ACCESSION NR.: AT4033367 S/2960/63/000/002/0003/0027

C

AUTHOR: Kondrat'yev, K. Ya.; Niylisk, Kh. Yu.

TITLE: Thermal radiation of the 9.6-micron absorption band of atmospheric ozone

SOURCE: Leningrad. Universitet. Problemy* fiziki atmosfery*, no. 2, 1963, 3-27

TOPIC TAGS: meteorology, ozone, troposphere, counterradiation, atmospheric thermal radiation, atmospheric water vapor, atmospheric stratification, tropopause, atmospheric vertical temperature gradient, earth radiation balance, atmospheric outgoing radiation, stratosphere

ABSTRACT: A study of recent experimental data has been made to determine the absorption (transmission) function of the atmosphere in the region of the ozone band (9.0-10.3 microns) and use the derived absorption (transmission) function for investigation of the dependence of the flux of thermal radiation of ozone on various factors (change of the content and stratification of O_3 and H_2O in the atmosphere, thermal stratification, etc.). The investigation also sought to establish what fraction of the flux of thermal radiation in the spectral region 9-10.3 microns is in relation to the total flux of atmospheric thermal radiation. The data are from the literature, rather than from original research. Critical review

Card 1/3

ACCESSION NR.: AT4033367

of these data indicate that absorption of radiation by water vapor in the region 9-10.3 microns strongly influences the results of determination of atmospheric counterradiation $G_{\Delta}\downarrow(z = 0)$ in this region of the spectrum. The decisive factors for $G_{\Delta}\downarrow(z = 0)$ and $F_{\Delta}\ z = 0$ (where $G_{\Delta}\downarrow$ and $G_{\Delta}\uparrow$ are descending and ascending fluxes and F_{Δ} is effective radiation) are the water vapor content and vertical distribution of temperature in the troposphere. The influence of ozone dominates only when there are very small quantities of water vapor and a large ozone content. At the tropopause and farther aloft the absorption of radiation by water vapor and the change of the H_2O content in the troposphere only slightly influences the results of determination of $G_{\Delta}\uparrow$. The principal factors here are the vertical distribution of temperature and the temperature of the earth's surface. Since $G_{\Delta}\downarrow$ averages less than 5% of the corresponding total flux of atmospheric counterradiation $G\downarrow$ and water vapor plays the principal role in determination of $G_{\Delta}\downarrow$, the influence of ozone on $G\downarrow$, and therefore on the radiation balance of the earth's surface, is extremely insignificant. Stratospheric ozone has a still smaller influence on the total flux of outgoing radiation. It is concluded that in computations of the total flux of thermal radiation which do not require high accuracy the influence of ozone can be neglected. It appears doubtful that the results of surface measurements of atmospheric radiation in the region of the 9.6μ band of ozone can be used for determination of the vertical distribution of

Card 2/3

ACCESSION NR.: AT4033367

ozone. Orig. art. has: 20 formulas, 7 figures and 10 tables.

ASSOCIATION: Leningradskiy universitet (Leningrad University)

SUBMITTED: 00 DATE ACQ: 23Apr64 ENCL: 00

SUB CODE: ES NO REF SOV: 008 OTHER: 024

Card 3/3

ACCESSION NR: AT4033368 S/2960/63/000/002/0028/0047

AUTHOR: Kondrat'yev, K. Ya.; Niylisk, Kh. Yu.

TITLE: The thermal radiation of carbon dioxide gas in the atmosphere

SOURCE: Leningrad. Universitet. Problemy* fiziki atmosfery*, no. 2, 1963, 28-47

TOPIC TAGS: atmospheric physics, atmospheric transmission, atmospheric carbon dioxide, atmospheric thermal radiation

ABSTRACT: Recent theoretical and experimental data have been used to determine the absorption (transmission) function of the atmosphere in the 12-18 micron region. The derived function has been used for investigation of the dependence of the flux of thermal radiation of carbon dioxide gas on various factors (change in the concentration of CO_2 and H_2O in the atmosphere, thermal stratification of the atmosphere, and others). In determining the transmission function of the atmosphere in the spectral region 12-18 microns the function will be dependent on both the content of carbon dioxide gas and on the content of water vapor. A change in the content of carbon dioxide gas in the atmosphere appreciably influences counterradiation only if the presence of water vapor in the atmosphere is not taken into account, but this case is not of practical significance because the atmosphere always contains both carbon dioxide gas and water vapor. In other cases changes in

Card 1/2

ACCESSION NR: AT4033368

counterradiation as a result of an increase or decrease in the CO_2 content are extremely small. The greater the total water vapor content in the atmosphere, the weaker is the dependence of counterradiation on a change in the quantity of CO_2. In the zones 0-10°N and 40-50°N G_{12-18} is almost independent of the CO_2 content of the atmosphere. In the zone 80-90°N the water vapor content of the atmosphere is insignificant and variations in the concentration of CO_2 will have an appreciable influence on G_{12-18}. However, as a result of a decrease of the CO_2 concentration from 0.027 to 0.015% the counterradiation in this latitude zone decreases only by 0.002 cal/cm^{2}min. G_{12-18} constitutes on the average only about 30% of the total counterradiation G_o of the atmosphere. A change in the water vapor content in the atmosphere influences the value G_{12-18} far more than a change in the content of CO_2. In the case of a temperature inversion the influence of a change in the content of CO_2 and water vapor on counterradiation is somewhat less than when there is a normal stratification. Orig. art. has: 5 figures, 17 formulas and 12 tables.

ASSOCIATION: Leningradskiy gosudarstvennyy universitet (Leningrad State University)

SUBMITTED: 00 DATE ACQ: 23Apr64 ENCL: 00

SUB CODE: AA NO REF SOV: 003 OTHER: 019

Card 2/2

KONDRAT'YEV, K.Ya.; NIYLISK, Kh.Yu.

Some results of theoretical calculations of the angular distribution of heat radiation from the earth as a planet under real conditions. Trudy GGO no.166:62-83 '64. (MIRA 17:11)

VAKHENYMM, K.Kh. [Vahenomm, K.], kand. sel'skokhoz. nauk; NIINEPUU, E.V. [Niinepuu, E.]

Hybrid turnip "Kuusiku." Zemledelie 26 no.5:61 My '64. (MIRA 17:6)

1. Estonskiy nauchno-issledovatel'skiy institut zemledeliya i melioratsii.

NIYUNIKOVA, O.I.

Treatment of gonorrhea with synthomycin. Sov.med. 20 no.7:36-39 Jl '56. (MLRA 9:10)

1. Iz otdela gonorrei i mikrobiologii (zav., prof. I.M.Porudominskiy i prof. N.M.Ovchinnikov) TSentral'nogo kozhno-venerologicheskogo instituta (dir. - dotsent N.M.Turanov) Ministerstva zdravookhraneniya SSSR.

(CHLORAMPHENICOL, ther. use
gonorrhea)
(GONORRHEA, ther.
chloramphenicol)

NIZAMETDINKHODZHAYEV, N.

Genesis of sedimentary formations in lead ores of Kalkanata limestones. Izv. AN Uz. SSR. Ser. geol. no.3:27-33 '57. (MIRA 11:9)

(Kalkanata Mountains--Lead ores)

NIZAMETDINOVA, G. A. Cand Vet Sci -- "Effect of various doses of biomycin and streptomycin upon the functional state of the cerebral cortex in healthy animals and under pathological conditions ~~of pathol...~~." Kazan', 1960 (Min Agr USSR. Kazan' State Vet Inst im N. E. Bauman). (KL, 4-61, 206)

KRYLOVA, N.A., prof.; KAZAKOV, I.F., starshiy nauchnyy sotrudnik; NIZAMETDINOVA, G.A., kand. veterin. nauk

Immunity potential of cattle vaccinated against brucellosis and paratyphoid fever. Uch. zap. KVI 89:183-195 '62. (MIRA 18:8)

1. Laboratoriya eksperimental'noy patologii i fiziologii (zav. - prof. N.A.Krylova) Kazanskogo veterinarnogo instituta.

NIZAMETDINOVA, M.

