BELYAYEVA, N. V.

Dissertation defended in the Geological Institute for the academic degree of Candidate of Geologo-Mineralogical Sciences:

"Distribution of Plankton Foraminifers in the Waters and Sediments of the Indian Ocean."

Vestnik Akad Nauk, NO. 4, 1963, pp 129-145

EBLYAZEVA, N.I.

Distribution of plankton foraminifers on the bottom of the Indian Ocean. Vop. mikropaleont. no.7:209-222 '63.
(MIRA 17:10)

1. Institut okeanologii AN SSSR.

BELYAYEVA, N.V.

Distribution of plankton foraminifers in the waters and the bottom of the Indian Ocean. Trudy Inst. okean. 68:12-83 '64.
(MIRA 17:6)

BELYAYEVA, N.V.

Relapsing agranulocytosis. Sovet med. 17 no. 12:3-6 Dec 1953.
(CIML 25:5)

1. Of the Hospital and Propedeutic Therapeutic Clinic (Director -- Prof. Ye. M. Tareyev, Active Member AMS USSR) of the Sanitary-Hygienic Faculty of First Moscow Order of Lenin Medical Institute.

BELYAYEVA, N.V.; KANEVSKAYA, T.S.

Acute hemolytic reaction (hemaglobinuria fever) in therapy with streptocide. Sov.med.19 no.9:48-51 S '55. (MLRA 8:12)

1. Iz gospital'noy i propedevticheskoy terapevticheskoy kliniki (dir.-deystvitel'nyy chlen Akademii meditsinskikh nauk SSSR prof. Ye. M. Tareyev) sanitarno-gigiyenicheskogo fakul'teta I Moskovskogo ordena Lenina meditsinskogo instituta i detskoy bol'nitsy Moskovsko-Kursko-Donbasskoy zheleznoy dorogi (nachal'nik A.N.Galkina)

(SULFANILAMIDE, injurious effects,
anemia, hemolytic, with hemoglobinuria)
(HEMOGLOBINURIA, etiology and pathogenesis
sulfanilamide, allergic reaction)
(ANEMIA, HEMOLYTIC, etiology and pathogenesis
sulfanilamide, allergic reaction)
(ALLERGY,
to sulfanilamide, causing hemolytic anemia with hemoglobinuria)

BELYAYEVA, N.V.

Aplastic anemia and agranulocytosis in synthomycin therapy. Sov. med. 21 no.8:112-122 Ag '57. (MIRA 10:12)

1. Iz propedevticheskoy i gospital'noy kliniki (dir. - deystvitel'nyy chlen Akademii meditsinskikh nauk SSSR prof. Ye.M.Tareyev) Sanitarno-gigiyenicheskogo fakul'teta I Moskovskogo ordena Lenina meditsinskogo instituta imeni I.M.Sechenova.

(CHLORAMPHENICOL, inj. eff.
agranulocytosis & aplastic anemia (Rus))
(ANEMIA, APLASTIC, etiol. & pathogen.
chloramphenicol ther. (Rus))
(AGRANULOCYTOSIS, etiol. & pathogen.
same)

BELYAYEVA, N.V., Cand Med Sci -- (diss) "Hematological syndromes in intolerance to drugs." Mos, 1958, 14 pp (First Mos Order of Lenin Med Inst im I.M. Sechenov) 200 copies (KL, 23-58, 111)

APROSINA, Z.G., kand.med.nauk; BELYAYEVA, N.V.

Treatment of lymphogranulomatosis with butadion. Sov.med. 23 no.1:119-124 Ja '59. (MIRA 12:2)

1. Iz kafedry obshchey i gospital'noy terapii (zav. - deystvitel'nyy chlen AMN SSSR prof.Ye.M. Tareyev) sanitarno-gigiyenicheskogo fakul'teta I Moskovskogo ordena Lenina meditsinskogo instituta imeni I.M. Sechenova na baze 24-y Gorodskoy klinicheskoy bol'nitsy (glavnyy vrach V.P. Uspenskiy).

(HODGKIN'S DISEASE, ther.
phenylbutazone (Rus))
(PHENYLBUTAZONE, ther. use
Hodgkin's dis. (Rus))

L 63798-65 EWT(m)/EWP(e)/EWP(v)/EWP(j)/T WW/RM

ACCESSION NR: AP5018794 UR/0138/65/000/007/0023/0028

667.494.7.061.43.01:621.798

AUTHOR: Garetovskaya, N. L.; Belyayeva, N. V.

TITLE: Adhesive compositions for polyester fiber

SOURCE: Kauchuk i rezina, no. 7, 1965, 23-28

TOPIC TAGS: polyester fiber, adhesive, bonding material, isocyanate, rubber bonding

ABSTRACT: The article presents certain data obtained by testing methods of bonding heavy technical polyester fabrics such as belting to rubbers used for the production of high-strength conveyor belts. Isocyanates were found to produce very strong bonds between polyester fiber and rubbers. At the present time, the most effective method of production consists of a two-stage impregnation: in a latex - resorcinol - formaldehyde composition and in an organic solvent. The bonding strength between rubber and fabric was studied as a function of the amount of isocyanate in the adhesive, duration of storage of the adhesive composition, duration of storage of the fabric smeared with the adhesive, method of impregnation, duration of contact between the fabric and a dichloroethane solution of isocyanate, and duration of storage of various bonded samples. The method of treatment

Card 1/2

L 63798-65

ACCESSION NR: AP5018794

with adhesive compositions containing isocyanates is recommended for the manufacture of materials obtained by spreading. In the production of triphenylmethane triisocyanate, the solvent dichloroethane should be replaced by methylene chloride. Orig. art. has: 6 figures.

ASSOCIATION: Nauchno-issledovatel'skiy institut rezinovoy promyshlennosti (Scientific Research Institute of the Rubber Industry)

SUBMITTED: 00 ENCL: 00 SUB CODE:

NO REF SOV: 004 OTHER: 011

Card 2/2

BELYAYEVA, N.V.; SAIDOVA, Kh.M.

Correlation of benthonic and planktonic Foraminifera in the surface layer of the sediments of the Pacific Ocean. Okeanologiia 5 no.6:1010-1014 '65. (MIRA 19:1)

1. Institut okeanologii AN SSSR.

GANAGO, F.M., kand. med. nauk; Prinimali uchastiye: ALEKSEYEVA, R.M., vrach (Sverdlovsk); AYZENSHTEYN, B.S., vrach (Sverdlovsk); BABINOVA, G.D., vrach (Sverdlovsk); BOROVITSKAYA, L.M., vrach (Sverdlovsk); VARGANOVA, M.V., vrach (Sverdlovsk); KOPYLOVA, K.P., vrach (Sverdlovsk); SOKOLOVA, O.V., vrach (Sverdlovsk); SHEVTSOVA, R.P., vrach (Sverdlovsk); SHELOMOVA, I.M., vrach (Sverdlovsk); BYKHOVSKAYA, M.A., vrach (Revda); BELYAYEVA, N.Ya., vrach (Magnitogorsk); KRUGLOVA, N.A., vrach (Kurgan); NIKIFOROVA, F.N., vrach (Kurgan); MITINA, O.A., vrach (Asbest); PORKHOVNIKOVA, E.D., vrach (Ufa); PONOMAREVA, N.I., vrach (Orenburg); RASSOSHNYKH, G.F., vrach (Perm'); SAZANOVA, V.V., vrach (Izhevsk)

Chemoprophylaxis of tuberculosis in children and adolescents in foci of tuberculous infection. Probl. tub. 42 no.1:6-11 '64. (MIRA 17:8)

1. Detskoye otdeleniye (zav. F.M. Ganago) Sverdlovskogo instituta tuberkuleza (dir. - prof. I.A. Shaklein) (for Ganago).

KRISTER, E.E., dotsent; BELYAYEVA, O.N.; GOLDINA, V.V.; GURSKAYA, T.K.; LESHCHENKO, A.I. (Kiyev)

Coronary insufficiency in people engaged in mental work. Klin.med. no.12:3-6 '61. (MIRA 15:9)

1. Iz otdela funktsional'noy patologii (zav. - dotsent E.E. Krister) Ukrainskogo nauchno-issledovatel'skogo instituta klinicheskoy meditsiny imeni akad. N.D. Strazhesko (dir. - zaslushennyy deyatel' nauki prof. A.L. Mikhnev).

(CORONARY HEART DISEASE)

BELYAYEVA, R.A.

Development of invention and innovation at the enterprises of the Administration of the Furniture and Woodworking Industries of the Leningrad Economic Council. Nauch. trudy LTA no.99:145-156 '62. (MIRA 17:1)

BELYAYEVA, R.A.

Evaluation of the state of the blood circulatroy system in mitral stenosis based on gas exchange data. Terap. arkh. 35 no.5:60-65 My'63 (MIRA 16:12)

1. Iz fakul'tetskoy terapevticheskoy kliniki Voronezhskogo meditsinskogo instituta (nauchnyy rukovoditel' - prof. M.N. Tumanovskiy).

[redacted], I. L., [redacted], A.A., [redacted], G. L.

"A zoologo-parasitological description of the foci of hemorrhagic nephroso-nephritis in the city of Khabarovsk and its outskirts." p. 122

Desyatoye soveshchaniye po parazitologicheskim problemam i prirodnoochagovym boleznyam. 22-29 Oktyabrya 1959 g. (Tenth Conference on Parasitological Problems and Diseases with Natural Foci 22-29 October 1959), Moscow-Leningrad, 1959, Academy of Medical Science USSR and Academy of US R, No. 1 254pp.

BELYAYEVA, T.B.; ZALGALLER, V.A.

Formulation of the theory of envelopes; a methodological note.
Usp. mat. nauk 18 no.5:137-149 S-O '63. (MIRA 16:12)

L [illegible]-67 EWT(d)/EWP(v)/EWP(k)/EWP(h)/EWP(l)
ACC NR: AT6024068 SOURCE CODE: UR/2944/66/000/003/0070/0075

AUTHOR: Belyayeva, T. B.

ORG: none

TITLE: Stability conditions for automatic control systems with variable parameters

SOURCE: Leningrad. Universitet. Kafedra vychislitel'noy matematiki i Vychislitel'nyy tsentr. Metody vychisleniy, no. 3, 1966, 70-75

TOPIC TAGS: automatic regulation, stability condition, linear differential equation

ABSTRACT: Stability conditions are given for the system

$$\dot{z}=Pz+q\varphi(\sigma),\quad \sigma=[\alpha_0+\alpha(t)]\,r^*z, \qquad (1)$$

as follows:

$$\alpha_0>0,\quad 0<\alpha(t)<\alpha_1; \qquad (2) \qquad 0<\frac{\varphi(\sigma)}{\sigma}<\mu_0\quad (\sigma\neq 0,\ \mu_0<+\infty). \qquad (3)$$

It is concluded that (1) is absolutely stable if the spectrum of matrix P lies in the left half-plane and if the following holds:

$$\frac{1}{(\alpha_0+\alpha_1)\mu_0}+\mathrm{Re}\,((P-i\omega I)^{-1}q,\ r)>0,\quad \omega>0.$$

Card 1/2

L 09442-67

ACC NR: AT6024068

It is proved that under certain assumptions in addition to conditions (2) and (3), the system of indirect control

$$\begin{cases} \dot{x} = Ax + a\varphi(\sigma), \\ \dot{\sigma} = [\alpha_0 + \alpha(t)]\, b^* x - \rho\varphi(\sigma), \quad \rho > 0. \end{cases}$$

is in its trivial solution stable as a whole. Orig. art. has: 35 formulas.

SUB CODE: 12/ SUBM DATE: 16Apr63/ ORIG REF: 005

Card 2/2

BELYAYEVA, T. G. Cand Biolog Sci

Dissertation: "Experimentally-Morphological and Hystological Investigations of the Cornea of Amphibia." 24/1/50

Moscow Regional Pedagogical Inst

SO Vecheryaya Moskva
Sum 71

BELYAYEVA, T. G.
BELYAEVA, T. G.

