

75-13-2-9/27

AUTHORS:

Babko, A. K., Yerezenko, O. M.

TITLE:

Investigation of the Photometric Determination Method of Cerium as a Peroxide Complex (Izucheniye fotometricheskogo metoda opredeleniya tseriya v vide perekisnogo kompleksa)

PERIODICAL:

Zhurnal Analiticheskoy Khimii, 1958, Vol. 13, Nr 2, pp. 206-210 (USSR)

ABSTRACT:

For the photometric determination of cerium this method has the greatest importance, being based upon the formation of a colored compound in the reaction with hydrogen peroxide in alkaline solution (Reference 1-4). This method permits the determination of cerium in presence of other rare earth metals. The colored complex forms in citrate containing solutions (References 2,5,7 , in ammoniacal solution (Reference 6), and also in a 5% solution of potassium carbonate (Reference 4). The reaction is well reproducible and specific and is marked by high sensitivity (References 3,4). The determination methods described in publications, which are based upon

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this reaction, however, have deficiencies; above all the colored peroxide complex of cerium is not soluble in water. Plank (Reference 1) indicated that the coloration with H_2O_2 is formed quickly, but that in this instance a precipitate deposits. In later works (References 3,4) this fact was not considered and no attention was paid to the influence of the formation of a solid phase. Experiments, however, showed that just this fact represents the main difficulty of the determination. Even in case of strict observation of the prescription usually after short time turbidity or the formation of a precipitate occurs, so that the measurement of the color in a colorimeter or photocolorimeter often is not possible at all. Experiments showed that the formation of the colored peroxide complex of cerium depends much on the acidity of the solution. In acid solution or also at a pH -value of 7 or 8 only a weak or no color at all forms, while at pH 8 or above coagulation or turbidity

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of the solution occurs. The authors tried to find conditions on which the photometric determination of cerium as peroxide complex is possible. To prevent the deposition of a precipitate various stabilizers were tested. Of all investigated compounds only glycerol was an suitable stabilizer. This action has only in presence of complex forming compounds glycerol has this effect. An increase of the citrate concentration increases the stability of the colloidal suspension, however, binds it, a part of the cerium and by this prevents the quantitative formation of the peroxide complex. As former Complexion III was suited. In presence of Complexion III and of a buffer solution with pH^9 a highly dispersive form of the colored cerium complex forms, so that a stabilizer is not necessary. But if a high quantity of salts is present in the solution the application of glycerol is expedient. Because cerium usually detected from the precipitate of the rare earth metals, the authors worked out a method to solve the oxalates of the rare earth metals

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without previously annealing them. This can be obtained by direct dissolving of the oxalates in sulfuric acid with persulfate or in nitric acid with permanganate. The performance of the developed photometric determination is given exactly. There are 1 figure and 7 references, 6 of which are Soviet.

ASSOCIATION: Ukrainskoye geologicheskoye upravleniye, Kiyev
(Kiyev, Ukrainian Geology Administration)

SUBMITTED: January 7, 1957

1. Rare earths--Analysis
2. Cerium--Determination
3. Photometry
4. Dithioglycerol--Chemical reactions

Card 4/4

YEREMENKO, V.N.; YEREMENKO, O.M.; BRUYEVICH, T.P.

Thermodynamic properties of liquid solutions in systems: lead -- bismuth and cadmium -- lead. Ukr.khim.zhur.17 no.5:658-677 '51.
(MIRA 9:9)

1. Institut chernoy metallurgii AN USSR.
(Lead-bismuth alloys) (Cadmium-lead alloys)

YEREMEN KO, O. M.

Chemical Abs.
Vol. 48 No. 6
Mar. 25, 1954
General and Physical Chemistry

The thermodynamic characterization of liquid solutions of lead inimony. V. M. Kremzky and O. M. Yermenko. *Dokl. Akad. Nauk. SSSR*, 18, 242-4 (1953) (in Russian).—The e.m.f. and temp. coeffs. of e.m.f. in the system: $Pb_{(aq)} | PbCl_2 | KCl soln. + LiCl | Pb$ in Sb soln. were detd. in the range -78° to 78° . The results are tabulated with the calcd. values of activity coeffs., relative partial molar heat capacities and entropies of the components in $Pb-Sb$ binary. Deviations from ideality in this soln. are small, and these decrease with rise in temp. For Sb the deviations are neg. in all temp. ranges, whereas for Pb the deviations are neg. in T up to 0.78° , after which the corrections become very small but pos. The difference of thermal capacities of the components of this system either in pure state or in soln. depends only on the compn. and not on temp. Solns. of $Pb-Sb$ appear to form without change in the mol. state of the components.
G. M. Kosolapoff

Ukrainian, C.M.
AUTHOR: Zosimovich, D. P. and Yeremenko, O. M. 73-1-20/26

TITLE: The Precipitation of Cobalt from Zinc Sulphate Solutions by Permanganate. (Vydeleniye Kobal'ta iz Rastvorov Sernokislogo Tsinka Permanganatom.)

PERIODICAL: Ukrainskiy Khimicheskii Zhurnal, 1957, Vol. 23, No.1, pp. 103 - 109 (USSR).

ABSTRACT: Contemporary methods for the production of zinc electrochemically are based on the electrolysis of purified solutions of zinc sulphate with insoluble electrodes (viz. Ref. 1). Various methods have been described for the purification of concentrated zinc sulphate solutions and the removal of copper, cadmium, iron, arsenic and other impurities. (viz. Refs. 2 and 3). One of the most harmful admixtures appear to be cobalt ions which cause considerable lowering zinc yield. Experiments have shown that the co-oxidation co-precipitation of cobalt in zinc sulphate solutions depend on the concentration of zinc in the solution. A decrease in the concentration of zinc causes an increased pH of the solution and also an increased amount of precipitated cobalt. To achieve a total precipitation of cobalt by permanganate a 50 times greater quantity of divalent ferric ions than cobalt ions have to be employed or 8 - 10 times the quantity of manganese ions than that

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• The Precipitation of Cobalt from Zinc Sulphate Solutions by
Permanganate.

of cobalt ions. Trivalent iron was not found to be suitable. Manganese has to be completely acidified to achieve the total separation of cobalt from zinc sulphate solutions when a large excess of manganese ions is present. Tables on the relation of the oxidation of cobalt to the zinc content in the solution (graph 1), on the relation of the pH of the zinc sulphate solution and of the concentration (graph 2), the separation of cobalt in relation to the content of divalent iron and to the content of divalent manganese (graphs 3 and 4) are given. It is shown in table 1 that the separation of cobalt depends on the zinc content and on the pH value, as well as on the presence of tri- and di-valent iron (table 2). Table 3 gives data on the oxidation of cobalt at partial oxidation of the divalent manganese. There are 5 graphs, 3 tables and 15 references, 13 of which are Slavic.

SUBMITTED: October, 30, 1956.

ASSOCIATION: Institute of General and Inorganic Chemistry, Academy
of Sciences, Ukrainian S.S.R. (Institut Obshchey i
Neorganicheskoy Khimii AN USSR.)

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The Precipitation of Cobalt from Zinc Sulphate Solutions by
Permanganate. 73-1-20/26

AVAILABLE: Library of Congress

Card 3/3

L 12883-63

EWP(q)/EWT(m)/BHS AFFTC/ASD JD/JG

ACCESSION NR: AP3001452

S/0073/63/029/005/0532/0538

56
55

AUTHOR: Pilipenko, A. T.; Yerenenko, O. M.

TITLE: Comparative characteristic of spectrophotometric methods of determining tantalum and niobium. 1. General criterion and inorganic reagents

SOURCE: ²⁷Ukrainskiy khimicheskiy zhurnal, v. 29, no. 5, 1963, 532-538

TOPIC TAGS: spectrophotometric methods, absorption spectra, Nb thiocyanate, tantalum, niobium, inorganic reagents

ABSTRACT: Spectrophotometric methods for determining Ta and Nb with inorganic reagents were compared using the formal molar coefficient of extinction. The absorption spectra of thiocyanates and hydrogen peroxide complexes were determined photometrically. The yellow Nb thiocyanate can be detected in presence of the Ti, very lightly colored and the colorless Ta complex; extraction with ether gives very definite separation, especially at 385 millimicrons. Brightly colored Mo, W, U, V, Fe, Co, Cu, An and Pt thiocyanates interfere. To determine Nb in the presence of W, it is better to use the given method in water-acetone instead of ether; this somewhat lowers the sensitivity for determining Nb, but noticeably lowers the detrimental influence of W. H sub 2 O sub 2 complexes with Nb, Ta and Ti in the

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L 12883-63

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presence of strong acid solution, permitting determination of Nb in the presence of Ta and Ti, but ineffective for Ta in the presence of Ti. Orig. art. has: 8 figures.