CARD 1 / 2 T PA - 1769

SUBJECT USSR / PHYSICS
AUTHOR AZIMOV,S.A., GULJAMOV,U.G., ZAMČALOVA,E.A., NIZAMETDINOVA, M.
PODGORECKIJ,M.I., JULDAŠEV,A.
TITLE The Investigation of σ-Stars Produced by Negative Pions.
PERIODICAL Žurn.eksp.i teor.fis,31,fasc.5,756-761 (1956)
Issued: 1 / 1957

These σ-stars were produced by negative pions which had come to a standstill in an emulsion chamber. This emulsion chamber consists of a large number of layers without carrier and permits the exact measuring of the energy of the secondary particles by determination of the range of ionization. The emulsion chamber used in this case consisted of 126 emulsion layers of 450 μ thickness each. The chamber was exposed in the stratosphere for a period of 7 hours. When looking through it was observed that light negative mesons got stuck, and those stars were selected which contained at least one secondary charged particle. Furthermore, the true length of the traces of all secondary particles was measured and, if necessary, followed from layer to layer. When looking through, in particular those σ-stars were investigated from the center of which traces of slow electrons could be followed. Such electrons are essentially connected with the mesoatomic stage of the capture of a negative pion, and they are usually created on the occasion of the capture of a negative pion by the heavy nuclei of the photo-emulsion (Ag and Br). The traces of the very slow electrons take the form of thickenings, and the σ-stars corresponding to them were brought into connection with the spallation of Ag- and Br-nuclei.

33116
S/638/61/001/000/043/056
B108/B138

24.2200(1147, 1158, 1164)

AUTHORS: Nizametdinova, M. A., Lobanov, Ye. M.

TITLE: Effect of radioactive radiations on the magnetic properties of ferrites

SOURCE: Tashkentskaya konferentsiya po mirnomy ispol'zovaniyu atomnoy energii. Tashkent, 1959. Trudy. v. 1. Tashkent, 1961, 267-270

TEXT: The variations in the properties of ferrites under neutrons, protons, and gamma irradiation have been studied. Variations in magnetic and electrical properties attributable to variations in the crystal lattice depend on the nature and dose of the radiation as well as on the composition of the ferrite. For this reason several types of ferrites of various shapes were investigated. Irradiation was carried out at the reactor of the Institut atomnoy energii AN SSSR (Institute of Atomic Energy AS USSR) (thermal neutrons), at the synchrocyclotron of the Ob"yedinennyy institut yadernykh issledovaniy (Joint Institute of Nuclear Research) (660-Mev protons), and at the Fiziko-tekhnicheskiy institut AN UzSSR (Physico-

Card 1/2

technical Institute AS UzSSR) (gamma rays, 350,000 r/hr). Measurement showed that total losses increase more rapidly with increasing field strength after, than before irradiation. The hysteresis loop became more rectangular when the ferrite was irradiated. Coercive force generally remained unchanged. Variations in the properties of ferrites under irradiation are either attributed to displacement of the ions in the lattice, or to variation in spin exchange interaction, in the valency of the ions of the interstitial metals, in ion spin orientation, and in domain movement. There are 1 figure, 3 tables, and 5 references: 2 Soviet and 3 non-Soviet.

ASSOCIATION: Institut yadernoy fiziki AN UzSSR (Institute of Nuclear Physics AS Uzbekskaya SSR)

35603
S/166/62/000/001/005/009
B125/B104

24.2210

AUTHORS: Nizametdinova, M. A., Lobanov, Ye. M.

TITLE: The influence of nuclear radiations on ferrites

PERIODICAL: Akademiya nauk Uzbekskoy SSR. Izvestiya. Seriya fiziko-matematicheskikh nauk, no. 1, 1962, 44 - 48

TEXT: The influence of protons and gamma rays on the magnetic permeability $\mu = \mu_1 - j\mu_2$ and the dielectric constant $\varepsilon = \varepsilon_1 - j\varepsilon_2$ has been determined for a cobalt-barium system which filled out the cross section of a coaxial line. The measurements were made with the input impedance Z_{sh} at short-circuit and Z_{idle} at idle run at 300, 500 and 800 ~~мегс~~ Mc. One of the first investigations of this type was made by N. V. Vol'kenshteyn and A. I. Orlov (Izv. AN SSSR, ser. fizicheskaya, vol. 18, 1954, no. 4, 494). The influence of rays on the magnetic properties of ferrites has been found by N. M. Omel'yanovskaya (Atomnaya energiya, v. 7, no. 1, 1959). The following expressions are found $\mu = \gamma' Z_c$ and $\varepsilon = \gamma'/Z_c$ with $Z_k' = Z_c' \operatorname{th}\gamma l$ and

Card 1/2

MUSAYEV, R.T.; NIZAMETDINOVA, M.A.

Mathematical modeling of the chemical process of adsorption using an electronic computer. Vop. vych. mat. i tekh. no.3:119-123 '64.
(MIRA 18:9)

L 42092-66 EWP(e)/T/EWP(t)/ETI IJP(c) JD

ACC NR: AP6019285 SOURCE CODE: GE/0030/66/015/002/K109/K113

47 B

AUTHOR: Akhundov, G. A.; Gasanova, N. A.; Nizametdinova, N. A.

ORG: Institute of Physics of the Academy of Sciences of the Azerbaydzhan SSR, Baku

TITLE: Optical absorption, reflection, and dispersion of GaS and GaSe layer crystals

SOURCE: Physica status solidi, v. 15, no. 2, 1966, K109-K113

TOPIC TAGS: gallium optic material, crystal optic property, Brillouin zone, exciton absorption

ABSTRACT: Optical reflection absorption and dispersion in GaS and GaSe single crystals were measured with a quality prism spectrometer at near normal incidence. The respective spectra are shown in figures 1, 2 and 3. The sharp decrease in absorption at 618 mμ is attributed to exciton absorption. The increase in reflection with wavelength at 484 mμ for GaS and 618 mμ for GaSe was caused by multiple reflections within the crystals. The possibility of a relationship between the reflection peaks and certain transitions in the Brillouin zone is discussed. The authors thank Prof. G. B. Abdullayev and Dr. F. M. Gashinizade for their help. Orig. art. has: 4 figures, 1 formula. [14]

Card 1/3

Σ L2092-66

ACC NR: AP6019285

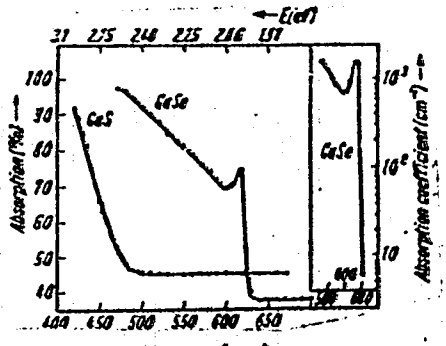


Fig. 1. Absorption spectra of GaS and GaSe at 300°K.

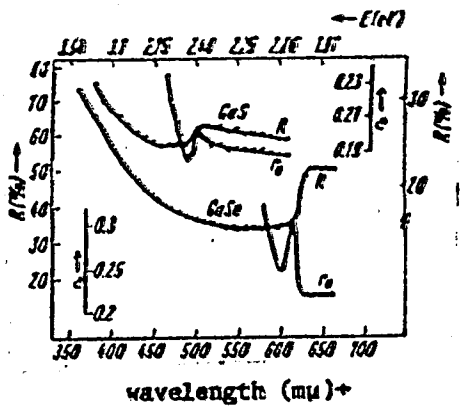


Fig. 2. Reflection spectra of GaS and GaSe at 300°K. R--reflection of the sample; r--surface reflection.

