GUTWIRTH, V.

The beginnings of the telephone. p. 317

SDELOVACI TECHNIKA (inistrestvo strojirenstvi), Vol. 4, No. 10, Oct. 1956

Praha, Czechoslovakia

SOURCE: East European List (EEAL) Library of Congress, Vol. 6, No. 1, January 1957

Gutwirth, V.

= J. Murgas; a biographic sketch. p. 206. ELEKTROTECHNIK. (Ministerstvo strojirenstvi) Praha. Vol. 11, no. 6, June 1956.

Source: EEAL LC Vol. 5, No. 10 Oct. 1956

[redacted], V.

Submarine cable. p.22 (Sdelovaci Technika. Vol. 5, no. 1, Jan. 1957, Czechoslovakia.)

SO: Monthly List of East European Accession (EEAL) LC. Vol. 6, no. 7, July 1957. Uncl.

Gutwirth, V.

Gutwirth, V. Beginnings of Czech technical literature; a review of Presl's Technologie (Technology). p. 44.
Reviews of new Czech and Slovak technical books. p. 46.
Books published abroad. p. 46.

Vol. 5, no. 1, Jan. 1957
STROJIRENSKA VYROBA
TECHNOLOGY
Czechoslovakia

So. East European Accessions, Vol. 6, May 1957
No. 5

GUTWIRTH, V.

Code or teletype? p. 85.

(Sdelovaci Technika. Vol. 5, no. 3, Mar. 1957. Praha, Czechoslovakia)

SO: Monthly List of East European Accessions (EEAL) LC, Vol. 6, no. 10, October 1957. Uncl.

GUTVIRTH, V.

From the history of cables.

P. 248, (Sdelovaci Technika) Vol. 5, no. 8, Aug. 1957, Praha, Czechoslovakia

SO: Monthly Index of East European Acessions (EEAI) Vol. 6, No. 11 November 1957

GUTWIRTH, V.

From the history of the microphone.

p. 266 (Sdelovaci Technika) Vol. 5, no. 9, Sept. 1957, Praha, Czechoslovakia

SO: MONTHLY INDEX OF EAST EUROPEAN ACCESSIONS (EEAI) LC, VOL. 7, NO. 1, JAN. 1958

GUTWIRTH, V.

250 years of the Czech Institute of Technology in Prague. p.145.
(Elektrotechnik, Vol. 12, No. 5, May 1957, Praha, Czechoslovakia)

SO: Monthly List of East European Accessions (EEAL) LC. Vol. 6, No. 9, Sept. 1957. Uncl.

GUTWIRTH, V.

TECHNOL HY

periodicals: SLOVACI TECHNIKA Vol. 6, no. 9, Sept. 1959

GUTWIRTH, V. What to do with television? p. 345.

Monthly List of East European Accessions (EEAI) LC Vol. 8, no. 5
May 1959, Unclass.

GUTYAN, A.M., inzh. (Kaluga)

Equipment used for loading rails. Put' i put. khoz. no.9:25 S '58. (MIRA 11:9)

(Railroads--Equipment and supplies) (Loading and unloading)

KOSHELYUK, Ye.G.; NEDUZHKO, N.Ya., dorozhnyy master (stantsiya Zachepilovka, Stalinskoy dorogi); YEGOROV, M.I., dorozhnyy master (stantsiya Kakhovka, Stalinskoy dorogi); GUTYAN, A.M., inzh.; KOREN', P.T., putevoy obkhodchik (Vil'nyus); GRISHANKOV, V.G., putevoy obkhodchik (Vil'nyus); KURSHNEVA, M.N., dezhurnaya po pereyezdu (Vil'nyus); BALAKIN, B.N.; PASECHNIK, A.I.; CHERDANTSEV, A. Ye., dorozhnyy master (stantsiya Verkh-Neyvinsk, Sverdlovskoy dorogi); STROCHKOV, A.A., inzh.

Letters to the editor. Put' i put.khoz. 4 no.2:40-42 F '60.
(MIRA 13:5)

1. Mekhanik puteizmeritel'noy telezhki, stantsiya Kovel', L'vovskoy dorogi (for Koshelyuk). 2. Zamestitel' nachal'nika distantsii puti, stantsiya Galich, Severnoy dorogi (for Balakin). 3. Inzhener distantsii, stantsiya Sambor, L'vovskoy dorogi (for Pasechnik).
(Railroads)

GUTYAN, A.M., inzh. (Kaluga)

Realization of a project. Put' i put.khoz. 7 no.7:27 '63.
(MIRA 16:10)

GUT'YAR, Ye. M. (Professor) Dr. Tech. Sci.

Dissertation: "Theory of a Lubrication Layer." Moscow Inst. of Mechanization and Electrification of Agriculture, imeni V. M. Molotov, 5 Mar 47.

SO: Vechernyaya Moskva, Mar, 1947 (Project #17836)

USSR/Keys Jun 1947

"Calculation of a Prismatic Key," Ye. M. Gut'yar, 5 pp

"Vestnik Mashinostroyeniya" Vol XXVII, No 6

Mathematical discussion. Gives the subject calculation, which has not been done before despite the simplicity of the construction of the key. Fully illustrated with formulae, five diagrams, and photograph.

14T81

1. KUT'YAP, YE. N., Prof.

2. USSR 600

4. Separators (Machines)

7. Unstable equilibrium of a separator shaft, Sel'khozmashina, No. 1, 1953.

9. Monthly List of Russian Accessions, Library of Congress, April 1953, Uncl.

GUT'YAR, Yo.M.

Calculations concerning a sliding bearing with a dynamic load. Izv.AN SSSR Otd.tekh.nauk no.5:762-766 My '53. (MLRA 6:8)
(Hearings (Machinery)) (D'iachkov, A.K.)

GUT'YAR, Ye.M.

Most advantageous pressure in pneumatic tires of agricultural machines. Sel'khozmashina no.12:14-16 D '53. (MLRA 6:12)
(Tires, Rubber) (Agricultural machinery)

GUT'YAR, Ye. M., professor; MAL'GIN, A.D., inzhener; SERGEYEV, M.P., professor, retsenzent; BATURA, F.G., inzhener, retsenzent MANAKIN, N.V., inzhener, redaktor; SOKOLOVA, T.F., tekhnicheskiy redaktor

[Machinery] Mashinovedenie. Moskva, Gos. nauchno-tekhn. izd-vo mashinostroit. lit-ry, 1954. 408 p. (MLRA 7:10)
(Machinery)

GUT'YAR, Ye.M.

Resistance to the turning of a wheel in a track. Sel'khozmashina no.2:23-25 F'55. (MLRA 8:3)
(Soil mechanics)

GUT'YAR, Yu.M.

Design of wooden connecting rods of variable cross sections used in agricultural machinery. Sel'khozmashina no.3:18-22 Mr '56.(MLRA 9:7)
(Agricultural machinery)

GUTYAR, Ya. M.

5-6-12/29

AUTHORS: Gutyar, Ya.M., Reshetov, D.N., Spitsyn, N.A., Professors, Doctors of Technical Sciences

TITLE: Questions on Teaching the Course in "Machine Parts" (Voprosy prepodavaniya kursa "Detali Mashin") Results of the Discussions (Itogi diskussii)

PERIODICAL: Vestnik Vysshey Shkoly, 1957, # 6, pp 56-57 (USSR)

ABSTRACT: The Teaching Methods Administration of the Ministry of Higher Education submitted to the Conference of Representatives of Moscow Vuz Chairs (see # 5 of 1957, this periodical) the results obtained from the discussion of questions pertaining to the course in machine parts at the higher technical institutions. The discussions at the conference proved that to improve the foundations of engineers training, the adoption of a number of measures in this direction was necessary. The discussions led to the following conclusions: 1) The course is to be given a more precise place and number of hours in the curriculum; 2) The lecture is to be regarded as the basic form to convey the theoretical foundations of the course. The chairs are to improve the methodical teaching and select the most important and valuable information; 3) The time

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GUT'YAR, Ye.M., doktor tekhn.nauk, prof.

Checking initial stresses in V-belt transmissions. Izv. vys. ucheb. zav.; mashinostr. no.1:36-41 '58. (MIRA 11:6)

1.Moskovskiy institut mekhanizatsii i elektrifikatsii sel'skogo khozyaystva.

(Belts and belting)

GUT'YAR, Ye.M., prof., doktor tekhn. nauk

Driving properties of a belt transmission with a tightener. Izv. vys. ucheb. zav.; mashinostr. no.10:53-57 '58. (MIRA 12:11)

1.Moskovskiy institut mekhanizatsii i elektrifikatsii sel'skogo khozyaystva.
(Belts and belting)

GUT'YAR, Ye.M., prof., doktor tekhn.nauk

Determining the elastic modulus of driving belts. Izv.vys. ucheb.zav.; mashinostr. no.1:3-7 '59. (MIRA 13:3)

1. Moskovskiy institut mekhanizatsii i elektrifikatsii sel'skogo khozyaystva.
(Belts and belting)

GUT'YAR, Ye.M., prof., doktor tekhn.nauk

Elements of the hydrodynamic friction theory. Trudy MIMESKH 4 no.1: 191-203 '59. (MIRA 13:10)
(Friction) (Lubrication and lubricants)

Gut'yar, Ye. M.

PHASE I BOOK EXPLOITATION SOV/5055

Vsesoyuznaya konferentsiya po treniyu i iznosu v mashinakh. 3d, 1958.

Gidrodinamicheskaya teoriya smazki. Opory skol'zheniya. Smazka i smazochnyye materialy (Hydrodynamic Theory of Lubrication. Slip Bearings. Lubrication and Lubricant Materials) Moscow, Izd-vo AN SSSR. 422 p. Errata slip inserted. 3,800 copies printed. (Series: Its: Trudy, v. 3)

Sponsoring Agency: Akademiya nauk SSSR. Institut mashinovedeniya. Resp. Eds. for the Section "Hydrodynamic Theory of Lubrication and Slip Bearings": Ye. M. Gut'yar, Professor, Doctor of Technical Sciences, and A. K. D'yachkov, Professor, Doctor of Technical Sciences; Resp. Ed. for the Section, "Lubrication and Lubricant Materials": G. V. Vinogradov, Professor, Doctor of Chemical Sciences; Ed. of Publishing House: M. Ya. Klebanov; Tech. Ed.: O. M. Gus'kova.

PURPOSE: This collection of articles is intended for practicing engineers and research scientists.

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Hydrodynamic Theory (Cont.) SOV/5055

COVERAGE: The collection, published by the Institut mashinovedeniya AN SSSR (Institute of Science of Machines, Academy of Sciences USSR) contains papers presented at the III Vsesoyuznaya konferentsiya po treniyu i iznosu v mashinakh (Third All-Union Conference on Friction and Wear in Machines) which was held April 9-15, 1958. Problems discussed were in 5 main areas: 1) Hydrodynamic Theory of Lubrication and Friction Bearings (Chairmen: Ye. M. Gut'yar, Doctor of Technical Sciences, and A. K. D'yachkov, Doctor of Technical Sciences); 2) Lubrication and Lubricant Materials (Chairman: G. V. Vinogradov, Doctor of Chemical Sciences); 3) Dry and Boundary Friction (Chairmen: B. V. Deryagin, Corresponding Member of the Academy of Sciences USSR, and I. V. Kragel'skiy, Doctor of Technical Sciences); 4) Wear and Wear Resistance (Chairman: M. M. Krushchov, Doctor of Technical Sciences; and 5) Friction and Antifriction Materials (Chairmen: I. V. Kragel'skiy, Doctor of Technical Sciences, and M. M. Krushchov, Doctor of Technical Sciences). Chairman of the general assembly (on the first and last day of the conference) was Academician A. A. Blagonravov. L. Yu. Pruzhanskiy,

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[illegible] in the design of bearings for turbo-electric generators and other heavy machinery, experimental data on the lubricating characteristics of many different lubricant materials, the effects of additives, operating and environmental conditions, corrosion, and accelerated wear testing. Many personalities are mentioned in the text. References accompany most of the articles.

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TABLE OF CONTENTS:

GUT'YAR, Ye.M., doktor.tekhn.nauk, prof.

Graphoanalytical calculations for sliding bearings without using external circulation-system. Trudy MIMESKH 10:5-15 '59.
(MIRA 13:12)

(Bearings (Machinery))
(Lubrication and lubricants)

GUT'YAR, Ye.M., doktor tekhn.nauk, prof.

Limit ellipticity of a pin and of the hole of the bearing and the gap between them. Trudy MIMESKH 10:16-24 '59. (MIRA 13:12)
(Bearings (Machinery))

GUT'YAR, Ye.M., doktor tekhn.nauk, prof.

Calculating unstrained bolts. Trudy MIMESKH 10:25-28 '59.
(MIRA 13:12)

(Bolts and nuts)

GUT'YAR, Ye.M., doktor tekhn.nauk, prof.

Investigating the performance of the V-belt type variable speed gear. Trudy MIMESKH 10:29-46 '59. (MIRA 13:12)
(Gearing) (Belts and belting)

GUT'YAR, Ye.M., doktor tekhn.nauk, prof.

Work of friction in V-belt drive. Trudy MIMESKH 10:47-56 '59.
(MIRA 13:12)

(Belts and belting) (Friction)

GUT'YAR, Ye.M., doktor tekhn.nauk, prof.

Optimum belt speed and maximum belt power. Trudy MIMESKH 10:57-62 '59. (MIRA 13:12)

(Belts and belting)

GUT'YAR, Ye.M., prof., doktor tekhn.nauk

Investigating tractive properties of a belt by sliding curves.
Vest.mash. 40 no.7:31-33 Jl '60. (MIRA 13:7)
(Belts and belting)

SHATS, Yakov Yudelevich; GUT'YAR, Ye.M., doktor tekhn. nauk, prof., retsenzent; IVANOV, P.I., kand. tekhn. nauk, red.; DANILOV, L.N., red. izd-va; EL'KIND, V.D., tekhn. red.

[Fundamentals of the design of coaxial gears] Osnovy proektirovaniia optimal'nykh soosnykh peredach. Moskva, Gos.nauchno-tekhn.izd-vo mashinostroit.lit-ry, 1961. 202 p. (MIRA 15:1)
(Gearing)

GUT'YAR, Ye.M., doktor tekhn.nauk, prof.

Volume theory of crushing. Izv. TSKhA no.4:163-166. '61.
(MIRA 14:9)

(Crushing machinery)

TRUBIN, Georgiy Konstantinovich, kand. tekhn. nauk; POLOTSKIY, M.S., kand. tekhn. nauk, retsenzent; GUT'YAR, Ye.M., doktor tekhn. nauk, prof., red.; CHERNOVA, Z.I., tekhn. red.; UVAROVA, A.F., tekhn. red.

[Contact fatigue of gear-wheel materials] Kontaktnaia ustalost' materialov dlia zubchatykh koles. Moskva, Mashgiz, 1962. 402 p. (MIRA 15:6)

(Metals—Fatigue) (Gearing)

GUT'YAR, Ye.M.

Pressure on the contact elliptic area. Tren.i izn.mash. no.15: 322-331 '62. (MIRA 15:4)
(Friction)

CHERNAVSKIY, S.A.; GUT'YAR, Ye.M., prof., doktor tekhn. nauk, retsenzent; ITSKOVICH, G.M., inzh., nauchn. red.; GIL'DENBERG, M.I., red.izd-va; UVAROVA, A.F., tekhn. red.

[Sliding bearings] Podshipniki skol'zheniia. Moskva, Mashgiz, 1963. 242 p. (MIRA 17:3)

GUT'YAR, Ye.M., doktor tekhn. nauk, prof.

About an extremum property of screw-type spur gearing. Izv. TSKHA no.4:230-232 '63. (MIRA 17:1)

GUT'YAR, Ye.M., doktor tekhn. nauk, prof.

Resistance of cars moved by traction or a driving mechanism to the rolling on the track. Izv. TSKHA no.1:110-116 '63. (MIRA 16:7)

(Railroad motorcars)

ALEKSANDROV, M.P.; GUT'YAR, Ye.M., doktor tekhn. nauk, prof., retsenzent

[Braking devices for machinery] Tormoznye ustroistva v mashinostroenii. Moskva, Mashinostroenie, 1965. 675 p. (MIRA 18:7)

L 41602-66 EWT(m)/T/EWP(e)/EWT(t)/ETI IJP(c) WH/DS/JD/JG

ACC NR: AP6018529 SOURCE CODE: UR/0181/66/008/006/1702/1707

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AUTHOR: Guyenok, Ye. P.; Kudzin, A. Yu.

