MUKHINA, V.A.

Specialization, redistribution of assortments among enterprises, and production calculation. Tekst.prom. 22 no.12:4-7 D '62.

1. Starshiy inzh. Instituta ekonomiki AN Belorusskoy SSR.
(White Russia—Textile industry)

BRILLIANT, V.A.; MUKHINA, V.A.; SMETANNIKOVA, A.I.

Some results of the physiological study of the tea plant. Trudy Bot.inst. Ser4.no.9:155-180 '53. (MLRA 6:6)

1. Botanicheskiy institut imeni V.L. Komarova akademii nauk SSSR. (Tea)

MUKHINA, V. A.

"Ecologic-Physiological Investigation of Tea." Cand Biol Sci, Inst of Botany, Acad Sci USSR, Leningrad, 1953. (RZhBiol, No 1, Sep 54)

SO: Sum 432, 29 Mar 55

MUKHINA, V.A.

Ecological and physiological characteristics of photosynthesis growth, and accumulation of dry body in tea. Trudy Inst.fiziol.rast. 10:177-188 '55. (MIRA 8:9)

1. Botanicheskiy institut Akademii nauk SSSR. (Tea)

MUKHINA, V.A.

Ecological and physiological study of tea in connection with its introduction into the Moldavian S.S.R. Trudy Bot.inst.Ser.4 no.10: 14-73 '55. (MLRA 9:5)

(Moldavia--Tea)

MUKHINA, V.A.

H-1

USSR / Plant Physiology. General Problems.

Abs Jour : Ref Zhur - Biol., No 16, 25 Aug 57, No 68906

Author : Mukhina, V.A.
Title : Some Data in Studies of Photosynthesis on Terrestrial Plants by the Manometric Method.

Orig Pub : Tr. Botan. in-ta AN SSSR, 1956, series 4, No 11, 225-240

Abstract : A new type of vessel for use in the Warburg apparatus for manometric measurements in photosynthesis is proposed. It is of cylindrical form (33-38 cm^3 volume, 4.5 cm diameter, 3.5 cm height) which provides a favorable ratio between the buffer area and the volume of the gaseous phase. The highest photosynthetic intensity was observed at a CO_2 concentration of about 2% in the vessel. For the determination of photosynthesis in the described vessels, leaf cuttings with an area of 2-6 cm^3, exposed for 45 min., are most suitable. Based on the results of their own

Card 1/2

MUKHINA, V.A.; LEYSLE, F.F.

Some physiological characteristics of Perilla during the photophase. Trudy Bot.inst.Ser. 4 no.13:266-293 '59.
(MIRA 13:3)

(Photoperiodism)

MUKHINA, V.A.

Diurnal course of photosynthesis and translocation of assimilates during the photophase in some short-day and long-day plants [w.s.i.E]. Trudy Bot. inst. Ser.4 no.14:167-187 '60. (MIRA 14:3)
(Photosynthesis) (Photoperiodism) (Plants, Motion of fluids in)

MUKHINA, V.A., nauchnyy sotrudnik

Utilization of the hidden potentialities of production in the textile enterprises of White Russia. Tekst. prom. 20 no. 11:67-69 N '60. (MIRA 13:12)

1. Institut ekonomiki Akademii nauk BSSR.
(White Russia--Textile industry)

CHERNOMORSKIY, S.A.; MUKHINA, V.A.

State of chlorophyll in leaves as related to the geographical origin of plants. Bot. zhur. 46 no. 5:683-685 My '61. (MIRA 14:7)

1. Botanicheskiy institut imeni V.L. Komarova AN SSSR, Leningrad.
(Chlorophyll)

MUKHIN, V.F.; MUKHINA, V.A.

Characteristics of the growth and development of corn in Leningrad Province. Trudy Bot.inst. Ser.4 no.17:35-52 '64.

(MIRA 18:1)

MUKHINA, V.A., kand. ekonom. nauk, starshiy nauchnyy sotrudnik

Use of synthetic fibers and materials in the textile industry of White Russia. Tekst. prom. 25 no.12:23-25 D '65.
(MIRA 19:1)

1. Institut ekonomiki AN BSSR.

MUKHINA, V.N.

SAMARCHYAN, R.S.; MUKHINA, V.N.; SULTANOV, K.I.; PRANULIS, M.F.

Torch lines and safety valves in oil and gas refineries. Azerb. neft.khoz. 35 no.10:33-35 O '56. (MLRA 10:1)
(Petroleum--Refineries)

MUKHINA, V.P.; KONEV, P.N.; SHNEYDER, B.A.; SHUYSKIY, V.P.

Basic characteristics of the paleogeography of the Urals in the Eifelian stage. Dokl. AN SSSR 164 no.3:644-647 S '65.
(MIRA 18:9)

1. Ural'skoye geologicheskoye upravleniye. Submitted December 21, 1964.

MUKHINA, V.S.

Graphic activity of primates in connection with [illegible]
emotional [illegible]
no.4:170-176 [illegible]

1. Kafedra [illegible]
imeni Ternina.

L 08083-67 EWT(1) GW

ACC NR: AT7001678 SOURCE CODE: UR/0213/66/006/001/0122/0135

AUTHOR: Mukhina, V. V.

ORG: Institute of Oceanography, AN SSSR (Institut okeanologii AN SSSR)

TITLE: Problem of the boundary between the quaternary and tertiary sediments of the Pacific Ocean

SOURCE: Okeanologiya, v. 6, no. 1, 1966, 122-135

TOPIC TAGS: oceanography, stratigraphy

ABSTRACT: The method of diatom analysis has been used for an investigation of the bottom sediments of the equatorial zone of the Pacific Ocean for their stratigraphic separation and clarification of the paleoclimatic conditions of sedimentation. Diatomaceous and other algae were studied in the deposits of four cores taken at four stations by the "Vityaz'" and cores taken by Swedish investigators at two stations. Four stations were in a zone of diatomaceous-radiolarian silts and the other two were in a region of typical carbonaceous sediments. Most of the article is a detailed description of the contents of each of the cores. It was found that the sediments in different cores were accumulated during periods of different duration. It was possible to some degree to reconstruct the history of sedimentation on the ocean floor from the Late Tertiary and the study shows that such cores can lead to a far better understanding of development of the ocean floor. Orig. art. has: 5 figures and 1 table. [JPRS: 38,230]

SUB CODE: 08 / SUBM DATE: 01Sep64 / ORIG REF: 007 / OTH REF: 005

UDC: 551.352

Card 1/1

ACC NR: AP7006060 SOURCE CODE: UR/0213/66/006/005/0807/0816

AUTHOR: Mukhina, V. V. -- Muhina, V. V.

ORG: Institute of Oceanology, AN SSSR (Institut Okeanologii AN SSSR)

TITLE: Siliceous organisms in suspension and in the surface layer of bottom sediments of the Indian Ocean

SOURCE: Okeanologiya, v. 6, no. 5, 1966, 807-816

TOPIC TAGS: oceanography, biology

SUB CODE: 08,06

ABSTRACT: The quantities of all the four groups of siliceous organisms and the specific composition of diatoms and silicoflagellata contained in samples of suspensions and in the surface layer of bottom sediments from the Indian Ocean are considered. The quantitative distribution of the siliceous organisms is subject to climatic zonality: in the surface layer of the ocean their high content is confined to the water rich in nutrient salts (divergence zones), whereas in the surface layer of the bottom sediments they are predominant in the areas where radiolarian-diatomaceous oozes are widely distributed. The latter fact is attributed to a rich development of plankton in the given area and to the absence of carbonate and terrigenous material among the siliceous sediments. With respect to specific composition, diatomaceous biocoenoses differ considerably from their tanatocoenoses. The representatives Nitzschia, Chaetoceros, which are predominant almost everywhere in the surface layer of the ocean, are replaced in the bottom sediments by the representatives of the genus coscinodiscus. Orig. art. has: 5 figures and 3 tables. [JPRS: 39,180]

Card 1/1 UDC: 551.352

09270866

MUKHINA, Ye.G.

Possibility of advancement of commercial almond plantations to the steppe and piedmont zones of the Crimea. Izv. Krym.otd. Geog.ob-va. no.2:69-74 '53. (MLRA 8:7)
(Crimea--Almond)

MUKHINA, Ye.G.

MUKHIN, Ye.G.

[illegible] of plant temperature by means of a thermoelectric plate-like receiver. Trudy [illegible] no.37:49-50 '54. (MLRA 7:12)

1. Odesskiy gidrometeorologicheskiy institut.
(Plant temperature) (Thermocouples)

MUKHINA, Ye. G.

Effect of saturation irrigation on the displacement of phase development of fruit crops. Trudy Ukr.NIGMI no.3:61-63 '55.
(MLRA 9:10)

1. Odesskiy gidrometeorologicheskiy institut.
(Soils moisture) (Fruit culture)

MUKHINA, YE.G.

USSR/Cultivated Plants - Fruits. Berries M-7

Abs Jour : Ref Zhur - Biol., No 1, 1958, No 1712

Author : Mukhina Ye.G. and Sheyntsis O.G.
Inst : Hydrometeorological Institute University of Odessa
Title : Effect of Shower Irrigation on the Retarding Florescence in Fruit Cultivation.

Orig Pub : Tr. Odessk. gidrometeorol. in-ta, 1956, vyp. 8, 47-55

Abstract : In the botanical garden of Odessa University a shower irrigation of the Kremlevskiy peach trees was performed in spring of 1953; two shower irrigations, one during spring (Ayvazovskiy) and one during autumn (Kremlevskiy) were performed in 1954. A shift in the phase of florescence of the peaches was noted on the irrigated areas, with flowering taking place two to three days later than in control. After the spring and autumn shower irrigations the difference in the moisture content in the soil of the irrigated and control areas reached 10%. The peaches of both varieties on the irrigated sections bloomed 5-6 days later. The increase in the moisture content had a

Card : 1/2

MUKHINA, Ye. G. (Dotsent, Odessa), K TUMANOVA, D. F., and N. S. CHOCHIA (Cand. of Geographical Sciences - Leningrad) and GOL'TSBERG, I. A. (Leningrad - Prof.)0

"Phenological, Micro- and Macrological Division into Districts."

report presented at a Phenological Conference in Leningrad, Nov 1957, by USSR Geographical Society.

MUKHINA, Ye.G.; SNEGIREV, D.P. [deceased]

Effect of meteorological conditions on the sugar content of peaches.
Trudy OGMI no.16:9-15 '58. (MIRA 12:9)
(Crimea--Peaches) (Crops and climate) (Sugar)

MUKHINA, Ye.G.

Relation between temperature conditions in winter and spring and the beginning of flowering in peaches and apricots. Trudy OGMI no.18:7-16 '59. (MIRA 13:5)
(Crimea--Peach) (Crimea--Aprict)

MUKHINA, Ye.G.

Agrometeorological conditions of apricot culture in the Ukraine.
Trudy OGMI no.22:3-7 '60. (MIRA 14:10)
(Ukraine--Apricot) (Meteorology, Agricultural)

MUKHINA, Ye.G.; DMITRIYEVA, L.I.; PERENKOVA, G.P.

Agrometeorological conditions for growing mazzard cherries in the Ukraine. Trudy OGMI no.25:3-11 '61. (MIRA 16:6)
(Ukraine--Cherry) (Crops and climate)

ALEKSEYEV, Mikhail Dmitriyevich; SLOBODSKAYA, Doroteya Isaakovna; KORZHOVA, Yu., spets. red.; MUKHINA, Ye.M., red.; FORMALINA, Ye.A., tekhn. red.

[Canning mackerel and saurel [illegible] in batch-type blanchers] Vyrabotka konservov v masle iz skumbrii i stavridy v blanshirovateliakh preryvnogo deistviia. Moskva, Rybnoe khoziaistvo, 1961. 16 p. (MIRA 14:9)

(Fish, Canned)

BRUDASTOVA, Mariya Alekseyevna; KONDRAT'YEV, Timofey Terent'yevich; MUKHINA, Ye.M., red.; POLUYEKHINA, N.I., tekhn. red.

[Mechanization of work in fish pond management] Mekhanizatsiia rabot v prudovykh rybovodnykh khoziaistvakh. Moskva, Rybnoe khoziaistvo, 1962. 22 p. (MIRA 16:6)
(Fish ponds)

BRUDASTOVA, Mariya Alekseyevna; MUKHINA, Ye.M., red.; POLUYEKHINA, N.I., tekhn. red.

[Hydraulic structures for pond fish farms]Gidrotekhnicheskie sooruzheniia prudovykh rybovodnykh khoziaistv. Moskva, Rybnoe khoziaistvo, 1962. 32 p. (MIRA 15:10)
(Fishponds)

NIKITIN, Boris Pavlovich; MUKHINA, Ye.M., red.; FORMALINA, Ye.A., tekhn. red.

[Organoleptic method for determining the quality of fish and fishery products]Organolepticheskii metod v otsenke kachestva ryby i ryboproduktov. Moskva, Rybnoe khoziaistvo, 1962. 89 p. (MIRA 16:3)

(Fishery products inspection)

MARTI, Yu.Yu., otv. red.; ALEKSEYEV, A.P., zam. otv. red.; NOSKOV, A.S., zam. otv. red.; BORODATOV, V.A., red.; VINOGRADOV, L.G., red.; ZAYTSEV, G.N., red.; IZHEVSKIY, G.K., red.; KAZANOVA, I.I., red.; KONSTANTINOV, K.G., red.; MUNTYAN, V.M., red.; NAUMOV, V.M., red.; SEDYKH, K.A., red.; FEDOSOV, M.V., red.; CHUMAKOVA, L.S., red.; AYNZAFT, Yu.S., red.; MUKHINA, Ye.M., red.; FORMALINA, Ye.A., tekhn. red.

[Soviet fishery research in the northwestern part of the Atlantic Ocean] Sovetskie rybokhoziaistvennye issledovaniia v severo-zapadnoi chasti Atlanticheskogo okeana. Moskva, Izd-vo zhurnala "Rybnoe khoziaistvo," 1962. 375 p. (MIRA 15:7)

1. Moscow. Vsesoyuznyy nauchno-issledovatel'skiy institut morskogo rybnogo khozyaystva i okeanografii. 2. Vsesoyuznyy nauchnyy institut morskogo rybnogo khozyaystva i okeanografii (for Marti, Fedosov).
(Atlantic Ocean—Fisheries—Research)

MUKHINA, Ye.P.

Placenta pseudozonaria humana. Akush. i gin. 33 no.2:107-109 Mr-Ap '57. (MIRA 10:6)

1. Iz kliniki akusherstva i ginekologii (zav. - prof. A.I.Patchenko) Leningradskogo pediatricheskogo meditsinskogo instituta.
(PLACENTA
pseudozonaria, rare case)

TOBILEVICH, V.P.; MUKHINA, Ye.P.; GERSHANOVICH, M.L.

Two cases of healing of vesico-vaginal fistulas under the influence of 4-methyluracil (metacil, methyluracil). Vop. onk. 10 no.3:115-117 '64. (MIRA 17:8)

1. Iz laboratorii eksperimental'noy onkologii (zav. - zasluzhennyy deyatel' nauki RSFSR prof. N.V. Lazarev), ginekologicheskogo otdeleniya (zav. - prof. V.P. Tobilevich) i terapevticheskoy gruppy Instituta onkologii AMN SSSR (dir. - deystvitel'nyy chlen AMN SSSR prof. A.I. Serebrov). Adres avtorov: Leningrad, P-329, 2-ya Berezovaya alleya d.3, Institut onkologii AMN SSSR.

AYNBINDER, N.M.; DIL'MAN, V.M.; MUKHINA, Ye.P.; NECHAYEVA, I.D.; SHARKOVA, Zh.M.

