DOBIN, Ye.S.

Case of pyrabutol intoxication. Vrach. delo no.8:131-132 Ag '61. (MIRA 15:3)

1. Terapevticheskoye otdeleniye 7-y Gorodskoy bol'nitsy Dnepropetrovska.
(PYRAZOLIDINEDIONE—TOXICOLOGY)

DOBIN, Yu.Ya.

A diffused form of exsudative erythema multiforme treated with penicillin. Vest. vener. no.2:47-48 Mar-Apr 1951. (CLML 20:9)

1. Lt. Col., Medical Corps.

DOBIN, YU. YA.

USSR/Medicine - Clinical Test Jan/Feb 52

"Determination of the Tensile Strength of a Blood Clot in Certain Skin and Venereal Diseases," Yu. Ya. Dobin

Vest Venerol i Dermatol," No 1, pp 42-44

Reference is made to an article published by A. M. Gurevich in "Khirurgiya" No 5, 1948, describing his new app for testing the tensile strength of blood clots, without previous processing of the blood. Dobin agrees with Gurevich that in certain inflammative and destructive processes in the organism, the tensile strength of a blood clot, may serve as

222T15

an indicator of pathology and may frequently be valuable in the diagnosis and prognosis of a disease. The author, supported by Popov, Gol'nik and Martynov, draws a parallel between this test and the reaction of erythrocyte pptn (ROE). He finds that the range of fluctuations in the blood clot tensile strength test is smaller than in the ROE test. Author observed the highest stage of tenacity in a blood clot in primary and recurrent syphilis, especially in cases with gonorrheal and pyodermic complications. It is in these cases that the author recommends the use of the blood clot tensile strength test, as well as in gonorrhea with complication and pyoderma.

222T15

DOBIN, Yu.Ya., podpolkovnik meditsinskoy sluzhby

Tannin-iodine-sulfanilamide suspension of treating suppurative skin diseases. Voen.med.zhur. no.12:73-74 D '56. (MLRA 10:3)
(SKIN--DISEASES) (PHARMACOLOGY)

DOBIN, Yu.Ya., podpolkovnik med.sluzhby; YABLONOVSKAYA, V.G.

Impetigo herpetiformis and its treatment. Voen-med.zhur. no.11:72 N '57. (MIRA 11:4)

(IMPETIGO)

DOBIN, Yu.Ya.

A case of migration of a metalic foreign body into the u'rethra (MIRA 11:7)
Sov.med. 22 no.4:139-140 Ap '58

(URETHRS, for.body
migration of metallic splinter after gunshot wd. of bladder (Rus))

(BLADDER, wds. & inj.
gunshot, migration of metallic splinter to urethra (Rus))

AKHMEDOVA, Z.P. [Akhmedava, Z.P.]; DOBINA, I.A.; TARUTINA, L.A. [Tarutsina, L.A.]; TURBIN, N.V. [Turbin, M.V.]; KHUTYLEVA, L.V. [Khatyliova, L.V.]

Change in the rate of ripening and heterosis of corn under various cultivation conditions. Vestsi AN BSSR Ser. biial. nav. no.3:54-64 '64. (MIRA 18:1)

CIRONEANU,I., dr.; DOBINDA,B., dr.; CALEA, Lucia, ing.

Modernization of slaughtering rooms at the Braila Slaughterhouse.
Ind alim anim 11 no.3:80-82, 84 Mr'63

1. Intreprinderea regionala a industriei carnii, Galati.

DOBINDA, V.

TECHNOLOGY

Determining the free chute speed of quartz sand in water. p. 79

Academia Republicii Populare Romine. Baza de Cercetari Stiintifice, Timisoara. STUDII SI CERCETARI STIINTIFICE. SERIA STIINTE TEHNICE. Timisoara. (Journal on technical sciences issued by the Scientific Research Base in Timisoara, Rumanian Academy.)

Vol. 4, no. 1/2, 1957

Monthly List of East European Acessions (EEAI), LC, Vol. 8, No. 3 March 1959, Unclass.

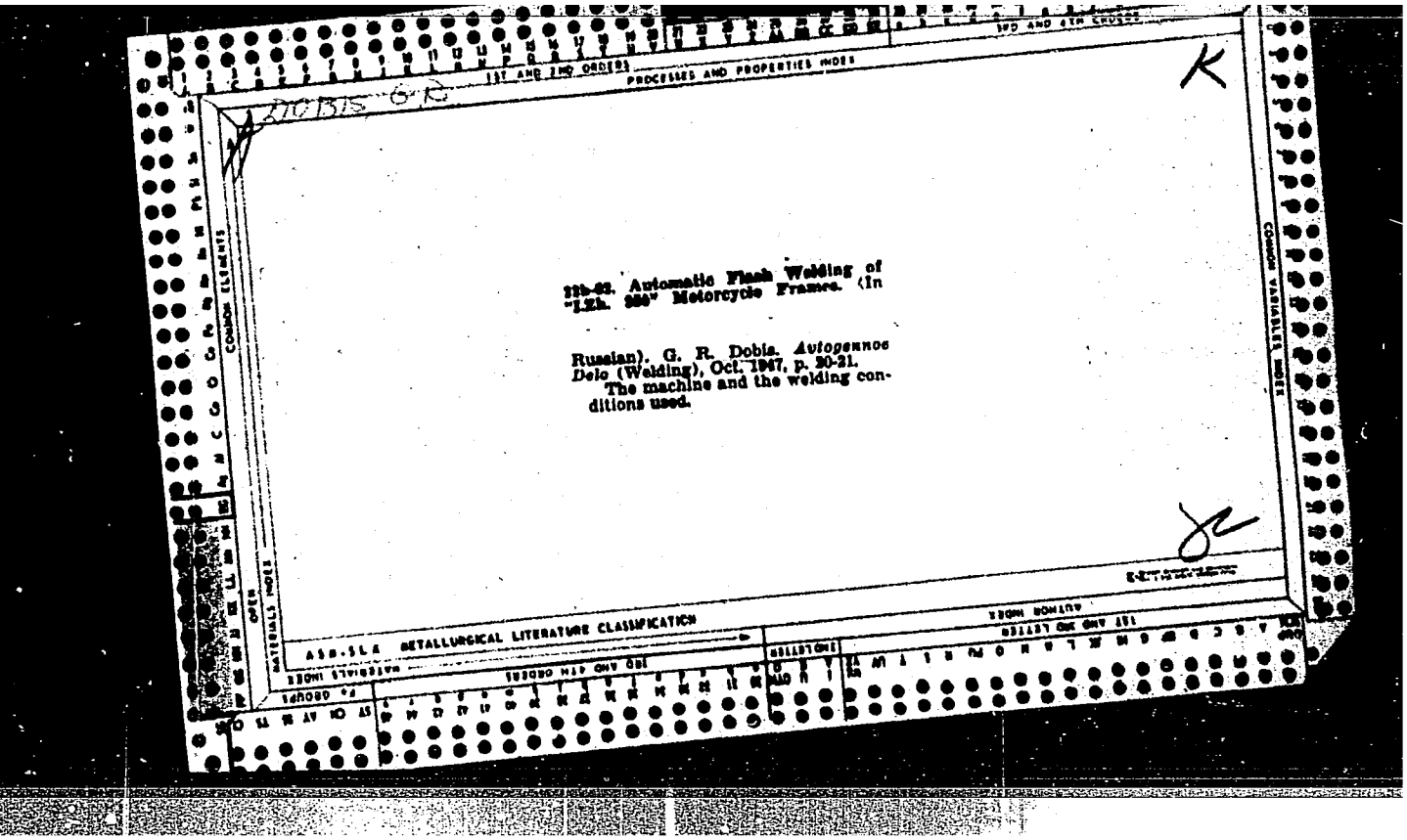
GYULAI, F.; ANTON, Viorica; ANGHEL, A.; DOBINDA, V., ing.; CIOCIRIAN, C.

Station for the experimental research on axial pumps. Studii tehn Timisoara 9 no.1/2:153-161 Ja-Je '62.

1. Secretar stiintific al Comitetului de redactie, "Studii si cercetari, Stiinte tehnice" - Timisoara - (for Dobinda).

DOBININ, F.D.

Some logical systems and indicators for ferrite-transistor devices. Priborostroenie no.4:15-19 Ap '62. (MIRA 15:4)
(Electronic digital computers)



228-62. Automatic Flash Welding of "I.Zh. 350" Motorcycle Frames. (In Russian). G. R. Dobia. *Avtogennoe Delo* (Welding), Oct. 1947, p. 20-21.
The machine and the welding conditions used.

H-28

COUNTRY : GDR
CATEGORY :

19930

ABS. JOUR. : RZKhim., No. 5 1960, No.

AUTHOR :
INST. :
TITLE :

ORIG. PUB. :

ABSTRACT : perature. Butter packaged and processed without a temperature increase (at 5.0-6.5°), remained stable for 5 days. Such butter, after 3 months' refrigerator storage, showed stabilities of 8, 8, and 4 days (the butter in the last case was processed and packaged at 2-10°), respectively. The results obtained from the processing and packaging of butter without preliminary temperature increases are explained by the destruction of the structure of the butter, as confirmed by photomicrographs, electric

CARD: 2/3

H-28

COUNTRY : GDR
CATEGORY :

19930

ABS. JOUR. : RZKhim., No. 5 1960, No.

AUTHOR :
INST. :
TITLE :

ORIG. PUB. :

ABSTRACT : conductivity data, and data on the degree of dispersion of the aqueous phase. For summer butter stored in refrigerators, the authors recommend packaging after a temperature increase in bulk form to 17°, and for winter butter, after a temperature increase to 19°.

G. Titov

CARD: 3/3

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DOBIS, G. R. PA 65T50

USSR/Engineering Mar 1948
Welding, Spot
Welding - Electrodes

"Electrode Arrangements for T-Shaped Welding on Spot-Welding Apparatus," G. R. Dobis, Engr, 2½ pp

"Avtogen Delo" No 3

Emphasizes great saving of weight in the application of spot welding to the welding of T-shaped parts. Describes equipment setup necessary for this operation.

[redacted] 65T50

DOBIS, G.R.

USSR/Engineering - Machines, Lathes Aug 51

"Surface Hardening of Cast-Iron Bedways of Lathes," G. R. Dobis, Engr

"Avtogen Delo" No 8, pp 23-26

Describes installation for hardening bedways of lathes using oxyacetylene flame for heating. Describes expts for establishing optimum conditions of operation and analyzes results. Depth of hardening - 2.5-4 mm, traveling rate of torch - 150 mm/min. Hardness of heat-treated layer along its cross section varies from 50 to 20 R_C.

200T56

DOBIS, J.

SURNAME, Given Names

Country: Czechoslovakia

Academic Degrees:

Affiliation: Prosection Unit, Okres Intitute of Public Health, Head F. Tomik; (Prosektura OUNZ, prednosta F. Tomik,)Trnava. Third Internal Clinic Med. Faculty, Comenius University,Head Prof. T.R. Niederland MD., Bratislava;(III.interna klinika lekarske Fakultete Univ.Komenskeho, prednosta prof.MUDr. T.R. Niederland) Bratislava.

Source: Prague, Ceskoslovenska Gastroenterecologie a Vyziva,Vol 15, No 6, Sept 1961; pp 414-419

Data: Investigations of the Activity of some Enzymes in Serum after Injury in Experimental Animals.

TOMIK, F.,
VIDO, I.,
NIEDERLAND, T.R. MD.
DOBIS, J.

GPO 981643

DOBIS, J.

SURNAME, Given Names

Country: Czechoslovakia

Academic Degrees: not given

Affiliation: Third Internal Clinic Medical Faculty, Comenius University Professor T.R. Niederland, MD. Bratislava. (III. interna klinika lekarske fakultete Univ. Komenskeho v Bratislave, prednosta profesor MUDr. T.R. Niederland) Bratislava. Prosection Unit, Okres Intitute of Public Health, Head F. Tomik MD. (Prosektura OUNZ prednosta MUDr. F. Tomik,) Trnava.

Source: Prague, Ceskoslovenska Gastroenterologie a Vyziva, Vol 15, No 6, Sept. 1961; pp 408- 413.

Data: Correlation of some Biochemical Findings with Morphological Ones After Experimental Liver Damage with Tetrachlormethane.

VIDO, I.,
TOMIK, F,.
VIDO, J.,
DOBIS, J,

GPO 981643

DOBIS, J.; VIDO, I.; NIEDERLAND, T.R.

Serum sorbitol dehydrogenase activity in liver lesions produced with tetrachloromethane in experimental conditions. Cesk. gastroent. vyz. 15 no.4:255-257 Je '61.

1. Z III internej kliniky lek. fak. Univ. Komenskeho v Bratislave, prednosta prof. MUDr. T.R.Niderland.
(DEHYDROGENASES blood) (LIVER DISEASES exper)
(CARBON TETRACHLORIDE toxicol)

VIDO, I.; TOMIK, F.; VIDO, J.; DOBIS, J.

Correlation of some biochemical findings with morphological findings following experimental injury of the liver with tetrachloromethane. Cesk. gastroent. vyz. 15 no.6:403-413 S '61.

1. III. interna klinika lek. fak. Univ. Komenskeho v Bratislave prednosta prof. MUDr. T.R. Niederland Prosektura OUNZ v Trnave, prednosta MUDr. F. Tomik.
(LIVER DISEASES exper) (CARBON TETRACHLORIDE toxicol)

TOMIK, F.; VIDD, I.; NIEDERLAND, T.R.; DOBIS, J.

