L 46009-66 EWT(1) GW
ACC NR: AR6029452 SOURCE CODE: UR/0169/66/000/005/D001/D001

AUTHOR: Kozlov, M. F.; Shapoval, L. I.; Fadeyeva, M. V.

TITLE: Principles of the disposition of a network of deep observation wells on the territory of the Belorussian SSR

SOURCE: Ref. zh. Geofizika, Abs. 5D4

REF SOURCE: Sb. Materialy 1-y Nauchn. konferentsii molodykh geologov Belorussii. Minsk, 1965, 147-148

TOPIC TAGS: geophysical exploration, Belorussian geostructure

ABSTRACT: In establishing a network of exploration wells within the territory of the Belorussian SSR the basic criteria used were geostructural elements which were at the same time large hydrogeological units. Such geostructural elements in the west are the Belorussian Massif and the adjacent Brest and sub-Baltic depressions, and in the east the Moscow and Pripyat' basins. In determining the location of wells within the individual hydrogeological regions, hydrodynamic, hydrochemical, geothermal, and gas characteristics of the different abyssal layers were taken into account. M. Konychev. [Translation of abstract] [SP]

SUB CODE: 08/

Card 1/1 UDC: 550.9(476)

FADEYEVA, M.V.

Formation of the cone of a trough of underground waters in the area of an acting water intake near the river. Dokl. AN BSSR 9 no.3:180-182 Mr '65. (MIRA 18:6)

1. Institut geologicheskikh nauk Gosudarstvennogo geologicheskogo komiteta SSSR.

FADEYEVA, M.V.

Experience in the determination of the coefficient of seepage from the data on water intake over a period of many years. Dokl. AN BSSR 9 no. 4:238-239 Ap '65.

1. Institut geologicheskikh nauk Gosudarstvennogo geologicheskogo komiteta SSSR. Submitted March 12, 1964.

S/046/60/006/02/15/019
B014/B014

AUTHORS: Makarov, V. I., Fadeyeva, N. A.

TITLE: Wave Emission by Shells Located in a Sound Field

PERIODICAL: Akusticheskiy zhurnal, 1960, Vol. 6, No. 2, pp. 261-263

TEXT: Fig. 1 shows the sound field in a steel cylinder treated with ultrasonic waves in one direction (arrow). The beam is so wide that a diffraction grating is formed, whose period is equal to the wavelength. The authors studied the determination of the propagation velocity of the waves from the radius of the caustic. Finally, the study of shells of different shapes is described (Figs. 2 and 3). It is shown that the method described may also be used to study sound fields in complex shells. There are 3 figures and 8 references: 4 Soviet, 3 German, and 1 American.

ASSOCIATION: Kafedra akustiki Moskovskogo gosudarstvennogo universiteta (Chair of Acoustics of Moscow State University)

SUBMITTED: September 9, 1959

Card 1/1

S/131/60/000/04/10/015
B015/B008

AUTHORS: Kaybicheva, M.N., Tulin, N.A., Bastrikov, N.F., Fadeyeva, N.I.

TITLE: Wall-blocks of Electric Steel-melting Furnaces From Scrap of Magnesite-chromite Bricks

PERIODICAL: Ogneupory, 1960, No. 4, pp. 186-188

TEXT: Experiments with these wall-blocks which were carried out at the Chelyabinskiy metallurgicheskiy zavod (Chelyabinsk Metallurgical Plant) are described in the paper under review. The charge was produced by crushing scrap of used magnesite-chromite- and chrome-magnesite bricks. The chemical composition of the experimental charges is given in table 1 and their granulation in table 2. Various grades of steel were smelted in the furnace with magnesite-chromite wall-blocks, the temperature of the metal before tapping being between 1560 and 1640°. It is stated in conclusion that the stability of the magnesite-chromite wall-blocks rammed from scrap is not inferior to that of wall-blocks made from magnesite powder. Various other furnace parts can also be produced from ground scrap of used bricks. The consumption of metallurgical

Wall-blocks of Electric Steel-melting Furnaces From Scrap of Magnesite-chromite Bricks

S/131/60/000/04/10/015
B015/B008

magnesite powder may be reduced by using scrap. There are 2 tables.

Card 2/2

KAYBICHEVA, M.N.; FADEYEVA, N.I.; TULIN, N.A.; SHATALOV, M.I.

Basic refractory wastes are a valuable raw material. Metallurg 6 no. 1:18-20 '61. (MIRA 14:1)

1. Vostochnyy institut ogneuporov i Chelyabinskiy metallurgicheskiy zavod.

(Refractory materials)

FADEYEVA, N.I.

Some results of testing perennial lawn grasses. Trudy Alma-At.bot. sada 5:132-150 '60. (MIRA 13:6)
(Alma-Ata--Grasses) (Lawns)

KAYBICHEVA, M. N.; FADEYEVA, N. I.; Prinimali uchastiye: KOSOLAPOV, Ye. F.; GILEV, Yu. P.; DRESVYANKIN, V. I.; MIKHAYLOV, V. S.

Studying conditions of service and the character of roof failure in electric steel smelting furnaces. Trudy Vost. inst. ogneup. no.2:101-117 '60. (MIRA 16:1)

(Electric furnaces—Maintenance and repair)
(Refractory materials—Testing)

DVOYENOSOV, Dzhon Vladimirovich; ZAMYATIN, Valeriy Mikhaylovich; SNESHKO, Yuriy Ivanovich; FADEYEVA, N.N., kand. tekhn. nauk, red.; GODINER, F.Ye., red.; SORKIN, M.Z., tekhn. red.

[Loads acting on a glider in flight] Nagruzki, deistvuiushchie na planer v polete. Moskva, Izd-vo DOSAAF, 1963. 138 p. (MIRA 16:8)
(Gliders (Aeronautics))

FADEYEVA, N. R

USSR/Microbiology - General Microbiology. F-1

Abs Jour : Ref Zhur - Biol., No 3, 1958, 9777

Author : Bekker, Z.E., Ostroukhov, A.A., Smirnova, A.D., Kosheleva, N.A., Fadeeva, ~~N.P.~~

Inst : -

Title : Growth Manifestations in Submerged Cultures of Peninillium Chrysogenum Thom.

Orig Pub : Antibiotiki, 1956, 1, No 3, 40-47

Abstract : Mycelial cells of P. chrysogenum Q 176 in a submerged culture on a Stoun and Farrel medium in a 1000 liter apparatus with mixing at 200 rpm and aeration of 1 volume of air per volume of medium per minute, undergo very characteristic transformation during cultivation, which may be provisionally represented in the form of 6 growth phases. The I phase: germination of conidia (begins in 13-24 hours from the time conidia are inoculated in the nutrient medium). Conidia swell and form one or several growth tubes.

Card 1/4

USSR/Microbiology - General Microbiology. F-1

Abs Jour : Ref Zhur - Biol., No 3, 1958, 9777

The second stage-- from IV to VI growth phases-- is characteristic of reduction and a prevalence of dissimilation of reserve substances. The second stage of development is chiefly connected with the process of penicillin formation. Results of observations on development of penicillin production in a submerged culture are used for microscopic control of fermantation in production.

Card 4/4

Using serological reactions in identifying Actinomycetes with the aid of sonically treated antigens. N. K. Solov'eva, I. E. Il'piner, and N. P. Fadeeva (All-Union Sci. Research Inst. Antibiotics, Moscow). *Mikrobiologiya* 25, 631–0 (1950).—Subsurface cultures in a maize mash of Actinomycetes yielded the most effective antigens after exposure to ultrasonic vibrations (740,000 cycles/sec.). Serological tests were used to show close or distant relations; the test varieties were *Actinomyces globisporus*, 3 varieties; *A. rimosus*, 2 strains; *A. aureofaciens*; *Streptomyces lavendulae*; *S. violaceus*; and *S. fradiae*. Julian E. Smith

~~Solov'yeva~~, FADEYEVA, N. P.

USSR/ Microbiology. General Microbiology F-1

Abs Jour: Ref Zhur - Biol., No 6, 1958, 24052

Author : Solov'yeva N. K., Rudaya, S. M., Tayg, M. M., Fadeeva, N. P.
Inst : Not given
Title : Morphologo-Cultural and Antagonistic Properties of Verticillate Actinomycetes.

