUCH. TRUD. MOSK. NAUCH. -ISSLEDOV. INST. VAKTS. I. SYVOR. 1956, 6 (53-58)

The possibility of creating higher levels of immunity by substituting a 3- for the hitherto used 2-injection technique was investigated. The level of immunity of 2,349 children was determined by means of the Schick test and the incidence of diphtheria and the severity of its clinical course in a group of 18,634 children was noted. First injection of 0.1 ml. was followed in 20-45 days by a second injection of 2.0 ml., and 15-20 days later a 3rd injection (2.0 ml.) was administered. Revaccination was performed 3-6 or 6-12 months later. It was observed that the level of immunity (as indicated by the Schick test) after 3 injections was twice as high as that created by 2 injections. Furthermore in the case of the children who received 3 injections the clinical course of diphtheria was much milder, and toxic and malignant forms much less frequent, than in the case of the children who received 2 injections only. (S)

Dubovikova, Yu. A.

EXCERPTA MEDICA Sec.4 Vol.11/4 Med.Microb. etc. April 58

1054. THE SIGNIFICANCE OF THE TIME LAPSE BETWEEN FIRST VACCINATION AGAINST DIPHTHERIA AND REVACCINATION (Russian text) -  
Dubovikova Yu. A. - NAUCH. TRUD. MOSK. NAUCH. -ISSLEDOV.  
INST. VAKTS. I. SYVOR. 1956, 6 (59-66)

During 1946-48 the efficacy of antidiphtheritic immunization with varying intervals between the vaccination and revaccination was followed on 935 children. It was found that extension of the interval between the 2-stage vaccination and revaccination at 6-7 months enhanced the efficacy of the immunization. Revaccination at an interval of 6-12 months after the triple vaccination trebled its effectiveness. The author advocates revaccination at 6-8 months instead of at 3-5 months.

(S)

Dubovikova, Yu. A.

EXCERPTA MEDICA Sec.4 Vol.11/4 Mod.Microb. etc. April 58

1053. THE INFLUENCE OF INFECTIOUS DISEASES ON THE LEVEL OF DIPH-  
THERIA IMMUNITY RESULTING FROM PREVIOUS IMMUNIZING INJEC-  
TIONS (Russian text) - Dubovikova Yu. A. - NAUCH. TRUD. MOSK.  
NAUCH.-ISSLEDOV. INST. VAKTS. I SYVOR. 1958, 6 (67-72)

Changes in the level of diphtheria immunity occurring following an attack of an infectious disease were studied by means of Schick testing. The children investigated had been immunized once only and before the age of 3. Schick testing was performed on 1,556 children who had suffered no illness during the preceding 6 months and on 577 children who had suffered an infectious disease during that period. In the former group 18.5% and in the latter group 27.2% positive reactions were obtained. This percentage was even greater in the case of children who had suffered an attack of an infectious disease within a month immediately preceding the Schick testing.

(8)

DUBOVIKOVA, Yu.A.; MARCHENKO, V.I.; LEUKHINA, L.O.; KAPUSTINA, A.I.

Late reactions in children to injections of adsorbed purified diphtheria toxin. Zhur.mikrobiol.epid. i immun. 29 no.3:39-43 Mr '58.  
(MIRA 11:4)

1. Iz Moskovskogo instituta vaktsin i syvorotok imeni Mechnikova.  
(DIPHTHERIA, immunology,  
remote reactions to adsorbed purified toxin in child (Rus)



"Modernization of Lathes to be Used for Special Purposes," with Dulesov, G. K., Taruntayev, A. M., and Fleyshev, M. M., Modernization of Metal-cutting Equipment, Moscow, Mashgiz, 1958. p. 108.

This book is intended for engineers and technicians working in the field of metal cutting.

DUBOVIKOVA, A. K.

Energetics; an index of popular literature. So vstupitel'nykh ocherkom i pod redaktsiei  
A. D. Smirnova. Moskva, Gos. bibliot.-bibliograf. izd-vo NKP RSFSR, 1940. 23 p.  
("Chto chitat' o tekhnike," vyp. 2 )

DUBOVIKOVA-KHROMOVA, O. A.

