MALAKHOV, G.M., prof., doktor tekhn.nauk; ZHELTETSKIY, A.Ye.; CHERNENKO, A.R.; VASHCHENKO, V.S.; NIKULIN, S.Ye., kand.tekhn.nauk; LIPNIK, G.F., kand.tekhn.nauk; LAVRINENKO, V.F., kand.tekhn.nauk; SULIMA, G.S., gornyy insh.

Breaking ore in a "compressed" medium in the Dzerzhinskiy Mine was not worthwhile. Gor.zhur. no.8:21-25 Ag '62. (MIRA 15:8)

1. Glavnyy insh. rudoupravleniya im. Dzerzhinskogo (for Zheltetskiy). 2. Zaveduyushchiy shakhtoy "Gigant" rudoupravleniya im. Dzerzhinskogo (for Chernenko). 3. Glavnyy insh. shakhty "Gigant" rudoupravleniya im. Dzerzhinskogo (for Vashchenko).
(Krivoy Rog Basin—Mining engineering)

VASHCHENKO, V.S., inzh.; SHMALIY, V.Ya., inzh.; NIKULIN, S.Ye., kand. tekhn. nauk; LINNIK, G.F., kand. tekhn. nauk; SULIMA, G.S., inzh.

Improving the operating efficiency at the "Gigant" mine. Met. i gornorud. prom. no.5:52-56 S-O '63. (MIRA 16:11)

1. Shakhta "Gigant", rudnik im. Dzerzhinskogo (for Vashchenko, Shmaliy). 2. Krivorozhskiy gornorudnyy institut (for Nikulin). 3. Institut avtomatiki Gosplana UkrSSR (for Linnik). 4. Krivorozhskiy gornorudnyy tekhnikum (for Sulima).

LINNIK, G.F., kand. tekhn. nauk; NIKULIN, S.Ye., kand. tekhn. nauk; SULIMA, G.S., inzh.; SADOVOY, I.P., inzh.

Certain results of the use of short-delay blasting in the Dzerzhinskii mine. Izv. vys. ucheb. zav.; gor. zhur. 6 no.9: 94 '63. (MIRA 17:1)

1. Institut avtomatiki Gosplana UkrSSR (for Linnik).
2. Krivorozhskiy gornorudnyy institut (for Nikulin, Sulima, Sadovoy). Rekomendovana kafedroy shakhtostroyeniya i provedeniya gornykh vyrabotok Krivorozhskogo gornorudnogo instituta.

KUNIN, Izyaslav Kopelovich; NIKULIN, S.Ye., kand. tekhn. nauk, retsenzent

[Ore drawing and haulage in underground mining] Vypusk 1 dostavka rudy pri podzemnoi dobyche. Moskva, Nedra, 196[illegible]. 196 p. (MIRA 17:9)

NIKULIN, T. G. - Chair of Parasitology, Moscow Veterinary Institute

"Therapy of Mullariasis in Goats"

The causative agent of mullariasis in goats (and sheep) in the nematode Mullarius cappillaris, which lives on the bronchi, bronchioles, alveoli, and parenchyma of the lungs of the host. Mullariasis is encountered most frequently in the forest and forest steppe regions.

Of the large number of remedies tested for this disease, the best results were obtained in intravenous, intramuscular, and subcutaneous application of emetine hydrochlorid

(Veterinariya, Vol 28, No 4, 1951, p28)
U-5246, 21 Dec 53

USSR/Diseases in Farm Animals. Diseases Caused by Arachno-Entoms.

Abs Jour: Ref Zhur-Biol., No 12, 1958, 54962.

Author : Nikulin, T. G., Potenkin, V. I.
Inst : Vitebsk. Institute of Veterinary Sciences.
Title : To the Method of Applying Hexachloran Powder for the Control of the Chicken Body Louse.

Orig Pub: Uch. zap. Vitebskogo vet. in-ta, 1956, 14, No 1, 192-194.

Abstract: No abstract.

Card : 1/1

MIKULIN, V.B.

Determining the inflow of surface waters in open-cut mining of mineral deposits. Izv.vys.ucheb.zav.; tsvet.met. 2 no.6:3-10 '59. (MIRA 13:4)

1. Krasnoyarskiy institut tsvetnykh metallov, kafedra gornoy mekhaniki i teplotekhniki.
(Strip mining) (Mine water)

NIKULIN, V.B., inzh.

Determining the inflow of surface waters into open-pit mines.
Izv.vys.ucheb.zav.; gor.zhur. no.10:6-11 '59.
(MIRA 13:5)

1. Krasnoyarskiy institut tsvetnykh metallov.
(Strip mining) (Mine water)

NIKULIN, V.E., inzh.

Efficient type of drain sump for open-pit mines. Izv.vys. ucheb.zav.; gor.zhur. no.7:125-130 '60. (MIRA 13:7)

1. Krasnoyarskiy institut tsvetnykh metallov imeni M.I. Kalinina. Rekomendovana kafedroy gornoy mekhaniki i teplotekhniki.
(Mine drainage) (Strip mining)

NIKULIN, V. B.

Cand Tech Sci - (diss) "Formation of water influx and drainage in opening working of deposits." Moscow, 1961. 25 pp; (Ministry of Higher and Secondary Specialist Education RSFSR, Moscow Mining Inst imeni I. V. Stalin); 200 copies; price not given; (KL, 6-61 sup, 222)

NIKULIN, Valentin Borisovich; D'YAKOVA, G.B., red. izd-va; MAKSIMOVA, V.V., tekhn. red.; LOMILINA, L.N., tekhn. red.

[Operator of pumps in coal mines and pits] Mashinist nasosnykh ustanovok ugol'nykh shakht i kar'erov. Moskva, Gos.nauchno-tekhn.izd-vo lit-ry po gornomu delu, 1961. 262 p. (MIRA 14:12)
(Mine pumps)

GREBENSHCHIKOV, G.L., gornyy inzh.; NIKULIN, V.B., gornyy inzh.

Mechanized water supply to holes during drilling in the Sibay mts. Gor. zhur. no.12:62 D '61. (MIRA 15:2)

1. Bashkirskiy medno-sernyy kombinat, g. Sibay (for Grebenshchikov).
2. Institut tsvetnykh metallov im. Kalinina (for Nikulin).
(Sibay Region--Boring--Water supply)

NIKULIN, V.B., kand.tekhn.nauk

Practice of constructing and using deeper pumping chambers in "Novaya" Mine. Gor. shur. no.12:15-18 D '62. (MIRA 15:11)

1. Moskovskiy institut stali i splavov.
(Leninogorsk region (East Kazakhstan Province)—Mine pumps)

KISELEV, V.I., prof., doktor tekhn. nauk; NIKULIN, V.B., kand. tekhn. nauk; USHAKOV, V.I., insh.

Removal of water in pneumatic mine networks under permafrost conditions. Gor. shur. no.7:48-50 Jl '62. (MIRA 16:8)

1. Moskovskiy institut stali i splavov.

NIKULIN, V.B., kand.tekhn.nauk

Review of the book by S.S.Begutskii, B.I.Zakhvatkina, A.Sh. Kil'man, A.N.Kislev, P.R.Kozlovskii, V.N.Molchanov, and L.I. Tarasevich, "Automatic mining equipment." Gor.zhur. no.12:67-68 D '63. (MIRA 17:3)

1. Moskovskiy geologorazvedochnyy institut.

MIKULIN, V.B., dotsent

Analysis of water drainage at the Novyi Sibay strip mine. Izv.vys. ucheb.zav.; gor.zhur. 7 no.12:7-11 '64.

(MIRA 18:2)

1. Moskovskiy institut stali i splavov. Rekomendovana kafedroy mekhanizatsii gornykh rabot.

POGRELOV, D.N., inzh. (poselok Komsomol'skiy, Kemerovskoy obl.);
MIKULIN, V.D., inzh. (poselok Komsomol'skiy, Kemerovskoy
obl.)

Operation of high-pressure feed pumps. Energetik 13 no.5:
24-26 My '65. (MIRA 18:8)

Distr: 4E4j

Capped plates for absorption apparatus. A. [illegible] [illegible]-sko, G. I. Mikulin, [illegible] [illegible], and M. E. Chizhik. U.S.S.R. [illegible], 25, 19[illegible]. The plates are particularly suitable for adsorption of gases by viscous liquids, e.g. absorption of CO_2 by Na_2CO_3 soln. To prevent "dead space" under the caps, the latter have apertures in their tops and they are flanged downward. M. Hosch

SHIKHOV, V.N.; MAKURIN, P.I.; NIKULIN, V.F.

