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 manganes 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.)

SOV/21-58-10-11/27

AUTHORS: Zosimovich, D.P. and Nechayeva, N.Ye.

TITLE: The Simultaneous Discharge of Cadmium and Nickel Ions (Sovmestnyy razryad ionov kadmiya i nikelya)

PERIODICAL: Dopovodi Akademii nauk Ukrains'koi RSR, 1958, Nr 10, pp 1075 - 1078 (USSR)

ABSTRACT: According to existent classical idea, the basic condition for the simultaneous discharge of ions is the equality of potentials for the discharging of ions. O.A. Yesin [Ref 2] developed the concept on the simultaneous discharge of metal and hydrogen ions. A.L. Rotinyan and V.L. Kheyfets [Ref 3] studied conditions for the simultaneous discharge of ions in refining nickel and cobalt. An investigation into the simultaneous discharge of cadmium and nickel ions represents an important theoretical problem which was studied by the authors by employing the method of polarization curves taken during the process of electrolytic isolation of cadmium from the electrolyte. The polarization curves obtained are shown in graphs 1 and 2. It turned out that the equality of the deposition potentials of metals and the concentration of ions in the electrolyte does not always lead to the simul-

The Simultaneous Discharge of Cadmium and Nickel Ions SOV/21-58-10-11/27

of nickel and cadmium. The investigation showed that only cadmium is deposited on the cathode, in spite of the approximate equality of their potentials. The concentration of Ni in Cd varied from 0.0001 to 0.01 per cent in the presence of 1-n $NiSO_4$ in the electrolyte. There are 2 graphs, 1 table and 5 Soviet references.

ASSOCIATION: Institut obshchey i neorganicheskoy khimii AN UkrSSR (Institute of General and Inorganic Chemistry of the AS UkrSSR)

PRESENTED: By Member of the AS UkrSSR, Yu.K. Delimarskiy

SUBMITTED: April 13, 1958

NOTE: Russian title and Russian names of individuals and institutions appearing in this article have been used in the transliteration

1. Nickel--Purification 2. Cadmium--Purification
3. Electrolytes--Performance 4. Ions--Performance

Card 2/2

ZOSIMOVICH D.P.

ZOSIMOVICH, D.P.; BOGATOVA, N.F.

Use of soluable nickel-molybdenum and nickel anodes for the formation of nickel-molybdenum alloys from alkaline electrolytes. Zhur.prikl. khim. 31 no.3:429-434 Mr '58. (MIRA 11:4)

1.Institut obshchey i neorganicheskoy khimii AN Ukrainskoy SSR.
(Nickel-molybdenum alloys) (Electroplating)

5(4) SOV/76-33-6-24/44

AUTHORS: Zosimovich, D. P., Bogatova, N. F.

TITLE: Electrolytic Separation of Zinc in the Presence of Small Quantities of Antimony and Cobalt (Elektroliticheskoye vydeleniye tsinka v prisutstvii malykh kolichestv sur'my i kobal'ta)

PERIODICAL: Zhurnal fizicheskoy khimii, 1959, Vol 33, Nr 6, pp 1324-1327 (USSR)

ABSTRACT: The quantity of electrolytically separated zinc and that of the hydrogen developed at the cathode in the process depends among other things on the impurities in the electrolyte. An investigation is made here of the simultaneous influence of antimony and cobalt in the electrolytic separation of zinc by the method of plotting polarization curves (PC) on zinc electrodes in a standard electrolyte (60 g/l Zn and 100 g/l H_2SO_4) with antimony- (0.05, 0.1, 0.2, 1.0 and 5.0 mg/l) and cobalt additions (20 mg/l). The polarization curves obtained reveal (Figs 1, 2), that an addition of only 0.05 mg/l Sb shifts the (PC) to more negative values, while an increase in the Sb addition causes the (PC) to shift to more electropositive values, i.e. with a rise in the Sb concentration in

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Electrolytic Separation of Zinc in the Presence of Small Quantities of Antimony and Cobalt SOV/76-33-6-24/44

the electrolyte the hydrogen separation increases and that of Zn drops. The Co additions likewise effect a shift of the Zn-separation potential to more negative values (Fig 3). With the simultaneous addition of Co- and Sb-cations the separation process is determined by Sb. It is assumed that the ions of Sb and Co act as surface active substances in the electrolytic Zn separation. Additions of Sb as potassium stibium tartrate or antimony sulfate have the same effect on the (PC). There are 3 figures and 10 Soviet references.

ASSOCIATION: Akademiya nauk USSR, Institut obshchey i neorganicheskoy khimii (Academy of Sciences of the UkrSSR, Institute of General and Inorganic Chemistry)

SUBMITTED: November 22, 1957

Card 2/2

ZOSIMOVICH, D.P. [Zosimovych, D.P.]; NECHAYEVA, N.Ye. [Nechieva, N.IE.]

Simultaneous discharge of cadmium and nickel ions. Dop.AN URSR. no.10:1075-1078 '58. (MIRA 12:1)

1. Institut obshchey i neorganicheskoy khimii AN USSR. Predstavil akademik AN USSR Yu.K.Delimarskiy [IU.K.Delimars'kyi].
(Electroplating) (Cadmium) (Nickel)

Zasimovich D.P.

24(8) PHASE I BOOK EXPLOITATION SOV/2117

Soveshchaniye po eksperimental'noy tekhnike i metodam vysokotemperaturnykh issledovaniy, 1956

Eksperimental'naya tekhnika i metody issledovaniy pri vysokikh temperaturakh; trudy soveshchaniya (Experimental Techniques and Methods of Investigation at High Temperatures; Transactions of the Conference on Experimental Techniques and Methods of Investigation at High Temperatures) Moscow, AN SSSR, 1959. 789 p. (Series: Akademiya nauk SSSR. Institut metallurgii. Komissiya po fiziko-khimicheskim osnovam protsessov stali) 2,200 copies printed.

Resp. Ed.: A.M. Samarin, Corresponding Member, USSR Academy of Sciences; Ed. of Publishing House: A.L. Bankvitser.

PURPOSE: This book is intended for metallurgists and metallurgical engineers.

COVERAGE: This collection of scientific papers is divided into six parts: 1) thermodynamic activity and kinetics of high-temperature processes 2) constitution diagram studies 3) physical properties of liquid metals and slags 4) new analytical methods and production of pure metals 5) pyrometry, and 6) general questions. For more specific coverage, see Table of Contents.

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Experimental Techniques and Methods (Cont.) SOV/2117

Zasimovich, D.P., F.F. Frantsevich-Zabludovskaya, A.I. Zayats, I.V. Bogatyrev, N.Ye. Nechayeva, and A.T. Vas'ko. Electrochemical Method of Obtaining Nickel-Molybdenum and Nickel-Tungsten Alloys 505

In the electrolytic precipitation of nickel-molybdenum and nickel-tungsten alloys from ammoniacal solutions, an increase in the concentration of molybdenum and tungsten at a given concentration of nickel leads to (1) an increase in their relative content in the alloy, provided the experiments are carried out at temperatures of up to 30° C, and (2) a drop in the output of current. In both types of alloys an increase in ammonia concentration results in an increase in nickel content and a simultaneous drop in the output of current. A rise in temperature leads to an increase in the current output, especially in the case of tungsten-nickel alloys. With a change in current density the current output passes through a maximum in both types of alloys. A rise in temperature affects the composition of the two types of alloys differently: the relative amount of tungsten in the alloy increases sharply, while that of molybdenum is nearly affected. An increase in current density nearly always leads to a drop in molybdenum content, but does not affect the composition of the tungsten alloys. The electrolyte compositions required for producing alloys with identical contents of molybdenum and tungsten are very different as regards the relative concentrations of the principal components. This may be due to the difference in the coefficients of diffusion of molybdeniferous and tungsteniferous ions determining the transfer of the ions to the cathode. Experiments conducted in large-scale installations confirm the belief that the proposed method is satisfactory for industrial application. An advantage of the suggested type of electrolytes (ammoniacal solutions) is their practically unlimited service life and their cheapness as compared with oxyacid electrolytes. The alloys thus produced are of satisfactory purity as regards metallic impurities (not more than 0.01 percent), but they contain a considerable amount of nonmetallic impurities, especially oxygen and nitrogen, because of the type of electrolytes used and the electrochemical process. Further study will be required to solve this problem.

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24(8) PHASE I BOOK EXPLOITATION SOV/2117

Soveshchaniye po eksperimental'noy tekhnike i metodam vysokotempera-turnykh issledovaniy, 1956

Eksperimental'naya tekhnika i metody issledovaniy pri vysokikh temperaturakh; trudy soveshchaniya (Experimental Techniques and Methods of Investigation at High Temperatures; Transactions of the Conference on Experimental Techniques and Methods of Investigation at High Temperatures) Moscow, AN SSSR, 1959. 789 p. (Series: Akademiya nauk SSSR. Institut metallurgii. Komissiya po fiziko-khimicheskim osnovam proizvodstva stali) 2,200 copies printed.

Resp. Ed.: A.M. Samarin, Corresponding Member, USSR Academy of Sciences; Ed. of Publishing House: A.L. Bankvitser.

PURPOSE: This book is intended for metallurgists and metallurgical engineers.

COVERAGE: This collection of scientific papers is divided into six parts: 1) thermodynamic activity and kinetics of high-temperature processes 2) constitution diagrams studies 3) physical properties of liquid metals and slags 4) new analytical methods and production of pure metals 5) pyrometry, and 6) general questions. For more specific coverage, see table of Contents.

III

Experimental Techniques and Methods (Cont.) SOV/2117

Zaimovich, D.P. Principles of the Electrochemical Method of Obtaining High-Purity Metals 525

It was shown that electrochemical methods, if properly developed, may provide a cheap and satisfactory way of producing a number of metals of high purity. The cathode process can be used to produce refined metal with minimum contamination by more electronegative impurities. Physicochemical investigations revealed the possibility of substantially reducing the quantity of precious-metal admixtures in the electrolyte, thereby obtaining cathode metal in which these metals are present in very small quantities. Anode refining of metals results almost complete preparation of contamination by the more electronegative metals originally present in the metal to be refined. Anode refining can be used even before refining the metals in aqueous solutions, which in certain cases makes it possible to obtain purer metals than when these steps are reversed. The proposed method was used for producing high-purity cadmium and is being developed for the production of other metals. The cadmium produced was of 99.997 percent purity containing impurities in the following amounts: Ni - 0.0001%; Cu - 0.0001%; Fe - 0.0001%; Zn - 0.0001%; Sb - 0.0002%; As - 0.0002%; Pb - 0.0001%. The proposed method may be used for producing a number of metals with a purity of from 99.99% to 99.999% and higher.

S/075/60/026/005/015/019
B004/B065

AUTHORS: Zosimovich, D. P., Antonov, S. P.