Phase analysis of aluminum alloys. NI Blok, O. A. Dubovskova-Khromova, and N. F. Lashko. Zavodskaya Lab, 21, 894-9 (1955)-  
An electrochem. method for phase sepu. in Al alloys is based on electrolytic soln. of the alloy in a monaq. electrolyte: 2g LiCl, 2g. KCNS 6g citric acid, or 2g. NaOAc all in 1200 ml. MeOH. The structural components are sepd. completely in 30-60 min. at a.c.d. of 0.813 amp/sq.cm. and 30v., with cooling in liquid N. A. cylindrical specimen 15 mm. long and 30-40 mm. long is used for tests. A suitable semipermeable membrane for use in MeOH soln. is made by soaking a little cellulose acetate with enough acetone for 1-2 days to produce a sol. of the consistency of liquid glue. A little of the soln. is spread over the inner surface of a 200-50-ml. beaker, the acetone vaporized, and the cellulose layer carefully removed and fastened to a glass support. Such membranes could be used for 10-15 tests. The x-ray and analytical studies of the anode residues of Al-Cu (with 4.85% Cu) revealed no intermetallic phase formation during aging at room temp. and at 100° but such phases were observed after aging at 220 and 350°. Alloys contg. no Cu (e. g., Al-Fe., Al-Ni, Al-Fe-Si) sepd, Al<sub>2</sub>Fe, Al<sub>3</sub>Ni, and Si as anode residues. No solid soln. of Al was found in them.

W. M. Sternberg

10.3600

28910

S/170/61/004/011/010/020  
B104/B112AUTHOR: Dubovis, M. I.

TITLE: Estimation of the temperature of contact surfaces between systems with heat removal into a semi-infinite medium

PERIODICAL: Inzhenerno-fizicheskiy zhurnal, v. 4, no. 11, 1961, 89-93

TEXT: The author studies the cooling of a plate of thickness  $R$  located in the range  $x > 0$ . The plate is in contact with a semi-infinite body ( $x < 0$ ).  $t_1(x, \tau)$  and  $t_2(x, \tau)$  are the temperatures of plate and semi-infinite body. The characteristics  $\lambda_2$ ,  $c_2$ , and  $\gamma_2$  of the semi-infinite body are constant. The following conditions are made: 1)  $t_2(x, 0) = 0$ ;

$t_1(x, 0) > 0$ ; 2) in the plate, heat is produced at a rate  $q$ ; 3) for  $0 < \tau < \tau_1$ ,

the temperature of the contact decreases or at least does not increase.

4)  $\partial^2 t_1(x, \tau) / \partial x^2 < 0$  ( $\tau_0 < \tau \leq \tau_1$ ,  $0 < x < R$ );  $t_1(x_1, \tau) < t_1(x_2, \tau)$ ,

( $0 < x_1 < x_2 < R$ ,  $\tau_0 < \tau \leq \tau_1$ ); the temperature drop  $t_1(R, \tau) - t_1(0, \tau)$  and  $\chi$

Card 1/3

28920

S/170/61/004/011/010/020  
B104/B112

Estimation of the temperature ...

the rate of its change decrease in time. A. V. Lykov (Teoriya teploprovodnosti, M., 1952) obtained solutions of a system of two semi-infinite bodies being in contact. From these results the author derives the formula

$$\frac{t_z}{t_1(R, \tau_1)} = \frac{1}{1 + \frac{b_2 R}{\sqrt{\pi} \lambda_1 \sqrt{\tau_1}}} = K_2 \quad (8), \quad \lambda$$

where  $t_z$  is the contact temperature. This expression can be used to estimate processes with intensive heat production (e.g., crystallization). Three systems (system I: two semi-infinite bodies being in contact; system II: one plate in contact with a semi-infinite body; system III: one plate in contact with a semi-infinite body; in the plate of the system III, crystallization is assumed to take place) are considered. Exact solutions of the system III are not known. For the estimation of the contact temperature  $t(0, \tau_k) \approx t_k K_2 = t_k / (1 + b_2 R / \lambda_1 \sqrt{\pi \tau_k})$  and  $t^*(0, \tau_k) < t_k$  are obtained.  $t_k$  is the crystallization temperature,  $t^*(0, \tau_k)$  is the contact temperature when  $t_H = t_k$ ,  $t_H = t_1(x, 0)$ . The high  
Card 2/3

28910

S/170/61/004/011/010/020  
B104/B112

Estimation of the temperature ...

efficiency of the estimate is demonstrated by data on four conventional metals being in contact with a conventional medium. It is shown that an increase of  $t_H$  increases the efficiency. There are 1 figure, 1 table, and 2 Soviet References.

