"APPROVED FOR RELEASE: 07/13/2001 CIA-RDP86-00513R001341420004-2

PODGHAYNOVA, V.N.; DOUGOREV, A.V.

Use of antipyrine derivatives in analytical chemistry. Report No.1: Extraction-photometric determination of titanium by means of diantipyrylmethane and tin (II) chloride. Zhur. anal. khim. 20 no.10:1059-1063 '65. (MIRA 18:11)

1. Ural'skiy politekhnicheskiy institut im. S.M. Kirova, Sverdlovsk.

APPROVED FOR RELEASE: 07/13/2001 CIA-RDP86-00513R001341420004-2"

"APPROVED FOR RELEASE: 07/13/2001 CIA-RDP86-00513R001341420004-2

MALKINA, T.G.; [illegible], V.N.

Determination of large amounts of copper by differential photometry. Zhur. anal. khim. 19 no.6:668-670 '64.

(MIRA 18:3)

1. Ural'skiy politekhnicheskiy institut imeni Kirova i Ural'skiy lesotekhnicheskiy institut, Sverdlovsk.

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"APPROVED FOR RELEASE: 07/13/2001 CIA-RDP86-00513R001341420004-2

PODCHAYNOVA, V.N., dotsent, kand. khimicheskikh nauk

Nature and stability of the thiosemicarbazide complex of copper in aqueous solutions. Sbor. nauch. trud. Ural. politekh. inst. no.122:120-127 '61. (MIRA 17:12)

APPROVED FOR RELEASE: 07/13/2001 CIA-RDP86-00513R001341420004-2"

"APPROVED FOR RELEASE: 07/13/2001 CIA-RDP86-00513R001341420004-2

CHECHNEVA, A.N.; PODCHAYNOVA, V.N.

Study of the reaction of platinum with 1,4-dipehnylthiosemicarbazide. Qualitative detection reaction for platinum. Izv. vys. ucheb. zav., khim i khim tekh. 7 no.5:731-735 '64 (MIRA 18:1)

1. Kafedra analiticheskoy khimii Ural'skogo politekhnicheskogo instituta imeni S.M. Kirova.

APPROVED FOR RELEASE: 07/13/2001 CIA-RDP86-00513R001341420004-2"

"APPROVED FOR RELEASE: 07/13/2001 CIA-RDP86-00513R001341420004-2

VOZISOVA, V.F.; PODCHAYNOVA, V.N.

Spectrophotometric study of a compound of germanium with N,N'-di-(2-hydroxy-5-sulfophenyl)-cyanophormazan. Zhur. anal. khim. 19 no.5:640-642 '64. (MIRA 17:8)

1. Ural'skiy politekhnicheskiy institut imeni Kirova, Sverdlovsk.

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"APPROVED FOR RELEASE: 07/13/2001 CIA-RDP86-00513R001341420004-2

PODCHAYNOVA, V. N.

The Second All-Union Conference on the Preparation and Analysis of High-Purity Elements, held on 24-28 December 1963 at Gorky State University im. N. I. Lobachevskiy, was sponsored by the Institute of Chemistry of the Gorky State University, the Physicochemical and Technological Department for Inorganic Materials of the Academy of Sciences USSR, and the Gorky Section of the All-Union Chemical Society im. D. I. Mendeleyev. The opening address was made by Academician N. M. Zhavoronkov. Some 90 papers were presented, among them the following:

V. M. Peshkova and co-workers; F. P. Gorbenko and others; V. N. Podchaynova and others. Methods for determining microquantities of Ni in P, Ca in Be compounds, and small quantities of Tl in Sb based materials.

(Zhur Anal Khim 19, No 6 1964 p. 777-79)

APPROVED FOR RELEASE: 07/13/2001 CIA-RDP86-00513R001341420004-2"

"APPROVED FOR RELEASE: 07/13/2001 CIA-RDP86-00513R001341420004-2

L 16599-63 EWP(q)/EWT(m)/BDS AFFTC/ESD-3 RM/JD

S/075/63/018/004/007/015

60

AUTHOR: Tikhonov, V. N. and Podchaynova, V. N.

TITLE: A spectrophotometric study of the peroxide complexes of cerium

PERIODICAL: Zhurnal analiticheskoy khimii, v. 18, no. 4, April 1963, 463-467

TEXT: The authors make a comparative study of the luminous absorption of cerium complexes in pure solutions and in the presence of other rare-earth elements, as well as magnesium. Their purpose was to find the optimum region of the spectrum in which the effect of the indicated elements would be minimal. They delineate portion of the spectrum in which it is necessary to measure the optical density in determining cerium by the peroxide method. There are 4 figures.

ASSOCIATION: Ural'skiy politekhnicheskiy institut im. S. M. Kirova, Sverdlovsk (Ural Polytechnic Institute im. S. M. Kirov, Sverdlovsk)

SUBMITTED: July 21, 1962

Card 1/1

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"APPROVED FOR RELEASE: 07/13/2001 CIA-RDP86-00513R001341420004-2

TIKHOVNOV, V.N.; PODCHAYNOVA, V.N.

Spectrophotometric study of peroxide complexes of cerium. Zhur. anal.khim. 18 no.4:463-467 Ap '63. (MIRA 16:6)

1. S.M.Kirov Ural Polytechnical Institute, Sverdlovsk.
(Cerium compounds) (Spectrophotometry)

APPROVED FOR RELEASE: 07/13/2001 CIA-RDP86-00513R001341420004-2"

"APPROVED FOR RELEASE: 07/13/2001 CIA-RDP86-00513R001341420004-2

PODCHAYNOVA, V.N.

Using para-anisidine in chemical analysis. Report No.2. Fractional detection and determination of copper with the help of para-anisidine. Trudy Ural. politekh. inst. no.94:134-140 '60. (MIRA 15:6)

(Anisidine) (Copper)

APPROVED FOR RELEASE: 07/13/2001 CIA-RDP86-00513R001341420004-2"

"APPROVED FOR RELEASE: 07/13/2001 CIA-RDP86-00513R001341420004-2

PODCHAYNOVA, V.N.

Colorimetric determination of copper in zinc melts by potassium thiocyanate. Trudy Ural. politekh. inst. no.94:141-144 '60. (MIRA 15:6)

(Colorimetry) (Copper)

APPROVED FOR RELEASE: 07/13/2001 CIA-RDP86-00513R001341420004-2"

"APPROVED FOR RELEASE: 07/13/2001 CIA-RDP86-00513R001341420004-2

Podchaynova, V. N.

PHASE I BOOK EXPLOITATION SOV/3850

SOV/9-M-8(11)

Akademiya nauk SSSR. Institut geokhimii i analiticheskoy khimii imeni V. I. Vernadskogo. Komissiya po analiticheskoy khimii

Spektrofotometricheskiye i kolorimetricheskiye metody analiza (Spectrophotometric and Colorimetric Methods of Analysis) Moscow, 1958. [illegible] p. (Series: Its: Trudy, tom. 8 (11) Errata slip inserted. 3,000 copies printed.

Resp. Ed.: I. P. Alimarin, Corresponding Member, Academy of Sciences USSR; Ed. of Publishing House: V. M. Peshkova; Tech. Ed.: N. I. Moskvichova.

PURPOSE: The publication is intended for chemists, particularly analytical chemists and geochemists.

COVERAGE: This collection of 29 articles is published as Volume VIII (XI) of the Transactions of the Committee on Analytical Chemistry at the Institute of Geochemistry and Analytical Chemistry imeni V. I. Vernadskiy, Academy of Sciences USSR. The general subject of the volume is the investigation of spectrophotometric and colorimetric analysis. Individual articles on the following topics may deserve special attention: the present state of light absorption analysis, the sensitivity of the colorimetric methods of inorganic analysis, the basic variations of the kinetic method of analysis, spectrophotometric investigation of heteropolyacids of germanium, a new colorimetric method of determining small quantities of thallium, a fluorimetric method of determining uranium, spectrophotometric investigation of the behavior of oxidation-reduction indicators, a phasometric optical-acoustical method of gas analysis, and a description of an automatic spectrophotometric gas analyzer. No personalities are mentioned. References are given at the end of each article.

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PODCHAYNOVA, V. N., Doc Chem Sci -- "Studies in the field of analytic chemistry of copper." Alma-Ata, 1961. (Kazakh State U im S. M. Kirov) (KL, 8-61, 230)

APPROVED FOR RELEASE: 07/13/2001 CIA-RDP86-00513R001341420004-2"

"APPROVED FOR RELEASE: 07/13/2001 CIA-RDP86-00513R001341420004-2

PODCHAYNOVA, V.N.; KRYLOVA, N.V.

Determination of copper in metallic lead. Trudy Ural.politekh. inst. no.96:113-116 '60. (MIRA 14:3)
(Copper—Analysis) (Lead—Analysis)

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"APPROVED FOR RELEASE: 07/13/2001 CIA-RDP86-00513R001341420004-2

PODCHAYNOVA, V.N.

Colorimetric determination of copper in steels and zinc alloys by means of rubeanic acid. Trudy Ural.politekh.inst. no.96:117-123 '60. (MIRA 14:3)

(Copper--Analysis) (Steel--Analysis) (Zinc alloys--Analysis)

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"APPROVED FOR RELEASE: 07/13/2001 CIA-RDP86-00513R001341420004-2

PODCHAYNOVA, V.N.

Analytical uses of dithiocarbamates. Trudy kom. anal. khim. 11:146-164 '60. (MIRA 13:10)

(Carbamic acid)

APPROVED FOR RELEASE: 07/13/2001 CIA-RDP86-00513R001341420004-2"

"APPROVED FOR RELEASE: 07/13/2001 CIA-RDP86-00513R001341420004-2

PODCHAYNOVA, V.N.; LOSEVA, G.G.