Shielding the dangerous zone of circular saws. Der. prom. 12 no.3:25-26 Mr '63. (MIRA 16:5)

1. Ural'skiy politekhnicheskiy institut im. S.M.Kirova.
(Circular saws--Safety measures)

SMOLONOGOV, Ye.P.; NIKULIN, V.I.; KOLESNIKOV, B.P., prof., doktor biol. nauk, otv. red.; KOSYAKOV, P.O., kand. ekon. nauk, otv. red.; PAL'MIN, M.Z., tekhn. red.

[Natural and economic conditions of the utilization of forests in the southern part of the Ural Area of the Ob' Valley] Prirodnye i ekonomicheskie usloviia ekspluatatsii lesov v iushnoi chasti Ural'skogo Priob'ia. Sverdlovsk, AN SSSR, 1963. 119 p. (MIRA 16:8)
(Ob' Valley--Forests and forestry--Economic aspects)

KOKOSOV, N.M.; NIKULIN, V.I.; KHARIN, V.I.; KOMAR, I.V., starshiy nauchnyy sotrudnik, otvetstvennyy redaktor; DOLGUSHIN, L.D., starshiy nauchnyy sotrudnik, otvetstvennyy redaktor

[The Khanti-Mansi National Area; a sketch of its natural resources and economy] Khanty-Mansiiskii natsional'nyi okrug; ocherk prirody i khoziaistva. Sverdlovsk, Izd-vo Akademii nauk SSSR, Ural'skii filial 1956. 102 p. (MLRA 9:10)

1. Institut geografii Akademii nauk SSSR (for Komar, Dolgushin)
(Khanti-Mansi National Area--Economic Geography)

MIKULIN, V.I.

Protein synthesis in various organs and tissues of rabbits under hypothermia. [with summary in English] Eksp. khir. 2 no.1:55-60 Ja-F '57 (MLRA 10:4)

1. Iz Instituta khirurgii imeni A.V. Vishnevskogo (dir.-chlen-korrespondent AMN SSSR prof. A.A. Vishnevskiy, nauchnyy rukovoditel' doktor biologicheskikh nauk A.S. Konikova) AMN SSSR.

(HYPOTHERMIA, exper.
protein synthesis in rabbits) (Rus)
(PROTEINS, metab.
synthesis in rabbits under hypothermia) (Rus)

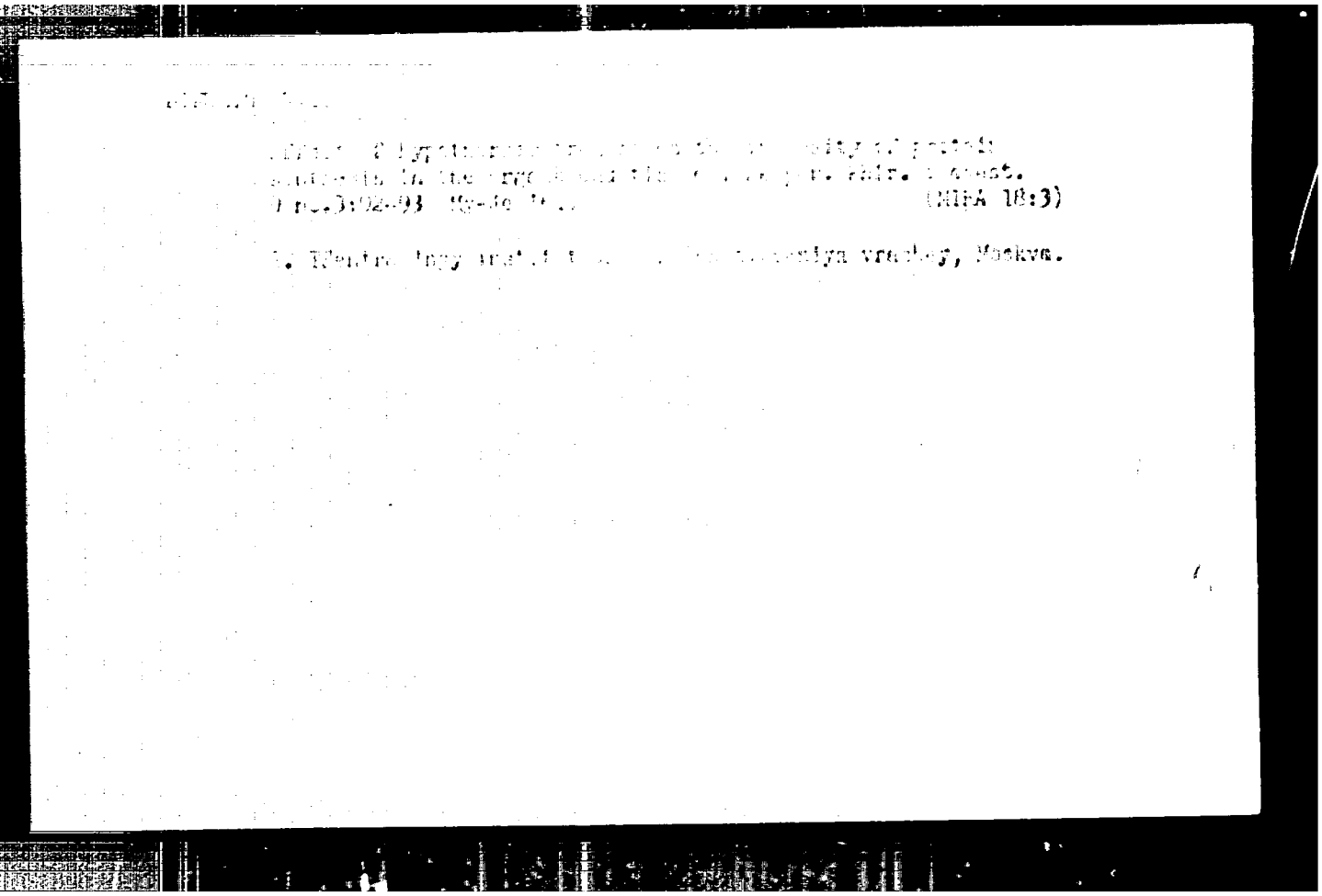
NIKULIN, V.I., Cand Med Sci -- (diss) "Effect of artificial hypothermy upon the intensity of the protein synthesis [illegible] of organs and tissues." Mos, 195[illegible]. 1[illegible] pp (Acad Med Sci USSR). 200 copies (KL,40-5[illegible], 1[illegible])

KIRILIN, V.I.

Intensity of protein synthesis in various organs and tissues soon after hypothermia. Eksp.khir. 4 no.2:39-42 Mr-Ap '59. (MIRA 12:5)

1. Iz laboratorii biokhimii (zav. - doktor biol.nauk A.S. Konikova) Instituta khirurgii imeni A.V.Vishnevskogo (dir. - deystvitel'nyy chlen AMN SSSR prof. A.A.Vishnevskiy).

(HYPOTHERMIA, eff.
on protein synthesis in animals (Rus))
(PROTEINS, metab.
synthesis, eff. of hypothermia in animals (Rus))



24.2560

S/126/62/013/003/004/023
E025/E535

AUTHORS: Kobolev, L.Ya., Nikulin, V.K. and Pomortsev, R.V.

TITLE: On the representation of the electrical conductivity tensor by means of line integrals. I

PERIODICAL: Fizika metallov i metallovedeniye, v.13, no.3, 1962, 351-358

TEXT: An expression is written down for the electrical current density of a nonrelativistic system of interacting particles in terms of the single particle Green's temperature function and the variation of the electrical current density is expressed as the integral of the product of the electrical conductivity tensor and the electric field. From this an expression is obtained for the electrical conductivity tensor which is simplified by neglecting magnetic fields. The single particle Green's function is then expressed in terms of the two-particle Green's function and the connection between the density of the electrical conductivity tensor and the collision integral is given. The Green's functions for the one- and two-particle cases are then represented as line integrals in a functional space of vector trajectories for the case when magnetization is

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On the representation of the ... S/126/62/013/003/004/023
E025/E535

absent. The modifications necessary when the particles are magnetized are discussed. These enable the subsequent calculation of the temperature-time correlation in the system from the known distribution function of the particles in a self-consistent field. The variational derivatives of the one- and two-particle Green's functions are then calculated for the case when magnetic fields are absent. A series expression is obtained for the electrical conductivity tensor. In the appendix an approximate expression is obtained for the collision integral taking magnetization into account but the treatment is limited to the consideration of the first term of the compensation theory of the two-particle Green's function.