Card 2/3

NIZAMETDINOVA, Ya.F.

Rhizosphere microflora of corn in typical irrigated Sierozem soils. Uzb.biol.zhur. no.1:5-13 '59. (MIRA 12:7)

1. Institut botaniki AN UzSSR.
(Rhizosphere microbiology) (Corn (Maize))

NIZAMETDINOVA, Ya.F.

Some characteristics of bacterial interrelationships in the corn rhizosphere. Uzb.biol.zhur.. no.5:31-40 '59. (MIRA 13:4)

1. Institut botaniki AN UzSSR.
(RHIZOSPHERE MICROBIOLOGY) (CORN (MAIZE))

NIZAMETDINOVA, Ya.F.

Some properties of Pseudomonas malvacearum, a causative agent of cotton gummosis. Nauch. trudy TashGU no.241. Biol. nauki no.44:63-72 '64. (MIRA 18:7)

NEKAYEV, P.; SAYECHNIKOV, I. (Semenov, Gor'kovskoy obl.); NIZAMEYEV, M. (Kazan'); VOSHKULAT, I.

From the mailbox. Mast.prom. i khud.promys. 4 no.4:36 Ap '63. (MIRA 16:10)

1. Predsedatel' obshchestvennogo soveta bytovogo kombinata, Shakhun'ya Gor'kovskoy oblasti.

NIZAMKHODZHAYEV, A.

Solution of the fundamental problems in field theory for a sphere. Sbor. nauch.-issl. rab. TTI no.15:111-124 '62.

Solution of the fundamental problems in the field theory for a spherical layer. 125-136 (MIRA 16:9)

22(1) SOV/47-59-3-26/53

AUTHOR: Nizamov I.M.

TITLE: Feeding a Cathode Tube From an Electrophorus

PERIODICAL: Fizika v shkole, 1959, Nr 3, p 75 (USSR)

ABSTRACT: The author recommends the use of an electrophorus in case it should be impossible to use a high-voltage inductor for the feeding of cathode ray and gas-discharge tubes. One of the tube electrodes is to be directly connected with the conductor of the machine, and the other through a 2-3 mm spark gap. It is not suitable to connect electrodeless tubes in this way, as the spark can break the glass, particularly at the sealed end.

ASSOCIATION: Vanyshevskaya srednyaya shkola, Buravevskogo rayona, Bashkirskoy ASSR (Vanyshevskaya Secondary School, Burayevskiy Rayon, Bashkir ASSR)

Card 1/1

NIZAMOV, M., master-povar

Continuous delivery of vegetables. Obshchestv.pit. no.2:48 '57.
(MIRA 11:4)

(Tashkent--Vegetables)

NIZAMOV, S.K.

The MD-54 narrow-gauge motorcar. Biul.tekh.-ekon.inform. no.2:66-68 '60. (MIRA 13:6)
(Railroad motorcars)

NIZAMOV, S.K., inzh.; BEGAN-BOGATSKIY, P.Z., inzh.

Narrow gauge MD54-4 diesel locomotive. Elek.i tepl. tiaga 5 no.12:32 D '61. (MIRA 15:1)

(Diesel locomotives)

BAGIROV, S.M.; NIZAMOV, T.I.; EFENDIZADE, A.A.

Bit load. Izv. vys. zav.; neft' i gaz 7 no.6:21-25 '64.
(MIRA 17:9)

1. Azerbaydzhanskiy institut nefti i khimii imeni M. Azizbekova, i Energeticheskiy institut imeni I.G. Yes'mana.

ARATOV, I.S.; KAPLAN, N.M., inzh.; NIZAMOVA, N.M., inzh.;
GUSEVA, M.I., inzh.

Various information. Masl.-zhir. prom. 29 no.3:39-40 Mr '63.
(MIRA 16:4)

(Oil industries)

RAKHIMOV, A.; BRONOVITSKIY, V.Ye.; NIZAMUTDINOV, Kh.

Preparation of graphite plastics from graphite ores in Central Asia. Uzb. khim. zhur. 8 no.6:72-78 '64. (MIRA 18:4)

1. Nauchno-issledovatel'skiy institut khimii i tekhnologii khlopkovoy tsellyulozy Gosudarstvennogo komiteta khimicheskoy promyshlennosti pri Gosplane SSSR.

VOLODIN, M.N., inzh.; NIZAMUTDINOV, R.G., inzh.; PUCHKOVSKIY, V.V., kand. tekhn. nauk

Bench testing of wet transformers of low capacity. Elek.sta. 29 no.6:77-79 Je '58. (MIRA 11:9)
(Electric transformers--Testing)

MYAKININ, Ye.G., kand.tekhn.nauk; NIZAMUTDINOV, R.G., inzh.; SHATROV, M.A., inzh.

Temperature condition of a compounding process. Elektrotekhnika 35 no.12:50-51 D '64. (MIRA 18:4)

POLAND

NIZANKOWSKA, S.

"Publications Issued by the (Polish) Metallurgical Institute and its Staff Between 1945 and 1954," by S. NIZANKOWSKA; Prace Instytutow Ministerstwa Hutnictwa, Gliwice, Nos. 2-4. 1955.

[redacted]

NIZANKOWSKI, Czeslaw

Method of preparation of transparent anatomical preparation with special reference to a new method. Postepy hig.med.dosw. 9 no.2: '55.

1. Zaklad Anatomii Opisowej AM Wroclaw, ul. Chalubinskiego 6a.
(ANATOMY,
Transparent anat.model, technic.)

NIZANSKY, J.

GEOGRAPHY & GEOLOGY

Periodicals: KRASY SLOVENSKA Vol. 36, no. 2, Feb. 1959

NIZNANSKY, J. Charm of the Beskydy Mountains in the wintertime. p.42.

Monthly List of East European Accessions (EEAI) LC, Vol. 8, No. 5, May 1959, Unclass.

NIZE, V.

Automatic control is the base for technological development.
NTO 3 no. 1:44-46 Ja '61. (MIRA 14:2)

1. Glavnyy spetsialist Gosudarstvennogo komiteta Soveta Ministrov SSSR po avtomatizatsii i mashinostroyeniyu.
(Automation)

HIZE, Vladimir Aval'dovich; KUBLANOVSKIY, L.E., kandidat tekhnicheskikh nauk, nauchnyy redaktor; SMIRNOVA, A.P., redaktor izdatel'stva; MEDVEDEV, L.Ya., tekhnicheskiy redaktor

[Automatization and dispatching in water supply systems] Avtomatizatsiia i dispetcherizatsiia sistem vodosnabzheniia. Moskva, Gos. izd-vo lit-ry po stroit. i arkhitekture, 1956. 241 p. (MLRA 9:11)
(Water supply engineering)

NIZE, V.E.

Instruments used in scientific research. Priborostroenie no.9: 12-14 S '61. (MIRA 14:9)
(Research) (Instruments)

33448
S/119/62/000/001/001/011
D201/D302

9,6000 (1040, 1139, 1159)

AUTHORS: Grishin, A.I., Kavalerov, G.I., Nize, V.E., Orshanskiy D.L., Pavlenko, V.A., Sotskov, B.S., and Yurkevich, A.P.

