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PIGULEVSKIY, G.V.; BOROVKOV, A.V.

Sesquiterpenes of the essential oil of the fruits of Libanotis transcaucasica Schischk growing in the Stavropol Territory. Zhur. prikl. khim. 36 no.4:926-928 Ap '63. (MIRA 16:7)

(Stavropol Territory--Essences and essential oils)
(Sesquiterpenes)

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PIGULEVSKIY, G.V.; BOROVKOV, A.V.

Sesquiterpenes of the essential oil of the fruits of Libanotis transcaucasica Schischk (Golubozersk form, introduced). Zhur. prikl. khim. 36 no.4:929-930 Ap '63. (MIRA 16:7)

(Essences and essential oils)
(Sesquiterpenes)

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KURANOVA, I.L.; SHENIN, Yu.D.; PIGULEVSKIY, G.V. [deceased]

Oxides of higher fatty unsaturated acids. Part 5: Interaction of oxides of petroselinic and petroselaidic acid methyl esters with acetic acid. Zhur. ob. khim. 34 no.10:3487-3493 O '64. (MIRA 17:...

1. Leningradskiy gosudarstvennyy universitet.

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FIGUIEVSKIY, G.V. [deceased]; KU

Reaction of sedinene

Zhur. ob. khim.

1. Leningradskiy gosudarstven

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PIGULEVSKIY, G. [deceased]

Third International Congress on Essential Oils. Rast. res. 1 no.1:152-153 '65. (MIRA 18:6)

1. Botanicheskiy institut im. V.L. Komarova AN SSSR, Leningrad.

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[illegible]KIY, G.V. (deceased) (Leningrad); KOVALEVA, V.I. (Leningrad);
MOSKVUS, D.V. (Leningrad)

Study of essential oils derived from the fruit of wild carrot
(Daucus carota L.) collected in various regions. Nast. issl.
no.2:227-230 '65. (MIRA 18:4)

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"APPROVED FOR RELEASE: Tuesday, August 01, 2000 CIA-RDP86-00513R001240

DRANITSYNA, Yu.A.; KERIMOV, S.Sh.; PIGULEVSKIY, G.V.

Furocoumarins in fruits of fennel Hippomarathrum microcarpum (MB) Fedtsch. Zhur. prikl. khim. 38 no.5:1172-1174 My '65. (MIRA 18:11)

1. Botanicheskiy institut AN SSSR.

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"APPROVED FOR RELEASE: Tuesday, August 01, 2000 CIA-RDP86-00513R001240

DRANITSYNA, Yu.A.; PIGULEVSKIY, G.V.; BUKREYEVA, T.V.

Coumarin compounds from fruits of Ar[illegible]. Zhur.prikl.khim. 38 no.11:2570-2575 N '65. (MIRA 19:1)

1. Submitted April 23, 1964.

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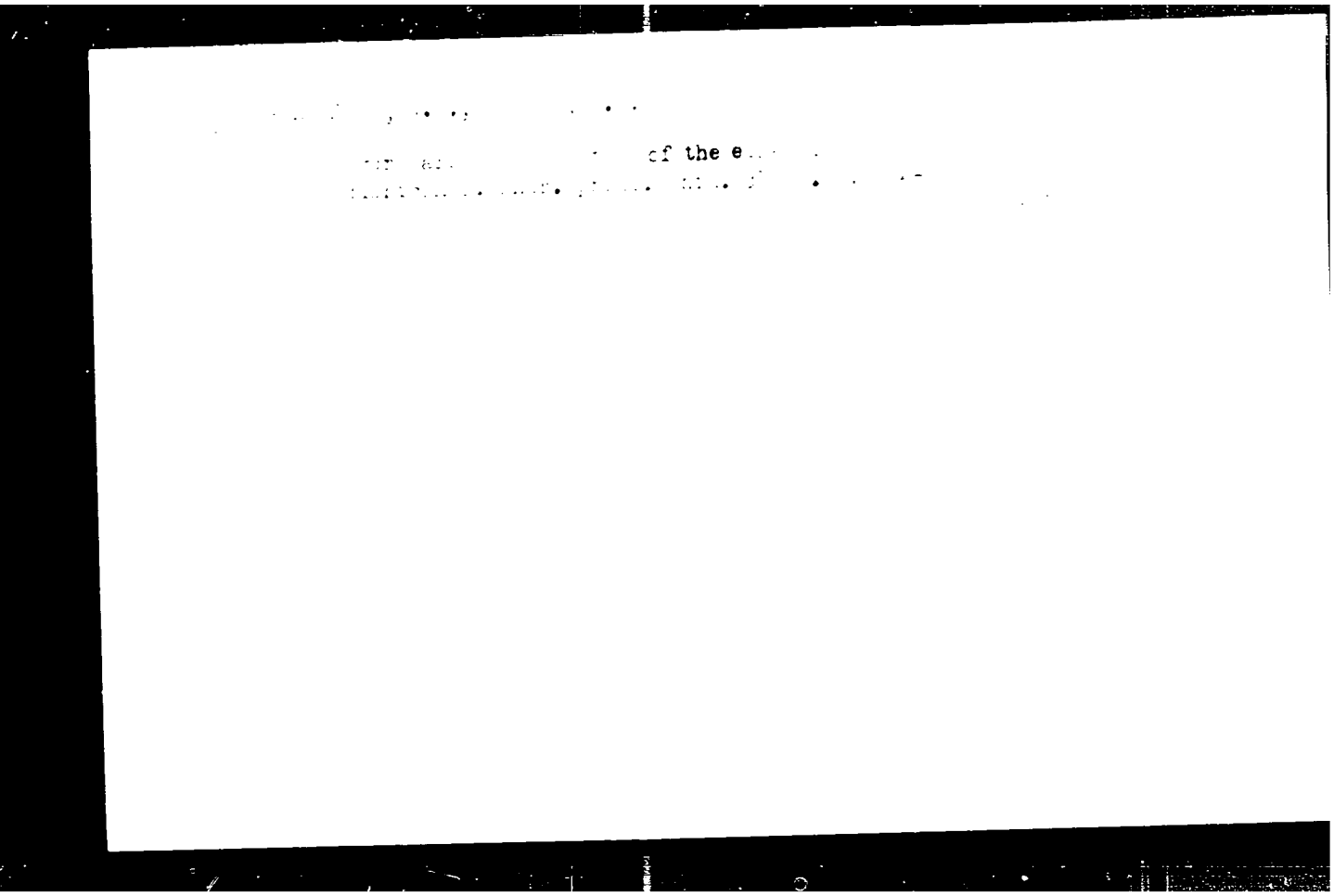

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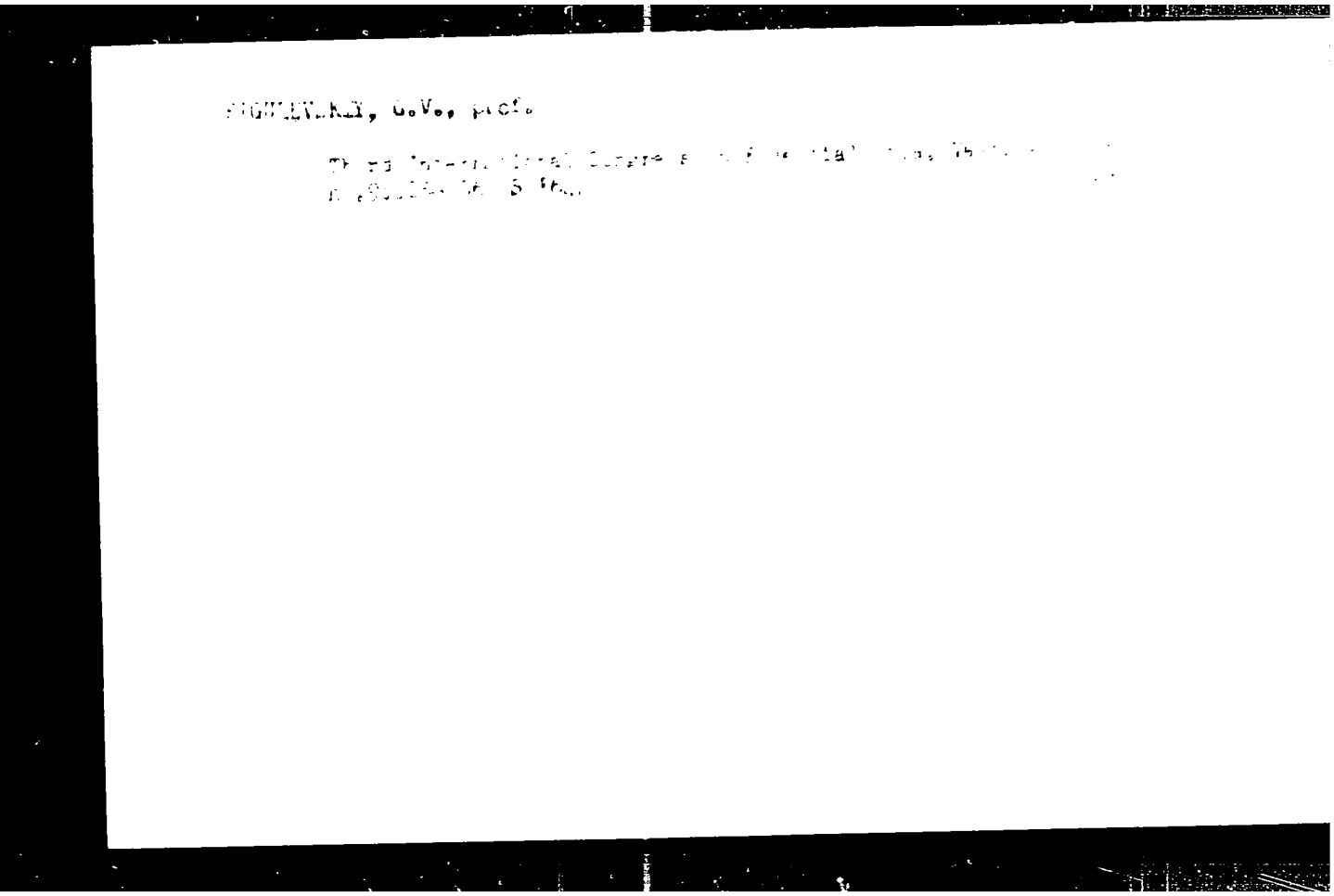

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Pigulevskiy

VASIL'EV, A.V., inzh.; PIGULEVSKIY, I.A., starshiy elektromekhanik.

Amplifier for trouble shooting in track circuits. Avtom., telem. i sviaz' 2 no.1:34 Ja '58. (MIRA 11:1)

1. Vereshchaginskaya distantsiya signalizatsii i svyazi Sverdlovskoy dorogi.

(Railroads--Telephone) (Electric circuits)

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PIGULEVSKIY, K., inzh.

First place in the competition for the best motors in the world.
Tekh.mol. 26 no.2:34 '58. (MIRA 11:2)

1.Sekretar' Vsesoyuznogo trenerskogo soveta po velosipednomu sportu.
(Motorcycles)

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BELYY, M.; PIGULEVSKIY, L.

Pushing barges on the Dnieper-Bug Canal and on the Pripet River. Rech. transp. 22 no.5:45-46 My '63. (MIRA 16:8)

1. Starshiy dispetcher Pinskogo uchastka Verkhne-Dneprovskogo parokhodstva (for Belyy). 2. Nachal'nik tekhnicheskogo otdela Pinskogo sudostroitel'nogo i sudoremontnogo zavoda (for Pigulevskiy).

(Dnieper-Bug Canal--Towing)
(Pripet River--Towing)

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PIGULEVSKIY, L.G.; KOVALEVA, V.I.

Essential oil obtained from wild carrot Daucus carota L. Zhur. prikl.khim. 28 no.12:1355-1357 D '55. (MLRA 9:3)
(Essences and essential oils) (Carrots)

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PIGULEVSKIY, M. Kh.

Fundamentals and methods of studying the physical and mechanical qualities of soil: supplement to the comparative study of the soils of the Leningrad province. Leningrad, 1936. (Trudy Leningradskogo otdeleniia Vsesoiuznogo nauchno-issledovatel'skogo instituta udobrenii, agrotekhniki i agropochvovedeniia, vyp. 44)

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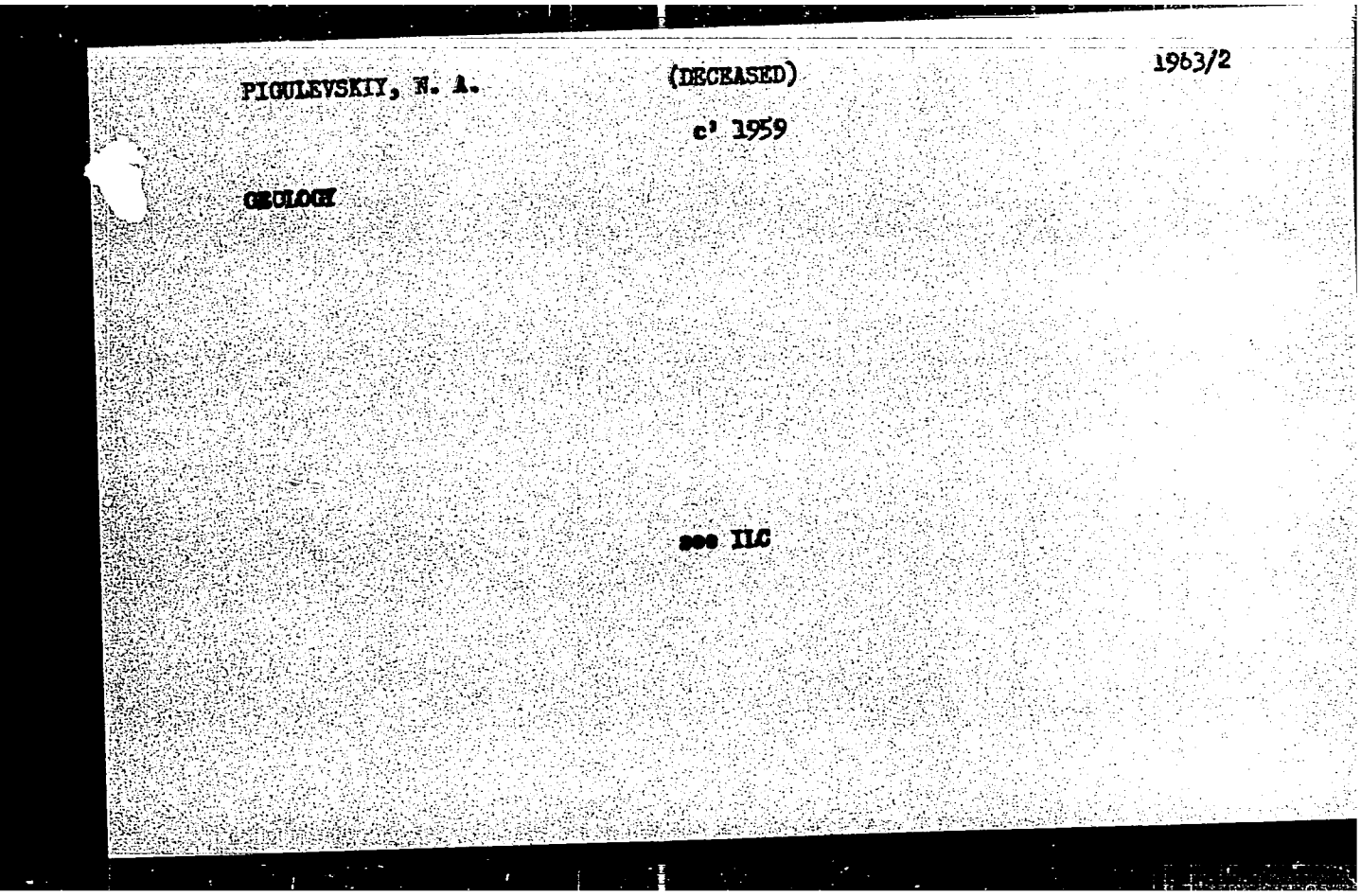

PIGULEVSKIY, N. A. (DECEASED) 1963/2

c' 1959

GEOLOGY

See IIC

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"APPROVED FOR RELEASE: Tuesday, August 01, 2000 CIA-RDP86-00513R001240

BRATIN, Vsevolod Sergeyevich, inzh.; TORGONSKIY, Mikhail Nikolayevich, dotsent, kand.tekhn.nauk; PIGULEVSKIY, S.V., retsenzent; D'YAKOVA, Ye.I., retsenzent; ZEYBST, M.B., red.; GORYUSHOVA, L.K., red.izd-va; KUZNETSOVA, A.I., tekhn.red.

[Construction of logging roads and artificial structures] Stroitel'stvo lesovoznykh dorog i iskusstvennykh sooruzhenii. Moskva, Goslesbumizdat, 1960. 330 p. (MIRA 14:4)

(Forest roads)

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"APPROVED FOR RELEASE: Tuesday, August 01, 2000 CIA-RDP86-00513R001240

PIGULEVSKIY, S. V.

PA 165T38

USSR/Medicine - Parasites' Infection, Experimental 11 Feb 50

"Experimental Infection of Man by the Larva of Gastrophilus Intestalis," S. V. Pigulevskiy, Leningrad Sanitation and Hygiene Med Inst

"Dok Ak Nauk SSSR" Vol LXX, No 5, pp 933-936

Studies method of penetration of skin by subject parasite, histological picture of section of skin into which larva have penetrated, and subjective sensation during penetration. Finds that in process of penetration into skin and movement thereafter important role is played not only by mouth

165T38

USSR/Medicine - Parasites (Contd) 11 Feb 50

and throat organs but also by cytolytic effect of salivary secretions. Notes pain and itching region of larva. Submitted 24 Nov 49 by Acad K. I. Skryabin.

165T38

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PIGULEVSKIY, Sergey Viktorovich; POPOVKIN, Aleksandr Petrovich; TOVSTOLUZHSKIY, N.I., inzh., retsenzent; GONCHAROV, A.F., inzh., retsenzent; KIMMEL', L.S., red.izd-va; GRECHISHCHEVA, V.I., tekhn. red.

[Construction and maintenance of 750 mm-gauge logging railroads] Ustroistvo i soderzhanie lesovoznykh zheleznykh dorog kolei 750 mm. Moskva, Goslesbumizdat, 1963. 224 p. (MIRA 17:3)

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"APPROVED FOR RELEASE: Tuesday, August 01, 2000 CIA-RDP86-00513R001240

PIGULEVSKIY, Sergey Vladimirovich, prof.; PCHELINTSEV, Yu.V., red.; ZENIN, V.V., tekhn. red.

[Pathogenic animals of Daghestan] Patogennye zhivotnye Dagestana. Saratov, Izd-vo Saratovskogo univ. Pt.2. [Poisonous animals] IAdovitye zhivotnye. 1961. 128 p. (MIRA 16:6)

(DAGHESTAN--POISONOUS ANIMALS)

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"APPROVED FOR RELEASE: Tuesday, August 01, 2000 CIA-RDP86-00513R001240

PIGULEVSKIY, Sergey Vladimirovich

(Dagestan State Med Inst), Academic Degree of Doctor of Medical Sciences, based on his defense, 11 February 1955, in the Council of the Leningrad Med Inst of Sanitation and Hygiene, of his dissertation entitled: "Classification and historical routes of distribution and philogeny of trematoda of the gorgodend [?] family."

Academic degree and/or title: Doctor of Sciences

SO: Decisions of VAK, List no. 24, 26 Nov 55, Byulleten' MVO SSSR, No. 20, Oct 57, Moscow, pp 22-24, Uncl. JPRS/NY-471

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SHEVCHENKO, A.L., inzh.; PIGULEVSKIY, V.G., inzh.

Installation for securing built up columns during their erection. Prom. stroi. 41 no.11:46 N '63. (MIRA 17:2)

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PIGULEVSKIY, V.G., inzh.

Precast reinforced concrete construction elements of buildings subjected to large dynamic loads. Prom.stroi. 38 no.6:36-39 '60. (MIRA 13:7)

1. Pridneprovskiy Promstroyproyekt.
(Factories—Design and construction)
(Strains and stresses)

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PIGULEVSKIY, V.G.

Shortcomings of roofs of industrial buildings with double cantilever slabs. Prom. stroi. 40 no.2:11-12 '62. (MIRA 15:7)
(Roofing, Concrete)

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PIGROV, V.M.

Pulse electrohydraulic method for controlling the freezing of pipes in wells. Azerb. neft. khoz. 39 no.5:16-17 My '60. (MIRA 13:10)

(Oil well drilling)

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PROCESSES AND PROPERTIES INDEX

Unsaturated hydrocarbons or hydrocarbon concentrates. M. D. Markovich and V. V. [illegible]. Russ 20,171, Mar 3, 1928. In the prepn. of unsatd. hydrocarbons or of concentrates high in these hydrocarbons by cracking petroleum products and compressing, cooling and fractionation, liquids boiling above 30° are condensed and removed while the remaining liquid and gaseous products are condensed all together by compression and cooling by the usual methods and the condensate is fractionated by lowering the pressure or raising the temp.