Studies on the activity of some serum enzymes after injuries in experimental animals. Cesk. gastroent. vyz. 15 no.6:414-419 S '61.

1. Prosektura OUNZ v Trnave, prednosta F. Tomik, a III. interna klinika lek. fak. Univ. Komenskeho v Bratislave, prednosta prof. MUDr. T.R.Niederland.

(WOUNDS AND INJURIES exper)
(ENZYMES blood)

NIEDERLAND, T. R.; GVOZDJAK, J.; DOBIS, J.; Technicka spolupraca MATOLKOVA, M.

Changes in the concentration of glycogen fractions in the striated muscle and myocardium in chronic and chronic-intermittent administrations of salicylates. Bratisl. lek. listy 41 no.7:415-419 '61.

1. Z III internej kliniky a Vedeckeho laboratoria pre farmakobiochemiu Lek. fak. Univ. Komenskeho v Bratislave, prednosta prof. MUDr. T. R. Niederland.

(MYOCARDIUM metab) (MUSCLES metab) (GLYCOGEN metab)
(SALICYLATES pharmacol)

DOBIS, J.; VIDO, I.; VIDO, J.; NIEDERLAND, T. R.

Studies on the activity of some enzymes in the blood serum in experimental carbon tetrachloride liver injuries. Bratisl. lek. listy 41 no.9:537-542 '61.

1. Z III internej kliniky Lek. fak. Univ. Komenskeho v Bratislave, prednosta prof. MUDr. T. R. Niederland.

(LIVER DISEASES exper) (TRANSAMINASES blood)

NAGY, Ferenc, dr. (Budapest); DOBIS, Otto (Budapest); LITVAN, Gabor (Budapest); TELES, Ivan (Budapest)

Determination of the molecular state of anhydrous aluminum chloride in benzol. Acta chimica Hung 21 no.4:397-407 '59. (MEAI 9:6)

1. Central Research Institute for Chemistry, Hungarian Academy of Sciences, Budapest. Vorgelegt von G.Schay.
(Aluminum chloride) (Benzene)

KUNZ, Alfons; GIBER, Janos; DOBIS, Otto

Studies in nitration with mixed acids. Pts. 2-3. Magy kem folyoir 65 no. 5:174-180 My '59.

1. Budapesti Muszaki Egyetem Ipari Szerves-Kemiai Tanszeke.

DOBIS, Otto; MAGY, Ferenc; TELCS, Ivan

Modified Ulmann device for the determination of the molecular state of deluted solutions. Magy kem folyoir 65 no. 11: 448-451 N '59.

1. Magyar Tudomanyos Akademia Kozponti Kemiai Kutato Intezete, Budapest.

35123
S/081/62/000/004/004/087
B149/B101

11.1510
11.0132.

AUTHORS: Berezin I. V., Vatsek K., Kuo-Ch'u, Dobish O., Kazanskaya N. F.

TITLE: Investigation of the kinetics of elementary free-radical reactions in the liquid phase using tritium

PERIODICAL: Referativnyy zhurnal. Khimiya, no. 4, 1962, 62, abstract 4B429 (Tr. po khimii i khim. tekhnol. [Gor'kiy] no. I, 1961, 18-30)

TEXT: The reactivity (R) of cis-decalin (I) and trans-decalin (II) in the reaction with free radical CH_3, generated by decomposition of acetyl peroxide at 55-90°C was investigated with the help of tritium (T). The rate of reaction of I and II with CH_3 was measured with reference to the standard reaction of breaking off a T atom from tritium-containing cyclohexane by the CH_3 radical. The ratio of the rate constants for the reactions between CH_3 and I and II is 1.56. The relative R of T atoms,

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BEREZIN, I.V.; DOBISH, O.

Reactivity of saturated hydrocarbons in their interaction with free methyl radicals in the liquid phase. Dokl. AN SSSR 142 no.1:105-108 Ja '62. (MIRA 14:12)

1. Moskovskiy gosudarstvennyy universitet im. M.V. Lomonosova. Predstavleno akademikom N.N. Semenovym.
(Hydrocarbons) (Radicals (Chemistry))

S/020/62/144/002/022/028
B101/B110

5.3300

AUTHORS: Berezin, I. V., and Dobish, O.

TITLE: The influence of structure and medium on the reactivity of hydrocarbons with free methyl radicals in the liquid phase

PERIODICAL: Akademiya nauk SSSR. Doklady, v. 144, no. 2, 1962, 374-377

TEXT: The reactivity of hydrocarbons with CH_3 (rate constant k_σ^H) was determined by concurrent reactions using n-heptane-4t as standard. Free CH_3 radicals were obtained by thermal decomposition of acetyl peroxide at 60-90°C. The ratio of the rate constants is given by $k_\sigma^H/k_{hept}^H = 10.5\left[(I_o - I)/I\right]\cdot\left[C_7H_{16}\right]/\left[RH\right]$, where I_o is the molar activity of CH_4 reacting with C_7H_{16} - t only, and I is that of CH_4 reacting with C_7N_{16} + RH. Results: (1) k_σ^H/k_{hept}^H depends linearly on the composition of the mixture. Hence, only values extrapolated for zero concentration of the hydrocarbon in question can be intercompared. The reaction of C_6H_6-t with

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The influence of structure ...

non-radioactive heptane gave more exact values than that of C_6H_6 with C_7H_{16}. (2) The composition of the medium influences especially the ratio of the reaction constants of cis-decalin, methyl cyclopentane, benzene, and above all that of isooctane. (3) k_σ^H/k_{hept}^H depends on the structure of the hydrocarbon. The values referred to a secondary bond of heptane for 80°C are respectively: 0.1 and 3.7 for primary bonds of heptane and toluene; 1.0, 0.89, and 1.42 for non-conjugate secondary bonds of heptane, cyclohexane, and cyclopentane; 35.1, 38.5, and 95 for conjugate secondary bonds of cyclohexene, methyl cyclopentene, and 1,3-cyclohexadiene; 9.6, 13.7, 6.65, and 17.9 for tertiary bonds of methyl cyclohexane, methyl cyclopentane, trans-decalin, and cis-decalin; 0.067 and 0.068 for aromatic C-H bonds of benzene and toluene. (4) The low value of k_σ^H/k_{hept}^H for 2,2,4-trimethyl pentane (isooctane) (1.6 ± 0.1 for $[C_7H_{16}] = 100\%$, 4.2 for $[RH] = 100\%$) indicates that the reactive bonds are screened by the methyl groups. There are 1 figure and 2 tables. The most important English-language references are: J. A. Meyer, V. Stannet, M. Szwarc, J. Am. Chem. Soc., 83, 25 (1961); E. W. R. Steacie, Atomic and Free Radical Reactions,

Card 2/3

The influence of structure ...

N. Y., 1954, p. 500.

ASSOCIATION: Moskovskiy gosudarstvennyy universitet im. M. V. Lomonosova (Moscow State University imeni M. V. Lomonosov)

PRESENTED: December 26, 1961, by N. N. Semenov, Academician

SUBMITTED: December 26, 1961

Card 3/3

DOBISHEV, A.M. [Dobyshev, A.M.], inzh.

New sugar beet planter. Mekh.sil'.hosp. 10 no.12:25-26
D '59. (MIRA 13:3)
(Planters(Agricultural machinery))

HUNYA, Tibor, dr.; DOBIZ, Istvan, dr.; MOLNAR, Miklos, dr.; PINTER, Miklos, dr.

Therapy of infants with dystrophy by Nerobol. Gyermekgyogyaszat 14 no.1:10-16 Ja '62.

1. Bekes Megyei Tanacs Csecsemootthona es a Bekes M. Tanacs Korhazanak laboratoriuma es rontgenosztalya, Gyula.
(INFANT NUTRITION) (MILK) (CALCIUM DIETARY)

HUNGARY

KRISAR, Zoltan, Dr, KOTSIS, Lajos, Dr, DOBJANSCHI, Sandor, Dr, MONOSI, Mihaly, Dr; I. Hospital of Nagyvarad (Oradea), Department of Surgery (department head-chief physician: KRISAR, Zoltan, Dr) (Nagyvaradi (Oradeai) I. sz. Korhaz, Sebeszeti Osztaly).

"Correction of Esophageal Stricture, Caused by Alkali Burns, by Plastic Surgery Using Tissue From the Transverse Colon."

Budapest, Magyar Sebeszet, Vol XIX, No 4, Aug 66, pages 236-243.

Abstract: [Authors' Hungarian summary] Retrosternal reconstruction of the esophagus with transverse colon tissue was performed in 17 cases of esophageal stricture caused by alkali burns. One patient was lost because of peritonitis subsequent to suppurative pleuritis, 14 patients had an uneventful recovery. The late results were satisfactory both from the functional and esthetic aspect. The operation is performed in a single session and, in the presence of a good general condition, without previous stomach fistula. In one case, gastric resection was also performed simultaneously with the plastic operation. The technical and postoperative-nursing problems of esophageal plastic with transverse colon tissue, the sources of the eventual complications and the mode of their treatment are discussed. 1 Hungarian, 19 Western references.

DOBKE, Bronislaw

Hiring refrigerating tonnage fixtures for oversea transportation of goods of the Polish foreign trade. Tech gosp morska 13 no.12:355-356 D'63.

1. Polfracht, Gdynia.

DOBKE, Bronislaw (Gdynia)

Packeting of lumber in overseas transportation. Tech gosp morska 14 no. 7:195-198 Jl '64.

P/036/61/000/002/002/004
A111/A126

AUTHOR: Dobke, Stanisław, Master of Engineering

TITLE: Technical and economic problems of surfacing blooming-mill rolls

PERIODICAL: Przegląd Spawalnictwa, 1961, no. 2, 37-41

TEXT: This paper was read at the 8th Scientific Technical District Conference in Gliwice, held on October 13-15, 1960, and deals with the problem of renewing hard surfaces on blooming mill rolls by shielded-arc welding. Investigations showed that 80% of worn out rolls can be renewed, if the deepness of cracks or other damages do not exceed 100 mm. The procedure consists of mechanical preparation, ultrasonic check, preheating, welding of the hard surface, cooling, dressing and final ultrasonic check. The most important part of the procedure is the preheating at temperatures ranging from 300 to 700°C, depending on the steel hardness. Among various preheating methods the induction method used in the Steel Plant im. Lenin is described. The induction wiring has an internal diameter of 1,300 mm and consists of 2 sections with 25 wirings of 500 amp each. The preheating time of a 40 t roll is reduced to 8 hours. In Poland core welding wires and TMn II melting material was used. Before welding of the hard surface the

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cracks were welded with copper-coated 5 mm SPla welding wire or TC200 welding material. The welding was performed by a 32-38 v, 650-750 amp, and 59 m/h ADS-100-2 welding apparatus. In the USSR an automatic welding device for the renewal of hard surfaces was developed. The cooling of renewed rolls is perfcrmed in a cooling chamber equipped with a thermostat, after which the rolls must be checked by ultrasonic devices to discover eventual cracks. A calculation of costs in Poland and in the GDR is given. There are 13 figures, 3 tables and 4 references: 3 Soviet-bloc and 1 non-Soviet-bloc.

ASSOCIATION: Huta im. Lenina (Lenin Plant), Kraków

DOBKE, Stanislaw, mgr inz.; PALUCHOWSKI, Wieslaw, mgr inz.

Hardfacing of pressure-pad rollers of a pipe resistance welder. Przegl spaw 15 no.5/6:125-128 My-Je '63.

1. Sekcja Spawalnicza Stowarzyszenia Inzynierow i Technikow Mechanikow Polskich Poludnie, Katowice.

DOBKE, Stanisław, mgr. inż.; JEDROSZ, Jacek, mgr. inż.

Resistance welding of rimmed steels with large segregations.
Przegl spaw 15 no.8:176-178 Ag'63

DOBKE, Stanislaw, mgr inz.

Possibilities of applying welding in repair and reclamation of blooming mill rolls and rolling equipment. Przegl spaw 15 no.12: 261-272 D '63.

1. Sekcja Spawalnicza Poludnia, Stowarzyszenie Inzynierow i Technikow Mechanikow Polskich.

DOBKE, Stanislaw, mgr inz.; FALUCHOWSKI, Wieslaw, mgr inz.

Electrovibration surfacing. Przegl spaw 16 no.7/8:174-178 Jl-Ag'64

DOBKIEWICZ, Dominika; REMBOWSKA-WACHOWSKA, Maria (Warszawa)

Studies on the effectiveness of piperazine in the treatment of helminthiases in children and adults. Wiadomosci parazyt., Warsz. 2 no.5:Suppl:125-126.1956.

1. Woj. Stacja Sanitarno-Epidemiologiczna.
(PIPERAZINES, therapeutic use,
helminthasis (Pol))
(HELMINTH INFECTIONS, therapy,
piperazine (Pol))

DOBKIN, A. S.

p. 3

9(4) PHASE I BOOK EXPLOITATION SOV/1889

RSFSR. Moskovskiy ekonomicheskiy administrativnyy rayon. Sovet narodnogo khozyaystva

Poluprovodnikovyye diody i triody i ikh primeneniye; sbornik statey. (Semiconductor Diodes and Triodes and Their Uses; Collection of Articles) Moscow, Tsentr. byuro tekhn. inform., 1958. 102 p. (Series: Dostizheniya nauki i tekhniki) 1,700 copies printed.

Consulting Engineer: Ye.Z. Korobeynikova; Ed.: G.P. Gaus.

PURPOSE: This book may be useful to engineers in the field of semiconductor electronics.