TITLE: Recent trends in the development of instrumentation

SOURCE: Priborostroyeniye, no. 1, 1962, 1 - 5

TEXT: A survey of recent trends in the development of instrumentation within the Soviet-bloc is given. The main objective is the standardization of instruments with the aim of simplifying the automation of industrial processes. A group of new temperature gauges is based on the dependence of gas viscosity on temperature. Another class of gauges is based on the temperature change of a plate resistance, in conjunction with a compensating plate and an electromagnetic circuit. Efforts are made to utilize the Austin effect. For high temperature operation (above 2000°C), graphite p-n junction thermocouples have been developed. New flow gauges have been produced for the petroleum industry. Several interchangeable high-

Card 1/4

Recent trends in the development ...

accuracy feed-back devices have been developed for measuring various parameters such as pressure and vacuum gauges, strain gauges, thermometers and density meters. Nuclear resonance methods are being developed for contactless flow measurement. Ultrasonic and radio-interference methods are used for level measurements and recordings. All new types of instruments are incorporated in new automatic control systems, developed around them. In 1961, 400 types of electrical measuring instruments were in production, varying from laboratory standards to high power distributing panel instruments. High sensitivity miniature meters are under development (1 - 2 cm^3 volume, 5 - 10 microcamps range). The accuracy of portable instruments is being improved and their dimensions are reduced. Digital instruments, both of continuous action and sampled data types continue to find more and more applications. As far as analytical instruments are concerned, the main trend is to increase the number of methods of analysis applicable in practice, to increase the discriminating properties, sensitivity and speed of operation, to standardize the electrical output, to develop analytical instruments suitable for automatic control processes, to develop automatic and

Card 2/4

Recent trends in the development ...

semi-automatic instruments. Those of interest are stated to be the newly developed series of standardized galvanic gas analyzers based on the micro-concentration of oxygen. Another method has been used in developing a spectrophotometric gas analyzer, with a sensitivity 10 times greater than that of the basic instrument; the instruments have ranges from 0 - 1.0 % volume of nitrogen in argon and 0 - 0.5% volume of nitrogen in helium. The range of gas analyzers based on infra-red absorption has been increased by several new instruments. Mention is made of a new instrument calibrated in 0 - 0.05 % CO_2, with output adapted to an automatic control system. New types of mass-spectrometers have been developed; with mass number ranges 1 to 600 ME, revolution 300 and sensitivity (argon) 0.002 %. All spectrometers are being revised to form a single range of six instruments. A radiospectrometer has been developed for the electron paramagnetic particles: Its production has started. Electrometric methods of liquid analysis and control are under development. Of interest is stated to be an industrial instrument for measuring and controlling HCl concentration in wood pulp with a varying solid to liquid phase. Other types of concentration meters were also develo-

Card 3/4

Recent trends in the development ...

ped, both for inorganic and organic analysis: Some are based on spectrometry. As far as the computer technique is concerned, three main trends are considered: The use of universal electronic computers for scientific and engineering calculations; the use of computers in economics and for processing large amounts of information; Application of control computers for the control and automatic control of industrial processes. In new computers the existing mercury and CRT delay lines are replaced by magnetic core memories and tubes by transistors. Modular technique is widely used together with micro-miniaturization. A new storage element has been developed based on the effect of stable internal polarization. Another interesting new component is the magnetic triode, consisting of a p-n junction, formed by alloying the intrinsic material with lead and tellurium.

Card 4/4

NIZE, Wlodzimierz

The universal automatic. Przegl techn 84 no.40: 1,3 6 O.'63.

1. Panstwowy Komitet to spraw Automatyzacji i Budowy Maszyn przy Radie Ministrow ZSRR, Moskwa.

G

KIZHEVATOVA, Maria

Order of life of children in sanatoria and preventoria. Gruzlica 22 no.11:825-827 Nov 54.

1. Sanatorium przeciwgruzlicze dla dzieci w Joworzu

(OCCUPATIONAL THERAPY, in various diseases
tuberc. in children, life order in sanatoria)
(TUBERCULOSIS, in infant and child
ther., occup. as part of life order in sanatoria)

WIZEGORODCEW, Maria

Effect of INH on tuberculin allergy in BCG-vaccinated children.
Gruzlica 31 no.6:670-672 Je '63.

1. Sanatorium w Jaworzu.

*

NIZEGORODCEW, Maria; KRZYSZKOWSKA, Anna; DYDAS, Julian

Effect of BCG on specific lesions in organs during tuberculosis in guinea pigs infected with strain H37Rv. Gruslica 25 no.12:977-984 Dec 57.

1. Z Sanatorium Przeciwgruslicznego dla Dzieci w Jaworzu. Dyrektor: dr med. M. Nizegorodcew. Adres: Warszawa, ul. Plocka 26.
(BCG VACCINATION, exper.
eff. on develop. of gastrointestinal tuberc. in guinea pigs, comparison of various ways of admin. (Pol))

KRZYSZKOWSKA, Anna; NIZEGORODCEW, Maria

Changes in cutaneous tuberculin sensitivity in children following sanatorial therapy. Gruzlica 31 no.1:33-40 '63.

1. Z Dzialu Metodyczno-Organizacyjnego Instytutu Gruzlicy Kierownik: doc. dr O. Buraczewski Dyrektor Instytutu: prof. dr W. Jaroszewicz i z Sanatorium Przeciwgruzliczego dla Dzieci w Jaworzu Dyrektor: dr med. M. Nizegorodcew.

(TUBERCULOSIS IN CHILDHOOD)
(TUBERCULIN REACTION)
(ANTITUBERCULAR AGENTS)

NIZEGORODCOM, V.A.

The important yet neglected importance of colors in production.
Przegl techn no.51:3,5 21 D '60.

NIZEL', V.M.

Circuit for installing an interelectrode gap when operating with a pulse generator. Zav. lab. 30 no.1:50 '64. (MIRA 17:9)

1. Ural'skiy nauchno-issledovatel'skiy institut chernykh metallov.

MARKOV, V.I.; BURMISTROV, S.I.; NIZKL'SKIY, Yu.N.

Alkylation of arenesulfonyl-N-alkylamides by secondary and tertiary alkanols. Zhur. ob. khim. 33 no.5:1520-1522 My '63. (MIRA 16:6)

1. Dnepropetrovskiy khimiko-tekhnologicheskiy institut. (Sulfonic acids) (Alkylation) (Alcohols)

L 16039-66 EWT(m)/EPF(n)-2/EWP(j)/T/EWA(h)/EWA(l) WW/GG/GS/RM

ACC NR: AT6006239 (A) SOURCE CODE: UR/0000/65/000/000/0021/0026

AUTHOR: Nizel'skiy, Yu. N.

65
63

ORG: Institute of Chemistry of High Molecular Compounds, AN UkrSSR (Institut khimii vysokomolekulyarnykh soyedineniy AN UkrSSR)

15,44,55

B+1

TITLE: Study of structural changes in caprone fiber by means of sorption

SOURCE: AN UkrSSR. Modifikatsiya svoystv polimerov i polimernykh materialov (Modification of the properties of polymers and polymeric materials). Kiev, Naukova dumka, 1965, 21-26

TOPIC TAGS: synthetic fiber, sorption, gamma radiation, radiation effect, polyvinyl alcohol, caprone

ABSTRACT: Sorption measurements were used to study structural changes induced in caprone fiber by gamma radiation and subsequent grafting of polyvinyl alcohol. Isotherms of sorption and desorption of water vapor were measured on both the original fiber and fiber modified with polyvinyl alcohol. The coefficients of diffusion of water vapor into the volume of the fiber were calculated. Experimental data showed

Card 1/2

2

L 16039-66

ACC NR: AT6006239

2

that the hygroscopicity of caprone fiber changes as a result of both the irradiation and the grafting of polyvinyl alcohol. The increased sorption of water vapor on fibers irradiated with doses up to 5 Mrad is due to the degradation of polymer chains. At higher doses, the observed decrease of sorption is due to the formation of cross-linked structures, which decrease the affinity of the polymer for water vapor and thus cause an increase in the diffusion coefficient. Orig. art. has: 6 figures.

