APPROVED FOR RELEASE: Thursday, September 26, 2002 CIA-RDP86-00513R001755010002-0"

TARATYNOVA, G.P.

Methods of numerical solutions of equations in finite differences and their application to the calculation of orbits of artificial earth satellites. Isk.sput.Zem. no.4:56-81 '60. (MIRA 13:5)

(Artificial satellites) (Orbits)
(Differential equations)

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3,2200
16,6500

S/044/62/000/006/078/127
B168/B112

AUTHOR: Taratynova, G. P.

TITLE: Methods of numerical solution of finite difference equations and their application to the calculation of the orbits of artificial earth satellites

PERIODICAL: Referativnyy zhurnal. Matematika, no. 6, 1962, 26-27, abstract 6V135 (Sb. "Iskusstv. sputniki Zemli", M., AN SSSR, no. 4, 1960, 56-81)

TEXT: For the finite difference equation of the first order

$$y_{n+1} - y_n = f(x_n, y_n) \quad (n = 1,2,\ldots), \qquad (1)$$

where $x_{n+1} = x_n + h$, $f(x_n, y_n)$ is a differentiable function, the initial value $y = y_0$ is known for $x = x_0$. The problem posed is to find the value of the unknown function y, which satisfies (1) when $x = x_n + H$, where $H = Nh$ and N is a positive integer, if the value of y is known for $x = x_n$.

Card 1/7

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By analogy with the methods of numerical integration of ordinary differential equations, two different methods were worked out for the numerical solution of equations (1): methods of the Runge type and interpolation methods of the Adams type. In the Runge-type methods, the increase of the unknown function y of equation (1) with an accuracy up to terms of the fourth order can be represented in the form of a combination of four expressions of the form:

$$\Delta y = y(x_n + h) - y(x_n) = R_1 k_1 + R_2 k_2 + R_3 k_3 + R_4 k_4,$$

where

$$k_1 = Nf(x_n, y_n),$$
$$k_2 = Nf(x_n + \alpha_1 H, y_n + \beta_1 k_1),$$
$$k_3 = Nf(x_n + \alpha_2 H, y_n + \beta_2 k_1 + \beta_3 k_2),$$
$$k_4 = Nf(x_n + \alpha_3 H, y_n + \beta_4 k_1 + \beta_5 k_2 + \beta_6 k_3),$$

whilst the parameters α_1, α_2, α_3, β_1, β_2, β_3, β_4, β_5, β_6, and the weight functions R_1, R_2, R_3, R_4 depend on N. From the system of algebraic equations used to determine the parameters and weight functions it follows that

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the parameters α_i and β_i must of necessity be dependent upon the correlations

$$\alpha_1 = \beta_1, \alpha_2 = \beta_2 + \beta_3, \alpha_3 = \beta_4 + \beta_5 + \beta_6.$$

Apart from this it was found that two of the parameters desired can be given arbitrarily. Accordingly, a two-parameter family of methods used for the numerical solution of equation (1) corresponds to a two-parameter family of solutions for a system of algebraic equations. Leaving α_1 and α_2 as arbitrary values we get:

$$\begin{gathered}
\alpha_3 = \frac{N-1}{N}; \ \beta_1 = \alpha_1, \\
\beta_2 = \frac{\alpha_2(\alpha_1(4\alpha_1 N - 3N + 5) + \alpha_2(N-3))}{2\alpha_1(2\alpha_1 N - N + 1)}, \\
\beta_3 = \frac{\alpha_2(\alpha_1 - \alpha_2)(N-3)}{2\alpha_1(2\alpha_1 N - N + 1)}, \\
R_3 = \frac{(N-1)(N-2)(2\alpha_1 N - N + 1)}{12\alpha_2 N^2(\alpha_2 - \alpha_1)(\alpha_2 N - N + 1)}, \\
R_4 = \frac{3N(N-1) + \alpha_1 N(3\alpha_2 N - 4N + 2)}{12(\alpha_1 N - N + 1)(\alpha_2 N - N + 1)} +
\end{gathered} \tag{2}$$

$$+\frac{\alpha_2 N(3\alpha_1 N-4N+2)}{12(\alpha_1 N-N+1)(\alpha_2 N-N+1)},$$

$$R_3=\frac{(N-1)-2(\alpha_1 R_2+\alpha_2 R_4)}{2\alpha_1 N},\quad R_1=1-R_2-R_3-R_4,\qquad (2)$$

$$\beta_6=\frac{(N-1)(N-2)(N-3)}{24\alpha_1\beta_5 N^2 R_4},$$

$$\beta_5=\frac{(N-1)(N-2)-6N^2(\alpha_2\beta_6 R_4+\alpha_1\beta_5 R_3)}{6\alpha_1 N^2 R_4}$$

$$\beta_4=\frac{N-1}{N}-\beta_5-\beta_6.$$

In addition to the two-parameter family of numerical solution methods of equation (1), there is also a one-parameter family provided that the system of algebraic equations for determining the parameters α_i and β_i and weights R_i in the so-called special cases, determined by the relations

$$1)\ \alpha_1=0,\ 2)\ \alpha_2=0,\ 3)\ \alpha_1=\alpha_2,\ 4)\ \alpha_2=\alpha_3,$$
$$5)\ \alpha_1=\frac{N-1}{N},\ 6)\ \alpha_1=\frac{N-1}{2N},\ 7)\ \alpha_2=\frac{N-1}{N},$$
$$8)\ R_2=0,\ 9)\ R_3=0,\ 10)\ R_4=0.$$

APPROVED FOR RELEASE: Thursday, September 26, 2002 CIA-RDP86-00513R001755010002-0"

is solvable. The special cases are excluded when working out a solution for (2). In the special cases (1) and (10), the system of equations for the determination of α_i, β_i, R_i is not satisfied by any finite values of the parameters sought. In the case of (7) there is a unique solution, corresponding to $R_3 = 0$, of the form

$$\alpha_1 = \frac{1}{N},\ \alpha_2 = \frac{3N-1}{4N},\ \beta_1 = \frac{1}{N},$$

$$\beta_2 = -\frac{(N-1)(N-4)}{2N},$$

$$\beta_3 = \frac{(N-1)(N-2)}{2N},$$

$$\beta_4 = -\frac{(3N-1)(3N^2-18N+11)}{64N(N-1)},$$

$$\beta_5 = \frac{(N-1)(3N-1)(3N-5)}{64N(N-2)},$$

$$\beta_6 = \frac{(N-3)(3N-1)(3N-5)}{64N(N-1)(N-2)},$$

$$R_1 = -\frac{(N-7)(N+1)}{6(3N-1)},\ R_2 = \frac{N^2-1}{6(3N-5)},$$

$$R_4 = \frac{16(N-1)(N-2)}{3(3N-1)(3N-5)},\ R_5 = 0.$$

In the case of (9) the solution is expressed in radicals and is awkward to apply in practice. Formulas for a one-parameter solution are given in the cases of (2), (3), (4), (5), (6), and (8). Third-order methods of numerical solution of equation (1) depending on one and two parameters are also obtained. On the basis of the example of the family of third-order methods it is shown how two free parameters can be dealt with so as to reduce the remainder term to a minimum. If the values of the increments of the unknown function are known in equation (1) for 4 values of the argument: $x_{n-3N} = x_n - 3H$, $x_{n-2N} = x_n - 2H$, $x_{n-N} = x_n - H$, x_n, where $H = Nh$ and the value of y_{n+N} has to be determined for $x_{n+H} = x_n + H$, then the author proposes the interpolation method, which is a generalization of the Adams method. Accordingly,

$$y_n = y_{n+N} - y_n = Nf_n + \alpha N\Delta f_{n-N} + \beta N\Delta^2 f_{n-2N} + \gamma N\Delta^3 f_{n-3N}, \qquad (3)$$

where

$$\alpha = (N - 1)/2N, \ \beta = (N - 1)(5N - 1)/12N^2, \ \gamma = (N - 1)(3N - 1)/8N^2,$$

or, expressing the increment in terms of the functions f_{n-3N}, f_{n-2N},

f_{n-N} and f_n, we get:

$$\Delta y_n = R_1 N f_{n-3N} + R_2 N_{n-2N} + R_3 N f_{n-N} + R_4 N f_n, \qquad (4)$$

where

$$R_1 = -(N-1)(3N-1)/8N^2, \quad R_2 = (N-1)(37N-11)/24N^2,$$

$$R_3 = -(N-1)(59N-13)/24N^2, \quad R_4 = (55N^2 - 36N + 5)/24N^2.$$

Formulas (3) and (4) correspond to the case of equidistant points for a sloping line. Formulas for numerical integration of (1) for cases of a horizontal and a broken line with equidistant points and also formulas for numerical integration for the case of a sloping line with non-equidistant points are given. A method of "initial rapprochement" for obtaining the four initial values of the unknown function with certain values of the argument - these initial values being necessary for the calculation - is indicated. The limiting case of $h \to 0$ or $N \to \infty$ is examined. The formulas obtained are used by the author for a numerical solution of the system of difference equations arising in calculations of the orbits of artificial earth satellites. Some results of calculations for orbits are given. [Abstracter's note: Complete translation.]

PRESNYAKOV, A.A.; TARATYNOVA, Z.G.

Use of hardness tests for determining the mechanical properties of sheet metals. Zav. lab. 21 no.2:228-229 '55 (MLRA 8:6)
(Sheet metal--Testing)

APPROVED FOR RELEASE: Thursday, September 26, 2002 "CIA-RDP86-00513R001755010002-0"

LOKSHIN, V.A., kand.tekhn.nauk; PAVLENKO, L.I., inzh.; TALDYKIN, K.N., inzh.; TARAVKOV, S.S., inzh.

Temperature conditions in the operation of air preheaters with a high degree of air heating. Elek.sta. 32 no.4:24-28 Ap '61. (MIRA 14:7)

(Air preheaters)

APPROVED FOR RELEASE: Thursday, September 26, 2002 CIA-RDP86-00513R001755010002-0"

LOKSHIN, V.A., kand.tekhn.nauk; PAVLENKO, L.I., inzh.; TARAVKOV, S.S., inzh.

Testing of a small economizer for boilers fired with anthracite fines under a system of upward gas flow. Teploenergetika 9 no.5:10-15 My '62. (MIRA 15:4)

1. Vsesoyuznyy teplotekhnicheskiy institut i Rostovenergo.
(Boilers--Testing)

TATARINOV, B.P., doktor tekhn. nauk, [illegible] inzh.

Redesigning of the separator systems of the boilers of a thermal electric power plant and state regional electric power plant of the Rostov Electric Utility System. Elek. sta. 34 no.10: 6-9 O '63. (MIRA 16:12)

APPROVED FOR RELEASE: Thursday, September 26, 2002 CIA-RDP86-00513R001755010002-0"

TARAVON, F. S.
Z. I. Nekrasov, Stal, 1947, 7, 106-9; Chem. Abstr., 1947, 41, 5070

APPROVED FOR RELEASE: Thursday, September 26, 2002 CIA-RDP86-00513R001755010002-0"

582. FOUR YEARS' EXPERIENCE OF TAENIASIS CONTROL IN THE REGION OF THE FIRST LENINAKAN UNITED HOSPITAL (Russian text) - Tarayan A. M. - MED. PARAZIT. (Mosk.) 1958, 27/2 (165-169) Tables 4

Extirpation of taeniases was carried out in one of the regions of Leninakan during 1953-1956. The work consisted in detection of the patients, their treatment in hospital and the final verification of the results of treatment in 3-3.5 months. Hospital treatment gave positive results in about 72% of cases. When the results of treatment were checked in 3-3.5 months, it was demonstrated that complete disinfestation was attained in 87% of cases. The number of patients infested by taenia decreased from 203 in 1953 to 70 in 1956, while the infection of the region decreased from 0.8 to 0.2% for the same period. Cysticercosis of the cattle according to data from the meat factory showed considerable decrease as a result of veterinary-sanitary measures which were carried out simultaneously. (XVII, 50)

L 03029-67 EWT(m)/EWP(t)/ETI IJP(c) JD

ACC NR: AP6019016 (N) SOURCE CODE: UR/0032/66/032/001/0018/0018

42
36
B

AUTHOR: Shkrobot, E. P.; Tarayan, M. G.; Blyakhman, A.A.

ORG: State Scientific-Research Institute for Nonferrous Metals (Gosudarstvennyy nauchno-issledovatel'skiy institut tsvetnykh metallov)

TITLE: Production of analytical concentrate during analysis of high-purity tellurium

19 27

SOURCE: Zavodskaya laboratoriya, v. 32, no. 1, 1966, 18

TOPIC TAGS: inorganic synthesis, tellurium compound, spectrographic analysis

ABSTRACT: A method of concentrating impurities by extracting them in the form of dithizonate and hydroxyquinolate compounds was used during the analysis of high-purity tellurium. The dithizonates and hydroxyquinolates of all impurities, except gold, were extracted by 95-100% at pH 10. The gold dithizonate was extracted from a 3 N HCl solution. Cyclohexanol was added during the extraction of Al; Cd, Ag, and Co were extracted into concentrate by 50% on the average. This required the use of correction coefficients when determining their amounts. Other elements were extracted almost entirely (>75%). The analysis of tellurium consisted of (1) dissolving the Te sample in a mixture of HCl and HNO_3, (2) extracting gold dithizonate from ~ 2.5 N HCl, (3) extracting other impurities from ammonia solution (pH 10) in the presence of cyclohexanol, and (4) producing a concentrate of impurities by the evaporation of the

UDC: 543.7

Card 1/2

APPROVED FOR RELEASE: Thursday, September 26, 2002 CIA-RDP86-00513R001755010002-0"

L 03029-67

ACC NR: AP6019016 6

combined extraction in the presence of Te oxide and charcoal powder, the burning of organic substances, and the roasting of dry residue for 5 mins. at 400-420C. The concentrate was then analyzed spectrally. The sensitivity of determinations was $n \cdot 10^{-5}\%$ for Zn, $n \cdot 10^{-6}\%$ for Cd, Ni, Co, Fe, Au, and $10^{-7}\%$ for Ag, Cu, Ga, In, Al, Pb, Bi. The presence Al, Fe, and Cu in used reagents even after their purification, made it impossible to determine Al and Fe $< n \cdot 10^{-5}$ and Cu $< n \cdot 10^{-7}\%$. K. A. Aldoshina, F. F. Kolmakova, and G. I. Krivousova participated in the work. Spectral analysis was made by A. N. Bogoyavlenskaya, E. F. Pereverzeva, and L. V. Mostryukova.

SUB CODE: 07/ SUBM DATE: none

Card 2/2

TARAYAN, M.G.

Method of determining sulfur in tellurium. Sbor. nauch. trud. Gintsvetmeta no.19:740-742 '62. (MIRA 16:7)

(Sulfur—Analysis)
(Tellurium—Analysis)

TARAYAN, S.

Training specialists at a plant. NTO no.11:60 N '59. (MIRA 13:4)

1. Chlen respublikanskogo pravleniya Nauchno-tekhnicheskogo obshchestva priborostroyeniya, g.Yerevan.
(Erivan--Instrument industry)

APPROVED FOR RELEASE: Thursday, September 26, 2002 CIA-RDP86-00513R001755010002-0"

TARAYAN, S.