ASSOCIATION: Proyektnyy institut "Uralgiproalyuminiy", g. Kamensk-Ural'sky  
(Design and Planning Institute "Uralgiproalyuminiy",  
Kamensk-Ural')

SUBMITTED: April 29, 1960

Card 3/3

DUBOVIS, M.I.

Heat capacity of binary alloys in the solidification interval.  
Lit. proizv. no.6:32-35 Je '64.

(MIRA 18:!)

**DUBOVIS-ARANOVS'KAYA, D. N. [Dubovis-Aranovs'ka, D. N.]**

Formation of methods of logical thought in secondary school pupils.  
Nauk. zap. Nauk.-dosl. inst. psikhol. 11:82-85 '59. (MIRA 13:11)

1. Gosudarstvennyy universitet im. A. M. Gor'kogo, Khar'kov.  
(Thought and thinking)  
(Learning, Psychology of)



DUBOVIS-ARANGVSKAYA, D.M.

Some conditions for the understanding of text structure by students.  
Vop. psikhol. 8 no.1:53-60 Ja-F '62. (MIRA 15:4)

1. Kafedra pedagogiki i psikhologii Khar'kovskogo universiteta  
imeni A.M.Gor'kogo.

(EDUCATIONAL PSYCHOLOGY)

S/081/62/000/014/019/039  
B166/B144

AUTHORS: Curvich, A. M., Dubovitskaya, B. B.

TITLE: Lead-barite intensifying screens

PERIODICAL: Referativnyy zhurnal. Khimiya, no. 14, 1962, 387-388,  
abstract 14K128 (Novosti med. tekhn., no. 5, 1961, 61 - 67)

TEXT: X-ray intensifying screen phosphors consist of a  $(Ba, Pb)SO_4$  phosphor calcined at  $900 - 1000^\circ C$  with a flux consisting of a mixture of sodium sulfate and bisulfate; the sulfate taken in this case being  $\leq 60\%$  of the weight of the finished phosphor. The quantity of bisulfate taken is 4 - 8% of the weight of blend (equal to 10-20% of the weight of sulfate). The mixed flux is got by adding a calculated quantity of pure  $H_2SO_4$  to a chromatographically purified solution of  $Na_2SO_4$ . The phosphor screen thus prepared has 25-30% higher glow intensity than ordinary standard screens; in this case, with voltages of the order of 80 - 100 kv on the X-ray tube the screen enables the exposure to be almost halved. 17 references.  
Card 1/2

lead-barite intensifying ...

S/081/62/000/014/019/039  
B165/B144

[Abstractor's note: Complete translation.]

Card 2/2

YANISHEVSKAYA, M.N.; DUBOVITSKAYA, N.K.; KLYUCHAREVA, T.Ye.; MITRIKINA, P.Ye.;  
PEKSHOVA, M.N.; SAMOYLOVA, Z.Ye.; TYUNEYEVA, G.A.

Difficulties in diagnosing some atypical dysenterial bacteria. Med.  
zhur. Usb. no.2:20-22 F '62. (MIRA 15:4)

1. Iz kafedry mikrobiologii (sav. - prof. P.F.Samsonov) Tashkentskogo  
gosudarstvennogo meditsinskogo instituta i laboratoriy gorodskoy i  
rayonnykh sanitarno-epidemiologicheskikh stantsiy Tashkenta.  
(SHIGELLA) (DYSENTERY)

DUBOVITSKAYA, N.V.

S/185/62/007/010/015/020  
D234/D308

AUTHORS: Dubovyts'ka N. V., Zasyrchuk, O. E., Larikov, L. N.  
and Petrov, Iu. H.

TITLE: X ray methods for the investigation of the kinetics  
of growth of recrystallization centers

PERIODICAL: Ukrayins'kyy fizychnyy zhurnal, v. 7, no. 10, 1962,  
1134-1136

TEXT: To determine more accurately the dimensions of recrystallization centers corresponding to the appearance of 'punches', thin (0.05 mm) carbonyl Ni foils (99.99% Ni) were studied by electron microscopy, after which x ray photographs at Cu K<sub>α</sub> wavelength were taken. Appearance of centers with maximum dimension  $L = 2 \times 10^{-4}$  cm after annealing during 15 min at 320°C corresponds to the appearance of first 'punches' on x ray photographs. Centers with  $L =$

$7 \times 10^{-4}$  cm correspond to very large quantities of spots and even to disappearance of the continuous line background. There is 1 figure.