ASSOCIATION: Ural'skiy gosudarstvennyy universitet imeni A. M. Gor'kogo
(Ural State University imeni A. M. Gor'kiy)

SUBMITTED: July 6, 1961

Card 2/2

L 9268-66 EWT(1)/EWT(m)/T/EWP(t)/EWP(b)/EWA(c) JD

ACC NR: AP5022708 SOURCE CODE: UR/0181/65/007/009/2701/2707

AUTHOR: Gubanov, A. I.; Nikulin, V. K.

ORG: Physicotechnical Institute im. A. F. Ioffe AN SSSR, Leningrad (Fizikotekhnicheskiy institut AN SSSR)

TITLE: Calculating the energy for penetration and diffusion of hydrogen in metals

SOURCE: Fizika tverdogo tela, v. 7, no. 9, 1965, 2701-2707

TOPIC TAGS: theoretic physics, hydrogen, gas diffusion, metal physics, nonferrous metal

ABSTRACT: Many-body theory is used as a basis for determining the energy shift of the ground state when a point charge is introduced into a crystal lattice. The configuration energy is isolated from this shift. This energy is determined by the dielectric constant of the electron gas in the lattice and that of the free gas of interacting electrons, and also by the pseudopotentials of the ions which make up the lattice. The pseudopotentials, which are determined from spectroscopic terms, are used for explaining anomalous diffusion of protons in noble metals. Orig. art. has: 14 formulas, 1 table.

SUB CODE: 20/ SUBM DATE: 26Mar65/ ORIG REF: 003/ OTH REF: 014

Card 1/1

L 9261-66 EWT(1)/EWT(m)/T/EWP(t)/EWP(b)/EWA(c)

ACC NR: AP5022709 SOURCE CODE: UR/0181/65/007/009/2708/2711

AUTHOR: Nikulin, V. K. 44,55

ORG: Physicotechnical Institute im. A. F. Ioffe AN SSSR, Leningrad (Fiziko-tekhnicheskiy institut AN SSSR) 44,55

TITLE: The method of pseudopotentials for ion structures in a metal

SOURCE: Fizika tverdogo tela, v. 7, no. 9, 1965, 2708-2711

TOPIC TAGS: theoretic physics, nonferrous metal, metal diffusion, solid state physics 44,55,18

ABSTRACT: The parameters for pseudopotentials of free ions of noble metals are determined. These pseudopotentials are used for determining the lattice constants of these metals and the difference in bonding energies for Au and Ag. A theory for anomalous diffusion of protons in noble metals is proposed on the basis of the pseudopotentials derived in this paper. In conclusion, I thank A. I. Gubanov for consultation, and N. I. Lavnikova for assistance with the calculations. Orig. art. has: 3 formulas, 1 table.

SUB CODE: 20/ SUBM DATE: 26Mar65/ ORIG REF: 005/ OTH REF: 009

Card 1/1

L 30982-66 EWT(1)/EWT(m)/EWP(t) IJP(c) JD/HW

ACC NR: AP6006874 SOURCE CODE: UR/0181/66/008/002/0619/0621

AUTHOR: Nikulin, V. K.

ORG: Physicotechnical Institute im. A. F. Ioffe, AN SSSR, Leningrad (Fiziko-tekhnicheskiy institut AN SSSR)

TITLE: Determination of the density of states on the Fermi surface of paramagnetic nickel from data on proton diffusion

SOURCE: Fizika tverdogo tela, v. 8, no. 2, 1966, 619-621

TOPIC TAGS: nickel, physical diffusion, Curie point, paramagnetic metal, proton interaction, energy band structure, excited state, specific heat, alloy system

ABSTRACT: The author presents a microscopic explanation of the fact that the coefficient of atomic diffusion in ferromagnetic materials deviates from the Arrhenius law in the vicinity of the Curie point. This is done by taking into account the change in the state density on the Fermi surface during the magnetic transistion. The particular derivation pertains to the diffusion of protons in nickel, where such an effect is known to take place. Approximate expressions are presented for the energy of the interaction between the proton and the screened ions, and for the screening constant. The state density is obtained from available band calculations (H. Ehrenreich et al., Phys. Rev. v. 131, 2469, 1963). Since

Card 1/2

ACC NR: AP6035838 (A) SOURCE CODE: UR/0413/66/000/020/0042/0042

INVENTOR: Kogan, P. A.; Nikulin, V. K.; Yakushin, A. N.

ORG: None

TITLE: Turbofan assembly with grease-packed bearings. Class 17, No. 187045

SOURCE: Izobreteniya, promyshlennyye obraztsy, tovarnyye znaki, no. 20, 1966, 42

TOPIC TAGS: antifriction bearing, industrial blower, grease, turbine

ABSTRACT: This Author's Certificate introduces: 1. A turbofan assembly with grease-packed bearings. The unit consists of a two-stage turbine mounted on a common shaft with a blower impeller. The weight and overall dimensions of the installation are reduced while simultaneously increasing the rotational velocity by using grease-packed antifriction bearings with the inner protective ring removed. The bearings have auxiliary lubrication make-up cavities in the housing and cups for adding grease. A water heat exchanger is built into the housing of the bearings. 2. A modification of this assembly in which remanent disbalance (radial dynamic loading) is reduced by using a one-piece housing for the two-stage turbine with a suspended diaphragm between the turbine discs.

Card 1/2 UDC: 621.512/516 629.13.01/06

NIKULIN, V.M., kand. ekonomicheskikh nauk

Books on economics and planning. Stroi. mat. 10 no.5:3 of cover My '64. (MIRA 17:9)

NIKULIN, V.M.

Revision of standards on normal refractory materials. Ogneupory 22 no.5:228-229 '57. (MLRA 10:6)

1. Ural'skoye otdeleniye instituta ogneuporov.
(Refractory materials--Standards)

15(0), 15(2)

AUTHORS: Nikulin, V. M., Nefedkina, Ye. B. SOV/131-59-1-2/12

TITLE: For Further Technical Progress
(Za dal'neyshiy tekhnicheskiy progress)

PERIODICAL: Ogneupory, 1959, Nr 1, pp 11 - 15 (USSR)

ABSTRACT: The total production of the works for refractory materials of the Mosoblsovnarkhoz in 1957 was 1.7 times greater than in 1950. The principal sources of the increase in production were: better utilization of equipment capacities, the elimination of bottlenecks, introduction of up-to-date experience, perfection of manufacturing processes, introduction of new modern refractory types of products. In the coming 7 years, it is intended to mechanize individual working operations and works departments; special attention will be paid to the questions of mechanizing the work of loading and unloading. The works in the Moscow area are getting substantial help from the scientific research institutes and the Khimiko-tekhnologicheskiy institut imeni Mendeleyeva (Chemical-Technological Institute imeni Mendeleyev). The Podol'skiy, Vnukovskiy, Snigirevskiy and

Card 1/2

Domodedovskiy works have extended the assortment of their products and - within the 7-year scheme - they will be modernized and will partly be automatically controlled with a view of increasing production figures considerably.

ZHUKOV, A. V.; MIKHAYLOV, A. S.[deceased]; NIKULIN, V. M.; REDIN, N. S.

Using the method of conventional accounting units for measuring labor productivity in refractory enterprises. Trudy Vost. inst. ogneup. no.2:170-179 '60. (MIRA 16:1)

(Refractories industry--Labor productivity)

NIKULIN, Vadim Mikhaylovich; ISKHAKOV, Galim Khanipovich; AMEL'CHENKO, M.I., retsenzent; VESELOV, N.G., red.; KRYZHOVA, M.L., red.izd-va; MATIYUK, R.M., tekhn.red.

[Labor productivity growth potentials in refractory materials production] Rezervy rosta proizvoditel'nosti truda v ogneupornom proizvodstve. Sverdlovsk, Ural.nauchno-tekhn.izd-vo lit-ry po chernoi i tsvetnoi metallurgii, Sverdlovskoe otd-nie, 1961. 65 p. (MIRA 14:6)

(Refractories industry)

BERESHNAYA, A.A.; NIKULIN, V.I.