USSR/Medicine - Tissue Transplantation May/Jun 51

"Restoration of the Cornea of Adult Mammals by Replacing it With Embryonal Skin," V. V. Popov, T. A. Bednyakova, T. G. Belyaeva, Exptl Embryol Lab imeni Filatov, Inst of Animal Morphol, Acad Sci USSR, and Chair of Embryol, Moscow State U imeni Lomonosov

"Iz Ak Nauk SSSR, Ser Biol" No 3, pp 3-17

Based work on Popov's expts on adult lower vertebrates, such as amphibia and fish. Used lab rats for expts. Rat embryos, 13-19 days old served as donors. Obtained best results with transplantations of skin from embryo 15-17 days old. Carried out total of 217 transplatations. Transplatate does not grow into skin, but always develops into cornea, exactly as had been demonstrated in expts conducted on lower vertebrates.

186T70

same article title and authors, Dokl. Ak. Nauk SSSR, 77, No. 3, p. 529-32, 1951

BELYAYEVA, T. G.

231T2

USSR/Biology, Medicine - Replacement of Cornea May 52

"Replacement of the Cornea of Adult Rats and Guinea Pigs With Fixed Embryonal Skin," T. G. Belyayeva, Inst of Animal Morphol imeni A. N. Severtsov, Acad Sci USSR

"Dok Ak Nauk SSSR" Vol 84, No 2, pp 381-384

Compares results achieved by replacing the cornea with fresh embryonal skin and "fixed" embryonal skin (i.e., skin preserved after treatment with formaldehyde and alc). Points out

231T2

that, in contradistinction to fresh skin, fixed skin serves merely as a matrix along which the regenerating tissue grows: the transplantate itself is composed of dead tissue that is gradually resorbed. Nevertheless, fixed skin becomes translucent after transplantation into the eye, just as fresh skin does. Presented by Acad A. I. Abrikosov 13 Mar 52.

231T2

BELYAYEVA, T. G.

USSR/Medicine - Experimental morphology

Card 1/1 Pub. 22 - 47/50

Authors : Belyaeva, T. G.

Title : Replacement of an open wound in the cornea of rabbits with the embryonal skin

Periodical : Dok. AN SSSR 100/1, 179-182, Jan. 1, 1955

Abstract : A new method is introduced for the revivification of pathologically changed cornea. A total of 248 embryonal skin transplant operations were carried out on rabbits with damaged cornea and the results obtained are described. Eleven references: 9 USSR, 1 German and 1 English (1915-1954). Illustrations.

Institution : Acad. of Sc., USSR, The A. N. Severtsov Institute of Animal Morphology

Presented by : A. I. Abrikosov, October 23, 1954

BELYAYEVA, T.G.

Some data on the secretion of corpora allata in caterpillars and adult forms of the Chinese tussah moth (Antheraea pernyi). Dokl. AN SSSR 134 no.4:987-990 O '60. (MIRA 13:9)

1. Institut morfologii zhivotnykh im. A.N.Severtsova Akademii nauk SSSR. Predstavleno akad. I.I.Shmal'gauzenom.
(Endocrine glands) (Insects--Physiology)

BELYAYEVA, T.G.

Histochemical study of the secretion of corpora allata in caterpillars of the Chinese tussah moth (Antheraea pernyi); polysaccharides. Dokl. AN SSSR 135 no.?:449-452 N '60. (MIRA 13:11)

1. Institut morfologii zhivotnykh im.A.N.Severtsova AN SSSR. Predstavleno akademikom Ye.N. Pavlovskim.
(Silkworms) (Glycogen) (Glands)

BELYAYEVA, T.G.

Data on the secretion of corpora cardiaca in caterpillars and adult moths of the Chinese oak silkworm (Antheraea pernyi). Dokl. AN SSSR 140 no.3:692-695 S '61. (MIRA 14:9)

1. Institut morfologii zhivotnykh im. A.N.Severtsova AN SSSR. Predstavleno akademikom I.I.Shmal'gauzenom.
(Insects--Physiology) (Glands)

USSR / Human and Animal Physiology. Neuromuscular Physiology. T

Abs Jour: Ref Zhur-Biol., No 9, 1958, 41653.

Author : Stroykova, K. V.; Belyayeva, T. I.
Inst : Not Given.
Title : The Effect of High Tension, Low Frequency Electrical Field on the Level of the Macroergic Phosphoric Compounds in the Skeletal Muscle of Warmblooded Animals.

Orig Pub: Fiziol. zh. SSSR, 1957, 43, No 5, 469-472.

Abstract: Mice were placed for a period of 3 hours between 2 lamellar electrodes charged with 60,0000 v. The speed of onset of muscle rigor (after decapitation)

Card 1/3

USSR / Human and Animal Physiology. Neuromuscular Physiology. T

Abs Jour: Ref Zhur-Biol., No 9, 1958, 41653.

Abstract: was determined in the experimental and control animals (placed in identical cages) after the method of L. N. Tank (Fiziol zh SSSR, 1954, 40, No 2, 216) during the same period, but with excluded transformers. The average time of rigor onset after the first exposure was short - 6.0-10.6 min, and in the controls - 23.5-27.0 min. After a third exposure, for periods of 3 hours, the time of rigor onset increased to 15-16.1 min. After 15 exposures, the time of rigor was 20.5 min. The average speed of rigor onset in the experimental animals was 16.1 min. A shorter rigor-onset time was noted in the experimental animals, with a tendency to slowing of rigor with the increase in the number of exposures. All the

Card 2/3

USSR / Human and Animal Physiology. Neuromuscular Physiology. T

Abs Jour: Ref Zhur-Biol., No 9, 1958, 41653.

Abstract: experiments demonstrated disturbances of the balance of the macroergic compounds under the effect of the electrical field. It is concluded that, during its early action the electrical field causes a decrease of the macroergic level and that with prolongation of exposure a change in the metabolic processes possibly takes place with compensating effect. The development of rigor at an earlier period, immediately after death, is characteristic.

Card 3/3

BELYAYEVA, T. M.

Belyayeva, T. M. and Morkovkina, A. G. "Cytobacteroscopy of urethral discharges in female gonorrhea", Sbornik nauch. trudov (Rost. obl. nauch.-issled. akusherslo-ginekol. in-t), Issue 8, 1948, p. 61-67

So: U-3261, 10 April 1953 (Letopis 'Zhurnal 'nykh Statey, No. 12, 1949).

BELYAYEVA, T. M.

BELYAYEVA, T. M. -- "The Problem of Changes in the Mucous Membrane of the Vagina and Cervix Uteri in Female Workers of Sorting Departments of Coal Mines under the Influence of Coal Dust." Rostov Na Donu State Medical Inst. Rostov na Donu, 1955. (Dissertation for the Degree of Candidate in Medical Sciences)

SO: Knizhnaya Letopis', No 1, 1956

[illegible] A.L., [illegible]

[illegible] acid content in the endometrium in the [illegible] of the menstrual cycle in sterility. Akush. i ginek. [illegible] gos. nauch. issl. in-ta 11:303-308 '63.

Study of the luteinic function in women with [illegible] of obscure etiology. Ibid.:309-316

1. Iz akushersko-ginekologicheskoy [illegible] (zav. - prof. [illegible]) Rostovskogo-na-Donu [illegible] instituta akusherstva i pediatrii (dir. - [illegible]) i [illegible] (konsul'tant - prof. [illegible]).

BELYAYEVA, T.N.

High-speed cutting on automatic machines. Mashinstroitel' no.9: 23-24 S '63. (MIRA 16:10)

(Machine tools)

DOBROVOL'SKIY, O.A.; BELYAYEVA, I.N.; GOLUBEV, V.F.

Measuring the density of methane by the hydrostatic suspension method. Gaz. prom. 9 no.11:47-48 '64. (MIRA 17:12)

ZVEREVA, V.A.; BELYAYEVA, T.N.

Dutch cheese as a possible source of food poisoning of a staphylococcal nature. Uch.zap. Mosk. nauch. issl. inst. san. i gig. no.4:53-56 '60 (MIRA 16:11)

PERMINOV, A.Ye.; ROMANOV, A.A.; MIZEROV, A.V.; TSYBA, M.M.; ZHELUDKOV, A.S.; NEKRASOV, V.V.; PRASOLOV, M.I.; BARTENEV, S.N.; BELYAYEVA, T.P.; ZHERDEV, P.A.; KOYVUNEN, T.M.; SMORODOV, P.V., redaktor; POD"YEL'SKAYA, K.M., tekhn. red.

[Manual for a Karelian field crop grower] Spravochnik karel'skogo polevoda. Petrozavodsk, Karel'skoe knizhnoe izd-vo, 1962. 435 p. (MIRA 17:3)

LEVSH, I.P.; EL'GORT, V.M.; ANOSHKINA, G.M.; BELYAYEVA, T.V.

Dynamics of the drying of Angren black clay. Uzb.khim. zhur. no.5:79-83 '61. (MIRA 14:9)

1. Srednaziatskiy politekhnicheskiy institut.
(Angren--Clay--Drying)

BELYAYEVA, T.V.

Composition and distribution of diatoms in the surface layer of the Pacific Ocean sediments. Okeanologiia 3 no.4:684-696 '63. (MIRA 16:11)

1. Institut okeanologii AN SSSR.

BELYAYEVA, T.V. (Sechkina)

Diatoms from the surface layer of sediments in the northwestern part of the Pacific Ocean. Trudy Inst.okean. 46:231-246 '61.
(MIRA 14:6)

(Pacific Ocean--Diatoms, Fossil)

BELYAYEVA, T.V. (Sechkina)

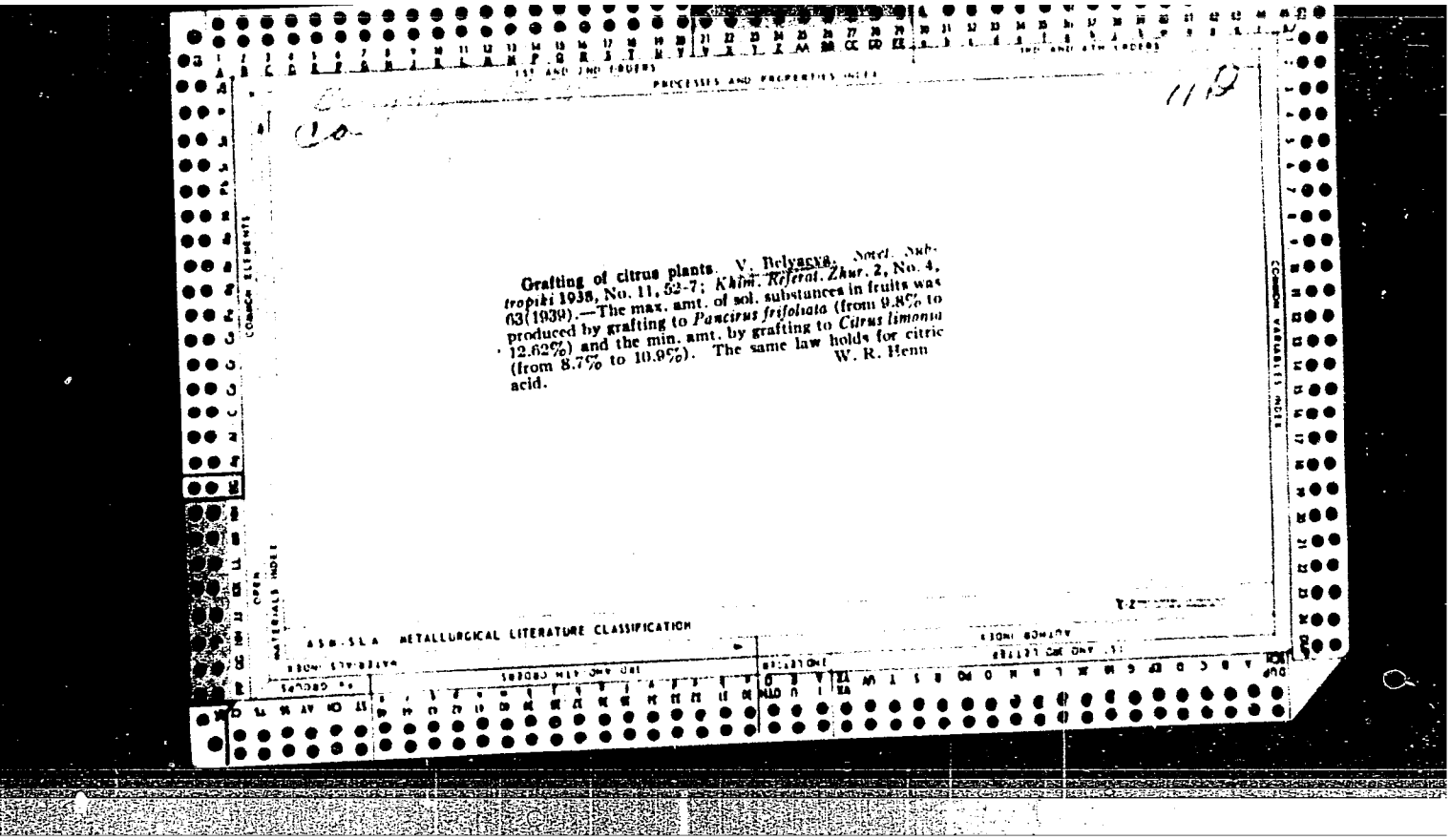
Diatoms from the surface layer of sediments in the Sea of Japan. Trudy Inst.okean. 46:247-262 '61. (MIRA 14:6)
(Japan, Sea of—Diatoms, Fossil)

VYAZOVSKAIA, N.; BELYAYEVA, V.