Card 1/2

X ray methods for ...

S/185/62/007/010/015/020  
D234/D303

ASSOCIATION: Instytut metalofizyky AN URSR, m. Kyiv (Institute  
of Metal Physics, AS UkrSSR, Kiev)

SUBMITTED: July 4, 1962

Card 2/2

INT(1) ENT(2)/EPR/T/ENP(t)/ESC(b)-2/ENP...  
AMON282? JD/HW ... 16/0918

Dubovitskiy, I. N.; Dubovitskiy, H.V. (Dubovitskiy, N. N.; Dubovitskiy, O. E.)

electron microscope study of the kinetics of the growth of recrystallization centers in deformed nickel and nickel-aluminum alloys

Dokl. Akad. Nauk SSSR, no. 7, 1964, 915-918

recrystallization, recrystallization kinetics, nickel, nickel-aluminum, crystal growth, nickel, nickel base alloy, electron microscope, deformed crystal

The electron microscope (transmission method) was used to investigate the growth of recrystallization centers of various sizes in deformed nickel and nickel-base alloy containing ~5% by weight of aluminum, deformed by 100%. The time of formation of the first recrystallization centers is compared with the size of their growth in different directions, while the growth of freely growing centers proved to be independent of time even in the case of the centers (less than 1 micron) which are still to grow.

APR 24 1963

...ply retards the growth of recrystallization centers. Since the time of

...of the first center, it remains negligibly small in the alloy as compared

...with the time of the first center.

...Inst., but metalofizyky AN UZSR (Institute of Physics of Metals, AN

...Oct 6)