COVERAGE: The articles in this collection discuss problems in the design, manufacture, and application of new types of semiconductor devices. The double-base diode is described and results of the calculation of its characteristics are given. Fused-junction silicon and germanium triodes are discussed

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and the characteristics of the type 314 fused-junction triode are presented. The effect of feedback in transistor amplifiers on nonlinear distortions is covered. Operation of low-frequency transistor amplifiers for individual units of multichannel communication systems is explained and a discussion of transistor units of the KPP 30/60 system is presented. Attention is given to the problems of cooling transistor devices. There is a review of Soviet and Western magazines and patents for 1956-1957 concerned with semiconductor devices and their applications. There are no references.

TABLE OF CONTENTS:

Press, F.P. Fused-Junction Silicon n-p-n- Triodes 4
The author discusses properties of silicon and describes the advantages of silicon triodes over germanium triodes. He also describes the construction and characteristics of fused-junction silicon n-p-n triodes.

Samokhvalov, M.M. Type 314 Germanium High-frequency Triodes 12
The author discusses the construction and applications of type 314 germanium triodes. He also explains the equivalent circuit of a fused-junction transistor and discusses limiting operating conditions of type 314 triodes.

Dobkin, A.S. Double-base Germanium Diode 25
The author discusses basic parameters and principles of operation of double-base diodes. He also explains the construction and characteristics of diodes and gives examples of their application.

Borisov, A.I. Nonlinear Distortions in Feedback Transistor Amplifiers 37
The author discusses nonlinear distortions in transistor amplifiers with and without feedback and describes methods of using feedback to decrease the distortions. He also derives expressions for calculating performance of transistor

amplifiers with various types of feedback.

Muradyan, A.G., and G.M. Mikirtichan. Transistor Amplifiers for Individual Units of Multichannel Communication Systems 61
The authors discuss the operation and characteristics of a low-frequency transistor amplifier used in a standard twelve-channel high-frequency system and derive formulas for calculating amplifier performance. A discussion of a transistor audio amplifier and a control-signal receiver is also presented.

Zaryanov, N.V. Cooling of Semiconductor Devices 74
The author describes a transistor chassis absorbing heat from transistor circuits and derives expressions that may be used in the design of transistor cooling elements.

Fridolin, G.G. Review of Certificates of Inventorship, Foreign Journals, and Patents for 1956 and 1957 Concerned With Semiconductor Devices and Their Applications 81
I. Transistor generators of sinusoidal oscillations 81
II. Flip-flop circuits and pulse generators 97

Semiconductor Diodes and Triodes (Cont.) SOV/1889

The author reviews Soviet and Western patents and magazines concerned with transistor circuits. He discusses the operation of various transistor oscillators, frequency dividers, modulators, and multivibrators.

AVAILABLE: Library of Congress (TK7872.T73 P58)

JP/jmr
7-23-59

Card 5/5

ZELIKMAN, G.A.; MAZEL', Ye.Z.; PRESS, F.P.; FRONK, S.V.; DOBKIN, A.S., red.; SMUL'SKIY, A.S., red.

[Silicon transistor diodes and triodes; manufacture techniques] Poluprovodnikovye kremnievye diody i triody, tekhnologiia proizvodstva. Moskva, Izd-vo "Energiia," 1964. 183 p. (MIRA 17:8)

ZELIKMAN, G.A.; MAZEL', Ye.Z.; PRESS, F.P.; FRONK, S.V.; DOBKIN, A.S., red.; SMUL'SKIY, A.S., red.

[Silicon diodes and triodes; their production technology] Poluprovodnikovye kremnievye diody i triody; tekhnologiia proizvodstva. Moskva, Energiia, 1964. 183 p. (MIRA 17:12)

PA 55/49T53

DOBKIN, B. F.

USSR/Engineering Jan 49
Turbines, Steam
Repairs

"Duration of Operating Period of Steam Turbines Between Major Overhauls," B. F. Dobkin, N. G. Stratonov, Engineers, 3 pp

"Elek Stants" No 1

Operating Codebook calls for major overhauls annually without regard to operating hours. Authors compiled 2-year data on repairs and breakdown of turbines to use as basis for recommending changes in overhaul schedule. 55/49T53

USSR/Engineering (Contd) Jan 49

Lists data in tabular form by operating periods between overhauls, and analyzes causes of breakdowns. Recommend 10,000 - 12,000 hours operation between overhauls (gradual implementation), excluding new installations (one-year overhaul, initially).

55/49T53

YAROSHEVICH, A.A.; GALASHEV, M.A.; DOBKIN, G., redaktor; STEPANOVA, N., tekhnicheskiy redaktor

[Heat system installations in collective farm centers] Teplofikatsiia vnutriusadebnogo sel'skokhoziaistvennogo proizvodstva v kolkhoze. Minsk, Gos. izd-vo BSSR, Red. selkhoz. lit-ry, 1955. 239 p. (MLRA 8:7)

(Collective farms) (Electric power plants)

DOBKIN, G. I.

Dobkin, G. I. - "Methods for burning peat in boiler installations," In symposium: Torf v nar. khoz-ve Belorus. SSR, Minsk, 1948, p. 73-80

So: U-3566, 15 March 53, (Letopis 'Zhurnal 'nykh Statey, No. 13, 1949)

DOBKIN, G.I.

Changes in the efficiency of pumps. Energetik 1 no.6:36-37 N '53. (MLRA 6:10)
(Pumping machinery)

PYATYSHKIN, N.M., kandidat tekhnicheskikh nauk; SEMENOV, Yu.K.; DOBKIN, G.I.

Modernizing a standard vertical furnace for burning peat. Energetik 2 no.1:3-8 Ja '54. (MLRA 7:1)
(Furnaces)

8 (6) SOV/112-57-5-9815

Translation from: Referativnyy zhurnal, Elektrotekhnika, 1957, Nr 5, p 25 (USSR)

AUTHOR: Dobkin, G. I., Kuz'min, Yu. P.

TITLE: Reducing Per-Unit Electric-Energy Consumption for Pulverizing the Milled Peat in Shaft-Mill Outfits (Umen'sheniye udel'nogo raskhoda elektro-energii pri razmole frezernogo torfa v shakhtno-mel'nichnykh ustanovkakh)

PERIODICAL: Sb. nauch. rabot. Belorus. politekhn. in-t, 1956, Nr 53, pp 116-128

ABSTRACT: Per-unit electric-energy consumption for pulverizing hard fuel depends on its mechanical properties, pulverization fineness, and moisture content. High content of volatile substances in the peat, amounting to 70%, permits a coarse peat pulverization before feeding it into chamber-type furnaces. Pulverization of the milled peat in shaft-type pulverizers has gained wide usage. Per-unit energy consumption may be further reduced by increasing the speed of the air-and-peat mixture in the shaft from the conventional

Card 1/2

Reducing Per-Unit Electric-Energy Consumption for Pulverizing the Milled . . . .

3.0-3.5 m/sec to 5.5-6.0 m/sec without increasing the unburned losses. With such a speed, small fractions (under 1 mm) of the milled peat are fanned off; they constitute about 50% of the total amount of the fuel and can be burned effectively without any pulverization. As a result, the actual pulverizer productivity is decreased, which reduces the per-unit energy consumption for pulverizing. Fanning off the fine fractions of the milled peat can be accomplished by a higher placement of the fuel inlet in the separation shaft or by feeding the fuel into an auxiliary shaft adjacent to the principal one. The second method is to be preferred because the auxiliary shaft functions as a drying stack. After the steps toward fanning off the fine fractions are taken, the shaft-pulverizer furnaces will become more reliable and economical installations for milled-peat burning.

I.M.P.

8(5) SOV/112-58-3-3655

Translation from: Referativnyy zhurnal. Elektrotekhnika, 1958, Nr 3, p 16 (USSR)

AUTHOR: Dobkin, G. I.

TITLE: Technological Progress in Soviet Thermal-Power Engineering (Tekhnicheskiy progress v sovetskoy teploenergetike)

PERIODICAL: Energ. sb. Nr 4, Minsk, 1957, pp 12-26

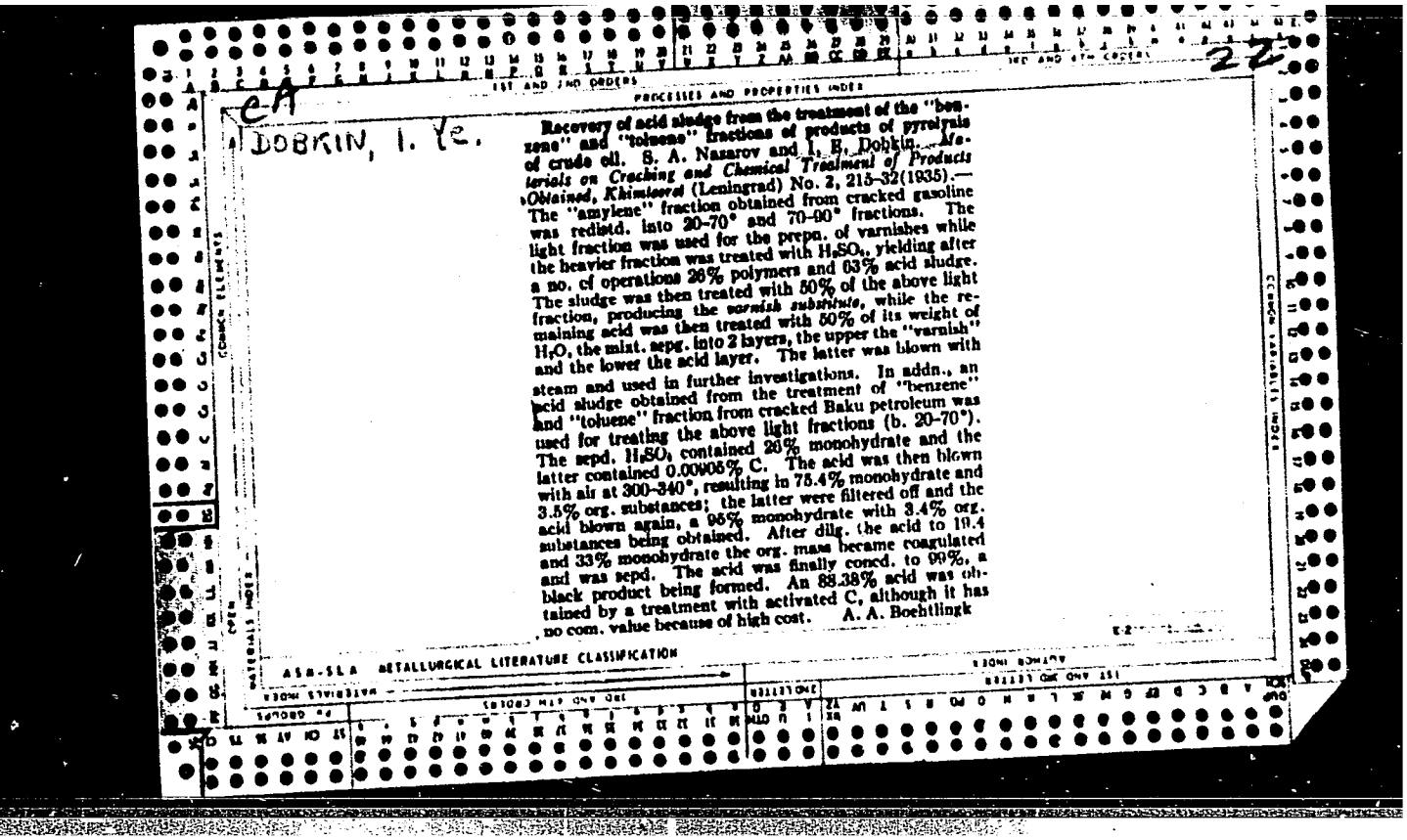
ABSTRACT: A short review is presented of problems associated with adoption of high-parameter steam: higher capacity of units, use of superhigh- and supercritical-pressure steam, steam reheating, selection of feed-water temperature. Some points of discussion on selecting steam parameters are presented as set forth in articles published in "Teploenergetika" journal in 1954 and 1955. Brief information is given on thermal power plants abroad, on torch and cyclon principles of fuel combustion, and on the development of steam-generating equipment and water-treatment systems in the USSR.

I.S.L.

Card 1/1

DOBKIN, I.I., inzh.

Mine survey or inspection of a hoisting unit. [Trudy] VNIMI no.47:302-314 '62 (MIRA 17:7)



CA

DOBKIN, I. Ye.

PROCESSES AND PROPERTIES INDEX

Recovery of acid sludge from the treatment of the "benzene" and "toluene" fractions of products of pyrolysis of crude oil. S. A. Nazarov and I. E. Dobkin. *Materials on Cracking and Chemical Treatment of Products Obtained, Khimizovat* (Leningrad) No. 2, 215-32(1935).— The "amylene" fraction obtained from cracked gasoline was redistd. into 20-70° and 70-90° fractions. The light fraction was used for the prepn. of varnishes while the heavier fraction was treated with H_2SO_4, yielding after a no. of operations 26% polymers and 63% acid sludge. The sludge was then treated with 50% of the above light fraction, producing the *varnish substitute*, while the remaining acid was then treated with 50% of its weight of H_2O, the mixt. sepg. into 2 layers, the upper the "varnish" and the lower the acid layer. The latter was blown with steam and used in further investigations. In addn., an acid sludge obtained from the treatment of "benzene" and "toluene" fraction from cracked Baku petroleum was used for treating the above light fractions (b. 20-70°). The sepd. H_2SO_4 contained 26% monohydrate and the latter contained 0.00905% C. The acid was then blown with air at 300-340°, resulting in 75.4% monohydrate and 3.5% org. substances; the latter were filtered off and the acid blown again, a 96% monohydrate with 3.4% org. substances being obtained. After dilg. the acid to 19.4 and 33% monohydrate the org. mass became coagulated and was sepd. The acid was finally concd. to 99%, a black product being formed. An 88.38% acid was obtained by a treatment with activated C, although it has no com. value because of high cost. A. A. Boehtlingk

ASB-SLA METALLURGICAL LITERATURE CLASSIFICATION

DOBKIN, I.Ye.; MESHCHANINOV, S.M.; PARFENOV, N.M.