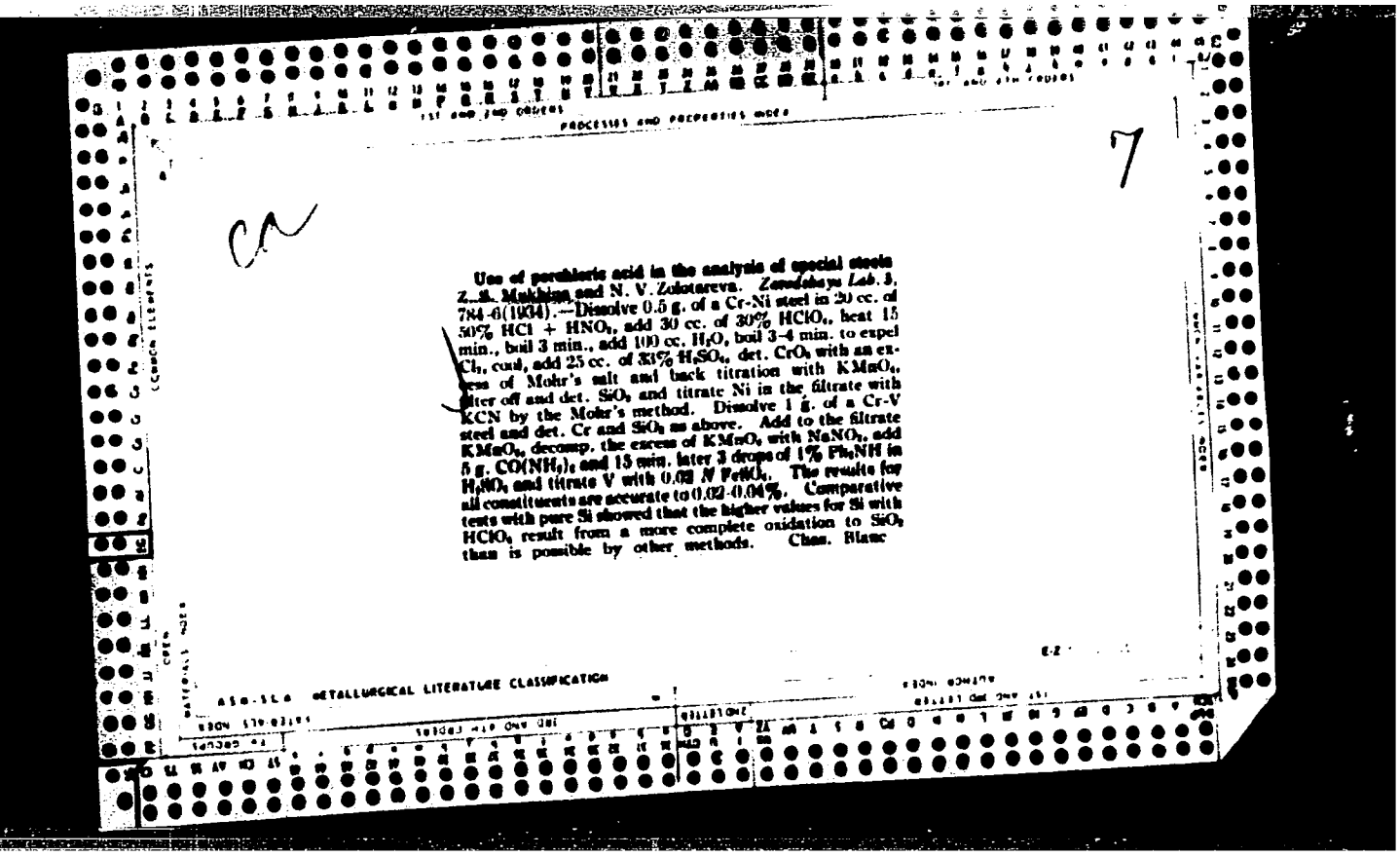
Experience with the antibiotic 2703 in six patients with chorioepithelioma of the uterus. Vop. onk. 10 no.5:103-107 '64. (MIRA 18:8)

1. Iz Instituta onkologii AMN SSSR (dir. - prof. A.I.Serebrov). Adres avtorov: Leningrad, P-129, 2-ya Berezovaya alleya, 3, Institut onkologii AMN SSSR.

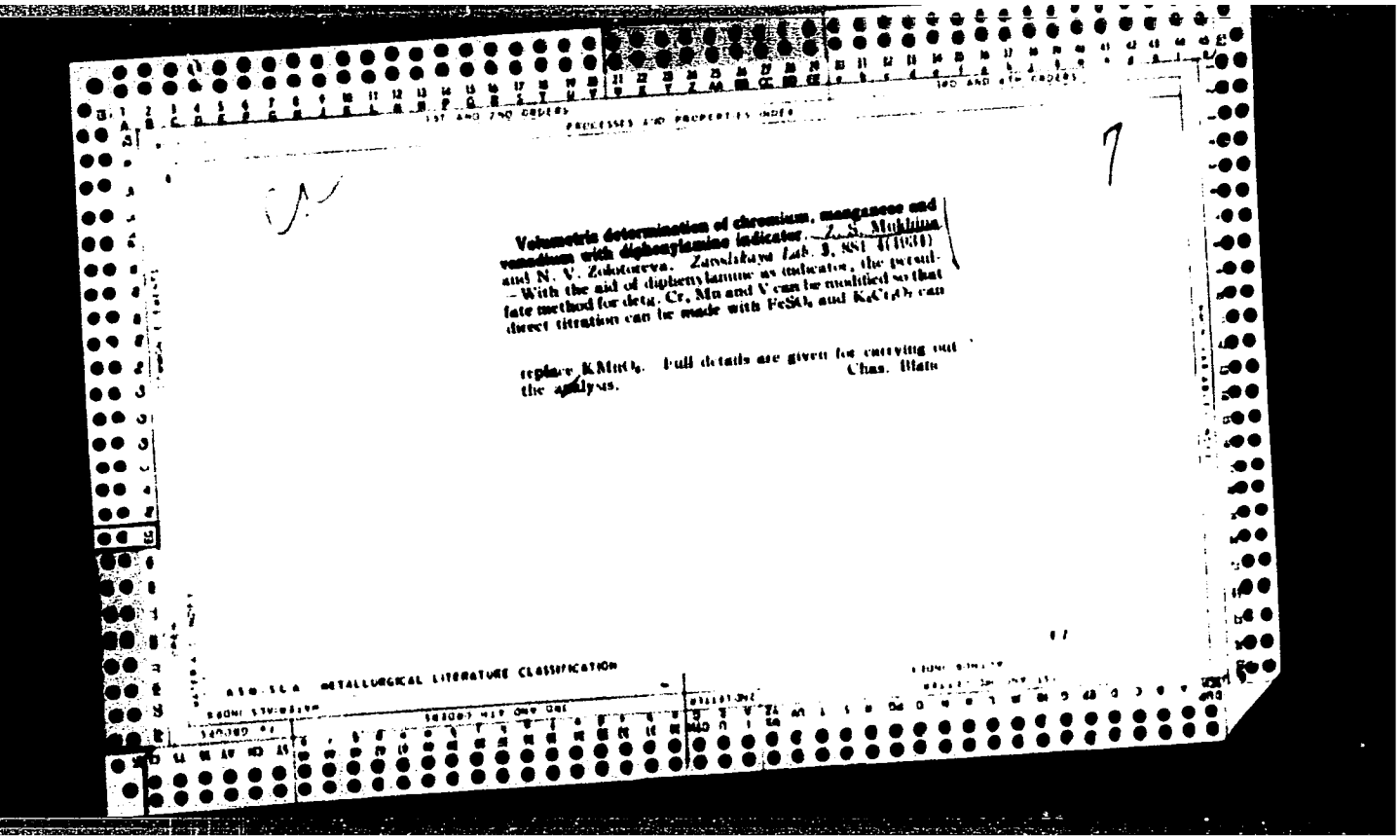
MUKHINA, Ye.P. (Leningrad, P-49, Zverinskaya ul., 33, kv.18)

Metastasizing of malignant tumors of the ovaries. Vop. onk. 10 no.12:27-31 '64. (MIRA 18:6)

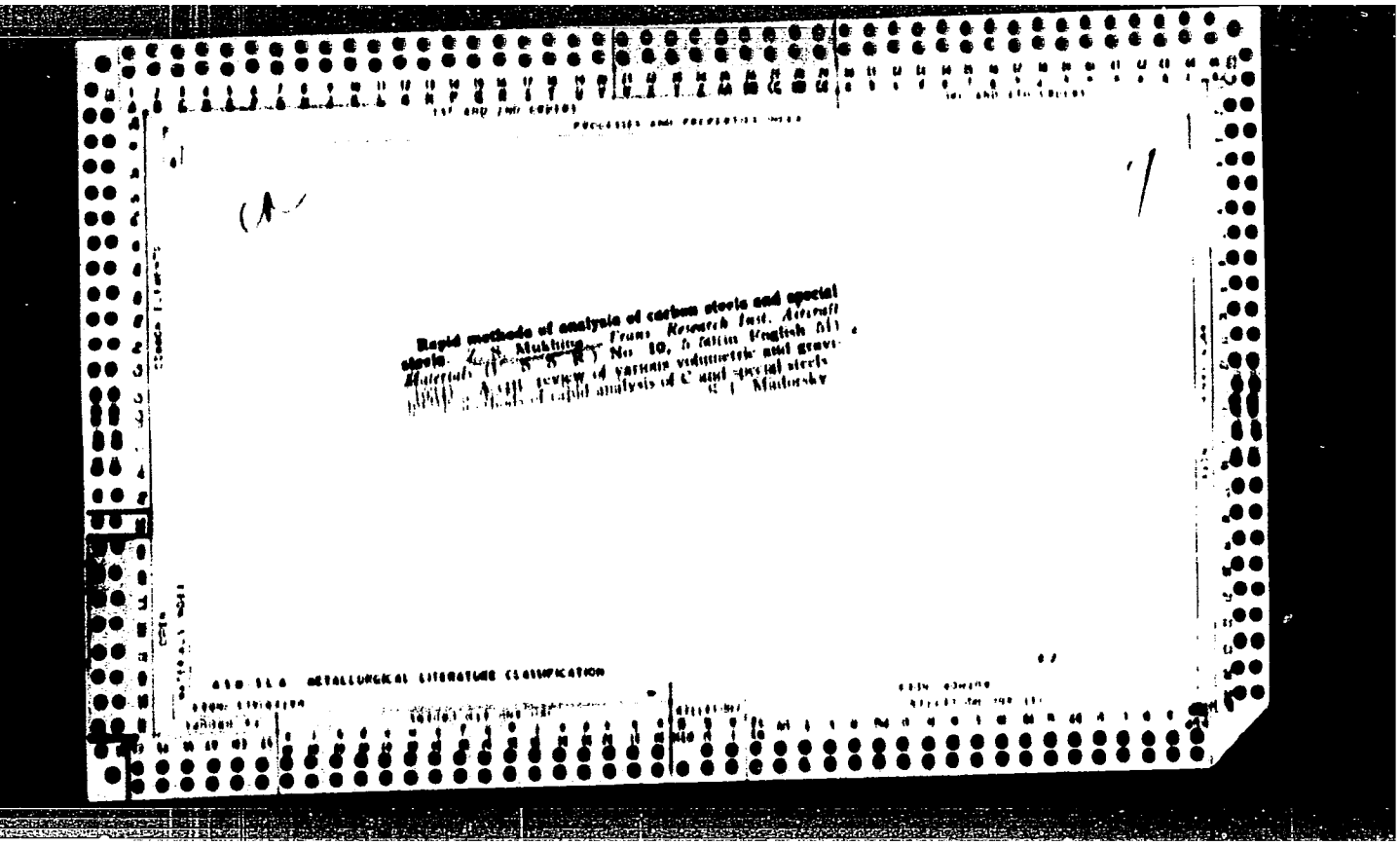
1. Iz kafedry onkologii (zav.- chlen-korrespondent AMN SSSR prof. A.I. Rakov) Leningradskogo instituta usovershenstvovaniya vrachey imeni Kirova (dir.- dotsent S.N. Polikarpov) i ginekologicheskogo otdeleniya (zav.- prof. V.P. Tobilevich) Instituta onkologii AMN SSSR (dir.-deystvitel'nyy chlen AMN SSSR prof. A.I. Serebrov).



Use of perchloric acid in the analysis of special steels. Z. A. Makhina and N. V. Zolotareva. *Zavodskaya Lab.* 3, 784-6(1934).—Dissolve 0.5 g. of a Cr-Ni steel in 20 cc. of 50% HCl + HNO_3, add 30 cc. of 30% $HClO_4$, heat 15 min., boil 3 min., add 100 cc. H_2O, boil 3–4 min. to expel Cl_2, cool, add 25 cc. of 33% H_2SO_4, det. CrO_3 with an excess of Mohr's salt and back titration with $KMnO_4$, filter off and det. SiO_2 and titrate Ni in the filtrate with KCN by the Mohr's method. Dissolve 1 g. of a Cr-V steel and det. Cr and SiO_2 as above. Add to the filtrate $KMnO_4$, decomp. the excess of $KMnO_4$ with $NaNO_2$, add 5 g. $CO(NH_2)_2$ and 15 min. later 3 drops of 1% Ph_2NH in H_2SO_4 and titrate V with 0.02 *N* $FeSO_4$. The results for all constituents are accurate to 0.02-0.04%. Comparative tests with pure Si showed that the higher values for Si with $HClO_4$ result from a more complete oxidation to SiO_2 than is possible by other methods. Chas. Blanc

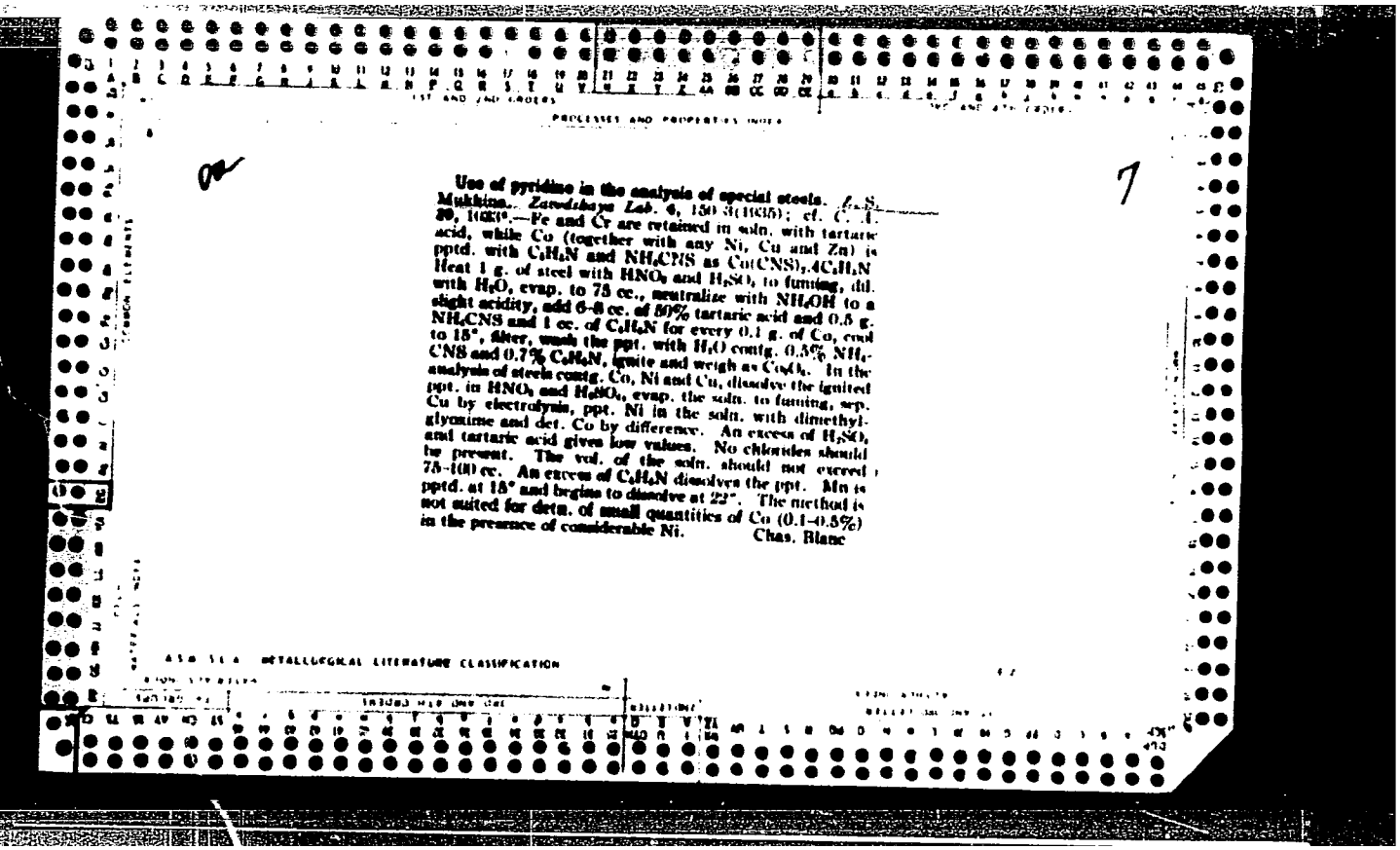


Volumetric determination of chromium, manganese and vanadium with diphenylamine indicator. Z. S. Mukhina and N. V. Zolotareva. *Zavodskaya Lab.* 3, 881 (1934). — With the aid of diphenylamine as indicator, the persulfate method for detg. Cr, Mn and V can be modified so that direct titration can be made with $FeSO_4$ and $K_2Cr_2O_7$ can replace KMnO$_4$. Full details are given for carrying out the analyses. Chas. Blatz