Moldavia - Muskrats

Muskrat in Moldavia. Vokrug sveta No. 3, 1953.

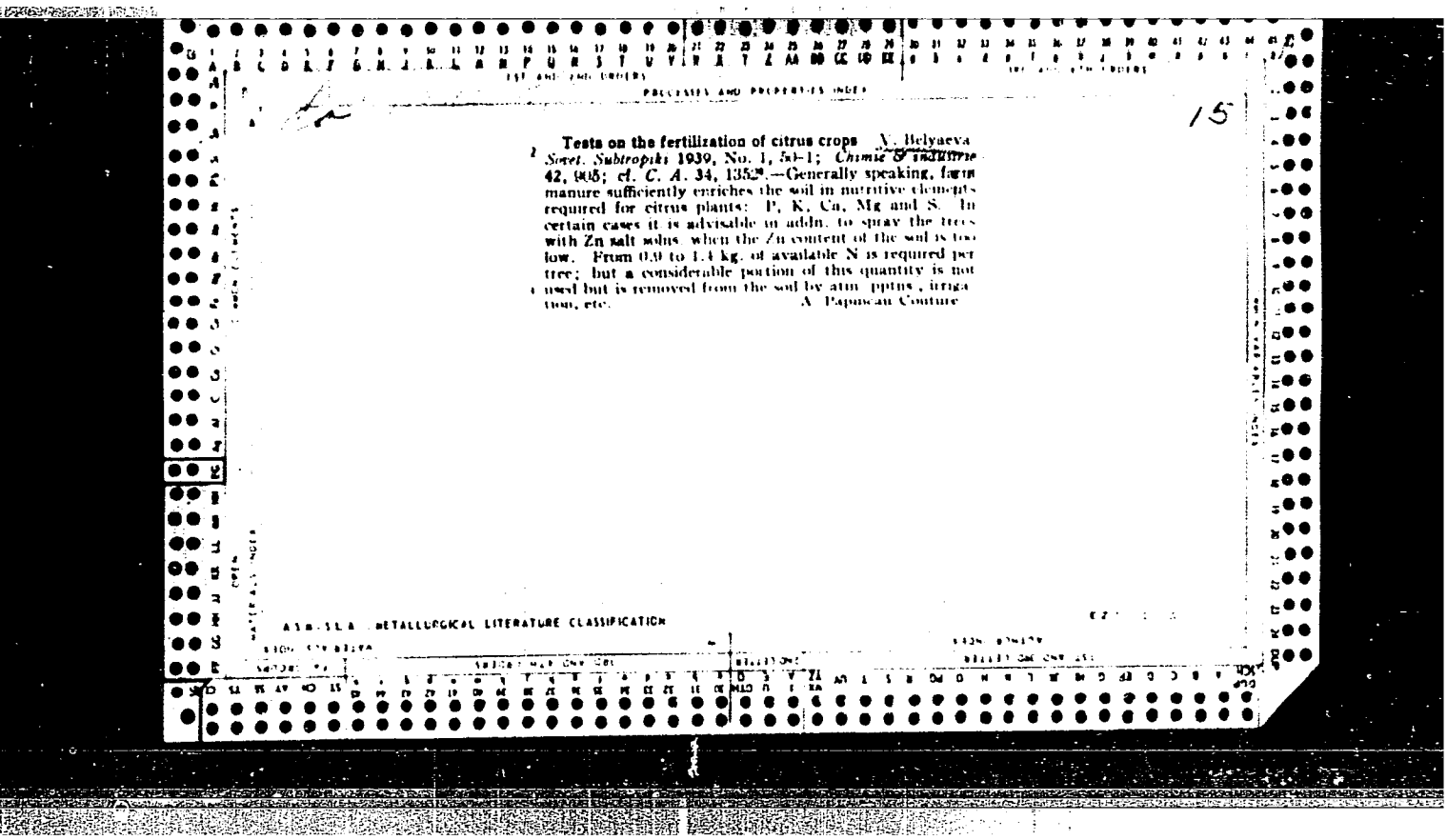
Monthly List of Russian Accessions, Library of Congress, June 1953. Unclassified.



Grafting of citrus plants. V. Belyaeva. *Sovet. Subtropiki* 1938, No. 11, 52-7; *Khim. Referat. Zhur.* 2, No. 4, 63(1939).—The max. amt. of sol. substances in fruits was produced by grafting to *Poncirus trifoliata* (from 9.8% to 12.62%) and the min. amt. by grafting to *Citrus limonia* (from 8.7% to 10.9%). The same law holds for citric acid.

W. R. Henn

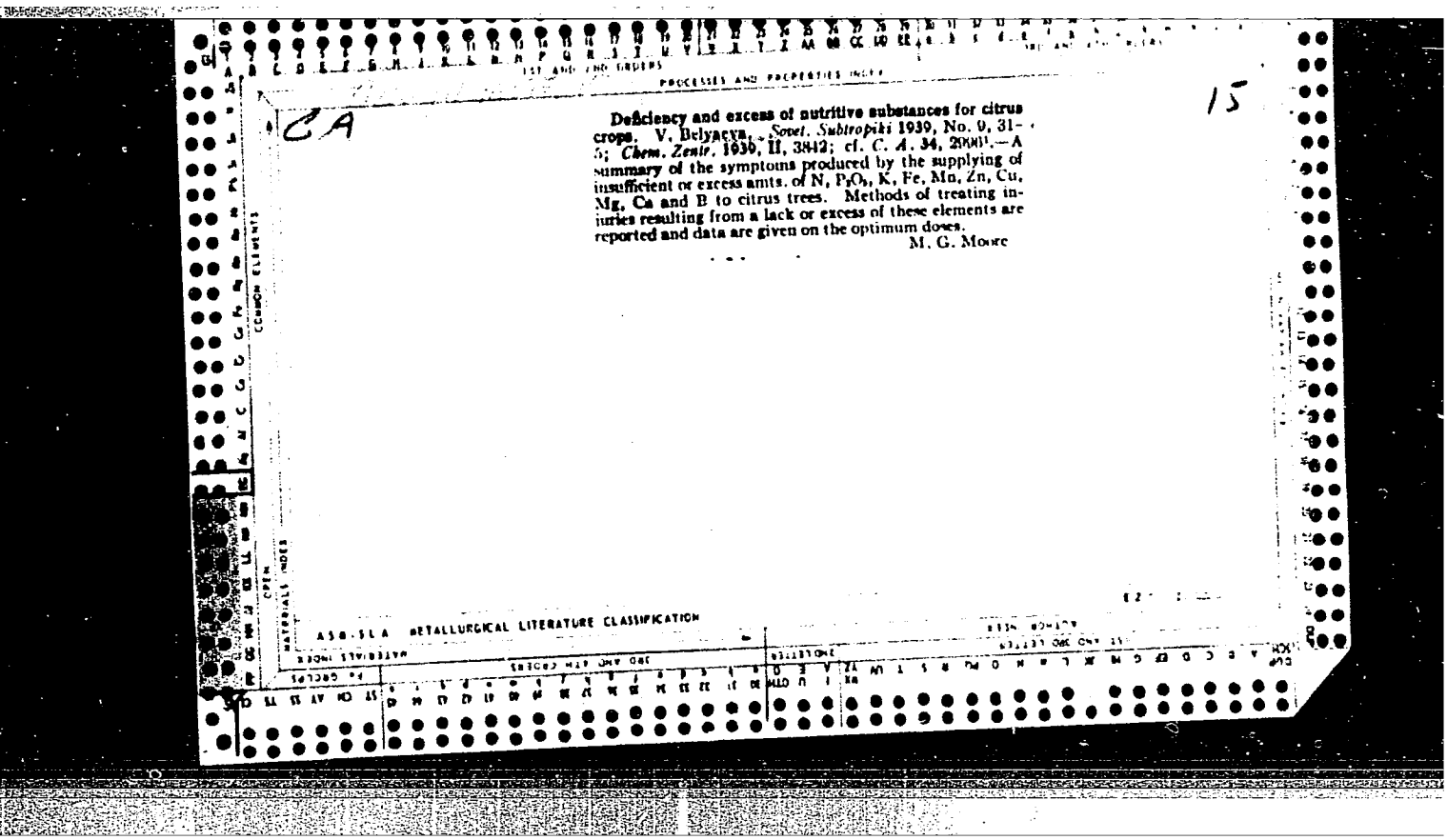
ASM-SLA METALLURGICAL LITERATURE CLASSIFICATION



15

Tests on the fertilization of citrus crops V. Belyaeva *Sovet. Subtropiki* 1939, No. 1, 58–1; *Chimie & industrie* 42, 905; *cf. C. A.* 34, 1352⁹.—Generally speaking, farm manure sufficiently enriches the soil in nutritive elements required for citrus plants: P, K, Ca, Mg and S. In certain cases it is advisable in addn. to spray the trees with Zn salt solns. when the Zn content of the soil is too low. From 0.9 to 1.4 kg. of available N is required per tree; but a considerable portion of this quantity is not used but is removed from the soil by atm. ppts., irrigation, etc. A. Papuscau Couture

A1a-1L1a METALLURGICAL LITERATURE CLASSIFICATION



CA

15

Deficiency and excess of nutritive substances for citrus crops. V. Belyaeva. *Sovet. Subtropiki* 1939, No. 9, 31–5; *Chem. Zentr.* 1939, II, 3842; cf. *C. A.* 34, 2080⁵.—A summary of the symptoms produced by the supplying of insufficient or excess amts. of N, P_2O_5, K, Fe, Mn, Zn, Cu, Mg, Ca and B to citrus trees. Methods of treating injuries resulting from a lack or excess of these elements are reported and data are given on the optimum doses.

M. G. Moore

A58-51A METALLURGICAL LITERATURE CLASSIFICATION

AGRANOVSKIY, I.; ARANOVICH, B.; BELYAYEVA, V.; BOL'SHAKOV, A.; GRUZDEV, V.; DICH, S.; ZELENTSOV, I.; KONKIN, A.; LEVIT, R.; MIKHAYLOV, N.; MOGILEVSKIY, Ye.; SERKOV, A.; SMELKOV, G.; SNETKOV, N.; SOROKIN, Ya.; SHIFRIN, L.

In memory of Vladimir Sergeevich Smurov, 1897-1965. Khim. volok. no.2:78 '65. (MIRA 18:6)

KUPEYEV, Yu.; MIKHAYLOVA, Ye.; BELYAYEVA, V.; STRANTSEVA, Yu.

Alternating current generator of the PAZ-652 motortruck. Avt.transp. 39 no.6:40-43 Je '61. (MIRA 14:7)
(Motortrucks—Electric equipment)

BELYAYEVA, V. A.

137-58-1-2104

Translation from: Referativnyy zhurnal, Metallurgiya, 1958, Nr 1, p 285 (USSR)

AUTHORS: Belyayeva, V. A., Tarantsova, M. I., Glushko, Ye. I.

