

MATVEIEVA, T.A.

Biology of *Purpura lapillus* (L.) in the region of the Eastern  
Murman Coast. Trudy Murm. biol. sta. 2:48-61 '55. (MLRA 10:8)  
(Murman Coast--Dog whelk)

MATVEYeva, T.A., NIKITINA, N.S., CHERNOVSKAYA, Ye.N.

Causes and effects of the irregular distribution of *Fabricia*  
*sabellae* Ehr. and *Arenicola marina* L. worms in littoral zones.  
Dokl. AN SSSR 105 no.2:370-373 '55. (MLRA 9:3)

1. Predstavлено скадемиком Ye.N. Pavlovskim.  
(Murmansk--Annelida)

KARGIN, V.A., akademik; MATVEYEVA, T.A.

High voltage multi-chamber electrodialysis. Dokl. AN SSSR 105  
no.2:294-297 '55.  
(MLRA 9:3)

1. Vsesoyuznyy nauchno-issledovatel'skiy institut khimicheskikh  
reaktivov.

(Electrodialysis)

AUTHORS: Kargin, V. A., Member, Academy of Sciences, USSR, Lastovskiy, R. P., Professor, Matveyeva, T. A. SOV/64-58-5-1/21

TITLE: The Analysis and Purification of Substances by Means of New Methods of Electro-Dialysis (Analiz i ochistka veshchestv pri pomoshchi novykh metodov elektrodializa)

PERIODICAL: Khimicheskaya promyshlennost', 1958, Nr 5, pp. 261 - 267 (USSR)

ABSTRACT: In the introduction an electro-dialyzer according to Pauli (Ref 1) and the principles of the electro-dialysis itself are outlined. In this case the method of high-voltage-electro-dialysis was applied by which a five-chamber-electro-dialyzer was constructed which operated with a voltage of 300 V between the lateral- and auxiliary chambers and with a potential difference of 1500-1800 V between the lateral chambers, so that a considerable improvement of the purification of weak electrolytes was achieved. In order to increase the sensitivity of the method in the separation of insoluble substances, a so-called "stream of ions" is introduced. With this kind of electro-dialysis the basic substance remains unaffected, whereas the admixtures undergo a chemical modification. For this

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The Analysis and Purification of Substances by Means  
of New Methods of Electro-Dialysis

SOV/64-58-5-1/21

purpose the schedule of operation was slightly re-arranged and  $TiO_2$ - and  $SiO_2$  samples of iron and heavy metals as well as cellulose were purified by  $SiO_2$ . The results are given in a table. A schematical drawing of a three-chamber-electro-dialyzer is given for the purification of non-electrolytes of salts and it is said that thicker membranes are employed with a higher electrolytic resistance and resistance of diffusion, because the speed of purification will be increased and diffusion losses will be reduced. In addition tests were carried out with a 5-chamber-electro-dialyzer to purify water by applying radioactive isotopes to check the quality of the working power. A graph of a multichamber-dialyzer is given with a description of the operating characteristics as well as a graphic representation of the pH-distribution in chambers; it is pointed out that a concentration and a determination of the admixture is possible up to quantities of from 0,01 - 0,00001%. Finally a detailed description is given of the working technique for analyses of substances according to the method of electro-dialysis as well as for the purification of substances and it is found that high-voltage-dialysis serves for the extraction of extremely

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The Analysis and Purification of Substances by Means SOV/64-58-5-1/21  
of New Methods of Electro-Dialysis

pure to spectroscopically pure substances, for the extraction and for the concentration of precious admixtures, for the purification of electrolyte contaminations and for the separation of some cation-compounds. There are 8 figures, 12 tables, and 6 references, 5 of which are Soviet.

ASSOCIATION: Vsesoyuznyy nauchno-issledovatel'skiy institut khimicheskikh reaktivov (All-Union Scientific Institute for the Research of Chemical Reagents)

- 1. Electrolytes--Purification
- 2. Materials--Separation
- 3. Materials--Analysis
- 4. Electrical equipment--Performance

Card 3/3

Matveyeva, T.A.

Country : BULGARIA H-12  
Category : Chemical Technology. Electrochemical Industries.  
Electroplating. Galvanic Cells.  
Abs. Jour : Ref Zhur-Khimiya, No 14, 1959, No 50214  
Author : Kargin, V. A.; Lastovskiy, R.P.; Matveyeva, T.A.  
Institute : -  
Title : Analysis and Purification of Substances with  
the Aid of New Electrodialysis Methods  
Orig Pub. : Tezhka prom-st, 1958, 7, № 11, 12-18  
Abstract : No abstract.

Card: 1/1

S/078/61/006/005/001/015  
B121/B208

AUTHORS: Kargin, V. A., Lastovskiy, R. P., Matveyeva, T. A.,  
Ryabchikov, D. I., Zarinskiy, V. A., and Farafonov, M. M.

TITLE: Purification of titanium dioxide and meta-titanic acid by the  
method of high-voltage electrodialysis

PERIODICAL: Zhurnal neorganicheskoy khimii, v. 6, no. 5, 1961, 1017 - 1019

TEXT: A method of purifying titanium dioxide and meta-titanic acid by  
high-voltage electrodialysis was devised. The laboratory set-up consists  
of a d-c source (capacity 5 - 5,7 KW), an electrodialyzer with five  
chambers of organic glass and control equipments for measuring amperage  
and voltage. The electrode spacing is 10 - 12 cm. The titanium dioxide  
to be purified is put into the central chamber of the electrodialyzer in  
the form of a suspension. Purification from the impurities Mg, Fe, Al,  
Ca, Sb, Pb, Sn, Cd, Bi, and Cu is carried out in an ionic current of Cl<sup>-</sup>  
and NO<sub>3</sub><sup>-</sup> at maximum electrode potential. To remove SiO<sub>2</sub> from titanium di-  
oxide, a dilute KOH solution is added in the anode chamber of the dialyzer,

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S/078/61/006/005/001/015  
B121/B208

Purification of titanium ...

which reduces the  $\text{SiO}_2$  content from 0,3 to 0,03 %. Traces of Hf, Nb, and Ta are separated from  $\text{SiO}_2$  by conversion to oxalate complexes. Purification was examined by means of the quartz spectrographs of the MCT-22 (ISP-22) or MCT-28 (ISP-28)-type. The spectrographic method for the determination of Nb, Ta, Hf, and Cr is precisely described. Titanium dioxide purified by high-voltage electrodialysis, and meta-titanic acid have the following contents of impurities: Zr, Hf, Nb, Ta less than  $1 \cdot 10^{-2} \%$ , Mg -  $5 \cdot 10^{-4} \%$ , Si -  $1 \cdot 10^{-3} \%$ , Fe - less than  $1 \cdot 10^{-4} \%$ , Al -  $3 \cdot 10^{-3} \%$ , Ca - less than  $1 \cdot 10^{-4} \%$ , Sb - less than  $1 \cdot 10^{-4} \%$ , P - less than  $1 \cdot 10^{-3} \%$ , Cu - less than  $1 \cdot 10^{-4} \%$ , Sn - less than  $1 \cdot 10^{-4} \%$ , Cd - less than  $1 \cdot 10^{-4} \%$ , Pb - less than  $1 \cdot 10^{-4} \%$ . There are 4 tables and 6 references: 5 Soviet-bloc and 1 non-Soviet-bloc.

Card 2/3

Purification of titanium ...

S/078/61/006/005/001/015  
B121/B208

ASSOCIATION: Institut chistykh khimicheskikh reaktivov  
(Institute of Pure Chemical Reagents)  
Institut geokhimii i analiticheskoy khimii im. V. I.  
Vernadskogo Akademii nauk SSSR  
(Institute of Geochemistry and Analytical Chemistry imeni  
V. I. Vernadskiy of the Academy of Sciences USSR)

SUBMITTED: March 17, 1960

Card 3/3

MATVEYEVA, T.A., inah.

Preparing the surface of polyester coatings for polishing. Der.  
prom. 14 no.2:8-9 F '65. (MIRA 18:6)

1. Moskovskiy lesotekhnicheskiy institut.

MATVEYEV, T.I., inzh.

Practical aspects of the making of cutters. Der.prom. 9 no.8:22  
Ag '60. (MIRA 13:8)  
(Woodworking machinery)



VOLKOVA, M.A.; MATVEYeva, T.N.

Telegamma-therapy of lung cancer; immediate results [with summary  
in English]. Khirurgia 33 no.12:25-28 D '57. (MIRA 11:2)

1. Iz Gosudarstvennogo onkologicheskogo instituta imeni P.A.Gartsena  
(Nauchnyy rukovoditel' - chlen-korrespondent AMN SSSR prof. A.I.  
Savitskiy dir. - prof. A.N.Movikov, zav. radiologicheskim otdeleniyem  
kandidat meditsinskikh nauk M.A.Volkova)

(LUNG NEOPLASMS, ther.

telegammather.)

(GAMMA RAYS, ther. use  
telegammather. in cancer of lungs)

MARMORSHTEIN, S.Ya.; MATVEYEVA, T.N.