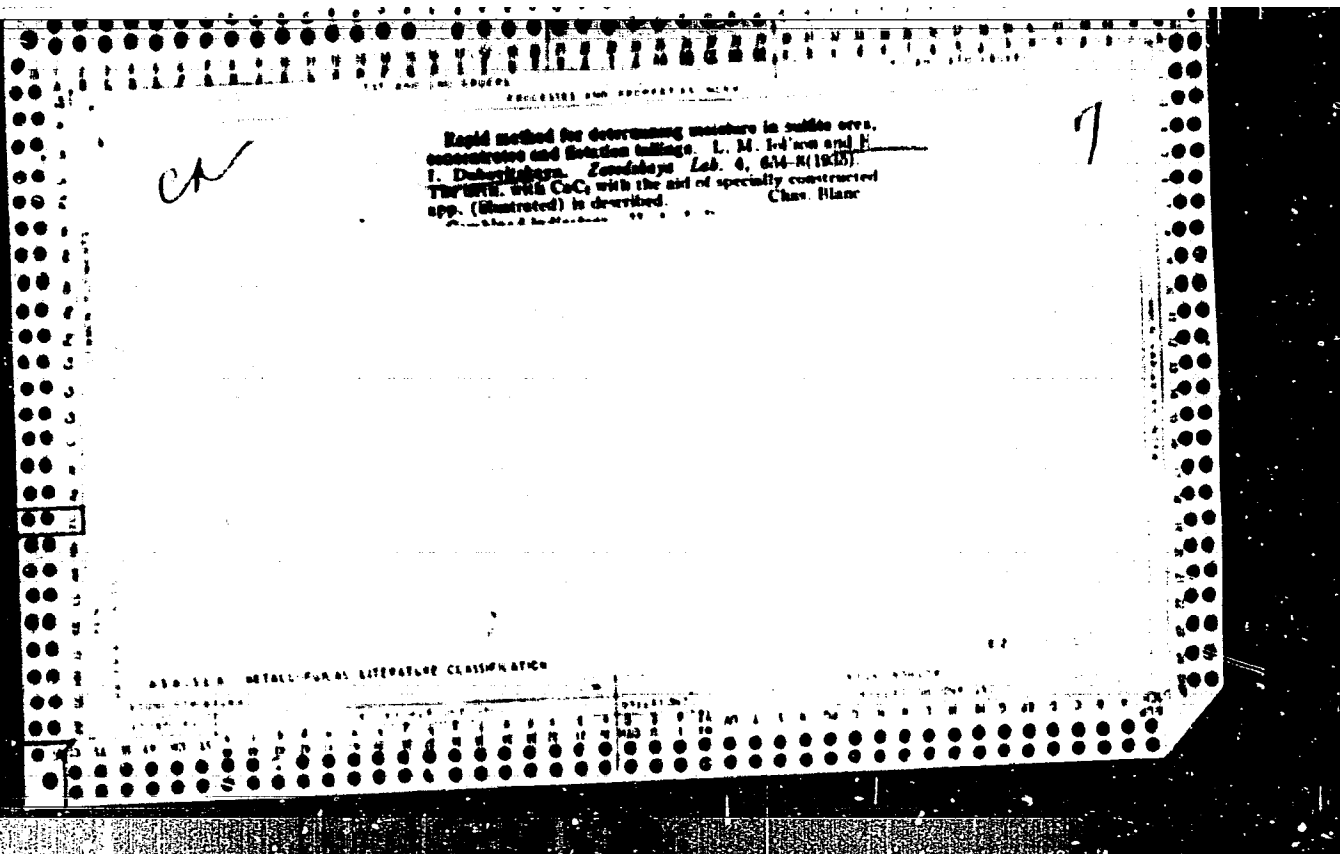
ENCL: 00

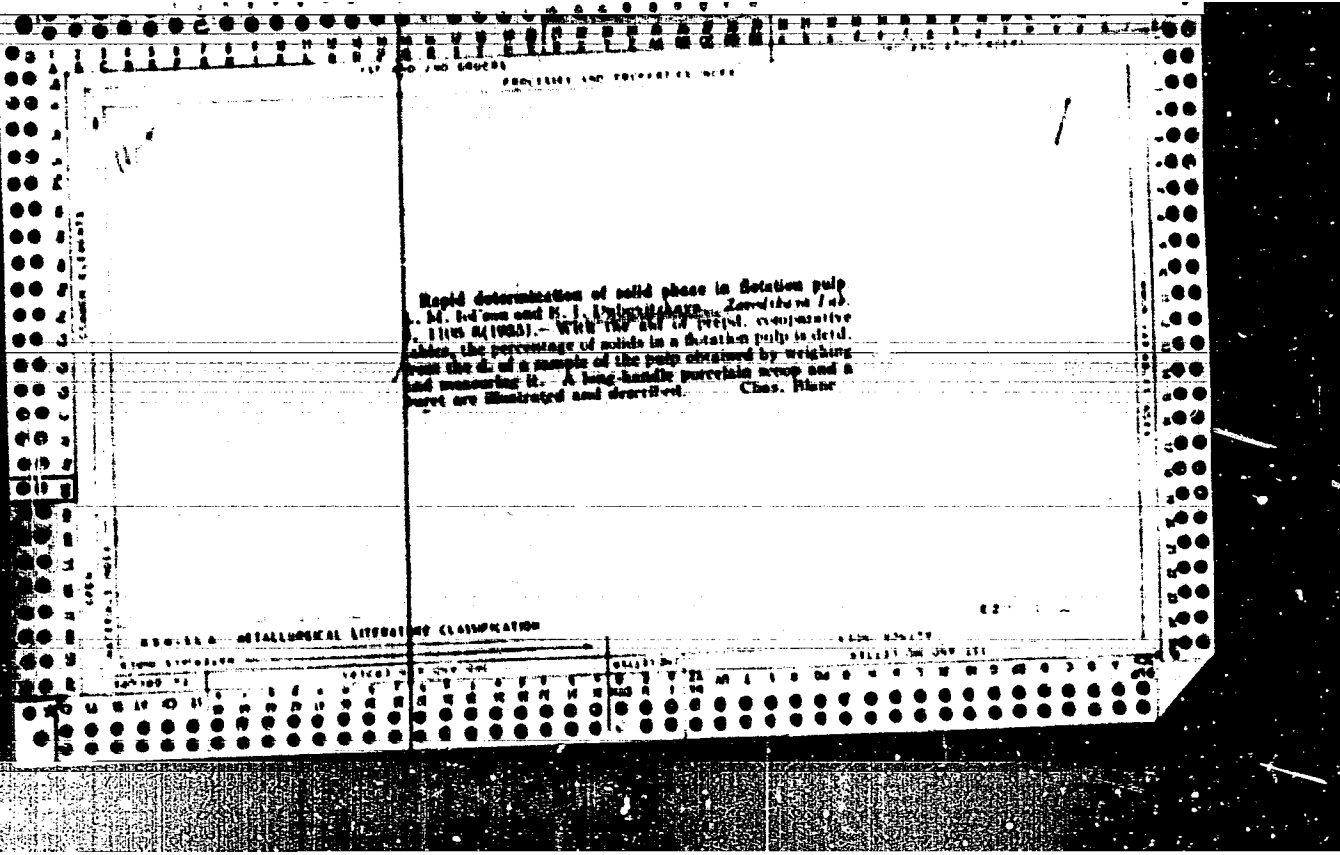
SUB NO: SS, 104

...02

OTHER: 002





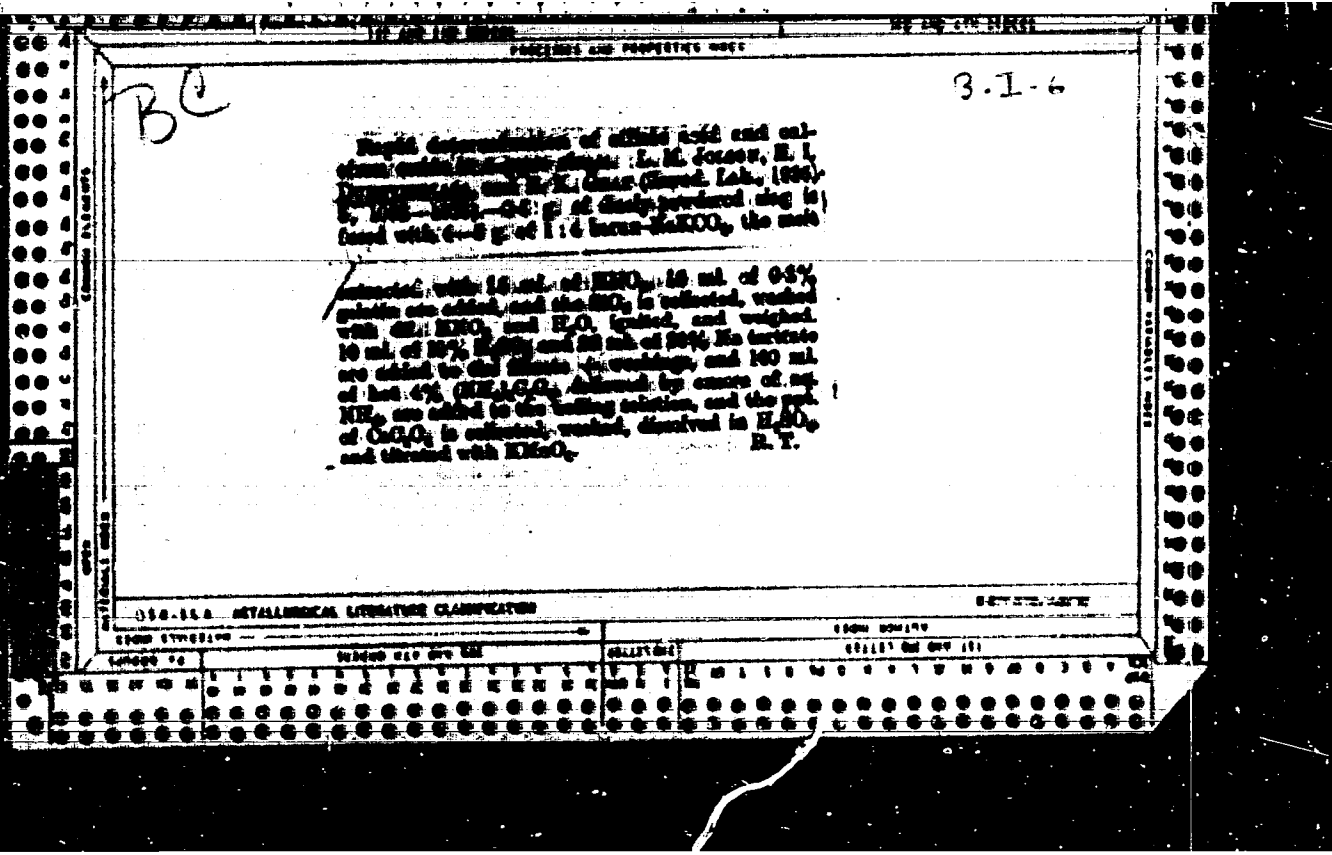


BC

B-I-S

RAPID DETERMINATION OF ZINC IN SULPHIDE COPPER  
 ORES, CONCENTRATES, AND TAILINGS. L. N. Jolson  
 and A. I. Zhuravitskaja (Zavod. Lab., 1936, 9, 17-  
 22). 1-2 g. of material are heated at 100° with 10-  
 20 ml. of conc.  $HNO_3$ , 2ml. of  $H_2SO_4$  are added to the  
 product, and the whole is further heated until  $SO_2$   
 fumes appear. 100ml. of  $H_2O$  are added, followed  
 by a 25 ml. excess of conc. aq.  $NH_3$ , the vol. is made  
 up to 200 ml., and the solution filtered. 1 ml. of  
 10%  $H_2O_2$ ,  $NH_4Cl$  is added to 50 ml. of the filtrate at  
 60°, and  $O_2$  passed in to complete pptn. of Cu. The  
 suspension is filtered, 10 ml. of 20%  $H_2SO_4$  and  
 1 ml. of 10%  $(NH_4)_2S_2O_8$  are added, the solution is  
 evaporated to 50 ml., 5 drops of 1%  $NH_4H_2PO_4$  in  $H_2SO_4$   
 are added, and the solution is titrated at 60° with  
 aq.  $K_2Fe(CN)_6$ . R. T.





*Ch*