Use of para-anisidine in chemical analysis. Reaction of the copper ion with para-anasidine, and colorimetric determination of copper in nickel and zinc alloys and in colored glasses. Izv.vys.ucheb. zav.; khim.i khim.tekh. 2 no.3:316-321 '59. (MIRA 13:8)

1. Ural'skiy politekhnicheskiy institut imeni S.M.Kirova, kafedra analiticheskoy khimii.
(Anisidine) (Copper--Analysis)

APPROVED FOR RELEASE: 07/13/2001 CIA-RDP86-00513R001341420004-2"

"APPROVED FOR RELEASE: 07/13/2001 CIA-RDP86-00513R001341420004-2

KRYLOV, Ye.I.; PATSUK, V.V.; PODCHAYNOVA, V.N.

Structure of sulfur nitride. Izv.vys.ucheb.zav.; khim.i khim tekh. 3 no.1:41-44 '60. (MIRA 13:6)

1. Kafedra khimii i tekhnologii redkikh elementov Ural'skogo politekhnicheskogo instituta imeni S.M.Kirova.
(Sulfur nitride)

APPROVED FOR RELEASE: 07/13/2001 CIA-RDP86-00513R001341420004-2"

"APPROVED FOR RELEASE: 07/13/2001 CIA-RDP86-00513R001341420004-2

SOV/137-59-1-2154

Translation from: Referativnyy zhurnal. Metallurgiya, 1959, Nr 1, p 283 (USSR)

AUTHOR: Podchaynova, V. N.

TITLE: A Study of the Reaction of the Copper Ion With Thiosemicarbazide (Izucheniye reaktsii iona medi s tiosemikarbazidom)

PERIODICAL: Tr. Komis. po analit. khimii AN SSSR, 1958, Vol 8(11), pp 183-197

ABSTRACT: Thiosemicarbazide (I) forms with Cu^{2+} at pH 7 a blue complex in which two molecules of I correspond to one atom of Cu. This compound is stable in light for two hours and can be heated up to 60°C [without decomposing]. When the Cu^{2+} concentration is $1.5 \cdot 10^{-4}$-$3 \cdot 10^{-3}$ mole/liter the color follows the Lambert-Beer law. To 10-20 cc of a solution containing $5 \cdot 10^{-5}$-$1 \cdot 10^{-4}$ g/cc Cu^{2+} an excess of 20-40 cc of I solution and 2N H_2SO_4 to the mark are added; the mixture is read on the colorimeter. The relative error is 4%. Ni, Co, and Fe do not impede the determination, neither do small amounts of Au, Ag, or Ru. A procedure for the determination of Cu in Ni, Zn, and Au alloys is adduced. Time required for the analysis is 25-35 min.

P. K.

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"APPROVED FOR RELEASE: 07/13/2001 CIA-RDP86-00513R001341420004-2

PODCHAYNOVA, V.N.

Reaction of copper ion with thiosemicarbazide. Trudy kom. anal. khim. 8:183-197 '58. (MIRA 11:8)

1. Ural'skiy politekhnicheskiy institut im. S.M. Kirova.
(Semicarbazide) (Copper)

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"APPROVED FOR RELEASE: 07/13/2001 CIA-RDP86-00513R001341420004-2

AUTHOR: Podchaynova, V. N. 75-13-2-6/27

TITLE: On the Solubility of Copper and Silver Reinecke Acid Salts (O rastvorimosti tetrarodanodiamminokhromiatov medi i serebra)

PERIODICAL: Zhurnal Analiticheskoy Khimii, 1958, Vol. 13, Nr 2, pp. 193-195 (USSR)

ABSTRACT: Ammonium-tetrathiocyano-diamine chromate (Reinecke salt) is used to a great extent in analytical chemistry for the proof and determination of a series of metals; so e. g. for the gravimetric and titrimetric determination of copper and for the quantitative determination of mer= cury, cadmium, and thallium (Refs. 1-6). Though Reinecke salt is since long time known as analytical reagent for many metals data on the solubility of the tetrathiocyano--diamine chromates of these metals are missing up to now in publications. The knowledge of the solubilities makes, however, possible a better working out of methods for the proof and determination of a series of metals. In the present paper the solubility of the Reinecke salts of

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copper and silver in water at 15°C is investigated. In the investigation of the copper compound Reinecke salt was used which contained the radioactive chromium-51 (γ-emitter, half-life 225 days). The corresponding silver compound was investigated by means of the radioactive silver isotope (β-emitter, half-life 225 days). The synthesis of the Reinecke salt was carried out according to the method of Kul'berg (Ref. 1o).
The Reinecke salt of the univalent copper was precipitated in hydrochloric acid solution, the corresponding silver salt from neutral solution in the case of a small excess of silver nitrate. A great excess of silver nitrate is to be avoided since in this case a precipitation is produced which is difficult to filter. In the investigation of the solubility the fact is taken into account that in the case of an infinite dilution the concentrations of the radioactive and the inactive element are equal (Ref. 11). The low solubility of the Reinecke salt of copper permitted the application of the known equation according to Nerist for the computation of the solubility product.

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On the Solubility of Copper and Silver Reinecke Acid Salts 75-13-2-6/27

The solubility was investigated as follows: The weighed sample of the salt in question was for a long time kept in pure water under constant stirring at 15°C (thermo= stat!). In the case of copper salt the saturation of the solution was obtained after 10-12 hours, in the case of silver salts after 30-32 hours. The solubility of copper salt was also determined in 0,01 normal hydrochloric acid solution at 15°C. It was found that the solubility of the copper salt in pure water at 15°C ($6,6 \cdot 10^{-5}$ mol/liter) differs only to a small extent from the solubili= ty in 0,01 normal hydrochloric acid solution ($6,78 \cdot 10^{-5}$ mol/liter). This confirmed the good applicability of the precipitation of small quantities of copper as Reinecke salt from only to a small extent hydrochloric solution. The detection of the results by radiochemical-methods by means of the indicators chromium-51 and sil= ver-110 is described precisely.

It was found that the solubility of the Reinecke salts of copper and silver in water at 15°C is reduced with increasing atomic weight of the element. The solubility

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"APPROVED FOR RELEASE: 07/13/2001 CIA-RDP86-00513R001341420004-2

On the Solubility of Copper and Silver Reinecke Acid Salts 75-13-2-6/27

product of the copper salt at 15°C was computed; it amounts to mean value of $3.67 \cdot 10^{-9}$.
There are 2 tables and 13 references, 10 of which are Soviet.

ASSOCIATION: Ural'skiy politekhnicheskiy institut im. S. M. Kirova (Ural Polytechnical Institute imeni S. M. Kirov)

SUBMITTED: October 2, 1956

1. Silver salts--Solubility 2. Copper salts--Solubility
3. Water--Solvent action 4. Radioisotopes--Applications

Card 4/4

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"APPROVED FOR RELEASE: 07/13/2001 CIA-RDP86-00513R001341420004-2

AUTHORS: Podchaynova, V. N., Ivantsova, M. K. 75-13-3-4/27

TITLE: The Polarographic Characteristic of the Copper Thiosemicarbazide Complex in Sulphuric and Hydrochloric Acid Solutions (Polyarograficheskaya kharakteristika tiosemikarbazidnogo kompleksa medi v sernokislom i solyanokislom rastvorakh)

PERIODICAL: Zhurnal Analiticheskoy Khimii, 1958, Vol 13, Nr 3, pp 284-288 (USSR)

ABSTRACT: Polarographic methods are successfully employed in the investigation of complex compounds of many cations (Ref 1). The chief condition for the applicability of polarographic methods in the determination of the stability constants of a complex (Ref 2) is the reversibility of the reduction process of ions at a dropping-mercury electrode. In reversible electrode processes the only process taking a slow course is the diffusion of ions to the surface of the electrode. All other stages of the process take a rapid course. The value of the electrode potential depends on the concentration of the ions present near the surface of the electrode. The equation for the cathode wave in reversible processes reads:

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$$E = E_{1/2} - \frac{0,059}{n} \log \frac{i}{i_d - i} .$$

Inirreversible electrode processes the displacement of the half-wave potential is not directly connected with the stability constants of the complex (Ref 3). The polarographic measurements were made on a visual polarograph of the type UPAN (Ural Branch AS USSR). A saturated calomel electrode served as anode, a dropping-mercury electrode as cathode. Exact details of the determination are given. Experiments showed that the reduction of the bivalent copper ion at a dropping-mercury electrode in 2n H_2SO_4 takes place in one step: $Cu^{2+} + 2e \rightarrow Cu^0$. The introduction of thiosemicarbazide into the solution causes a displacement of the half-wave potential to the negative side. This fact indicates the formation of a complex. The half-wave potential of the cathode-wave of the reduction of the copper thiosemicarbazide complex in 2n sulfuric acid amounts to -o,35 to -o,31 V. The investigations showed that the reduction of the copper thiosemicarbazide complex in a sulfuric acid solution belongs to the irreversible processes. Therefore a polarographic determination of

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"APPROVED FOR RELEASE: 07/13/2001 CIA-RDP86-00513R001341420004-2

75-13-3-4/27

The Polarographic Characteristic of the Copper Thiosemicarbazide Complex in Sulphuric and Hydrochloric Acid Solutions

the stability constants of this complex is impossible. The copper thiosemicarbazide complex was also investigated in 1n hydrochloric acid as medium. It became evident that on this occasion the discharge of complex ions takes place in two stages. The half-wave potentials of the cathode-wave for the first stage are -0,02 to -0,04 V, and for the second stage -0,28 to -0,3 V. The second stage of the process is irreversible, therefore the stability constant of the complex cannot be polarographically determined in a hydrochloric acid solution either. A.G. Stromberg furnished valuable indications in relation to the present work. There are 6 figures and 4 references, 3 of which are Soviet.