Dynamics of the roentgenological picture of cancer of the lung  
under the influence of telegamma therapy. Vop.onk. 7 no.3:12-  
20 '61. (MJRA 14:5)  
(LUNGS—CANCER) (GAMMA RAYS—THERAPEUTIC USE)

MATVEYEVA, T.N.

Radiotherapy of malignant tumors of the root of the tongue as revealed by materials of the P.A. Gertzen State Oncological Institute. Vop. onk. 7 no. 4:103-107 '61. (MIRA 14:4)

1. Iz radiologicheskogo otdeleniya (zav. - starshiy nauchnyy sotrudnik M.A. Volkova) Gosudarstvennogo onkologicheskogo instituta imeni P.A. Gertsena (dir. - prof. A.N. Novikov). Adres avtora: Moskva, d-284, 2-y Botkianskij proyezd, 3, Gosudarstvennyy onkologicheskiy institut imeni P.A. Gertsena.  
(TONGUE--CANCER) (GAMMA RAYS—THERAPEUTIC USE)

NOVIKOV, A.N., prof.; GARIN, N.D., doktor med.nauk; GOL'BERT, Z.V.,  
kand.med.nauk; VOLKOVA, M.A., kand.med.nauk; KISELEVA, Ye.S.,  
kand.med.nauk; MATVEYEVA, T.N., kand.med.nauk; VAVAKIN, A.D.,  
kand.med.nauk

Initial experience in the combined treatment of pulmonary  
cancer. Khirurgia no.8:22-28 Ag '62. (MIRA 15:8)

1. Iz Gosudarstvennogo nauchno-issledovatel'skogo onkologicheskogo  
instituta imeni P.A. Gertsena (dir. - prof. A.N. Novikov) Mini-  
sterstva zdravookhraneniya RSFSR.  
(LUNGS--CANCER)

GOL'BERT, Z.V.; KOBZEVA, S.A.; MATVEYEVA, T.N.

Morphological changes in lung cancer under the influence of  
preoperative tele gammatherapy. Vop. onk. 11 no.8:3-8 '65.  
(MIRA 18:11)

1. Iz patologoanatomicheskogo i radiologicheskogo otdeleniy  
Gosudarstvennogo onkologicheskogo instituta imeni P.A.Gertsena  
(direktor - prof. A.N.Novikov).

*MATVEYEVA, T.P.*

GERSHOV, M.M.; MAMONTOVA, L.D.; MATVEYEVA, T.P.; VEYSMAN, S.YA.

Washing and dyeing wool fabrics in the same bath. Tekst. prom. 18  
no.1:55-56 Ja '58. (MIRA 11:2)

(Dyes and dyeing--Wool)

MATVEYEVA, T. S.

LEBDEV, D.V. [translator]; MATVEYEVA, T. S. [translator]; LASKEVICH, Yu.I.  
[translator]; OSTRYAKOVA-VARSHAVER, V.P. [translator]; KHVOSTOVA,  
V.V. [translator]; BARANOV, P.A., redaktor; ASTAUROV, B.L., professor,  
redaktor; SYSINA, N.A., redaktor; IOVLEVA, N.A., tekhnicheskij  
redaktor

[Polyploidy; collection of articles] Poloploidiiia; sbornik statei.  
Perevod D.V.Lebedeva i dr. Pod.red. i s predist. P.A.Baranova i B.L.  
Astaurova. Moskva, Izd-vo inostr.lit-ry, 1956. 398 p. (MLRA 10:6)

1. Chlen-korrespondent Akademii nauk SSSR (for Baranova)  
(Polyploidy)

BARANOV, P.A.; MATVEYEV, T.S.

Polypleidy as a method in experimental botany. Biul. Glav. bot.  
sada no.31:49-57 '58. (MIRA 12:5)

I. Botanicheskiy institut im. V.I. Komareva AN SSSR.  
(Polypleidy)

MATVEYEV, T.S.

Polyploid form of nemesia. Biul.Glav.bot.sada no.32:43-45  
'58.  
(MIRA 12:5)

1. Botanicheskiy institut im. V.L.Komarova AN SSSR.  
(Leningrad--Nemesia) (Polyploidy)

BARANOV, P.A. [deceased]; MATVYIEVA, T.S.

Role of polyploidy in experimental botany. Trudy MOIP. Otd.biol.  
(MIRA 16:5)  
5:11-20 '62.

1. Botanicheskiy institut imeni V.L. Komarova AN SSSR, Leningrad.  
(POLYPLOIDY)

MATVEYEVA, T.S.

Polyploidy in ornamental plants. Trudy MOIP. Otd.biol. 5:333-  
359 '62. (MIRA 16:5)

1. Botanicheskiy institut imeni V.L. Komarova AN SSSR, Leningrad.  
(PLANTS, ORNAMENTAL) (POLYPLOIDY)

ZHUKOVSKIY, P.M., otv. red.; TROSHIN, A.S., otv. red.; ASTAUROV, B.L., red.; ZHINKIN, L.N., red.; MATVEYEVA, T.S., red.; SAKHAROV, V.V., red.; FEDOROV, A.A., red.; CHUKSANOVA, N.A., red.

[Polyploidy and breeding; transactions] Poliploidiiia i selektsiia; trudy. Moskva, Nauka, 1965. 322 p.

(MIRA 18:6)

1. Soveshchaniye po poliploidii, 1963. 2. Deystvitel'nyy chlen Vsesoyuznoy akademii sel'skokhozyaystvennykh nauk imeni V.I.Lenina (for Zhukovskiy). 3. Chlen-korrespondent AN SSSR (for all except Zhukovskiy).

MATVEYEVA, T. S.

"Pathological Changes in the Human Brain During Acute Oxygen Deficiency."  
Cand Med Sci, Central Inst for the Advanced Training of Physicians, 30 Dec 54.  
(VM, 22 Dec 54)

Survey of Scientific and Technical Dissertations Defended at USSR Higher  
Educational Institutions (12)  
SO: Sum. No. 556, 24 Jun 55

MATVEYEV, T.S.

Pathmorphology of the human brain in acute anoxia. Zhur. nevr. i psich.  
58 no.12:1455-1464 '58.  
(MIRA 12:1)

1. Tsentral'nay sudobnomeditsinskaya laboratoriya (Gluchnyy rukovoditel'-  
prof. M. I. Avdeyev) Moskva.  
(ASPHYXIA, pathol.  
brain (Rus))  
(BRAIN, pathol.  
in asphyxia (Rus))

KUKUYEV, L. A.; MATVEYEVA, T. S.; ABOVYAN, V. A.

Two types of disorders in focal vascular lesions of the brain beyond the limits of the principal focus. Nauch. trudy Inst. nevr. AMN SSSR no.1:450-456 '60. (MIRA 15:7)

1. Laboratoriya patologii nervnoy sistemy cheloveka Instituta mezga AMN SSSR, direktor - prof. S. A. Sarkisov.

(CEREBROVASCULAR DISEASE)

MATVEIEVA, T.S.

Pathology of nerve fibers and synaptic junctions of the human  
brain in focal vascular lesions. Itur.nevr.i psikh. 60 no.1:  
18-25 '60. (MIRA 13:6)

1. Laboratoriya patologii nervnoy sistemy (zav. L.A. Kukayev)  
Instituta mozga (dir. - prof. S.A. Sarkisov) AMN SSSR, Moskva.  
(BRAIN pathol.)

MATVEYeva, T.S.

KUKUEV, L.A.; MATVEYeva, T.S.; ABOVIAN, V.A.

Pyramidal tract in the system of the motor analyzer. Zhur. nerv. i  
psich. 60 no. 2:129-134 '60. (MIRA 14:4)

1. Laboratoriya patologii nervnoy sistemy cheloveka (zav. L.A.  
Kukuyev) Instituta mozga (dir. - prof. S.A. Sarkisov) AMN SSSR,  
Moskva.

(PYRAMIDAL TRACT) (MOVEMENT (PHYSIOLOGY))

MATVEYEVA, T.S.

Pathology of the connections of the motor analyisor in the vascular foci of the brain. Zhur. nevr. i psikh. 62 no.12:1769-1776 '62.  
(MIRA 16:11)

1. Iz laboratorii patologii nervnoy sistemy cheloveka (zav.-L.A. Kukuyev) Instituta mozga (dir. - prof. S.A. Sarkisov)  
AMN SSSR, Moskva.

\*

MATVEYEVA, T.S.; IVANCHENKO, O.V.

Prolonged development of a melanoma with metastasis into  
the brain; clinicomorphological observation. Zhur. nerv.  
i psikh. 64 no.8:1132-1135 '64. (MIRA 17:12)

1. Institut mozga (dirkotor - prof. S.A. Sarkisov) AMN SSSR,  
laboratoriya patologii nervnoy sistemy cheloveka (zaveduyushchiy -  
prof. L.A. Kukuyev), Moskva.

MATVEYEVA, T.S.