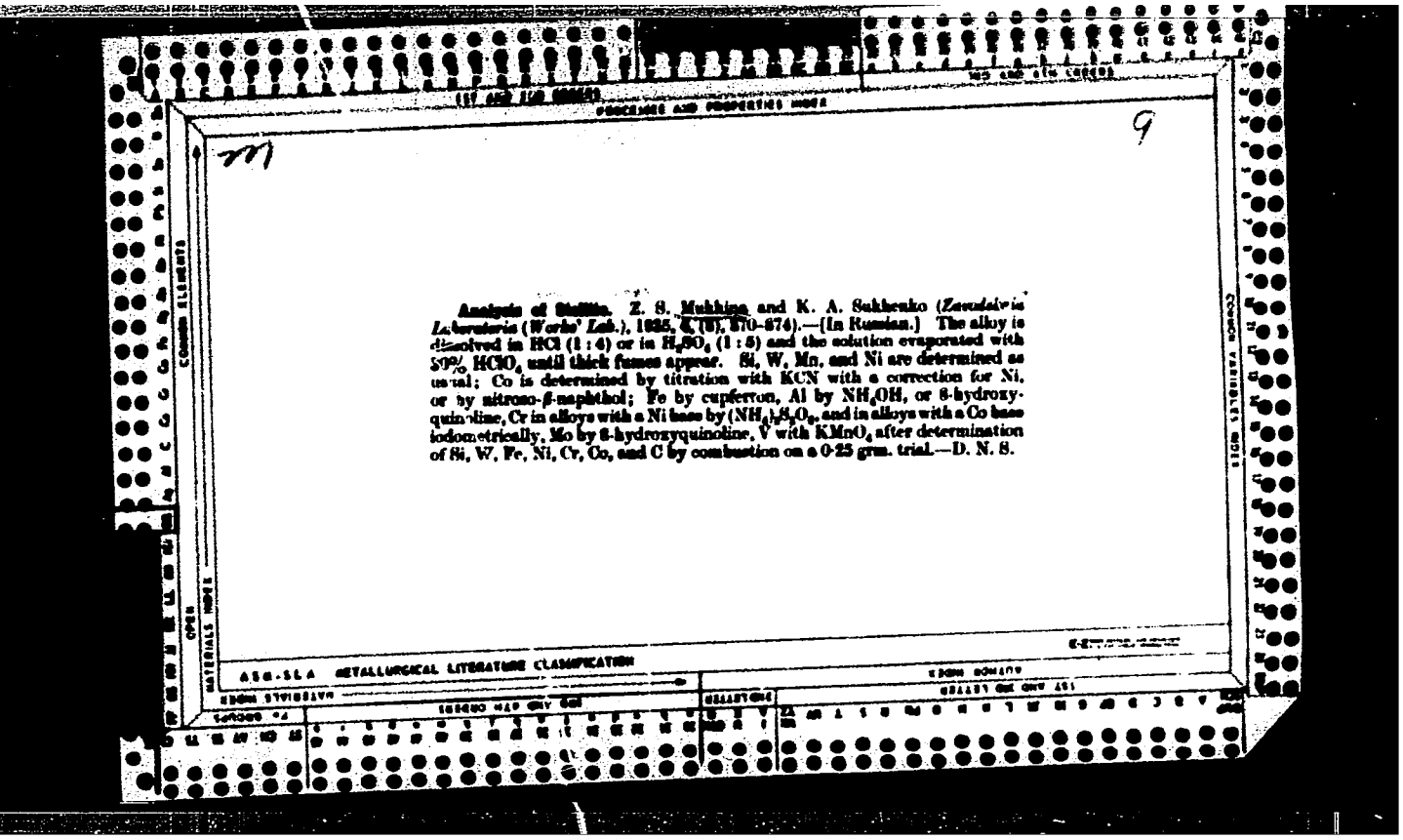
Rapid methods of analysis of carbon steels and special steels. [illegible] Mukhina. *Trans. Research Inst. Aircraft Materials* (USSR) No. 10, 5 refs. (English tr.) [illegible] review of various volumetric and gravimetric methods of rapid analysis of C and special steels [illegible] Mukhina

ASM SLA METALLURGICAL LITERATURE CLASSIFICATION

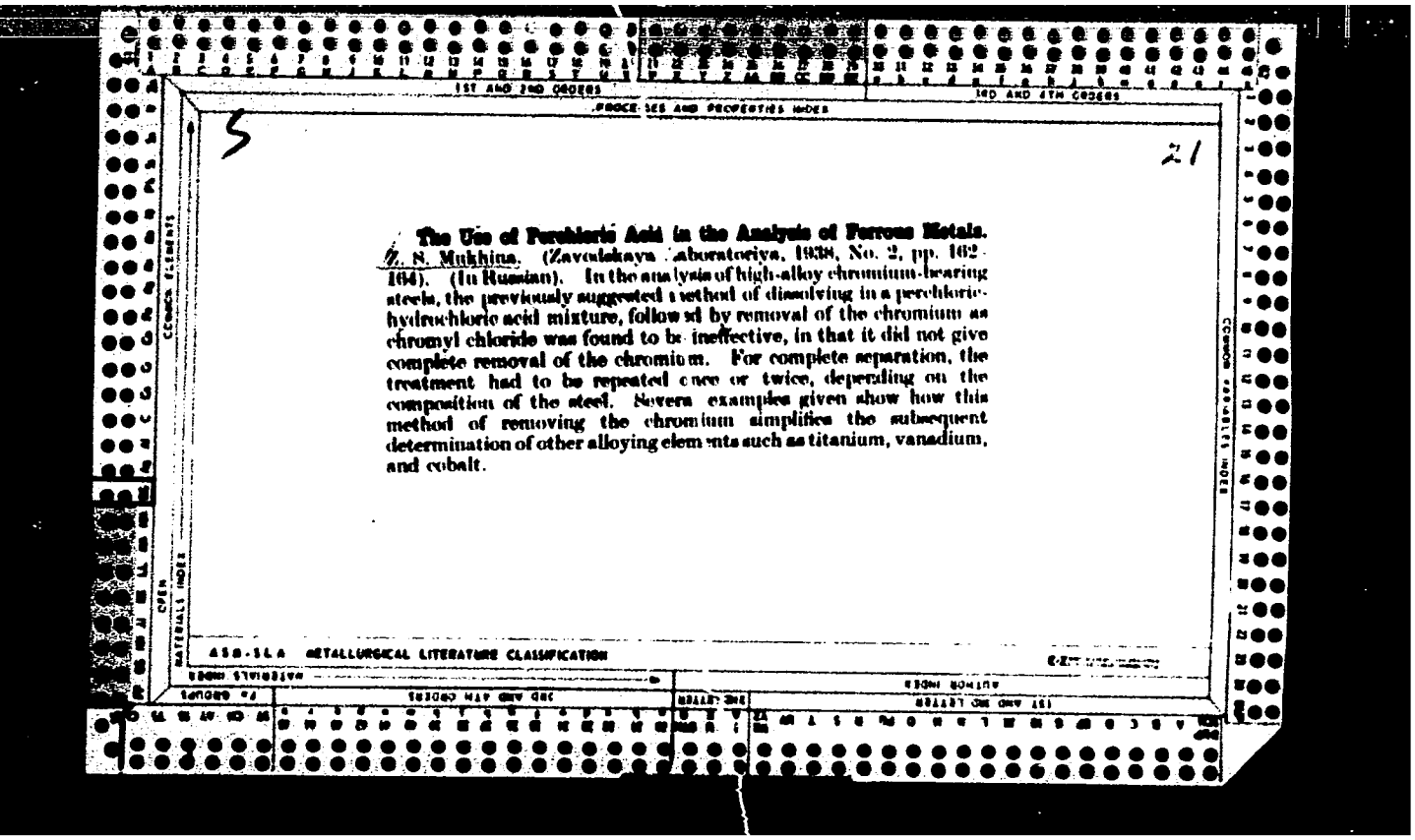


Use of pyridine in the analysis of special steels. [illegible] Mukhina. *Zavodskaya Lab.* 4, 150-3(1935); cf. C. A. 30, 1033⁹.—Fe and Cr are retained in soln. with tartaric acid, while Co (together with any Ni, Cu and Zn) is pptd. with C_5H_5N and NH_4CNS as $Co(CNS)_2.4C_5H_5N$. Heat 1 g. of steel with HNO_3 and H_2SO_4 to fuming, dil. with H_2O, evap. to 75 cc., neutralize with NH_4OH to a slight acidity, add 6-8 cc. of 50% tartaric acid and 0.5 g. NH_4CNS and 1 cc. of C_5H_5N for every 0.1 g. of Co, cool to 15°, filter, wash the ppt. with H_2O contg. 0.5% NH_4CNS and 0.7% C_5H_5N, ignite and weigh as Co_3O_4. In the analysis of steels contg. Co, Ni and Cu, dissolve the ignited ppt. in HNO_3 and H_2SO_4, evap. the soln. to fuming, sep. Cu by electrolysis, ppt. Ni in the soln. with dimethylglyoxime and det. Co by difference. An excess of H_2SO_4 and tartaric acid given low values. No chlorides should be present. The vol. of the soln. should not exceed 75-100 cc. An excess of C_5H_5N dissolves the ppt. Mn is ppted. at 15° and begins to dissolve at 22°. The method is not suited for detn. of small quantities of Co (0.1-0.5%) in the presence of considerable Ni.

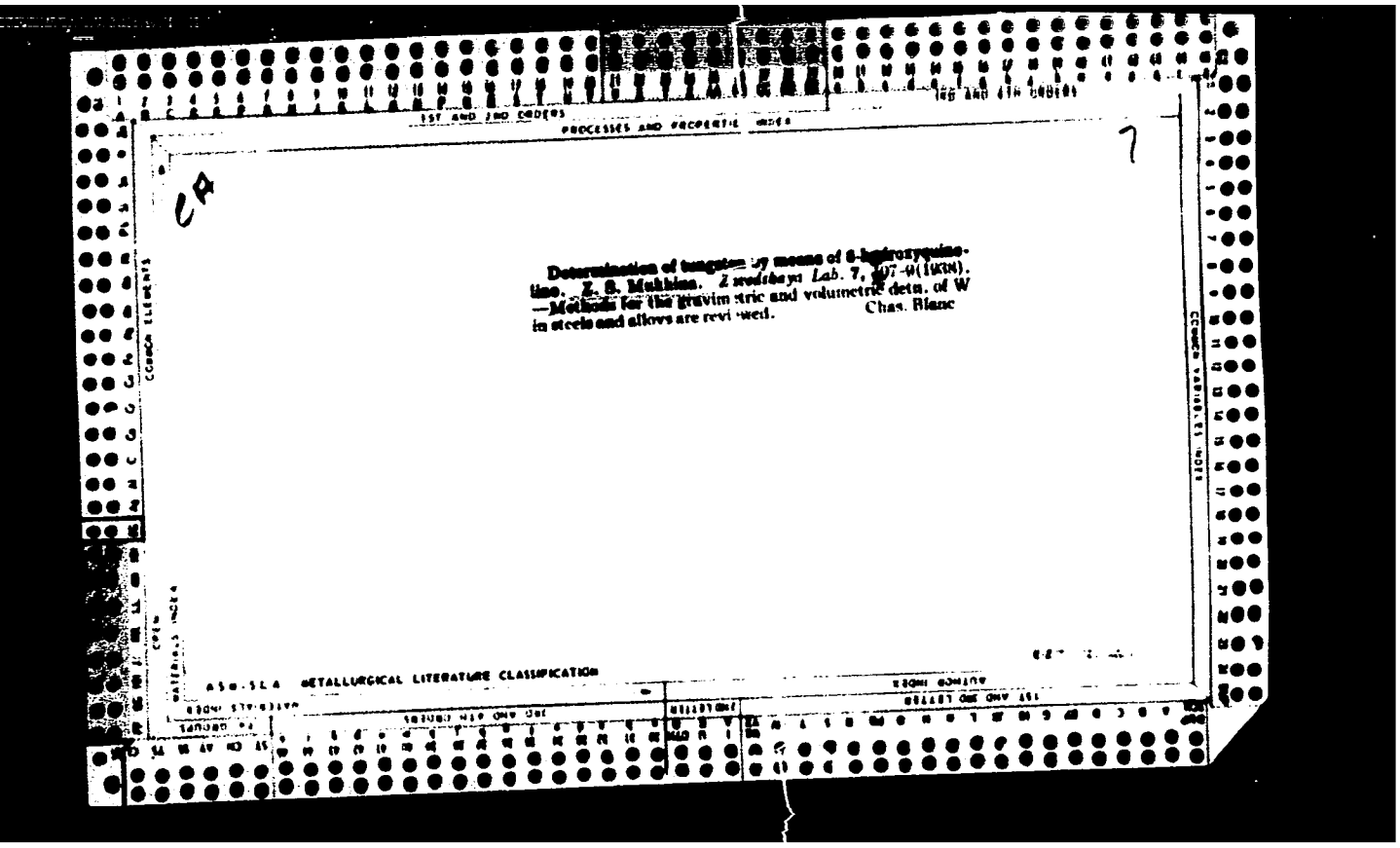
Chas. Blanc



Analysis of Steelite. Z. S. Mukhina and K. A. Sukhenko (*Zavodskaya Laboratoria* (*Works' Lab.*), 1935, **4**, (10), 870–874).—[In Russian.] The alloy is dissolved in HCl (1 : 4) or in H_2SO_4 (1 : 5) and the solution evaporated with 50% $HClO_4$ until thick fumes appear. Si, W, Mn, and Ni are determined as usual; Co is determined by titration with KCN with a correction for Ni, or by nitroso-β-naphthol; Fe by cupferron, Al by NH_4OH, or 8-hydroxyquinoline, Cr in alloys with a Ni base by $(NH_4)_2S_2O_8$, and in alloys with a Co base iodometrically, Mo by 8-hydroxyquinoline, V with $KMnO_4$ after determination of Si, W, Fe, Ni, Cr, Co, and C by combustion on a 0·25 grm. trial.—D. N. S.