TITLE: Electrolytic Segregation of Iron from Titanium (Elektroliticheskoye otdeleniye zheleza ot titana)

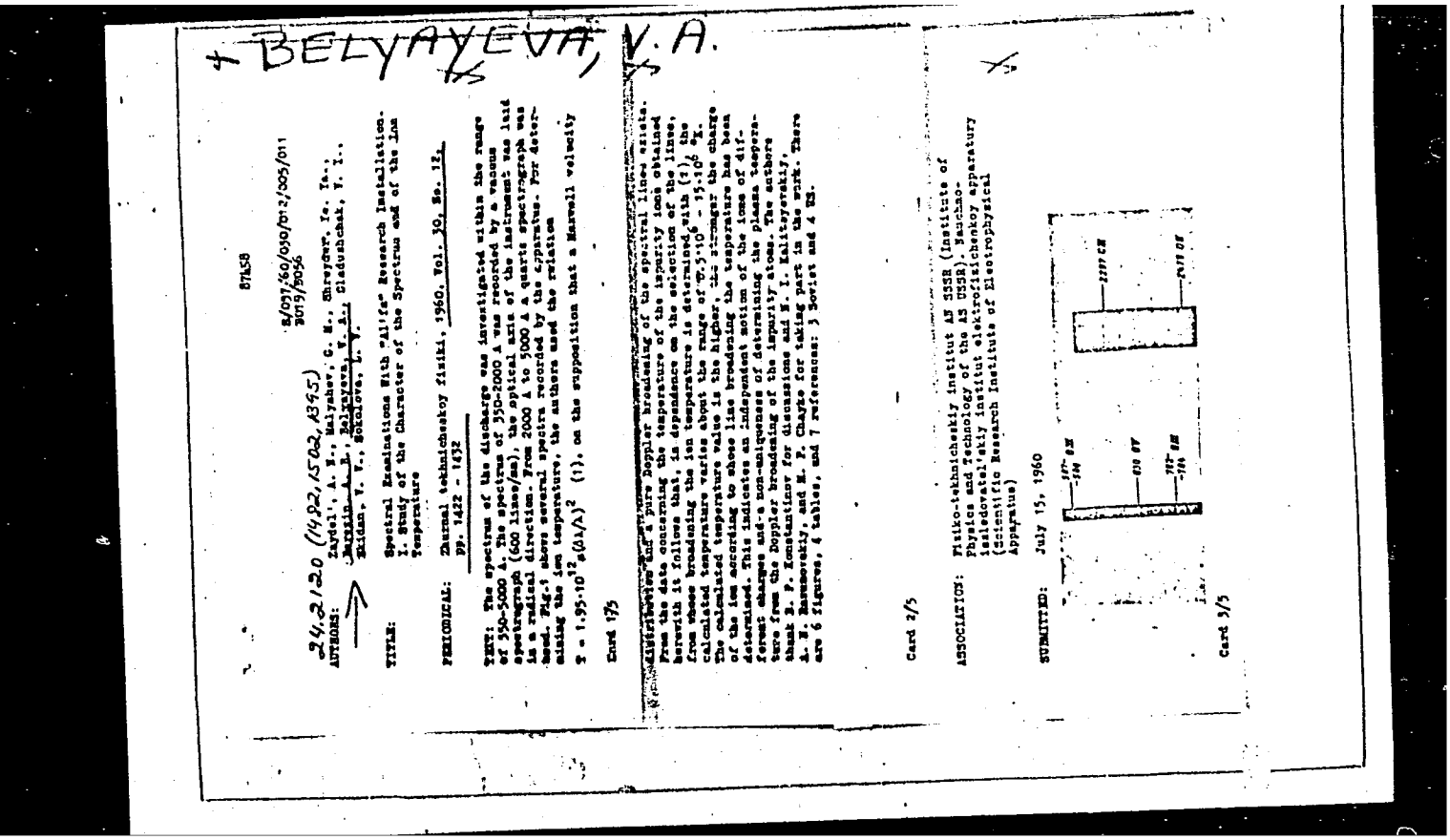
PERIODICAL: Sb. stud. rabot. Rostovsk. un-t, 1957, Nr 3, pp 45-48

ABSTRACT: An experimental verification of the segregation of Fe from Ti by electrolysis, using an Hg cathode at 2.5-3 amp and 5-6 v in 50-55 min time is presented. An artificial mixture of Fe and Ti containing 0.28-32.77 percent Ti was investigated. To determine the Ti in the Fe-Ti, 0.5 g of the latter is dissolved in 20 cc aqua regia, 2-3 drops of HF being added at the end of the period of solution, subsequent to which 20 cc H_2SO_4 (1:1) is added; evaporation follows until SO_3 vapors appear. The precipitant coming down under these conditions is dissolved in 5 percent H_2SO_4 and one then proceeds as described above.

Z. G.

1. Iron—Separation 2. Titanium—Separation 3. Electrolysis —Applications

Card 1/1



+ BELYAYEVA, V. A.

87458

S/057/60/030/012/005/011
B019/B056

24.2120 (1482,1502,1395)

AUTHORS: Zaydel', A. N., Malyshev, G. M., Shreyder, Ye. Ya., Martsin, A. P., Belyayeva, V. A., Gladushchak, V. I., Zilitan, V. P., Sokolova, L. V.

TITLE: Spectral Examinations With "Iliff" Research Installation. I. Study of the Character of the Spectrum and of the Ion Temperature

PERIODICAL: Zhurnal tekhnicheskoy fiziki, 1960, Vol. 30, No. 12, pp. 1422 - 1432

TEXT: The spectrum of the discharge was investigated within the range of 350-5000 Å. The spectrum of 350-2000 Å was recorded by a vacuum spectrograph (600 lines/mm), the optical axis of the instrument was laid in a radial direction. From 2000 Å to 5000 Å a quartz spectrograph was used. Fig.1 shows several spectra recorded by the apparatus. For determining the ion temperature, the authors used the relation $\beta = 1.95 \cdot 10^{12} \beta(\Delta\lambda/\lambda)^2$ (1), on the supposition that a Maxwell velocity

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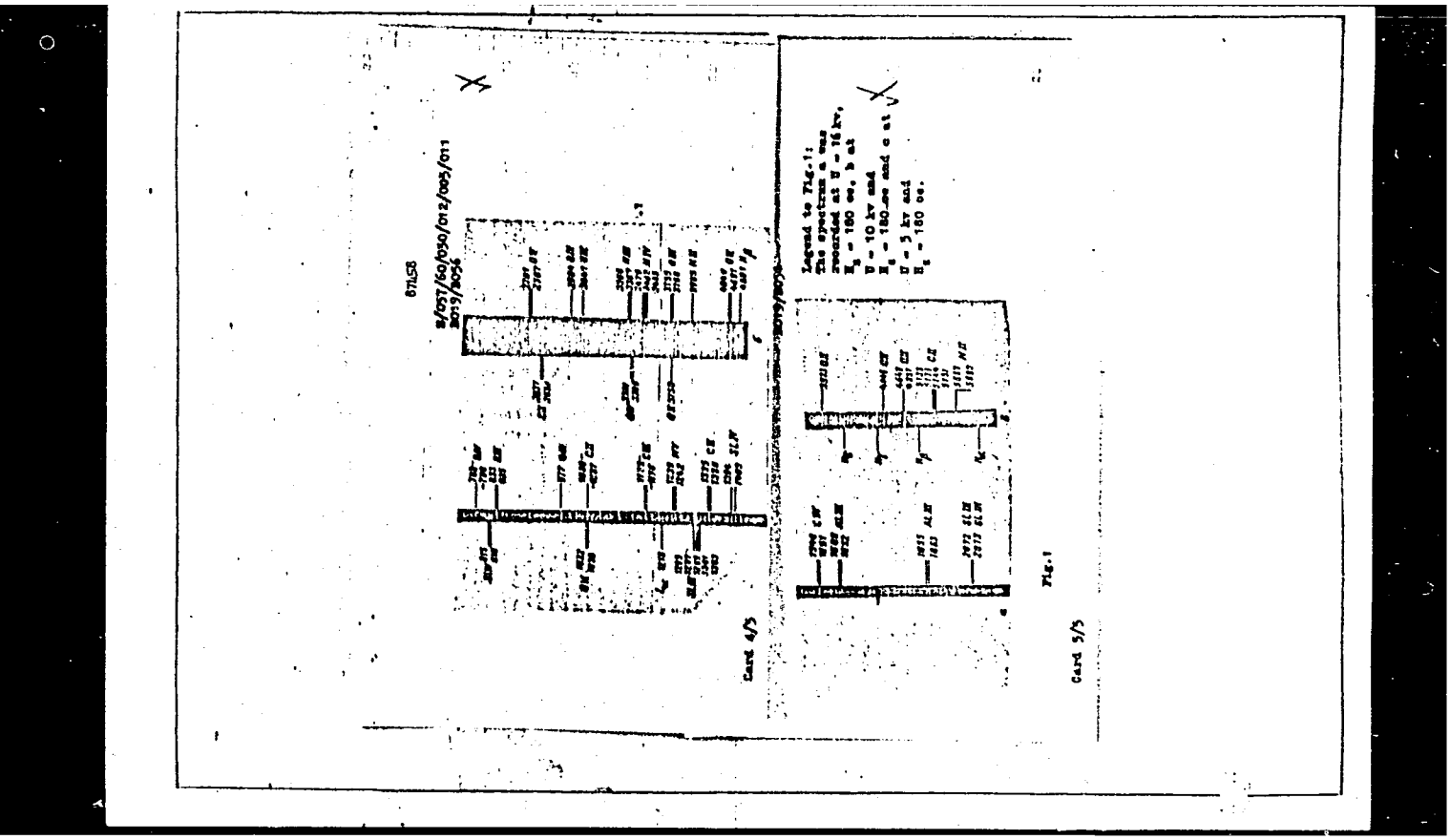
distribution and a pure Doppler broadening of the spectral lines exist. From the data concerning the temperature of the impurity ions obtained herewith it follows that, in dependence on the selection of the lines, from these broadening the ion temperature is determined with (1/) the calculated temperature varies about the range of $0.5 \cdot 10^6$ - $15 \cdot 10^6$ °K. The calculated temperature value is the higher, the stronger the charge of the ion according to these line broadening the temperature has been determined. This indicates an independent motion of the ions of different charges and a non-uniformness of determining the plasma temperature from the Doppler broadening of the impurity atoms. The authors thank S. P. Kondaurov for discussions and N. I. Kaliteyevskiy, A. P. Komel'kov, and M. P. Chayka for taking part in the work. There are 6 figures, 4 tables, and 7 references: 3 Soviet and 4 US.

Card 2/5

ASSOCIATION: Fiziko-tekhnicheskiy institut AN SSSR (Institute of Physics and Technology of the AS USSR), Nauchno-issledovatel'skiy institut elektrofizicheskoy apparatury (Scientific Research Institute of Electrophysical Apparatus)

SUBMITTED: July 15, 1960

Card 3/5



BELYAYEVA, V.A.; DRITS, V.A.; ZAKHVALINSKIY, M.N.; LARINA, V.A.; NAGORNAYA, Ye.F.; NIKULINA, S.Ye.; NAGORNYY, G.I.; SEMIUSOVA, T.N.

Characteristics of clays of the Troshkovskiy deposits of the Irkutsk Province. Izv. Fiz.-khim. nauch.-issl. inst. Irk. un. 5 no.1:252-289 '61. (MIRA 16:8)

(Irkutsk Province--Clay--Analysis)

GORBACHEV, S.V.; BELYAYEVA, V.A.

Electrooxidation - electroreduction of the system iodine - iodide.
Zhur.fiz.khim. 35 no.9:2158-2162 '61. (MIRA 14:10)

1. Khimiko-tekhnologicheskiy institut imeni D.I. Mendeleyeva.
(Iodine) (Iodides)
(Oxidation-reduction reaction)

GORBACHEV, S.V.; BELYAYEVA, V.A.

Electrolytic reduction-oxidation of the $Mn^{3+} - Mn^{2+}$ system. Part 1. Zhur. fiz. khim. 36 no.1:229-233 Ja '62. (MIRA 16:8)

1. Khimiko-tekhnologicheskiy institut im. D.I. Mendeleyeva.
(Manganese compounds) (Electrochemistry)

GORBACHEV, S.V.; BELYAYEVA, V.A.

