NIZNANSKY, J.

"From the first to the hundredth kilometer of our spring hiking"

Krasy Slovenska. Bratislava, Czechoslovakia. Vol. 36, no. 3, Mar. 1959

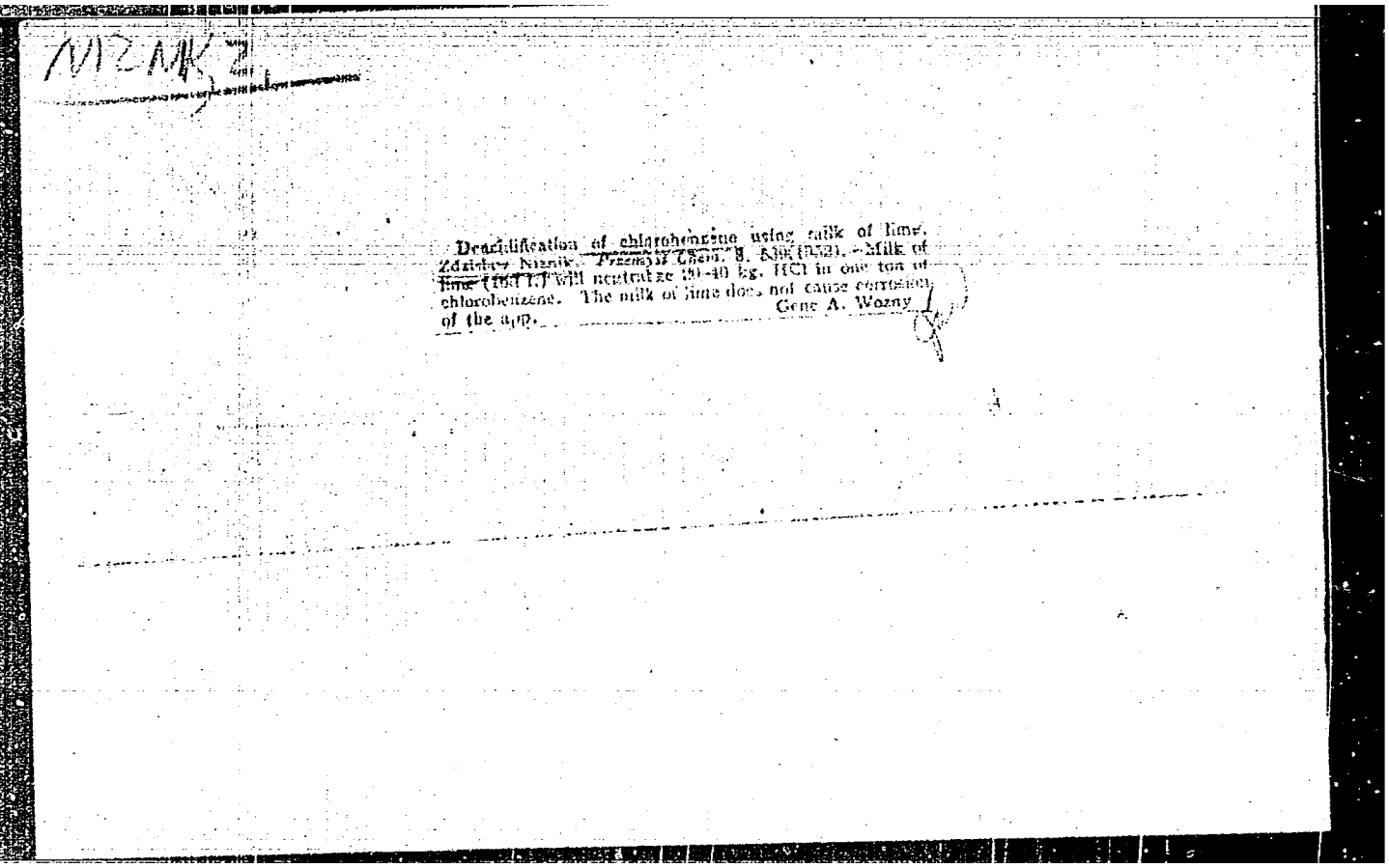
Monthly list of East European Accessions (EEAI), LC, Vol. 8, No. 6, Jun 59, Unclas

DUHIS, I.; MARCINCIN, F.; DURISOVA, E.; NIZNIK, V.; RADAC, F.