ASSOCIATION: Kiyevskiy gosudarstvennyy universitet im. T. G. Shevchenko (Kiev State University)

SUBMITTED: 01Mar62

DATE ACQ: 12Jun63

ENCL: 00

SUB CODE: .00

NO REF SOV: 020

OTHER: 016

Card 2/2

L 12882-63 EWP(q)/EWT(m)/BDS AFFTC/ASD JD/JG

ACCESSION NR: AP3001453

S/0073/63/029/005/0538/0547

58

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AUTHOR: Pilipenko, A. T.; Yeremenko, O. M.

TITLE: Comparative characteristics of spectrophotometric methods of determining tantalum and niobium. 2. Use of organic reagents

SOURCE: ²¹Ukrainskiy khimicheskiy zhurnal, v. 29, no. 5, 1963, 538-547

TOPIC TAGS: absorption spectra, SF-4 spectrophotometer, Nb, Ta, pyrogallol, pyrocatechol, Trilon B, hydroquinone, o-oxyquinoline, phenylfluorone, dimethylfluorone, arsenazo, alizarin S, sulfosalicylic acid, quercetin, methyl violet, rhodamine B, rhodanide, hydrogen peroxide, heteropoly acid, thiocyanate, Ti

ABSTRACT: The absorption spectra (data obtained on SF-4¹⁰ spectrophotometer) of Nb and Ta complexed with pyrogallol, pyrocatechol, Trilon B, hydroquinone, o-oxyquinoline, phenylfluorone, dimethylfluorone, arsenazo, alizarin S, sulfosalicylic acid, quercetin, methyl violet, rhodamine B, rhodanide, hydrogen peroxide and heteropoly acid were studied to determine best method for determining these elements. Extraction with thiocyanate (rhodanide) gave sharpest separation of Nb; extraction with methyl violet for Ta. The interference of Ti, Mo, Fe, V, and other associated impurities in the analyses was also studied. Orig. art. has: 1 table and 9 figures.

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Kiev State Un.

PILIPENKO, A.T.; YEREMENKO, O.M.

Comparative characteristics of spectrophotometric methods for determining tantalum and niobium. Part 1: General criteria and inorganic reagents. Ukr.khim.zhur. 29 no.5:532-538 '63.

Comparative characteristics of spectrophotometric methods for determining tantalum and niobium. Part 2: Use of organic reagents, 538-547. (MIRA 16:9)

1. Kiyevskiy gosudarstvennyy universitet im. T.G.Shevchenko.

KAN'KOVSKAYA, Ye.N.; YEREMENKO, O.M.; ALIMPIYEVA, O.M.

Seals from sawdust with linoleum type coatings. Plast. massy no.2;
70-71 '65. (MIRA 18:7)

OKHRIMENKO, I.S.; YAKOVLEVA, A.D.; KUZNETSOVA, K.B.; Prinimali
uchastiye: VEREMENKO, O.N.; GORONOVICH, Z.P.; ZBORZHIL, L.S.

Paint mixes and coatings based on sulfochlorinated polyethy-
lene. Lakokras.mat. i ikh prim. no.4:25-30 '62. (MIRA 16:11)

RUKAVTSOVA, V.F.; STIFATOVA, N.N.; KOROBKIN, V.B.; MOROZOVA, T.I.;
SOFRONOVA, V.A.; SHAFOROST, P.D.; PLATONOVA, N.P.; YEREMENKO, O.S.;
IVANOVA, A.M.; SILAYEVA, N.Ya.; SUYETINA, S.M.; RAL'YANOVA, T.Ye.;

Study of the dust factor in the founding departments of six
Krasnodar plants. Nauch. trudy Kub. gos. med. inst. 19:63-76
'62. (MIRA 17:8)

1. Iz sanitarno-epidemiologicheskoy stantsii g. Krasnodara
i polikliniki No.8 Krasnodara.

S/262/62/000/004/024/024
1014/I252

AUTHOR: Y Eremenko, O. S., Horbatyy, Yu. P. and Virozub, I. O.

TITLE: On radial equilibrium in a turbine rotor

PERIODICAL: Referativnyy zhurnal, Silovyye ustanovki, no. 4, 1962, 89, abstract 42.4.562. "Collection prats' in-ta teploenerg" AN URSR, 1961, no. 22, 55-59

TEXT: An approximate method for determination of flow parameters in a turbine rotor is considered with centrifugal and Coriolis accelerations taken into account. It was assumed that the liquid is ideal and non-compressible, the flow non-turbulent in absolute motion, and the cascade cylindrical. Approximate formulas were obtained for the dependence of velocity and pressure on the radius of the inter-blade channel section, and on the distance along the turbine axis.

[Abstracter's note: Complete translation.]

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S/526/62/000/024/007/013
D234/D308

AUTHORS: Virozub, I.O., Horbatyy, Yu.P., Yeremenko, O.S. and Fedosenko, H.P.

TITLE: Some results of the investigation of a ring grid

SOURCE: Akademiya nauk Ukrayins'koyi RSR. Instytut teploenerhetyky. Zbirnyk prats'.. no. 24, 1962. Teploobmin ta hidrodynamika, 86-90

TEXT: The grid was studied in 9 sections along the height of the channel between the blades, with $M = 0.5$ and 0.8 . The distance from the outlet edge plane to the point of measurement was 4.5 and 9 mm. Graphs of the variation of flow parameters, of the velocity coefficient and the stream outlet angle vs. channel height, pressure distribution along the profile (in the sections III, V, VI) and flow charts are given. $M = 0.5$ has better efficiency than $M = 0.8$. There are 4 figures.

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S/526/62/000/024/008/013
D234/D308

AUTHORS:

Virozub, I.O., Horbatyy, Yu.P., Yeremenko, O.S. and Fedosenko, H.P.

TITLE:

Aerodynamic investigations of a turbine stage with relatively short blades under varying operating conditions

SOURCE:

Akademiya nauk Ukrayins'koyi RSR. Instytut teploenerhetyky. Zbirnyk prats'. no. 24, 1962. Teploobmin ta hidrodynamika, 91-97

TEXT:

The ratio of mean diameter to blade length in the working wheel was 10.38. The flow parameters were measured before the first directional device, in the gap between it and the working wheel, and behind the working wheel, in seven sections along the channel heights. The air flow rate was constant for different numbers of revolutions. The full pressure remains nearly constant in the core of the stream and drops sharply near the outlet edge. The velocity of rotation did not affect the efficiency of the direction-

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Aerodynamic investigations ...

S/526/62/000/024/008/013
D234/D308

al grid. The outlet angles decrease with increasing velocity coefficient. Energy losses are greatest near the blade ends. In the channels of the working wheel a considerable part of the working substance flows from the root towards the end, especially when the velocity of rotation increases. The experimental increase of the axial component of velocity is much larger than the calculated one. The rate of flow through different sections of a thin cylindrical layer of the working substance is not constant. There are 9 figures and 1 table.

Card 2/2

YEREMENKO, P.

In honor of the 47th anniversary of the Great October. Stroi.
truboprov. 9 no.11:3,1 N '64. (MIRA 18:2)

YEREMENKO, R. K.

"Study of the Mechanism of Reactions of Synthesis and
Decomposition of Polythionates With the Help of Tagged Sulfur."
Cand Chem Sci, Inst of Physical Chemistry imeni L. V.
Pisarzhevskiy, Acad Sci Ukrainian SSR, 30 Sep 54. (IU, 21 Sep 54)

SO: Sum 432, 29 Mar 55

YEREMENKO, R. K.

YEREMENKO, R. K.

USSR/ Chemistry Physical chemistry

Card : 1/1 Pub. 151 - 10/35

Authors : Brodskiy, A. I., and Eremenko, R. K.