TITLE: Stress of Electrodeposits of Chromium Under Different Conditions of Electrolysis

PERIODICAL: Ukrainskiy khimicheskiy zhurnal, 1960, Vol. 26, No. 5, pp. 663 - 668

TEXT: The purpose of the present work was to study the effect of the stress of electrodeposited chromium upon the development of cracks and surface defects. Flexible steel cathodes 0.1 mm thick, which had been varnished on one side, were used for the purpose, and M. L. Pertsovskiy's method was applied. The experimental conditions were a Cr_2O_3 concentration of 100-600 g/l, a current density of 10-100 a/dm^2, and a temperature of 22°C. The authors determined: 1) the weight of the cathode before and after the experiment; 2) the deflection z of the free end of the cathode; 3) the function $z = f(t)$; 4) the function $t = f(\mu)$, where μ is the thickness of the deposit expressed in microns; 5) the function

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Stress of Electrodeposits of Chromium Under Different Conditions of Electrolysis

S/073/60/026/005/015/019
B004/B063

$z = f(\mu)$. The stress σ was calculated from the equation: $\sigma = Ed^2z/3\mu l^2$ (E - modulus of elasticity of the cathode; d - its thickness; l - its length). z rose at first with μ, after which it decreased as a result of cracking in the deposit. As a rule, stress increased with current density and temperature up to 50°C. E attained values between 1960 and 6100 kg/cm^2. Between 0° and 11°C, stress changed only slightly, and the deposits showed cracks already with a thickness of 1 - 1.5 μ, probably due to an increase in the hydrogen content. The decrease of stress above 50°C was ascribed to the formation of stable, cubic Cr crystals. The minimum of stress at 20-25°C might be due to an increase in stability of hexagonal Cr at these temperatures. N. P. Fedot'yev, Yu. M. Pozin, V. S. Ioffe, A. L. Rotinyan, A. T. Vagramyan, Yu. S. Tsareva, Arkharov, and S. A. Nemnonov are mentioned. There are 6 figures and 20 references: 11 Soviet, 2 US, 2 British, 1 Roumanian, 4 German, and 1 Swiss.

ASSOCIATION: Institut obshchey i neorganicheskoy khimii AN USSR (Institute of General and Inorganic Chemistry of the AS UkrSSR)

SUBMITTED: April 1, 1959

Card 2/2

ZOSIMOVICH, D.P.; NECHAYEVA, N.Ye.

Electrochemical investigation of a simultaneous discharge of cadmium and zinc ions using the tagged atom method. Radiokhimiia 3 no.6:743-748 '61. (MIRA 14:12)

(Zinc—Isotopes)
(Cadmium)
(Electrochemistry)

ZOSIMOVICH, D.P.; SHVAB, N.A.

Remelting high-purity cathode zinc. Tsvet. met. 34 no.6:27-32 Je '61. (MIRA 14:6)

(Zinc--Electrometallurgy)

S/080/61/034/008/009/018
D204/D305

18 3100

AUTHORS: Zosimovich, D.P., Kladnitskaya, K.B. and Grisevich, A.N.

TITLE: Electrochemical production of pure cadmium

PERIODICAL: Zhurnal prikladnoy khimii, v. 34, no. 8, 1961, 1764-1769

TEXT: The present paper describes experiments carried out in a glass electrolytic cell of 1 liter capacity using $CdSO_4$ as electrolyte. Two anodes, cast from commerical Cd Kd-0 containing considerable impurites (shown in Table 1), and a Cd cathode of metal containing small amounts of metals which separates at potentials more negative than that of Cd separation (i.e. Ni, Fe and Zn) were used. With optimum conditions for electrolysis (D_k of 100 A/m^2, temp. 35°C period of 8 hours) about 0.7 kg Cd was produced. Table 1 shows relevant data on the purity of the Cd produced and it is clear that the use of a flowing electrolyte with external intermediate purification substantially reduces the Cu and Pb contents of cathode

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Electrochemical production...

residues. Methods of purifying $CdSO_4$ solutions from Cu were studied. The solution was passed through a column of Cd cuttings at a certain speed and was also agitated with Cd cuttings. The Cd cuttings were first treated by agitation with dilute H_2SO_4 to remove oxide film and basic salts. Optimum conditions for purifying the solution by Cd metal are: S/V 1.6, duration 30 - 60 mins; temperature 18 - 20°C, acidity (minimum) 0.5 g/l H_2SO_4. With these conditions, the Cu content can be reduced to 0.02 - 0.03 mg/l, the degree of purification being independent of the Cd content of the solution. After purification from Cu, the acid solution was purified from Pb by co-precipitation with $SrSO_4$. The experimental method developed was tested on an industrial scale in a pilot plant. The cathode metal produced was carefully washed, remelted in a H_2 atmosphere in a special furnace. The remelted Cd contained the following proportions of impurities: (%) Cu - 1.10^{-4}, Ni - $0.5.10^{-4}$, Pb - $4.5.10^{-4}$, Zn - 6.10^{-4}, Fe - 5.10^{-4}, Sb - $0.6.10^{-4}$, Tl - $3.6.10^{-4}$. The purity of the Cd was, thus, 99.998%. Further purification was effected by zone refining. There are 4 tables and 14 ref-

Card 2/3

Electrochemical production... S/080/61/034/008/009/018
D204/D305

erences: 13 Soviet-bloc and 1 non-Soviet-bloc.

SUBMITTED: October 18, 1960

Table 1 Legend: Impurity content in Cd before and after refining. A) Impurity, B) Impurity content in anode, C) Impurity content in cathode cadmium (%), D) Degree of refining, E) Without recirculation, F) With recirculation, G) Cu, Ni Pb, Fe, Zn.

A) Примесь	B) Содержание примесей в аноде (%)	C) Содержание примесей в катодном кадмии (%)		D) Степень рафинирования	
		E) без протока	F) с протоком	без протока	с протоком
G) Медь	0.01	0.001	0.0001	10	100
Никель	0.13	0.0002	0.0002	650	650
Свинец	0.03	0.009	0.001	3	30
Железо	0.011	0.0001	0.0001	100	100
Цинк	0.005	0.0004	0.0004	12	12

Card 3/3

S/659/62/008/000/027/028
I048/I248

AUTHORS: Vas'ko, A.T., and Zosimovich, D. [I., P., or N.]

TITLE: Electrochemical preparation of nickel-tungsten alloys from acid peroxide electrolytes

SOURCE: Akademiya nauk SSSR. Institut metallurgii, Issledovaniya po zharoprochnym splavam. v.8. 1962. 217-223

TEXT: Nickel-tungsten alloys were deposited on a Pt cathode from electrolytes containing Na tungstate 30 g./l., hydrogen peroxide (30% solution) 21 ml./l., boric acid 50 g./l/. sulfuric acid to pH 1.9-2.3, and nickel sulfate 0.01-600 g./l., at 50°C and a c.d. of 10 amp./sq.dm., using Ni anodes. Deposits with high W contents were obtained from electrolytes containing small amounts of Ni, but the current efficiency was extremely poor (0.03%); the deposits from electrolytes containing 20-300 g. $NiSO_4$/l. were of poor quality and contained non-metallic inclusions. The current efficiency with solutions containing 600 g. $NiSO_4$/l. was about 62%, and the W content of the deposit was 25%. Increasing the Na tungstate concen-

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S/659/62/008/000/027/028
I048/I248

Electrochemical preparation of...

tration above 20 g./l. had no effect on the W content of the deposit but reduced the current efficiency. Increasing the pH within the range 1.0 - 5.0 caused an increase in the current efficiency accompanied by a sharp decrease in the W content of the deposit; deposits with a high W content (70%) were obtained at pH below 1.5 but the rate of decomposition of the H_2O_2 was prohibitively high. The optimum H_2O_2 concentration was about 5 ml. of the 30% solution per liter electrolyte; the optimum boric acid concentration was 30 g./l. The temperature had to be maintained at 40-50°C, to prevent rapid decomposition of the H_2O_2 at higher temperatures, and to prevent crystallization of the boric acid at lower ones. The optimum c.d. was 10-20 amp./sq.dm. On the basis of the above data, the optimum process conditions are defined as follows: electrolyte composition - Na tungstate 20 g./l., $NiSO_4$ 600 g./l., H_2O_2 (30% solution) 5 ml./l., H_2SO_4 to pH 2.1; boric acid 50 g./l.; temperature 50°C; c.d. 10 amp./sq.dm. The W content of the deposit obtained under the optimum con-

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Electrochemical preparation of...

ditions was 20%, and the energy consumption was 3.7 kw.hr./kg. deposit. The acid peroxide electrolyte has a higher stability, a lower toxicity, and is associated with higher current efficiencies than the ammonia-containing baths used for the deposition of Ni-W alloys. There are 4 figures and 3 tables.

Card 3/3

ZOSIMOVICH, D.P.; ZAYATS, A.I.; RUDAYA, L.K.

Colorimetric study of modification transformations in chromium sulfate electrolytes. Ukr.khim.zhur. 28 no.2:150-156 '62. (MIRA 15:3)

1. Institut obshchey i neorganicheskoy khimii AN USSR.
(Chromium plating) (Chromium compounds)

ZOSIMOVICH, D.P.; ANTONOV, S.P.

Preparation of chromic acid from chromium hydroxide.
Ukr.khim.zhur. 28 no.6:987-990 '62. (MIRA 15:11)

1. Institut obshchey i neorganicheskoy khimii AN UkrSSR.
(Chromic acid)
(Chromium hydroxide)

S/080/62/035/006/010/013
D204/D307

AUTHORS: Vas'ko, A. T. and Zosimovich, D. P.

TITLE: Electrochemical preparation of Ni-W alloys from acidic peroxide electrolytes

PERIODICAL: Zhurnal prikladnoy khimii, v. 35, no. 6, 1962, 1302-1308

TEXT: The experiments were conducted in a cell of the usual type, with an Ni cathode and Pt or Ni anodes, over 15 min to 10 hrs, with mechanical stirring: At 50°C and with a current density (D) of 10 A/dm^2 and using an electrolyte of Na_2WO_4 30 g/l, 30% H_2O_2 21 ml/l, H_3BO_3 50 g/l and H_2SO_4 to give pH 1.9 - 2.3, it was found that the best alloys (~25% W) were deposited from solutions to which 300 - 600 g $NiSO_4$/l were added. Under the same conditions and with 400 g $NiSO_4$/l of electrolyte, the optimum Na_2WO_4 content was ~20 g/l, which gave an alloy of ~25% W, with a current efficiency

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(ρ) > 60%. Using an electrolyte containing 30 g Na_2WO_4/l, 420 g $NiSO_4$/l and 20 ml of 30% H_2O_2/l, and adjusting the pH with H_2SO_4, the preferred pH range was 2.0 - 2.2. With 20 g Na_2WO_4, 400 g $NiSO_4$, and 50 g H_3BO_3 per liter, at pH 2.0 - 2,2, it was found that small (5 ml/l) additions of H_2O_2 raised the W content and ρ of the alloy, whilst further additions lowered ρ and, to a certain extent, the W content. Additions of 30 - 50 g/l of H_3BO_3 to the electrolyte containing optimum amounts of Na_2WO_4, H_2O_2 and $NiSO_4$, at pH 2.0 - 2.2 improved the alloy quality and raised ρ. The optimum range of temperature was 40 - 50°C. Increasing the D lowered the W content of the alloy and raised ρ, but at D > 20 A/dm^2 the deposits were partly dendritic; low D's (~2.5 A/dm^2) yielded dense, light colored deposits with high corrosion resistance, suitable for use as coatings. The recommended conditions (electrolyte - Na_2WO_4 20 g/l, 30% H_2O_2 5 ml/l, $NiSO_4$ 600 g/l, H_3BO_3 50 g/l, H_2SO_4 to give pH

Electrochemical preparation of ...

