BORODINA, F.P.

Brief characteristics of natural foragelands in Kzyl-Orda Province. Trudy Inst. bot. AN Kazakh. SSR 13:73-100 '62. (MIRA 15:12)
(Kzyl-Orda Province--Pastures and meadows)

BORODINA, G. A.

Soap for sea water. M. N. Zaliopo, L. M. Baranov, and G. A. Borodina. *Maslobalno-Zhirovaya Prom* 19, No. 2, 16–18(1954).—Manuf. of soap from coconut oil (I) with good phys. and sea water laundering qualities is described. One half (4.4–5 tons) part of the I charge is run into the pan, and 40% soln. of NaOH is added until about 10% excess of alkali necessary to saponify I is present. An addnl. 2 tons of I is run into the same pan and saponif. The resulting paste (II) is treated with 20% soln. of NaCl at the rate of 1% of salt based on the wt. of II. The last 2 tons of I is then added to II, and the saponn. process is repeated. At this stage the soap paste (III) should contain fatty acids 42–45, free NaOH 1–1.4, and NaCl 1–1.2%. On leaving the pan III is cooled with water at 11° prior to drying. Drying is by mech. passage through a continuous drier with air-intake temp. at 90° and the exhaust at 50–52°. The soap shavings, contg. fatty acids 63–65 and free alkali 1.5–1.9% are mixed first with synthetic fatty acids (C_{16}–C_{18}) to improve the plasticity of the finished product and to reduce its alkali content to 0.2% of the wt. of acids, perfumed, and then compressed into a bar prior to cutting, moistening with glycerol, stamping, and packaging. The authors claim that this soap was used successfully in the maritime provinces for washing purposes. V. N. K.

BORODINA G.A.

ZALIOPO, M.N.; BARANOV, L.M.; BORODINA, G.A.

Use of synthesic fatty acids in the production of toilet soap.
Masl.-zhir.prom. 19 no.6:17-21 '54. (MLRA 7:10)
(Soap) (Acids, Fatty)

BORODINA, G.A.

Application of hyposulfate in manufacture of toilet soap. G. A. Borodina and E. S. Dmitrieva. *Maslobeino-Zhirovoye Prom.* 21, No. 1, 19-20(1950).—The problems in connection with the use of approx. 0.08% of $Na_2S_2O_3$ (I) in finished soap (II) to preserve or improve its original color are discussed. II made of rosin 2, coconut oil 12, beef tallow 86%, and contg. I grew lighter in color during 3 months' storage, but II made of rosin 5, coconut oil 7, lard and beef tallow 20, and hydrogenated cottonseed oil 68% became grayish in color owing to formation of Ni sulfide. Traces of Ni in hydrogenated fats and S from decompn. of I prohibited the use of I as a color preservative or improver for soaps.

Vladimir N. Krakovsky

(2)

BARODINA, G. A.

√Protection of toilet soap against darkening. S. A. Moldavskaya, B. S. Dmitrieva, G. A. Barodina, and L. M. Donetskaya (Factory "Svoboda," Moscow). *Maslobolno-Zhirovaya Prom.* 23, No. 3, 22–5(1957).—Toilet soap made of lard and beef-tallow developed dark spots over the surface area during storage, when contaminated with metal particles from the dis or manufg. e[illegible]inery. Whereas, soap made from 75% hydrogenated fat s[illegible]p stock did not develop dark spots in storage. Spot development was not retarded by 2–5% rosin, and was enhanced by 1% of a deodorant compd. Spot formation was inhibited by the addn. of 0.1% of water glass to soap after the graining operation. Inhibition of oxidative deterioration in soap during storage prevented spotting around metal nucleuses, especially that deposited on the surface of the soap from bronze.

Vladimir N. Krukovsky

ROZHDESTVENSKIY, D.A., kand.tekhn.nauk; ZALIOPO, M.N., inzh.; BORODINA, G.A., inzh.

Phase changes in soap and their quantitative determination. Masl.-zhir.prom. 25 no.9:24-28 '59. (MIRA 12:12)

1. Institut narodnogo khozyaystva im. G.V.Plekhanova (for Rozhdestvenskiy). 2. Moskovskaya fabrika "Svoboda" (for Zaliopo, Borodina)
(Soap)

ROZHDESTVENSKIY, D.A.; ZALIOPO, M.N.; BORODINA, G.A.

Phase transitions in soap and their quantitative analysis. Koll. zhur. 22 no.4:458-463 Jl-Ag '60. (MIRA 13:9)

1. Institut narodnogo khozyaystva im. G.V.Plekhanova i Fabrika "Svoboda", Moskva.

(Soap)

BORODINA, GALINA IVANOVNA

LEVKOVICH, Pavel Yemel'yanovich; BORODINA, Galina Ivanovna; KOBISHCHANOV, M.A., redaktor; RATNIKOVA, A.P., redaktor; NADEINSKAYA, A.A., tekhnicheskiy redaktor

[Rock pressure and roof control in stopes of mines of the Karaganda Basin] Gornoe davlenie i upravlenie krovlei v ochistnykh zaboiakh shakht Karagandinskogo basseina. Moskva, Gos.nauchno-tekhn. izd-vo lit-ry po ugol'noi promysh., 1955. 92 p.
(MLRA 9:2)

(Karaganda Basin--Coal mines and mining)

DUDKO, I.M.; BORODINA, G.I.

Daily working regime in mines and longwalls after changing all underground workers to a six-hour working day. Sbor. DonUGI no.28:155-165 '62. (MIRA 16:8)
(Hours of labor) (Coal mines and mining--Management)

[illegible], [illegible]; [illegible], [illegible]; [illegible], Inzh.; [illegible], [illegible]

Analysis of [illegible] not fulfilling the standards of cyclicity. [illegible], [illegible]

([illegible] 17:10)

APPROVED FOR RELEASE: 06/09/2000 CIA-RDP86-00513R000206430001-5"

LUKINA, M.T., kand.khim.nauk; BORODINA, G.L., nauchnyy sotrudnik

The linear color method for the determination of carbon dioxide gas in the atmosphere. Gig. i san. 24 no.8:80-82 Ag '59.
(MIRA 12:11)

1. Iz Ural'skogo nauchno-issledovatel'skogo instituta Akademii kommunal'nogo khozyaystva imeni K.D.Pamfilova.
(AIR POLLUTION)

BORODINA, G. M. and DORMIDONTOV, A. A.

"Severe Case of Ascaridiasis", Med. Paraz. i Paraz. Bolez., Vol. 17, No. 2, pp 181, 1948.

BORODINA, G. M.

BORODINA, G. M.- "Certain Features of the Clinical Course of Pneumonia in Rachitic Children." Sverdlovsk State Med Inst, Sverdlovsk, 1955 (Dissertations for Degree of Candidate of Medical Sciences)

SO: Knizhnaya Letopis' No. 26, June 1955, Moscow

BORODINA, G.M.

Some peculiarities of the clinical course of pneumonia in children. Vop.okh.mat. i det. 1 no.6:87-88 N-D '56. (MIRA 10:1)

1. Iz kafedry fakul'tetskoy pediatrii Sverdlovskogo gosudarstvennogo meditsinskogo instituta.
(PNEUMONIA) (RICKETS)

PROCESSES AND PROPERTIES INDEX

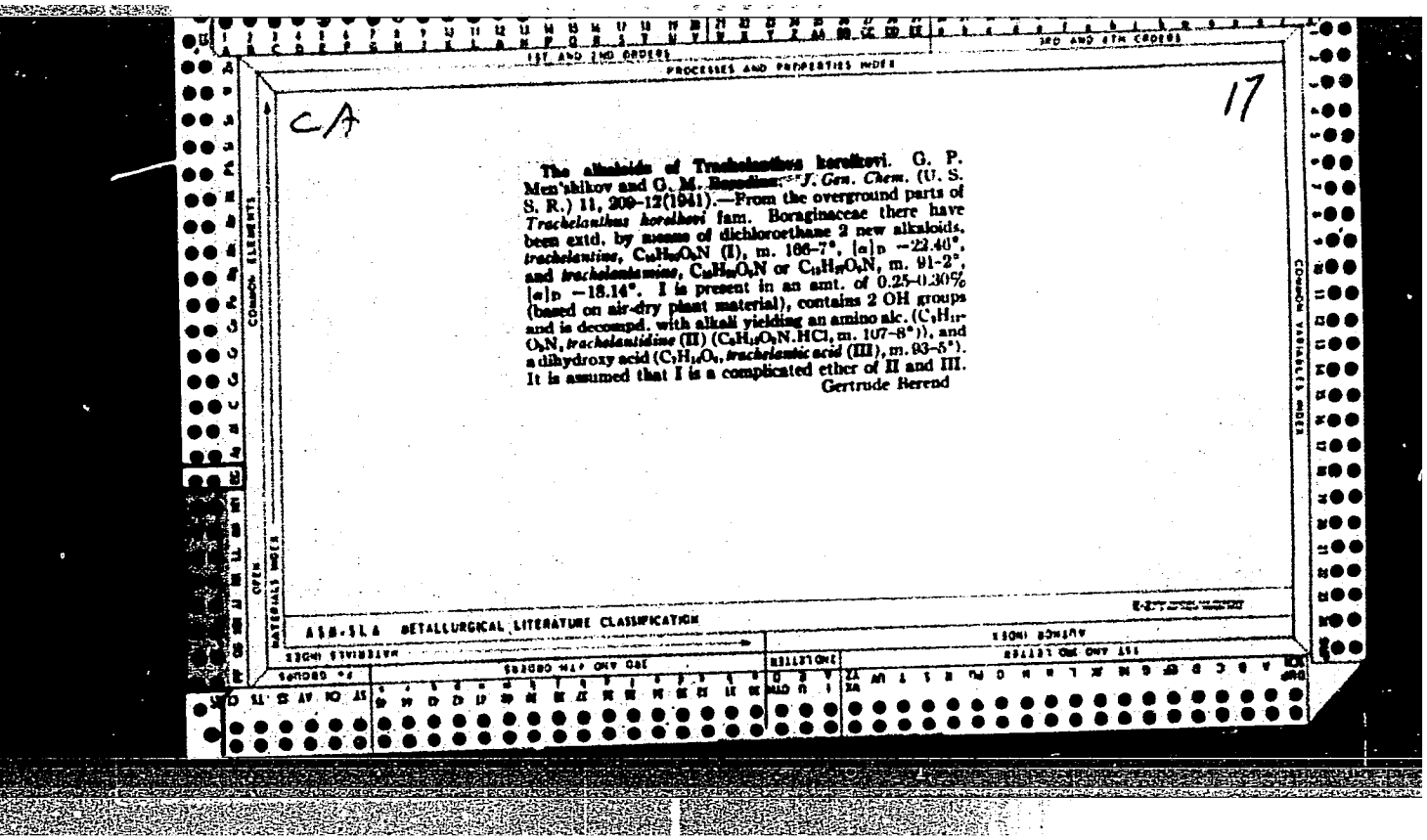
BC

A-3

Reduction of lead organic nitro-compounds. K. A. Kotscheschkov and G. M. Borodina (Bull. Acad. Sci. U.R.S.S., Sér. Chim., 1937, 569—576).—$PbPh_2(NO_3)_2$ and fuming HNO_3 (7 hr. at 100°) yield $[m-C_6H_4(NO_2)]_2Pb(NO_3)_2$, converted by HBr into Pb di-m-nitrophenyl dibromide, reduction of which in acid, alkaline, or neutral solution leads to formation of amine, which immediately decomposes into NH_2Ph and $PbBr_2$.

