KOGAN, I.

BARANOV, B.; KOGAN, I.

Pay rates for hourly workers. Sots.trud. no.9:76-78 S '56.
(MIRA 9:12)
(Airplane industry) (Wages)

KOGAN, I., inzhener (g. Kirov)

Experience in operating Yak-12 airplanes. Grazhd.av.14 no.1:23 Ja '57. (MLRA 10:4)
(Airplanes)

KOGAN, I., inzh. (g. Kirov)

The regulations are carefully observed. Grazhd. av. 15 no.3:33 Mr '58.
(Airplanes--Maintenance and repair) (MIRA 11:5)

BENDEL', V.; GRACHEV, B.; KOGAN, I.

Automation of the washing, drying and packaging of feathers and down. Mias. ind. SSSR 33 no.4:23-24 '62. (MIRA 17:2)

1. Ministerstvo proizvodstva i zagotovok sel'skokhozyaystvennykh produktov RSFSR (for Bendel'). 2. TSentral'noye konsturktorskoye byuro proyektirovaniya oborudovaniya myasnoy i molochnoy promyshlennosti Soveta narodnogo khozyaystva Moskovskogo gorodskogo ekonomicheskogo rayona (for Grachev). 3. Moskovskaya fabrika pero-pukhovykh izdeliy (for Kogan).

EXCERPTA MEDICA Sec 10 Vol 10/11 Obstetrics Nov 57

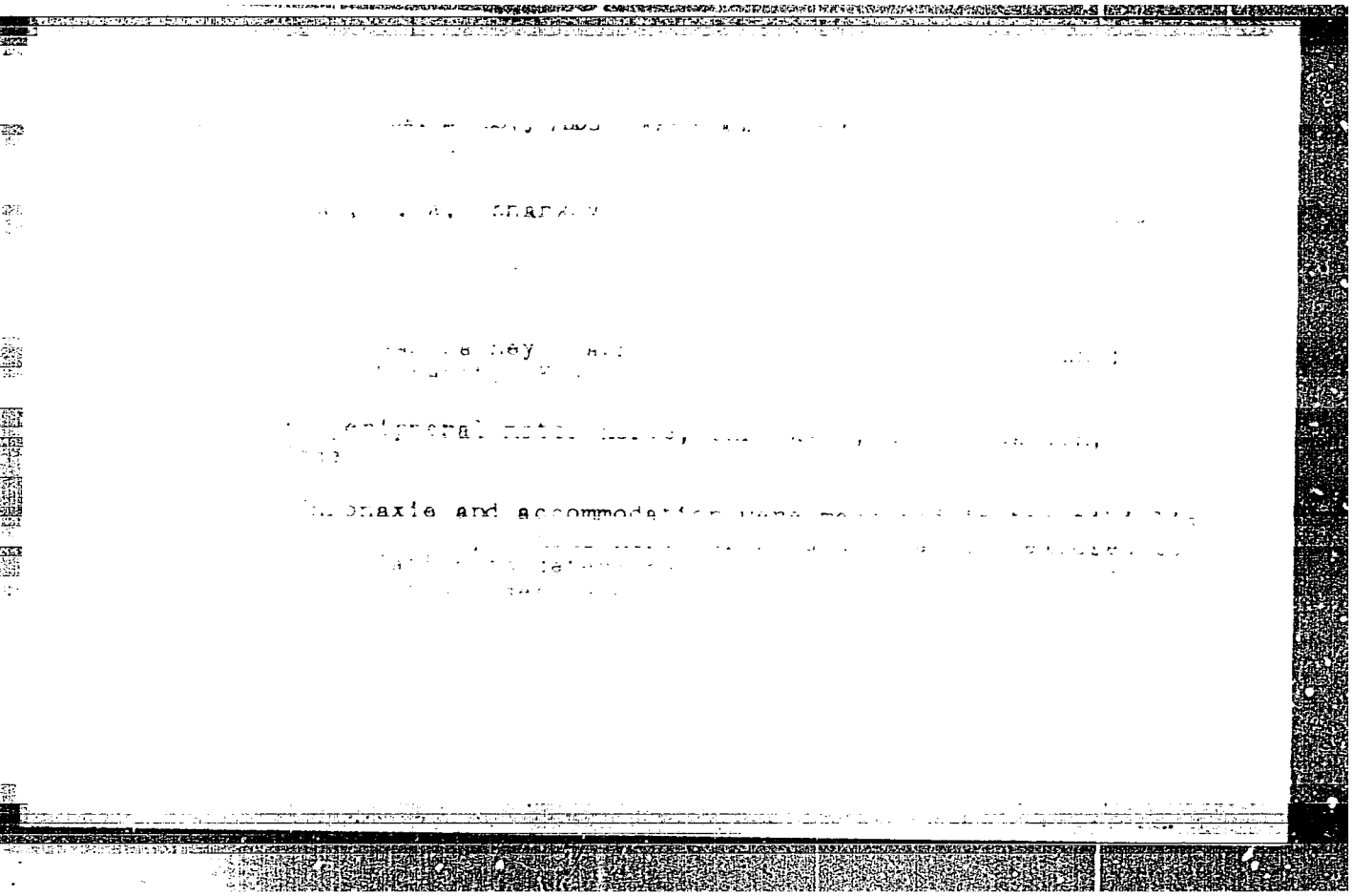
2099. KOGAN I. A., AGEYEV G. V. and SHAPIRO S. N. * Changes in the secretory function of the stomach in connection with diseases of the female gonads (Russian text) AKUŠ. I GINEK. 1956 #2 (49-52) Tables 2

Both the volume and total acidity of the gastric juice of male and female dogs decreased after gonadectomy. For instance in female dogs the mean total volume of gastric secretion (after histamine stimulation) was 75.6 ml. before ovariectomy and 29.1 ml. after it. Of 21 women, who were treated for gynaecological diseases, 14 showed a slight and presumably insignificant increase of the free HCl values during remission.

Siurala - Helsinki (VI, 10)

IL'IN, A.N.; KAPUSTIN, A.P., KOGAN, I.A.; POPOV, I.V.; PROZOROVA, N.A.; SAVARENSKIY, I.A.; CHIKHACHEV, S.M.; SOKOLOV, N.I.[deceased], doktor geol-mineral.nauk, otv.red.; SPRYGINA, L.I., red.izd-va; SUSHKOVA, L.A., tekhn.red.

[Karst phenomena near Dzerzhinsk, Gorkiy Province] Karstovye iavleniia v raione goroda Dzerzhinska Gor'kovskoi oblasti. Moskva, Izd-vo Akad.nauk SSSR, 1960. 121 p (Akademiia nauk SSSR. Laboratoriia gidrogeologicheskikh problem. Trudy, vol. 32)
(Dzerzhinsk region (Gorkiy Province)--Karst)



ACCESSION NR: AT3002375

[illegible] the disturbances are fewer, and [illegible]

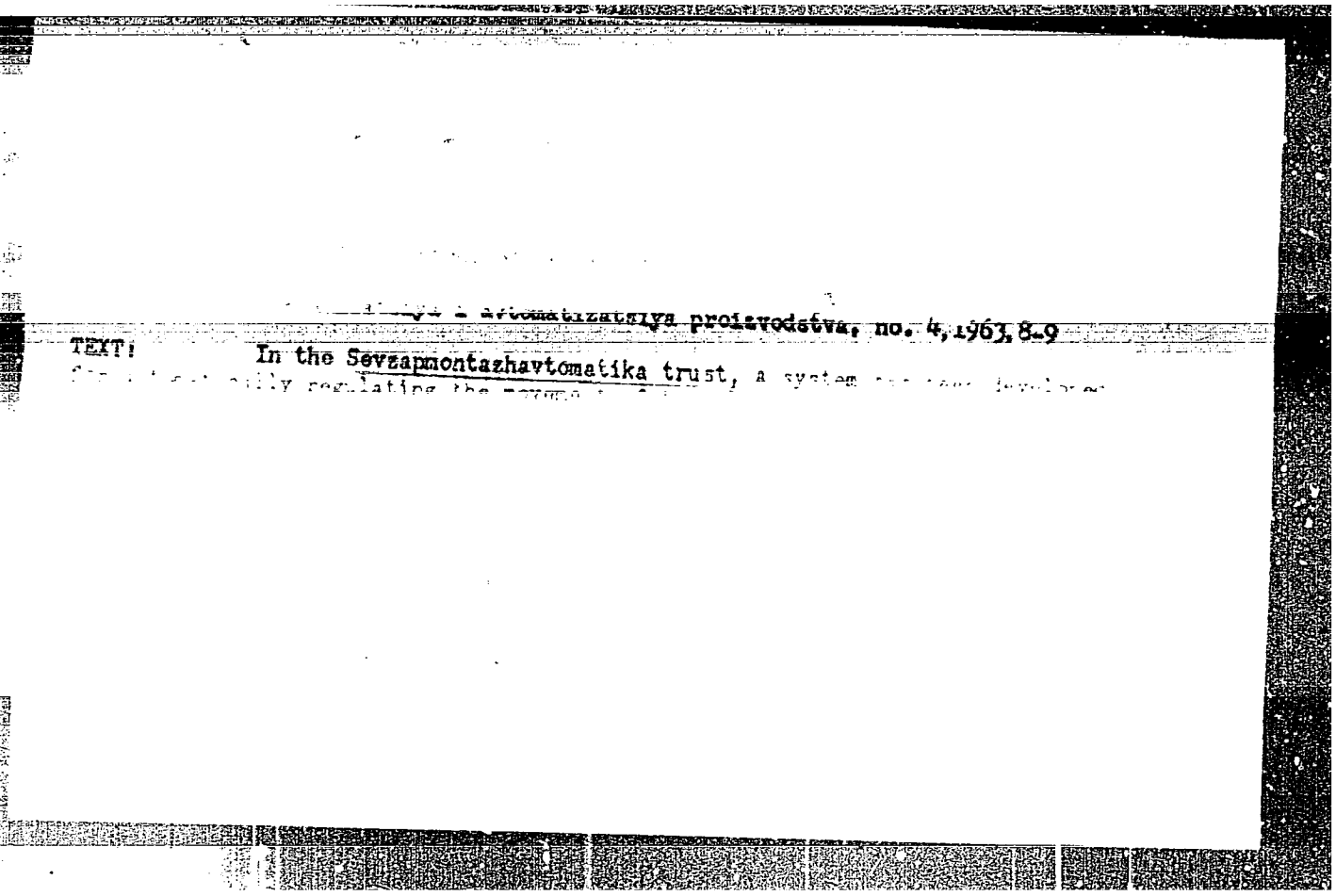
NO REF SOV: 020 OTHER: 001

ARNAUTOV, A. K.; BURSHTEYN, S. A.; GENES, V. S.; DZHAFAROV, G. K.; KOGAN, I. A.; MAMOTYUK, Ye. M.; NIKOLAYEVA, M. G.; PISKAREVA, Ye. V.; POPOVA, L. Y.; TKACH, V. K.; FASTYUCHENKO, O. V.; FRENKEL', L. A.; TSYBENKO, P. A.

Characteristics of some early reactions of rats, irradiated with various doses, to burning by flame. Radiobiologiia 2 no.3: 406-413 '62. (MIRA 15:7)

1. Institut meditsinskoy radiologii, Khar'kov.

(X RAYS—PHYSIOLOGICAL EFFECT)
(BURNS AND SCALDS)

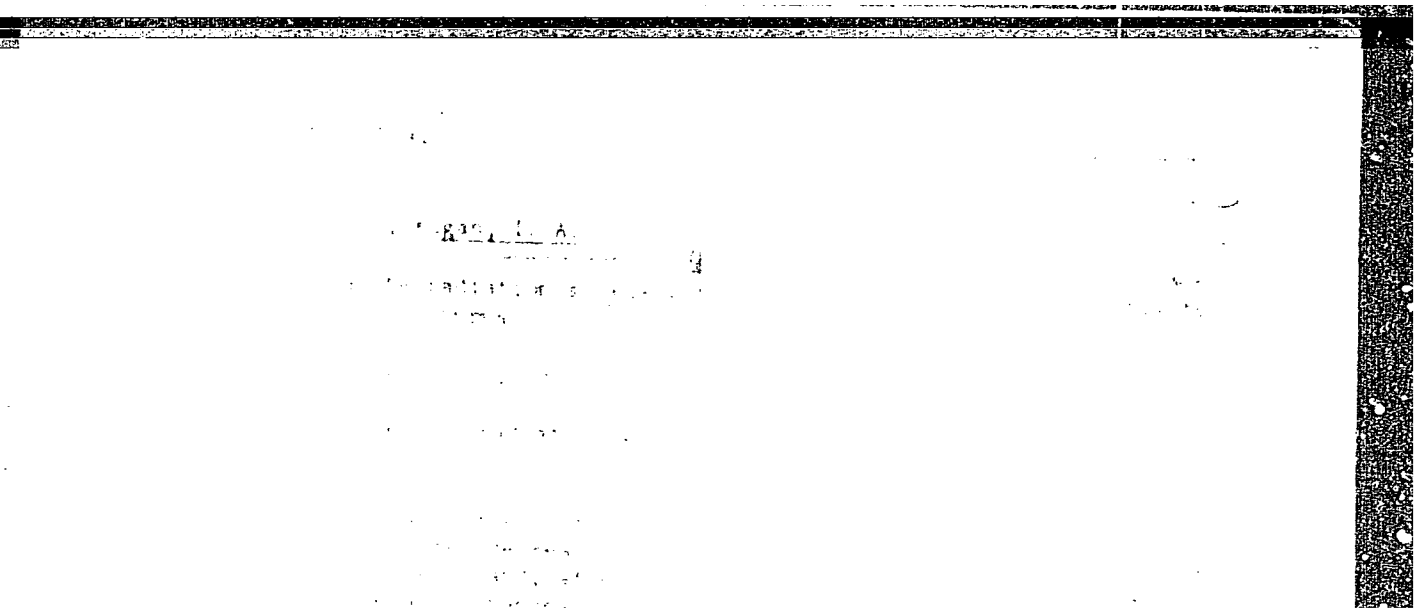


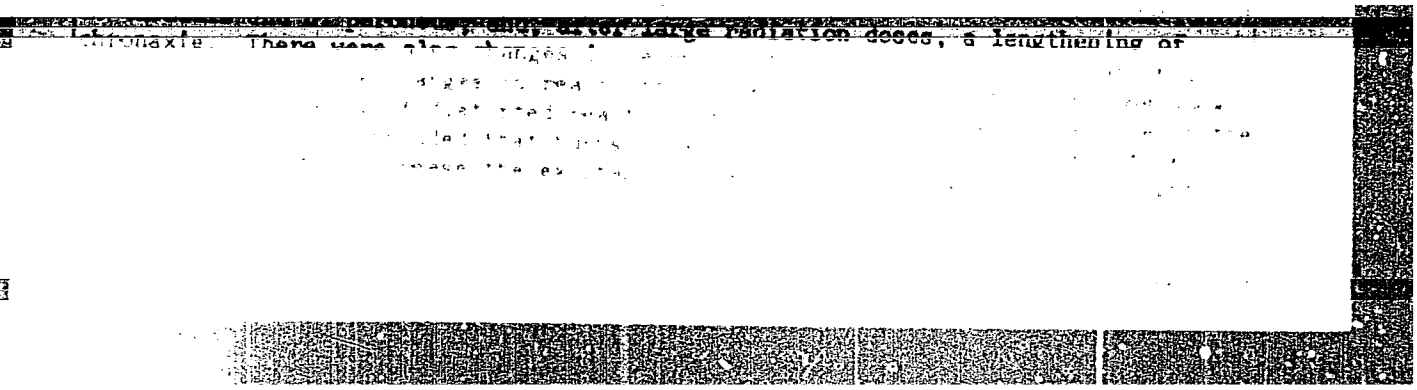
[illegible] i avtomatizatsiya proizvodstva, no. 4, 1963, 8-9

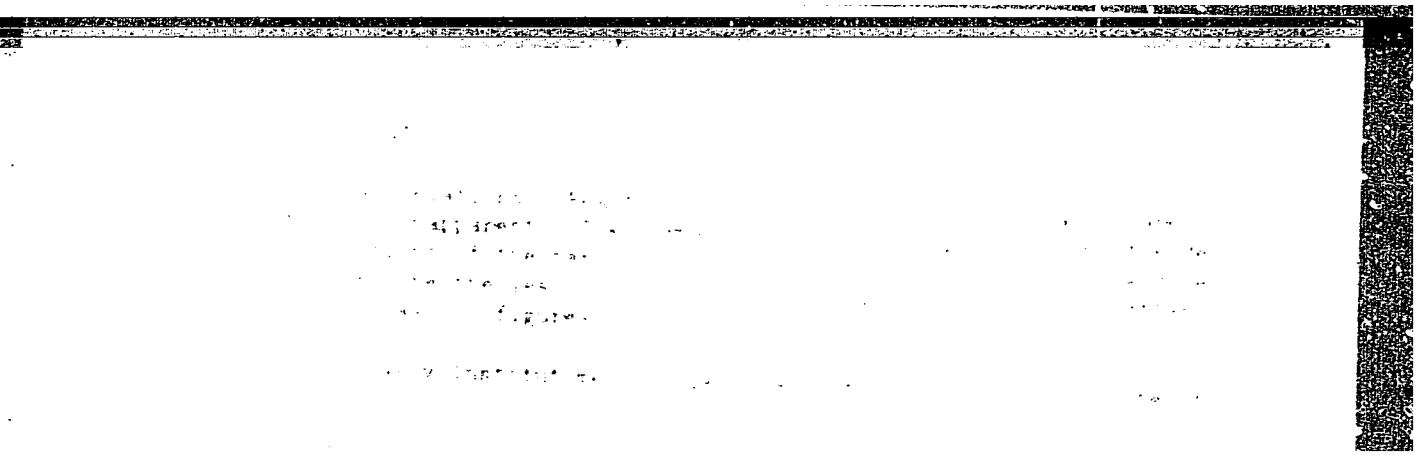
TEXT: In the Sevzapmontazhavtomatika trust, a system [illegible]

KOGAN, I.A., inzh.; ROZENTSVEYG, I.Yu., inzh.; EYGENBROT, I.M., inzh.