The first conference in Armenia. NTO no.12:32 D '59 (MIRA 13:3)

1. Uchenyy sekretar' Armyanskogo respublikanskogo pravleniya Nauchno-tekhnicheskogo obshchestva priborostroitel'noy promyshlennosti.
(Armenia--Instrument industry)

APPROVED FOR RELEASE: Thursday, September 26, 2002 CIA-RDP86-00513R001755010002-0"

PANOSYAN, A.K.; ARUTYUNYAN, R.Sh.; TARAYAN, Sh.S.

Effect of the interrelationships of some soil bacteria on nitrogen assimilation under various farm crops. Vop.mikrobiol. no.1:219-229 '61. (MIRA 17:10)

APPROVED FOR RELEASE: Thursday, September 26, 2002 CIA-RDP86-00513R001755010002-0"

TARAYAN, S.

In the Scientific Technical Society of Armenian Instrument Manufacturers. Prom.Arm. 5 no.1:59-61 Ja '62. (MIRA 15:2)

1. Uchenyy sekretar' Armyanskogo respublikanskogo pravleniya Nauchno-tekhnicheskogo obshchestva priborostroitel'noy promyshlennosti.

(Armenia--Instrument industry)

TARAYAN, S.

Valuable initiative. Prom.Arm. 5 no.9:58-59 S '62. (MIRA 15:9)

1. Uchenyy sektetar' Nauchno-tekhnicheskogo obshchestva priborostroitel'noy promyshlennosti Armenii.
(Armenia--Machine-tool industry)

TARAYAN, S.G.

The M97 microammeter. Priborostroenie no.5:26 My '62. (MIRA 15:5)

(Ammeter)

APPROVED FOR RELEASE: Thursday, September 26, 2002 CIA-RDP86-00513R001755010002-0"

TARAYAN, S.G.

The M97 microammeter. Priborostroenie no.7:28-29 Jl '63.
(MIRA 16:9)

APPROVED FOR RELEASE: Thursday, September 26, 2002 CIA-RDP86-00513R001755010002-0"

TARAYAN, S.G., inzh.

The M900 microammeters and millivoltmeters. Priborostroenie no.6:20 Je '65. (MIRA 18:7)

APPROVED FOR RELEASE: Thursday, September 26, 2002 CIA-RDP86-00513R001755010002-0"

PANOSYAN, A.K.; TARAYAN, Sh.S.; ARUTYUNYAN, R.Sh.

Effect of the root system of cereals on the assimilation of nitrogen [in Armenian with summary in Russian] Mikrobiol.sbor. no.4:3-12 '49.
(MICRO-ORGANISMS, NITROGEN-FIXING) (MIRA 9:8)
(GRAIN)

1. PANOSYAN, A. K.; MINASYAN, A. I.; TARAYAN, Sh. S.; ARUTYUNYAN, R. Sh.

2. USSR (600)

4. Botany - Ecology

7. Problem of interaction of certain crop rotation plants and microorganisms of the soil. Mikrobiol.sbor. no. 6, 1951.

9. Monthly Lists of Russian Accessions, Library of Congress, March 1953, Unclassified.

1. TARAYAN, SH.S.: MUNAJYAN, A.I.: PANOSYAN, A.K.: ANUTYUNYAN, R.SH:

2. USSR (600)

4. Soil Microorganisms

7. Problems of interaction of certain crop totation plants and microorganisms of the soil (in Armenian with Russian Summary). Mikrobiol. sbor. No. 6, 1951

9. Monthly List of Russian Accessions, Library of Congress, March, 1953, Unclassified.

PROCESSES AND PROPERTIES INDEX

7

Rapid determination of magnesium in limestones and dolomites. N. A. Tananaev and V. M. Tatavan. *Zavodskaya Lab.* 3, 112-13(1931); cf. Tananaev, *ibid.* 1, Nos. 8-9(1932).—It is recommended to ppt. $Mg(OH)_2$ in the filtrate from the Ca detn. after removing NH_4^+ by treatment with HCHO. The $Mg(OH)_2$ ppt. is ignited and weighed as MgO. Chas. Blanc

ASM-SLA METALLURGICAL LITERATURE CLASSIFICATION

PROCESSES AND PROPERTIES INDEX

18

Purification of copper-sulfate solutions for crystallization. L. A. Rotinyantz and V. Terayan. *J. Applied Chem.* (U. S. S. R.) 9, 813-18(1936).—In the production of $CuSO_4$ from hydrometallurgical soln. (cf. Asaev, *et al.*, *C. A.* 30, 5510, 5520), a hot soln. of $CuSO_4$, contaminated with Fe, Zn, Co, Ni, As, Sb, Al, Mg and Ca, is treated with 1.5 parts of $Ca(ClO)_2$. The ppt. of $Fe(OH)_3$, together with Sb, As and $CaSO_4$ is filtered off. The filtrate is treated with HF and NaF to ppt. the fluorides of Ca and Mg and in part Al and Zn. The filtrate after concn. gives pure $CuSO_4$. The HF is recovered by treating the filter cake with H_2SO_4.

Chas. Blanc

ASM-SLA METALLURGICAL LITERATURE CLASSIFICATION

7

CA

Potentiometric titration of aluminum in silicate rocks.
V. M. Tarayan. *Zavodskaya Lab.* 8, 273-6(1939).
Fuse 0.25-0.30 g. of the sample with Na_2CO_3, dissolve in HCl, ppt. the Ti, Al and Fe with NH_3, filter, wash with hot water and dissolve in 1 *N* HCl until acid to methyl orange. Sat. the soln. with NaCl, add an equal vol. alc., sat. with CO_2, add 3-4 drops of cold, satd. $FeSO_4$ soln. and titrate with 0.5 *N* NaF. The potentiometric results are as accurate as in gravimetric results. H. Z. K.

1ST AND 2ND CODES

PROCESSES AND PROPERTIES INDEX

3RD AND 4TH CODES

COMMON ELEMENTS

COMMON VARIABLES INDEX

M

***Potentiometric Determination of Beryllium.** V. M. Tarayan (*Zavod. Lab.*, 1946, 12, (6), 543–546).—[In Russian]. The complex Na_2BeF_4 is sufficiently stable to make possible the potentiometric determination of Be with NaF. The stability of Na_3AlF_6 is of the same order, however, so that the presence of Al interferes with the potentiometric titration of Be and vice versa. Mg does not interfere with the determination of Be. A description of the scheme of analysis is given.—N. A.

MATERIALS INDEX

ASB-SLA METALLURGICAL LITERATURE CLASSIFICATION

3RD AND 4TH CODES

1ST AND 2ND LETTER

AUTHOR INDEX

1ST AND 2ND ORDERS

PROCESSES AND PROPERTIES INDEX

C

Potentiometric determination of calcium. W. M. TARA-YAN. *Zavodskaya Lab.*, **13**, 554–57 (1947); abstracted in *Chem. Zentr.*, **1949**, I [7/8] 414. Ca can be determined potentiometrically only by precipitation reaction. The method for titration with fluorine ion and oxalate ion is described in detail; the titration can also be made in the presence of Cl, NH_4, and Mg except in cases where the Mg:Ca ratio is greater than 3:1. M. HA.

CONDENSED ELEMENTS

CHEM. MATERIALS INDEX

ASM-SLA METALLURGICAL LITERATURE CLASSIFICATION

3RD AND 4TH ORDERS

1ST AND 2ND LETTERS

7

TARAYAN, V.M.

Potentiometric determination of aluminum with fluoride ion. V. M. Tarayan and R. N. Ovseyan (V. M. Molotov State Univ., Yerevan). *Izvest. Akad. Nauk Armyan. S.S.R., Fiz.-Mat., Estestven. i Tekh. Nauk* 5, 409-508 (1952). The investigation was a study of the conditions for the Treadwell and Hermanni method (C.A. 24, 4741). The initial pH should be 8. Ca and B did not interfere. On a titration curve there were 2 distinct breaks, the 1st corresponding to the equiv. point of Al and the 2nd to that of Ca. This method for Al was not applicable in the presence of Be. Bivalent members of the 3rd analytical group did not interfere nor did NH_4, BO_3, PO_4, and NH_4^+. M. Hirsch

1952

APPROVED FOR RELEASE: Thursday, September 26, 2002 CIA-RDP86-00513R001755010002-0"

7

54

Potentiometric reactions of precipitation and of complex formation with platinum indicator electrode. V. M. Tarasov (V.M. Molotov State Univ., Yerevan). *Zavod. Lab.* 18, 50 (1952). The purpose of this investigation was to study the applicability of ppts. and of complex formations in quant. analysis. Solns. of $Pt(NO_3)_2$ and $Pt(OAc)_2$ were titrated potentiometrically with $(NH_4)_2C_2O_4$. The titrate was aq. or aq.-alc. and neutralized with AcOH or HNO_3 to methyl orange. The potential indicating system was Pt, Fe^{+++}, Fe^{++}. The potential jump at the equiv. point was distinct. It was more pronounced in aq.-alc. solns. than in aq. solns. Use of HNO_3 enhanced the sharpness of the equiv. point. Alkali acetates did not interfere provided their concn. did not exceed 1 *N*. Titration with $P_2O_7^{4-}$ gave a good end point, but not quite as clear as with $C_2O_4^{2-}$. Titration with PO_4^{3-} and P^- gave unsatisfactory results. M. Hosch

1952

TARAYAN, V.M.

Mercurimetry as a reductometric method in volumetric analysis. Part 4. Mechanism of mercurimetric reduction. Izv.AN Arm.SSR.Ser.FMET nauk 5 no.1:9-16 '52. (MLRA 9:7)

1.Yerevanskiy gosudarstvennyy univesitet.
(Mercurimetry)

TARAYAN, V. M.

Dissertation: "Mercurometry As a Reductometric Method in Volumetric Analysis (Mercuroreductometry)." Dr Chem Sci, Tbilisi State Univ., Tbilisi, 1953. (Referativnyy Zhurnal--Khimiya, Moscow, No 5, Mar 54)

SO: SUM 243, 19 Oct 54

CIA-RDP86-00513R001755010002-0"

TARAYAN, V. M. (YEREVAN)

USSR/Chemistry - Mercury Compounds Aug 53

"The Properties of the Mercu o-Ion," V. M. Tarayan (Yerevan)

Usp Khim, Vol 22, No 8, pp 1002-1009

On the basis of available data, arrives at the conclusion that Hg is bivalent both in mercuri-compds and mercuro-compds. Points out that mercuro-compds always dissociate with the formation of mercuri-ions. Represents mercuro-compds as X-Hg-Hg-X. 18 USSR refs and 31 foreign refs are appended.

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APPROVED FOR RELEASE: Thursday, September 26, 2002 CIA-RDP86-00513R001755010002-0"

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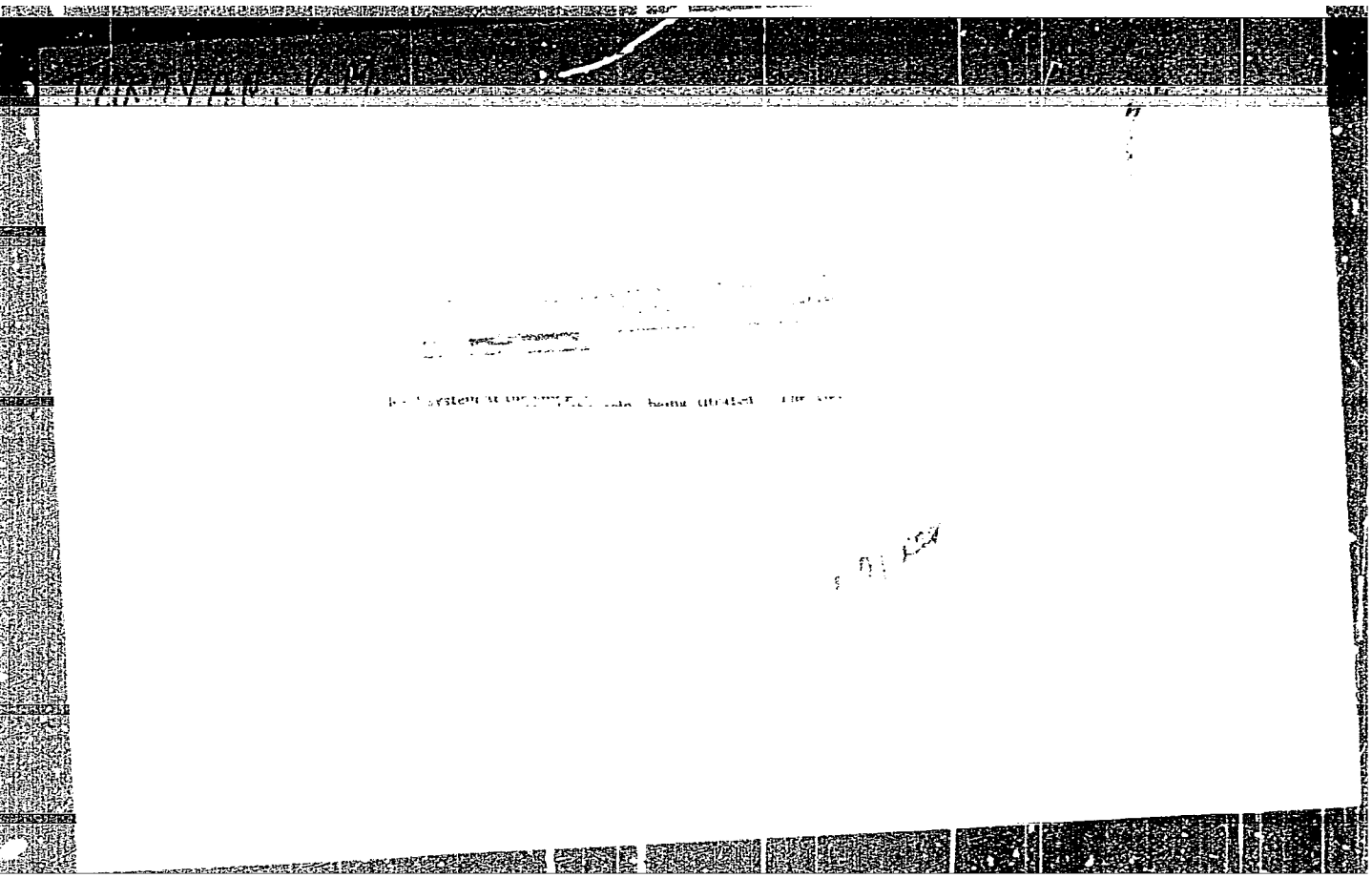

TARAYAN, V M

1/1149 Determination of iron with mercurous nitrate in the presence of chlorides. V. M. Tarayan [illegible] (USSR, [illegible])

[illegible]

obtained [illegible] sample is fused with 1.5 g of Na_2CO_3, the mass [illegible] dissolved in 2 N H_2SO_4, 0.3 N HNO_3 or 2 N HCl. [illegible] solution is diluted with water to a vol. of 100 [illegible] solution are added, [illegible] 0.1 N $Hg_2(NO_3)_2$. Results are independent of the nature of the acid used. G. S. Smith

TARAYAN, V.M.