SUB CODE: 07/ SUBM DATE: 06Oct65/ ORIG REF: 009/ OTH REF: 001

11/

Card 2/2

S/0021/64/000/001/0082/0084

ACCESSION NR: AP4010061

AUTHOR: Guty*rya, V. S. (Academician); Kachan, O. O.; Kolbanovs'ky*y, Yu. A.; Polak, L. S.; Nizel's'ky*y, Yu. M.; Frolova, V. S.

TITLE: Radiolysis of cyclohexane adsorbed by synthetic zeolites

SOURCE: AN UkrRSR. Dopovidi, no. 1, 1964, 82-84

TOPIC TAGS: radiation chemistry, radiolysis cation-exchanger, molecular sieve, zeolite, synthetic zeolite, type X molecular sieve

ABSTRACT: The present work was done to determine the influence of the chemical composition of the adsorbents on the composition of the radiolytic products of cyclohexane. Synthetic zeolites (commercial CoX, NaX, NaCaX and NaNiX) were used to adsorb cyclohexane, which was irradiated with Co^{60} gamma-radiation. The radiolytic products were analyzed by gas chromatography. The results indicate that the presence of two cations in the zeolite, one of them of variable valence, is important for the formation of an adsorbent actively affecting radiolysis. Orig. art. has 2 figures and 1 table.

Card 1/2

ACCESSION NR: AP4010061

ASSOCIATION: Insty*tut khimiyi polimeriv i monomeriv AN UkrRSR (Institute of the Chemistry of Polymers and Monomers, AN UkrRSR); Insty*tut naftokhimichnogo sy*ntezu AN SRSR (Institute of Petrochemical Synthesis, AN SRSR /Ukrainian equivalent of SSSR/)

SUBMITTED: 20Jun63	DATE ACQ: 10Feb64	ENCL: 00
SUB CODE: CH, NS	NO REF SOV: 001	OTHER: 003

Card 2/2

NIZETIC, Branko, Dr.

Modern aspects of aviation ophthalmology. Voj. san. pregl. Beogr. 13 no.11-12:573-580 Nov-Dec 56.

1. Ocno odjeljenje Opce bolnice u Splitu.
(MEDICINE, AVIATION,
ophthalmol. aspects (Ser))
(OPHTHALMOLOGY,
aviation ophthalmol. (Ser))

NIZGURETSKIY, Z.D., inzh.

Using elements of the random function theory for estimating the accuracy of the determination of useful mineral contents and thickness of deposits during geometrization. [Trudy] VNIMI no.50:292-311 '63.

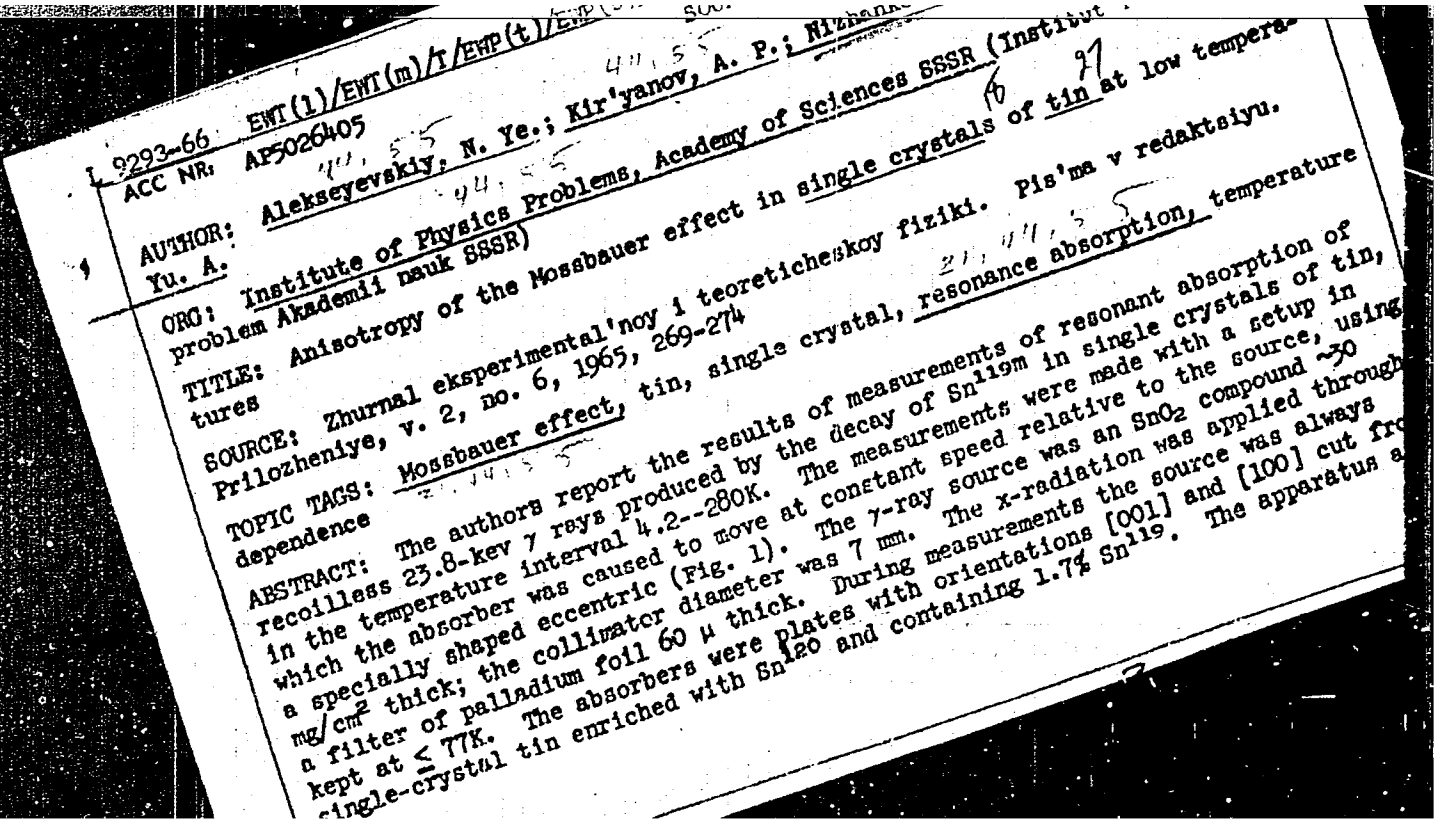
Statistical regularities of the distribution of useful mineral contents in certain Ural deposits. Ibid.:312-322
(MIRA 17:10)

GARBER, L.S., inzh; NIZGURYTSKIY, Z.D., inzh.

Quantitative evaluation of the accuracy of exploratory findings in coal deposit.. [Trudy]VNIIM no.50:3[illegible] '63. (MIRA 17:10)

NIZGURETSKIY, Z.D., inzh.

Distribution curves of metal in ore bodies. [Trudy] VNIMI no.47:272-277 '62 (MIRA 17:7)



L 9293-66 EWT(1)/EWT(m)/T/EWP(t)/ETI
ACC NR: AP5026405

AUTHOR: Alekseyevskiy, N. Ye.; Kir'yanov, A. P.; Nizhank
Yu. A.