R. T.

ASM-SLA METALLURGICAL LITERATURE CLASSIFICATION

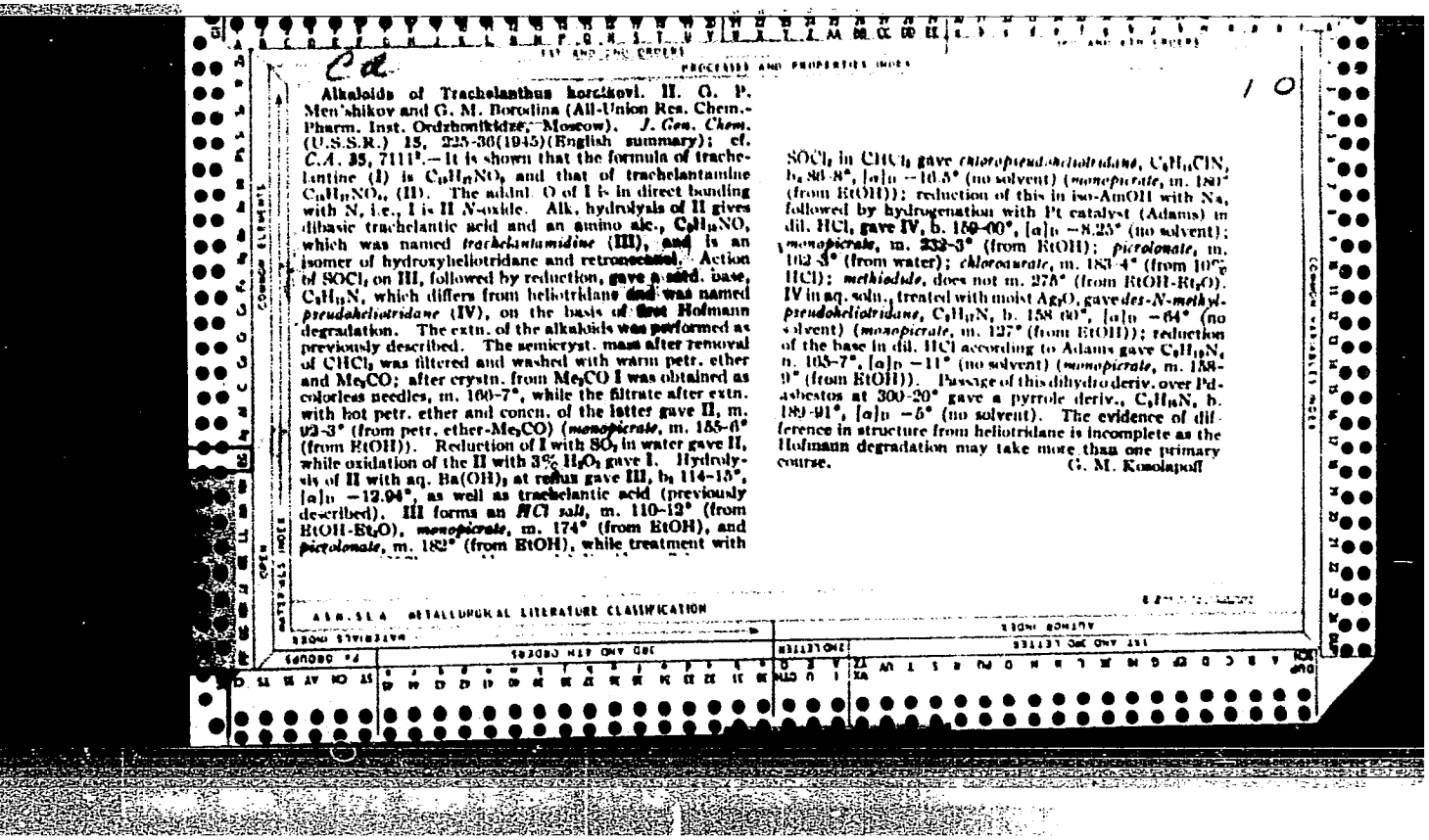


CA

17

The alkaloids of Trachelanthus korolkovi. G. P. Men'shikov and G. M. Rozenblium. *J. Gen. Chem.* (U. S. S. R.) 11, 209–12(1941).—From the overground parts of *Trachelanthus korolkovi* fam. Boraginaceae there have been extd. by means of dichloroethane 2 new alkaloids, *trachelantine*, $C_{15}H_{25}O_5N$ (I), m. 166–7°, $[\alpha]_D$ −22.40°, and *trachelanthamine*, $C_{15}H_{25}O_4N$ or $C_{15}H_{27}O_4N$, m. 91–2°, $[\alpha]_D$ −18.14°. I is present in an amt. of 0.25–0.30% (based on air-dry plant material), contains 2 OH groups and is decompd. with alkali yielding an amino alc. ($C_5H_{11}O_2N$, *trachelanthidine* (II) ($C_5H_{11}O_2N$.HCl, m. 107–8°)), and a dihydroxy acid ($C_5H_{10}O_4$, *trachelanthic acid* (III), m. 93–5°). It is assumed that I is a complicated ether of II and III.