2.1; temperature - 50°C, D = 10 A/dm^2) give an alloy containing 19% W, with a ρ of 88%. The power consumption was 3.7 kw-hrs/kg of alloy as opposed to 12 kw-hrs/kg necessary for similar alloys deposited from ammoniacal electrolytes. There are 4 figures and 3 tables.

ASSOCIATION: Institut obshchey i neorganicheskoy khimii AN SSSR (Institute of General and Inorganic Chemistry, AS USSR)

SUBMITTED: May 9, 1961

Card 3/3

ZOSIMOVICH, D.P.; KLADNITSKAYA, K.B.; DVERNYAKOVA, A.A.

Separation of trivalent iron from trivalent chromium in hydrochloric acid solutions. Zhur.prikl.khim. 35 no.7:1479-1483 Jl '62. (MIRA 15:8)
(Iron-chromium alloys) (Iron--Analysis)
(Chromium--Analysis)

ZOSIMOVICH, D.P.; KLADNITSKAYA, K.B.; DVERNYAKOVA, A.A.

Separation of trivalent chromium from bivalent iron in hydrochloric acid solutions. Zhur.prikl.khim. 35 no.7: 1484-1487 Jl '62. (MIRA 15:8)
(Iron-chromium alloys) (Iron--Analysis)
(Chromium--Analysis)

ZOSIMOVICH, D.P.; ANTONOV, S.P.

Physicochemical study of polychromate electrolytes. Zhur.prikl.-khim. 35 no.12:2791-2793 D '62. (MIRA 16:5)
(Chromates) (Electrolytes)

ZOSIMOVICH, D.P., kand.khim.nauk; SHVAB, N.A.; BELINSKIY, V.N.

Electromechanical preparation of pure manganese by the refining of high-phosphorus manganese alloys. Mo. i gornorud. prom. no.3:35-36 My-Je '63. (MIRA 17:1)

1. Institut obshchey i neorganicheskoy khimii AN UkrSSR.

ZOSIMOVICH, D.P.; AFONSKIY, S.S.

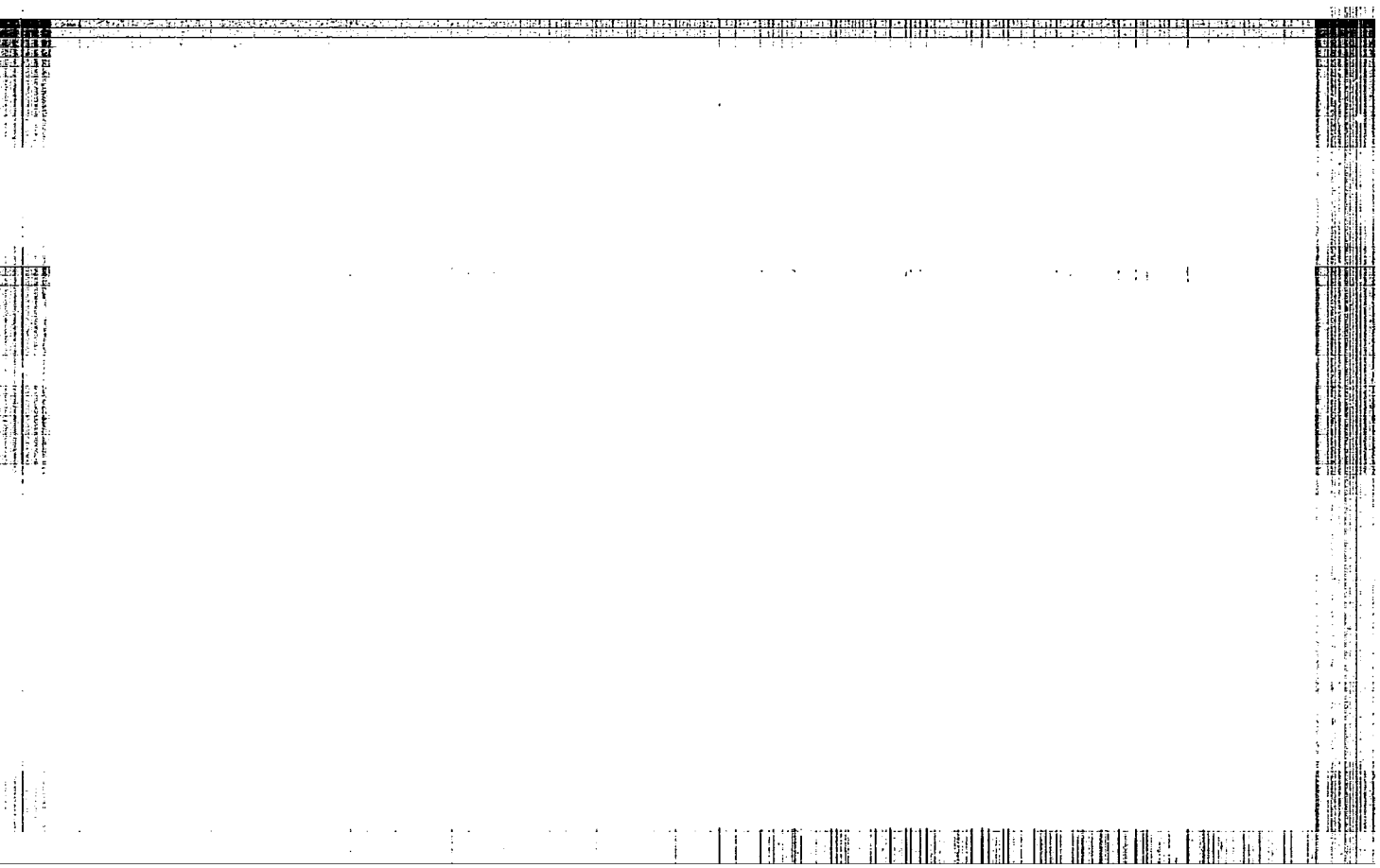
Anodic polarization of chromium, iron, and ferrochrome in chromic acid solution. Ukr. khim. zhur. 29 no.4:396-400 '63. (MIRA 16:6)

1. Institut obshchey i neorganicheskoy khimii AN UkrSSR.
(Iron-chromium alloys)
(Polarization(Electricity))

ZOSIMOVICH, D.P.; ANTONOV, S.P.; BUDKEVICH, V.V.

Anodic oxidation in chromichromate electrolytes. Ukr.khim.zhur. 29 no.6:642-647 '63. (MIRA 16:9)

1. Institut obshchey i neorganicheskoy khimii AN UkrSSR.
(Chromium compounds) (Oxidation, Electrolytic)



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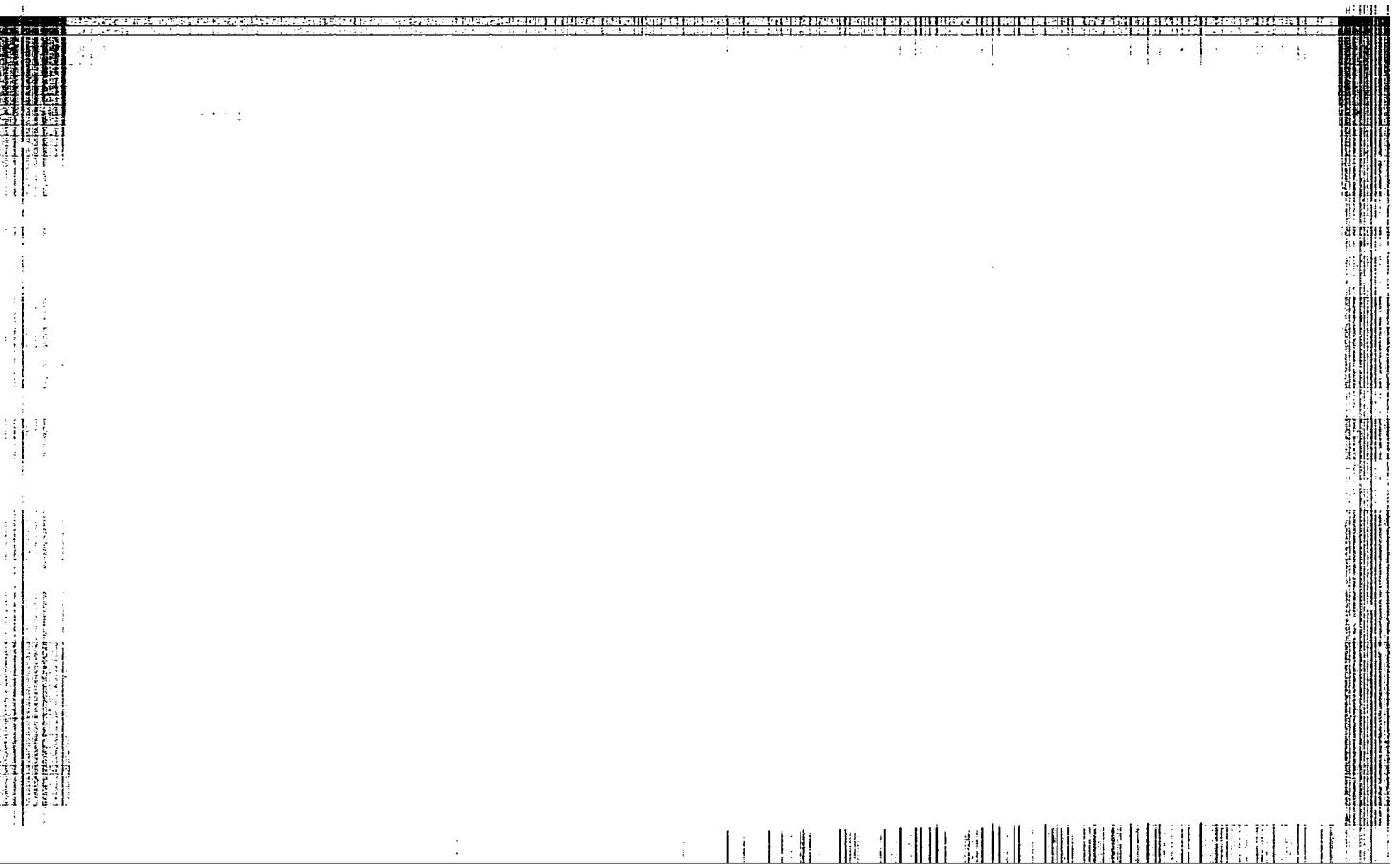

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ANTONOV, S.P.; ZOSIMOVICH, D.P.