ASSOCIATION: Ural'skiy politekhnicheskiy institut im. S.M. Kirova, Sverdlovsk (Sverdlovsk, Ural' Polytechnic Institute imeni S.M. Kirov)

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APPROVED FOR RELEASE: 07/13/2001 CIA-RDP86-00513R001341420004-2"

"APPROVED FOR RELEASE: 07/13/2001 CIA-RDP86-00513R001341420004-2

The Polarographic Characteristic of the Copper Thiosemicarbazide Complex in Sulphuric and Hydrochloric Acid Solutions 75-13-3-4/27

SUBMITTED: August 6, 1956

1. Complex ions--Polarographic analysis

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"APPROVED FOR RELEASE: 07/13/2001 CIA-RDP86-00513R001341420004-2

AUTHORS: Podchaynova, V. N., Cnosova, S. P. SOV/75-13-5-5/24

TITLE: Study of the ~~Reaction~~ of Bivalent Copper Ion With Potassium Thiocyanate (Izucheniye reaktsii iona dvukhvalentnoy medi s rodanidom kaliya)

PERIODICAL: Zhurnal analiticheskoy khimii, 1958, Vol 13, Nr 5, pp 535-537 (USSR)

ABSTRACT: The thiocyanate complexes of copper have often been examined (Refs 1-9). For the quantitative determination of copper, however, only the reaction between thiocyanate ions and Cu^{2+} in an aqueous solution of acetone has been used. In an aqueous solution the black $Cu(SCN)_2$ is gradually reduced to the white $Cu(SCN)$ (Ref 1). The authors of the paper under review examined the reaction between Cu^{2+} ions and potassium thiocyanate in an aqueous solution. In order to prevent the reduction of copper, various oxidizing agents were added. Among the oxidizing agents tested, diluted nitric acid (pH $\sim$3) proved to be the best, as it reacts with thiocyanate ions without forming colored products. With the increase of concentration of potassium thiocyanate the optical density of the solutions created increases

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"APPROVED FOR RELEASE: 07/13/2001 CIA-RDP86-00513R001341420004-2

SOV/75-13-5-5/24

Study of the Reaction of Bivalent Copper Ion With Potassium Thiocyanate

to a certain degree and then remains constant. An addition of nitric acid even in small quantities effects an increase of the optical density of the solutions. Larger quantities of nitric acid also increase the optical density of solutions when copper is absent, as they react with potassium thiocyanate and form colored products. An addition of 0,12 to 0,5 ml of HNO_3 (1:1), however, does not change the optical density. Hydrochloric acid does not affect the composition of the complex. Zinc ions, even when amounting to a hundred times the quantity of copper, do not interfere with the formation of the copper-thiocyanate complex. The disturbing effect of iron can be neutralized by means of sodium fluoride. Quantities of up to 0,5 ml of a 1 n solution of NaF in 25 ml of the solution to be tested do not influence the optical density, whereas a large amount of fluoride ions reduce the color intensity. In concentrations of 5 times 10^{-3} to 2,8 times 10^{-2} g Cu per liter the solutions of the copper thiocyanate complex follow Beer's law in case of a surplus of KSCN. The color of the solutions does not change for 35 minutes. Therefore, in low concentrations of copper

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this reaction may be used for the photometric determination of copper in a weak solution of nitric acid or hydrochloric acid in the presence of large quantities of zinc and also small amounts of iron.
Metaphosphoric acid was chosen as complex-forming compound in order to prevent the reduction of copper by thiocyanate ions in an aqueous solution. When Cu^{2+} ions and thiocyanate ions are present, a yellow green complex is formed with metaphosphoric acid, which is stable even in the presence of reducing agents. The color of this complex is invariable as to time and corresponds to Beer's law in concentrations of 2,5 times 10^{-3} to 3,5 times 10^{-2} g Cu per liter. The colored phosphate thiocyanate complex of copper can serve for the photometric determination of copper in solutions which contain large amounts of aluminum and zinc and small amounts of iron. The sensitivity of the determination amounts to 2,5 times 10^{-6} to 3,5 times 10^{-5} g Cu per ml, therefore, it is greater than the sensitivity of the determination of copper with ammonia and potassium ferrocyanide. The methods for both de-

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Study of the Reaction of Bivalent Copper Ion With Potassium Thiocyanate SOV/75-13-5-5/24

terminations developed are described in the paper. The determinations are made by means of calibration curves. There are 5 figures and 11 references, 1 of which is Soviet.

ASSOCIATION: Ural'skiy politekhnicheskiy institut im. S. M. Kirova, Sverdlovsk (Ural Polytechnic Institute imeni S. M. Kirov, Sverdlovsk)

SUBMITTED: January 4, 1957

Card 4/4

APPROVED FOR RELEASE: 07/13/2001 CIA-RDP86-00513R001341420004-2"

"APPROVED FOR RELEASE: 07/13/2001 CIA-RDP86-00513R001341420004-2

PODCHAYNOVA, V.N.

137-58-4-8668

Translation from: Referativnyy zhurnal, Metallurgiya, 1958, Nr 4, p 335 (USSR)

AUTHOR: Podchaynova, V.N.

TITLE: On the Fractional and Drop Reaction of the Copper Ion with Ammonium Tetrathiocyanodiamminochromate (K voprosu o drobnoy i kapel'noy reaktsii iona medi s tetrarodanidodiamminokhromiatom ammoniya)

PERIODICAL: Tr. Ural'skogo politekhn. in-ta, 1957, Nr 69, pp 107-112

ABSTRACT: A method has been developed for the fractional determination of Cu by ammonium tetrathiocyanodiamminochromate (I). Into a test tube containing 0.2-0.5 cc of the hot solution under investigation is placed a few drops of HCl, and 0.1 g hydrazine chloride (II) or hydroxylamine is added, and the whole brought to the boiling point. Then 1 cc 10% I is added dropwise. If Cu ions are present a yellow color will appear. For dropwise determination of Cu, a drop of I and a drop of the solution HCl and II under investigation are placed on a strip of filter paper. If Cu ions are present, an orange-yellow spot will appear. The minimum that can be detected in pure solutions is $2.5 \cdot 10^{-6}$ g/liter, while in the presence of cations of the 5 analytic groups it is

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137-58-4-8668

On the Fractional and Drop (cont.)

$5 \cdot 10^{-6}$ g/liter. Cu ions can be detected in steels, Zn, Al, and Ni alloys, ores and slags when $\leq 0.3\%$ Cu is present. 3-4 drops of a mixture of HNO_3 and HCl is applied to the cleansed surface of a specimen of the metal or alloy. After reaction ceases, the solution is transferred to a porcelain crucible and the hole is washed with water. The solution in the crucible is evaporated almost to dryness, and 2-3 drops 1:1 HCl, 3 cc water, and 0.2 g II are added. The whole is heated to the boiling point, and 1-2 cc 10% I is added. When Cu is present, a yellow coloration appears.

K. K.

1. Copper--Determination 2. Ammonium tetrathiocyanodiamminochromate --Chemical reactions

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"APPROVED FOR RELEASE: 07/13/2001 CIA-RDP86-00513R001341420004-2

PODCHAYNOVA, V. N.

157-58-4-3613

Translation from: Referativnyy zhurnal, Metallurgiya, 1958, Nr 4, p 547 (USSR)

AUTHORS: Podchaynova, V.N., Mishina, A.G.

TITLE: A New Microchemical Reaction for Copper Ions (Novaya mikrokhimicheskaya reaktsiya na ion medi)

PERIODICAL: Tr. Ural'skogo politekhn. in-ta 1957, Nr 69, pp 113-118

ABSTRACT: A new microchemical reaction for Cu^{2+} employing thiosemicarbazide (I) in H_2SO_4 solution was studied. I combines with Cu^{2+} to form dark blue crystals. When a 0.5% solution of I in 2N H_2SO_4 reacts with sulfate solutions of Cu salts containing $\leq 10^{-4}$ g Cu/cc, a blue tint is all that appears. When the Cu concentration is greater (10^{-2}-10^{-3} g/cc), a dark blue, fine, crystalline precipitate comes down at once. The coming down of precipitates from more dilute solutions may be promoted by addition of solid, fine-ground K_2SO_4 powder. Ions of Pb, Ag, and Hg act as inhibitors. Centrifugal and crucible methods of analysis for Cu in ores, minerals, and ferrous and nonferrous alloys are proposed. To determine Cu in steels, the Fe has to be bound by NaF. The minimum amount of Cu that can be detected is 5.10^{-6} g/cc. 10 min are required to analyze for Cu.

1. Copper ions - Detection
2. Copper ions - Chemical Reactions
3. Copper - Determination

K.K.

Card 1/2

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"APPROVED FOR RELEASE: 07/13/2001 CIA-RDP86-00513R001341420004-2

PODCHAYNOVA, V.N.

137-58-5-11187

Translation from: Referativnyy zhurnal, Metallurgiya, 1958, Nr 5, p 327 (USSR)

AUTHOR: Podchaynova, V.N.

TITLE: The Employment of Para-anisidine and Potassium Rhodanide in Photocolorimetric Determination of Copper in Metallic Aluminum, Cadmium, Zinc, and Nickel (Kolorimetricheskoye opredeleniye medi v metallicheskom alyuminii, kadmii, tsinke i nikele para-anizidinom i rodanidom kaliya)

PERIODICAL: Tr. Ural'skogo politekhn. in-ta, 1957, Nr 69, pp 119-125

ABSTRACT: The process of determination of Cu relies on the formation of a reddish-purple compound of Cu^{2+} with para-anisidine in neutral and slightly acidic media containing rhodanide. The reaction is specific in nature; the color becomes most intense after a period of 15-20 minutes and remains stable for several hours. Sensitivity of the method is 6×10^{-7} g/cc. Oxidizing ions interfere with the process of determination; the presence of not more than 0.1% of Fe^{3+} is permissible. The Cu is preliminarily precipitated in the form of CuS with the aid of CdS suspension. The mixture employed during colorimetric procedures is composed of equal volumes of a 2-N KCNS solution and a 0.2-N solution of

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137-58-5-11187

The Employment of Para-anisidine (cont.)

para-anisidine. The determination is accomplished by means of a photocolorimeter, as well as by the method of colorimetric titration. The duration of the process is 40-45 minutes.

P.K.

1. Metals--Analysis 2. Copper--Determination 3. Colorimetry--Applications
4. Para-anisidine--Applications 5. Potassium rhodanide--Applications

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"APPROVED FOR RELEASE: 07/13/2001 CIA-RDP86-00513R001341420004-2

PODCHAYNOVA, V.N.