Gertrude Berend

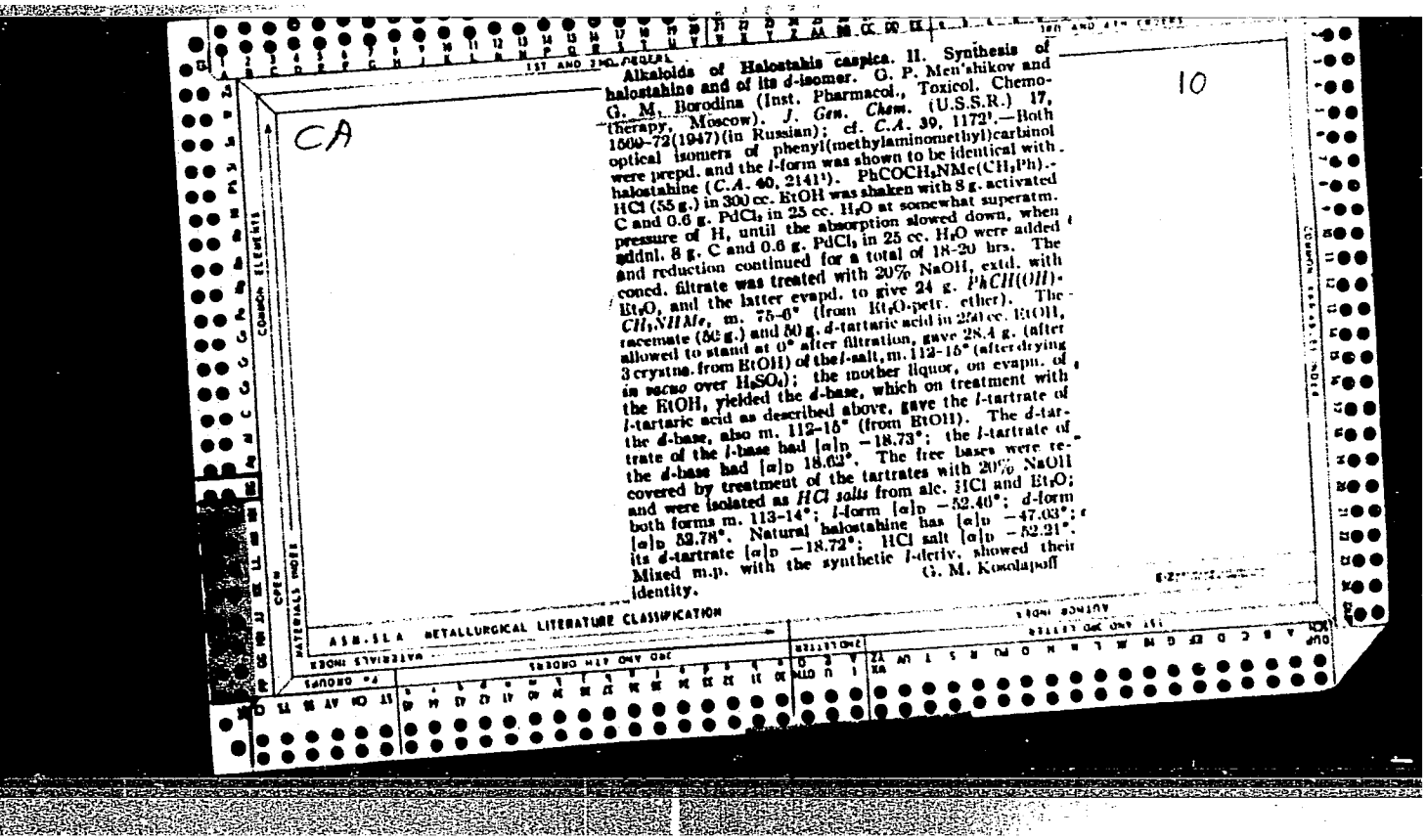


Cd

10

Alkaloids of Trachelanthus korolkovi. II. G. P. Men'shikov and G. M. Borodina (All-Union Res. Chem.-Pharm. Inst. Ordzhonikidze, Moscow). *J. Gen. Chem.* (U.S.S.R.) **15**, 225-30(1945)(English summary); cf. *C.A.* **35**, 7111[3].—It is shown that the formula of trachelantine (I) is $C_8H_{13}NO_3$ and that of trachelantamine $C_8H_{13}NO_4$, (II). The addnl. O of I is in direct bonding with N, i.e., I is II *N*-oxide. Alk. hydrolysis of II gives dibasic trachelantic acid and an amino alc., $C_8H_{15}NO$, which was named *trachelantamidine* (III), and is an isomer of hydroxyheliotridane and retronecanol. Action of $SOCl_2$ on III, followed by reduction, gave a satd. base, $C_8H_{15}N$, which differs from heliotridane and was named *pseudoheliotridane* (IV), on the basis of the Hofmann degradation. The extn. of the alkaloids was performed as previously described. The semicryst. mass after removal of $CHCl_3$ was filtered and washed with warm petr. ether and Me_2CO; after crystn. from Me_2CO I was obtained as colorless needles, m. 160–7°, while the filtrate after extn. with hot petr. ether and concn. of the latter gave II, m. 92–3° (from petr. ether-Me_2CO) (*monopicrate*, m. 185–6° (from EtOH)). Reduction of I with SO_2 in water gave II, while oxidation of the II with 3% H_2O_2 gave I. Hydrolysis of II with aq. $Ba(OH)_2$ at reflux gave III, b_5 114–15°, $[\alpha]_D$ −12.94°, as well as trachelantic acid (previously described). III forms an *HCl salt*, m. 110–12° (from EtOH-Et_2O), *monopicrate*, m. 174° (from EtOH), and *picrolonate*, m. 182° (from EtOH), while treatment with $SOCl_2$ in $CHCl_3$ gave *chloropseudoheliotridane*, $C_8H_{14}ClN$, b_5 86–8°, $[\alpha]_D$ −10.5° (no solvent) (*monopicrate*, m. 181° (from EtOH)); reduction of this in iso-AmOH with Na, followed by hydrogenation with Pt catalyst (Adams) in dil. HCl, gave IV, b. 189–90°, $[\alpha]_D$ −8.25° (no solvent); *monopicrate*, m. 233–3° (from EtOH); *picrolonate*, m. 102–3° (from water); *chloroaurate*, m. 183–4° (from 10% HCl); *methiodide*, does not m. 275° (from EtOH-Et_2O). IV in aq. soln., treated with moist Ag_2O, gave *des-N-methylpseudoheliotridane*, $C_7H_{13}N$, b. 158–60°, $[\alpha]_D$ −64° (no solvent) (*monopicrate*, m. 127° (from EtOH)); reduction of the base in dil. HCl according to Adams gave $C_7H_{15}N$, b. 165–7°, $[\alpha]_D$ −11° (no solvent) (*monopicrate*, m. 158–9° (from EtOH)). Passage of this dihydro deriv. over Pd-asbestos at 300–20° gave a pyrrole deriv., $C_7H_{11}N$, b. 189–91°, $[\alpha]_D$ −5° (no solvent). The evidence of difference in structure from heliotridane is incomplete as the Hofmann degradation may take more than one primary course.

G. M. Kosolapoff



CA

10

Alkaloids of Halostahis caspica. II. Synthesis of halostahine and of its *d*-isomer. G. P. Men'shikov and G. M. Borodina (Inst. Pharmacol., Toxicol. Chemotherapy, Moscow). *J. Gen. Chem.* (U.S.S.R.) 17, 1569–72(1947)(in Russian); cf. *C.A.* 39, 1172⁹.—Both optical isomers of phenyl(methylaminomethyl)carbinol were prepd. and the *l*-form was shown to be identical with halostahine (*C.A.* 40, 2141⁵). $PhCOCH_2NMe(CH_2Ph)$.-HCl (55 g.) in 300 cc. EtOH was shaken with 8 g. activated C and 0.6 g. $PdCl_2$ in 25 cc. H_2O at somewhat superatm. pressure of H, until the absorption slowed down, when addnl. 8 g. C and 0.6 g. $PdCl_2$ in 25 cc. H_2O were added and reduction continued for a total of 18–20 hrs. The concd. filtrate was treated with 20% NaOH, extd. with Et_2O, and the latter evapd. to give 24 g. $PhCH(OH)$-CH_2NHMe, m. 75–6° (from Et_2O-petr. ether). The racemate (56 g.) and 50 g. *d*-tartaric acid in 250 cc. EtOH, allowed to stand at 0° after filtration, gave 28.4 g. (after 3 crystns. from EtOH) of the *l*-salt, m. 112–15° (after drying in vacuo over H_2SO_4); the mother liquor, on evapn. of the EtOH, yielded the *d*-base, which on treatment with *l*-tartaric acid as described above, gave the *l*-tartrate of the *d*-base, also m. 112–15° (from EtOH). The *d*-tartrate of the *l*-base had $[\alpha]_D$ −18.73°; the *l*-tartrate of the *d*-base had $[\alpha]_D$ 18.62°. The free bases were recovered by treatment of the tartrates with 20% NaOH and were isolated as *HCl salts* from alc. HCl and Et_2O; both forms m. 113–14°; *l*-form $[\alpha]_D$ −52.40°; *d*-form $[\alpha]_D$ 52.78°. Natural halostahine has $[\alpha]_D$ −47.03°; its *d*-tartrate $[\alpha]_D$ −18.72°; HCl salt $[\alpha]_D$ −52.21°. Mixed m.p. with the synthetic *l*-deriv. showed their identity.

G. M. Kosolapoff

BORODINA, G. M.

R/Chemistry - Alkaloids Apr 51

ynthesis and Structure of Certain Colchicine De-
ivatives," M. N. Shchukina, G. M. Borodina, Yu. N.
eynker, All-Union Sci Res Chemicopharm Inst imeni
Ordzhonikidze, Moscow

Zhur Obshch Khim" Vol XXI, No 4, pp 735-739

obtained new substitution compds of colchicine with-
ut splitting basic mol skeleton. Examd interaction
f colchicine with: (1) alc solns of org amines,
here methoxy group on ring C was replaced by amine
radical; and (2) with alc soln of sodium alcoholate,
where methoxyl group was saponf, ring C aromatized.

182T25

USSR/Chemistry - Alkaloids (Contd) Apr 51

and carboxylic acid salt formed. Describes Me and
Et esters of latter, obtained by action of alkyl
halides on it. Interaction of aminocolchicine and
chlorocarbonic acid ester yielded carbothoxyamino-
colchicine.

182T25

BORODINA, G. M.

232T31

USSR/Chemistry - Pharmaceuticals Sep 52

"Some Syntheses in the Series of 4-Acetaminobenzaldehydes," M. N. Shchukina, G. M. Borodina, Ye. D. Sazonova, All-Union Sci Res Chem-Phar Inst imeni S. Ordzhonikidze, Moscow

"Zhur Obshch Khim" Vol 22, No 9, pp 1659-1663

A series of aromatic aldehydes contg substituents in the 2 and 3 positions as well as an acetamino group in the 4 position were obtained. The thiosemicarbazones of these aldehydes were prepd. By treating 4-amino-2- and 3-methoxybenzaldehydes

232T31

with succinic anhydride or benzoyl chloride, the corresponding acylated compds were obtained. The prepn of 4-acetamino-2-methoxycinnamic acid, 4-acetamino-2-methoxyhydroxycinnamic acid, and 4-amino-2-oxyhydrocinnamic acid is described.

232T31

Alkylation of the ethyl ester of β-hydroxycapric acid. G. M. Borodina and M. N. Shchukina (S. Ordzhonikidze All-Union Sci. Research Chem.-Pharm. Inst., Moscow). *Sbornik Statei Obshchei Khim., Akad. Nauk S.S.S.R.* 1, 382-4(1953).—Addn. of 42 g. C7H15CHO and 60 g. $BrCH_2CO_2Et$ in 60 ml. C_6H_6 to 23.5 g. activated Zn dust under 25 ml. Et_2O, followed by brief warming, started a vigorous reaction which required external cooling even when the addn. extended over 1-2 hrs. The mixt. heated 1.5 hrs. longer, treated with 10% H_2SO_4 and the org. layer sepd., washed and distd. yielded 48% $C_7H_{15}CH(OH)CH_2CO_2Et$ (I), b_{15} 130-5°, d_{20} 0.9354, n_D^{20} 1.4365. I (10.5 g.) and 24 g. EtI in 20 ml. EtOH were treated with 18 g. dry Ag_2O and the mixt. stirred at reflux 20 hrs., filtered and the filtrate distd. yielding 5 g. I and 30% $C_7H_{15}CH(OEt)CH_2CO_2Et$, b_{15} 93°, d_{20} 0.8892, n_D^{20} 1.420. Similarly were obtained the following *alkoxy analogs* of I: *BuO*, b_{15} 104-6°, d_{20} 0.8721, n_D^{20} 1.4230; $C_5H_{11}O$, b_{10} 110-14°, d_{20} 0.8714, n_D^{20} 1.4285; $C_6H_{13}O$, b_{13} 155-7°, d_{20} 0.8713, n_D^{20} 1.4313. Hydrolysis of the corresponding esters with 40% KOH 12 hrs. at room temp. gave the following free acids: $C_7H_{15}CH(OEt)CH_2CO_2H$, b_{15} 120-5°, m. 13-14°; *BuO analog*, b_5 119-21°, f.p. about 5°; $C_5H_{11}O$ *analog*, b_{10} 113-16°, f.p. 0-2°. The yields of both the esters and the acids were rather low. G. M. K.

BORODINA, G. M.

USSR/Chemistry - Synthesis

Card 1/1 Pub. 151 - 9/38

Authors : Borodina, G. M.

Title : Synthesis of certain beta-hydroxy acids and their esters

Periodical : Zhur. ob. khim. 24/2, 235-238, Feb 1954

Abstract : The synthesis of ethyl ethers of beta-ketotridecane and beta-ketopentadecane acids through partial acidolysis of acylmalonic esters, obtained from the reaction of magnesium ethoxymalonic ester with undecane and tridecane acid chloride, is described. The chemical properties of the derived acids were analyzed. The products obtained through saponification of esters of beta-hydroxytridecane, beta-hydroxypentadecane and beta-hydroxystearic acids, with an aqueous alcohol solution of potassium hydroxide, are listed. Seven references 2-USA; 3-German; 1-French and 1-Italian (1869-1951).

Institution : The S. Ordzhonikidze All-Union Scientific Research Chem-Pharm. Inst. Moscow

Submitted : June 10, 1953

USSR/ Chemistry Synthesis methods

Card : 1/1 Pub. 151 - 22/35

Authors : Borodina, G. M., and Tarasevich, E. S.

Title : Synthesis of certain derivatives of aliphatic beta-amino acids

Periodical : Zhur. ob. khim. 24, Ed. 7, 1205 - 1207, July 1954

Abstract : The synthesis of beta-amino undecane and beta-amino lauric acids (aliphatic beta-amino acid derivatives), by the reaction of aldehydes with malonic acid and alcohol ammonia solution, is described. The process of obtaining ethyl ethers and homologous hydroxamic acids, from the above mentioned amino acids, is explained. Three German and 2 USSR references.

Institution : The S. Ordzhonikidze All Union Scient.-Research Chemical Pharmaceutical Institute

Submitted : January 29, 1954

BORODINA, G.M.; ANTOSHINA, N.V.