Determination of bismuth, lead, nickel and zinc impurities in copper by the polarographic method. S. A. Petrenko, E. I. Dubovitskiy and T. V. Aral'eva. *Zh. Anal. Khim.* 1954, 9, 124-11 (1954). — The following methods have been developed for the polarographic detn. of (1) Bi and Pb and (2) Ni and Zn in metallic Cu. (1) Dissolve 50 g. of Cu in HNO<sub>3</sub> (1:2), expel oxides of N, dil. to 300 ml., add 5 ml. of 10% FeCl<sub>3</sub>, neutralize with NH<sub>3</sub>, and ppt. the Fe(OH)<sub>3</sub> by heating on a water bath for 30 min. Filter and wash the ppt. contg. Fe, Bi and Pb, dissolve in 10 ml. concd. HCl, add 5 ml. of 40% tartaric acid, then add NH<sub>3</sub> to alk., and 10 ml. of 10% K<sub>2</sub>S. Heat on the sand bath to 60-70° to coagulate the sulfides of Bi and Pb, filter through filter paper pulp, wash with 1% KCN soln., and then with 2% (NH<sub>4</sub>)<sub>2</sub>SO<sub>4</sub>. Dissolve the ppt. in hot 6 N HCl taking care not to use more than 30 ml. Boil the soln. for 5 min., dil. to 50 ml. with 6 N HCl, place in the electrolyzer, pass H<sub>2</sub> through the soln. for 10 min. and then take the polarogram. (2) Dissolve two 5-g. samples separately in min. of 5 ml. concd. H<sub>2</sub>SO<sub>4</sub> + 5 ml. concd. HNO<sub>3</sub> + 30 ml. water, expel oxides of N, dil. the solns. to 250 ml., add 5 g. of NH<sub>4</sub>NO<sub>3</sub> and