ORG: Dnepropetrovsk State University (Dnepropetrovskiy gosudarstvennyy universitet)

TITLE: Dependence of polarization of single crystal $BaTiO_3$-Ta_2O_5 on the humidity of the surrounding atmosphere

SOURCE: Fizika tverdogo tela, v. 8, no. 6, 1966, 1702-1707

TOPIC TAGS: dielectric polarization, ferroelectric property, barium titanate, tantalum containing alloy, electric hysteresis, atmospheric humidity, surface property

ABSTRACT: This is a continuation of earlier work (FTT v. 7, 2845, 1965 and preceding papers) on the ferroelectric properties of single crystals of barium titanate to which tantalum oxide is added. The tests were made on $BaTiO_3$ with 0.3 mol.% Ta_2O_5, grown from the solution in a potassium fluoride melt. Silver electrodes were deposited by cathode sputtering. The dielectric constant and the dielectric loss angle were measured at 1 Mc by variation of the reactance, and at audio frequencies by a bridge method. The dielectric hysteresis loops were investigated at 50 cps by the Sawyer-Tower procedure. The electric conductivity was measured with an ohm meter. The relative humidity of the surrounding atmosphere was produced with the aid of saturated salt solutions. The results showed a strong increase in the dielectric constant and in the dielectric losses with increasing humidity, when measured in a weak field, and an increase in the crystal polarization in strong fields. The dielectric constant

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GUT'YERRES, P. (Moskva)

Stability of underground multihinged open systems. Stroi. mekh. i rasch. soor. 2 no.5:21-27 '60. (MIRA 13:9)
(Underground construction) (Structures, Theory of)

GUT'YERRFS, P.A., kand.tekhn.nauk

Calculation of round plates under axially symmetrical loads. Nauch. zap. MIIVKH 20:15-30 '58. (MIRA 13:6)
(Elastic plates and shells)

GUTYRA, I. student

Public health system in Czechoslovakia. Vrach.delo no.3:313-314 Mr'58 (MIRA 11:5)

1. Kafedra istorii meditsiny (zav. - dots. P.T. Petrov) Khar'kovskogo meditsinskogo instituta.
(CZECHOSLOVAKIA--PUBLIC HEALTH)

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PHASE I BOOK EXPLOITATION SOV/6246

Soveshchaniye po tseolitam. 1st, Leningrad, 1961.

Sinteticheskiye tseolity; polucheniye, issledovaniye i primeneniye (Synthetic Zeolites: Production, Investigation, and Use). Moscow, Izd-vo AN SSSR, 1962. 286 p. (Series: Its: Doklady) Errata slip inserted. 2500 copies printed.

Sponsoring Agency: Akademiya nauk SSSR. Otdeleniye khimicheskikh nauk. Komisiya po tseolitam.

Resp. Eds.: M. M. Dubinin, Academician and V. V. Serpinskiy, Doctor of Chemical-Sciences; Ed.: Ye. G. Zhukovskaya; Tech. Ed.: S. P. Golub'.

PURPOSE: This book is intended for scientists and engineers engaged in the production of synthetic zeolites (molecular sieves), and for chemists in general.

Card 1/13

Synthetic Zeolites: (Cont.) SOV/6246

COVERAGE: The book is a collection of reports presented at the First Conference on Zeolites, held in Leningrad 16 through 19 March 1961 at the Leningrad Technological Institute imeni Lensovet, and is purportedly the first monograph on this subject. The reports are grouped into 3 subject areas: 1) theoretical problems of adsorption on various types of zeolites and methods for their investigation, 2) the production of zeolites, and 3) application of zeolites. No personalities are mentioned. References follow individual articles.

TABLE OF CONTENTS:

SOV/6246

Synthetic Zeolites: (Cont.)

GALICH, P.N.; GOLUBCHENKO, I.T.; GUTYRYA, A.A.; GUTYRYA, V.S.; DOLINSKAYA, E.S.; MOZDOR, Ye.V.; HEYMARK, I.Ye.

Nature of cokelike deposits formed on CaC-type molecular sieves in the cracking of n. alkanes. Neftekhimiia 2 no.2:193-195 Mr-Ap '62. (MIRA 15:6)

1. Institut khimii polimerov i monomerov AN USSR i Institut fizicheskoy khimii imeni Pisarzhevskogo AN USSR, Kiyev.
(Paraffins) (Cracking process)

GALICH, P.N.; GUTYRYA, A.A.; GUTYRYA, A.A.; GUTYRYA, V.S.; NEYMARK, I.Ye.

Certain features of the catalysis of alkanes over zeolites (molecular sieves). Dokl.AN SSSR 144 no.1:147-150 My '62. (MIRA 15:5)

1. Institut khimii polimerov i monomerov AN USSR i Institut fizicheskoy khimii AN USSR. 2. Chlen-korrespondent AN SSSR (for Gutyrya).

(Paraffins) (Catalysis) (Zeolites)

GUTYRYA, L. S., and MAKHMUTBEKOV, B. M., (Prof.) -- Baku

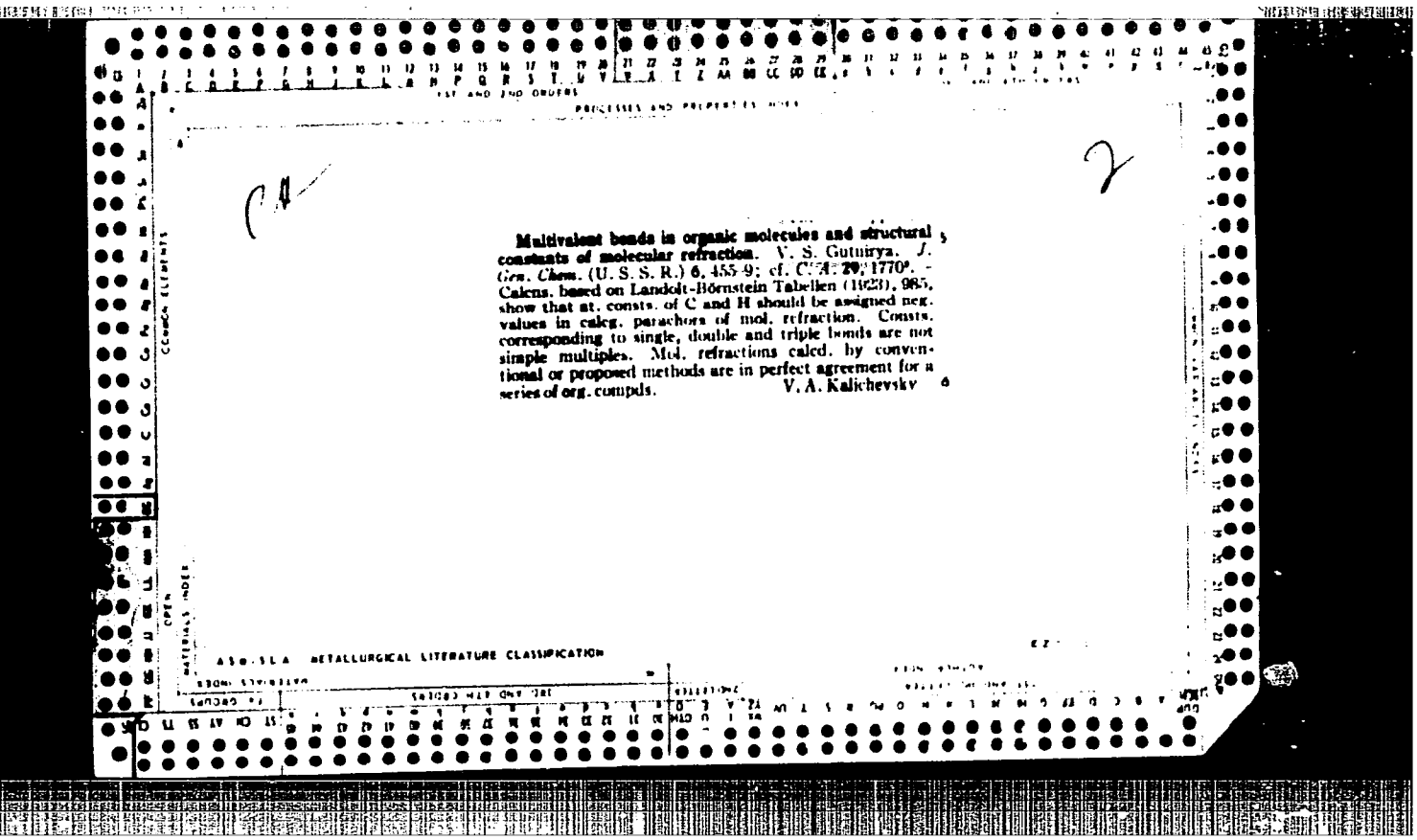
"The Remote Results of Surgical and Conservative Treatment of Patients Suffering from Obliterating Endarteritis."

Report submitted for the 27th Congress of Surgeons of the USSR, Moscow, 23-28 May 1960.

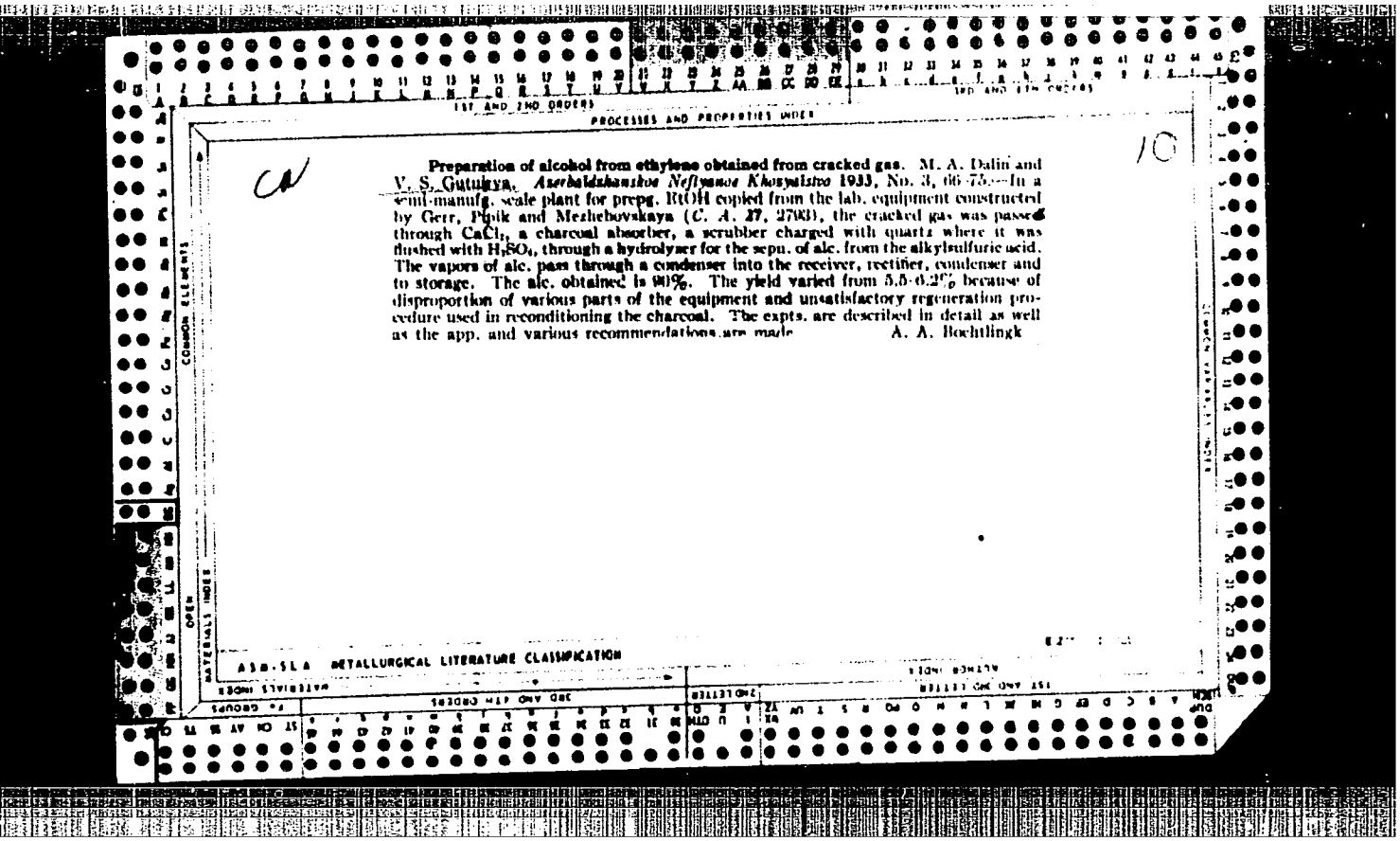
TAYANSKIY, Ya.L.; GUTYRYA, L.S.

Hypotension due to acute adrenocortical insufficiency in orthopedic practice. Eksper. khir. i anest. 9 no.3:78-79 My-Je '64. (MIRA 18:3)

1. Ukrainskiy nauchno-issledovatel'skiy institut ortopedii i travmatologii (dir. - dotsent I.P. Alekseyenko, nauchnyy rukovoditel' - chlen-korrespondent AMN SSSR prof. F.R. Bogdanov), Kiyev.



Multivalent bonds in organic molecules and structural constants of molecular refraction. V. S. Gutiirya. *J. Gen. Chem.* (U. S. S. R.) 6, 455-9; cf. C.A. 29, 1770⁹. - Calcns. based on Landolt-Börnstein Tabellen (1923), 985, show that at. consts. of C and H should be assigned neg. values in calcg. parachors of mol. refraction. Consts. corresponding to single, double and triple bonds are not simple multiples. Mol. refractions calcd. by conventional or proposed methods are in perfect agreement for a series of org. compds.
V. A. Kalichevsky



PROCESSES AND PROPERTIES INDEX

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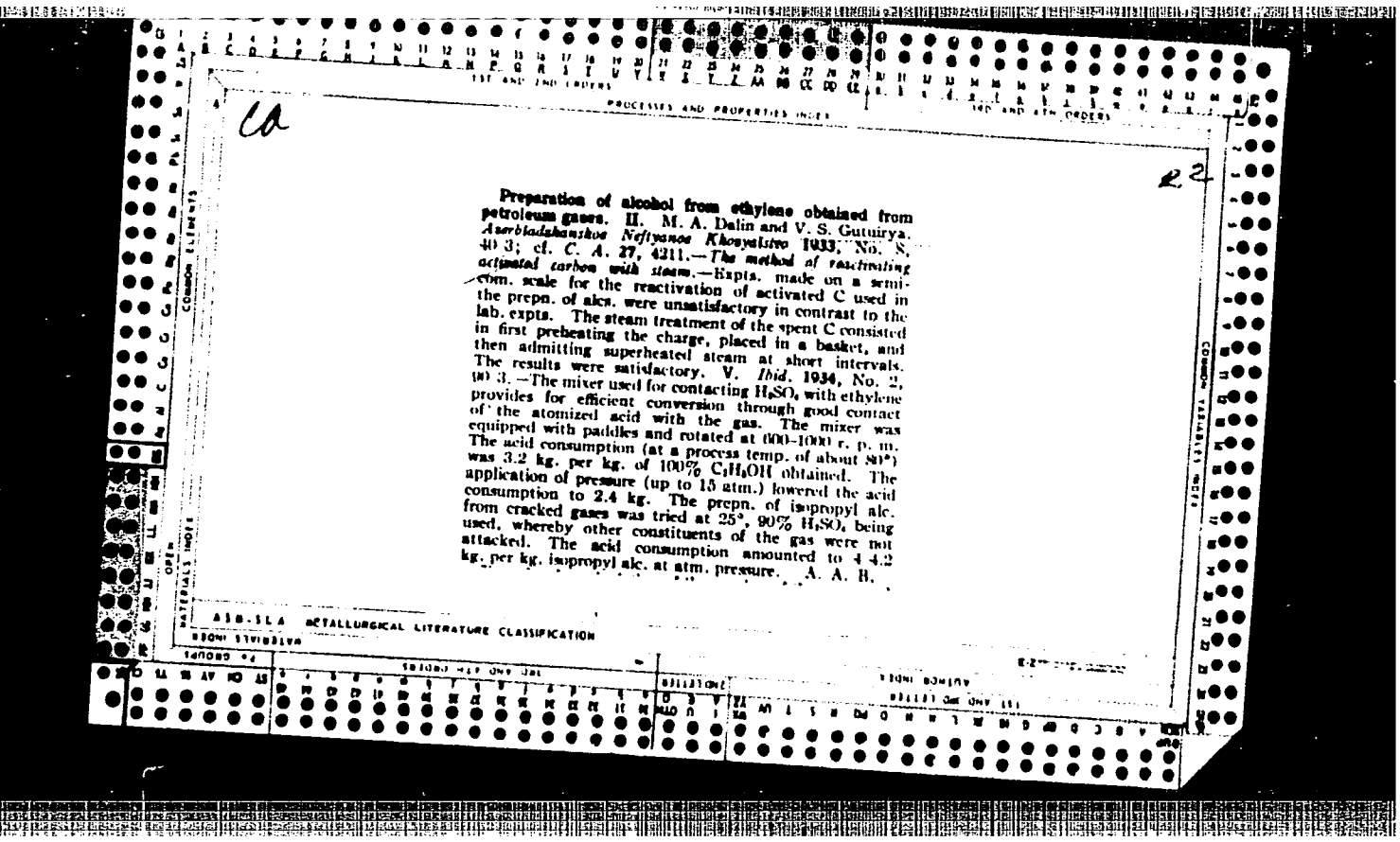
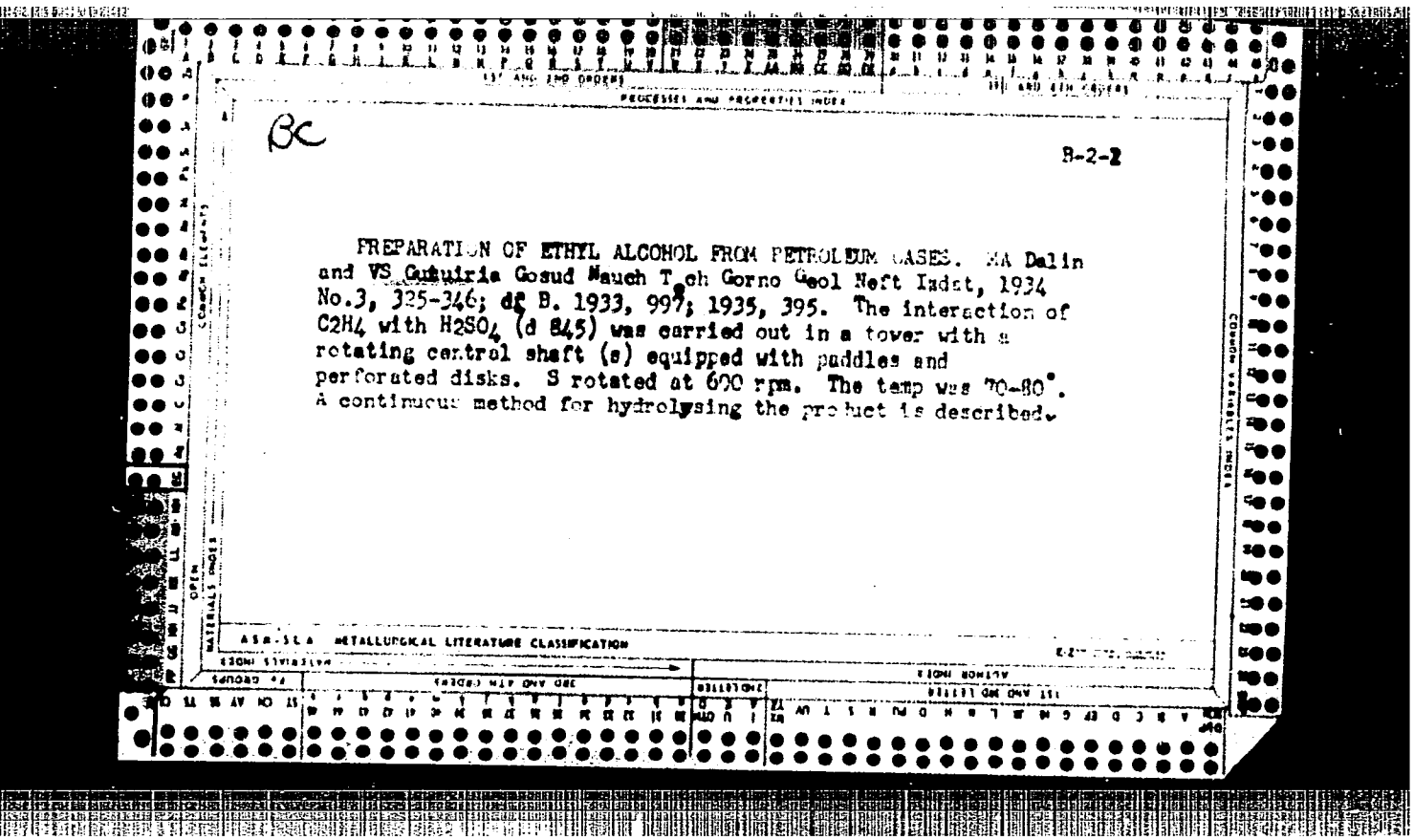
Preparation of alcohol from ethylene obtained from cracked gas. M. A. Dalin and V. S. Gutnikova. *Azerbaidzhanskoe Neftyanoe Khozyaistvo* 1933, No. 3, 66-75.—In a semi-manufg. scale plant for prepg. EtOH copied from the lab. equipment constructed by Gerr, Pipik and Mezhebovskaya (*C. A.* **27**, 2703), the cracked gas was passed through $CaCl_2$, a charcoal absorber, a scrubber charged with quartz where it was flushed with H_2SO_4, through a hydrolyzer for the sepn. of alc. from the alkylsulfuric acid. The vapors of alc. pass through a condenser into the receiver, rectifier, condenser and to storage. The alc. obtained is 90%. The yield varied from 5.5-6.2% because of disproportion of various parts of the equipment and unsatisfactory regeneration procedure used in reconditioning the charcoal. The expts. are described in detail as well as the app. and various recommendations are made. A. A. Bochtlingk