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Ethylene or concentrates high in ethylene. M. B. Markovich and V. V. Protopopov. Russ. 20,165, June 12, 1929. Organic substances are cracked and refined with H_2SO_4. To the gas contg. ethylene before, during or after compression but before cooling are added org. solvents in which olefins are more sol. than other hydrocarbons. The addn. is made by evapg. the solvents before compressing and at normal pressure or through the compressor lubricator by lubricating the cylinders of the latter, or by injection into the discharge pipe of the compressor. After the complete or partial liquefaction by cooling and sepn. of H_2O the entire mixt. is rectified by being passed through one or two rectifying columns with reboiler sections in succession.

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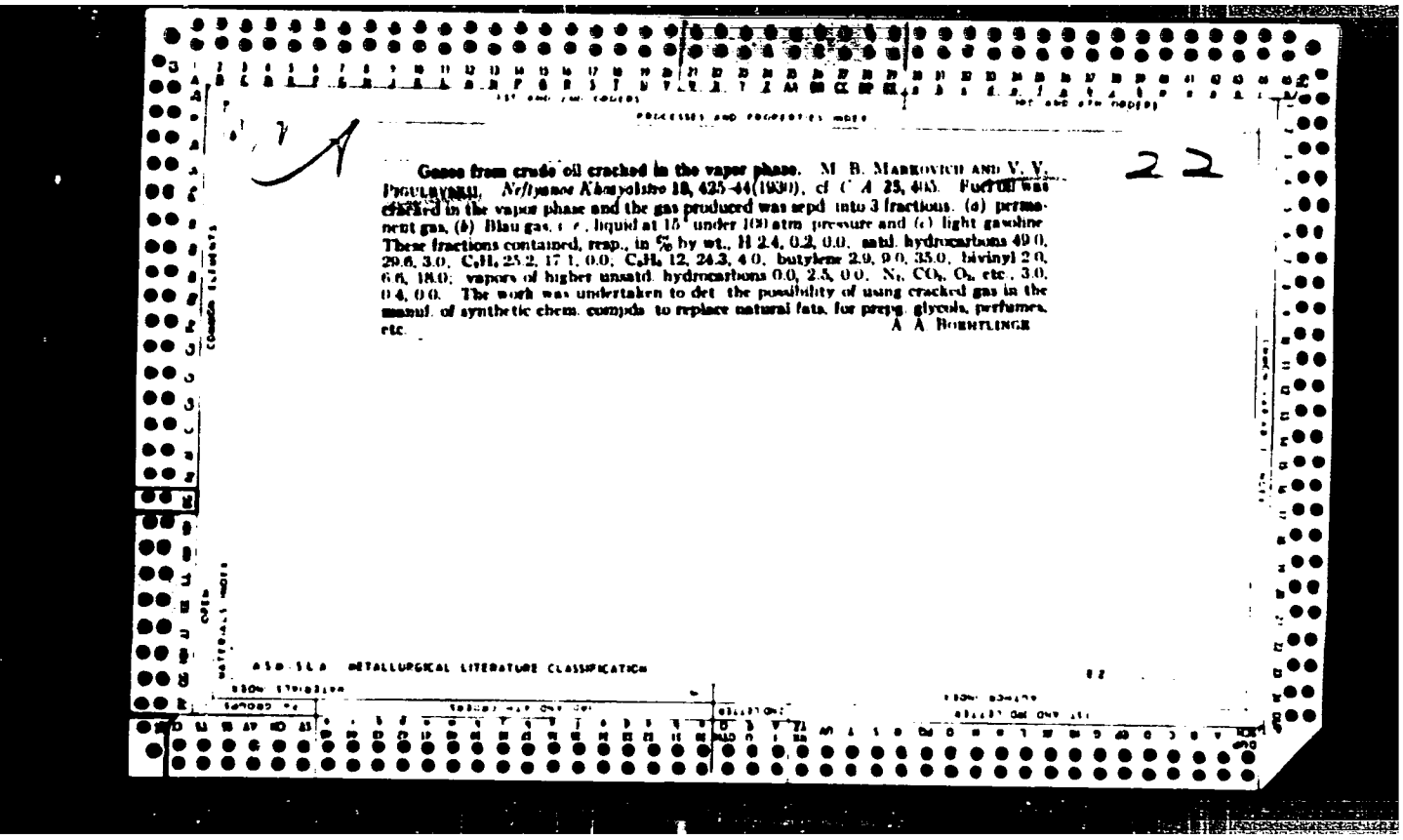

Gases from crude oil cracked in the vapor phase. M. B. Markovich and V. V. Pogulyaeva. *Neftyanoe Khozyaistvo* 18, 425-44 (1930). cf. *C. A.* 25, 405. Fuel oil was cracked in the vapor phase and the gas produced was sepd. into 3 fractions. (*a*) permanent gas, (*b*) Blau gas, i. e., liquid at 15° under 100 atm. pressure and (*c*) light gasoline. These fractions contained, resp., in % by wt., H 2.4, 0.2, 0.0, satd. hydrocarbons 49.0, 29.6, 3.0, C_2H_4 25.2, 17.1, 0.0, C_3H_6 12, 24.3, 4.0, butylene 2.9, 9.0, 35.0, divinyl 2.0, 6.6, 18.0; vapors of higher unsatd. hydrocarbons 0.0, 2.5, 0.0, N_2, CO_2, O_2, etc., 3.0, 0.4, 0.0. The work was undertaken to det. the possibility of using cracked gas in the manuf. of synthetic chem. compds. to replace natural fats, for prepn. glycols, perfumes, etc.

A. A. Boehtlingk

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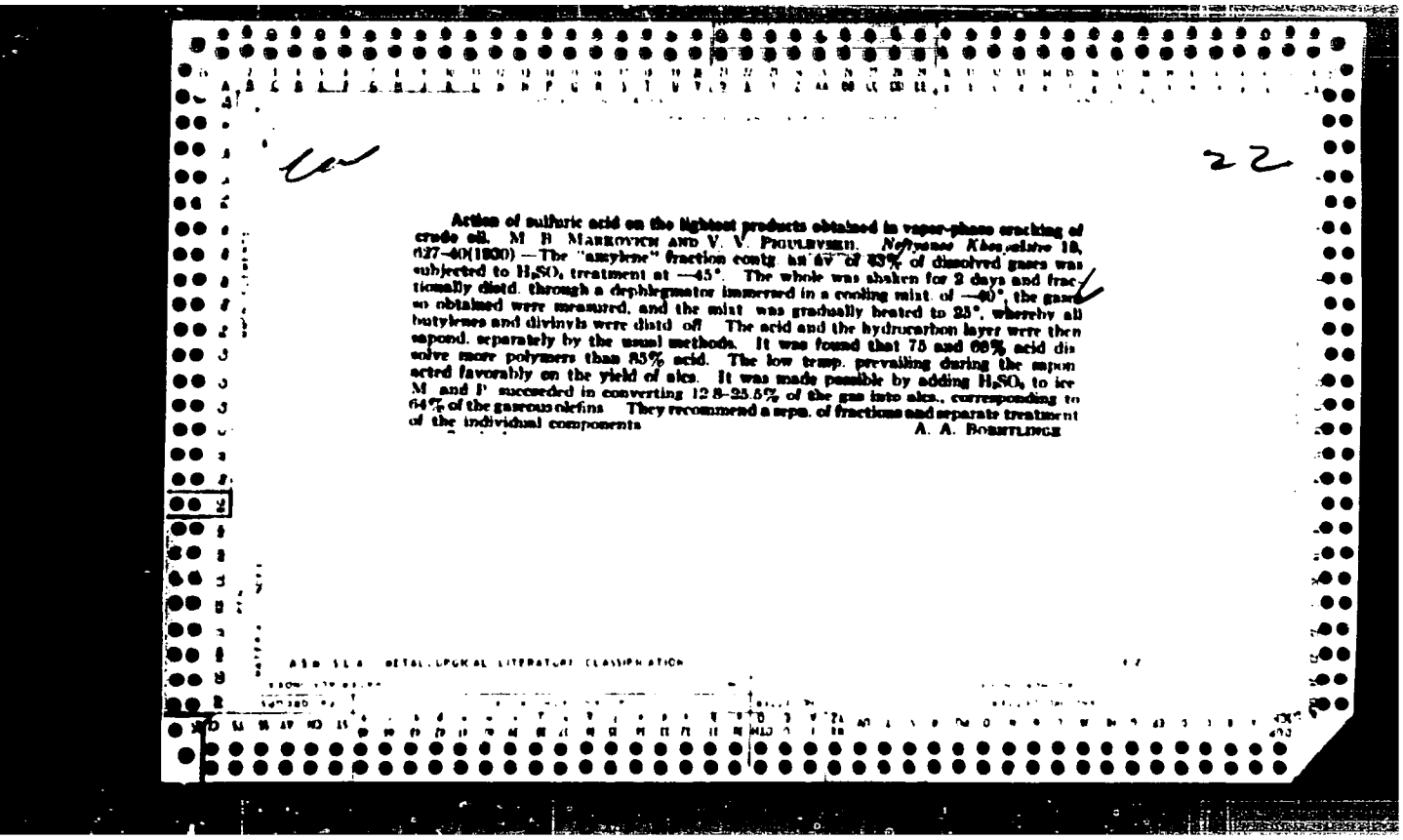

Action of sulfuric acid on the lightest products obtained in vapor-phase cracking of crude oil. M. B. Markovich and V. V. Poluektov. *Neftyanoe Khozyaistvo* 18, 627–40(1930).—The "amylene" fraction contg. an av. of 83% of dissolved gases was subjected to H_2SO_4 treatment at —45°. The whole was shaken for 2 days and fractionally distd. through a dephlegmator immersed in a cooling mixt. of —40°; the gases so obtained were measured, and the mixt. was gradually heated to 25°, whereby all butylenes and divinyls were distd. off. The acid and the hydrocarbon layer were then sapond. separately by the usual methods. It was found that 75 and 68% acid dissolve more polymers than 85% acid. The low temp. prevailing during the saponn acted favorably on the yield of alcs. It was made possible by adding H_2SO_4 to ice. M. and P. succeeded in converting 12.8–25.5% of the gas into alcs., corresponding to 64% of the gaseous olefins. They recommend a sepn. of fractions and separate treatment of the individual components.

A. A. Boshtlinga

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PROCESSES AND PROPERTIES INDEX

Action of sulfuric acid on the lightest products obtained when cracking petroleum in the vapor phase. II. [illegible]. Neftyanoe Khoz. 20, No. [illegible].—Butylene concentrate used as the stock for the prepn. of butyl alcs. was prepd. by rectifying the so-called "amylene liquor" or pyrogasoline by the Markovich and Pigulevskii method. This concentrate contained about 20–18% divinyl, 35–40% isobutylene, 35–40% normal butylenes and an admixture of some amylenes and normal butane. The degree of unsatn. detd. with bromine water was found to be 98.7%, the initial b. p. −5° to −8° and the end point +1° to +2°. In the treatment of this concentrate with H_2SO_4 the following three factors were considered: temp. during treatment, duration of treatment and the acid concn. The yield of Me_3COH amounted to 35–40%, the rest being "divinyl concentrate." The latter yielded about 35% of MeEtCHOH and about 30% polymers calcd. on the "butylene concentrate."

A. A. Boehtlingk

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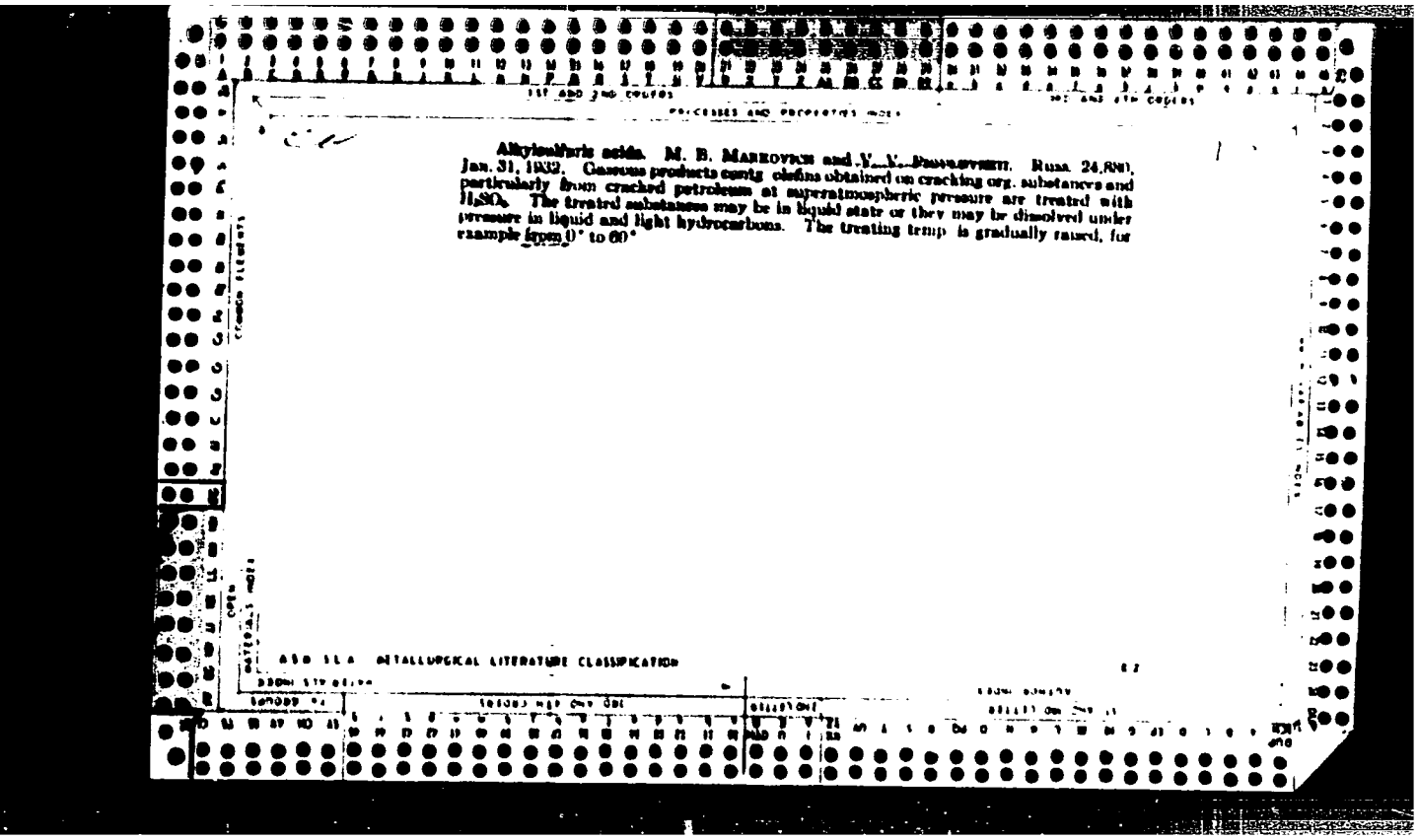

Alkylsulfuric acids. M. B. Marrovich and V. V. Pogosyan. Russ. 24,880, Jan. 31, 1932. Gaseous products cont. olefins obtained on cracking org. substances and particularly from cracked petroleum at superatmospheric pressure are treated with H_2SO_4. The treated substances may be in liquid state or they may be dissolved under pressure in liquid and light hydrocarbons. The treating temp. is gradually raised, for example from 0° to 60°.

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"APPROVED FOR RELEASE: Tuesday, August 01, 2000 CIA-RDP86-00513R00124O

CA

Alkyl sulfates. M. B. Markovich and V. V. Pigulevskii. Russ. 25,899, Mar. 31, 1932. Gaseous cracked products obtained in the absence of catalysts are treated with H_2SO_4 at a temp. below 3°. The propylene and normal butylenes are extd. with H_2SO_4 of not less than 80% strength and isobutylene and amylenes with acid of not less than 75% strength.

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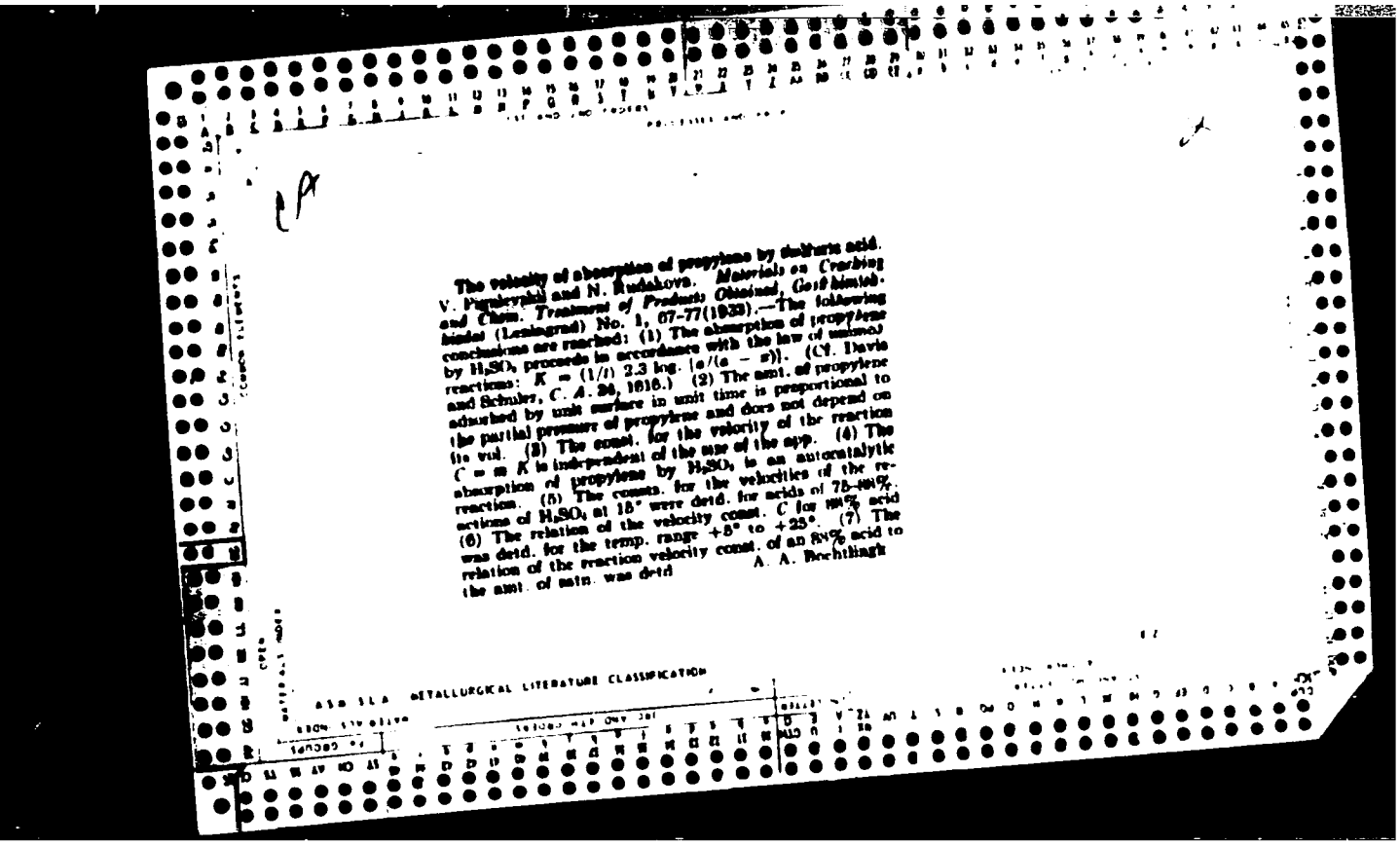

The velocity of absorption of propylene by sulfuric acid. V. Pigulevskii and N. Rudakova. *Materials on Cracking and Chem. Treatment of Products Obtained, Gosti himizdat (Leningrad) No. 1, 67-77(1939).*—The following conclusions are reached: (1) The absorption of propylene by H_2SO_4 proceeds in accordance with the law of unimol reactions: $K = (1/t)\ 2.3 \log. [a/(a - x)]$. (Cf. Davis and Schuler, *C. A.* 30, 1016.) (2) The amt. of propylene adsorbed by unit surface in unit time is proportional to the partial pressure of propylene and does not depend on its vol. (3) The const. for the velocity of the reaction $C = m K$ is independent of the size of the app. (4) The absorption of propylene by H_2SO_4 is an autocatalytic reaction. (5) The consts. for the velocities of the reactions of H_2SO_4 at 15° were detd. for acids of 78–84%. (6) The relation of the velocity const. C for 84% acid was detd. for the temp. range +5° to +25°. (7) The relation of the reaction velocity const. of an 84% acid to the amt. of satn. was detd.