Coordination of work plans of scientifical research institutes and experimental factory laboratories of the medical supplies industry for 1955. Med.prom. no.1:45-46 Ja-Mr '55. (MLRA 8:5)

(MEDICAL SUPPLIES)

BORODINA, G.M.

Conference on coordinating plans for 1957. Med. prom. 11 no.2:64-65 F '57 (MLRA 10:4)

(MEDICAL SUPPLIES)

AUTHOR: Borodina, G. M.

TITLE: Certain Reactions of Halostachyn (Nekotorye Reaktsii galostakhina)

PERIODICAL: Zhurnal Obshchey Khimii, 1957, Vol. 27, No. 1, pp. 281-283 (U.S.S.R.)

ABSTRACT: The report describes certain synthetic reactions of halostachyn (phenylmethylaminomethylcarbinol). Nitration of levo- and dextro-halostachyns gave levo- and dextro-nitrophenylmethylaminomethyl-carbinols, separated in the form of their hydrochlorides. The latter were reduced in presence of palladium over carbon into homologous levo- and dextro-aminophenyldimethylaminomethylcarbinols. The nitro-hydrochlorides obtained had a melting point of 210-215° for both antipodes which indicates their lack in para- and meta-isomer mixture. Catalytic hydrogenation of levo- and dextro-nitrophenylmethylaminomethyl carbinol hydrochlorides in presence of palladium over carbon yielded levo- and dextro-aminophenyl-methylaminomethylcarbinol hydrochlorides which were diazotized, and levo- and dextro-diazophenylmethylaminomethylcarbinols which were combined with beta-naphthol with the formation of azo-dyes.

Card 1/2

Certain Reactions of Halostachyn

As to the beta-naphthol combination product, it is known that in this reaction the hydroxyl group of the beta-naphthol is always in ortho-position relative to the diazo-component.
There are 4 references, of which 2 are Slavic.

ASSOCIATION: All-Union Scientific-Research Chemical-Pharmaceutical Institute im. S. Ordzhonikidze (Vsesoyuznyy Nauchno-Issledovatel'skiy Khimiko-Farmatsevticheskiy Institut im. S. Ordzhonikidze)

PRESENTED BY:

SUBMITTED: January 30, 1956

AVAILABLE:

Card 2/2

BORODINA, G.M.

Condensation reaction of 8-chloro-methyl-caffeine and arsanilic acid. Khim.nauk i prom. 3 no.5:681 '58. (MIRA 11:11)

1. Vsesoyuznyy nauchno-issledovatel'skiy khimiko-farmatsevticheskiy institut im S. Ordzhonikidze.
(Caffeine) (Arsanilic acid)

BORODINA, G.M.

Conference on coordinating research plans. Med.prom. 12 no.2:64-65 F '58. (MIRA 11:3)
(PHARMACEUTICAL RESEARCH)

69996

5.3900

AUTHORS: Kraft, M. Ya., Borodina, G. M., Strel'tsova, I. N., Struchkov, Yu. T.

S/020/60/131/05/025/069
B011/B117

TITLE: Structure of Monomeric Arseno Compounds

PERIODICAL: Doklady Akademii nauk SSSR, 1960, Vol 131, Nr 5, pp 1074-1076 (USSR)

TEXT: It was proved by the authors in their paper that among all determinations of the molecular weight of arsenobenzene given in literature, only the methods by F. F. Blicke and F. Smith (Ref 10) are correct. All results obtained with other methods are distorted by resinification reactions. All arseno compounds hitherto described can be divided into two groups: I) colored, amorphous, non-crystallizing and non-distillable compounds. Some of these are insoluble in any solvent, others are soluble in appropriate solvents only, when they form viscous solutions. They were found to be polymers (see scheme). II) Colorless and easily crystallizing, distillable substances. They have the character of monomers. A cyclic structure was demonstrated for arsenomethane (III). The situation is more complicated with arsenobenzene: its molecular weight is rather different according to the individual researchers and techniques used (399.8, 402, 642 and, finally, according to F. F. Blicke and F. Smith 895 and 915). It was obviously because of this multiplicity that the structural formula R—As=As-R (R = C_6H_5) was adopted. It is, however, improbable that a compound with such a

Card 1/3

Structure of Monomeric Arseno Compounds

S/020/60/131/05/025/069
B011/B117

structure should be colorless. The authors presume that the difference between above-mentioned results could be explained with reference to the instability of the arsenobenzene. Its resinification (polymerization) products are most readily oxidized in air up to C_6H_5AsO. The latter as well as the resinification products of arsenobenzene are very readily soluble in many solvents, but are difficult to detect whereby unreliable results for the molecular weight of arsenobenzene are obtained. The authors arrived at the conclusion that reliable data on the structure of arsenobenzene can be obtained only when the X-ray structural analysis method is used. The thin, almost colorless (yellowish) crystals of arsenobenzene form thin needles. Axis b is the longer one. The simpler shapes are pinacoids {100} and {001}. From data obtained, the authors came to the conclusion that there are 3 crystallographically non-equivalent As atoms contained in a cell. As is proved by the established projection of the electron density (Fig 1), the arsenobenzene molecule is a cyclic system consisting of As atoms. One phenyl group is bound to each As atom. The cycle is six-membered (IV). Such cyclic molecules occupy the position of centers of symmetry within the crystal. The cycle is not arranged in one plane, but has a chair-shaped configuration and a valence angle As - As - As of 93°. The outer valence angles As - As - C are

69996

Structure of Monomeric Arseno Compounds

S/020/60/131/05/025/069
B011/B117

99 ± 3°. The lengths of the bonds As - As are 2.44 A, and that of the bonds C - As = 1.96 A. Provided that data for arsenobenzene given by Blicke and Smith are correct, then their data on the molecular weights of p-arsenotoluene and p-arsenoanisol are also reliable. Hence, the authors come to the conclusion that there are no arseno compounds with a structure R - As=AS - R at all. They actually are either polymers (I) and (II) or cyclic compounds (III) and (IV). There are 1 figure and 10 references, 3 of which are Soviet.

ASSOCIATION: Vsesoyuznyy nauchno-issledovatel'skiy khimiko-farmatsevticheskiy institut im. S. Ordzhonikidze (All-Union Chemicopharmaceutical Scientific Research Institute imeni S. Ordzhonikidze). Institut elementoorganicheskikh soyedineniy Akademii nauk SSSR (Institute of Elemental Organic Compounds of the Academy of Sciences, USSR)

PRESENTED: October 12, 1959, by A.N. Nesmeyanov, Academician

SUBMITTED: October 6, 1959

Card 3/3

KRAFT, M.Ya.; BORODINA, G.M.

Reactions of diphenyltin with iodine. Zhur.ob.khim. 32 no.5:1665-1667 My '62. (MIRA 15:5)

1. Vsesoyuznyy nauchno-issledovatel'skiy khimiko-farmatsevticheskiy institut imeni S.Ordzhonikidze.
(Tin) (Iodine)

PERSHIN, G.N., prof.; KRAFT, M.Ya., prof.; ROZENTUL, M.A., prof.; POZHARSKAYA, A.M., starshiy nauchnyy sotrudnik; MILOVANOVA, S.N., starshiy nauchnyy sotrudnik; BORODINA, G.M., starshiy nauchnyy sotrudnik; MASLOV, P.Ye., starshiy nauchnyy sotrudnik; IVANOVSKAYA, Ye.A., mladshiy nauchnyy sotrudnik; ARONSON, P.Yu., mladshiy nauchnyy sotrudnik; KANCHUKH, Sh.F.; SHEYER, A.A.; ZALIOPO, M.P., spetsialist po moyushchim sredstvam

Treatment of your hair with selenium sulfide soap. Izobr. i rats. no.12:32-33 '63. (MIRA 17:2)

1. Zaveduyushchiy laboratoriyey khimioterapii infektsionnykh zabolevaniy Vsesoyuznogo nauchno-issledovatel'skogo khimiko-farmatsevticheskogo instituta im. Ordzhonikidze (for Pershin). 2. Zaveduyushchiy laboratoriyey metalloorganicheskikh soyedineniy Vsesoyuznogo nauchno-issledovatel'skogo khimiko-farmatsevticheskogo instituta im. Ordzhonikidze (for Kraft). 3. Zaveduyushchiy otdelom TSentral'nogo kozhno-venerologicheskogo instituta (for Rozentul). 4. Zaveduyushchiy laboratoriyey lekarstvennykh form Vsesoyuznogo nauchno-issledovatel'skogo khimiko-farmatsevticheskogo instituta im. Ordzhonikidze (for Pozharskaya). 5. Vsesoyuznyy nauchno-issledovatel'skiy khimiko-farmatsevticheskiy institut im. Ordzhonikidze (for Milovanova, Borodina, Ivanovskaya, Aronson). 6. Tsentral'nyy kozhno-venerologicheskiy institut (for Maslov).

Borodina, G.N.

BORODINA, G.N.; YANOVITSKIY, M.G. (Moskva)

Dynamic electrocardiographic observations during the treatment of hypertension with prolonged hunger. Klin.med. 35 no.7:123-129 Jl '57. (MIRA 10:11)

1. Iz otdeleniya lechebnoy fizkul'tury (zav. - prof. V.N.Moshkov) i otdeleniya funktsional'noy diagnostiki (zav. - doktor meditsinskikh nauk G.Ye.Marantidi) TSentral'nogo instituta kurortologii (dir. - kandidat meditsinskikh nauk G.N.Pospelova).

(HYPERTENSION, therapy,
hunger, eff. on ECG (Rus))
(HUNGER, therapeutic use,
hypertension, eff. on ECG (Rus))
(ELECTROCARDIOGRAPHY, in various diseases,
hypertension, eff. of hunger ther. (Rus))

MESHCHERSKAYA, K.A.; BORODINA, G.P.; KOROLEVA, N.P.; LITVAK, F.I.; OSTROVSKAYA, L.A.

Effect of β-sitosterol on the course of experimentally induced atherosclerosis in rats and rabbits. Farm.i toks. 22 no.5:434-440 S-O '59. (MIRA 13:3)

1. Kafedra farmakologii, biokhimii, patanatomii i fakul'tetskoy terapii Blagoveshchenskogo meditsinskogo instituta.
(STEROLS pharmacol.)
(ARTERIOSCLEROSIS exper.)

REYMERS, F.E.; BORODINA, G.P.

Changes in the sugar content of onion bulbs in winter and transition of plants to the fruit-bearing period. Trudy Vost.-Sib.fil. AN SSSR no.20:3-18 '60. (MIRA 13:11)
(Onions—Storage) (Sugars)
(Plants, Effect of temperature on)

DANOVICH, K.N.; SENDAROVICH, B.P.; BORODINA, G.P.