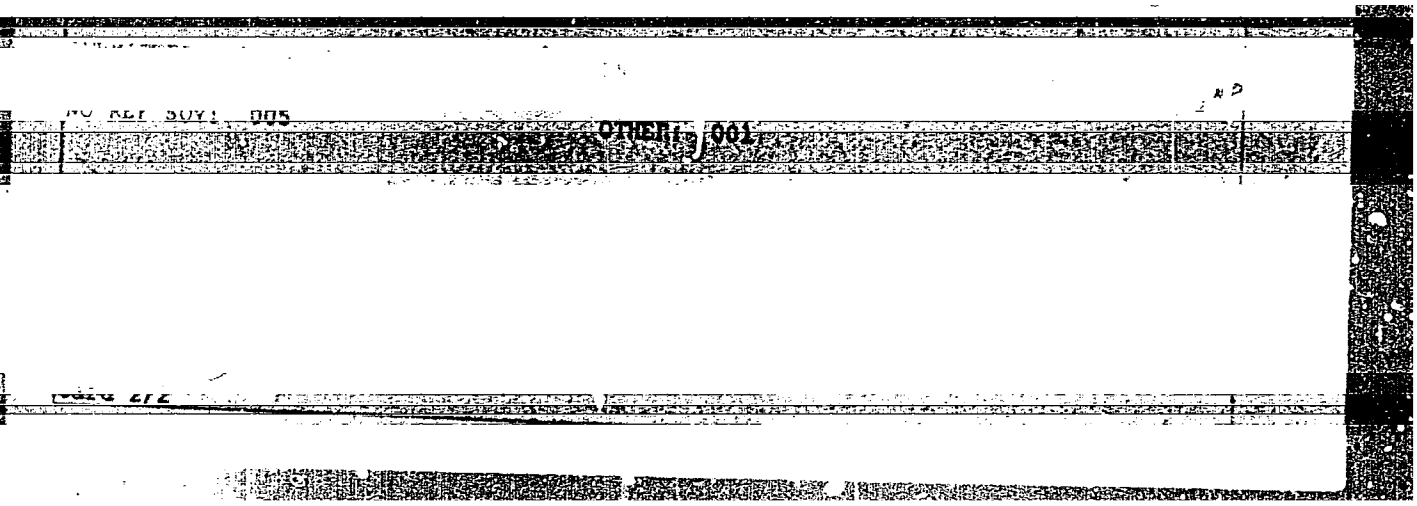
Automatic control of an arc steel-smelting furnace. Mekh. i avtom. proizv. 17 no.4:8-9 Ap '63. (MIRA 17:9)







APPROVED FOR RELEASE: 09/18/2001 CIA-RDP86-00513R000723610010-1"



KOGAN, I.B., master

Solar water heater in Azerbaijan. Energetik 6 no. 1:15 Ja '58.
(MIRA 11:5)
(Azerbaijan--Solar water heaters)

FADEYEV, A.D., kand. ist. nauk; YAKOVLEVA,A.P.; CHERNYKH,N.S.,otv. red.; KALASHNIKOVA, P.I., red.; KOGAN, I.B., red.; KRASNUSHKIN, A.A., red.; CHISTYAKOV, V.P., red.; KOZHEVNIKOVA, V.A., red.; DURASOVA, V.M., tekhn. red.

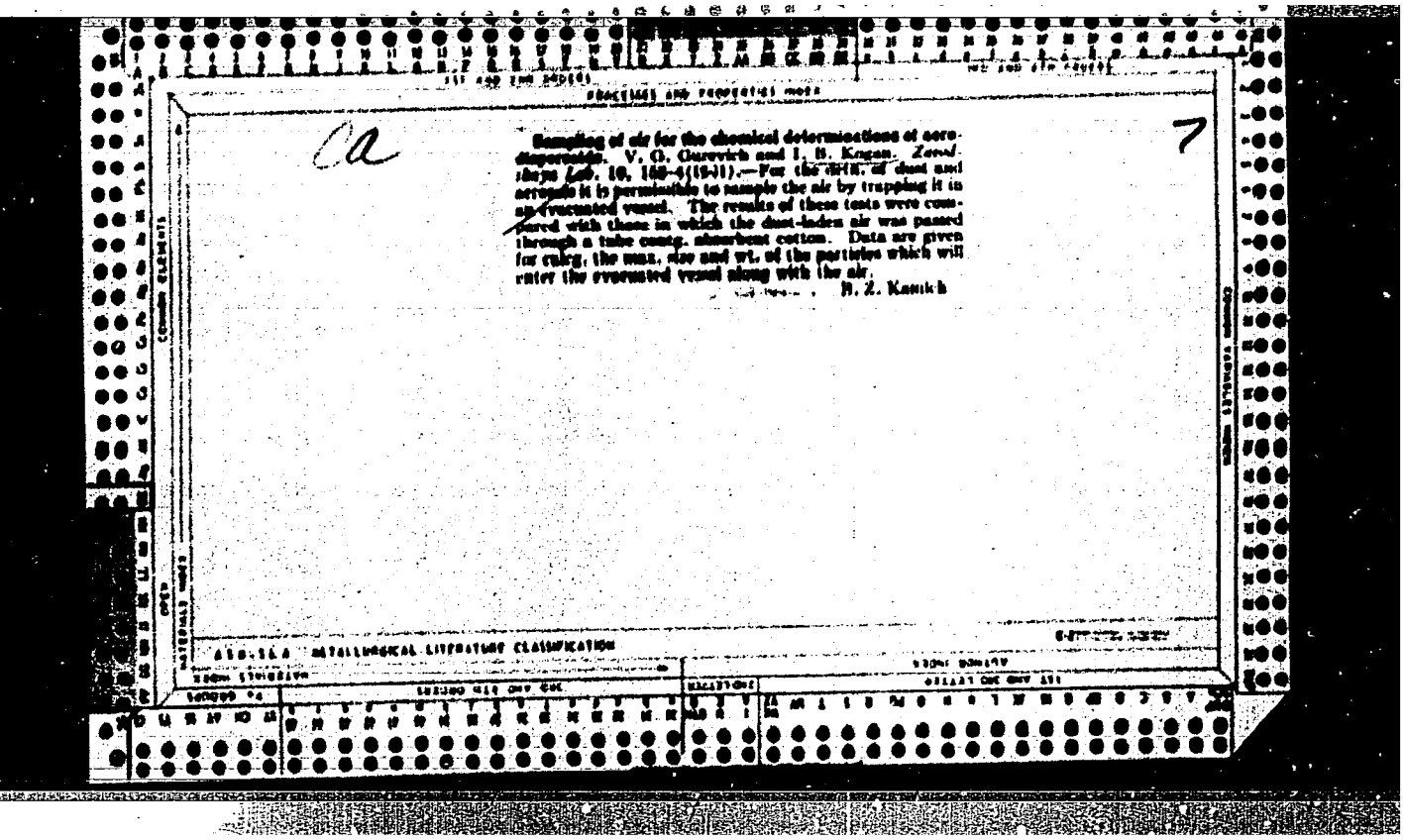
[The V.I.Lenin Volga Hydroelectric Power Station, 1950-1958] Volzhskaia GES imeni V.I.Lenina (1950-1958 gg); dokumenty i materialy. Kuibyshev, Kuibyshevskoe knizhnoe izd-vo, 1963. 407 p. (MIRA 16:7)

1. Kommunisticheskaya partiya Sovetskogo Soyuza. Kuybyshevskiy oblastnoy komitet. Partiynyy arkhiv.. 2. Starshiy prepodavatel' kafedry istorii partii Kuybyshevskogo politekhnicheskogo instituta (for Fadeyev). 3. Nauchnyy sotrudnik partarkhiva Kuybyshevskogo oblastnovo komiteta Kommunisticheskoy partii Sovetskogo Soyuza (for Yakovleva).
(Volga Hydroelectric Power Station (Lenin))

SOBOLEV, I.M.; SIMANKOV, G.M., otv. red.; KOVALEV, O.I., red.; KOGAN, I.B., red.; LOVYAGIN, N.V., red.; NAZAROVA, N.V., red.; GOL'DSHTEYN, L.Ye., red.; DURASOVA, V.M., tekhn.red.

[Guidebook to the city of Kuybyshev] Putevoditel' po gorodu Kuibyshevu. Kuibyshev, Kuibyshevskoe knizhnoe izd-vo, 1962. 319 p. (MIRA 16:9)

(Kuybyshev--Guidebooks)



Ca

7

Sampling of air for the chemical determinations of aerodispersoids. V. G. Gurevich and I. B. Kagan. *Zavod. Lab.* 10, 168-9(1941).—For the determination of dust and aerosols it is permissible to sample the air by trapping it in an evacuated vessel. The results of these tests were compared with those in which the dust-laden air was passed through a tube contg. absorbent cotton. Data are given for calcg. the max. size and wt. of the particles which will enter the evacuated vessel along with the air.

H. Z. Kanikh

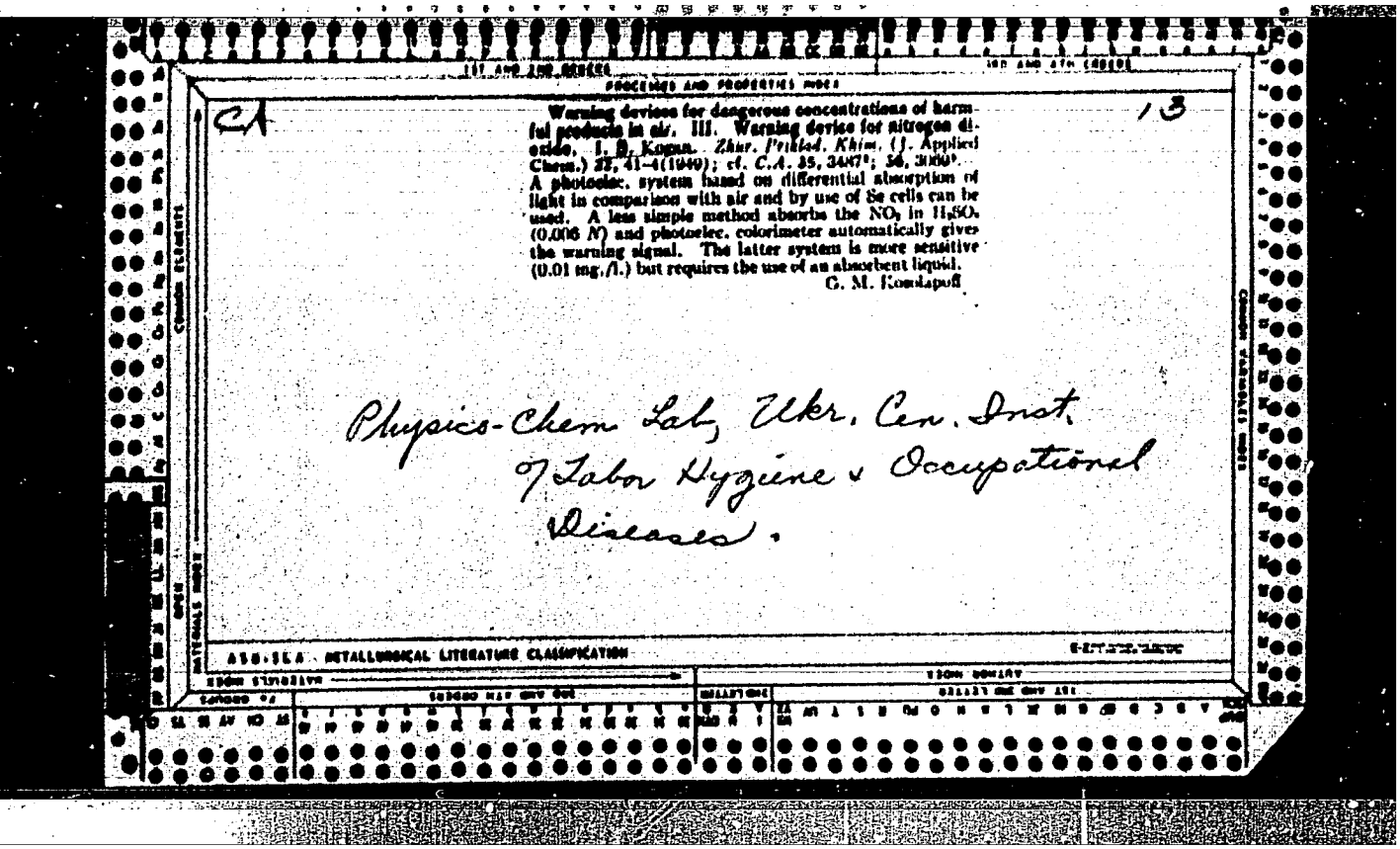
PROCESSES AND PROPERTIES INDEX

eA

1

Signalling apparatus for dangerous concentrations of benzene in air. I. B. Kogan. *J. Applied Chem.* (U. S. S. R.) 14, [illegible], describes an automatic app. for signalling the appearance of dangerous concns. of benzene vapor in air (i. e., 0.3 mg./l. or higher). Air is drawn into a quartz tube in which combustion of org. matter takes place, the resulting CO_2 being absorbed in hydrated [illegible] soln. The change of cond. of this soln. sets off the signal, sound or lamp, through an elec. relay. The app. responds to other harmful org. vapors (toluene, benzine, etc.) and is of simple construction. However, it has the drawback of the necessary elec. muffle heater for the tube; this makes it impossible to have the entire device in enclosures potentially charged with benzene vapors or other explosive vapors. In this case, the app. is placed outside and the signalling device wired into the building. G. M. Kosolapoff