Solubility of copper and silver salts of Reinecke acid [with summary in English]. Zhur.anal.khim. 13 no.2:193-195 Mr-Ap '58. (MIRA 11:4)

1.Ural'skiy politekhnicheskiy institut im. S.M. Kirova.
(Reinecke acid) (Copper salts) (Silver salts)

APPROVED FOR RELEASE: 07/13/2001 CIA-RDP86-00513R001341420004-2"

"APPROVED FOR RELEASE: 07/13/2001 CIA-RDP86-00513R001341420004-2

Podchaynova, V.N.

USSR/Inorganic Chemistry. Complex Compounds.

Abs Jour : Ref Zhur - Khimiya, No. 8, 1957, 26459.

Author : ~~Podchaynova, V.N.~~, Vereshchagina, N.N.
Inst : Uralsk Polytechnical Institute.
Title : Study of Reaction of Copper Ion with Hydrazide of Isonicotine Acid.

Orig Pub : Tr. Ural'skogo politekhn. in-ta, 1956, sb. 57, 145 - 155.

Abstract : The solubility of the intracomplex compound of Cu (2^+) with hydrazide of isonicotine acid of the composition $Cu(C_6H_6ON_3)_2$ (I) is 0.148 g per lit at 20 to 21°. Assuming a complete dissociation of I in the saturated solution, the authors compute the solubility product of I. Yellow solutions of I follow the law of Lambert - Bär in the range of Cu

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"APPROVED FOR RELEASE: 07/13/2001 CIA-RDP86-00513R001341420004-2

PODCHAYNOVA, V. N.

USSR/Inorganic Chemistry - Complex Compounds, C

Abst Journal: Referat Zhur - Khimiya, No 1, 1957, 659

Author: Podchaynova, V. N., Krylov, Ye. I., and Ryabchikov, D. I.

Institution: None

Title: On the Valency of Copper in Some Complex Compounds

Original Periodical: Zh. neorgan. khimii, 1956, Vol 1, No 3, 406-411

Abstract: The magnetic susceptibility of a number of Cu complexes has been measured at 18° with a view toward establishing the valency of Cu in these complexes. Cu "ditizonat" [Tr. note: diphenyldithiocarbazonate ?] and the thiocyanate of Cu-n-anisidinate obtained by treating a dilute $CuSO_4$ solution with an excess of p-anisidine [methoxyaniline] (I) and KCNS are diamagnetic (the composition of neither compound has been established), which indicates that they contain Cu. The following complexes are paramagnetic (the numbers in parentheses give the values of $\mu_{(eff)}$ in μ_B calculated from Curie's law): Cu p-anisidinate sulfate obtained by treating a dilute $CuSO_4$ solution with an

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FROLOV, L.V., inzh.; EPSHTEYN, S.M., inzh.; PODCHEKAYEV, V.A., inzh.

Mesh-reinforced vault sections. Transp. stroi. 11 no.10:29-32 O '61. (MIRA 14:10)
(Escalators) (Tunnels) (Reinforced concrete construction)

APPROVED FOR RELEASE: 07/13/2001 CIA-RDP86-00513R001341420004-2"

"APPROVED FOR RELEASE: 07/13/2001 CIA-RDP86-00513R001341420004-2

PODCHEKO, P.I.

Clinincal aspects of a malignant thymoma. Trudy SMI 17:25-29 '63. (MIRA 18:1)

1. Iz propedevticheskoy terapevticheskoy kafedry (zav. - prof. Ye.I. Zaytseva) Smolenskogo gosudarstvennogo meditsinskogo instituta.

APPROVED FOR RELEASE: 07/13/2001 CIA-RDP86-00513R001341420004-2"

"APPROVED FOR RELEASE: 07/13/2001 CIA-RDP86-00513R001341420004-2

MIL'CHENKO, D.V., gornyy inzh.; ZARUKIN, G.V., gornyy inzh.; PODCHERNIN, P.K., gornyy inzh.

Operation of main mine pumping systems with small capacity sumps. Gor. zhur. no. 11:60-62 N '60. (MIRA 13:10)

1. Maslyanskiy rudnik Zyryanovskogo svintsovogo kombinata. (Mine drainage)

APPROVED FOR RELEASE: 07/13/2001 CIA-RDP86-00513R001341420004-2"

"APPROVED FOR RELEASE: 07/13/2001 CIA-RDP86-00513R001341420004-2

PODCHERNOV, F.S. (Kiyev)

Drier for pipes. Stroi. truboprov. 8 no.9:25 S '63.
(MIRA 16:11)

1. Glavnyy mekhanik Stroitel'nogo upravleniya No.4 tresta Ukrgazneftestroy.

APPROVED FOR RELEASE: 07/13/2001 CIA-RDP86-00513R001341420004-2"

"APPROVED FOR RELEASE: 07/13/2001 CIA-RDP86-00513R001341420004-2

L 35866-66 EWP(e)/EWT(m)/EWP(w)/T/EWP(t)/ETI IJP(c) JD/JG

ACC NR: AP6020958 (A) SOURCE CODE: UR/0226/66/000/006/0017/0023

AUTHOR: Samsonov, G. V.; Lapshov, Yu. K.; Podchernyayeva, I. A.; Fomenko, V. S.; Yerosov, Yu. I.; Dudnik, Ye. M.

ORG: Institute of the Problems of Material Science, AN UkrSSR (Institut problem materialovedeniya AN UkrSSR)

TITLE: Production and physical properties of alloys of the W-LaB_6 system

SOURCE: Poroshkovaya metallurgiya, no. 6, 1966, 17-23

TOPIC TAGS: tungsten base alloy, lanthanum hexaboride ~~containing alloy~~, tungsten boride ~~containing alloy~~, ~~alloy~~ metal, physical property, alloy phase diagram, x ray diffraction analysis

ABSTRACT: Six tungsten-base alloys containing 1, 3, 5, 10, 30 or 50 mol% lanthanum hexaboride were prepared from alloy powder with a particle size of 50 μ by hot compacting in an argon atmosphere in graphite molds coated with boron nitride. It was found that the reaction of tungsten with lanthanum hexaboride results in decomposition of the latter and in the formation of W_2B and WB borides. Metallographic and x-ray diffraction analysis showed that alloys containing 1, 3, or 5% lanthanum hexaboride had a two-phase structure consisting of tungsten-base solid solution and tungsten boride (W_2B) and a microhardness of 620, 597, and 535 dan/mm^2, respectively. Alloy with 10%

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"APPROVED FOR RELEASE: 07/13/2001 CIA-RDP86-00513R001341420004-2

L 35866-66

ACC NR: AP6020958

lanthanum hexaboride had a four-phase structure consisting of tungsten-base solid solution, W_2B, WB, and LaB_6-base phase. Alloys with 30 or 50% lanthanum hexaboride contained two W_2B-base and LaB_6-base phases. The alloys containing 1, 3, 5 and 10% lanthanum hexaboride have a resistivity at room temperature of 6.9, 17.75, 23.1, and 41.6 kohm·cm, respectively. Small additions of lanthanum hexaboride (about 1 mol%) sharply reduced the work function of tungsten at 1700C. These alloys appear to be promising materials for cathodes working at medium and high temperatures. Orig. art. has: 7 figures and 1 table. [AZ]

SUB CODE: 11/ SUBM DATE: 27Dec65/ ORIG REF: 017/ OTH REF: 003
ATD PRESS: 5036

Card 2/2

APPROVED FOR RELEASE: 07/13/2001 CIA-RDP86-00513R001341420004-2"

"APPROVED FOR RELEASE: 07/13/2001 CIA-RDP86-00513R001341420004-2

L 4988-66 EWT(1)/EWP(e)/EWT(m)/EWP(i)/ETC/EPF(n)-2/EWG(m)/EPA(w)-2/T/EWP(t)/EWP(b)

ACC NR: AP5025901 IJP(c) JD/JG/AT/WH SOURCE CODE: UR/0057/65/035/010/1860/1862

AUTHOR: Paderno, Yu. B.; Fomenko, V. S.; Podchernyayeva, I. A.; Makarenko, G. N. 49,55

ORG: Institute for the Study of Problems of Material Sciences, AN SSSR, Kiev (Institut problem materialovedeniya AN SSSR)

TITLE: Thermionic emission from CeC_2

SOURCE: Zhurnal tekhnicheskoy fiziki, v. 35, no. 10, 1965, 1860-1862

TOPIC TAGS: thermionic emission, rare earth metal, cerium carbide, carbide, cathode, cerium bicarbide

ABSTRACT: The thermal emission properties of CeC_2, whose electronic structure resembles that of ThC_2 (which is known to be a good emitter) have been investigated in the temperature range of 1200—1770K, in view of the possible use of the material for the production of efficient cathodes. The methods and instrumental setup used for the experiments were described in an earlier work (Samsanov, G. V., V. S. Fomenko, V. N. Paderno, and B. M. Rud'. Teplofizika vysokikh temperatur, 2, 730, 1964). Suspended in absolute alcohol, the carbide was deposited onto a tantalum substrate upon which it formed a 0.2—0.3-mm-thick layer. To prevent oxidation, the deposition did not last more than three

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"APPROVED FOR RELEASE: 07/13/2001 CIA-RDP86-00513R001341420004-2

L 4988-66

ACC NR: AP5025901

minutes. The measurements of the work function taken during the activation process showed a minimum of 2.49 ev at 1380K, which value remained unchanged until 1520K, when an insignificant increase could be observed. At any given fixed temperature, the stationary value of the work function was attained rapidly when the cathode temperature was high. The good emission properties of CeC_2 are indicated by its fast activation, with the work function changing from 3.20 to 2.49 ev in the temperature range of 1220—1380K. The maximum current density actually measured was 3 amp/cm^2 at a cathode temperature of 1700K, but a rough extrapolation leads to a value of 17 amp/cm^2 at 2300K. The authors hope that studies of other rare-earth metal carbides may help to explain the influence of the electronic structure on the emission properties of materials. Orig. art. has: 2 figures. [ZL]

SUB CODE: EM,IC/ SUBM DATE: 05Feb65/ ORIG REF: 004/ OTH REF: 004

ATD PRESS: 4131

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APPROVED FOR RELEASE: 07/13/2001 CIA-RDP86-00513R001341420004-2"

"APPROVED FOR RELEASE: 07/13/2001 CIA-RDP86-00513R001341420004-2

L 16805-66 EWT(m)/EWP(t) IJP(c) JD/JG

ACC NR: AP6003370 (A) SOURCE CODE: UR/0363/66/002/001/0128/0132

AUTHOR: Samsonov, G.V.; Podchernyayeva, I.A.