Orig Pub: Antibiotiki, 1957, 2, No 2, 21-26

Abstract: Eighty-five verticil cultures of actinomycetes were studied, isolated chiefly from soils of Pamir. On the basis of the verticillate character of the cultures studied, they are divided into 2 groups; cultures with straight and arranged into verticillate (primary and secondary) sporidifera; cultures with spiral sporifera arranged in verticils. Verticillate cultures with straight sporodifera occur

Card 1/2

All Soviet Antibiotics

USSR/ Microbiology. General Microbiology F-1

Abs Jour: Ref Zhur - Biol., No 6, 1958, 24052

Abstract: considerably more frequently. The majority of the cultures of the first group are related to Actinomyces verticillatus, some cultures are considered as varieties of these species. Cultures of the second group are related to A. circulatus and Streptomyces reticuli. One strain (67) is considered a variety of S. rubrireticuli. Cultures with straight sporodifera exert a specific antifunga action on Candida albicans. Verticil cultures with spiral sporodifera either express their antagonism against Candida albicans but weakly, or it is totally absent. Many verticle cultures of the first group inhibit growth (in vitro) of Trychophyton crateriforme, Microsporon lanosum and Achorion schonleini.

Card 2/2

FADEYEVA, N.P.; RAUTENSHTEYN, Ya.I.; EL'PINER, I.Ye.

Effect of ultrasound on certain actinophages and bacteriophages.
Mikrobiologiia 28 no.3:391-396 My-Je '59. (MIRA 13:3)

1. Institut mikrobiologii AN SSSR i Institut biofiziki AN SSSR.
(ULTRASONICS, eff.
on actinophages & bacteriophages (Rus))
(ACTINOMYCES
actinophages, eff. of ultrasonics (Rus))
(BACTERIOPHAGE
actinophages & bacteriophages, eff. of ultrasonics (Rus))

FADEYEVA, N.P.; EL'PINER, I.Ye.

Effect of ultrasonic waves on Azotabacter chroococcum. Mikrobiologiia 28 no.4:488-489 Jl-Ag '59. (MIRA 12:12)

1. Institut biologicheskoy fiziki AN SSSR.
(ULTRASONICS eff.)
(AZOTOVACTER radiation eff.)

FADEYEVA, N.P.; RAUTENSHTEYN, Ya.I.; EL'PINER, I.Ye.

Adsorption of actinophages by actinomycetes susceptible to them.
Mikrobiologiia 29 no.3:388-394 My-Je '60. (MIRA 13:7)

1. Institut mikrobiologii AN SSSR i Institut biofiziki AN SSSR.
(ACTINOMYCES) (BACTERIOPHAGE)

RAUTENSHTEYN, Ya. I.; FADEYEVA, N. P.; EL'PINER, I. Ye.

Possibility of obtaining nonlysogenic variants from lysogenic cultures of actinomycetes using ultrasonics. Mikrobiologiia 30 no.3:441-446 My-Je '61. (MIRA 15:7)

1. Institut mikrobiologii AN SSSR i Institut biofiziki, AN SSSR, Moskva.

(ULTRASONIC WAVES—PHYSIOLOGICAL EFFECT)
(ACTINOMYCES)

39621
S/194/62/000/004/062/105
D295/D308

27.1220

AUTHORS: Fadeyeva, N. P., El'piner, I. Ye. and Rautenshteyn, Ya. I.

TITLE: The influence of ultrasonic waves on the development of actinomycetes

PERIODICAL: Referativnyy zhurnal, Avtomatika i radioelektronika, no. 4, 1962, abstract 4-5-37a (Mikrobiologiya, 30, no. 5, 1961, 849-854)

TEXT: The results are given of a study of the stability of spores of actinomycetes under the influence of ultrasonic waves on the rate of growth of spores of sound irradiation. 1. Act. olivaceus No. 132 spores are comparatively stable under the action of ultrasound of 20 W/cm^2 intensity at a frequency of 650 kc/s; a noticeable decrease of the growth of spores occurs after they have been irradiated in the dark for 10 - 20 min. 2. Irradiated spores grow more slowly in comparison with non-irradiated ones, 3. In cultures grown out of irradiated spores or fragments of mycelium, in the

Card 1/2

S/194/62/000/004/062/105
D295/D308

The influence of ...

first 24 hours' growth, the occurrence of mycelium with a large number of thickened lateral shoots is observed, which was never observed in control experiments. 4. Cultures grown out of irradiated spores or mycelium fragments differ from control cultures by a higher accumulation of biomass and for a more delayed passage to autolysis. [Abstracter's note: Complete translation.]

Card 2/2

RAUTENSHTEYN, Ya.I.; FADEYEVA, N.P.

Lysogenic conversions of citrate resistance in Actinomyces venezuelae. Dokl. AN SSSR 161 no.6:1441-1443 Ap '65. (MIRA 18:5)

1. Institut mikrobiologii AN SSSR. Submitted July 28, 1964.

L 62522-65

ACCESSION NR: AP5016422 UR/0220/65/034/003/0442/0449

AUTHOR: Solov'yeva, N. Ya.; Fadeyeva, N. P.; Rautenshteyn, Ya. I.; El'piner, I. Ye.

TITLE: Characteristics of the induced effect of UV irradiation and ultrasonics on a lysogenic Actinomyces fradiae strain 8004 culture

SOURCE: Mikrobiologiya, v. 34, no. 3, 1965, 442-449

TOPIC TAGS: fungus, actinomycetes, ultraviolet irradiation, ultrasonic vibration, lysis, phage

ABSTRACT: In a series of experiments, lysogenic cultures of Act. fradiae, strain 8004 and control culture strains were exposed to UV irradiation and ultrasonic vibration to compare effects on induced phage formation and liberation. Suspensions of Act. fradiae spores and 5, 8, and 20 hr old mycelium were UV irradiated by three BUV-15 lamps (wave length 2537 angstroms, focal length 50 cm, 65.76 ergs/mm^2 sec) for periods up to 5 min. For ultrasonic vibration of Act. fradiae cultures, a piezoquartz generator (700 kc/s, 15 watt/cm^2) was used for periods up to 45 min, with continuous cooling of cultures