At refractories plants administered by the Sverdlovsk Economic Council. Ogneupory 26 no.10:447-449 '61.
(MIRA 14:11)

1. Upravleniye chernoy metallurgii Sverdlovskogo sovnarkhoza (for Bereshnaya). 2. Vostochnyy institut ogneuporov (for Nikulin).

(Sverdlovsk Province--Refractories industry)

NIKULIN, Vadim Mikhaylovich; POZDNYAKOVA, G.L., red. izd-va; OBUKHOVSKAYA, G.P., tekhn. red.

[Reuse of refractory materials]Vtorichnoe ispol'zovanie ogneuporov. Moskva, Metallurgizdat, 1962. 91 p. (MIRA 15:11)

(Refractory materials)

NIKULIN, Vadim Mikhaylovich; KONONOV, A.S., retsenzent; POPOV, L.P., red.; SKOROBOGACHEVA, A.P., red. izd-va; MAL'KOVA, N.T., tekhn. red.

[Economics and organization of the manufacture of refractories] Ekonomika i organizatsiia proizvodstva ogneuporov. Sverdlovsk, Metallurgizdat, 1962. 200 p. (MIRA 15:7)
(Refractories industry)

NIKULIN, V.M.

Labor productivity at refractories enterprises.
Ogneupory 27 no.11:514-516 '62. (MIRA 15:11)

1. Vostochnyy institut ogneuporov.
(Refractories industry--Labor productivity)

NIKULIN, V.M., insh.

Operation of the BKZ 75-39-FB boilers on natural gas. (MIRA 16:3)
Energetik 11 no.4:7-9 Ap '63.
(Boilers)
(Gas as fuel)

NIKULIN, V.M., kand. ekonom. nauk; [illegible], I.F., inzh.

Efficient intensifiers for cement plants. Tsement 30 no.3:9 My-Je '64. (MIRA 17:11)

1. Donetskiy sovet narodnogo khozyaystva.

NIKULIN, V.M., kand. ekonom. nauk

Calculating the economic efficiency of lengthening the work periods between overhauling of glass fu[illegible]. Stek. i ker 21 no.9:41-42 S '64. (MIRA 18:4)

1. Donetskiy sovet narodnogo khozyaystva.

NIKULIN, V.M., kand. ekonom. nauk; KHIZHNYAK, L.T., inzh.;
OGANEZOVA, S.Z., inzh.; VINARIK, L.S., inzh.

Optimum layout for glass using the linear programming method.
Stek. i ker. 22 no.11:11-15 N '65. (MIRA 18:11)

DOLGORUKOV, Yu.A.; NIKULIN, V.M.

Increasing the resistance of blast furnace shafts is an important potentiality of metallurgical production. Metallurg 10 no.9:9-11 S '65. (MIRA 18:9)

1. Donetskiy sovet narodnogo khozyaystva.

NIKULIN, V. N. Cand Biolog Sci

Dissertation: "Anatomy of the Alimentary Tract of River Beaver." 27/11/50

Moscow Fur Inst

SO Vechernyaya Moskva
Sum 71

NIKULIN, V.N.

Electrolytic polishing of KhV-5 tool steel. Trudy KKHTI no.13:63-65 '48. (MIRA 12:12)

1.Kazanskiy khimiko-tekhnologicheskiy institut im. S.M. Kirova, kafedra fizicheskoy i kolloidnoy khimii.
(Tool steel) (Electrolytic polishing)

NIKULIN, V.N.

Kinetics of the reaction between silver hydrosol and a solution of halogen salts. Trudy KKHTI no.15:78-81 '50. [publ. '51] (KIRA 12:12)
(Silver halides) (Chemical reaction, Rate of)

Production of silver organosols in an ultrasonic field. V. N. Nikulin and N. N. Terpilovskii. Trudy Kazan. [redacted] Inst. 1953, No. 17, 107-8; Referat. Zhur., Khim. 1954, No. 44100.—A ppt. of colloidal Ag obtained by the Carey Lea method was dispersed in an ultrasonic field of 81 kc. frequency and 6 w./sq. cm. intensity. The treatment lasted 3 min. at 18°. Thus were obtained Ag sols in alcs., ethers, ketones, and hydrocarbons. The stability of the sol depended on the nature of the dispersion medium; they were most stable in alc. The sols thus prepd. had a concn. ≤ 25 mg./l. M. Hosch

Orientation of crystallites in electrolytic tin deposits. S. M. Kocher[illegible] [illegible] Chem. Technol., Kazan [illegible] (1940). —The tin deposits from a stannate bath [illegible] x-ray pattern [illegible] than those from an acid $SnSO_4$ bath. The degree of orientation increases when the deposit thickness increases and when the grain size, the c.d. (<8 amp./sq. dm.) and the temp. [illegible] decrease. The most complete orientation along the [illegible] axis was achieved by adding [illegible] glue, PhOH [illegible] to acid $SnSO_4$ soln. [illegible] Bikerman

NIKULIN, V. N.

Cathodic reduction of oxygen as a function of orientation and structure of the electrode crystallites. I. Reduction of oxygen on tin. V. N. Nikulin and N. M. Kochergin (S. M. Kirov Inst. Chem. Technol., Kazan). Zhur. Fiz. Khim. 30, [illegible] — Sn plates were immersed in a phosphate buffer (pH 5.9?) initially containing 0.01 g. O per l., and the content of O was [illegible] from time to time, without current. The rate [illegible] of O was [illegible] ... by about 4% to 2 hrs. ... was electrocoated with ... ture; and less rapid when ... orientation. Thus the rate depends on crystal orientation.

J. J. [illegible]

76-32-5-11/47

AUTHOR: Nikulin, V. N.

TITLE: The Cathodic Reduction of Oxygen Depending Upon the Orientation and Structure of the Electrode Crystallites (Katodnoye vosstanovleniye kisloroda v zavisimosti ot orientatsii i struktury kristallitov elektroda) II. The Reduction of Oxygen on the Different Faces of Tin Monocrystals (II. Vosstanovleniye kisloroda na razlichnykh granyakh monokristalla olova)

PERIODICAL: Zhurnal fizicheskoy khimii, 1958, Vol. 32, Nr 5, pp. 1035 - 1037 (USSR)

ABSTRACT: In the present paper investigation results of the oxygen reduction on two surfaces (110) and (001) of a tin monocrystal are given. The monocrystals were not produced according to the method by Bridzhmen (Reference 3) but by the modified method by B. N. Buchmanov (Reference 4) with a crystal orientation having been obtained by a special working technique. The electrodes were obtained by a cutting out of the oriented crystals and then were polished, by which means it was achieved that the electrode surfaces coincided with the desired surfaces (110) and (001) to 1-2°. The experiments were carried out

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with electrodes containing a passivation layer, as well as with electrodes not containing it, the method of investigation being similar to that in the previous work. From the graphically shown results it can be seen that the oxygen reaction on the different crystal surfaces takes a different course, namely a stronger one on the surface (001) than on the surface (110); this is proof that in the electrochemical reaction the crystallographical properties exert an essential influence on the reaction velocity. The removal of the passivation film effected an increase of the reaction velocity without changing the character of the dependence of the reaction on the crystal surface. There are 6 figures and 6 references, 6 of which are Soviet.

ASSOCIATION: Kazanskiy khimiko-tekhnologicheskiy institut im. S. M. Kirova (Kazan' Chemical Technological Institute imeni S. M. Kirov)

SUBMITTED: November 21, 1956

1. Oxygen--Reduction 2. Single crystals--Growth 3. Tin crystals--Properties 4. Electrodes--Surface properties

AUTHOR: Nikulin, V. N.