Industrial properties of solidol obtained from mixtures of oxidized liquid petroleum waxes and high-molecular synthetic fatty acids. Proizv. smaz. mat. no.2:6-15 '56. (MIRA 10:11)

1. Leningradskiy neftemaslozavod imeni Shaumyana.
(Lubrication and lubricants)
(Acids, Fatty) (Paraffins)

DOBKIN, I.Ye

DOBKIN, I.Ye.

Shaumian Leningrad Petroleum and Lubricant Plant. Neftianik 2 no.11:36-37 N '57. (MLRA 10:10)
(Leningrad--Lubrication and lubricants)

DOBKIN, I.Ye.; GUSHANSKAYA, P.G.; SYCHEVA, L.F.

Production of C_5 - C_9 low molecular weight synthetic fatty by the oxidation of soft paraffins. Proizv.smaz.mat. no.5: 34-44 '59. (MIRA 13:4)

1. Leningradskiy opytnyy neftemaslozavod imeni Shaumyana.
(Acids, Fatty) (Paraffins)

DOBKIN, I. Ye.

Problems pertaining to raw materials and technology in producing lubricants based on synthetic fats for mass consumption. Proizv. smaz. mat. no.6/8:12-23 '61. (MIRA 14:8)

1. Leningradskiy opytnyy neftemaslozavod, imeni Shaumyana.
(Lubrication and lubricants) (Acids, Fatty)

GUSHANSKAYA, P.G.; SYCHEVA, L.F.; DOBKIN, I.Ye.; LEV, L.I.

Using partition chromatography for the separation of low molecular weight acids obtained in the oxidation of soft paraffins. Khim.i tekh.topl.i masel 6 no.8:31-36 Ag '61. (MIRA 14:8)

1. Neftemaslozavod im. Shaumyana.
(Acids, Organic)
(Chromatographic analysis)
(Paraffins)

S/137/62/000/010/006/028
A052/A101

AUTHORS: Afanas'yev, I. D., Dobkin, I. Ye., Sazanova, M. N., Soltan, S. G., Garzanov, G. Ye., Tokar', I. K., Chamin, I. A., Belosevich, V. K., Pavlov, I. M.

TITLE: The effect of substances with a lower surface tension in the composition of synthetic lubricants on the cold rolling of thin metal strips

PERIODICAL: Referativnyy zhurnal, Metallurgiya, no. 10, 1962, 8, abstract 10D46 ("Novosti neft. i gaz. tekhn. Neftepererabotka i neftekhimiya", no. 4, 1962, 23 - 27)

TEXT: The data on the effect of various technological lubricants on the cold rolling of strips on a two- and four-high mill are cited. Synthetic greases - esters of saturated synthetic fatty acids, - reduce the friction and the resistance of metal to deformation at rolling of carbon steel and Ti (BT-1-T) (VT-1-T) strips more effectively than animal fat, palm oil, mineral oils etc. Synthetic lubricants, due to their low costs and good lubricating quality, should

Card 1/2

S/137/62/000/010/006/028
A052/A101

The effect of substances with a lower surface tension..

be recommended for an extensive testing on cold rolling mills.

N. Yudina

[Abstracter's note: Complete translation]

Card 2/2

L 14574-66 EWT(m)/T DJ

ACC NR: AP6005336 SOURCE CODE: UR/0413/66/000/001/0074/0074

INVENTOR: Papok, K. K.; Kreyn, S. E.; Vipper, A. B.; Zuseva, B. S.; Garzanov, G. Ye.; Vinner, G. G.; Dobkin, I. Ye.; Afanas'yev, I. D.; Rogachevskaya, T. A.; Somov, V. A.; Botkin, P. P.; Kuliyev, A. M.; Zeynalova, G. A.

ORG: none

TITLE: Preparation of motor oil. Class 23, No. 177579

SOURCE: Izobreteniya, promyshlennyye obraztsy, tovarnyye znaki, no. 1, 1966, 74

TOPIC TAGS: motor oil, antiwear additive, detergent additive

ABSTRACT: An Author Certificate has been issued for a preparative method for motor oil, involving addition of a detergent and an antiwear additive to the oil base. The method provides for the use of an alkyl-formaldehyde condensation product and of a dialkyl dithiophosphate based on C_{12}-C_{16} alcohols as the additives. [BO]

SUB CODE: 11/ SUBM DATE: 16Apr64/ ATD PRESS: 4190

Card 1/1 UDC: 621.892.8

GLADCHENKO, I.P.; DOBKIN, R.D.; KOKIN, A.D.

Building structures and products made of plastics. Plast.massy no.9:22-30 '60. (MIRA 13:11)
(Plastics) (Building materials industry)

NIKOLAYEV, A.N.; GLADCHENKO, I.P.; BIRGAUZ, G.O.; DOBKIN, R.D.; SPEKTOR, E.I.

Window casements made of glass plastics. Plast. massy no.7:60-63 '65.
(MIRA 18:7)

DOBKIN, S F

Osnovy Proizvodstva Pechatnoy Produktsii (Production Principles of the Printing Industry) Moskva, Iskusstvo, 1954. 167 P. Illus., Diagrs., Tables.

SO: N/5
747
.D6

CHIRKIN, Viktor Vasil'yevich, kand.tekhn.nauk; SOKOLOV, Ivan Georgiyevich, kand.tekhn.nauk; VERSHINSKIY, Vladimir Vasil'yevich, inzh. Prinimali uchastiye: BELAVENTSEV, N.V., inzh.; DOBKIN, S.Z., inzh. KAZANSKIY, G.A., inzh., retsenzent; SMIRNOV, A.V., red.; DANILOV, L.N., red.izd-va; SAFRANOVA, I.Yu., red.izd-va; UVAROVA, A.F., tekhn.red.; SOKOLOVA, T.F., tekhn.red.

[Technology of car construction] Tekhnologiia vagonostroeniia. Pod obshchei red. V.V.Chirkina. Moskva, Gos.nauchno-tekhn.izd-vo mashinostroit.lit-ry, 1960. 483 p. (MIRA 13:11)
(Railroads--Cars--Construction)

DOBKIN, V.M.

Beyrakh, Z. Ya. and Dobkin, V.M., "Automatic Control of Steel-Ball Mills," Moscow, Mashgiz, 1953, 24 pages with illustrations (Central Boiler and Turbine Scientific Research Institute, imeni I.I. Polzunov).

DOBKIN, Vadim Mikhaylovich; DULEYEV, Yevgeniy Mikhaylovich; FEL'DMAN, Yefim Petrovich; MARKOV, B.A., red.; VORONIN, K.P., tekhn.red.

[Automatic regulation of heat processes at electric power stations] Avtomaticheskoe regulirovanie teplovykh protsessov na elektrostantsiiakh. Moskva, Gos.energ.izd-vo, 1959. 399 p. (MIRA 13:5)

(Automatic control) (Boilers)

BARSHAY, G.; DOBKIN, V.

Plastic turbodrill turbine. Izv. vys. ucheb. zav.; neft' i gaz 2 no.8:8 '59. (MIRA 12:11)
(Plastics) (Turbodrills)

ACCESSION NR: AR5008964

S/0137/65/000/00[illegible]

SOURCE: Ref. Zh. Metallurgiya, Abs. 1D60

AUTHOR: Meyerovich, I. M.; Pankin, V. A.; Dobkin, V. L.

ACCESSION NR: AR5008964

Card 2/2

DOBKIN, V. M.*

PHASE I BOOK EXPLOITATION SOV/4671

Akademiya nauk SSSR. Institut avtomatiki i telemekhaniki. Seminar po pnevmogidravlicheskoy avtomatike. 2d and 3d session

Voprosy pnevmo- i gidro- avtomatiki (Problems in Pneumatic and Hydraulic Automation) Moscow, 1960. 211 p. Errata slip inserted. 4,500 copies printed.

Resp. Ed.: M.A. Ayzerman, Doctor of Technical Sciences, Professor; Ed. of Publishing House: A.A. Tal'; Tech. Ed.: S.G. Tikhomirova.

PURPOSE: This collection of articles is intended for scientific workers, industrial designers and engineers interested in automation and telemechanics.

COVERAGE: The collection of 23 articles is a continuation of an earlier work of the Academy of Sciences USSR, on pneumatic and hydraulic automation systems, published in 1959. A wide range of problems connected with the design and operation of pneumatic and hydraulic automation equipment is described. An addition to problems based on experiments, the collection also contains discussions of new trends in the field, such as the possibility of using very low pressure for the operation of pneumatic devices. Some articles of this collection were written in the German Democratic Republic and in Czechoslovakia and reflect a somewhat different approach to automation problems. No personalities are mentioned. References accompany most of the articles.

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Volgin, V.V. Direct and Reverse Lead in Automatic Regulation Systems Composed of AUS Pneumatic Instruments 79

Dvoretskiy, V.M. Small Scale Hydraulic Lead Block of Compensation Type 88

Temnyy, V.P. Method of Increasing the Amplification of Industrial Hydraulic Instruments 93

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Nikitin, V.A. AUS Unified Pneumatic Assembly System - Base of a Complex Automation in the Petroleum Refining Industry 123

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Zalmanzon, L.A., and A.I. Semikova. Investigation of Characteristics of Pneumatic Chambers Used as Summators 148

Berends, T.K., and A.A. Tal'. Pneumatic Throttleless Relay Diagrams 154

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Anders, V.R., T.K. Berends, and N.L. Kharas. KhPR-1P Regulating Chromatograph With a Pneumatic Outlet 162

Dobkin, V.I., M.L. Kurskaya and Yu.I. Ostrovskiy. Application of an External Regulator for Controlling and Regulating Certain Chemical Processes According to the Thermal Effect of the Reaction

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THE GERMAN DEMOCRATIC REPUBLIC AND CZECHOSLOVAKIA

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Hampl, T. (Czechoslovakia), Hydraulic Regulators of the Křižík Plant 205

AVAILABLE: Library of Congress (TJ840.S42)

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* initials should be V.M. [illegible]