Seed corn production in Eastern Siberia. Trudy Vost.-Sib.fil. AN SSSR no.20:29-39 '60. (MIRA 13:11)
(Siberia, Eastern—Corn (Maize))
(Seed production)

BORODINA, G.P.

Some data on brewing qualities of barleys grown in Irkutsk Province. Trudy Vost.-Sib.fil. AN SSSR no.20:121-123 '60. (MIRA 13:11)
(Irkutsk Province--Barley--Varieties)
(Brewing)

MESHCHERSKAYA, K.A.; BORODINA, G.P.

Role of bile acids in the hypocholesterinemic action of β-sitosterol. Farm. i toks. 25 no.1:44-47 Ja-F '62. (MIRA 15:4)

1. Kafedra farmakologii (zav. - prof. K.A.Meshcherskaya) i biokhimii (zav. - dotsent A.Ye.Borodin) Blagoveshchenskogo gosudarstvennogo meditsinskogo instituta.

(SITOSTEROLS) (CHOLESTEROL) (BILE ACIDS)

MESHCHERSKAYA, K.A.; BORODINA, G.P.

Sorptive properties of skeletal rat muscles in alloxan diabetes.
Trudy MOIP. Otd. biol. 9:27-29 '64. (MIRA 18:1)

1. Meditsinskiy institut, g. Blagoveshchensk.

MESHCHERSKAYA, K.A.; KOROLEVA, N.P.; BORODINA, G.P.

Influence of lignoceryl alcohol on the course of experimental atherosclerosis in rats. Farm. i toks. 24 no.5:583-586 S-O '61. (MIRA 14:10)

1. Kafedry farmakologii, pathologicheskoy anatomii i biologicheskoy khimii Blagoveshchenskogo meditsinskogo instituta.

(ARTERIOSCLEROSIS) (LIGNOSERYL ALCOHOL)

S/033/60/037/005/014/024
E032/E514

AUTHOR: Borodina, G.V.

TITLE: Calculation of the Flux of Stellar Radiation at the Slit of a Spectrograph

PERIODICAL: Astronomicheskiy zhurnal, 1960, Vol.37, No.5, pp.897-901

TEXT: The flux of radiation from a star of magnitude m which passes across a telescope objective of diameter D is calculated from the formula (Ref.1)

$$F = \eta \frac{\pi D^2}{4} E = \eta \frac{\pi D^2}{4} \cdot 2.13 \cdot 10^{-10} \cdot 2.5119^{-m} \text{ lumen} \quad (1)$$

where E is the illumination due to the star in phots. It is assumed that the losses in the telescope objective can be neglected, i.e. $\eta = 1$. Diffraction and flicker effects are allowed for by assuming that the diffraction pattern is randomly disturbed in accordance with the usual Gaussian distribution. There are 4 figures, 2 tables and 5 references: 3 Soviet and 2 English.

ASSOCIATION: Glavnaya astronomicheskaya observatoriya Akademii nauk SSSR (Main Astronomical Observatory of the Academy of Sciences USSR)

SUBMITTED: January 21, 1960

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SOV/24-59-3-22/33

AUTHOR: Borodina, I. A. (Leningrad)

TITLE: Generation of Oscillations in Current Regulation Systems

PERIODICAL: Izvestiya Akademii nauk SSSR, Otdeleniye tekhnicheskikh nauk, Energetika i avtomatika, 1959, Nr 3, pp 155-159 (USSR)

ABSTRACT: The generation of oscillations is that deliberately excited for special purposes in systems containing amplidynes. The general circuit diagram is shown in Fig 1; the system for which the equations have been compiled is that of Fig 2. The rest of the paper is simply an extended demonstration of the fact that oscillations of stable amplitude and frequency are possible; some numerical values are given for a case in which the oscillations are of small amplitude and have a nearly sinusoidal waveform. The paper contains 7 figures and 4 Soviet references.

SUBMITTED: March 30, 1959.

Card 1/1

DRIVING, A.Ya., inzh.; MATEVOSYAN, R.R., doktor tekhn. nauk, red.; BORODINA, I.S., red.

[Stability of poles with wire guys] Ustroichivost' macht na ottiazhkakh. Moskva, Stroiizdat, 1964. 111 p. (MIRA 17:10)

AUTHOR: Borodina, I. V. SOV/64-58-5-17/21

TITLE: Scientific Conferences of the Member States of the Council of Mutual Economic Aid (Nauchnyye soveshchaniya stran-uchastnits Soveta Ekonomicheskoy Vzaimopomoshchi) Conference on the Problems of the Investigation and Production of Synthetic Rubber (Soveshchaniye po voprosam issledovaniy i proizvodstva sinteticheskogo kauchuka)

PERIODICAL: Khimicheskaya promyshlennost', 1958, Nr 5, pp. 322-322 (USSR)

ABSTRACT: The conference took place in Leningrad from May 15 to 24 and it was attended by delegates from the following countries: the Bulgarian People's Republic, the Hungarian People's Republic, The German Democratic Republic, the Polish People's Republic, the Roumanian People's Republic, the Soviet Union and the Czechoslovakian Republic. There were also observers delegated from the Chinese People's Republic. 22 lectures were given and discussed, among them some on the level and the prospects of the production of synthetic rubber in the German Democratic Republic, Poland, the USSR and Czechoslovakia. Lectures were given on the problems of the production of divinylstyrene rubber in the German Democratic Republic, the

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Scientific Conferences of the Member States of the Council of Mutual Economic Aid. Conference on the Problems of the Investigation and Production of Synthetic Rubber

SOV/64-58-5-17/21

USSR and Czechoslovakia. Lectures were given on the problems of the production of chloroprene rubber in Bulgaria, the USSR and Czechoslovakia. Lectures were also delivered by members of the Roumanian and Czechoslovakian delegation on the production of monomers for the production of synthetic rubber and by the Soviet delegation on the properties of the synthetic isoprene rubber and on rubber for special use. After the lectures had been delivered an extended exchange of opinions took place with decisions and recommendations being made with respect to the further development of rubber production. During their stay in Leningrad the delegates visited the All-Union Scientific Research Institute for Synthetic Rubber imeni S.V.Lebedev, Member, Academy of Sciences, USSR (Vsesoyuznyy nauchno-issledovatel'skiy institut sinteticheskogo kauchuka imeni akademika S.V. Lebedeva) as well as the Leningrad Factory for Technical Rubber Articles, and the factory "Red Triangle(Leningradskiy zavod rezinovykh tekhnicheskikh izdeliy i zavod "Krasnyy treugol'nik"). After the conference was finished the Yaroslavl' tire factory (Yaroslavskiy shinnyy

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Scientific Conferences of the Member States of the Council of Mutual Economic Aid. Conference on the Problems of the Investigation and Production of Synthetic Rubber SOV/64-58-5-17/21

zavod) and other enterprises were visited.

1. Synthetic rubber--Production 2. Scientific reports

Card 3/3

AUTHOR: I.V. Borodina SOV/138-58-12-10/17

TITLE: International Conference of Member-Country Participants in the Council of Economic Cooperative Aid on Questions of Research and Production of Synthetic Rubber (Mezhdunarodnoye soveshchaniye stran-uchastnits soveta ekonomicheskoy vzaimopomoshchi po voprosam issledovaniy i proizvodstva sinteticheskogo kauchuka)

PERIODICAL: Kauchuk i Rezina, 1958, Nr 12, pp 30-32 (USSR)

ABSTRACT: The conference held in May 1958 was attended by about 40 specialists in synthetic rubber from Bulgaria, Czechoslovakia, East Germany, Hungary, Poland, Rumania and USSR. Observers from China were also present. The aim was to coordinate development and exchange information on production of synthetic rubber between the Eastern bloc countries. The main papers read at the conference concerned: Development and production of divinyl (butadiene) - styrol rubber (East Germany). Methods of producing soft divinyl-styrol rubbers which do not require hot plastification, on ribbon forming machines. Properties of carboxyl rubbers and uses for tyres and

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International Conference of Member-Country Participants in the Council of Economic Cooperative Aid on Questions of Research and Production of Synthetic Rubber

articles requiring high elasticity (USSR). Use of Kanifol emulsifiers for improvement of divinyl-styrol rubbers. The properties and use of chlorprene rubbers (Russia, Czechoslovakia, Bulgaria). Properties of isoprene synthetic rubber (USSR). Production and processing of acetylene from natural gas with particular respect to use in manufacture of chlorprene and nitrile rubbers (Rumania). Industrial methods of dehydrogenization of butane (USSR). Catalysts of high activity for dehydrogenization of butylene (Czechoslovakia). New methods of chromo-photographic analysis of gas mixtures in production of synthetic rubber (Czechoslovakia).

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Member countries were recommended to concentrate development work in all these fields. Proposals were worked out for interchange of information and material samples between specialists of the member countries participating in the conference.

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S/138/60/000/002/009/009
A051/A029

AUTHOR: Borodina, I.V.

TITLE: A Report on the III. Session of the Active Group for Synthetic Rubber

PERIODICAL: Kauchuk i Rezina, 1960, No. 2, p. 51

TEXT: The III. Session of the synthetic rubber group took place on November 19 - 26, 1959, in Yerevan', convened by the Permanent Committee of the SEV, to discuss mutual cooperation in the work of the chemical industry. Delegations from the GDR, Poland, Rumania, the USSR and Czechoslovakia took part, as well as observers from the Chinese People's Republic. Four subjects were discussed: 1) The major paths of scientific research and experimental work on synthetic rubber and initial monomers for the period of 1960 - 1961 and recommendations for cooperation in this work. 2) Suggestions for the designing of new synthetic rubber plants and demands placed on the new types of installations in these plants. 3) A report of the delegations on the fulfillment of decisions taken by the I. Session of the active group in Bucharest and the II. Session in Leipzig. 4) A plan of action for 1960.

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A051/A029

A Report on the III. Session of the Active Group for Synthetic Rubber

The importance of mutual cooperation between the countries of the Soviet block was emphasized. The following people presented papers on the first point of the agenda: the Director of the Buna Plant in Schkopau, Nelles, (GDR); the Assistant Director of the Osventsim Chemical Plant, Gayevskiy, Poland; the Director of the Plant under construction for synthetic rubber in Rumania, Moldavanu; Director of the VNIISK (USSR) Garmonov; the Director of the NIIMSK, Sobolev (USSR); and the Director of the Czechoslovakian Scientific Research Institute for Synthetic Rubber, Pekh (CSR). Decisions were adopted as a result of the discussions on the performance of work according to a coordinated plan. For example, the method for obtaining divinyl by single and double stage dehydration of butane was assigned to the USSR, the production of synthetic latexes to the GDR, developing a method for the purification of waste waters in the production of divinyl-styrene rubber to Czechoslovakia. Decisions were also adopted on the mutual exchange of information on the production of divinyl-nitrile rubber, on methods for concentrating divinyl, on the synthesis of silicon rubber, on chromatographic analysis of the products from the production of synthetic rubber, etc. The

A Report on the III. Session of the Active Group for Synthetic Rubber

group suggested that detailed discussions be held at the next session on results of developing methods for modifying colophony and on the composition and technology of rubber production based on colophony emulsifiers.