Electrooxidation-electroreduction of complex di-trivalent iron salts. Part 2: Dependence of the rate of electrolysis on the composition. Zhur.fiz.khim. 36 no.8:1794-1797 Ag '62. (MIRA 15:8)

1. Moskovskiy khimiko-tekhnologicheskiy institut imeni D.I. Mendeleyeva.
(Oxidation-reduction reaction) (Electrolysis) (Iron compounds)

YAKOVLEVA, Ye.F.; BELYAYEVA, V.A.

Investigation of carbides precipitated from 12Kh2MFSR steel in three different electrolytes. Sbor. trud. TSNIICHM no.31:129-132 '63. (MIRA 16:7)

(Chromium-manganese steel--Analysis)
(Electrochemical analysis)
Carbides)

KUZNETSOV, Ye.V.; SHERMERGORN, I.M.; BELYAYEVA, V.A.

Synthesis of polyesters based on trivalent phosphorus acids by condensation polymerization at the interface. Trudy KKHTI no.30: 70-76 '62. (MIRA 16:10)

BELYAYEVA, V.A.

New design of rotating disk electrodes. Zhur. fiz. khim. 36 no.6:
1385-1387 Je'62 (MIRA 17:7)

1. Moskovskiy khimiko-tekhnologicheskiy institut Mendeleyeva.

S/076/63/037/001/021/029
B101/B186

AUTHORS: Gorbachev, S. V., Belyayeva, V. A.

TITLE: Electrooxidation and electroreduction of the system Mn^{3+}/Mn^{2+}. II. Dependence of the rate of electrolysis on its composition

PERIODICAL: Zhurnal fizicheskoy khimii, v. 37, no. 1, 1963, 197 - 201

TEXT: The polarization curves of the system Mn^{3+} - Mn^{2+} were plotted, Mn^{3+} being stabilized as pyrophosphate complex $\left[Mn(H_2P_2O_7)_3\right]^{3-}$. The measurements were made at constant total concentration $[Mn^{3+}] + [Mn^{2+}] = 0.024$ M, ratio $[Mn^{3+}]:[Mn^{2+}] = 7:1$ to 1:7, and at a rotational speed n of the platinum disc electrode varying between 360 and 3000 rpm at 40.5°C, as well as with n = 0 at 20.3°C. The dependences amp. I (μa) versus $[Mn^{2+}]$ for the anodic process, and I versus $[Mn^{3+}]$ for the cathodic process, were plotted from the polarization curves. Results: In both anodic and cathodic process the curves I versus concentration pass through a maximum. In purely chemical polarization the maximum corresponds to the ratio 1:1 of the components

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Electrooxidation and...

S/076/63/037/001/021/029
B101/B186

$[Mn^{2+}]$ and $[Mn^{3+}]$. If in addition partial or pure concentration polarization occurs, the maximum shifts with increasing polarization potential toward the increasing concentration of Mn^{3+} in the cathodic process and toward the increasing concentration of Mn^{2+} in the anodic process. Further, the maximum depends on temperature, e.g. at 40.5°C, $\Delta\varphi$ = 300 mv, the cathodic maximum lies near ~100 μa, ~0.018 mole/l Mn^{3+}; at 20.3°C, $\Delta\varphi$ = 300 mv, it is positioned near ~70 μa, ~0.014 mole/l Mn^{3+}. Also, I is a linear function of the square root from the angular velocity of the electrode. There are 5 figures.

ASSOCIATION: Moskovskiy khimiko-tekhnologicheskiy institut im. D. I. Mendeleyeva (Moscow Institute of Chemical Technology imeni D. I. Mendeleyev)

SUBMITTED: November 23, 1961

Card 2/2

GORBACHEV, S.V.; BELYAYEVA, V.A.

Electrooxidation - electroreduction of the system Mn^{3+}/Mn^{2+}. Part 2. Zhur.fiz.khim. 37 no.1:197-201 Ja '63. (MIRA 17:3)

1. Moskovskiy khimiko-tekhnologicheskiy institut imeni Mendeleyeva.

L 54584-65 EWG(j)/EWT(m)/EPF(c)/EPR/EWP(j)/EWA(h)/EWA(l) Pc-4/Pr-4/Ps-4/
Pad TIAAP/RPL WW/RM
ACCESSION NR: AP5012447 UR/0062/65/000/004/0594/0598
541.15+541.51

AUTHORS: Tikhomirov, L. A.; Belyayeva, V. A.; Buben, N. Ya.

TITLE: The kinetics of free radical build-up during radiolytic decomposition of solid substances

SOURCE: AN SSSR. Izvestiya. Seriya khimicheskaya, no. 4, 1965, 594-598

TOPIC TAGS: radiolysis, free radical, electron paramagnetic spectrometer, electron paramagnetic resonance, reaction rate

ABSTRACT: The method of electron paramagnetic resonance was used to study the build-up and recombination of radicals CH_2OH and CH_3CHOH in the irradiated compounds $CaCl_2 \cdot 4CH_3OH$ and $CaCl_2 \cdot 3C_2H_5OH$. The samples were bombarded with electrons having energies of 1.6 mev directly in the resonator of an electron paramagnetic spectrometer. It was found that the limiting concentrations of the alcohol radicals in irradiated crystals do not depend on the radiation dosage. The reaction rate constant increases slowly with rise in temperature, not changing greatly for the different substances examined. This suggests that the process of radical

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L 54584-65
ACCESSION NR: AP5012447

destruction is the same for the different substances. If irradiation does not appreciably affect the recombination rate of the radicals (in the temperature range 240-300K) then two processes of first-order radical destruction may be effective. First, the radiation itself may not only generate radicals, but destroy them as well, with formation of hydrogen atoms and molecules with double bonds. Secondly, the large number of radicals may not be uniformly distributed through the substance but rather be in pairs and groups, leading to first-order destruction of the radicals and to weak temperature dependence of the reaction rate constant. The dominant process can be determined only by examining the final products of solid-phase radiolytic decomposition. The temperature dependence of the reaction rate constant does not obey the Arrhenius equation. Orig. art. has: 4 figures.

ASSOCIATION: Institut khimicheskoy fiziki, Akademii nauk SSSR (Institute of Chemical Physics, Academy of Sciences, SSSR)

SUBMITTED: 26Dec63 ENCL: 00 SUB CODE: SS, NP

NO REF SOV: 007 OTHER: 008

Card 2/2

BELYAYEVA, V.A.

Cathodic reduction of tetravalent tin. Zhur.fiz.khim. 39 no.10:2576-2578 O '65. (MIRA 18:12)

1. Tul'skiy politekhnicheskiy institut. Submitted June 28, 1964.

BELYAYEVA, V.A.; ZAKHVALINSKIY, M.N.; ZIMINA, T.D.; DEMINA, T.N.; KALASHNIKOV, P.V.; NAGORNAYA, Ye.F.; NAGORNYY, G.I.; TITOVA, T.P.

Adsorption properties of Gymyl' argillites. Trudy DVFAN SSSR. Ser.khim. no.7:18-25 '65.

(MIRA 18:12)

L 46946-66 EWT(m)/T/EWP(t)/ETI IJP(c) JD/HW

ACC NR: AT6030229 SOURCE CODE: UR/2776/66/000/049/0116/0124

55
B+1

AUTHOR: Yakovleva, Ye. F.; Bogomolova, G. P.; Belyayeva, V. A.

ORG: none

TITLE: Phase analysis of EP164 and EI725 steels, and EI893 alloy

SOURCE: Msocow. Tsentral'nyy nauchno-issledovatel'skiy institut chernoy metallurgii. Sbornik trudov, no. 49, 1966. Novyye metody ispytaniy metallov; khimicheskiy kontrol' v metallurgii (New methods in the analysis of metals; chemical control in metallurgy), 116-124

TOPIC TAGS: phase analysis, heat resistant steel, nickel chromium steel, nickel chromium alloy, titanium containing alloy, tungsten containing alloy, aluminum containing alloy/EP164 nickel chromium steel, EP725 nickel chromium steel, EI893 nickel base alloy

ABSTRACT: A method of phase analysis of EP164 and EI725 nickel-chromium steels, and EI893 nickel-base alloy (see Fig. 1) has been developed. In EI893 alloy, 18% of V'-phase was isolated after aging for 15,000 hr at 800C and about 20% of the same phase was isolated after aging for 20,000 hr at 750C. In both cases, significant

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L 16910-66

ACC NR: AT6030229

Table 1.

Steel or Alloy	Chemical composition, %										
	C	Si	Mn	Cr	Ni	Al	Ti	W	Mo	Ce	B
EI893	0,08 —	0,50 —	0,50 —	15,00 17,00	Base —	1,20 1,60	1,20 1,60	8,00 10,00	3,50 5,00	0,025 —	0,01 —
EP164	0,08 —	0,50 —	0,50 1,00	14,00 16,00	22,00 25,00	— —	1,40 1,80	4,00 5,00	— —	0,025 —	— —
EI725	0,08 —	0,50 —	0,50 1,00	14,00 16,00	36,00 38,00	— —	1,40 1,90	4,00 5,00	— —	0,025 —	0,005 —

quantities of Ti(C, N) were found, but no traces of Me_2W-base Laves phase were detected. Orig. art. has: 3 figures and 5 tables. [TD]

SUB CODE: 11, / SUBM DATE: none/ ORIG REF: 002

Card 2/2 afs

BELYAYEVA, V. A.

Dissertation: "Importance of Succulent Plant Fodder (Vegetables, Greens) in the Feeding of Mink." Cand Biol Sci, Moscow Fur and Pelt Inst, 10 May 54. Vechernyaya Moskva, Moscow, 2 May 54.

SO: SUM 284, 26 Nov 1954

VYSHCHEPAN, Aleksandr Georgiyevich; MEL'MAN, Mikhail Yevdokimovich; BELYAYEVA, V.A., redaktor; SUDAK, D.M., tekhnicheskiy redaktor; MEDRISH, D.M., tekhnicheskiy redakter.

[Food products; a commercial guide] Tovarovedenie prodovol'stvennykh tovarov; uchebnik dlia shkol torgovogo uchenichestva. Moskva, Gos.izd-vo torgovoi lit-ry, 1955. 380 p. (MLRA 9:5)
(Food)

IKHINOV, G.S., professor, redaktor; SPERANSKIY, V.G., professor, redaktor; BELYAYEVA, V.A., redaktor; NAZAROV , B.A., redaktor; SUDAK, D.M., tekhnicheskiy redaktor.

[Commodity expert's manual of food products] Spravochnik tovaroveda prodovol'stvennykh tovarov. Moskva, Gos.izd-vo torgovoi lit-ry. Pt.2 [Milk and milk products. Edible fats and mayonnaise. Eggs and egg products. Starch, sugar, honey. Confectionery. Alcoholic and non-Alcoholic beverages. Tea and coffee. Spices, salt, tobacco. Meat and meat products. Fish, fish products] Moloko i molochnye tovary. Pishchevye zhiry i maionez. Iaitsa i ĭaichnye tovary. Krakhmal, sakhar, med. Konditerskie tovary. Alkogol'nye i bezalkogol'nye napitki. Chai i kofe. Prianosti, sol', tabak. Miasi i miasnye tovary. Ryba, rybnye tovary. 1955. 555 p. (MLRA 8:11)
(Food)

BELYAYEVA, Valentina Aleksandrovna; DEMENT'YEVA, M.L., redaktor; MEDRISH, D.M., tekhnicheskiy redaktor

[Home use of corn in foreign countries] Pishchevoe ispol'sovanie kukuruzy v zarubezhnykh stranakh. Moskva, Gos. izd-vo torgovoi lit-ry, 1956. 103 p. (MLRA 9:9)
(Corn(Maize))

BELYAYEVA, V.A.

CHISTYAKOV, Fedor Maksimovich; MUDRETSOVA-VISS, Klavdiya Alekseyevna; BELYAYEVA, V.A., redaktor; SUDAK, D.M., tekhnicheskiy redaktor.