ORG: Institute of Physics Problems, Academy of Sciences SSSR (Institut
problem Akademii nauk SSSR)

TITLE: Anisotropy of the Mossbauer effect in single crystals of tin at low tempera
tures

SOURCE: Zhurnal eksperimental'noy i teoreticheskoy fiziki. Pis'ma v redaktsiyu.
Prilozheniye, v. 2, no. 6, 1965, 269-274

TOPIC TAGS: Mossbauer effect, tin, single crystal, resonance absorption, temperature
dependence

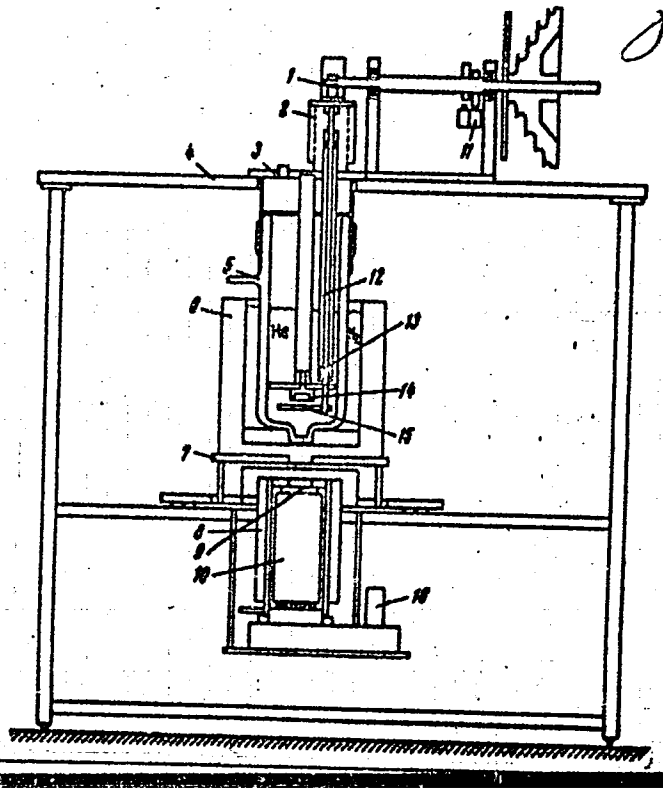
ABSTRACT: The authors report the results of measurements of resonant absorption of recoilless 23.8-kev γ rays produced by the decay of Sn^{119m} in single crystals of tin, in the temperature interval 4.2--280K. The measurements were made with a setup in which the absorber was caused to move at constant speed relative to the source, using a specially shaped eccentric (Fig. 1). The γ-ray source was an SnO_2 compound ~30 mg/cm² thick; the collimator diameter was 7 mm. The x-radiation was applied through a filter of palladium foil 60 μ thick. During measurements the source was always kept at ≤ 77K. The absorbers were plates with orientations [001] and [100] cut fr single-crystal tin enriched with Sn^{120} and containing 1.7% Sn^{119}. The apparatus a

L 9293-66

ACC NR: AP5026405

Fig. 1. Over-all view of the installation.

1 - Eccentric cam, 2 - bellows, 3 - cap, 4 - mounting stand, 5 - helium Dewar, 6 - container for liquid nitrogen, 7 - lead screen, 8 - thermostat, 9 - NaI(Tl) crystal, 10 - FEU-13 photomultiplier, 11 - commutator, 12 - stem, 13 - stuffing box, 14 - radiation source, 15 - absorber, 16 - high-voltage supply.



Card 2/3

L 9293-66

ACC NR: AP5026405

procedure are described briefly. Typical resonance absorption curves and the temperature dependence of the amplitude of the maximum absorption are presented. The experimental data were reduced by a procedure described earlier (G. A. Bykov and Pham Zuy Hien, ZhETF v. 43, 909, 1962). By using large statistics, a stronger source, better instrumental geometry, and single-crystal samples, the authors were able to establish the presence of anisotropy of the Mossbauer effect at 4.2K. The magnitude of the anisotropy was found to be (1.08 ± 0.02), and to go through an inversion in the region T = (40 ± 5)K. The temperature dependence of the Mossbauer-effect anisotropy can probably be attributed to an overlap of the optical and acoustical branches of the phonon spectrum of tin. Orig. art. has: 3 figures and 1 table.

SUB CODE: 20/ SUBM DATE: 20Jul65/ ORIG REF: 003/ OTH REF: 002

Card 3/3

NIZHANSKIY, P. G.

Engineer, Krasnyy Proletariy Plant, "Modern Methods of Painting Machine Tools, "Stanki i Instrument, 10, No 1, 1939.

Report U-1505, 4 Oct 1951.

NIZHANSKIY, P.G.

MASLOV, D.P.; SASOV, V.V.; NIZHANSKIY, P.G.; DEM'YANYUK, F.S., professor, retsenzent; LUR'YE, G.B., prof., redaktor.

[Technology of automobile and tractor construction] Tekhnologiia avtotraktorostroeniia. Moskva, Gos. nauchno-tekhn. izd-vo mashinostroit. i sudostroit. lit-ry, 1953. 628 p. (MLRA 7:6)
(Automobiles--Design and construction) (Tractors--Design and construction)

. NIZHANSKIY, P G

12(2) PHASE I BOOK EXPLOITATION SOV/1513

Maslov, Dmitriy Petrovich, Vladimir Viktorovich Sasov, and Pavel Grigor'yevich Nizhanskiy

Tekhnologiya avtomotostroyeniya (Technology of Building Automobile Motors) 2nd ed. Moscow, Mashgiz, 1958. 694 p. 15,000 copies printed.

Reviewer: A.A. Anders, Engineer; Ed.: B.V. Smirnov, Engineer; Ed. of Publishing House: L.I. Yegorkina; Tech. Ed.: A.Ya. Tikhanov; Managing Ed. for Literature on Automotive, Transport, and Agricultural Machine Building: I.M. Bauman, Engineer.

PURPOSE: This book is approved by the Department of Secondary Schools of the Ministry of Higher Education of the USSR as a textbook for students of machine-building tekhnikums.

COVERAGE: The book describes fundamental machining operations, methods of machining characteristic parts of automobiles and motorcycles, and also problems connected with planning machine shops in automobile plants. The book describes machine tool attachments and gives basic information on attachment design and adaptation to automobile

Card 1/ 20

and motorcycle production. In the compilation of machining data, highly productive and progressive technological processes, characteristic of serial mass-production of parts, were taken into consideration. As a basis of the text, the authors used their tekhnologiya avtotraktorostroyeniye (Technology of Automobile Tractor Construction) published in 1953. Special attention is given to the development of mechanization and automation of production processes and to new achievements in the field of technological processes in the USSR and abroad. Docent L.P. Maslov, Candidate of Technical Sciences was responsible for Parts I,II, and III; Docent V.V. Sasov, Candidate of Technical Sciences for Part IV (with the exception of Chapter XXIX); Docent P.G. Nizhanskiy was responsible for Part V and Chapter XXIX. The bibliography consists of 19 references, all Soviet.

TABLE OF CONTENTS:

MIZHARADZE, Aleksandr Ivanovich; CHILASHVILI, Shalva Yefimovich; AMITIN, Ioan Il'ich, spetsredaktor; DENISOVA, I.S., redaktor; KIRSANOVA, N.A., tekhnicheskiy redaktor

[Dust control in dry boreholes] Bor'ba s pyl'iu pri sukhom burenii shpurov. [Moskva] Izd-vo VTsSPS Profizdat, 1956. 45 p. (MLRA 10:3)
(Boring) (Mine dusts)

NIZHARADZE, A., starshiy nauchnyy sotrudnik, kandidat tekhnicheskikh nauk.

Dry dust removal in boring blast holes. Sots. trud no.4:123-124 Ap '57. (MLRA 10:6)

1. Tbilisskiy institut okhrany truda Vsesoyuznogo tsentral'nogo soveta professional'nykh soyuzov.
(Dust collectors)

NIZHARADZE, A.I., starshiy nauchnyy sotrudnik

TBIOT-54. Okhr. truda i sots. strakh. no.1:78 Jl '58. (MIRA 11:12)

1.Tbilisskiy nauchno-issledovatel'skiy institut okhrany truda Vsesoyuznogo tsentral'nogo soveta profsoyuzov.
(Dust collectors)

NIKHARADZE, Aleksandr Ivanovich; CHILASHVILI, Shalva Yefimovich;
DENISOVA, I.S., red.; RAKOV, S.I., tekhn.red.