The Use of Perchloric Acid in the Analysis of Ferrous Metals. V. N. Mukhina. (Zavodskaya Laboratoriya, 1938, No. 2, pp. 162-164). (In Russian). In the analysis of high-alloy chromium-bearing steels, the previously suggested method of dissolving in a perchloric-hydrochloric acid mixture, followed by removal of the chromium as chromyl chloride was found to be ineffective, in that it did not give complete removal of the chromium. For complete separation, the treatment had to be repeated once or twice, depending on the composition of the steel. Several examples given show how this method of removing the chromium simplifies the subsequent determination of other alloying elements such as titanium, vanadium, and cobalt.



MUKHINA, Z.S.

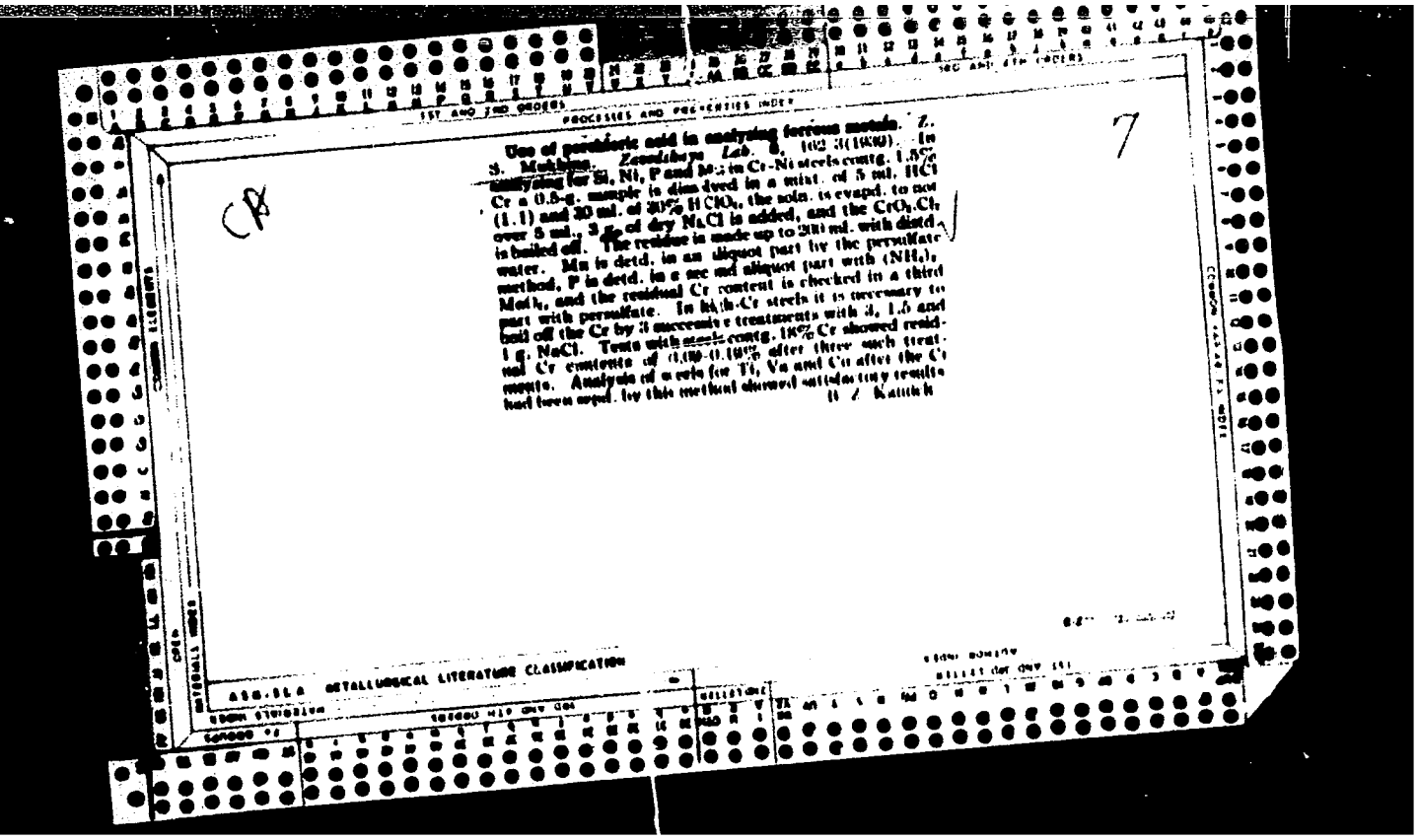
MUKHINA, Z.S.

Analiz chernykh metallov. Pod red. F. K. Gerl'e. 2. izd. Moskva, Oboronpriz, 1939. 131 p., diagrs. (VIAM. Trudy, no.54)

Title tr.: Analysis of ferrous metals.

QD133. M85 1939

SO: Aeronutical Sciences and Aviation in the Soviet Union, Library of Congress, 1955



PROCESSES AND PROCESSING INDEX

7

Use of periodic acid in analyzing ferrous metals. Z. S. Mukhina. *Zavodskaya Lab.* 8, 102 3(1939). In analyzing for Si, Ni, P and Mn in Cr-Ni steels containg. 1.5% Cr a 0.5-g. sample is dissolved in a mixt. of 5 ml. HCl (1.1) and 20 ml. of 30% $HClO_4$, the soln. is evapd. to not over 5 ml., 3 g. of dry NaCl is added, and the CrO_2Cl_2 is boiled off. The residue is made up to 200 ml. with distd. water. Mn is detd. in an aliquot part by the persulfate method, P is detd. in a sec ond aliquot part with $(NH_4)_2$ Molb., and the residual Cr content is checked in a third part with persulfate. In high-Cr steels it is necessary to boil off the Cr by 3 successive treatments with 3, 1.5 and 1 g. NaCl. Tests with steels containg. 18% Cr showed residual Cr contents of 0.09-0.10% after three such treatments. Analysis of steels for Ti, Va and Cu after the Cr has been oxpel. by this method showed satisfactory results

H. J. Kanitsch

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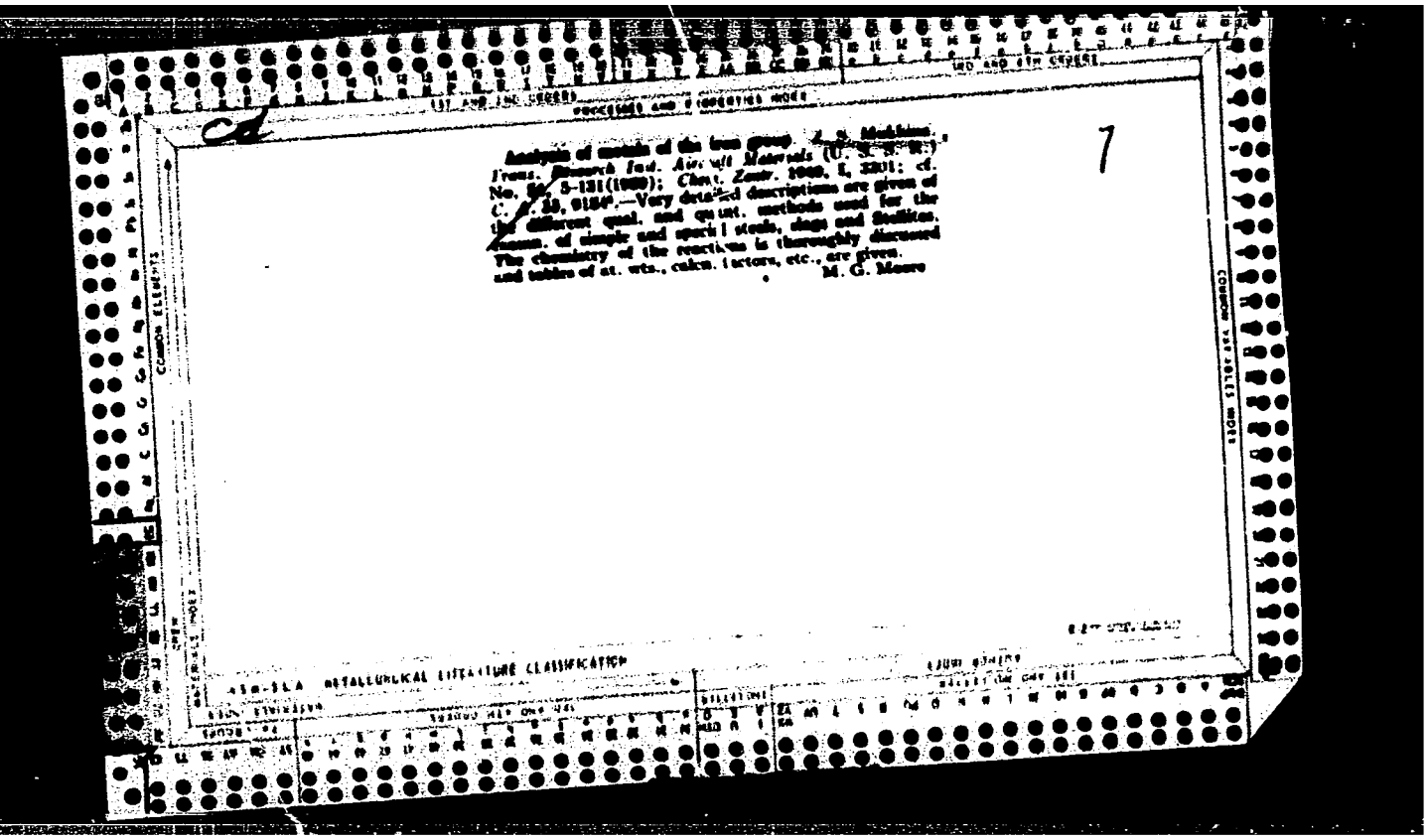
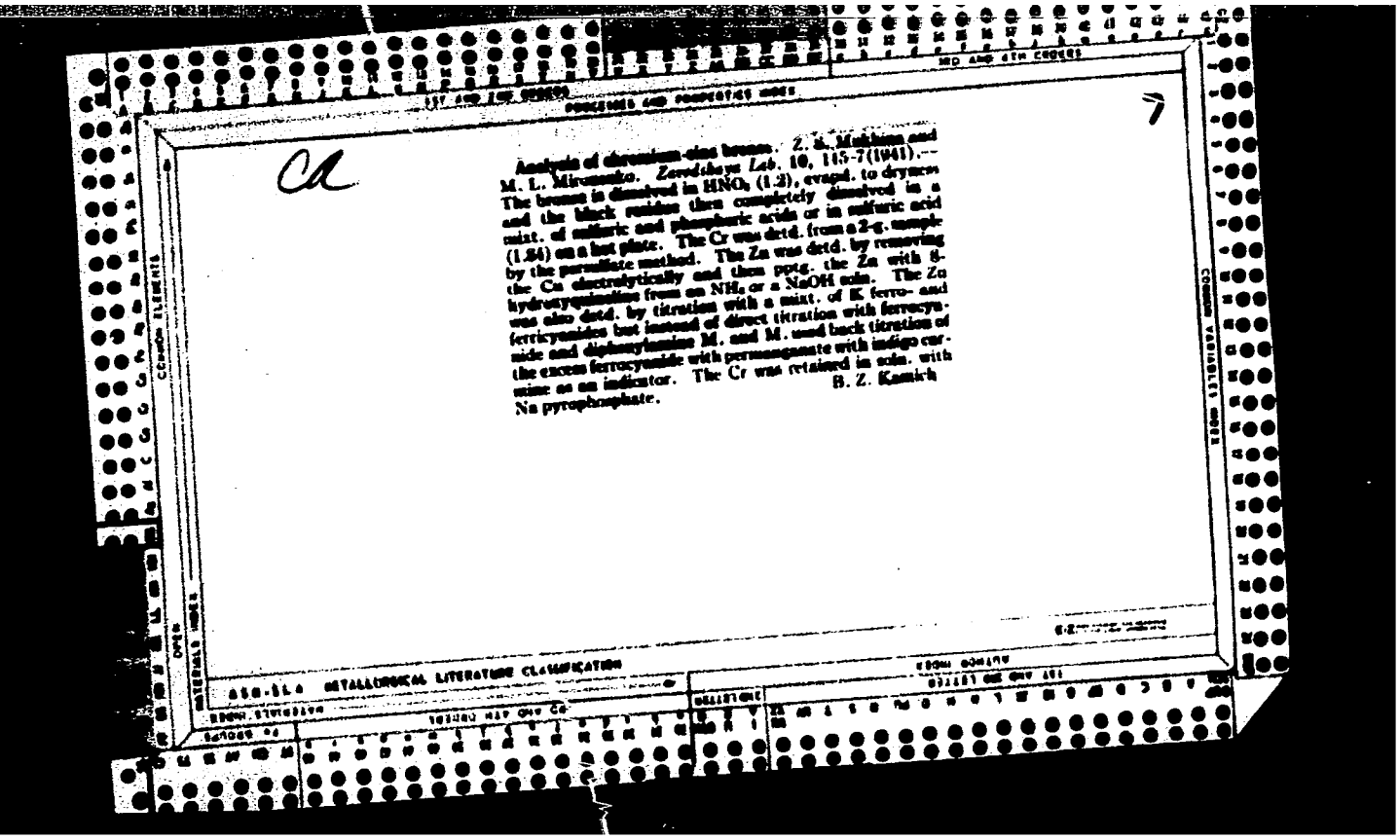


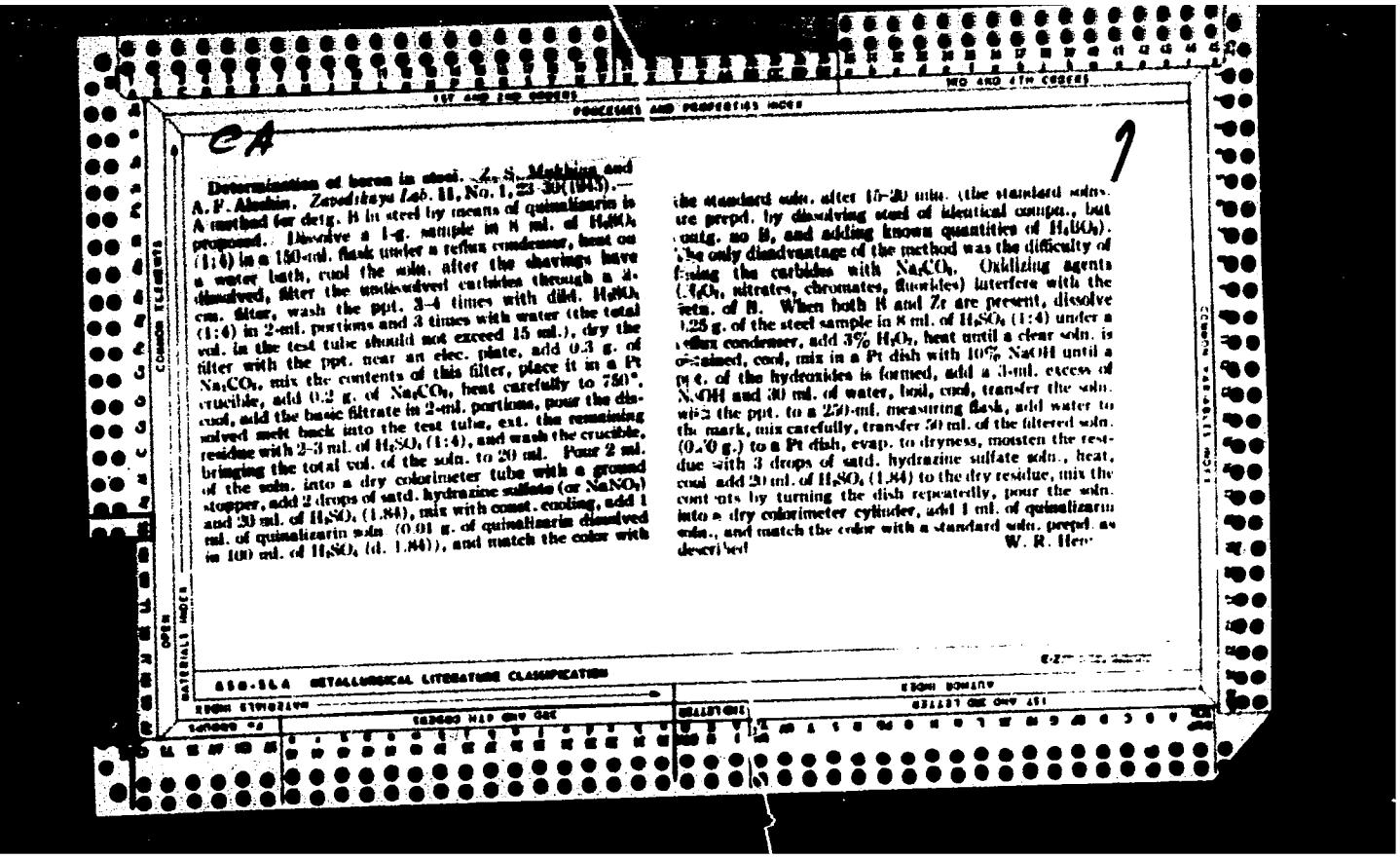
Analysis of metals of the iron group. [illegible]
Trans. Research Inst. Aircraft Materials (U.S.S.R.)
No. [illegible] 5-131(1939); Chem. Zentr. 1940, I, 2331; cf.
C. A. 33, 8184.—Very detailed descriptions are given of
the different qual. and quant. methods used for the
detn. of simple and special steels, slags and ferroalloys.
The chemistry of the reactions is thoroughly discussed
and tables of at. wts., calcn. factors, etc., are given.
M. G. Moore