A. A. Bochthlingk

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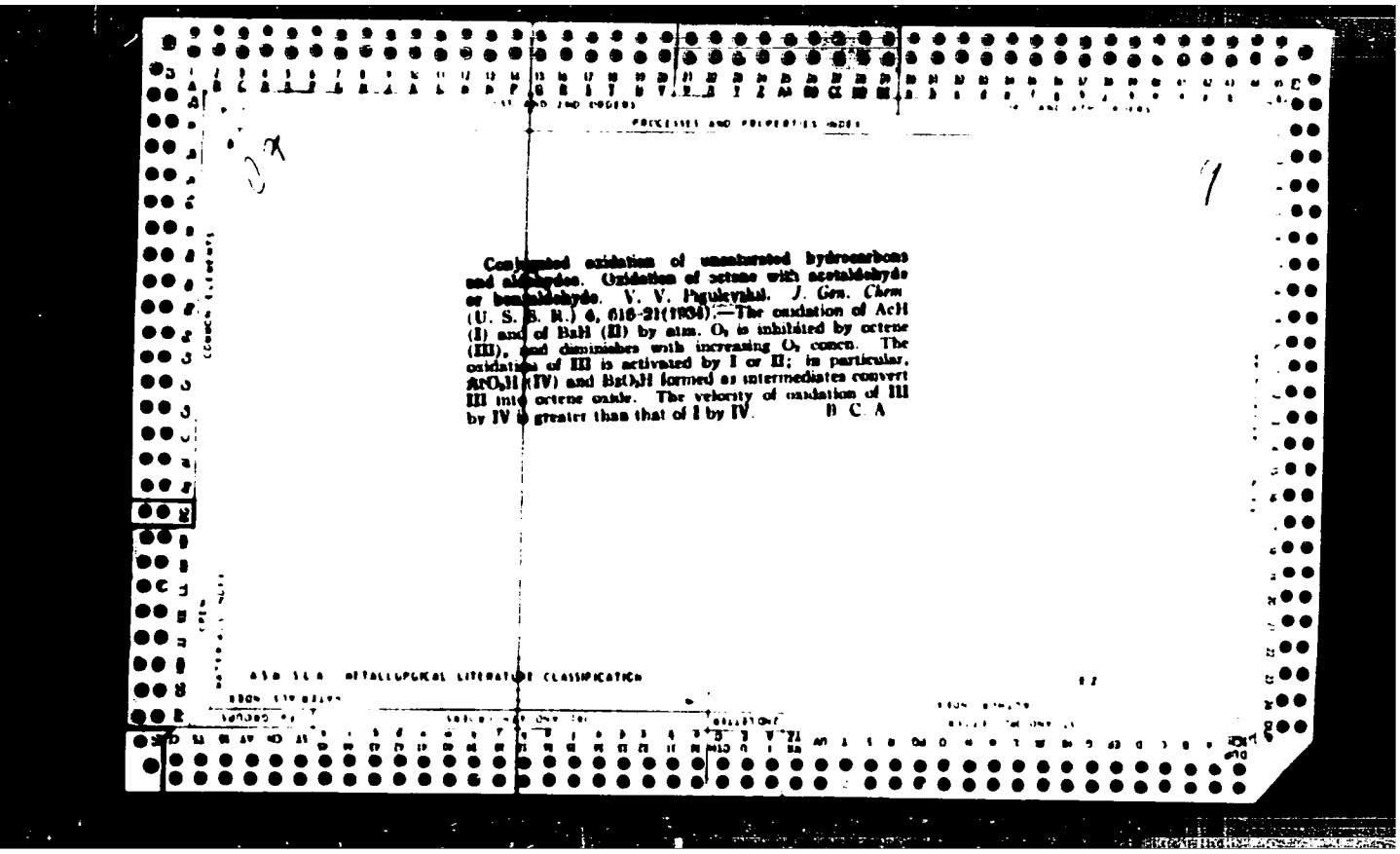

Conjugated oxidation of unsaturated hydrocarbons and aldehydes. Oxidation of octene with acetaldehyde or benzaldehyde. V. V. Pgulevskii. *J. Gen. Chem.* (U. S. S. R.) 4, 616-21(1934).—The oxidation of AcH (I) and of BzH (II) by atm. O_2 is inhibited by octene (III), and diminishes with increasing O_2 concn. The oxidation of III is activated by I or II; in particular, AcO_3H (IV) and BzO_3H formed as intermediates convert III into octene oxide. The velocity of oxidation of III by IV is greater than that of I by IV. B C A

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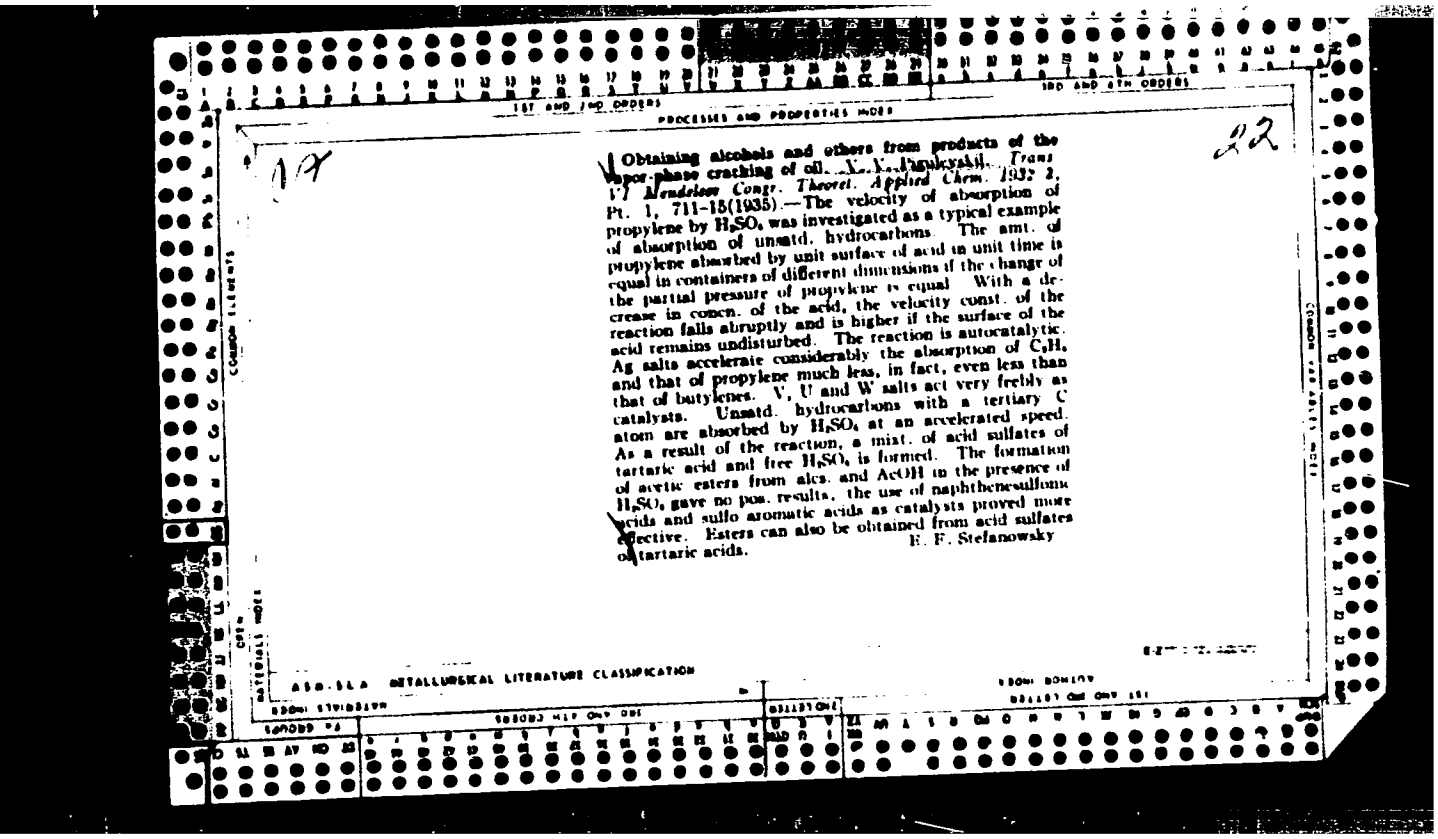

PROCESSES AND PROPERTIES INDEX

1ST AND 2ND ORDERS

3RD AND 4TH ORDERS

Obtaining alcohols and others from products of the vapor-phase cracking of oil. V. V. Ipatieff. *Trans 1st Mendeleev Congr. Theoret. Applied Chem.* 1932 2, Pt. 1, 711-15(1935).—The velocity of absorption of propylene by H_2SO_4 was investigated as a typical example of absorption of unsatd. hydrocarbons. The amt. of propylene absorbed by unit surface of acid in unit time is equal in containers of different dimensions if the change of the partial pressure of propylene is equal. With a decrease in concn. of the acid, the velocity const. of the reaction falls abruptly and is higher if the surface of the acid remains undisturbed. The reaction is autocatalytic. Ag salts accelerate considerably the absorption of C_3H_6 and that of propylene much less, in fact, even less than that of butylenes. V, U and W salts act very feebly as catalysts. Unsatd. hydrocarbons with a tertiary C atom are absorbed by H_2SO_4 at an accelerated speed. As a result of the reaction, a mixt. of acid sulfates of tartaric acid and free H_2SO_4 is formed. The formation of acetic esters from alcs. and AcOH in the presence of H_2SO_4 gave no pos. results, the use of naphthenesulfonic acids and sulfo aromatic acids as catalysts proved more effective. Esters can also be obtained from acid sulfates of tartaric acids.

E. F. Stefanowsky

A59-51A METALLURGICAL LITERATURE CLASSIFICATION

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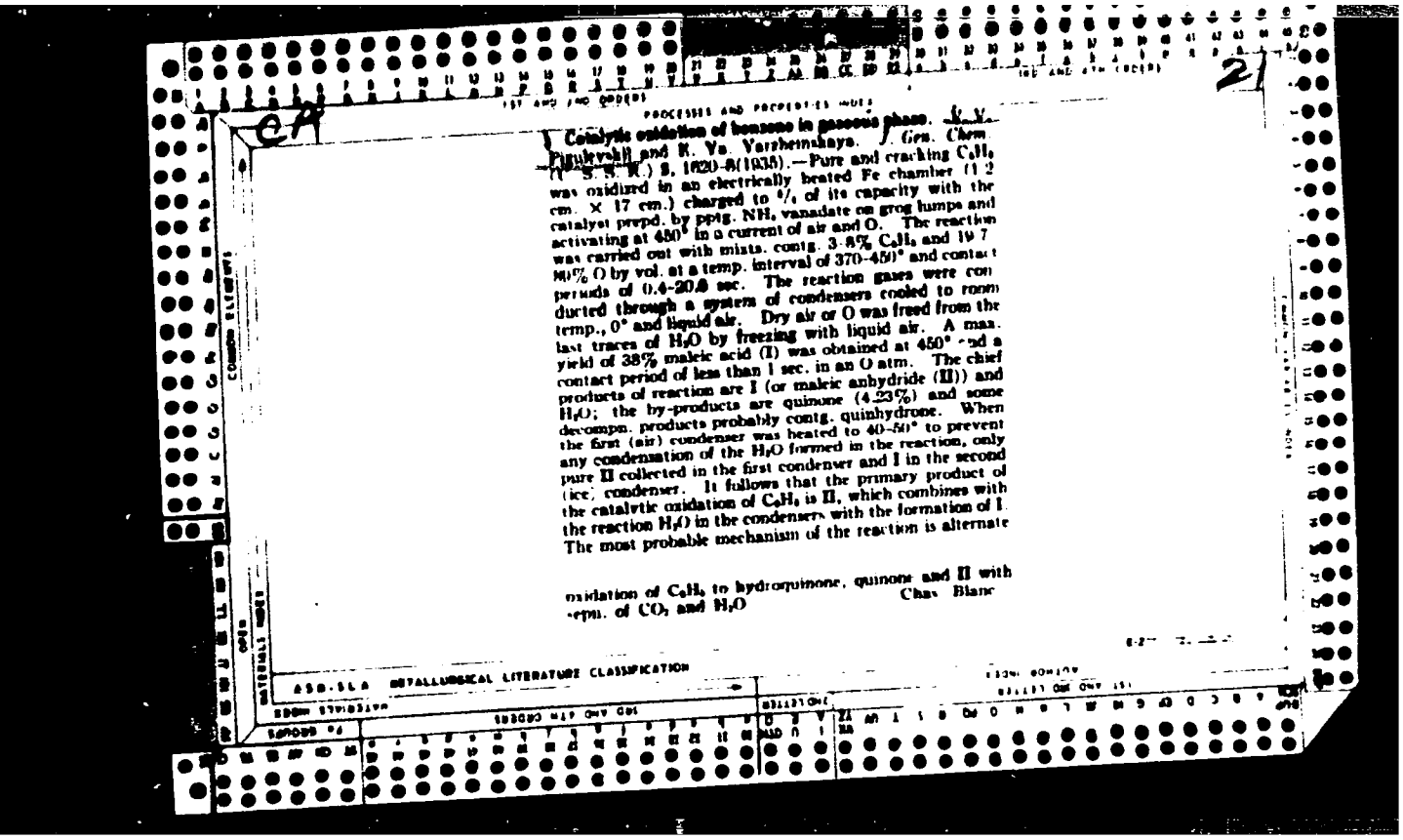

Catalytic oxidation of benzene in gaseous phase. V. V. Pavlovskii and K. Ya. Varshavskaya. J. Gen. Chem. (U. S. S. R.) 5, 1029-8(1935).—Pure and cracking C_6H_6 was oxidized in an electrically heated Fe chamber (1 2 cm. × 17 cm.) charged to ⅔ of its capacity with the catalyst prepd. by pptg. NH_4 vanadate on grog lumps and activating at 450° in a current of air and O. The reaction was carried out with mixts. contg. 3-8% C_6H_6 and 19 7 90% O by vol. at a temp. interval of 370-450° and contact periods of 0.4-20.8 sec. The reaction gases were conducted through a system of condensers cooled to room temp., 0° and liquid air. Dry air or O was freed from the last traces of H_2O by freezing with liquid air. A max. yield of 38% maleic acid (I) was obtained at 450° and a contact period of less than 1 sec. in an O atm. The chief products of reaction are I (or maleic anhydride (II)) and H_2O; the by-products are quinone (4.23%) and some decompn. products probably contg. quinhydrone. When the first (air) condenser was heated to 40-50° to prevent any condensation of the H_2O formed in the reaction, only pure II collected in the first condenser and I in the second (ice) condenser. It follows that the primary product of the catalytic oxidation of C_6H_6 is II, which combines with the reaction H_2O in the condensers with the formation of I. The most probable mechanism of the reaction is alternate oxidation of C_6H_6 to hydroquinone, quinone and II with evpn. of CO_2 and H_2O

Chas Blanc

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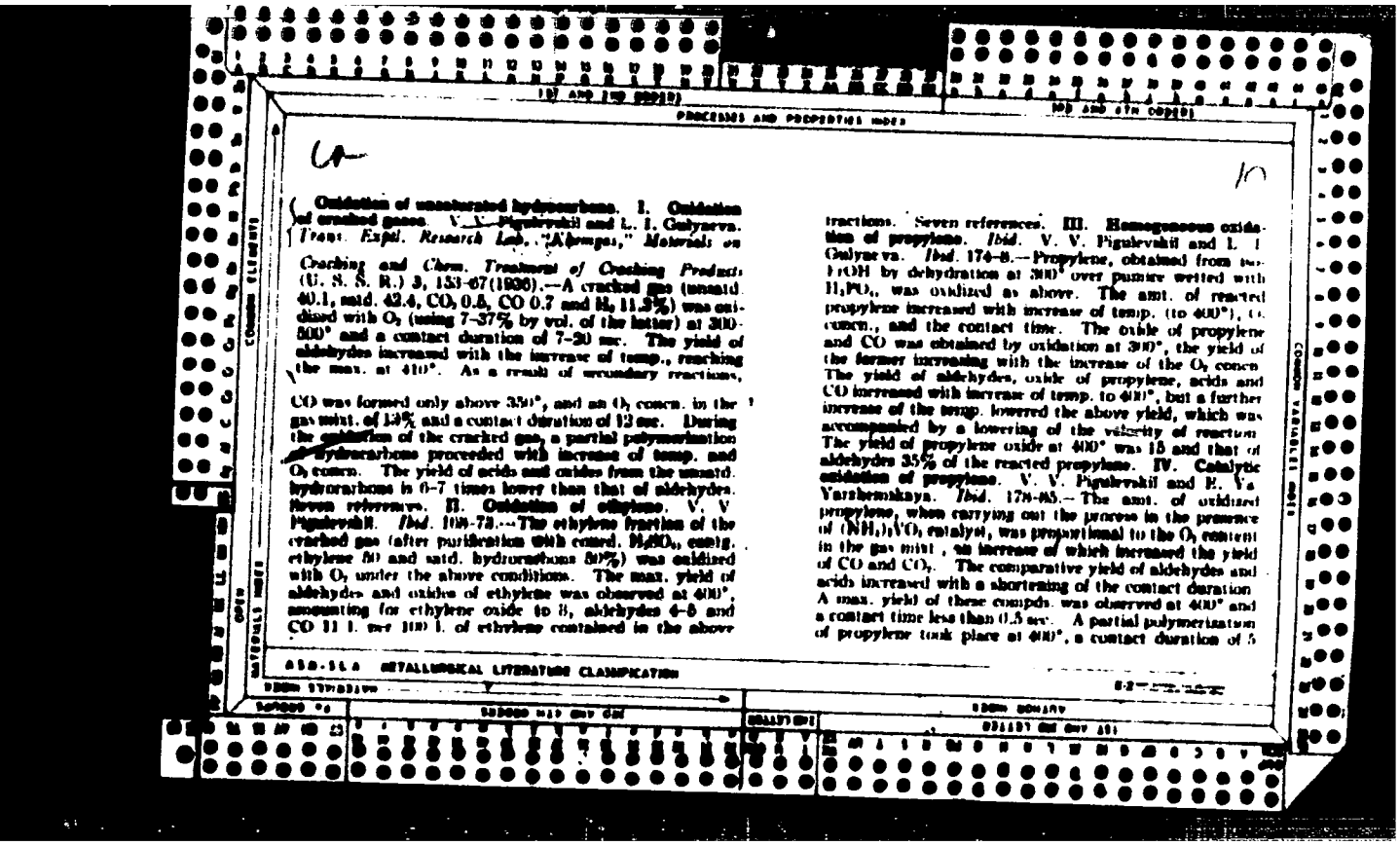

Oxidation of unsaturated hydrocarbons. I. Oxidation of cracked gases. V. V. Pigulevskii and L. I. Gulyaeva. *Trans. Expil. Research Lab., "Khimgaz," Materials on Cracking and Chem. Treatment of Cracking Products* (U. S. S. R.) 3, 153-67(1936).—A cracked gas (unsatd. 40.1, satd. 42.4, CO_2 0.8, CO 0.7 and H_2 11.3%) was oxidized with O_2 (using 7–37% by vol. of the latter) at 300–500° and a contact duration of 7–20 sec. The yield of aldehydes increased with the increase of temp., reaching the max. at 410°. As a result of secondary reactions, CO was formed only above 350°, and an O_2 concn. in the gas mixt. of 15% and a contact duration of 13 sec. During the oxidation of the cracked gas, a partial polymerization of hydrocarbons proceeded with increase of temp. and O_2 concn. The yield of acids and oxides from the unsatd. hydrocarbons is 6–7 times lower than that of aldehydes. Seven references. II. Oxidation of ethylene. V. V. Pigulevskii. *Ibid.* 169–78.—The ethylene fraction of the cracked gas (after purification with concd. H_2SO_4, contg. ethylene 50 and satd. hydrocarbons 50%) was oxidized with O_2 under the above conditions. The max. yield of aldehydes and oxides of ethylene was observed at 400°, amounting for ethylene oxide to 8, aldehydes 6–8 and CO 11 l. per 100 l. of ethylene contained in the above fractions. Seven references. III. Homogeneous oxidation of propylene. *Ibid.* V. V. Pigulevskii and L. I. Gulyaeva. *Ibid.* 179–84.—Propylene, obtained from isoPrOH by dehydration at 300° over pumice wetted with H_3PO_4, was oxidized as above. The amt. of reacted propylene increased with increase of temp. (to 400°), O_2 concn., and the contact time. The oxide of propylene and CO was obtained by oxidation at 300°, the yield of the former increasing with the increase of the O_2 concn. The yield of aldehydes, oxide of propylene, acids and CO increased with increase of temp. to 400°, but a further increase of the temp. lowered the above yield, which was accompanied by a lowering of the velocity of reaction. The yield of propylene oxide at 400° was 15 and that of aldehydes 35% of the reacted propylene. IV. Catalytic oxidation of propylene. V. V. Pigulevskii and E. Ya. Yarkhemskaya. *Ibid.* 178–85.—The amt. of oxidized propylene, when carrying out the process in the presence of $(NH_4)_2VO_3$ catalyst, was proportional to the O_2 content in the gas mixt., an increase of which increased the yield of CO and CO_2. The comparative yield of aldehydes and acids increased with a shortening of the contact duration. A max. yield of these compds. was observed at 400° and a contact time less than 0.5 sec. A partial polymerization of propylene took place at 400°, a contact duration of 5