ASM-SLA METALLURGICAL LITERATURE CLASSIFICATION

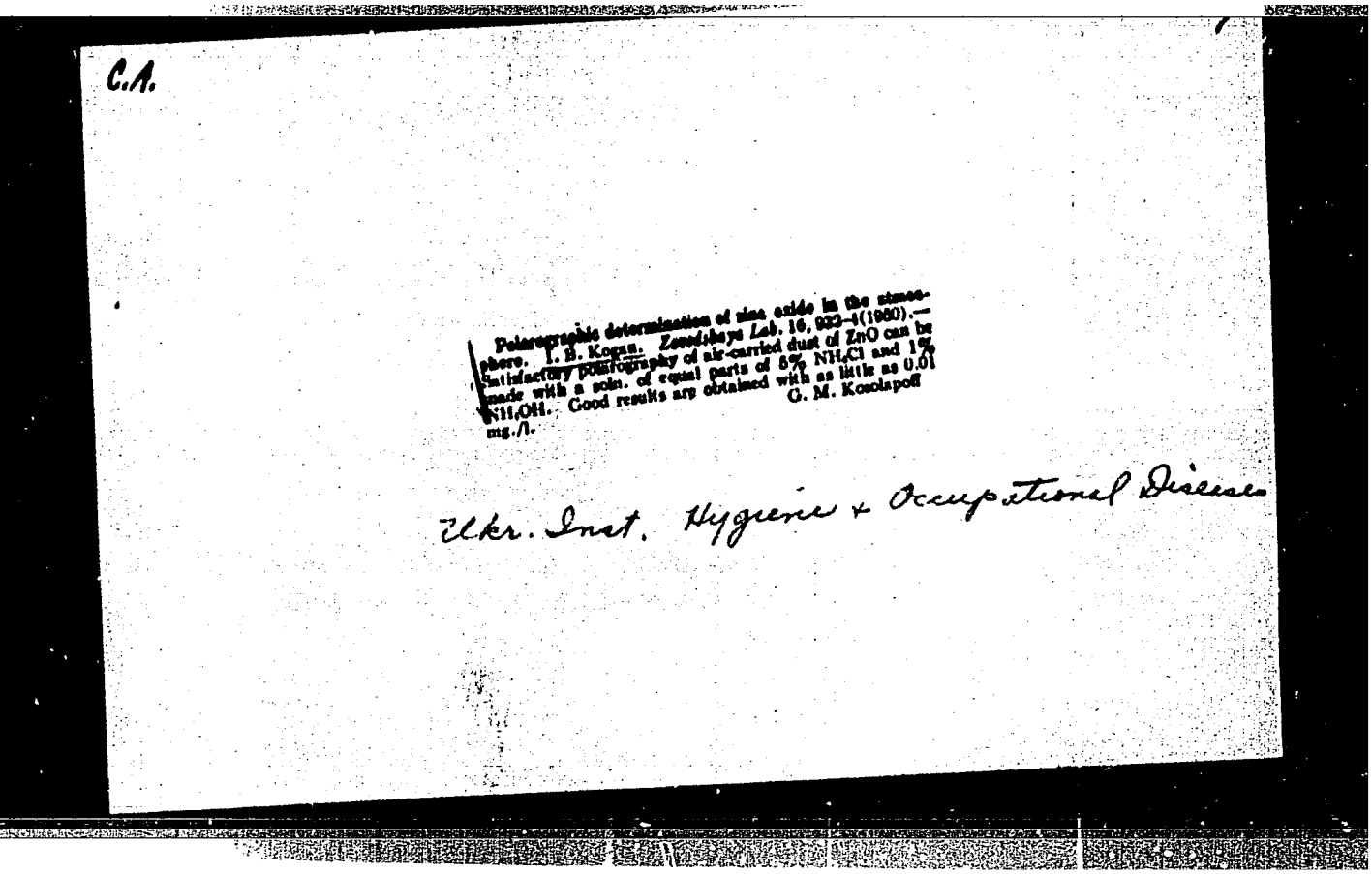


C1 13

Warning devices for dangerous concentrations of harmful products in air. III. Warning device for nitrogen dioxide. I. B. Kogan. *Zhur. Prikład. Khim.* (*J. Applied Chem.*) 22, 41–4(1949); cf. *C.A.* 35, 3447[1]; 36, 3000[1]. A photoelec. system based on differential absorption of light in comparison with air and by use of Se cells can be used. A less simple method absorbs the NO_2 in H_2SO_4 (0.006 *N*) and photoelec. colorimeter automatically gives the warning signal. The latter system is more sensitive (0.01 mg./l.) but requires the use of an absorbent liquid.
G. M. Kondapoff

Physics-Chem Lab, Ukr. Cen. Inst. of Labor Hygiene & Occupational Diseases.

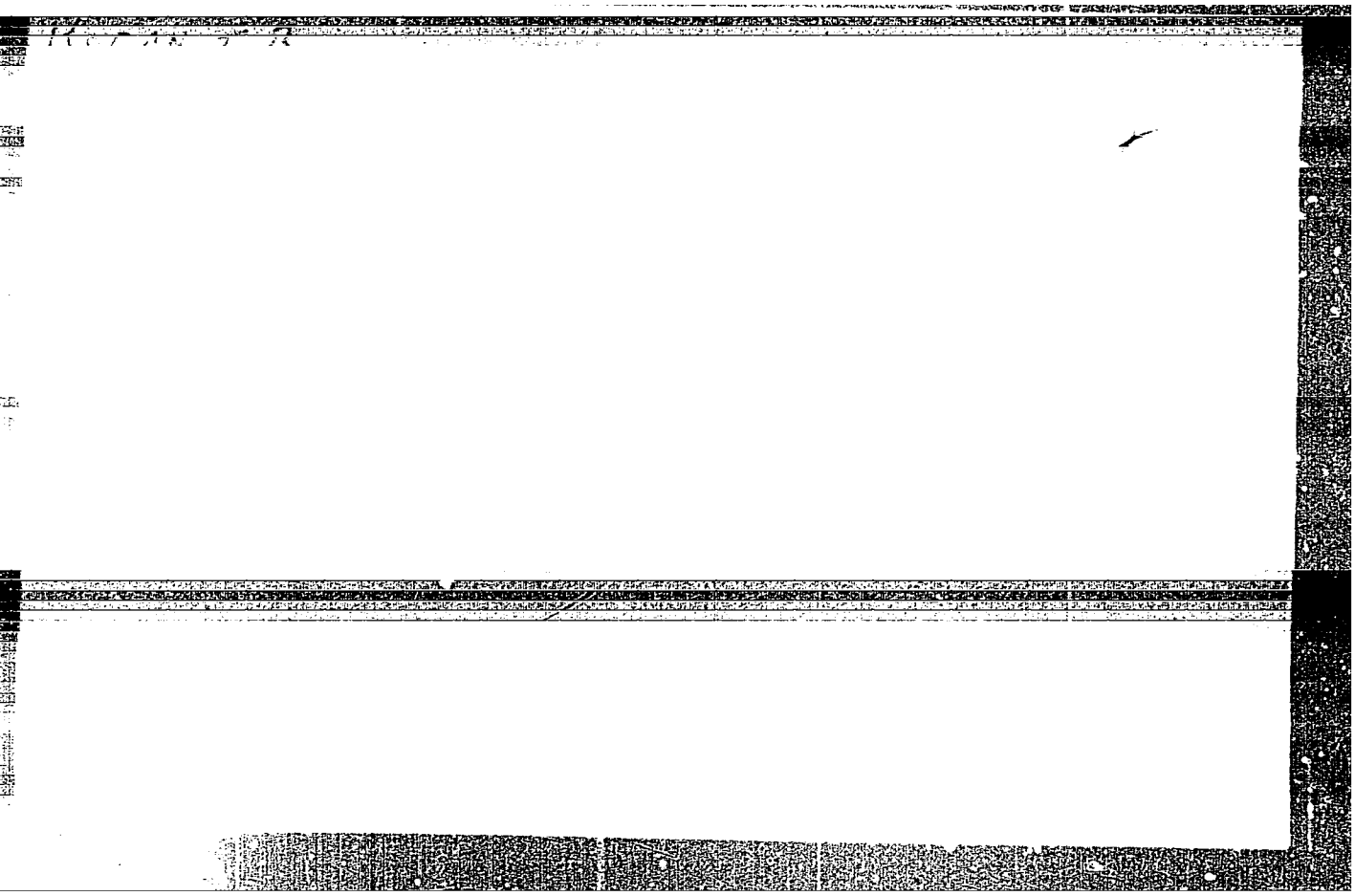
ASM-SLA METALLURGICAL LITERATURE CLASSIFICATION



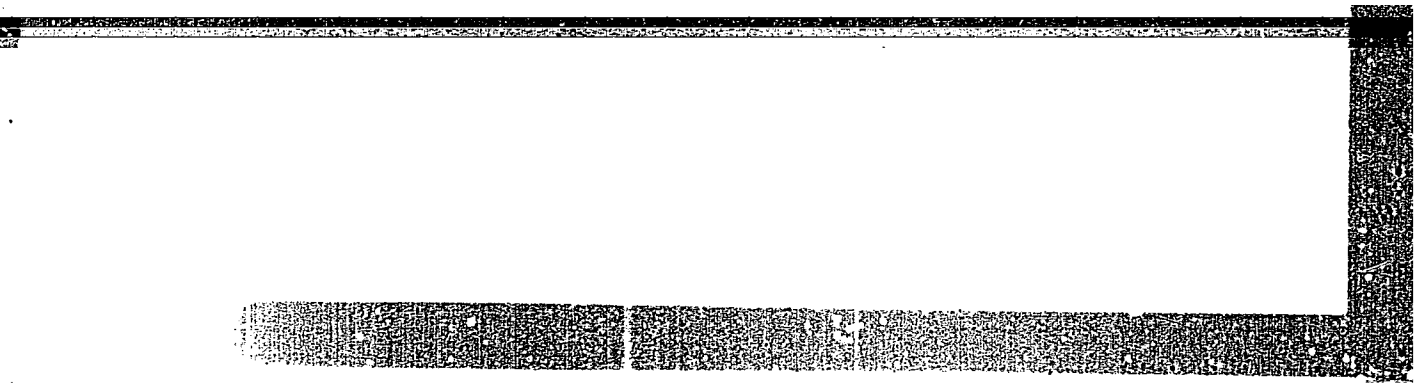
C.A.

Polarographic determination of zinc oxide in the atmosphere. I. B. Kogan. *Zavodskaya Lab.* 16, 932–4(1950).—Satisfactory polarography of air-carried dust of ZnO can be made with a soln. of equal parts of 5% NH_4Cl and 1% NH_4OH. Good results are obtained with as little as 0.01 mg./l.
G. M. Kosolapoff

Elkr. Inst. Hygiene + Occupational Diseases



APPROVED FOR RELEASE: 09/18/2001 CIA-RDP86-00513R000723610010-1"



APPROVED FOR RELEASE: 09/18/2001 CIA-RDP86-00513R000723610010-1"

KOGAN, I.B.

AID P - 2642

Subject : USSR/Medicine

Card 1/1 Pub. 37 - 19/22

Author : Troitskiy, A. A.

Title : Review on chapters VI and IX of the book Methods of Investigating Industrial Hygiene, ed. by V. K. Navrotskiy

Periodical : Gig. i san., 8, 58-60, Ag 1955

Abstract : A review of the chapters: "Methods of determining the chemical substances in air" by I. B. Kogan, and "Laboratory methods of the diagnosis of occupational poisoning", by K. G. Abramovich. Footnotes.

Institution : Not given

Submitted : No date

KOGAN, I.B.

Polarographic determination of ozone and chlorine in the air of industrial buildings using solid electrodes. Report No.2 [with summary in English]. Zhur.anal.khim. 13 no.2:225-229 Mr-Ap '58. (MIRA 11:4)

1.Ukrainskiy nauchno-issledovatel'skiy institut gigiyeny truda i profzabolevaniy, Khar'kov.
(Ozone) (Chlorine) (Air--Analysis)

KOGAN, I.B.

Determination of malein anhydride in the presence of phthalic anhydride, α-naphthoquinone, and benzoic acid in the air. Gig. i san. 23 no.7:87-90 Jl '58. (MIRA 12:1)

1. Iz Ukrainskogo instituta gigiyeny truda i professional'nykh zabolevaniy.

(AIR POLLUTION, determ.
determ. of malein anhydride in presence of phthalic anhydride, α-naphthoquinone and benzoic acid (Rus))
(MALEATES, determination,
malein anhydride, determ. in air in presence of phthalic anhydride, α-naphthoquinone & benzoic acid (Rus))

AUTHOR: Kogan, I.B. 32-3-15/52

TITLE: The Quantitative Determination of Benzanthrone in Air (Kolichestvennoye opredeleniye benzantrona v vozdukhe)

PERIODICAL: Zavodskaya Laboratoriya, 1958, Vol. 24, Nr 3, pp. 291-293 (USSR)

ABSTRACT: Determination can be carried out by three different methods, viz. colorimetrically, polarographically, and by the fluorescence method. The first method is based upon measuring the intensity of the color of the coloring agent, formed by the action of concentrated sulfuric acid upon benzanthrone, in which case the latter should be dissolved in methanol. Sensitivity amounts to up to ~2 γ benzanthrone in 3 ml liquid with an accuracy of ± 10-15%. Standard samples are usually produced for a range of from 2 to 20 γ/3 ml. Polarographic determination was carried out in an 80% methanol solution with 0.1n sulfuric acid at -0.9 V and was compared with standard samples. By the fluorescence method it is possible to determine up to 0.02 γ benzanthrone, in which case, owing to the lack of a fluorometer, comparative determinations can be carried out with standard samples. It is possible to determine

Card 1/2

The Quantitative Determination of Benzanthrone in Air

32-3-15/52

also bromine benzanthrone by the methods mentioned. Good results are obtained from quantities of 50 γ of benzanthrone upwards. There are 2 figures, 2 tables, and 2 references, 1 of which is Slavic.

ASSOCIATION: Ukrainian Institute for Labor Hygiene and Occupational Diseases (Ukrainskiy institut gigiyeny truda i profzabolevaniy)

AVAILABLE: Library of Congress

1. Benzanthrone-Determination 2. Colorimetric methods-Application
3. Polarographic methods-Application

Card 2/2

AUTHOR: Kogan, I.B. 32-24-4-15/67

TITLE: The Determination of Phtalic Anhydride in Air According to Derived Polarograms (Opredeleniye ftalevogo angidrida v vozdukhe po proizvodnym polyarogrammam)

PERIODICAL: Zavodskaya Laboratoriya, 1958, Vol. 24, Nr 4, pp. 420-421 (USSR)

ABSTRACT: The determination apparatus was constructed according to a slightly modified scheme by Levek (Ref 1). Instead of two capillaries two electrolytic condensers were used, one of them on a galvanometer with 2100 microfarad and a maximum working voltage of 6 V, the other with 3000 microfarad and a maximum voltage of 40-50 V. The revolving velocity of the potentiometer drum is given as being 15 seconds. Ordinary as well as derived polarograms can be recorded, and it was found that satisfactory polarograms are obtained in a range of from 0.005 - 0.1n hydrochloric acid, whereas 0.5 - 1.n solutions cannot be used. Phtalic anhydride results are given in tables. Determinations of maleic anhydride alone as well as mixed with phtalic anhydrides in 0.1n hydrochloric acid resulted in good and distinct polarization

Card 1/2

The Determination of Phtalic Anhydride in Air According to Derived Polarograms

32-24-4-15/67

curves. If, in the air investigated, smaller quantities of maleic anhydrides exist besides larger quantities of phtalic anhydrides, the former can be determined according to simple and the latter according to derived polarograms. Samples can be taken by filtering the air through a paper filter with a velocity of 5-10 l/min., in which case the phtalic anhydride is dissolved in the filter with hot water and is further investigated. There are 3 figures, and 1 table.

ASSOCIATION: Ukrainskiy institut gigiyeny truda i profzabolevaniy (Ukrainian Institute for Labor Hygiene and Occupational Diseases)

1. Air--Polarographic analysis 2. Phthalic anhydride--Determination
3. Air--Testing equipment

Card 2/2

KOGAN, I.B.; NENARTOVICH, A.V.

Rapid determination of a weak concentration of carbon monoxide in the air. Bezop. truda v prom. 4 no.9:22-23 S '60. (MIRA 13:9)

1. Ukrainskiy nauchno-issledovatel'skiy institut gigiyeny truda i profzabolevaniy.
(Eudiometer) (Air--Analysis) (Carbon monoxide)

KOGAN, Izrail' Bentsianovich; BERDNIKOV, A.I., red.; SENCHILO, K.K., tekhn. red.

[Polarographic analysis in industrial sanitary chemistry] Polirarograficheskii analiz v promyshlenno-sanitarnoi khimii. Moskva, Medgiz, 1961. 151 p. (MIRA 14:12)
(Polarography) (Industrial hygiene)

KOGAN, I. B.; VASIL'YEVA, I. P.

Chromatographic partition and quantitative determination of nitrophenols in air. Zav. lab. 28 no.12:1428-1429 '62. (MIRA 16:1)

1. Ukrainskiy institut gigiyeny truda i profzabolevaniy.

(Phenol) (Air—Analysis)
(Chromatographic analysis)

KOGAN, Israil' Bentsianovich; BERDNIKOV, A.I., red.; SENCHILO, K.K., tekhn. red.

[Polarographic analysis in industrial sanitary chemistry] Poliarograficheskii analiz v promyshelnno-sanitarnoi khimii. Moskva, Medgiz, 1961. 151 p. (MIRA 16:9)
(SANITARY CHEMISTRY) (POLAROGRAPHY)

KOGAN, I. D. PA 27T82

Sep/Oct 1947
Metals, Nonferrous

"Development of Raw Resources of Nonferrous Metallurgy," I. D. Kogan, 6 pp

"Razvedka Nedr" No 5

General historical account of the development of nonferrous metal deposits in various parts of the USSR, for example in the Kazakh SSR, and the Far Eastern regions of the USSR.

LC 27T82

Card 1/1 Pub. 46 - 21/21

Abstract : ... Technical

: October 23, 1954

KOGAN, I. D.