ASM-SLA METALLURGICAL LITERATURE CLASSIFICATION



Preparation of alcohol from ethylene obtained from petroleum gases. II. M. A. Dalin and V. S. Gutnirya. *Azerbaidzhanskoe Neftyanoe Khozyaistvo* 1933, No. 8, 40-3; cf. *C. A.* **27**, 4211.—*The method of reactivating activated carbon with steam.*—Expts. made on a semi-com. scale for the reactivation of activated C used in the prepn. of alcs. were unsatisfactory in contrast to the lab. expts. The steam treatment of the spent C consisted in first preheating the charge, placed in a basket, and then admitting superheated steam at short intervals. The results were satisfactory. V. *Ibid.* **1934**, No. 2, 90-3.—The mixer used for contacting H_2SO_4 with ethylene provides for efficient conversion through good contact of the atomized acid with the gas. The mixer was equipped with paddles and rotated at 600–1000 r. p. m. The acid consumption (at a process temp. of about 80°) was 3.2 kg. per kg. of 100% C_2H_5OH obtained. The application of pressure (up to 15 atm.) lowered the acid consumption to 2.4 kg. The prepn. of isopropyl alc. from cracked gases was tried at 25°, 90% H_2SO_4 being used, whereby other constituents of the gas were not attacked. The acid consumption amounted to 4-4.2 kg. per kg. isopropyl alc. at atm. pressure. A. A. B.



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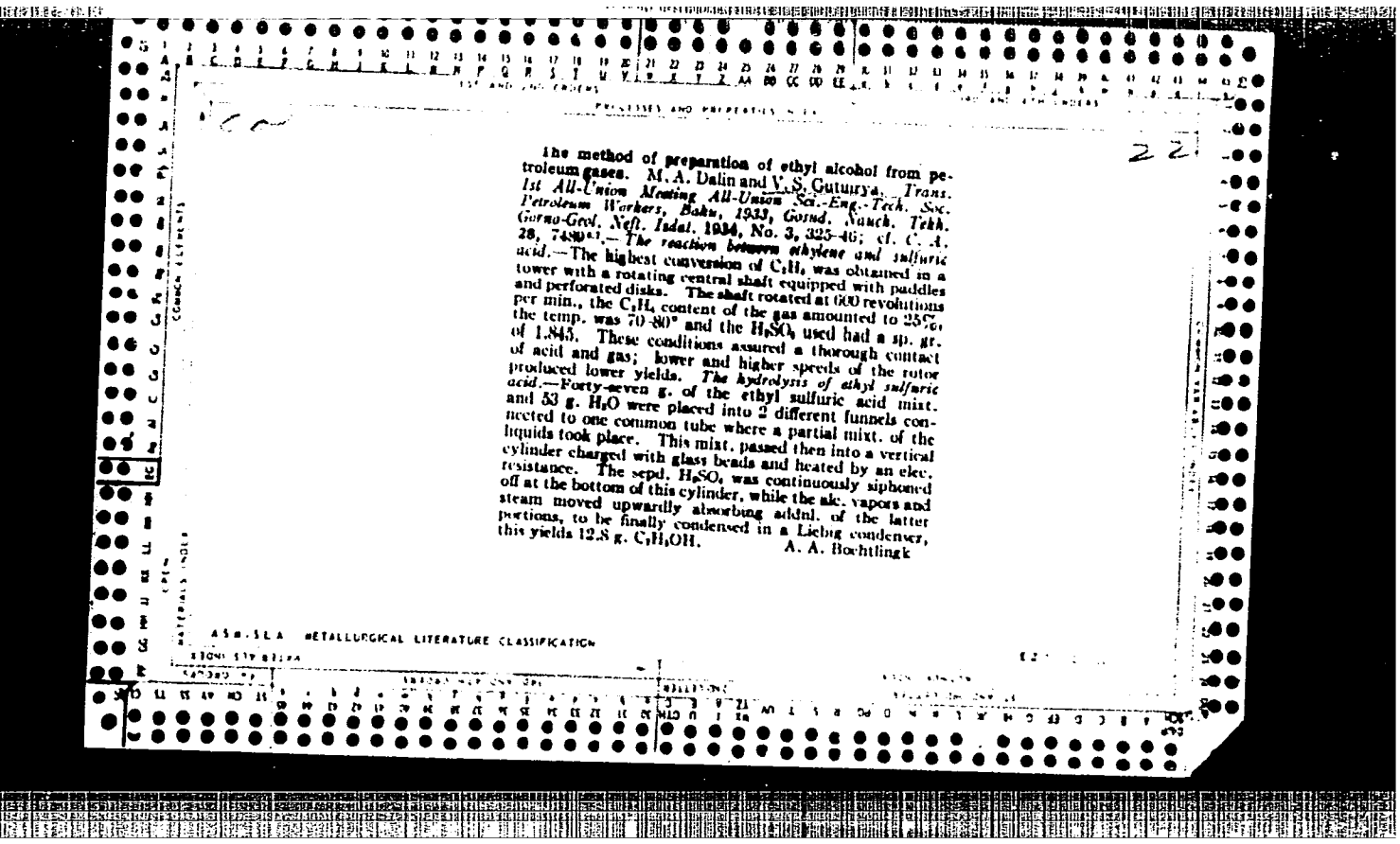
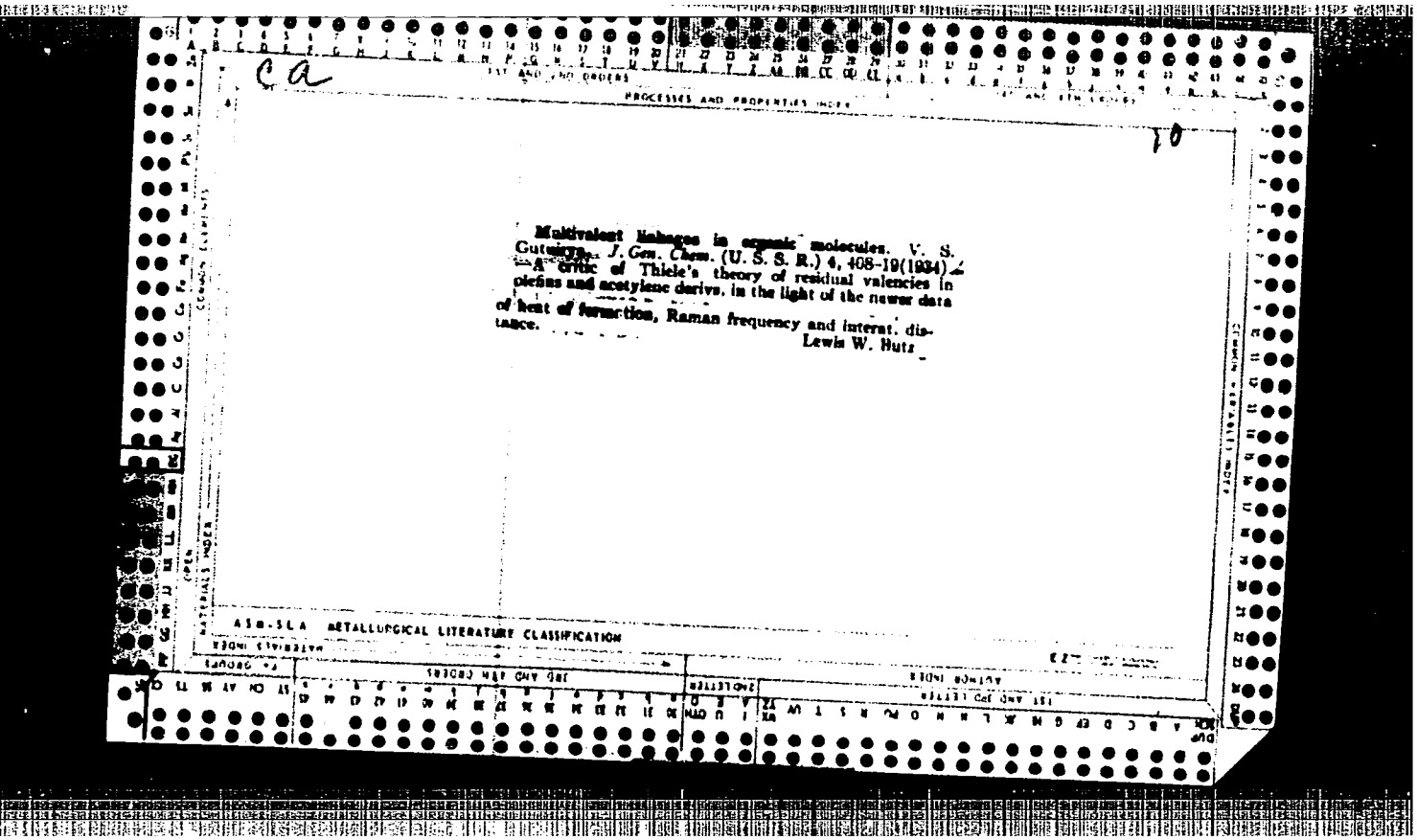
PREPARATION OF ETHYL ALCOHOL FROM PETROLEUM GASES. MA Dalin and VS Gutuirie Gosud Nauch Tech Gorno Geol Neft Inst, 1934 No.3, 325-346; df B. 1933, 997; 1935, 395. The interaction of C_2H_4 with H_2SO_4 (d 845) was carried out in a tower with a rotating central shaft (s) equipped with paddles and perforated disks. S rotated at 600 rpm. The temp was 70-80°. A continuous method for hydrolysing the product is described.

ASM-SLA METALLURGICAL LITERATURE CLASSIFICATION



The method of preparation of ethyl alcohol from petroleum gases. M. A. Dalin and V. S. Guturya. *Trans. 1st All-Union Meeting All-Union Sci.-Eng.-Tech. Soc. Petroleum Workers, Baku, 1933, Gosud. Nauch. Tekh. Gorno-Geol. Neft. Izdat.* 1934, No. 3, 325-46; cf. *C. A.* 28, 7480[1].—*The reaction between ethylene and sulfuric acid.*—The highest conversion of C_2H_4 was obtained in a tower with a rotating central shaft equipped with paddles and perforated disks. The shaft rotated at 600 revolutions per min., the C_2H_4 content of the gas amounted to 25%, the temp. was 70-80° and the H_2SO_4 used had a sp. gr. of 1.845. These conditions assured a thorough contact of acid and gas; lower and higher speeds of the rotor produced lower yields. *The hydrolysis of ethyl sulfuric acid.*—Forty-seven g. of the ethyl sulfuric acid mixt. and 53 g. H_2O were placed into 2 different funnels connected to one common tube where a partial mixt. of the liquids took place. This mixt. passed then into a vertical cylinder charged with glass beads and heated by an elec. resistance. The sepd. H_2SO_4 was continuously siphoned off at the bottom of this cylinder, while the alc. vapors and steam moved upwardly absorbing addnl. of the latter portions, to be finally condensed in a Liebig condenser, this yields 12.8 g. C_2H_5OH.