Potential of the mercury electrode in mercurous solutions. Nauch.trudy Erev.un.ne.53:65-73 '56. (MIRA 9:10)

1.Kafedra analiticheskoy khimii.
(Electrodes, Mercury)

of Al with NaCl the [illegible] pH range is 2 to [illegible]
optd. for which the optimum pH range and the use of a
With the compensation method and the use of a
S.C.E., the electrode potential of the aluminium
electrode in a soln. of Al with an acetate buffer
-1·1 V. In the titration with NaF, the
potential at the end-point is -1·38 V. The
potential of the aluminium electrode remains
[illegible] carried out by means
[illegible] considered

TARAYAN, V.M.

TARAYAN, V.M.; ELIZAYAN, L.A.

Solubility product of tetravalent cerium hydroxide. Izv. AN Arm. SSR Ser. khim. nauk 10 no.3:189-193 '57. (MIRA 10:12)

1. Yerevanskiy gosudarstvennyy universitet im. V.M. Molotova.
(Cerium hydroxides)

APPROVED FOR RELEASE: Thursday, September 26, 2002 CIA-RDP86-00513R001755010002-0"

TARAYAN, V.M.

VIII. ХИМИЧЕСКИЕ НАУКИ

а) На степень доктора наук

808. [illegible] 1944, 240 [illegible]. (Тр. [illegible]).
[illegible] 1945, 19.3.

Эристави Димитрий Иосифович. К вопросу изучения физико-химических свойств марганцевых руд Чиатура. 1944, 260 с. (Инст. химии АН Груз. ССР).
Защ. 1945, 19.3.

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Защ. 1943, 19.7.

810. Тараян Вергиния Макоровна. Меркурометрия как редуктометрический метод объемного анализа. Ереван, 1953. [4], 266 с., 30 отд. рис.
Защ. 1954, 14.1.

Dissertation for degree of
Doctor Chemical Sciences

Def. at
Tbilisi State U.

APPROVED FOR RELEASE: Thursday, September 26, 2002 CIA-RDP86-00513R001755010002-0"

TARAYAN, V.M.; MELIKSETYAN, A.P.

Reductometric determination of hypochlorite by means of mercury. Nauch. trudy Erev. un. 60:73-82 '57. (MIRA 11:8)

1.Kafedra analiticheskoy khimii Yerevanskogo gosudarstvennogo universiteta.
(Hypochlorites) (Titration)

APPROVED FOR RELEASE: Thursday, September 26, 2002 CIA-RDP86-00513R001755010002-0"

TARAYAN, V.M.; ELIAZYAN, L.A.

Effect of pH and complex formation reactions on the potential of a ceric - cerous system. Izv. AN Arm. SSR ser. khim. nauk 10 no.6:395-401 '57. (MIRA 11:6)

1.Yerevanskiy gosudarstvennyy universitet im. V.M. Molotova.
(Cerium)

APPROVED FOR RELEASE: Thursday, September 26, 2002 CIA-RDP86-00513R001755010002-0"

TARAYAN, V.M.; EKIMYAN, M.G.

Effect of pyrophosphate and fluoride on the oxidation-reduction potential of the Mn^{3+}/Mn^{2+} system. Izv. AN Arm. SSR khim. nauk 11 no.1:23-29 '58. (MIRA 11:6)

1. Yerevanskiy gosudarstvennyy universitet.
(Manganese) (Oxidation--Reduction reaction)

APPROVED FOR RELEASE: Thursday, September 26, 2002 CIA-RDP86-00513R001755010002-0"

TARAYAN, V.M.; ELIAZYAN, L.A.

Cerium pyrophosphate formation reaction. Izv.AN Arm. SSR. Khim.nauki 11 no.4:243-248 '58. (MIRA 11:11)

1. Yerevanskiy gosudarstvennyy universitet.
(Cerium phosphates)

APPROVED FOR RELEASE: Thursday, September 26, 2002 CIA-RDP86-00513R001755010002-0"

5(2) PHASE I BOOK EXPLOITATION SOV/1760

Tarayan, Vergine Makarovna

Merkuroreduktometriya; merkurometriya kak reduktometricheskiy metod ob"yemnogo analiza (Use of Mercury as a Titrimetric Reducing Agent; Mercury Reduction in Volumetric Analysis) Yerevan, Izd-vo Yerevanskogo univ-ta, 1958. 191 p. 1,000 copies printed.

Sponsoring Agency: Yerevan. Universitet. Redaktsionno-izdatel'skiy sovet.

Resp. Ed.: Yu.Yu. Lur'ye; Ed. of Publishing House: N.Oganyan; Tech. Ed.: A.Ovasapyan.

PURPOSE: This book is intended for chemical analysts, students and teachers of quantitative analysis courses and other persons interested in mercury and its compounds as reducing agents in chemical analysis.

COVERAGE: The book contains literary data and theoretical considerations on the results of studies dealing with the properties of mercury ions. Also, the author has collected and generalized the results of Soviet and foreign literature published since 1940 on the utilization of the reduction properties of mercury compounds in quantitative analysis. Methods of precipitation and

Card 1/7

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reduction methods of analysis, described as new, which bear a fine shade of difference from the well-known mercurimetric method are included under the name "merkuroreduktometriya" [reduction mercurimetry]. The author further states that this field is relatively new and is in no wise exhausted by this book. There are 183 references, 87 of which are Soviet, 15 English, 70 German, 8 French, and 3 Spanish. No personalities are mentioned.

TABLE OF CONTENTS:

Foreword 3

Ch. I. Properties of a Mercury Ion 7
1. Structure of mercury compounds 7
2. Special features of the equilibrium $Hg_2^{2+} \rightleftarrows Hg^2 + Hg$ 14
3. Electrochemical properties of mercury ions 22
a. Normal potential of a Hg^{+2}_2/Hg-system and the origination of the solubility of mercury salts 22
b. The potential of a mercury electrode in solutions of mercury salts 24

APPROVED FOR RELEASE: Thursday, September 26, 2002 CIA-RDP86-00513R001755010002-0"

c. The influence of complex formations on the potential of a mercury electrode in mercury and mercury ion solutions 29
d. The influence of acidity on the oxidation-reduction potential of an Hg^{2+}/Hg-system 40

Ch. II. The Possibility of Using Mercury Compounds in Reduction Mercurimetry 47
1. Direct reduction-mercurimetric determination of oxidizing agents 48
2. Reduction-mercurimetric determination of oxidizing agents in the presence of rhodanide 49
3. Reduction-mercurimetric determination based on displacement reactions 52
4. Reduction-mercurimetric determinations in alkaline media 53

Ch. III. Active Solutions Used in Reduction Mercurimetry 54
1. Preparation of mercury salt solutions 54
2. Establishing the titer of active solutions used in reduction mercurimetry: mercury nitrate and mercury perchlorate 55
a. Gravimetric method 55
b. Volumetric analytical methods of determining mercury ions 57
3. Stability of mercury salt solutions 63

APPROVED FOR RELEASE: Thursday, September 26, 2002 CIA-RDP86-00513R001755010002-0"

Ch. IV. Methods of Direct Reduction-Mecurimetric Determination of Oxidizing Agents 67
1. Determination of gold 69
2. Determination of cerium 77
a. Potentiometric variant 78
b. Visual variant 82
3. Determination of hypobromites 85
a. Potentiometric variant 87
b. Visual variant 90
4. Determination of hypochlorites 92
5. Determination of manganese 96
a. Potentiometric variant 96
b. Visual variant 100
6. Determination of chromium 104
7. Determination of vanadium 108

Ch. V. Reduction-Mercurimetric Method of Determining Oxidizing Agents in the Presence of Rhodanide 111

APPROVED FOR RELEASE: Thursday, September 26, 2002 CIA-RDP86-00513R001755010002-0"

1. Determination of iron 113
   a. Oxidation-reduction potential of the Fe^{3+}/Fe^{2+}-system in the presence of rhodanide 115
   b. Special features of the reduction-mercurimetric determination of iron oxide 118
   c. Reduction-mercurimetric determination of iron in the presence of chlorides 124
2. Determination of iodine 128
   a. Potentiometric titration of iodine with mercury nitrate 129
   b. Visual variant 132
3. Determination of molybdenum 133
   a. Potentiometric determination of molybdenum 135
   b. Dependency of the potential of a system on rhodanide concentration and acidity 139
4. Determination of Hexacyanoferrates (III) 143
5. Determination of Copper 144
   a. Potentiometric variant 144
   b. Influence of rhodanide on the oxidation-reduction potential of a Cu^{2+}/Cu^{+}-system 146
   c. Visual variant of the reduction-mercurimetric determination of copper 149

APPROVED FOR RELEASE: Thursday, September 26, 2002 CIA-RDP86-00513R001755010002-0"

6. The determination of arsenic (V), tungsten (VI) and titanium (IV) 153

Ch. VI. Reduction-Mercurimetric Determination of Oxidizing Agents, Based on Displacement Reactions 156
1. Determination of chromium 157
2. Determination of vanadium 159
3. Determination of cerium 160
4. Determination of manganese 161
5. Determination of persulfates 161
6. Determination of copper 163
7. Determination of hypochlorites 163
8. Determination of hydrogen peroxide and potassium chlorate 165

Ch. VII. Reduction-Mercurimetric Determinations in Alkaline Media 166
1. Determination of trivalent chromium salts 168
2. Determination of arsenites 169
3. Determination of hydrogen peroxide 169
4. Determination of hydrazine 170

APPROVED FOR RELEASE: Thursday, September 26, 2002 CIA-RDP86-00513R001755010002-0"

Ch. VIII. The Specificity of Mecurimetric Reduction Reactions 171
1. Specificity of the reduction-mercurimetric determination of iron 173
a. Reduction-mercurimetric determination of iron in the presence of chromates, vanadates, and tetravalent cerium 173
b. Reduction-mercurimetric determination of iron in the presence of arsenic (V), molybdenum (VI), tungsten (VI), and titanium (IV) 176
2. Reduction-mercurimetric determination of copper in the presence of iron 179
3. Reduction-mercurimetric determination of molybdenum in the presence of tungsten 180

Bibliography 182

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APPROVED FOR RELEASE: Thursday, September 26, 2002 CIA-RDP86-00513R001755010002-0"

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Effect of pH on mercury electrode potential in solution of mercurous salt. Izv.AN Arm.SSR. Khim.nauki 11 no.2:95-98 '58. (MIRA 11:11)

1. Yerevanskiy gosudarstvennyy universitit.
(Electrodes, mercury) (Hydrogen ion concentration)

APPROVED FOR RELEASE: Thursday, September 26, 2002 CIA-RDP86-00513R001755010002-0"

TARAYAN, V.M.; EKIMYAN, M.G.

Composition of rhenium-rhodanide complexes. Report No.2. Dokl. AN Arm. SSR 27 no.1:33-35 '58. (MIRA 11:9)

1.Yerevanskiy gosudarstvennyy universitet. 2.Chlen-korrespondent AN ArmSSR (for Ekimyan).
(Rhenium) (Thiocyanates) (Complex compounds)

APPROVED FOR RELEASE: Thursday, September 26, 2002 CIA-RDP86-00513R001755010002-0"

TARAYAN, V.M.; MUSHEGYAN, L.G.

New method for separating rhenium and molybdenum. Dokl. AN Arm. SSR 27 no.3:157-160 '58. (MIRA 11:12)

1.Chlen-korrespondent AN Armyanskoy SSR (for Tarayan). 2.Institut geologicheskikh nauk AN Armyanskoy SSR.
(Rhenium) (Molybdenum)

APPROVED FOR RELEASE: Thursday, September 26, 2002 CIA-RDP86-00513R001755010002-0"

TARAYAN, V.M.; MUSHEGYAN, L.G.

Colorimetric determination of rhenium in the presence of molybdenum. Report No.2. Izv.AN Arm.SSR.Khim.nauki 12 no.6:407-412 '59. (MIRA 13:7)

1. Institut geologicheskikh nauk AN Armyanskoy SSR.
(Rhenium--Analysis)

APPROVED FOR RELEASE: Thursday, September 26, 2002 CIA-RDP86-00513R001755010002-0"

TARAYAN, V.M.; ELIAZYAN, L.A.

Spectrophotometric determination of cerium in the ultraviolet.
Izv. AN Arm. SSR.Khim. nauki 13 no.4:245-249 '60. (MIRA 13:12)

1. Institut geologicheskikh nauk AN ArmSSSR.
(Cerium--Analysis)

APPROVED FOR RELEASE: Thursday, September 26, 2002 CIA-RDP86-00513R001755010002-0"

TARAYAN, V.M.

Potentiometric precipitation and complex-forming reactions with a platinum indicator electrode. Izv. AN Arm. SSR, Khim. nauki 13 no.5:333-342 '60. (MIRA 14:2)

1. Yerevanskiy gosudarstvennyy universitet. Kafedra analiticheskoy khimii.

(Electrodes, Platinum) (Potentiometric analysis)

APPROVED FOR RELEASE: Thursday, September 26, 2002 CIA-RDP86-00513R001755010002-0"

TARAYAN, V.M., AVAKYAN, T.T.

Catalytic reduction of selenic acid. Dokl.AN Arm.SSR 30 no.4:231-234 '60. (MIRA 13:8)

1. Institut geologicheskikh nauk Akademii nauk Armyanskoy SSR.
2. Cheln-korrespondent AN Armyanskoy SSR (for Tarayan).
(Selenic acid) (Reduction, Chemical)

APPROVED FOR RELEASE: Thursday, September 26, 2002 CIA-RDP86-00513R001755010002-0"

TARAYAN, V.M.; NALBANDYAN, N.S.

Effect of iron on the color of a rhenium-thiocyano complex.
Izv. AN Arm.SSR. Khim.nauki 14 no.5:435-440 '61. (MIRA 15:1)

1. Institut geologicheskikh nauk AN Armyanskoy SSR.
(Rhenium compounds)
(Thiocyano compounds)

APPROVED FOR RELEASE: Thursday, September 26, 2002 CIA-RDP86-00513R001755010002-0"

S/171/61/014/006/004/005
E075/E136

AUTHORS: Tarayan, V.M., Arstamyan, Zh.M., and Shaposhnikova, G.N.

TITLE: Coprecipitation of small amounts of selenium and tellurium with ferric hydroxide. Part I. Precipitation of selenium.