TITLE: The Cathodic Reduction of Oxygen Depending on the [illegible]orientation and the Structure of Electrode Crystallites (Katodnoye vosstanovleniye kisloroda v zavisimosti ot orientatsii i struktury kristallitov elektroda). III. The Investigation of the Electrode Processes on Tin (III. Issledovaniye elektrodnykh protsessov na olove)

PERIODICAL: Zhurnal fizicheskoy khimii, 1958, Vol. [illegible], No 7, pp. 1451-1456 (USSR)

ABSTRACT: Wagner and Traud (Ref 1) suggested the indirect registration of polarization curves for the investigation of the cathodic reduction of oxygen, which Delahay (Refs 2, 3) then used. In the present paper the investigations mentioned in the title were carried out according to this method. From the experimental part may be seen that according to a method earlier described mono- and polycrystalline electrodes were produced. The electrolyte cell consist: of 3 glass vessels, the cathode-, the intermediate- and the anode vessel, the test electrode being immersed into the cathode vessel. A silver chloride electrode served as control electrode, while mercury served

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The Cathodic Reduction of Oxygen Depending on the Orientation and the Structure of Electrode Crystallites. III. The Investigation of the Electrode Processes on Tin

as anode in the polarographic determinations. The electrolyte was put into a thermostat ($25^{\circ} \pm 0{,}2 - 0{,}5^{\circ}$), while the solution was mixed by means of a magnetic mixer with a speed of 160 revs/min. The measurements were carried out with a potentiometer with a mirror galvanometer of the type [illegible], a polarograph of the system according to Geyrovskiy and a titration microculonometer according to Kistyakovskiy, whereas the oxygen was determined according to the method by Winkler. From the experimental data obtained the amperage of the reaction of the cathodic oxygen reaction was calculated according to an equation, the results being represented graphically, the number of electrons n taking part simultaneously in the reaction were also calculated according to an equation by Delahay and are represented graphically as a function of the potential. From it may be seen that the electrode processes taking part on tin depend on the structural properties of the electrode. At the surface of polycrystalline electrodes with a texture (101) a simultaneous formation of water and

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The Cathodic Reduction of Oxygen [illegible]ing on the Orientation and the Structure of Electrode Crystallites. III. The Investigation of the Electrode Processes on Tin

partly of hydrogen peroxide to the potential - 0,7 Volt was found, above that only of hydrogen peroxide, whereas in the case of tin surfaces with a texture (211) as well as without texture water alone is only formed at low or higher potentials; in the intermediate range a simultaneous formation of water and hydrogen peroxide is found. The overvoltage of the oxygen reduction is in the case of (101) textures a little higher than in the case of electrodes with a (211) structure, or without a structure. With monocrystalline electrodes it was found that at the (110) section the water formation takes place at medium potential values, and that otherwise water and hydrogen peroxide are formed simultaneously; at (001) sections, however, the formation of water and hydrogen peroxide takes place within the whole potential range investigated. There are 13 figures and 7 references, 4 of which are Soviet.

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SOV/76-[illegible]-7-2/42

The Cathodic Reduction of Oxygen Depending on the Orientation and the Structure of Electrode Crystallites. III. An Investigation of the Electrode Processes on Tin

ASSOCIATION: Kazanskiy khimiko-tekhnologicheskiy institut im. S. M. Kirova
(Kazan' Chemical Technological Institute imeni S. M. Kirov)

SUBMITTED: November 21, 1956

1. Oxygen—Reduction 2. Electrolytic cells—Equipment 3. Tin electrodes—Performance 4. Tin electrodes—Test methods

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5 (4)

AUTHOR: Nikulin, V. N. SOV/76-33-6-29/44

TITLE: Cathodic Reduction of Oxygen Depending on the Orientation and Structure of the Electrode Crystallites (Katodnoye vosstanovleniye kisloroda v zavisimosti ot oriyentatsii i struktury kristallitov elektroda). IV. Reduction of Oxygen on Lead (IV. Vosstanovleniye kisloroda na svintse)

PERIODICAL: Zhurnal fizicheskoy khimii, 1959, Vol 33, Nr 6, pp 1360-1364 (USSR)

ABSTRACT: The cathodic reduction of oxygen on the faces (111), (100) and (110) of the lead single crystal was investigated. The orientation of the single lead crystal and the determination of the crystallographic main direction was made by X-rays, whereupon the electrodes were made by suitable polishing. Figures of the fine structure (Figs 4-6), as well as the X-ray pictures of the above-mentioned crystal faces (Figs 1-3), are given. The oxygen precipitation on the individual crystal faces was first examined, and it was ascertained that with no external current the most intense oxygen precipitation occurs on face (100). The investigation of the electrode processes was made by polarization curves (PC) which were drawn in the common

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way and by the indirect method (Ref 8). It was observed that the (PC) obtained by the one and the other method (Figs 9, 10) are different. The difference of the (PC) for face (111) is due to the formation of hydrogen peroxide which is especially high on the face. The computation of the apparent number of electrons participating in the reaction shows (Figs 11-13) that on faces (110) and (100) a four-electron process is going on which leads to the formation of water, whereas on face (111) a strong two-electron process takes place, by which hydrogen peroxide is generated. This difference is explained by the dissimilarity of the atom packing on the various crystal faces. The most efficient packing of oxygen molecules can take place on face (110), and the least efficient on face (111)(Fig 14). The oxygen more intensely adsorbed on faces (110) and (100) will to a higher extent be reduced to water than that on face (111). There are 14 figures and 22 references, 15 of which are Soviet.

Cathodic Reduction of Oxygen Depending on the Orientation and Structure of the Electrode Crystallites. IV. Reduction of Oxygen on Lead

SOV/76-33-6-29/44

ASSOCIATION: Kazanskiy khimiko-tekhnologicheskiy institut im. S. M. Kirova (Kazan' Chemical-technological Institute imeni S. M. Kirov)

SUBMITTED: November 30, 1957

Card 3/3

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77662
SOV/80-33-2-37/52

AUTHORS: Nikulin, V. N., Tsypin, M. Z.

TITLE: Brief Communications. Electrolytic Polishing of Silver in Sodium Thiosulfate Solutions

PERIODICAL: Zhurnal prikladnoy khimii, 1960, Vol 33, Nr 2, pp 469-471 (USSR)

ABSTRACT: Electrolytic polishing of silver in a sodium thiosulfate solution gave very good results, comparable to those obtained in cyanate or thiocyanate baths. Stainless steel cathodes were used; their sizes were 4 to 5 times as large as the size of the treated objects. Optimal conditions were as follows: concentration of the electrolyte, 600 to 1300 g $Na_2S_2O_3 \cdot 10H_2O$ per liter; current density, 4 to 5 amp/dm^2; temperature, 20 to 25° C. Intermittent current was used with working periods of 3-4 seconds. To prevent the darkening of the solution by insoluble silver sulfides which make direct observation of the treated objects impossible, a separating diaphragm was used; $NaNO_3$ solution (200 g/liter) was the catholyte

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used here. Raising the current density above the optimum value causes the covering of the entire surface with a film and the cessation of the polishing; lowering the current density below the optimum value causes the dissolving of the treated surface. The process is accompanied by a periodic formation and dissolution of a film on the silver surface, similarly to electrolytic polishing using cyanate solutions. It can be assumed, therefore, that the mechanism of the smoothing of the surface is identical in both instances. There are 7 Soviet references.

SUBMITTED: April 9, 1959

Card 2/2

S/076/60/034/012/019/027
B020/B067

AUTHORS: Nikulin, V. N. and Teypin, M. Z.

TITLE: Electrode Potentials of the Silver Monocrystal

PERIODICAL: Zhurnal fizicheskoy khimii, 1960, Vol. 34, No. 12, pp. 2814-2816

TEXT: The authors attempted to study the dependence of the electrode potential of the silver monocrystal on the crystallographic orientation and the composition of the electrolyte. The breeding of silver monocrystals and the production of the electrodes have been described already earlier (Ref. 7). The static and dynamic potentials were measured by a high-impedance potentiometer of the type ППТВ(PPTV) and the ГЗС-53 (GZS-53) mirror galvanometer. A saturated calomel half-cell was used as reference electrode. The results of the potential measurements in cyanide solution (Ref. 8) and in a sodium thiosulfate solution are given in Tables 1 and 2. The static, steady potentials of silver measured in different electrolytes are given in Table 3. The potential values mentioned were referred to the potential of the ordinary hydrogen electrode. The values for the silver

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Electrode Potentials of the Silver Monocrystal S/076/60/034/012/019/027
B020/B067

potentials given in the Tables prove that the potential depends on the crystallographic orientation and the surface structure of the electrode with the surface difference during polarization and in nonequilibrium state being more pronounced. The results obtained indicate that the electrode potentials of silver are determined not only by the interaction forces in the crystal lattice but also by the interaction forces of the ion atoms with the molecules or ions of the electrolyte. There are 3 tables and 8 references: 6 Soviet, 1 US, and 1 British.