METALLURGICAL LITERATURE CLASSIFICATION

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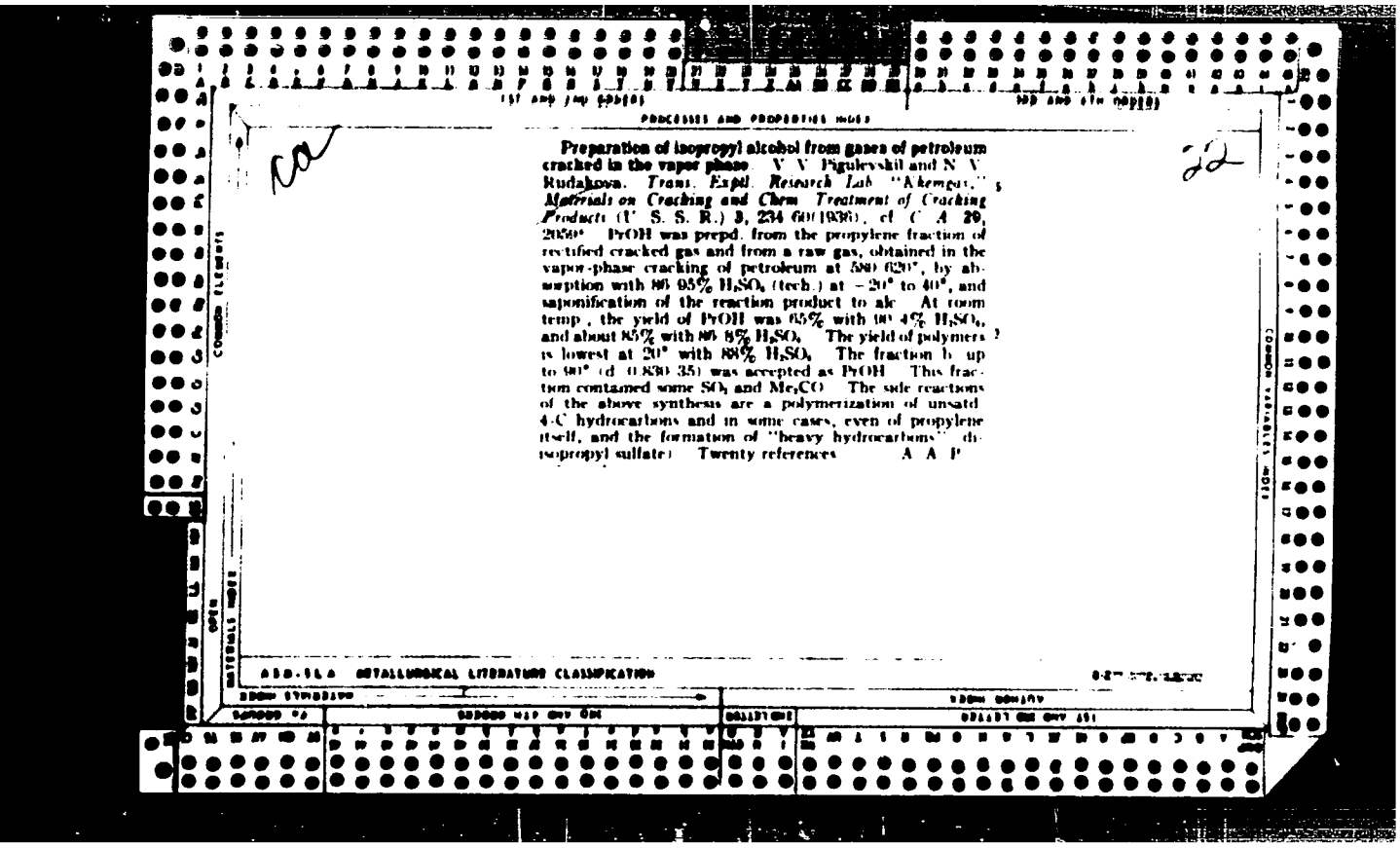

Preparation of isopropyl alcohol from gases of petroleum cracked in the vapor phase. V. V. Pigulevskii and N. V. Rudakova. *Trans. Exptl. Research Lab. "Khemgaz," Materials on Cracking and Chem. Treatment of Cracking Products* (U. S. S. R.) **3**, 234-60 (1936); cf. *C. A.* **29**, 2056⁸. PrOH was prepd. from the propylene fraction of rectified cracked gas and from a raw gas, obtained in the vapor-phase cracking of petroleum at 580-620°, by absorption with 86-95% H_2SO_4 (tech.) at −20° to 40°, and saponification of the reaction product to alc. At room temp., the yield of PrOH was 65% with 90-4% H_2SO_4, and about 85% with 86-8% H_2SO_4. The yield of polymers is lowest at 20° with 88% H_2SO_4. The fraction b. up to 90° (d. 0.830-35) was accepted as PrOH. This fraction contained some SO_2 and Me_2CO. The side reactions of the above synthesis are a polymerization of unsatd. 4-C hydrocarbons and in some cases, even of propylene itself, and the formation of "heavy hydrocarbons" (diisopropyl sulfate). Twenty references. A. A. P.

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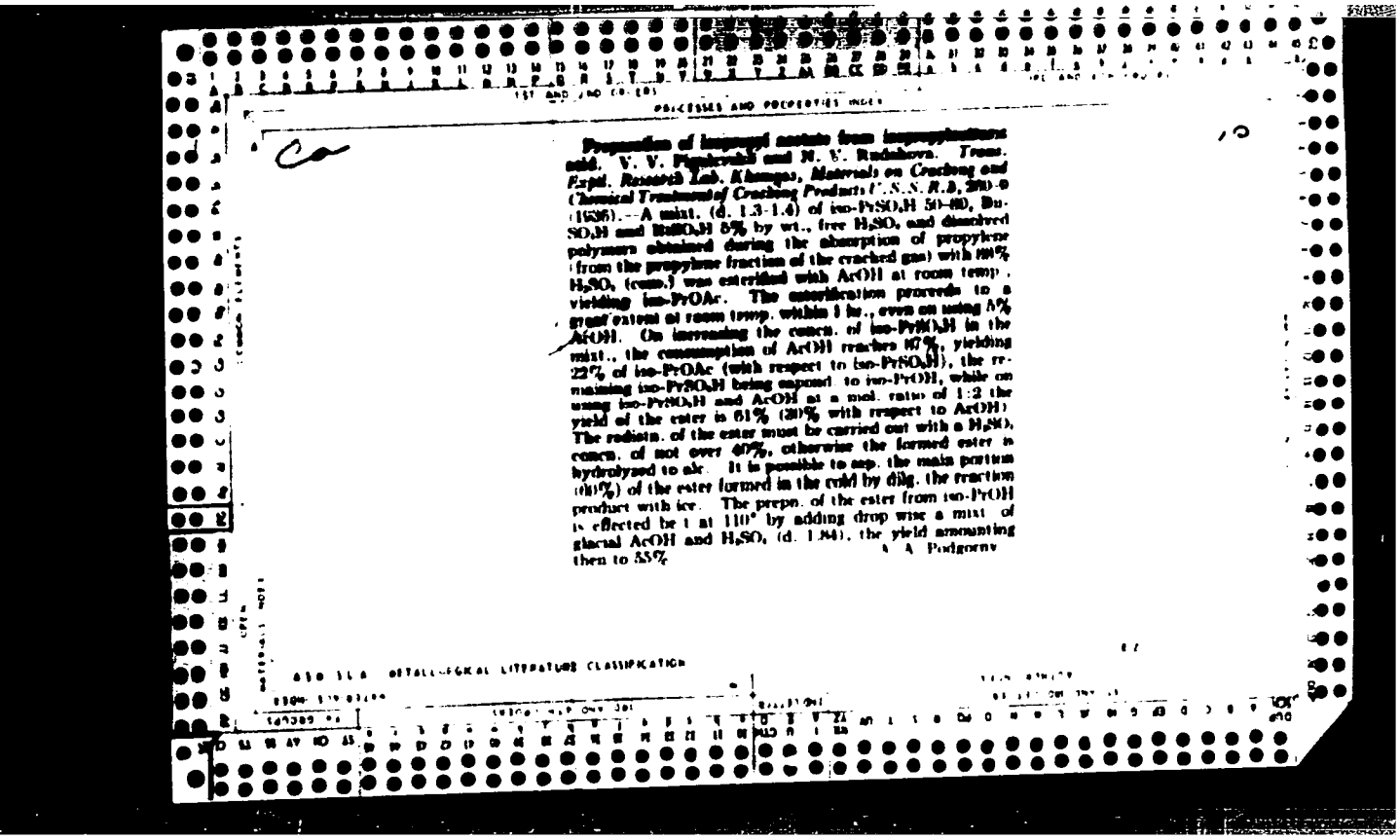

Preparation of isopropyl acetate from isopropylsulfuric acid. V. V. Pigulevskii and N. V. Rudakova. *Trans. Explt. Research Lab. Khimgaz, Materials on Cracking and Chemical Treatment of Cracking Products* (U.S.S.R.), 1936, 9-16 (1936).—A mixt. (d. 1.3-1.4) of iso-$PrSO_4H$ 50-60, $BuSO_4H$ and $BuHSO_4H$ 5% by wt., free H_2SO_4 and dissolved polymers obtained during the absorption of propylene (from the propylene fraction of the cracked gas) with 80% H_2SO_4 (conc.) was esterified with AcOH at room temp., yielding iso-PrOAc. The esterification proceeds to a great extent at room temp. within 1 hr., even on using 5% AcOH. On increasing the concn. of iso-$PrSO_4H$ in the mixt., the consumption of AcOH reaches 87%, yielding 22% of iso-PrOAc (with respect to iso-$PrSO_4H$), the remaining iso-$PrSO_4H$ being exposed to iso-PrOH, while on using iso-$PrSO_4H$ and AcOH at a mol. ratio of 1:2 the yield of the ester is 61% (20% with respect to AcOH). The reaction of the ester must be carried out with a H_2SO_4 concn. of not over 40%, otherwise the formed ester is hydrolyzed to alc. It is possible to sep. the main portion (60%) of the ester formed in the cold by dilg. the reaction product with ice. The prepn. of the ester from iso-PrOH is effected by heating at 110° by adding drop wise a mixt. of glacial AcOH and H_2SO_4 (d. 1.84), the yield amounting then to 55%.

A. A. Podgorny

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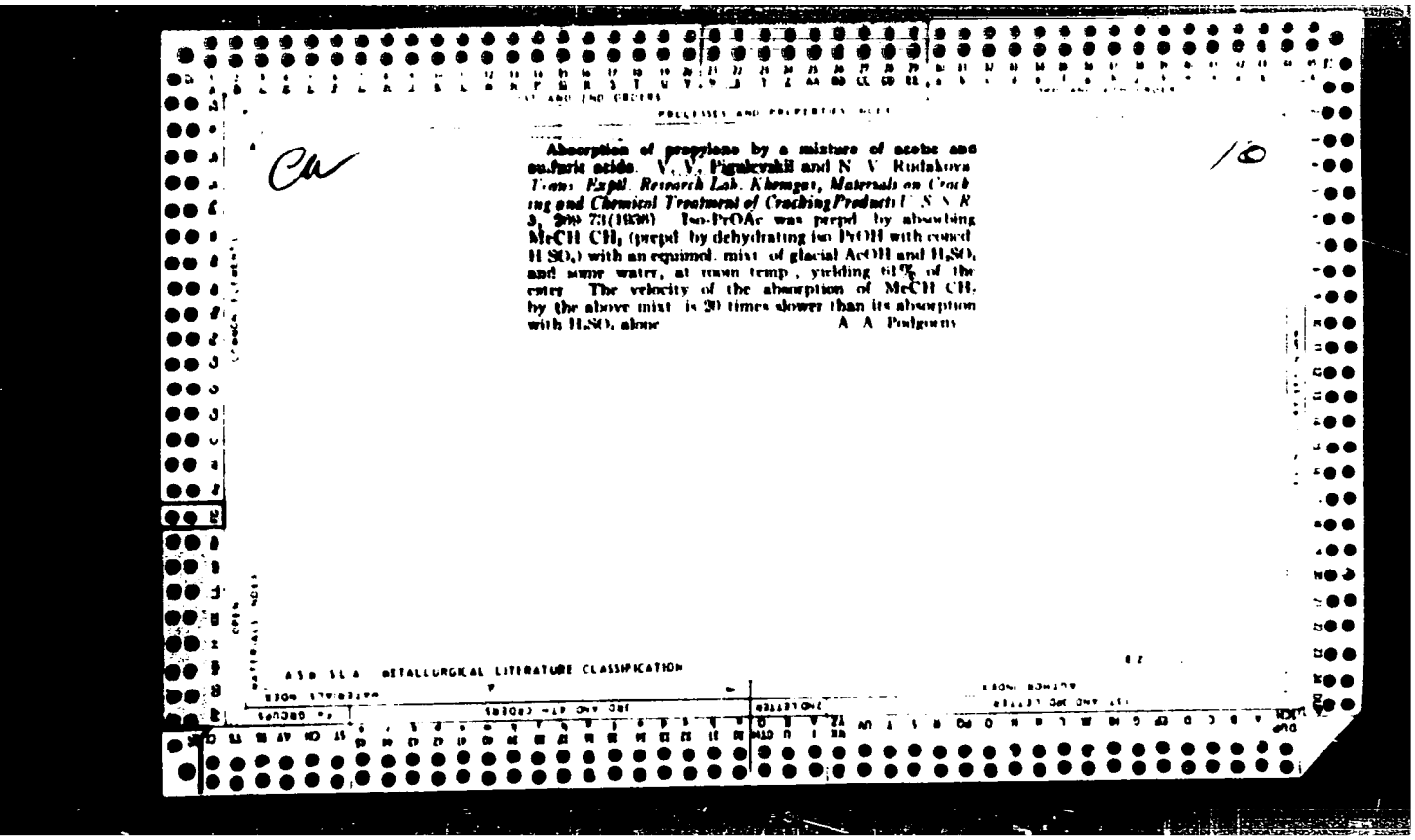

Absorption of propylene by a mixture of acetic and sulfuric acids. V. V. Pigulevskii and N. V. Rudakova *Trans. Exptl. Research Lab. Khimgaz, Materials on Cracking and Chemical Treatment of Cracking Products U. S. S. R.* 3, 269-73(1938). Iso-PrOAc was prepd. by absorbing MeCH:CH$_2$ (prepd. by dehydrating iso-PrOH with cond. H$_2$SO$_4$) with an equimol. mixt. of glacial AcOH and H$_2$SO$_4$, and some water, at room temp., yielding 61% of the ester. The velocity of the absorption of MeCH:CH$_2$ by the above mixt. is 20 times slower than its absorption with H$_2$SO$_4$ alone. A. A. Polgunov

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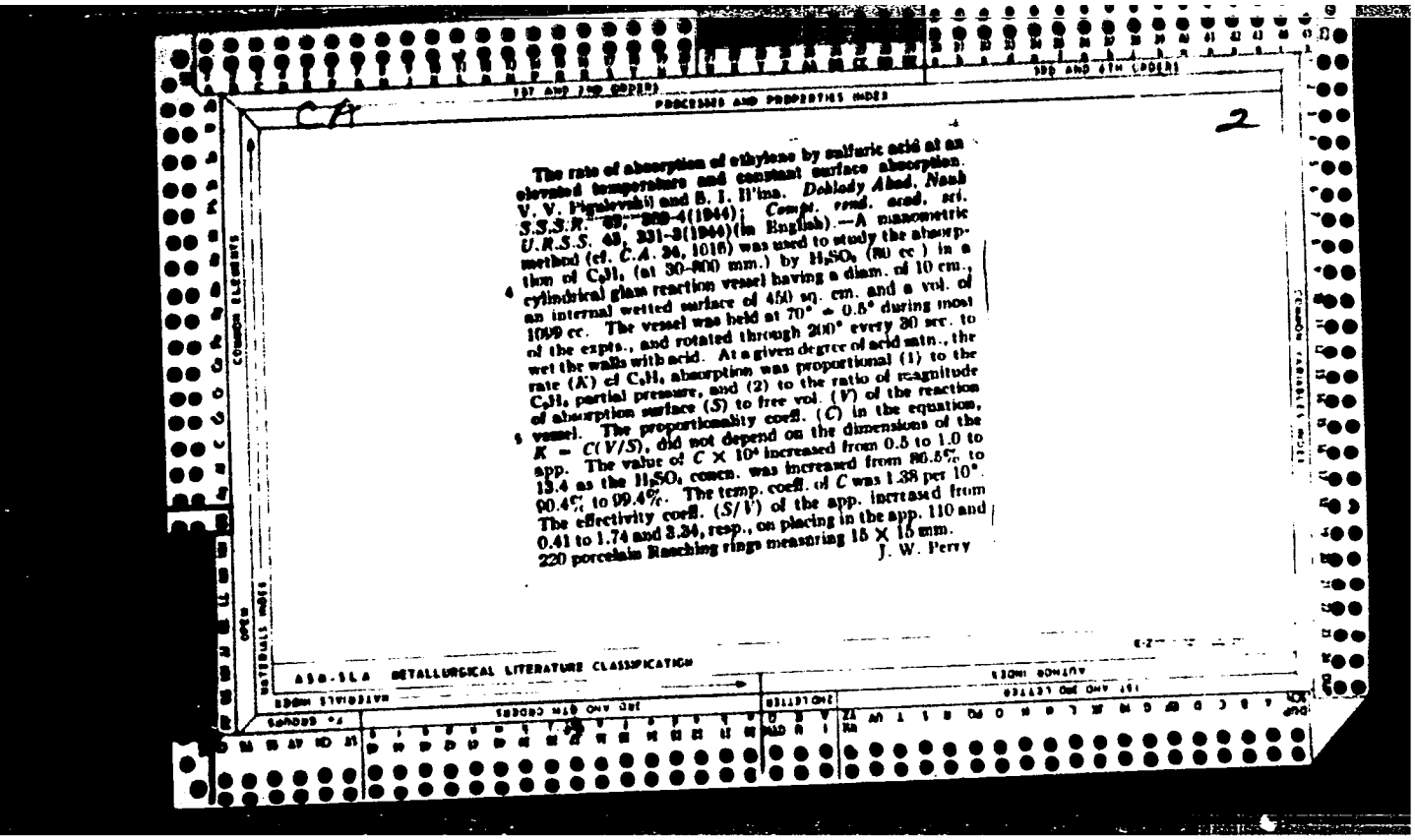

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The rate of absorption of ethylene by sulfuric acid at an elevated temperature and constant surface absorption. V. V. Pigulevskii and B. I. Il'ina. *Doklady Akad. Nauk S.S.S.R.* 43, 329-32(1944). *Compt. rend. acad. sci. U.R.S.S.* 43, 331-3(1944)(in English).—A manometric method (cf. *C.A.* 34, 1016) was used to study the absorption of C_2H_4 (at 30–800 mm.) by H_2SO_4 (80 cc.) in a cylindrical glass reaction vessel having a diam. of 10 cm., an internal wetted surface of 450 sq. cm. and a vol. of 1099 cc. The vessel was held at 70° ± 0.5° during most of the expts., and rotated through 200° every 30 sec. to wet the walls with acid. At a given degree of acid satn., the rate (K) of C_2H_4 absorption was proportional (1) to the C_2H_4 partial pressure, and (2) to the ratio of magnitude of absorption surface (S) to free vol. (V) of the reaction vessel. The proportionality coeff. (C) in the equation, $K = C(V/S)$, did not depend on the dimensions of the app. The value of $C \times 10^4$ increased from 0.5 to 1.0 to 13.4 as the H_2SO_4 concn. was increased from 80.8% to 90.4% to 99.4%. The temp. coeff. of C was 1.38 per 10°. The effectivity coeff. (S/V) of the app. increased from 0.41 to 1.74 and 3.34, resp., on placing in the app. 110 and 220 porcelain Raschig rings measuring 15 × 15 mm.