PERIODICAL: Akademiya nauk Armyanskoy SSR. Izvestiya. Khimicheskiye nauki, v.14, no.6, 1961, 551-559

TEXT: The authors investigated: 1) the behaviour of Se (IV) in the presence of Te (IV) during their simultaneous precipitation with $Fe(OH)_3$; 2) influence of elements which are always present in the sulphide ores such as Cu, Pb, Cd, Zn, Mo; 3) the possibility of single stage precipitation of Se with $Fe(OH)_3$; and 4) the possibility of application of the precipitation method for determination of Se and Te in sulphide ores. The experiments were conducted with 0.05-0.5 mg of Se and 300 mg Fe salt. Precipitation was carried out with NH_4OH in the presence of NH_4Cl. Se coprecipitated with $Fe(OH)_3$ was determined colorimetrically. It was shown that the precipitation of Se with

Card 1/2

APPROVED FOR RELEASE: Thursday, September 26, 2002 CIA-RDP86-00513R001755010002-0"

Coprecipitation of small amounts ... S/171/61/014/006/004/005
E075/E136

$Fe(OH)_3$ was completed between pH = 6 to 8. At pH = 8 the percentage of Se precipitated decreases. The quantity of Se which is fully precipitated with 300 mg of Fe (single precipitation) did not exceed 0.4 mg. The best results were obtained by precipitating $Fe(OH)_3$ by dropwise addition of concentrated NH_4OH at room temperature. This method gives a $Fe(OH)_3$ with a maximum specific surface. It was established that Se is adsorbed on $Fe(OH)_3$, when the latter precipitates. As the amount of adsorbed Se decreases with increasing temperature, the best separation of Se was achieved at room temperature. Te is quantitatively precipitated with Se between pH 6.4 to 8.1. Considerable quantities of Cu, Zn, Pb, Cd and Mo (up to 300 mg) did not influence the process of Se precipitation with $Fe(OH)_3$. There are 6 figures and 1 table.

ASSOCIATION: Institut geologii AN ArmSSR
Yerevanskiy gosudarstvennyy universitet
(Geology Institute AS Arm.SSR
Yerevan State University)

SUBMITTED: July 5, 1961

Card 2/2

APPROVED FOR RELEASE: Thursday, September 26, 2002 CIA-RDP86-00513R001755010002-0"

TARAYAN, V.M.; OVSEPYAN, Ye.N.; KHACHATRYAN, L.G.

Composition of the rhodanide complex of rhenium. Report No.3. Dokl. AN Arm. SSR 33 no.4:169-171 '61. (MIRA 15:1)

1. Yerevanskiy gosudarstvennyy universitet. 2. Chlen-korrespondent AN Armyanskoy SSR (for Tarayan).
(Rhenium compounds)

APPROVED FOR RELEASE: Thursday, September 26, 2002 CIA-RDP86-00513R001755010002-0"

TARAYAN, V.M.; AVAKYAN, T.T.

Colorimetric determination of selenium and tellurium in sulfide ores. Zav.lab. 27 no.8:967-970 '61. (MIRA 14:7)

1. Geologicheskiy institut AN Armyanskoy SSR.
(Selenium--Analysis) (Tellurium--Analysis) (Sulfides)

APPROVED FOR RELEASE: Thursday, September 26, 2002 CIA-RDP86-00513R001755010002-0"

S/171/62/015/005/002/008
E071/E592

AUTHORS: Tarayan, V.M. and Arstamyan, Zh.M.

TITLE: On the colorimetric determination of selenium and tellurium in sulphide ores. Communication 2

PERIODICAL: Akademiya nauk Armyanskoy SSR. Izvestiya. Seriya khimicheskikh nauk. v.15, no.5, 1962, 415-421

TEXT: A modification of the previously proposed rapid method of determination of selenium and tellurium in sulphide ores based on the reduction of selenous acid with hydrazine in the presence of iodine monochloride (Zav.lab.27, 967, 1961) is described. During the photometric determination of tellurium as iodide complex, the preliminary reduction and separation of selenium by the iodide is incomplete. For this reason selenium should be separated under such conditions that the formation of the tellurium complex does not take place. Therefore, ranges of concentration of iodide (0.02 N) and hydrochloric acid (0.5-1.0 N) which represent a threshold of complex formation for tellurium (at tellurium concentrations 0.05-5 μg/ml) were found. It was also shown that the reduction of selenous acid in 0.01 N iodide

Card 1/2

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solution is quantitatively completed in one hour. In the modified method of determination, first the selenous acid is reduced (0.01 N potassium iodide); at this concentration of iodide, tellurium does not form a complex. After the determination of selenium, the conditions are modified to produce tellurium complex for the photometric determination of tellurium. This method is superior to the previously proposed one in that it is faster, well reproducible and more accurate in respect of tellurium readings. The analytical procedure is described in detail. There are 2 figures and 3 tables.

ASSOCIATION: Yerevanskiy gosudarstvennyy universitet
Kafedra analiticheskoy khimii
(State University in Yerevan, Department of Analytical Chemistry)

SUBMITTED: September 3, 1962

TARAYAN, V.M.; ARSTAMYAN, Zh.M.

Coprecipitation of selenium and tellurium with iron hydroxide. Part 3: Coprecipitation and precipitation of selenium and tellurium. Izv.AN Arm.SSR.Khim.nauki 17 no.1:38-45 '64. (MIRA 17:4)

1. Yerevanskiy gosudarstvennyy universitet, kafedra analiticheskoy khimii.

APPROVED FOR RELEASE: Thursday, September 26, 2002 CIA-RDP86-00513R001755010002-0"

TARAYAN, V.M.; MUSHEGYAN, L.G.

Composition of the rhenium thiocyanate complex compound. Part 4. Izv.AN Arm.SSR.Khim.nauki 17 no.1:46-54 '64. (MIRA 17:4)

1. Yerevanskiy gosudarstvennyy universitet, kafedra analiticheskoy khimii.

TARAYAN, V.M.; MUSHEGYAN, L.G.; EKIMYAN, M.G.

Composition of a rhenium thiocyanate complex compound. Part 5: Rhenium thiocyanate complex compound in sulfuric acid solution. Izv. AN Arm.SSR.Khim.nauki 17 no. 3:296-300 '64. (MIRA 17:7)

1. Yerevanskiy gosudarstvennyy universitet, kafedra analiticheskoy khimii.

TARAYAN, V.M.; ARSTAMYAN, Zh.M.

Determination of selenium, tellurium, and gold in gold-containing electrolyte slimes. Izv. AN Arm. SSR. Khim. nauki 17 no.6:623-630 '64. (MIRA 18:6)

1. Yerevanskiy gosudarstvennyy universitet, kafedra analiticheskoy khimii.

MUSHEGYAN, L.G.; TARAYAN, V.M.

Composition of rhenium thiocyanate complex compound. Izv. AN Arm. SSR. Khim.nauki 18 no.1:118-120 '65. (MIRA 18:5)

1. Yerevanskiy gosudarstvennyy universitet, kafedra analiticheskoy khimii.

AP 5015849

65/01/002/0025/0226
541.9+546.23+547.496.3

[illegible] Sadikova, [illegible]

[illegible] between selenium and thiourea

[illegible] determination, thiourea

[illegible] selenious acid with thiourea has been [illegible] of elemental selenium [illegible] selenium, but also [illegible] concentration of thiourea [illegible] (SO_4). The dissolution of elemental selenium in thiourea and the [illegible] of a solid phase in dilution of sulfuric acidities are the result of the lack of formation of a complex compound between selenium and thiourea. The existence of this [illegible] of a complex compound between selenium and thiourea [illegible] spectrophotometric analysis: the polaro[illegible] determined by polarographic and [illegible] toward more negative values [illegible] wave potential of selenious acid was shifted [illegible] and the spectral absorption peak of 230 mμ with a molar extinction [illegible] of area.

07466-65

ACCESSION NR: AP5015646 [illegible] tellurous acid

and pure urea; in other words, [illegible] complex compound are being [illegible] composition of this complex compound are being [illegible] the spectrophotometric deter-

[illegible] complex [illegible] tellurium. Orig. art has [illegible] structure and also [illegible]

[illegible] Kafedra analiticheskoy khimii Yaroslavskiy gosudarstvennyy universitet [illegible] Department of Analytical Chemistry, Yaroslavl State University)

SUBMITTED: [illegible] ENCL: 00 SUB CODE: IV

NO REF SOV: [illegible] OTHER: [illegible]

TARAYAN, V.M.; GAYBANYAN, A.G.

New reaction for perrhenate ions. Izv.AN Arm.SSR. Khim.nauki 18 no.4:426 '65. (MIRA 18:12)

1. Yerevanskiy gosudarstvennyy universitet, kafedra analiticheskoy khimii. Submitted March 9, 1965.

APPROVED FOR RELEASE: Thursday, September 26, 2002 CIA-RDP86-00513R001755010002-0"

TARAYAN, V.M.; SARKISYAN, A.A.

Thiourea complex of tellurium. Zhur.neorg.khim. 10 no.12: 2684-2686 D '65. (MIRA 19:1)

1. Yerevanskiy gosudarstvennyy universitet.

OVSEPYAN, Ye.N.; TARAYAN, V.M.; SHAPOSHNIKOVA, G.N.; VARTANYAN, S.A.; TOSUNYAN, A.O.; MESROPYAN, L.G.; KUROYAN, R.A.

Letters to the editors. Izv. AN Arm.SSR. Khim. nauki 18 no.2:225-228 '65. (MIRA 18:11)

1. Yerevanskiy gosudarstvennyy universitet, kafedra analiticheskoy khimii (for Ovsepyan, Tarayan, Shaposhnikova).
2. Institut organicheskoy khimii AN ArmSSR (for Vartanyan, Tosunyan, Mesropyan, Kuroyan).

TARAYAN, Ye.I.

Cavitation erosion in components of superhigh-pressure radial-axial flow hydroturbines. Izv.AN Arm.SSR.Ser.FMET nauk 8 no.5:71-85 S-O '55. (MLRA 9:3)

1. Vodno-energeticheskiy institut AN Armyanskoy SSR.
(Hydraulic turbines)

APPROVED FOR RELEASE: Thursday, September 26, 2002 CIA-RDP86-00513R001755010002-0"

TARAYAN, Ye. S,:

TARAYAN, Ye. S.: "X-ray irradiation of injuries to the bonejoint system in brucellosis". Baku, 1955. Azerbaydzhan State Medical Inst. (Dissertations for the Degree of Candidate of Medical Sciences.)

So. Knizynaya letopis'. No. 49, 3 December 1955. Moscow.

APPROVED FOR RELEASE: Thursday, September 26, 2002 CIA-RDP86-00513R001755010002-0"

BOYARSKIY, L.A.; GORDOV, A.N.; IOSEL'SON, G.L.; KANDYBA, V.V.; KIRENKOV, I.I.; KOVALEVSKIY, V.A.; KRAKHMAL'NIKOVA, G.A.; LAPINA, E.A.; TARAYANTS, K.G.

Using the photoelectric method for precise work in the field of optical pyrometry. Trudy VNIIM no.36:23-32 '58. (MIRA 11:11)
(Pyrometry)

APPROVED FOR RELEASE: Thursday, September 26, 2002 CIA-RDP86-00513R001755010002-0"

TARAYEV, S., podpolkovnik

Relate all political education work to the tasks of sub-units. Voen.-inzh.zhur.94 no.7:17-22 Jl '50. (MIRA 10:12)
(Communist education) (Military education)

APPROVED FOR RELEASE: Thursday, September 26, 2002 CIA-RDP86-00513R001755010002-0"

TARAYEVA, M.

DAIRYING

Spreading the practice of working on a 24-hours basis. Mol. Prom. 13 No. 8, 1952.

Monthly List of Russian Accessions, Library of Congress November 1952 UNCLASSIFIED

APPROVED FOR RELEASE: Thursday, September 26, 2002 CIA-RDP86-00513R001755010002-0"

1. TARAYEVA, M.

2. USSR (600)

4. Dairy Plants

7. Possibilities for increasing labor productivity in the butter industry. Moloch.prom., 14, no. 2, 1953.

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

APPROVED FOR RELEASE: Thursday, September 26, 2002 CIA-RDP86-00513R001755010002-0

L 12768-66 EWT(m)/EWP(v)/T/EWP(t)/EWP(k)/EWP(b)/EWA(h)/EWA(c)

ACC NR: AP6002585 SOURCE CODE: UR/0286/65/000/023/0080/0080

INVENTOR: Lazarev, A. N.; Prokoshkin, D. A.; Il'in, L. S.; Shlykov, O. P.; Tarayeva, M. I.; Novoselov, A. S.; Barashkov, M. A.

ORG: none

TITLE: Brazing alloy for soldering. Class 49, No. 176784

SOURCE: Byulleten' izobreteniy i tovarnykh znakov, no. 23, 1965, 80

TOPIC TAGS: brazing, titanium, titanium brazing

ABSTRACT: This Author Certificate introduces a copper-base brazing alloy for titanium. To lower the melting temperature of the alloy and to increase the strength of joints, the alloy contains 2—4% aluminum, 4—6% tin, 24—26% titanium, and the rest copper. [ND]

SUB CODE: 13,11/ SUBM DATE: 12May64/ ATD PRESS: 4184

Card 1/1 UDC: 621.791.36:669.295

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15(2)

AUTHORS: Nikulina, L. N., Tarayeva, T. I. SOV/72-59-8-12/17

TITLE: Petrographical Peculiarities of China Stone (Petrograficheskiye osobennosti kitayskogo farforovogo kamnya)

PERIODICAL: Steklo i keramika, 1959, Nr 8, pp 40-44 (USSR)

ABSTRACT: G. L. Yefremov, A. I. Avgustinik (Footnote 1) established an analogy between China stone and the Olonets sandstone. The Gosudarstvennyy nauchno-issledovatel'skiy keramicheskiy institut (State Ceramic Scientific Research Institute) is studying China stone. The results of microscopic examinations are shown in the ground sections represented in figures 1 and 2, and it was found that China stone consists of quartz, feldspar, cemented sericite and a slight amount of carbonate. A more detailed description is given. The chemical analysis was carried out by T. V. Terent'yeva. Its results are shown in table 1. On the basis of the data found in the analysis the mineralogical composition of the samples was calculated and assembled in table 2. It was found that the fine fraction of China stone consist of 69% sericite, 22% quartz, and 9% carbonate. The thermal investigation of China stone was carried out by V. A. Berezovskaya

Card 1/2

(Footnote 2) and illustrated in figures 3,4 and 5. The mechanical composition of the ground samples is given in table 3 The results of ceramic investigations are to be found in table 4. Figure 6 shows the dilatometric curve of the stone Nan'-kan. Conclusions: China stone constitutes a metamorphic kind of the secondary quartzite type. Main components are quartz, sour plagioclase, and sericite. Measures will have to be taken to find similar kinds of stone on Soviet territory, since such a stone constitutes a valuable raw material for the ceramics industry. The types mentioned in the relevant publications (Footnotes 3 and 4) are not suited for these purposes since they contain dark pigments. There are 6 figures, 4 tables, and 4 Soviet references.

APPROVED FOR RELEASE: Thursday, September 26, 2002 CIA-RDP86-00513R001755010002-0"

NIKULINA, L.N.; TARAYEVA, T.I.

A variety of Glukhovtsy kaolin. Trudy GIKI no.1:38-45 '60. (MIRA 16:1)

(Glukhovtsy—Kaolin)

FILINTSEV, G.P.; TARAYEVA, T.I.

Dressing Luppiko deposit pegmatites. Trudy GIKI no.3:3-13 '61. (MIRA 18:7)

APPROVED FOR RELEASE: Thursday, September 26, 2002 CIA-RDP86-00513R001755010002-0"

GLASSON, V.V.; TARAYEVA, T.I.

Investigating Troshkova clay. Trudy GIKI no.3:31-46 '61. (MIRA 18:7)

TARAYEVA, YE. K.