Lipid dystrophy of nerve cells as a symptom of retrograde degeneration. Zhur. nevr. i psikh. 64 no. 12:1805-1808 '64.

1. Laboratoriya patologii nervnoy sistemy cheloveka (zaveduyushchiy - prof. L.A.Kukuyev) Instituta mozga (direktor - prof. S.A.Sarkisov) AMN SSSR, Moskva.

CA

9

Cathodic processes during metallic corrosion. N. D. Tomashov and T. V. Matysyova (Acad. Sci. U.S.S.R., Moscow). Zhar. Fiz. Khim. 24, 1281-93 (1950).—The kinetics of H and O depolarization on metals and alloys is studied. The rates of H evolution ( $v_H$ ) and O absorption ( $v_O$ ) are measured volumetrically (C.A. 40, 1773<sup>1</sup>) e.g. during 100-150 hrs. Values of the ratio  $v_O/v_H$  for Al, Cu, Cd, Fe, Zn, and Mg (at 25°, 700 mm. in air, in a 0.5 N NaCl soln.) are, resp.,  $\infty$ ,  $\infty$ , 104, 137, 33, and 0. Various Al alloys are also studied in a 0.5 N NaCl soln.; with low concns. of foreign elements, the corrosion of the alloy changes with  $v_O$ ; for alloys with higher concns.,  $v_O$  does not change much from alloy to alloy and the corrosion is detd. by  $v_H$ . The kinetics on a duralumin cathode is also studied in a variety of conditions (temp., immersion, O atm., mixing of soln., addition of H<sub>2</sub>O<sub>2</sub>, periodic wetting of cathode); the different factors show that the increase in  $v_O$  is due to the neg. difference effect. In conditions simulating atm. corrosion of Mg,  $v_O$  may become equal to or even larger than  $v_H$  in contrast with the behavior of Mg in salt solns. Michel Boudart

TOMASHOV, N.D.; MATVEYeva, T.V.

Hydrogen and oxygen depolarization in corrosion of metals. Trudy  
Inst. Fiz. Khim. Akad. Nauk S.S.R., 2, Issledovaniya po Korroziyi Metal.  
(MLRA 4:10)  
No. 1, 146-65 '51.  
(CA 47 no. 14; 6850 '53)

MATVEYEVA, T. V.

UNSUB / Chemistry - Rubber

Nov/Dec 51

"Distribution of Non Electrolytes Under Equilibrium Dialysis of High-Polymer Solutions," V. A. Vilenkiy,  
T. V. Matveyeva, Ryazan Ned Inst imeni Acad I. P. Pavlov

"Kolloid Zhur" Vol XIII, No 6, pp 412-415

On basis that nonelectrolytes and electrolytes under equil dialysis may become nonuniformly distributed between high-polymer soln and its equil liquid, expts were conducted on equil dialysis in rubber-benzene-hexane and rubber-benzene-cyclohexane mixts.

198T7

MATVEYEVA, T.V.

Chemical Abst.  
Vol. 45  
Apr. 10, 1954  
Electrochemistry

*(2)*  
*3*

Effect of cathodic evolution of hydrogen on the limiting diffusion current of oxygen depolarization. N. D. Torganyan and T. V. Matveyeva. *Doklady Akad. Nauk S.S.R.* 90, 51-2 (1953); *cf., C.A.* 45, 6144d.—During a study of corrosion processes, the rate of cathodic absorption of dissolved O on electrolysis was observed. A buffered 0.5N soln. of NaCl (pH 9.2) was electrolyzed in a pure O atm. (25°, 780 mm.) with a smooth Pt cathode at c.d. values between 0.084 and 3.0 ma./sq. cm. The rates of H evolution (I) and O absorption (III), corresponding to the limiting diffusion current, varied from 0 to 0.019 and 0.03 cc./sq. cm. hr., resp. The value of II was max. when the c.d. was 1 ma./sq. cm. The effect of H evolution on the limiting diffusion current was due to the decrease in thickness of the diffusion layer that resulted from the presence of H bubbles.

J. W. Loweberg, Jr.

TOMASHOV, N.D.; MATVEYEVA, T.V.

Effect of a cathodic hydrogen on the diffusion flow limit of oxygen depolarization. Trudy Inst.fiz.khim. no.5:153-158 '55. (MLRA 9:5)  
(Electrolytic corrosion)

MATVEYEVA, T. V.

TOMASHOV, Nikon Danilovich. Prinimeli uchestiye: TYUKINA, M.N.; PALEOLOG, Ye.N.; CHERNOVA, G.P.; MIKHAYLOVSKIY, Yu.N.; LUNEV, A.F.; TIMONOVA, M.A.; MODESTOVA, V.N.; MATVEYEVA, T.V.; BYALOBZHESKIY, A.V.; ZHUK, N.P.; SHREYDER, A.V.; TITOV, V.A.; VEDENEYEVA, M.A.; LOKOTILOV, A.A.; BERUKSHTIS, G.K.; DERYAGINA, O.G.; FEDOTOVA, A.Z.; POKIN, M.N.; MIROLYUBOV, Ye.N.; ISAYEV, N.I.; AL'TOVSKIY, R.M.; SHCHIGOLEV, P.V.. YEGOROV, N.G., red.izd-va; KUZ'MIN, I.F., tekhn.red.

[Theory of the corrosion and the protection of metals] Teoriia korrozii i zashchity metallov. Moskva, Izd-vo Akad.nauk SSSR, 1959. 591 p. (MIRA 13:1)

(Corrosion and anticorrosives)

85375

S/081/60/000/017/007/016  
A006/A001*26.1620*Translation from: Referativnyy zhurnal, Khimiya, 1960, No. 17, pp. 74-75,  
# 68756

AUTHORS: Fokin, M.N., Matveyeva, T.V., Tomashov, N.D.

TITLE: Cells for Testing Metal-Solution Systems Under the Effect of Electronic Radiation With Consideration of Polarization Phenomena

PERIODICAL: Tr. In-ta fiz. Khimii AN SSSR, 1959, No. 7, pp. 114-118

TEXT: Designs of a cell are suggested where the metallic electrode is polarized anodically (cell a) and cathodically (cell b) during electronic irradiation of the metal-solution system. Characteristics of radiation are: electron energy  $\sim$  1 Mev; density of the electron flux:  $3.3 \times 10^{13}$  electron/cm<sup>2</sup> . sec; power of a dose in a layer of the solution near the electrode of 1-mm thickness:  $6.6 \times 10^{19}$  ev/cm<sup>3</sup> sec. Thickness of the layer of the circulating solution (3% NaCl) over the electrode in cell "a": 1 and 10 mm (less and more than the thickness of the layer of full absorption of the electron radiation energy). In cell "a" at a thickness of the solution layer equal to 1 mm, the corrosion rate of

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85373

S/081/60/000/017/007/016  
A006/A001

Cells for Testing Metal-Solution Systems Under the Effect of Electronic Radiation  
With Consideration of Polarization Phenomena

1X18H9T (1Kh18N9T) steel is by 2 orders of magnitude higher than that of a non-irradiated specimen. The nature of destruction and the corrosion rate in irradiation are different from those with anodic polarization of the specimen from an external current source. These differences were not observed if the thickness of the layer was 10 mm. The placing of a protector or cathodic polarization of the specimen in cell "a" protects it against increased corrosion during irradiation.

D. Kokoulina

Translator's note: This is the full translation of the original Russian abstract.

Card 2/2

5131D

1047

21030  
S/598/61/000/006/028/034  
D217/D303

AUTHORS: Matveyeva, T.Y., Tyukina, M.N., Pavlova, V.A., and Tomashov, N.D.

TITLE: Investigating the anodic oxidation of titanium in sulphuric acid solutions

SOURCE: Akademiya nauk SSSR. Institut metallurgii. Titan i yego splavy. no. 6, 1961. Metallotermiya i elektrokhimiya titana, 211 - 220

TEXT: The results of investigating the anodic oxidation of Ti in aqueous H<sub>2</sub>SO<sub>4</sub> solutions and the properties of the oxide films in relation to the conditions of anodizing (concentration and temperature of electrolyte, time of anodizing and anodic current density) are reported. The material studied was annealed Ti sheet from an experimental batch, having an elongation of 14.8%, produced powdermetallurgically and having the following chemical composition 0.13 % Fe, 0.15 % Ni, 0.17 % Si, 0.050 % C, 0.098 % N<sub>2</sub> and 0.34 % Ca. Ti iodide and Ti of specification VT1 were used as reference specimens in individual experiments. The specimens were cleaned

X

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S/598/61/000/006/028/034  
D217/D303

Investigating the anodic oxidation ...