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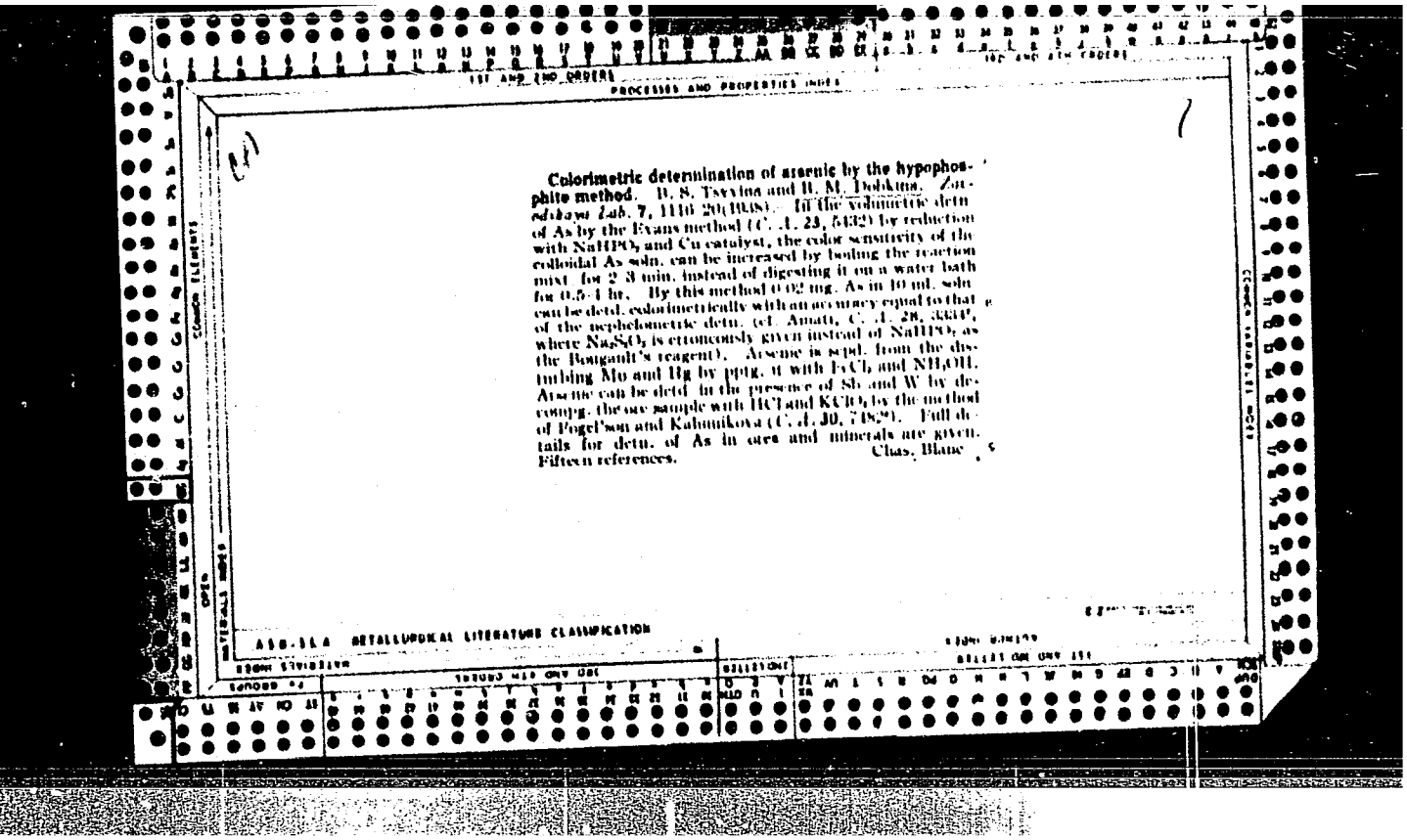
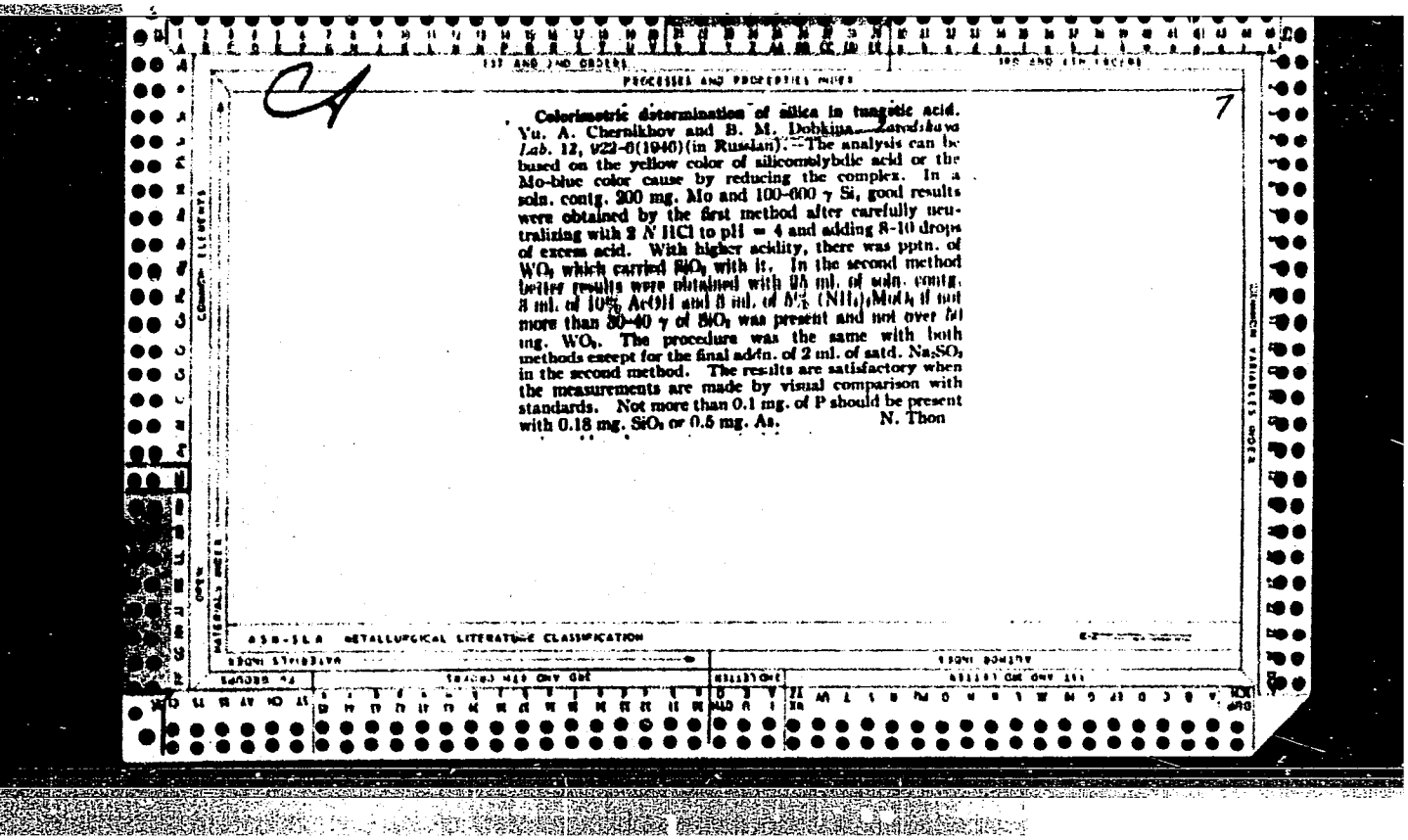
DOBKIN, V.M.

Concerning the article "Technical and economic indices for the evaluation of the degree of automation in production." Khim.prom. no.12:932-933 D '63. (MIRA 17:3)



Colorimetric determination of arsenic by the hypophosphite method. B. S. Tsvetina and H. M. Dobkina. *Zavodskaya Lab.* 7, 1116-20(1938). In the volumetric detn of As by the Evans method (*C. A.* 23, 5432) by reduction with NaH_2PO_2 and Cu catalyst, the color sensitivity of the colloidal As soln. can be increased by boiling the reaction mixt. for 2-3 min. instead of digesting it on a water bath for 0.5-1 hr. By this method 0.02 mg. As in 10 ml. soln can be detd. colorimetrically with an accuracy equal to that of the nephelometric detn. (cf. Amati, *C. A.* 28, 3331[9], where Na_2SO_3 is erroneously given instead of NaH_2PO_2 as the Baugault's reagent). Arsenic is sepd. from the disturbing Mo and Hg by ppts. it with $FeCl_3$ and NH_4OH. Arsenic can be detd. in the presence of Sb and W by decomps. the ore sample with HCl and $KClO_3$ by the method of Pogel'son and Kalunikova (*C. A.* 30, 748[9]). Full details for detn. of As in ores and minerals are given. Fifteen references.

Chas. Blanc



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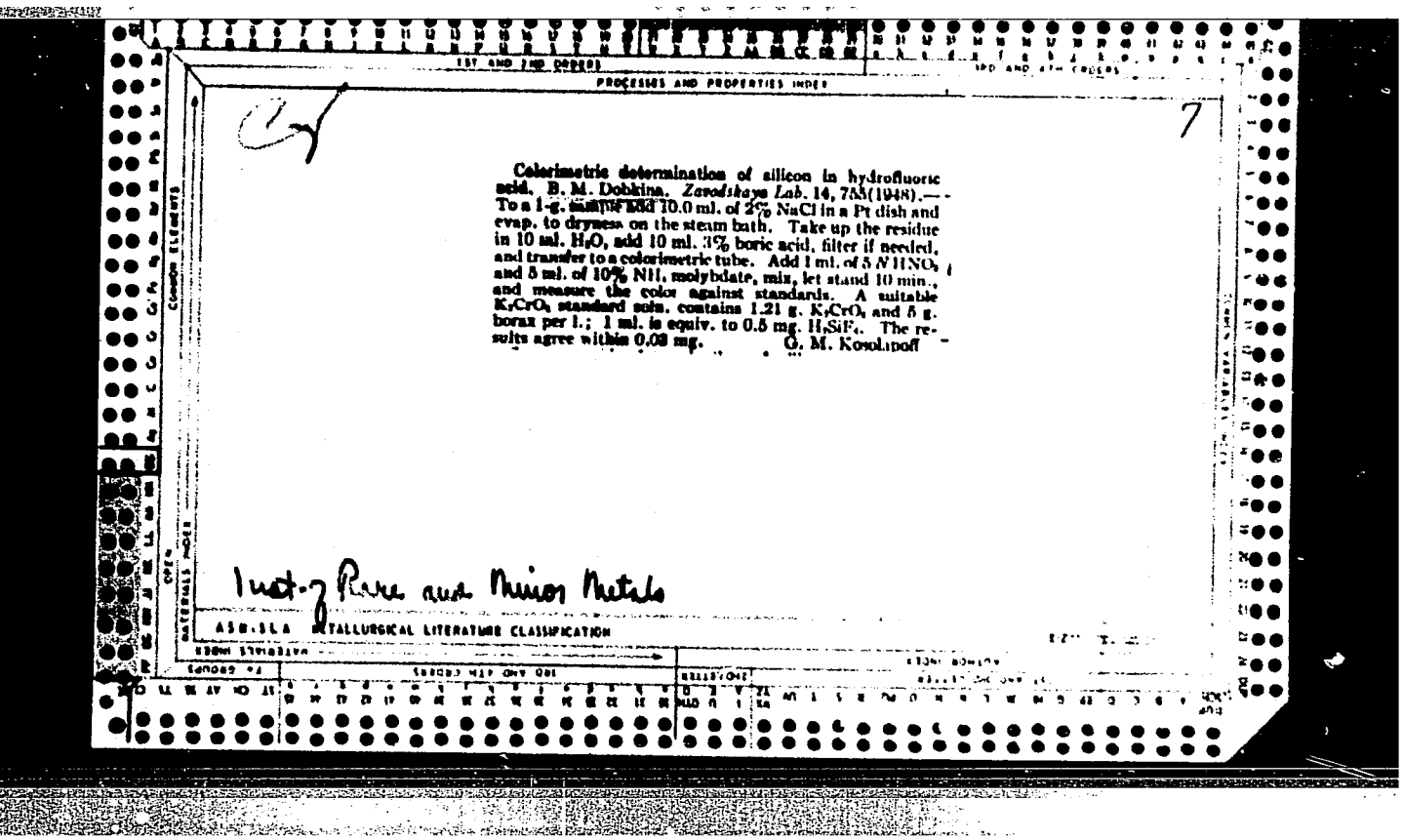
7

Colorimetric determination of silica in tungstic acid. Yu. A. Chernikhov and B. M. Dobkina. *Zavodskaya Lab.* 12, 722-6(1940)(in Russian).—The analysis can be based on the yellow color of silicomolybdic acid or the Mo-blue color cause by reducing the complex. In a soln. contg. 200 mg. Mo and 100-600 γ Si, good results were obtained by the first method after carefully neutralizing with 2 *N* HCl to pH = 4 and adding 8-10 drops of excess acid. With higher acidity, there was pptn. of WO_3 which carried SiO_2 with it. In the second method better results were obtained with 25 ml. of soln. contg. 3 ml. of 10% AcOH and 3 ml. of 5% $(NH_4)_2MoO_4$ if not more than 30-40 γ of SiO_2 was present and not over 50 mg. WO_3. The procedure was the same with both methods except for the final addn. of 2 ml. of satd. Na_2SO_3 in the second method. The results are satisfactory when the measurements are made by visual comparison with standards. Not more than 0.1 mg. of P should be present with 0.18 mg. SiO_2 or 0.5 mg. As. N. Thon

ASM-SLA METALLURGICAL LITERATURE CLASSIFICATION



PROCESSES AND PROPERTIES INDEX

7

Colorimetric determination of silicon in hydrofluoric acid. B. M. Dobkina. *Zavodskaya Lab.* 14, 755(1948).—To a 1-g. sample add 10.0 ml. of 2% NaCl in a Pt dish and evap. to dryness on the steam bath. Take up the residue in 10 ml. H_2O, add 10 ml. 3% boric acid, filter if needed, and transfer to a colorimetric tube. Add 1 ml. of 5 *N* HNO_3 and 5 ml. of 10% NH_4 molybdate, mix, let stand 10 min., and measure the color against standards. A suitable K_2CrO_4 standard soln. contains 1.21 g. K_2CrO_4 and 5 g. borax per l.; 1 ml. is equiv. to 0.5 mg. H_2SiF_6. The results agree within 0.08 mg. G. M. Kosolapoff