VISHNEVSKIY, I.I.; ZUBAKIN, A.T.; MYAND, Kh.P.; LEYKIN, B.P., redaktor; TARAYEVA, Ye.K., redaktor izdatel'stva; MEL'NICHENKO, F.P., tekhnicheskiy redaktor

[Planning work and wages in construction brigades; practices of Estonian builders] Planirovanie truda i zarabotnoy platy v stroitel'nykh brigadakh; iz opyta stroek Estonskoi SSR. Moskva, Gos.izd-vo lit-ry po stroit. i arkhit., 1957. 57 p. (MIRA 10:9)
(Wages) (Estonia--Construction industry)

APPROVED FOR RELEASE: Thursday, September 26, 2002 CIA-RDP86-00513R001755010002-0"

TARATYNOVA, G.P.

Methods of numerical solutions of equations in finite differences and their application to the calculation of orbits of artificial earth satellites. Isk.sput.Zem. no.4:56-81 '60. (MIRA 13:5)

(Artificial satellites) (Orbits)
(Differential equations)

APPROVED FOR RELEASE: Thursday, September 26, 2002 CIA-RDP86-00513R001755010002-0"

3,2200
16,6500

S/044/62/000/006/078/127
B168/B112

AUTHOR: Taratynova, G. P.

TITLE: Methods of numerical solution of finite difference equations and their application to the calculation of the orbits of artificial earth satellites

PERIODICAL: Referativnyy zhurnal. Matematika, no. 6, 1962, 26-27, abstract 6V135 (Sb. "Iskusstv. sputniki Zemli", M., AN SSSR, no. 4, 1960, 56-81)

TEXT: For the finite difference equation of the first order

$$y_{n+1} - y_n = f(x_n, y_n) \quad (n = 1,2,\ldots), \qquad (1)$$

where $x_{n+1} = x_n + h$, $f(x_n, y_n)$ is a differentiable function, the initial value $y = y_0$ is known for $x = x_0$. The problem posed is to find the value of the unknown function y, which satisfies (1) when $x = x_n + H$, where $H = Nh$ and N is a positive integer, if the value of y is known for $x = x_n$.

Card 1/7

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By analogy with the methods of numerical integration of ordinary differential equations, two different methods were worked out for the numerical solution of equations (1): methods of the Runge type and interpolation methods of the Adams type. In the Runge-type methods, the increase of the unknown function y of equation (1) with an accuracy up to terms of the fourth order can be represented in the form of a combination of four expressions of the form:

$$\Delta y = y(x_n + h) - y(x_n) = R_1 k_1 + R_2 k_2 + R_3 k_3 + R_4 k_4,$$

where

$$k_1 = Nf(x_n, y_n),$$
$$k_2 = Nf(x_n + \alpha_1 H, y_n + \beta_1 k_1),$$
$$k_3 = Nf(x_n + \alpha_2 H, y_n + \beta_2 k_1 + \beta_3 k_2),$$
$$k_4 = Nf(x_n + \alpha_3 H, y_n + \beta_4 k_1 + \beta_5 k_2 + \beta_6 k_3),$$

whilst the parameters α_1, α_2, α_3, β_1, β_2, β_3, β_4, β_5, β_6, and the weight functions R_1, R_2, R_3, R_4 depend on N. From the system of algebraic equations used to determine the parameters and weight functions it follows that

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the parameters α_i and β_i must of necessity be dependent upon the correlations

$$\alpha_1 = \beta_1, \alpha_2 = \beta_2 + \beta_3, \alpha_3 = \beta_4 + \beta_5 + \beta_6.$$

Apart from this it was found that two of the parameters desired can be given arbitrarily. Accordingly, a two-parameter family of methods used for the numerical solution of equation (1) corresponds to a two-parameter family of solutions for a system of algebraic equations. Leaving α_1 and α_2 as arbitrary values we get:

$$\begin{gathered}
\alpha_3 = \frac{N-1}{N}; \ \beta_1 = \alpha_1, \\
\beta_2 = \frac{\alpha_2(\alpha_1(4\alpha_1 N - 3N + 5) + \alpha_2(N-3))}{2\alpha_1(2\alpha_1 N - N + 1)}, \\
\beta_3 = \frac{\alpha_2(\alpha_1 - \alpha_2)(N-3)}{2\alpha_1(2\alpha_1 N - N + 1)}, \\
R_3 = \frac{(N-1)(N-2)(2\alpha_1 N - N + 1)}{12\alpha_2 N^2(\alpha_2 - \alpha_1)(\alpha_2 N - N + 1)}, \\
R_4 = \frac{3N(N-1) + \alpha_1 N(3\alpha_2 N - 4N + 2)}{12(\alpha_1 N - N + 1)(\alpha_2 N - N + 1)} +
\end{gathered} \tag{2}$$

$$+\frac{\alpha_2 N(3\alpha_1 N-4N+2)}{12(\alpha_1 N-N+1)(\alpha_2 N-N+1)},$$

$$R_3=\frac{(N-1)-2(\alpha_1 R_2+\alpha_2 R_4)}{2\alpha_1 N},\quad R_1=1-R_2-R_3-R_4,\qquad (2)$$

$$\beta_6=\frac{(N-1)(N-2)(N-3)}{24\alpha_1\beta_5 N^2 R_4},$$

$$\beta_5=\frac{(N-1)(N-2)-6N^2(\alpha_2\beta_6 R_4+\alpha_1\beta_5 R_3)}{6\alpha_1 N^2 R_4}$$

$$\beta_4=\frac{N-1}{N}-\beta_5-\beta_6.$$

In addition to the two-parameter family of numerical solution methods of equation (1), there is also a one-parameter family provided that the system of algebraic equations for determining the parameters α_i and β_i and weights R_i in the so-called special cases, determined by the relations

$$1)\ \alpha_1=0,\ 2)\ \alpha_2=0,\ 3)\ \alpha_1=\alpha_2,\ 4)\ \alpha_2=\alpha_3,$$
$$5)\ \alpha_1=\frac{N-1}{N},\ 6)\ \alpha_1=\frac{N-1}{2N},\ 7)\ \alpha_2=\frac{N-1}{N},$$
$$8)\ R_2=0,\ 9)\ R_3=0,\ 10)\ R_4=0.$$

APPROVED FOR RELEASE: Thursday, September 26, 2002 CIA-RDP86-00513R001755010002-0"

is solvable. The special cases are excluded when working out a solution for (2). In the special cases (1) and (10), the system of equations for the determination of α_i, β_i, R_i is not satisfied by any finite values of the parameters sought. In the case of (7) there is a unique solution, corresponding to $R_3 = 0$, of the form

$$\alpha_1 = \frac{1}{N},\ \alpha_2 = \frac{3N-1}{4N},\ \beta_1 = \frac{1}{N},$$

$$\beta_2 = -\frac{(N-1)(N-4)}{2N},$$

$$\beta_3 = \frac{(N-1)(N-2)}{2N},$$

$$\beta_4 = -\frac{(3N-1)(3N^2-18N+11)}{64N(N-1)},$$

$$\beta_5 = \frac{(N-1)(3N-1)(3N-5)}{64N(N-2)},$$

$$\beta_6 = \frac{(N-3)(3N-1)(3N-5)}{64N(N-1)(N-2)},$$

$$R_1 = -\frac{(N-7)(N+1)}{6(3N-1)},\ R_2 = \frac{N^2-1}{6(3N-5)},$$

$$R_4 = \frac{16(N-1)(N-2)}{3(3N-1)(3N-5)},\ R_5 = 0.$$

In the case of (9) the solution is expressed in radicals and is awkward to apply in practice. Formulas for a one-parameter solution are given in the cases of (2), (3), (4), (5), (6), and (8). Third-order methods of numerical solution of equation (1) depending on one and two parameters are also obtained. On the basis of the example of the family of third-order methods it is shown how two free parameters can be dealt with so as to reduce the remainder term to a minimum. If the values of the increments of the unknown function are known in equation (1) for 4 values of the argument: $x_{n-3N} = x_n - 3H$, $x_{n-2N} = x_n - 2H$, $x_{n-N} = x_n - H$, x_n, where $H = Nh$ and the value of y_{n+N} has to be determined for $x_{n+H} = x_n + H$, then the author proposes the interpolation method, which is a generalization of the Adams method. Accordingly,

$$y_n = y_{n+N} - y_n = Nf_n + \alpha N\Delta f_{n-N} + \beta N\Delta^2 f_{n-2N} + \gamma N\Delta^3 f_{n-3N}, \qquad (3)$$

where

$$\alpha = (N - 1)/2N, \ \beta = (N - 1)(5N - 1)/12N^2, \ \gamma = (N - 1)(3N - 1)/8N^2,$$

or, expressing the increment in terms of the functions f_{n-3N}, f_{n-2N},

f_{n-N} and f_n, we get:

$$\Delta y_n = R_1 N f_{n-3N} + R_2 N_{n-2N} + R_3 N f_{n-N} + R_4 N f_n, \qquad (4)$$

where

$$R_1 = -(N-1)(3N-1)/8N^2, \quad R_2 = (N-1)(37N-11)/24N^2,$$

$$R_3 = -(N-1)(59N-13)/24N^2, \quad R_4 = (55N^2 - 36N + 5)/24N^2.$$

Formulas (3) and (4) correspond to the case of equidistant points for a sloping line. Formulas for numerical integration of (1) for cases of a horizontal and a broken line with equidistant points and also formulas for numerical integration for the case of a sloping line with non-equidistant points are given. A method of "initial rapprochement" for obtaining the four initial values of the unknown function with certain values of the argument - these initial values being necessary for the calculation - is indicated. The limiting case of $h \to 0$ or $N \to \infty$ is examined. The formulas obtained are used by the author for a numerical solution of the system of difference equations arising in calculations of the orbits of artificial earth satellites. Some results of calculations for orbits are given. [Abstracter's note: Complete translation.]

PRESNYAKOV, A.A.; TARATYNOVA, Z.G.

Use of hardness tests for determining the mechanical properties of sheet metals. Zav. lab. 21 no.2:228-229 '55 (MLRA 8:6)
(Sheet metal--Testing)

APPROVED FOR RELEASE: Thursday, September 26, 2002 "CIA-RDP86-00513R001755010002-0"

LOKSHIN, V.A., kand.tekhn.nauk; PAVLENKO, L.I., inzh.; TALDYKIN, K.N., inzh.; TARAVKOV, S.S., inzh.

Temperature conditions in the operation of air preheaters with a high degree of air heating. Elek.sta. 32 no.4:24-28 Ap '61. (MIRA 14:7)

(Air preheaters)

APPROVED FOR RELEASE: Thursday, September 26, 2002 CIA-RDP86-00513R001755010002-0"

LOKSHIN, V.A., kand.tekhn.nauk; PAVLENKO, L.I., inzh.; TARAVKOV, S.S., inzh.

Testing of a small economizer for boilers fired with anthracite fines under a system of upward gas flow. Teploenergetika 9 no.5:10-15 My '62. (MIRA 15:4)

1. Vsesoyuznyy teplotekhnicheskiy institut i Rostovenergo.
(Boilers--Testing)

TATARINOV, B.P., doktor tekhn. nauk, [illegible] inzh.

Redesigning of the separator systems of the boilers of a thermal electric power plant and state regional electric power plant of the Rostov Electric Utility System. Elek. sta. 34 no.10: 6-9 O '63. (MIRA 16:12)

APPROVED FOR RELEASE: Thursday, September 26, 2002 CIA-RDP86-00513R001755010002-0"

TARAVON, F. S.
Z. I. Nekrasov, Stal, 1947, 7, 106-9; Chem. Abstr., 1947, 41, 5070

APPROVED FOR RELEASE: Thursday, September 26, 2002 CIA-RDP86-00513R001755010002-0"

582. FOUR YEARS' EXPERIENCE OF TAENIASIS CONTROL IN THE REGION OF THE FIRST LENINAKAN UNITED HOSPITAL (Russian text) - Tarayan A. M. - MED. PARAZIT. (Mosk.) 1958, 27/2 (165-169) Tables 4

Extirpation of taeniases was carried out in one of the regions of Leninakan during 1953-1956. The work consisted in detection of the patients, their treatment in hospital and the final verification of the results of treatment in 3-3.5 months. Hospital treatment gave positive results in about 72% of cases. When the results of treatment were checked in 3-3.5 months, it was demonstrated that complete disinfestation was attained in 87% of cases. The number of patients infested by taenia decreased from 203 in 1953 to 70 in 1956, while the infection of the region decreased from 0.8 to 0.2% for the same period. Cysticercosis of the cattle according to data from the meat factory showed considerable decrease as a result of veterinary-sanitary measures which were carried out simultaneously. (XVII, 50)

L 03029-67 EWT(m)/EWP(t)/ETI IJP(c) JD

ACC NR: AP6019016 (N) SOURCE CODE: UR/0032/66/032/001/0018/0018

42
36
B

AUTHOR: Shkrobot, E. P.; Tarayan, M. G.; Blyakhman, A.A.

ORG: State Scientific-Research Institute for Nonferrous Metals (Gosudarstvennyy nauchno-issledovatel'skiy institut tsvetnykh metallov)

TITLE: Production of analytical concentrate during analysis of high-purity tellurium

19 27

SOURCE: Zavodskaya laboratoriya, v. 32, no. 1, 1966, 18

TOPIC TAGS: inorganic synthesis, tellurium compound, spectrographic analysis

ABSTRACT: A method of concentrating impurities by extracting them in the form of dithizonate and hydroxyquinolate compounds was used during the analysis of high-purity tellurium. The dithizonates and hydroxyquinolates of all impurities, except gold, were extracted by 95-100% at pH 10. The gold dithizonate was extracted from a 3 N HCl solution. Cyclohexanol was added during the extraction of Al; Cd, Ag, and Co were extracted into concentrate by 50% on the average. This required the use of correction coefficients when determining their amounts. Other elements were extracted almost entirely (>75%). The analysis of tellurium consisted of (1) dissolving the Te sample in a mixture of HCl and HNO_3, (2) extracting gold dithizonate from ~ 2.5 N HCl, (3) extracting other impurities from ammonia solution (pH 10) in the presence of cyclohexanol, and (4) producing a concentrate of impurities by the evaporation of the

UDC: 543.7

Card 1/2

APPROVED FOR RELEASE: Thursday, September 26, 2002 CIA-RDP86-00513R001755010002-0"

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ACC NR: AP6019016 6

combined extraction in the presence of Te oxide and charcoal powder, the burning of organic substances, and the roasting of dry residue for 5 mins. at 400-420C. The concentrate was then analyzed spectrally. The sensitivity of determinations was $n \cdot 10^{-5}\%$ for Zn, $n \cdot 10^{-6}\%$ for Cd, Ni, Co, Fe, Au, and $10^{-7}\%$ for Ag, Cu, Ga, In, Al, Pb, Bi. The presence Al, Fe, and Cu in used reagents even after their purification, made it impossible to determine Al and Fe $< n \cdot 10^{-5}$ and Cu $< n \cdot 10^{-7}\%$. K. A. Aldoshina, F. F. Kolmakova, and G. I. Krivousova participated in the work. Spectral analysis was made by A. N. Bogoyavlenskaya, E. F. Pereverzeva, and L. V. Mostryukova.

SUB CODE: 07/ SUBM DATE: none

Card 2/2

TARAYAN, M.G.