Use of the diphenylamine reaction in the diagnosis and examination of stomach cancer. Cesk. gastroent. vyz. 17 no.6: 354-357 S '63.

1. Cs. statne kupele Bardekovske Kupele, riaditel MUDr. F. Radac.

(STOMACH NEOPLASMS) (BIPHENYL COMPOUNDS)
(NEOPLASM DIAGNOSIS)



Decalcification of chlorobenzene using milk of lime. Zdzisław Niznik. *Przemysł Chem.* 8, 538 (1952).—Milk of lime (10% $Ca(OH)_2$) will neutralize 190–40 kg. HCl in one ton of chlorobenzene. The milk of lime does not cause corrosion of the app.

Gene A. Wozny

NIZNIKOWSKA, Janina; OKNINSKA, Anna

Nephrotic syndrome in Schonlein-Henoch's disease. Pol. tyg. lek. 20 no.25:932-934 21 Je '65.

1. Z Kliniki Diagnostyki Chorob Dziecięcych AM w Warszawie (Kierownik: prof. dr. med. Z. Lejmbach).

[redacted], Janina; ONDINSKA, Anna

Nephrotic syndrome in infants. Wiad. lek. 18 no.10:821-824 15 My '65.

1. Z Kliniki Diagnostyki Dzieciecej AM w Warszawie (Kierownik: prof. dr. med. Z. Lejmbach).

NIZNIKOWSKA-MARKS, Maria Janina

NIZNIKOWSKA-MARKS, Maria Janina (Warszawa, Jagiellonska 12 m.28)

Two cases of mediastinal tumors. Pediat. polska 29 no.3:277-282 Mr '54.

1. Z Kliniki Diagnostyki Chor. Dziec. Akademii Medycznej w Warszawie. Kierownik: prof. dr med. Z.Lejmbach.
(MEDIASTINUM, neoplasms,
*in child)

WIZNIKOWSKA-MARKS, Maria Janina

Case of paroxysmal tachycardia in one-year-old child. Pediat. polska. 29 no.7:714-718 July 54.

1. Z Kliniki Diagnostyki Chorob Dzieci Akademii Medycznej w Warszawie. Kierownik: prof. dr med. Z.Lejmbach.
(TACHYCARDIA, PAROXYSMAL, in infant and child.)

NIZNIKOWSKA-MARKS, Maria Janina, Warszawa, Jagiellonska 12 m.28

A case of congenital chyloperitoneum. Pediat. polska 29 no.11: 1117-1120 Nov 54.

1. Z kliniki Diagnostyki chor. dziec. Akademii Med. w Warszawie kierownik: prof. dr. med. Z.Lejmbach

(ASCITES
chylous, congen.)

CZOCHANSAK, Jagna; NIZNIKOWSKA-MARKS, Maria Janina

Staphylococcal pneumonia complicated by pleural empyema. Pediat. polska 30 no.6:531-541 Je '55.

1. Z Kliniki Diagnostyki Chorob Dzieci A.M. w Warszawie. Kierownik: prof. dr med. Z Lejmbach. Warszawa, Dzialdowska 1/3

(PNEUMONIA, in infant and child, micrococcal, with pleural empyema)
(MICROCOCCAL INFECTIONS, in infant and child, pneumonia with pleural empyema)
(EMPYEMA, PLEURAL, in infant and child, with micrococcal pneumonia)

BRZOSKO, W.; WIZNIKOWSKA-MARKS, M. J.; WURM, Ch.

Endocardial fibroelastosis. Pediat. polska 31 no.4:373-388 Apr 56.

1. Z Kliniki Diagnostyki Chorob Dziecięcych w Warszawie Kierownik: prof. dr. med. Z. Lejmbach i z Zakładu Anatomii Patologicznej w Warszawie. Kierownik: prof. dr. med. L. Paszkiewicz Warszawa, Dzialdowska 1/3.
(CARDIAC ENLARGEMENT in infant and child, endocardial fibroelastosis (Pol))

OKNINSKA, Anna; NIZNIKOWSKA-MARKS, Janina; LAMERS, Janina

Observations on congenital stridor in children. Pediat. polska 31 no.9:969-981 Sept 56.