ASSOCIATION: Kazanskiy khimiko-tekhnologicheskiy institut im. S.M.Kirova (Kazan' Institute of Chemical Technology imeni S. M. Kirov)

SUBMITTED: April 8, 1959

Card 2/2

NIKULIN, V.N. (Kazan'); TSIPIN, M.Z. (Kazan')

Cathodic reduction of oxalic acid in relation to the structure and crystallographic characteristics of the lead electrode. Zhur. fiz. khim. 35 no.1:58-61 Ja '61. (MIRA 14:2)

1. Kazanskiy khimiko-tekhnicheskiy institut im. S.M.Kirova.
(Oxalic acid) (Lead)

NIKULIN, V.N.

Cathodic reduction of oxygen in relation to the orientation and structure of the electrode crystallites. Part 5: Reduction of oxygen at different faces of a single crystal of silver. Zhur. fiz. khim. 35 no.1:86-89 Ja '61. (MIRA 14:2)

1. Kazanskiy khimiko-tekhnologicheskiy institut im. S.M. Kirova.
(Silver crystals) (Reduction, Electrolytic)

NIKULIN, V.N.; ZAMURAGIN, P.V. (Kazan')

Effect of the structure and crystallographic characteristics of electrodes on the electroreduction of pyruvic acid. Zhur. fiz. khim. 35 no.2:287-293 F '61. (MIRA 16:7)

1. Kazanskiy khimiko-tekhnologicheskiy institut imeni Kirova.
(Pyruvic acid) (Reduction, Electrolytic)

BESPAL'KO, I.G., red.; GUSEV, V.F.; YEVDOKIMOV, F.D. prof., red.; IVANOV, S.M., red.; NIKULIN, V.N., red.; SICHIORKO, G.A., red.; SIPTSOV, A.S., red.

[Transactions of the scientific conference on production] Trudy nauchno-proizvodstvennoi konferentsii. Pskov, 1962. 341 p. (MIRA 18:2)

1. Leningrad. Nauchno-issledovatel'skiy veterinarnyy institut. 2. Nachal'nik veterinarnogo otdela Pskovskogo oblastnogo upravleniya proizvodstva i zagotovok sel'skokhozyaystvennykh produktov i Leningradskiy Nauchno-issledovatel'skiy veterinarnyy institut (for Nikulin). 3. Leningradskiy veterinarnyy institut (for Yevdokimov).

NIKOLIN, V.N.; KVASHEV, V.G.

Discrete element of the programmed ignitron breaker control. Avtom. i prib. no.2:29-31 Ap-Je '63. (MIRA 18:8)

1. Institut [illegible] AN [illegible].

ACCESSION NR: AT5017384

AUTHOR: Drymalyk, Ya. P. (Kiev); Nikulin, I. I. (Kiev); Protsenko, N. M. (Kiev); Shurkhin, V. I. (Kiev)

TITLE: The RTsU-MI-1 and RTsU-MI-2 magnetic tape digital parameter recorders

SOURCE: Konferentsiya po avtomaticheskomu kontrolyu i metodam elektricheskikh izmereniy. 3d, Novosibirsk, 1961. Avtomaticheskiy kontrol' i metody elektricheskikh izmereniy; trudy konferentsii, t. 2. Tsifrovyye izmeritel'nyye pribory. Elektricheskiye izmereniya neelektricheskikh velichin. Ustroystva avtomaticheskogo kontrolya i upravleniya v promyshlennosti (Automatic control and electrical measuring techniques; transactions of the conference, v. 2: Digital measuring instruments. Electrical measurements of nonelectrical quantities. Devices for automatic control and regulation in industry). Novosibirsk, Redizdat Sib. otd. AN SSSR, 1964, 56-59

TOPIC TAGS: magnetic tape recorder, binary tape recorder, digital parameter recorder, computer input

ABSTRACT: After listing 10 existing Soviet and Western systems for the collection and processing of information (D.W. Halfhill, Nucleonics, v. 16, 1958; P.J. Weber, Magnetic Tape Recorders, 1959, no. 3; E.G. Wildanger, IRE Trans. PGIE-11, 1959; V.M. Glushkov, A.I. Nikitin, Avtomatika i priborostroyeniye, Kiev, 1960, no. 2).

Card 1/3

L 06446-65

ACCESSION NR: AT5017384

the authors briefly describe the design and technical characteristics of the RTsU-ML-1 and RTsU-ML-2 recorders developed at the Vychislitel'nyy tsentr AN Ukr SSR (Computer Center, AN Ukr SSR) and intended for the direct input of digital material into the "Ural-1" computer. The RTsU-ML-1 works with a binary code, can function up to 16 sensing devices, the output sensor voltages are within [illegible] V, the sampling frequency reduced to a single sensor is 320 c/sec, the sampling frequency from each sensor during a complete cycle and the maximum displacement rate of the tape is 20 [illegible] the error of the device is approximately ±0.5%, the maximum length of the tape is 250 m, and the registration time is 12-60 min. It contains 150 standard semiconductor elements, 325 P-13 and P-15 transistors, 450 D9D diodes and 20 vacuum tubes. The analogous RTsU-ML-2 device can use the magnetic tape computer accumulator permitting a high density (10 binary signs per millimeter of tape) and a high rate of registration (about 20 thousand 8-digit binary numbers per second). Its accuracy will be on the order of ±0.5÷1.0%. Orig. art. has: 1 figure and 1 table.

ASSOCIATION: none

SUBMITTED: 11Nov64 ENCL: 06 SUB CODE: CP

NO REF SOV: 002 OTHER: 003

Card 3/2

NIKULIN, V.N.

Electrochemical reduction of formaldehyde on a zinc single crystal. Zhur. fiz. khim. 38 no.5:1103-1110 My '64.
(MIRA 18:12)

1. Kazanskiy khimiko-tekhnologicheskiy institut imeni Kirova. Submitted Jan. 21, 1963.

ARKHANGEL'SKIY, I.I., prof.; DARDA, P.N.; CHISTOV, N.P., kand. veter. nauk; NIKULIN, V.N.; VOROB'YEV, M.M., kand. veter. nauk (Vitebsk, BSSR); ARKHIPOV, V.V., kand. veter. nauk

Infection focuses. Veterinariia 41 no.1:29-33 Ja '64. (MIRA 17:3)

1. Vsesoyuznyy nauchno-issledovatel'skiy institut veterinarnoy sanitarii (for Arkhangel'skiy). 2. Nachal'nik veterinarnogo otryada postoyanno-deystvuyushchey protivoyashchurnoy ekspeditsii Gosudarstvennogo nauchno-kontrol'nogo instituta veterinarnykh preparatov (for Darda). 3. Leningradskiy nauchno-issledovatel'skiy veterinarnyy institut (for Chistov). 3. Pskovskoye oblastnoye upravleniye proizvodstva i zagotovok sel'skokhozyaystvennykh produktov (for Nikulin).

L 4500-66 EWT(d)/EWP(1) IJP(c) BB/GG

ACC NR: AP5023270 UR/0302/65/000/003/0027/0029
681.142.35:681.142.177.6

AUTHOR: Nikulin, V.N.; Kvachev, V.G.

TITLE: Digital recorder with punchcard output

SOURCE: Avtomatika i priborostroyeniye, no. 3, 1965, 27-29

TOPIC TAGS: digital computer, punched card, digital device, binary logic, data recording, decimal base

ABSTRACT: Digital recording devices cannot feed the accumulated data to electronic computers without their preliminary conversion into the machine code. In an earlier attempt to utilize computers for direct processing of data, Ya. P. Drymalyk et al. at the Institut kibernetiki AN Ukr SSR (Institute of Cybernetics AN Ukr SSR) utilized magnetic tape recordings (Avtomatika i priborostroyeniye, priborostroyeniye, no. 4, 1961; Avtomaticheskiy kontrol' i metody elektricheskikh izmereniy, t. 2, Sibirskoye otdeleniye AN SSSR, Novosibirsk, 1964) in conjunction with the "Ural" computer. However, this approach demanded that the magnetic recording heads and the form of the recordings of the registering device and the computer be strictly identical. Consequently, the personnel of the Institute of Cybernetics designed and constructed a digital recorder which collects data on standard punchcards which can subsequently be used in any computer with a punchcard input. The present article presents the block diagram of the device and describes its operation. It uses a mixed binary-decimal base system, works with up to 8 sensors which it scans

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L 4500-66

ACC NR: AP5023270

cyclically every 0.13, 0.26, 0.52, 1.05, 2.1, 4.2, or 8.4 sec, and its buffer memory can store 1024 bits. The accuracy of the system (determined by the DC amplifier accuracy) is 0.5%, the amplitude of the analog-digital converter input voltage is 0 - 20 v, the number of programmed measuring ranges is 3, the minimum number of cycles per range is 1, the maximum number of measurements per sensor is 1022, output rate is 10 cards/min, synchronization accuracy is 10^{-6} sec, and power required is 1.5 kw. Orig. art. has: 1 formula and 2 figures.