[Microbiology] Mikrobiologiia. Moskva, Gos.izd-vo torgovoi lit-ry, 1957. 256 p. (MLRA 10:6)
(Microbiology)

BUKOSUYEV, Andrey Nikolayevich; BELYAYEVA, V.A., redaktor; MEDRISH, D.M., tekhnicheskiy redaktor

[Flour and groats; chemistry and commercial guide] Khimiia i tovarovedenie muki i krupy. Moskva, Gos. izd-vo torgovoi lit-ry, 1957. 379 p. (MLRA 10:4)

(Meal)

KURBATOVA, R.A.; BELYAYEVA, V.A.

Procreative function of women after conservative myomectomy.
Kaz. med. zhur. no.2:60-61 Mr-Ap'63 (MIRA 16:11)

1. Otdeleniye operativnoy ginekologii (zav. - prof. M.V. Dubnov) Instituta akusherstva i ginekologii AMN SSSR.

BELYAYEVA, V.B.

TMTD for controlling anthracnose of cucumber in greenhouses. Zashch. rast. ot vred. i bol. 6 no.11:32 N '61.
(MIRA 16:4)

1. Nauchno-issledovatel'skiy institut ovoshchnogo khozyaystva, st. Perlovskaya, Moskovskoy obl.
(Cucumber—Diseases and pests)
(Anthracnose) (Disulfide)

AEDC(a)/AS(mp)-2 IJP/MLK

ACCESSION NR: AT4048192 S/0000/64/000/000/0109/0115

AUTHOR: Baranova, V. G., Pankov, A. G., Khripin, E. G., Glazy*rina, R. V., Belyayeva, V. D., Obeshchalova, N. V., Dolgova, N. A., Kn,azeva, M. F., Mishina, A. V., Ivoylova, M. A.

TITLE: The use of gas chromatography in the production of monomers for synthetic rubber

SOURCE: Vsesoyuznaya nauchno-tekhnicheskaya konferentsiya po gazovoy khromatografii. 2d, Moscow, 1962. Gazovaya khromatografiya (Gas chromatography); trudy* konferentsii. Moscow, Izd-vo Nauka, 1964, 109-115

TOPIC TAGS: gas chromatography, monomer production, two-stage chromatography, integral volume detector, katharometer, hexene demethylation, synthetic rubber, isopentane dehydration, flame ionization detector, isoprene polymerization

ABSTRACT: This is a survey of applied and applicable methods for chromatographic analysis. For example, two-stage chromatography for contact separation of the following components is described: H_2, $N_2 + O_2$, CH_4, C_2H_6, C_3H_8, C_4H_{10}, C_4H_8 and C_4H_6. Integral volume detectors with autorecordors are applicable where no very low concentrations are involved (e.g. the mixture from the catalytic dehydration of isopentane).

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L 14958-65

ACCESSION NR: AT4048192

Chromatographic equipment with a katharometer is indicated for substances with a boiling point above 40-45C, those which dissolve easily in alkali or where low concentrations (less than 1%) have to be determined. This equipment is described and illustrated (chromatographic separation of complex mixtures from hexene demethylation, or of piperylene in isoprene concentrate). The sensitivity threshold may be increased by using a thermo-chemical monitor (from the Kh-2M apparatus). Standard calibration with an artificial mixture is required for this equipment. The calibration coefficients were found to be constant for considerable variations of concentration and some modification of test conditions. This set-up was also used to determine admixtures of butylenes and methyl-ethyl ether in divinyl of high purity and those of n-butylene in isobutylene. The sensitivity of gas chromatography may be increased by concentration of impurities to a degree where they can be detected, or by increasing the sensitivity of the detector. A flame-ionization detector has been used at the NIIMSK. This considerably facilitates control of product purity and makes possible determination of the basic polymerization centers; thus, e.g., cyclopentadiene was determined as one of the centers of catalytic isoprene polymerization, appearing as early as the dehydration stage. Orig. art. has: 2 tables and 4 figures.

ASSOCIATION: None

Submitted: 16Jul64

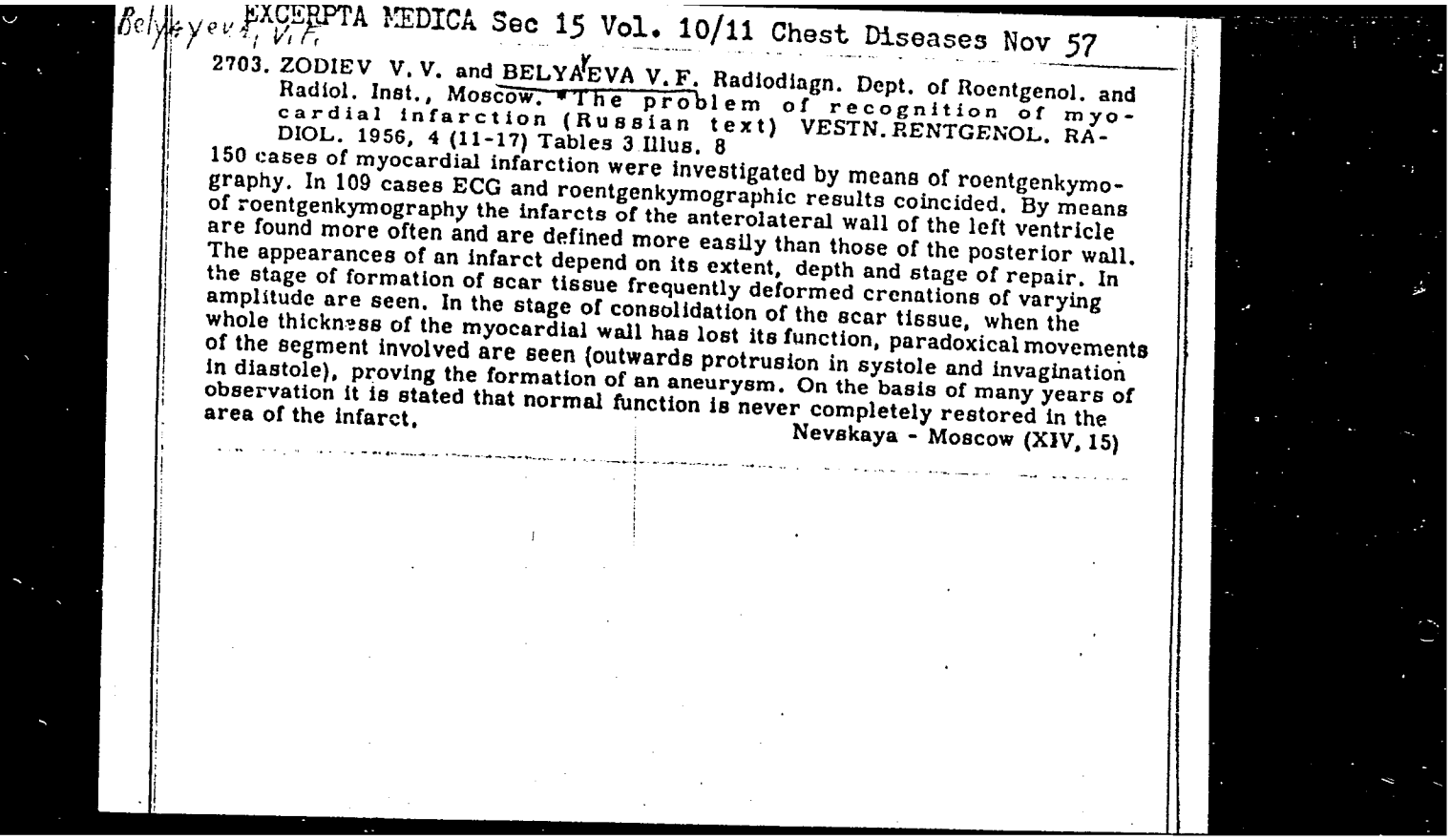
Card 2/3

SHEKHTER, I.A., professor; BELYAYEVA, V.F.

Results of angiocardiography in the diagnosis of congenital heart defects. Vest. rent. i rad. no.2:62-67 Mr-Ap '55. (MLRA 8:5)

1. Iz rentgenodiagnosticheskogo otdela (zav. prof. I.A.Shekhter) Gosudarstvennogo nauchno-issledovatel'skogo instituta rentgenologii i radiologii imeni V.M.Molotova (dir. I.G.Lagunova).

(ANGIOGRAPHY,
angiocardiography, diag. of congen. cardiovasc. defects)
(CARDIOVARSCULAR SYSTEM, radiography,
angiocardiography, diag. of congen. cardiovasc. defects)
(CARDIOVASCULAR DEFECTS, CONGENITAL, diagnosis,
angiocardiography)



Belyayeva, V.F.

EXCERPTA MEDICA Sec 15 Vol. 10/11 Chest Diseases Nov 57

2703. ZODIEV V. V. and BELYAEVA V. F. Radiodiagn. Dept. of Roentgenol. and Radiol. Inst., Moscow. *The problem of recognition of myocardial infarction (Russian text) VESTN. RENTGENOL. RADIOL. 1956, 4 (11-17) Tables 3 Illus. 8

150 cases of myocardial infarction were investigated by means of roentgenkymography. In 109 cases ECG and roentgenkymographic results coincided. By means of roentgenkymography the infarcts of the anterolateral wall of the left ventricle are found more often and are defined more easily than those of the posterior wall. The appearances of an infarct depend on its extent, depth and stage of repair. In the stage of formation of scar tissue frequently deformed crenations of varying amplitude are seen. In the stage of consolidation of the scar tissue, when the whole thickness of the myocardial wall has lost its function, paradoxical movements of the segment involved are seen (outwards protrusion in systole and invagination in diastole), proving the formation of an aneurysm. On the basis of many years of observation it is stated that normal function is never completely restored in the area of the infarct.

Nevskaya - Moscow (XIV, 15)

BELYAYEVA, V. F., Candidate Med Sci (diss) -- "The significance of multi-aperture roentgeno-kymography (continous and graduated) in the diagnosis of limited injuries to the myocardium". Moscow, 1959. 15 pp (State Sci Res Roentgenological-Radiological Inst of the Min Health RSFSR), 150 copies (KL, No 25, 1959, 139)

BELYAYEVA, V.F.

Significance of multistage radiokymography in the diagnosis of limited myocardial diseases. Trudy TSentr. nauch.-issl. inst. rentg. i rad. 10:97-101 '59. (MIRA 12:9)
(HEART--RADIOGRAPHY)

ZODIYEV, V.V., prof.; YAKHNICH, I.M., prof.; BELYAYEVA, V.F., nauchnyy sotrudnik; TESLYA, T.A., nauchnyy sotrudnik

Clinical roentgenological changes in the cardiovascular system due to ionizing radiation. Vest. rent. i rad. 35 no. 5:24-29 My-Je '60. (MIRA 14:2)

1. Iz rentgenodiagnosticheskogo otdela (zav. - prof. I.A. Shekhter) Gosudarstvennogo nauchno-issledovatel'skogo rentgeno-radiologicheskogo instituta Ministerstva zdravookhraneniya RSFSR (direktor - doktor med. nauk I.G. Lagunova).
(CARDIOVASCULAR SYSTEM) (RADIATION—PHYSIOLOGICAL EFFECT)

ZODIYEV, V.V., prof. (Moskva, G-270, 3-ya Frunzenskaya ul., d.4,kv.19); BELYAYEVA, V.F., kand.med.nauk; BUKHMAN, A.I.; RABKIN, I.Kh.

X-ray diagnosis of aortic aneurysms. Vest.rent.i rad. 36 no.3:26-31 My-Je '61. (MIRA 14:7)

1. Iz Gosudarstvennogo nauchno-issledovatel'skogo rentgeno-radiologicheskogo instituta Ministerstva zdravookhraneniya RSFSR (dir. - prof. I.G.Lagunova.), Gospital'noy khirurgicheskoy kliniki I Moskovskogo ordena Lenina meditsinskogo instituta (zav. kafedroy - deystvitel'nyy chlen AMN SSSR prof. B.V.Petrovskiy) i Moskovskoy gorodskoy polikliniki No.51 (glavnyy vrach Z.S.Rykhlova).
(AORTIC ANEURYSMS)

ZARETSKIY, Vasiliy Vasil'yevich; BELYAYEVA, V.F., red.; PETROVA, N.K., tekhn. red.