A. A. Boehtlingk

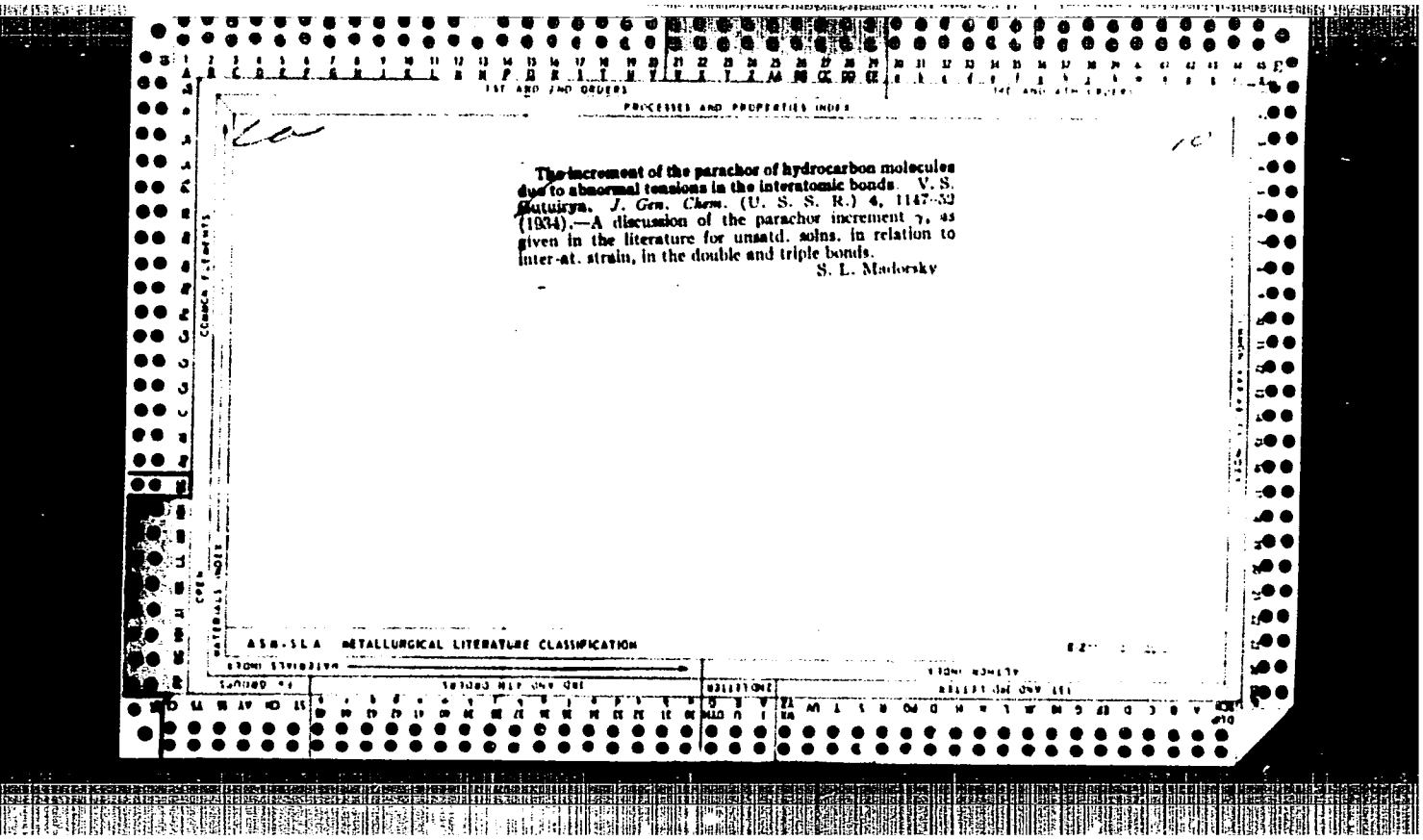


Ca

10

Multivalent linkages in organic molecules. V. S. Gutsiyev. *J. Gen. Chem.* (U. S. S. R.) 4, 408–19(1934). A critic of Thiele's theory of residual valencies in olefins and acetylene derivs. in the light of the newer data of heat of formation, Raman frequency and interat. distance.
Lewis W. Hutz

ASM-SLA METALLURGICAL LITERATURE CLASSIFICATION

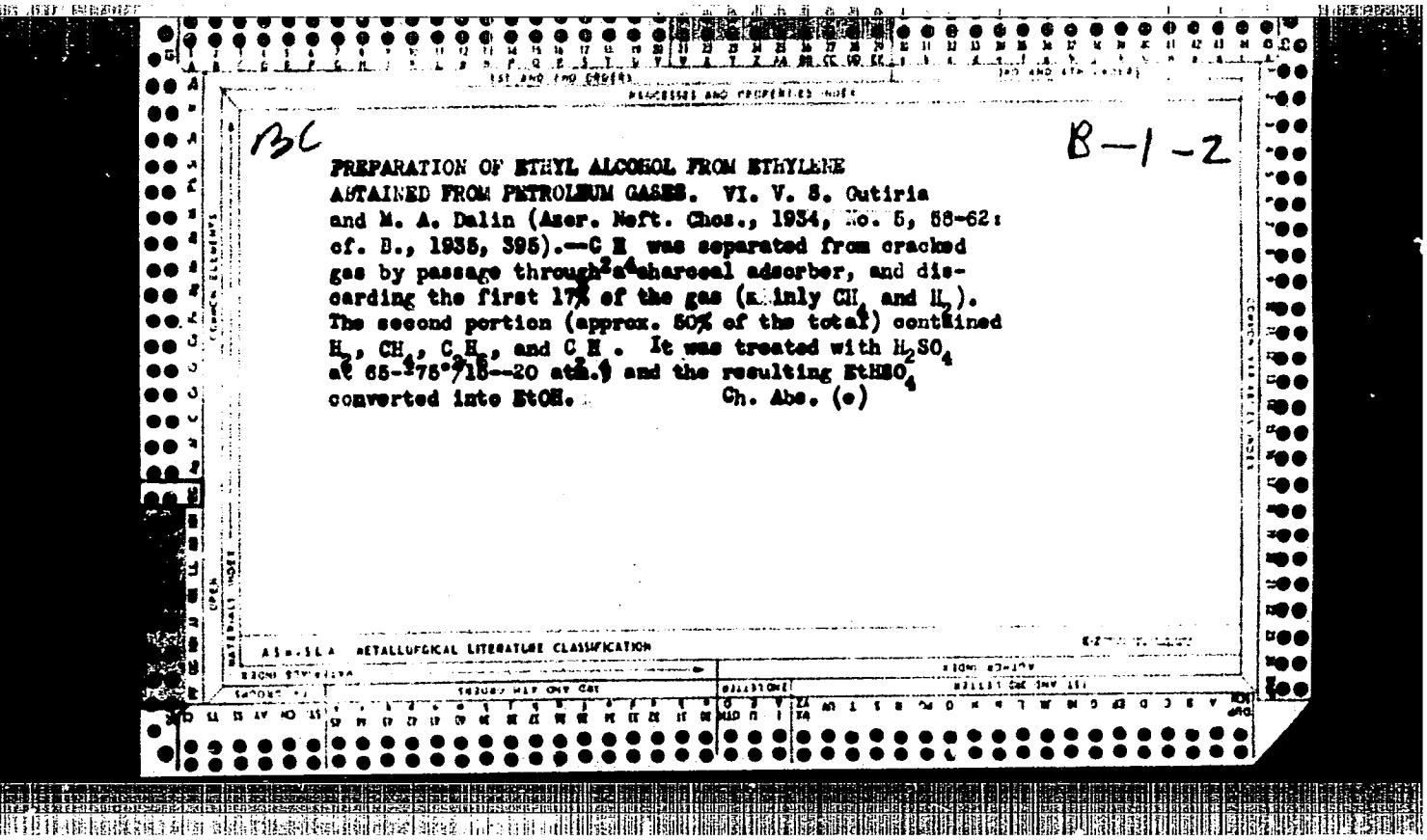


PROCESSES AND PROPERTIES INDEX

The increment of the parachor of hydrocarbon molecules due to abnormal tensions in the interatomic bonds. V. S. Guttiriya. *J. Gen. Chem.* (U. S. S. R.) 4, 1147–52 (1934).—A discussion of the parachor increment γ, as given in the literature for unsatd. solns. in relation to inter-at. strain, in the double and triple bonds.

S. L. Madorsky

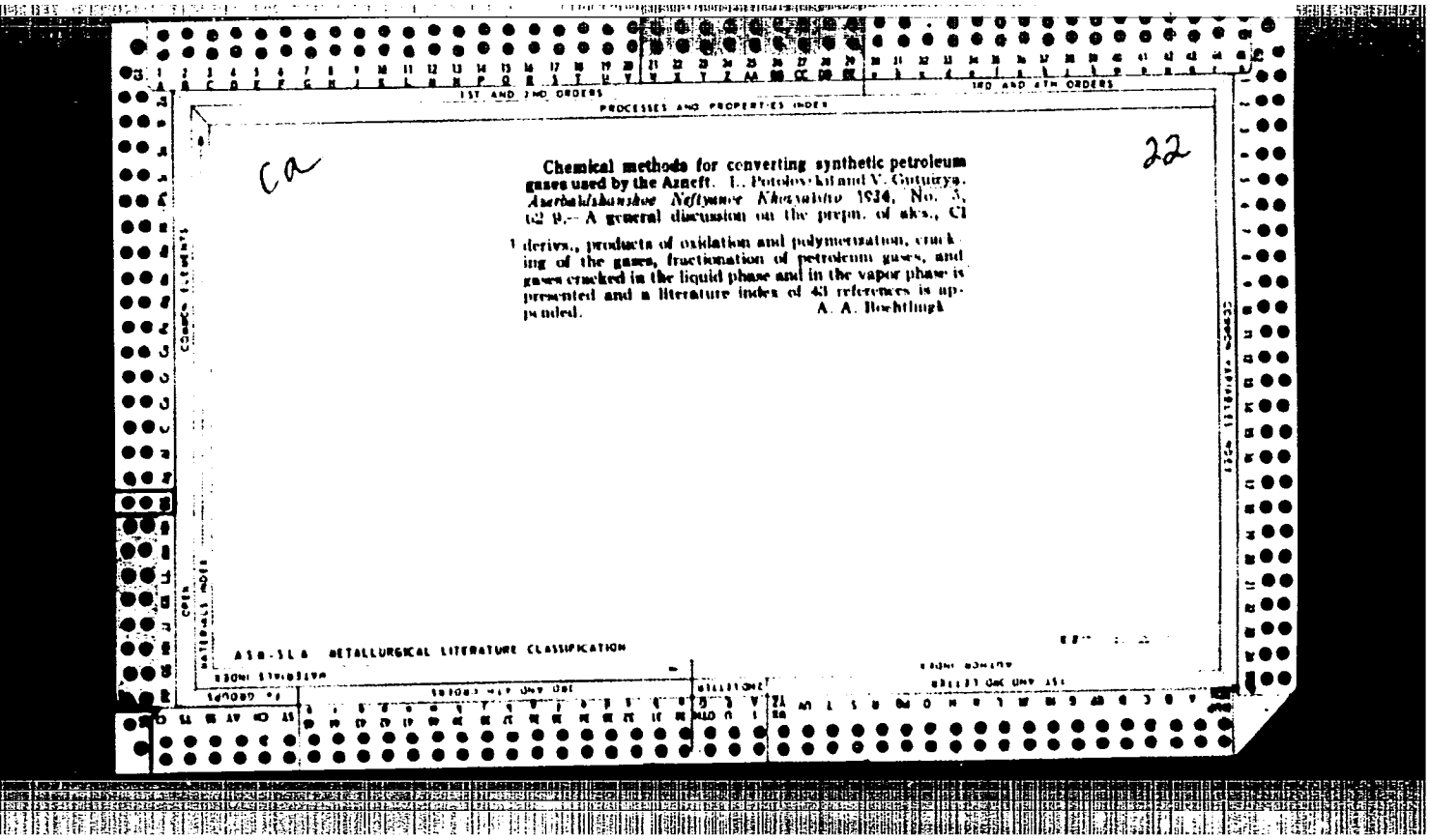
ASM-SLA METALLURGICAL LITERATURE CLASSIFICATION



BC

B-1-2

PREPARATION OF ETHYL ALCOHOL FROM ETHYLENE OBTAINED FROM PETROLEUM GASES. VI. V. S. Gutiria and M. A. Dalin (Azer. Neft. Chos., 1934, No. 5, 58-62: cf. B., 1935, 395).—C$_2$H$_4$ was separated from cracked gas by passage through a charcoal adsorber, and discarding the first 17% of the gas (mainly CH$_4$ and H$_2$). The second portion (approx. 50% of the total) contained H$_2$, CH$_4$, C$_2$H$_6$, and C$_2$H$_4$. It was treated with H$_2$SO$_4$ at 65–75°/15–20 atm. and the resulting EtHSO$_4$ converted into EtOH. Ch. Abs. (e)



1ST AND 2ND ORDERS

3RD AND 4TH ORDERS

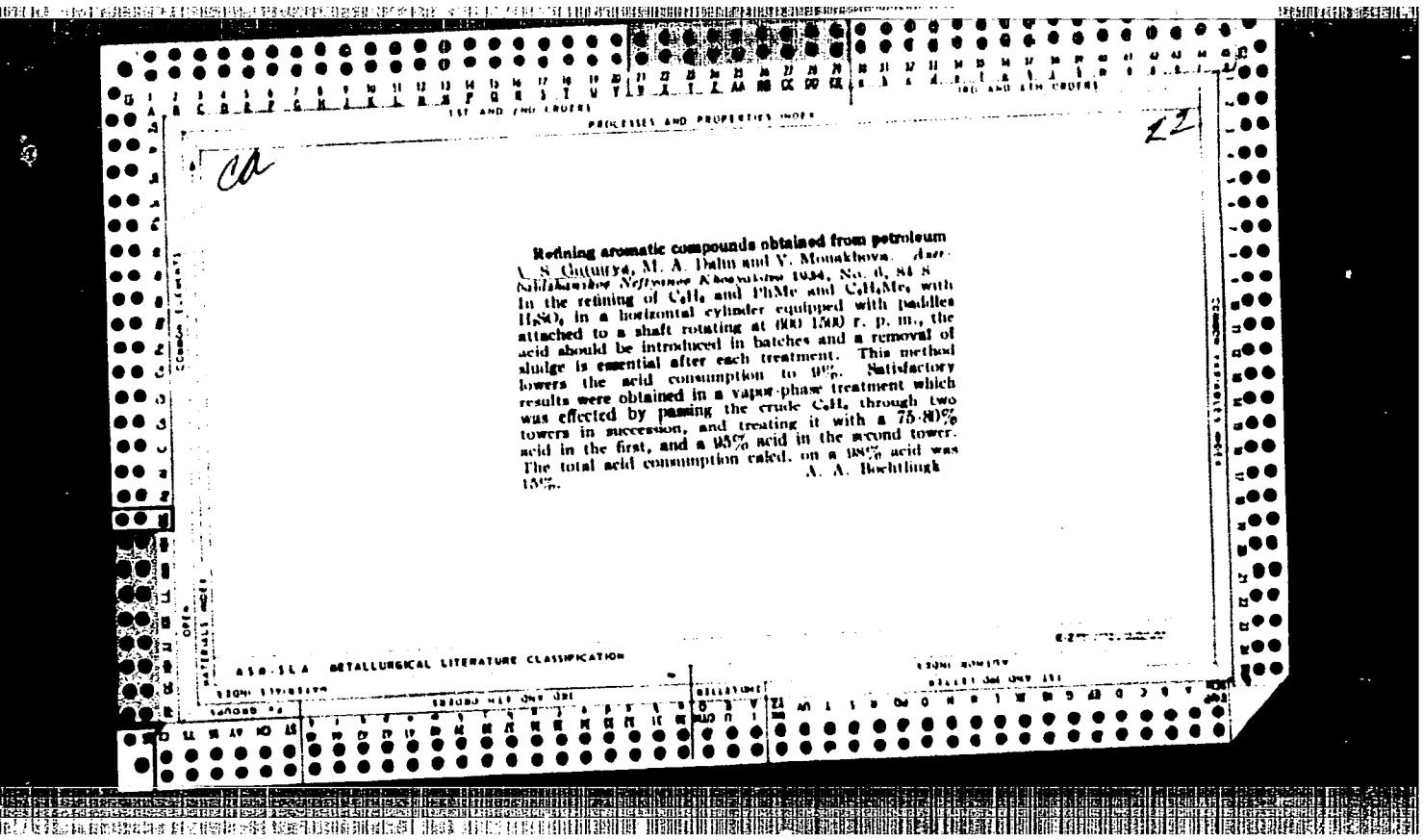
PROCESSES AND PROPERTIES INDEX

CA

22

Chemical methods for converting synthetic petroleum gases used by the Azneft. L. Potolovskii and V. Gutnyya. *Azerbaidzhanskoe Neftyanoe Khozyaistvo* 1934, No. 5, 62 pp.—A general discussion on the prepn. of alks., Cl derivs., products of oxidation and polymerization, cracking of the gases, fractionation of petroleum gases, and gases cracked in the liquid phase and in the vapor phase is presented and a literature index of 43 references is appended.
A. A. Boehringh

ASB-SLA METALLURGICAL LITERATURE CLASSIFICATION



Refining aromatic compounds obtained from petroleum

U. S. Quturya, M. A. Dalin and V. Mouakhova. *Azer. Neftyanoe Khozyaistvo* 1934, No. 6, 84-8

In the refining of C_6H_6 and PhMe and $C_6H_4Me_2$ with H_2SO_4 in a horizontal cylinder equipped with paddles attached to a shaft rotating at 600-1500 r. p. m., the acid should be introduced in batches and a removal of sludge is essential after each treatment. This method lowers the acid consumption to 0%. Satisfactory results were obtained in a vapor-phase treatment which was effected by passing the crude C_6H_6 through two towers in succession, and treating it with a 75-80% acid in the first, and a 95% acid in the second tower. The total acid consumption calcd. on a 98% acid was 15%.