ASM-SLA METALLURGICAL LITERATURE CLASSIFICATION



Analysis of chromium-zinc bronze. Z. A. Mukhina and M. L. Mirvenata. *Zavodskaya Lab.* 10, 115-7(1941).—The bronze is dissolved in HNO_3 (1:3), evapd. to dryness and the black residue then completely dissolved in a mixt. of sulfuric and phosphoric acids or in sulfuric acid (1.84) on a hot plate. The Cr was detd. from a 2-g. sample by the persulfate method. The Zn was detd. by removing the Cu electrolytically and then ppte. the Zn with 8-hydroxyquinoline from an NH_4 or a NaOH soln. The Zn was also detd. by titration with a mixt. of K ferro- and ferricyanides but instead of direct titration with ferrocyanide and diphenylamine M. and M. used back titration of the excess ferrocyanide with permanganate with indigo carmine as an indicator. The Cr was retained in soln. with Na pyrophosphate.

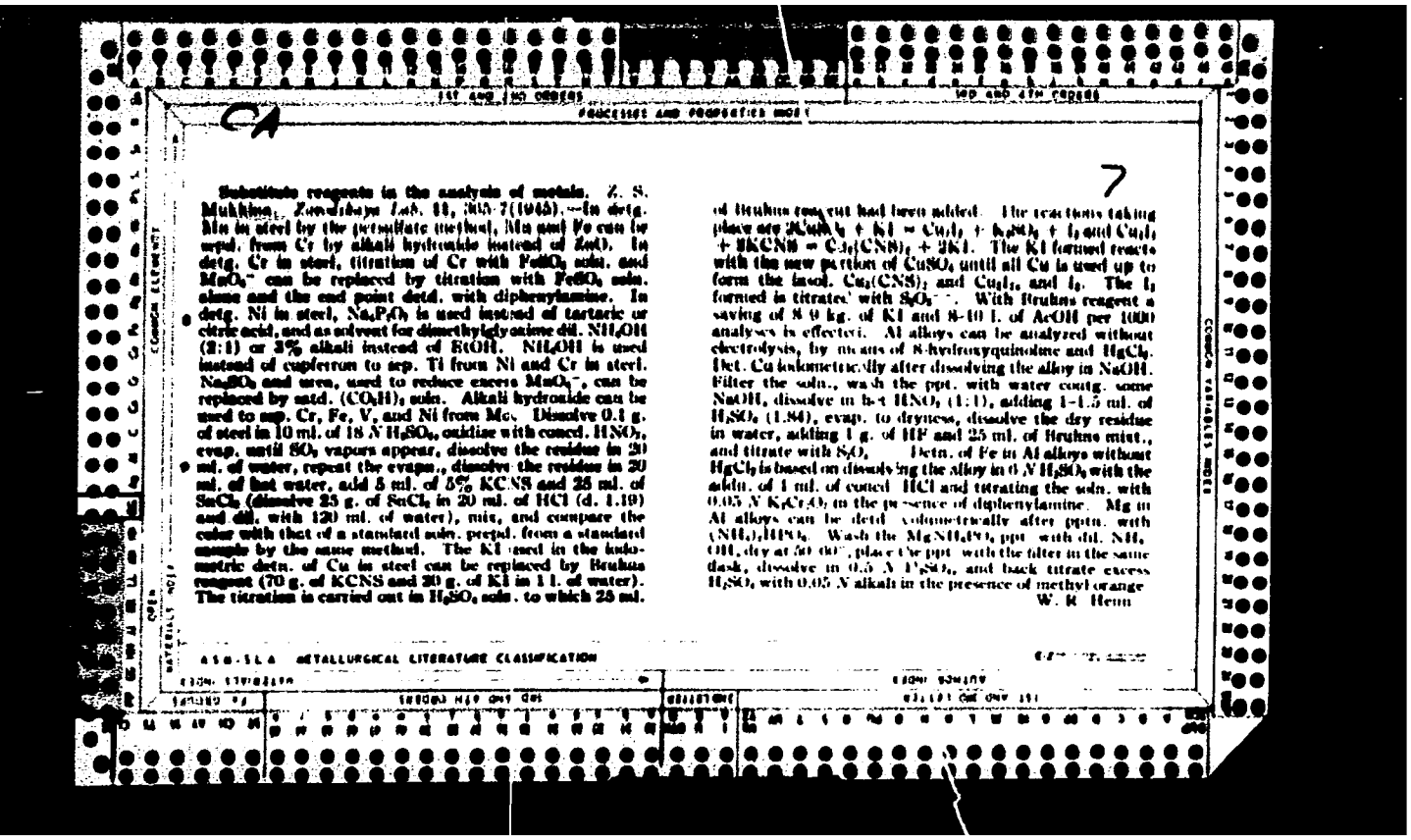
B. Z. Kamish



CA

1

Determination of boron in steel. L. S. Mukhina and A. F. Alushin. *Zavodskaya Lab.* 11, No. 1, 23-30(1945).—A method for detg. B in steel by means of quinalizarin is proposed. Dissolve a 1-g. sample in 8 ml. of H_2SO_4 (1:4) in a 150-ml. flask under a reflux condenser, heat on a water bath, cool the soln. after the shavings have dissolved, filter the undissolved carbides through a 4-cm. filter, wash the ppt. 3–4 times with dild. H_2SO_4 (1:4) in 2-ml. portions and 3 times with water (the total vol. in the test tube should not exceed 15 ml.), dry the filter with the ppt. near an elec. plate, add 0.3 g. of Na_2CO_3, mix the contents of this filter, place it in a Pt crucible, add 0.2 g. of Na_2CO_3, heat carefully to 750°, cool, add the basic filtrate in 2-ml. portions, pour the dissolved melt back into the test tube, ext. the remaining residue with 2–3 ml. of H_2SO_4 (1:4), and wash the crucible, bringing the total vol. of the soln. to 20 ml. Pour 2 ml. of the soln. into a dry colorimeter tube with a ground stopper, add 2 drops of satd. hydrazine sulfate (or $NaNO_2$) and 20 ml. of H_2SO_4 (1.84), mix with const. cooling, add 1 ml. of quinalizarin soln (0.01 g. of quinalizarin dissolved in 100 ml. of H_2SO_4 (d. 1.84)), and match the color with the standard soln. after 15–20 min. (the standard solns. are prepd. by dissolving steel of identical compn., but contg. no B, and adding known quantities of H_3BO_3). The only disadvantage of the method was the difficulty of fusing the carbides with Na_2CO_3. Oxidizing agents (Cr_2O_3, nitrates, chromates, fluorides) interfere with the detn. of B. When both B and Zr are present, dissolve 1.25 g. of the steel sample in 8 ml. of H_2SO_4 (1:4) under a reflux condenser, add 3% H_2O_2, heat until a clear soln. is obtained, cool, mix in a Pt dish with 10% NaOH until a ppt. of the hydroxides is formed, add a 3-ml. excess of NaOH and 30 ml. of water, boil, cool, transfer the soln. with the ppt. to a 250-ml. measuring flask, add water to the mark, mix carefully, transfer 50 ml. of the filtered soln. (0.20 g.) to a Pt dish, evap. to dryness, moisten the residue with 3 drops of satd. hydrazine sulfate soln., heat, cool, add 20 ml. of H_2SO_4 (1.84) to the dry residue, mix the contents by turning the dish repeatedly, pour the soln. into a dry colorimeter cylinder, add 1 ml. of quinalizarin soln., and match the color with a standard soln. prepd. as described. W. R. Hen-