Method of determining sulfur in tellurium. Sbor. nauch. trud. Gintsvetmeta no.19:740-742 '62. (MIRA 16:7)

(Sulfur—Analysis)
(Tellurium—Analysis)

TARAYAN, S.

Training specialists at a plant. NTO no.11:60 N '59. (MIRA 13:4)

1. Chlen respublikanskogo pravleniya Nauchno-tekhnicheskogo obshchestva priborostroyeniya, g.Yerevan.
(Erivan--Instrument industry)

APPROVED FOR RELEASE: Thursday, September 26, 2002 CIA-RDP86-00513R001755010002-0"

TARAYAN, S.

The first conference in Armenia. NTO no.12:32 D '59 (MIRA 13:3)

1. Uchenyy sekretar' Armyanskogo respublikanskogo pravleniya Nauchno-tekhnicheskogo obshchestva priborostroitel'noy promyshlennosti.
(Armenia--Instrument industry)

APPROVED FOR RELEASE: Thursday, September 26, 2002 CIA-RDP86-00513R001755010002-0"

PANOSYAN, A.K.; ARUTYUNYAN, R.Sh.; TARAYAN, Sh.S.

Effect of the interrelationships of some soil bacteria on nitrogen assimilation under various farm crops. Vop.mikrobiol. no.1:219-229 '61. (MIRA 17:10)

APPROVED FOR RELEASE: Thursday, September 26, 2002 CIA-RDP86-00513R001755010002-0"

TARAYAN, S.

In the Scientific Technical Society of Armenian Instrument Manufacturers. Prom.Arm. 5 no.1:59-61 Ja '62. (MIRA 15:2)

1. Uchenyy sekretar' Armyanskogo respublikanskogo pravleniya Nauchno-tekhnicheskogo obshchestva priborostroitel'noy promyshlennosti.

(Armenia--Instrument industry)

TARAYAN, S.

Valuable initiative. Prom.Arm. 5 no.9:58-59 S '62. (MIRA 15:9)

1. Uchenyy sektetar' Nauchno-tekhnicheskogo obshchestva priborostroitel'noy promyshlennosti Armenii.
(Armenia--Machine-tool industry)

TARAYAN, S.G.

The M97 microammeter. Priborostroenie no.5:26 My '62. (MIRA 15:5)

(Ammeter)

APPROVED FOR RELEASE: Thursday, September 26, 2002 CIA-RDP86-00513R001755010002-0"

TARAYAN, S.G.

The M97 microammeter. Priborostroenie no.7:28-29 Jl '63.
(MIRA 16:9)

APPROVED FOR RELEASE: Thursday, September 26, 2002 CIA-RDP86-00513R001755010002-0"

TARAYAN, S.G., inzh.

The M900 microammeters and millivoltmeters. Priborostroenie no.6:20 Je '65. (MIRA 18:7)

APPROVED FOR RELEASE: Thursday, September 26, 2002 CIA-RDP86-00513R001755010002-0"

PANOSYAN, A.K.; TARAYAN, Sh.S.; ARUTYUNYAN, R.Sh.

Effect of the root system of cereals on the assimilation of nitrogen [in Armenian with summary in Russian] Mikrobiol.sbor. no.4:3-12 '49.
(MICRO-ORGANISMS, NITROGEN-FIXING) (MIRA 9:8)
(GRAIN)

1. PANOSYAN, A. K.; MINASYAN, A. I.; TARAYAN, Sh. S.; ARUTYUNYAN, R. Sh.

2. USSR (600)

4. Botany - Ecology

7. Problem of interaction of certain crop rotation plants and microorganisms of the soil. Mikrobiol.sbor. no. 6, 1951.

9. Monthly Lists of Russian Accessions, Library of Congress, March 1953, Unclassified.

1. TARAYAN, SH.S.: MUNAJYAN, A.I.: PANOSYAN, A.K.: ANUTYUNYAN, R.SH:

2. USSR (600)

4. Soil Microorganisms

7. Problems of interaction of certain crop totation plants and microorganisms of the soil (in Armenian with Russian Summary). Mikrobiol. sbor. No. 6, 1951

9. Monthly List of Russian Accessions, Library of Congress, March, 1953, Unclassified.

PROCESSES AND PROPERTIES INDEX

7

Rapid determination of magnesium in limestones and dolomites. N. A. Tananaev and V. M. Tatavan. *Zavodskaya Lab.* 3, 112-13(1931); cf. Tananaev, *ibid.* 1, Nos. 8-9(1932).—It is recommended to ppt. $Mg(OH)_2$ in the filtrate from the Ca detn. after removing NH_4^+ by treatment with HCHO. The $Mg(OH)_2$ ppt. is ignited and weighed as MgO. Chas. Blanc

ASM-SLA METALLURGICAL LITERATURE CLASSIFICATION

PROCESSES AND PROPERTIES INDEX

18

Purification of copper-sulfate solutions for crystallization. L. A. Rotinyantz and V. Terayan. *J. Applied Chem.* (U. S. S. R.) 9, 813-18(1936).—In the production of $CuSO_4$ from hydrometallurgical soln. (cf. Asaev, *et al.*, *C. A.* 30, 5510, 5520), a hot soln. of $CuSO_4$, contaminated with Fe, Zn, Co, Ni, As, Sb, Al, Mg and Ca, is treated with 1.5 parts of $Ca(ClO)_2$. The ppt. of $Fe(OH)_3$, together with Sb, As and $CaSO_4$ is filtered off. The filtrate is treated with HF and NaF to ppt. the fluorides of Ca and Mg and in part Al and Zn. The filtrate after concn. gives pure $CuSO_4$. The HF is recovered by treating the filter cake with H_2SO_4.

Chas. Blanc

ASM-SLA METALLURGICAL LITERATURE CLASSIFICATION

7

CA

Potentiometric titration of aluminum in silicate rocks.
V. M. Tarayan. *Zavodskaya Lab.* 8, 273-6(1939).
Fuse 0.25-0.30 g. of the sample with Na_2CO_3, dissolve in HCl, ppt. the Ti, Al and Fe with NH_3, filter, wash with hot water and dissolve in 1 *N* HCl until acid to methyl orange. Sat. the soln. with NaCl, add an equal vol. alc., sat. with CO_2, add 3-4 drops of cold, satd. $FeSO_4$ soln. and titrate with 0.5 *N* NaF. The potentiometric results are as accurate as in gravimetric results. H. Z. K.

1ST AND 2ND CODES

PROCESSES AND PROPERTIES INDEX

3RD AND 4TH CODES

COMMON ELEMENTS

COMMON VARIABLES INDEX

M

***Potentiometric Determination of Beryllium.** V. M. Tarayan (*Zavod. Lab.*, 1946, 12, (6), 543–546).—[In Russian]. The complex Na_2BeF_4 is sufficiently stable to make possible the potentiometric determination of Be with NaF. The stability of Na_3AlF_6 is of the same order, however, so that the presence of Al interferes with the potentiometric titration of Be and vice versa. Mg does not interfere with the determination of Be. A description of the scheme of analysis is given.—N. A.

MATERIALS INDEX

ASB-SLA METALLURGICAL LITERATURE CLASSIFICATION

3RD AND 4TH CODES

1ST AND 2ND LETTER

AUTHOR INDEX

1ST AND 2ND ORDERS

PROCESSES AND PROPERTIES INDEX

C

Potentiometric determination of calcium. W. M. TARA-YAN. *Zavodskaya Lab.*, **13**, 554–57 (1947); abstracted in *Chem. Zentr.*, **1949**, I [7/8] 414. Ca can be determined potentiometrically only by precipitation reaction. The method for titration with fluorine ion and oxalate ion is described in detail; the titration can also be made in the presence of Cl, NH_4, and Mg except in cases where the Mg:Ca ratio is greater than 3:1. M. HA.

CONDENSED ELEMENTS

CHEM. MATERIALS INDEX

ASM-SLA METALLURGICAL LITERATURE CLASSIFICATION

3RD AND 4TH ORDERS

1ST AND 2ND LETTERS

7

TARAYAN, V.M.

Potentiometric determination of aluminum with fluoride ion. V. M. Tarayan and R. N. Ovseyan (V. M. Molotov State Univ., Yerevan). *Izvest. Akad. Nauk Armyan. S.S.R., Fiz.-Mat., Estestven. i Tekh. Nauk* 5, 409-508 (1952). The investigation was a study of the conditions for the Treadwell and Hermanni method (C.A. 24, 4741). The initial pH should be 8. Ca and B did not interfere. On a titration curve there were 2 distinct breaks, the 1st corresponding to the equiv. point of Al and the 2nd to that of Ca. This method for Al was not applicable in the presence of Be. Bivalent members of the 3rd analytical group did not interfere nor did NH_4, BO_3, PO_4, and NH_4^+. M. Hirsch

1952

APPROVED FOR RELEASE: Thursday, September 26, 2002 CIA-RDP86-00513R001755010002-0"

7

54

Potentiometric reactions of precipitation and of complex formation with platinum indicator electrode. V. M. Tarasov (V.M. Molotov State Univ., Yerevan). *Zavod. Lab.* 18, 50 (1952). The purpose of this investigation was to study the applicability of ppts. and of complex formations in quant. analysis. Solns. of $Pt(NO_3)_2$ and $Pt(OAc)_2$ were titrated potentiometrically with $(NH_4)_2C_2O_4$. The titrate was aq. or aq.-alc. and neutralized with AcOH or HNO_3 to methyl orange. The potential indicating system was Pt, Fe^{+++}, Fe^{++}. The potential jump at the equiv. point was distinct. It was more pronounced in aq.-alc. solns. than in aq. solns. Use of HNO_3 enhanced the sharpness of the equiv. point. Alkali acetates did not interfere provided their concn. did not exceed 1 *N*. Titration with $P_2O_7^{4-}$ gave a good end point, but not quite as clear as with $C_2O_4^{2-}$. Titration with PO_4^{3-} and P^- gave unsatisfactory results. M. Hosch

1952

TARAYAN, V.M.

Mercurimetry as a reductometric method in volumetric analysis. Part 4. Mechanism of mercurimetric reduction. Izv.AN Arm.SSR.Ser.FMET nauk 5 no.1:9-16 '52. (MLRA 9:7)

1.Yerevanskiy gosudarstvennyy univesitet.
(Mercurimetry)

TARAYAN, V. M.

Dissertation: "Mercurometry As a Reductometric Method in Volumetric Analysis (Mercuroreductometry)." Dr Chem Sci, Tbilisi State Univ., Tbilisi, 1953. (Referativnyy Zhurnal--Khimiya, Moscow, No 5, Mar 54)

SO: SUM 243, 19 Oct 54

CIA-RDP86-00513R001755010002-0"

TARAYAN, V. M. (YEREVAN)

USSR/Chemistry - Mercury Compounds Aug 53

"The Properties of the Mercu o-Ion," V. M. Tarayan (Yerevan)

Usp Khim, Vol 22, No 8, pp 1002-1009

On the basis of available data, arrives at the conclusion that Hg is bivalent both in mercuri-compds and mercuro-compds. Points out that mercuro-compds always dissociate with the formation of mercuri-ions. Represents mercuro-compds as X-Hg-Hg-X. 18 USSR refs and 31 foreign refs are appended.

269T25

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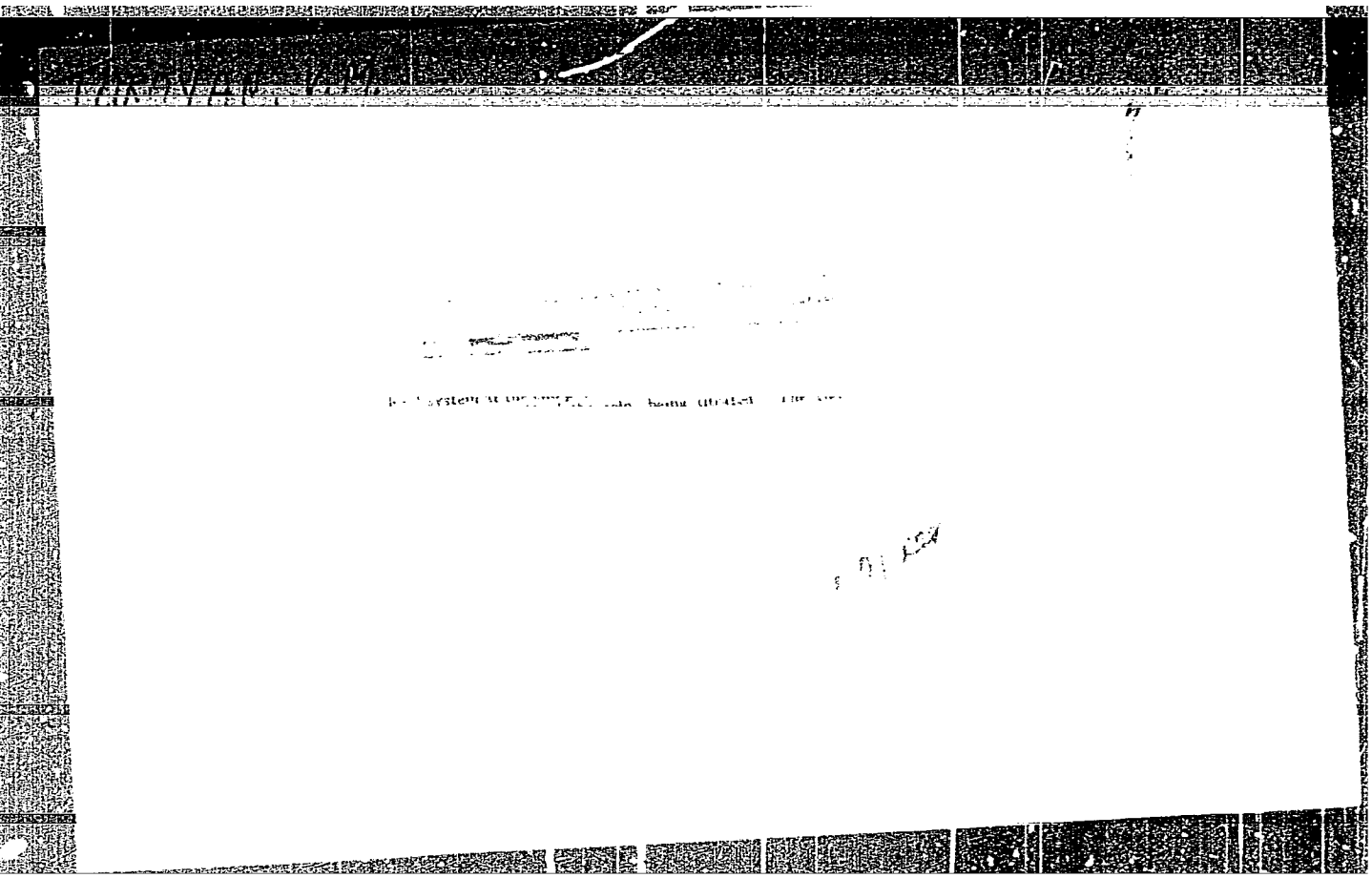

TARAYAN, V M

1/1149 Determination of iron with mercurous nitrate in the presence of chlorides. V. M. Tarayan [illegible] (USSR, [illegible])

[illegible]

obtained [illegible] sample is fused with 1.5 g of Na_2CO_3, the mass [illegible] dissolved in 2 N H_2SO_4, 0.3 N HNO_3 or 2 N HCl. [illegible] solution is diluted with water to a vol. of 100 [illegible] solution are added, [illegible] 0.1 N $Hg_2(NO_3)_2$. Results are independent of the nature of the acid used. G. S. Smith

TARAYAN, V.M.