AUTHOR: Kogan, I.D. 132-11-3/7

TITLE: Achievements of Soviet Geologists in Discovering Deposits of Non-ferrous and Rare Metals (Dostizheniya sovetskikh geologov v sozdanii syr'yevoy bazy tsvetnykh i redkikh metallov)

PERIODICAL: Razvedka i okhrana nedr, 1957, No 11, pp 21-26 (USSR)

ABSTRACT: The author reviews the ore mining industry covering non-ferrous and rare metals in Russia before the advent of Communism, and enumerates the achievements made on this field by Soviet geologists. In 1932, the 4th All Union Geological Conference laid plans for future geologic prospecting work. Mention was made at the conference of the tremendous difficulties Soviet geologists were facing in the pursuance of their tasks, caused by the lack of scientific and technical personnel, geologic maps and prospecting equipment. In spite of these difficulties, by the end of the First 5-Year Plan prospecting operations were successful in discovering numerous deposits of non-ferrous and rare metals. This applies especially to large copper deposits in the Urals which were developed in the Degtyarka district. During the same period detailed prospecting operations were carried out in the Novolevinsk, Krasnogvardeysk, Sibay, Buribay, Bakruzyak and other areas. In

Card 1/6

Achievements of Soviet Geologists in Discovering Deposits of Non-ferrous and Rare Metals

1928, copper-porphyrite deposits in Kazakhstan in the Kounradskiy and Boshchekul'skiy were explored and large copper deposits located in Dzhezkazgan. As a result of systematic prospecting and development, Kazakhstan is leading in the production of copper. Extensive copper-porphyrite deposits were also found in Transcaucasus in 1928 (Agarakskiy) and in 1931 in Central Asia (Almalykskiy). The shortage of lead and zink was alleviated by the end of the First 5-Year Plan after developing the rich deposits found at Turlansk at the Karatau range (Kazakhstan). Also by the end of the First 5-Year Plan the first copper-nickel-sulfide deposit was exploited in the Noril'sk area. In 1926, systematic prospecting determined the exact expanse of silicate nickel ores in the Ufaleyskiy and Revdinskiy districts and the commercial values of the Tyulenevskiy and other deposits. In 1928, silicate ores were found in the Khililovsk district (Ayderbakskoye deposit), in 1931 in the Kvarkenskiy district (Ayderlinskoye deposit) and in the Aktyubinsk district (Buranovskoye deposit). In the same year nickel sulfide ores were discovered at Monche-Tundra on the

Card 2/6

Achievements of Soviet Geologists in Discovering Deposits of Non-ferrous and Rare Metals

beryllium, zirconium, tantalum, niobium and cobalt deposits up to the end of the Second 5-Year Plan period. During the Third 5-Year Plan great strides ahead were made towards supplying the country with non-ferrous and rare minerals. New copper ore deposits were discovered in southern Ural, Kazakhstan and Transcaucasus. Prospecting on a large scale was carried out in the Dzhezkazgan, Almalyka and Agaraka areas. Available resources of lead increased considerably during the Second 5-Year Plan as a result of deposits developed in the Rudny Altay and new deposits discovered in Kazakhstan. Discovery and development of nickel ore deposits enabled the construction of the large nickel combines Severonikel, Yuzhuralnikel, and the Noril'sk plant. In 1934, the first nickel plant was built in Ufalei. As a result of systematic prospecting additional nickel ore deposits were located, and the importance of nickel deposits in the Krasnoyarsk kray, Murmansk, Chkalovsk and Aktyubinsk oblast increased considerably. The supply with raw material for the aluminum industry was greatly improved during the Second 5-Year Plan. Deposits of Central Ural (Sokolovskiy, Pirogovskiy and others) were 1.5 as large as those at

132-11-3/7

Achievements of Soviet Geologists in Discovering Deposits of Non-ferrous and Rare Metals

Tikhvin, and the commercial value of bauxite mined in northern Ural was proven. New deposits of bauxite were discovered in southern Ural on the territory of the Bashkir SSR (Kukshinskiy group), in Kazakhstan (Akmolinskiy and Turgayskiy rayons), in eastern and western Siberia (Salairskoye deposit). Numerous deposits were discovered during the Second 5-Year Plan, the most important were found in the Yakut ASSR. Further deposits of tin were discovered on the Chukhotka peninsula, and of special importance were the tin-polymetallic deposits found in the Primorskoy Kray. Other polymetallic ores, mined in the Kirgiz SSR and the northern Caucasus, were found to contain tin. The available resources of tungsten were increased greatly by new discoveries in the Buryat-Mongolian ASSR and the Kabardino-Balkarsk ASSR. Molybdenum was mainly discovered in the complex tungsten-molybdenum mines (Chikoy, Umal'tinsk and others), the output of which surpassed all former deposits. Large deposits of mercury and antimony were already known at the First 5-Year Plan. During the Second 5-Year Plan the output of mines in operation was considerably increased (Nikitovskiy, Khaydarkan, Kadam-Dzhayskiy, Turgay), and new mercury

Card 5/6

KOGAN, I.D.

Possibilities of increasing the efficiency of geological prospecting [with summary in English]. Sov.geol. 1 no.9:141-148 S '58. (MIRA 12:2)

1. Gosudarstvennaya komissiya po zapasam.
(Prospecting)

KOGAN, I.D. otv.red.; ANDRIYKO, V.F., red.; BORZUNOV, V.M., red.; MIRLIN, R.Ye., red.; MIRONOV, K.V., red.; SERGEYEVA, N.A. red.izd-va; GUROVA, O.A., tekhn.red.

[Materials of the State Committee on Resources on prospecting methods, evaluation and calculation of mineral deposits; collected studies] Materialy GKZ po metodike razvedki, promyshlennoi otsenke i podschetu zapasov mestorozhdenii poleznykh iskopaemykh; sbornik. Moskva, Gos.nauchno-tekhn.izd-vo lit-ry po geol. i okhrane nedr. No.1. 1959. 153 p. (MIRA 13:4)

1. Russia (1923- U.S.S.R.) Gosudarstvennaya komissiya po zapasam poleznykh iskopayemykh.
(Mines and mineral resources)

KOGAN, I.D.

Basic requirements for geological reports in estimating reserves in the State Commission on Mineral Reserves. Sov.geol. 4 no.5:121-133 My '61. (MIRA 14:6)

1. Gosudarstvennaya komissiya po zapasam poleznykh iskopayemykh pri Sovete Ministrov SSSR.
(Mines and mineral resources)

KALLISTOV, P.L.; ZENKOV, D.A.; PROKOF'YEV, A.P. Prinimali uchastiye: BOGDANOV, F.M.; BORZUNOV, V.M.; BURYBLIN, A.V.; DROZDOV, M.D.; YEROFEYEV, B.N.; KOMISSAROV, A.K.; KOGAN, I.D.; LYUBIMOV, I.A.; MIRLIN, R.Ye.; ROKHLIN, M.I.; SERGEYEV, P.V.; SEMENOV, A.D.; FROLOV, V.V.; NEMANOVA, G.F., red. izd-va; GORDIYENKO, Ye.B., tekhn. red.

[Instructions for applying the classification of reserves to primary gold deposits] Instruktsiia po primeneniiu klassifikatsii zapasov k korennym mestorozhdeniiam zolota. Moskva, Gos. nauchno-tekhn.izd-vo lit-ry po geol. i okhrane nedr, 1955. 46 p. (MIRA 15:2)

1. Russia (1923- U.S.S.R.) Gosudarstvennaya komissiya po zapasam poleznykh iskopayemykh.
(Gold ores--Classification)

KOGAN, I.D.

Basic requirements of the State Committee on Mineral Resources for calculating the reserves of ore deposits. Mat GKZ no.3: 3-18 '63

GUSEYNOV, M.M.; ISMAYIL-ZADE, I.M.; STEPANYAN, A.M.; KOGAN, I.G.; DZHAFAROV, N.K.

Result of treating mycosis of the scalp without the use of rays. Vest.derm.i ven. 33 no.6:16-20 N-D '59. (MIRA 13:12)

(SCALP--DISEASES) (IODIDES--THERAPEUTIC USE) (VITAMINS--A)

KOGAN, I.I., inzh.

New designs of standardized tower cranes. Bezop.truda v prom. 5 no.11:29-30 N '61. (MIRA 14:11)
(Cranes, derricks, etc.)

KOGAN, I.I.

Tula Expedition of 1812-1818. Trudy Inst. ist.est.i tekh. 33:216-227 '60. (MIRA 13:8)
(Moscow Basin--Coal mines and mining)

KOGAN, I.I.; TSEYTLIN, L.V.

Our practices in constructing roadbeds. Transp.stroi. 10 no.4:11-13 Ap '60. (MIRA 13:9)

1. Nachal'nik Proizvodstvenno-tekhnicheskogo otdela tresta TSentrostroymekhanizatsiya (for Kogan). 2. Nachal'nik mekhkolonny No.43 tresta TSentrostroymekhanizatsiya (for TSeytlin).
(Railroads--Earthwork)

BELINKIY, Yevgeniy Aleksandrovich; KOGAN, I.I., inzh., nauchn. red.; KOSTANDOV, A.I., red.izd-va; PUL'KINA, Ye.A., tekhn.red.

[Efficient water-heating systems] Ratsional'nye sistemy vodianogo otopleniia. Leningrad, Gosstroiizdat, 1963. 207 p. (MIRA 16:12)

(Hot-water heating)

KIPNIS, A.M.; KOGAN, I.I.

Stand for adjusting manometers. Priborostroenie no.8:30 Ag '60.
(MIRA 13:9)
(Manometer—Testing)

S/028/61/000/008/003/003
D220/D304

AUTHOR: Kogan, I. I.

TITLE: The introduction of new standards and control of existing standards

PERIODICAL: Standartizatsiya, no. 8, 1960, 38 - 42

TEXT: The author states that on the basis of past experience the introduction of new standards is accomplished with great difficulty in the USSR. The "Committee of Standards for Measures and Measuring Instruments" helps the factories adopt new standards. Extensive work is being done by the Ivanov GKL on introducing new standards: 42 new standards on fabrics prepared by TU are coming out at the present time. Two new measures of hardness have been introduced by the Ivanov GKl: - MTR and MTB which are in accordance with the requirements of GOST 9031 - 59. The National Control Laboratory carried out an investigation at the factory of BIM on the manufacture of cotton fabrics. Deviations from the standard requirements were noted for a) cotton

Card 1/5

fabric and b) staple. The Laboratory report stated that the physical-mechanical properties of fabrics were not in accordance with the national standards. Due to the introduction of automatic control these deviations from the standard were eliminated. The Gor'kiy GKL has made it possible for the factory of "Krasnaya Etna" to select dimensions for producing spring wire which satisfy the requirements of GOST 9389-60. GOST 370-60 was not accepted in connection with vertical drilling machines. The Tomsk GKL investigated the quality of manometers and found that they satisfied the requirements of GOST 8625-59. The most urgent problem is to increase the tensile strength of cords. Due to the intensive investigation carried out by GKL this problem was also solved, the strength of cords now being in accordance with specifications. The Stalingrad GKL carried out investigations in a paint factory. With the help of the management GKL arranged the introduction of new standards and adherence to existing standards was also achieved. Effective work is car-

ried out by the Krasnodar GKL for the electrotechnical factory of Armavir. The plant's electric motor output was in accordance with the standards of TU, due to the help given by GKL. The Karel' GKL carried out work on improving the quality of corrugated cardboard (GOST 7420-55) and cardboard for box-making (GOST 1933-56). Successful work was carried out by the GKL on improving the quality of paper for newspapers (GOST 6445-53) its quality requirements now being in accordance with the standards. The Irkutsk GKL has carried out work on the subject of boxes in the tea-pressing factory. The results of investigation were to introduce a new "box dimension" in accordance with the standard GOST 3916-55, and to control humidity in wood, both factories contributing to improving the quality of boxes. The Primorsk GKL carried out investigations in a plywood factory and by their assistance raised the output by 2000 m3 of plywood, saving 164 thousand rubles. The Tula GKL investigated the efficiency of a furniture factory where 12.5% of the chairs were rejected and 25% were under size. By helping them with new

Card 3/5

standards this inefficiency was totally eliminated. Through the help of the Rostov GLK a considerable amount of material was saved in an electric service station. The Vladimir GKL observed that in the Kosterev textile factory the shuttles were not according to GOST 5906-59, but in fact according to TU-511-56 which brought about differences in the weight and linear dimensions. Serious deviations from standards exist in a Gor'kiy automobile service works where, for instance, clutches of a type MY (MU) 200 deviated from the GOST 8707-58 standard. The Yaroslavl' GKL proved that electric motors with special drive did not satisfy the requirements of GOST 183-55 and GOST 8215-56. The factory in conjunction with GKL eliminated these defects. The Yaroslavl' GKL eliminated the deviation from quality requirements of diamond powder from the standard GOST 9201-59. The Kuybyshev GKL showed that the products of an abrasives manufacturing factory deviated from GOST 4785-53. The author concludes that national laboratories should be given a free

KOGAN, I.I.

Equipping state inspection laboratories and enterprises with new measuring instruments. Izm.tekh. no.8:55-56 Ag '60.
(MIRA 13:9)
(Measuring instruments)

KOGAN, I.I.

Intensify state inspection of measuring devices for fuel and lubrication materials. Izm.tekh. no.2:55-56 F '61. (MIRA 14:2)
(Petroleum products—Measurement)

KOGAN, I.I.

Cooperation of the State Testing Laboratory in introducing new measuring eqipment in the national economy. Izm.tekh. no.9:58-60 S '61. (MIRA 14:8)
(Testing laboratories)

KOGAN, I.I.

Promote the exchange of experience among the state testing laboratories. Izm.tekh. no.10:56 O '61. (MIRA 14:11)
(Testing laboratories)

KCGAN, I.I.

Inspecting the introduction and maintenance of standards.
Standartizatsiia 25 no.8:38-43 Ag '61. (MIRA 14:7)
(Standards, Engineering) (Testing laboratories)

KOGAN, I.I.; PETROPAVLOVSKIY, V.V.

Improve the inspection of measuring equipment in preventive medicine institutions. Izm.tekh. no.3:57-58 Mr '62. (MIRA 15:2)

(Medical instruments and apparatus—Testing)

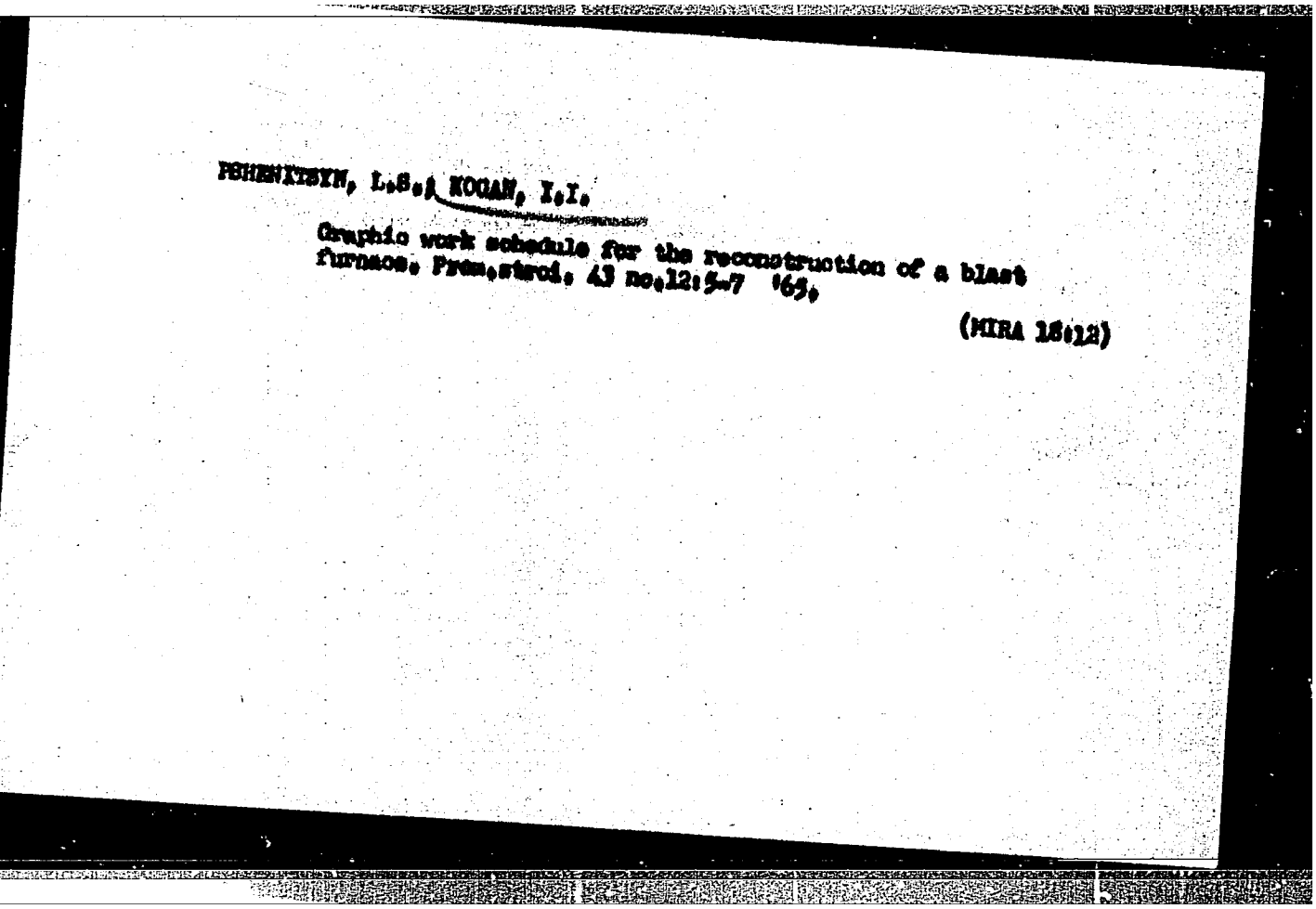
KOGAN, I.I.