[Over-all dust control in underground mines] Kompleksnoe obespylivanie podzemnykh vyrabotok. Moskva, Izd-vo VTsSPS Profizdat, 1960. 107 p. (MIRA 14:1)
(Mine ventilation) (Dust collectors)

NIZHARADZE, A.I.; CHILASHVILI, Sh.Ye.; DZHANIASHVILI, G.G.

Dry dust removal during pipe finishing. Metallurg 7 no.9: 32-33 S '62. (MIRA 15:9)

1. Vsesoyuznyy nauchno-issledovatel'skiy institut okhrany truda, g.Tbilisi.

(Pipe mills—Hygienic aspects)

NIZHARADZE, G. I.: Master Med Sci (diss) -- "Material on the clinical aspects and the pathoarchitectonics of the central nervous system in young children in toxic forms of bacterial dysentery". Tbilisi, 1958. 14 pp (Tbilisi State Med Inst), 200 copies (KL, No 4, 1959, 131)

BOKERIYA, M.S.; NANEYSHVILI, B.R.; NIZHARADZE, G.I.

Some problems in the pathomorphology of the central nervous system in young children with different forms of pneumonia. Soob. AN Gruz. SSR 26 no.5:619-621 My '61. (MIRA 14:8)

1. Tbilisskiy gosudarstvennyy institut usovershenstvovaniya vrachey. Predstavleno akademikom A.D.Zurabashvili.
(CHILDREN--DISEASES) (PNEUMONIA) (NERVOUS SYSTEM--DISEASES)

VISHNEVETSKAYA, L.O.; MIZHARADZE, G.I.

Clinical morphological changes in lungs in sepsis of the newborn. Soob. AN Gruz. SSR 30 no.3:373-378 Mr '63.
(MIRA 17:6)

1. Tbilisskiy gosudarstvennyy institut usovershenstvovaniya vrachey. Predstavleno akademikom A.D. Zurabashvili.

NIZHARADZE, G.I.

Pathogenesis and morphology of pneumonia in children during the first days of life. Soob. AN Gruz. SSR 35 no.3:681-687 S '64.
(MIRA 17:11)

1. Institut usovershenstvovaniya vrachey, Tbilisi. Predstavleno akademikom A.D. Zurabashvili.

NEMARADZE, G.I.

Congenital pneumonias in newborn infants. Soob. AN Gruz. SSR 4[illegible]
35.1:187-194 O '65. (MIRA 18:12)

1. Tbilisskiy gosudarstvennyy institut usovershenstvovaniya vrachey. Submitted April 9, 1965.

L 02427-67 EWT(m)/T/EWP(t)/ETI IJP(c) JD/JG

ACC NR: AP6031728 SOURCE CODE: UR/0136/66/000/009/0072/0074

AUTHOR: Kolchin, O. P.; Filipenko, V. V.; Nizharadze, K. S.; Abramovich, Z. B.; Sumarokova, N. V.; Man'shchikov, V. A.

36
35
B

ORG: none

TITLE: Synthesis of niobium carbide with a low nitrogen content

SOURCE: Tsvetnyye metally, no. 9, 1966, 72-74

TOPIC TAGS: niobium carbide, high purity carbide, ~~low nitrogen niobium carbide~~, niobium carbide synthesis, NIOBIUM COMPOUND, CARBIDE, NITROGEN, OXYGEN, CHEMICAL SYNTHESIS

ABSTRACT: An investigation has been made of the various factors which contribute to the contamination with nitrogen and oxygen of niobium carbide produced by a continuous process in the Tamman furnace. The investigation results showed that the only significant source of contamination was the inflow of air into the reaction chamber when the furnace was opened every 30 min for charging and removing the final product. Modification of the charge chamber decreased the cross section of the charging shute from 1000 to 160 cm^2, cut in three the number of openings required to charge the chamber, and sharply reduced the amount of the air flowing in through a narrowed charge shute. A hydraulic lock was also installed for combustion gases, which made it possible to increase the pressure of gases in the furnace to 100—200 mm Hg and thus practically eliminate the inflow of air into the furnace.

Card 1/2 UDC: 669.293

L 02427-67

ACC NR: AP6031728

The resulting improvement of the process substantially improved the quality of niobium carbide produced. The niobium carbide produced in the modernized furnace contained 89.32—89.63% Nb(+Ta), 0.03—0.14% Fe, 10.0—10.4% C, and only 0.028—0.059% N and 0.14—0.52% O, instead of the previous 0.3% N and 2—3% O. Tantalum carbide with a low content of nitrogen and oxygen was also produced in the modernized furnace, and it is believed that pure carbides of other refractory metals can be produced in it. Orig. art. has: 2 figures.

SUB CODE: 07 / SUBM DATE: none/ ORIG REF: 005/ OTH REF: 001

Card 2/2

NIZHARADZE, Nadim Isetovich; DZHIBUTI, Nadezhda Makarovna

[Adzhar A.S.S.R.] [Adzharskaia ASSR. Batumi, Gos.izd-vo] 1957. 263 p. [In Georgian] (MIRA 12:2)

(Adzhar A.S.S.R.--Economic conditions)

NIZHARADZE, Nadim Izetovich, kand. geogr. nauk, dots; GAVRILOVA, S., red.; DZHIBUTI, N., red.; GOGRONIDZE, V., tekhn. red.

[Soviet Adzharia; economic and geographical features] Sovetskaia Adzhariia; ekonomiko-geograficheskaia kharakteristika. Batumi, Gos. izd-vo, 1961. 259 p. (MIRA 14:10)
(Adzharistan--Economic geography)

MIZHARADZE, M.V.

Ertso mercury ore manifestation. Trudy GPI [Gruz.] no.2: 105-114 '63. (MIRA 17:9)

NIZHARADZE, S.R.

Projective scale on a conic section and its properties. Uch. zap. MOPI 123:395-406 '63. (MIRA 17:4)

NIZHARADZE, S.R. (Batumi); SOLNTSEVA, T.V. (Moskva)

Construction of nomograms on universal curves of the third order. Nom. sbor. no.2:145-152 '64. (MIRA 18:3)

NIZHEGOL'SKIY, N.F.

First conference of the efficiency promoters and innovators of the Stalino Administration of Gas Mains. Gaz.prom. 5 no.11:51-52 N '60. (MIRA 13:11)

(Gas, Natural--Pipelines)

NIZHEGOL'SKIY, N.F.

Device for packing linear cocks with grease. Gaz.prom. 6 no.2: 38-39 '61. (MIRA 14:4)

(Gas, Natural--Pipelines)

NIZHEGORODOV, A.I.; PORTNOV, M.N., red.; DEYEVA, V.M., tekhn. red.; TRU-KHINA, O.N., tekhn. red.

[People, machinery, and crop yields] Liudi, tekhnika, urozhai. Moskva, Gos. izd-vo sel'khoz. lit-ry, 1960. 46 p. (MIRA 14:7)
(Farm mechanization)

NIZHEGORODOV, M. F., Eng.

Clay

Physico-technical and water characteristics of cracked clays. Gidr. stroi., 20, No. 5, 1951

Monthly List of Russian Accessions, Library of Congress, November 1952. UNCLASSIFIED.

NIZHEGORODOV, M. F.

Development of anticlines in oil fields. Biul.MOIP.Otd.geol.38 no.2:159-160 Mr-Ap '63. (MIRA 16:5)

(Petroleum--Geology)

15(2) SOV/72-59-1-10/16

AUTHORS: Dobuzhinskiy, V. I., Zayonts, R. M., Nizhegorodov, N. N.