A. A. Boehtlingk

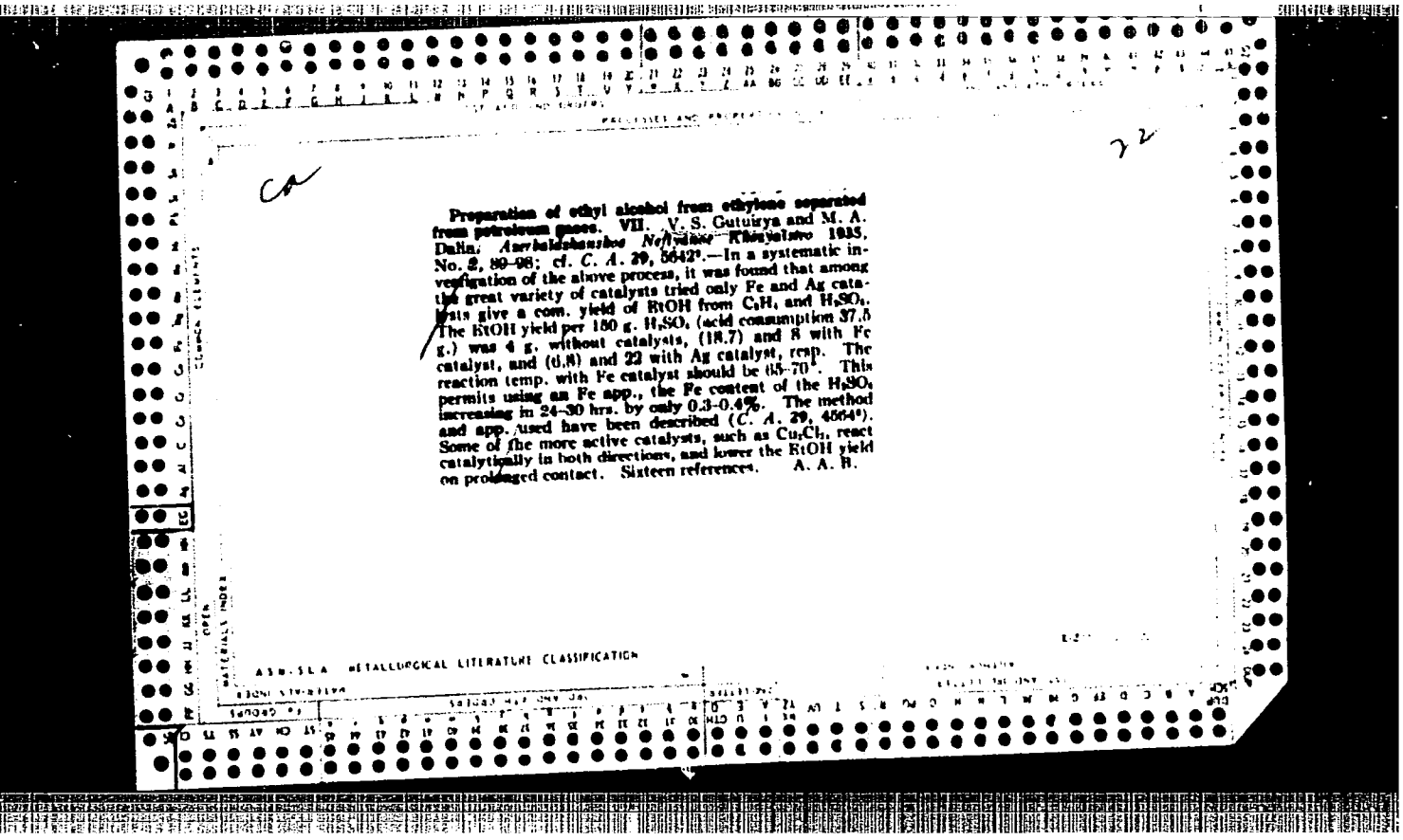
PROCESSES AND PROPERTIES INDEX

Ca

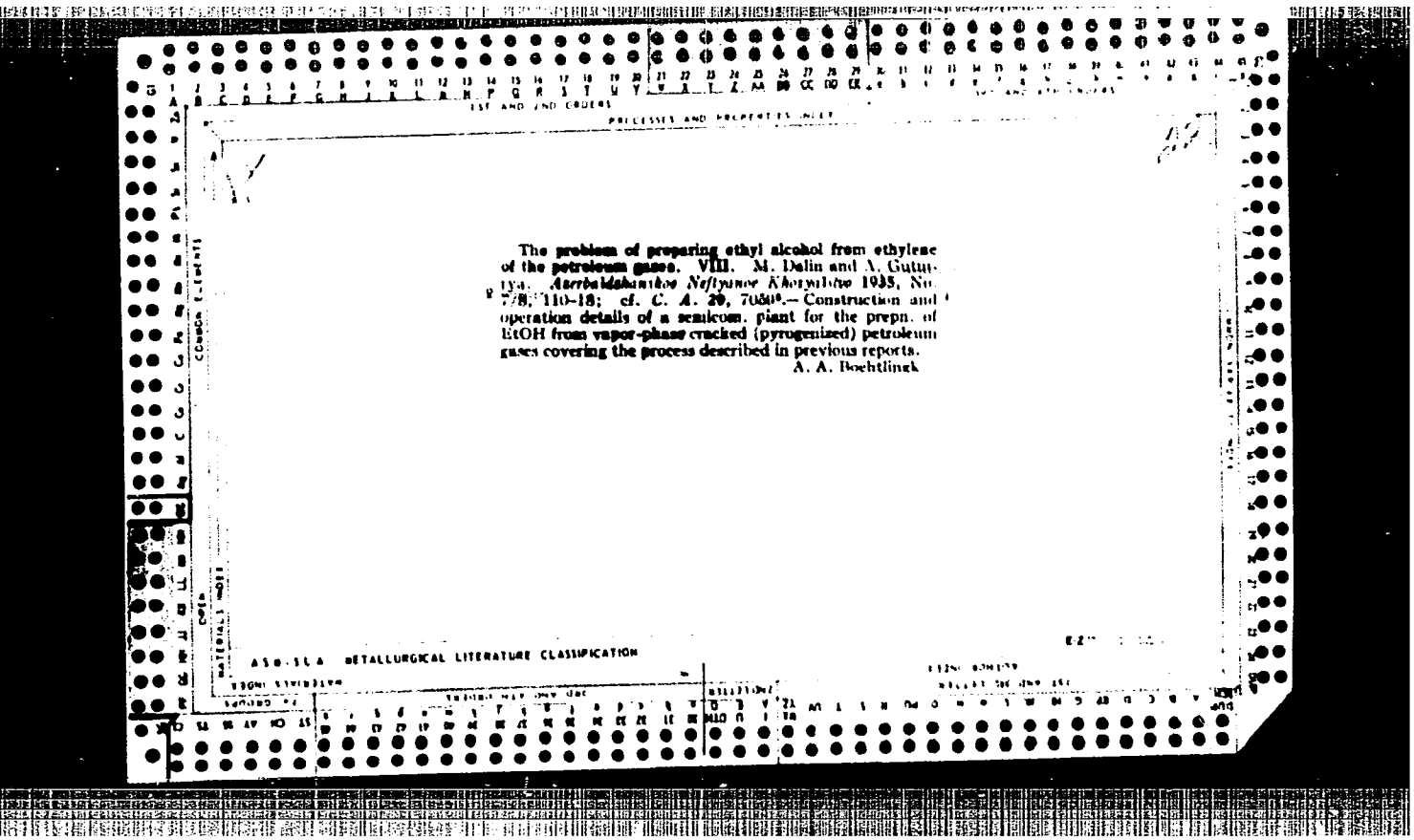
10

Action of nitrates of various metals on mixtures of hydrocarbons. P. M. Aliev and V. S. Gutuirya. *Ukrain. Khem. Zhur.* 9, 10-16(1934).—Satd. and aromatic hydrocarbons (I) do not react with $Al(NO_3)_3.9H_2O$ at 95-100°, while pinene and 1-octene are converted into NaOH-sol. products. This reaction is applicable to the detn. of unsatd. hydrocarbons in mixts. with I. B. C. A.

ASM-SLA METALLURGICAL LITERATURE CLASSIFICATION



Preparation of ethyl alcohol from ethylene separated from petroleum gases. VII. V. S. Gutiuiya and M. A. Dalin. *Azerbaidzhanskoe Neftyanoe Khozyaistvo* 1935, No. 2, 89–98; cf. *C. A.* 29, 5642⁸.—In a systematic investigation of the above process, it was found that among the great variety of catalysts tried only Fe and Ag catalysts give a com. yield of EtOH from C_2H_4 and H_2SO_4. The EtOH yield per 180 g. H_2SO_4 (acid consumption 37.5 g.) was 4 g. without catalysts, (18.7) and 8 with Fe catalyst, and (0.8) and 22 with Ag catalyst, resp. The reaction temp. with Fe catalyst should be 65–70°. This permits using an Fe app., the Fe content of the H_2SO_4 increasing in 24–30 hrs. by only 0.3–0.4%. The method and app. used have been described (*C. A.* 29, 4564⁸). Some of the more active catalysts, such as Cu_2Cl_2, react catalytically in both directions, and lower the EtOH yield on prolonged contact. Sixteen references. A. A. B.



The problem of preparing ethyl alcohol from ethylene of the petroleum gases. VIII. M. Dalin and A. Gutnikova. *Azerbaidzhanskoe Neftyanoe Khozyaistvo* 1935, No. 7/8, 110–18; *cf. C. A.* **29**, 7050[9].— Construction and operation details of a semicom. plant for the prepn. of EtOH from vapor-phase cracked (pyrogenized) petroleum gases covering the process described in previous reports.
A. A. Boehtlingk

PROCESSES AND PROPERTIES INDEX

The composition of synthetic ethyl alcohol and the influence of various factors during its synthesis. V. S. Gutyrya, M. A. Dalin and R. Shenderova. *Azerbaidzhanskoe Neftyanoe Khoz.* **1936**, No. 5, 72-82. —The presence of small amts. of propylene in C_2H_4 leads to the formation of great amts. of polymers and iso-PrOH and to a considerable lowering in the yield of EtOH in the treatment with H_2SO_4. Concd. (98%) H_2SO_4 has higher polymerizing properties than weaker acid. High pressure promotes polymerization. The hydrolysis of the ethylsulfuric acid should be carried out at elevated temps. and the hydrolyzed product must be rapidly removed from the reaction vessel. S can be removed from the EtOH by boiling with Hg. Twenty-nine references.

A. A. Boehtlingk

ASM-SLA METALLURGICAL LITERATURE CLASSIFICATION

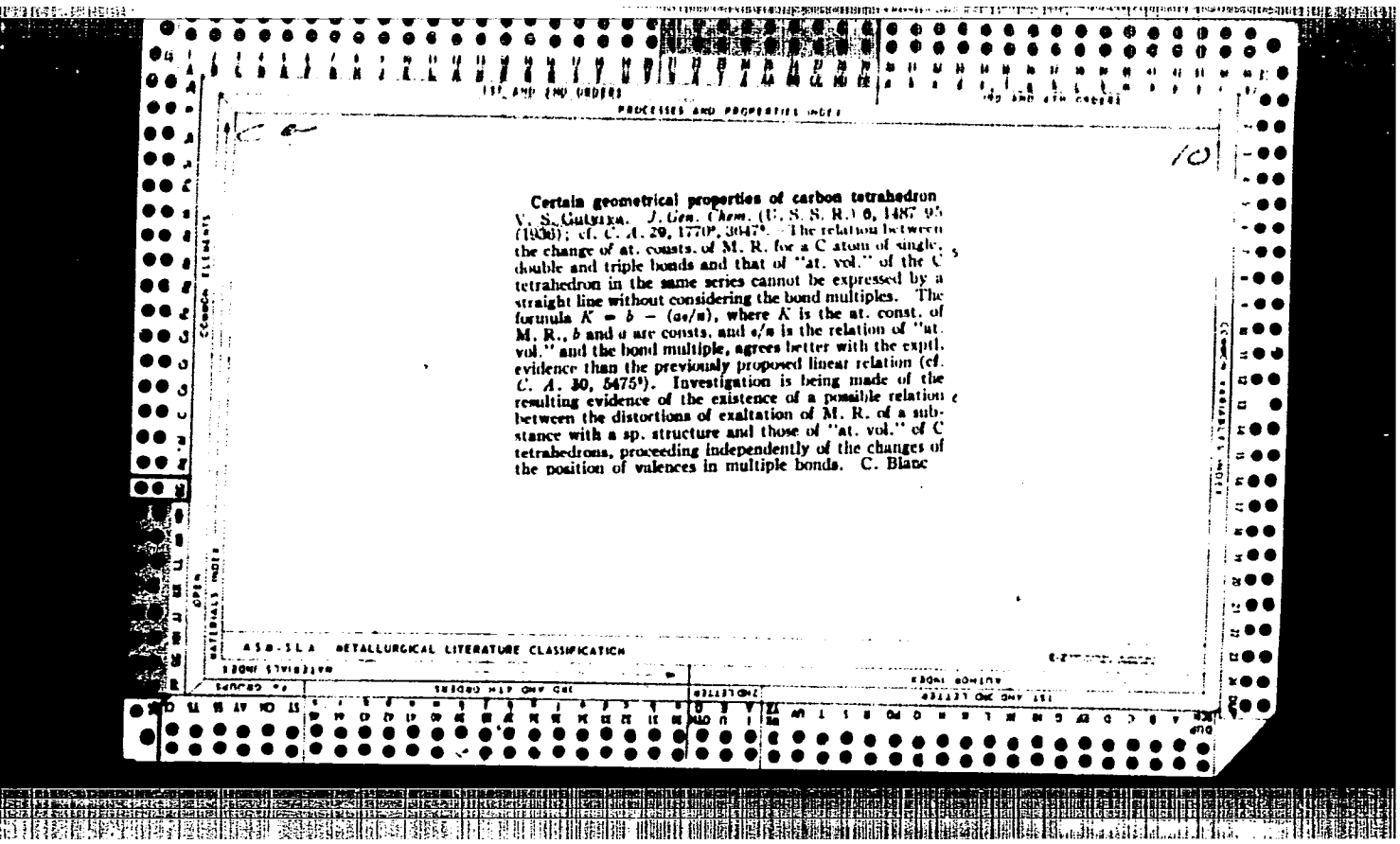
BC

A-1

(A) Increments of parachor of polymethylenic rings. (B) Multiple linkings in molecules of carbon compounds, and the structural constants of molecular refraction. [illegible] (J. Gen. Chem. Russ., 1936, 6, 340—346, 455—459).—(A) Experimental vals. of increments in parachors of homologous series of cyclic polymethylenic hydrocarbons differ considerably from those calc. from Mumford and Phillips' formula (A., 1929, 1219), or from other formulæ derived by Gutiria.

(B) The structural consts. of mol. refraction, MR, of C-C, C:C, and C⋮C compounds are derived from $K = an \sin \alpha + b$, where n represents the no. of linkings between C atoms, α is the angle subtended by the lines of valency, and a and b are consts., depending on the λ of the light used. The vals. calc. for MR are in satisfactory agreement with those calc. by the usual formula, and with experiment, for a no. of hydrocarbons.

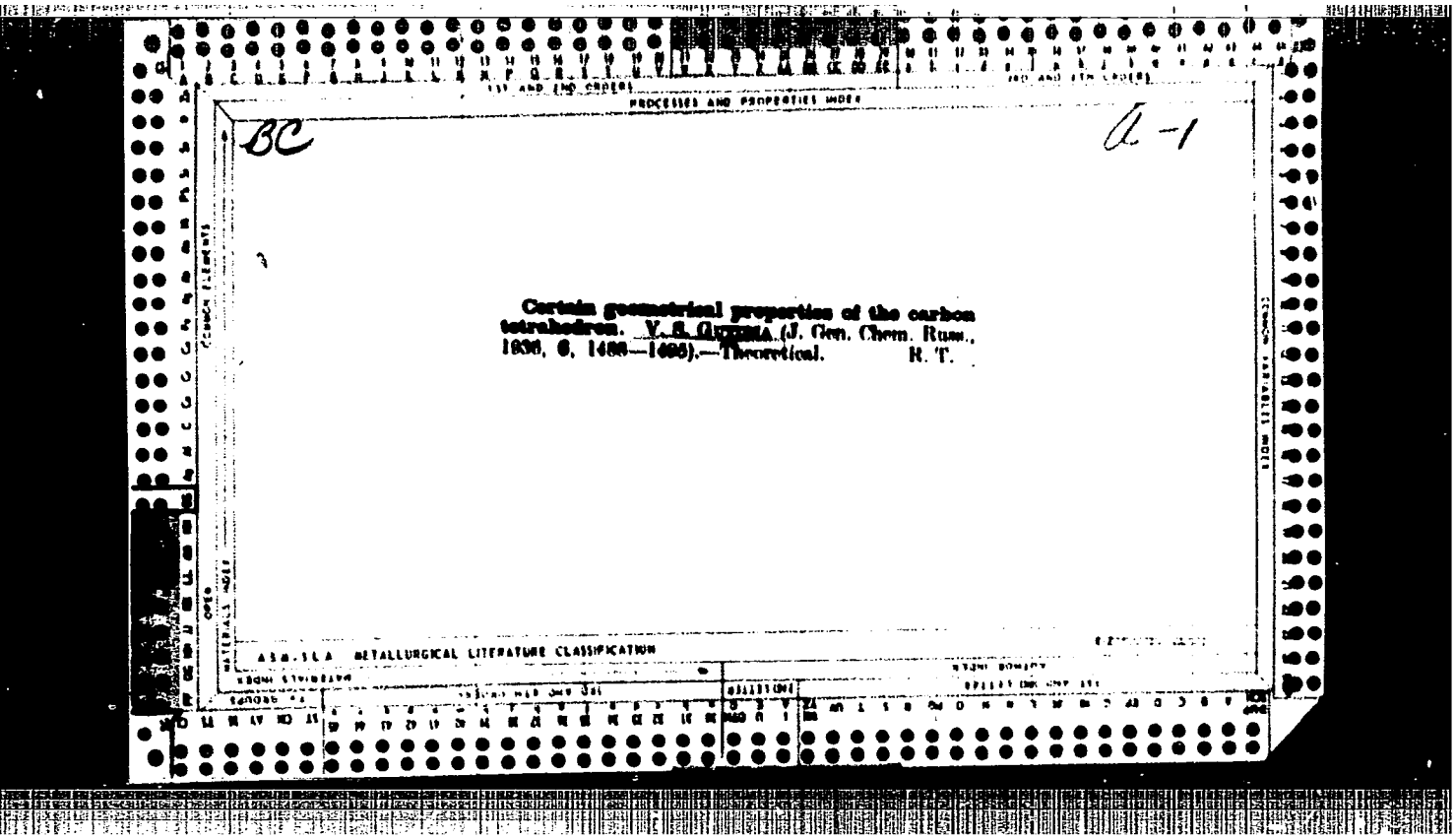
R. T.