1. Z Kliniki Diagnostyki Chorob Dzieci A.M. w Warszawie. Kierownik: prof. dr. med. Z. Lejmbach. Adres: Warszawa, ul. Dzialdowska 1/3.
(STRIDOR, in infant and child, congen. (Pol))

NIZNIKOWSKA-MARKS, Maria Janina; SZULC, Alicja

Fiedler's interstitial myocarditis in infants on the basis of personal cases. Pediat. polska 32 no.10:1091-1102 Oct 57.

1. Z Kliniki Diagnostyki Chorob Dziecięcych A. M. w Warszawie Kierownik: prof. dr med. Z. Lejmbach. Adres: Warszawa, ul Dzialdowska 1/3.
(MYOCARDITIS, in inf. & child
interstitial (Pol))

LEJMBACH, Z., NIZNIKOWSKA-MARKS, M.J., SIOMOWNA-WALEJKO, B.

Staphylococcal pneumonia. Pediat. polska 33 no.4:395-400 Apr '58.

1. Adres: Warszawa, ul. Dzialdowska 1/3.
(MICROCOCCAL INFECTIONS, in inf. & child
pneumonia (Pol))
(PNEUMONIA, in inf. & child.
micrococcal (Pol))

LEJMBACH, Z., MIZNIKOWSKA-MARKS, M.J.

Staphylococcal pneumonia in Poland based on statistical data of recent years. Pediat. polska 33 no.4:401-405 Apr '58.

1. Adres: Warszawa, Dzialdowska 1/3.
(MICROCOCCAL INFECTIONS, in inf. & child.
pneumonia, statist. in Poland. (Pol))
(PNEUMONIA, In inf. & child.
micrococcal in Poland, statist. (Pol))

NIZNIKOWSKA-MARKS, Maria Janina (Warszawa, ul: Jagiellonska 12 m.28)

A case of adrenogenital syndrome with electrolyte disorder. Pediat. polska 33 no.4:481-484 Apr '58.

1. Z Kliniki Diagnostyki Chorob Dziecicych A.M. w Warszawie. Kierownik: doc. dr med. Z. Lejmabach.

(ADRENOGENITAL SYNDROME, case reports
with body fluid balance disord. (Pol))
(BODY FLUID BALANCE,
disord in adrenogenital synd., case report (Pol))

NIZNIKOWSKA-MARKS, Maria Janina; CZOCHANSKA, Jagna; BOBRYCKA, Danuta.

A case of dystonic form of hepato-lenticular degeneration. Pediat. polska 35 no.7:787-792 Jl '60.

1. Z Kliniki Diagnostyki Chorob Dzieci Kierownik: prof. dr med. Z.Lejmbach
(HEPATOLENTICULAR DEGENERATION in inf & child)

NIZNIKOWSKA-MARKS, Maria Janina; OKNINSKA, Anna

Cerebrospinal meningitis caused by Bacillus pyocyaneus. Pediat. polska 35 no.11:1331-1337 N '60.

1. Klinika Diagnostyki Chorob Dzieci w Warszawie, Kierownik: prof. dr med. Z. Lejmbach.
(MENINGITIS in inf & child)
(PSEUDOMONAS INFECTIONS in inf & child)

LUDWICZAK, Halina; NIZNIKOWSKA-MARKS, Janina; PRZYBYLSKA, Halina; ZMUDZKA, Barbara

Pyelonephritis in children -- selected problems dealing with the prognosis and therapy. I. Pediat. pol. 37 no.10:1011-1022 O '62.

1. Z Kliniki Diagnostyki Chorob Dzieci AM.Kierownik: prof. dr med. Z. Lejmbach.

(PYELONEPHRITIS)

LUDWICZAK, Halina; NIZNIKOWSKA-MARKS, Janina; OKNINSKA, Anna; PRZYBYLSKA, Halina

Pyelonephritis in infants. II. Pediat. pol. 37 no.10:1023-1028 O '62.

1. Z Kliniki Diagnostyki Chorob Dzieci AM. Kierownik: prof. dr med. Z. Lejmbach.

(PYELONEPHRITIS)

LUDWICZAK, Halina; NIZNIKOWSKA-MARKS, Maria; SZOTOWA, Wanda

Chronic hypoproteinemia and gluten intolerance. (Observations on a case of celiac disease). Pediat. pol. 38 no.5:491-496 My '63.