Title : Reaction of polythionates investigated with the aid of marked sulfur

Periodical : Zhur. ob. khim. 24, Ed. 7, 1142 - 1150, July 1954

Abstract : The results obtained in studying the mechanism of trithionate formation, with the aid of radioactive sulfur, are described. The mean activity of trithionate was found to be identical with the activity of its decomposition products - silver sulfide and sulfuric acid. The structure of polythionates, which was established long ago by D. I. Mendeleev, was confirmed in this experiment. The entire reaction process of polythionates (addition, separation and exchange of complete sulfite and thiosulfate groups), is explained. Twenty-five references: 4 USSR since 1870, 21 German, USA and Italian. Tables.

Institution : Acad. of Sc. Ukr-SSR, The L. V. Pisarzhevskiy Inst. of Physical Chemistry

Submitted : February 15, 1954

YEREMENKO, R. K.

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V Investigations of the reactions of polythionates, with the aid of labeled sulfur. II. Reaction of tetrathionate and pentathionate. R. K. Yermenko and A. I. Brodskii. *Zhur. Obshch. Khim.* 25, 1241-60(1955); *cf. C.A.* 49, 2855h.

Tetrathionate and pentathionate, like trithionate, contain unbranched chains of sulfide S atoms, with sulfite groups at the ends (*cf. C.A.* 48, 13200g). Distribution of the labeled S was detd. by treatment of the products with KCN: $\text{S}_4\text{O}_{10}^{--} + 3\text{CN}^- + \text{H}_2\text{O} = \text{S}_2\text{O}_4^{--} + \text{SO}_3^{--} + \text{SCN}^- + 2\text{HCN}$; or $\text{S}_5\text{O}_{12}^{--} + 4\text{CN}^- + \text{H}_2\text{O} = \text{S}_2\text{O}_4^{--} + \text{SO}_3^{--} + 2\text{SCN}^- + 2\text{HCN}$. Distribution in the thiosulfate was then detd. by reaction with Ag^+ : $\text{S}_2\text{O}_4^{--} + 2\text{Ag}^+ + \text{H}_2\text{O} = \text{Ag}_2\text{S} + \text{SO}_3^{--} + 2\text{H}^+$. All the central (sulfide) S atoms of the polythionate appear in SCN^- and in the sulfide S atom of $\text{S}_2\text{O}_4^{--}$ (finally in Ag_2S), whereas all end S atoms appear finally as SO_3^{--} . Such exchange processes as occur among the ions obtained do not interfere with the detn. To a soln. of 4.6 g. labeled $\text{S}_4\text{O}_{10}^{--}$ in 30 ml. ligroine at -15° was added in portions, with cooling, 45 ml. satd. (at 0°) aq. soln. of SO_2 . The org. layer was removed, air was passed through the aq. layer to remove SO_2 , the soln. was cooled to 0° , and 9 g. KOH in 60 ml. EtOH was added. The pptd. $\text{K}_2\text{S}_4\text{O}_6$ was washed with EtOH, dried, and recrystd.; it was free from other polythionates, sulfate, thiosulfate, sulfite, or chloride. $\text{K}_2\text{S}_4\text{O}_6$ was prepd. also by addn. of aq. $\text{K}_2\text{S}_2\text{O}_8$ contg. labeled sulfide S to ice-cold iodine in EtOH, or (along with trithionate) from thiosulfate and SO_2 in the presence of nitrite. To prep. $\text{K}_2\text{S}_4\text{O}_6$, 50 ml. concd. HCl was added, at -10° , to a soln. of 39 g. labeled $\text{Na}_2\text{S}_2\text{O}_4$ in 10 ml. H_2O contg. 0.7 g. As₂O₃ (as Na salt). H_2S was evolved. The

pptd. NaCl was removed, and the mixt. was stored 3-4 days at room temp., filtered, concd. *in vacuo* at 40° to 15 ml., again filtered, and 6.0 ml. AcOH and 5.4 g. KOAc (as a slurry formed by addn. of AcOH to a satd. alc. soln.) were added. The pptd. $\text{K}_2\text{S}_4\text{O}_6$, recrystd. from 0.5N HCl, was free from chloride, sulfide, sulfate, or other polythionates. In $\text{K}_2\text{S}_4\text{O}_6$ and $\text{K}_2\text{S}_5\text{O}_{12}$, all the activity was found in the central (sulfide) S atoms, evenly distributed except in the $\text{K}_2\text{S}_4\text{O}_6$ from thiosulfate and SO_2 , in which case the distribution was 2:1 on the two central atoms. These results suggest that the reactions involved in the preps. are: for $\text{K}_2\text{S}_4\text{O}_6$, $\text{S}_2\text{O}_4^{--} + 2\text{H}_2\text{O} = \text{S}_2(\text{OH})_2 + 2\text{H}^+ + 2\text{Cl}^-$, $\text{S}_2(\text{OH})_2 + 2\text{SO}_3^{--} + 2\text{H}^+ = \text{S}_2(\text{SO}_3)_2^{--} + 2\text{H}_2\text{O}$; or (in presence of iodine as oxidizing agent) $2\text{SSO}_3^{--} = \text{O}_2\text{SSSSO}_3^{--} + 2e^-$; or $\text{SSO}_3^{--} + 2\text{H}^+ + \text{H}_2\text{O} = 2\text{S}(\text{OH})_2$, then $\text{S}(\text{OH})_2 + 2\text{SSO}_3^{--} + 2\text{H}^+ = \text{S}(\text{SSO}_3)_2^{--} + 2\text{H}_2\text{O}$, then $\text{S}(\text{SSO}_3)_2^{--} + \text{SO}_3^{--} = \text{O}_2\text{SSSSO}_3^{--} + \text{SSO}_3^{--}$, then $\text{O}_2\text{SSSSO}_3^{--} + 2\text{SO}_3^{--} = 2\text{S}(\text{SO}_3)_2^{--} + 2\text{SSO}_3^{--}$; for $\text{K}_2\text{S}_5\text{O}_{12}$, $[\text{As}] + \text{SSO}_3^{--} = [\text{As}]\text{S} + \text{SO}_3^{--}$, then $[\text{As}]\text{S} + 2\text{SSO}_3^{--} = \text{O}_2\text{SSSSSO}_3^{--} + [\text{As}]$ ($[\text{As}]\text{S}$ an intermediate sulfide compd. whose probable nature is discussed). Also in *J. Gen. Chem. U.S.S.R.* 25, 1189-96(1955) (Engl. translation).

Lawrence Summers

100. of Vap. Chem. 11/10/55
11/10/55
11/10/55

YEREMENKO, R. K.

USSR/Chemistry - Analysis methods

Card 1/1 Pub. 22 - 24/49

Authors : Brodskiy, A. I., Memb. Corresp., Acad. of Sc., USSR; and Yeremenko, R. K.

Title : Study of the reaction of tetrathionates and pentathionates by means of radioactive sulfur

Periodical : Dok. AN SSSR 101/3, 487-490, Mar 21, 1955

Abstract : Experiments are described in which radioactive S was applied to the study of formation and destruction reactions of tetra- and pentathionates which were derived from initial substances containing radioactive S. In order to investigate the activity distribution in the polythionate obtained, pentathionate was decomposed with potassium cyanide. Results obtained by studying the reaction with radioactive S are listed. Eleven references: 2 USSR, 5 German, 1 Italian, 2 USA and 1 English (1870-1954). Tables.

Institution : Acad. of Sc., Ukr.-SSR, The L. V. Pisarzhevskiy Inst. of Phys. Chem.

Submitted : July 30, 1954

L 47315-66 EWT(1)/EWP(m)
ACC NR: AR60283

SOURCE CODE: UR/0269/66/000/005/0014/0014

AUTHOR: Yeremenko, R. P.

TITLE: Precise solution of the shadow equation

SOURCE: Ref. zh. Astronomiya, Abs. 5.51.111

REF SOURCE: Byul. In-ta teor. astron. AN SSSR, v. 10, no. 6, 1965, 446-449

TOPIC TAGS: shadow, earth shadow, shadow equation, intersection point,
elliptic orbit, orbit eccentricity, eccentric anomaly

ABSTRACT: The intersection points of the elliptical orbit of a satellite with the
Earth's shadow are determined by a precise solution of the fourth order algebraic
equation, with respect to the value $\tan E/2$ (E is the eccentric anomaly). No
assumptions are made for the magnitude of orbital eccentricity. [Translation of
abstract] [AM]

SUB CODE: 22/

Card 1/1 afs

UDC: 521.4

RABINOVICH, O.M., prof.; FAYERSHTYM, D.G., kand.tekhn.nauk; STANKOVICH,
G.L., inzh.; YEREMENKO, R.V.