10

Certain geometrical properties of carbon tetrahedron. V. S. Gutyrya. *J. Gen. Chem.* (U. S. S. R.) 6, 1487-95 (1936); cf. *C. A.* 29, 1770⁹, 3047⁹. The relation between the change of at. consts. of M. R. for a C atom of single, double and triple bonds and that of "at. vol." of the C tetrahedron in the same series cannot be expressed by a straight line without considering the bond multiples. The formula $K = b - (a\sigma/n)$, where K is the at. const. of M. R., b and a are consts. and σ/n is the relation of "at. vol." and the bond multiple, agrees better with the exptl. evidence than the previously proposed linear relation (cf. *C. A.* 30, 5475⁹). Investigation is being made of the resulting evidence of the existence of a possible relation between the distortions of exaltation of M. R. of a substance with a sp. structure and those of "at. vol." of C tetrahedrons, proceeding independently of the changes of the position of valences in multiple bonds. C. Blanc

ASM-SLA METALLURGICAL LITERATURE CLASSIFICATION



BC

A-1

Certain geometrical properties of the carbon tetrahedron. V. S. Gurevich (J. Gen. Chem. Russ., 1936, 6, 1488—1495).—Theoretical. R. T.

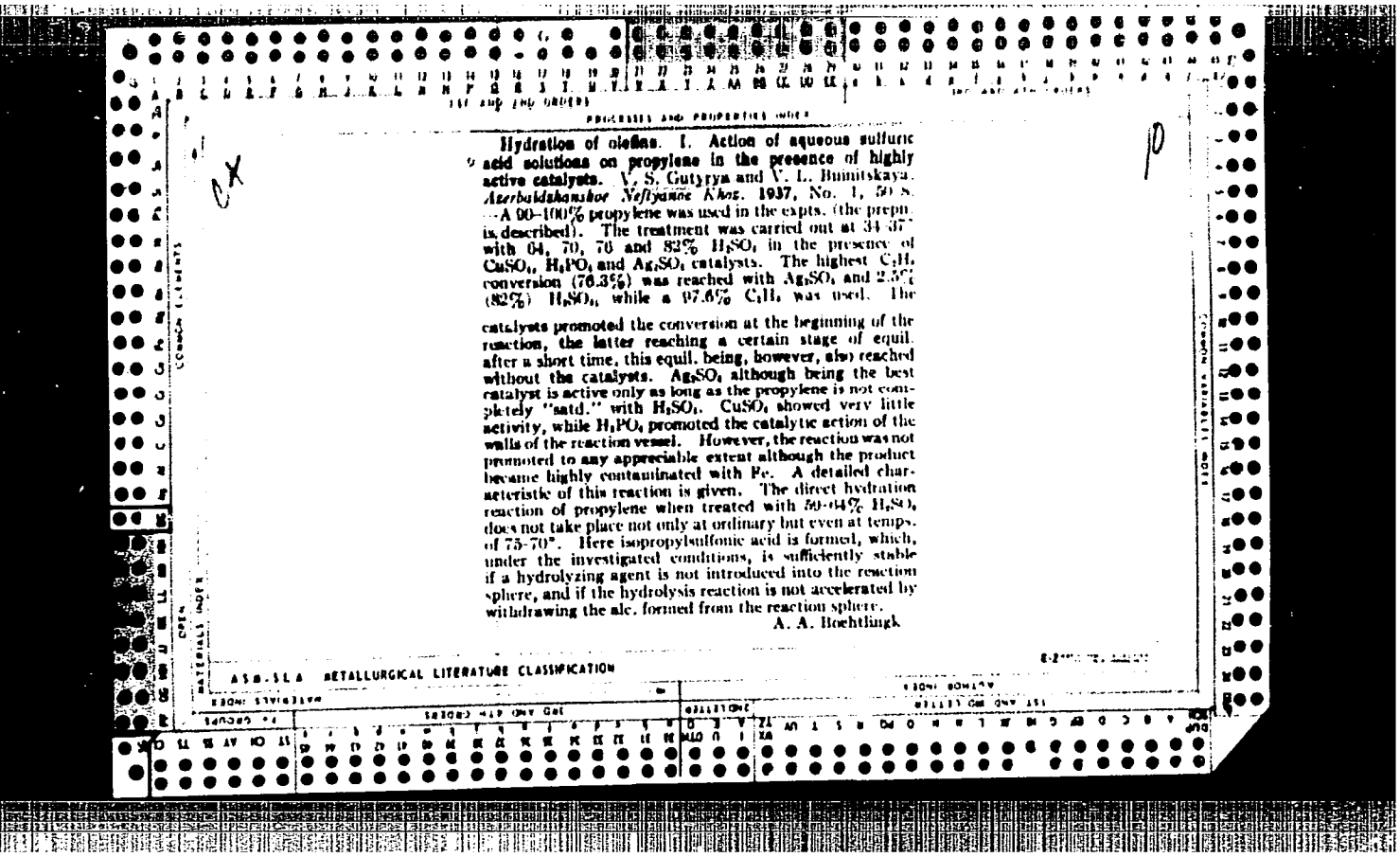
PROCESSES AND PROPERTIES INDEX

CA

21

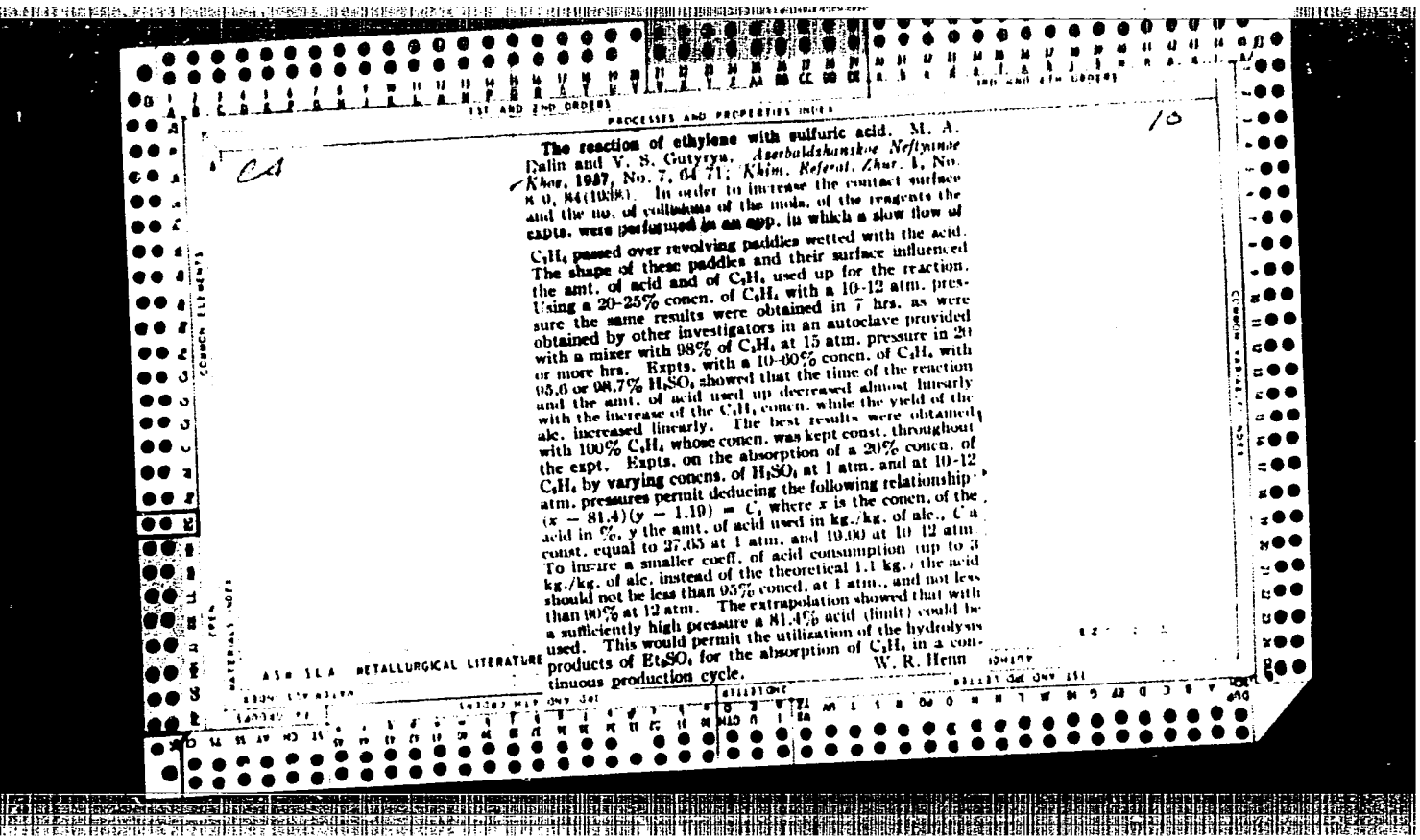
Synthesis of isopropyl alcohol from petroleum gases. I. V. S. Gutyrya, M. A. Dalin and A. Gevorkyan. Pro-
Azerbaidzhan. Neftyanoe Khoz. 1936, No. 7, 67-73. by 91-96%
pylene is polymerized in insignificant amts. by 91-96%
H_2SO_4, and not at all by 90-85% acid. Acids with a range
of 90-93% give almost an identical yield of alc. (41%) and
their consumption amounts to 2.2 kg. per kg. of alc. The
alc. yield is 38% with 90-85% acids, and the consumption
of acid is 2.4-2.8 kg. per kg. alc. The best concn. of H_2-
SO_4 for commercial scale processes is 85-86%. The equip-
ment used and the process are described and the results
are tabulated. Fifteen references. A. A. B.

ASM-SLA METALLURGICAL LITERATURE CLASSIFICATION



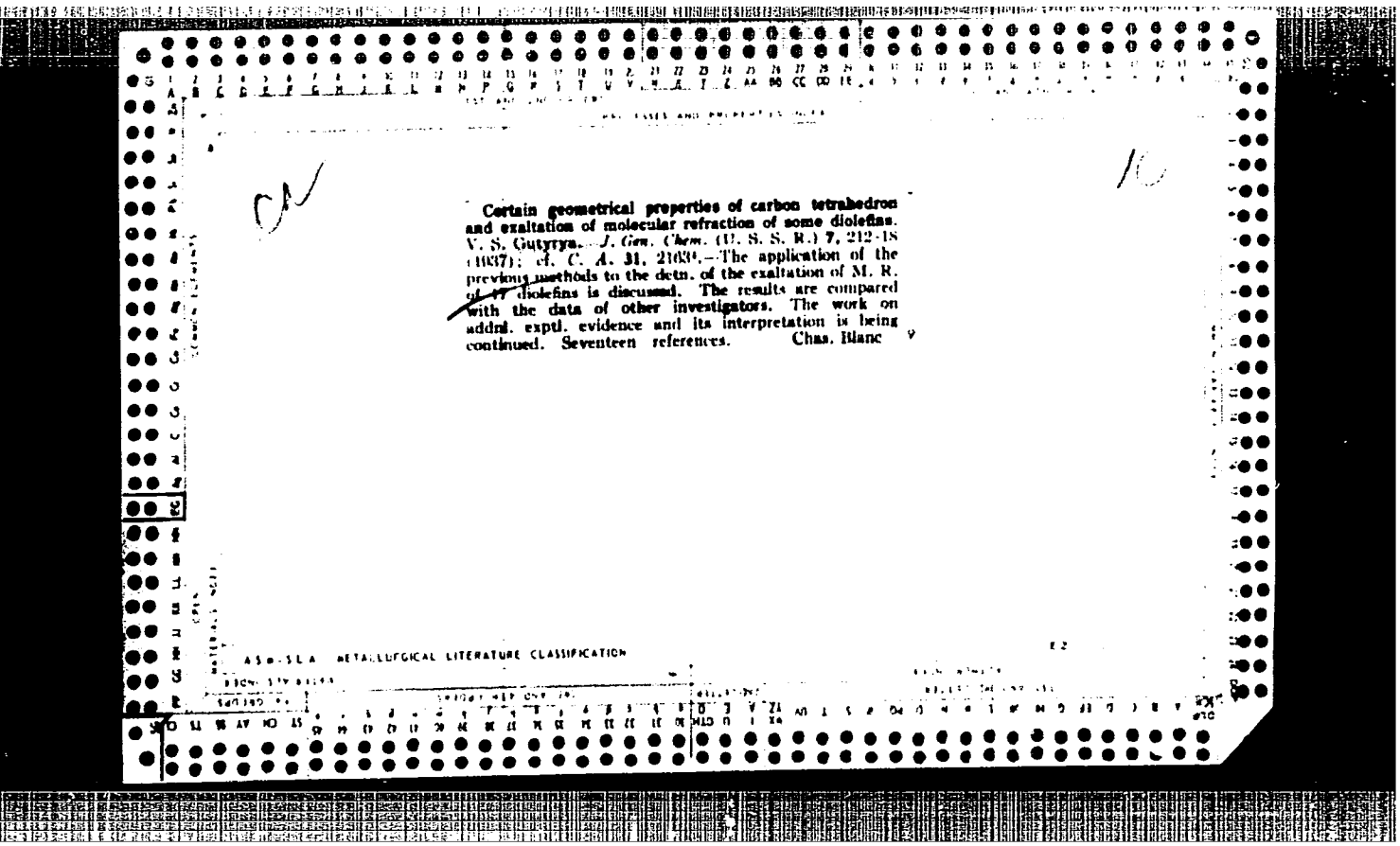
Hydration of olefins. I. Action of aqueous sulfuric acid solutions on propylene in the presence of highly active catalysts. V. S. Gutyrya and V. L. Bunitskaya. *Azerbaidzhanskoe Neftyanoe Khoz.* 1937, No. 1, 50 s. —A 90–100% propylene was used in the expts. (the prepn. is described). The treatment was carried out at 34–37° with 64, 70, 76 and 82% H_2SO_4 in the presence of $CuSO_4$, H_3PO_4 and Ag_2SO_4 catalysts. The highest C_3H_6 conversion (76.3%) was reached with Ag_2SO_4 and 2.5% (82%) H_2SO_4, while a 97.6% C_3H_6 was used. The catalysts promoted the conversion at the beginning of the reaction, the latter reaching a certain stage of equil. after a short time, this equil. being, however, also reached without the catalysts. Ag_2SO_4 although being the best catalyst is active only as long as the propylene is not completely "satd." with H_2SO_4. $CuSO_4$ showed very little activity, while H_3PO_4 promoted the catalytic action of the walls of the reaction vessel. However, the reaction was not promoted to any appreciable extent although the product became highly contaminated with Fe. A detailed characteristic of this reaction is given. The direct hydration reaction of propylene when treated with 50–64% H_2SO_4 does not take place not only at ordinary but even at temps. of 75–70°. Here isopropylsulfonic acid is formed, which, under the investigated conditions, is sufficiently stable if a hydrolyzing agent is not introduced into the reaction sphere, and if the hydrolysis reaction is not accelerated by withdrawing the alc. formed from the reaction sphere.