[Electrokymography] Elektrokimografiia. Moskva, Medgiz, 1963. 290 p. (MIRA 16:11)
(Electrokymography)

BELYAYEVA, V.I., kand.istorich.nauk, dotsent

Struggling for the fulfillment of the seven-year plan ahead of time. Tekst.prom. 23 no.5:43-48 My '63. (MIRA 16:5)

1. Zaveduyushchiy kafedroy marksizma-leninizma Vsesoyuznogo zaochnogo instituta tekstil'noy i legkoy promyshlennosti (VZITLP). (Moscow—Textile industry) (Socialist competition)

BELYAYEVA, V K.

Subject : USSR/Chemistry AID P - 1570

Card 1/1 Pub. 119 - 5/5

Authors : D. I. Ryabchikov and V. K. Belyayeva (Moscow)

Title : Methods for determination of humidity

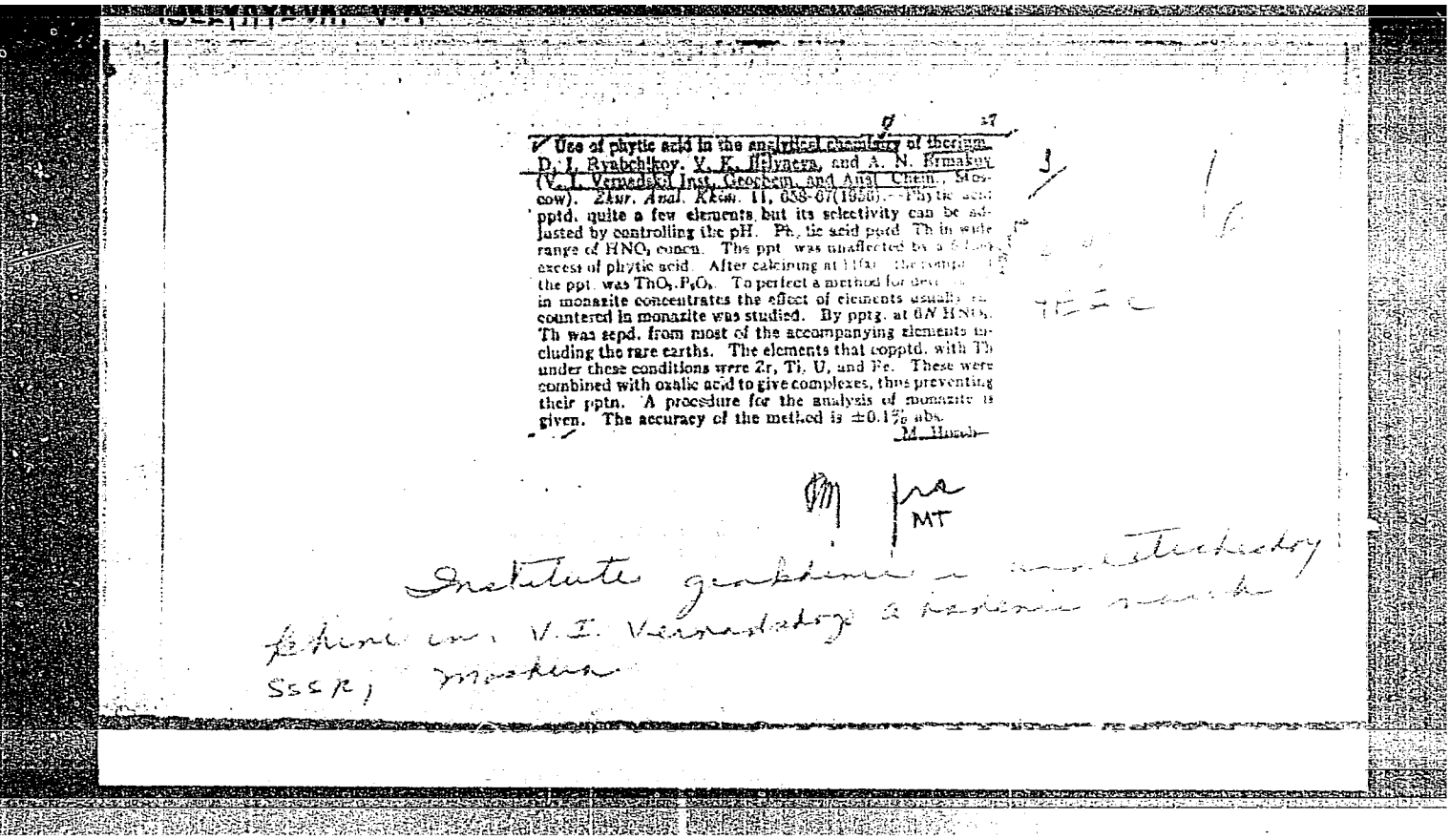
Periodical : Usp. khim., 24, no.2, 240-248, 1955

Abstract : Methods of direct and indirect determination of humidity are reviewed, such as distillation, drying in a drying oven or desiccator, heating with infrared rays, and the gasometric and hydride methods. Two tables, 5 sketches, 78 references (23 Russian: 1908-1954)

Institution: None

Submitted : No date

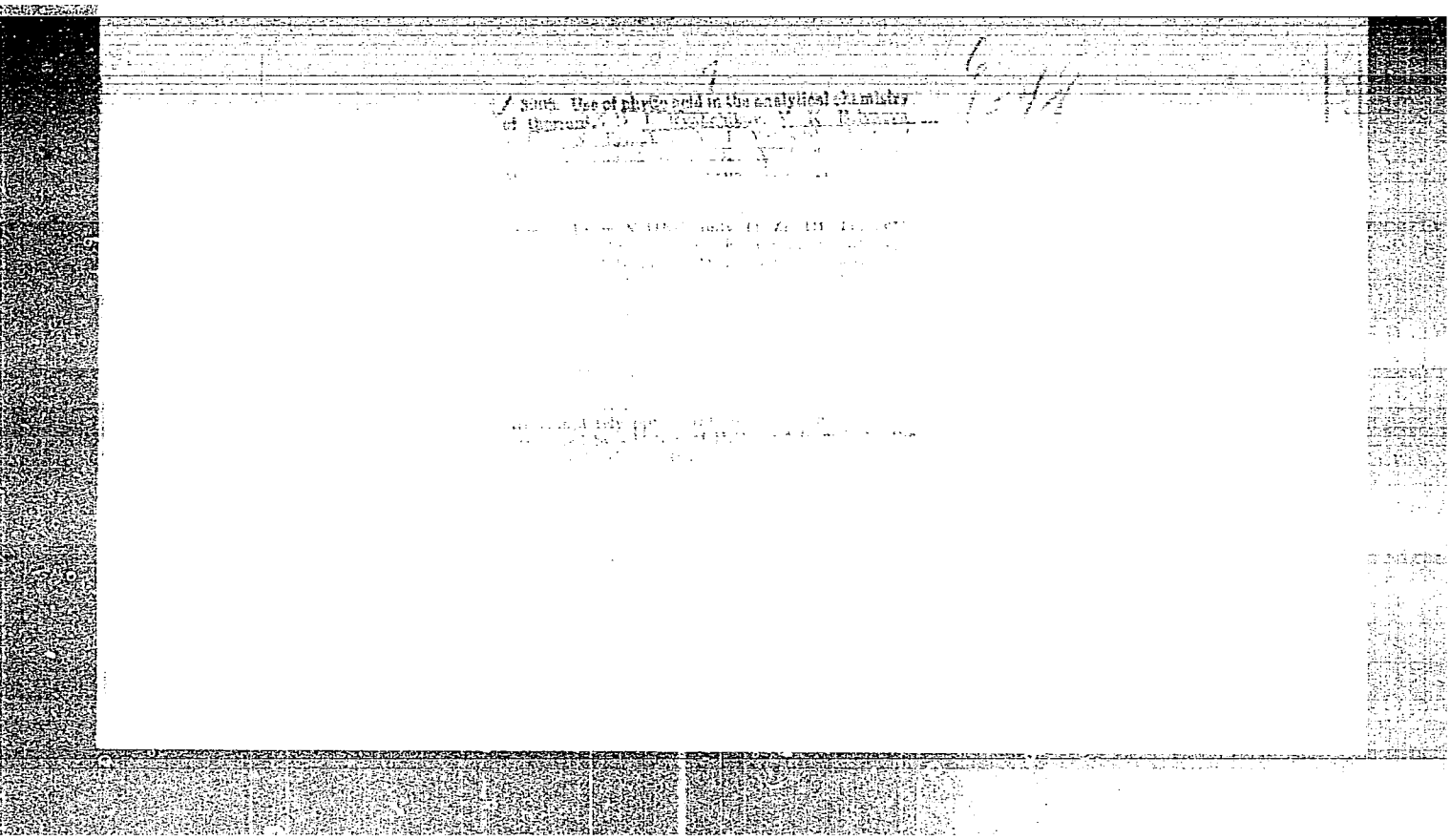
M.V.I. Verkad



Use of phytic acid in the analytical chemistry of thorium. D. I. Ryabchikov, V. K. Il'yukha, and A. N. Ermakov (V. I. Vernadskii Inst. Geochem. and Anal. Chem., Moscow). *Zhur. Anal. Khim.* 11, 658-67(1956).—Phytic acid ppts. quite a few elements but its selectivity can be adjusted by controlling the pH. Ph, tic acid ppts Th in wide range of HNO_3 concn. The ppt was unaffected by a [illegible] excess of phytic acid. After calcining at 1150° the compn of the ppt was $ThO_2.P_2O_5$. To perfect a method for determining in monazite concentrates the effect of elements usually encountered in monazite was studied. By pptg. at 6*N* HNO_3, Th was sepd. from most of the accompanying elements including the rare earths. The elements that copptd. with Th under these conditions were Zr, Ti, U, and Fe. These were combined with oxalic acid to give complexes, thus preventing their pptn. A procedure for the analysis of monazite is given. The accuracy of the method is ±0.1% abs.
M. Hirsch

MT

Institute geokhimii i analiticheskoy khimii im. V. I. Vernadskogo Akademii nauk SSSR, Moskva



Investigation of thorium complexes with aminopolycarboxylic acids by high-frequency titration

cyclobutanediaminetetraacetate, cyclopentanediaminetetraacetate, and cyclohexanediaminetetraacetate were studied

BELYAYEVA, V. K., YERMAKOV, A. M., and MAROV, I. N.

"Possibilities of using anionites for the caluculation of the constants of the stability of charged ions."

report presented at The Use of Radioactive Isotopes in Analytical Chemistry, Conference in Moscow, 2-4 Dec 1957
Vestnik Ak Nauk SSSR, 1958, No. 2, (author Rodin, S. S.)

YERMAKOV, A.N.; BELYAYEVA, V.K.; MAROV, I.N.

Anion-exchange study of complex formation of zirconium and hafnium with oxalate ions. Trudy kom.anal.khim. 9:170-178 '58.
(MIRA 11:11)
(Zirconium oxalate) (Hafnium oxalate) (Complex compounds)

5(4) SOV/78-4-2-39/40

AUTHORS: Yermakov, A. N., Belyayeva, V. K., Marov, I. N., Chmutova, M. K.

TITLE: On the Use of Ion Exchange for Investigating the Composition of the Complex Oxalates of Pu(IV), Zr, and Hf (O primenenii ionnogo obmena k izucheniyu sostava kompleksnykh oksalatov Pu(IV), Zr i Hf)

PERIODICAL: Zhurnal neorganicheskoy khimii, 1959, Vol 4, Nr 2, pp 493-496 (USSR)

ABSTRACT: The complex compounds of plutonium, zirconium, and hafnium were investigated by means of the ion-exchange method by oxalic acid. The following formulas of the complexes were found: $[Pu(C_2O_4)_5]^{6-}$, $[Zr(C_2O_4)_5]^{6-}$, and $[Hf(C_2O_4)_5]^{6-}$. These complexes are formed if oxalate ions in the solution are in excess at pH 5.8-6.2. The distribution coefficients and the exchange constants of the three elements in these compounds are almost equal. The coordination number of the metal in oxalate complexes of plutonium (IV), zirconium, and hafnium is probably 6. There are 1 figure, 3 tables, and 13 references, 10 of which are Soviet.