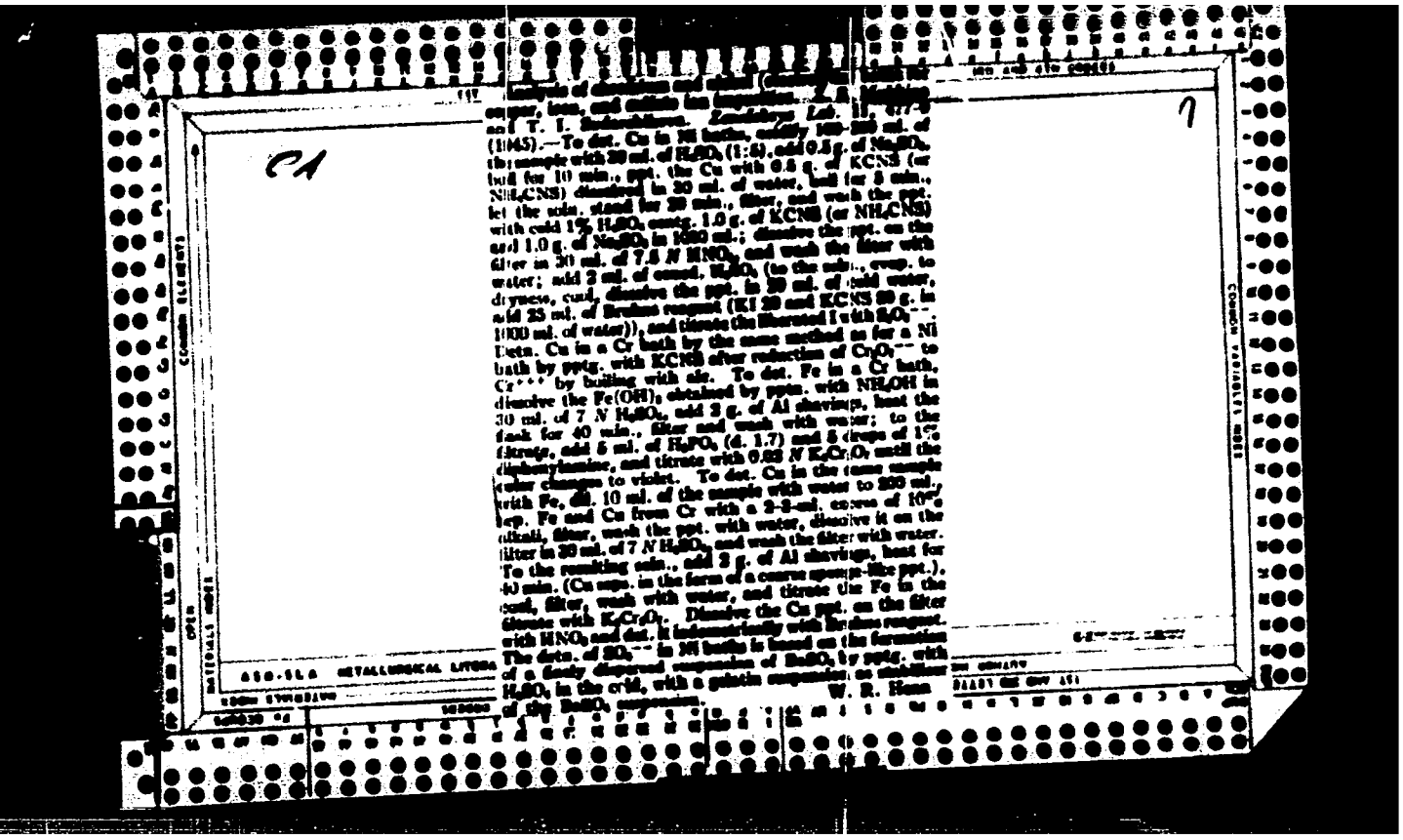
CA

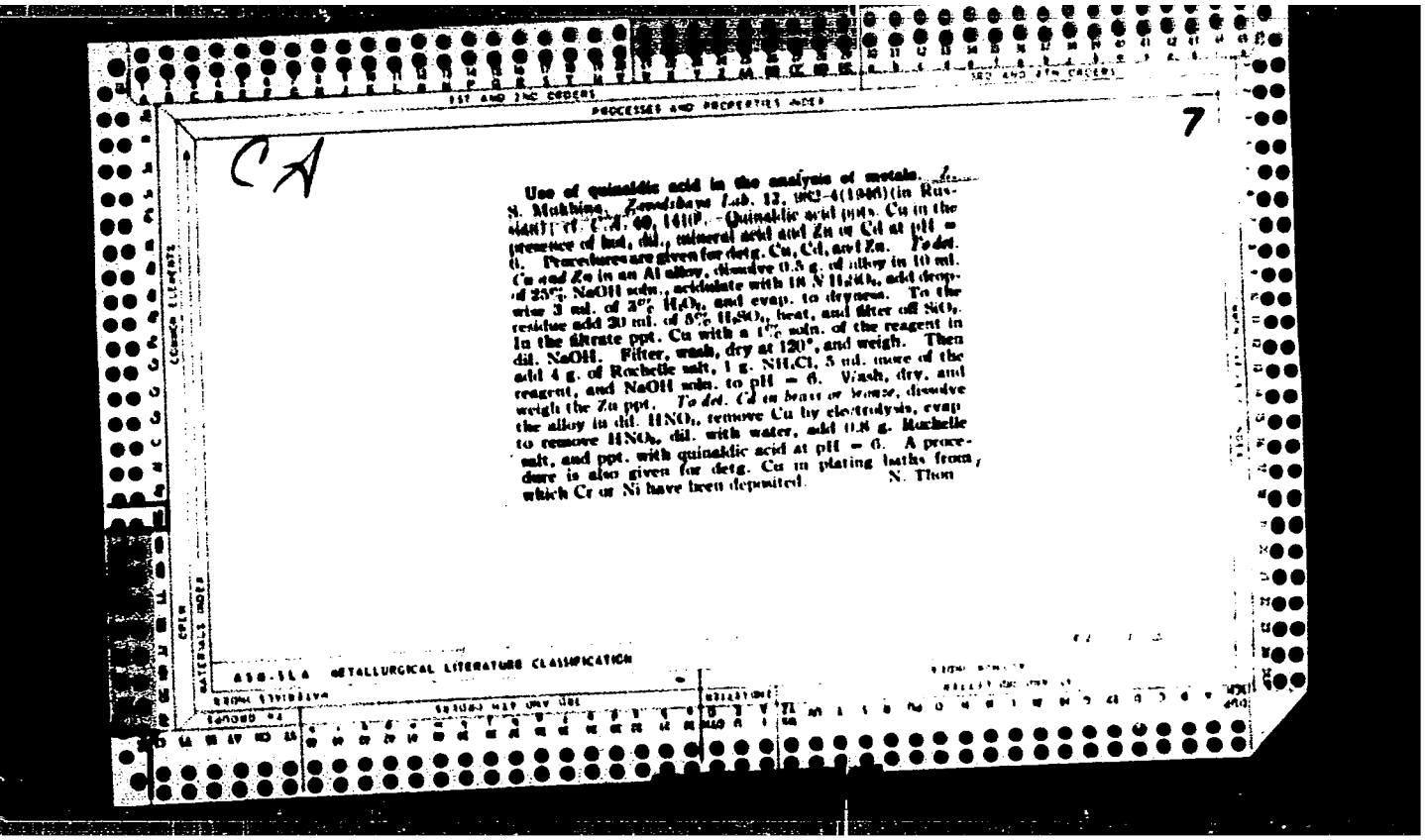
7

Substitute reagents in the analysis of metals. Z. S. Mukhina. *Zavodskaya Lab.* 11, 305-7(1945).—In detg. Mn in steel by the persulfate method, Mn and Fe can be sepd. from Cr by alkali hydroxide instead of ZnO. In detg. Cr in steel, titration of Cr with $FeSO_4$ soln. and MnO_4^- can be replaced by titration with $FeSO_4$ soln. alone and the end point detd. with diphenylamine. In detg. Ni in steel, $Na_4P_2O_7$ is used instead of tartaric or citric acid, and as solvent for dimethylglyoxime dil. NH_4OH (2:1) or 3% alkali instead of EtOH. NH_4OH is used instead of cupferron to sep. Ti from Ni and Cr in steel. Na_2SO_3 and urea, used to reduce excess MnO_4^-, can be replaced by satd. $(CO_2H)_2$ soln. Alkali hydroxide can be used to sep. Cr, Fe, V, and Ni from Mo. Dissolve 0.1 g. of steel in 10 ml. of 18 *N* H_2SO_4, oxidize with concd. HNO_3, evap. until SO_3 vapors appear, dissolve the residue in 20 ml. of water, repeat the evapn., dissolve the residue in 20 ml. of hot water, add 5 ml. of 5% KCNS and 25 ml. of $SnCl_2$ (dissolve 25 g. of $SnCl_2$ in 20 ml. of HCl (d. 1.19) and dil. with 120 ml. of water), mix, and compare the color with that of a standard soln. prepd. from a standard sample by the same method. The KI used in the iodometric detn. of Cu in steel can be replaced by Bruhns reagent (70 g. of KCNS and 20 g. of KI in 1 l. of water). The titration is carried out in H_2SO_4 soln. to which 25 ml. of Bruhns reagent had been added. The reactions taking place are $2CuCl_2 + 4KI = Cu_2I_2 + I_2 + 4KCl$ and $Cu_2I_2 + 2KCNS = Cu_2(CNS)_2 + 2KI$. The KI formed reacts with the new portion of $CuSO_4$ until all Cu is used up to form the insol. $Cu_2(CNS)_2$ and Cu_2I_2, and I_2. The I_2 formed is titrated with $Na_2S_2O_3$. With Bruhns reagent a saving of 8-9 kg. of KI and 8-10 l. of AcOH per 1000 analyses is effected. Al alloys can be analyzed without electrolysis, by means of 8-hydroxyquinoline and $HgCl_2$. Det. Cu iodometrically after dissolving the alloy in NaOH. Filter the soln., wash the ppt. with water contg. some NaOH, dissolve in hot HNO_3 (1:1), adding 1–1.5 ml. of H_2SO_4 (1.84), evap. to dryness, dissolve the dry residue in water, adding 1 g. of HF and 25 ml. of Bruhns mixt., and titrate with $Na_2S_2O_3$. Detn. of Fe in Al alloys without $HgCl_2$ is based on dissolving the alloy in 0.5 *N* H_2SO_4 with the addn. of 1 ml. of concd. HCl and titrating the soln. with 0.05 *N* $K_2Cr_2O_7$ in the presence of diphenylamine. Mg in Al alloys can be detd. colorimetrically after pptn. with $(NH_4)_2HPO_4$. Wash the $MgNH_4PO_4$ ppt. with dil. NH_4OH, dry at 50–60°, place the ppt. with the filter in the same flask, dissolve in 0.5 *N* H_2SO_4, and back titrate excess H_2SO_4 with 0.05 *N* alkali in the presence of methyl orange.

W. R. Hemm

A50-SLA METALLURGICAL LITERATURE CLASSIFICATION





CA

7

Use of quinaldic acid in the analysis of metals. S. Mukhina. *Zavodskaya Lab.* 12, 982-4(1946)(in Russian). Cf. *C.A.* 40, 1411f. Quinaldic acid ppts. Cu in the presence of lead, dil., mineral acid and Zn or Cd at pH = 6. Procedures are given for detg. Cu, Cd, and Zn. *To det.* Cu and Zn in an Al alloy, dissolve 0.5 g. of alloy in 10 ml. of 25% NaOH soln., acidulate with 10 N H_2SO_4, add dropwise 3 ml. of 3% H_2O_2, and evap. to dryness. To the residue add 20 ml. of 5% H_2SO_4, heat, and filter off SiO_2. In the filtrate ppt. Cu with a 1% soln. of the reagent in dil. NaOH. Filter, wash, dry at 120°, and weigh. Then add 4 g. of Rochelle salt, 1 g. NH_4Cl, 5 ml. more of the reagent, and NaOH soln. to pH = 6. Wash, dry, and weigh the Zn ppt. *To det. Cd in brass or bronze*, dissolve the alloy in dil. HNO_3, remove Cu by electrolysis, evap. to remove HNO_3, dil. with water, add 0.8 g. Rochelle salt, and ppt. with quinaldic acid at pH = 6. A procedure is also given for detg. Cu in plating baths from which Cr or Ni have been deposited. N. Thon

MUKHINA, Z. S. PA 11T45

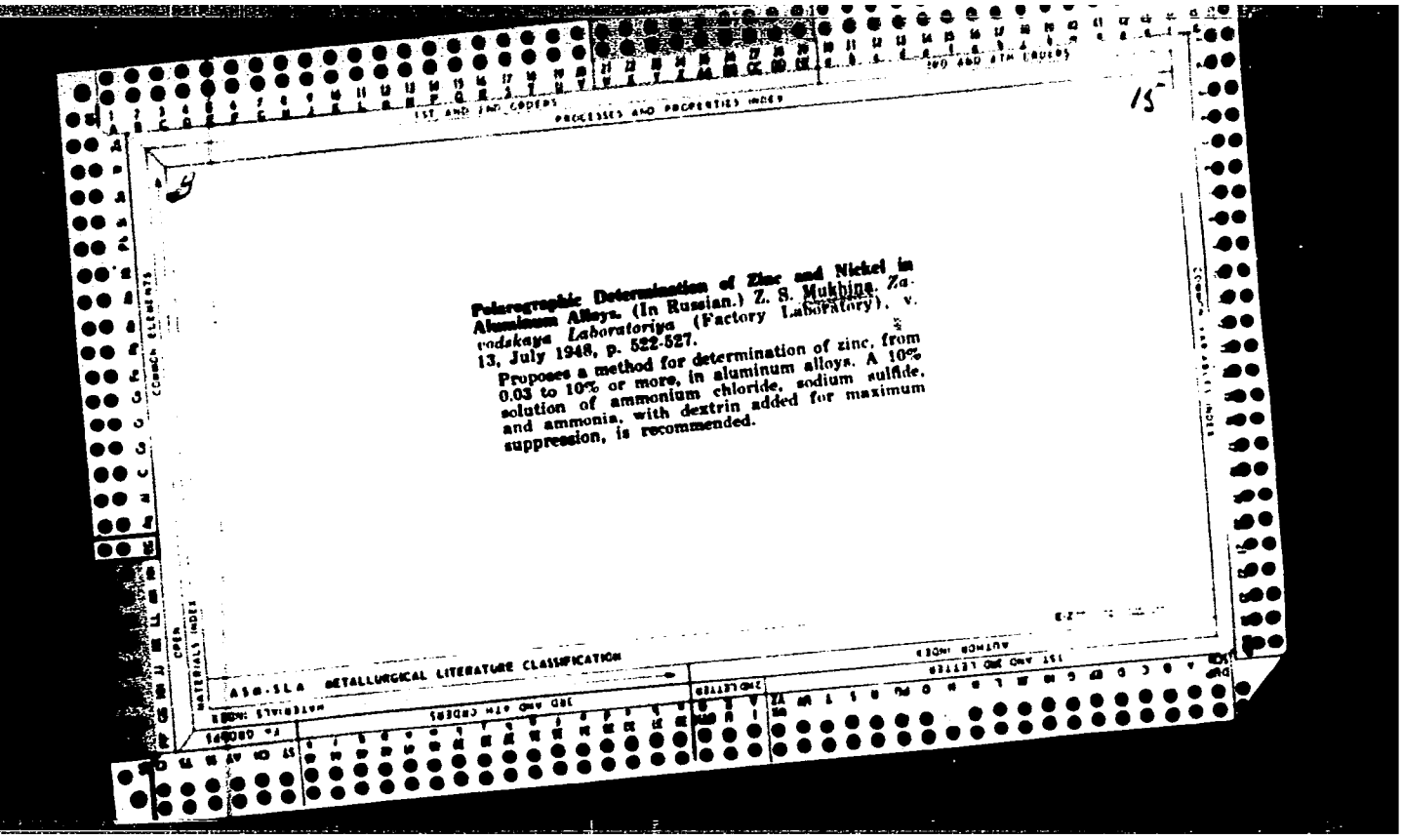
USSR/Polarographic Analysis
Metallurgy May 1947

"Determination of Lead in Steel by Polarographic Method," Z. S. Mukhina, 1 p

"Zavod Lab" Vol XIII, No 5 - p-620-21

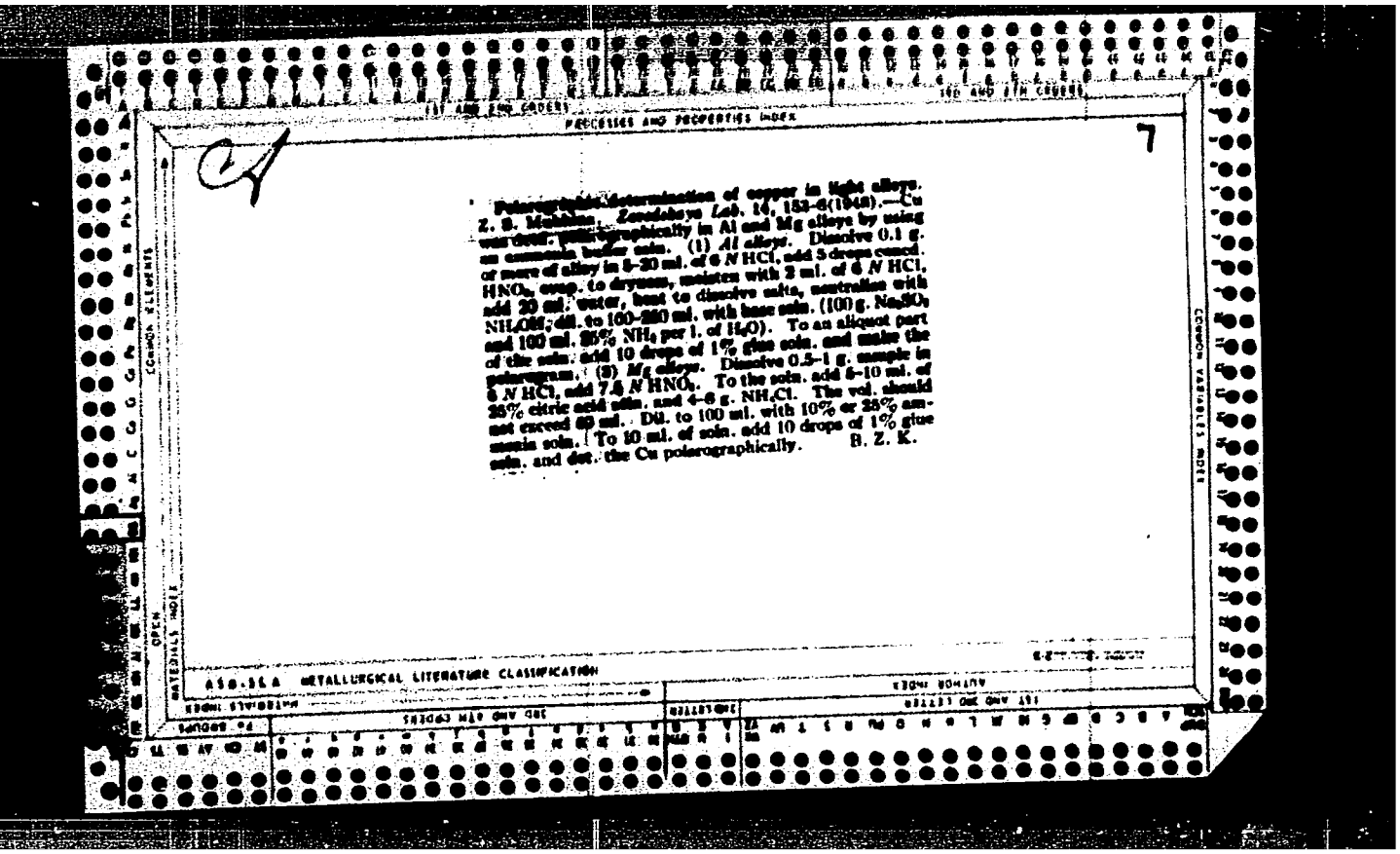
Brief account of a method using a solution of 6-normal saline and 12% phosphoric acid. Table given of comparative results of the polarographic method and the molybdate method.

11T45



Polarographic Determination of Zinc and Nickel in Aluminum Alloys. (In Russian.) Z. S. Mukhina. *Zavodskaya Laboratoriya* (Factory Laboratory), v. 13, July 1948, p. 522-527.

Proposes a method for determination of zinc, from 0.03 to 10% or more, in aluminum alloys. A 10% solution of ammonium chloride, sodium sulfide, and ammonia, with dextrin added for maximum suppression, is recommended.



PROCESSES AND PROPERTIES INDEX

7

Polarographic determination of copper in light alloys. Z. S. Mukhina. *Zavodskaya Lab.* 14, 182-6(1948).—Cu was detd. polarographically in Al and Mg alloys by using an ammonia buffer soln. (1) *Al alloys.* Dissolve 0.1 g. or more of alloy in 5–20 ml. of 6 *N* HCl, add 5 drops concd. HNO_3, evap. to dryness, moisten with 2 ml. of 6 *N* HCl, add 20 ml. water, heat to dissolve salts, neutralize with NH_4OH, dil. to 100–200 ml. with base soln. (100 g. Na_2SO_3 and 100 ml. 25% NH_4 per l. of H_2O). To an aliquot part of the soln. add 10 drops of 1% glue soln. and make the polarogram. (2) *Mg alloys.* Dissolve 0.5–1 g. sample in 6 *N* HCl, add 7 & *N* HNO_3. To the soln. add 5–10 ml. of 25% citric acid soln. and 4–6 g. NH_4Cl. The vol. should not exceed 40 ml. Dil. to 100 ml. with 10% or 25% ammonia soln. To 10 ml. of soln. add 10 drops of 1% glue soln. and det. the Cu polarographically. B. Z. K.