39
13

ORG: Institute of Materials Science Problems, Academy of Sciences UkrSSR (Institut problem materialovedeniya Akademii nauk UkrSSR)

TITLE: On the emissive properties of alkaline earth oxides

55, 27 27

SOURCE: AN SSSR. Izvestiya. Neorganicheskiye materialy, v. 2, no. 1, 1966, 128-132

TOPIC TAGS: alkaline earth oxide, work function, transition metal, electron structure

ABSTRACT: The thermoemissive and certain other physical properties (melting point, forbidden gap width) of alkaline earth oxides are discussed. It is shown that all these properties are determined by the distribution of the valence electrons of the metal between the oxygen atoms (with the formation of s^2p^6 configurations), and by hybrid sp states and d states (for alkaline earth metals). The thermoemissive properties of oxide cathodes consisting of a film of alkaline earth oxide on a transition metal backing are considered, and it is shown that the work function in thermoemission is determined by the nature of the interaction between the oxide and the metal of the backing. It was found that the conditions for a low work function of an oxide cathode are a maximum

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L 16805-65

ACC NR: AP6003370

probability of formation of a high statistical weight of d^5 electron configurations by the transition metal atoms of the backing at a simultaneous moderate concentration of collectivized electrons, and also a maximum transfer of s electrons of the alkaline earth metal to d states and their minimum binding in hybrid sp configurations. These conditions suggest ways of further improving oxide cathodes. Orig. art. has: 1 figure.

SUB CODE: 11, 20 / SUBM DATE: 12Jul65 / ORIG REF: 007 / OTH REF: 001

Card 2/2 mc

APPROVED FOR RELEASE: 07/13/2001 CIA-RDP86-00513R001341420004-2"

"APPROVED FOR RELEASE: 07/13/2001 CIA-RDP86-00513R001341420004-2

L 06579-67 EWT(m)/EWP(e)/EWP(w)/EWP(t)/ETI IJP(c) JD/JG

ACC NR: AP6029821 SOURCE CODE: UR/0363/66/002/008/1454/1459

AUTHOR: Samsonov, G. V.; Lapshov, Yu. K.; Podchernyayeva, I. A.; Fomenko, V. S.; Yerosov, Yu. I.; Dudnik, Ye. M.

ORG: Institute of Material Science Problems, Academy of Sciences SSSR (Institut problem materialovedeniya akademii nauk UkrSSR)

TITLE: Some physical properties of the W-LaB_6 alloys

SOURCE: AN SSSR. Izvestiya. Neorganicheskiye materialy, v. 2, no. 8, 1966, 1454-1459

TOPIC TAGS: solid mechanical property, tungsten, boron, lanthanum, x ray, alloy, phase composition, phase diagram

ABSTRACT: The phase composition of several W-LaB_6 alloys (1-50 mole % LaB_6) was studied by x ray technique Microhardness, specific electrical resistivity in 293°-1273°K range, and thermal emission parameters and emanation coefficients in the 1200-1950°K range were determined for various W-LaB_6 alloys. The alloy samples were prepared by hot pressing of suitable W+LaB_6 mixture in an argon atmosphere. The x ray analyses were made with a URS-501M apparatus provided with CuKα-emission source. It was found that during the interaction between W and LaB_6 there occurs a simultaneous formation of two borides, W_2B and WB, and a decomposition of LaB_6. These processes were accompanied by an increase in the specific electrical resistivity of the samples. It was also

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UDC: 546.3-19-78-654'271

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"APPROVED FOR RELEASE: 07/13/2001 CIA-RDP86-00513R001341420004-2

L 06579-67

ACC NR: AP6029821

found that an addition of as little as 1 mole % LaB_6 to W results in a sharp decline in the samples work function. This effect is explained in terms of the declining statical weight of the stable d^5- configurations in the tungsten atoms leading, in turn, to an easy thermal excitation of the metals' non-localized electrons. Orig. art. has: 5 figures and 3 tables.

SUB CODE: 11,20/SUBM DATE: 21Jul65/ ORIG REF: 015/ OTH REF: 002

Card 2/2

APPROVED FOR RELEASE: 07/13/2001 CIA-RDP86-00513R001341420004-2"

"APPROVED FOR RELEASE: 07/13/2001 CIA-RDP86-00513R001341420004-2

SOKOLOV, M.I.; PODCHERNYAYEVA, R.Ya.; MEN'SHIKH, L.K.

Transmission of genetic characters with the aid of ribonucleic acid isolated from influenza viruses. Vop. virus. 10 no.2:139-142 Mr-Ap '65. (MIRA 18:10)

1. Institut virusologii imeni D.I.Ivanovskogo AMN SSSR, Moskva.

APPROVED FOR RELEASE: 07/13/2001 CIA-RDP86-00513R001341420004-2"

"APPROVED FOR RELEASE: 07/13/2001 CIA-RDP86-00513R001341420004-2

PODCHERNYAYEVA, R.Ya.; SOKOLOV, M.I.

Hybridization of influenza viruses. Report No.2: Change in the properties of hybrids of influenza viruses. Vop. virus no.6:697-701 N-D '63. (MIRA 17:6)

1. Institut virusologii imeni D.I. Ivanovskogo AMN SSSR, Moskva.

APPROVED FOR RELEASE: 07/13/2001 CIA-RDP86-00513R001341420004-2"

"APPROVED FOR RELEASE: 07/13/2001 CIA-RDP86-00513R001341420004-2

SOKOLOV, M.I.; PODCHERNYAYEVA, R.Ya.; DAVYDOVA, A.A.

Hybridization of influenza viruses. Report no.1: Methods and conditions for obtaining influenza virus hybrids. Vop. virus. 8 no.5:547-553 S-O'63 (MIRA 17:1)

1. Institut virusologii imeni D.I.Ivanovskogo AMN SSSR, Moskva.

APPROVED FOR RELEASE: 07/13/2001 CIA-RDP86-00513R001341420004-2"

"APPROVED FOR RELEASE: 07/13/2001 CIA-RDP86-00513R001341420004-2

SOKOLOV, M.I., PODCHERNYAYEVA, R.YA.

"Experimental data on hybridization of influenza viruses."

Report submitted to the Intl. Congress for Microbiology
Montreal, Canada 19-25 Aug 1962

APPROVED FOR RELEASE: 07/13/2001 CIA-RDP86-00513R001341420004-2"

"APPROVED FOR RELEASE: 07/13/2001 CIA-RDP86-00513R001341420004-2

PODCHESOV, E.N.; STROYNOVSKIY, V.V.; VSTAVSKIY, L.I.; KURASOV, D.A.; CHUMAKOV, V.N.; SOROKIN, V.M., inzh., retsenzent; MAKSIMOV, N.V., kand. tekhn. nauk, red.; VOROB'YEVA, L.V., tekhn.red.

[Maintenance and repair of ChS2 and ChS3 electric locomotives; work practices in the "Oktiabr'" repair shop of the Southern Railroad] Obsluzhivanie i remont elektrovozov CHS3; opyt kollektiva depo "Oktiabr'" IUzhnoi zheleznoi dorogi. Moskva, Transport, 1964. 99 p. (MIRA 17:4)

APPROVED FOR RELEASE: 07/13/2001 CIA-RDP86-00513R001341420004-2"

"APPROVED FOR RELEASE: 07/13/2001 CIA-RDP86-00513R001341420004-2

KATKOV, Yu.D.; PODCHESOV, E.N.; STROYNOVSKIY, V.V.; ZOZULYA, S.Ya.; mashinist-instruktor; KURAPOV, V.P., mashinist; BOGDANOV, V.I., mashinist; PORTYANKO, V.G., mashinist.

One more circuit for the antislippage protection of VL23 electric locomotives. Elek. i tepl. tiaga 4 no.11:19-21 N '60. (MIRA 13:12)

1. Mashinist-instruktor lokomotivnogo depo "Oktyabr'" Yuzhnoy dorogi (for Katkov). 2. Nachal'nik sluzhby lokomotivnogo khozyaystva Yuzhnoy dorogi (for Podchesov). 3. Glavnyy inzhener depo "Oktyabr'" Yuzhnoy dorogi (for Stroynovskiy).
(Electric locomotives)

APPROVED FOR RELEASE: 07/13/2001 CIA-RDP86-00513R001341420004-2"

"APPROVED FOR RELEASE: 07/13/2001 CIA-RDP86-00513R001341420004-2

Podchishalova, R. A.

77.021.113

703

The Influence of Concentration of Bromide and Hydroxyl Ions on the Photographic Properties of Emulsions. A. V. BORIN, Z. I. GRATSIANSKAYA and R. A. PODCHISHCHALOVA. *Zhur. Priklad. Khim.*, 1953, 26, 708-720.—Increasing the surface equivalent concentration of potassium bromide at the beginning of physical ripening retards fog formation during chemical ripening without increasing the ultimate dimensions of the crystals. Active centres that take part in forming the photographic properties of emulsions consist of silver and silver sulphide and are formed during physical ripening. The concentration of bromide and hydroxyl ions at the beginning of chemical ripening exerts a specific influence on gamma, the higher the concentration the higher the gamma. The stability of emulsions on long storage is determined by the concentration of bromide and hydroxyl ions in the emulsion at the time of application to a base.

Chem. Abs.

3 4000

Graph

WRS

APPROVED FOR RELEASE: 07/13/2001 CIA-RDP86-00513R001341420004-2"

"APPROVED FOR RELEASE: 07/13/2001 CIA-RDP86-00513R001341420004-2

PODCHISHCHALOVA, R.A.

USSR.