J. W. Perry

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PIGULEVSKIY, V.V.

USSR

Determination of formaldehyde in mixtures with other aldehydes. M. M. Ketelaĭ and V. V. Pigulevskiĭ. *Trudy Vsesoyuz. Nauch.-Issledovatel. Inst. Khim. Reaktivov. Osobo Chistykh Veshchestv* (KHIMGAZ) 6, 221-8(1951).—The recommended methods for detg. formaldehyde mixed with AcH involve the use of KCN, or a consecutive oxidation with H_2O_2 and $KMnO_4$ in an alk. soln. The formaldehyde detn. in mixts. with other aldehydes was found accurate to within ±2–3%.
W. M. Sternberg

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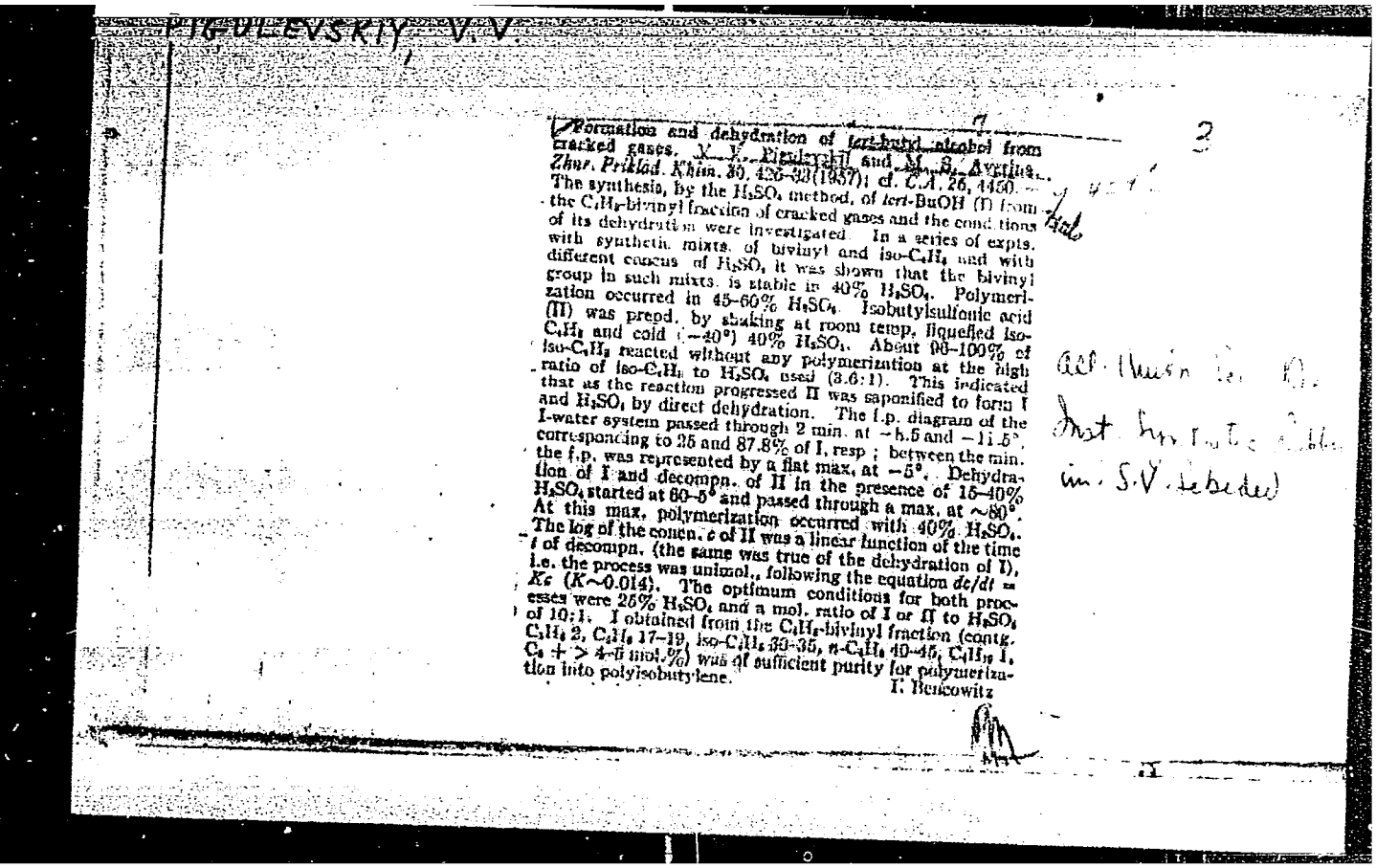

PIGULEVSKIY, V.V.

Formation and dehydration of *tert*-butyl alcohol from cracked gases. V. V. Pigulevskiĭ and M. S. Averina. *Zhur. Prikład. Khim.* 30, 426–30(1957); cf. *C.A.* 26, 4450. — The synthesis, by the H_2SO_4 method, of *tert*-BuOH (I) from the C_4H_8-divinyl fraction of cracked gases and the conditions of its dehydration were investigated. In a series of expts. with synthetic mixts. of divinyl and iso-C_4H_8 and with different concns. of H_2SO_4 it was shown that the divinyl group in such mixts. is stable in 40% H_2SO_4. Polymerization occurred in 45–60% H_2SO_4. Isobutylsulfonic acid (II) was prepd. by shaking at room temp. liquefied iso-C_4H_8 and cold (−40°) 40% H_2SO_4. About 90–100% of iso-C_4H_8 reacted without any polymerization at the high ratio of iso-C_4H_8 to H_2SO_4 used (3.6:1). This indicated that as the reaction progressed II was saponified to form I and H_2SO_4 by direct dehydration. The f.p. diagram of the I-water system passed through 2 min. at −6.5 and −11.5°, corresponding to 25 and 87.8% of I, resp.; between the min. the f.p. was represented by a flat max. at −5°. Dehydration of I and decompn. of II in the presence of 15–40% H_2SO_4 started at 80–5° and passed through a max. at ~80°. At this max. polymerization occurred with 40% H_2SO_4. The log of the concn. *c* of II was a linear function of the time *t* of decompn. (the same was true of the dehydration of I), i.e. the process was unimol., following the equation $dc/dt = Kc$ ($K \sim 0.014$). The optimum conditions for both processes were 25% H_2SO_4 and a mol. ratio of I or II to H_2SO_4 of 10:1. I obtained from the C_4H_8-divinyl fraction (contg. C_3H_6 2, C_4H_6 17–19, iso-C_4H_8 30–35, *n*-C_4H_8 40–45, C_4H_{10} 1, $C_5 +$ > 4–5 mol.%) was of sufficient purity for polymerization into polyisobutylene.

I. Berkowitz

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PIGULEVSKIY, V.V.; LEONT'YEVA, V.V.

The composition of butylenes obtained by S.V. Lebedev's process.
Zhur.prikl.khim. 30 no.8:1267-1270 Ag '57. (MIRA 11:1)
(Butene)

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MIKHAYLOVA, V.N.; PIGULEVSKIY, V.V.

Synthesis of some esters of β-chloropropionic acid. Zhur.prikl. khim. 30 no.12:1843-1847 D '57. (MIRA 11:1)

1.Leningradskiy institut kinoinzhenerov.
(Propionic acid)

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PIGULEVSKIY, V.V.; NAZAROVA, S.S.

Density, viscosity, and electric conductivity of products of interaction between n.-butylenes and sulfuric acid. Zhur. prikl.khim. 35 no.5:1077-1082 My '62. (MIRA 15:5)

1. Leningradskiy institut kinoinzhenerov.
(Butenes)
(Sulfuric acid)

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SIMONOVA, N.I.; PIGULEVSKIY, V.V.

Synthesis of 1-phenyl-3-pyrazolidone (phenidone). Trudy LIKI no. 5:190-195 '59. (MIRA 13:12)

1. Kafedra obshchey, analiticheskoy i organicheskoy khimii Leningradskogo instituta kinoinzhenerov.
(Photography--Developing and developers)
(Pyrazolidone)

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MIKHAYLOVA, V.N.; PIGULEVSKIY, V.V.

Synthesis of 1-phenyl-3-pyrazolidone (phenidone) from the methyl ester of β-chloropropionic acid. Trudy LIKI no. 5:196-199 '59. (MIRA 13:12)

1. Kafedra obshchey i analiticheskoy khimii Leningradskogo instituta kinoinzhenerov.
(Photography--Developing and developers)
(Propionic acid)

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MIKHAYLOVA, V.N.; PIGULEVSKIY, V.V.

Synthesis of 1-phenyl-3-pyrazolidone (phenidone) from esters of β-chloropropionic acid. Zhur. ob. khim. 28 no.11:3112-3115 N '58. (MIRA 12:1)

1. Leningradskiy institut kinoinzhenerov.
(Phenidone) (Propionic acid)

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"APPROVED FOR RELEASE: Tuesday, August 01, 2000 CIA-RDP86-00513R001240

AUTHORS: Simonova, M.I., and Pigulevskiy, V.V.

TITLE: A Method of Producing 1-Phenyl-3-Pyrazolidon (Sposob polucheniya 1-fenil-3-pirazolidona)

PERIODICAL: Byulleten' izobreteniy, 1958, Nr 6, p 125 (USSR)

ABSTRACT: Class 57b, 13_{01}. Nr 113570 (581767 of 8 Aug 57). Submitted to the Committee for Inventions and Discoveries at the Ministers Council of USSR. A method of producing 1-phenyl-3-pirazolidon by condensing phenylhydrazine with methyl ether monomer of acrylic acid; reducing the possibility of the formation of oxidization products through the effect of air in the process by carrying out the reaction by heating with a reflux condenser for 20 hours in a weakly acidous medium created by phenylhydrazine carbonate.

Card 1/1

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"APPROVED FOR RELEASE: Tuesday, August 01, 2000 CIA-RDP86-00513R001240

AUTHOR: Nikhavlova, V. N., Pigulevskiy, V. V. SOV/79-28-8-56/66

TITLE: Addition of the Hydrogen Halides to the Esters of α,β-Unsaturated Acids (Prisoyedineniye galogenvodorodov k efiram α,β-nepredel'nykh kislot)

PERIODICAL: Zhurnal obshchey khimii, 1953, Vol. 28, Nr 8, pp. 2265-2267 (USSR)

ABSTRACT: It is known that hydrogen halides affiliate to acrylates and methacrylates to form esters of β-halogen propionic and β-halogen isobutyric acids (Refs 1 - 3). In the work reported in this paper the authors found that in the synthesis of these esters the addition of the hydrogen halide must occur with cooling. The great number of esters of the above acids which are synthesized by various methods have not been carefully observed; their properties have been little investigated, and the possibilities of their practical use have not been developed. β-halogen propionates can be used for the synthesis of 1-phenyl-3-pyrazolidon (Ref 7), which is presently used as a developer in photographic processes. The synthesis of the butyl ester of β-chloro (bromo, iodo) propionic and isobutyric acids as products of the addition of hydrogen halides

Card 1/3

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Addition of the Hydrogen Halides to the Esters of α,β-Unsaturated Acids SOV/79-28-8-5

to butyl acrylate and butyl methacrylate are described (Table 1). The butyl esters of β-iodopropionic and β-chloro (iodo)-isobutyric acids were synthesized for the first time. All the synthesized butylates are colorless, transparent, and strongly smelling liquids obtainable at room temperature in the absence of light. In order to avoid a decomposition the distillation must be carried out at low pressure, since otherwise the acrylic and methacrylic acids produced polymerize. The simple synthesis described here for these esters can also be used for the esters of β-halogen propionic and β-halogen isobutyric acids.
There are 3 tables and 9 references, 3 of which are Soviet

ASSOCIATION: Leningradskiy institut kinoinzhenerov (Leningrad Institute of Motion-Picture Engineers)

SUBMITTED: June 4, 1957

Card 2/3

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Addition of the Hydrogen Halides to the Esters of α,β-Unsaturated Acids

SOV/79-28-9-56/

Card 3/3

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"APPROVED FOR RELEASE: Tuesday, August 01, 2000 CIA-RDP86-00513R001240

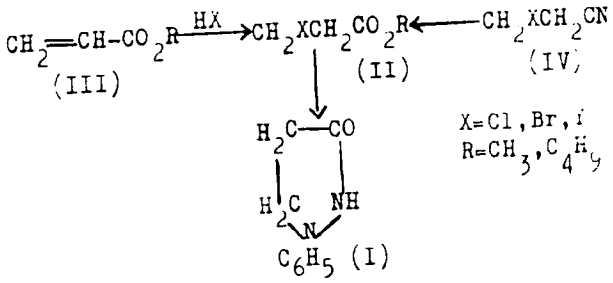
SOV/79-28-11-46/55

AUTHORS: Mikhaylova, V.N., Pigulevskiy, V.V.

TITLE: On the Synthesis of the 1-Phenyl-3-Pyrazolidone (Phenidone) From β-Chloro Propionates (O sinteze 1-fenil-3-pirazolidona (fenidona) iz efirov β-khlorpropionovoy kisloty)

PERICDICAL: Zhurnal obshchey khimii, 1958, Vol 28, Nr 11, pp 3112-3115 (USSR)

ABSTRACT: As the authors reported (Ref 1), the esters of the β-halogen propionic acids (II) can be used as initial products of the synthesis of 1-phenyl-3-pyrazolidone (I). These initial products can be obtained from the appropriate acrylates (III) by the action of halogen hydracid on these, as well as from the nitriles (IV) of these acids:



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On the Synthesis of the 1-Phenyl-3-"Pyrazolidone (Phenidone)" From β-Chloro Propionates

The authors synthesized the 1-phenyl-3-"pyrazolidone"(I, from the esters of the β-chloro propionic acid and the nitriles of the β-bromo-and β-iodo propionic acid. At present the 1-phenyl-3-"pyrazolidone"is widely used in cinematography in the place of metol (Refs 2-5). In the testing of the method by Beringer (Beringer-Ref 6) according to which"phenidone" is obtained from phenyl hydrazine and β-halogen propionic acid or their esters, it was observed that the condensation on highly alkaline medium takes place under a resinification, and that the yield of "phenidone" is very small and its separation from the oily reaction product is very difficult. Earlier, the authors had observed no resinification in the condensation of equimolecular amounts of methyl β-chloro propionate with phenyl hydrazine in weakly alkaline medium and in inert gaseous envelope (Ref 9) but had obtained the 1-phenyl-3-"pyrazolidone"in good yield as crystals. It was further observed that the condensation of the methyl and butyl β-chloro propionates with phenyl hydrazine in weakly alkaline medium takes place in two stages: First rather rapidly a formation of hydrogen halide takes place under the formation of the corresponding β-substituted propionates (V) and then the hydrochloric phenyl hydrazine is formed. The second condensation stage

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"APPROVED FOR RELEASE: Tuesday, August 01, 2000 CIA-RDP86-00513R001240

On the Synthesis of the 1-Phenyl-3-Pyrazolone Phenidone," From β-Chloro Propionates

is then the cyclization of the compound (V) under the formation of (I) (Scheme 2). The phenyl hydrazine salt must be removed prior to the separation of the "phenidone" as it would render this separation very difficult. The table shows that the synthesis of the "phenidone" from the methyl β-chloro propionate takes place more rapidly than that from the butyl ester, and that the yield in the first case is higher than in the second. The nitriles of the β-iodo(bromo)-propionic acid synthesized from acryl nitrile and hydrogen halide were identified and characterized.- There are 1 table and 15 references, 8 of which are Soviet.

ASSOCIATION: Leningradskiy institut kinoinzhenerov (Leningrad Institute of Cinematographic Engineers)

SUBMITTED: November 2, 1957

APPROVED FOR RELEASE: Tuesday, August 01, 2000 CIA-RDP86-00513R0012408

"APPROVED FOR RELEASE: Tuesday, August 01, 2000 CIA-RDP86-00513R001240

AUTHORS: Pigulevskiy, V.V., Labutin, A.L.

TITLE: A Block Furnace for the Testing of Catalyzers and the Investigation of Catalytic Reactions (Blochnaya pech' dlya ispytaniya katalizatorov i izucheniya kataliticheskikh reaktsiy)

PERIODICAL: Zavodskaya Laboratoriya, 1958, Vol. 24, Nr 3, pp. 358-359 (USSR)

ABSTRACT: A block furnace for the investigation of catalytic dehydration reactions of butane and butylene as well as of the dehydration catalyzers themselves was constructed. The block is of highly refractory aluminum bronze AL p10 of good thermal conductivity. As is shown by a drawing, the furnace has the usual [illegible]ace, two channels being provided for the purpose of cool[illegible] operation in certain gas atmospheres. The furnaces work at temperatures of from 550° to 675° C for up to 10 000 hours without any repair being necessary. The thermoregulator works with an accuracy of up to 3 to 4° C. Selection of the metal for the interior of the surface depends on test conditions. For the aforementioned tests steel of the type Ж 28 having a chromium content of about 27% was used

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A Block Furnace for the Testing of Catalyzers and the Investigation of Catalytic Reactions

32-3-38/52

with success at 550 - 675° C. There are 1 figure, and 2 references, 1 of which is Slavic.

ASSOCIATION: All-Union Scientific Research Institute of Synthetic Rubber imeni S. V. Lebedev (Vsesoyuznyy nauchno-issledovatel'skiy institut sinteticheskogo kauchuka im. S.V. Lebedeva)

AVAILABLE: Library of Congress

1. Catalyzers--Test methods 2. Catalytic reactions--Investigations
3. Furnaces--Applications

Card 2/2

APPROVED FOR RELEASE: Tuesday, August 01, 2000 CIA-RDP86-00513R0012408

"APPROVED FOR RELEASE: Tuesday, August 01, 2000 CIA-RDP86-00513R001240

MIKHAYLOVA, V.N.;PIGULEVSKIY, V.V.

Addition of hydrohalogens to esters of α,β-unsaturated acids.
Zhur. ob. khim. 28 no. 8:2265-2267 Ag '58. (MIRA 11:10)

1. Leningradskiy institut kinoinzhenerov.
(Acids, Organic)

APPROVED FOR RELEASE: Tuesday, August 01, 2000 CIA-RDP86-00513R0012408

"APPROVED FOR RELEASE: Tuesday, August 01, 2000 CIA-RDP86-00513R001240

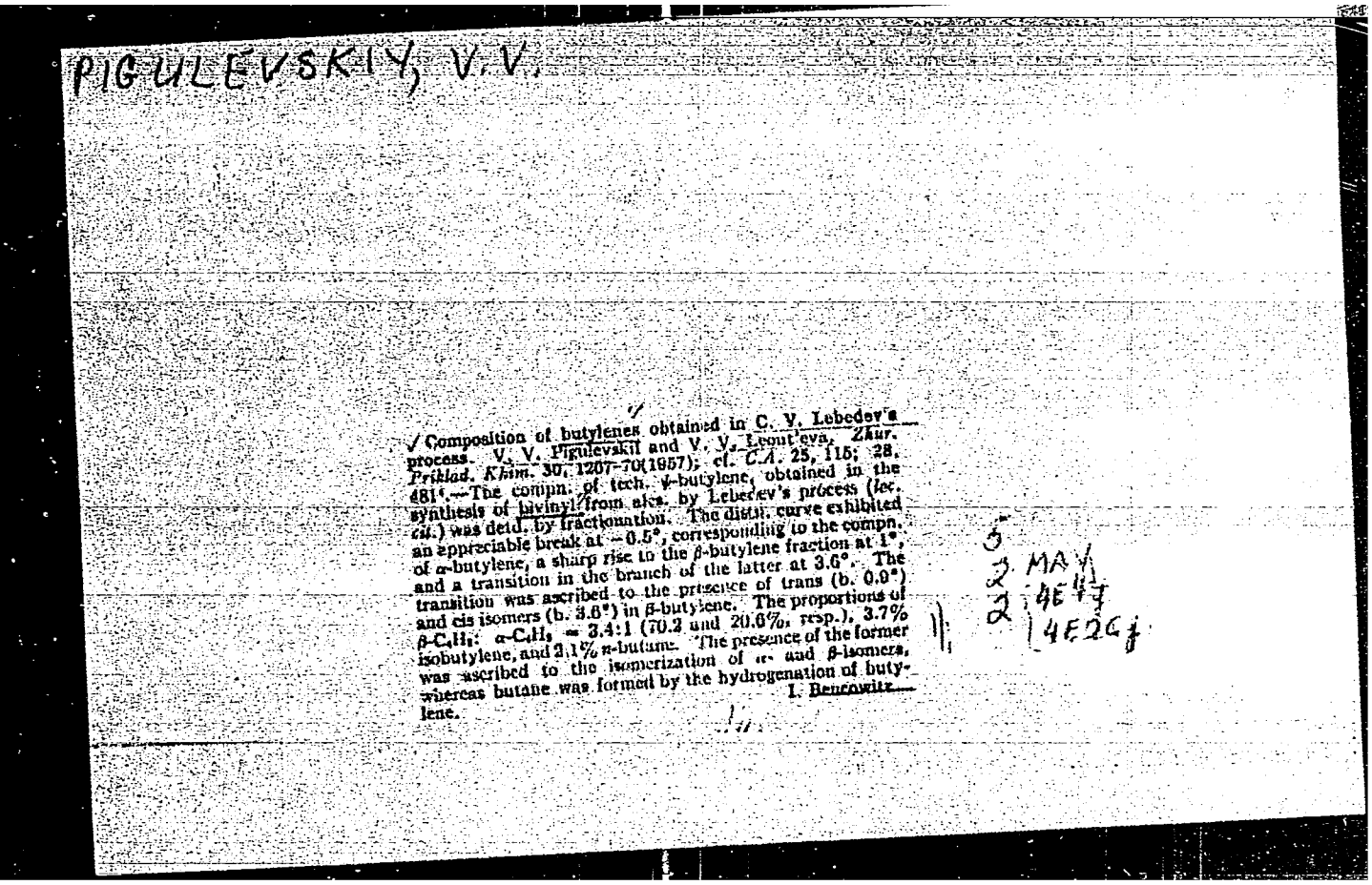
PIGULEVSKIY, V.V.; LABUTIN, A.L.