A. A. Boehtlingk



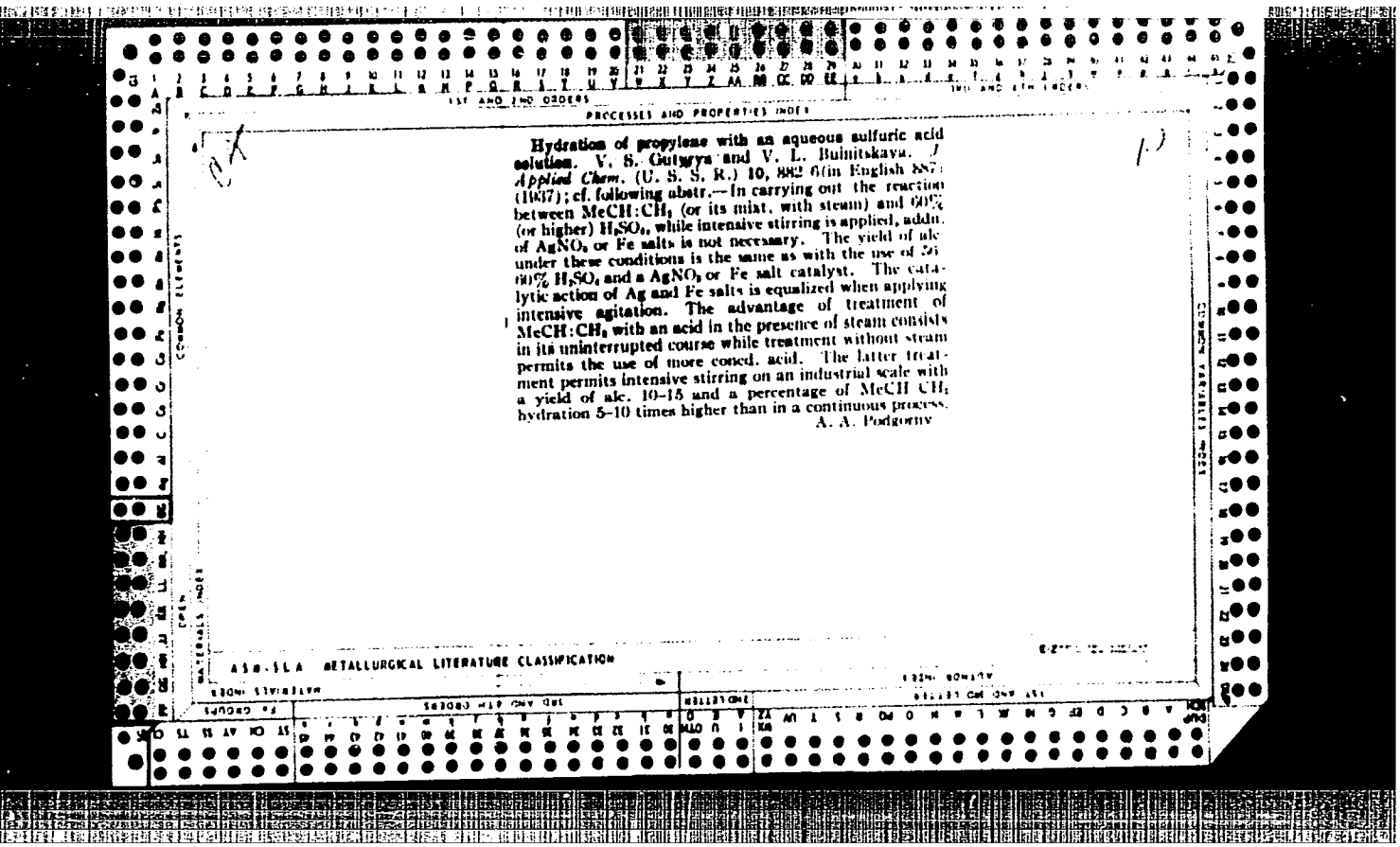
The reaction of ethylene with sulfuric acid. M. A. Dalin and V. S. Gutyrya. *Azerbaidzhanskoe Neftyanoe Khoz.*, 1937, No. 7, 64-71; *Khim. Referat. Zhur.* 1, No. 8-9, 84(1938). In order to increase the contact surface and the no. of collisions of the mols. of the reagents the expts. were performed in an app. in which a slow flow of C_2H_4 passed over revolving paddles wetted with the acid. The shape of these paddles and their surface influenced the amt. of acid and of C_2H_4 used up for the reaction. Using a 20-25% concn. of C_2H_4 with a 10-12 atm. pressure the same results were obtained in 7 hrs. as were obtained by other investigators in an autoclave provided with a mixer with 98% of C_2H_4 at 15 atm. pressure in 20 or more hrs. Expts. with a 10-60% concn. of C_2H_4 with 95.6 or 98.7% H_2SO_4 showed that the time of the reaction and the amt. of acid used up decreased almost linearly with the increase of the C_2H_4 concn. while the yield of the alc. increased linearly. The best results were obtained with 100% C_2H_4 whose concn. was kept const. throughout the expt. Expts. on the absorption of a 20% concn. of C_2H_4 by varying concns. of H_2SO_4 at 1 atm. and at 10-12 atm. pressures permit deducing the following relationship $(x - 81.4)(y - 1.19) = C$, where x is the concn. of the acid in %, y the amt. of acid used in kg./kg. of alc., C a const. equal to 27.65 at 1 atm. and 19.00 at 10-12 atm. To insure a smaller coeff. of acid consumption (up to 3 kg./kg. of alc. instead of the theoretical 1.1 kg.) the acid should not be less than 95% concd. at 1 atm., and not less than 90% at 12 atm. The extrapolation showed that with a sufficiently high pressure a 81.4% acid (limit) could be used. This would permit the utilization of the hydrolysis products of Et_2SO_4 for the absorption of C_2H_4 in a continuous production cycle.

W. R. Henn



Certain geometrical properties of carbon tetrahedron and exaltation of molecular refraction of some diolefins. V. S. Gutyrya. *J. Gen. Chem.* (U. S. S. R.) 7, 212-18 (1937); cf. C. *A.* 31, 2103⁹.—The application of the previous methods to the detn. of the exaltation of M. R. of 17 diolefins is discussed. The results are compared with the data of other investigators. The work on addnl. exptl. evidence and its interpretation is being continued. Seventeen references. Chas. Blanc

ASD-SLA METALLURGICAL LITERATURE CLASSIFICATION



PROCESSES AND PROPERTIES INDEX

Hydration of propylene with an aqueous sulfuric acid solution. V. S. Gutyrya and V. L. Buinitskaya. *J Applied Chem.* (U. S. S. R.) **10**, 882-6(in English 887-(1937); cf. following abstr.—In carrying out the reaction between MeCH:CH_2 (or its mixt. with steam) and 60% (or higher) H_2SO_4, while intensive stirring is applied, addn. of $AgNO_3$ or Fe salts is not necessary. The yield of alc under these conditions is the same as with the use of 50-60% H_2SO_4 and a $AgNO_3$ or Fe salt catalyst. The catalytic action of Ag and Fe salts is equalized when applying intensive agitation. The advantage of treatment of MeCH:CH_2 with an acid in the presence of steam consists in its uninterrupted course while treatment without steam permits the use of more concd. acid. The latter treatment permits intensive stirring on an industrial scale with a yield of alc. 10-15 and a percentage of MeCH:CH_2 hydration 5-10 times higher than in a continuous process.

A. A. Podgorny

ASM-SLA METALLURGICAL LITERATURE CLASSIFICATION

1ST AND 2ND ORDERS

PROCESSES AND PROPERTIES INDEX

10

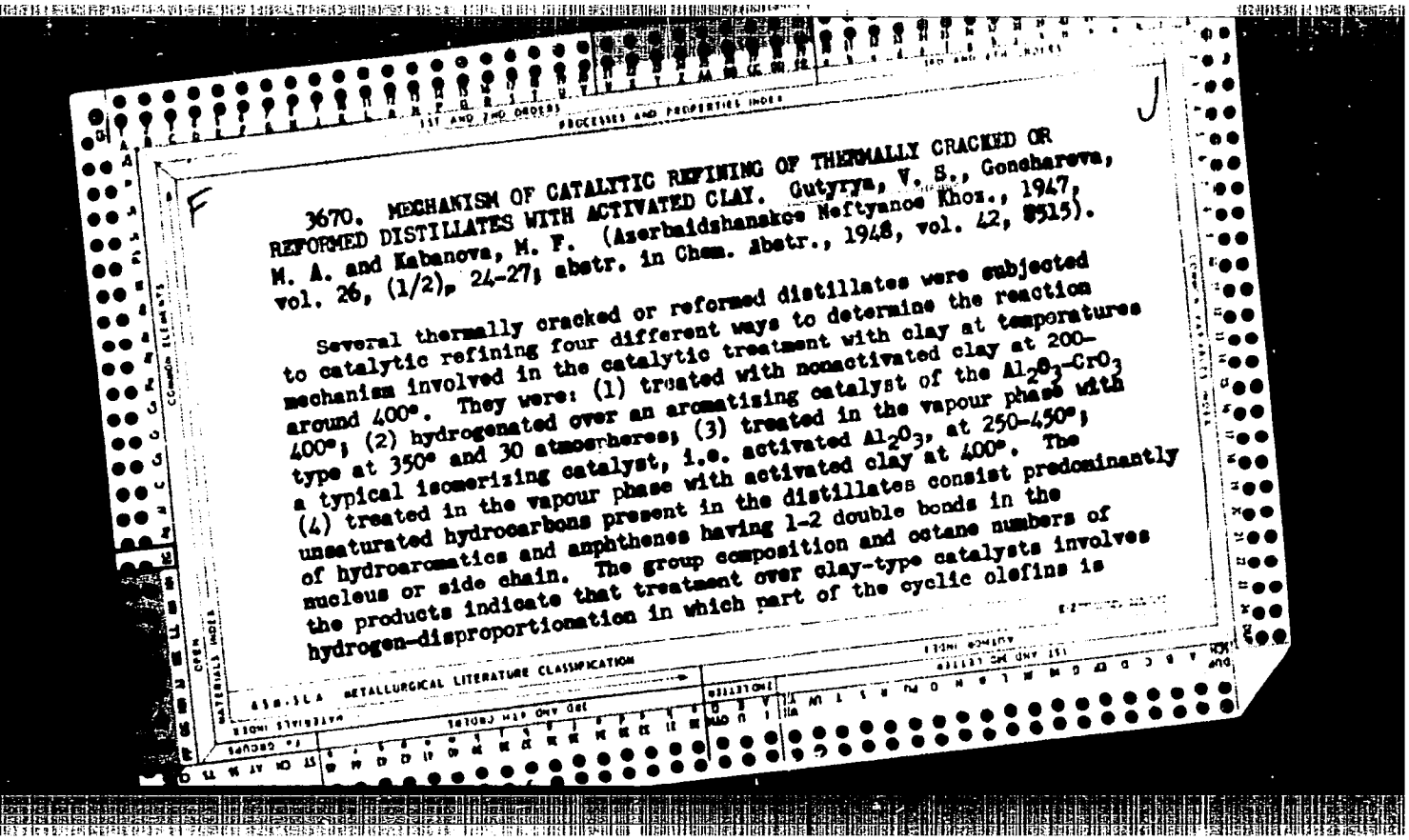
Mechanism of the reaction of olefins with sulfuric acid V. Gutyrya. *J. Gen. Chem.* (U. S. S. R.) 9, 221-7 (1939). —The reaction of olefins with H_2SO_4 was studied by treating iso-PrOH, BuOH and iso-AmOH with 78-98% H_2SO_4 at 0-60° for different periods of time and following the process of hydrogenation, polymerization and dehydrogenation of the resulting olefins by detg. their d. and I nos. The tabulated results show that, contrary to Nametkin, *et al.* (C. A. 31, 1002[2], 8750[4]), the hydrogenation and polymerization of olefins by H_2SO_4 proceed independently of each other, since at low temps. (0°) and short duration of contact (30 sec.) the 2 reactions are inhibited, while at a 9-hr. contact the formation of polymers takes place without the formation of satd. compds. At room temp. the highly accelerated polymerization process is accompanied by dehydrogenation (formation of highly unsatd. compds.), the 2 reactions taking place either before or during the process of hydrogenation. At higher temps. (50° and higher) the high rate of dehydrogenation either retards or completely inhibits the hydrogenation of olefins. Cf. Ormandy and Craven, C. A. 25, 2841. Chas. Blanc

ASM-SLA METALLURGICAL LITERATURE CLASSIFICATION

GUTYRIA, V.S.

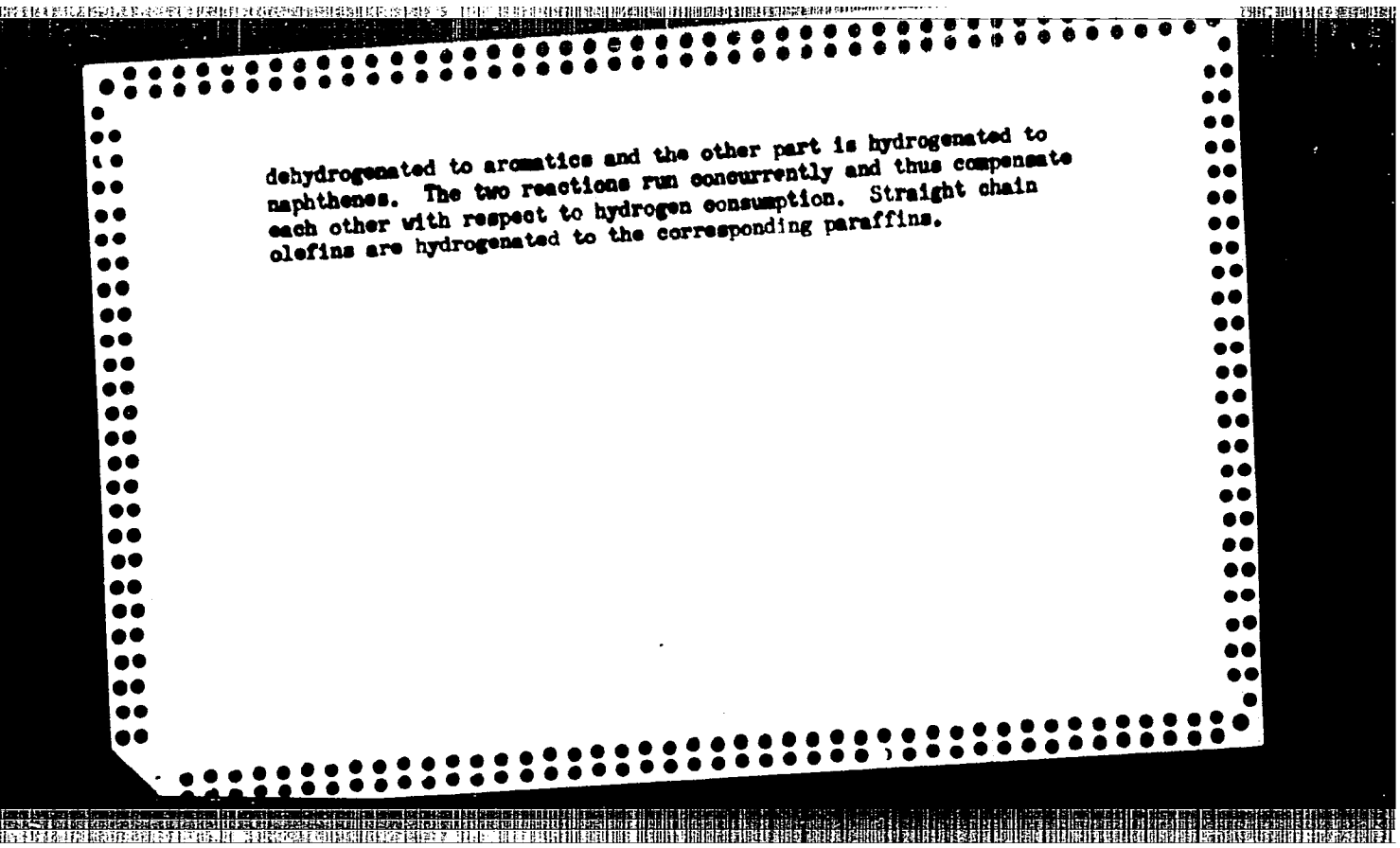
GUTYRIA, V.S. Nefti Azerbaidzhana. Baku, Aznefteizdat, 1945. 129 p.
(Azerbaidzhanskii nauchno-issledovatel'skii institut neftepererabotyvaiushchei promyshlennosti.). DLC: HD9575.R83B35

SO: LC, Soviet Geography, Part II, 1951/Unclassified.

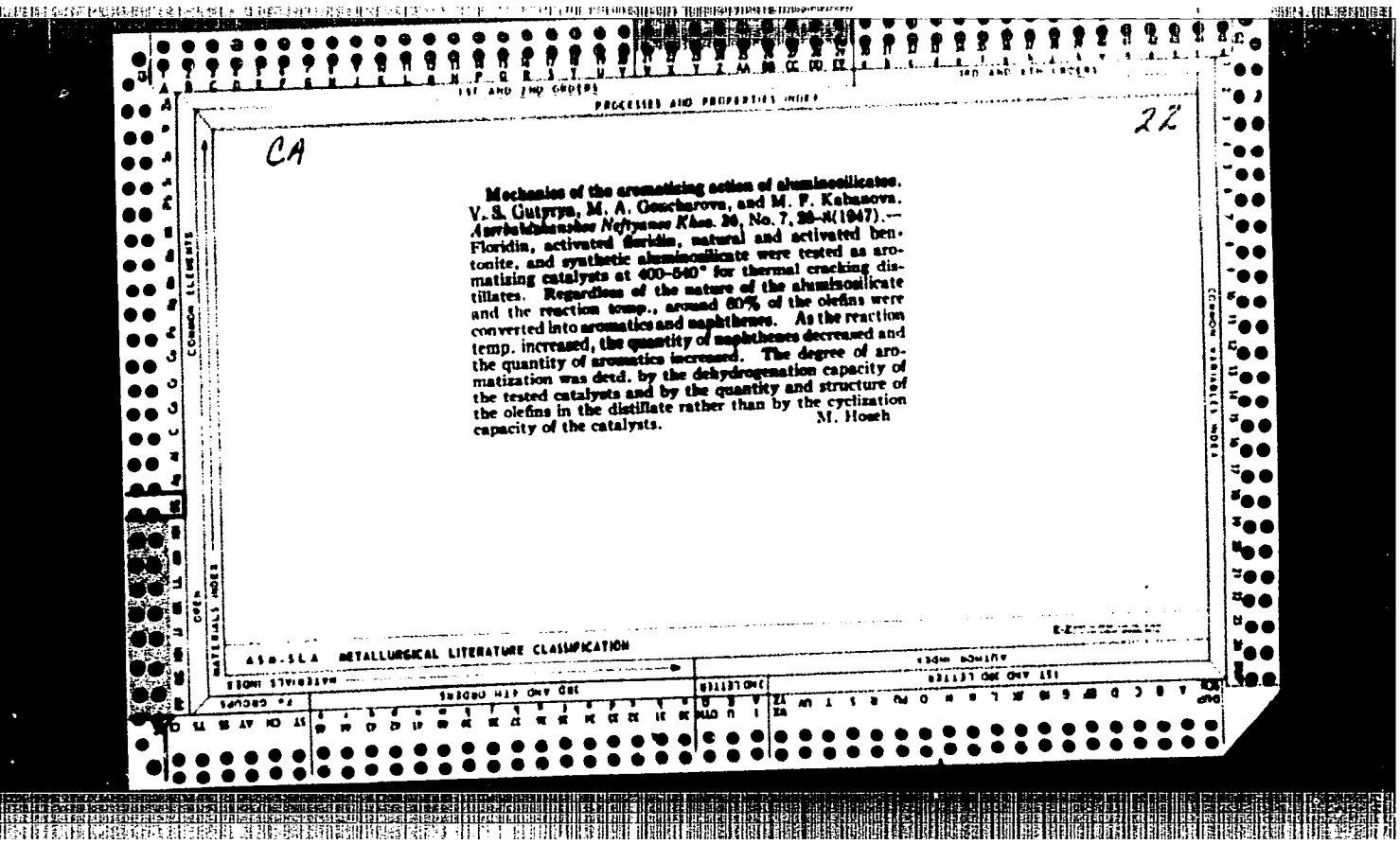


3670. MECHANISM OF CATALYTIC REFINING OF THERMALLY CRACKED OR REFORMED DISTILLATES WITH ACTIVATED CLAY. Gutyrya, V. S., Goncharova, M. A. and Kabanova, M. F. (Azerbaidzhanskoe Neftyanoe Khoz., 1947, vol. 26, (1/2), 24-27; abstr. in Chem. Abstr., 1948, vol. 42, 8515).