The influence of concentration of bromide and hydroxyl ions on the photographic properties of emulsions. A. V. Borin, Z. I. Gratsianskaya, and R. A. Podchishchalova. *J. Appl. Chem. U.S.S.R.* 26, 669 [illegible] tion).—See *C.A.* 48, 2499e. H. L. H.

APPROVED FOR RELEASE: 07/13/2001 CIA-RDP86-00513R001341420004-2"

"APPROVED FOR RELEASE: 07/13/2001 CIA-RDP86-00513R001341420004-2

PODCHISHCHALOVA, R.A.

Chemical Abstracts
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Mar. 10, 1954
Photography

KAW
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The influence of concentration of bromide and hydroxyl ions on the photographic properties of emulsions. A. V. Borin, Z. I. Gratsianskaya, and [redacted] (Zhur. Priklad. Khim. 26, 708-20(1953).—Increasing the surface equiv. concn. of KBr at the beginning of phys. ripening retards fog formation during chem. ripening without increasing the ultimate dimensions of the crystals. Active centers that take part in forming the photographic properties of emulsions consist of Ag and Ag_2S and are formed during phys. ripening. The concn. of bromide and hydroxyl ions at the beginning of chem. ripening exerts a specific influence on gamma, the higher the concn. the higher the gamma. The stability of emulsions on long storage is detd. by the concn. of bromide and hydroxyl ions in the emulsion at the time of application to a base. V. N. B.

APPROVED FOR RELEASE: 07/13/2001 CIA-RDP86-00513R001341420004-2"

"APPROVED FOR RELEASE: 07/13/2001 CIA-RDP86-00513R001341420004-2

PODCHISHCHALOVA, R. A.

USSR/ Chemistry - Photographic

"The Influence of the Concentration of Bromine Ions and Hydroxyl Ions on the Photographic Propeties of an Emulsion," A. V. Borin, Z. I. Gratsianskaya and R. A. Podchishchalova

Zhur Prik Khim, Vol 26, No 7, pp 708-720

Raising the concn of KBr above the equiv prevents haze formation during chemical development. The centers that are formed during phys ripening participate in the formation of photographic properties of the emulsion. A change in the conc of Br and OH ions at the start of chem development has a significant effect on the contrast coef. As the concn of the above ions increases, the contrast coef grows. Raising the concn of Br ions at the start of chem development improves the sensitizing effect of dyestuff in the emulsion. Observed the disappearance of the desensitizing action of H-ions on the light-sensitive layer that is optically sensitized with disubstituted thiocarbocyanine Dyes.

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APPROVED FOR RELEASE: 07/13/2001 CIA-RDP86-00513R001341420004-2"

"APPROVED FOR RELEASE: 07/13/2001 CIA-RDP86-00513R001341420004-2

PODCHISHCHALOVA, R.N.

Feb 1954
graphic arts

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2144* Influence of the Concentration of Bromine and Hydroxyl Ions on the Photographic Properties of the Emulsion. (Russian.) A. V. Borin, Z. I. Gratsianskaia, and R. A. Podchishchalova. *Zhurnal Prikladnoi Khimii*, v. 26, no. 7, July 1953, p. 708-720.

The nature of the change of photographic properties on the dry emulsion film after lengthy storage is determined by a concentration of bromine ions in the emulsion. Tables, graphs. 20 ref.

APPROVED FOR RELEASE: 07/13/2001 CIA-RDP86-00513R001341420004-2"

"APPROVED FOR RELEASE: 07/13/2001 CIA-RDP86-00513R001341420004-2

BORIN, A.V.; GRATSIANSKAYA, Z.I.; PODCHISHCHALOVA, R.A.

Effect of the concentration of bromine and hydroxyl ions on photographic properties of emulsion. Zhur.prikl.khim. 26 no.7:708-720 Jl '53. (MLRA 6:7)

(Photographic emulsions)

APPROVED FOR RELEASE: 07/13/2001 CIA-RDP86-00513R001341420004-2"

"APPROVED FOR RELEASE: 07/13/2001 CIA-RDP86-00513R001341420004-2

PODCHUFAROV, B.M., kand. tekhn. nauk, dots.; CHUKANOV, N.M., assistent

Representation of the given law of air pressure in the working flow space of variable volume. Izv. vys. ucheb. zav.; mashinostr. no.11/12:209-217 '58. (MIRA 13:3)

1.Tul'skiy mekhanicheskiy institut.
(Pneumatic machinery)

APPROVED FOR RELEASE: 07/13/2001 CIA-RDP86-00513R001341420004-2"

"APPROVED FOR RELEASE: 07/13/2001 CIA-RDP86-00513R001341420004-2

PODCHUFAROV, B.M., kand.tekhn.nauk, dotsent

Motion of an ideal model of a cyclic automatic control system having two degrees of freedom. Izv.vys.ucheb.zav.; mashinostr. no.7:3-8 '59. (MIRA 13:6)

1. Tul'skiy mekhanicheskiy institut.
(Automatic control--Models)

APPROVED FOR RELEASE: 07/13/2001 CIA-RDP86-00513R001341420004-2"

"APPROVED FOR RELEASE: 07/13/2001 CIA-RDP86-00513R001341420004-2

PODCHUFAROV, B.M., kand.tekhn.nauk, dotsent

Dynamics of cyclic automatic control with a minor cycle time. Izv.vys.ucheb.zav.; mashinostr. no.12:151-161 '61. (MIRA 15:2)

1. Tul'skiy mekhanicheskiy institut.
(Automatic control)

APPROVED FOR RELEASE: 07/13/2001 CIA-RDP86-00513R001341420004-2"

"APPROVED FOR RELEASE: 07/13/2001 CIA-RDP86-00513R001341420004-2

ACCESSION NR: AP4039717 S/0145/64/000/004/0030/0042

AUTHORS: Podchufarov, B. M. (Candidate of technical sciences, Docent); Chekmazov, V. I. (Engineer)

TITLE: On stationary state stability in a pneumatic servomechanism

SOURCE: IVUZ. Mashinostroyeniye, v. 4, 1964, 30-42

TOPIC TAGS: pneumatic servomechanism, power cylinder, pneumatic drive, momentum conservation laws, piston, valve, neutral state, stability criterion

ABSTRACT: The stability of the neutral (stationary) state in a pneumatic servomechanism (control signal $f(t) = 0$) was analyzed by considering the characteristic features of the flow processes in the power cylinder of the pneumatic drive. The mass and momentum conservation laws inside each compartment of the cylinder as well as the equations of motion for the piston and the value were written, and the neutral state of the servomechanism was defined by $dF/dt = 0$ (F = pressure p, specific weight γ, piston and valve coordinate X,x) and $d^2X/dt = d^2x/dt = 0$. A linear model was selected for the pneumatic system, and the stabili-

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"APPROVED FOR RELEASE: 07/13/2001 CIA-RDP86-00513R001341420004-2

PODCHUFAROV, B.M., kand. tekhn. nauk, dotsent; CHEKMAZOV, V.I., inzh.

Stability of the steady state of a pneumatic servomechanism. Izv.vys. ucheb.zav.; mashinostr. no.4:30-42 '64. (MIRA 18:1)

1. Tul'skiy mekhanicheskiy institut.

APPROVED FOR RELEASE: 07/13/2001 CIA-RDP86-00513R001341420004-2"

"APPROVED FOR RELEASE: 07/13/2001 CIA-RDP86-00513R001341420004-2

PODCHUFAROV, B.M., kand. tekhn. nauk, dotsent

Some problems in the theory of pneumatic servomechanisms taking into consideration the heat exchange in working drive hollows and piping. Izv. vys. ucheb. zav.; mashinostr. no.6:134-146 '64. (MIRA 17:12)

1. Tul'skiy politekhnicheskiy institut.

APPROVED FOR RELEASE: 07/13/2001 CIA-RDP86-00513R001341420004-2"

"APPROVED FOR RELEASE: 07/13/2001 CIA-RDP86-00513R001341420004-2

PODCHUFAROV, B.M., kand. tekhn. nauk, dotsent

Energy potentialities of pneumatic drives used in automatic control systems. Izv. vys. ucheb. zav.; mashinostr. no.9:99-109 '64. (MIRA 17:12)

1. Tul'skiy politekhnicheskiy institut.

APPROVED FOR RELEASE: 07/13/2001 CIA-RDP86-00513R001341420004-2"

"APPROVED FOR RELEASE: 07/13/2001 CIA-RDP86-00513R001341420004-2

PODCHUFAROV, B.M., kand.tekhn.nauk, dotsent

Dynamics of cyclic automatic control. Izv.vys.ucheb.zav.; mashinostr. no.8:42-51 '61. (MIRA 15:1)

1. Tul'skiy mekhanicheskiy institut.
(Automatic control)

APPROVED FOR RELEASE: 07/13/2001 CIA-RDP86-00513R001341420004-2"

"APPROVED FOR RELEASE: 07/13/2001 CIA-RDP86-00513R001341420004-2

PODCHUFAROV, B.M., kand.tekhn.nauk, dotsent

Dynamics of the cyclic automatic control of a machine having a movable foundation. Izv.vys.ucheb.zav.; mashinostr. no.6:84-94 '63. (MIRA 16:10)

1. Tul'skiy mekhanicheskiy institut.

APPROVED FOR RELEASE: 07/13/2001 CIA-RDP86-00513R001341420004-2"

"APPROVED FOR RELEASE: 07/13/2001 CIA-RDP86-00513R001341420004-2

ACCESSION NR: AP4043312 S/0145/64/000/006/0134/0146

AUTHOR: Podchufarov, B. M.(Candidate of Technical Sciences)

TITLE: Some problems of the theory of compressed air servomechanisms in calculating the heat exchange in piping and the operating chambers of a drive

SOURCE: IVUZ. Mashinostroyeniye, no. 6, 1964, 134-146

TOPIC TAGS: servomechanism, compressed air servomechanism, compressed air drive, pneumatic servounit theory, heat exchange, servomechanism power characteristic, servomechanism mechanical characteristic, servomechanism stability boundary, control system, pneumatic control system, automation

ABSTRACT: The author considers a dynamic model of a compressed air drive and a compressed air servounit, and includes in his calculations the exchange of heat between the working medium and the walls of the piping or drive chambers. Hitherto ignored in theoretical studies, the effect of heat exchange is calculated and plotted in relation to the mechanical and power characteristics of a drive, as well as to the distribution of planes of parameters D-W (quality-volume) and D-M (quality-reduced piston mass) in the stability-instability area. Stability boundaries under assigned conditions (gas temperature in receiver 800K, wall area 15cm^2, piston area 3.14 cm^2, W=2.54 cm^3, M=0.345·10^{-3}

Card 1/2

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"APPROVED FOR RELEASE: 07/13/2001 CIA-RDP86-00513R001341420004-2

PODCHUFAROV, B M.