S/138/60/000/009/010/012
A051/A029

AUTHOR: Borodina, I.V.

TITLE: A Conference of Scientific Workers in the Synthetic Rubber Industry on Improving the Quality of Divinyl-Styrene Rubbers

PERIODICAL: Kauchuk i Rezina, 1960, No. 9, pp. 59 - 60

TEXT: A regional conference of workers of the synthetic rubber industry took place on June 30, and July 1, 1960, in Voronezh. It was dedicated to the problems of improving the quality and extending the assortment of divinyl-styrene rubbers. Representatives of the Voronezh, Krasnoyarsk, Karaganda, Kuybyshev, Sterlitamak and Omsk Synthetic Rubber Plants, the Voronezh, Dnepropetrovsk, Moscow, Leningrad, Omsk and Yaroslavl' Tire Plants, the VNIISK, NIIMSK, NIIShP, NIIRP Giprokauchuk, OKB of Automation, Goskhimkomitet, the Voronezh, Azerbaydzhan, Krasnoyarsk, Kuybyshev, Bashkiria, Omsk, Karaganda Councils of National Economy, took part in the conference. The chairman of the State Committee of the USSR Council of Ministers on Chemistry, V.S. Federov opened the meeting by emphasizing the significance of increasing the quality of the divinyl-styrene rubber and the number of grades available. He pointed out that both the quality and the amount available do not satisfy the growing demand of the automobile and tire industries.

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A Conference of Scientific Workers in the Synthetic Rubber Industry on Improving the Quality of Divinyl-Styrene Rubbers

T.V. Bashkatov, Head of the Board of Synthetic rubber and Petrochemistry of the Goskhimkomitet read a paper on the problems of the synthetic rubber industry for improving the quality of divinyl-styrene rubber; B.K. Karmin (NIIShP) on the demands of the tire industry on quality and assortment of divinyl-styrene rubbers; B.S. Korotkevich (Giprokauchuk) on the state of designing the equipment for divinyl-styrene rubber production of an elevated quality in operating and new plants; L.D. Kudryavtsev (Voronezh Synthetic Rubber Plant) on measures for organizing the production of colophony divinyl-styrene rubbers at the Voronezh Synthetic Rubber Plant; A.I. Nuriyeva (Upravleniye neftyanoy i khimicheskoy promyshlennosti Azerbaydznanskoy SNKh - Department of Oil and Chemical Industry in the Azerbaydzhan SNKh); B.D. Breyman (Sterlitamakskiy zavod SK - Sterlitamak Synthetic Rubber Plant) and E.Kh. Rud' (TsNIL at the Krasnoyarsk Synthetic Rubber Plant) reported on the work carried out by the Sumgait, Sterlitamak and Krasnoyarsk Synthetic Rubber Plants in connection with the preparations for the production of divinyl-styrene rubber with higher qualities; A.M. Perminov (VNIISK) on the comparative evaluation of the properties of various divinyl-styrene rubbers; I.I. Radchenko (VNIISK) on the results of research and experimental work on the production of divinyl-styrene

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A Conference of Scientific Workers in the Synthetic Rubber Industry on Improvi... the Quality of Divinyl-Styrene Rubbers

rubbers based on colophony emulsifiers; A.Ye. Kalaus (VNIISK) on the development of an industrial composition for the polymerization process based on disproportionated colophony; E.G. Lazaryants, (NIIMSK) on the technological process for rubber separation from the latex by coagulation with sodium chloride; M.O. Nemtsov (VNIISK) on the development of a method for the production of disproportionate colophony, V.P. Shatalov (TsNIL of the Voronezh Synthetic Rubber Plant) on the work of synthesizing divinyl-styrene and divinyl-methylstyrene rubbers in systems with colophony emulsifiers. The following representatives took part in the discussions of the presented papers: V.S. Federov, I.V. Garmonov the director of VNIISK, A.S. Novikov the director of the NIIRP laboratory, A.I. Bakharev the head engineer of the Dnepropetrovsk Tire Plant, O.N. Dyment the head engineer of the Department of Oil Refinery and Chemical Industry of the Bashkiria National Economic Council, etc. The main problem facing the synthetic rubber industry is improving the quality of Soviet divinyl-styrene rubbers to the level of that of other countries. The main means for solving this problem were given: 1) Change-over of the production of divinyl-styrene (methyl-styrene) rubbers to that of the soft types, not requiring thermomastication and the application of high-aromatic oils. 2) Exchange of the

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Nekal emulsifier to a colophony or combined type (based on colophony and synthetic fatty acids) with a change-over to coagulation with sodium chloride. 3) Application of new stoppers, regulators, stabilizers, which would ensure an increase in quality of the rubber. 4) A significant increase in the purity of the initial monomers and auxiliary materials. 5) Ensuring conditions for a strict maintainance and narrowing of the variation limits of the technological parameters in the polymerization and separation processes based on the wide application of new methods for automating the processes. 6) Development and introduction of new types of divinyl-styrene rubbers. Measures were suggested for introducing the new methods into the listed plants within the next 2 - 3 years, for research and experimental work, and also for organizational measures for supplying the synthetic rubber industry with new materials.

Card 4/4

BORODINA, I.V.

All-Union conference of the representatives of the synthetic rubber industry. Kauch. i rez. 24 no.2:52-53 F '65. (MIRA 18:4)

BORODINA, K. A.

Cartography

Dissertation: "Improvement of the Representation of Plant Cover and of Terrains on Topographic Maps With a Scale of 1:25,000-1:100,000." Cand Tech Sci, Moscow Inst of Engineers of Geodesy, Aerial Photography and Cartography, 19 Mar 54. (Vechernyaya Moskva Moscow, 9 Mar 54)

SO: SUM 213, 20 Sep 1954

BORODINA, K.A., kand.tekhn.nauk.

Representation of populated places on topographical maps. Geod.i kart. no.8:60-68 Ag '57. (MIRA 10:10)

(Cartography)

BORODINA, K. G.; [redacted], T. N.

Find of graptolites in coal-quartsite shales of the Cheremshanskoye deposit. Izv. AN SSSR Ser. geol. 27 no.10:84-86 O '62. (MIRA 15:10)

1. Vsesoyuznyy geologicheskiy nauchno-issledovatel'skiy institut, Chelyabinskiy geologorazvedochnyy trest.

(Cheremshanka region(Chelyabinsk Province)—Graptolites)

BORODINA, K.G.

Structure and composition of the weathering surface in the Severnoye nickel deposit. Kora vyvetr. no.5:221-237 '63. (MIRA 16:7)

1. Ural'skoye geologicheskoye upravleniye.
(Ufaley Range--Weathering)

BORODINA, K.G.

Nickel β-cerolite from the weathering surface of the Severnoye nickel deposit in the Ufaley region. Kora vyvetr. no.5:58-64 '63. (MIRA 16:7)

1. Ural'skaya kompleksnaya tematicheskaya ekspeditsiya Ural'skogo geologicheskogo upravleniya.
(Ufaley region—Nickel ores)
(Ufaley region—Cerolite)

BORODINA, K.G.

Morenosite from the Cheremshansk nickel deposit in the Urals.
Kora vyvetr. no.9:34-36 '65. (MIRA 19:1)

NIKISHINA, M.F.; KREMNEV, L.Ya.; BORODINA, L.A.; ARKHIPOVA, A.P.; BEGUNKOVA, N.I.

Bituminous and tar emulsions used in road construction. Avt.dor. 21 no.11:25-27 N '58. (MIRA 11:12)
(Road materilas)

KREMNEV, L.Ya.; BORODINA, L.A.

Production of highly concentrated bituminous emulsions. Avt. dor. 22 no.7:4-6 Jl '59. (MIRA 12:9)
(Bituminous materials)

NIKISHINA, Mariya Filippovna; EVENTOV, Iosif Markovich; ARKHIPOVA, Aleksandra Pavlovna; BEGUNKOVA, Ninel' Ivanovna; BORODINA, Lyubov' Alekseyevna; IGON'KINA, Galina Sergeyevna; NAZAROV, Vladimir Vladimirovich; ALEKSEYEV, A.P., red.

[Emulsions used in road construction] Dorozhnye emul'sii. [By] M.F.Nikishina i dr. Moskva, Transport, 1964. 171 p. (MIRA 17:12)

PLESHKOVA, N.M.; BORODINA, L.G.

Results of the treatment of syringomyelia with I^{131}. Zhur. nevr. i psikh. 65 no.8:1178-1181 '65. (MIRA 18:8)

1. Kafedra meditsinskoy radiologii (zaveduyushchiy - prof. V.K. Modestov) TSentral'nogo instituta usovershenstvovaniya vrachey, Moskva; kafedra nervnykh bolezney (zaveduyushchiy - prof. E.M. Vizen) i kafedra rentgenologii i radiologii (zaveduyushchiy - dotsent G.I. Rylova) Permskogo meditsinskogo instituta.

BORODINA, L. I.

Borodina, L. I.

"The Pre-Imago Stages in the Development of Chewing Beetles (of the Family Agrotinae) Which Attack Crops in Tashkent Oblast (Comparative Morphological Survey, Geographical Distribution, and Affinity for Various Agricultural Crops)." Acad Sci Kazakh SSR, Inst of Zoology, Alma-Ata, 1955 (Dissertation for the degree of Candidate in Biological Sciences)

SO: Knizhnaya letopis' No. 27, 2 July 1955

BORODINA, L.I.

BORODINA, L.I.

Distinctive characteistics of the eggs of cutworms (subfam. Agrotinae) pests of cultivated plants in Uzbekistan. Trudy Inst. zool. i paraz. AN Uz. SSR 6:11-16 '56. (MLRA 10:6)
(Tashkent Province--Cutworms)

BORODINA, L.M.

Specialized manufacture of fastening parts and tools. Vest. mashinostr. 44 no.12:68-70 D '64. (MIRA 18:2)

TERSKIKH, V.I.; KOROVIN, I.L.; BORODINA, L.T.

Interspira suilla nom.nov., a new micro-organism from the same class as Spirochaetaceae. Veterinariia 32 no.12:66-67 D '55. (MLRA 9:4)
(PROTOZOA, PATHOGENIC) (PARASITES--SWINE)

AMENUEL', Irina Abramovna; KARPOVA, L.P., retsenzent; BORODINA, L.V., retsenzent; RYCHKOVA, O.I., red.