Block furnace for testing catalysts and study of catalytic reactions. Zav. lab. 24 no.3:358-359 '58. (MIRA 11:3)

1.Vsesoyuznyy nauchno-issledovatel'skiy institut sinteticheskogo kauchuka im. S.V. Lebedeva.
(Electric furnaces) (Catalysts) (Catalysis)

APPROVED FOR RELEASE: Tuesday, August 01, 2000 CIA-RDP86-00513R0012408

"APPROVED FOR RELEASE: Tuesday, August 01, 2000 CIA-RDP86-00513R001240



PIGULEVSKIY, V.V.

Composition of butylenes obtained in C. V. Lebedev's process. V. V. Pigulevskii and V. V. Leont'eva. *Zhur. Prikład. Khim.* 30, 1207–70(1957); cf. *C.A.* 25, 115; 28, 481i.—The compn. of tech. γ-butylene, obtained in the synthesis of divinyl from alcs. by Lebedev's process (*loc. cit.*) was detd. by fractionation. The distn. curve exhibited an appreciable break at −0.5°, corresponding to the compn. of α-butylene, a sharp rise to the β-butylene fraction at 1°, and a transition in the branch of the latter at 3.6°. The transition was ascribed to the presence of trans (b. 0.9°) and cis isomers (b. 3.6°) in β-butylene. The proportions of β-C_4H_8: α-C_4H_8 = 3.4:1 (70.2 and 20.6%, resp.). 3.7% isobutylene, and 2.1% *n*-butane. The presence of the former was ascribed to the isomerization of α- and β-isomers, whereas butane was formed by the hydrogenation of butylene.

I. Bencowitz

3 MAY 2 4E47 2 4E26

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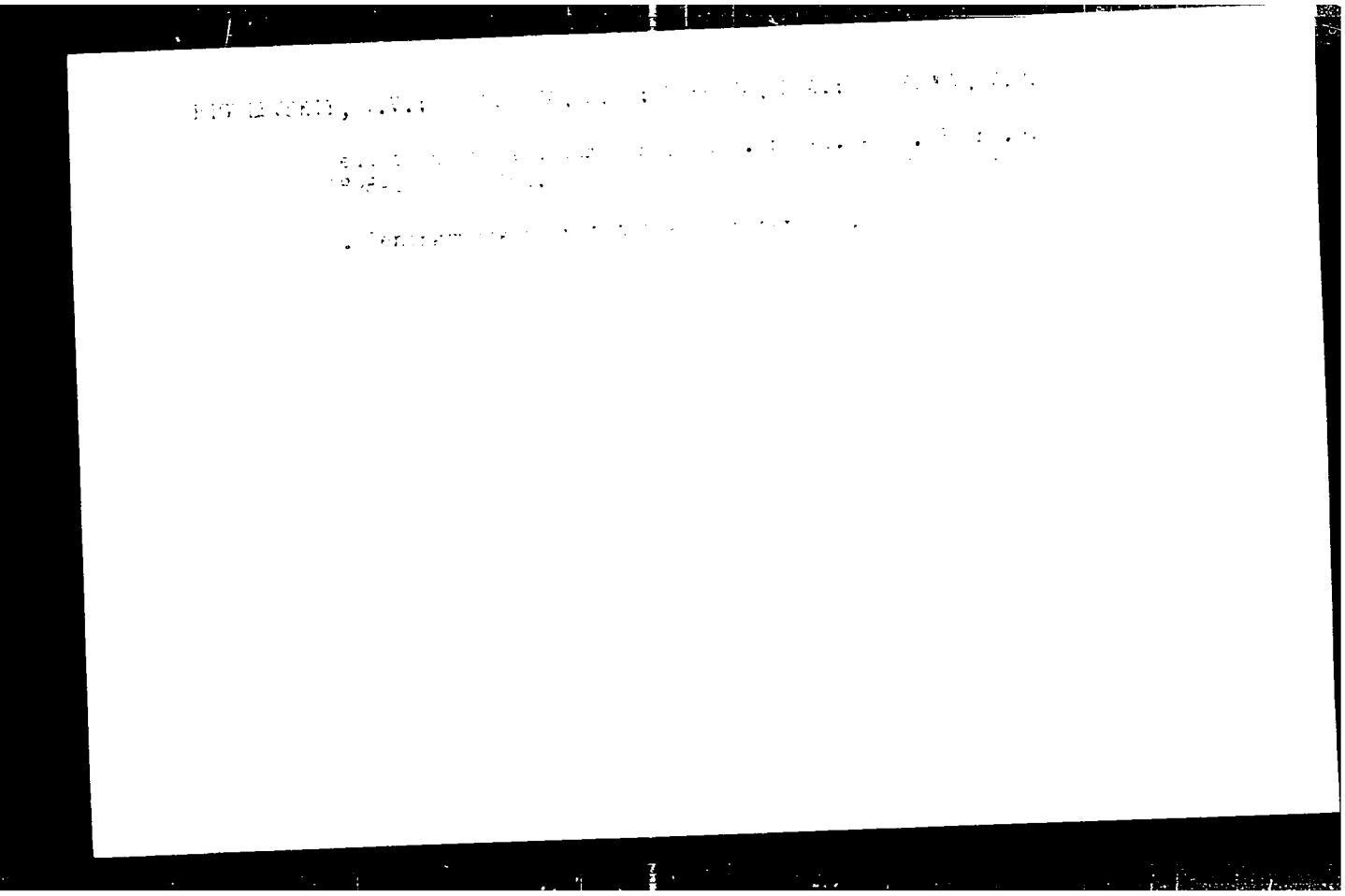

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"APPROVED FOR RELEASE: Tuesday, August 01, 2000 CIA-RDP86-00513R001240

PIGULEVSKIY, Ye. D. Cand Tech Sci -- (diss) "Study of [redacted] supersonic "vision" during transformation by the [redacted] convex-relief method." Len, 1957. 12 pp (Min of Higher Education USSR. Len Electrical Engineering Inst im V. I. Ul'yanov (Lenin)), 100 copies (KL, 3-58, 97)

APPROVED FOR RELEASE: Tuesday, August 01, 2000 CIA-RDP86-00513R0012408

"APPROVED FOR RELEASE: Tuesday, August 01, 2000 CIA-RDP86-00513R001240

SOV/46-4-4-8/20

AUTHOR: Pigulevskiy Ye.D.

TITLE: On the Sensitivity and Resolving Power of Acoustico-Optical Conversion on the Surface of a Liquid (O chuvstvitel'nosti i razreshayushchey sposobnosti akustiko-opticheskogo preobrazovaniya na poverkhnosti zhidkosti)

PERIODICAL: Akusticheskiy Zhurnal, 1958, Vol 4, Nr 4, pp 348-354 (USSR)

ABSTRACT: Ultrasonic beams are used to study internal inhomogeneities of opaque media. An essential part of any apparatus for visualization of ultrasonic images is an acoustico-optical convertor. Acoustico-optical conversion on the surface of a liquid, based on the deformation by constant acoustic pressure of a free surface of a liquid or of a boundary between two immiscible liquids, was proposed by Sokolov in 1936 (Ref 1). The liquid surface relief can be visualized optically since it is simply an assembly of curved mirrors. The optical part of the system records deviations of parallel rays of light by various parts of the liquid surface. Fig 1 shows the optical arangement used to study the liquid surface relief. Experiments on the sensitivity of the acoustico-optical conversion (defined as the smallest intensity of

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On the Sensitivity and Resolving Power of Acoustico-Optical Conversion on the Surface of a Liquid

the acoustic field which can be detected after conversion) were carried out by the author in the Acoustics Laboratory of the Leningrad Electrotechnical Institute imeni Lenin. The author found that the sensitivity of conversion is determined by the radii of curvature of the liquid surface relief and not by the absolute values of depth. The largest radius of curvature which can be detected depends on the optical part of the conversion apparatus. The sensitivity of conversion, which is given by the reciprocal of the radius of curvature of the surface relief, is found to be inversely proportional to the value of the surface tension and density of the liquid. At high ultrasonic frequencies (above 10 Mc/s) the surface tension forces predominate, while below 0.5 Mc/s it is the gravitational forces that are decisive. The resolving power of the acoustico-optical conversion was studied both on liquid and on solid surfaces. A pattern consisting of two parallel bands (called a "double slit") was used as the test object. The resolving power in observation of internal inhomogeneities of liquids was determined by the diffraction distribution in the ultrasonic image and does not depend on the properties of the acoustico-optical conversion system. The smallest distance that can be resolved acoustically is

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"APPROVED FOR RELEASE: Tuesday, August 01, 2000 CIA-RDP86-00513R001240

On the Sensitivity and Resolving Power of Acoustico-Optical Conversion on the Surface of a Liquid

in the case of a "double slit", given by $d = \lambda/1.65A$ where A is the ultrasonic aperture. Figs 3, 4 and 5 show some of the results obtained using various conditions and patterns. In transmission of ultrasonic beams by plane parallel plates it was found that the resolving power decreased due to multiple internal reflections of ultrasound, as shown in Fig 6. Figs 7-9 show longitudinal cross-sections of ultrasonic beams passing through plane-parallel plates with internal defects. The effect of multiple reflections in plane-parallel plates may be minimized by increasing the ultrasonic frequency or by deposition of acoustic anti-reflection films on the plate faces. Studies of the acoustico-optical conversion, carried out in the Acoustics Laboratory of the Leningrad Electrotechnical Institute under the direction of S.Ya. Sokolov, Corresponding Member of the Academy of Sciences of the U.S.S.R., led to development of a new method of control of the quality of metal sheets. There are 9 figures and 5 references, 2 of which are

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SOV/46-4-4-8/20

On the Sensitivity and Resolving Power of Acoustico-Optical Conversion on the Surface of a Liquid

Soviet, 1 American, 1 German and 1 translation.

ASSOCIATION: Leningradskiy elektrotekhnicheskiy institut im. V.I. Ul'yanova (Lenina)
(Leningrad Electrotechnical Institute imeni V.I. Ul'yanov (Lenin))

SUBMITTED: August 30, 1957

Card 4/4

APPROVED FOR RELEASE: Tuesday, August 01, 2000 CIA-RDP86-00513R0012408

"APPROVED FOR RELEASE: Tuesday, August 01, 2000 CIA-RDP86-00513R001240

PHASE I BOOK EXPLOITATION SOV/5300

Pigulevskiy, Yevgeniy Dmitriyevich

Ul'trazvukovaya mikroskopiya; stenogramma lektsii (Ultrasonic Microscopy; Verbatim Report of a Lecture) Leningrad, 1959. 23 p. (Series: Leningradskiy dom nauchno-tekhnicheskoy propagandy. Seriya: Kontrol' kachestva produktsii) 6,500 copies printed.

Sponsoring Agency: Obschestvo po rasprostraneniyu politicheskikh i nauchnykh znaniy RSFSR.

Ed.: A.K. Gurvich, Engineer. Tech. Ed.: V.L. Gvirts.

PURPOSE: This booklet is intended to acquaint workers in industry with the physical principles underlying the application of ultrasound rays to "see" into opaque media, and with certain concrete methods of ultrasound microscopy.

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COVERAGE: The author acquaints the reader with the practical application of ultrasound. He briefly traces the history of ultrasound microscopy, underlining the importance of this technique in the study of opaque materials. He discusses a number of design principles and some possible designs for ultrasound microscopes used for defectoscopy and for the control of the thickness and uniformity of coverings and coatings of metal parts. The text is illustrated by seven conceptual diagrams of design principles and the equipment designs discussed, two photographs of defectograms, and three photos of actual instruments. There is no table of contents. No personalities are mentioned. There are 12 references: 11 Soviet and 1 German.

TABLE OF CONTENTS (Compiled From Section Headings):

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"APPROVED FOR RELEASE: Tuesday, August 01, 2000 CIA-RDP86-00513R001240

VOYTSEKHOVSKAYA, I.A.; GRAMMAKOV, A.G., prof.; YERMOLOVA, A.P.; LYATKOVSKAYA, N.M.; MALYSHEVA, T.D.; ORLOV, V.M.; PIGULEVSKIY, Ye.D.; VASILEVSKAYA, V.N., tekhn. red.

[Exercises in physics] Posobie k uprazhneniiam po fizike. Leningrad, Leningr. elektrotekhn. in-t im. V.I.Ul'ianova (Lenina). Part 3.[Optics, atomic physics] Optika, atomnaia fizika. 1962. 197 p. (MIRA 16:12)
(Physics--Problems, exercises, etc.)

APPROVED FOR RELEASE: Tuesday, August 01, 2000 CIA-RDP86-00513R0012408

"APPROVED FOR RELEASE: Tuesday, August 01, 2000 CIA-RDP86-00513R001240

43208
S/046/62/008/004/014/017
B106/B186

AUTHORS: Moskovenko, I. V., Figulevskiy, Ye. D., Semenova, N. S.

TITLE: Electrification of suspensions of colloid particles in an ultrasonic field

PERIODICAL: Akusticheskiy zhurnal, v. 8, no. 4, 1962, 479-480

TEXT: Particles suspended in nonconductive liquids were found to acquire a negative electrical charge when an ultrasonic field acts upon them. The effective charge of the particles was determined by measuring their electrophoretic mobility in an Abramson-Dofman microchamber with a 1.5-kcps ultrasonic generator. The power of the latter was limited by the cavitation depending on the viscosity of the liquid. Cavitation obviously promotes the destruction of the diffusion layer between the suspended colloid particles. Ultrasound without cavitation will only deform this layer, thus giving the particles an effective charge. There are 2 figures. The English-language reference is: I. I. Hermans. Charged colloid particles in ultrasonic field. Phil. Mag., 1938, 25, 426-438; 1936, 267, 674-683.

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"APPROVED FOR RELEASE: Tuesday, August 01, 2000 CIA-RDP86-00513R001240

3/048/62/026/004/014/017
B108/B186

Electrification of suspensions of...

ASSOCIATION: Leningradskiy elektrotekhnicheskiy institut im. V. I. Ul'yanova (Lenina) (Leningrad Electrotechnical Institute imeni V. I. Ul'yanov (Lenin))

SUBMITTED: [illegible]

Card 2/2

APPROVED FOR RELEASE: Tuesday, August 01, 2000 CIA-RDP86-00513R0012408

"APPROVED FOR RELEASE: Tuesday, August 01, 2000 CIA-RDP86-00513R001240

PIGULEVSKIY, Ye.D.; SAZONOV, A.M.

Resonance absorption of ultrasound in NaCl crystals. Akust. zhur. 9 no.2:245 '63. (MIRA 16:4)

1. Leningradskiy elektrotekhnicheskiy institut imeni V. I. Ul'yanova (Lenina).
(Absorption of sound)
(Nuclear magnetic resonance and relaxation)

APPROVED FOR RELEASE: Tuesday, August 01, 2000 CIA-RDP86-00513R0012408

"APPROVED FOR RELEASE: Tuesday, August 01, 2000 CIA-RDP86-00513R001240

/[illegible], K.V., [illegible]V, L.G.; [illegible]KIY, Ye.P.

Attenuation of [illegible] waves in a plate with free boundaries. (MIRA 17:6)
Akust. zhur. 10 n.2:169-180 '64.

1. Leningradskiy elektrotekhnicheskiy institut imeni V.I. Ul'yanova (Lenina).

APPROVED FOR RELEASE: Tuesday, August 01, 2000 CIA-RDP86-00513R0012408

"APPROVED FOR RELEASE: Tuesday, August 01, 2000 CIA-RDP86-00513R001240

PIGULOVSKIY, N.A.

Potato loading machine. Kons. i ov. prom. 13 no.10:42-43 O '58. (MIRA 11:10)

1.Nach. konstruktorskogo byuro Belorusskogo nauchno-issledovatel'skogo instituta pishchevoy promyshlennosti.
(Potatoes) (Loading and unloading)

APPROVED FOR RELEASE: Tuesday, August 01, 2000 CIA-RDP86-00513R0012408

"APPROVED FOR RELEASE: Tuesday, August 01, 2000 CIA-RDP86-00513R001240

PIGULOVICH, Ye.V.

Portable equipment for the loading of rods into a rod mill. TSvet. met. 36 no.1:76-77 Ja '63. (MIRA 16:5)
(Crushing machinery)

APPROVED FOR RELEASE: Tuesday, August 01, 2000 CIA-RDP86-00513R0012408

"APPROVED FOR RELEASE: Tuesday, August 01, 2000 CIA-RDP86-00513R001240

MAN'KOVSKAYA, N.K.; ZHURBA, A.S.; GRUSHEVENKO, V.I.; TRIANDAFILIDI, I.G.; STERKHOVA, L.N.; PIGUL'SKAYA, R.I.; MITEL'MAN, B.Yu.