X

with emery paper, degreased with acetone, etched for 15 seconds at room temperature in a solution consisting of 15 % HF and 5 % HNO<sub>3</sub>, and rinsed with water. Anodizing was carried out in the same way as for Al. The solution was agitated and the current was supplied across anodized Ti terminals. In the course of anodizing, the voltage was changed, the anodic current density being kept constant. The properties of the films obtained were determined by means of a drop method developed by the authors, using a solution consisting of 1.22 % HF, 0.91 % HNO<sub>3</sub>, remainder - water. The time taken for intense evolution of gas bubbles to begin after application of a drop of the above solution to a restricted film surface, was noted. Films possessing the best protective properties (according to their drop test performance), were also tested for their corrosion resistance by semi-immersing the specimens in 40 and 75 % solutions of H<sub>2</sub>SO<sub>4</sub> at 30°. The weight of the films was determined from the loss in weight sustained by the anodized specimens on removing the film. The films were removed by cathodic polarization without noticeable dissolution of metallic Ti, using a current of 1.5 mA/cm<sup>2</sup> in a 20 % H<sub>3</sub>PO<sub>4</sub> solution with addition of 0.1 % CrO<sub>3</sub> at 80°. The film thick-

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Z1030

Investigating the anodic oxidation ... S/598/61/000/006/028/034  
D217/D303

ness was calculated from the weight. It is shown that anodic oxidation of Ti in  $H_2SO_4$  solutions at room temperature requires a high terminal voltage, as a result of which films of low quality form. Raising the temperature of the electrolyte to  $80^\circ$  and above, results in a decrease in terminal voltage and enables films of better protective qualities to be obtained. The following methods of anodizing Ti in  $H_2SO_4$  solutions were found to give satisfactory results: 1) 18 %  $H_2SO_4$  solution, temperature:  $80^\circ$ , anodic current density:  $0.5 A/dm^2$ , anodizing time: 2 - 8 hours; 2) 18 %  $H_2SO_4$  solution, temperature:  $100^\circ$ , anodic current density:  $2 A/dm^2$ , time of anodizing: 2 hours. There are 9 figures, 3 tables and 14 references: 3 Soviet-bloc and 11 non-Soviet-bloc. The 4 most recent references to the English-language publications read as follows: P.D. Miller, R.A. Jefferys, and E.A. Pray, Metal Progress, 1956, 69, 61; H.A. Johansen, G.B. Adams and P. van Rysselberghe, J. Electrochem. Soc., 1957, 104, 339; H. Richard, Metal Finishing Journal, 1957, 3, 10; H. Nagasaki, H. Ishida, Keikindzoky Light Metals, 1958, 8, 60.

Card 3/3

188300

24012

S/080/61/034/006, 015, 020  
D247/D305

AUTHORS: Matveyeva, T.V., Tyukina, M.N., and Pavlova, V.A.

TITLE: Dependence of the rate of corrosion of anodized binary aluminum-base alloys on their copper content

PERIODICAL: Zurnal prikladnoy khimii, v. 34, no. 6, 1961,  
1365 - 1367

TEXT: The role of copper concentration on the rate of corrosion of aluminum alloys and the properties of anodic oxide films, produced on their surfaces, was investigated. The rate of corrosion was determined by the volume of oxygen absorbed and hydrogen evolved, using an apparatus described by N.D. Tomashov and T.V. Matveyeva (Ref. 3: Tr. Inst. fiz. khim. AN SSSR, 3, 2, 39, 1951). Binary aluminum-base alloys containing 0.9, 1.95, 3.96, 5.48 and 7.63 % copper were tested, the materials used for the preparation of the alloys being ABOOC (AVOOC) aluminum (99.99 %) and spectroscopically pure copper. All alloys were homogenized at a temperature of 485°

Card 1/5

Dependence of the rate of ...

24012  
S/080/61/034/006/C.5/C20  
D247/D305

for 240 hours, followed by quenching in water at room temperature. Metallographic analysis showed that alloys containing up to 3.96 % copper were homogeneous solid solutions. Alloys containing 5.48 and 7.63 % Cu consisted of a mixture of solid solution and eutectic. Anodic oxidation was carried out in a 4N sulphuric acid solution at a current density of 1 A/cm<sup>2</sup> and a temperature of 25° for 20 minutes. The thickness of the films produced was 5 - 7 μ. Corrosion tests were carried out by fully immersing the specimens in a 0.5 N sodium chloride solution at a temperature of 25° and a pressure of 760 mm Hg. Fig. 1 shows the relationship between volume of hydrogen evolved (and oxygen absorbed) and time in the corrosion of anodized aluminum alloys of various copper contents, and Fig. 2 shows the same relationship for non-anodized alloys. From these two graphs it can be seen that corrosion of the alloys tested in a 0.5 N sodium chloride solution takes place with mixed oxygen-hydrogen depolarization. In still, thermostatically controlled solutions of the above composition, the rate of corrosion of Al-Cu alloys, anodized by the normal sulphuric acid method, is approximately

Card 2/5

Dependence of the rate of ...

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S/080/61/034/C05/C15/C20  
D247/D305

half that of non-anodized alloys. As the copper content increases, so the rate of corrosion increases, at first essentially due to an increase in the rate of depolarization by oxygen, and subsequently only due to depolarization by hydrogen. There are 2 figures and 3 Soviet-bloc references.

SUBMITTED: July 19, 1960

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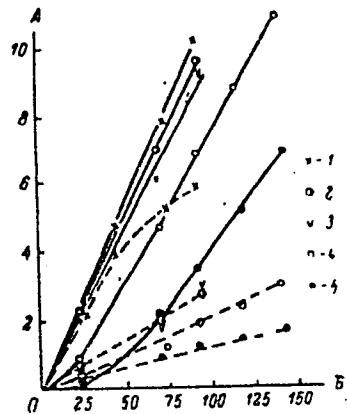
Card 3/5

24012  
S/080/61/034/006/015/020  
D247/D305 X

Dependence of the rate of ...

Fig. 1. Dependence of volume of oxygen absorbed (continuous lines) and hydrogen evolved (dotted lines) on time in the corrosion of anodized binary aluminum-copper alloys in a 0.5 N NaCl solution.

Legend: A - volume ( $\text{cm}^3/\text{dm}^2$ );  
B - time (hours); copper content  
of alloys (%): 1 - 7.63, 2 - 3.96,  
3 - 5.48, 4 - 2.95, 5 - 1.9.



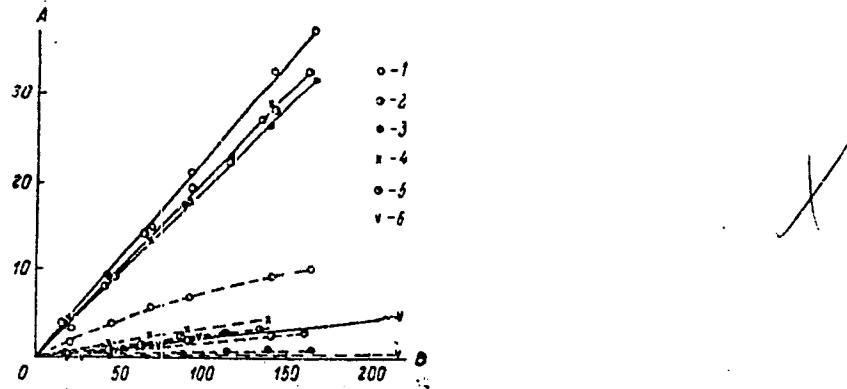
Card 4/5

Dependence of the rate of ...

24012  
S/080/61/034/006/C15/020  
D247/D305

Fig. 2. Dependence of volume of oxygen absorbed (continuous lines) and hydrogen evolved (dotted lines) on time in the corrosion of binary aluminum-copper alloys covered with natural films in a 0.5% NaCl solution.

Legend: A - volume ( $\text{cm}^3/\text{dm}^2$ ); B - time (hours); copper content of alloys (%): 1 - 7.63, 2 - 3.96, 3 - 1.9, 4 - 5.48, 5 - 2.95, 6 - 0.98.



Card 5/5

100-26	16	16	16
ACQUISITION NO.	AT40430		

conditions are recommended for anodizing titanium in sulfuric acid: 1) an 18% sulfuric acid solution at 80°C., an anodic current density of 0.5 A/dm<sup>2</sup>, and anodizing periods of 2 and 1 hours which produce films 0.9 and 2.5 μ thick, respectively; 2) an 11% sulfuric acid solution at 100°C., an anodic current density of 1.0 A/dm<sup>2</sup>, and a duration of anodizing of 2 hr. which produces a film thickness of 1.2 μ. The films obtained under the above conditions are black, lustrous, dense, and adhere strongly to the base metal. Except for the anodizing of tita-

L 34394-66 EWT(m)/EWP(t)/ETI IJP(c) JB/JG/WB  
ACC NR: AF6003321 SOURCE CODE: UR/0365/66/002/001/0057/0062

37  
e

AUTHOR: Tomashov, N. D.; Matveyeva, T. V.