Use of a rotating disk electrode in the study of anodic oxidation of chromium. Ukr. khim. zhur. 29 no.10:1111-1112 '63. (MIRA 17:1)

1. Institut obshchey i neorganicheskoy khimii AN UkrSSR.

NEMTSOV, V.D.; SKIBINSKIY, G.V.; ZOSIMOVICH, D.P.

Oscillograph for electrochemical measurements. Ukr. khim. zhur. 29 no.10:1113-1115 '63. (MIRA 17:1)

1. Institut obshchey i neorganicheskoy khimii AN UkrSSR.

ZOSIMOVICH, D.P.; KLADNITSKAYA, K.B.; IVANOVA, N.D.

Separation of trivalent chromium from bivalent iron in sulfuric acid solutions. Zhur.prikl.khim., 36 no.2:333-338 F '63. (MIRA 16:3)
(Chromium) (Iron)

ZOSIMOVICH, D.P. [Zosymovych, D.P.]; ANTONOV, S.P.

Preparation and regeneration of chromic acid by anodic oxidation of chromium hydroxide. Khim.prom. [Ukr.] no.1:10-12 Ja-Mr '64. (MIRA 17:3)

ACCESSION NR: AP4011975 S/0073/64/030/001/0059/0062

AUTHORS: Zosimovich, D.P.; Nemtsov, V.D.

TITLE: Cathodic polarization of the silicon electrode during the electro-deposition of tin and nickel

SOURCE: Ukrainskiy khimicheskiy zhurnal, v. 30, no. 1, 1964, 59-62

TOPIC TAGS: tin electrodeposit, nickel electrodeposit, silicon electrode, silicon semiconductor electrode, polarization, rectifying contact, ohmic contact, p-type silicon, n-type silicon, hole conductor, electron conductor, cathode polarization

ABSTRACT: The polarization accompanying the electrodeposition of tin or nickel onto samples of silicon monocrystals, p- or n-type, both having the same (111) orientation, either polished with boron carbide or etched with SR-8, is shown in the enclosed figures. Greater polarization is used to deposit the metals onto a semiconductor electrode than onto the metal electrode. Polarization of the

Card 1/6

ACCESSION NR: AP4011975

mechanically treated silicon is higher than in the etched electrode, apparently due to the presence of deformed layers, polycrystalline powders and oxide film. The hole-type (p-type) silicon is polarized more strongly than the electron type. In electrodepositing nickel onto the silicon electrode, polarization of the electrode with the etched surface is higher than of the polished. The character of the electrolytic contacts: for nickel on electron or hole type silicon--rectifying; for tin on n-type silicon--ohmic; for tin on p-type silicon--rectifying. Orig. art. has: 2 figures.

ASSOCIATION: Institut obshchey i neorganicheskoy khimii AN UkrSSR (Institute of General and Inorganic Chemistry AN UkrSSR)

SUBMITTED: 10Jul63 DATE ACQ: 14Feb64 ENCL: 04

SUB CODE: PH, ML NO REF SOV: 003 OTHER: 008

Card 2/3

STENDER, V.V., otv. red.; ZOSIMOVICH, D.P., zam. otv. red.; DELIMARSKIY, Yu.K., red.; LOSHKAREV, M.A., red.; NECHAYEVA, N.Ye., red.; NIKIFOROV, A.F., red.; BYCHKOVA, R.I., red.

[Hydroelectrometallurgy of chlorides; reports] Gidroelektrometallurgiia khloridov; doklady. Kiev, Naukova dumka, 1964. 178 p. (MIRA 17:11)

1. Vsesoyuznyy seminar po prikladnoy elektrokhimii. 5th, Dnepropetrovsk, 1962. 2. Dnepropetrovskiy khimiko-tekhnologicheskiy institut (for Stender).

ZOSIMOVICH, D.P.; NEMTSOV, V.D.

Cathodic polarization of a silicon electrode in the electrodeposition of tin and nickel. Ukr. khim. zhur. 30 no.6: 59-62 '64. (MIRA 17:6)

1. Institut obshchey i neorganicheskoy khimii AN UkrSSR.

L 02423-67 EWT(1)/EWT(m)/T/EWP(t)/ETI IJP(c) AT/JD

ACC NR: AP6031517 SOURCE CODE: UR/0073/66/032/009/0957/0960

AUTHOR: Zosimovich, D. P.; Nemtsov, V. D.

71
B

ORG: Institute of General and Inorganic Chemistry, AN UkrSSR (Institut obshchey i neorganicheskoy khimii AN UkrSSR)

TITLE: Photoelectric effect in polarization of silicon in solutions of metal chlorides

SOURCE: Ukrainskiy khimicheskiy zhurnal, v. 32, no. 9, 1966, 957-960

TOPIC TAGS: electrolytic deposition, indium, tin, antimony, electrode polarization, silicon, electrode, surface ionization, photoelectric method, photoelectric effect

ABSTRACT: The silicon-electrolyte solution interface has been studied in solutions of indium, tin and antimony chlorides by recording variations in the surface photopotential of the silicon electrode versus its steady-state electric potential under different conditions of polarization. A difference was noted in the photoelectric effect on the n-versus p-type silicon and on the polished versus etched silicon surface in all solutions studied. The photopotential drop on p-type silicon in the metal chloride solutions was interpreted as determining the deposition potential of the metal. The photopotential of the etched n-type silicon in all metal-containing solutions decreased sharply with the electrode potential shift toward the region of anodic polarization. The photopotential versus steady-state electrode potential data

Card 1/2 UDC: 546.148+546.28

L 02423-67

ACC NR: AP6031517 0

reflect the surface state of the silicon electrode under various conditions of polarization and indicate differences in electronic configuration at the silicon-electrolyte interface, depending on the conductivity type and surface treatment of silicon. Orig. art. has: 6 figures. [JK]

SUB CODE: 07,10/ SUBM DATE: 18Jan65/ ORIG REF: 003/ OTH REF: 001/

hs

Card 2/2

L 36875-66 EWT(m)/T DS
ACC NR: AP6017651 (A) SOURCE CODE: UR/0073/66/032/001/0020/0023

AUTHOR: Zosimovich, D. P.; Nemtsov, V. D.

ORG: Institute of General and Inorganic Chemistry, Academy of Sciences UkrSSR (Institut obshchey i neorganicheskoy khimii AN UkrSSR)

TITLE: Polarization of a silicon electrode during the electrolytic deposition of indium and antimony

SOURCE: Ukrainskiy khimicheskiy zhurnal, v. 32, no. 1, 1966, 20-23

TOPIC TAGS: indium, antimony, electrode, electroplating, silicon single crystal

ABSTRACT: Polarization of a silicon electrode during the electrolytic deposition of indium and antimony was studied in the 20°-60°C range as a function of the type of electrode conductivity and surface pretreatment. Indium was deposited from $InCl_3$ (30 g/l) + HCl(10 g/l) electrolyte at pH = 1.5. Antimony was deposited from $KSbOC_4H_4O_6$(60 g/l) + HCl(4 ml/l) electrolyte at pH = 1.6. The silicon electrode (made of silicon single crystals) was polished and caustic treated. The effect of temperature on cathodic polarization and the oscillograms of cathodic polarization

Card 1/2 UDC: 541.13

L 36875-66
ACC NR: AP6017651

were graphed for In and Sb deposition on p- and n-type silicon electrodes. The potential of deposition of In and Sb on n-type silicon electrode is more negative than on p-type silicon electrode. Metal deposition on silicon electrode was found to be inhibited by the presence of silicon oxide layer on the electrode surface. In depositing In on a silicon electrode, electrode polarization increases with increasing temperature. On a silicon electrode, an indium deposit produces an ohmic contact in the case of n-type conductivity and a rectifying contact in the case of p-type conductivity. For both types of conductivity, the antimony deposits on silicon electrode produced a rectifying contact. Orig. art. has: 4 figures.

SUB CODE: 20,09,11/ SUBM DATE: 16Sep64/ ORIG REF: 006/ OTH REF: 008

Card 2/2

ZOSIMOVICH, D.P.; SHVAB, N.A.; ANDREYCHENKO, V.G.

Conditions for the removal of impurities form manganese electrolytes. Ukr. khim. zhur. 31 no.10:1104-1107 '65.
(MIRA 19:1)

1. Institut obshchey i neorganicheskoy khimii AN UkrSSR.
Submitted May 7, 1964.

ANTONOV, S.P.; ZOSIMOVICH, D.P.

Kinetics of the anodic oxidation of trivalent chromium.
Ukr.khim.zhur. 31 no.5:484-491 '65.
(MIRA 18:12)

1. Institut obshchey i neorganicheskoy khimii AN UkrSSR.
Submitted Jan. 25, 1964.

ZOSIMOVICH, D.P.; ZAYATS, A.I.; KLADNITSKAYA, K.B.; CHEBUKINA, L.K.

Separation of Cr_{3+} from iron by crystallization of ammonium-chrome alums. Zhur. prikl. khim. 38 no.5:979-987 My '65.
(MIRA 18:11)

ZOSIMOVICH, D. P.; SHVAB, N. A.; GRISEVICH, A. N.; NECHAYEVA, N. Ye.; KLADNITSKAYA, K. B.
Kiev

"Die elektrochemische Gewinnung von Reinstmetallen: Zink, Kadmium und Mangan."

report submitted for 2nd Intl Symp on Hyperpure Materials in Science and Technology, Dresden, GDR, 28 Sep-20ct 65.

Institut obshchey i neorganicheskoy khimii Akademii nauk UkSSR, Kiev

ZOSIMOVICH, D.P.; AFONSKIY, S.S.

Effect of trivalent chromium and iron ions on the electrodeposition of chromium from chromic acid solutions. Ukr.khim.zhur. 31 no.2:185-190 '65. (MIRA 18:4)

1. Institut obshchey i neorganicheskoy khimii AN UkrSSR.

ZOSIMOVICH, D.P.; ANTONOV, S.P.; STEPANENKO, V.G.