ASM-SLA METALLURGICAL LITERATURE CLASSIFICATION

MUKHINA, Z. S. PA 62T69

[redacted] Mar 1948
[redacted] Indium - Determination
Metallurgy

"Determination of Indium in Lead Bearings," Z. S. Mukhina, All-Union Inst Aviation Materials, 1 p

"Zavod Lab" Vol XIV, No 3

Describes very favorable results obtained for indium determination in lead bearings using ammonium acetate. Experiments were conducted on lead nitrate solutions containing indium. Comparison of this method to the polarographic method shows that the former has considerable time-saving advantage.

[redacted]

MUKHINA, Z.S. PA 28/49T14

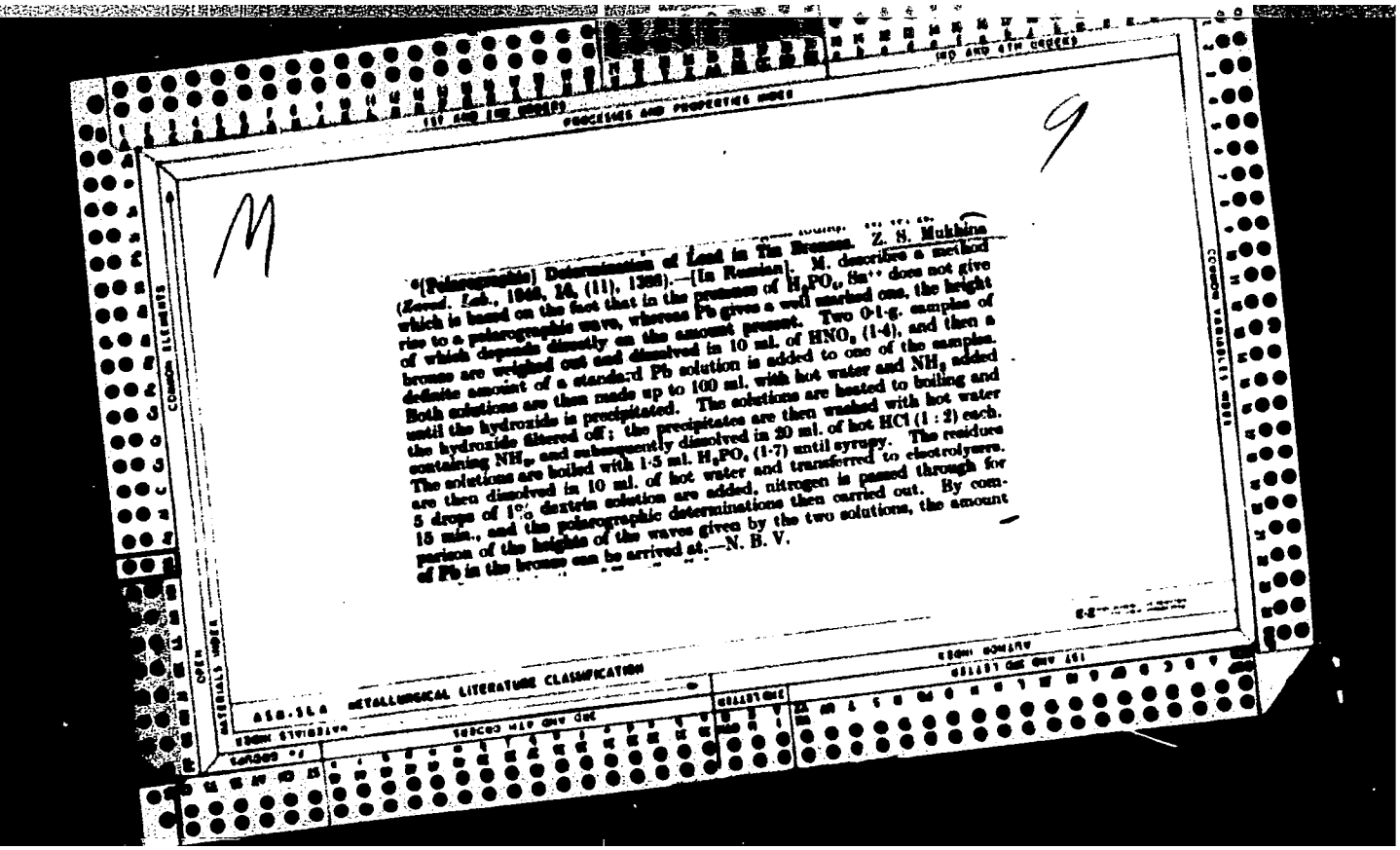
USSR/Chemistry - Magnesium, Determination Oct 48
Chemistry - Titration, Polarimetric

"Determination of Magnesium, Molybdenum, and Nickel by Polarimetric Titration," Z. S. Mukhina, All-Union Inst of Avn Materials, 4 pp

"Zavod Lab" Vol XIV, No 10 pp 1144-48

Develops polarimetric method of determining magnesium, molybdenum, and nickel, which considerably shortens the process. Shows that the results meet requirements for arbitrary analysis.

28/49T14



"[Polarographic] Determination of Lead in Tin Bronzes. Z. S. Mukhina (Zavod. Lab., 1942, 14, (11), 1358).—[In Russian.] M. describes a method which is based on the fact that in the presence of H_3PO_4, Sn^{++} does not give rise to a polarographic wave, whereas Pb gives a well marked one, the height of which depends directly on the amount present. Two 0·1-g. samples of bronze are weighed out and dissolved in 10 ml. of HNO_3 (1·4), and then a definite amount of a standard Pb solution is added to one of the samples. Both solutions are then made up to 100 ml. with hot water and NH_4 added until the hydroxide is precipitated. The solutions are heated to boiling and the hydroxide filtered off; the precipitates are then washed with hot water containing NH_4, and subsequently dissolved in 20 ml. of hot HCl (1 : 2) each. The solutions are boiled with 1·5 ml. H_3PO_4 (1·7) until syrupy. The residues are then dissolved in 10 ml. of hot water and transferred to electrolysers. 5 drops of 1% dextrin solution are added, nitrogen is passed through for 15 min., and the polarographic determinations then carried out. By comparison of the heights of the waves given by the two solutions, the amount of Pb in the bronze can be arrived at.—N. B. V.

CA

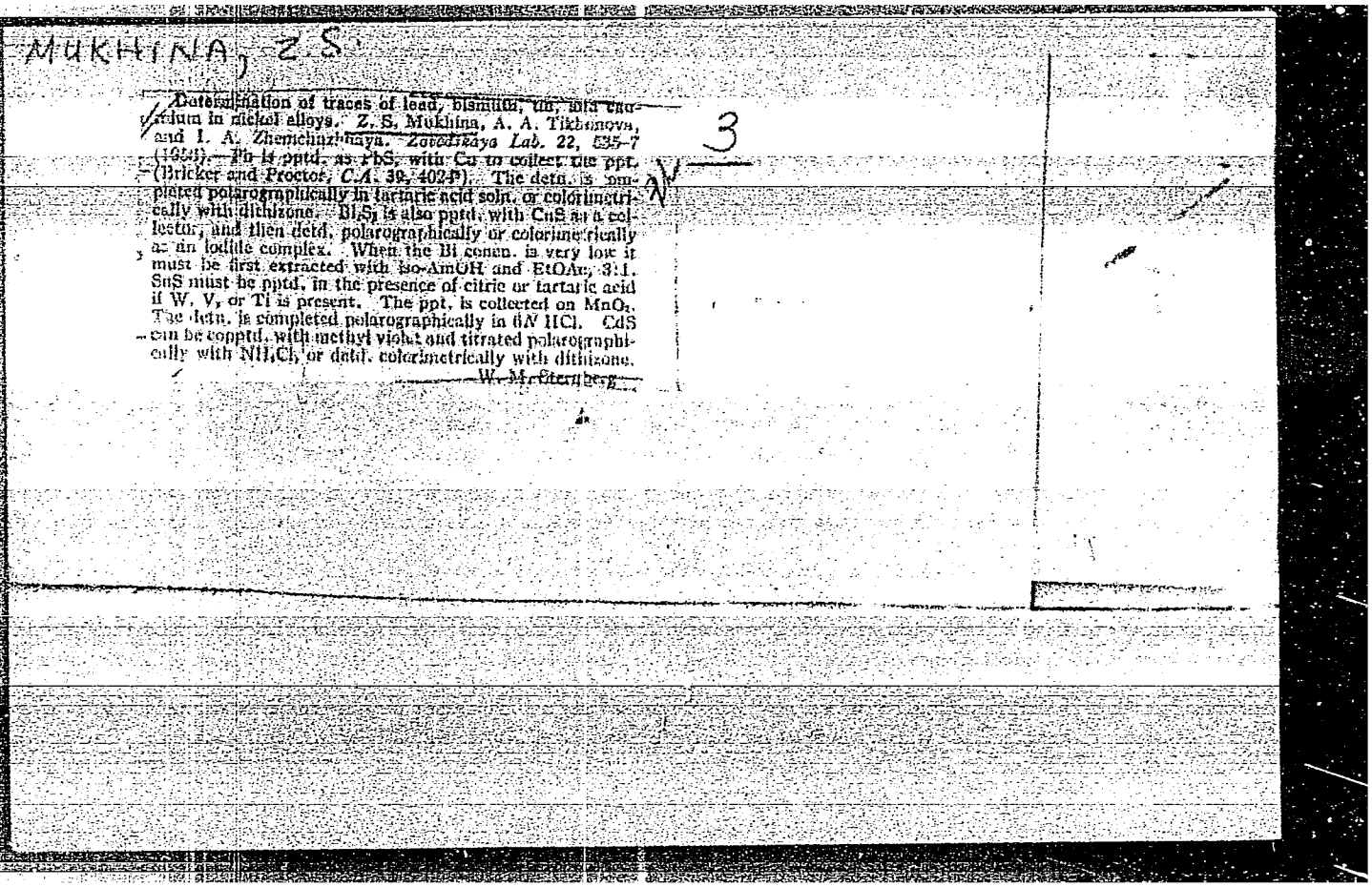
7

Determination of tin in aluminum alloys and other metals. Z. S. Mukhina. *Zavodskaya Lab.* 16, 546–8 (1950).—The detn. proper involves sepn. of stannic and antimonic acids by ppta. in the MnO_2; the ppt. is taken up in HCl, reduced to give Sn by means of NaH_2PO_2, Fe, or NH_4OH, then a little glue is added and the soln. is blown with N for 15 min. after which the Sn is detd. polarographically as usual. The Al alloys are treated first with NaOH, others with mineral acids. G. M. K.

Mukhina, Z. S.

3356. New methods of analysis of silver solder. Z. S. Mukhina. Report of symposium: [illegible] Metody Anal. Metal. [illegible] Metallurgizdat, 1955, 184–197; Ref. Zhur. Khim., 1956, Abstr. No. 22,762.—Dissolve the solder (0·5 g) in 15 ml of HNO_3, boil out oxides of N, add 0·1 N HCl to precipitate AgCl completely and, after 30 to 60 min, filter [illegible] and wash it with hot water. Collect the [illegible] to volume [illegible] H_2SO_4 (1 ml) to 20 ml of the soln. and evaporate to dryness. Dissolve the residue in 60% HCl (5 ml), add 10 ml of water and transfer to a 100-ml flask. Add aq. NH_3 till alkaline and make up to the mark. Obtain a polarogram for Cu at − 0·66 V, Cd at − 0·8 V and Zn at − 1·4 V. The basal soln. consists of 100 g of NH_4Cl, 100 ml of aq. NH_3, 50 g of Na_2SO_3 and 100 ml of 1% dextrin soln. made up to 1 litre. Zinc may be determined by amperometric titration with Na diethyldithiocarbamate soln. with a mercury cathode after removal of Cu, Cd and Ni with alkali. Silver is determined by titration with diethyldithiocarbamate after dissolving the AgCl in alkali and acidifying to dimethyl yellow. Cadmium may also be determined (after removal of Ag as AgCl and Cu with $Na_2S_2O_3$) by titration with 5:6-benzoquinoline after the addition of KI soln.

G. D. Korkin



MUKHINA, Z. S.

Determination of traces of lead, bismuth, tin, and cadmium in nickel alloys. Z. S. Mukhina, A. A. Tikhonova, and I. A. Zhemchuzhnaya. *Zavodskaya Lab.* 22, 635–7 (1956).—Pb is pptd. as PbS, with Cu to collect the ppt. (Bricker and Proctor, *C.A.* 39, 4024*). The detn. is completed polarographically in tartaric acid soln. or colorimetrically with dithizone. Bi_2S_3 is also pptd. with CuS as a collector, and then detd. polarographically or colorimetrically as an iodide complex. When the Bi concn. is very low it must be first extracted with iso-AmOH and EtOAc, 3:1. SnS must be pptd. in the presence of citric or tartaric acid if W, V, or Ti is present. The ppt. is collected on MnO_2. The detn. is completed polarographically in 6*N* HCl. CdS can be copptd. with methyl violet and titrated polarographically with NH_4Cl or detd. colorimetrically with dithizone.

W. M. Sternberg

Mukhina, Z.S.

1515. Polarographic determination of niobium and tungsten in alloys. Z. S. Mukhina and A. A. Tikhonova. *Zavod. Lab.*, 1956, 22 (10), 1154–1156. —In 10 *N* HCl in the presence of citric acid as complexing agent Nb gives a polarographic wave at − 0·98 V vs. the S.C.E. and W a wave at − 0·42 to 0·44 V. With ratios of Nb to W of between 1:1 and 1:5, determination of the two elements in the same soln. is possible. The method is applied to the determination of Nb in the presence of W in alloys based on Ni, Cr, Fe and Co. To determine Nb and W in steel, 1 g is dissolved in 40 ml of dil. HCl (1 + 1) with the addition of a few drops of HNO_3, the soln. is evaporated to dryness, and the residue is moistened with 10 ml of conc. HCl, which is evaporated off. The residue is dissolved in 200 ml of 2% HCl, the hot soln. is filtered and the washed ppt. is ignited and fused with 4 to 5 g of K_2CO_3. The melt is dissolved in water and diluted to 100 ml in a calibrated flask. A portion (10 ml) of the filtered soln. is mixed with 0·2 ml of 50% potassium citrate soln. and 30 ml of conc. HCl and 5 drops of gelatin soln. and diluted to 50 ml in a calibrated flask. After passage of N to remove O, the polarogram is taken.

G. S. Smith

E

Country : USSR
Category: Virology. Bacterial Viruses (Phages)

Abs Jour: Ref Zhur-Biol., No 23, 1958, No 103509

Author : Belyayeva, I. A.; Mukhina, Z. S.
Inst : -
Title : Study of the Activity and Stability of the Commercial Series of Cholera Bacteriophage

Orig Pub: Sb. Bakteriofagiya. Tbilisi, Gruzmedgiz, 1957, 333-336.

Abstract: Study of 48 series of cholera phage prepared in different years showed that keeping them under refrigerator conditions for 18-23-25 months did not notably change their titer, range of lytic action or rapidity of the occurrence of the secondary growth. Ya. I. Rautenshteyn.

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MUKHINA, Z., tkachikha.

Expedite the construction of preschool institutions. Okhr. truda i sots. strakh. no.3:59-61 S '58. (MIRA 12:1)

1.L'nofabrika imeni Oktyabr'skoy revolyutsii.
(Kostroma--Textile workers)
(Maternal and infant welfare)

5(2) PHASE I BOOK EXPLOITATION SOV/3224

Mukhina, Zinaida Stepanovna, Yekaterina Ivanovna Nikitina, Lidiya Mitrofanovna Budanova, Raisa Samuilovna Volodarskaya, Lyudmila Yakovlevna Polyak, and Anna Aleksandrovna Tikhonova

Metody analiza metallov i splavov (Methods of Analysis of Metals and Alloys) Moscow, Oborongiz, 1959. 527 p. Errata slip inserted. 8,050 copies printed.