30321

S/145/61/000/008/001/005
D262/D304

16.8000 (1031,1132,1329)

AUTHOR: Podohufarov, B. M., Candidate of Technical Sciences, Docent

TITLE: Dynamics of cyclic automation

PERIODICAL: Izvestiya vysshikh uchebnykh zavendeniy. Mashinostroyeniye, no. 8, 1961, 42-51

TEXT: The purpose of this study is to examine the ideal dynamic model of cyclic automation as a closed dynamic system, and to obtain approximate recurrence relations which allow, with sufficient accuracy, to calculate and construct the transitional operating conditions at the multiple repetitions of cycles. The differential equation of the motion of automation is given in the form:

$$d\left(\frac{MV^2}{2}\right)+\sum_{\nu=1}^{n}\frac{1}{\eta_\nu}\,d\left(\frac{M_\nu i_{\nu x}^2 V^2}{2}\right)+\sum_{\nu=1}^{n}\frac{1}{\eta_\nu}\,d\left(\frac{M_\nu i_{\nu y}^2 V^2}{2}\right)=$$

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D262/D304

Dynamics of cyclic automation

$$= \left(F + \sum_{\nu=1}^{n} \frac{i_{\nu x}}{\eta_{\nu}} F_{\nu x} + \sum_{\nu=1}^{n} \frac{i_{\nu y}}{\eta_{\nu}} F_{\nu y} \right) dX \qquad (1)$$

where: M - mass of the leading element; M_{ν} - mass of the driven element ν; X - coordinate of the leading element; V - projection of the leading element velocity on axis OX; $i_{\nu x}$ and $i_{\nu y}$ - gear ratios from the leading element to the driven element ν:

$$i_{\nu x} = \frac{V_{\nu x}}{V} = f_{\nu,1}(X) \qquad (2)$$

$$i_{\nu y} = \frac{V_{\nu y}}{V} = f_{\nu,2}(X) \qquad (3)$$

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"APPROVED FOR RELEASE: 07/13/2001 CIA-RDP86-00513R001341420004-2

30321

S/145/61/000/008/001/005
D262/D304

Dynamics of cyclic automation

($V_{\nu x}$ and $V_{\nu y}$ are projections of the driven element ν velocity on axes OX and OY respectively);

$$\eta_\nu = \frac{R_{\nu x}}{R_\nu} i_{\nu x} + \frac{R_{\nu y}}{R_\nu} i_{\nu y} = \varphi_\nu (X) \qquad (4)$$

R_ν - projection on axis OX of the resultant reactions of bonds applied to the leading element at presence of the driven element ν; $R_{\nu x}$ - projection on axis OX of the resultant reactions of bonds applied to the element ν; $R_{\nu y}$ - projection on axis OY of the resultant reactions of bonds applied to the element ν; F - projection of the resultant internal forces applied to the leading element on axis OX; $F_{\nu x}$ and $F_{\nu y}$ - projection of the resultant internal forces, applied to the driven element ν, on axes OX and OY respectively; n - number of driven elements. The recurrence rela-

Card 3/4

APPROVED FOR RELEASE: 07/13/2001 CIA-RDP86-00513R001341420004-2"

"APPROVED FOR RELEASE: 07/13/2001 CIA-RDP86-00513R001341420004-2

PODCHUFAROV, Fedor Mikhaylovich

[Tula Communists during the preparation of the mass collective-farm movement] Tul'skie kommunisty v period podgotovki massovogo kolkhoznogo dvizheniia, 1924-1929 gg. Tula, Tul'skoe knizhnoe izd-vo, 1959. 130 p. (MIRA 13:8)
(Tula Province--Collective farms)

APPROVED FOR RELEASE: 07/13/2001 CIA-RDP86-00513R001341420004-2"

"APPROVED FOR RELEASE: 07/13/2001 CIA-RDP86-00513R001341420004-2

PODCHUFAROV, I. I.

4 Oct 1947

~~USSR/Who's Who - Economic~~ 7317
~~Petroleum Industry~~ 4203.0100
~~Legislation~~ 3122.0400

"137. Concerning the Collegium of the Main Administration for Construction of Enterprises of the Petroleum and Gas Industries (Glavneftgazstroy) of the Soviet of Ministers of the USSR" ½ p

"Sobraniye Postanovleniy Sovmin SSSR" No 7

Decree No 3010, 27 Aug 1947, confirms the following members of the Collegium of the Glavneftgazstroy: Chairman L. B. Safraz'yan, V. I. Papirovskiy, V. A. Pachkin, I. I. Podchufarov, A. K. Knorre, A. S. Shchekanenko, M. M. Bashilov, S. M. Blank, M. F. Yudin. Complete.

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LC

APPROVED FOR RELEASE: 07/13/2001 CIA-RDP86-00513R001341420004-2"

"APPROVED FOR RELEASE: 07/13/2001 CIA-RDP86-00513R001341420004-2

PODCHUFAROV, L.L.

Preparing for the 21st Congress of the Communist Party of the Soviet Union. Transp. stroi. 8 no.10:1-3 O '58. (MIRA 11:11)

1. Zamestitel' Ministra transportnogo stroitel'stva.
(Railroads--Construction)

APPROVED FOR RELEASE: 07/13/2001 CIA-RDP86-00513R001341420004-2"

"APPROVED FOR RELEASE: 07/13/2001 CIA-RDP86-00513R001341420004-2

PODCHUFAROV, I. I.

Shift to the shortened workday and reorganization of wages in organizations of the Ministry of Construction for the Transportation Industry. Transp. stroi. 10 no.9:1-3 S '60. (MIRA 13:9)

1. Zamestitel' ministra transportnogo stroitel'stva.
(Hours of labor) (Wages)
(Transportation—Building and structures)

APPROVED FOR RELEASE: 07/13/2001 CIA-RDP86-00513R001341420004-2"

"APPROVED FOR RELEASE: 07/13/2001 CIA-RDP86-00513R001341420004-2

BEREZHNOY, Yu.N. Prinimali uchastiye: PODCHUFAROV, I.I.; KOTSEN, Ye.G.; MYSYUTIN, D.K.; DOBSHITS, M.L., otv. za vypusk; GUSEV, K.M., tekhn. red.

[Through forests, swamps, and mountains] Skvoz' lesa, bolota, gory; sbornik o molodykh stroiteliakh transporta. Moskva, Orgtransstroi, 1961. 177 p. (MIRA 14:11)

1. Russia (1923- U.S.S.R.) Ministerstvo transportnogo stroitel'stva. (Road construction) (Railroads—Construction)

APPROVED FOR RELEASE: 07/13/2001 CIA-RDP86-00513R001341420004-2"

"APPROVED FOR RELEASE: 07/13/2001 CIA-RDP86-00513R001341420004-2

GUTKOVSKIY, V. A., kand. tekhn. nauk (Gomel'); PODCHUFAROV, M. S. (Gomel')

Shift systems in the operation of locomotives. Zhel. dor. transp. 45 no.1:76-77 Ja '63. (MIRA 16:4)

1. Nachal'nik sluzhby lokomotivnogo khozyaystva Belorusskoy dorogi (for Podchufarov).

(White Russia--Locomotives)

APPROVED FOR RELEASE: 07/13/2001 CIA-RDP86-00513R001341420004-2"

"APPROVED FOR RELEASE: 07/13/2001 CIA-RDP86-00513R001341420004-2

SYTSKO, P.A.; GUTKOVSKIY, V.A.; PODCHUFAROV, M.S.; BULANKOV, L.V. inzh., retsenzent; MAMCHENKO, V.P., inzh., red.; DROZDOVA, N.D., tekhn. red.

[Shift crew method in the operation of locomotives; experience of the White Russian Railroad] Smennaia ezda na parovozakh; opyt Belorusskoi dorogi. Moskva, Transzheldorizdat, 1963. 56 p. (MIRA 16:12)
(White Russia—Railroads—Management)

APPROVED FOR RELEASE: 07/13/2001 CIA-RDP86-00513R001341420004-2"

"APPROVED FOR RELEASE: 07/13/2001 CIA-RDP86-00513R001341420004-2

PODCHUFAROV, M.S.

Specialization and coordination of work at steam locomotive depots. Zhel.dor.transp. 40 no.10:80 O '58. (MIRA 11:12)

1. Nachal'nik slushby lokomotivnogo khozyaystva, g. Minsk.
(Railroads--Repair shops)

APPROVED FOR RELEASE: 07/13/2001 CIA-RDP86-00513R001341420004-2"

"APPROVED FOR RELEASE: 07/13/2001 CIA-RDP86-00513R001341420004-2

ZUYEV, Yu.S.; POSTOVSKAYA, A.F.; PODCHUFAROVA, G.M.

Role of light in the light and ozone aging of rubber. (MIRA 16:8)
Kauch. i rez. 22 no.7:14-17 Jl '63.

1. Nauchno-issledovatel'skiy institut rezinovoy promyshlennosti.
(Rubber--Testing)

APPROVED FOR RELEASE: 07/13/2001 CIA-RDP86-00513R001341420004-2"

"APPROVED FOR RELEASE: 07/13/2001 CIA-RDP86-00513R001341420004-2

PODCHUFAROVA, G. M., SHLYK, A. A., and KALER, V. L. (USSR)

"Protchlorophyllide in the Green Plant."

Report presented at the 5th International Biochemistry Congress, Moscow, 10-16 Aug 1961

APPROVED FOR RELEASE: 07/13/2001 CIA-RDP86-00513R001341420004-2"

"APPROVED FOR RELEASE: 07/13/2001 CIA-RDP86-00513R001341420004-2

SHLYK, A.A.; KALER, V.L.; PODCHUFAROVA, G.M.