Chemical changes in synthetic fatty acids during the rectification process under plant conditions. Khim. i tekh. topl. i masel 10 no.2:24-27 F '65. (MIRA 18:8)

1. UkrNIIGIPRONEFT'.

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"APPROVED FOR RELEASE: Tuesday, August 01, 2000 CIA-RDP86-00513R001240

PIGURNOV, A., general-leytenant zapasa

In the last months of the war. Komm. Vooruzh. Sil 46 no.9:50-56 My '65. (MIRA 18:7)

APPROVED FOR RELEASE: Tuesday, August 01, 2000 CIA-RDP86-00513R0012408

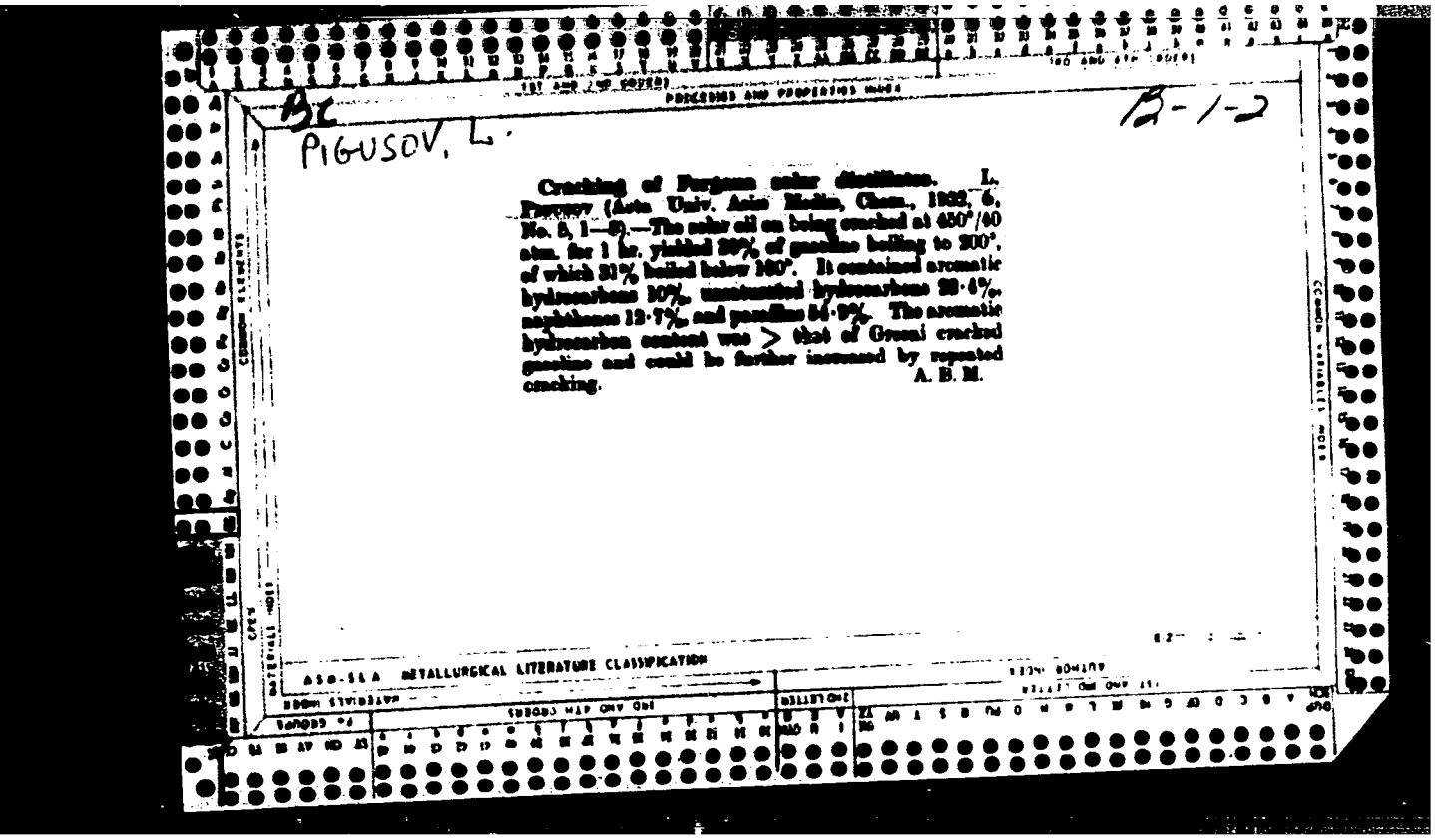
"APPROVED FOR RELEASE: Tuesday, August 01, 2000 CIA-RDP86-00513R001240

GLAVINSKIY, David Germanovich; DENSHCHIKOV, Mikhail Tikhonovich; PIGUZOV, A.T., inzh., retsenzent; FEL'DMAN, M.S., inzh., retsenzent; POPOV, V.I., prof., spets. red.; KOVALEVSKAYA, M.I., red.; SOKOLOVA, I.A., tekhn. red.

[Mechanization and automation in the brewing industry] Mekhanizatsiia i avtomatizatsiia pivovarennogo proizvodstva. Moskva, Izd-vo "Pishchevaia promyshlennost'," 1964. 419 p. (MIRA 17:4)

APPROVED FOR RELEASE: Tuesday, August 01, 2000 CIA-RDP86-00513R0012408

"APPROVED FOR RELEASE: Tuesday, August 01, 2000 CIA-RDP86-00513R001240



B-1-2

PIGUSOV, L.

Cracking of Pergusa solar distillates. L. Pigusov (Acta Univ. Asiae Mediae, Chem., 1932, 6, No. 5, 1—6).—The solar oil on being cracked at 450°/40 atm. for 1 hr. yielded 39% of gasoline boiling to 200°, of which 31% boiled below 100°. It contained aromatic hydrocarbons 10%, unsaturated hydrocarbons 29·4%, naphthenes 12·7%, and paraffins 54·9%. The aromatic hydrocarbon content was > that of Grosni cracked gasoline and could be further increased by repeated cracking. A. B. M.

A50-5&A METALLURGICAL LITERATURE CLASSIFICATION

APPROVED FOR RELEASE: Tuesday, August 01, 2000 CIA-RDP86-00513R0012408

"APPROVED FOR RELEASE: Tuesday, August 01, 2000 CIA-RDP86-00513R001240

ACC NR: AP7005427 SOURCE CODE: UR/0065/65/000/010/0032/0034

PIGUSOVA, L. I., NIKOLINA, V. YA., DUBININ, M. M. and SHISHAKOVA, T. N.,
VNII NP

"Acid-Resistance of Synthetic Zeolite, Erionite"

Moscow, Khimiya i Tekhnologiya Topliv i Masel, No 10, 1965, pp 32-34

Abstract: Synthetic erionite, one of the new native zeolites, has the composition $0.5K_2O \cdot 0.4Na_2O \cdot Al_2O_3 \cdot 6.6SiO_2 \cdot 5.5H_2O$. It was treated with a hydrochloric acid solution of varying composition at 96-98°C for an hour. Degree of decomposition was found according to the analysis of the filtrate. After treatment with the acid the zeolite, previously washed from the reaction products (NaCl and KCl) and acid residues was tested for change in water adsorption capacity and its capacity to adsorb a mixture of nitrous gases of NO_2-N_2O_4. The data indicated that the zeolite structure can be maintained under severe conditions such as when the pH of the hydrochloric acid is about 2.1-2.4.

Changes in the crystal lattice even when treated with 0.1 N hydrochloric acid could not be detected by x-ray analysis. The water adsorption capacities of zeolites before and after treatment were changed little. Consequently the exchange of Na and K cations by H cations occurs without significant disturbance of the crystals.

UDC: 543:544

Card 1/2 0926 2291

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"APPROVED FOR RELEASE: Tuesday, August 01, 2000 CIA-RDP86-00513R001240

ACC NR: AP7005427

Synthetic zeolites in the H-form were studied under stationary conditions in the adsorption-desorption of NO_2-N_2O_4 gas. The tests were conducted in the Kazan Chemico-Technological Institute imeni S. M. Kirov by Z. B. Krasnyy and T. G. Musinyy according to a method developed by them. In comparison with silica gel No. 6 erionite has substantial advantage in its considerable larger adsorption capacity at low concentrations.

Conducted tests showed very small quantities of adsorbed benzene on synthetic erionite which attests to the fact that the effective size of its pores are about 5 angstroms. Hexagonal synthetic erionite is stable in hydrochloric acid with a pH of about 2.5. No changes in its structure were observable after numerous adsorption-desorption of the nitrous gases. Orig. art. has: 5 figures and 1 table. [JPRS: 38,970]

TOPIC TAGS: zeolite, nitrogen oxide, silica gel, crystal lattice structure

SUB CODE: 07,20 / SUBM DATE: none / ORIG REF: 004 / OTH REF: 005

Card 2/2

APPROVED FOR RELEASE: Tuesday, August 01, 2000 CIA-RDP86-00513R0012408

"APPROVED FOR RELEASE: Tuesday, August 01, 2000 CIA-RDP86-00513R001240

PIJADE, Rafael

Recurrent appearance of pulmonary echinococcosis. Srpski arh. celok. lek. 87 no.12:1175-1179 D '59.

1. Rendgenolosko odeljenje Vojne bolnice u Skoplju, Nacelnik: ppuk. dr Rafael Pijade.
(LUNG DISEASES surg.)
(ECHINOCOCCOSIS surg.)

APPROVED FOR RELEASE: Tuesday, August 01, 2000 CIA-RDP86-00513R0012408

"APPROVED FOR RELEASE: Tuesday, August 01, 2000 CIA-RDP86-00513R001240

PIJADE, Rafael

A rare localization of echinococcal cyst. Srpski arh. celok. lek. 88 no.1:95-98 Ja '60.

1. Rendgenolosko odeljenje Vojne bolnice u Skoplju, Nacelnik: ppuk. dr Rafael Pijade.
(ECHINOCOCCOSIS radiogr.)
(DIAPHRAGM dis.)

APPROVED FOR RELEASE: Tuesday, August 01, 2000 CIA-RDP86-00513R0012408

"APPROVED FOR RELEASE: Tuesday, August 01, 2000 CIA-RDP86-00513R001240

Piguta, D.B.

PIGUTA, D.B.

Objections to V.A.Gorbov's review of D.B.Piguta's book "Sanitary improvement of inhabited communities." Gig. i san. 22 no.11:69-73 N '57. (MIRA 11:1)

(PUBLIC HEALTH, RURAL) (GORBOV, V.A.)

APPROVED FOR RELEASE: Tuesday, August 01, 2000 CIA-RDP86-00513R0012408

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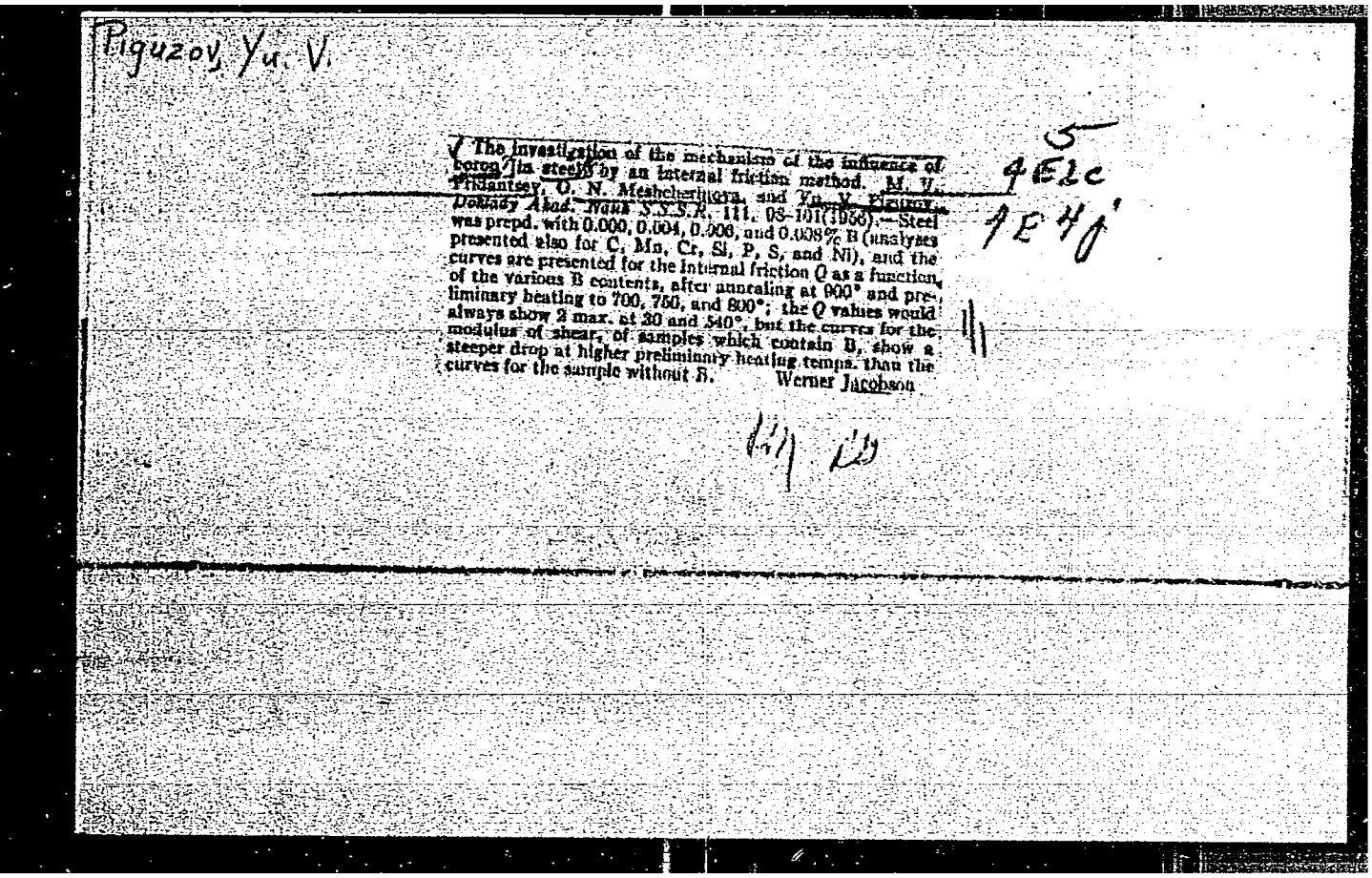

Piguzov, Yu. V.

5
4E2c
4E4j'

The investigation of the mechanism of the influence of boron in steels by an internal friction method. M. V. Priluntsev, O. N. Meshcheriagova, and Yu. V. Piguzov. *Doklady Akad. Nauk S.S.S.R.* 111, 98-101(1956).—Steel was prepd. with 0.000, 0.004, 0.006, and 0.008% B (analyses presented also for C, Mn, Cr, Si, P, S, and Ni), and the curves are presented for the internal friction Q as a function of the various B contents, after annealing at 900° and preliminary heating to 700, 750, and 800°; the Q values would always show 2 max. at 30 and 540°, but the curves for the modulus of shear, of samples which contain B, show a steeper drop at higher preliminary heating temps. than the curves for the sample without B. Werner Jacobson

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"APPROVED FOR RELEASE: Tuesday, August 01, 2000 CIA-RDP86-00513R001240

PIGUTA, D.

PA 26/49T67

USSR/Medicine - Epidemiology Jul 48
Medicine - Literature, Medical

"Review of Professors L. V. Gromashevskiy and G. M. Vaynrakha's Book, 'Local Epidemiology,'" D. Piguta, 1½ pp

"Gig i San" No 7

Unfavorable review of book, published by Medgiz, Moscow, 1947. Considers it unfit for a manual.

FDB 26/49T67

APPROVED FOR RELEASE: Tuesday, August 01, 2000 CIA-RDP86-00513R0012408

"APPROVED FOR RELEASE: Tuesday, August 01, 2000 CIA-RDP86-00513R001240

PIGUTA,D.B.

[Establishing sanitary conditions in inhabited places] Sanitarnaia ochistka naselennykh mest. Moskva, Medgiz, 1955. 251 p.
(SANITATION)
(MLRA 8:11)

APPROVED FOR RELEASE: Tuesday, August 01, 2000 CIA-RDP86-00513R0012408

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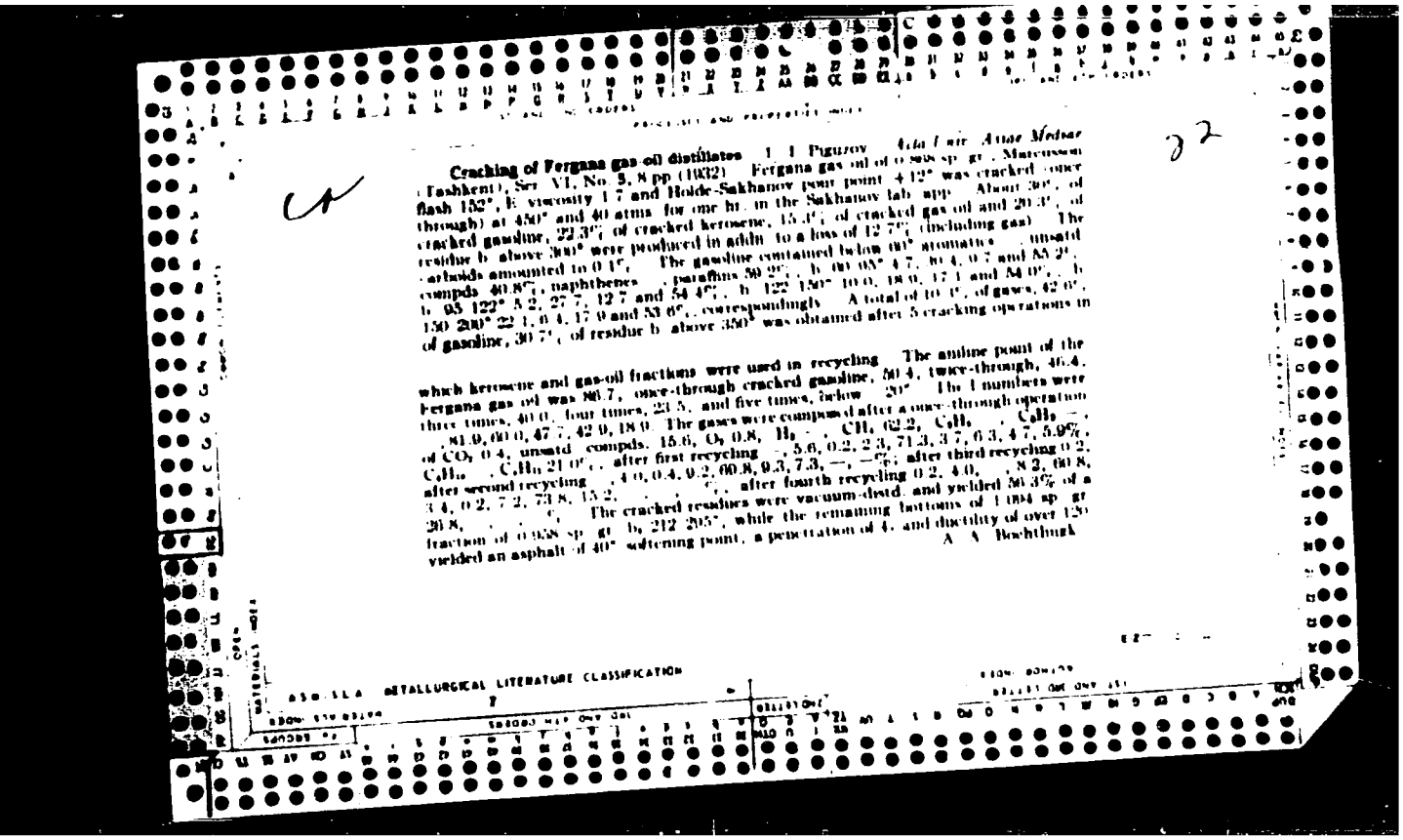

Cracking of Fergana gas-oil distillates I. I. Figurov *Acta Univ. Asiae Mediae* (Tashkent), Ser. VI, No. 5, 8 pp. (1932). Fergana gas oil of 0.895 sp. gr., Marcusson flash 152°, E. viscosity 1.7 and Holde-Sakhanov pour point +12° was cracked once through at 450° and 40 atms. for one hr. in the Sakhanov lab. app. About 30% of cracked gasoline, 22.3% of cracked kerosene, 15.4% of cracked gas oil and 20.3% of residue b. above 300° were produced in addn. to a loss of 12.7% (including gas). The carbides amounted to 0.1%. The gasoline contained below 100° aromatics, unsatd. compds. 40.8%, naphthenes, paraffins 50.2%; b. 60–95° 4.7, 30.4, 0.7 and 85.2%; b. 95–122° 5.2, 27.7, 12.7 and 54.4%; b. 122–150° 10.0, 18.0, 17.1 and 54.0%; b. 150–200° 22.1, 0.4, 17.0 and 53.6%, correspondingly. A total of 10.4% of gases, 42.0% of gasoline, 30.7% of residue b. above 350° was obtained after 5 cracking operations in which kerosene and gas-oil fractions were used in recycling. The aniline point of the Fergana gas oil was 80.7, once-through cracked gasoline, 50.4, twice-through, 46.4, three times, 40.0, four times, 22.5, and five times, below 20°. The 1 numbers were 81.9, 60.0, 47.7, 42.9, 18.9. The gases were composed after a once-through operation of CO_2 0.4, unsatd. compds. 15.6, O_2 0.8, H_2 —, CH_4 62.2, C_2H_6, C_3H_8 —, C_4H_{10}, C_5H_{12} 21.0%, after first recycling —, 5.6, 0.2, 2.3, 71.3, 3.7, 0.3, 4.7, 5.9%, after second recycling —, 4.0, 0.4, 0.2, 60.8, 9.3, 7.3, —, —%; after third recycling 0.2, 3.4, 0.2, 7.2, 73.8, 15.2, , , , after fourth recycling 0.2, 4.0, , 8.2, 60.8, 20.8, , , . The cracked residues were vacuum-distd. and yielded 50.3% of a fraction of 0.958 sp. gr. b. 212–305°, while the remaining bottoms of 1.004 sp. gr. yielded an asphalt of 40° softening point, a penetration of 4, and ductility of over 150.