ORG: Institute of physical Chemistry, AN SSSR (Institut fizicheskoy khimii AN SSSR)

TITLE: Corrosion and electrochemical behavior of rhenium

SOURCE: Zashchita metallov, v. 2, no. 1, 1966, 57-62

TOPIC TAGS: rhenium, corrosion resistance, electrochemical analysis, electric potential, sulfuric acid, hydrochloric acid, phosphoric acid

ABSTRACT: The rate of Re corrosion (Re contained 0.0075 K, 0.0009 Na, < 0.004 Ca, 0.001 Fe, 0.0002 Ni, 0.0006 Ni, 0.00015 Al, and 0.0007% Mn) was studied at 25°C and 100°C in solutions of H<sub>2</sub>SO<sub>4</sub>, HCl, H<sub>3</sub>PO<sub>4</sub>, K<sub>2</sub>H, HNO<sub>3</sub>, H<sub>2</sub>O<sub>2</sub>, and NaCl at various concentrations and in distilled H<sub>2</sub>O. In the presence of atmospheric oxygen and at 25°C, the rate of corrosion was very small (<0.0001 g/m<sup>2</sup>-hr) in nonoxidizing acids (H<sub>2</sub>SO<sub>4</sub>, HCl, and H<sub>3</sub>PO<sub>4</sub>). At 100°C in the same media, the Re corroded with a small rate of corrosion (<0.016 g/m<sup>2</sup>-hr). In distilled water in the presence of atmospheric oxygen and at 25°C, the corrosion was also very small (<0.0001 g/m<sup>2</sup>-hr), but at 100°C it was higher than in nonoxidizing acids and similar to that in NaCl solutions (0.05 g/m<sup>2</sup>-hr). Alkalies reacted with Re more actively than nonoxidizing acids: the rate of Re dissolution in 5% and 10% KOH was 0.015 g/m<sup>2</sup>-hr. The overvoltage of H liberation had a low

Caro 1/2

UDC: 669.849

L 34394-66

ACC NR: AP6003/2

value in nonoxidizing acids: 0.1 v in 40%  $H_2SO_4$  solution at a current density of 1 milliamp/cm<sup>2</sup> and at 25°C. The ability of Re for passivation was very small. The Re was passive (anode current <0.001 milliamp/cm<sup>2</sup>) in nonoxidizing acids at nearly stationary potentials ( $\leq 0.85$  v). A certain degree of passivation of Re was observed within the same range of potentials (0.4 - 0.8 v) in NaCl and KOH solutions, but at much higher current density ( $\sim 1$  milliamp/cm<sup>2</sup>). In oxidizing media ( $\geq 0.05\%$  solutions of  $H_2O_2$  and  $HNO_3$  at concentrations  $> 10\%$ ), the Re was very unstable. A rate of Re corrosion of the order of 200 g/m<sup>2</sup>-hr was observed in  $\geq 40\%$   $HNO_3$ . The stationary potential of Re in these solutions was very positive ( $\leq +1$  v). This affected a high rate of corrosion because of overpassivation. The corrosion of Re in the solutions investigated had an electrochemical nature and the corrosion behavior of Re was controlled by the kinetics of anodic and cathodic processes under the conditions studied. Orig. art. has: 7 fig. and 1 table.

SUB CODE: 13/ SUBM DATE: 31Mar65/ ORIG REF: 003/ OTH REF: 004

Cord 2/2 RLG

147368-66 EWT(m)/EWP(t)/ETI IJP(c) JD/JG/WB  
ACC NM AR6028440 SOURCE CODE: UR/0137/66/000/005/I080/I080

AUTHOR: Tomashov, N. D.; Matveyeva, T. V.

TITLE: Corrosion and electrochemical behavior of vanadium in sulfuric acid  
solutions

SOURCE: Ref. zh. Metallurgiya, Abs. 51555

REF SOURCE: Sb. Korroziya met. i splavov. No. 2. M., Metallurgiya, 1965,  
21-28

TOPIC TAGS: corrosion, vanadium, anodic polarization, passivation

ABSTRACT: The curves of the vanadium corrosion rate expressing its dependency on sulfuric acid concentration pass through a maximum at 80% of the latter's concentration. At a 25% concentration, the corrosion rate of vanadium is low and occurs with oxygen depolarization. In 60—80% solutions of  $H_2SO_4$ , it is followed by oxygen-hydrogen depolarization. Passivation of vanadium with anodic polariza-

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UDC: 669.292:620.193

L 47368-66

ACC NR: AR6028440

tion occurs at a 0.75 v potential and a  $D_a$  of 400 m amp/cm<sup>2</sup> in a 40% concentration of H<sub>2</sub>SO<sub>4</sub>. During corrosion in a 20% concentration of H<sub>2</sub>SO<sub>4</sub> without the application of current, vanadium dissolves as V<sub>4</sub><sup>3+</sup>. During the anodic dissolution of vanadium in 40—80% solution at a 0.55—0.95 v potential, it dissolves as V<sup>4+</sup>; in an 80% solution of sulfuric acid at a potential greater than 1.4 v, it dissolves as V<sup>5+</sup>. [Translation of abstract]

[FM]

SUB CODE: 13/

Card 2/2 afs

ACC NR: AT7004169

SOURCE CODE: UR/0000/66/000/000/0166/0177

AUTHOR: Tomashov, N.D.; Matveyeva, T.V.

ORG: none

TITLE: Corrosion and electrochemical behavior of rhenium

SOURCE: AN SSSR. Institut fizicheskoy khimii. Korroziya i zashchita konstruktsionnykh splavev (Corrosion and protection of structural alloys) Moscow, Izd-vo Nauka, 1966, 166-177

TOPIC TAGS: rhenium, ~~rhenium~~ corrosion, Rhenium electrochemical analysis, passivation, passivation potential

ABSTRACT: Specimens of rhenium, sintered from 99.999%-pure electrolytic rhenium powder, were forged with intermediate annealing in vacuum at 200°C and tested for electrochemical and corrosion behavior in  $H_2SO_4$ ,  $H_3PO_4$ , KOH,  $HNO_3$  and NaCl solutions of various concentrations at temperatures ranging from 25 to 100°C and for time periods up to 200 days. Corrosion tests were made on specimens fully submerged into solutions under conditions of natural aeration. In fully nonoxidizing media, e.g., distilled oxygen-free water, rhenium at 100°C had a very low corrosion rate (0.001 g/m<sup>2</sup>hr). In nonoxidizing acids (sulfuric, hydrochloric, phosphoric) of any concentration in the presence of air oxygen, the corrosion rate was less than 0.001 g/m<sup>2</sup>hr at 25°C and slightly higher,

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UDC: none

ACC NR.

AT7004169

max.  $0.016 \text{ g/m}^2\text{hr}$ , at  $100^\circ\text{C}$ . Rhenium had a similar low corrosion rate, less than  $0.001 \text{ g/m}^2\text{hr}$ , in distilled water with access to air oxygen at  $25^\circ\text{C}$ ; but at  $100^\circ\text{C}$ , the corrosion rate was  $0.05 \text{ g/m}^2\text{hr}$ , the same as that in 0.8 and 16% NaCl solutions at  $100^\circ\text{C}$ . Alkalies were found to be more reactive with rhenium than nonoxidizing acids; even at  $25^\circ\text{C}$  the rhenium dissolution rate in 3 and 10% KOH solutions was  $0.015 \text{ g/m}^2\text{hr}$ . In oxidizing media (hydrogen peroxide solutions at a concentration higher than 0.05%); nitric-acid solutions at a concentration higher than 10%) rhenium corroded readily; its corrosion rate in 40% nitric acid was about  $200 \text{ g/m}^2\text{hr}$  and remained practically constant with further increases in the acid concentration. In the investigated solutions, rhenium corrosion has an electrochemical nature, and the corrosion behavior is determined entirely by the kinetics of the anodic and cathodic processes under the investigated conditions. Oxidizing solutions which ensure the effective course of cathodic depolarization shift the stationary potential of rhenium into the positive region (up to  $+1.0 \text{ v}$ ), which results in a high corrosion rate because of the overpassivation phenomenon. The passivation properties of rhenium are very weak. In nonoxidizing acids at the near-stationary potentials (up to  $+0.85 \text{ v}$ ) rhenium is passive (the anodic current is less than  $0.001 \text{ mamp/cm}^2$ ). In the same region of potentials (from  $-0.4$  to  $+0.8 \text{ v}$ ), rhenium is passive to some extent also in NaCl and KOH solutions but at relatively high current densities (about  $1.0 \text{ mamp/cm}^2$ ). Orig. mat. has: 7 figures and 1 table. [MS]

SUB CODE: 11/ SUBM DATE: 23 Sep 66/ ORIG REP: 003/ OTH REP: 004/

ATD PRESS: 5116

Card 2/2

L 04775-67 EWT(m)/EWP(t)/ETI IJP(c) JD/JG/WB  
ACC NR: AP6025717

SOURCE CODE: UR/0365/66/002/004/0429/0435  
27  
B

AUTHOR: Tomashov, N. D.; Matveyeva, T. V.