[Technology of dressmaker-type women's clothing] Tekhnologiia zhenskogo legkogo plat'ia. Moskva, Legkaia industriia, 1965. 151 p. (MIRA 18:8)

ACHARKAN, V.A.; BARSKOV, I.M.; BIRYUKOV, I.S.; BORODINA, L.Ya.; BRENNER, M.M.; GORELIK, B.Ye.; GUMEROV, M.N.; ZORKAYA, N.M.; IOFFYSH, A.I.; KAYDALOVA, O.N.; KAPUSTIN, Ye.I.; LEBEDEVA, M.A.; LESHKOVTSEV, V.A.; LYSENKO, V.P.; MARKIN, A.B.; MIKHAYLOV, N.N.; NEST'YEV, I.V.; NECHAYEV, N.V.; NIKOL'SKIY, A.V.; OSTROUKHOV, M.Ya.; PISARZHEVSKIY, O.N.; POLUBOYARINOV, M.M.; POPOV, Yu.N.; PRASOLOV, M.A.; POKATAYEV, Yu.N.; RIMBERG, A.M.; RYABOV, V.S.; SEMKOV, B.F.; SPERANSKAYA, Ye.A.; TAKOYEV, K.F.; TRIFONOVA, G.K.; TROFIMOVA, V.I.; SHAKHNAZAROV, G.Kh.; SHKARENKOVA, G.P.; SHMERLING, K.G.; EYDEL'MAN, B.I.; MIKAELYAN, E.A., red.; MUKHIN, Yu.A., tekhn.red.

[U.S.S.R. as it is; a popular illustrated handbook] SSSR kak on est'; populiarnyi illiustrirovannyi spravochnik. Moskva, Gos.izd-vo polit. lit-ry, 1959. 462 p. (MIRA 12:2)

(Russia)

BORODINA, M. A.

Borodina, M. A. and Bobin, V. V. "On the use of Saki, mud extracts in the treatment of diseases of the peripheral nervous system", Sbornik nauch. trudov kurorta Saki, Vol. IV, 1948, p. 221-25.

So: U-3261, 10 April 1953 (Letopis 'Zhurnal 'nykh Statey, No. 12, 1949).

BORODINA, M.A.

Effect of the administration of penicillin and streptomycin by means of the electrophoretic methods on the course of experimental neuritis. Antibiotiki 5 no.4:55-60 Jl-Ag '60. (MIRA 13:9)

1. Nevrologicheskiy i eksperimental'nyy otdely Nauchno-issledovatel'skogo instituta klimatologii i klimatoterapii imeni I.M. Sechenova.
(PENICILLIN) (STREPTOMYCIN)
(ELECTROPHORESIS) (NEURITIS)

BORODINA, M.A., kand.med.nauk, dotsent; SHATROV, A.A., kand.med.nauk

Boleslav Vladimirovich Likhterman; on his 60th birthday.
Vop.kur., fizioter.i lech.fiz.kul't. 28 no.1:91-92 '63.
(MIRA 16:4)

(LIKHTERMAN, BOLESLAV VLADIMIROVICH, 1902-)

S/020/61/140/006/026/030
B107/B101

AUTHORS: Tsiklis, D. S., and Borodina, M. D.

TITLE: Formation of acetylene during adiabatic compression of methane

PERIODICAL: Akademiya nauk SSSR. Doklady, v. 140, no. 6, 1961, 1376 - 1379

TEXT: The formation of acetylene was studied in mixtures of methane with hydrogen, nitrogen, or rare gases during adiabatic compression up to 9000 kg/cm^2. A piston was used for compression. The plant is described in detail elsewhere: Yu. N. Ryabinin, ZhETF, 23, 461 (1953); D. S. Tsiklis, Tekhnika fiziko-khimicheskikh issledovaniy pri vysokikh davleniyakh (Technique of physicochemical investigation at high pressures), 1958. The acetylene content was determined colorimetrically, if it was above 0.1%, however, argentometrically. According to Ya. S. Kazarnovskiy, the equilibrium constant of the reaction $2\ CH_4 = C_2H_2 + 3\ H_2$ is $\log K = -18077/T + 13.09 \log T - 0.02347\ T + 0.06335\ T^2 - 107520/T^2 - 23.9$. This would mean that at 1500°K and 10000 kg/cm^2, e. g., 2% acetylene should be formed.

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Formation of acetylene during...

Tests at this pressure, however, yielded no acetylene. Gas mixtures were used for further experiments, i. e. nitrogen with 2, 4, 14, and 38% methane; argon with 2, 4, 6, 7, and 14% methane; helium with 3, 6, and 14% methane; xenon with 7% methane; krypton with 3% methane. Table 1 gives the acetylene content and the yield, the values being obtained by graphic interpolation. Changes in the composition of the mixture due to gas losses during compression are slighter in the case of nitrogen, and more pronounced in mixtures with rare gases and hydrogen. The mean molecular weight was therefore determined before and after compression. Results: In mixtures with nitrogen, the highest yield was obtained at 2% CH_4 + 98%N_2. The yield versus pressure plot shows a sharp peak. No acetylene forms in the mixture with hydrogen. In the mixtures with rare gases the yield was highest with argon. From reaction-kinetical considerations it follows that yields are a maximum, when the masses of the colliding molecules are about equal. There are 4 figures, 1 table, and 9 references: 3 Soviet and 6 non-Soviet. The four most recent references to English-language publications read as follows: P. A. Longwell, B. H. Sage, J. Chem. and Eng. Data, 5, 322 (1960); G. B. Skinner, W. E. Ball, J. Phys. Chem., 64, 1025 (1960); G. B. Skinner, E. M. Sokoloski, J. Phys. Chem., 64, 1028

Formation of acetylene during...

(1960); S. W. Benson, The Forendations of Chemical Kinetics, 1960.

ASSOCIATION: Gosudarstvennyy nauchno-issledovatel'skiy i proyektnyy institut azotnoy promyshlennosti i produktov organicheskogo sinteza (State Design and Planning Scientific Research Institute of the Nitrogen Industry and for Products of Organic Synthesis)

PRESENTED: May 4, 1961, by S. I. Vol'fkovich, Academician

SUBMITTED: April, 28, 1961

Table 1. Acetylene yield in compression of mixtures of methane with nitrogen, argon, helium, xenon, and krypton as a function of pressure. Legend: (a) Acetylene content of the gas mixture, in % by volume; (b) Acetylene yield, in %; (1) compression pressure, in kg/cm^2; (2) mixture of:

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TSIKLIS, D. S.; BORODINA, M. D.

Formation of hydrogen cyanide in the adiabatic compression of methane mixtures with ammonia. Dokl. AN SSSR 147 no.4: 860-862 D '62. (MIRA 16:1)

1. Gosudarstvennyy nauchno-issledovatel'skiy i proyektnyy institut azotnoy promyshlennosti i produktov organicheskogo sinteza.

(Hydrocyanic acid) (Methane) (Ammonia)

TAYEV, L.S., dots.; BORODINA, N.G., red.

[Calculation of contactors and current conducting parts of electrical apparatus; manual for course and diploma projects] Raschet kontaktov i tokovedushchikh chastei elektricheskikh apparatov; uchebnoe posobie dlia kursovogo i diplomnogo proektirovaniia. Moskva, Energ. in-t 1964. 50 p. (MIRA 18:5)

1. Kafedra elektroapparatostroyeniya Moskovskogo energeticheskogo instituta (for Tayev).

L 55968-65 EWT(d)/EWT(m)/EWP(w)/EWP(c)/EWA(d)/EWP(v)/EPR/T/EWP(t)/EWP(k)/
EWP(z)/EWP(b)/EWP(l) Pf-4/Ps-4 MJW/JD

ACCESSION NR: AR5017258 UR/0276/65/000/006/B042/B043
621.785.533:621.822

SOURCE: Ref. zh. Tekhnologiya mashinostroyeniya. Svodnyy tom, Abs. 6B363

AUTHORS: Chirikov, V. T.; Borodina, M. I.

TITLE: The influence of nitrogen case hardening on the quality of bearings

CITED SOURCE: Tr. Vses. n.-i. konstrukt., tekhnol. in-ta podshipnik. prom-sti, no. 1(37), 1964, 3-26

TOPIC TAGS: nitrogen, case hardening, bearing, carbon, carbonitride/ ShKh15 steel

TRANSLATION: Data on the working quality improvement after nitrogen case hardening of bearing parts made of steel ShKh15 are presented. These data show the advantages of this process as compared with the method used abroad, involving heating in neutral atmospheres obtained from endothermic gas. A method for regulating the process of nitrogen case hardening was developed. This method makes it possible to produce nitrogen case hardened layers 0.05 to 3.00 mm thick on the working surface of rings and rollers made of steel ShKh15. Such layers contain an optimal concentration of carbon and nitrogen which does not form the brittle carbonitride phases. 25 illustrations. 5 tables. Bibliography 5 entries.

Card 1/1

BORODINA, M.L.; VELIKOSLAVINSKAYA, T.A.; DAVYDOVSKAYA, B.L.

Advantage of using high titanium content ilmenite slags instead of ilmenite for the production of titanium dioxide by the sulfuric acid method. Titan i ego splavy no.2:73-77 '59. (MIRA 13:6)

(Titanium oxides) (Slag)

5(2) SOV/63-4-3-10/31

AUTHOR: Borodina, M.L.

TITLE: Titanium Dioxide (Rutile)

PERIODICAL: Khimicheskaya nauka i promyshlennost', 1959, Vol 4, Nr 3, pp 351-355 (USSR)

ABSTRACT: The high intensity and opaqueness of titanium dioxide is due to its high refraction coefficient and the optimum size of the particles of 0.3 - 0.4 μ. It has a low photochemical activity and is resistant to all acids, except sulfuric acid and HF, and to all aqueous solutions of alkali. Rutile may be prepared from titanium tetrachloride by thermal hydrolysis [Ref 3]. A drawback of rutile is its slightly yellow shade, because the rays in the violet and blue part of the spectrum are not completely reflected. The raw materials for rutile production are: ilmenite $FeTiO_3$ with a TiO_2 content of 52%; natural rutile concentrate with 98% TiO_2 [Ref 6]; and titanium slags with more than 70% TiO_2 [Ref 11]. Rutile is produced from ilmenite by the sulfuric acid method, in which the mineral is decomposed and then hydrolyzed; or by the chloration of rutile concentrate with following decomposition. The optimum size of the rutile particles depends on the concentration

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and the acid factor of the titanyl sulfate. Thermal hydrolysis of titanium salts produces titanium hydroxide. The anions of the hydrolyzed salt are adsorbed by the precipitated metatitanic acid and hinder the transformation of anatase to rutile. The same effect has PO_4^{3-}. The hydrolysis of an aqueous solution of titanium tetrachloride containing 210 g/l HCl produces rutile. Sols produced by pouring titanium tetrachloride solution into hot water contain microcrystals of anatase, rutile, etc. Heating of anatase produces rutile. The reaction rate is reduced by HCl in the atmosphere and facilitated by alkali vanadates, $K_2Cr_2O_7$, ZnO, etc. The treatment of the pigment by aluminum hydroxide and silicon increases the light and atmosphere resistance of the coatings. Silicon-organic polymers impart hydrophobic properties and moisture-resistance. Amines of the fatty series improve the dispersion in the binding material [Ref 3]. The sulfuric acid method should be improved by concentrating the raw material and by reducing the consumption of sulfuric acid.