Intensify the state inspection of measuring equipment for fuels and lubricants. Izm.tekh. no.1:60-61 Ja '63. (MIRA 16:2)
(Petroleum products—Measurement)

KOGAN, I.I.; BUDZIS, V.A.

In state testing laboratories of the State Committee of Standard Measures and Measuring Instruments. Izm. tekh. no.6:58-59 Je '63. (MIRA 16:8)

(Testing laboratories)



PECHENYUK, L.S.; KOGAN, Ya.I.

Graphic work schedule for the reconstruction of a blast furnace. Prom.stroi. 43 no.12:5-7 '65.

(MIRA 18:12)

ARNAUTOV, A.K.; BURSHTEYN, Sh.A.; GENES, V.S.; KOGAN, I.K.; MAMATYUK, Ye.M.; LITVINENKO, A.S.; MOSKALENKO, I.P.; NIKOLAYEVA, M.G.; PISKAREVA, Ye.V.; POPOVA, L.Ya.; RUDNEV, L.I.; SIDYAKIN, V.V.; TKACH, V.K.; FASTYUCHENKO, O.V.; FISUN, A.N.; FRENKEL', L.A.; TSYBENKO, N.A.; SHRAMENKO, B.I.

Comparative study on the effect of X rays (147 kv) and braking radiation generated with linear accelerator (3 Mev) upon animals. Radiobiologiia 2 no.2:211-215 '62. (MIRA 15:4)

1. Khar'kovskiy institut meditsinskoy radiologii i Ukrainskoy fiziko-tekhnicheskiy institut AN USSR, Khar'kov.
(RADIATION--PHYSIOLOGICAL EFFECT)

KOGAN, I. Kn.

429

Tualetnyye polki i zerkal'nyye. M., LPOZ, 1954. 13s. s ill. 21 sm. (Tsentr. sovet promystuaeti. Kosperarsiya SSSR. Tekhn. Upr. Obmen proizvod.-Tekhn. opytom. Luchshiye obrastsy izoeliy shiroko potrebleniya. 25). 1.000 ekz. Bespl.-Aut. ukazan v konce Teksta.--(54-14787 zh)

686.7

SO: Knizhanaya, Letopis, Vol. 1, 1955

SLAVIN, S.V., doktor ekon. nauk; GRANIK, G.I., kand. ekon. nauk; LOGINOV, V.P.; MIKHAYLOV, S.V.; SHAPALIN, B.F., kand. geogr. nauk; AVAKYAN, M.I., nauchnyy sotr.; ZAKHAROV, G.A., nauchnyy sotr.; KAMENITSER, L.S., nauchnyy sotr.; TITOVA, N.I., nauchnyy sotr.; TYURDENEV, A.P., nauchnyy sotr.; CHUGUNOV, B.I., starshiy nauchnyy sotr.; KOGAN, I.L.; MESHKOVSKAYA, L.V., starshiy inzh.; LUKIN, I.I.; FAYERSHTEYN, R.I.; Prinimali uchastiye: Agranat, G.A., kand. geogr. nauk, red.; PUZANOVA, V.F., kand. geogr. nauk, red.; KUPRIYANOV, A.B., nauchnyy sotr., red.; SOBOLEV, Yu.A., red. izd-va; TIKHOMIROVA, S.G., tekhn. red.

[Problems in developing the productive forces of Magadan Province] Problemy razvitiia proizvoditel'nykh sil Magadanskoi oblasti. Moskva, Izd-vo Akad. nauk SSSR, 1961. 301 p. (MIRA 15:1)

1. Akademiya nauk SSSR. Sovet po izucheniyu proizvoditel'nykh sil. 2. Glavnyye inzhenera proyekta "Dal'stroyproyekt" (for Kogan, Fayershteyn). 3. Institut ekonomiki Akademii nauk SSSR (for Chugunov). 4. Energoupravleniye Magadanskogo Soveta narodnogo khozyaystva (for Meshkovskaya). 5. Nachal'nik Oblastnogo otdela po delam stroitel'stva i arkhitektury Magadanskoy oblasti (for Lukin).
(Magadan Province—Industries) (Magadan Province—Economic policy)

CHUBUKOV, A.A.; IVANOV, A.V.; CHERNOGOROV, L.L.; Prinimali uchastiye: KOGAN, I.L.; TALANOVA, L.N.; POPOVA, Ye.P.; ABROSOV, A.P.

Cleaning of spinnerets in the manufacture of viscose fibers. Khim.volok. no.1:69-70 '63. (MIRA 16:2)

1. Rostovskiy nauchno-issledovatel'skiy institut tekhnologii mashinostroyeniya.

(Rayon spinning)

KOZLOV, Aleksey Yefimovich; KOKOSHEV, Vasiliy Grigor'yevich; PETROV, Georgiy Yefimovich; RATOVSKIY, Petr Mikhaylovich; KOGAN, L.L., red.

[Manufacture of diaphragms and bellows from beryllium bronze] Izgotovlenie membran i sil'fonov iz berillievoi bronzy. Leningrad, 1964. 17 p. (Leningradskii dom nauchno-tekhnicheskoi propagandy. Obmen peredovym opytom. Seriia: Goriachaia i kholodnaia obrabotka metallov davleniem, no.2) (MIRA 17:7)

KOGAN, I. L.

Kogan, I. L., ed Ship sanitation Sostavili M. G. Markhasev I dr. Moskva, Medgiz, 1945.

157 p.

KOGAN, I. L.

Translation from: Referativnyy zhurnal, Metallurgiya, 1958, Nr 1, p 16 (USSR) 137-1958-1-103

AUTHOR: Kogan, I. L.

TITLE: A Plan for Stripping the El'gi Deposit (Proyekt otrabotki El'ginskogo mestorozhdeniya)

PERIODICAL: Kolyma, 1957, Nr 4, pp 14-18

ABSTRACT: A plan for stripping the deposit and a design for a concentration mill for washing and milling the sands are offered.

A. Sh.

1. Mining engineering—USSR 2. Mines—Operation—USSR

Card 1/1

KOGAN, Isaak Moiseyevich. VINOGRADOV, Ivan Davydovich; SHURUYEV, V.N., spetsredaktor; MORSHCHIKOV, V.D., redaktor; RAKOV, S.I., tekhnicheskiy redaktor

[New wage scale in effect] Novye tarifnye usloviia v deistvii. [Moskva] Izd-vo VTsSPS Profizdat, 1957. 38 p. (MIRA 10:9)
(Wages)

BLOTSKIY, S.N., inzh.; OSINTSEV, V.V., inzh.; DEMCHENKO, F.N., inzh.;
Prinimali uchastiye: VOLODIN, M.V.; KOGAN, I.M.; ZAKHAROV, N.V.;
BLOTSKIY, A.N.; UKKONEN, V.A.

Increase in the efficiency of the Brown-Bowery steam turbine. Prom.
energ. 17 no.3:28-29 Mr '62. (MIRA 15:2)
(Steam turbines)

AUTHOR: I.M. Kogan

TITLE: The Problem of Stability and the Effect of Parasitic Reactance of Selective RC-Systems (K voprosu stabil'nosti i vliyaniya parazitnykh reaktivnostey selektivnykh RC-sistem)

SOV/106-58-10-2/13

PERIODICAL: Elektrosvyaz', 1958, Nr 10, pp 9 - 19 (USSR)

ABSTRACT: The assumptions usually made that the elements of RC amplifiers remain constant and that parasitic reactances can be ignored, are unjustifiable for frequencies exceeding 1000 c/s. The object of this paper is to develop the theory to accord more closely with practical circuits. The author divides RC amplifiers, which employ phase-shifting negative feedback, into two types: RCR - circuits with differentiating networks; CRC - with integrating networks. The general circuit containing three phase-shifting networks is given in Fig 1. The effects of variation in the circuit elements on the basic parameters of the RC amplifier - the critical amplification coefficient without feedback A_o and the frequency ω_o at which self-oscillation occurs - are investigated, and then

Card 1/4

the effect of stray capacitance in the circuit. The equivalent RCR circuit is given in Fig 2. It is shown that the condition most favourable for self-oscillation is when the phase-shifting networks are all identical. Amplification stability is optimum when identical networks are used and worsens sharply for small values of C and large values of R in the second and third networks compared to the values of the first network. Frequency instability increases with increase of resistance and capacity values and to obtain the most effective control of the frequency the resistance of the first network and the capacity of the last should be varied as these elements have the greatest effect on the frequency. The equivalent CRC circuit is given in Fig 5. It is shown that amplification instability increases with reduction of the resistances and capacities, when the phase-shifting networks are identical. The effects of stray reactances of both the anode load and of the phase-shifting networks are next investigated. The equivalent circuits taking

stray reactances into account are shown in Figs 8 and 9. For the RCR type of circuit, the effect of the anode load phase angle φ_a is considered. The curves of Fig 10 show that the modulus of the amplification coefficient increases with reduction of φ_a. The effect of the shunt capacity across the load resistance R_a causes the amplitude of self-oscillations to reach a maximum value as R_a is increased. The effect of stray capacity across the phase-shifting networks is to make necessary an increase in the critical gain (over the theoretical gain necessary for oscillations). For CRC type circuits the shunting capacity across the anode load leads to reduction of the amplification coefficient. The stray capacities across the phase-shifting

networks merely increase the basic circuit capacity. Thus, CRC types are more convenient for high frequency oscillators than RCR type circuits.
There are 15 illustrations, no references,

SUBMITTED: January 31, 1958

AUTHOR: Kogan, I.M. SOV/106-59-6-5/14

TITLE: Selective Properties of the Autodyne Receiver (Izbiratel'nyye svoystva avtodinnogo priyema)

PERIODICAL: Elektrosvyaz', 1959, Nr 6, pp 31-40 (USSR)

ABSTRACT: The selective properties of an autodyne, as for other receiving apparatus, are of fundamental practical significance. The article is based on the Meissner autodyne circuit (Fig 1), having transformer feedback to the anode; "e" is the received signal voltage. To enable the results obtained to be extended to any autodyne circuit, the relationships between the parameters of the Meissner circuit and the parameters of other autodyne circuits are first established. Because investigation of the selective properties involves cubic equations, a method for the approximate solution of such equations is advanced. The general circuit of an auto-oscillator as shown in Fig 3 takes the form of a three-terminal circuit, and the "normal" circuit is shown in Fig 2. The Meissner circuit is transformed to the normal circuit by formulae (1) and the three-terminal circuit is transformed to the normal circuit by formulae (2). From these formulae, the

Card 1/3

relations between the parameters of the three-terminal circuit and the Meissner circuit are derived (Eq (7)). The autodyne receiver can operate under two regimes which the author classifies as 1) beat reception, and 2) constant current reception. The author first considers constant current reception. The selective properties of an autodyne are determined by the frequency band within which the external e.m.f. produces a practically significant change in either the amplitude or the frequency of the autodyne. A formula is derived (Eq (28)) which agrees well with the experimental results given in Refs 8 and 9, and which shows that the bandwidth within which there is any significant change in the frequency of the oscillations is approximately twice the total locking band, with a weak tendency to decrease with reduction in the external e.m.f. It is concluded that the pass band of an autodyne operating under constant current reception conditions is approximately 1½ to 2 times the total locking band, both with respect to frequency and amplitude.

Selective Properties of the Autodyne Receiver SOV/106-59-6-5/14

Finally the author investigates the operation of an autodyne under beat conditions. Comparison is made of the relationships obtained for the autodyne and the relationships between the selectivity (bandwidth) of an unexcited regenerator and its degree of regeneration.

Card 3/3

There are 8 figures and 10 references, of which 9 are Soviet and 1 is English.

SUBMITTED: July 26, 1958

KOGAN, I. M.

Reply to E.N.Garmash's letter to the editor. Elektrosviaz' 14 no.2:78 F '60. (MIRA 13:5)
(Electric capacitance)

9.2580

AUTHOR: Kogan, I.M.

S/106/62/000/007/002/005
A055/A101

TITLE: Amplifying and selective properties of the autodyne in the presence of external noise emf

PERIODICAL: Elektrosvyaz', no. 7, 1962, 11 - 16

TEXT: The effect of the external noise emf upon the autodyne circuit has been analyzed by many investigators, and namely by L.S. Pontryagin, A.A. Andronov, A.A. Vitt ("Zh.E.T.F.", 1933, v. 3) who used the Einstein-Fokker equations method, and by S.M. Rytov ("Zh.E.T.F.", 1955, v. 29, no. 3) who used the symbolic differential equations and correlation theory method. Applied to practical calculations, these methods imply, however, very complicated calculations and may lead to exaggerated errors. In the present article is described a method that can be named "harmonic method", inasmuch as it takes into account the effect of a harmonic emf on the self-oscillator. In the first part of the article, the author expounds the fundamental principles underlying his analytical mehtod. In the second and essential part of the article, he analyzes the amplifying and selective

Card 1/2

Amplifying and selective....

S/106/62/000/007/002/005
A055/A101

properties of the autodyne circuit in the presence of an external noise emf. Formulae for $\overline{\Delta I^2}_{noise}$, the dispersion σ_I^2 of the noise current at the autodyne output and the "transmission factor" of the autodyne circuit as regards the external noise emf are deduced in this part of the article. The author emphasizes the fact that the use of the formulae deduced by him renders practical calculations particularly simple. The Soviet personalities mentioned in the article are: A.A. Lyubomudrov and V.I. Smirnov. There is 1 figure.

SUBMITTED: February 8, 1962

Card 2/2

KOGAN, I.M.; OSINTSEV, V.V.

Reduction of the noise produced by turbocompressors. Biul.TSIICHM no.4:49-50 '61. (MIRA 14:10)

1. Chelyabinskiy metallurgicheskiy zavod.
(Turbomachines—Noise)

ACC NR: AP6004823 SOURCE CODE: UR/0108/66/021/001/0008/0014

AUTHOR: Kogan, I. M.