1. Z Kliniki Diagnostyki Chorob Dzieci AM w Warszawie Kierownik: prof. dr med. Z. Lejmbach.
(CELIAC DISEASE)

NIZNIKOWSKA-MARKS, Janina; OKNINSKA, Anna

Rare forms of the nephrotic syndrome in children. Pediat. pol. 38 no.7:637-643 Jl '63.

1. Z Kliniki Diagnostyki Chorob Dzieci AM w Warszawie Kierownik: prof. dr med. Z. Lejmbach.
(NEPHROTIC SYNDROME) (GLOMERULONEPHRITIS)
(AMYLOIDOSIS)

NIZNIKOWSKA-MARKS, Janina; OKNINSKA, Anna

Apropos of treatment and early prognosis in the nephrotic syndrome in children. Pediat pol. 38 no.9:747-753 Ag '63.

1. Z Kliniki Diagnostyki Chorob Dzieci AM w Warszawie; kierownik prof. dr. med. Z.Lejmbach.

*

KANSY, Jerzy; NIZNIKOWSKA-MARKS, Janina

Contribution to conditions precipitating the appearance of nephritis. Pediat. pol. 38 no.10:923-926 O '63.

1. Z Kliniki Diagnostyki Chorob Dzieci AM w Warszawie Kierownik: prof. dr med. Z. Lejmbach.
(NEPHRITIS) (HYPERTENSION)

NIZNIKOWSKA-MARKS, Maria Janina

Contribution to diagnostic difficulties in cardiac changes due to Friedreich's disease. Pediat. pol. 38 no.11:1001-1015 N '63.

1. Z Kliniki Diagnostyki Chorob Dzieci AM w Warszawie Kierownik: prof. dr med. Z. Lejmbach.
(FRIEDREICH'S ATAXIA) (HEART DISEASE)
(DIAGNOSIS, DIFFERENTIAL) (ELECTROCARDIOGRAPHY)

NIZNIKOWSKA-MANKO, Janina; OKNINSKA, Ann

Role of stenosis of the lower segment of the urinary tract in chronic pyelonephritis. Pediat. Pol. 39 no.3:269-280 Mr'64

1. Z Kliniki Diagnostyki Chorob Dzieci AM w Warszawie; kierownik prof.dr.med. Z.Lejmbach.

NIZNIKOWSKA-MARKS, Janina; MARKS, Eugeniusz

A case of congenital insensitivity to pain. Neurol., neurochir. psychiat. Pol. 14 no.3:525-527 My-Je '64

1. Z Kliniki Diagnostyki Chorob Dziecięcych w Warszawie (Kierownik: prof. dr. med. Z. Lejmbach).

GORZYNSKA-FAJER, Irena; NIZNIKOWSKA-MARKS, Janina; SLOMOWNA, Barbara; WOCJAN, Juliusz

A case of platybasia associated with Arnold-Chiari syndrome.
Pediat. Pol. 40 no.9:983-985 S '65.

1. Z Kliniki Diagnostyki Chorob Dzieci AM w Warszawie (Kierownik: prof. dr. med. Z. Lejmbach), z Zakladu Radiologii Pediatrycznej (Kierownik: prof. dr. med. K. Rowinski) i z Kliniki Neurochirurgii AM w Warszawie (Kierownik: prof. dr. med. L. Stepien).

NIZNIKOWSKA-MARKS, Janina; OKNINSKA, Anna

Late recurrences of nephrotic syndrome. Pediat. Pol. 40 no.10: 1091-1094 O '65.

1. Z Kliniki Diagnostyki Chorob Dzieci AM w Warszawie (Kierownik: prof. dr. med. Z. Lejmbach).

CZECHOSLOVAKIA

KOZINKA, Vladimir, KLASOVA, Albina, and NIZNJANSKI, Augustin; Department of Plant Physiology of the Botanical Institute of The Slovak Academy of Sciences (Oddelenie fyziologie rastlin Botanickeho instytutu SAV,) Bratislava.

"Changes in Physiologic Regulation of Plant Transpiration Ascribable to Industrial Pollutants."

Bratislava, Biologia, Vol 18, No 8, 1963; pp 565-578.