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5(2)

AUTHORS: Ryabchikov, D. I., Yermakov, A. N., Belyayeva, V. K., Marov, I.N. SOV/78-4-8-18/43

TITLE: An Investigation of the Complex Formations of Zirconium and Hafnium With Tartaric Acid by Means of the Ion Exchange Method (Izucheniye kompleksoobrazovaniya tsirkoniya i gafniya s vinnoy kislotoy metodom ionnogo obmena)

PERIODICAL: Zhurnal neorganicheskoy khimii, 1959, Vol 4, Nr 8, pp 1814-1826 (USSR)

ABSTRACT: The investigation of the complex formations in aqueous solutions of zirconium and hafnium is rendered difficult by a strong tendency of these elements towards hydrolysis and polymerization. Therefore, the usual physico-chemical methods cannot be applied. For this reason the ion exchange method, the investigation of the equilibrium distribution of an element between two phases of a heterogeneous system are suggested. This relatively new method is described in detail on the basis of publication data. The authors used $Zr^{95}+Nb^{95}$ for their own experiments. In this case the softer β-radiation of Nb^{95} was absorbed by an aluminum filter, moreover Hf^{181} and the cation exchanger KU-2.

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The solution was buffered with $NaClO_4$. By means of experiments it was found that in the case of a concentration of 2 - 1.3 mol hydrogen ions per liter no hydrolysis or polymerization takes place. The following is assumed to be the probable reaction of the complex formation of Zr and Hf with tartaric acid: $Me^{4+} + H_2tart \rightleftharpoons MeH_{2-n}tart^{4-n} + nH^+$. The distribution coefficient was computed and its dependence on the ratio $\frac{V}{m}$ (Table 3 V = volume of the solution, m = weighed portion of the cation exchanger) was determined. Moreover, the number of hydrogen ions released from tartaric acid in the complex formation was determined (Fig 5). The complex compounds of hafnium are more stable than those of zirconium (Tables 3, 4). A sorption of ions of the type $MeHtart^{3+}$ or $Metart^{2+}$ was not observed. Probably they do not take place due to steric factors or the weakening of the ionic charge in consequence of the linkage with the oxy groups of tartaric acid. There are 5 figures, 4 tables, and 38 references, 10 of which are Soviet.

SUBMITTED: April 16, 1959

Card 2/2

BELYAYEVA, V.K.

Akademiya nauk SSSR. Komissiya po analiticheskoy khimii

Metody opredeleniya primesey v chistykh metallakh (Methods of Determining Admixtures in Pure Metals) Moscow, 1960. 411 p. (Series: Its: Trudy, 12) 3,500 copies printed.

Resp. Eds.: A.P. Vinogradov, Academician, and D.I. Ryabchikov, Doctor of Chemical Sciences; Ed. of Publishing House: M.P. Volynets; Tech. Ed.: T.V. Polyakova.

PURPOSE: This collection of articles is intended for chemists, metallurgists and engineers.

COVERAGE: The articles describe methods for detecting and determining various admixtures and their traces in pure metals. Also discussed are many chemical, physicochemical, electrochemical, spectrochemical and luminescence methods of analyzing materials of high purity. The editors state that these methods have been developed within the last five or six years by various Soviet scientific institutions, and are now employed in research and factory laboratories of the Soviet Union. No personalities are mentioned. References, mostly Soviet, accompany each article.

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S/078/60/005/05/11/037
B004/B016

AUTHORS: Ryabchikov, D. I., Yermakov, A. N., Belyayeva, V. K., Marov, I. N.

TITLE: Complex Formation of Zirconium and Hafnium With Some Hydroxy Acids

PERIODICAL: Zhurnal neorganicheskoy khimii, 1960, Vol. 5, No. 5, pp. 1051-1067

TEXT: The authors intended to investigate the stability of the complex compounds of Zr and Hf with various organic acids, and, in the case of differences in their stability, the development of a method of separating these two elements. G. A. Yevtikova took part in this investigation. The authors describe the reagents applied (tartaric acid, citric acid, malic acid, trihydroxy-glutaric acid, $HClO_4$, $ZrOCl_2 \cdot 8H_2O$, $HfOCl_2 \cdot 8H_2O$, cation exchangers of the KU-2 type, anion exchangers of the EDE-10p type). Zr^{95} and Hf^{181} were used as tracers. Preliminary experiments indicated that dicarboxylic acids (glutaric, glutamic, succinic, malonic, maleic, and fumaric acid) do not form complexes with Zr or Hf, whereas the afore-mentioned hydroxy acids (and the mesoxalic acid) change the distribution of Zr and Hf even in strongly acid media by the formation of stable complexes. Tables 1-5 give the experimental data for the five hydroxy acids in the presence of 0.125, 0.5, 1, and 2 M $HClO_4$, and the partition coefficients K_d as well as the separation factor $\alpha = K_{d_{Hf}} / K_{d_{Zr}}$.

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Complex Formation of Zirconium and Hafnium With Some Hydroxy Acids

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Figs.1-5 show the change of K_d in dependence on the concentration of the organic acid. $K_{d_{Zr}}$ is always smaller than $K_{d_{Hf}}$. For citric acid, $\alpha = 4$. The separation of Zr and Hf by means of KU-2 cation exchangers by elution with 1 M $HClO_4$ and 0.0256 M citric acid is based thereupon, as suggested and described by the authors. Fig. 6 shows the yield curves of the chromatographically separated complexes of Zr and Hf, which were identified by measuring their peaks by means of a γ-spectrometer (Fig. 7). This was carried out by G. A. Chernov. Figs. 8-11 show the dependence of $1/K_d$ on the concentration of the complexing substance. The authors determined the number of coordinate groups for the Zr and Hf complexes with the organic acids (Figs. 12-15). Table 6 presents the data for the adsorption of Hf onto the EDE-10p anion exchanger. The formation coefficients of the complexes are given in Table 7. The authors discuss the structure of the complex compounds. As may be seen from Table 8, dicarboxylic acids (succinic acid) do not form complex compounds, hydroxy-dicarboxylic acids, however, do. This is indicative of the participation of both carboxyl and hydroxyl groups in the complex formation. The stability of the complex compounds of Zr and Hf decreases in the following order: Oxalic acid > mesoxalic acid ≫ tri-hydroxy-glutaric acid > citric acid > lactic acid > tartaric acid > malic acid. There are 15 figures, 8 tables, and 3 Soviet references.

SUBMITTED: July 30, 1959

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S/078/60/005/012/016/016
B017/B064

AUTHORS: Marov, I. N., Belyayeva, V. K., Yermakov, A. N., and Ryabchikov, D. I.

TITLE: Chromatographic Separation of Zirconium and Hafnium

PERIODICAL: Zhurnal neorganicheskoy khimii, 1960, Vol. 5, No. 12, pp. 2844-2847

TEXT: A new method of separating zirconium and hafnium by means of the КУ-2 (KU-2) cationite was developed. A solution of 0.025 mole citric acid and 1 mole perchloric acid, or 1 mole nitric acid, was used as desorbent. The rate of desorption is 0.5 - 0.6 ml/min·cm^2. Zirconium and hafnium were radiometrically analyzed in the extracts with the isotopes Zr^{95} and Hf^{181}. Fig. 1 shows the curves for the chromatographic distribution of Zr^{95} (+Nb^{95}) and Hf. It was found that with an increased loading of the cationite the value V_{max} rises, and the ratio $V_{max}Hf/V_{max}Zr$ decreases. This effect is explained by the formation of polynuclear zirconium complexes, and the effect of the large zirconium

S/078/62/007/001/001/005
B119/B110

AUTHORS: Ryabchikov, D. I., Yermakov, A. N., Belyayeva, V. K., Marov, I. N., Yao K'o-min

TITLE: Application of ion exchange for studying the complex formation of zirconium and hafnium with sulfate ion

PERIODICAL: Zhurnal neorganicheskoy khimii, v. 7, no. 1, 1962, 69-75

TEXT: The experimental part of the present paper was carried out by the method described in Refs. 8 and 9 (Ref. 8: D. I. Ryabchikov, A. N. Yermakov, V. K. Belyayeva, I. N. Marov, Zh. neorgan. khimii, 4, 1814 (1959); Ref. 9: The same authors, Zh. neorgan. khimii, 5, 1051 (1960)). Anion exchanger ЭДЭ-10П (EDE-10P) and cation exchanger КУ-2 (KU-2) were used. The complex formation of Zr and Hf with sulfuric acid was examined by cation exchange in chloric-acid solution with a hydrogen-ion concentration of $[H^+]$ = 2.33 moles/l. At sulfuric-acid concentrations of up to 0.1 mole/l, three complexes form with Zr, which correspond to the ratios of metal : H_2SO_4 = 1 : 1, 1 : 2, and 1 : 3. Hf forms two complexes corresponding to metal : H_2SO_4 = 1 : 1 and 1 : 2. The equilibrium

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constants of the complexing reactions were calculated by methods of Fronaeus and Schubert. $\left[K_j = \frac{[M(SO_4)_j^{4-2j}]\,[H^+]^j}{[M^{4+}]\,[HSO_4^-]^j}\right]$. Values for Zr: $K_1 = 361 \pm 12$, $K_2 = (2.17 \pm 0.15)\cdot 10^3$, $K_3 = (4.06 \pm 1.2)\cdot 10^5$; for Hf: $K_1 = 130 \pm 6$, $K_2 = (2.09 \pm 0.1)\cdot 10^3$. It has been found that the complex $M(SO_4)^{2+}$ is absorbed by the cation exchanger КУ-2 (KU-2) within the limits of error. Mention is made of papers by V. F. Saksin (Ref. 4: Nauchn. dokl. vysshey shkoly. Khimiya i khim. tekhnologiya no. 1.75 (1959)), A. K. Kirakosyan, I. V. Tananayev (Ref. 5: Zh. neorgan. khimii, 4, 852 (1959)), Ye. P. Mayorova, V. V. Fomin (Ref. 11: Zh. neorgan. khimii, 3, 1937 (1958)). There are 6 figures, 4 tables, and 12 references: 5 Soviet and 7 non-Soviet. The four most recent references to English-language publications read as follows: E. L. Zebroski, H. W. Alter, F. K. Neumann, J. Amer. Chem. Soc., 76, 5646 (1954); R. A. Day, R. N. Wilhite, F. D. Hamelton, J.

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Application of ion exchange ... S/078/62/007/001/001/005
B119/B110

Amer. Chem. Soc., 77, 3180 (1955); J. C. Sullivan, J. C. Hindman. J. Amer. Chem. Soc., 76, 593 (1954); B. A. I. Lister. J. Chem. Soc. (11), 3123 (1951).

SUBMITTED: January 3, 1961

Card 3/3

L 13505-63 EWP(q)/EWT(m)/BDS AFFTC/ASD JD/JG

ACCESSION NR: AP3003474 S/0078/63/008/007/1623/1633

AUTHOR: Yermakov, A. N.; Marov. I. N.; Belyayeva, V. K.

TITLE: Properties of aqueous solutions of zirconium oxychloride

SOURCE: Zhurnal neorganicheskoy khimii, v. 8, no. 7, 1963, 1623-1633

TOPIC TAGS: zirconium, zirconium oxychloride, potentiometry, cryoscopy

ABSTRACT: The authors studied the condition of zirconium in aqueous solutions of $ZrOCl_2 \cdot 8H_2O$ by potentiometric, cryoscopic, and electric conductivity methods, and by measuring the diffusion rate. Purpose of study was to obtain information concerning hydrolysis and degree of polymerization of this compound. $ZrOCl_2 \cdot 8H_2O$, thrice recrystallized from a commercial chloride solution, was used for the study. The composition of the compound corresponded precisely to the formula. The solutions to be tested were prepared by dissolving a weighed portion of the salt in distilled water which was chilled to 3-4°. The solutions were kept at this temperature for 24 hours. In all cases, each experiment was repeated no less than two times. Authors determined the activity of hydrochloric acid in zirconium oxychloride solutions at 0.2, 10, and 25° in concentration ranges of 0.006-0.38 mol/kl. The drops in the freezing points of the zirconium oxychloride solutions were measured in relation to salt concentration

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