Card 1/3

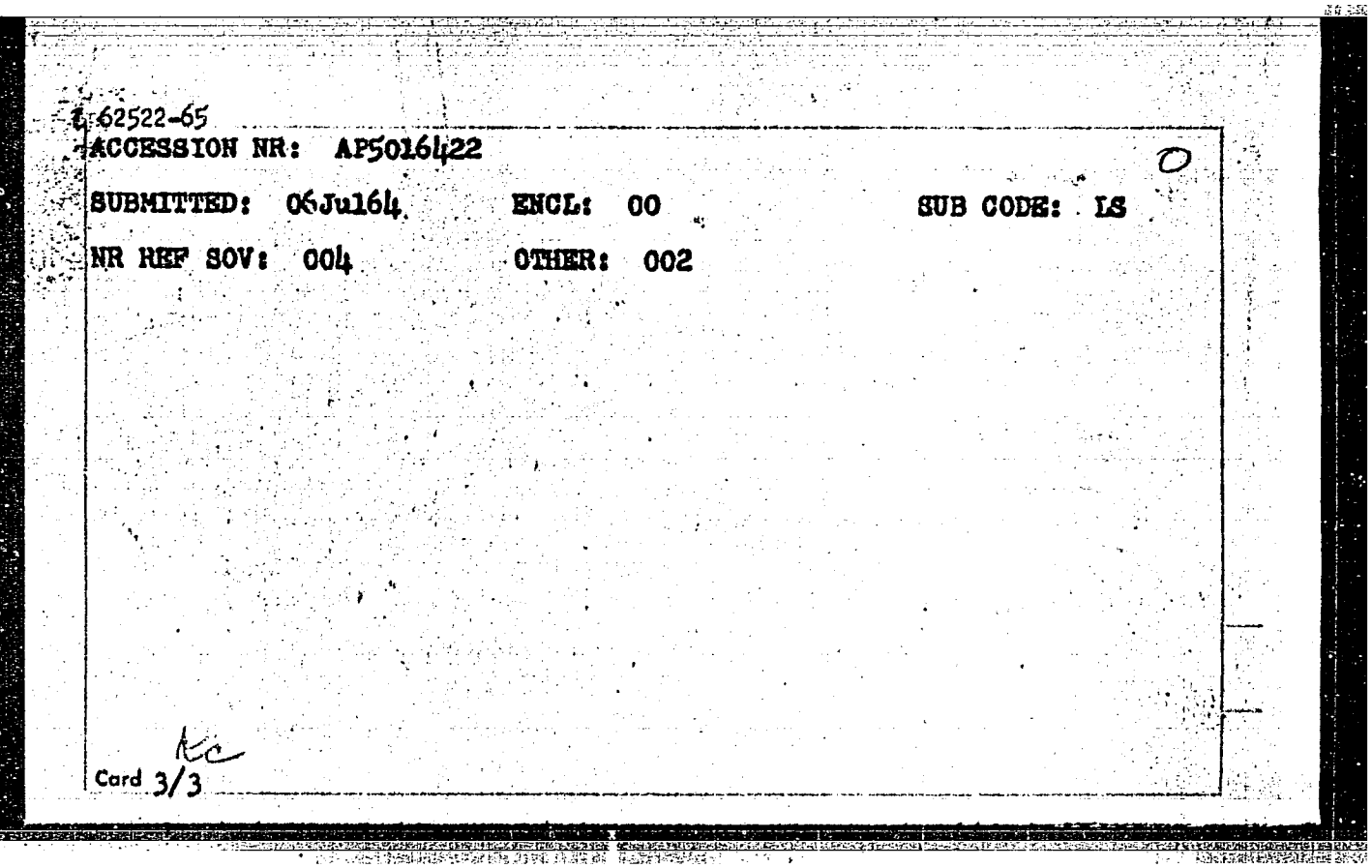
L 62522-65

ACCESSION NR: AP5016422

during vibration. Following UV irradiation and ultrasonic vibration, the cultures were transferred to columns and incubated at 27°. Culture samples were taken at regular intervals (up to 24 hrs) and centrifuged for 30-40 min at 2500 rpm to determine the number of liberated phages in the supernatant and induced phage formation by difference in experimental and control titers. Findings show that the number of phage particles spontaneously liberated by a lysogenic culture of Act. fradiae, 8004 depends on the maturity of the inoculated material. With spores and 5-8 hr old mycelium, an appreciable number of mature phage particles is liberated, approaching 10^8-10^9 units/ml in some cases. With 20 hr old mycelium, the number of spontaneously liberated phages is generally smaller. Thus, the formation of mature phage particles in lysogenic cultures is largely the result of young mycelium lysing. Both spores and 20 hr old mycelium of Act. fradiae 8004 are affected by UV and ultrasonics, liberating 3 to 10 times as many phage particles as found in control cultures. Orig. art. has: 10 figures and 1 table.

ASSOCIATION: Institut mikrobiologii AN SSSR (Microbiology Institute, AN SSSR); Institut biofiziki AN SSSR (Biophysics Institute, AN SSSR)

Card 2/3



62522-65
ACCESSION NR: AP5016422

SUBMITTED: 06Jul64 ENCL: 00 SUB CODE: LS

NR REF SOV: 004 OTHER: 002

Card 3/3

B[illegible], D.Y.; [illegible], N.V.

Forms and causes of defective microstructure in the production of iron-graphite products. [illegible] (MIRA 13:8)

1. Moskovskiy zavod [illegible].

APPROVED FOR RELEASE: Thursday, July 27, 2000 CIA-RDP86-00513R00041233(

PREOBRAZHENSKIY, V.S.; FADEYEVA, N.V.; MUKHINA, L.I.; TOMILOV, G.M.; MURZAYEV, E.M., doktor geograf.nauk, otv.red.; TUGARINOV, D.N., red.izd-va; MARKOVICH, S.G., tekhn.red.

[Types of landscape and natural zones of the Buryat A.S.S.R.] Tipy mestnosti i prirodnoe raionirovanie Buriatskoi ASSR. Moskva, Izd-vo Akad.nauk SSSR, 1959. 215 p. (MIRA 12:6)

1. Sotrudniki Instituta geografii Akademii nauk SSSR (for Preobrazhenskiy, Fadeyeva, Mukhina, Tomilov).
(Buryat-Mongolia--Physical geography)

LEONT'YEV, N.F.; MUKHINA, L.I.; OLYUNIN, V.N.; PREOBRAZHENSKIY, V.S.; FAYEYEVA, N.V.

New concepts on the orography of Transbaikalia. Izv.AN SSSR Ser.geog. no.4:82-88 Jl-Ag '60. (MIRA 13:7)

1. Institut geografii AN SSSR.
(Transbaikalia--Mountains)

FADEYEVA, N. V.

Cand Geog Sci - (diss) "Selenginskoye meso-mountains. (Physico-geographic characteristics)." Moscow, Pub. Moscow Univ, 1961. 19 pp; (Ministry of Education RSFSR, Moscow State Pedagogical Inst imeni V. I. Lenin); 200 copies; price not given; (KL, 6-61 sup, 201)

PREOBRAZHENSKIY, V.S.; FADEYEVA, N.V.; MUKHINA, L.I.

Taking into account heat and moisture correlation in conducting studies for making medium-scale maps of landforms. Izv. AN SSSR. Ser. geog. no. 4:104-110 Jl-Ag '61. (MIRA 14:7)

1. Institut geografii AN SSSR.
(Atmospheric temperature) (Landforms) (Humidity)

MUKHINA, L.I.; FADEYEVA, N.V.

The Fifth All-Union Conference on the Study of Landforms.
Izv. AN SSSR. Ser. geog. no.6:157-162 N-D '61. (MIRA 14:12)
(Landforms- Congresses)

FADEYEVA, Natal'ya Vasil'yevna; BUYANTUYEV, B.R., otv. red.; BAZAROV, D.B., otv. red.; RUTKOVSKAYA, Z.A., red.izd-va; BATOTSYRENOVA, D.B., tekhn. red.

[Central mountains of the Selenga Basin; natural conditions and regionalization] Selenginskoe srednegor'e; prirodnye usloviia i raionirovanie. Ulan-Ude, Buriatskoe knizhnoe izd-vo, 1963. 169 p. (MIRA 16:12)
(Selenga Valley--Natural resources)

FADEYEVA, N.V.; KHOREV, B.S.

The Second Scientific Conference of the Geographers of Siberia and the Far East. Izv. AN SSSR. Ser.geog. no.1:148-153 Ja-F '63. (MIRA 16:2)

(Siberia—Geography—Congresses)
(Soviet Far East—Geography—Congresses)

KOZLOV, I.V.; FADEYEVA, N.V., retsenzent; FILIPPOVICH, L.S., retsenzent; RASSADINA, A.P., red.; RODIONOVA, F.A., red.

[Pictures of the nature of our motherland; reader on the physical geography of the U.S.S.R.] Kartiny prirody nashei Rodiny; kniga dlia chteniia po fizicheskoi geografii SSSR. Moskva, Izd-vo "Prosveshchenie," 1964. 271 p. (MIRA 17:7)

1. Nauchnyye sotrudniki Instituta geografii AN SSSR (for Fadeyeva, Filippovich).

FADEYEVA, N.V.; SAMOYLOVA, G.S.

Likenesses and differences of landforms of the intermontane steppe depressions of the Altai and Transbaikalia. Vest.Mosk. un.Ser.5: Geog. 20 no.4:41-50 Jl-Ag '65.

(MIRA 18:12)

1. Institut geografii AN SSSR i Kafedra fizicheskoy geografii SSSR Moskovskogo gosudarstvennogo universiteta. Submitted September 15, 1964.

KHABAS, I.M. [deceased]; FADEYEVA, O.A.

Studies of purified tetanus anatoxin based on agar precipitation. Biul. eksp. biol. i med. 47 no.4:95-99 Ap '59. (MIRA 12:7)

1. Iz Nauchno-issledovatel'skogo instituta vaktsin i syvorotok (dir. - dotsent M.P. Belov; nauchnyy rukovoditel' - prof. A.V. Ponomarev), Leningrad. Predstavlena deystvitel'nym chlenom AMN SSSR G.V. Vygodchikovym.
(TETANUS, immunol.
anatoxin, agar precipitation of purified prep. (Rus))

KHABAS, I.M. [deceased]; KATS, I.Z.; FADEYEVA, O.A.

Fractional analysis of diphtheria anatoxin. Nauch. osn. proizv. bakt. prep. 10:77-90 '61. (MIRA 18:7)

1. Leningradskiy institut vaktsin i syvorotok.

UGLEVA, A.I.; KHABAS, I.M. [deceased]; FADEYEVA, O.A.; KATS, I.Z.; TER-OSIPOVA, M.Z.; ROZHDESTVENSKAYA, V.O.

Production of purified sorbed diphtheria and tetanus anatoxin for active immunization of children. Nauch. osn. proizv. bakt. prep. 10:100-106 '61. (MIRA 18:7)

1. Leningradskiy institut vaktsin i syvorotok.

DEMIDOVA, L.S., SHAVYRINA, A.V., KUZINA, Z.M., FADEYEVA, O.I., LEVIN, V.L.

Results of using geobotanical methods in hydrogeological investigations in Chernozem regions, Trudy VAGT no.1:61-70 '55. (MLRA 9:11)

(Phytogeography) (Chernozem soils)
(Water, Underground)

TONKIKH, A. V., FADEYEVA, O.N.

"The Problem of the Interrelation Between the Anterior Lobe of the Hypophysis and the Suprarenal Supararenal Cortex."

Theses of the Proceedings of the Annual Scientific Sessions 23-26 March 1959 (All-Union Institute of Experimental Endocrinology)

From the Laboratory of Nerve Trophism of the Institute of Physiology imeni I. P. Pavlov of the Academy of Sciences USSR (Director--Academician K. M. Bykov).

BORKOVSKAYA, Yu.A.; FADEYEVA, O.N.