Abstract [Russian article; German summary modified]: Histologic and metabolic studies of effect of some fluorine compounds commonly present in industrial pollutants onto Cucumis sativa L., applied as spray or in powder form. The changes in intensity of stomatal and cuticular transpiration were of greater importance than actual total effect on transpiration as such. The stomata closed and cuticular lesions appeared. When they are wet, trichomes lose their protective capacity. Five tables, 5 graphs; 8 photomicrographs; 1 Czech, 2 Soviet and 23 Western references.

1/1

NIZNANSKY, Fr.; Kremery, Vl.

Investigation of the enzymology of Brucella strains. Cesk. epidem. mikrob. imun. 7 no.4:252-256 July 58.

1. Statny vedecky veterinarny ustav v Bratislave.
(BRUCELLA, metabolism
enzyme studies (Cz))
(ENZYMES
of Brucella strains, analysis (Cz))

SMUSHKOVICH, B.L.; IL'IN, G.N.; NIZOV, A.A.

Automation of a device for cupping test of sheet metals. Zav.lab. 30 no.4:491-492 '64. (MIRA 17:4)

1. Spetsial'noye konstruktorskoye byuro po razrabotke avtomaticheskikh sredstv izmereniya mass i priborov ispytatel'noy tekhniki Verkhne-Volzhskogo soveta narodnogo khozyaystva.

NIZOV, A. A.

"Electrophoretic Investigation of the Blood Plasma in Patients With Rheumatism and Acute Septic Endocarditis." Cand Med Sci, Central Inst for the Advanced Training of Physicians, 21 Dec 54. (VM, 8 Dec 54)

Survey of Scientific and Technical Dissertations Defended at USSR Higher Educational Institutions (12)

SO: Sum. No. 556, 24 Jun 55

NIZOV, A.A., kandidat meditsinskikh nauk

Utilization of modifications of plasma proteins in a differential diagnosis of rheumatism and subacute septic endocarditis. Terap.arkh. 28 no.5:23-29 '56. (MLRA 9:10)

1. Iz kafedry propedevtiki vnutrennikh bolezney (zav. prof. Ye.S. Medvedev) Ryazanskogo meditsinskogo instituta imeni I.P.Pavlova.

(ENDOCARDITIS, SUBACUTE BACTERIAL, differential diagnosis, rheum. heart dis., blood protein test (Rus))
(RHEUMATIC HEART DISEASE, differential diagnosis, endocarditis, subacute bact., blood protein test (Rus))
(BLOOD PROTEINS, in various diseases, endocarditis, subacute bact. & rheum. heart dis., differ. diag. (Rus))

T-4

USSR / Human and Animal Physiology (Normal and Pathological). Blood.

Abs Jour : Ref Zhur - Biologiya, No 13, 1958, No. 60135

Author : Nizov, A. A.
Inst : Central Institute for the Advanced Training of Physicians

Title : Plasma Proteins in Rheumatism

Orig Pub : Nauchn. raboty aspirantov i klinich. ordinatorov. Tsentr. in-t usoversh. vrachoy, 1957, Vyp. 4, 103-111

Abstract : The protein fractions in the plasma were studied in 20 patients in the active stage of rheumatism by electrophoresis. In eleven patients during the acute rheumatic stage, a hypoprotoinemia was found, dropping as low as 10.2 gm.%. They showed a sharp drop in the albumin (by 24.88%). In all of the patients, the fibrinogen was increased (8.69 - 29.42% of plasma proteins). The globulins

Card 1/2

NIZOV, A.A.; LUPACHEV, V.F.

Dynamics of the electrophoretic blood protein formula during treatment with royal jelly preparation. Inform.biul.o mat.mol-ch. no.3:86-89 '62. (MIRA 16:2)

1. Klinika gospital'noy terapii (zav. prof. N.A. Troitskiy) Ryazanskogo meditsinskogo instituta imeni akademika I.P. Pavlova.
(ROYAL JELLY—THERAPEUTIC USE) (BLOOD PROTEINS)
(PAPER ELECTROPHORESIS)

NIZOV, A.A. (Ryazan')

Electrophoretic protein formula in rheumatic fever treated with steroid hormones. Nauch. trudy Riaz. med. inst. 14:170-172 '63.