ORG: Institute of Physical Chemistry Academy of Sciences SSSR (Institut  
fizicheskoy khimii Akademii nauk SSSR

TITLE: Corrosion and electrochemical behavior of vanadium in acid  
solutions

SOURCE: Zashchita metallov, v. 2, no. 4, 1966, 429-435

TOPIC TAGS: vanadium, corrosion rate, electrochemistry

ABSTRACT: The rate of corrosion of vanadium in different concentrations  
of hydrochloric, sulfuric and phosphoric acid solutions at 25° and 100°  
and the electrochemical behavior of vanadium in sulfuric acid were  
determined. The rate of vanadium corrosion in naturally aerated  
distilled water at 25° increases with time, amounting to 0.025 gm/m<sup>2</sup> per  
hr in 300 days. In deaerated water the rate is practically nil  
indicating that atmospheric oxygen dissolved in water is the cause of  
corrosion. Vanadium is very resistant to corrosion in any concentration  
of phosphoric acid at 25°. At 100° the corrosion rate increases with  
increase in acid concentration: vanadium is relatively resistant to 10%

UDC: 620.193.41:669.292

Cord 1/2

L 04775-67

ACC NR: AP6025717

phosphoric acid but corrodes rapidly in solutions of over 60% concentration. The rate of vanadium corrosion increases rapidly with increase in hydrochloric acid concentration. At 25° it has little corrosion resistance to hydrochloric acid solutions of over 30% concentration; at 100°, over 10% solutions. The corrosion rate-acid concentration curves for vanadium in sulfuric acid go through a maximum at 80% acid concentration. Vanadium has little resistance to 60-90% sulfuric acid solutions at 25°; at 100° its rate of corrosion is 2 orders greater than at 25° and it has little resistance to sulfuric acid solutions of over 20%. Passivation of vanadium in acid media is relatively low. In 40% sulfuric acid the passivation potential is + 0.75 v, passivation current 400 ma/cm<sup>2</sup>; in 80% acid, 0.95 v at 8 ma/cm<sup>2</sup>. Overpassivation, with formation of the pentavalent vanadium ion, develops immediately after the onset of passivity. Orig. art. has: 3 figures and 3 tables.

SUB CODE: 1107 / SUBM DATE: 13Aug65 / ORIG REF: 003 / OTH REF: 002

Cord 2/2 20

L 28394-66 ACC NR: AT6013785	ENT(m)/EWP(t)/ETI (N)	IJP(t) JD/JG/NB/GI
SOURCE CODE: UR/0000/65/000/000/0021/0028		
AUTHOR: Tomashov, N. D. (Doctor of chemical sciences, Professor); Matveyeva, T.V.		
ORG: none		
TITLE: <u>Electrochemical and corrosion behavior of vanadium in sulfuric acid solutions</u>		
SOURCE: Korroziya metallov i splavov (Corrosion of metals and alloys), no. 2, Novosibirsk, Izd-vo Metallurgiya, 1963, 21-28		
TOPIC TAGS: corrosion, electrochemistry, vanadium, sulfuric acid, passivator additive		
<p><b>ABSTRACT:</b> Since the treatment of stainless steels with even minute amounts of V (1-3%) greatly enhances their passivability and corrosion resistance, obtaining more accurate information on the corrosion and electrochemical properties of V itself is of great interest. In this connection, the authors investigated the corrosion of 1 and 0.12 mm thick strips of V in H<sub>2</sub>SO<sub>4</sub> solutions of various concentrations (0-100%) and temperatures. The corrosion was determined according to the weight loss of the specimens. For their electrochemical tests the specimens, following their vacuum annealing at 875°C for 1 hr, were provided with a welded-on contact of constantan wire. Findings: Up to a 40% concentration of H<sub>2</sub>SO<sub>4</sub>, vanadium remains relatively</p>		
Card 1/3		

S-28394-66

ACC NR. AT6013785

corrosion resistant over the test time (30 days). Increasing the concentration of the acid above 40% leads to a sharper rise in the corrosion rate of V, particularly when the concentration is 70-80%; above 80% the corrosion rate decreases sharply (Fig. 1). An investigation of the kinetics of corrosion of V at 25°C for 40 days in

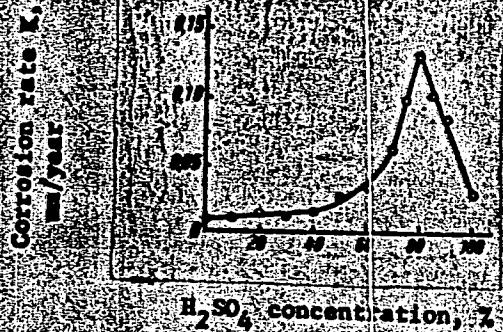


Fig. 1. Corrosion rate of vanadium as a function of H<sub>2</sub>SO<sub>4</sub> concentration at 25°C and test time (30 days)

20, 40 and 80% H<sub>2</sub>SO<sub>4</sub> solutions showed that V corrodes with almost purely oxygen depolarization. The passivation of V in a 40% solution of H<sub>2</sub>SO<sub>4</sub> occurs in the presence of an 0.75-v potential and a current density of 100 ma/cm<sup>2</sup>. The hydrogen overvoltage

Card 2/3

L 28394-66

ACC NR: AT6013785

for V in 40 and 80%  $H_2SO_4$  solutions is 0.25 v for a current density of 10 ma/cm<sup>2</sup>. During corrosion of V in a 20% solution of  $H_2SO_4$  without application of current (in the presence of an 0.24-v normal corrosion potential of V), V passes over into the solution in the form of  $V^{5+}$ . During anodic dissolution of V in 40 and 80% solutions of  $H_2SO_4$  in the presence of potentials of from 0.55 to 0.95 v V passes over into the solution in the form of  $V^{4+}$  and in 80%  $H_2SO_4$ , at potentials exceeding 1.4 v, in the form of  $V^{5+}$ . Orig. art. has: 11 figures.

SUB CODE: 51 07, 11

SUM DATE: 19Jul65/ ORIG REF: 003/ OTH REF: 002

Card 3/3

28 (5)

**AUTHORS:** Korolev, Ye. M., Roy, V. I., Matveyeva, V. A. SOV/32-25-10-41/63

05752

**TITLE:** Waterproofing Transmitters Which Measure Deformations Under Higher Pressure**PERIODICAL:** Zavodskaya laboratoriya, 1959, Vol 25, Nr 10, pp 1250 - 1252 (USSR)**ABSTRACT:** Investigations of the state of stress in damaged parts of industrial devices for high pressure were carried out by the tensiometric method. For the determination of deformations on the inner surfaces it was necessary to seal the transmitters against the action of water at high pressure (400-900 atm). The carbinol paste prepared for this purpose at the NIIKhIMMASH (Ref 1) proved to be inadequate. Various sealing media were tested (Table) such as bakelite varnish, silicon nitroglyptal glue, 192-T, bitumen varnish, nitro lacquer, carbinol paste, perchlorovinyl paste, technical vaseline-paraffin mixtures, and "Pushsalo"). The sealing qualities were tested by means of the transmitter of the type ET-1, and it was found that the two last-mentioned substances effect the best sealing. As the outlet of the transmitters had to be altered also for tests to be carried out at high pressure under water, a new construction

Card 1/2

Waterproofing Transmitters Which Measure Deformations  
Under Higher Pressure 05752  
SOV/32-25-10-41/63

was worked out also for the latter (Figure), which provides  
for a chlorovinyl insulation with a rubber insert. There are  
1 figure, 1 table, and 2 Soviet references.

ASSOCIATION: Irkutskiy filial Vsesoyuznogo nauchno-issledovatel'skogo i  
konstruktorskogo instituta khimicheskogo mashinostroyeniya  
(Irkutsk Branch of the All-Union Scientific Research- and  
Designing Institute for Chemical Machine Building)

Card 2/2

MATVEYEVA, V.A., inzh.

Analysis of operations and finances of automotive transportation  
units. Trudy MIEI no.16:67-75 '61. (MIRA 14:12)  
(Kazakhstan—Transportation, Automotive)

MATVEYEVA, V. A.

MATVEYEVA, V. A., pomoshchnik shkol'no-sanitarnogo vracha (Moskva)

Role of assistant sanitary physicians in the inspection of the  
sanitary and hygienic regimen in schools. Vel'd. i skush. 22 no.8:  
32-35 Ag '57. (MIRA 10:12)  
(SCHOOL HYGIENE) (SCHOOLS--MEDICAL INSPECTION)

MATVEYEVA, V.A., Cand Med Sci -- (diss) "Experience  
of the introduction of the method of  
planning of continuous penetration method of constant observation of children in  
rural ~~village~~ consultations. (Data <sup>on</sup> the physical development  
and state of health of children in <sup>rural localities</sup> villages)." Rostov-on-Don,  
1958, 16 pp (Rostov-on-Don State Med Inst) 200 copies  
(KL, 50-58, 130)

- 135 -

MATVEYeva, V.A.

Planned preventive services for children in rural areas. Vop. okh.  
mat. i det. 3 no.1:55-59 Je-F '58. (MIRA 11:2)

1. Iz Rostov'skogo oblastnogo nauchno-issledovatel'skogo instituta  
akusherstva i pediatrii (dir. D.S.Baranovskaya, nauchnyy rukovoditel'  
prof. I.Ya.Seretriyskiy)  
(CHILDREN--CARE AND HYGIENE)  
(PUBLIC HEALTH, RURAL)

MATVEYEVA, V.F. [Matvieleva, V.F.], doktor med.nauk, prof.