Testing a steam superheater of a boiler fired with natural
gas. Elek.sta. 31 no.1:2-8 Ja '60. (MIRA 13:5)
(Superheaters--Testing)

RABINOVICH, O.M., prof.; FAYERSHTEYN, D.G., kand.tekhn.nauk; PET'KO, V.M.,
kand.tekhn.nauk; LEBEDEV, F.M., inzh.; VYSOTSKAYA, A.I., inzh.;
YEREMENKO, R.V., inzh.

Increase in the evaporation capacity of boilers converted to
operation on natural gas. Energetik 10 no.11:11-14 N '62.
(MIRA 15:12)

(Boilers)
(Gas as fuel)

YEREMENKO, S.

Turning out qualified highway technicians. Avt.transp. 32 no.3:
31 Mr '54. (MLRA 7:8)

1. Rostovskiy dorozhno-mekhanicheskiy tekhnikum.
(Road construction workers)

YEREMENKO, S.

Increase the accumulation of local industry. Fin. SSSR 20 no.1:
43-45 Ja '59. (MIRA 12:2)

1. Zaveduyushchiy L'vovskim oblfinothdelom.
(Lvov Province--Industries)

PROKOPCHUK, A.Ya.; YEREMENKO, S.A.

Resistance of the hematoencephalic barrier in rabbits. Dokl.
AN BSSR 8 no. 1:66-68 Ja '64. (MIRA 17:5)

1. Minskiy gosudarstvennyy meditsinskiy institut.

YEREMENKO, S.A. [Yaromenka, S.A.]; YEREMENKO, V.B. [Yaromenka, V.B.]

Amount of cerebrospinal fluid in rabbits. Vestsi. AN BSSR.
Ser. biial.nav. no.1:97-100 '64. (MIRA 17:6)

PROKOPCHUK, A.Ya.; YEREMENKO, S.A.

Effect of age on the distribution of arsenic radionuclide
(AS⁷⁶) in the brain of a dog. Dokl. AN BSSR 8 no.2:130-132
F '64. (MIRA 17:8)

PROKOPCHUK, A.Ya.; FILIPCHIK, V.I.; YEREMENKO, S.A.; GRINGAUZ, M.Ya.

Problem of the permeability and protection of the skin. Dokl. AN
BSSR 8 no.10:680-681 0 '64. (MIRA 18:3)

1. Institut fiziologii AN BSSR.

KEYL'MAN, V.A.; YEREMENKO, S.I.

Electric heat treatment of bitumen without boilers. Avt.dor. 22
no.3:8-9 Mr '65.

(MIRA 18:5)

SOV/137-58-10-20629

Translation from: Referativnyy zhurnal, Metallurgiya, 1958, Nr 10, p 42 (USSR)

AUTHORS: Shirokov, N.I., Petukhov, B.G., Yeremenko, S.N.

TITLE: Deoxidation of Rail Steel Without Aluminum or With Replacement Thereof by Silico-calcium (Raskisleniye rel'sovoy stali bez alyuminiya ili s zamenoy yego silikokal'tsiyem)

PERIODICAL: Izv. vyssh. uchebn. zavedeniy. Chernaya metallurgiya, 1958, Nr 1, pp 41-54

ABSTRACT: To reduce the alumina-inclusions content of rail steel, this being one of the assumed causes of rail lamination, experimental heats of grade R50 steel were run in 380-t basic open-hearth furnaces without deoxidation of the Al in the ladle, and also with replacement of aluminum by Si-Ca. Determination was also made of [O] and of the stable nonmetallic inclusions (NI) in the liquid steel in the process of melting and pouring. It is established that the contents, composition, and quantity of stable NI in the steel during the period of pure boil undergo virtually no change and are not dependent upon the duration of the boil of the steel in the furnace. The NI and N content of the steel at the moment of its release from the furnace increases.

Card 1/3

SOV/137-58-10-20629

Deoxidation of Rail Steel Without Aluminum (cont.)

After deoxidation in the ladle in the ways indicated, $[O]$ is the same as in standard Al deoxidation. In a ladle sample of the metal, the smallest amount of stable NI and the most favorable composition thereof (minimum Al_2O_3 contents) are found upon deoxidation with Si-Ca. The production of first-grade rails from this metal is lower with standard deoxidation than with the variants practiced in these experiments. The macroscopic structure of the rails improves upon deoxidation by Si-Ca in the ladle and is impaired upon deoxidation by Fe-Si alone. The quantity of stable NI in the finished rails declines relative to the ladle specimens of the metal both with the standard and with the experimental methods of deoxidation. The quantity of stable NI in the experimental steels is virtually identical in either procedure and is less than the content thereof in steels deoxidized in the ordinary way. In the experimental steels, the inclusions consist primarily of SiO_2 (50-65%), while in the standard heats the dominant component is Al_2O_3 (~60%). The total degree of contamination of rail metal deoxidized in the standard way and by the experimental procedures is virtually identical and is considerably greater than in ladle specimens due to sulfides and oxides and the appearance of sulfosilicates in the NI. Consecutive planings of the rail heads show that when aluminum is replaced by Si-Ca, the number of clear rails, excluding those showing NI in the form of scratches due to

Card 2/3

SOV/137-58-10-20629

Deoxidation of Rail Steel Without Aluminum (cont.)

reduction, is greatest, but the mean length of the scratches on one rail examined was also the greatest of any. Steel deoxidized by the experimental methods is of coarse granular structure (Nrs 2-4). Upon deoxidation by the experimental variants, σ_b increases (by 1.3-0.9 kg/mm²) and the plastic and resilience properties diminish: δ is reduced by 0.6-0.3% and ψ by 2.1-1.4%. At the test temperature, + 20°C and -40°C, a_k diminished by factors of 1.5 to 2. Owing to the impairment of these properties, the question of eliminating addition of Al or replacement thereof by Si-Ca will have to be solved after track-service testing of experimental rails.

V.M.

1. Steel--Processing
2. Steel--Properties
3. Steel--Impurities
4. Aluminum oxides---Determination

Card 3/3

SOV/137-58-10-20613

Translation from: Referativnyy zhurnal, Metallurgiya, 1958, Nr 10, p 39 (USSR)

AUTHORS: Levin, A.M., Danilov, P.M., Yeremenko, S.N., Pravdina, T.E.

TITLE: Oxygen, Nonmetallic Inclusions, and Certain Problems of the Technology of Electric Steelmaking (Kislород, nemetallicheskiye vklucheniya i nekotoryye voprosy tekhnologii elektropлавki stali)

PERIODICAL: Izv. vyssh. uchebn. zavedeniy. Chernaya metallurgiya, 1958, Nr 1, pp 55-74

ABSTRACT: Specimens of metal were taken during 13 heats of various steels in 30-t electric-arc furnaces. [O] was determined by the Herty method and by vacuum melting, the nonmetallic inclusions (NI) were determined by electrolytic and metallographic methods. It was established that in low-carbon steels (LCS) [O] at the end of the oxidizing period attains 0.06%, but declines to 0.02% when ready for tapping, and further to 0.01% during tapping. In medium-carbon steels (MCS), [O] was 0.041-0.01% at the end of the oxidizing period and dropped to 0.01% when it was time for tapping. In high-carbon steels (HCS) [O] fluctuates in the vicinity of ~0.01% during the entire heat, and approximates 0.005% when ready for tapping. It is found

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SOV/137-58-10-20613

Oxygen, Nonmetallic Inclusions, and Certain Problems (cont.)

that only in the LCS did [O] diminish to less than equilibrium with C during period of Fe-Si and Al deoxidation, while in all other cases it was higher than the values in equilibrium with C. The most pronounced diminution in [O] occurred during the slagging off of the oxidizing and the making of the white slag. Upon deoxidation of the Si, the LCS first displayed a pronounced diminution in [O], which later slowed down or ceased completely, while in MCS a smooth drop in [O] was observed, and in HCS there was no change in [O] in the majority of cases. During tapping there was a pronounced reduction in [O] in the LCS, a less pronounced reduction in MCS, while both decreases and increases in [O] were observed in HCS. On deoxidation, the Si contents of NI in LCS rose on the average from 0.0038 to 0.0288% and then declined to 0.01% at the time of Al addition, subsequently rising to 0.0292%, and declining again to 0.01% during tapping. A similar regularity was also observed in MCS, but in HCS the NI contents fluctuated ~0.007%, did not increase after Si deoxidation, and increased after Al deoxidation to less than 0.01%. The data obtained are taken as good cause for recommendation of intensified deoxidation of the steel at the outset of the reduction period by use of complex deoxidizers and addition of Fe-Si to the slag in addition to Fe-Si, as this makes for a shorter heat. Bibliography: 7 references.