A. A. Bochtlingk

METALLURGICAL LITERATURE CLASSIFICATION

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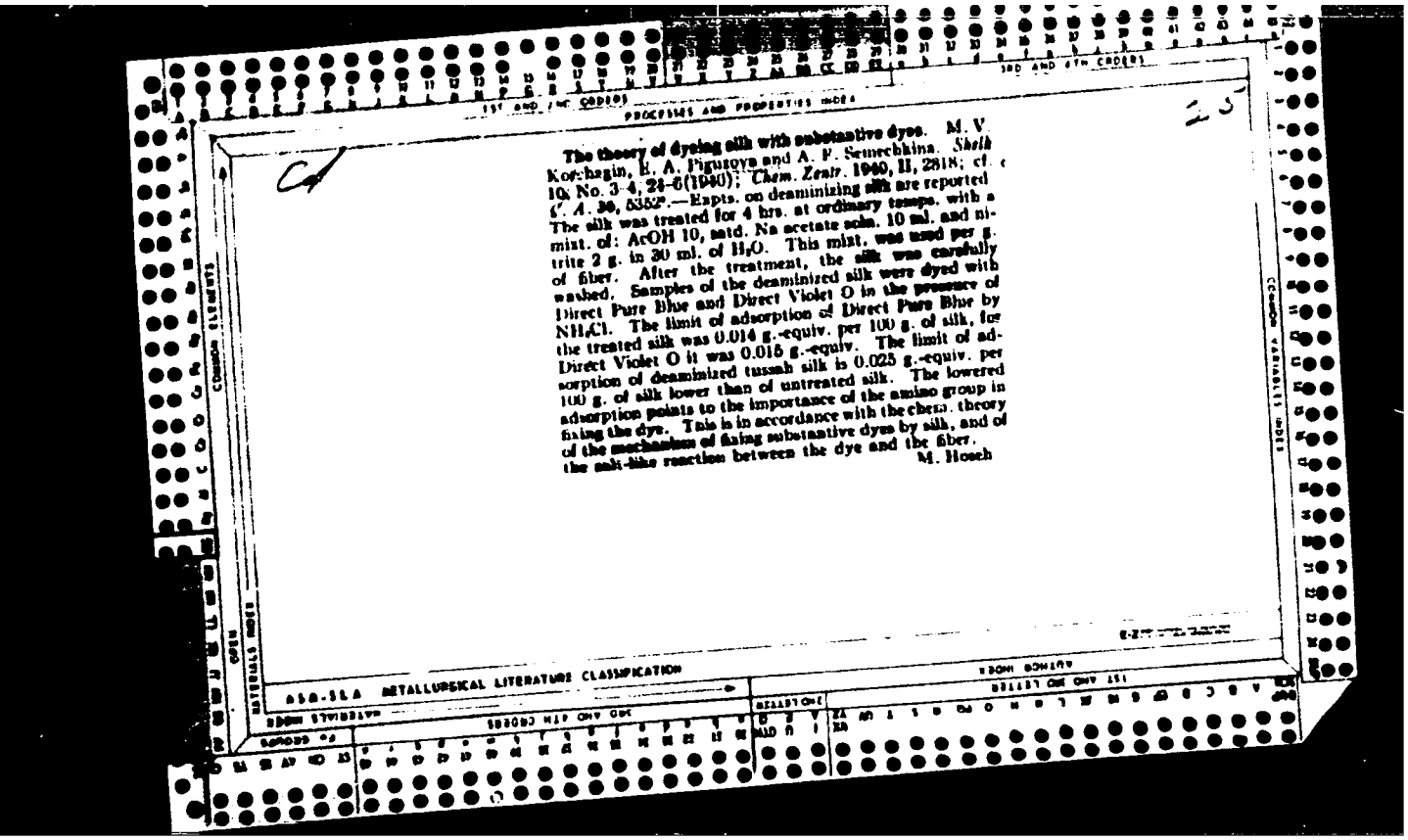

The theory of dyeing silk with substantive dyes. M. V. Korshagin, E. A. Pigurova and A. F. Semechkina. *Shelk* 10, No. 3-4, 24-6(1940); *Chem. Zentr.* 1940, II, 2818; cf. *C. A.* 30, 8352.—Expts. on deaminizing silk are reported. The silk was treated for 4 hrs. at ordinary temps. with a mixt. of: AcOH 10, satd. Na acetate soln. 10 ml. and nitrite 2 g. in 30 ml. of H_2O. This mixt. was used per g. of fiber. After the treatment, the silk was carefully washed. Samples of the deaminized silk were dyed with Direct Pure Blue and Direct Violet O in the presence of NH_4Cl. The limit of adsorption of Direct Pure Blue by the treated silk was 0.014 g.-equiv. per 100 g. of silk, for Direct Violet O it was 0.015 g.-equiv. The limit of adsorption of deaminized tussah silk is 0.025 g.-equiv. per 100 g. of silk lower than of untreated silk. The lowered adsorption points to the importance of the amino group in fixing the dye. This is in accordance with the chem. theory of the mechanism of fixing substantive dyes by silk, and of the salt-like reaction between the dye and the fiber.

M. Hosch

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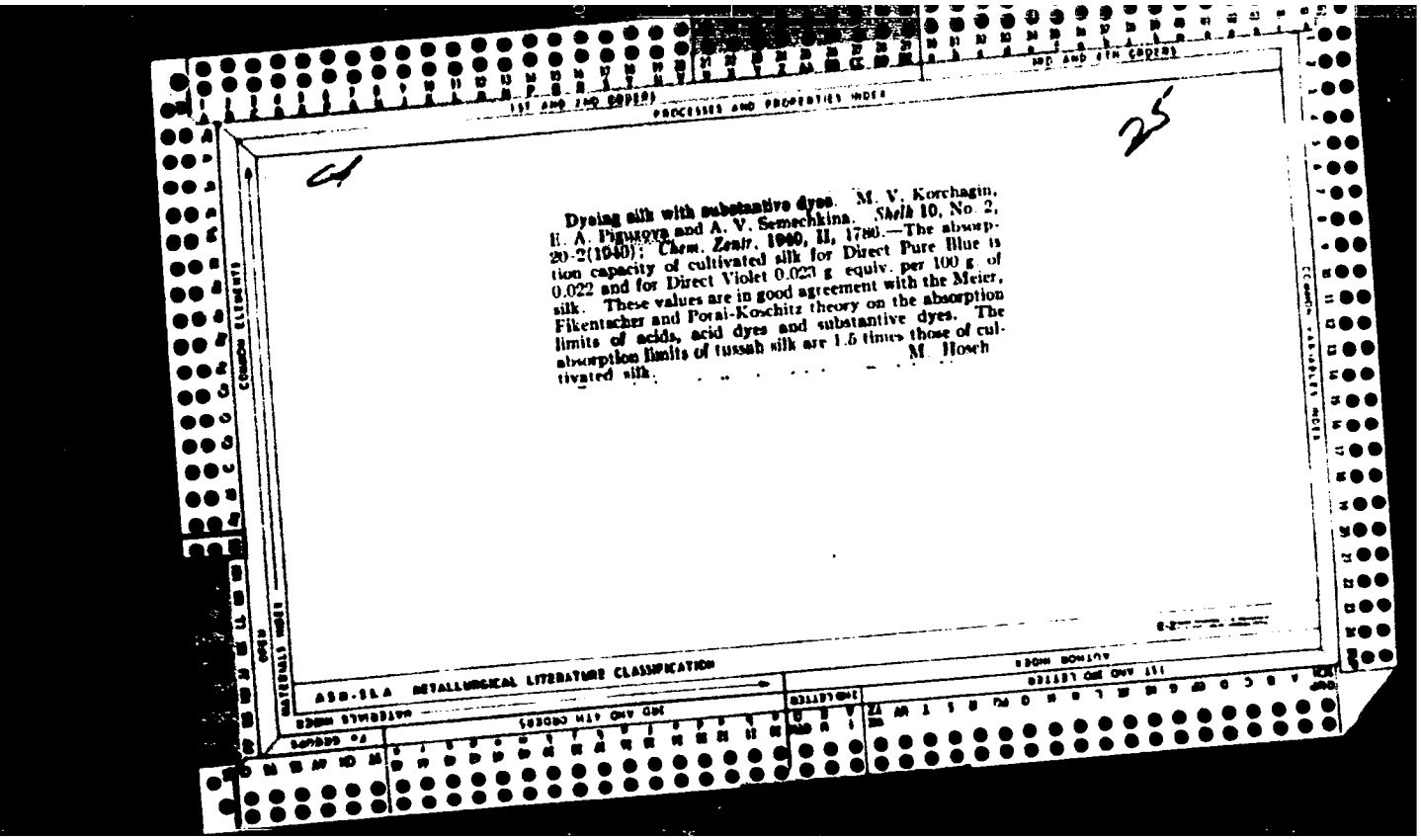

Dyeing silk with substantive dyes. M. V. Korchagin, E. A. Pigunova and A. V. Semechkina. *Shelk* 10, No. 2, 20-2(1940); *Chem. Zentr.* 1940, II, 1780.—The absorption capacity of cultivated silk for Direct Pure Blue is 0.022 and for Direct Violet 0.023 g equiv. per 100 g. of silk. These values are in good agreement with the Meier, Fikentscher and Porai-Koschitz theory on the absorption limits of acids, acid dyes and substantive dyes. The absorption limits of tussah silk are 1.5 times those of cultivated silk. M. Hoseh

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TIGUZOV, Yu. V.,

"Effect of Chromium on the Elastic Properties and Internal Friction of Ferrite." (Dissertation for Degree of Candidate of Technical Sciences.) Min Higher Education USSR, Moscow Order of Labor Red Banner Inst of Steel imeni I. V. Stalin, Moscow, 1955

SO: M-1036 28 Mar 56

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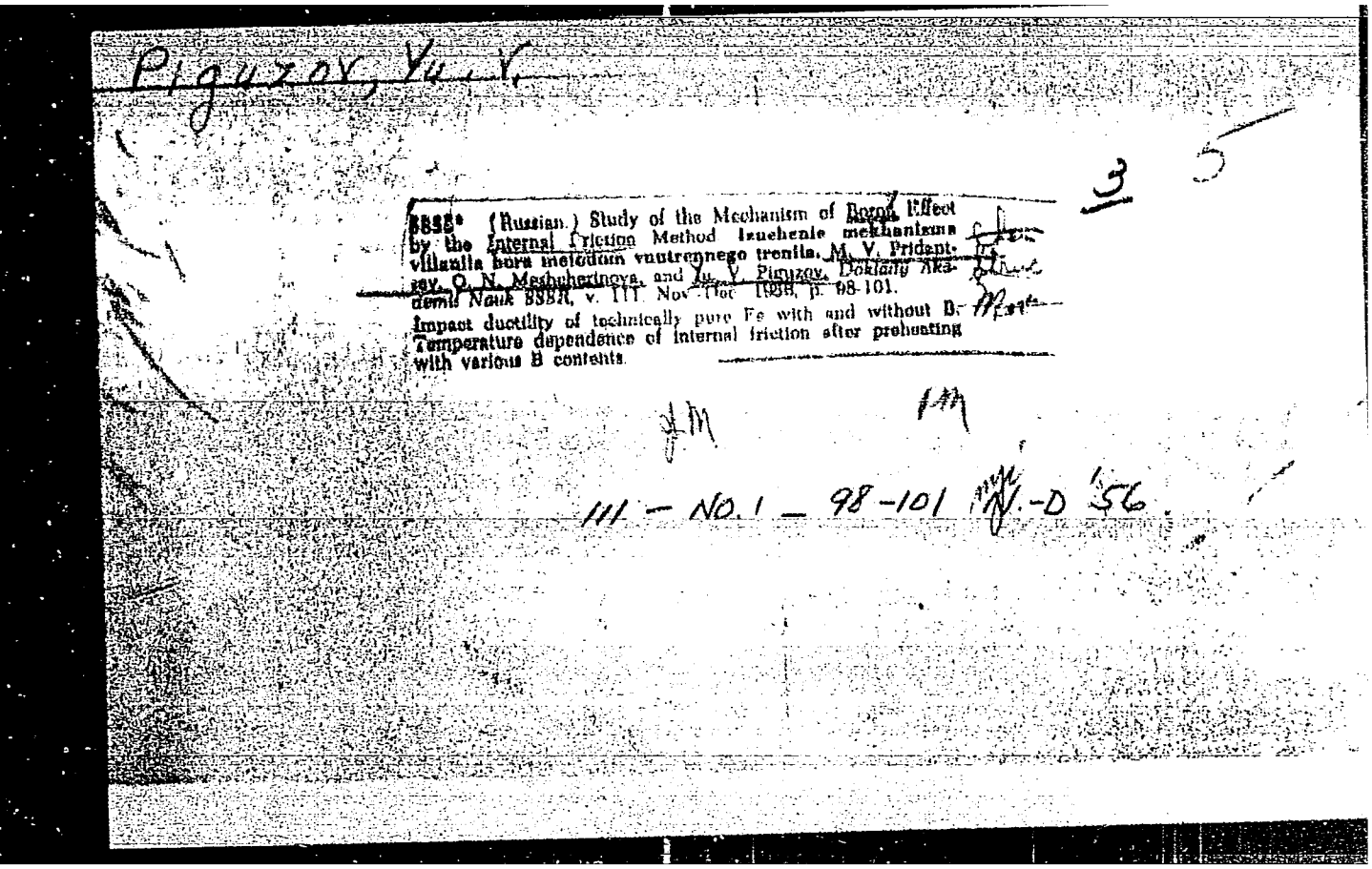

Piguzov, Yu. V.

3 5

8858* (Russian.) Study of the Mechanism of Boron Effect by the Internal Friction Method Izuchenie mekhanizma vliyaniia bora metodom vnutrennego treniia. M. V. Pridantsev, O. N. Meshcheriakova, and Yu. V. Piguzov. Doklady Akademii Nauk SSSR, v. 111, Nov.-Dec. 1956, p. 98-101.
Impact ductility of technically pure Fe with and without B. Temperature dependence of internal friction after preheating with various B contents.

111 - NO. 1 - 98-101 N.-D '56

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PA - 2243

AUTHOR PIGUZOV, YU.V.

TITLE An Investigation of the internal Friction in the γ- and α-phases of high Chromium Steel (Izucheniye vnutrennogo treniya v γ- i α-faskh vysokokhromistoy stali).

PERIODICAL Doklady Akademii Nauk SSSR, 1957, Vol 112, Nr 4, pp 636-639 (U.S.S.R.)
Received 4/1957 Reviewed 5/1957

ABSTRACT The investigation of a steel in which both austenite and ferrite can be obtained would be interesting and so would be the investigation of the $\gamma \rightarrow \alpha$-transformation occurring in this steel by the method of internal friction. For this purpose the specially produced steel 105 KH 12 (chemical composition in %: C 1,05; Cr 11,90; N 0,012) was used. The castings weighing 30 kg were forged into rods, annealed in the vacuum, and then cold-drawn into a wire of 0,7 mm. Measurements were carried out by means of the vacuum-torsion-pendulum RKF-MIS in a vacuum of $\sim 10^{-4}$ torr at frequencies of 0,4 and 1,4 c. A diagram shows the temperature-dependence of the internal friction of the samples chilled in water at various temperatures. The curves of temperature-dependence of the internal friction of the samples chilled from 800 - 1020° at a frequency of ~1,4 c have a peak at ~210°. The height of the peak grows with increasing chilling-temperature. On the occasion of chilling at at least 1160° (up to melting temperature) the peak completely vanishes at ~210° and at approximatively 280° a new peak appears the height of which practically does not depend on chilling-temperature. The amount of

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PA - 2243

An Investigation of the internal Friction in the γ- and α-phases of high Chromium Steel.

the inner background is here much smaller than in the case of the first measuring-series. The curve of the samples chilled from 1130° has two maxima at ~ 210° and ~ 280°. Radiographic and microstructure investigations show that chilling leads to different phase-states. A table contains the lattice-parameters and the structure-phase-components of the samples with different temperatures.
The peak at approximatively 210° is due to the interaction between the carbon-atoms and the defects caused by elastic stresses in the martensite-lattice. The higher the chilling-temperature the greater the micro-stresses in the lattice.
The author considers the solution of carbides to be a decisive factor in the case of an increase of the peak, which is indicated by the modification of the inner background. The peak at ~ 280° is due to the diffusion of the carbon-atoms embossed in the γ-iron and has only one relaxation-time. Position and height of this peak do not change in the case of gradual tempering up to 500° temperature after a modification of 100° in each case. (4 illustrations)

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PA - 2243

An Investigation of the internal Friction in the - and α-phases of high Chromium Steel.

ASSOCIATION Moscow Institute for Steel "J.V.STALIN"
PRESENTED BY G.V.KUDRYUMOV, member of the Academy, on 4. 7. 1956
SUBMITTED 22. 6. 1956
AVAILABLE Library of Congress

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137-58-6-13468

Translation from: Referativnyy zhurnal, Metallurgiya, 1958, Nr 6, p 333 (USSR)

AUTHORS: Piguzov, Yu. V., Finkel'shteyn, B. N.

TITLE: Moduli of Elasticity in the Fe-Cr System as a Function of Concentration (Kontsentratsionnaya zavisimost' moduley uprugosti v sisteme zhelezo-khrom)

PERIODICAL: Sb. Mosk. in-t stali, 1957, Vol 36, pp 168-175

ABSTRACT: E and G measurements were performed on eight types of Fe-Cr alloys containing 0.85, 1.8, 3.72, 4.7, 6.76, and 14% of Cr, respectively. The moduli were calculated from the resonant frequencies of longitudinal and torsional oscillations generated by electromagnetic means in cylindrical specimens. Vacuum-smelted alloys were forged into rods 8 mm in diameter at a temperature of 1100°C; the rods were then drawn out, in conjunction with process-annealing operations carried out under vacuum, to a diameter of 6 mm. The specimens were subjected to following heat-treatment procedures: tempering at a temperature of 900° for a period of one hour; quenching in water at 940°; annealing for a period of two hours at a temperature of 550° followed by another two-hour anneal period at 700°. It was

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137-58-6-13468

Moduli of Elasticity in the Fe-Cr System as a Function of Concentration

established that at increasing concentrations of Cr, the values of E and G increase somewhat, while the Poisson ratio is reduced. The critical Debye temperature, θ_D, was computed on the basis of the propagation velocities of longitudinal and transverse waves. It was found that the θ_D increases with increasing Cr content, which indicates a strengthening of the interatomic bonds. The results obtained coincide qualitatively with the values of θ_D (obtained by X-ray methods) as found in literature. Heat-treatment procedures have very little effect on the values of E, G, and θ_D.

1. Iron-chromium systems--Elasticity 2. Iron-chromium systems--Temperature factors 3. Iron-chromium systems--Mechanical properties 4. Iron-chromium systems--Test results A. F.

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"APPROVED FOR RELEASE: Tuesday, August 01, 2000 CIA-RDP86-00513R001240

SOV-3-58-9-25/36

AUTHOR: Piguzov, Yu.V., Candidate of Technical Sciences, Moscow Institute of Steel imeni I.V. S'alin

TITLE: Relaxation Phenomena in Pure Metals and Alloys (Relaksatsionnyye yavleniya v chistykh metallakh i splavakh)

PERIODICAL: Vestnik vysshey shkoly, 1958, Nr 9, pp 72-73 (USSR)

ABSTRACT: From 2-4 April 1958, an Intervuz Conference on the "Relaxation Phenomena of Pure Metals and Alloys" took place at the Moskovskiy institut stali (Moscow Institute of Steel). The conference was attended by 196 representatives of 24 higher educational institutions and 31 scientific-research institutes (including 8 institutes of the USSR AS), from 13 cities of the Soviet Union. Doctor K. Mishek of the Prague Institute of Technical Physics and Den Ge Sen of the Pyongyang State University were also present. S.I. Filippov, Deputy Director of the Institute of Steel, opened the conference. A reviewing report was delivered by B.N. Finkel'shteyn [Finkelstein (Moscow Institute of Steel). V.T. Shmatov (Institute of Physics of the USSR AS in Sverdlovsk) and N.S. Fastov (Tsentral'nyy nauchno-issledovatel'skiy institut chërnoy metallurgii (TsNIIChM) Central Scientific-Research Institute of Ferrous Metallurgy)

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gave information on the application of the thermodynamics of non-balanced conditions. V.S. Postnikov (Kemerovskiy pedagogicheskiy institut - Kemerovo Pedagogical Institute) dealt in his report with questions of the internal friction of plastic deformed metals and alloys under increased temperatures. G.S. Pisarenko and V.V. Khil'chevskiy (Kiyev Polytechnic Institute and Institute of Metallo-Ceramics and Special Alloys UkrSSR AS) told the conference about a method of experimental examination of the energy dissipation in materials. A.A. Sazonova and K.F. Starodubov (Dnepropetrovsk Metallurgical Institute) reported on studies into the influence of annealing temperature after hardening, and isothermic hardening during the subsiding of oscillations in silicon spring steel. The report of M.F. Alekseyenko, Yu.V. Piguzov and L.S. Fedotova (Moscow Institute of Steel and the All-Union Institute of Aircraft Materials) was dedicated to the annealing friability of high-chromium steels and its influence on internal friction. S.N. Polyakov (Institute of Ferrous Metallurgy UkrSSR AS) spoke on the influence of manganese and molybdenum on the solubility of carbon in alpha-iron and on the kinetics of the separation of carbon, by internal friction, from a solid solution containing

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