Treating newborns in small oxygen tents. Ped., akush. i gin. 20  
no.6:33-38 '58. (MIRA 13:1)

1. Kafedra akusherstva i ginekologii pediatriceskogo fakul'teta  
(zav. - prof. V.F. Matveyeva) Khar'kovskogo meditsinskogo instituta  
(direktor - dots. I.P. Kononenko).

(INFANTS (NEWBORN)) (OXYGEN--THERAPEUTIC USE)

MATVEYeva, V.A.

Mass prevention of rickets in the village. Vop. okh.mat.i det. 5  
no.1978-81 Ja-F '60. (MIRA 13:5)

1. Iz Rostovskogo-na-Donu instituta akusherstva i pediatrii (dir. -  
D.S. Baranovskaya, nauchnyy rukovoditel' - prof. I.Ya. Serebriyskiy).  
(MOCHETINSKII DISTRICT--RICKETS)

MATVEYEVA, V.F., prof.; KORETSKIY, M.I., kand. med. nauk

Asphyxia of the newborn and its treatment. Akush. i gin. no.6:12-20  
N-D '63. (MIRA 17:12)

1. Iz akushersko-ginekologicheskoy kliniki (zav. prof. V.F.Matveyeva)  
Khar'kovskogo meditsinskogo instituta.

MALEVICH, L.L.; MATVEIEVA, V.G.

*Earthworm fauna in the forests of western White Russia.  
Uch. zap. MGPI no.227:398-403 16, (MIRA 18:11)*

MATVEVA, V.I., Cand Tech Sci —(disc) "Rotor balancing and automatic control of vibrations of bushings of mine ventilators." St-line, 1978.  
25 pp with drawings; 1 ~~sheet~~ of drawings (Min. of Higher Education USSR).  
Donetsk Order of Labor Red Banner Industrial Inst in N.S.Khrushchev),  
150 copies (KL,44-58, 123)

-42-

MATVEYEVA, V. K.

"The Parasitic Fungus [Erysiphe graminis] of Oaks and Measures  
for Combating It in the Mountains and Foothills of the Zailiyskiy  
Ala-Tau, Alma-Ata Oblast." Cand Agr Sci, Kazakh Agricultural Inst,  
Alma-Ata, 1953. (RZhBiol, No 1, Sep 54)

SO: Sum 432, 29 Mar 55

SIVOKOBIL'SKIY, A.I.; MATVEYEVA, V.M.

Diesel engines operating with natural gas. Mashinostroenie no.2:  
124-125 Mr-Ap '62. (MIRA 15:4)  
(Diesel engines)

MATVEYEVA, Varvara Mikhaylovna; PARILOVA, Galina Nikolayevna;  
KOROLEVA, V.D., OTV. red.

[Collection of chemistry texts with methodological instructions and exercises in Russian for foreign students] Sbornik tekstov po khimii s metodicheskimi ukazaniami i zadaniami po russkому iazyku dlia studentov-inostrantsev. Sost. V.M.Matveeva, G.N.Parilova. Leningrad, 1962. 82 p.  
(MIRA 15:9)

1. Leningrad. Universitet.  
(Chemistry—Study and teaching)

17(1)

SOV/177-58-11-14/50

AUTHORS: Smolenskiy, M.L., Lieutenant-Colonel of the Medical Corps, and Matveyeva, V.N.

TITLE: The Sugar Level in the Blood and in the Spinal Fluid in a Closed Injury of the Cerebrum

PERIODICAL: Voyenno-meditsinskiy zhurnal, 1958, Nr 11, pp 48 - 50 (USSE)

ABSTRACT: The author reports on changes of the sugar level in the blood and in spinal fluid which may occur in closed injuries of the cerebrum and on its sequela. According to investigations of various authors, including D.A. Shamburov and V.S. Asatiani, the quantity of sugar in the normal spinal fluid is subjected to considerable fluctuations from 40 to 60 mg%. The authors base this article on their own investigations and on the observation of 50 persons who sustained a closed cerebral trauma. The results are summed up in two conclusions. 1) The low values of the sugar level in the liquor (55.58 mg%) and its low relation

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SOV/177-58-11-14/50

The Sugar Level in the Blood and in the Spinal Fluid in a Closed Injury of the Cerebrum

to blood sugar (0.60-0.64 mg%) may prove a serious trauma of the cerebrum suffered up to 1 month ago, and high values of the blood level in the liquor may give evidence of a mild trauma. 2) An increase of the sugar level in the liquor (61-70 mg%) and its relation to sugar in the blood near the above limit of the norm or over it, may indicate a serious trauma, sustained up to half a year ago. These indicators also remain regularly in persons who suffered from trauma considerably earlier. There is 1 table.

Card 2/2

BOGOYAVLENSKAYA, L.B.; VIL'SHANSKAYA, F.L.; MATVEYEVA, V.N.; SAKHAROVA, P.K.;  
KUZNETSOVA, Ye.V.; KAGAN, M.I.

Biological structure of intestinal diseases of infants; author's  
abstract. Zhur.mikrobiol.,epid.i immun. 30 no.11:113 N '59.

1. Iz Moskovskoy gorodskoy sanitarno-epidemiologicheskoy stantsii.  
(INFANTS--DISEASES) (INTESTINES--DISEASES) (MIRA 13:3)

BITKINA, L.N.; FEDOSYUK, R.Ya.; LOBKOV, M.A.; MIKERINA, N.Ya.; GLUKHOVTSEVA,  
Z.N.; RUMANOVA, R.G.; VIL'SHANSKAYA, F.L.; MATVEYEVA, V.N.,  
YAMPOL'SKAYA, V.A.; VARSHAVSKIY, E.I.

Outbreak of salmonellosis. Zhur. mikrobiol. epid. i immun. 31 no.2:  
99-100 D '60. (MIRA 14:6)  
(SALMONELLA)

TOPOLYANSKAYA, S.I.; MEDOROVA, O.A.; NUKHNAREVICH, A.F.; BRONSHTEYN, R.B.;  
GRINBERG, TS.B.; NIKOLAYEVA, K.G.; SPERANSKAYA, K.I.; IVANOVA, V.N.;  
KISELEVA, V.P.; VIL'SHANSKAYA, F.L.; MATVEYEVA, V.N.

Finds of *Salmonella* reading. Zhur. mikrobiol. epid. i immun. 32  
no. 7:123 Je '61. (MIRA 15:5)

1. Iz sanitarno-epidemiologicheskoy stantsii Kalininskogo rayona  
Moskvy i Moskovskoy gorodskoy sanitarno-epidemiologicheskoy stantsii.  
(SALMONELLA READING)

KAGAN, M.I.; KUZNETSOVA, Ye.V.; VIL'SHANSKAYA, F.L.; BOGOYAVLENSKAYA, L.B.;  
MATVEYEVA, V.N.; SAKHAROVA, P.K.

Epidemiological observations on patients with colienteritis. Zhur.  
mikrobiol. & epid. i immun. 32 no.10:78-80 O '61. (MIRA 14:10)

1. Iz Gorodskoy sanitarno-epidemiologicheskoy stantsii i sanitarno-  
epidemiologicheskoy stantsii Dzerzhinskogo rayona Moskvy.  
(ESCHERICHIA COLI) (INTESTINES--DISEASES)

KOROSTELEV, V.Ye.; KOVALEVA, N.I.; PROKHOROVA, L.N.; MATKOVSKAYA, Ye.K.;  
CHERNYSHEVA, N.I.; MATVEYEVA, V.N.; KOSTROMINA, I.N.; SEMINA, N.A.;  
TELESHEVSKAYA, E.A.

Study of the reaction-producing qualities of the chemically associated  
vaccine of the Gamaleia Institute of Epidemiology and Microbiology  
against typhoid fever, paratyphoid fever, and tetanus.. Zhur.  
*mikrobiol.epid.i immun.* 33 no.5:121-122 My '62. (MIRA 15:8)

1. Iz Instituta epidemiologii i mikrobiologii imeni Gamalei AMN  
SSSR.  
(VACCINES) (TYPHOID FEVER) (PARATYPHOID FEVER) (TETANUS)

SMOLENSKIY, M.L.; MATVEYEV, V.N.

Sequelae of closed trauma of the brain (oxidative processes).  
Zhir. nevr. i psich. 61 no.9:1346-1349 '61. (MIL 14:9)  
(BRAIN—WOUNDS AND INJURIES) (OXIDATION, PHYSIOLOGICAL)

MATVEYEVA, V. P.