1. Steel--Production
 2. Induction furnaces--Operation
 3. Steel
 4. Oxygen--Performance
- Card 2/2 --Impurities A.Sh.

SHIROKOV, N.I., kand.tekhn.nauk, dotsent; PETUKHOV, B.G., inzh.; YEREMENKO
S.H., inzh.

Effect of the method of introducing aluminum into the metal
on the quality of rail steel. Izv.vys.ucheb.zav.; chern.met.
no.6:29-34 Je '58. (MIRA 12:8)

1. Sibirskiy metallurgicheskiy institut i Kuznetskiy metallurgi-
cheskiy kombinat. Rekomendovano kafedroy metallurgii stali
Sibirskogo metallurgicheskogo instituta.
(Steel--Metallurgy) (Railroads--Rails)

DANILOV, P.M.; KRAMAROV, A.D.; YEREMENKO, S.N.; GLAZKOVA, L.V.

Oxygen content and nonmetallic inclusions in steel with its
deoxidation by aluminum. Izv. vys. ucheb. zav.; Chern. met. 4
no.8:48-55 '61. (MIRA 14:9)

1. Kuznetskiy metallurgicheskiy kombinat i Sibirskiy metallurgicheskiy
institut.

(Steel--Oxygen content) (Aluminum)

L 24542-66 EWT(d)/EEC(k)-2

ACC NR: AP6006329

SOURCE CODE: UR/0413/66/000/002/0052/0052

AUTHORS: Tankevich, Yb. N.; Yeremenko, S. S.

ORG: none

TITLE: A bridge for measuring the parameters of complex impedances. Class 21, 177967 27
B

SOURCE: Izobreteniya, promyshlennyye obraztsy, tovarnyye znaki, no. 2, 1966, 52 9m

TOPIC TAGS: electric measuring instrument, electric impedance

ABSTRACT: This Author Certificate presents a bridge for measuring the parameters of complex impedances, for example, the tangent of the angle of capacitor losses at the time of their quality inspection. The device contains a power supply generator, a bridge circuit, an amplifier, and a phase-sensitive detector. This detector responds to the voltage component of the bridge circuit unbalance. The bridge circuit is found in the quadrature with its power supply voltage. The design increases the precision of the unbalance voltage selection of the quadrature component. The reference voltage to the phase-sensitive detector is fed from one of the elements of the series phase-splitting RC circuit connected to

Card 1/2

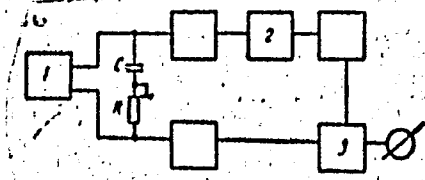
UDC: 621.317.733.025 2

L-24542-66

ACC NR: AP6006329

the output of the generator (see Fig. 1.).

Fig. 1. 1 - generator; RC - phase-splitting circuit; 2 - bridge circuit; 3 - phase sensitive detector.



The voltage from the other element of the RC circuit is fed to the diagonal of the bridge power supply. Orig. art. has: 1 figure.

SUB CODE: 09/ SUBM DATE: 10Jun64.

Card 2/2

KHAZAN, G.L.; TARNOPOL'SKAYA, M.M.; BATYRENKO, R.I.; GOCHAROVA, N.N.;
YEREMENKO, S.V.; KANGELARI, S.S.; KUTEPOV, V.N. (Khar'kov)

Influence of the microclimate of the plant and of industrial
labor on the incidence of respiratory diseases among machinery
industry workers. Vrach.delo no.2:199 # '60. (MIRA 13:6)

1. Ukrainskiy nauchno-issledovatel'skiy institut gigiyeny truda
i professional'nykh zabolevaniy.

(MACHINERY INDUSTRY--HYGIENIC ASPECTS)
(RESPIRATORY ORGANS--DISEASES)

YAKHONTOV, V., prof. (Tashkent); YEREMENKO, T. (Tashkent); BOGOLYUBOVA, A.
(Tashkent)

Entomophages of the apple and cherry ermine moths *Hyponomeuta*
malinellus L. and *Hyponomeuta padellus*. Zashch. rast. ot vred.
1 bol. 10 no.8:53-54 '65. (MIRA 18:11)

CHIGIRINSKIY, P.K.; LITVINOVA, I.P.; MIROSHNICHENKO, S.V.; YEREMENKO, T.D.

Alleviating the seasonal factors of work. Koms. i ev. prom. no.7:
33-36 J1 '63. (MIRA 16:9)

1. Konservnyy kombinat v Krymske.

LITVINOVA, I.P.; YEREMENKO, T.D.

Mechanization and automation of production processes in the
Canning Combine in Krymsk. Kons. i ev. prem. no. 7:41-42 . J1
'63. (MIRA 16:9)

1. Konservney kombinat v Krymske.

YEREMENKO, T. S., Cand Agr Sci -- "Scolytid beetles - ^{pests} destruc-
of the fruit plantations
~~tive insects~~ of the Tashkentskaya Oblast fruit plants."

Len, 1961. (Min of Agr USSR. All-Union Order of Lenin Acad
Agr Sci im V. I. Lenin. All-Union Sci Res Inst ^{of} Protection
of Plants) (KL, 8-61, 253)

- 364 -

YEREMENKO, T. S., aspirant

The bark beetle *Scolytus rugulosus* Ratz. Zashch. rast. ot vred.
1 kol. 5 no. 10:38 0 '60. (MIRA 16:1)

1. Tashkentskiy sel'skokhozyaystvennyy institut.

(Tashkent Province—Bark beetles—Extermination)

BEREZOVSKIY, V.M.; YEREMENKO, T.V.

Alloxazine and iscalloxazine series. Part 4: New synthesis of 2'-
deoxyriboflavine and synthesis of its 2-thio analog. Zhur. ob.
khim. 31 no. 11:3831-3835 N '61. (MIRA 14:11)

1. Vsesoyuznyy nauchno-issledovatel'skiy vitaminnyy institut.
(Riboflavine)

BEREZOVSKIY, V.M.; TUL'CHINSKAYA, L.S.; YEREMENKO, T.V.; RODIONOVA, Ye.P.
BARSKAYA, M.A.

Series of alloxazine and iscalloxazine. Part 5: Catalysts of the
reaction of secondary aromatic orthoaminoazo compounds with
trihydroxypyrimidines. Zhur. ob. khim. 31 no. 11:3689-3694 N '61.
(MIRA 14:11)

1. Vsesoyuznyy nauchno-issledovatel'skiy vitaminnyy institut.
(Alloxazine) (Isoalloxazine) (Catalysts)

BEREZOVSKIY, V. M.; YEREMENKO, T. V.

Allo- and isocalloxazine series. Part 8: Synthesis of galactoflavine, antagonist of the vitamin-B₂. Zhur. ob. khim. 32
no.12:4056-4059 D '62. (MIRA 16:1)

1. Vsesoyuznyy nauchno-issledovatel'skiy vitaminnyy institut.

(Alloxazine) (Isoalloxazine)

BEREZOVSKIY, V.M.; YEREMENKO, T.V.

Chemistry of allo- and isoalloxazines. Usp. khim. 32 no.6:
671-706 Je '63. (MIRA 16:8)

1. Vsesoyuznyy nauchno-issledovatel'skiy vitaminnyy institut.
(Alloxazine) (Isoalloxazine)

YEREMENKO, T.Ye.

Testing the strength of casing pipes. Neft. khoz. 35 no.12:13-25
D '57. (MIRA 11:2)

(Pipe--Testing)

YEREMENKO, T. Ye.

AUTHOR: Mochernyuk, D. Yu.