Methanism in developing sleep inhibition after the administration of adrenaline. Fiziol. zhur. 47 no.7:806-814 Jl '61. (MIRA 15:1)

1. From the Laboratory of Tropic Innervation, I.P.Pavlov Institute of Physiology, Leningrad.
(ADRENALINE) (SLEEP)

BORKOVSKAYA, Yu.A.; KLIMOV, P.K.; FADEYEVA, G.N.

Changes in cerebral circulation following administration of adrenaline and pituitary hormones. Fiziol. zhur. 49 no.12: 1482-1488 D '63. (MIRA 17:12)

1. Laboratoriya fiziologii vegetativnoy nervnoy sistemy i nervnoy trofiki Instituta fiziologii im. I.P. Pavlova AN SSSR, Leningrad.

MEDVEDOVSKIY, O. (Syktyvkar, Komi ASSR); FADEYEVA, S. (Kiyev); ZINGER, G. (Kiyev); BORSHCHEVSKIY, Ye. (Moskovskaya obl.); ARONOV, I.; PRUDEYEV, B. (Chita)

From the mailbox. Mest.prom.i khud. promys. 3 no.1:37 Ja '63.
(MIRA 16:2)

1. Sotrudniki Nauchno-issledovatel'skogo instituta mestnoy i toplivnoy promyshlennosti Gosplana UkrSSR (for Fadeyeva, Zinger).
(Manufactures)

1ST AND 2ND ORDERS

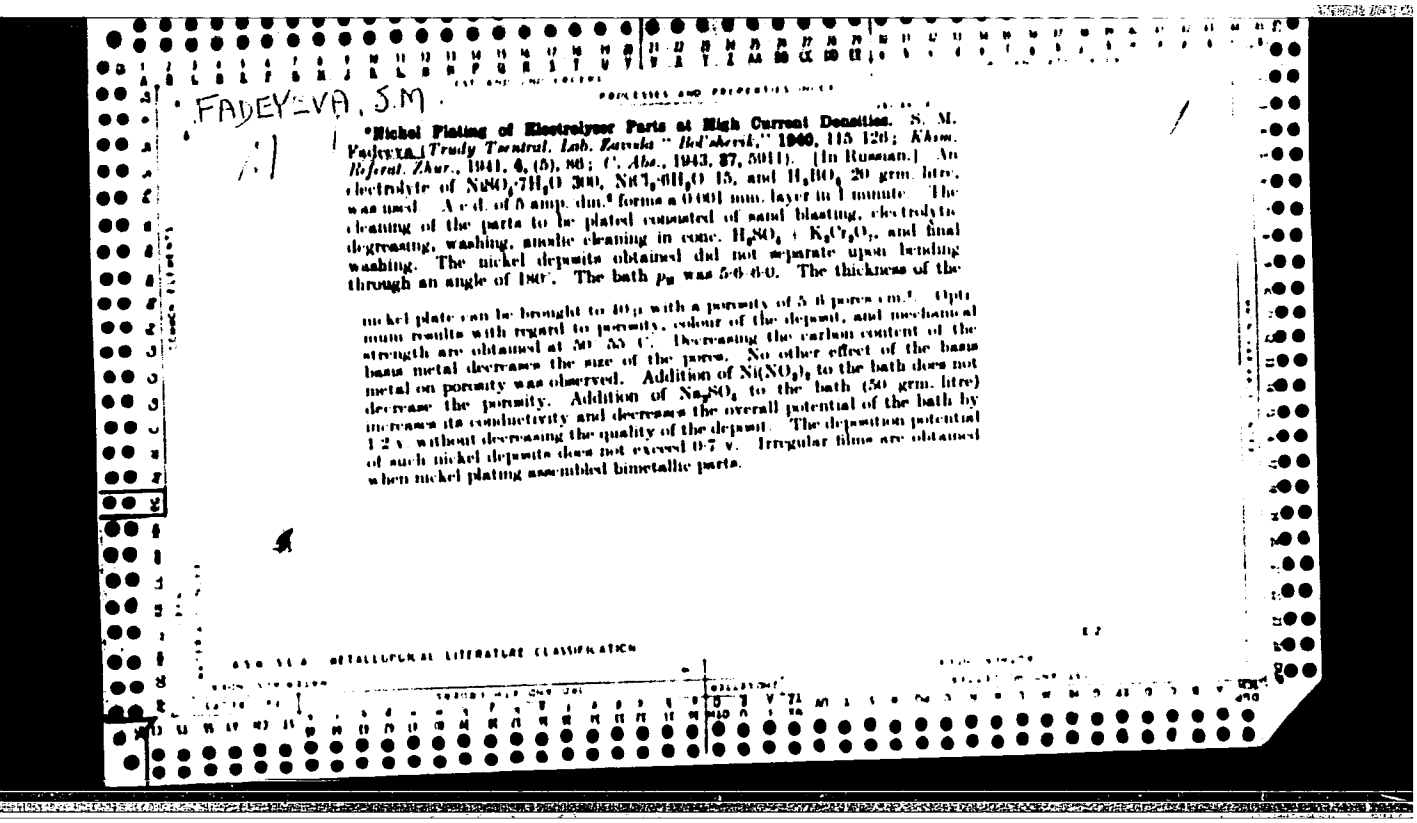
PROCESSES AND PROPERTIES INDEX

FADEYEVA, S.M.

2

Choice and testing of materials for construction of apparatus for production of 2-furaldehyde. N. N. Gratsianskii and S. M. Fadeeva. *Korroziya i Borba s Nei*, No. 1, 19-21 (1937).—The following materials were tested: (1) sheet copper contg. 0.05% impurities, (2) Al bronze contg. 10% Al, (3) cast iron contg. C 1.45, Cr 30.9, Si 0.96, Mn 0.555 and S 0.063%, (4) cast iron contg. 4.8% Al, (5) iron contg. 0.5% Cu. Materials (4) and (5) catalyze the polymerization of boiling furaldehyde, and are, therefore, unsuitable. Material resisted corrosion under all conditions of the process, except in the autoclave and the neutralizer, where it lost, resp., 1.07 and 0.61 g. per sq. m. per hr. The best material for the autoclave and the neutralizer is Al bronze (losses 0.03–0.05 g. per sq. m. per hr.). Sheet copper lost 0.9 g. In all other parts of the app. Al bronze and Cr cast iron per sq. m. per hr. underwent practically no loss. C. S. Shapiro

ASM-SLA METALLURGICAL LITERATURE CLASSIFICATION



FADEYEVA, S.M.

Nickel Plating of Electrolyser Parts at High Current Densities. S. M. Fadeyeva. *Trudy Tsentral. Lab. Zavoda "Bol'shevik,"* 1940, 115-126; *Khim. Referat. Zhur.*, 1941, 4, (5), 86; *C. Abs.*, 1943, 37, 5011). [In Russian.] An electrolyte of $NiSO_4 \cdot 7H_2O$ 300, $NiCl_2 \cdot 6H_2O$ 45, and H_3BO_3 20 grm. litre, was used. A c.d. of 5 amp. dm.^{2} forms a 0·001 mm. layer in 1 minute. The cleaning of the parts to be plated consisted of sand blasting, electrolytic degreasing, washing, anodic cleaning in conc. H_2SO_4 + $K_2Cr_2O_7$, and final washing. The nickel deposits obtained did not separate upon bending through an angle of 180°. The bath p_H was 5·0-6·0. The thickness of the nickel plate can be brought to 40 μ with a porosity of 5-6 pores cm.^{2}. Optimum results with regard to porosity, colour of the deposit, and mechanical strength are obtained at 50-55° C. Decreasing the carbon content of the basis metal decreases the size of the pores. No other effect of the basis metal on porosity was observed. Addition of $Ni(NO_3)_2$ to the bath does not decrease the porosity. Addition of Na_2SO_4 to the bath (50 grm. litre) increases its conductivity and decreases the overall potential of the bath by 1·2 v. without decreasing the quality of the deposit. The deposition potential of such nickel deposits does not exceed 0·7 v. Irregular films are obtained when nickel plating assembled bimetallic parts.

SOV/137-57-11-22056

Translation from: Referativnyy zhurnal, Metallurgiya, 1957, Nr 11, p 198 (USSR)

AUTHORS: Fadeyeva, S.M., Val'be, R.S.

TITLE: Silver Plating Cutlery With Alternating-polarity Current (Gal'vanicheskoye serebreniye stolovykh priborov tokom peremennoy polyarnosti)

PERIODICAL: Tr. Ukr. n.-i. in-ta mestn. i toplivn. prom-sti. 1956, Nr 11, pp 126-138

ABSTRACT: The selection of conditions for galvanic silverplating with reversible current was carried out. A bath containing (in g/l): Ag 35 - 38, KCN 35 - 40, with a 2.2-sec period for the reversal of the direction of the current, a 3.15:1 ratio of direct to reverse current and a current density of $\leq$ 1.1-1.5 amp/dm^2, ensure the production of a bright coating without the addition of a brightening agent. The introduction of the above-stated method into production permitted an increase in productivity of the baths by 150-200%, reduced the time of silver plating from 2 hours by the old method to 25-30 min, and eliminated wire-brushing and buffing in

Card 1/2

SOV/137-57-11-22056

Silver Plating Cutlery With Alternating-polarity Current

preparation of the article for electroplating.