Inst. of Rare and Minor Metals

ASM-SLA METALLURGICAL LITERATURE CLASSIFICATION

CA

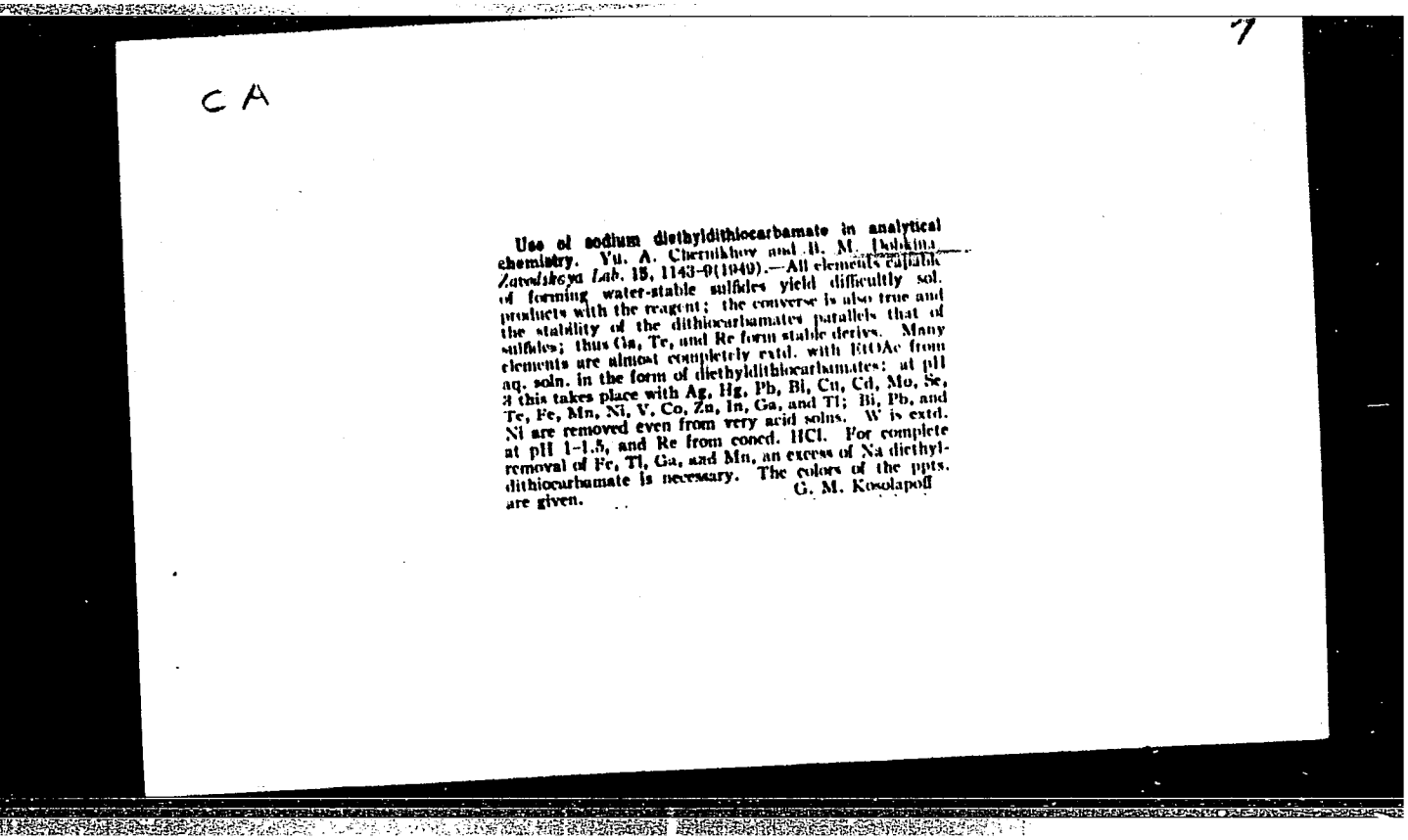
7

Rapid determination of calcium and magnesium in a solution containing ammonium molybdate. Yu. A. Chernikhov, B. M. Dobkina, and V. M. Vladimirova. *Zavodskaya Lab.* 16, 1178-82 (1948).—Ca and Mg are simultaneously sepd. from NH_4 molybdate in ammoniacal soln. as a mixt. of Ca oxalate and Mg phosphate, without preliminary removal of Al and Fe. Centrifugal sepn. is advised for rapidity. After the pptn., Mg is titrated acidimetrically, while Ca is titrated permanganometrically.
G. M. K.

CA

7

Determination of small quantities of cadmium. Yu. A. Chernikhov and B. M. Lobkina. *Zavodskaya Lab.* 15, 900-9(1949).—Cd diethyldithiocarbamate is sol. in org. solvents and is stable in aq. solns.; Cd solns. react with Na diethyldithiocarbamate to form a ppt. at pH 1.5-9.0; the ppt. is readily extd. from aq. solns. by CCl_4 or BuOAc. For detg. small amts. of Cd, it is 1st extd. from the aq. soln. at pH 2-3, and the interfering ions of Pb, Bi, Zn are sepd. by means of dithizone. If Fe is present it should be removed before the carbamate treatment, preferably by the thiocyanate method. Shake 25 ml. of the aq. soln. of the sample with 8-10 ml. CCl_4 or AcOBt and 2 ml. 2-3% Na diethyldithiocarbamate for 1 min. (repeat 3-4 times); treat the org. layer with 10 ml. of 7.5 *N* HNO_3. Evap. the acid soln. to dryness, dil. with 10 ml. of dil. HCl, add a few crystals of hydroxylamine and 0.5 ml. of 20% citric acid, neutralize to litmus with NH_4OH, and add 3 ml. concd. NH_4OH in excess. To this soln. add 5 ml. 0.05% dithizone in CCl_4 and shake 2 min., repeat with fresh portions until the color is unchanged. Wash the org. ext. with 2 small portions of H_2O, add 0.01 *N* HCl in two 4-ml. portions with shaking, wash the aq. soln. with a little CCl_4, dil. with 0.01 *N* HCl to 10 ml., and compare the color with standards. G. M. Kosolapoff



CA

7

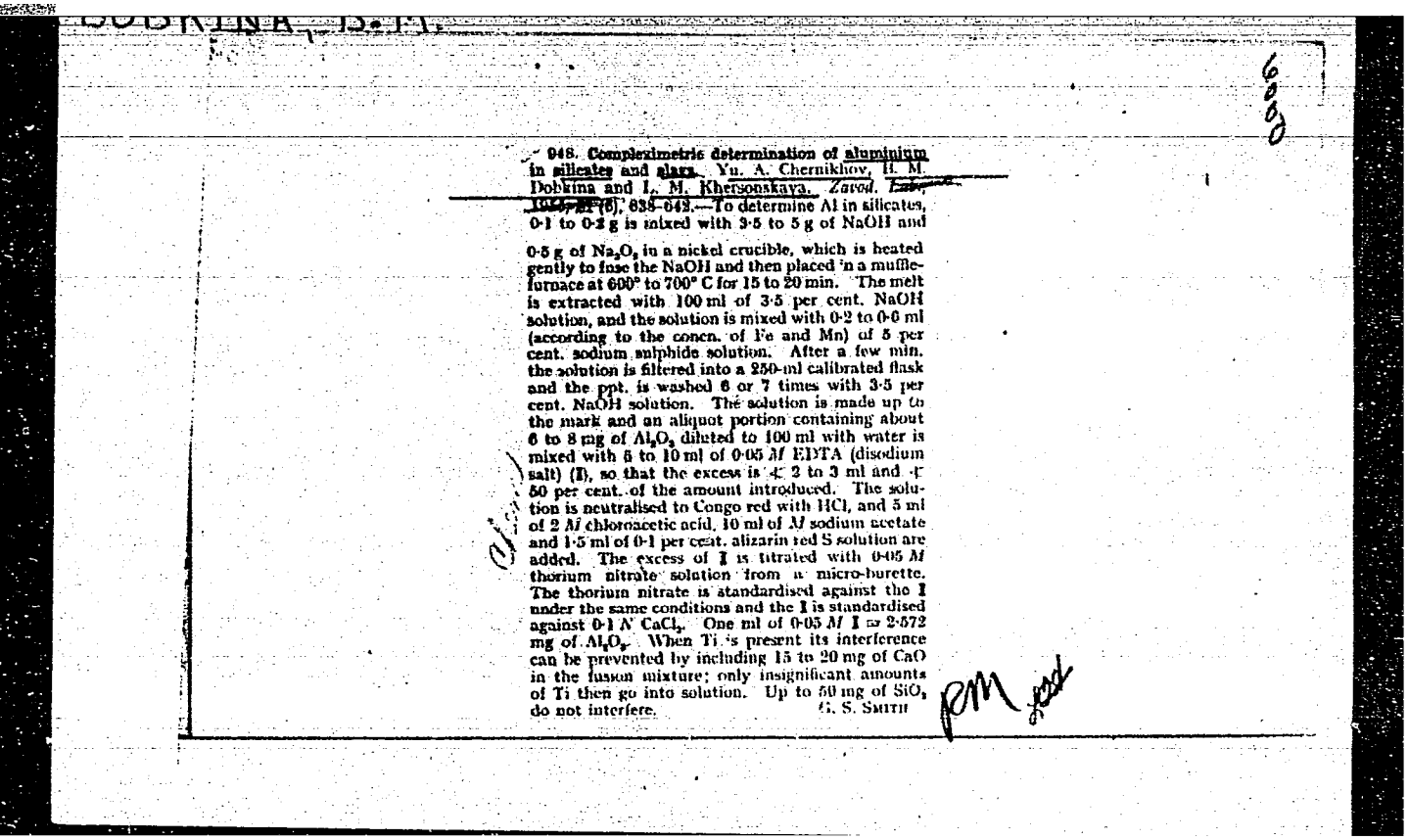
Use of sodium diethyldithiocarbamate in analytical chemistry. Yu. A. Chernikhov and R. M. Ukhina. *Zavodskaya Lab.* 15, 1143-9(1949).—All elements capable of forming water-stable sulfides yield difficultly sol. products with the reagent; the converse is also true and the stability of the dithiocarbamates parallels that of sulfides; thus Ga, Te, and Re form stable derivs. Many elements are almost completely extd. with EtOAc from aq. soln. in the form of diethyldithiocarbamates; at pH 3 this takes place with Ag, Hg, Pb, Bi, Cu, Cd, Mo, Se, Te, Fe, Mn, Ni, V, Co, Zn, In, Ga, and Tl; Bi, Pb, and Ni are removed even from very acid solns. W is extd. at pH 1–1.5, and Re from concd. HCl. For complete removal of Fe, Tl, Ga, and Mn, an excess of Na diethyldithiocarbamate is necessary. The colors of the ppts. are given.