ORG: Scientific and Technical Society of Radio Engineering and Electrocommunication (Nauchno-tekhnicheskoye obshchestvo radiotekhniki i elektrosvyazi)

TITLE: Is telepathy possible? For purposes of discussion. [Reported at the Scientific Board on Cybernetics, AN SSSR, 3 July 65]

SOURCE: Radiotekhnika, v. 21, no. 1, 1966, 8-14

TOPIC TAGS: telepathy, information theory

ABSTRACT: An attempt is made to answer the question whether or not telepathy is physically possible, whether the observed facts can be accounted for by an electromagnetic carrier of telepathic information. The two individuals engaged in telepathic experiments are regarded as an "inductor" and a "receiver"; a part of the electromagnetic energy radiated by the "inductor" via his "antenna" is received by the "receiver" via his "antenna." Formulas connecting the telepathic-system capacity, biocurrents, and antenna surfaces show that, with lower rates of transmission, the

Card 1/2

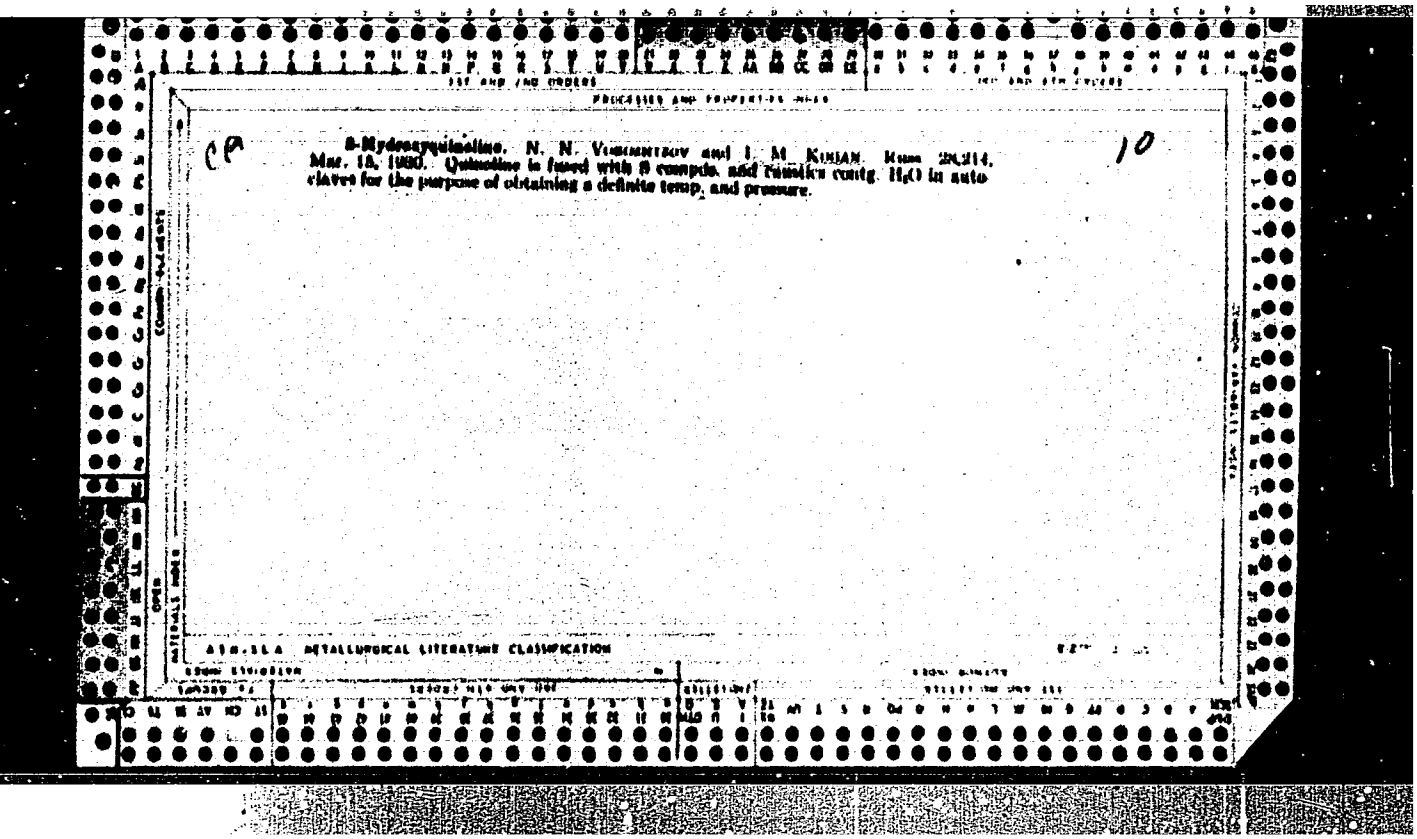
UDC: 621.371:621.391.13

ACC NR: AP6004823

required biocurrents decrease indefinitely. Five types of (published) telepathic observations are cited. It is found analytically that in principle telepathy through a biocurrent-generated electromagnetic field is possible at any distance, greater ranges corresponding to lower rates of information transmission. Possible wavelengths of telepathic transmissions are roughly figured out as lying between 10 m and 1000 km. Possible "inductor" power is under 10^{-10} w. Accurate psychological and biophysical experiments are held desirable. Orig. art. has: 3 figures, 19 formulas, and 2 tables. [03]

SUB CODE: 17/ SUBM DATE: 22May65/ ORIG REF: 004/ OTH REF: 002/ ATD PRESS: 4218

Card 2/2 PB

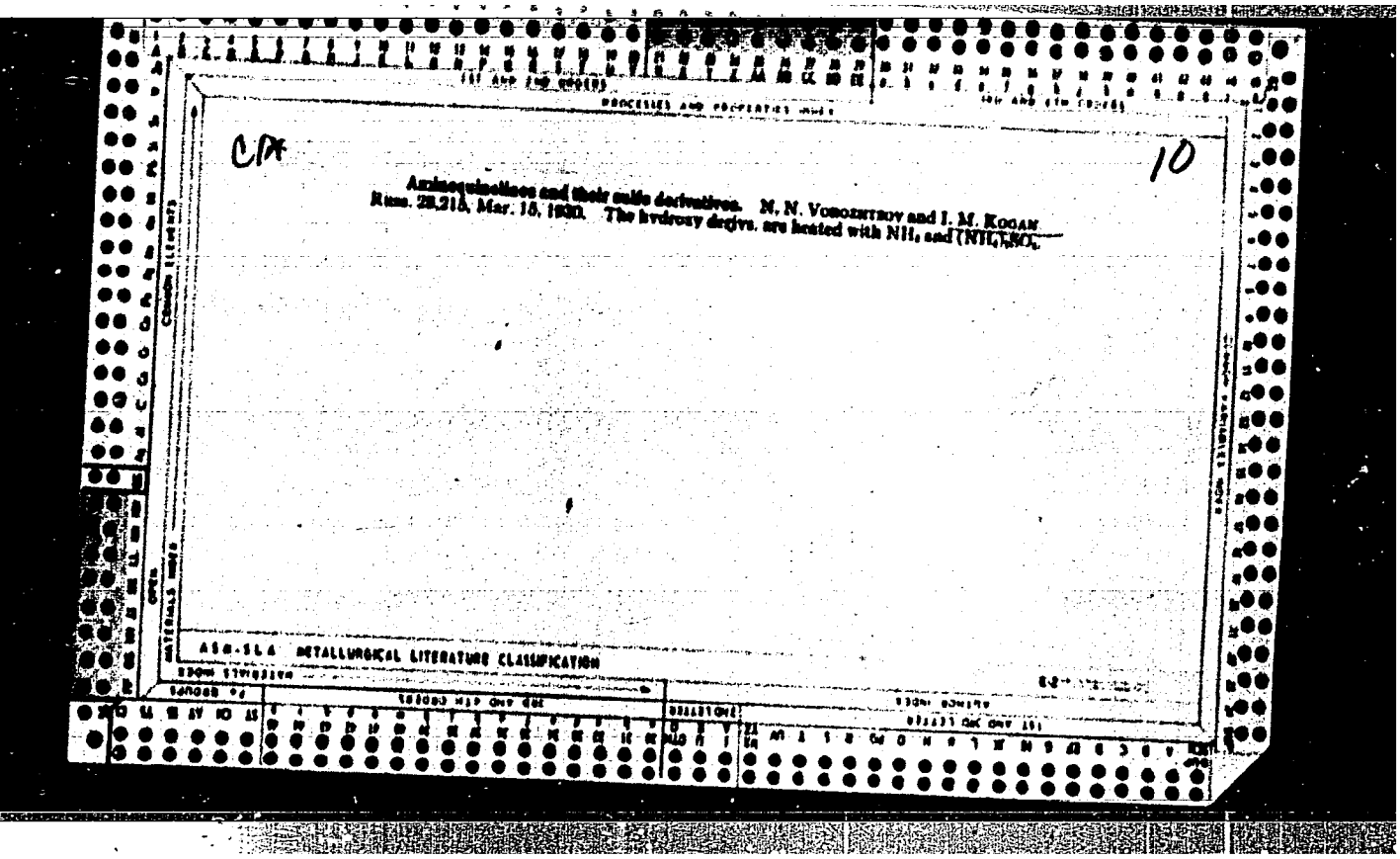


CP

8-Hydroxyquinoline. N. N. Vorozhtsov and I. M. Kirian. Russ. 28,214, Mar. 18, 1936. Quinoline is fused with 8 compds. and caustic contg. H_2O in autoclaves for the purpose of obtaining a definite temp. and pressure.

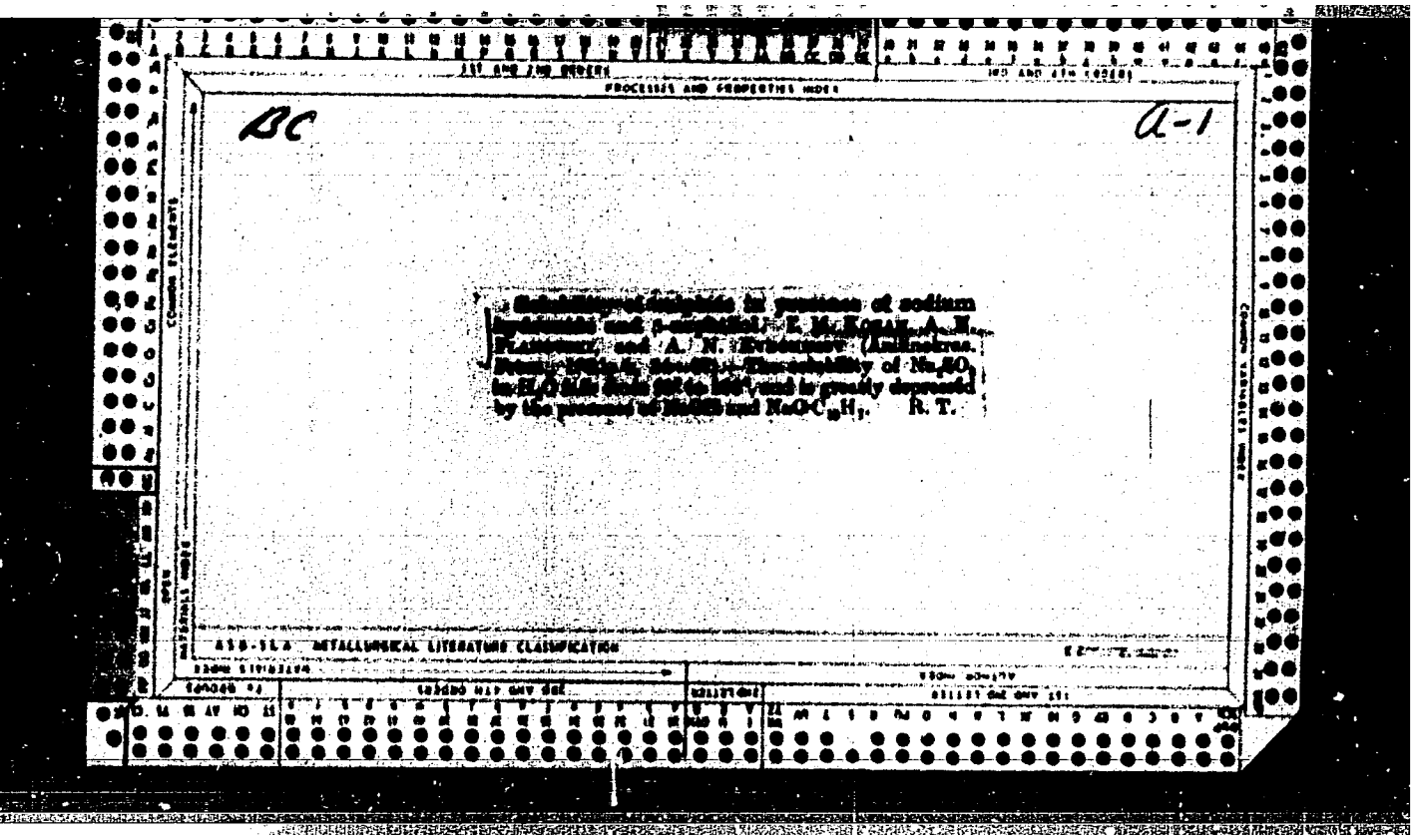
10

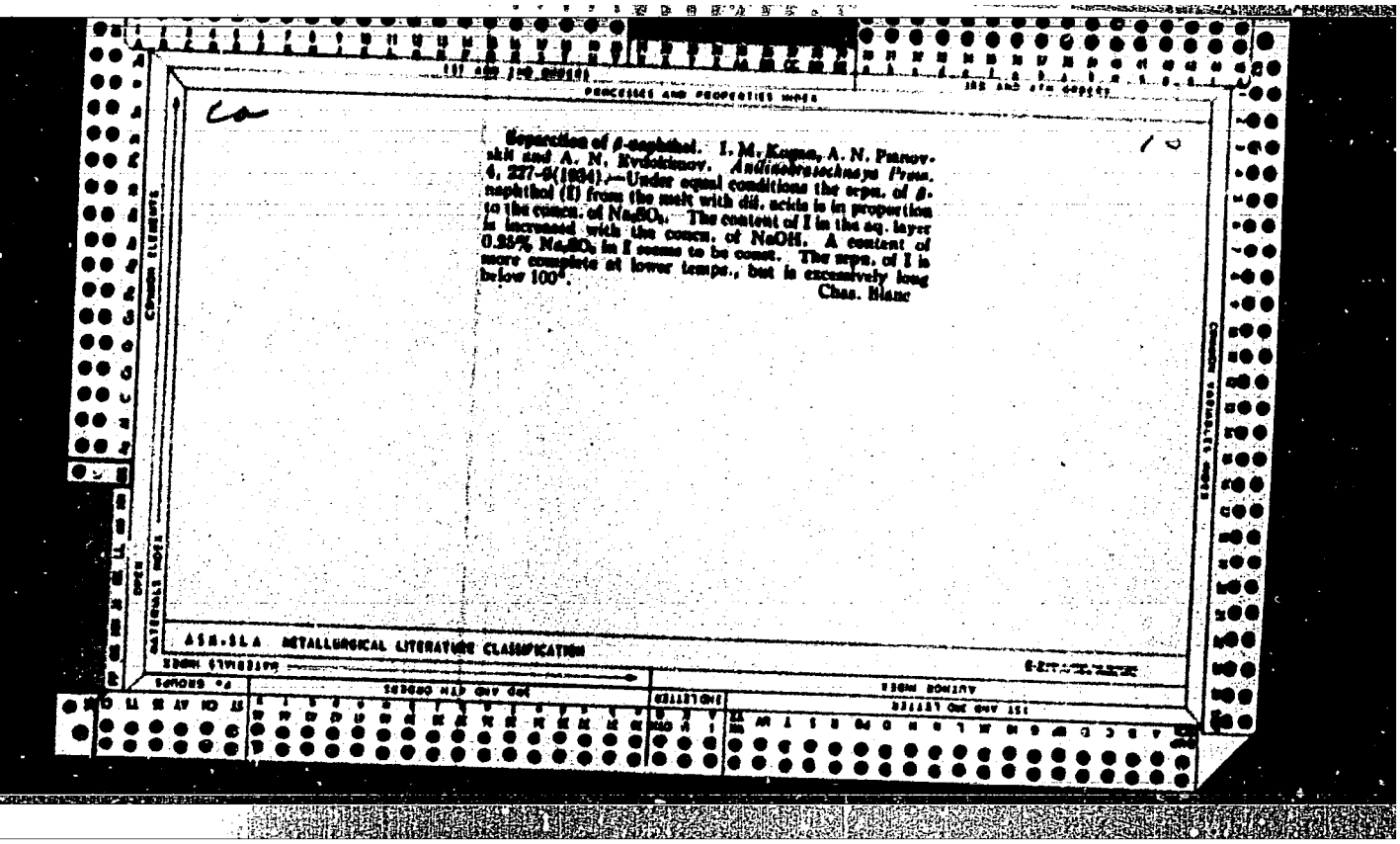
A59-51A METALLURGICAL LITERATURE CLASSIFICATION



Condensation of dinitrochlorobenzene with p-aminophenol-2,5-disulfonic acid. I. M. Kogan, A. S. Voronov and A. Z. Lyubitskaya. *Anilinokrasochnaya Prom.* 3, 183-4(1933).—A yield of 80% 2,4-$(O_2N)_2C_6H_3NHC_6H_2(SO_3Na)_2OH$ (2,5,4) (I) was obtained by refluxing 12 hrs. in a salt bath a mixt. of 10 g. 1,4,2,5-$C_6H_2(NH_2)(OH)(SO_3H)SO_3Na$, 6 g. $C_6H_3(NO_2)_2Cl$, 2.4 g. AcONa and 60 cc. H_2O, and then salting out with NaCl. By working with alc. 49% of I results. I gives fugitive yellow dyeings on wool from an acid bath. C. B.