Sov/93-58-4-5/19

TITLE: Testing the Watertightness of Casing Couplings Under External Pressure (Ispytaniye muftovykh soyedineniy obsadnykh trub na germetichnost' pri naruzhnom davlenii)

PERIODICAL: Neftyanoye khozyaystvo, 1958, Nr 4, pp 26-27 (USSR)

ABSTRACT: The author states that casing joint leakage is due to plastic failure in the engaged threads as shown in Fig. 1. This was determined by bench tests and application of radial external pressure. A comparison of collapsing pressure on smooth pipe and on coupling joints showed that the pipe body in the area of initial threading weakens on the average by 10.9 percent. This comparison was based on collapsing pressure data given in the dissertation "Testing of Casing Deformation in Extra Deep Wells", by T. Ye. Yermenko. The author concludes that the collapsing pressure at the lower end of a casing string must be calculated by the weakest spot in the initial threaded zone, that 6 5/8" casings with wall thickness of 10 mm. are 10 percent stronger when the torque does not exceed 550 kilogram-meters, and that reliable joint tightness at the lower part of a casing string can be secured by welding the joints after tightening them with wrenches at low torque. There is 1 figure.

Card 1/1 1. Pipe fittings--Test methods 2. Pipe fittings--Mechanical properties

YEREMENKO, T. Ye., Doc Tech Sci (diss) -- "Investigation of pipe casing for resistance to crushing by external pressure with a simultaneous axial load".

L'vov, 1959. 24 pp (Min Higher Educ Ukr SSR, L'vov Polytech Inst), 150 copies
(KL, No 24, 1959, 133)

YEREMENKO, T.Ye.

Means for reducing the amount of metal used in manufacturing oil
and gas well casings. Neft. khoz. 38 no.12:21-27 D '60.
(MIRA 14:4)

(Oil well casing)

YEREMENKO, T.Ye., doktor tekhn.nauk; MOCHERNYUK, D.Yu., kand.tekhn.nauk;
GELETIY, N.G., inzh.

Effect of flow properties and flow conditions of slurries on the
fluid replacement process in well cementing. Nauch. zap.
Ukrniiproekta no.9:56-65 '62. (MIRA 16:7)
(Oil well cementing) (Gas well cementing)

YEREMENKO, T.Ye.; PISKOZUB, L.I.

Determining the critical pressure for stability loss in a casing weakened by apertures. Izv. vys. ucheb. zav.; neft' i gaz 7 no.8:21-26 '64. (MIRA 17:10)

YEREMENKO, Terentiy Yefimovich; BULATOV, A.I., red.; ISAYEVA,
V.V., ved. red.

[Bracing oil and gas wells] Kreplenie neftiannykh i gazo-
vykh skvazhin. Moskva, Nedra, 1965. 213 p.
(MIRA 18:5)

YEREMENKO, T.Ye.; YAKOVLEV, V.A.

Selecting methods for determining the service lifetime of bits.
Izv. vys. ucheb. zav.; neft' i gaz 8 no.3:29-32 '65.

(MIRA 18:5)

1. L'vovskiy politekhnicheskii institut i institut "UKRNIGIPRONFT".

YEREMENKO, V., kapitan, komandir zvena, voyennyy letchik 1-go klassa.

Systems for attention switching are necessary. Av . 1 Kosm. 47
no.12360-61 D '64 (MIRA 1831)

YEREMENKO, V., inzh.

~~Consolidate~~ Consolidate transportation offices. Sots.trud 4 no.7:127-128
J1 '59. (MIRA 13:4)
(Railroads, Industrial)

YEREMENKO, V.

Methodological problems in the standardization of the working
capital of collective farms. Vop. ekon. no.7:80-92 J1 '59.
(MIRA 12:11)

(Collective farms--Finance)

OLESHCHENKO, V.; YEREMENKO, V.

Semiautomatic machine for grinding teeth. Mashinostroitel' no.2:15
F '63. (MIRA 16:3)
(Grinding machines)

YEREMENKO, V., kand.tekhn.nauk

Storage of garlic and onions in refrigerators. Sov. torg. 35 no.9:
48-49 S.'62. (MIRA 16:2)
(Vegetables—Storage)

YEREMENKO, S.A. [Yaromenka, S.A.]; YEREMENKO, V.B. [Yaromenka, V.B.]

Amount of cerebrospinal fluid in rabbits. Vestsi. AN BSSR.
Ser. bial.nav. no.1:97-100 '64. (MIRA 17:6)

YEREMENKO, Vladimir Danilovich; VASIL'YEV, A.I., redaktor

[Storage of onions and garlic] Khranenie luka i chesnoka. Moskva.
Gos.isd-vo trgovoi lit-ry, 1956. 54 p. (MIRA 10:8)
(Onions--Storage) (Garlic--Storage)

YEREMENKO, V. D.

The content of volatile oil, vitamin C, and of dry matter in green meadow vegetables. V. D. Yermenko. *Sovetsk Nauch. Rabot. Moskva Inst. Narod. Khoz.* 1974, No. 5, 166-70; *Referat. Zhur. Khim., Biol. Khim.* 1955, No. 796. — The perennial varieties of *Alfium* contain 15.8-33.61 mg. % (on dry-wt. basis) of vitamin C when the volatile-oil content is high, e.g. 0.011-0.014 % on the dry-wt. basis.

B. S. Levine

PARAMONOV, A., prof.; YAREMENKO, V.^D, dots.

Reduce losses in onion and garlic. Sov.torg. no.5:43-44
My '59. (MIRA 12:7)
(Garlic) (Onions--Diseases and pests)

YEREMENKO, V.D.; MIROCHNIK, F.M.; SPIRINA, K.F.

Sanitary control of vegetables and fruits treated with methyl
bromide gas. Gig. i san. 27 no.3:59-63 Mr '62. (MIRA 15:4)

1. Iz Moskovskoy gorodskoy sanitarno-epidemiologicheskoy stantsii
i Instituta narodnogo khozyaystva imeni G.V.Plekhanova.
(FRUIT) (VEGETABLES) (METHANE)

YEREMENKO, V.; MYUCE, S.

New remedy against onion and garlic pests. Sov. torg. 34 no.8:57-58
Ag '61. (MIRA 14:8)

(Onions--Diseases and pests)
(Garlic--Diseases and pests)

YEREMENKO, Vladimir Danilovich; SINEL'NIKOVA, TS.B., red.

[Storage and processing of onion and garlic] Khranenie
i pererabotka luka i chesnoka. Moskva, Ekonomika, 1965.
110 p. (MIRA 18:5)

YEREMENKO, Valentin Fedorovich [IEREMENKO, V.F.]; BODROVA, A., red.;
MIL'KIN, Yu., tekhn. red.

[A paradise for the rich and a trap for the poor] Rai dlia
bohatykh, pastka dlia bidnykh. Kyiv, Derzh. vyd-vo polit. lit-ry
URSR, 1961. 46 p. (MIRA 14:9)
(United States--Economic conditions)

MIKHAYLOV, S.S.; KAGAN, I.I.; YEREMENKO, V.I.

Afferent innervation of cerebral veins. Vop. neirokhir. 27 no.5:
7-12 S-0 '63. (MIRA 17:5)

1. Kafedra operativnoy khirurgii (zav. - prof. S.S. Mikhaylov)
Orenburgskogo instituta.

YEREMENKO, V.I. (Orenburg, Sovetskaya ul., 14, kv.24)

Receptor innervation of superficial veins in the human brain. Arkh.
anat., gist. i embr. 46 no.2:32-35 F '64. (MIRA 17:12)

1. Kafedra normal'noy anatomii (zav. - dotsent V.Yu.Pervushin) Oren-
burgskogo gosudarstvennogo meditsinskogo instituta.

YEREMENKO, V. I.

Practice of manufacturing gears with hard slits. Avt. trakt. prom.
no. 9:24-25 S '55. (MIRA 8:12)

1, Lipetskiy traktorny zavod
(Gearing)

ACC NR: AR6035409

SOURCE CODE: UR/0137/66/000/009/A008/A008

AUTHOR: Mizhenko, V. I.; Yeremenko, V. I.; Sklyarenko, L. I.

TITLE: Use of the lying drop method to determine the surface energy and density of liquids that wet the substrate material

SOURCE: Ref. zh. Metallurgiya, Abs. 9A51

REF. SOURCE: Sb. Poverkhnostn. yavleniya v rasplavakh i voznikayushchikh iz nikh tverd. fazakh. Hal'chik, 1965, 211-215

TOPIC TAGS: surface property, liquid property, surface energy, fluid density measurement, calcium fluoride, copper

ABSTRACT: It is shown that the lying drop method can be used for an exact determination of the surface energy and density of liquids by forced formation of a symmetrical drop of the wetting liquid on a substrate even at contact angles less than 45° . The method was verified on CaF_2 and Cu. The data obtained agree with the earlier determinations. 4 illustrations. Bibliography, 11 titles. (From RZH Fiz.) [Translation of abstract]

SUB CODE: 20, 11

Card 1/1

UDC: 669-154.532.61

YEREMENKO, V. KH.