G. M. Kosolapoff

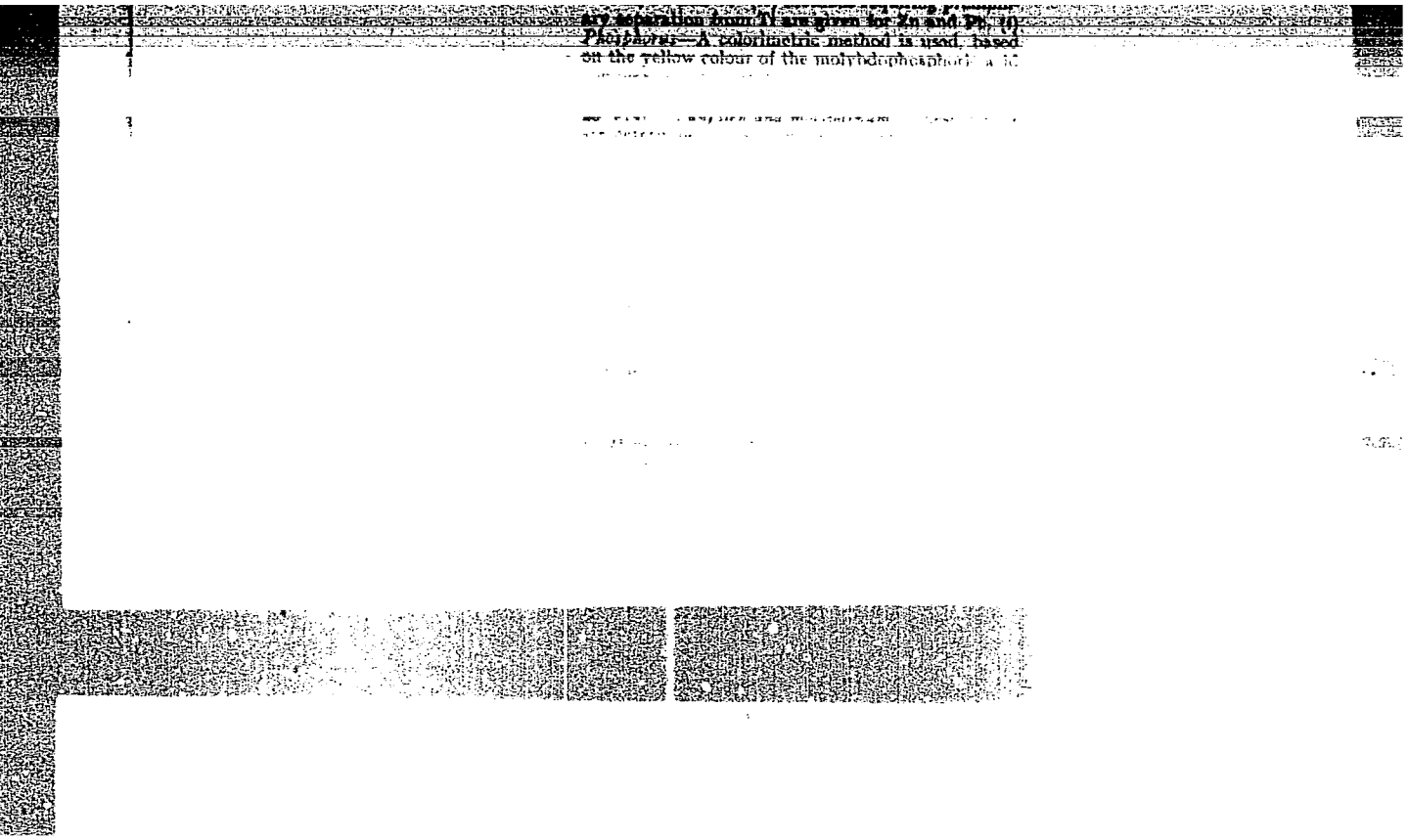
CA

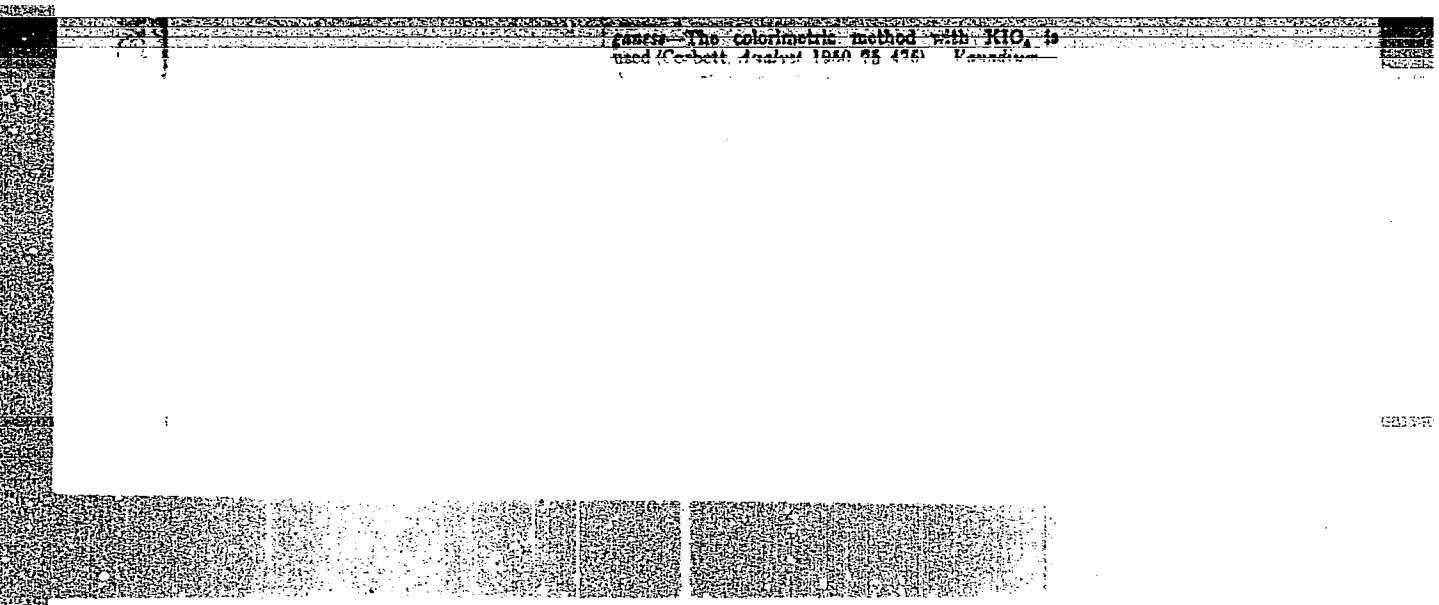
7

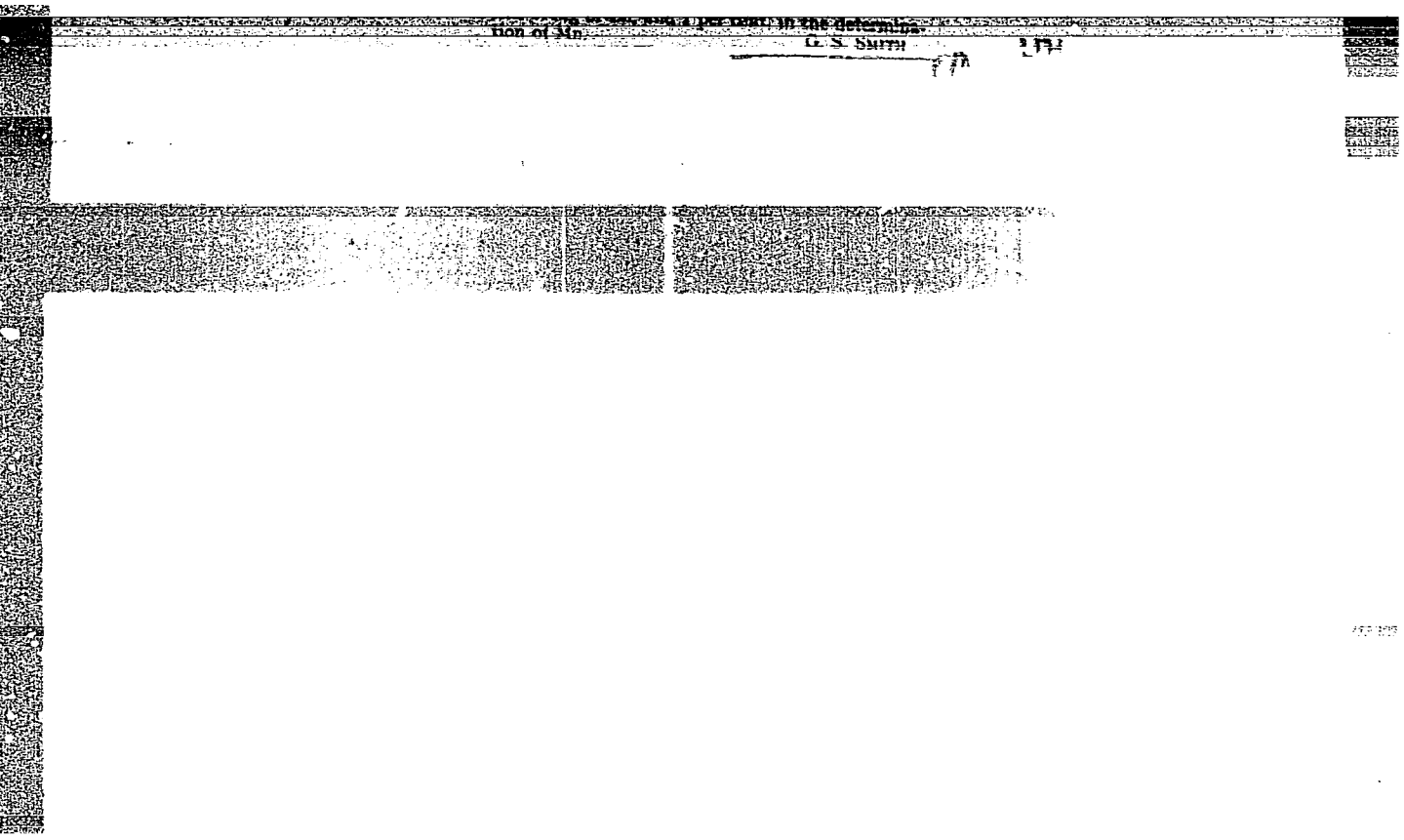
Determination of vanadium and aluminum with sodium diethyldithiocarbamate. Yu. A. Chernikhov and H. M. Dobkina. *Zavodskaya Lab.* 16, 402-5(1950).—The dithiocarbamate of V is quant. extd. from acid (0.1 0.2 *N*) solns. by BtOAc or $CHCl_3$. The reverse process cannot be accomplished by HNO_3 alone, but only on addn. of H_2O_2 or HCl; amts. over 2 γ are readily isolated, which permits the sepn. from Al, alk. earths, and other interfering elements which complicate the colorimetry of V. The actual detn. is done according to Vinogradov (C.A. 26, 2130). The HNO_3 treatment is best done with 10 ml. 1:1 HNO_3, 30% H_2O_2 in 10–12 drops amts. with 15–32 ml. $CHCl_3$ ext., after removal of Al by shaking the ext. with 10 ml. 1:20 HNO_3. G. M. Kosolapoff

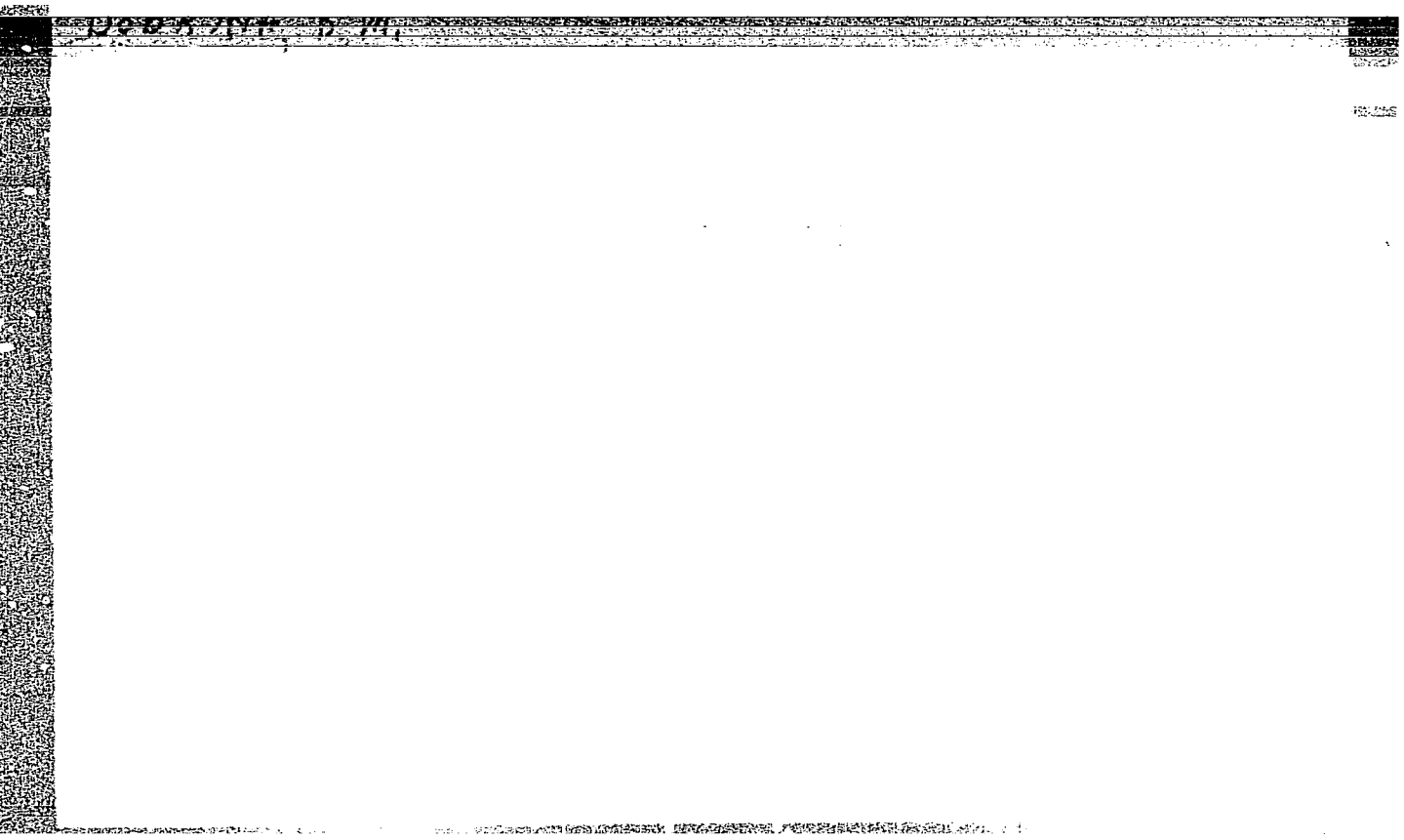


948. **Complexiometric determination of aluminium in silicates and slags.** Yu. A. Chernikhov, H. M. Dobkina and L. M. Khersonskaya. *Zavod. Lab.*, 1960, **26** (6), 638–642.—To determine Al in silicates, 0·1 to 0·2 g is mixed with 3·5 to 5 g of NaOH and 0·5 g of Na_2O_2 in a nickel crucible, which is heated gently to fuse the NaOH and then placed in a muffle-furnace at 600° to 700° C for 15 to 20 min. The melt is extracted with 100 ml of 3·5 per cent. NaOH solution, and the solution is mixed with 0·2 to 0·6 ml (according to the concn. of Fe and Mn) of 5 per cent. sodium sulphide solution. After a few min. the solution is filtered into a 250-ml calibrated flask and the ppt. is washed 6 or 7 times with 3·5 per cent. NaOH solution. The solution is made up to the mark and an aliquot portion containing about 6 to 8 mg of Al_2O_3 diluted to 100 ml with water is mixed with 5 to 10 ml of 0·05 *M* EDTA (disodium salt) (I), so that the excess is 2 to 3 ml and 50 per cent. of the amount introduced. The solution is neutralised to Congo red with HCl, and 5 ml of 2 *M* chloroacetic acid, 10 ml of *M* sodium acetate and 1·5 ml of 0·1 per cent. alizarin red S solution are added. The excess of I is titrated with 0·05 *M* thorium nitrate solution from a micro-burette. The thorium nitrate is standardised against the I under the same conditions and the I is standardised against 0·1 *N* $CaCl_2$. One ml of 0·05 *M* I ≈ 2·572 mg of Al_2O_3. When Ti is present its interference can be prevented by including 15 to 20 mg of CaO in the fusion mixture; only insignificant amounts of Ti then go into solution. Up to 50 mg of SiO_2 do not interfere. G. S. Smith