L. A.

Card 2/2

SOV/123-59-16-64611

Translation from: Referativnyy zhurnal. Mashinostroyeniye, 1959, Nr 16, p 135 (USSR)

AUTHOR: Fadeyeva, S. M.

TITLE: Galvanic Tinplating With Current of Alternating Polarity in Stannate Electrolytes

PERIODICAL: Tr.N.-i. in-ta mestn. i toplivn. prom-sti, 1958, vyp. 12, 72 - 87

ABSTRACT: Results are reported of investigations which were carried out to find out the possibilities of obtaining by electrolysis lustrous and uniform deposits of tin of substantial thickness in order to substitute the hot method by the galvanic one. It was established that such deposits are obtained in an electrolyte containing (in gram/liter): 25-35 Sn, 25-30 metanitrobenzoic acid, 40 $NaOH_{total}$, 15 $NaOH_{free}$ at a temperature of 90-95°C, current density of 7 amp/dm^2, duration of impulses: direct - 4 seconds, reverse - 0.5 sec and a continuous circulation of the electrolyte. The tinplating, deposited on a cold-rolled steel band, with a thickness of layer of 6 - 7μ is practically non-porous. The following factors were determined in the investigation: The effects of current

Card 1/2

Galvanic Tinplating With Current of Alternating Polarity in Stannate Electrolytes

density and electrolytic temperature on the cathode yield per current, the effect of nitrobenzoic acid on the dispersibility of the electrolyte, and the effect of the alternating direction of the current on the cathode and anode processes.

S.V.M.

S/081/61/000/024/050/086
B107/B110

AUTHOR: Fadeyeva, S. M.

TITLE: Cold chroming in a tetrachromate electrolyte

PERIODICAL: Referativnyy zhurnal. Khimiya, no. 24, 1961, 344, abstract 24K130 (Tr. n.-i. in-ta mestn. i toplivn. prom-sti, no. 15, 1961, 108 - 121)

TEXT: The electrodeposition of chromium from an electrolyte of the following composition (in g/l) : CrO_3 380, NaOH 60, H_2SO_4 0.26 - 2.5 was studied. It was found that with increasing current density the yield at the cathode increases up to 30% and decreases to 8% with a current density of 20 a/dm^2 if the temperature of the solution is increased to 65°C. The effect of additions of organic substances $MgSO_4$, $CaSO_4$ and the effect of the Cr^{3+} concentration on the yield and the quality of the deposit were studied. The hardness of the chromium coatings is reduced from 397.5 to 264 kg/mm^2 if the current density is increased from 20 to 60 a/dm^2. With

Card 1/2

S/081/61/000/024/050/086
B107/B110

Cold chroming in a ...

a thickness of 8 - 10μ the chromium coatings are practically without pores. An electrolyte of the following composition (in g/l) : CrO_3 360 - 380, NaOH 60, H_2SO_4 0.8 - 1, $MgSO_4$ 2.5, Cr_2O_3 8 - 12; is suggested for applying wear-resistant protective and decorative chromium coatings instead of triple nickel-plating (current density 15 - 60 a/dm^2; temperature 16 -25°C; yield about 25 - 32%); the coating is polished on a soft disk.
[Abstracter's note: Complete translation.]

Card 2/2

KUCHEROV, V. F.; GRIGOR'YEVA, N. Ya.; FADEYEVA, T. M.; KOGAN, G. A.

Conjugation factors in cyclic systems. Report No. 5: Mutual transformations and the kinetics of isomerization of hexalin-1, 2-dicarboxylic acids under the influence of alkalies. Izv. AN SSSR. Otd. khim. nauk no.1:137-145 '63.
(MIRA 16:1)

1. Institut organicheskoy khimii im. N. D. Zelinskogo AN SSSR.

(Cyclohexanedicarboxylic acid)
(Isomerization)
(Conjugation(Chemistry))

TSAGOLOV, N.A., prof., doktor ekon.nauk; BLYUMIN, I.G., prof., doktor ekon.nauk [deceased]; RUMYANTSEV, A.M., prof.; KORNIYENKO, A.A., dotsent, kand.ekon.nauk; SHNEYERSON, A.I., prof., doktor ekon.nauk; LIF, Sh.B., prof., doktor ekon.nauk; SHVEDKOVA, G.M., kand.ekon. nauk; FISHEVSKIY, Yu.K.; DVORKIN, I.N., doktor ekon.nauk; SIDOROV, I.F.; KHAFIZOV, R.Kh., kand.ekon.nauk; NIKOLAYEV, A.B., kand.ekon. nauk; AVRAMCHUK, F.P., kand.ekon.nauk; AL'TER, L.B., doktor ekon. nauk; BOYARSKIY, A.Ya., prof., doktor ekon.nauk; BREGEL', E.Ya., prof., doktor ekon.nauk; ARZUMANYAN, A.A.; VOLODIN, V.S., dotsent, kand.ekon.nauk; MIKSHA, L.S., kand.ekon.nauk; BUNKINA, M.K., dotsent, kand.ekon.nauk; YEVREYSKOV, A.V., kand.ekon.nauk; FADEYEVA, T.A., kand.ekon.nauk; KOLGANOV, M.V., prof., doktor ekon.nauk; KHROMUSHIN, G.B., kand.ekon.nauk; MOSHENSKIY, M.G., kand.ekon.nauk; IVANOV, N.N., kand.ekon.nauk; GUTTSAYT, M.G., dotsent, kand.ekon. nauk; ABOLTIN, V.Ya., prof., doktor ekon.nauk; KOLLONTAY, V.M., kand.ekon.nauk; GLUKHAREV, L.I., kand.ekon.nauk; POKROVSKIY, A.I., kand.ekon.nauk; DADASHEV, G.A., dotsent, kand.ekon.nauk; ALESHINA, I.V., kand.ekon.nauk; ZHAMIN, V.A., dotsent, kand.ekon.nauk;

(Continued on next card)

TSAGOLOV, N.A.--(continued) Card 2.
KOZLOV, A.P.; TIMOFEYEV, T.T., kand.istor.nauk; ALEKSEYEV, A.M., dotsent, kand.ekon.nauk; FILATOVA, Ye.M., dotsent, kand.ekon.nauk. Prinimali uchastiye: VOLKOV, F.M., kand.ekon.nauk; KHROMUSHIN, G.B.; VOZNESENSKIY, L.A., nauchnyy sotrudnik. SPERANSKAYA, L., red.; CHEPELEVA, O., tekhn.red.

[Criticism of present-day bourgeois, reformist, and revisionist economic theories] Kritika sovremennykh burzhuaznykh, reformistskikh i revizionistskikh ekonomicheskikh teorii. Pod red. N.A.TSagalova. Moskva, Izd-vo Sotsial'no-ekon.lit-ry, 1960. 588 p. (MIRA 13:5)

1. Moscow. Universitet. 2. Chlen-korrespondent AN SSSR (for Arzumanyan).
(Economics)

L 16064-66 EWT(m)/EWP(t) IJP(c) JD
ACC NR: AP6003251 (N) SOURCE CODE: UR/0020/65/165/006/1329/1331

AUTHOR: Fadeyeva, T. A.; Pasheva, Z. P.

30
28
8

ORG: None

TITLE: Phase composition of amorphous films obtained by vapor condensation during heating of a silicon dioxide-silicon mixture in a vacuum

27

SOURCE: AN SSSR. Doklady, v. 165, no. 6, 1965, 1329-1331

TOPIC TAGS: silicon dioxide, silicon, electron diffraction analysis, vapor condensation, computer calculation

ABSTRACT: The structure of thin films obtained by condensation of silicon monoxide vapor (evolved by a mixture of SiO_2 and Si on heating) in a vacuum was studied by electron diffraction. After finding the average atomic density, the authors calculated the radial distribution function with a computer. The data indicate that the number of closest neighbors of silicon n_{Si-Si} is 4. This result is explained by assuming that elemental silicon with a diamond structure is present in the film together with SiO_2 as an independent phase. Thus, the results of the analysis of the radial distribution curve are interpreted as showing the presence in these films of two independent amorphous or submicroscopic phases, viz., silicon dioxide and silicon. The paper was presented by Academician N. V. Belov,

Card 1/2 UDC: 539.235

L 16064-66
ACC NR: AP6003251

13 May 1965. In conclusion, authors express their appreciation to Acad. N. V. Belov and L. I. Tatarinova for useful suggestions and interest in this study. Orig. art. has: 2 figures.