Ed. of Publishing House: T. M. Kunyavskaya; Tech. Ed.: V. P. Rozhin.

PURPOSE: This book is intended for laboratory technicians of plants and may also be of use to personnel of chemical and analytic laboratories of scientific institutions and schools of higher education.

COVERAGE: The book reviews various methods of analyzing steel, cast iron, complex iron, chromium-, nickel- and cobalt-base alloys. It also reviews methods of determining the content of elements in aluminum, magnesium and copper alloys as well as in various binary alloys. Principles of physical and chemical analysis for

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metallurgical studies are briefly explained, and laboratory equipment used for this kind of analysis is described and illustrated. Methods of analysis are grouped according to the type of alloy being analyzed. Each method is described and its accuracy, theoretical basis and procedure are indicated. The application of chromatographic separation in analyzing various metal alloys is explained. The appendix contains the description of various titration solutions, the reactivation of solutions and tables indicating weights of substances used in acidimetry as well as certain oxidizers, reducing agents, conversion coefficients, atomic weights of elements, etc. V. Ye. Bukhtiarov and D. V. Romanov wrote the part entitled "Methods of Chromatographic Analysis". There are 118 references: 108 Soviet, 4 German, 3 English 2 Czech and 1 French.

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5

MUKHINA, Z.S.; TIKHONOVA, A.A.; ZHEMCHUZHNAYA, I.A.

Determining lead, bismuth, tin, cadmium impurities in niobium and niobium alloys. Trudy Kom. anal. khim. 12:71-74 '60. (MIRA 13:8)
(Niobium--Analysis)

MUKHINA, Z.S.; TIKHONOVA, A.A.; ZHEMCHUZHNAYA, I.A.

Detecting traces of lead, tin, bismuth and cadmium in metallic chromium and its alloys. Trudy Kom. anal. khim. 12:298-310 '60.
(MIRA 13:8)

(Chromium--Analysis)

PHASE I BOOK EXPLOITATION SOV/6035

Mukhina, Zinaida Stepanovna, and Yekaterina Ivanovna Nikitina

Uskorennyye metody analiza titana i yego splavov (Accelerated Methods of Analyzing Titanium and Titanium Alloys) Moscow, Oborongiz, 1961. 121 p. Errata slip inserted. 5050 copies printed.

Ed.: T. M. Kunyavskaya; Tech. Ed.: L. A. Garnukhina; Managing Ed.: A. S. Zaymovskaya, Engineer.

PURPOSE: This book is intended for technical personnel of scientific research institutes and analytical laboratories of metallurgical and machinery plants. It can also be used in schools of higher education.

COVERAGE: The book describes chemical and (mainly) physicochemical methods of determining all the components of industrially produced titanium alloys. Optimum methods, selected from several cited, for determining each of the com-

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ponents are described. In most of the methods [for Fe, Cr, Ni, V, Co, Si, Mg, Mn, Mo, Sb, Ta, P, Cl, S, Cu, Cd, and Zn], the component can be determined directly from a solution of the alloy sample. Such a procedure eliminates extraction processes and considerably expedites and simplifies the entire analytical procedure. The determination of small amounts of Ni, Al, Cu, and Zn in alloy samples with organic reagents is described. An amperometric method which employs a solid electrode in determining Cr and V in a single sample is also detailed. Emphasis is placed on the determination of impurities. No personalities are mentioned. There are 19 references: 14 Soviet and 5 English.

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Introduction 3

Selection of Samples for Chemical Analysis 4

ZAKHAROVA, Galina Vasil'yevna, kand. tekhn. nauk; POPOV, Ivan Alekseyevich, kand. tekhn. nauk; ZHOROVA, Liliana Pavlovna; FEDIN, Boris Vladimirovich; Prinimali uchastiye: MUKHINA, Z.S., zasl. deyatel' nauki i tekhn. RSFSR; POPOVA, I.A., zasl. deyatel' nauki i tekhn. RSFSR; YEGOROVA, N.D., zasl. deyatel' nauki i tekhn. RSFSR; NIKITINA, Ye.I., zasl. deyatel' nauki i tekhn. RSFSR; ZHEMCHUZHNAYA, Ye.A., zasl. deyatel' nauki i tekhn. RSFSR; ZHABINA, V.A.; SAVITSKIY, Ye.M., red.; STROYEV, A.S., red.; ARKHANGEL'SKAYA, M.S., red. izd-va; KARASEV, A.I., tekhn. red.

[Niobium and its alloys] Niobii i ego splavy. By G.V.Zakharova i dr. Moskva, Gos. nauchno-tekhn. izd-vo lit-ry po chernoi i tsvetnoi metallurgii, 1961. 368 p. (MIRA 14:12)
(Niobium)

MUKHINA, Z.S.; ZHEMCHUZHNAYA, I.A.; KOTOVA, G.S.

Analysis of impurities in refractory alloys based on nickel, cobalt, iron, and chromium. Zhur.anal.khim. 17 no.2:170-173 Mr-Ap '62. (MIRA 15:4)

(Alloys) (Metals--Analysis)

ZHENDAREVA, Ol'ga Grigor'yevna; MUKHINA, Zinaida Stepanovna;
KUNYAVSKAYA, T.M., red.; PUKHLIKOVA, N.A., tekhn. red.

[Methods of analyzing electroplating baths] Metody analiza gal'vanicheskikh vann. Moskva, Oborongiz, 1963.
269 p. (MIRA 16:10)
(Electroplating)

L 62695-65 EWT(m)/EWA(d)/EWP(t)/EWP(z)/EWP(b) IJP(c) MJW/JD

ACCESSION NR: AP5018755 UR/0075/65/020/007/0785/0788
543.253

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32
B

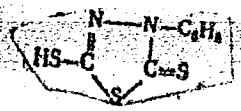
AUTHOR: Mukhina, Z.S.; Kotova, G.S.; Kuz'micheva, R.A.
44,55 44,55 44,55

TITLE: Determination of lead, copper, bismuth, and cadmium in heat-resistant alloys
27 27 27 27 35, 44, 10

SOURCE: Zhurnal analiticheskoy khimii, v. 20, no. 7, 1965, 785-788

TOPIC TAGS: lead determination, copper determination, bismuth determination, cadmium determination, heat resistant alloy, nickel alloy, chromium alloy

ABSTRACT: A method was developed for extracting trace impurities (0.0001% and more) of lead, bismuth, copper, and cadmium, in the form of diethyldithiocarbamates, and for extracting trace impurities of these metals with a solution of bismuthol II



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ACCESSION NR: AP5018755

in chloroform. The determination of these elements is carried out by using a single sample of the heat-resistant alloy and an oscillopolarographic (or photometric) method as the last step of the determination. The entire analytical procedure is described in detail for the case of nickel and chromium heat-resistant alloys, and results of a determination of lead are tabulated for the case of EI437b alloy. Oscillographic polarography increases the sensitivity of the determination considerably. Orig. art. has: 3 tables.

ASSOCIATION: none

SUBMITTED: 20Apr64 ENCL: 00 SUB CODE: MM, IC

NO REF SOV: 007 OTHER: 009

Card 2/2

MUKHINA-KOROTOVA, T.K.

Some features of the formation of sound pitch differentiation at an early age. Vop. psikhol. 10 no.1:61-71 Ja-F '64
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1. Institut psikhologii Akademii pedagogicheskikh nauk RSFSR, Moskva.

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SO: Sum 318, 23 Dec. 1954

ADILKHODZHAYEV, A. A.; MUKHITDINOV, A. M.

Experimental study of the shearing strength of keramzit concrete wall slab. Sbor. nauch. trud. NII po stroi. ASiA no.2:45-57 '61. (MIRA 16:1)

(Concrete walls—Testing) (Keramzit)

MUKHITDINOV, A.M., aspirant

Detection of urinary calculi invisible to X-rays with the aid of bilitrast. Med. zhur. no.10:23-25 '61. (MIRA 14:10)

1. Iz kafedry rentgenologii i meditsinskoy radiologii Tashkentskogo gosudarstvennogo meditsinskogo instituta (nauchnyy rukovoditel'- prof. D.N.Maksumov).
(CALCULI, URINARY) (PHORETIC ACID)

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Calculation of the bending of elements of pressed reinforcements of reinforced concrete structures according to their deformations". Sb. trud. NII po stroi. ASiA no.43 3-9 '63. (MIRA 17:8)

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X-ray clinic observations of patients with various forms of intestinal stasis during treatment at the Khodzha-Obi-Garm health resort. Preliminary report. Zdrav. Tadzh. 6 no.5:21-24 '59. (MIRA 13:3)

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(OBI-GARM-MINERAL WATERS) (CONSTIPATION)

MUKHITDINOV, B. N., Cand. Medic. Sci. (diss) "Functional and Morphological Changes of Large Intestine in Patients with Chronic Colitis After Treatment at Khodzha-Obi-Garm Health Resort (Dynamic X-ray Observations)," Yerevan, 1961, 19 pp. (Yerevan Med. Inst.) 200 copies (KL Supp 12-61, 287).

KICHEVA, Ye.F.; MUKHITDINOV, B.N.

Development of X-ray service in Tajikistan. Zdrav.Tadzh. 9 no.3:52-54 My-Je '62. (MIRA 15:8)
(TAJIKISTAN--RADIOLOGY,MEDICAL)

MUKHITDINOV, G.N.

Carbonization effects in alkali rocks of the Vichnevyye Mountains. Trudy Inst.min., geokhim.i kristalokhim.red.elem. no.2:265-270 '59. (MIRA 15:4)

(Vishnevyye Mountains--Rocks, Carbonate)

YES'KOVA, Ye.M.; MUKHITDINOV, G.N.; KHALEZOVA, Ye.B.

Characteristics of the chemical and mineralogical composition of alkali rocks in the Vishnevyye Mountains. Trudy Inst. min., geokhim. i kristallokhim. red. elem. no. 3:127-144 '59. (MIRA 14:5)
(Vishnevyye Mountains—Rocks, Igneous—Analysis)

3(5)

AUTHORS: Zhabin, A. G., Mukhitdinov, G. N. SOV/20-126-5-39/69

TITLE: On the Hypogene Dispersion Halo of Rare Earths Around the Vishnevogorskaya-Il'menogorskaya Miascite Intrusion (South Ural) (O gipogennom oreole vynosa redkikh zemel' vokrug Vishnevogorsko-Il'menogorskoy intruzii miaskitov)(yuzhnyy Ural))

PERIODICAL: Doklady Akademii nauk SSSR, 1959, Vol 126, Nr 5, pp 1055-1057 (USSR)

ABSTRACT: The intrusion of the biotite-nepheline-syenites (miascites) mentioned in the title lies in the core of an anticlinal fold of meridional range. This fold constitutes a structural part of the Sysertsko-Il'menogorskiy anticlinorium and of the Il'menogorskaya suite consisting of gneiss and crystalline slate (separated out by B. M. Ronenson in 1958). The endocontact varieties of the miascite were transformed into nepheline-less alkaline syenites due to the interaction with the containing rocks. The containing rocks of the intrusion exocontact were metasomatically and extensively transformed into aegirite-augite-microcline- and biotite-microcline-phenites. In the phenite zone of the northern part of the Vishnevyye gory a great variety of rare earths was ascertained. Besides the known rare earths (orthite, chevkinite,

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and eschynite) also bastnasite, britholite, monacite, rare-earth thorianite, betafite and niobo-eschynite were found. The rare earths are also present in the calcite, sphene (in tenths of per cent) as well as in the apatite. Inside the intrusion mentioned in the title, manganese-orthite (Ref 3) was only found singly. Various paragenetic associations of the minerals of rare earths appear, which belong to different stages of the mineral formation, which are genetically connected with the said intrusion. The earliest paragenesis is apparently formed by orthite-containing phenites, gneiss transformed into phenite, and the calcite-diopside-scapolite rocks. The next association is bound to feldspar-pegmatites deposited in the phenites and the above-mentioned gneiss (eschynite, betafite, orthite). One part of these veins is siliceous miascite, another part is quartz-microcline-granite-pegmatite transformed into phenite. A regular gravitation of the eschynite to the endo- and exo-contact of the miascite pegmatites deposited in containing rocks speaks of an undoubtful loss on erosion,(vynos) of the rare earths from the pegmatites into the rocks last mentioned. The principal mass of the rare earths is scattered in calcite and

apatite. The most interesting paragenetic associations, in which rare earths take part, belong to the 2nd phase of the carbonatization stage which fill out the cracks of the phenite as small veins. After the carbonatization stage, small veins of quartz-arfvedsonite are formed in the phenites. All interesting discoveries of chevkinite were made here. Also britholite (recently found to be identical with lessingite (Ref 6)) was found here. The composition of the rare earths in the said minerals is very similar: Cerium dominates over all others. The sum of lanthanum, cerium and neodymium amounts, for example in orthite, to 94.4% of the total quantity of rare earths, in the chevkinite to 96, in the eschynite to 80.5%(according to data by Ye. M. Yes'kova) and in the calcite to 89%. There are 5 references, 4 of which are Soviet.

ASSOCIATION: Institut mineralogii, geokhimii i kristallografii redkikh elementov (Institute of Mineralogy, Geochemistry and Crystallography of Rare Elements)

PRESENTED: January 16, 1959, by D. I. Shcherbakov, Academician

SUBMITTED: January 14, 1959

MUKHITDINOV, G.N

PHASE I BOOK EXPLOITATION SOV/5740

Akademiya nauk SSSR. Institut mineralogii, geokhimii i kristallokhimii redkikh elementov

Voprosy mineralogii, geokhimii i genezisa mestorozhdeniy redkikh elementov (Problems in Mineralogy, Geochemistry, and Deposit Formation of Rare Elements) Moscow, Izd-vo AN SSSR, 1960. 253 p. (Series: Its: Trudy, vyp. 4) Errata printed on the inside of back cover. 2,200 copies printed.

Chief Ed.: K. A. Vlasov, Corresponding Member, Academy of Sciences USSR;
Resp. Ed.: V. V. Lyakhovich; Ed. of Publishing House: L. S. Taranov;
Tech. Ed.: P. S. Kashina.

PURPOSE: This book is intended for geologists, mineralogists, and petrographers.

COVERAGE: This is a collection of 23 articles on the formation, geology, mineralogy, petrography, and geochemistry of deposits of rare elements in Siberia and [Soviet] Central Asia. The distribution and characteristics of rare elements found in these areas as well as some quantitative and qualitative methods of investigating the rocks and minerals in which they are found,

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Problems in Mineralogy (Cont.) SOV/5740

or with which they are associated, are discussed. Two articles present an economic investigation of the possibilities of industrial extraction and utilization of selenium, tellurium, and hafnium. No personalities are mentioned. Each article is accompanied by references.

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(Vyshnevyye Mountains—Pegmatities)
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[The achievements of the agricultural year and tasks for further developing cotton growing and other branches of agriculture in the Uzbek S.S.R. during 1956; a report at a conference of leaders of agriculture in Uzbekistan, December 20, 1955] Itogi sel'skokhoziaistvennogo goda i zadachi po dal'neishemu razvitiiu khlopkovodstva i drugikh otraslei sel'skogo khoziaistva v Uzbekskoi SSR and 1956 god; doklad na soveshchanii peredovikov sel'skogo khoziaistva Uzbekistana 20 dekabria 1955 goda. Tashkent, Gos. izd-vo Uzbekskoi SSR, 1956. 35 p. (MLRA 9:10)

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MUKHITDINOV, U.

Activity of defoliants in relation to the moisture supply of the cotton plant. Dokl.AN Uz.SSR no.9:55-58 '58. (MIRA 11:12)

1. Institut genetiki i fiziologii rasteniy AN UzSSR. Predstavleno chlenom-korrespondentom AN UzSSR S.S.Sadykovym.
(Cotton growing) (Defoliation)