TITLE: Faience Firing in Screened Tier Carts of Oil-Heated Tunnel Furnaces (Obzhig fayansa v ekranirovannykh etazherochnykh vagonetkakh tunnel'nykh pechey, otaplivayemykh mazutom)

PERIODICAL: Steklo i keramika, 1959, Nr 1, pp 29-33 (USSR)

ABSTRACT: In 1955 G. A. Biryukov, N. N. Yermakov, M. D. Kuznetsova, Assistants at the Kirovskiy zavod stroitel'nogo fayansa (Kirov Works of Building Faience) and the authors of this article suggested to protect the products to be fired against direct exposure to the oil flame by refractory screens. A series of firing tests without molds yielded good results, and therefore 2 tunnel furnaces were adapted to the new firing method at the Kirov Works (Fig 1). The control diagram of the furnace is shown in figure 2. A two-step shelf for the products to be fired is shown in figure 3, its parts in figure 4. The shelf parts are made of cordierite developed by R. K. Kordonskaya at the NIIStroykeramika. Table 2 shows temperature conditions for firing in molds as compared to that carried out on shelves. Due to the adaptation

Card 1/2

Faience Firing in Screened Tier Carts of Oil-Heated Tunnel Furnaces

of the tunnel furnaces considerable savings as well as an increase in the furnace output and a decrease in specific fuel consumption were attained. There are 4 figures and 2 tables.

ASSOCIATION: Kirovskiy zavod stroitel'nogo fayansa
(Kirov Works of Building Faience)

Card 2/2

NIZHEGORODOV, O. [Nyzhehorodov, O.]

Idea of a rolling mill operator has been approved by an academician. (MIRA 15:1)
Nauka i zhittia 11 no.10:42-43 O '61.
(Rolling (Metalwork))

NIZHEGORODOV, P. S.

NIZHEGORODOV, P. S.--"Procedure for Teaching High Jumps Using the "Roll" Method." *(Dissertations for Degrees in Science and Engineering Defended at USSR Higher Educational Institutions.) State Order of Lenin and Order of Red Banner Inst of Physical Culture imeni P. F. Lesgaft, Leningrad, 1955

SO: Knizhnaya Letopis', No. 25, 18 Jun 1955

* For Degree of Candidate In Pedagogical Sciences

NIZHEGORODOV, V. M.: Master Med Sci (diss) -- "The effect of ascorbic acid on the course of carboxytoxicosis". L'vov,1958. 16 pp (L'vov State Med Inst), 200 copies (KL, No 4, 1959, 131)

NIZHEGORODOV, V.M.

Vitamin C metabolism in the animal organism as affected by small doses of carbon monoxide. Vrach.delo no.2:181-184 F '58. (MIRA 11:3)

1. Kafedra obshchey gigiyeny (zav.-prof. V.Z.Kartynyuk) L'vovskogo meditsinskogo instituta.
(ASCORBIC ACID) (CARBON MONOXIDE--PHYSIOLOGICAL EFFECT)

NIZHEGORODOV, V.M.

Capacity of some tissues of the animal body to regenerate dehydroascorbic acid in chronic carbon monoxide poisoning. Zdrav.Bel. 8 no.7:64-66 Jl '62. (MIRA 15:11)

1. Kafedra obshchey gigiyeny (ispolnyayushchiy obyazannosti zaveduyushchego - kand.med.nauk V.M.Nizhegorodov) Grodnenskogo meditsinskogo instituta (rektor - dotsent L.F.Supron).
(CARBON MONOXIDE--TOXICOLOGY)
(DEHYDROASCORBIC ACID)

NIZHEGORODOV, V.M.

Effect of chronic carbon monoxide intoxication on the daily vitamin C requirement of the animal organism. Zdrav.Bel. 8 no.12:50-53 D '62. (MIRA 16:1)

1. Kafedra obshchey gigiyeny (ispolnyayushchiy obyazannosti zaveduyushchego - kand.med.nauk V.M.Nizhegorodov) Grodnenskogo meditsinskogo instituta.
(ASCORBIC ACID) (CARBON MONOXIDE—PHYSIOLOGICAL EFFECT)

VORONIN, A.P.; NIZHEGORODOV, V.M., dotsent; KALININ, I.T., assistent

Conditions of storage, transport and use of poisonous chemicals.
Zdrav. Bel. 9 no.7:55-56 Jl '63 (MIRA 17:4)

1. Iz kafedry obshchey gigiyeny (zav. - dotsent V.M.Nizhegorodov) Grodnenskogo meditsinskogo instituta.

L 07832-67 EWT(1)/EWP(e)/EWT(m)/EEC(k)-2/EWP(t)/EWP(k) IJP(c) WW/JW/WH

ACC NR: AP6033817 SOURCE CODE: UR/0168/66/000/004/0103/0105

AUTHOR: Nizhegorodova, I. V.; Fadeyev, V. V.; Shvom, Ye. M.; Shklover, L. P.

ORG: Department of Wave Processes, Moscow State University (Kafedra volnovykh protsessov, Moskovskiy gosudarstvennyy universitet)

TITLE: Q-switching of ruby laser with help of bleachable filters made of phthalocyanine solutions

SOURCE: Moscow. Universitet. Vestnik. Seriya III. Fizika, astronomiya, no. 4, 1966, 103-105

TOPIC TAGS: ruby laser, laser modulation, passive Q switch, liquid Q switch, metal phthalocyanine

ABSTRACT: The dynamics of development of giant pulses and optimization of parameters of a ruby laser with a bleachable liquid filter, the Q-switching efficiency of the filter as a function of its absorption characteristics, have been studied experimentally. The experimental setup consisted of a 120 mm ruby rod 12 mm in diameter and a cell with a phthalocyanine solution which was placed in the cavity of the laser. The cavity was formed by a mirror with 99% reflection and a plane-parallel glass plate as the exit mirror. The bleaching process was initiated under the effect of fluorescence, then developed under the effect of an ordinary laser pulse which grew into a giant pulse by an avalanche-type mechanism. The coefficient of initial transmission (T) of the filter should satisfy the equation $R_1T^2 \geq R_{eff}$, where R_1 is the

UDC: 621.378.325

Card 1/2

reflection coefficient of one of the mirrors (99% in the experiment) and Reff is the reflection coefficient of the exit mirror. The width of the absorption band of the bleachable solution should be less than 300 Å and the shift of its absorption peak in relation to the pulse emitting wave length should be less than 50 Å for a good Q-switching filter. These conditions were met to an optimum degree in solutions of vanadyl phthalocyanine in nitrobenzene, zirconium phthalocyanine in nitrobenzene and in benzyl alcohol. Giant pulses of 70, 70, and 55 Mw, respectively, were obtained with the above solutions, at 12 kJ pumping energy and T = 12%. The output power of the giant pulses was one or two orders of magnitude lower with the solutions of aluminum phthalocyanine chloride in nitrobenzene or ethyl alcohol and of zirconium phthalocyanine in toluene or ethyl alcohol. The authors thank S. A. Akhmanova and R. V. Khokhlova for valuable discussion. Orig. art. has: 3 figures and 1 table.

SUB CODE: 07, 20/ SUBM DATE: 22Sep65/ ORIG REF: 003/ OTH REF: 003/ ATD PRESS: 5101

KAZAKOVA, Ye.A., kand.tekhn.nauk; CHERNYAVSKAYA, M.K.; NIZHEGORODOVA, N.V.

Enrichment of weak nitrous gases by adsorption in a fluidized bed. Khim.prom. no.7:506-512 Jl '62. (MIRA 15:9)
(Nitrogen oxide) (Adsorption) (Fluidization)

NIZHEGORODTSEV, N.

Machinery cleans the premises. Okhr.truda i sots.strakh. 5 no.10:38 O '62. (MIRA 15:11)
(Cleaning machinery and appliances)