SUB CODE:07,20/ SUBM DATE: 13Apr65 / ORIG REF: 004 / OTH REF: 007

Card 2/2

PADEYEVA, T.I., Cand Med Sci--(diss) "Data on the epidemiology and seroprophylaxis of Botkin's disease in Rostov-on-Don for 1953-1956." Rostov-on-Don, 1957. 12 pp (Rostov State Med Inst), 200 copies (KL,47-58, 136)

FADEYEVA, T.I.

Serological prevention of Botkin's disease in children's institutions in Rostov-on-Don. Zhur.mikrobiol.epid. i immun. 29 no.4:21-27 Ap '58. (MIRA 11:4)

1. Iz kafedry epidemiologii Rostovskogo meditsinskogo instituta.
(HEPATITIS, INFECTIOUS, prevention and control,
gamma globulin, in child. institutions (Rus)
(GAMMA GLOBULIN, ther. use,
hepatitis, infect., prev. in child. institutions (Rus)

FADEYEVA, T.I.

Control of epidemic hepatitis (Botkin's disease) in tuberculosis institutions in Rostov-on-Don. Zhur.mikrobiol., epid.i immun. 32 no.12:119 D '61. (MIRA 15:11)

1. Iz kafedry epidemiologii Rostovskogo-na-Donu meditsinskogo instituta.

(ROSTOV-ON-DON--HEPATITIS, INFECTIOUS)

FADEYEVA, T.I.

Possible infection with infectious hepatitis through breast feeding. Zhur.mikrobiol., epid.i immun. 33 no.8:125 Ag '62. (MIRA 15:10)

1. Iz kafedry epidemiologii Rostovskogo-na-Donu meditsinskogo instituta.
(HEPATITIS, INFECTIOUS) (BREAST FEEDING--HYGIENIC ASPECTS)

CHERNYSHEVA, A.P.; FADEYEVA, T.I.

Outbreak of epidemic hepatitis in a school. Sbor. trud. Rost. gos. med. inst. no.22:90-92 '63. (MIRA 18:7)

1. Iz Sanitarno-epidemiologicheskoy stantsii Proletarskogo rayona Rostova-na-Donu i kafedry epidemiologii Rostovskogo gosudarstvennogo meditsinskogo instituta (zav. - prof. T.D.Yanovich).

FADEYEVA, T.I.

Ways of distribution of Botkin's epidemic hepatitis. Sbor. nauch. trud. Rost. gos. med. inst. no.22:93-99 '63. (MIRA 18:7)

1. Iz kafedry epidemiologii Rostovskogo gosudarstvennogo meditsinskogo instituta (zav. - prof. T.D.Yanovich).

KUCHEROV, V.F.; GRIGOR'YEVA, N.Ya.; FADEYEVA, T.M.

Conjugation factors in cyclic systems. Part 3: Some spectral regularities in the series of isomeric cyclohexadiene-1,2-dicarboxylic acids and their derivatives. Zhur.ob.khim. 31 no.9:2894-2898 S '61. (MIRA 14:9)

1. Institut organicheskoy khimii imeni N.D.Zelinskogo.
(Cyclohexadienedicarboxylic acid--Spectra)

S/079/63/033/001/006/023
D204/D307

AUTHORS: Mironov, V. A., Fadeyeva, T. M., Sobolev, Ye. V. and Yelizarova, A. N.

TITLE: Substituted cyclopentadienes and related compounds. VI. Tetramethylcyclopentadiene as an equilibrium mixture of isomers

PERIODICAL: Zhurnal obshchey khimii, v. 33, no. 1, 1963, 84-91

TEXT: A continuation of previous work (DAN SSSR, 143, 1112 (1962)). The present study was aimed at an investigation of the isomerization of tetramethylcyclopentadiene (A) by analogy with the isomerism of dimethylcyclopentadienes studied in an earlier work. The isomeric mixture A was prepared from MeMgI/Et_2O and 2,3,4-trimethyl-Δ^2-cyclopentenone (obtained by the method of Nazarov et al (Izv. AN SSSR, OKhN, 1946, 529), decomposing the reaction mixture with (a) diluted HCl at ~30°C, and (b) crushed ice at 0°C. The yields of A were respectively 66 and 72%. 70% of the mixture was found to be

S/079/63/033/001/006/023
D204/D307

the isomer 1,2,3,4-tetramethylcyclopentadiene (I); the 1,2,4,5,-form (III) and probably the 1,2,3,5-form (II) were also present. Almost pure III was obtained by slow rectification of A on a high-efficiency column, at 50 - 60°C, under vacuum; this could be reversed to form I by heating. Formation of the energetically less favorable isomer III is ascribed to stopping A from attaining thermodynamic equilibrium. Adducts of maleic anhydride (MA), with I and III were prepared in 68 - 76% yields (ether-benzene solutions, -10°C) and some simple derivatives of these adducts (the corresponding dicarboxylic acid and dimethyl ester from the adduct of MA with I; the corresponding γ-lactone acid and its methyl ester from the adduct of MA with II) were prepared. The advice of V. T. Aleksanyan is acknowledged. There are 2 figures.

ASSOCIATION: Institut organicheskoy khimii imeni N. D. Zelinskogo. Komissiya po spektroskopii Akademii nauk SSSR (Institute of Organic Chemistry imeni N. D. Zelinskiy. Spectroscopy Commission of the Academy of Sciences of the USSR)

SUBMITTED: December 11, 1961

KONDRAT'YEVA, G.V.; KOGAN, G.A.; FADEYEVA, T.M.; ZAV'YALOV, S.I.

β-Dicarbonyl compounds. Report No.21: Dissimilarity in chemical behavior of 2-methyl-1,3-cyclopentadienone and 2-methyldihydroresorcinol. Izv.AN SSSR.Ser.khim. no.9:1648-1653 S '64.
(MIRA 17:10)

1. Institut organicheskoy khimii im. N.D.Zelinskogo AN SSSR.

SOBOLEV, Ye.V.; MIRONOV, V.A.; FADEYEVA, T.M.

Substituted cyclopentadienes and related compounds. Report 14: Special features of the vibrational spectra of adducts of substituted cyclopentadienes with maleic anhydride. Izv. AN SSSR. Ser. khim. no.8:1357-1363 '65. (MIRA 18:9)

1. Institut organicheskoy khimii im. N.D. Zelinskogo AN SSSR i Institut neorganicheskoy khimii Sibirskogo otdeleniya AN SSSR.

NOVIKOV, A.G.; KONOVALOVA, L.I.; FADEYEVA, T.M.

Continuous dyeing with insoluble azo dyes with partial drying of the fabric after "azotolation." Tekst.prom. 25 no.11:69-70 N '65. (MIRA 18:12)

1. Glavnyy inzhener Ivanovskogo khlopchatobumazhnogo kombinata imeni Samoylova (for Novikov). 2. Zaveduyushchiy khimicheskoy laboratoriyey Ivanovskogo khlopchatobumazhnogo kombinata imeni Samoylova (for Konovalova). 3. Starshiy inzhener-khimik Ivanovskogo khlopchatobumazhnogo kombinata imeni Samoylova (for Fadeyeva).

KOZLOVSKAYA, L.S.; FADEYEVA, T.N.; ZAGURAL'SKAYA, L.M.

Effect of invertebrates on the decomposition of the upper sphagnum soil. Izv. SO AN SSSR no.12: Ser biol.-med. nauk no.3:50-56 '64. (MIRA 18:6)

1. Institut lesa i drevesiny Sibirskogo otdeleniya AN SSSR, Krasnoyarsk.

KHOMUTOV, N.Ye.; SKORNYAKOV, V.V.; FADEYEVA, T.P. (Moscow)

Effect of the electrode material on the electrolytic reduction of streptomycin to dihydrostreptomycin. Zhur. fiz. khim. 38 no.1:102-107 Ja'64. (MIRA 17:2)

1. Khimiko-tekhnologicheskiy institut imeni Mendeleyeva.

FADDEYEVA, T.S.

1. FADDEYEVA, T. S., NIKOL'SHAYA, L. G.

2. USSR (600)

4. Leningrad Province - Clover

7. Effect of mowing clover on its further and seed production in Leningrad Province. Vest. Len un No. 4 1952.

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

FADEYEVA T. S.

1. T. S. FADDEYEVA, N. A. KARPOV

2. USSR (600)

4. Benzene Hexachloride

7. Relation of the harvest of clover seed to the dates on which the seed vessels are with hexachloran. Vest. Len. un. no. 4. 1952.

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

FADEYEVA,T.S.; DOBROVIDOVA,N.F.; DUBROVA,V.P.