Ivanov, V. V. and Yeremenko, V. Kh. - "Material for studying the seaweed of the Chagan Dam region", Uchen. zapiski (Ural'skiy ped. i uchitel. in-t im. Pushkina), Issue 1, 1948, (Column-heading: 1947; article 4), p. 1-8, - Bibliog: 9 items.

SO: U-3042, 11 March 53, (Letopis 'Zhurnal 'nykh Statey, No. 8, 1949).

YEREMENKO, V.K.

Steam Turbines

Turbine operating practices. Elek. sta. 23
no1 4 (1952)
Inzh.

MLRA. Library of Congress, August 1952, UNclassified.

YEREMENKO, V.K.

YEREMENKO, V.K., inzhener.

Drain cap for cation filters. Energetik 2 no.6:11-12 Je '54.
(Filters and filtration) (MLRA 7:7)

YEREMENKO, V. K.

91/125-99-5-13/16

18(5,7), 25(5) None Given

1855

AUTHOR: NONE GIVEN
TITLE: Scientific-Technical Conference on Questions of Valuing Engineering

REGION:CALL: Avtomaticheskaya sverka. 1959, Vol 12, Nr 3 (USSR) pp 95-96

QUESTIONS:

The scientific-technical conference on question of welding engineering convened in Kharkov from March 11-13, 1959. The following organizations participated in the conference: The Scientific Technical State Committee of the Council of Ministers of the USSR, the Institute of Electric Welding of the Academy of Sciences of the USSR, Khar'kov Journal No. 6, the Academy of Sciences of the Ukrainian SSR, the Ministry of Machine Building of the USSR, the machine industry. After the introduction of GIKK URSR, G.P. Kostin was elected Chairman of GIKK URSR. A report by V.I. Zakharenko, the Chairman of Academic Administration of Welding Patent On the Reinforcement and Automation of Welding Engineering". After that, the following reports were heard at the conference: Report of Com plan URSR

Card 1/3

heard at the conference. He said:

D.I. Polyakov on establishing material engineering bases in the Republic for the development of welding. Vice Chairman of the State Scientific Center for the Use of Atomic Energy, V. Yakovlev on the introduction of welding engineering in the enterprises of the Ministry of Heavy Machine Building. Chief of the Central Scientific Administration of the Ministry of Machine Building, V. Kuznetsov on the introduction of welding engineering in the enterprises of the Ministry of Machine Building. Chairman of the State Scientific Center for the Use of Atomic Energy, V. Yakovlev on the introduction of welding engineering in the enterprises of the Ministry of Machine Building. Chairman of the State Scientific Center for the Use of Atomic Energy, V. Yakovlev on the introduction of welding engineering in the enterprises of the Ministry of Machine Building.

Case 2/3

5/5 P-700

YEREMENKO, Viktor Mikhaylovich, kapitan; ZEL'TSMAN, L.N., red.; BUTOVA,
L.A., tekhn.red.

[The whaler "Taifun."] Kitoboets "Taifun." Vladivostok, Pri-
morskoe knizhnoe izd-vo, 1960. 23 p.

(MIRA 14:5)

(Whaling)

S/0181/64/006/004/1013/1017

ACCESSION NR: AP4028422

AUTHORS: Yeremenko, V. V.; Zvyagin, A. I.

TITLE: Light absorption by cobalt fluoride crystals above and below the Neel temperature

SOURCE: Fizika tverdogo tela, v. 6, no. 4, 1964, 1013-1017

TOPIC TAGS: light absorption, cobalt fluoride, Neel temperature, antiferromagnetic state, electron phonon interaction, Van Vleck mechanism, absorption band

ABSTRACT: The authors considered the effect of temperature in the interval 20-400K on the absorption band in single crystals of CoF_2 in the near infrared region (wavelength of ~ 1.4 microns), above and below the point of antiferromagnetic ordering (Neel temperature of about 38K). The parameters of the absorption band do not change anomalously during transition of the material at the Neel temperature. To find an explanation for this, the limits of the absorption band were defined, and possible mechanisms for the formation of the band were considered. It is concluded that the principal causes are the great force of electron-phonon interaction and the Van Vleck mechanism of allowed transition. As for the temperature dependence of the absorption maximum in the frequency scale, it is found that when the optical

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ACCESSION NR: AP4028422

transition of the ionic spin moment does not change, the absorption band may shift in the frequency scale (because of exchange interaction) only when there is a marked change in the exchange integral during transition to the excited state. "In conclusion, we take this opportunity to thank Professor B. I. Verkin, corresponding member of the AN UkrSSR, for his constant interest in the work, and we thank V. G. Yurko for participating in the measurements." Orig. art. has: 4 figures and 2 formulas.

ASSOCIATION: Fiziko-tekhnicheskii institut nizkikh temperatur AN UkrSSR, Kharkov
(Physicotechnical Institute of Low Temperatures, AN UkrSSR)

SUBMITTED: 16Sep63

ENCL: 00

SUB CODE: OP, SS

NO REF SOV: 005

OTHER: 013

Card

2/2

LEVCHENKO, Yevgeniy Andreyevich; SOLODOVNIK, P.S., retsenzent;
RATANOVA, V.F., st. nauchn. sotr., kand. biol. nauk,
retsenzent; YEREMENKO, V.M., st. inzh., retsenzent;
KLEYMAN, L.M., red.

[Control of granary pests] Bor'ba s vreditel'nykh khlebnykh
zapasov. Moskva, Kolos, 1965. 142 p. (MIRA 18:9)

1. Zaveduyushchiy laboratoriyey Vsesoyuznogo nauchno-
issledovatel'skogo instituta zerna i produktov yego pererab-
otki (for Solodovnik). 2. Gosudarstvennyy proizvod-
stvennyy komitet po khleboproduktam i kombikormovoy pro-
myshlennosti RSFSR (for Yermenko).

YEREMENKO, V. N. AND SOLOMKO, V. P.

Dilatometric Study of Sintering of Single Component Metallic Conglomerates

Sintering processes of Cu and Ni powders of 60-85-micron granulation, previously compressed into briquets, were studied using Chevenard's of Cu powders was found to obey the law $\Delta L = mtn$ for all temperatures (ΔL = shrinkage, m and n constants) The graphic $\Delta L(t)$ in logarithmic scale agreed well with Shaler's assumptions (J. Metals, 185, 796, 1949). (RZhFiz, No. 5, 1955)

SO: Sum. No. 639, 2 Sep 55

YEREMENKO, V.N., kandidat khimicheskikh nauk

α -solid solution boundary of the Ni - Sb system. Trudy Inst. Chern.
met. AN URSR 3:139-147 '49. (MIRA 8:7)
(Solutions, Solid)

YEREMENKO, V. IV.

Chemical Abst.
Vol. 48 No. 3
Feb. 10, 1954
Metallurgy and Metallography

(2) Constitution diagram of the system manganese-molybdenum. V. N. Yermenko and E. F. Zheleva. *Ukrain. Khim. Zhur.* 10, 370-88 (1950) (in Russian). An exptl. study was made by using Mo powder prepd. from ammonium molybdate by a process involving H_2 reduction of the oxides. This Mo contained C 0.015, Si 0.02, Fe 0.015, P 0.004%, and a trace of S. The electrolytic Mn contained C 0.012, Mn 0.024, Fe 0.004, S 0.0023%, and traces of Al, P, and Cu. A 25% Mo master alloy was prepd. for making the alloys. The alloys were melted in corundum crucibles in a Kryptol furnace under a slag of CaF_2 (0.8 mole) and NaF (0.2 mole) and were cast in Al_2O_3 molds heated to 500°. Thermal analysis was made by remelting part of an alloy and following its cooling for about 5 hrs. by using a thermocouple protected by a corundum tube. Data were obtained on Mn and on 14 alloys ranging from 0.08 to 12.0% Mo. Metallographic polishing was done by using kerosene instead of water to prevent oxidation. The etchant was 1:1:2 HCl:Al₂O₃. The m.p. of Mn was 1241°, and its 3 eut. points were at 1139, 1083, and 690°. The 1st of these was due to the cause of the undercooling of β -Mn. An equil. diagram was constructed for compns. up to 12% Mo and the following reaction on cooling appeared in the β -Mn region: $\beta \rightarrow \alpha + \gamma$ at 1.35% Mo, where α was an intermetallic compound; $\beta \rightarrow \alpha + \gamma$ at 0.80° and 1.7% Mo, $\alpha \rightarrow \alpha' + \gamma$ at 1070° and 2.1% Mo, where α' was an unknown intermetallic compd.; liquid $\rightarrow \delta + \gamma$ at 1250° and 0.6% Mo; liquid $+ \alpha \rightarrow \gamma$ at 1250° and 0.4% Mo. A. G. G.