Potential of the mercury electrode in mercurous solutions. Nauch.trudy Erev.un.ne.53:65-73 '56. (MIRA 9:10)

1.Kafedra analiticheskoy khimii.
(Electrodes, Mercury)

of Al with NaCl the [illegible] pH range is 2 to [illegible]
optd. for which the optimum pH range and the use of a
With the compensation method and the use of a
S.C.E., the electrode potential of the aluminium
electrode in a soln. of Al with an acetate buffer
-1·1 V. In the titration with NaF, the
potential at the end-point is -1·38 V. The
potential of the aluminium electrode remains
[illegible] carried out by means
[illegible] considered

TARAYAN, V.M.

TARAYAN, V.M.; ELIZAYAN, L.A.

Solubility product of tetravalent cerium hydroxide. Izv. AN Arm. SSR Ser. khim. nauk 10 no.3:189-193 '57. (MIRA 10:12)

1. Yerevanskiy gosudarstvennyy universitet im. V.M. Molotova.
(Cerium hydroxides)

APPROVED FOR RELEASE: Thursday, September 26, 2002 CIA-RDP86-00513R001755010002-0"

TARAYAN, V.M.

VIII. ХИМИЧЕСКИЕ НАУКИ

а) На степень доктора наук

808. [illegible] 1944, 240 [illegible]. (Тр. [illegible]).
[illegible] 1945, 19.3.

Эристави Димитрий Иосифович. К вопросу изучения физико-химических свойств марганцевых руд Чиатура. 1944, 260 с. (Инст. химии АН Груз. ССР).
Защ. 1945, 19.3.

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Защ. 1943, 19.7.

810. Тараян Вергиния Макоровна. Меркурометрия как редуктометрический метод объемного анализа. Ереван, 1953. [4], 266 с., 30 отд. рис.
Защ. 1954, 14.1.

Dissertation for degree of
Doctor Chemical Sciences

Def. at
Tbilisi State U.

APPROVED FOR RELEASE: Thursday, September 26, 2002 CIA-RDP86-00513R001755010002-0"

TARAYAN, V.M.; MELIKSETYAN, A.P.

Reductometric determination of hypochlorite by means of mercury. Nauch. trudy Erev. un. 60:73-82 '57. (MIRA 11:8)

1.Kafedra analiticheskoy khimii Yerevanskogo gosudarstvennogo universiteta.
(Hypochlorites) (Titration)

APPROVED FOR RELEASE: Thursday, September 26, 2002 CIA-RDP86-00513R001755010002-0"

TARAYAN, V.M.; ELIAZYAN, L.A.

Effect of pH and complex formation reactions on the potential of a ceric - cerous system. Izv. AN Arm. SSR ser. khim. nauk 10 no.6:395-401 '57. (MIRA 11:6)

1.Yerevanskiy gosudarstvennyy universitet im. V.M. Molotova.
(Cerium)

APPROVED FOR RELEASE: Thursday, September 26, 2002 CIA-RDP86-00513R001755010002-0"

TARAYAN, V.M.; EKIMYAN, M.G.

Effect of pyrophosphate and fluoride on the oxidation-reduction potential of the Mn^{3+}/Mn^{2+} system. Izv. AN Arm. SSR khim. nauk 11 no.1:23-29 '58. (MIRA 11:6)

1. Yerevanskiy gosudarstvennyy universitet.
(Manganese) (Oxidation--Reduction reaction)

APPROVED FOR RELEASE: Thursday, September 26, 2002 CIA-RDP86-00513R001755010002-0"

TARAYAN, V.M.; ELIAZYAN, L.A.

Cerium pyrophosphate formation reaction. Izv.AN Arm. SSR. Khim.nauki 11 no.4:243-248 '58. (MIRA 11:11)

1. Yerevanskiy gosudarstvennyy universitet.
(Cerium phosphates)

APPROVED FOR RELEASE: Thursday, September 26, 2002 CIA-RDP86-00513R001755010002-0"

5(2) PHASE I BOOK EXPLOITATION SOV/1760

Tarayan, Vergine Makarovna

Merkuroreduktometriya; merkurometriya kak reduktometricheskiy metod ob"yemnogo analiza (Use of Mercury as a Titrimetric Reducing Agent; Mercury Reduction in Volumetric Analysis) Yerevan, Izd-vo Yerevanskogo univ-ta, 1958. 191 p. 1,000 copies printed.

Sponsoring Agency: Yerevan. Universitet. Redaktsionno-izdatel'skiy sovet.

Resp. Ed.: Yu.Yu. Lur'ye; Ed. of Publishing House: N.Oganyan; Tech. Ed.: A.Ovasapyan.

PURPOSE: This book is intended for chemical analysts, students and teachers of quantitative analysis courses and other persons interested in mercury and its compounds as reducing agents in chemical analysis.

COVERAGE: The book contains literary data and theoretical considerations on the results of studies dealing with the properties of mercury ions. Also, the author has collected and generalized the results of Soviet and foreign literature published since 1940 on the utilization of the reduction properties of mercury compounds in quantitative analysis. Methods of precipitation and

Card 1/7

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reduction methods of analysis, described as new, which bear a fine shade of difference from the well-known mercurimetric method are included under the name "merkuroreduktometriya" [reduction mercurimetry]. The author further states that this field is relatively new and is in no wise exhausted by this book. There are 183 references, 87 of which are Soviet, 15 English, 70 German, 8 French, and 3 Spanish. No personalities are mentioned.

TABLE OF CONTENTS:

Foreword 3

Ch. I. Properties of a Mercury Ion 7
1. Structure of mercury compounds 7
2. Special features of the equilibrium $Hg_2^{2+} \rightleftarrows Hg^2 + Hg$ 14
3. Electrochemical properties of mercury ions 22
a. Normal potential of a Hg^{+2}_2/Hg-system and the origination of the solubility of mercury salts 22
b. The potential of a mercury electrode in solutions of mercury salts 24

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c. The influence of complex formations on the potential of a mercury electrode in mercury and mercury ion solutions 29
d. The influence of acidity on the oxidation-reduction potential of an Hg^{2+}/Hg-system 40

Ch. II. The Possibility of Using Mercury Compounds in Reduction Mercurimetry 47
1. Direct reduction-mercurimetric determination of oxidizing agents 48
2. Reduction-mercurimetric determination of oxidizing agents in the presence of rhodanide 49
3. Reduction-mercurimetric determination based on displacement reactions 52
4. Reduction-mercurimetric determinations in alkaline media 53

Ch. III. Active Solutions Used in Reduction Mercurimetry 54
1. Preparation of mercury salt solutions 54
2. Establishing the titer of active solutions used in reduction mercurimetry: mercury nitrate and mercury perchlorate 55
a. Gravimetric method 55
b. Volumetric analytical methods of determining mercury ions 57
3. Stability of mercury salt solutions 63

APPROVED FOR RELEASE: Thursday, September 26, 2002 CIA-RDP86-00513R001755010002-0"

Ch. IV. Methods of Direct Reduction-Mecurimetric Determination of Oxidizing Agents 67
1. Determination of gold 69
2. Determination of cerium 77
a. Potentiometric variant 78
b. Visual variant 82
3. Determination of hypobromites 85
a. Potentiometric variant 87
b. Visual variant 90
4. Determination of hypochlorites 92
5. Determination of manganese 96
a. Potentiometric variant 96
b. Visual variant 100
6. Determination of chromium 104
7. Determination of vanadium 108

Ch. V. Reduction-Mercurimetric Method of Determining Oxidizing Agents in the Presence of Rhodanide 111

APPROVED FOR RELEASE: Thursday, September 26, 2002 CIA-RDP86-00513R001755010002-0"

1. Determination of iron 113
   a. Oxidation-reduction potential of the Fe^{3+}/Fe^{2+}-system in the presence of rhodanide 115
   b. Special features of the reduction-mercurimetric determination of iron oxide 118
   c. Reduction-mercurimetric determination of iron in the presence of chlorides 124
2. Determination of iodine 128
   a. Potentiometric titration of iodine with mercury nitrate 129
   b. Visual variant 132
3. Determination of molybdenum 133
   a. Potentiometric determination of molybdenum 135
   b. Dependency of the potential of a system on rhodanide concentration and acidity 139
4. Determination of Hexacyanoferrates (III) 143
5. Determination of Copper 144
   a. Potentiometric variant 144
   b. Influence of rhodanide on the oxidation-reduction potential of a Cu^{2+}/Cu^{+}-system 146
   c. Visual variant of the reduction-mercurimetric determination of copper 149

APPROVED FOR RELEASE: Thursday, September 26, 2002 CIA-RDP86-00513R001755010002-0"

6. The determination of arsenic (V), tungsten (VI) and titanium (IV) 153

Ch. VI. Reduction-Mercurimetric Determination of Oxidizing Agents, Based on Displacement Reactions 156
1. Determination of chromium 157
2. Determination of vanadium 159
3. Determination of cerium 160
4. Determination of manganese 161
5. Determination of persulfates 161
6. Determination of copper 163
7. Determination of hypochlorites 163
8. Determination of hydrogen peroxide and potassium chlorate 165

Ch. VII. Reduction-Mercurimetric Determinations in Alkaline Media 166
1. Determination of trivalent chromium salts 168
2. Determination of arsenites 169
3. Determination of hydrogen peroxide 169
4. Determination of hydrazine 170

APPROVED FOR RELEASE: Thursday, September 26, 2002 CIA-RDP86-00513R001755010002-0"

Ch. VIII. The Specificity of Mecurimetric Reduction Reactions 171
1. Specificity of the reduction-mercurimetric determination of iron 173
a. Reduction-mercurimetric determination of iron in the presence of chromates, vanadates, and tetravalent cerium 173
b. Reduction-mercurimetric determination of iron in the presence of arsenic (V), molybdenum (VI), tungsten (VI), and titanium (IV) 176
2. Reduction-mercurimetric determination of copper in the presence of iron 179
3. Reduction-mercurimetric determination of molybdenum in the presence of tungsten 180

Bibliography 182

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APPROVED FOR RELEASE: Thursday, September 26, 2002 CIA-RDP86-00513R001755010002-0"

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Effect of pH on mercury electrode potential in solution of mercurous salt. Izv.AN Arm.SSR. Khim.nauki 11 no.2:95-98 '58. (MIRA 11:11)

1. Yerevanskiy gosudarstvennyy universitit.
(Electrodes, mercury) (Hydrogen ion concentration)

APPROVED FOR RELEASE: Thursday, September 26, 2002 CIA-RDP86-00513R001755010002-0"

TARAYAN, V.M.; EKIMYAN, M.G.

Composition of rhenium-rhodanide complexes. Report No.2. Dokl. AN Arm. SSR 27 no.1:33-35 '58. (MIRA 11:9)

1.Yerevanskiy gosudarstvennyy universitet. 2.Chlen-korrespondent AN ArmSSR (for Ekimyan).
(Rhenium) (Thiocyanates) (Complex compounds)

APPROVED FOR RELEASE: Thursday, September 26, 2002 CIA-RDP86-00513R001755010002-0"

TARAYAN, V.M.; MUSHEGYAN, L.G.

New method for separating rhenium and molybdenum. Dokl. AN Arm. SSR 27 no.3:157-160 '58. (MIRA 11:12)

1.Chlen-korrespondent AN Armyanskoy SSR (for Tarayan). 2.Institut geologicheskikh nauk AN Armyanskoy SSR.
(Rhenium) (Molybdenum)

APPROVED FOR RELEASE: Thursday, September 26, 2002 CIA-RDP86-00513R001755010002-0"

TARAYAN, V.M.; MUSHEGYAN, L.G.

Colorimetric determination of rhenium in the presence of molybdenum. Report No.2. Izv.AN Arm.SSR.Khim.nauki 12 no.6:407-412 '59. (MIRA 13:7)

1. Institut geologicheskikh nauk AN Armyanskoy SSR.
(Rhenium--Analysis)

APPROVED FOR RELEASE: Thursday, September 26, 2002 CIA-RDP86-00513R001755010002-0"

TARAYAN, V.M.; ELIAZYAN, L.A.

Spectrophotometric determination of cerium in the ultraviolet.
Izv. AN Arm. SSR.Khim. nauki 13 no.4:245-249 '60. (MIRA 13:12)

1. Institut geologicheskikh nauk AN ArmSSSR.
(Cerium--Analysis)

APPROVED FOR RELEASE: Thursday, September 26, 2002 CIA-RDP86-00513R001755010002-0"

TARAYAN, V.M.

Potentiometric precipitation and complex-forming reactions with a platinum indicator electrode. Izv. AN Arm. SSR, Khim. nauki 13 no.5:333-342 '60. (MIRA 14:2)

1. Yerevanskiy gosudarstvennyy universitet. Kafedra analiticheskoy khimii.

(Electrodes, Platinum) (Potentiometric analysis)

APPROVED FOR RELEASE: Thursday, September 26, 2002 CIA-RDP86-00513R001755010002-0"

TARAYAN, V.M., AVAKYAN, T.T.

Catalytic reduction of selenic acid. Dokl.AN Arm.SSR 30 no.4:231-234 '60. (MIRA 13:8)

1. Institut geologicheskikh nauk Akademii nauk Armyanskoy SSR.
2. Cheln-korrespondent AN Armyanskoy SSR (for Tarayan).
(Selenic acid) (Reduction, Chemical)

APPROVED FOR RELEASE: Thursday, September 26, 2002 CIA-RDP86-00513R001755010002-0"

TARAYAN, V.M.; NALBANDYAN, N.S.

Effect of iron on the color of a rhenium-thiocyano complex.
Izv. AN Arm.SSR. Khim.nauki 14 no.5:435-440 '61. (MIRA 15:1)

1. Institut geologicheskikh nauk AN Armyanskoy SSR.
(Rhenium compounds)
(Thiocyano compounds)

APPROVED FOR RELEASE: Thursday, September 26, 2002 CIA-RDP86-00513R001755010002-0"

S/171/61/014/006/004/005
E075/E136

AUTHORS: Tarayan, V.M., Arstamyan, Zh.M., and Shaposhnikova, G.N.

TITLE: Coprecipitation of small amounts of selenium and tellurium with ferric hydroxide. Part I. Precipitation of selenium.