Influence of growing conditions on the formation of a stand of clover. Vest.Len.un. 10 no.4:3-16 Ap '55. (MLRA 8:8)
(Clover)

FADEYEVA, T. S.

Some problems in the theory of domination. Vest.Len.un.11 no.9: 3-10 '56. (MLRA 9:8)
(Hybridization, Vegetable) (Heredity)

FADEYEVA, T.S.

Relationship between the processes of regeneration and general growth of the grafted plant [with summary in English]. Bot. zhur. 43 no.6: 788-798 Je '58. (MIRA 11:7)

1. Leningradskiy gosudarstvennyy universitet im. A.A. Zhdanova.
(Grafting)

FADEYEVA, T.S.; KIRILLOVA, G.A.

Study of heterosis in strawberry hybrids during early developmental stages. Issl. po gen. no.1:147-160 '61. (MIRA 15:1)
(HETEROSIS) (STRAWBERRY BREEDING)

FADEYEVA, T.S.

Sex genetics in garden strawberries (Fragaria elatior Ehrh.) Issl. po gen. no.1:92-105 '61. (MIRA 15:1)
(STRAWBERRIES) (PLANTS, SEX IN)

FADEYEVA, T.S.; DYATLOVA, A.I.

Dynamics of seed germination in the reciprocal hybrids of strawberries. Bot. zhur. 47 no.8:1190-1194 Ag '62. (MIRA 15:10)

1. Leningradskiy gosudarstvennyy universitet.
(Strawberry breeding) (Germination)

FADEYEVA, T.S.

Early diagnosis of the coloration in strawberries. Nauch.dokl. vys.shkoly; biol.nauki no.2:169-170 '63. (MIRA 16:4)

1. Rekomendovana kafedroy genetiki i selektsii Leningradskogo gosudarstvennogo universiteta im. A.A.Zhdanova.
(STRAWBERRIES) (COLOR OF FRUIT)

FADEYEVA, T.S.

Significance of heterozygosity and ontogenetic adaptations for the retention of typical characteristics in clonal varieties of the strawberry. Issl. po gen. no.2:111-120 '64. (MIRA 18:4)

FADEYEVA, T.S.; IRKAYEVA, N.M.

Quality of pollen in the heterotic combinations of reciprocal hybrids in strawberry. Issl. po gen. no.2:140-149 '64. (MIRA 18:4)

FADEYEVA, T.S.; NARBUT, S.I.

Significance of the effect of heterosis in preserving the varietal characteristics in plants. Vest. LGU 20 no.15:128-137 '65.
(MIRA 18:9)

FADEYEVA, V., kandidat tekhnicheskikh nauk.

Modern methods for investigating ceramic materials. Stroi. mat., izd.i konstr. 2 no.9:20-22 S '56. (MLRA 9:11)
(Ceramic materials)

KURYACH'YEV, A.; FADEYEVA, V.

In the commission for planning and designing. Mias.ind.SSSR 31 no.3:26-27 '60. (MIRA 13:9)

1. Rostovskoye otdeleniye instituta Gidrorybproyekt.
(Rostov Province--Meat industry)

Fadeyeva, V. I.

Category: USSR/Analytical Chemistry - Analysis of inorganic substances. G-2

Abs Jour: Referat Zhur-Khimiya, No 9, 1957, 30967

Author : Belyavskaya T. A., Fadeyeva V. I.
Inst : Moscow University. Chair of Analytical Chem.
Title : Quantitative Separation of Beryllium from Some Elements by the Method of Ion-Exchange Chromatography

Orig Pub: Vestn. Mosk. un-ta, 1956, No 6, 73-79

Abstract: Study of the conditions of Be adsorption by SBS cathion-exchange resin, depending on pH, and of its desorption by hydrochloric acid, alkalies and solutions of $(NH_4)_2CO_3$, $NaHCO_3$. A method of quantitative separation of Be from Cu and Ni is described. To the solution containing Be and Cu (Ni), is added NH_4OH and an excess of 10% solution of $(NH_4)_2CO_3$ (pH 8.5-9). The solution is passed through a column (height 20, diameter 0.7 cm) containing SBS in NH_4^+-form, at a rate of 1.5-2 ml/minute. The column is washed with 20-30 ml of $(NH_4)_2CO_3$ solution, the solutions are

Card : 1/2 -7-

15.2220 2808, 1273, 1142

S/180/61/000/002/011/012
E073/E535

AUTHORS: Portnoy, K. I., Levinskiy, Yu.V. and Fadeyeva, V.I. (Moscow)

TITLE: On the Nature of Interaction of Some High Melting Point Carbides and their Solid Solutions with Carbon

PERIODICAL: Izvestiya Akademii nauk SSSR, Otdeleniye tekhnicheskikh nauk, Metallurgiya i toplivo, 1961, No.2, pp.147-149

TEXT: The diagrams of state of metal-carbon systems (the metal being Ti, Zr, Nb, Ta, Hf) have been studied in considerable detail. However, no data are available in literature on the interaction in the pseudo-binary systems TiC-C and NbC-C and as regards ZrC-C, TaC-C and HfC-C it is only mentioned that their diagrams are of a eutectic character. The aim of the work described was to determine the nature of the interaction of such carbides and their solid solutions with carbon. Particular attention was paid to investigating the temperature of appearance of the liquid phase in such systems. The equipment consisted of heating apparatus of 25 kW, the heating being carried out by direct passage of current through a graphite cartridge, inside which the investigated carbide

was placed on a graphite base. The experiments were carried out in an argon atmosphere with a pressure of 5 to 10 mm Hg in excess of the atmospheric pressure. The temperature of appearance of the liquid phase was determined as the minimum temperature at which a thin layer of the carbide powder fused with particles of 10 to 10 on the graphite base. The fusion was observed visually after cooling the specimens. The temperature was measured by an optical pyrometer. Near the liquid phase temperature the measurements were made at steps of 20 to 30°C, the average accuracy of measuring the temperature being ±50°C. Metallographic analysis has shown that the pseudo-binary systems TiC-C, ZrC-C, NbC-C, TaC-C, HfC-C and the pseudo-ternary systems TiC-ZrC-C, NbC-ZrC-C, NbC-TiC-C, TaC-NbC-C, TaC-TiC-C, TaC-ZrC-C, TiC-HfC-C and ZrC-HfC-C are eutectic in nature. Microphotographs of the eutectic structures of the first five systems are reproduced in Fig.1. X-ray analysis of solidifying drops of the eutectic showed that two phases were present in the specimens, namely, graphite and the appropriate carbide. This confirmed the suitability of the selected method of investigations. Fig.2 shows the hypothetical diagrams of state of

the pseudo-binary systems TiC-C, ZrC-C, NbC-C, TaC-C and HfC-C. The composition of the eutectic is determined by a method described by Saltykov in his book "Stereometric metallography" published in 1958. In investigating pseudo-ternary systems, MeC-Me'C-C, mixtures of the powders of the individual carbides or mixtures of powders of the appropriate metals were taken as the starting material, whereby the quantities were chosen so as to obtain a solid solution of carbides of the required composition. X-ray analysis of specimens held for durations of 10 sec to 3 min at 2200-3200°C has shown that for all the investigated compositions and all the holding times only one homogeneous phase was present, which indicates a very high speed of carbidization of the metal powders and of their homogenization at these temperatures. Fig.3 shows the dependence of the lattice period a, kX of homogeneous solid solutions of carbides on their composition, mol.%. These relations are in good agreement with data published by C. Agte et al. (Ref.6), A. Ye. Koval'skiy and Ya. S. Umanskiy (Ref.7) and J. Norton (Ref.8). In the investigated pseudo-ternary systems, the eutectics consist of graphite and a carbide phase of variable composition. It was established that the temperature of formation

of binary eutectics in these pseudo-ternary systems depends to a considerable extent on the composition of the solid solution of the carbides. These dependences are plotted in Fig.4 (t,°C vs. wt.%). Data were obtained on the fusion temperature and the composition of the eutectics in the systems TiC-C and NbC-C. The fusion temperatures of the eutectics of the ZrC-C and TaC-C systems are in good agreement with the data given in the literature (Refs.2-3). However, the fusion temperature of the eutectic of the system HfC-C was 450°C higher than the value given by P. Cotler and I. J. Kohn (Ref.4). It was established that the diagrams of state of the pseudo-ternary systems TiC-ZrC-C, NbC-ZrC-C, NbC-TiC-C, TaC-NbC-C, TaC-Ti-C-C, TaC-ZrC-C have a eutectic nature. Furthermore, the dependence was determined of the temperatures of formation of binary eutectics in these systems as a function of the composition of the carbide phase. There are 4 figures and 8 references: 3 Soviet and 5 non-Soviet.