Effect of the nature of foreign cations on the anodic oxidation of trivalent chromium. Ukr. khim. zhur. 31 no.4:420-421 '65. (MIRA 18:5)

1. Institut obshchey i neorganicheskoy khimii AN UkrSSR.

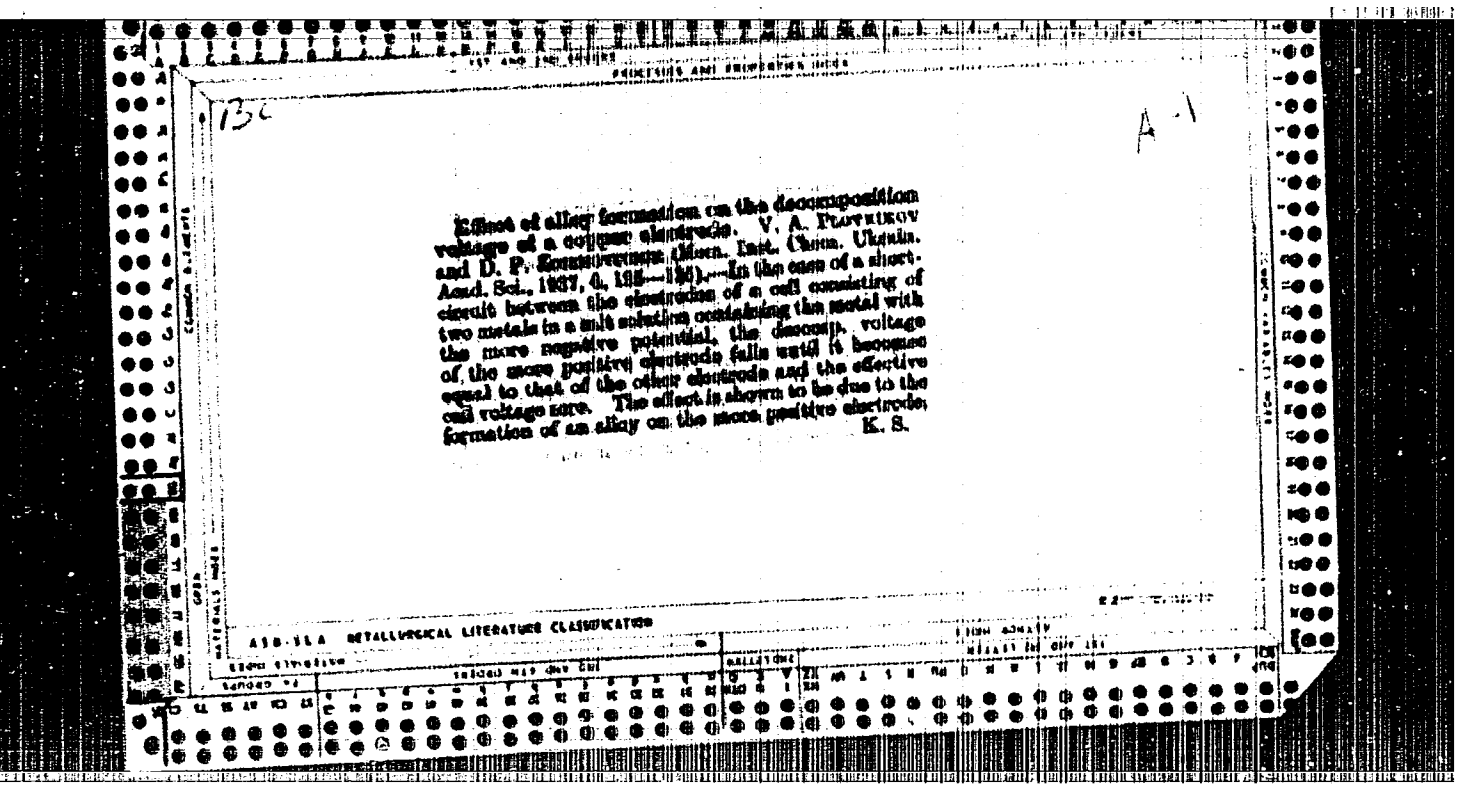
ZOSIMOVICH, D.P., kand. khimicheskikh nauk; AFONSKIY, S.S., inzh.

Electrodeposition of chromium in the presence of a large quantity of threevalent chromium, iron and sulfuric acid. Mashinostroenie no.5:70-71 S-O '64 (MIRA 18:2)

APONSKIY, S.S.; ZOSIMOVICH, D.P.

Conditions of separation of Cr^{6+} and Fe^{3+} in chromic acid solutions. Zhur.prikl.khim. 38 no.11:2536-2540 N '65. (MIRA 18:12)

1. Submitted October 30, 1963.



13c

A-1

Effect of alloy formation on the decomposition voltage of a copper electrode. V. A. Plotnikov and D. P. Konstantinov (Mem. Inst. Chem. Ukrain. Acad. Sci., 1937, 4, 125—134).—In the case of a short-circuit between the electrodes of a cell consisting of two metals in a salt solution containing the metal with the more negative potential, the decomp. voltage of the more positive electrode falls until it becomes equal to that of the other electrode and the effective cell voltage zero. The effect is shown to be due to the formation of an alloy on the more positive electrode.

K. S.

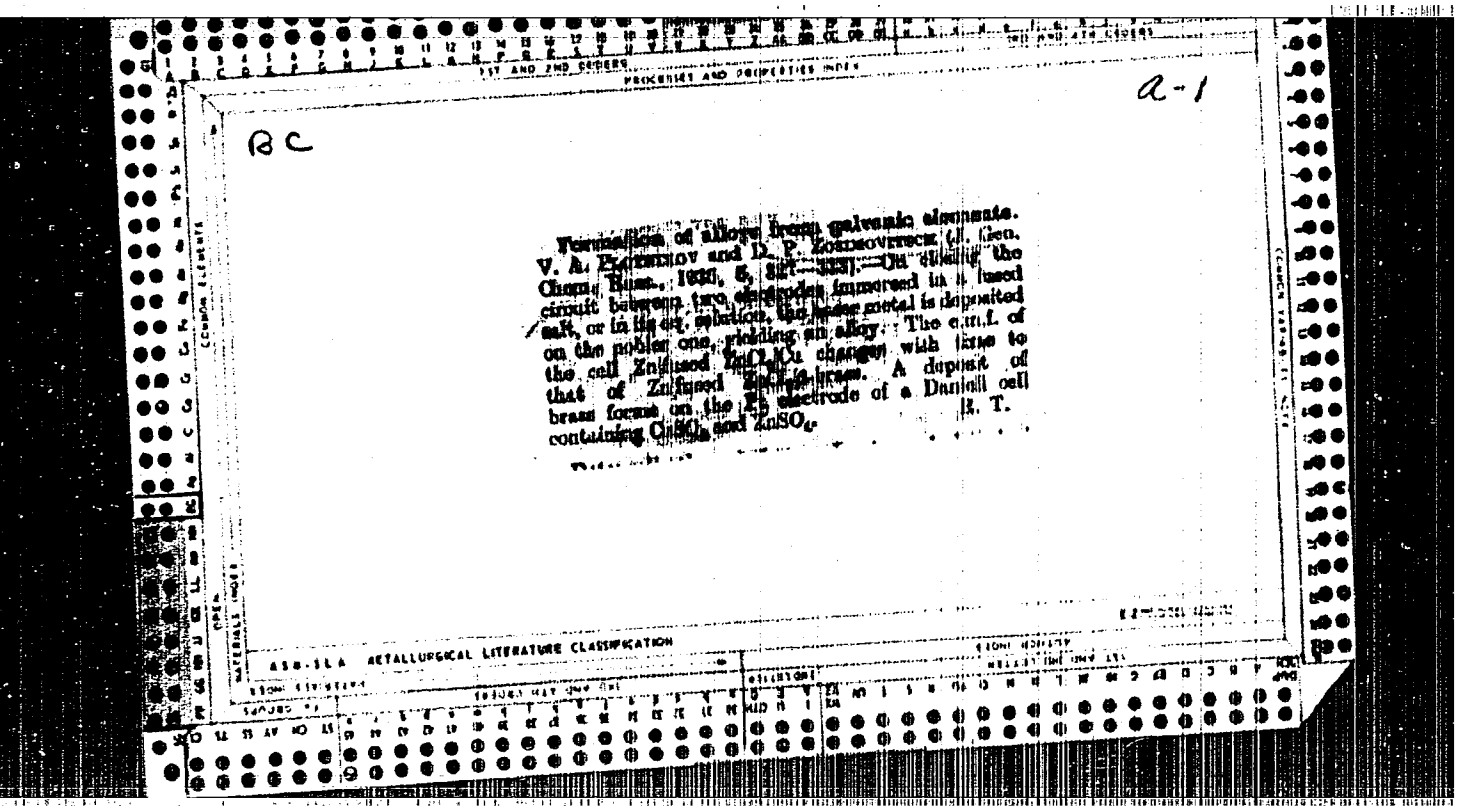
A58-51A METALLURGICAL LITERATURE CLASSIFICATION

PROCESSES AND PROPERTIES INDEX

B2

Formation of aluminium–copper and zinc–iron alloys in galvanic elements. V. A. Plotnikov and D. P. Zosimovich (Mem. Inst. Chem. Ukrain. Acad. Sci., 1938, 5, 300—310).—The e.m.f. of the cell Al|$AlCl_3$-NaCl|Cu, at 200—400°, falls with time, as a result of formation of a layer of Al-Cu alloy at the cathode. Substitution of a Pb or Cd for the Cu electrode results in a similar fall in e.m.f., but the initial val. is almost immediately established on breaking the circuit; this points to the formation of unstable Al-Pb or -Cd alloys. Very little diminution in e.m.f. is shown by the cell Zn|N-$ZnSO_4$|Fe (11—90°), but Fe electrodes thus treated exhibit augmented resistance to corrosion. The layer of brass formed in the cell Cu|$ZnCl_2$|Zn is more resistant to corrosion than the original Cu surface. R. T.

ASM-SLA METALLURGICAL LITERATURE CLASSIFICATION



1ST AND 2ND ORDERS

PROCESSES AND PROPERTIES INDEX

B-I-4

BC

X-Ray study of coatings of alloys deposited in galvanic elements. D. P. ZOSIMOVICH and M. V. BUTSCHKEVICH (Mem. Inst. Chem. Ukrain. Acad. Sci., 1935, 2, 45—53).—Immersion of Zn or Cu electrodes in aq. $ZnSO_4$ or in molten $ZnCl_2$ results in deposition of Zn on Cu, with formation of a brass coating; at the same time the e.m.f. falls, to attain a final const. low level. The layers, in order of deposition, are α-, β-, and γ-brass, deposition of each layer being associated with its characteristic potential. R. T.

ASM-SLA METALLURGICAL LITERATURE CLASSIFICATION

ZOSIMOVITSCH, D.P.,
PLOTNIKOV, V. A., ZhOKh,, 1934, 10, No. 10, 50-54.