PERIODICAL: Akademiya nauk Armyanskoy SSR. Izvestiya. Khimicheskiye nauki, v.14, no.6, 1961, 551-559

TEXT: The authors investigated: 1) the behaviour of Se (IV) in the presence of Te (IV) during their simultaneous precipitation with $Fe(OH)_3$; 2) influence of elements which are always present in the sulphide ores such as Cu, Pb, Cd, Zn, Mo; 3) the possibility of single stage precipitation of Se with $Fe(OH)_3$; and 4) the possibility of application of the precipitation method for determination of Se and Te in sulphide ores. The experiments were conducted with 0.05-0.5 mg of Se and 300 mg Fe salt. Precipitation was carried out with NH_4OH in the presence of NH_4Cl. Se coprecipitated with $Fe(OH)_3$ was determined colorimetrically. It was shown that the precipitation of Se with

Card 1/2

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Coprecipitation of small amounts ... S/171/61/014/006/004/005
E075/E136

$Fe(OH)_3$ was completed between pH = 6 to 8. At pH = 8 the percentage of Se precipitated decreases. The quantity of Se which is fully precipitated with 300 mg of Fe (single precipitation) did not exceed 0.4 mg. The best results were obtained by precipitating $Fe(OH)_3$ by dropwise addition of concentrated NH_4OH at room temperature. This method gives a $Fe(OH)_3$ with a maximum specific surface. It was established that Se is adsorbed on $Fe(OH)_3$, when the latter precipitates. As the amount of adsorbed Se decreases with increasing temperature, the best separation of Se was achieved at room temperature. Te is quantitatively precipitated with Se between pH 6.4 to 8.1. Considerable quantities of Cu, Zn, Pb, Cd and Mo (up to 300 mg) did not influence the process of Se precipitation with $Fe(OH)_3$. There are 6 figures and 1 table.

ASSOCIATION: Institut geologii AN ArmSSR
Yerevanskiy gosudarstvennyy universitet
(Geology Institute AS Arm.SSR
Yerevan State University)

SUBMITTED: July 5, 1961

Card 2/2

APPROVED FOR RELEASE: Thursday, September 26, 2002 CIA-RDP86-00513R001755010002-0"

TARAYAN, V.M.; OVSEPYAN, Ye.N.; KHACHATRYAN, L.G.

Composition of the rhodanide complex of rhenium. Report No.3. Dokl. AN Arm. SSR 33 no.4:169-171 '61. (MIRA 15:1)

1. Yerevanskiy gosudarstvennyy universitet. 2. Chlen-korrespondent AN Armyanskoy SSR (for Tarayan).
(Rhenium compounds)

APPROVED FOR RELEASE: Thursday, September 26, 2002 CIA-RDP86-00513R001755010002-0"

TARAYAN, V.M.; AVAKYAN, T.T.

Colorimetric determination of selenium and tellurium in sulfide ores. Zav.lab. 27 no.8:967-970 '61. (MIRA 14:7)

1. Geologicheskiy institut AN Armyanskoy SSR.
(Selenium--Analysis) (Tellurium--Analysis) (Sulfides)

APPROVED FOR RELEASE: Thursday, September 26, 2002 CIA-RDP86-00513R001755010002-0"

S/171/62/015/005/002/008
E071/E592

AUTHORS: Tarayan, V.M. and Arstamyan, Zh.M.

TITLE: On the colorimetric determination of selenium and tellurium in sulphide ores. Communication 2

PERIODICAL: Akademiya nauk Armyanskoy SSR. Izvestiya. Seriya khimicheskikh nauk. v.15, no.5, 1962, 415-421

TEXT: A modification of the previously proposed rapid method of determination of selenium and tellurium in sulphide ores based on the reduction of selenous acid with hydrazine in the presence of iodine monochloride (Zav.lab.27, 967, 1961) is described. During the photometric determination of tellurium as iodide complex, the preliminary reduction and separation of selenium by the iodide is incomplete. For this reason selenium should be separated under such conditions that the formation of the tellurium complex does not take place. Therefore, ranges of concentration of iodide (0.02 N) and hydrochloric acid (0.5-1.0 N) which represent a threshold of complex formation for tellurium (at tellurium concentrations 0.05-5 μg/ml) were found. It was also shown that the reduction of selenous acid in 0.01 N iodide

Card 1/2

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solution is quantitatively completed in one hour. In the modified method of determination, first the selenous acid is reduced (0.01 N potassium iodide); at this concentration of iodide, tellurium does not form a complex. After the determination of selenium, the conditions are modified to produce tellurium complex for the photometric determination of tellurium. This method is superior to the previously proposed one in that it is faster, well reproducible and more accurate in respect of tellurium readings. The analytical procedure is described in detail. There are 2 figures and 3 tables.

ASSOCIATION: Yerevanskiy gosudarstvennyy universitet
Kafedra analiticheskoy khimii
(State University in Yerevan, Department of Analytical Chemistry)

SUBMITTED: September 3, 1962

TARAYAN, V.M.; ARSTAMYAN, Zh.M.

Coprecipitation of selenium and tellurium with iron hydroxide. Part 3: Coprecipitation and precipitation of selenium and tellurium. Izv.AN Arm.SSR.Khim.nauki 17 no.1:38-45 '64. (MIRA 17:4)

1. Yerevanskiy gosudarstvennyy universitet, kafedra analiticheskoy khimii.

APPROVED FOR RELEASE: Thursday, September 26, 2002 CIA-RDP86-00513R001755010002-0"

TARAYAN, V.M.; MUSHEGYAN, L.G.

Composition of the rhenium thiocyanate complex compound. Part 4. Izv.AN Arm.SSR.Khim.nauki 17 no.1:46-54 '64. (MIRA 17:4)

1. Yerevanskiy gosudarstvennyy universitet, kafedra analiticheskoy khimii.

TARAYAN, V.M.; MUSHEGYAN, L.G.; EKIMYAN, M.G.

Composition of a rhenium thiocyanate complex compound. Part 5: Rhenium thiocyanate complex compound in sulfuric acid solution. Izv. AN Arm.SSR.Khim.nauki 17 no. 3:296-300 '64. (MIRA 17:7)

1. Yerevanskiy gosudarstvennyy universitet, kafedra analiticheskoy khimii.

TARAYAN, V.M.; ARSTAMYAN, Zh.M.

Determination of selenium, tellurium, and gold in gold-containing electrolyte slimes. Izv. AN Arm. SSR. Khim. nauki 17 no.6:623-630 '64. (MIRA 18:6)

1. Yerevanskiy gosudarstvennyy universitet, kafedra analiticheskoy khimii.

MUSHEGYAN, L.G.; TARAYAN, V.M.

Composition of rhenium thiocyanate complex compound. Izv. AN Arm. SSR. Khim.nauki 18 no.1:118-120 '65. (MIRA 18:5)

1. Yerevanskiy gosudarstvennyy universitet, kafedra analiticheskoy khimii.

AP 5015849

65/01/002/0025/0226
541.9+546.23+547.496.3

[illegible] Sadikova, [illegible]

[illegible] between selenium and thiourea

[illegible] determination, thiourea

[illegible] selenious acid with thiourea has been [illegible] of elemental selenium [illegible] selenium, but also [illegible] concentration of thiourea [illegible] (SO_4). The dissolution of elemental selenium in thiourea and the [illegible] of a solid phase in dilution of sulfuric acidities are the result of the lack of formation of a complex compound between selenium and thiourea. The existence of this [illegible] of a complex compound between selenium and thiourea [illegible] spectrophotometric analysis: the polaro[illegible] determined by polarographic and [illegible] toward more negative values [illegible] wave potential of selenious acid was shifted [illegible] and the spectral absorption peak of 230 mμ with a molar extinction [illegible] of area.

07466-65

ACCESSION NR: AP5015646 [illegible] tellurous acid

and pure urea; in other words, [illegible] complex compound are being [illegible] composition of this complex compound are being [illegible] the spectrophotometric deter-

[illegible] complex [illegible] tellurium. Orig. art has [illegible] structure and also [illegible]

[illegible] Kafedra analiticheskoy khimii Yaroslavskiy gosudarstvennyy universitet [illegible] Department of Analytical Chemistry, Yaroslavl State University)

SUBMITTED: [illegible] ENCL: 00 SUB CODE: IV

NO REF SOV: [illegible] OTHER: [illegible]

TARAYAN, V.M.; GAYBANYAN, A.G.

New reaction for perrhenate ions. Izv.AN Arm.SSR. Khim.nauki 18 no.4:426 '65. (MIRA 18:12)

1. Yerevanskiy gosudarstvennyy universitet, kafedra analiticheskoy khimii. Submitted March 9, 1965.

APPROVED FOR RELEASE: Thursday, September 26, 2002 CIA-RDP86-00513R001755010002-0"

TARAYAN, V.M.; SARKISYAN, A.A.

Thiourea complex of tellurium. Zhur.neorg.khim. 10 no.12: 2684-2686 D '65. (MIRA 19:1)

1. Yerevanskiy gosudarstvennyy universitet.

OVSEPYAN, Ye.N.; TARAYAN, V.M.; SHAPOSHNIKOVA, G.N.; VARTANYAN, S.A.; TOSUNYAN, A.O.; MESROPYAN, L.G.; KUROYAN, R.A.

Letters to the editors. Izv. AN Arm.SSR. Khim. nauki 18 no.2:225-228 '65. (MIRA 18:11)

1. Yerevanskiy gosudarstvennyy universitet, kafedra analiticheskoy khimii (for Ovsepyan, Tarayan, Shaposhnikova).
2. Institut organicheskoy khimii AN ArmSSR (for Vartanyan, Tosunyan, Mesropyan, Kuroyan).

TARAYAN, Ye.I.

Cavitation erosion in components of superhigh-pressure radial-axial flow hydroturbines. Izv.AN Arm.SSR.Ser.FMET nauk 8 no.5:71-85 S-O '55. (MLRA 9:3)

1. Vodno-energeticheskiy institut AN Armyanskoy SSR.
(Hydraulic turbines)

APPROVED FOR RELEASE: Thursday, September 26, 2002 CIA-RDP86-00513R001755010002-0"

TARAYAN, Ye. S,:

TARAYAN, Ye. S.: "X-ray irradiation of injuries to the bonejoint system in brucellosis". Baku, 1955. Azerbaydzhan State Medical Inst. (Dissertations for the Degree of Candidate of Medical Sciences.)

So. Knizynaya letopis'. No. 49, 3 December 1955. Moscow.

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BOYARSKIY, L.A.; GORDOV, A.N.; IOSEL'SON, G.L.; KANDYBA, V.V.; KIRENKOV, I.I.; KOVALEVSKIY, V.A.; KRAKHMAL'NIKOVA, G.A.; LAPINA, E.A.; TARAYANTS, K.G.

Using the photoelectric method for precise work in the field of optical pyrometry. Trudy VNIIM no.36:23-32 '58. (MIRA 11:11)
(Pyrometry)

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TARAYEV, S., podpolkovnik

Relate all political education work to the tasks of sub-units. Voen.-inzh.zhur.94 no.7:17-22 Jl '50. (MIRA 10:12)
(Communist education) (Military education)

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TARAYEVA, M.

DAIRYING

Spreading the practice of working on a 24-hours basis. Mol. Prom. 13 No. 8, 1952.

Monthly List of Russian Accessions, Library of Congress November 1952 UNCLASSIFIED

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1. TARAYEVA, M.

2. USSR (600)

4. Dairy Plants

7. Possibilities for increasing labor productivity in the butter industry. Moloch.prom., 14, no. 2, 1953.

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

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L 12768-66 EWT(m)/EWP(v)/T/EWP(t)/EWP(k)/EWP(b)/EWA(h)/EWA(c)

ACC NR: AP6002585 SOURCE CODE: UR/0286/65/000/023/0080/0080

INVENTOR: Lazarev, A. N.; Prokoshkin, D. A.; Il'in, L. S.; Shlykov, O. P.; Tarayeva, M. I.; Novoselov, A. S.; Barashkov, M. A.

ORG: none

TITLE: Brazing alloy for soldering. Class 49, No. 176784

SOURCE: Byulleten' izobreteniy i tovarnykh znakov, no. 23, 1965, 80

TOPIC TAGS: brazing, titanium, titanium brazing

ABSTRACT: This Author Certificate introduces a copper-base brazing alloy for titanium. To lower the melting temperature of the alloy and to increase the strength of joints, the alloy contains 2—4% aluminum, 4—6% tin, 24—26% titanium, and the rest copper. [ND]

SUB CODE: 13,11/ SUBM DATE: 12May64/ ATD PRESS: 4184

Card 1/1 UDC: 621.791.36:669.295

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15(2)

AUTHORS: Nikulina, L. N., Tarayeva, T. I. SOV/72-59-8-12/17

TITLE: Petrographical Peculiarities of China Stone (Petrograficheskiye osobennosti kitayskogo farforovogo kamnya)

PERIODICAL: Steklo i keramika, 1959, Nr 8, pp 40-44 (USSR)

ABSTRACT: G. L. Yefremov, A. I. Avgustinik (Footnote 1) established an analogy between China stone and the Olonets sandstone. The Gosudarstvennyy nauchno-issledovatel'skiy keramicheskiy institut (State Ceramic Scientific Research Institute) is studying China stone. The results of microscopic examinations are shown in the ground sections represented in figures 1 and 2, and it was found that China stone consists of quartz, feldspar, cemented sericite and a slight amount of carbonate. A more detailed description is given. The chemical analysis was carried out by T. V. Terent'yeva. Its results are shown in table 1. On the basis of the data found in the analysis the mineralogical composition of the samples was calculated and assembled in table 2. It was found that the fine fraction of China stone consist of 69% sericite, 22% quartz, and 9% carbonate. The thermal investigation of China stone was carried out by V. A. Berezovskaya

Card 1/2

(Footnote 2) and illustrated in figures 3,4 and 5. The mechanical composition of the ground samples is given in table 3 The results of ceramic investigations are to be found in table 4. Figure 6 shows the dilatometric curve of the stone Nan'-kan. Conclusions: China stone constitutes a metamorphic kind of the secondary quartzite type. Main components are quartz, sour plagioclase, and sericite. Measures will have to be taken to find similar kinds of stone on Soviet territory, since such a stone constitutes a valuable raw material for the ceramics industry. The types mentioned in the relevant publications (Footnotes 3 and 4) are not suited for these purposes since they contain dark pigments. There are 6 figures, 4 tables, and 4 Soviet references.

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NIKULINA, L.N.; TARAYEVA, T.I.

A variety of Glukhovtsy kaolin. Trudy GIKI no.1:38-45 '60. (MIRA 16:1)

(Glukhovtsy—Kaolin)

FILINTSEV, G.P.; TARAYEVA, T.I.

Dressing Luppiko deposit pegmatites. Trudy GIKI no.3:3-13 '61. (MIRA 18:7)

APPROVED FOR RELEASE: Thursday, September 26, 2002 CIA-RDP86-00513R001755010002-0"

GLASSON, V.V.; TARAYEVA, T.I.

Investigating Troshkova clay. Trudy GIKI no.3:31-46 '61. (MIRA 18:7)

TARAYEVA, YE. K.

VISHNEVSKIY, I.I.; ZUBAKIN, A.T.; MYAND, Kh.P.; LEYKIN, B.P., redaktor; TARAYEVA, Ye.K., redaktor izdatel'stva; MEL'NICHENKO, F.P., tekhnicheskiy redaktor

[Planning work and wages in construction brigades; practices of Estonian builders] Planirovanie truda i zarabotnoy platy v stroitel'nykh brigadakh; iz opyta stroek Estonskoi SSR. Moskva, Gos.izd-vo lit-ry po stroit. i arkhit., 1957. 57 p. (MIRA 10:9)
(Wages) (Estonia--Construction industry)