electrolyze to remove the Cu. After the electrolysis neutralize the solns. with NH<sub>3</sub> and acidify with HOAc. Heat on a bath to boiling and then subject to internal electrolysis with a Pb electrode for 60-90 min. Combine the solns., neutralize with NH<sub>3</sub> to a slight alk., add a bit of Na<sub>2</sub>SO<sub>4</sub> with a spatula and then 25 ml. of 2% NaOH. Allow the sulfides to coagulate and filter through filter

paper pulp, wash 2-3 times with 1% soln. of (NH<sub>4</sub>)<sub>2</sub>SO<sub>4</sub> and treat with 15-20 ml. of concd. HNO<sub>3</sub> in the presence of a small amt. of (NH<sub>4</sub>)<sub>2</sub>SO<sub>4</sub>, filter through filter-paper pulp, wash 3-4 times with hot water, add 5 ml. of H<sub>2</sub>SO<sub>4</sub> (1:1) and evap. on a bath to change the nitrates to sulfates. Cool, add 10 ml. of water, filter, wash the PbSO<sub>4</sub> with hot water, combine the wash waters with the filtrate, add NH<sub>3</sub> dropwise to weak alk., add 5 ml. of a soln. contg. 0.1 N NH<sub>4</sub>OAc and 0.25 N KCNS, dil. the soln. to 50 ml., place 10 ml. of soln. in electrolyzer, pass H<sub>2</sub> through for 15 min. and take the polarogram. Detn. of Pb and Bi takes 3.5 hrs. and Ni and Zn 10 hrs.