Several thermally cracked or reformed distillates were subjected to catalytic refining four different ways to determine the reaction mechanism involved in the catalytic treatment with clay at temperatures around 400°. They were: (1) treated with nonactivated clay at 200-400°; (2) hydrogenated over an aromatizing catalyst of the Al_2O_3-CrO_3 type at 350° and 30 atmospheres; (3) treated in the vapour phase with a typical isomerizing catalyst, i.e. activated Al_2O_3, at 250-450°; (4) treated in the vapour phase with activated clay at 400°. The unsaturated hydrocarbons present in the distillates consist predominantly of hydroaromatics and naphthenes having 1-2 double bonds in the nucleus or side chain. The group composition and octane numbers of the products indicate that treatment over clay-type catalysts involves hydrogen-disproportionation in which part of the cyclic olefins is



dehydrogenated to aromatics and the other part is hydrogenated to naphthenes. The two reactions run concurrently and thus compensate each other with respect to hydrogen consumption. Straight chain olefins are hydrogenated to the corresponding paraffins.

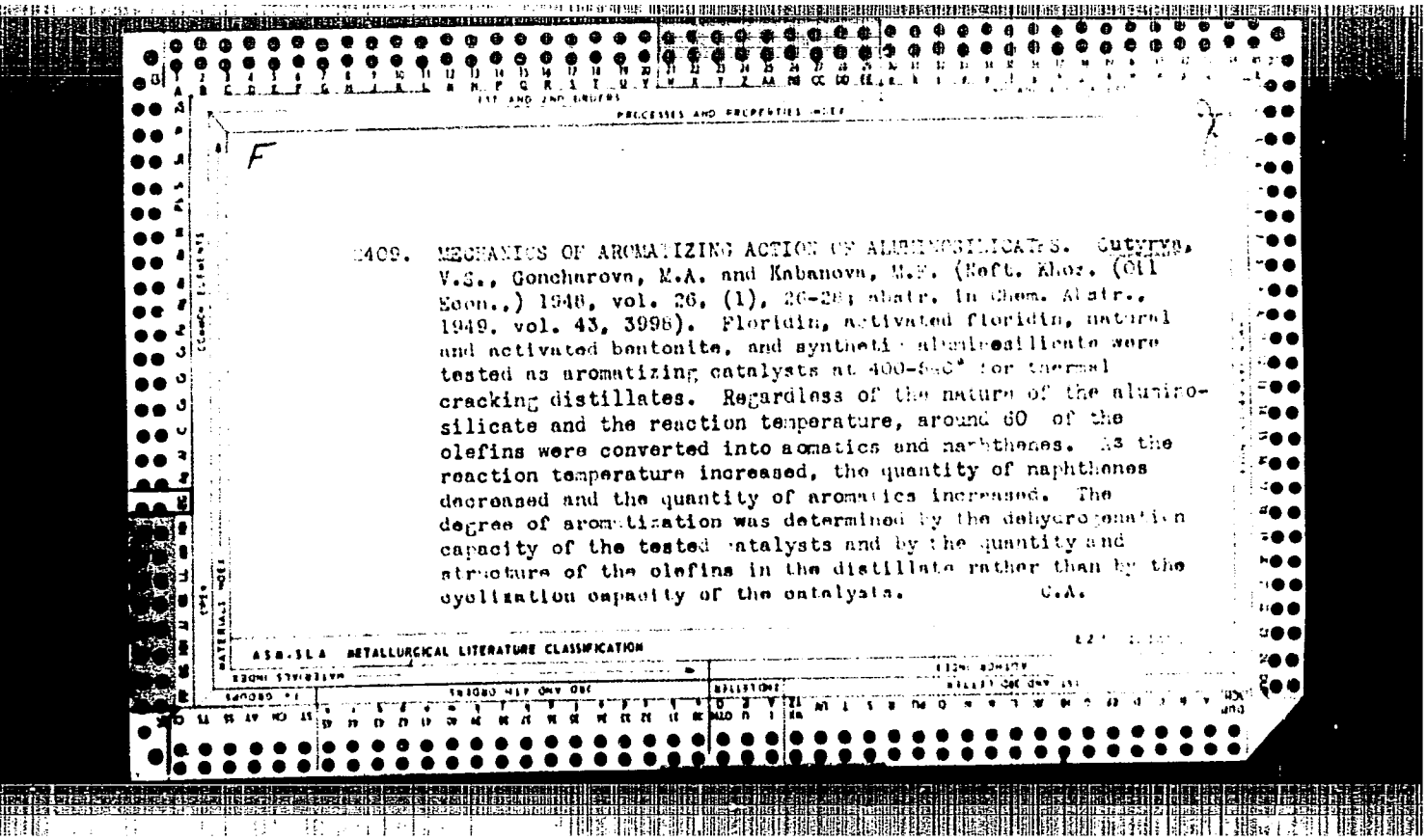


CA

22

Mechanism of the aromatizing action of aluminosilicates. V. S. Gutyrya, M. A. Goncharova, and M. P. Kabanova. *Azerbaidzhanskoe Neftyanoe Khoz.* 26, No. 7, 26–8(1947).—Floridin, activated floridin, natural and activated bentonite, and synthetic aluminosilicate were tested as aromatizing catalysts at 400–540° for thermal cracking distillates. Regardless of the nature of the aluminosilicate and the reaction temp., around 60% of the olefins were converted into aromatics and naphthenes. As the reaction temp. increased, the quantity of naphthenes decreased and the quantity of aromatics increased. The degree of aromatization was detd. by the dehydrogenation capacity of the tested catalysts and by the quantity and structure of the olefins in the distillate rather than by the cyclization capacity of the catalysts.

M. Hoseh



F

3409. MECHANISM OF AROMATIZING ACTION OF ALUMINOSILICATES. Gutyrya, V.S., Goncharova, M.A. and Kabanova, M.F. (Neft. Khoz. (Oil Econ.,) 1948, vol. 26, (1), 26-28; abstr. in Chem. Abstr., 1949, vol. 43, 3998). Floridin, activated floridin, natural and activated bentonite, and synthetic aluminosilicate were tested as aromatizing catalysts at 400-[illegible]° for thermal cracking distillates. Regardless of the nature of the aluminosilicate and the reaction temperature, around 60 of the olefins were converted into aromatics and naphthenes. As the reaction temperature increased, the quantity of naphthenes decreased and the quantity of aromatics increased. The degree of aromatization was determined by the dehydrogenation capacity of the tested catalysts and by the quantity and structure of the olefins in the distillate rather than by the cyclization capacity of the catalysts. C.A.

ASM-SLA METALLURGICAL LITERATURE CLASSIFICATION

AKHMEDOV, Mamed Nadzhaf ogly; KARDASH, Ita Matveyevna; GUTYRYA, V.S., prof., red.; KRAMSKOY, V.P., kand. tekhn. nauk, red.; GONCHAROV, I.A., tekhn. red.

[Methods for carrying out the production process on petroleum refining units] Metody vedeniia tekhnologicheskogo rezhima na neftepererabatyvaiushchikh ustanovkakh; iz opyta raboty zavoda im.A.A.Andreeva. Baku, Aznefteizdat, 1954. 67 p. (MIRA 16:8)

1. Chlen-korrespondent AN SSSR (for Gutyrya).
(Petroleum--Refining)

KULIYEV, Ali Musa, professor, doktor khimicheskikh nauk; GUTYRYA, V.S., professor, redaktor; GONCHAROV, I.A., tekhnicheskiy redaktor

[Ways of improving the qualities of petroleum lubricants] Puti uluchsheniia kachestv neftianykh smazochnykh masel. Baku, Aznefteizdat, 1954. 92 p. [Microfilm] (MLRA 9:12)
(Lubrication and lubricants)

GUTYRYA, V.S.; PISHNAMAZZADE, B.F.; KOSHKLEVA, L.M.; ALIYEV, A.F.

Activated silica from serpentinite as an adsorbent for extracting aromatic hydrocarbons from petroleum fractions. Dokl. Azerb.SSR 10 no.1:3-10 '54. (MLRA 7:7)

1. Institut nefti Akademii nauk Azerbaydzhanskoy SSR.
(Silica) (Petroleum--Refining)

ISMAYLOV, R.G.; SPEKTOR, Sh.Sh.; GUTYRYA, V.S.

Evaluating the degree of utilization of raw materials by operating crews of oil refineries. Azerb.neft.khoz.35 no.7:27-29 Jl '56.
(Petroleum--Refining)

ZUL'FUGAROV, Z.G.; GUTYRYA, V.S., red.; MIKELADZE, G., red.izd-va; POGOSOV,V., tekhn.red.

[Effect of synthesis of catalysts in cracking and their physico-chemical properties] Vliianie uslovii sinteza krekiruiushchikh katalizatorov na ikh fiziko-khimicheskie svoistva. Baku, Izd-vo Akad. nauk Azerbaidzhanskoi SSR, 1957. 221 p. (MKRA 11:2)
(Catalysts) (Cracking process)

ZUL'FUGAROV, Z.G.; GUTYRYA, V.S., professor, redaktor; PEVZNER, M.I., tekhnicheskiy redaktor

[Studies on the physical and chemical characteristics and refining properties of Azerbaijan clays and gumbrin] Issledovanie fiziko-khimicheskikh svoistv i otbelivaiushchei sposobnosti glin mestorozhdenii Azerbaidzhanskoi SSR i gumbrina. Baku, Izd-vo Akad. nauk Azerbaidzhanskoi SSR, 1957. 247 p. (MLRA 10:8)

1. Chlen-korrespondent Akademii nauk SSSR (for Gutyrya)
(Azerbaijan--Clay)

ALIYEV, V.S.; GUTYRYA, V.S.

The contribution of scientists of the Azerbaijan petroleum industry to the development of Russian petroleum refining methods. Azerb.neft.khoz. 36 no.11:47-49 N '57. (MIRA 11:2)
(Petroleum--Refining)

KULIYEV, Ali Musa ogly, prof.; KULIYEV, Rasul Shirin ogly; ALIYEV, Mamed Ibragim ogly; GUTYRYA, V.S., prof., doktor khim.nauk, red.; SHTEYNGEL', A.S., red.izd-va

[Production technology and investigation of lubricating oils from Baku petroleum] Tekhnologiia polucheniia i issledovanie masel iz Bakinskikh neftei. Baku, Azerbaidzhanskoe gos.izd-vo neft. i nauchno-tekhn.lit-ry, 1958. 644 p. (MIRA 12:9)
(Baku--Petroleum) (Lubrication and lubricants)

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30V/81-59-10-36405

Translation from: Referativnyy zhurnal. Khimiya, 1959, Nr 10, p 439 (USSR)

AUTHORS: Nasirov, A.B., Gutyrya, V.S., Zul'fugarly, D.I.

TITLE: Effect of Some Conditions of Catalytic Cracking in a Bubbling Layer of Synthetic Alumosilicate on the Formation of Aromatic Hydrocarbons in the Composition of Gasoline

PERIODICAL: Sb. tr. Azerb. n.-i. in-t neftepererabat. prom-sti, 1958, Nr 2, pp 44-55 (Azerbaydzhanian summary)

ABSTRACT: The catalytic two-stage cracking of the kerosene-gas-oil fractions of Baku petroleum has been investigated; the first stage is realized in an installation with circulating bubbling alumosilicate catalyst, the second stage in a reactor with a stationary bubbling layer of the same catalyst. Gasoline of two-stage cracking obtained from two types of petroleum of different composition is characterized by approximately the same hydrocarbon composition depending on the temperature in the first stage: with an increase in the temperature of the first stage from 420 to 480°C, in gasoline of the second stage the content of aromatic hydrocarbons increases from 29.4 - 26.1 to 35.0 - 42.5% at the expense of the reduction

Card 1/2

NASIROV, A.B.; GUTYRYA, V.S.; ZUL'FUGARLY, D.I.

Chemical composition of gasoline from two-stage catalytic cracking. Sbor.trud.AzNII NP no.2:56-69 Ag '58.
(MIRA 12:6)

(Cracking process) (Gasoline--Analysis)

SOV/81-59-8-28958

Translation from: Referativnyy zhurnal. Khimiya, 1959, Nr 8, p 503 (USSR)

AUTHORS: Nasirov, A.B., Gutyrya, V.S., Zul'fugarly, D.I.

TITLE: Hexamethylenes of Gasoline of Two-Stage Catalytic Cracking

PERIODICAL: Sb. tr. Azerb. n.-i. in-t neftepererabat. prom-sti, 1958, Nr 2, pp 70 - 76 (Azerb. summary)

ABSTRACT: The characteristic is cited of naphthene-paraffin residues remaining after chromatographic extraction of aromatic hydrocarbons from gasolines which are products of the two-stage catalytic cracking of the gas-oil fractions of Balakhany heavy and Surakhany choice petroleum. Independently of the nature of the initial raw material, a temperature increase in the first stage leads to a decrease in the content of methylcyclohexane and 1,3- and 1,4-dimethylcyclohexanes and consequently of the total content of hexamethylenes in the product.

N. Kel'tsev

Card 1/1

GUTYRYA, V.S.

Preparing residual stock for catalytic cracking. Sbor.trud.Az. NII NP no.4:42-53 '59. (MIRA 15:5)
(Cracking process)

GUSEYNOVA, L.Sh.; GUTYRYA, V.S.

Effect of aromatic hydrocarbons in Baku petroleum on catalytic cracking indices of distillates from this petroleum. Sbor.trud. Az NII NP no.4:54-68 '59. (MIRA 15:5)
(Cracking process)

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PHASE I BOOK EXPLOITATION SOV/6246

Soveshchaniye po tseolitam. 1st, Leningrad, 1961.

Sinteticheskiye tseolity; polucheniye, issledovaniye i primeneniye (Synthetic Zeolites: Production, Investigation, and Use). Moscow, Izd-vo AN SSSR, 1962. 286 p. (Series: Its: Doklady) Errata slip inserted. 2500 copies printed.

Sponsoring Agency: Akademiya nauk SSSR. Otdeleniye khimicheskikh nauk. Komisiya po tseolitam.

Resp. Eds.: M. M. Dubinin, Academician and V. V. Serpinskiy, Doctor of Chemical-Sciences; Ed.: Ye. G. Zhukovskaya; Tech. Ed.: S. P. Golub'.

PURPOSE: This book is intended for scientists and engineers engaged in the production of synthetic zeolites (molecular sieves), and for chemists in general.

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Synthetic Zeolites: (Cont.) SOV/6246

COVERAGE: The book is a collection of reports presented at the First Conference on Zeolites, held in Leningrad 16 through 19 March 1961 at the Leningrad Technological Institute imeni Lensovet, and is purportedly the first monograph on this subject. The reports are grouped into 3 subject areas: 1) theoretical problems of adsorption on various types of zeolites and methods for their investigation, 2) the production of zeolites, and 3) application of zeolites. No personalities are mentioned. References follow individual articles.

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Synthetic Zeolites: (Cont.)

GALICH, P.N.; GOLUBCHENKO, I.T.; GUTYRYA, A.A.; GUTYRYA, V.S.; DOLINSKAYA, E.S.; MOZDOR, Ye.V.; NEYMARK, I.Ye.

Nature of cokelike deposits formed on CaC-type molecular sieves in the cracking of n. alkanes. Neftekhimiia 2 no.2:193-195 Mr-Ap '62. (MIRA 15:6)

1. Institut khimii polimerov i monomerov AN USSR i Institut fizicheskoy khimii imeni Pisarzhevskogo AN USSR, Kiyev.
(Paraffins) (Cracking process)