ASM-SLA METALLURGICAL LITERATURE CLASSIFICATION





Separation of β-naphthol. I. M. Kogan, A. N. Panov-skii and A. N. Kvyatkovov. *Azotnaya Prom.* 4, 227-8(1934).—Under equal conditions the sepn. of β-naphthol (I) from the melt with dil. acids is in proportion to the concn. of Na_2SO_3. The content of I in the aq. layer is increased with the concn. of NaOH. A content of 0.25% Na_2SO_3 in I seems to be const. The sepn. of I is more complete at lower temps., but is excessively long below 100°.
Chas. Blanc

ASM-SLA METALLURGICAL LITERATURE CLASSIFICATION

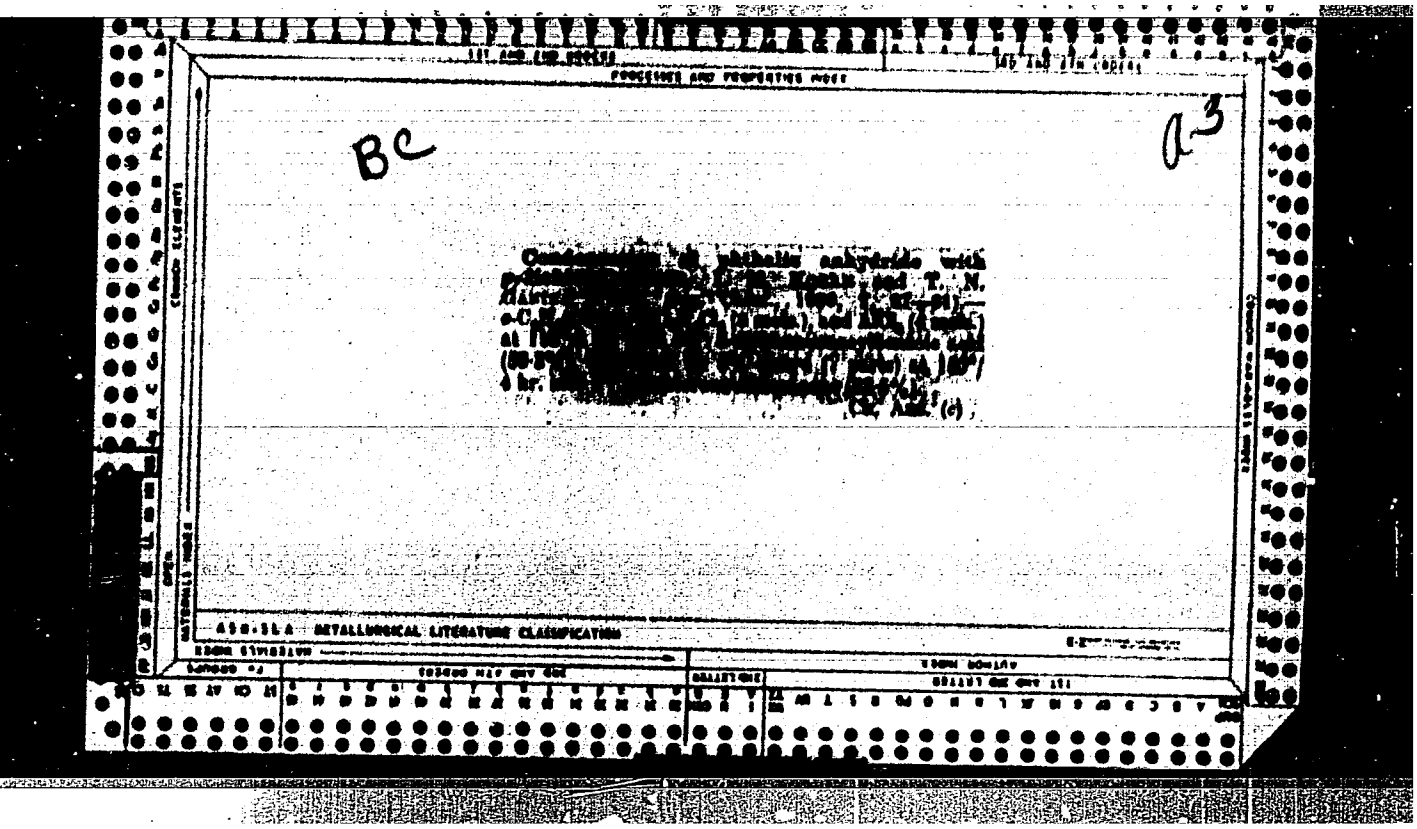
CA

10

The reduction of the nitrotoluenes by solutions of alkaline sulfides. I. M. Kogan and A. I. Kisber. *J. Gen. Chem.* (U. S. S. R.) [illegible] (1935).—Each of the 3 nitrotoluenes was heated with aq. Na_2S and with aq. Na_2S_2 soln. on a water bath and samples taken at various time intervals after the beginning of heating were analyzed for toluidine content by diazotization. It was immaterial whether the amine was sepd. from the reaction mixt. by extn. with Et_2O or distn. with steam. Each run was made with 1 g. of the nitrotoluene. A 17% excess of Na_2S in 3 cc. H_2O was taken as calcd. from the reaction: $4RNO_2 + 6Na_2S + 7H_2O \rightarrow 4RNH_2 + 3Na_2S_2O_3 + 6NaOH$. In the case of Na_2S_2, a 80% excess was taken based on the reaction: $RNO_2 + Na_2S_2 + H_2O \rightarrow RNH_2 + Na_2S_2O_3$. With time the yield of amine rose to a max. and then decreased, the decrease being accompanied by the formation of colored products. The authors state that these observations are probably due to the secondary reaction: $RNO + RNH_2 \rightarrow RN{:}NR + H_2O$. The yields in % of amine obtained after the no. of hrs. in parentheses with Na_2S were: From *p*-nitrotoluene, 12 (4), 21.8 (8), 34.6 (12), 32 (16), 34.6 (20), 23 (24). From *m*-nitrotoluene, 17.3 (4), 23 (8), 34.6 (16), 4.3 (20), traces (24). From *o*-nitrotoluene, 0 (4), 0 (8). With Na_2S_2 from *p*-nitrotoluene, 11.5 (1), 17.3 (2), 23 (4), 46.5 (8), 31.8 (12), 35 (20). From *m*-nitrotoluene, 20 (2), 28.9 (4), 35 (8, 10, 12), 28.9 (16), 30 (24). From *o*-nitrotoluene, 7.3 (4), 8.7 (8).

Lewis W. Butz

ASM-SLA METALLURGICAL LITERATURE CLASSIFICATION

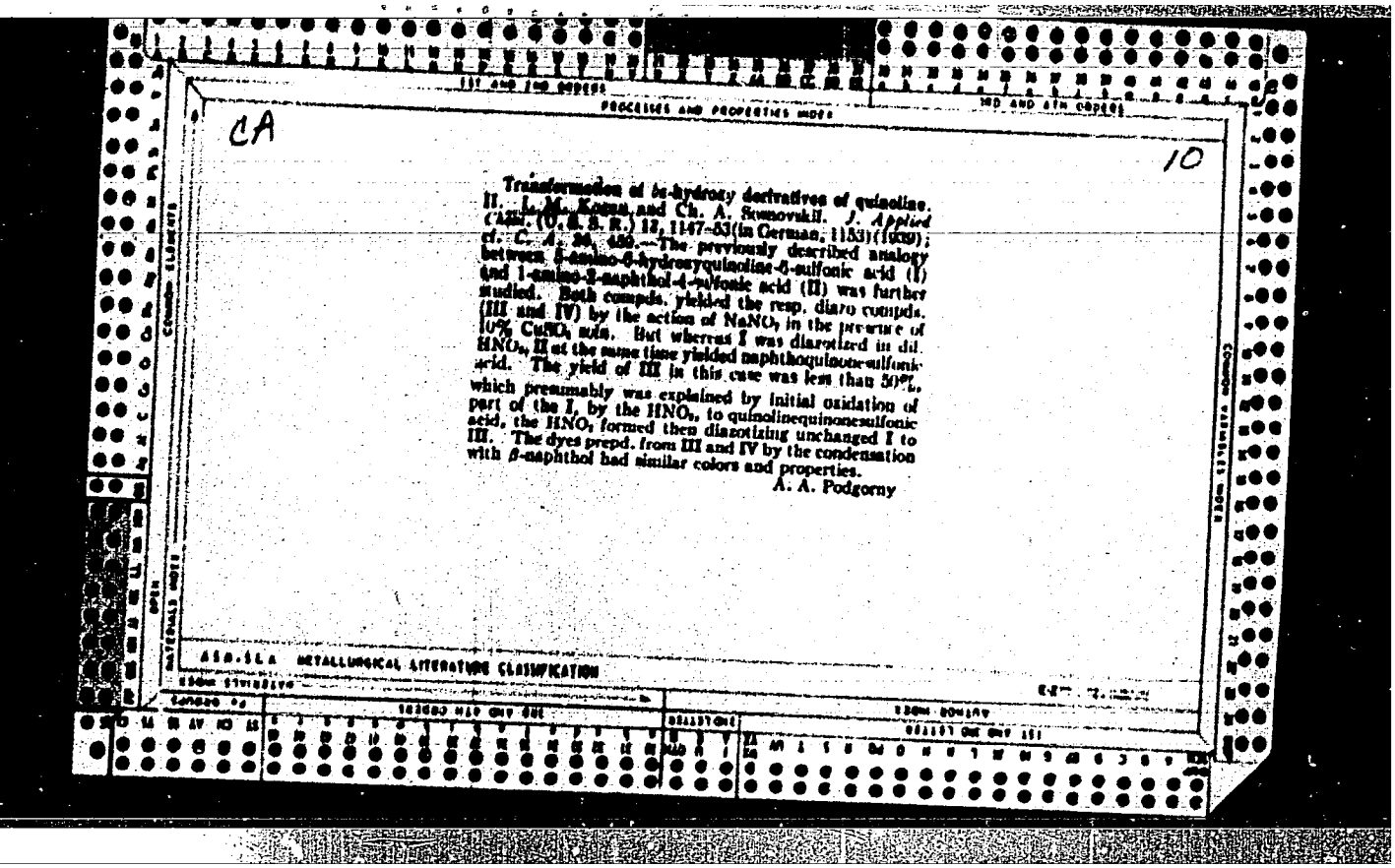


The reaction of azo dyes with nitrous acid. I. I. M. Kogan and M. A. Chekalin. *J. Applied Chem.* (U. S. S. R.) 11, 450-64(in French 464)(1938).—Helianthin (88.1 g.), in 4 l. of water treated with a mixt. of 200 cc. of concd. HCl and $NaNO_2$ soln. (200 g. in 600 cc. of water) at 20° for an hr., yielded yellow crystals of $Me_2NC_6H_4NO_2$, m. 162-3°. After sepn. of these crystals, the soln. was satd. with 1 kg. of NaCl, causing pptn. of nitrohelianthin. The mother liquor was treated with 15 g. β-naphthol in 200 cc. of water and 4 g. of NaOH at 0°, yielding the Orange II dye, therefore, the mother liquor contained some of $O.O_2S.C_6H_4.N{:}N$. Thus, the above reaction proceeded in 2 directions: (1) splitting of the azo compd. into the initial diazo compd. and nitro deriv. of the azo component (Me_2NPh)(65%); and (2) nitration of the azo dyes (35%). Thirty-one references. II. *Ibid.* 465-70(in French 470).—p-$NaO_3SC_6H_4N{:}NC_6H_4NH_2$ (30 g.) in 300 cc. of water contg. 4 g. of NaOH was treated with 7 g. of $NaNO_2$ in 30 cc. of water at 10°. No compds. similar to those obtained in treating helianthin were formed.—p-$HO_3SC_6H_4N{:}NC_{10}H_6NH_2$-α (32.9 g.) was dissolved in 200 cc. of warm water contg. 4 g. NaOH; after adding 60 g. of NaCl and 7 g. $NaNO_2$, 30 cc. of HCl were rapidly added at 10°, yielding a ppt. of $O.O_2SC_6H_4$-$N{:}N.C_{10}H_6.N{:}N$. The filtrate was treated with an alk. soln. of β-naphthol, yielding the Orange II dye, therefore, the filtrate contained p-$O.O_2S.C_6H_4.N{:}N$. The presence of 1,4-$O_2NC_{10}H_6N{:}N$ was also observed in the products of the reaction, but no NO_2 deriv. of the azo compd. was identified. Nine references. A. A. Podgorny

PROCESSES AND PROPERTIES INDEX

The interaction of 1,8-naphthylaminesulfonic acid with bisulfite. I. M. Kogan and A. I. Nikolaeva. *J. Applied Chem.* (U. S. S. R.) 11, 630-6 (in French 639) (1938); cf. *C. A.* 16, 1040; 23, 2433; 29, 954; and N. N. Vorozhtsov, *Anilin. Prom.* (U. S. S. R.) No. 1, 31 (1931). — 8,1-$NH_2C_{10}H_6SO_3Na$ and $NaHSO_3$ soln. of 100° Bé. were dild. with water to 100 cc. and refluxed on a water bath. In all cases 2.8 g. of 8,1-$NH_2C_{10}H_6SO_3H$ (97%) I was used while the amts. of $NaHSO_3$ were varied (20, 7 and 1 mol. per mol. of acid). An aliquot (1 cc.) was taken out at 0.5-1 hr. intervals for the detn. of the amt. of acid reacted. After 25 hrs., the amts. of I transformed to 8,1-$HOC_{10}H_6SO_3H$ II were 80, 80 and 2.6%, resp. To det. the effect of diln. of $NaHSO_3$ similar expts. were carried out with the 1:7 ratio of I to $NaHSO_3$ but dilg. with water to 100, 150, 200 and 400 cc. In this case, the yield of II decreased with increase of diln. The best yield was observed in the soln. having p_H about 4.2, and the lowest at p_H 4.6. To observe the effect of the H-ion concn., a series of expts. was carried out as follows: 3.1 g. of $NaHSO_3$ soln. (36° Bé.) and 24.6 g. of $NaHSO_4$ or $Al_2(SO_4)_3$ (in the same mol. ratio as $NaHSO_3$), yielding II in the amts. 25% (after 7 hrs.) and 11% (after 5 hrs.), resp. The partial substitution of $NaHSO_3$ with $PhNH_2.HCl$ (0.07 mol. and 0.01 mol. of $NaHSO_3$) yielded 8% of II after 4 hrs. which did not increase with the time. With 0.01 mol. of I, 0.01 mol. of $NaHSO_3$ and AcOH in amts. to make 5, 2, 1, 0.5 and 0.2% soln. the yields of II were 3, 11, 11, 18 and 6%, resp., after 3 hrs. Therefore, the reaction proceeded only in weakly acid soln. and the velocity of the reaction depended on the H-ion concn. The partial substitution of $NaHSO_3$ with $Al_2(SO_4)_3$ or $PhNH_2.HCl$ decreased the yield. The best reagent for the prepn. of II was $NaHSO_3$ in the amt. of 7 mol. per 1 mol. of I. A. A. Podgorny