PA 194T2

USSR/Astronomy - Astrophysics

Nov/Dec 51

"Model of Main-Sequence Star With Absorption Law  $k = k_0 \cdot 0.875T^{-3.5}$ ," A. G. Macevich, V. P. Matveyeva, L. N. Tulenkova, Inst of Astr and Phys, Acad Sci Kazakh SSR, Alma-Ata; State Astr Inst imeni Shternberga, Moscow

"Astron Zhur" Vol XXVIII, No 6, pp 432-442

Discusses in detail model of star with convective core with absorption law  $k = k_0 \cdot 0.875T^{-3.5}$  and its properties. Compares it with formerly obtained computation of  $k$ . Application to existing stars indicates that model with convective core fits only main-sequence stars, but fails to explain giants or subgiants. Authors thank Acad V. G. Fesenkov for advice. Submitted Nov 50.

MASIEVICH, A.G.; MATVEIEVA, V.P.; TULENKOVA, L.N.

Calculations for a star model with center convection for  
different laws of absorption and its adaptation to main  
sequence stars. Izv. Astrofiz. Inst. AN Kazakh.SSR 1 no.  
1/2:143-171 '55.

(MLRA 9:10)

(Stars--Constitution)

NATVEIEVA, V.P., inzhener.

G.V. Kopkin designed centrifugal relay for SKB-11 scraper  
conveyors. Ugol' 32 no.6:42 Je '57. (MIRA 10:7)

1. Dom tekhniki tresta Kuybyshevugol'.  
(Conveying machinery) (Electric relays)

MATVEYEVA, V.S.

On the rate of photosynthesis in the cotton leaf. Uzb.biol.zhur.  
no.2:16-18 '60. (MIRA 14:5)

1. Institut genetiki i fiziologii rasteniy AN UzSSR.  
(PHOTOSYNTHESIS) (COTTON)

PETROSYAN, G.A., inzh.; TYUTIN, S.A., inzh.; MATVEYEVA, V.T., inzh.;  
SARANCHA, A.P., inzh.

Concerning E.F.Kirpichev and A.P.Konjaev's article "Results of  
testing MP-VTI ash collectors having scrubbers with 4,100 mm.  
diameter." Teploenergetika 11 no.2:96 F '64. (MIRA 17:4)

MATVEYEVA, Valentina Vasil'yevna

Amount of Micro-organisms in Air of some Locations and Ways of  
Sanitation of Air Surroundings.

Dissertation for candidate of a Medical Science degree. Chair of General Hygiene  
( head, Prof. L.I. Los') Defending in Soviet Kazan Medical Institute, 1954

3

MNUKHINA, Raisa Semenovna; MATVEYEVA, V.V., red.

[Electroencephalographic studies on conditioned reflex reactions and their analysis in the light of N.E. Vvedenskii's theory] Elektroenzefalograficheskie issledovaniia uslovnoreflektornykh reaktsii i ikh analiz v svete teorii N.E. Vvedenskogo. Leningrad, Izd-vo Leningr. univ., 1964. 156 p. (MIRA 17:9)

L'VOVICH, Aleksandr Yur'yevich; POLYAKOV, N.N., otv. red.;  
MATVEYEVA, V.V., red.

[Statics; methodological instructions no.1 in the course  
of theoretical mechanics for second-year students] Statika;  
metodicheskie ukazaniia no.1 po kursu teoreticheskoi me-  
khaniki dlia studentov II kursa. Leningrad, 1964. 20 p.  
(MIRA 17:7)

l. Leningrad. Universitet. Otdel nauchnogo obucheniya. Ma-  
tematiko-mekhanicheskii fakul'tet.

NOVOSELOV, Viktor Sergeyevich; POLYAKHOV, N.N., otv. red.;  
MATVEYEVA, I.V., red.

[Dynamics of a material point; methodological instructions no.3, on the course of theoretical mechanics for the third-year correspondence students in state universities with specialties "Mathematics," "Mechanics" and "Astronomy"] Dinamika material'noi tochki; metodicheskie ukazaniia No.3. po kursu teoreticheskoi mekhaniki dlia studentov III kursa zaochnogo obucheniia gosudarstvennykh universitetov po spetsial'nostiam "Matematika," "Mekhanika" i "Astronomiia." Leningrad, 1964. 33 p. (MIRA 17:9)

1. Leningrad. Universitet. Otdel zaochnogo obucheniya. Matematiko-mekhanicheskiy fakultet.

NOVOSELOV, Viktor Sergeevich; POLYAKHOV, N.N., otd. red.;  
MATVEYEVA, V.V., red.

[Dynamics of a material system; methodological instructions  
No.1 on the course of theoretical mechanics for third year  
correspondence students of state universities specializing  
in "Mathematics," "Mechanics" and "Astronomy"] Dinamika ma-  
terial'nykh sistem; metodicheskie ukazaniia No.1 po kursu  
teoreticheskoi mekhaniki dlia studentov III kursa zaochnogo  
obucheniia gosudarstvennykh universitetov po spetsial'nostiam  
"Matematika," "Mekhanika," i "Astronomiia." Leningrad,  
1964. 40 p.  
(MIRA 18:3)

1. Leningrad. Universitet. Otdel zaochnogo obucheniya.  
Matematiko-mekhanicheskiy fakul'tet.

BUKHARINOV, Georgiy Nikolayevich; POLYAKHOV, N.N., otv. red.;  
MATVEYEVA, V.V., red.

[Kinematics of a point and an ideal solid body; methodological instructions no.2 in the course on theoretical mechanics (for 2d year correspondence students of state universities specializing in mathematics, mechanics and astronomy)] Kinematika tochki i absoliutno tverdogo tela; metodicheskie ukazaniia No.2 po kursu teoreticheskoi mekhaniki (dlia studentov II kursa zaochnogo obucheniiia gosudarstvennykh universitetov po spetsial'nostiam: matematika, mekhanika i astronomiya). Leningrad, 1964. 56 p.  
(MIRA 18:1)

NITSENKO, Andrey Aleksandrovich; MATVEYeva, V.V., red.

[Economic geobotanical zoning of Leningrad Province]  
Khoziaistvenno-geobotanicheskoe raionirovanie Leni-  
gradkoi oblasti. Leningrad, Izd-vo Leningr. univ.,  
1964. 126 p. (MIRA 18:3)

NOVOSELOV, Viktor Sergeyevich; POLYAKHOV, N.N., otv. red.;  
MATVEYEVA, V.V., red.

[Dynamics of material systems; methodological instructions  
No.4 on a course of theoretical mechanics for third-year  
correspondence students of State universities majoring in  
mathematics, mechanics, and astronomy] Dinamika material'-  
noi sistemy; metodicheskie ukazaniia No.4 po kursu teore-  
ticheskoi mekhaniki dlia studentov III kursa zaochnogo  
obuchenija gosudarstvennykh universitetov po spetsial'no-  
stiam "Matematika," "Mekhanika" i "Astronomiia." Lenin-  
grad, Izd-vo Leningr. univ., 1964. 40 p. (MIRA 18:4)

1. Leningrad. Universitet. Otdel zaochnogo obucheniya.  
Matematiko-mekhanicheskiy fakul'tet.

SIMAKOV, V.N., prof., otd. red.; MATVEYEVA, V.V., red.

[Soil and geobotanical research in the Northwest of the  
U.S.S.R.] Agropochvennye i geobotanicheskie issledovaniia  
Severo-Zapada SSSR; sbornik statei. Leningrad, 1965, 134 p.  
(MIRA 18:5)

1. Leningrad. Universitet.

SEMENOV, Severin Pavlovich; MAKAROV, P.V., prof., otv. red.;  
MATVEYEVA, V.V., red.

[Morphology of the vegetative nervous system and  
interoceptors] Morfologija vegetativnoi nervnoi sistemy  
i interoreceptatorov. Leningrad, Izd-vo Leningr. univ.,  
1965. 157 p.  
(MIRA 18:9)

1. Chlen-korrespondent AMN SSSR (for Makarov).

LEBEDEV, V.I., prof., otv. red.; MORACHEVSKIY, A.G., dots., otv. red.; PROKHOROVA, M.I., prof., otv. red.; TRUTNEV, A.G., prof., otv. red.; POZDYSHEVA, V.A., red.; PETROVICHEVA, O.L., red.; MATVEYEVA, V.V., red.; SKOMYNINA, N.P., red.

[Chemistry in the natural sciences] Khimiia v estestvennykh naukakh. Leningrad, Izd-vo Leningr. univ., 1965.  
216 p.  
(MIRA 18:9)

1. Leningrad. Universitet.

MATVEYEV, V.Y.; KURDIN, R.D., ott.red.; TIRASPOL'SKAYA, R.S., red.;  
ZIDANOVA, L.P., red.; SEROBIN, A.N., tekhn.red.

[Agroclimatic manual for East Kazakhstan Province] Agroklimati-  
cheskii spravochnik po Vostochno-Kazakhstanskoi oblasti. Lenin-  
grad, Gidrometeor.iad-vo, 1960. 152 p. . (MIRA 14:4)

1. Kazakh S.S.R. Upravleniye gidrometeorologicheskoy sluzhby.
2. Direktor Alma-Atinskoy gidrometeorologicheskoy observatorii  
(for Kurdin).

(East Kazakhstan Province--Crops and climate)