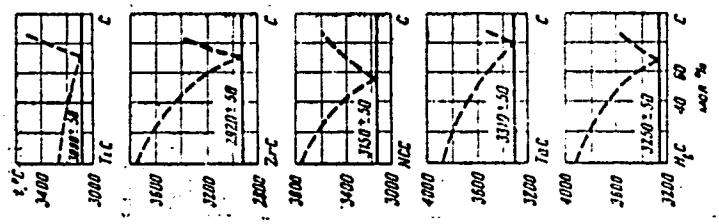
[Abstractor's Note: This is a slightly condensed translation.]

SUBMITTED: September 12, 1960

Card 4/6

Fig.1

Fig.2



Card 5/6

On the Nature of Interaction ...

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E073/E535

Fig.3

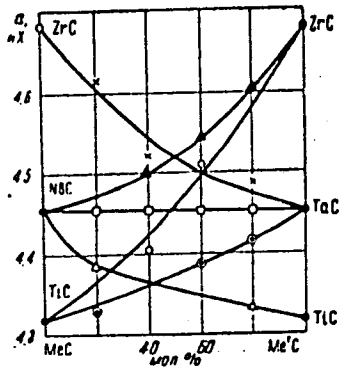
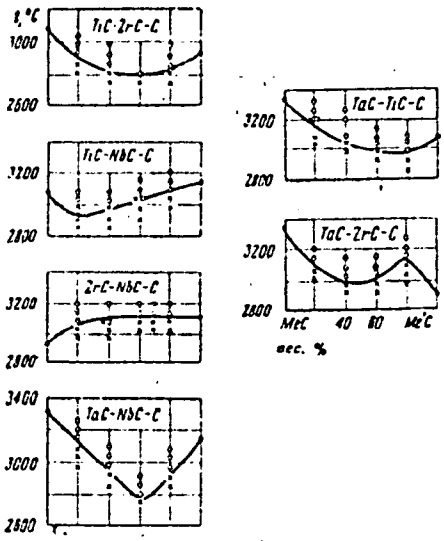


Fig.4



Card 6/6

ALIMARIN, I.P.; FADEYEVA, V.I.; PETROVA, T.N.

Gravimetric determination of scandium with phenylphosphinic acid.
Zhur.anal.khim. 16 no.5:549-551 S-O '61. (MIRA 14:9)

1. Lomonosov Moscow State University.
(Scandium--Analysis) (Phosphinic acid)

S/075/62/017/008/004/004
E071/E135

AUTHORS: Fadeyeva, V.I., and Alimarin, I.P.

TITLE: Use of chlorophosphonazo III for the photometric determination of titanium, zirconium, thorium and scandium

PERIODICAL: Zhurnal analiticheskoy khimii, v.17, no.8, 1962, 1020-1023

TEXT: Some results of a systematic study of properties of solutions of chlorophosphonazo III [2,7-bis-(4-chloro-2-phosphonbenzolazo)-1,8-dioxynaphthalene-3,6-disulphoacid] and its compounds with thorium, zirconium, titanium and scandium are reported. The molar extinction coefficient of solutions of Th, Zr, Ti and Sc compounds at 690 mμ are, respectively: 43,100; 33,000; 10,800; 12,500; and the apparent equilibrium constants of the complex compounds are: $pK_{Th} = 13.9$; $pK_{Zr} = 13.4$; $pK_{Ti} = 5.7$; $pK_{Sc} = 6.9$. A high stability of the complex compounds permits the determination of the above elements in the presence of sulphates,

phosphates, oxalates and other interfering ions. The reagent is most selective in respect of thorium and zirconium; the presence of di- and trivalent elements has no practical interference. Of importance is the determination of scandium on the background of zirconium, titanium, iron and aluminium if these are bound with tartaric acid. The determination of thorium and zirconium can be done either by the usual photometric method or by the spectrophotometric titration method. Aqueous solutions of compounds of thorium, zirconium, titanium and scandium with the reagent conform to Beer's law up to concentrations of 1-1.2 μg/mℓ of Zr, Ti and Sc, and 2 μg/mℓ of Th.
There are 5 figures and 2 tables.

ASSOCIATION: Moskovskiy gosudarstvennyy universitet im. M.V. Lomonosova
(Moscow State University imeni M.V. Lomonosov)

SUBMITTED: March 13, 1962

FADEYEVA, V. I.

ALIMARIN, I.P. (Moscow, Bogorodskiy val.d.3); FADEEVA, V.I. [Fadeyeva, V.I.] (Moscow, Bogorodskiy val.d.3)

Use of aromatic phosphonic acids for determining rare elements. Acta chimica Hung 32 no.2:171-182 '62.

1. Institut geokhimii i analiticheskoy khimii Akad.nauk SSSR.

L 10730-63 EWP(q)/EWT(m)/BDS--AFFTC/ASD--JD/JG

ACCESSION NR: AP3002261 S/0089/63/014/006/0559/0562

55

AUTHOR: Portnoy, K. I.; Fadeyeva, V. I.; Timofeyeva, N. I.

TITLE: Polymorphism of some oxidizers of rare-earth elements and their interaction with water

SOURCE: Atomnaya energiya, v. 14, no. 6, 1963, 559-562

TOPIC TAGS: samarium, europium, gadolinium, polymorphism

ABSTRACT: Polymorphism of the oxidizers, samarium, europium and gadolinium is considered. The presence of two modifications of these oxidizers is established and the temperature of phase transformation is determined. It is shown that the activation of these oxidizers in relation to boiling water depends on their structure. Quantitative laws governing the solubility of the oxidizers in boiling water are introduced. Orig. art. has: 2 figures.

ASSOCIATION: none

SUBMITTED: 27Aug62 DATE ACQ: 12Jul63 ENCL: 00

SUB CODE: 00 NO REF SOV: 001 OTHER: 004

Card 1/1

Alimarin, I.P.; Fadeyeva, V.I.

Photometric method for determining scandium with chlorophosphonaze-III in wolframite. Vest.Mosk. un. Ser.2: Khim. 18 no.4:67-69 Jl-Ag '63. (MIRA 16:9)

1. Kafedra analiticheskey khimii Moskovskogo universiteta.
(Scandium--Analysis) (Wolframite--Analysis)
(Photometry)

FADEYEVA, V.I.; ALIMARIN, I.P.; IVANOV, V.M.

Dissociation of chlorophosphonazo III of (2,7-bis)4-chloro-2-phosphonobenzolazo- (1,8-dihydroxynaphthalene-3,6-disulfonic acid). Vest. Mosk. un. Ser. 2: Khim. 18 no.5:44-48 S-O '63. (MIRA 16:11)

1. Kafedra analiticheskoy khimii Moskovskogo universiteta.

PORTNOY, K.I.; TIMOFEYEVA, N.I.; FADEYEVA, V.I.

Reaction of rare-earth oxides with chromium. Zhur. neorg. khim. 10 no.9:2041-2043 S '65. (MIRA 18:10)

L 10422-66 EWT(m)/EWP(t)/EWP(b) IJP(c) JD/JG

ACC NR: AP6000286 SOURCE CODE: UR/0078/65/010/009/2041/2043

45
43
03

AUTHOR: Portnoy, K.I.; Timofeyeva, N.I.; Fadeyeva, V.I.

ORG: None

TITLE: Reactions of rare earth oxides with chromium

SOURCE: Zhurnal neorganicheskoy khimii, v. 10, no. 9, 1965, 2041-2043

TOPIC TAGS: chromium compound, europium compound, samarium compound, inorganic oxide, powder metal, sintering, phase diagram, metal analysis, rare earth element, redox reaction

ABSTRACT: Powdered Sm_2O_3-Cr_2O_3 and Eu_2O_3-Cr_2O_3 mixtures with various ratios of the components were pressed and sintered at 1073, 1273, 1473, and 1573K, and the products were studied by chemical and x-ray analyses. Phase diagrams of the two systems were plotted. The compound formed by Eu_2O_3 and Sm_2O_3 with chromic oxide has a rhombic structure with parameters $\underline{a}$ = 5.38 Å, $\underline{b}$ = 5.51 Å, $\underline{c}$ = 7.64 Å for $SmCrO_3$, and $\underline{a}$ = 5.30 Å, $\underline{b}$ = 5.52 Å, and $\underline{c}$ = 7.60 Å for $EuCrO_3$. Also studied were the systems Cr-Sm_2O_3 (Eu_2O_3). The $SmCrO_3$ phase was formed under all conditions by the reaction of chromium metal with samarium oxide. The chromite content in samples sintered in hydrogen increases with the temperature and is independent of the composition of the mixture, probably because the formation of the chromite via reduction of Sm_2O_3 is much slower than the reaction of

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L 10442-66

ACC NR: AP6000286

chromic oxide with samarium oxide. In the case of europium oxide reacting with chromium, europium chromite also was formed. Orig. art. has: 3 figures and 1 table.

SUB CODE: 07 / SUBM DATE: 01Jan64 / OTH REF: 003

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