B. Z. Kamich



APPROVED FOR RELEASE: 08/25/2000  
CIA-RDP86-00513R000411410004-6

L. V. Dubovitska, N.V. (Dubovitskaya, N. V.) Smirnov, D. E.

Microscope study of the kinetics of the recrystallization of deformed nickel and nickel-aluminum alloy

Dokl. Akad. Nauk SSSR, no. 7, 1964, 916-918

recrystallization, recrystallization kinetics, grain growth, CRYSTAL GROWTH, nickel, nickel base alloy, electron microscope, recrystallized crystal

Electron microscope (transmission electron microscope) was used to investigate growth of recrystallization centers of various sizes in deformed nickel and nickel-base alloy containing ~5% by weight of aluminum, deformed by 50%. The time of formation of the first recrystallization centers is compared with the time of their growth. It is shown that while



1. APPROVED

... retards the growth of recrystallization centers since the time of  
... the first centers remains negligibly small in the alloy as compared  
... of their growth to visible dimensions.

Institut metalofiziky AN URSR (Institute of Physics of Metals, AN

00065

ENCL: 00

578 0000 83, 84

002

OTHER: 002

LARIKOV, L.M.; YURCHENKO, Ya.F.; DUBOVITSKAYA, N.V.

Investigating recovery processes during the heating of steels  
in high-strength conditions. Fiz. met. i metalloved. 20  
no.4:570-573 0 '65. (MIRA 18:11)

1. Institut metallofiziki AN UkrSSR.

833/00 EN11/EN10/EN10/1/EN11/EN11/EN10/EN10

INSTITUTE FOR THE PHYSICS OF METALS IN USSR (Institute  
METALLOFIZIKI AN UKRSSR)

71/11/11 metalloy i metallovedeniya

HEATING OF A COLD ROLLED DEFORMED STRIP OF V10 STEEL. Measurements  
made with a differential vacuum calorimeter during the continuous  
heating of samples (at a rate of approximately 2 degrees/min) have

L 8937-66

ACC NR: AP5027143

breadth of the x-ray interference line was made with a NBS-50T  
(see also in the interval of the line)

AP5027143

is evidently substantial. "The authors express their thanks to  
M. V. Kirilov, M. D. Perkaev and M. V.

SLBM DATE 17 Dec 64.

21

NYC

DUBOVITSKIY, A.

DUBOVITSKIY, A. "In the valley of the Ashchila", (On the outstanding 'chavany' of the kolkhozes of Kurgal'dzhinskiy Rayon, Akmol'n Oblast, outline), Kazakhstan, 14, 1949, p. 122-31.

SO: U-4393, 19 August 53, (Letopis 'Zhurnal 'nykh Statey', No. 22, 1949).

DUBOVITSKIY, A., MAJ

Pg. 173112

"New Demonstrating Devices on Aerodynamics,"  
Maj A. Dubovitskiy, Engr

"Vest Vozdush Flota" No 1, pp 45-49

Standard set consists of small universal wind tunnel, 2-component bal, set of characteristic shapes, battery-type pressure gauge and smoke tunnel. Tunnel uses 3 air-flow speeds 1, 17, and 21 m/sec.

DUBOVITSKIY, A., shturnan

Aeronavigation in winter. Grazhd.av. 12 no.1:19 Ja '55. (MIHA 16:3)

1. Moskovskoye upravleniye Grazhdanskogo vozdukhogo flota.  
(Airplane—Cold Weather operation)



DUBOVITSKIY, A.

With the builders of Cherepovets. Za rul. 18 no.4:4 Ap '60.

(MERA 13:8)

1. Predsedatel' komiteta Dobrovol'nogo obshchestva sodeystviya armii,  
aviatsii i flotu stroitel'stva metallurgicheskogo zavoda, Cherepovets.  
(Cherepovets—Motorcycle racing)