ASM-SLA METALLURGICAL LITERATURE CLASSIFICATION

BC

a-1

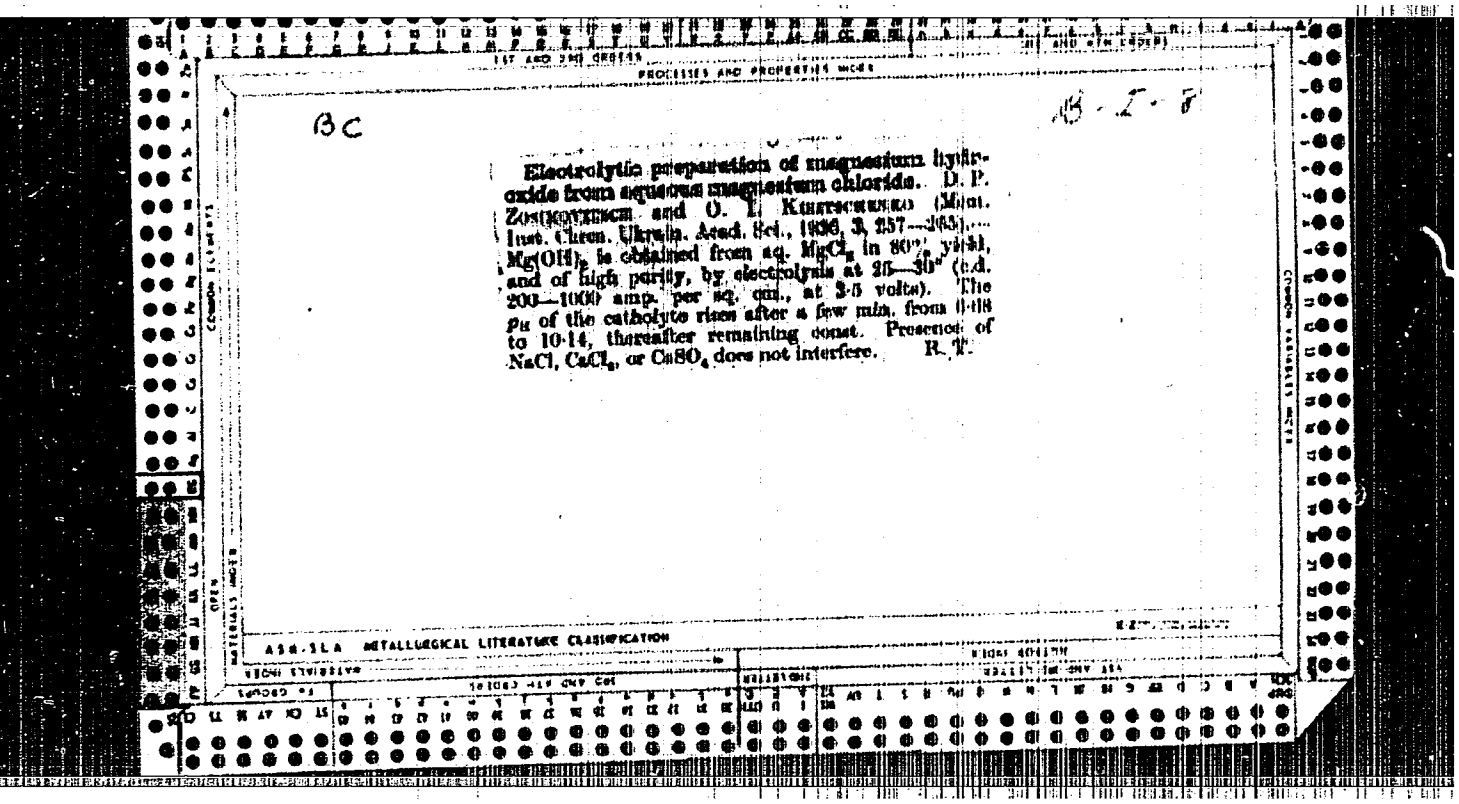
Electrolytic deposition of silver from non-aqueous solutions containing aluminium bromide. V. A. Plotnikov, D. P. Zhemovitskii, and E. I. Kirichenko (Mem. Inst. Chem. Ukrain. Acad. Sci., 1937, 4, 15—27).—A fine cryst. deposit of Ag can be obtained by electrolysis of solutions of AgCl or AgBr in PhMe or xylene containing $AlBr_3$. Working details are given. F. J. G.

BC

B-I-6

Electrochemical production of anhydrous aluminium chloride. V. A. Plotnikov and D. P. Zosimovich (Mem. Inst. Chem. Ukrain. Acad. Sci., 1936, 3, 115–121).—Electrolysis of 2 : 3 $AlCl_3$-NaCl or 6 : 3 : 2 $AlCl_3$-NaCl-KCl at 150° with an Al-plated graphite cathode (7 amp./12 volts) results in 90% yield of Al; Cl_2 evolved at the anode is utilised to prepare further $AlCl_3$ from clay. R. T.

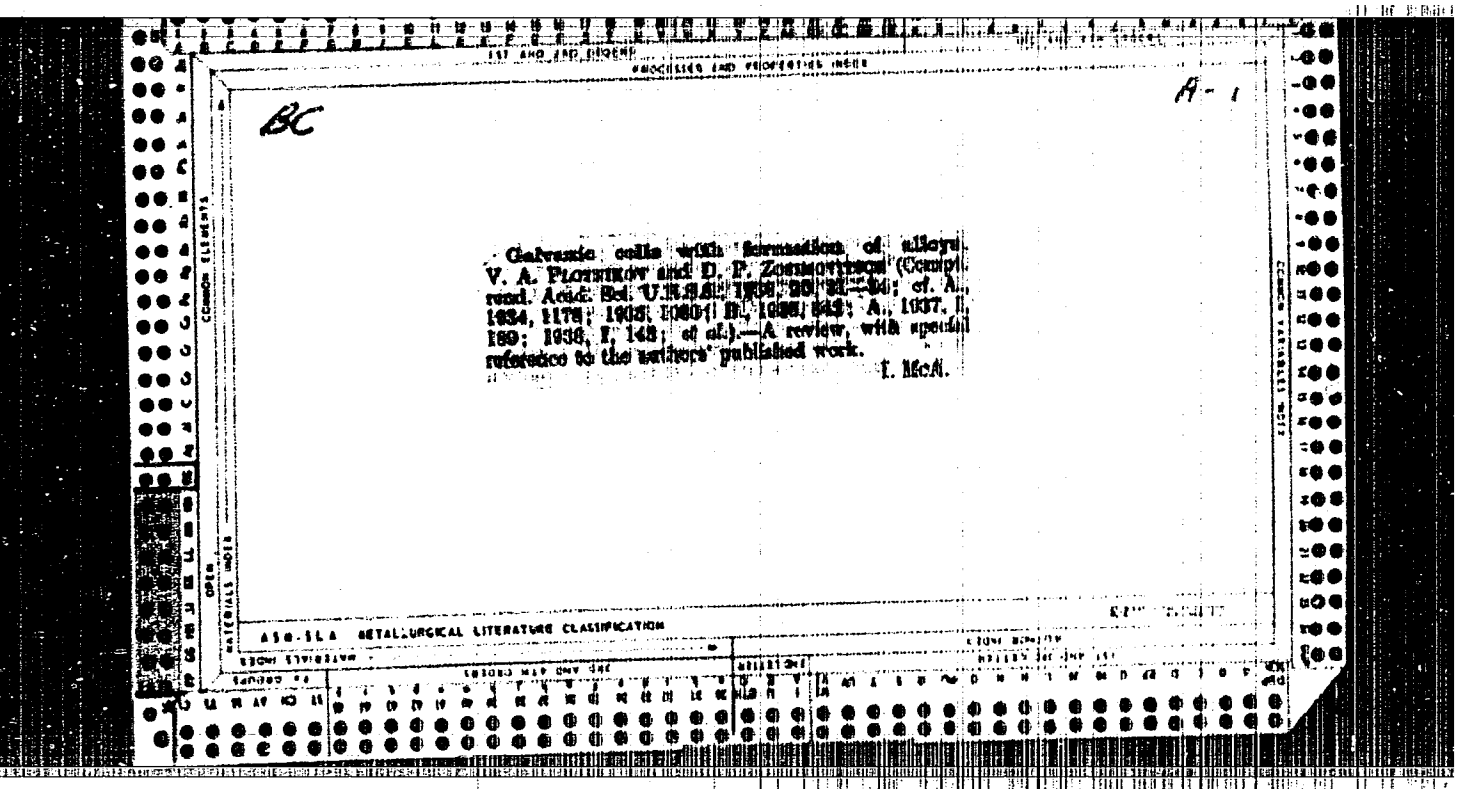
ASM-SLA METALLURGICAL LITERATURE CLASSIFICATION



BC

B-2-8

Electrolytic preparation of magnesium hydroxide from aqueous magnesium chloride. D. P. Zosimovich and O. I. Kharchenko (Min. Inst. Chem. Ukrain. Acad. Sci., 1936, 3, 257—263).—$Mg(OH)_2$ is obtained from aq. $MgCl_2$ in 80% yield, and of high purity, by electrolysis at 25—30° (c.d. 200—1000 amp. per sq. cm., at 3·5 volts). The p_H of the catholyte rises after a few min. from 0·18 to 10·14, thereafter remaining const. Presence of NaCl, $CaCl_2$, or $CaSO_4$ does not interfere. R. T.



BC

A-1

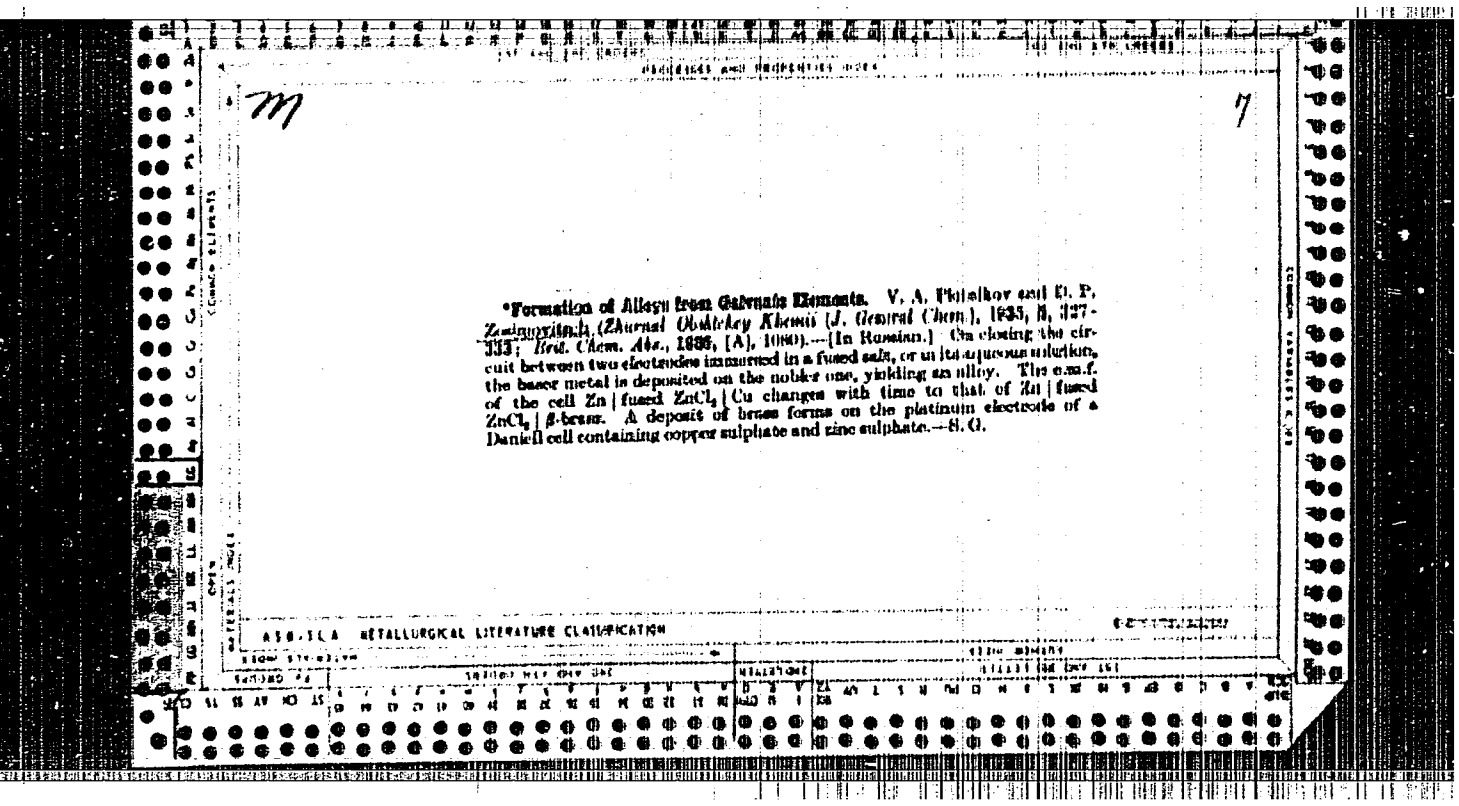
Galvanic cells with formation of alloys. V. A. Plotnikov and D. P. Zommerman (Compt. rend. Acad. Sci. U.R.S.S., 1930, 26, 31—34; cf. A., 1934, 1178; 1935, 1060; B., 1936, 543; A., 1937, I, 169; 1938, I, 148; et al.).—A review, with special reference to the authors' published work.