ASSOCIATION: none

SUBMITTED: 00 ENCL: 00 SUB CODE: DP, IE, EC

NO REF SOV: 002 OTHER: 000

Card 2/2

VOLOVIZHENSKIY, G.S., NIKULIN, V.N.

Sergei Mikhailovich Kochergin, 1912-1965. Zhur. fiz. khim. 39 no.9:2330 S '65. (MIRA 18:10)

12300 also 1513
28 1000 1013,1068,1021

S/125/60/000/010/006/015
A161/A133

AUTHORS: Nikulin, V.N., and Skurikhin, V.I.

TITLE: Program Voltage Transmitter for Automatic Welding Process Regulators

PERIODICAL: Avtomaticheskaya svarka, 1960, No. 10, pp. 42-45

TEXT: The described transmitter has been developed at the Computing Center of the Academy of Sciences of the UkrSSR on a suggestion of Academician B.Ye.Paton. It produces stepped voltage with variable amplitude and a duration that is the multiple of an a-c cycle. Stepped voltage can be used for the work organs of various machines, and also for the control of resistance welding machine regulators. A detailed description of the transmitter is given. Its four units are shown in a block diagram (Fig.1) - pulse synchronizing, time programming, level programming, and forming the output signal. Step amplitude within a cycle is programmed by a binary code. When the code changes one bit, the step amplitude on the output changes by 3 v. The number of possible steps is 15, i.e., the voltage is varied from 0 to 45 volt. The programm duration is 62 cycles. The level program unit (Fig.2)

S/125/60/000/010/006/015
A161/A133

Program Voltage Transmitter for Automatic Welding Process Regulators

is the main unit; programming is effected with the aid of switches. If at a t_n moment the switches are in the positions 1, 0, 1, 0, the pulse to the bar $\mathcal{A}$ moves triggers I, II, III, IV into same position. The next pulse at the t_{n+1} moment sets the triggers corresponding to the position of the tumblers on the bar $\mathcal{B}$. The output signal forming unit (Fig.3) produces different voltage and transforms codes into voltage by adding voltage. The output voltage of the summing circuit (resistors R_1-R_4) varies in a range of 0.5-4.5 volt according to codes on the triggers, and a УПТ(UPT) d-c amplifier with an amplifying coefficient of K=10 amplifies it. The output voltage magnitude can be controlled by changing resistance magnitude R_2. The time programming unit sends pulses into the code bars synchronized with the network frequency. This is achieved by a 62-digit ferrite-diode shift register with a key triode. Compensation rings suppress interferences. To move a pulse one digit in the register (Fig.4) the ring in the preceding cell must be remagnetized; pulses are recorded in the first digit by discharge the capacitor C_3 through the primary winding of the first ring. When the push button K is pressed, the capacitor C_3 discharges through diode $Д_4$, the winding of the first ring W_1

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A161/A133

Program Voltage Transmitter for Automatic Welding Process Regulators

and the open by-pass collector-emitter in key triode K. The ferrite ring magnetizes, and the arriving cycle pulse remagnetizes it and charges capacitor C_2. The recorded pulse has to circulate in the register to repeat the program automatically, i.e., the register must have a feedback. A П14 (P14) triode fitted amplifier УС is provided to make the pulse from the last digit sufficiently strong to remagnetize the ring of the first digit. The program duration is selected by connecting the register digit outputs to six switches having 11 operation positions and one idle position each. The sliders of the switches are connected by one bar. If the program is to be set with a certain number of cycles, one of the switches is to be set into the position corresponding to the digit on which the program ends. The pulse synchronizing unit produces pulses synchronizing the blocking generator with a-c network frequency and includes a cathode follower. The shift winding of the ferrite register is connected to the load circuit of the cathode follower. A positive pulse controlling the key triode forms also in the load circuit of the cathode follower. The transmitter proved dependable in tests. Oscillograms (Fig.5) of its output voltage illustrate its capacities. Out-

S/125/60/000/010/006/015
A161/A133

Program Voltage Transmitter for Automatic Welding Process Regulators

put voltage can be changed to practically any form. There are 5 figures.

ASSOCIATION: Vychislitel'nyy tsentr AN USSR (Computing Center of AS UkrSSR)

SUBMITTED: May 5, 1960

Card 4/8

NIKULIN, V.N.

Programmed control systems with self-correction, built on the basis of numerical techniques. Avtom.svar. 16 no.5:28-33 My '63. (MIRA 16:11)

1. Institut kibernetiki AN UkrSSR.

MARKOV, G.S.; IVANOV, V.P.; NIKULIN, V.P.; CHERNOBAI, V.F.

Helminths of reptiles of the Volga Delta and the Caspian steppes.
Trudy Astr. sap. no.6:145-172 '62. (MIRA 16:7)

(Caspian Sea region--Worms, Intestinal and parasitic)
(Caspian Sea region--Parasites--Reptiles)

1(0) 8(2)

AUTHOR: Nikulin, V.P., Engineer SOV/119-58-12-6/13

TITLE: Electromagnetic Oscillographs Used in Investigations and Tests in Aviation Engineering (Magnitoelektricheskiye ostsillografy, primenyayemiyye pri issledovaniyakh i ispytaniyakh aviatsionnoy tekhniki)

PERIODICAL: Priborostroyeniye, 1958, Nr 12, pp 16-18 (USSR)

ABSTRACT: The oscillographs listed in the following table have a number of features in common: They are supplied with 27 V d.c., the quantities measured must be recorded with an accuracy varying between ± 0.3 to 1.5 %, their current sensitivity must cover a range of 5,000 to 10,000 mm/mA, and the eigenfrequency must be between 10,000 and 15,000 cy. The instruments listed in the table have been developed and built in various scientific institutions of aviation industry.

Card 1/3

AGAL'TSOV, P.M.; [illegible], N.I.; [illegible], Ye.S.

Classification of measurements and the evaluation of the precision of measuring instruments. Izm. tekh. no.3:49 Mr '64. (MIRA 17:8)

MARKOV, G.S.; IVANOV, V.P.; KRYUCHKOV, B.P.; LUK'YANOVA, Zh.F.; NIKULIN, V.P.; CHERNOBAY, V.F.

Protozoans and ticks parasitizing on reptiles on the Caspian Sea region. Uch. zap. Volg. gos. ped. inst. no.16:106-110 '64. (MIRA 19:1)

1. Kafedra zoologii Volgogradskogo gosudarstvennogo pedagogicheskogo instituta.

NIKULIN, V. V., Candidate Tech Sci (diss) -- "Investigation of the process of breaking up brittle bodies with a cutting tool". Tula, 1959. 25 pp (Min Higher Educ USSR, Tula Mech Inst), 150 copies (KL, No 25, 1959, 135)

NIKULIN, V.V.

Utilization of reed waste at the Kherson Pulp Plant. Bum. i der. prom. no.2:43-44 Ap-Je '63. (MIRA 17:2)

AUTHOR: Nikulin, V.Ya. SOV/132-58-11-13/7

TITLE: An Experiment in Drilling Deep Bore-Holes With the Rig ZIF-650A by the Chernogorsk Geological Prospecting Team (Opyt bureniya glubokikh skvazhin stankom ZIF-650A v Chernogorskoy geologorazvedochnoy partii)

PERIODICAL: Razvedka i okhrana nedr, 1958, Nr 11, pp 52 - 53 (USSR)

ABSTRACT: The drilling rig ZIF-650A was used to drill a bore hole 835.1 m deep. The author describes in detail this experiment made by the Chernogorsk Geological Prospecting Team. The average speed of drilling was 0.47 m/hour. There are 3 tables.

ASSOCIATION: The Chernogorskaya geologorazvedochnaya partiya (The Chernogorsk Geological Prospecting Team)

Card 1/1

NIKULIN, V.Ya.

Preventing fires and explosions in air drilling. Razved.i okh. nedr. 28 no.11:49-50 N '62. (MIRA 15:12)

1. Noril'skaya kompleksnaya geologorazvedochnaya ekspeditsiya.
(Boring—Safety measures)

NIKULIN, Ye.