ASM-SLA METALLURGICAL LITERATURE CLASSIFICATION

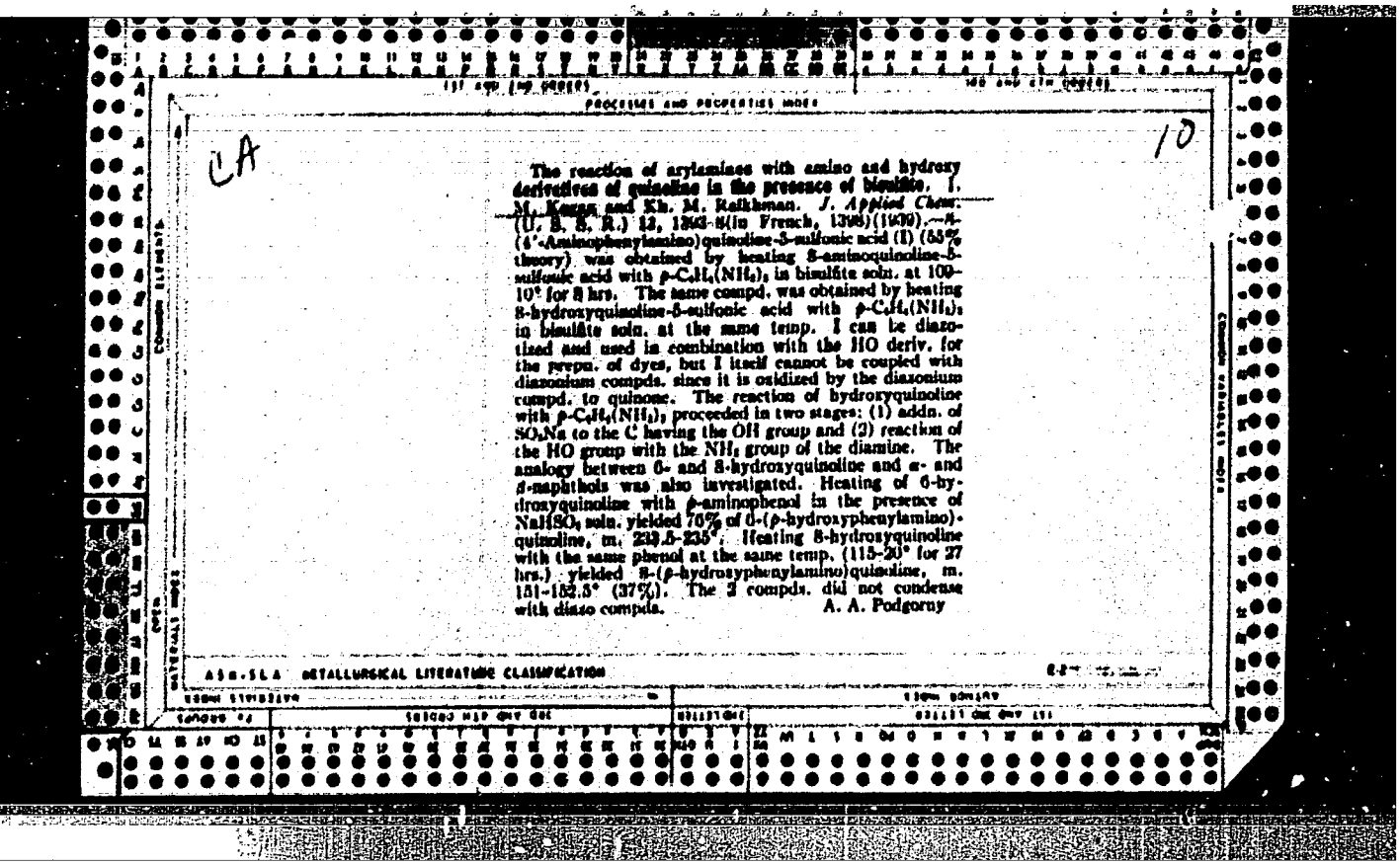


CA

10

Transformation of β-hydroxy derivatives of quinoline. II. L. M. Kogan and Ch. A. Stomovskii. *J. Applied Chem. (U.S.S.R.)* 12, 1147-53(in German, 1153)(1939); cf. *C. A.* 34, 450.—The previously described analogy between 8-amino-6-hydroxyquinoline-5-sulfonic acid (I) and 1-amino-2-naphthol-4-sulfonic acid (II) was further studied. Both compds. yielded the resp. diazo compds. (III and IV) by the action of $NaNO_2$ in the presence of 10% $CuNO_3$ soln. But whereas I was diazotized in dil. HNO_2, II at the same time yielded naphthoquinonesulfonic acid. The yield of III in this case was less than 50%, which presumably was explained by initial oxidation of part of the I, by the HNO_2, to quinolinequinonesulfonic acid, the HNO_2 formed then diazotizing unchanged I to III. The dyes prepd. from III and IV by the condensation with β-naphthol had similar colors and properties.

A. A. Podgorny

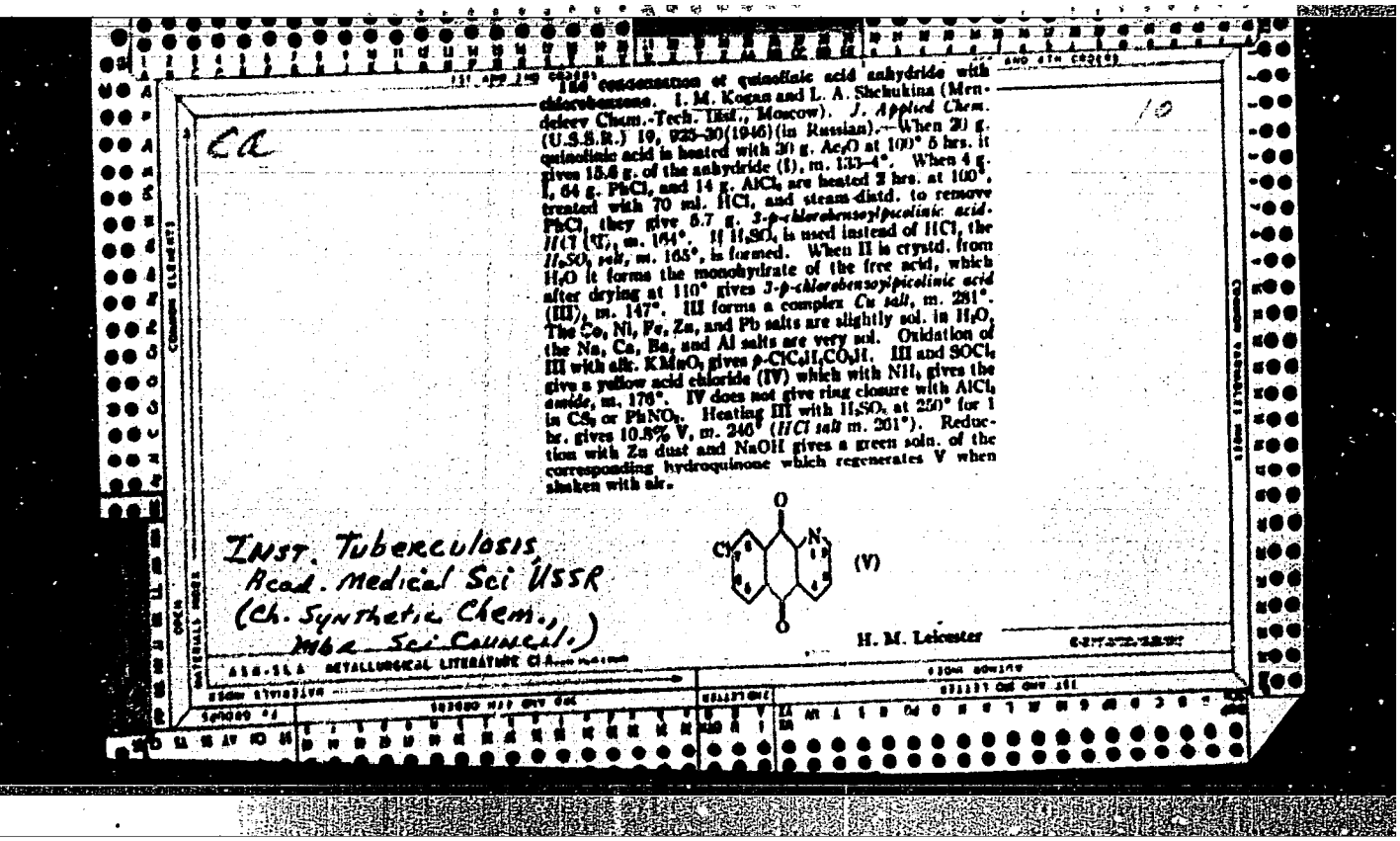


CA

10

The reaction of arylamines with amino and hydroxy derivatives of quinoline in the presence of bisulfite. I. M. Kogan and Kh. M. Rafikman. *J. Applied Chem. (U. S. S. R.)* 13, 1363-8(in French, 1369)(1940).—4-(4'-Aminophenylamino)quinoline-3-sulfonic acid (I) (55% theory) was obtained by heating 8-aminoquinoline-3-sulfonic acid with p-$C_6H_4(NH_2)_2$ in bisulfite soln. at 100-10° for 8 hrs. The same compd. was obtained by heating 8-hydroxyquinoline-3-sulfonic acid with p-$C_6H_4(NH_2)_2$ in bisulfite soln. at the same temp. I can be diazotized and used in combination with the HO deriv. for the prepn. of dyes, but I itself cannot be coupled with diazonium compds. since it is oxidized by the diazonium compd. to quinone. The reaction of hydroxyquinoline with p-$C_6H_4(NH_2)_2$ proceeded in two stages: (1) addn. of SO_3Na to the C having the OH group and (2) reaction of the HO group with the NH_2 group of the diamine. The analogy between 6- and 8-hydroxyquinoline and α- and β-naphthols was also investigated. Heating of 6-hydroxyquinoline with p-aminophenol in the presence of $NaHSO_3$ soln. yielded 70% of 6-(p-hydroxyphenylamino)-quinoline, m. 234.5-235°. Heating 8-hydroxyquinoline with the same phenol at the same temp. (115-20° for 27 hrs.) yielded 8-(p-hydroxyphenylamino)quinoline, m. 151-152.5° (37%). The 2 compds. did not condense with diazo compds.

A. A. Podgorny



CA

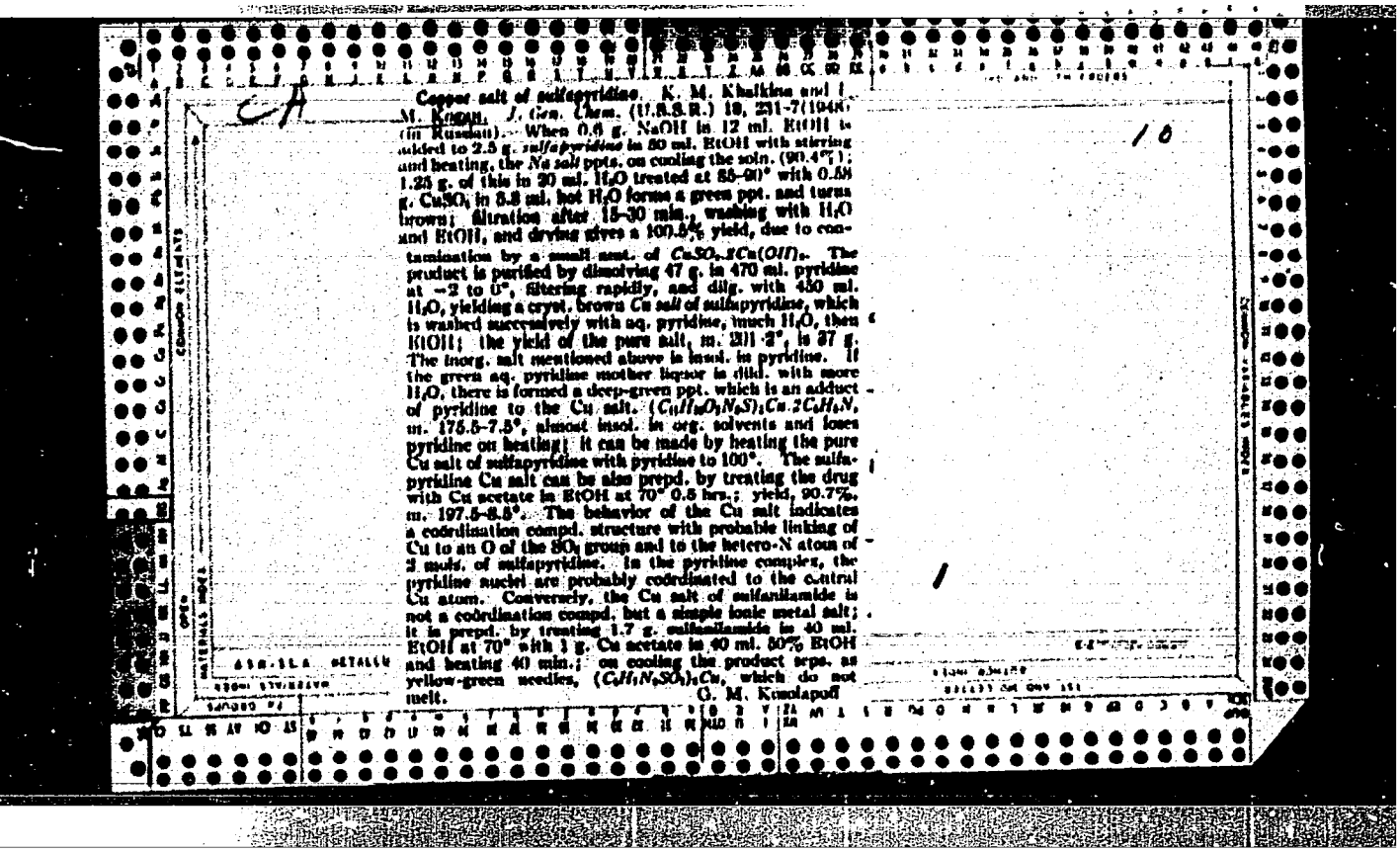
10

The condensation of quinolinic acid anhydride with chlorobenzene. I. M. Kogan and L. A. Shchukina (Mendeleev Chem.-Tech. Inst., Moscow). *J. Applied Chem. (U.S.S.R.)* 19, 925–30(1946)(in Russian).—When 20 g. quinolinic acid is heated with 20 g. Ac_2O at 100° 5 hrs. it gives 15.6 g. of the anhydride (I), m. 132–4°. When 4 g. I, 64 g. $PhCl$, and 14 g. $AlCl_3$ are heated 2 hrs. at 100°, treated with 70 ml. HCl, and steam-distd. to remove $PhCl$, they give 5.7 g. *3-p-chlorobenzoylpicolinic acid. HCl* (II), m. 164°. If H_2SO_4 is used instead of HCl, the H_2SO_4 *salt*, m. 165°, is formed. When II is crystd. from H_2O it forms the monohydrate of the free acid, which after drying at 110° gives *3-p-chlorobenzoylpicolinic acid* (III), m. 147°. III forms a complex *Cu salt*, m. 281°. The Co, Ni, Fe, Zn, and Pb salts are slightly sol. in H_2O, the Na, Ca, Ba, and Al salts are very sol. Oxidation of III with alk. $KMnO_4$ gives *p*-$ClC_6H_4CO_2H$. III and $SOCl_2$ give a yellow acid chloride (IV) which with NH_4 gives the *amide*, m. 176°. IV does not give ring closure with $AlCl_3$ in CS_2 or $PhNO_2$. Heating III with H_2SO_4 at 250° for 1 hr. gives 10.8% V, m. 240° (*HCl salt* m. 201°). Reduction with Zn dust and NaOH gives a green soln. of the corresponding hydroquinone which regenerates V when shaken with air.

(V)

H. M. Leicester

Inst. Tuberculosis, Acad. Medical Sci USSR (Ch. Synthetic Chem., Med Sci Council.)



CA

10

Copper salt of sulfapyridine. K. M. Khalkina and I. M. Kogan. *J. Gen. Chem.* (U.S.S.R.) 18, 231-7(1948) (in Russian).—When 0.6 g. NaOH in 12 ml. EtOH is added to 2.5 g. *sulfapyridine* in 50 ml. EtOH with stirring and heating, the *Na salt* ppts. on cooling the soln. (90.4%); 1.25 g. of this in 20 ml. H_2O treated at 85–90° with 0.58 g. $CuSO_4$ in 5.8 ml. hot H_2O forms a green ppt. and turns brown; filtration after 15–30 min., washing with H_2O and EtOH, and drying gives a 100.5% yield, due to contamination by a small amt. of $CuSO_4 \cdot 3Cu(OH)_2$. The product is purified by dissolving 47 g. in 470 ml. pyridine at −2 to 0°, filtering rapidly, and dilg. with 450 ml. H_2O, yielding a cryst. brown *Cu salt of sulfapyridine*, which is washed successively with aq. pyridine, much H_2O, then EtOH; the yield of the pure salt, m. 211–2°, is 37 g. The inorg. salt mentioned above is insol. in pyridine. If the green aq. pyridine mother liquor is dild. with more H_2O, there is formed a deep-green ppt. which is an adduct of pyridine to the Cu salt, $(C_{11}H_{11}O_2N_3S)_2Cu \cdot 2C_5H_5N$, m. 175.5–7.5°, almost insol. in org. solvents and loses pyridine on heating; it can be made by heating the pure Cu salt of sulfapyridine with pyridine to 100°. The sulfapyridine Cu salt can be also prepd. by treating the drug with Cu acetate in EtOH at 70° 0.5 hrs.; yield, 90.7%, m. 197.5–8.5°. The behavior of the Cu salt indicates a coördination compd. structure with probable linking of Cu to an O of the SO_2 group and to the hetero-N atom of 2 mols. of sulfapyridine. In the pyridine complex, the pyridine nuclei are probably coördinated to the central Cu atom. Conversely, the Cu salt of sulfanilamide is not a coördination compd. but a simple ionic metal salt; it is prepd. by treating 1.7 g. sulfanilamide in 40 ml. EtOH at 70° with 1 g. Cu acetate in 40 ml. 50% EtOH and heating 40 min.; on cooling the product sepa. as yellow-green needles, $(C_6H_7N_2SO_2)_2Cu$, which do not melt.

G. M. Kosolapoff

(2)

Dinitro derivatives of diphenylurea and its substitution products. I. M. Korun and D. F. Kutepov. U.S.S.R. 78,379, Dec. 31, 1949. p-$(O_2NC_6H_4NH)_2CO$ or its substitution products are obtained by the action of dil. HNO_3 on $CO(NHPh)_2$ or its substitution products having no salt-forming groups. The reaction is carried out at elevated temp., up to 100°. M. Hosch

10-13-54 MAF