T. McA.

BC

X-Ray study of surface Al–Cu alloys, formed in a galvanic element. D. P. Zosimovitsch, M. V. [illegible], and O. M. [illegible] (Mem. Inst. Chem. Ukrain. Acad. Sci., 1936, 3, 227—246).—The amount of Al which combines with Cu in the action of the cell Al|$AlCl_3$–NaCl|Cu rises with the temp. from 200° to 550°. α-Cu–Al is formed at 200—300°, and transition to the γ-alloy takes place at 300—350°. β-Cu–Al was not found. R. T.

METALLURGICAL LITERATURE CLASSIFICATION



M

7

Formation of Alloys from Galvanic Elements. V. A. Plotnikov and D. P. Zasimovitch (*Zhurnal Obshchey Khimii* [*J. General Chem.*], 1935, 5, 327–333; *Brit. Chem. Abs.*, 1936, [A], 1080).—[In Russian.] On closing the circuit between two electrodes immersed in a fused salt, or in an aqueous solution, the baser metal is deposited on the nobler one, yielding an alloy. The e.m.f. of the cell Zn | fused $ZnCl_2$ | Cu changes with time to that of Zn | fused $ZnCl_2$ | β-brass. A deposit of brass forms on the platinum electrode of a Daniell cell containing copper sulphate and zinc sulphate.—S. G.

A.S.T.I.A METALLURGICAL LITERATURE CLASSIFICATION

ZOSIMOVICH, D.P.

*Formation of Alloys from Galvanic Elements. V. A. Plotnikov and D. P. Zosimovitsch (*Mem. Inst. Chem. All-Ukrain. Acad. Sci.*, 1934, 1, 170-180).—[In Russian, with German summary.] See *Met. Abs.*, this vol., p. 608.—S. G.

Production of Ferro-Alloys Directly from Minerals in the Electric Arc Furnace. Alfred Salmony-Karsten (*Quím. e Ind.*, 1935, 11, 231-235; *C. Abs.*, 1936, 30, 963).—Briefly described some large commercial installations for the production of ferro-silicon, ferro-manganese, ferro-chromium, ferro-molybdenum, and ferro-tungsten.—S. G.

ASM-SLA METALLURGICAL LITERATURE CLASSIFICATION

[illegible], D.P.; [illegible], N.Ye.; [illegible], I.T.

Preparation of bivalent [illegible] chloride [illegible] hydrate. Ukr. khim. zhur. 30 no.[illegible]:1109-11[illegible] '64.

(MIRA 17:[illegible])

1. Institut obshchey i neorganicheskoy khimii AN UkrSSR.

L 2744-66 EWT(1)/FCC/EWA(h) GW

ACC NR: AT5028296 SOURCE CODE: UR/3113/65/000/008/0009/0012

AUTHOR: Zosimovich, I. D.

ORG: Kiev State University (Kiyevskiy gosudarstvennyy universitet)

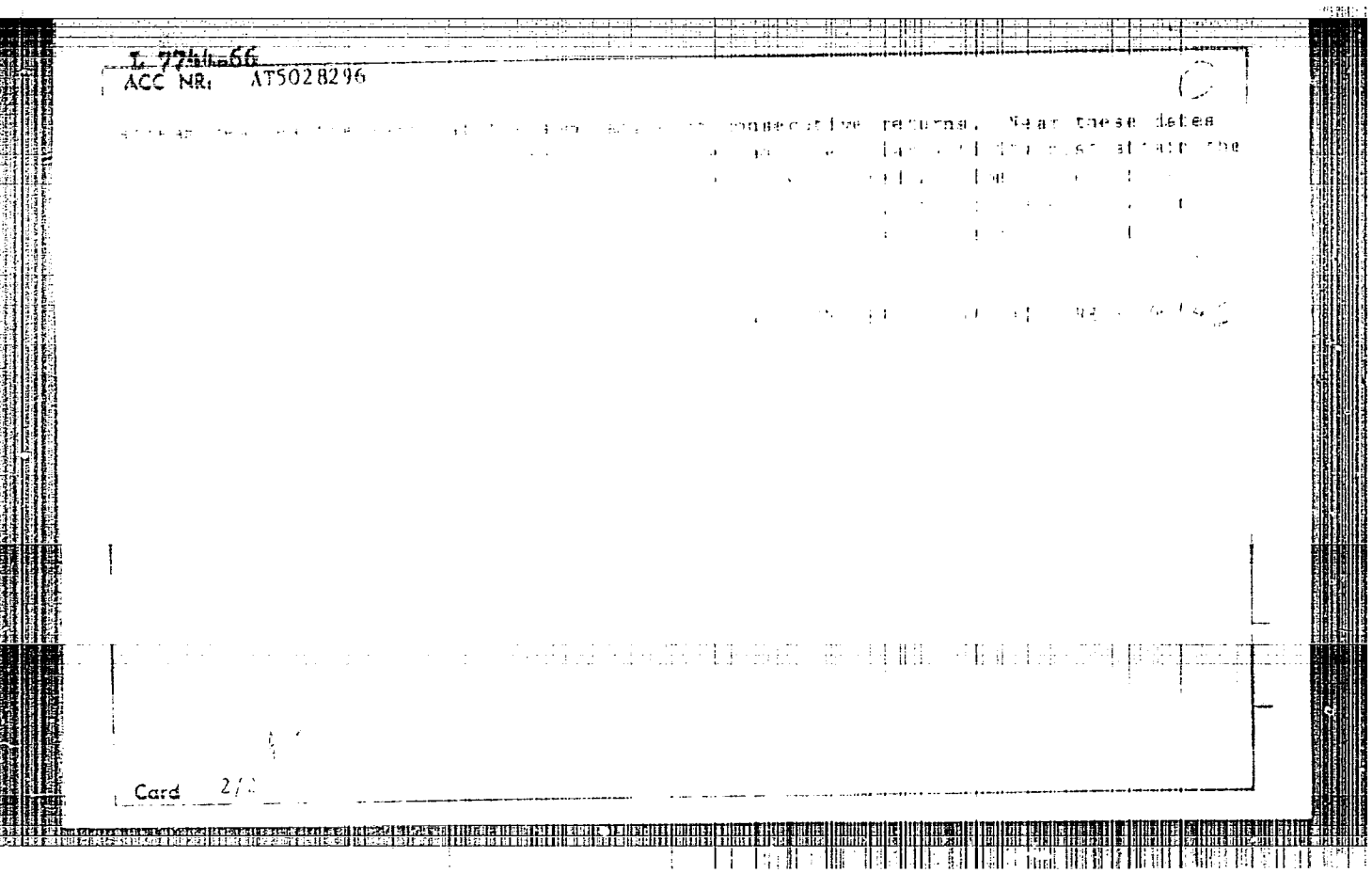
TITLE: [illegible] results [illegible] geomagnetic data to investigate the solar corpuscular [illegible]

SOURCE: AN UkrSSR. Mezhduvedomstvennyy geofizicheskiy komitet. Informatsionnyy byulleten', no. 8, 1965. [illegible] (Geophysics and astronomy), 9-12

TOPIC TAGS: magnetic storm, [illegible] correlation coefficient, solar activity, [illegible] field, geomagnetic index

ABSTRACT: In general, magnetic storms [illegible] every 27 days, which is explained by the coronal rays of the sun rotating together with the sun. Terrestrial magnetic data were studied in 27-day intervals from [illegible] 1918. The correlation coefficients for [illegible]

Card 1/2



ZOSIMOVICH, V. P.

Beets and Beet Sugar

Dynamics of leaf growth in sugar beets and its effect on yield and sugar content of biological types of various varieties. Sol. i sem., 19, No. 9, 1952.

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

USSR/Cultivated Plants - Commercial, Oil-Bearing, Sugar-Bearing. M

Abs Jour : Ref Zhur Biol., No 12, 1958, 53735

Author : Zosimovich, V.P.
Inst : [redacted]
Title : Supplementary Pollination of Seed Plants.

Orig Pub : Sakharnaya svekla, 1957, No 6, 37-40

Abstract : Experiments conducted for a long time by the All-Union Scientific Research Institute of Sugar Beets in different beet growing regions, confirmed the positive role of supplementary pollination in increasing the yield and the quality of the seeds, and also in intensifying vital energy in the offspring. Supplementary pollination proved to be effective not only in rainy weather but also in the presence of clear and windy weather. The increase of the seed yield from pollination averaged 1-2 cwt/ha. -- A.M. Smirnov

Card 1/1

Country : USSR
Category: Cultivated Plants. Commercial. Oil-Bearing. Sugar-Bearing.

M

Abs Jour: RZhBiol., No 11, 1958, No 49060

land will be sown with sugar beets with separate fruits (single seeded or single shoot). --
A.M. Smirnov

Card : 2/2

ZOSIMOVICH, V. P.: Doc Biol Sci (diss) -- "The evaluation of the wild and cultivated sugar beet". Kiev, 1958. 40 pp (Acad Sci Ukr SSR, Dept of Biol Sci), (KL, No 12, 1959, 127)

ZOSIMOVICH, V.P.

Polyploid varieties of sugar beets. Sakh.prom. 34 no.5:56-62 My '60. (MIRA 14:5)

1. Vsesoyuznyy nauchno-issledovatel'skiy institut sakharnoy svekly.
(Sugar beets)

ZOSIMOVICH, V.P. [Zosymovych, V.P.], laureat Leninskoy premii

New forms of plants. Nauka i zhyttia 12 no.9:48 S '62.
(MIRA 16:1)

1. Chlen-korrespondent AN UkrSSR.
(Plant breeding) (Chromosome numbers)

KONDRATYUK, Ye.M.[Kondratiuk, IE.M.], otv. red.; ZOSIMOVICH, V.P., [Zosymovych, V.P.], red.; MAKAREVICH, V.A.[illegible], red.; POPOV, V.P., red.; RUBTSOV, L.I., red.; SOKOLOVSKIY, O.I.[Sokolovs'kyi, O.I.], red.; IL'KUN, G.M.[Il'kun, H.M.], red.; KOKHNO, M.A., red.; ANDRIYCHUK, M.D.[Andriichuk, M.D.], red.izd-va; TURBANOVA, N.A., tekhn. red.