Over-all mechanization is an important factor in lowering expenses. (MIRA 14:3)
Mekh.transp. 19 no.6:41 Ag '60.
(Inland water transportation—Costs)

PODGORNYY, K., starshiy inzh.-leytenant; NIKULIN, Ye., kapitan tekhnicheskoy sluzhby

Eight times faster. Av.i kosm. 44 no.3:60-61 '62. (MIRA 15:3)
(Airplanes--Maintenance and repair)

L 15717-66 EWT(1)/EWT(m) JD

ACC NR: AT6003097 SOURCE CODE: UR/3181/63/000/015/0275/0282

AUTHOR: Tsererin, V. A.; Morgunov, N. K.; Nikulin, Ye. G. 26

ORG: None B+1

TITLE: Taking into account nonuniformity of the gas supply in the hydraulic design of a gas main

SOURCE: Kuybyshev. Aviatsionnyy institut. Trudy, no. 15, pt. 2, 1963. Doklady Kustovoy nauchno-tekhnicheskoy konferentsii po voprosam makhaniki zhidkosti i gaza (Reports of the Joint scientific-technical conference on problems of the mechanics of liquid and gas), 275-282

TOPIC TAGS: gas engineering, hydraulic resistance, pipeline

ABSTRACT: The article starts with a review of important work in the field done in the Soviet Union and abroad. The experimental investigation was done on a high pressure gas main in Kuybyshev; the gas main, used to supply purified natural gas, was long and of large diameter. It was provided with sampling points at which observations were made every 15 minutes for a period of three days. A figure shows the pressure at the beginning and end of the gas main as a function of time. As a result of the experiments it was found that unsteady state flow has a considerable effect on the resistance of the gas main, and

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ACC NR: AT6003097

must be taken into account in design and installation. A method based on the gasodynamic theory of modelling permits tests to be carried out on short sections of gas main. In design, to determine the diameter of the gas main, the average integral value of the flow should be used; this can be obtained from a typical daily chart. Choice of the resistance coefficient must be made on the basis of existing experimental data. Orig. art. has: 3 formulas, 3 figures, and 1 table.

SUB CODE: 13/ SUBM DATE: 00/ ORIG REF: 013/ SOV REF: 000/ OTH REF: 000

Card 2/2

ACCESSION NR: AP4043014 S/0057/64/034/007/1338/1340

AUTHOR: Nikulin, Ye.I.; Kir'yanin, I.A.

TITLE: Measurement of the resistance of aluminum in a magnetic field at low temperatures

SOURCE: Zhurnal tekhnicheskoy fiziki, v.34, no.7, 1964, 1338-1340

TOPIC TAGS: electric resistivity, aluminum, magnetoresistance

ABSTRACT: The resistance of 99.9998% pure aluminum was measured in magnetic fields up to 27 kOe at liquid helium and liquid hydrogen temperatures. The ratio $\rho(300)/\rho(4.2)$ of the resistivity at 300°K to that at 4.2°K for this material was 5200 before annealing and 11 800 after a 2 hour anneal at 400°C. It was necessary to renew the anneal after each measurement in order to maintain the large value of $\rho(300)/\rho(4.2)$. The samples were helical, the magnetic field was parallel to the axis of the helix, and currents up to 10 A were employed. The results of the measurements are presented graphically. In a 20 kOe field, $\Delta\rho/\rho$ was 1.85 at 4.2°K and 4.30 at 20.4°K. These results are compared with those obtained by I.R.Purcell and R.B.Jacobs (Cryogenics 3, 109,1963) with material for which $\rho(300)/\rho(4.2)$ was 2600. The

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ACC NR: AP6037006 (A,N) SOURCE CODE: UR/0181/66/008/011/3410/3411

AUTHOR: Kogan, A. V.; Nikulin, Ye. I.

ORG: Physicotechnical Institute im. A. F. Ioffe, AN SSSR Leningrad (Fiziko-tekhnicheskiy institut AN SSSR)

TITLE: Effective magnetic field on the Nb and Ta nuclei dissolved in iron

SOURCE: Fizika tverdogo tela, v. 8, no. 11, 1966, 3410-3411

TOPIC TAGS: magnetic field, impurity center, iron alloy, low temperature research, specific heat

ABSTRACT: The authors measured the nuclear component of the specific heat of Fe-Nb alloys (0.59 and 0.28 at.% Nb) and Fe-Ta alloys (1.88, 0.98, and 0.48 at.% Ta), prepared by melting in an atmosphere of helium in an electromagnetic crucible. The measurements were made in the temperature interval 0.06 -- 0.16K. The very low temperature was obtained by adiabatic demagnetization of cerium-magnesium nitrate. The specific heat of the investigated alloys was determined as the difference of the specific heats of the cerium-magnesium nitrate crystals with and without the sample. The specific heat was determined from the measured change in temperature. The results obtained for the effective magnetic field are $\sim 2.5 \times 10^5$ Oe on Nb and $(5.9 - 5.4) \times 10^5$ Oe on Ta. The data agree with the results obtained by nuclear resonance

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ACC NR: AP6037006

in the case of Nb, but not in the case of Ta. The difference is attributed to differences in the Ta contents and differences in the heat treatments prior to measurement. The authors thank Z. A. Guts and T. A. Sidorova for preparing the samples. Orig. art. has: 1 formula and 1 table.

SUB CODE: 20/ SUBM DATE: 27May66/ ORIG REF: 001/ OTH REF: 003

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L 06527-67 EWP(e)/EWT(m)/EWP(w)/T/EWP(t)/ETI IJP(c) JH/AH/JG

ACC NR: AR6031072 SOURCE CODE: UR/0277/66/000/007/0014/0014

AUTHOR: Burminskaya, L. N.; Zaboleyev-Zotov, V. V.; Nikulin, Yu. M.; Pashkov, P. O.

TITLE: Mechanical properties of aluminum corundum alloys

SOURCE: Ref. zh. Mashinostr mat konstr i raschet detal mash. Gidropr, Abs. 7.48.99

REF SOURCE: Sb. Materialy Nauchn. konferentsii. Sovnarkhoz Nizhne-Volzhsk. ekon. r-na. Volgogradsk. politekhn. in-ta. T. 1. Volgograd, 1965, 359-363

TOPIC TAGS: alloy, mechanical property, aluminum alloy, aluminum corundum alloy

ABSTRACT: A study was made of the hardness and strength of aluminum electrocorundum alloys over the entire concentration range at room and elevated temperatures up to 300C. The particle size of the electrocorundum was ~100 μ. The samples tested were cylinders, 25 mm in diameter and 4—8 mm high. The changes in hardness of the material do not follow the additivity rule. Within the 20 to 50% by volume range of the corundum, the hardness of the material remains

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ACC NR: AR6031072

constant (HB 70). In the range of high concentration corundum, the HB of the material increases sharply (up to HB 150 at 65--75% by volume), while the strength shows a drastic drop during the pressing of the ball. A bibliography of 3 references is given. [Translation of abstract].

SUB CODE: 13/

Card 2/2 egk

ACC NR: AR6029503 SOURCE CODE: UR/0137/66/000/006/I035/I035

AUTHOR: Burmistskaya, L. N.; Nikulin, Yu. M.; Pashkov, P. O.; Zaboleyev-Zotov, V. V.

TITLE: Effect of interphase interaction on the strength of certain aluminum alloy--mixtures 27

SOURCE: Ref. zh. Metallurgiya, Abs. 6I237

REF SOURCE: Sb. Materialy Nauchn. konferentsii. Sovnarkhoz Nizhne-Volzhsk. ekon. r-na. Volgogradsk. politekhn. in-t. T. I. Volgograd, 1965, 364-368

TOPIC TAGS: phase composition, corundum, boron compound, phase reaction

TRANSLATION: The hardness and dispersion resistance of alloy-mixtures of Al with a hard phase composition ranging from 20 to 60% was determined. Corundum, Si carbide and B carbide were used as hard phases. The base hardness in alloys with hard particles ranged from 70 kg/mm^2 for corundum to 180 kg/mm^2 for boron carbide relative to 25 kg/mm^2 for Al. No correlation was found between the alloy properties and the characteristics of the hard particles. The dependence of hardness on the superheating temperature (700-1000°C) was linear for alloys with hard particles. For alloys of Al with oxides, the hardness was independent of the superheat temperature whereas in the alloys with Si and B carbides the line had a different slope. E. Kadaner.

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UDC: 539.4.015:669.715

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