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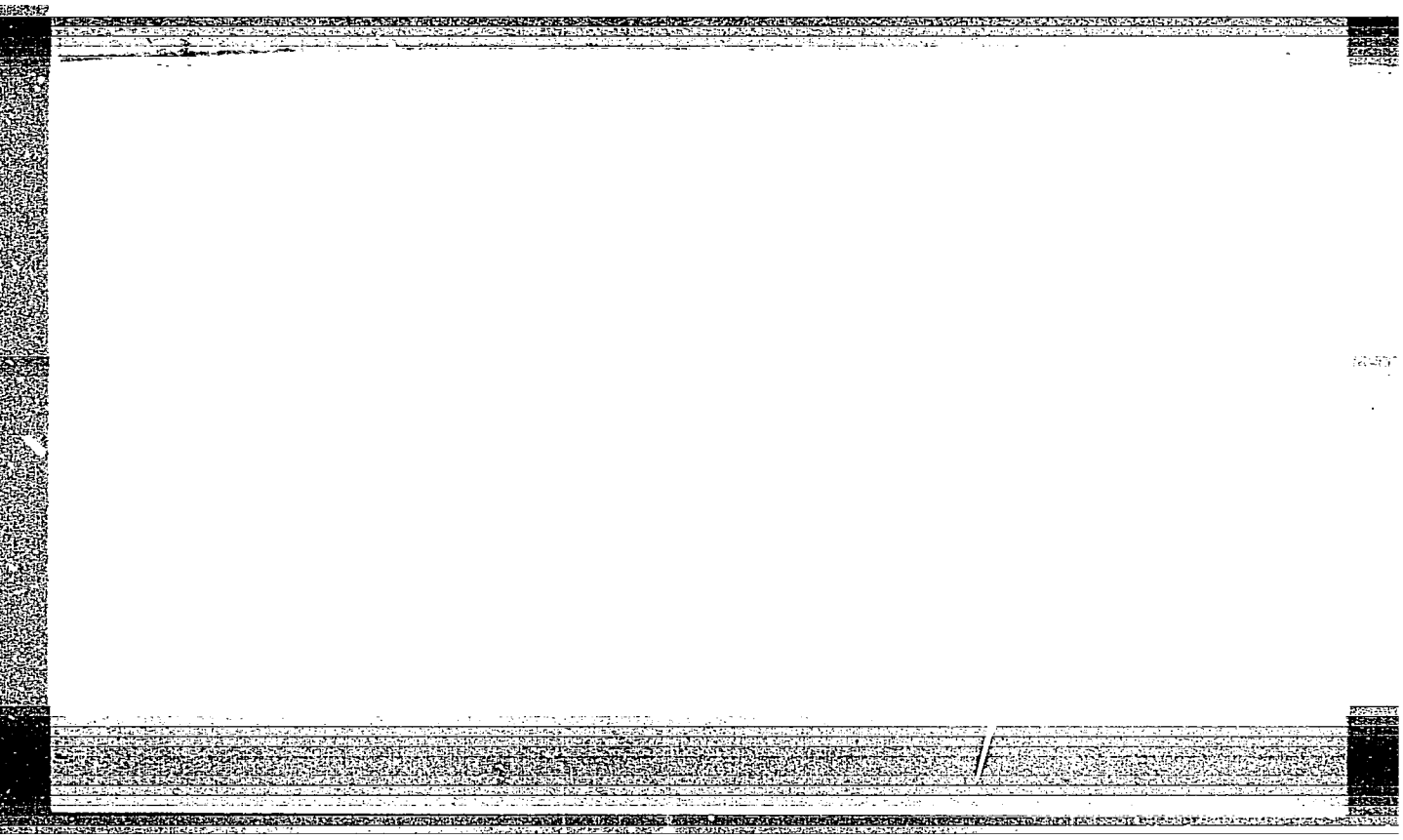

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AUTHORS: Dobkina, B.M., Malyutina, T.M. 32-24-4-3/67

TITLE: The Spectrophotometric Determination of Cerium in Preparations of Lanthanum, Neodymium and Praseodymium (Spektrofotometricheskoye opredeleniye tseriya v preparatakh lantana, neodima i prazeodima)

PERIODICAL: Zavodskaya Laboratoriya, 1958, Vol. 24, Nr 4, pp. 390-392 (USSR)

ABSTRACT: On the basis of the method developed by Telep and Boltz (Ref 1) a method of determining cerium besides the above mentioned elements was worked out with the sensitivity of up to 5 - 10 γCe/25 ml. Among other things it was found that the functional curve of the optical density of cerium concentration (at 0.4 to 30 γ/ml) is of rectinilear character and that deviations do not exceed 2-3%, and that, furthermore, in a carbonate medium and a pH of about from 10.5 to about 50 mg lanthanum-, neodymium- and praseodymium oxide remain in solution also without the addition of tartaric- and/or citric acid, and do not disturb the determination of cerium even in the case of only 0.01% cerium. In a paper published in 1956 (Ref 3), in which a spectrophotometric determination of cerium in ultraviolet, but without any

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addition of hydrogen peroxide is described and the disturbing influence of lanthanum and neodymium is pointed out, no data are given with respect to the effect exercised by praseodymium. As may be seen from the process of analysis described, a potash solution and a 3% hydrogen peroxide solution were used, and the calibration curve was calculated from a series of standard solutions of cerium nitrate. The results obtained from the lanthanum preparations were compared with data obtained by the spectral method, whereas no method of comparison was available for the neodymium- and praseodymium preparations. There are 2 tables, and 3 references, 0 of which are Soviet.

ASSOCIATION: Gosudarstvennyy institut malykh i redkikh metallov (State Institute for Rare and Trace Metals)

1. Lanthanum--Analysis 2. Neodymium--Analysis 3. Proseodymium --Analysis 4. Cerium--Determination 5. Spectrophotometers --Applications

AUTHORS: Chernikhov Yu.A., Melamed, Sh.G., Dobkina, B.M. 32-24-6-5/44

TITLE: The Determination of Mioroquantities of Titanium on a Niobium Background (Opredeleniye mikrokoliohestv titana na fone niobiya)

PERIODICAL: Zavodskaya Laboratoriya, 1958, Vol 24, Nr 6, pp 677-679 (USSR)

ABSTRACT: As niobium forms a colored complex with hydrogen peroxide in a highly acid medium, whereas the titanium complex is formed in a weakly acid medium, suitable methods of determination were developed by Schoeller (Ref 2) as well as by Palilla, Adler and Hiskey (Ref 3). It is proved in the course of the present paper that if the ratio between Nb_2O_5 : TiO_2 exceeds 100 : 1, it is not possible to determine titanium. The experiments carried out together with Ye.I.Petrova showed that much too high a value is obtained for titanium, which is explained as being due to the absorption of niobium; different wavelengths are used in this connection, and thus the peroxide method is described as being unsuited for the determination of small quantities of titanium in niobium. For the determination of titanium beside niobium also the application of chromotropic acid is recommended; in view of existing discrepancies in the instructions, experiments were duly carried out.

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The Determination of Microquantities of Titanium on a Niobium Background

32-24-6-5/44

It was found that by evaporation-fractionation of titanium on carbon in the light arc sensitivity is increased but reproducibility is diminished; it is possible to use different wavelengths. This spectral method was worked out with mechanically mixed standard samples, and it may be seen from the diagram of calibration given that the error limit is ± 15% with a degree of sensitivity of 0.002%. There are 2 figures, and 5 references, 0 of which are Soviet.

ASSOCIATION: Gosudarstvennyy institut malykh i redkikh metallov (State Institute of Tracer and Rare Metals)

1. Titanium--Determination 2. Niobium--Chemical effects
3. Titanium--Spectra

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5(2), 5(4)

AUTHORS: Dobkina, B. M., Malyutina, T. M.

SOV/32-24-11-8/37

TITLE: The Determination of Tantalum by Differential Spectrophotometry (Opredeleniye tantala differentsial'noy spektrofotometriyey)

PERIODICAL: Zavodskaya Laboratoriya, 1958, Vol 24, Nr 11, pp 1336-1343 (USSR)

ABSTRACT: Relative errors can be so diminished by the differential method that this method is as exact as gravimetric analysis. The method is based on using as a zero solution a solution of the element to be determined in increased concentrations. The theoretical basis of the method was developed by Hiskey et al. (Khiski) (Refs 1-3), and it can be shown mathematically that an increase in the optical density of the standard solution increases the accuracy of the determination, and that the error for the case $\frac{I_2}{I_1} = 1$ is minimal. In instruments in which it is not possible to regulate the light intensity over a wide range an increase in the optical density of the standard

solution did not give Hiskey and Joung (Yang) (Ref 3) an increase in the accuracy of measurement. Since practically no data exist in the Soviet publications on differential spectrophotometry a table on the application of this method is given. Tantalum was determined in the ultra-violet region by reacting it with pyrogallol in an oxalate-acid medium. A 4 N HCl solution with 400 mg pyrogallol, 120 mg ammonium oxalate, and 30-50 mg potassium pyrosulfate per 10 ml of solution, added, was used for this purpose. A series of solutions containing 0.5 to 1.2 mg Ta_2O_5 were prepared; one of these solutions was the zero solution (C_1) and a second solution of higher concentration (C_2) was measured in relation to the first. The interval 0.7 to 0.9 mg Ta_2O_5 was found to be optimal for C_1. In the presence of niobium, at a concentration of $Nb_2O_5:Ta_2O_5$= 3:1, the relative error in the tantalum determination was about 0.5%, and with a ratio of 6:1 about 1%. The optical properties of the titanium and tantalum pyrogallol complex compounds are additive, so that with a ratio of $TiO_2:Ta_2O_5$=

1:6 the relative error in the tantalum determination is about 0.5%. Tantalum concentrates, with number No.1 containing about 4% TiO_2 and about 25% Nb_2O_5, and Nos. 2 and 3 containing about 2% TiO_2 and about 15% Nb_2O_5, were analyzed. A Cф4 spectrophotometer was used at a wave-length of 325 mμ. The tantalum content was calculated using the equation:
$C_x = D_x \cdot F + C_0$ (F=0.666).
There are 5 tables and 25 references, 1 of which is Soviet.

ASSOCIATION: Gosudarstvennyy nauchno-issledovatel'skiy institut redkikh i malykh metallov (State Scientific Research Institute for Rare and Trace Metals)

DoBKiNA, B.M.

AUTHOR: Bilimovich, G. N. SOV/75-14-4-30/30

TITLE: Section of Analytical Chemistry of the VIII Mendeleyev Congress on General and Applied Chemistry

PERIODICAL: Zhurnal analiticheskoy khimii, 1959, Vol 14, Nr 4, pp 511-512 (USSR)

ABSTRACT: Approximately 300 persons participated in the work of the Department of Analytical Chemistry, among them representatives of various scientific research institutes, higher schools and industrial enterprises in Russia, scientists from China, Bulgaria, the CSR, Poland, Hungary, and Italy. Approximately 70 reports were heard. In his opening speech I. P. Alimarin reported on the achieved results and on modern problems of analytical chemistry. I. V. Tananayev reported on the application of physico-chemical analysis in heterogeneous systems for the solution of a series of problems of analytical chemistry. V. I. Kuznetsov reported on modern aims in the use of organic reagents; A. K. Babko showed at the example of halide and thiocyanate complexes the correlation between the stability of complexes and the position of the corresponding central atoms in the periodic system. V. M. Peshkova and V. M. Bochkova lectured on the stability of oximates of Cu, Co, and Ni as depending on the structure of the oxime molecule. V. P. Toropova lectured on the double character of reaction of some compounds in the formation of complexes. The problem of the application of heteropolyacide in analytical chemistry was dealt with in the lectures of I. P. Shakhova and co-workers, and A. I. Kokorin and N. A. Polotebnova. A large number of lectures dealt with the use of new organic reagents in analysis: A. I. Busev and K. I. Ivanyutin reported on the application of dialkyl and diaryl dithio-phosphoric acid for the separation of elements, A. I. Portnov used aryl arsonic acid and aryl phosphinic acid. N. P. Lastovskiy and his co-workers treated some properties of new complexons. The

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lectures of I. A. Nazarenko, G. G. Shitareva and A. I. Kononenko dealt with the photometric determination of a series of elements using fluorine derivates. A. I. Cherkesov lectured on the use of halochromation in analytical chemistry. B. M. Dobkina and T. M. Malyutina lectured on the determination of tantalum using differential spectrophotometry. Iu. V. Morachevskiy and L. A. Stolyarova reported on new highly sensitive analysis methods

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using an ultraviolet microscope. Several lectures dealt with methodical and theoretical problems of spectrum analysis (N. F. Zakhariy and G. A. Sheynin; K. Ye. Vaynshteyn and co-workers). N. S. Poluektov and M. N. Nikonova treated the perfection of flame photometry. Several lectures dealt with the determination of elements by polarography (S. I. Sinyakova; Z. B. Rozhdestvenskaya and I. A. Yarovoy; Ya. P. Gokhshteyn). New results in using fixed electrodes were reported by Z. D. Ganchenko and Yu. S. Lyalikov and co-workers. The lecture of N. I. Udal'tsova and P. N. Paley treated the use of amperometric titration with two electrodes in the chemistry of uranium and thorium. M. M. Senyavin showed possibilities of predicting the conditions of chromatographic separation of elements based on their position in the periodic system. T. A. Belyavskaya reported on the use of ion exchange in the investigation of the state of substances in solutions. A. S. Vernidub and V. I. Petrashen' lectured on the chromatographic separation of a series of elements, N. G. Polyanskiy reported on adapting the properties of ion exchanger resins, V. M. Shemyakin and associates reported on the chromatographic proof of sulfanilamide preparations in

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liquids of the organism. G. L. Storobinets and associates treated the application of high polymers in chromatographic analysis. The lecture of A. A. Zhukhovitskiy and N. M. Turkel'taub, G. Shay dealt with gas chromatography. Several lectures treated the use of radioactive isotopes for the chromatographic investigation of complex formation (D. I. Ryabchikov and associates), for the investigation of the co-precipitation mechanism of ions of rare metals with sulfides (N. A. Rudnev) and for determining rare elements by means of isotope dilution (I. P. Alimarin, G. N. Bilimovich). In the field of elementary organic microanalysis the lectures of N. G. Korshun, E. E. Gel'man and V. A. Klimova with associates have to be mentioned, who treated the elaboration of rapid micromethods for the simultaneous determination of several elements from one weighed portion of boron, fluorine and silicium-organic compounds.