Titanium Dioxide (Rutile) SOV/63-4-3-10/31

There are 33 references, 6 of which are Soviet, 18 English, 2 German, 2 Canadian, 2 Italian, 1 American, 1 French and 1 Czechoslovakian.

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BORODINA M.L.

S/180/60/000/02/028/028
E071/E135

AUTHOR: Ogurtsov, S.V.

TITLE: Scientific Conference on the Metallurgy, Chemistry and Electrochemistry of Titanium

PERIODICAL: Izvestiya Akademii nauk SSSR, Otdeleniye tekhnicheskikh nauk, Metallurgiya i toplivo, 1960, Nr 2, pp 167-168 (USSR)

ABSTRACT: The conference took place on January 14-20 1960 in Moscow in the Institute of Metallurgy, Academy of Sciences, USSR. It was organised by the Committee for Coordination of Scientific Research on Titanium. About 400 representatives of academic and research institutions and works participated in the conference. The conference was divided into four sections: 1) raw materials and smelting of ores; 2) chemical technology and chlorination; 3) metallothermic methods of smelting titanium; and 4) electrolysis. The following papers were read:
Metallurgical evaluation of some new deposits (S.B. Dmitrovskiy); State and prospects of improving the technology of smelting of ilminite concentrates (V.A. Reznichenko and V.I. Solov'yev);

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Thermodynamic investigations of titanium compounds (F.B. Khalimov and V.A. Reznichenko); An investigation of the process of reduction of iron-titanium concentrates with carbon (M.B. Rapoport); Some hydrodynamic and kinetic features of the process of chlorination of titanium dioxide in molten chlorides (Kim Men-rin); Oxidation of titanium tetrachloride with oxygen (G.S. Moynov, B.N. Kalent'yev, V.A. Reznichenko); Utilisation of ilminite concentrates for the production of titanium dioxide pigment by the sulphuric acid method (M.L. Borodina, S.B. Shaykovich, N.A. Gubarova); An investigation of some properties of the system $TiCl_4 - AlCl_3 - FeCl_3$ (N.K. Druzhinina); An investigation of phase equilibria liquid-vapour in systems formed by titanium tetrachloride with chloroanhydrides of mono- and tri-chloroacidic acids (G.V. Seryakov, S.A. Vaks, L.S. Sidorina); Determination of the summary content of carbon in titanium tetrachloride (G.V. Seryakov, S.A. Vaks, I.M. Golovanov); Basic conditions for standardised

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results of the process of production of titanium by the magnesium thermite method (S.V. Ogurtsov, V.A. Reznichenko, V.K. Ustinov, V.I. Kozhevnikov, A.I. Dedkov); On the two stage method of production of titanium by the sodium thermite method (V.A. Reznichenko, S.V. Ogurtsov); Production of a high purity titanium (V.I. Batashev); The influence of the content of chlorine in a high purity titanium sponge on the process of smelting and on the quality of the metal produced (G.M. Vaynshteyn); The production of titanium and its alloys by refining of black anodes (Academician I.P. Bardin, A.D. Khromov, V.I. Lukashin); On the theory of refining of titanium (V.A. Sukhodskiy); Production of titanium by electrolysis of titanium dioxide in fluoride-chloride melts (I.P. Bardin, A.A. Kazayn); Electrolytic production of titanium from chloride-fluoride melts (V.M. Ioffe, N.N. Rozanov, N.A. Lyubimova); Electrolytic refining of titanium waste products (V.M. Lozovatskiy); and a number of other reports.
There are no figures, tables or references.

Card 3/3

PIKTORINSKAYA, N.K.; SHUB, D.M.; BORODINA, M.L.; BOGATYREV, P.M.

Increasing the resistance to chalking of muffle zinc whites in air. Lakokras. mat. i ikh prim. no. 6:21-26 '60. (MIRA 13:12)
(Zinc oxide)

BORODINA, M.L.; GOMOZOVA, V.G.; MIKHAYLOVA, Yu.V.; ZOLOTUKHINA, A.N.

Effect of nuclei used in the production of titanium dioxide on its pigmentary properties. Lakokras. mat. i ikh. prim. no.4:16-21 '61. (MIRA 16:7)

(Titanium oxide) (Pigments)

S/081/61/000/019/042/085
B110/B101

AUTHORS: Borodina, M. L., Shaykevich, S. B., Piktorinskaya, N. K., Gubareva, N. A.

TITLE: Preparation of titanium dioxide from highly titaniferous slags by means of sulfuric acid

PERIODICAL: Referativnyy zhurnal. Khimiya, no. 19, 1961, 283, abstract 19K53 (Lakokrasochn. materialy i ikh primeneniye, no. 1, 1961, 33 - 36)

TEXT: Extraction of TiO_2 from 75 - 85% ilmenite slag yields 95 - 96%. The H_2SO_4 consumption for extraction of 1 t TiO_2 from 42% ilmenite concentrate is 3.75 t, and 2.51 t for 80% titaniferous slags. The use of slag instead of ilmenite concentrate saves >33% H_2SO_4 and avoids all technical operations connected with the formation of iron sulfate. [Abstracter's note: Complete translation.]

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S/137/62/000/006/030/163
A006/A101

AUTHORS: Borodina, M. L., Ziv, Ye. F., Shaykevich, S. B., Gubareva, N. A.

TITLE: Utilization of ilmenite concentrates for the production of pigmentary titanium dioxide with the aid of the sulfuric acid method

PERIODICAL: Referativnyy zhurnal, Metallurgiya, no. 6, 1962, 13, abstract 6G96 (In collection: "Titan i yego splavy", no. 5, Moscow, AN SSSR, 1961 282 - 288)

TEXT: It was established that with greater intensity of rutilizing the ilmenite concentrate, the degree of Ti extraction decreases from 94 to 76%. Best results regarding the requirements of pigmentary TiO_2 production by the sulfuric acid method, are obtained with a concentrate of the following composition: TiO 49 - 53%; FeO 20 - 31%; Fe_2O_3 14 - 22%; the amount of rutilized ilmenite is 0.3 - 1.78%. Pigmentary TiO_2, obtained from this concentrate, is distinguished by a high degree of whiteness and dispersity, and is characterized by the least Cr and V admixtures.

[Abstracter's note: Complete translation]

L. Vorob'yeva

Card 1/1

YERMOLAYEVA, T.A.; BORODINA, M.L.; ABRAMSON, D.L.; SMETANKINA, T.A.; ANUFRIYEVA, N.S.; POTAPOVA, M.P.

Modifying rutile titanium dioxide for the improvement of its physical and technological properties. Lakokras.mat.i ikh prim. no.1:20-25 '62. (MIRA 15:4)

(Rutile)

GOMOZOVA, V.G.; FEDOTOVA, I.M.; LYUTTSAU, V.G.; BORODINA, M.L.

Properties of sol nuclei and of titanium hydroxide obtained by the sulfuric acid method. Lakokras.mat.i ikh prim. no.1:26-30 '63. (MIRA 16:2)

(Titanium hydroxide)
(Colloids)

S/081/62/000/024/030/052
B119/B186

AUTHORS: Yermolayeva, T. A., Borodina, M. L., Abramson, D. L., Smetankina, T. A., Anufriyeva, N. S., Potapova, M. P.

TITLE: Modification of titanium dioxide in the rutile form to improve its physical and technical properties

PERIODICAL: Referativnyy zhurnal. Khimiya, no. 24(II), 1962, 903, abstract 24P625 (Lakokrasochn. materialy i ikh primeneniye, no.1, 1962, 20-25)

TEXT: Investigations were made to find modifying substances (MS) for improving the physical and technical properties of titanium dioxide in the rutile modification (rutile) (I), to develop a method of applying MS to the surface of I, and to study the effect of MS on the properties of I. It was found that the effect of MS was much greater when they were mixed with I by additional wet grinding in a ball mill or in an apparatus with stirrer (mixing machine) (adapted for further investigations) than in the dry procedure. I consisting of 70% particles $< 1\mu$, or I in a finely disperse form (with $\sim 85\%$ particles $< 1\mu$) which settles in small

Card 1/2

Modification of titanium dioxide ...

amounts in the filter bags of a Loesch mill, is used for the experiments. MS, like amines of the aliphatic series and other organic compounds, affect only slightly the color intensity, the covering power, and the resistance to air (of I) but reduce the absorption power of moisture by a factor of 1.5 to 2 as well as the settling of I in the finished enamels, and improve the resistance to abrasion. The best results were obtained with 1% addition of alkamon OC -2 (OS-2) (PA), of quaternary ammonium salts of diethyl aminomethyl glycol ethers of higher fat alcohols. An optimum method of modifying I was developed. Solutions of aluminum, silicon, and phosphorus compounds were successively poured, stirring all the time, into an aqueous suspension of disperse I containing 200 g/liter of TiO_2. The washing out is followed by treatment with PA, filtration, drying of the residue, and fine grinding in a jet mill. The best results are obtained by introduction of 2.8% aluminum phosphate with subsequent application of 0.5% PA. The color intensity of I increases by 8-20%, the photochemical activity decreases to 1/3 - 1/4 (literally: by the 3-4 fold), the resistance to abrasion is improved. The resistance of the coat to chalking is doubled. [Abstracter's note: Complete translation.]

Card 2/2

BORODINA, M.L.; SHAYKEVICH, S.B.; KAPUSTINA, M.D.; VASIL'YEVA, N.L.

Ilmenite concentrates for the production of titanium dioxide by the sulfuric acid method. Lakokras.mat. i ikh prim. no.2:22-25 '63.
(MIRA 16:4)

(Titanium oxides) (Ilmenite)

BORODINA, M.L.; YERMOLAYEVA, T.A.; ISIRIKYAN, A.A.; KISELEV, A.V.; USHAKOVA, Ye.V.

Adsorption properties of commercial samples of a rutile pigment with a modified surface. Koll.zhur. 26 no.2:156-162 Mr-Ap '64. (MIRA 17:4)

1. Moskovskiy universitet imeni Lomonosova, khimicheskiy fakul'tet.