[Biological problems of acclimatized plants] Pytannia biologii aklimatyzovanykh roslyn. Kyiv, 1963. 90 p. (MIRA 16:7)

1. Chlen-korrespondent AN Ukr.SSR (for Zosimovich).
(Ukraine—Plant introduction)

ZOSIMOVICH, V.P.

Polyploid sugar beets. Vest.AN SSSR 33 no.2:66-68 F '63.
(MIRA 16:2)

1. Chlen-korrespondent AN UkrSSR.
(Polyploidy) (Ukraine--Sugar beet breeding)

KONDRATYUK, IE.M. [Kondratiuk, IE.M.], otv. red.; ZOSIMOVICH, V.P., [Sasymovych, V.P.], red.; MAKAREVICH, V.A. [Zakurevych, V.A.], red.; POPOV, V.P., red.; RUBTSOV, L.I., red.; SOKOLOVSKIY, O.I. [Sokolovs'kyi, O.I.], red.; IL'KUN, G.M. [Il'kun, H.M.], red.; KOKHNO, M.A., ; ANDRIICHUK, M.D., red.izd-va; TURBANOVA, N.A., tekhn.red.

[Biological problems of acclimatized plants] Pytannia biologii aklimatyzovanykh roslyn. Kyiv, Vyd-vo AN Ukr.SSR, 1963. 90 p. (MIRA 16:11)

1. Akademiya nauk URSR. Kiev. Botanychnyi sad. 2. Chlen-korrespondent AN Ukr.SSR (for Zosimovich).

(Ukraine--Plant introduction)

ZOSIMOVICH, V. P.

"Peculiarity in some reciprocal hybrids of cultivated beets."

report submitted to 10th Intl Botanical Cong, Edinburgh, 3-12 Aug 64.

ZOSIMOVICH, V.P. [Zosymovych, V.P.]; PANIN, V.A. [Panin, V.O.]

Study of reciprocal triploid hybrids and parental forms of sugar beets. Dop. AN URSR no.7:950-953 '65.

(MIRA 18:8)

1. Institut botaniki AN UkrSSR. 2. Chlen-korrespondent AN UkrSSR (for Zosimovich).

ZOSIMOVICH, V.P., red.otv.; MODILEVSKIY, Ya.S., red.; KOLESNIK, N.N., doktor biol. nauk, red.; KHUDYAK, M.I., kand. biol. nauk, red.; KORDYUM, Ye.L., kand. biol. nauk, red.; KUZNETSOVA, A.S., red.

[Cytology and genetics] TSitologiia i genetik . Kiev, Naukova dumka, 1965. 223 p. (MIRA 19:1)

1. Akademiya nauk URSR, Kiev. 2. Chlen-korrespondent AN Ukr.SSR i Institut botaniki AN Ukr.SSR (for Zosimovich).

SEPPAR, A.; PYATNITSKIY, V.; ZOSIMOVICH, Yu.

How is your production likely to develop? Koks i khim. no.3:59-60 '62. (MIRA 15:3)

1. Magnitogorskiy metallurgicheskiy kombinat (for Seppar).
(Coke industry)

TERENT'YEVA, Ye.I.; ZOSIMOVSKAYA, A.I.

Histidine, arginine, and SH-compounds in blood and bone marrow cells and their changes under the influence of roentgen rays. Med. rad. 5 no.11:20-24 N '60. (MIRA 13:12)
(BLOOD) (MARROW) (X RAYS--PHYSIOLOGICAL EFFECT)

ZOSIMOVSKAYA, A.I.

Study of the mitotic cycles of marrow cells. Arkh. anat., gist. i embr. 43 no.11:99-111 N '62. (MIRA 17:8)

1. Laboratoriya eksperimental'noy teitologii i teitokhimii Instituta radiatsionnoy i fiziko-khimicheskoy biologii AN SSSR. Adres avtora: Moskva, V-312, 1-ya Akademicheskiy proyezd, 18, Institut radiatsionnoy i fiziko-khimicheskoy biologii AN SSSR.

TERENT'YEVA, E.I.; ZOSIMOVSKAYA, A.I.; KAZANOVA, L.I.; TOTSKAYA, A.A.

Cytochemical investigation of the elements of hemopoiesis.
TSitologiia 2 no.4:412-427 Jl-Ag '60. (MIRA 13:9)

1. TSentral'nyy institut rematologii i perelivaniya krovi Ministerstva zdravookhraneniya SSSR, Moskva.
(HEMOPOIETIC SYSTEM)

ZOSIMOVSKAYA, A.I.

Studying the mitotic cycle in marrow cells of mice by the method of radioautography. Dokl. AN SSSR 151 no.3:687-690 Jl '63.
(MIRA 16:9)

1. Institut radiatsionnoy i fiziko-khimicheskoy biologii AN SSSR. Predstavleno akademikom V.A.Engel'gardtom.
(AUTORADIOGRAPHY) (KARYOKINESIS) (MARROW)

USSR/General Problems of Pathology - Tumors. Comparative Oncology. U
Human Neoplasms.

Abs Jour : Ref Zhur Biol., No 1, 1959, 4229

Author : Terent'yeva, E.I., Zosimovskaya, A.I., Kazanova, L.I.
Inst : -
Title : Cytochemical Investigations of the Elements of Hemopoiesis. I. The Content of Fat, Glycogen and Nucleinic Acid in the Blood Cells and in the Bone Marrow of Healthy Humans and Those Suffering from Leukoses

Orig Pub : Probl. gematol. i pereliwaniya krovi, 1957, 2, No 5, 24-31. 64.

Abstract : Drops of fat within the cells of the bone marrow (BM) of healthy subjects are contained in the form of traces only in single myelo- and metamyelocytes, in occasional mature granulocytes and in lymphocytes. They are demonstrated in moderate amounts in leudocytes of the peripheral blood. The glycogen content in the hemopoietic

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USSR/General Problems of Pathology - Tumors. Comparative Oncology. U
Human Neoplasms

Abs Jour : Ref Zhur Biol., No 1, 1959, 4229

and lymphadenosis (CL) (14, 13,). The glycogen content in the hemopoeitic cells is decreased without relation to the form of the illness. As the condition of the patient becomes impaired an increase of the fat content and a decrease of glycogen is observed in the blood cells and in the cells of the bone marrow. In the acute and subacute course of the disease the decrease of the quantity of nucleinic acids particularily of RNA is observed in the hemopoietic cells. With impairment of the condition a decrease of the value of DNA and RNA is often observed; with improvement some increase of the nucleinic acids is observed in the hemopoietic cells. In CM and CL the content of RNA is decreased, and DNA fluctuates within a small range as compared with normal. The content of DNA in the hemopoietic cells is inconstant in CL. The content of nucleinic acids increases with the

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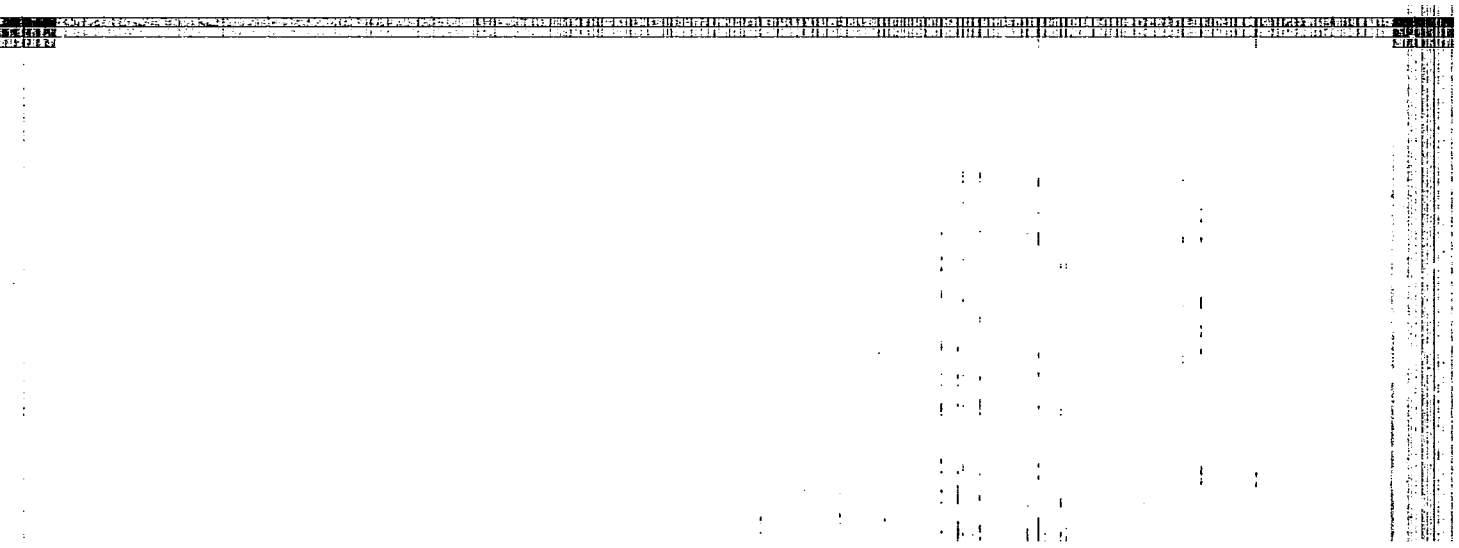

APPROVED FOR RELEASE: 03/15/2001 CIA-RDP86-00513R002065430006-5"

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(KARYOKINESIS) (COLCHICINE—PHYSIOLOGICAL EFFECT)
(RADIATION—PHYSIOLOGICAL EFFECT)

TERENT'YEVA, E.I.; ZOSIMOVSKAYA, A.I.; KAZANOVA, L.I.; FAYNBERTEYN, F.E.

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(ANEMIA, APLASTIC, pathology
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(LEUKEMIA, metab.
fat, glycogen & nucleic acid content in bone marrow cells & in blood cells)
(FAT LIPIDS, metab.
content in blood cells & bone marrow cells in leukemia)
(GLYCOGEN, metab.
same)

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B-I-8

Electrochemical production of aluminium oxide from aqueous aluminium sulphate. V. A. [illegible], D. P. [illegible], O. K. [illegible], and I. H. [illegible] (J. Chem. Ind. Russ., 1935, 12, 271—276).—Na_2SO_4 is added to aq. $Al_2(SO_4)_3$, obtained by extracting clay with H_2SO_4, and a current is passed, when $Al(OH)_3$ deposits from the catholyte and H_2SO_4 forms in the anolyte. Details of the optimum conditions of electrolysis are given.

R. [illegible]

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