YEREMENKO, V. N.

~~Constitution diagram of the nickel-antimony system.~~
~~V. N. Yermenko and G. I. Kruchynskaya. Trudy Inst. Chern. Met., Akad. Nauk Ukr. S.S.R., Khark. 1952. No. 5, 115-22 (1951).—The previous work was reviewed. New exptl. work in the range 34 to 62% Sb was done to give data on the β - and δ -phases and on the $\beta \rightarrow \beta'$ transformation. Eleven alloys were prepd. with electrolytic Cu and pure Sb. The purity of these metals was previously reported by E. (1949, 3, 137 (1949)). One hundred g. of alloy was melted in H₂ in a corundum crucible, transferred to a porcelain tube, and held at 1300-50°. Then direct and differential cooling curves were taken with a Kurnakov app. and pure Ni as a reference. Cooling from 1300 to 400° took 4 hrs. Hardness tests could not be taken because of the hardness and brittleness of the alloys. Metallographic specimens were etched for 5 to 15 sec. in a mist. of 60% glacial AcOH and 40% concd. colorless HNO₃. The boundaries of the β -phase were detd. by water-quenching alloys that had been held for 2.5 to 15 hrs. at 700, 600, 500, and 1000°, and observing whether they were single-phase. The results were summarized in a temp.-compn. diagram. The $\alpha + \beta$ eutectic point was at 39% Sb and 1103°. The liquidus curve over the β region had a max. at 1170° and at the compn. Ni₈₅Sb₁₅. The $\beta + \gamma$ eutectic point was at 52.8% Sb and 1080°. The lower and upper concn. limits of the β phase at various temps. were: 41.2, 43.8; 1000° 41.5, 47.4; 900° 41.8, 48; 800° 42, 45.7; 700° 42.2, 45.5; 600° 42.5, 45.8. β -Phase solid. with Ni transformed to β' at 435°. β -Phase solid. with Sb transformed to β' at 647°. The δ -phase, Ni₈₅Sb₁₅, solid. about 39% Sb, formed at 650° so that the $\alpha + \delta$ region was replaced at lower temps. by the $\alpha + \delta$ and $\delta + \beta$ regions. A constitution diagram of the Ni-Sb system was constructed on the basis of the present and previous work.~~
A. G. Gay

YEREMENKO, V.N.; YEREMENKO, O.M.; BRUYEVICH, T.P.

Thermodynamic properties of liquid solutions in systems: lead -- bis-
muth and cadmium -- lead. Ukr.khim.zhur.17 no.5:658-677 '51.
(MLRA 9:9)

1. Institut chernoy metallurgii AN USSR.
(Lead-bismuth alloys) (Cadmium-lead alloys)

YEREMENKO, V. N.

Journal of Applied Chemistry
June 1954
Industrial Inorganic Chemistry

Effect of nickel on the polymorphic transformations of manganese.
V. N. Yermenko and V. I. Skuratovskaya (*Ukr. Akad. Nauk.*, 1957,
18, 213—218).—Ni lowers the temp. of β - α and γ - α transitions, and
raises that of the δ - γ transition. 0.5% Ni suppresses the formation of
 α -Mn; a δ -solid solution crystallises below, and a γ -solid solution
above, 7.5% Ni. 17% Ni suppresses the formation of solid solutions
based on β -Mn. Between 4.5 and 7.5% Ni there is a peritectic
transition δ - α liquid at 1170°. R. C. MURRAY.

YEREMENKO, V.N.

*Equilibrium Diagram of the System Manganese-Nickel.
V. N. Eremenko and R. D. Shcherba (Ukrain. Khim. Zhur.,
1952, 18, (2), 219-231).—[In Russian]. The equilibrium
diagram of the Mn-Ni system has been determined for alloys
contg. 21.9-81.3 wt.-% Ni by thermal and microscopical
methods, the alloys being prepared from the materials used
by E. and Skuratovskaya (cf. preceding abstract). The
liquidus and solidus passed through a min. at 39.8 wt.-% Ni
and 1020° C., the solid phase produced being a solid soln.
At lower temp. (~905°-910° C.) the γ phase in the region
of ~52 wt.-% Mn transformed into a solid soln. of Ni or Mn
in MnNi, termed the ϵ phase. At still lower temp. (~650°-
743° C.), a further transformation ($\epsilon \rightarrow \epsilon'$) occurred, the trans-
formation temp. being greater for alloys richer in Ni. At
room temp. the ϵ' phase exists in the range 38-63 wt.-%
Ni, the single-phase ϵ' region lying at 48-56 wt.-% Ni (in-
creasing to 63 wt.-% Ni at 600° C., then decreasing again for
further increase in temp.).—G. V. E. T.

MG

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MGT

YEREMENKO, V. N.

Chemical Abstr.
Vol. 48 No. 6
Mar. 25, 1954
General and Physical Chemistry

The thermodynamic characterization of liquid solutions of lead in bismuth. V. N. Yermenko and G. M. Korolovskiy. *Ukrain. Khim. Zhur.* 18, 233-34 (1952) (in Russian).—The e.m.f. and temp. coeffs. of e.m.f. in the system: $Pb_{(aq)} | PbCl_2 | KCl \text{ soln.} + LiCl | Pb \text{ in } Sb \text{ soln.}$ were detd. in the range 20-750°. The results are tabulated with the calcd. values of activity coeffs., relative partial molar heat capacities and entropies of the components in Pb-Sb binary. Deviations from ideality in this soln. are small, and these decrease with rise in temp. For Sb the deviations are neg. in all compns., whereas for Pb the deviations are neg. up to $N_{Pb} 0.75$, after which the corrections become very small but pos. The difference of thermal capacities of the components of this system either in pure state or in soln. depends only on the compn. and not on temp. Solns. of Pb-Sb appear to form without change in the mol. state of the components.

G. M. Korolovskiy

YEREMENKO, V.N.

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PHASE I BOOK EXPLOITATION
Yeremenko, V.N.

Karbid titana i zharostoykiye materialy na yego osnove (Titanium Carbide and Other Heat Resistant Materials with a TiC Base)
Kiyev, Izd-vo AN Ukr. SSR, 1954. 74 p. 3,000 copies printed.

Sponsoring agency: Akademiya nauk Ukrainskoy SSR. Laboratoriya spetsial'nykh splavov.

Resp. Ed.:

Frantsevich, I.N., Corresponding Member AN
Ukr. SSR; Ed. of Publishing House:
Shtul'man, I.F.; Tech. Ed.: Sivachenko, Ye.K.

PURPOSE:

This book is intended for researchers, metallurgists, designers, instructors, students, and others who are interested in the use of cermets, particularly titanium carbide, in jet-aircraft engines. The interest has arisen as a result of the need for constructional materials which will withstand operating temperatures above 1000°C.

Card 1/5

Titanium Carbide and Other Heat Resistant Materials (Cont.) 253

COVERAGE:

The author discusses the properties of titanium carbide and other heat-stable materials with a TiC base and briefly describes methods of preparing them. All previous investigations of these materials are surveyed. The author states that the presently-used materials (nickel, cobalt, iron, and chrome alloys, containing various amounts of Mo, Ti, Ta, Nb, W, Al, etc.) are unsatisfactory for use at temperatures above 1000°C. He states that titanium carbide, because of its low specific gravity, resistance to thermal shock and oxidation, and ability to combine with metals, appears to present the best prospects for combining the desirable properties of metals and ceramic materials. There are 133 references, of which 23 are Soviet, 76 English, 31 German, 2 French, and 1 Austrian.

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