Study of protochlorophyllide accumulation and transformation in green plants by radiochromatography with a carrier. Biokhimiia 26 no.2:259-265 Mr-Ap '61. (MIRA 14:5)

1. Laboratory of Biophysics and Isotopes, Academy of Sciences of the Byelorussian S.S.R., Minsk.
(CHLOROPHYLL) (CHROMATOGRAPHIC ANALYSIS)
(CARBON--ISOTOPES)

APPROVED FOR RELEASE: 07/13/2001 CIA-RDP86-00513R001341420004-2"

"APPROVED FOR RELEASE: 07/13/2001 CIA-RDP86-00513R001341420004-2

L 14418-63 EPF(c)/EPR/EWP(j)/EWP(q)/EWT(m)/BDS AFFTC/ASD Pr-4/Ps-4/
Pc-4 RM/WW/JD

ACCESSION NR: AP3004253 S/0138/63/000/007/0014/0017

AUTHOR: Zuyev, Yu. S.; Postovskaya, A. F.; Podchufarova, G. M.

TITLE: Role of light in the ozone-light-induced cracking of vulcanizates

SOURCE: Kauchuk i rezina, no. 7, 1963, 14-17

TOPIC TAGS: light aging, ozone cracking, ozone-light-induced cracking, light-activated ozone cracking, light activation, antioxidant, antiozonant, photosensitizer, sodium butadiene rubber, chloroprene rubber, butadiene-styrene rubber, natural rubber, SKB, neoprene W, SKS-30 ARK, light filter, conditional static modulus, photooxidation, molecule mobility, nickel diethyldithiocarbamate

ABSTRACT: In order to determine the causes of the activating effect of light on ozone cracking of vulcanizates, a comparative study of light aging, ozone cracking, and cracking produced by light and ozone simultaneously (LOC) was undertaken. Experiments were conducted with sodium butadiene (SKB), chloroprene (neoprene W), butadiene-styrene (SKS-30 ARK), and natural rubber containing various antioxidants, photosensitizers, and light-filtering substances. The effect of light aging was determined from the change in the conditional static

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"APPROVED FOR RELEASE: 07/13/2001 CIA-RDP86-00513R001341420004-2

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ACCESSION NR: AP3004253

modulus of undeformed vulcanizates. Resistance to ozone cracking and LOC was determined from data on the time elapsed at the onset of cracks and the failure of vulcanizates at 15% elongation. The results of the study, presented in the form of tables, indicate that the activating effect of light on LOC is due both to photooxidation and to an increase in the mobility of degraded rubber molecules. The resistance of vulcanizates to LOC can be improved by retarding oxidation with antioxidants, antiozonants, and "anti-light-aging agents," by suppressing the photosensitizing effect of ingredients, and by checking the adverse effect of strong light absorbers with such substances as nickel diethyldithiocarbamate. Orig. art. has: 5 tables.

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

SUBMITTED: 00 DATE ACQ: 21Aug63 ENCL: 00

SUB CODE: CH, PH NO REF SOV: 009 OTHER: 001

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APPROVED FOR RELEASE: 07/13/2001 CIA-RDP86-00513R001341420004-2"

"APPROVED FOR RELEASE: 07/13/2001 CIA-RDP86-00513R001341420004-2

SHLYK, A.A.; KALER, V.L.; PODCHUFAROVA, G.M.

Protochlorophyllide in green leaves exposed to light.
Dokl.AN SSSR 133 no.6:1472-1475 Ag '60. (MIRA 13:8)

1. Laboratoriya biofiziki i izotopov Akademii nauk BSSR g.Minsk. Predstavleno akad. A.P.Vinogradovym.
(Chlorophyll)
(Plants, Effect of light on)

APPROVED FOR RELEASE: 07/13/2001 CIA-RDP86-00513R001341420004-2"

"APPROVED FOR RELEASE: 07/13/2001 CIA-RDP86-00513R001341420004-2

ROKOTYAN, Ye.S., doktor tekhn.nauk, prof.; ZHUKEVICH-STOSHA, Ye.A.; SOLOV'YEV, O.P.; LYAMIN, G.N.; SAPOZHNIKOV, A.Ya.; LIPUKHIN, V.A.; KOGOS, A.M.; ISTOMIN, A.V., retsenzent; KARPMAN, M.A., nauchn. red.; PODCHUFAROVA, S.I., red.; KOGAN, F.L., tekhn. red.

[Modern rolling mills abroad] Sovremennye prokatnye stany za rubezhom. Moskva, 1962. 419 p. (MIRA 16:8)

1. Moscow. TSentral'nyy institut nauchno-tekhnicheskoy informatsii mashinostroyeniya.

(Rolling mills)

APPROVED FOR RELEASE: 07/13/2001 CIA-RDP86-00513R001341420004-2"

"APPROVED FOR RELEASE: 07/13/2001 CIA-RDP86-00513R001341420004-2

LIBERMAN, L.Ya., kand. tekhn. nauk; STANYUKOVICH, A.V., kand. tekhn. nauk, red.; LEBEDEVA, N.I., red.; PODCHUFAROVA, S.I., red.; GROSMAN, L.A., red.; KOVAL'SKAYA, I.F., tekhn. red.

[Materials used in the manufacture of power machinery]Materialy, primeniaemye v energomashinostroenii. Moskva, TsINTIMASh, 1961. 181 p. (MIRA 16:4)
(Electric machinery industry--Equipment and supplies)
(Electric engineering--Materials)

APPROVED FOR RELEASE: 07/13/2001 CIA-RDP86-00513R001341420004-2"

"APPROVED FOR RELEASE: 07/13/2001 CIA-RDP86-00513R001341420004-2

PODCZASKI, BRUNON
WLADYSLAW LOSKIEWICZ, Prace nad Mosiadzami, 1936, (A) 2, 1-124

APPROVED FOR RELEASE: 07/13/2001 CIA-RDP86-00513R001341420004-2"

"APPROVED FOR RELEASE: 07/13/2001 CIA-RDP86-00513R001341420004-2

PODCZASIAK, Pawel

Trends in the determination of a uniform organizational model of electric power plants. Energetyka Pol 16 no.12: 371-372 D '62.

1. Zaklad Energetyczny, Gorzow.

APPROVED FOR RELEASE: 07/13/2001 CIA-RDP86-00513R001341420004-2"

"APPROVED FOR RELEASE: 07/13/2001 CIA-RDP86-00513R001341420004-2

PODCZASIAK, Pawel, Techn.

Organizational problems of network exploitation in power plants. Energetyka Pol 15 no.7:193-198 Jl '61. (EEAI 10:9/10)

1. Zaklad Energetyczny, Gorzow.

(Electric power-plants) (Electric networks)

APPROVED FOR RELEASE: 07/13/2001 CIA-RDP86-00513R001341420004-2"

"APPROVED FOR RELEASE: 07/13/2001 CIA-RDP86-00513R001341420004-2

PODDANA,B.; NEUMANN,E.

Necrotizing vasculitis simulating Gougerot's triad. Cesk. derm. 39 no.1:18-20 F'64.

1. I. dermato-venerologicka klinika fakulty vseobecneho lekarstvi KU v Praze; prednosta: prof. dr. J.Konopik, DrSc.

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PODDANY, V.

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CzECHOSLOVAKIA

TESAR, J., Docent Dr; PODDANY, V; NADVORNIK, F; PECH, Z; REHANEK, L; SOBOTKA, J; VIHAN, R.

1. Chair of the Judicial Faculty of General Medicine KU (Katedra soudniho lekarstvi fakulty vseobecneho lekarstvi KU), Prague (for Tesar); 2. Regional Hygienic-epidemiological Station of the Middle Bohemian Region, Microbiological Ward (Krajska hygienicko-epidemiologicka stanice Stredoceskeho kraje, mikrobiologicke oddeleni), Prague - (for all)

Prague, Rozhledy v tuberkulose, No 3, 1963, pp 153-156

"Undiagnosed Cases of Tuberculosis in Sudden and Forcible Deaths."

APPROVED FOR RELEASE: 07/13/2001 CIA-RDP86-00513R001341420004-2"

"APPROVED FOR RELEASE: 07/13/2001 CIA-RDP86-00513R001341420004-2

BARTOS, J.; PODDANY, V.

Reticular hemoblastoma of the orbit. Cesk. oftal. 21 no.6: 479-483 N '65.

1. Ocni oddeleni (vedouci MUDr. J. Bartos) a patologickoanatomicke oddeleni (vedouci MUDr. V. Poddany) Obvodniho ustavu narodniho zdravi v Kladne.

APPROVED FOR RELEASE: 07/13/2001 CIA-RDP86-00513R001341420004-2"

"APPROVED FOR RELEASE: 07/13/2001 CIA-RDP86-00513R001341420004-2

PODDERNIAK, S.

NOFER, J.; PODDERNIAK, S.

Effect of hot microclimate in spinning and weaving plants on absenteeism due to diseases and on working efficiency of workers. Med. pracy 4 no.5: 325-342 1953. (CLML 25:5)

1. Of the Institute of Industrial Medicine (Head--Prof. E. Paluch, M.D.), Lublin.

APPROVED FOR RELEASE: 07/13/2001 CIA-RDP86-00513R001341420004-2"

"APPROVED FOR RELEASE: 07/13/2001 CIA-RDP86-00513R001341420004-2

PODDEBNIAK S.

PALUCH, E.; MROZOWSKI, K.; PODDEBNIAK, S.

[Hemoglobin levels of Polish workers] Hodnoty haemoglobinu u delniki v polsku v r. 1948. Pracovni lek. 2 no.1:1-9 F '50. (CIML 19:1)

1. Of the Institute of Public Hygiene and of the Department of Industrial Hygiene of the State Institute of Hygiene, Lodz. (Head -- Prof. Emil Paluch, M.D.).

APPROVED FOR RELEASE: 07/13/2001 CIA-RDP86-00513R001341420004-2"