Electrophoretic protein formula of the blood and its dynamics in the treatment of so-called major collagen diseases with steroid hormones. Ibid.:173-175 '63.

Electrophoretic protein formula of the blood in patients with rheumatoid polyarthritis in the process of treatment with cortisone. Ibid.:176-180 '63. (MIRA 17:5)

NIZOV, A.A.

Total protein and the electrophoretic protein formula of the blood in patients with pulmonary pathology. Nauch.trudy Riaz. med.inst. 18 no.2:120-127 '64.

Total protein and the electrophoretic protein formula of the blood in subacute septic endocarditis, rheumatic fever, and other collagenoses. Ibid.:128-137

(MIRA 19:1)

1. Kafedra gospital'noy terapii (zav. - prof. N.A.Trotsakiy) Ryazanskogo meditsinskogo instituta.

S/117/60/000/012/021/022
A004/A001

AUTHORS: Bloshteyn, Ye. A., Nizov, F. A.

TITLE: The Cooperation Between Institute and Plant

PERIODICAL: Mashinostroitel', 1960, No. 12, p. 42

TEXT: The authors report on the introduction of the hot-rolling of the driven spiral bevel gears of the main automobile transmission at the Moskovskiy avtozavod im. Likhacheva (Moscow Automobile Plant im. Likhachev). Formerly these gears were produced by gear-cutting machines which resulted in a metal waste of nearly 50% of the net metal weight. The Nauchno-issledovatel'skiy institut tekhnologii avtomobil'noy promyshlennosti (Technological Scientific Research Institute of the Automobile Industry) NIIT-Avtoprom, after having studied the problem together with the Plant staff, developed the new process of hot-rolling the bevel gears from blanks preliminarily heated by h-f currents. A design group of specialists was formed at the Institute, headed by V. V. Yakimanskiy. His theory of spiral bevel gearings was taken as the basis for the development of the new process. The design of the special machine for the rolling of bevel gears, pictured in Figure 2, was conferred upon the leading designer I. I. Krichinskiy and

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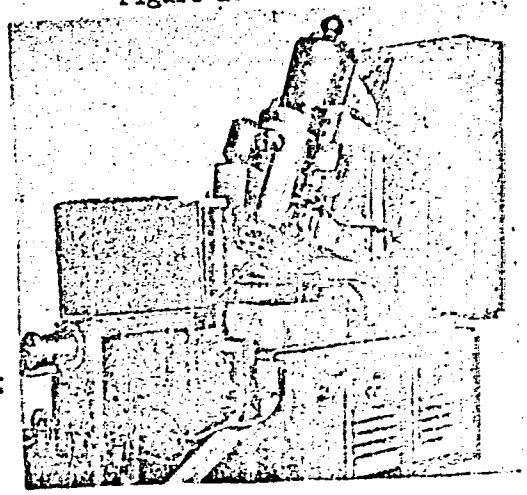
S/117/60/000/012/021/022
A004/A001

The Cooperation Between Institute and Plant

N. A. Shlyapin, engineer of the technological department. The machine is a complex aggregate carrying out the induction heating of the blank, the rolling of the teeth and the burnishing of the rolled gears. To increase the accuracy of the rolled gears the kinematic circuit of the machine was shortened and rendered more rigid. This was attained by synchronizers, straight bevel gears, mounted on the same axis with the workpiece and tool, which are geared in simultaneously when the rolling tool and the workpiece are meshed. To find the most expedient way of heating the blank over all its end surface, the design office of the electric heating shop of ZIL, headed by I. N. Shklyarov, developed a number of inductors and suggested the design of a ring-shaped heater, ensuring a quick and uniform heating of the blank. To protect the blank from scale, the aureole of internal gas was used, preventing the

Figure 2:



Card 2/3

NISHCHENKOVA, L.G.; BELONOGOV, K.N.; GOSTININ, V.P.; BELOVA, N.A.; NIZOV, G.A.; SELEZNEV, M.M.

Catalytic reduction of nitro derivatives with hydrogen. Part 2: Continuous reduction of sodium p-nitrophenolate on a skeletal nickel catalyst. Izv.vys.ucheb.zav.; khim. i khim. tekh. 6 no.6:952-956 '63. (MIRA 17:4)

1. Ivanovskiy khimiko-tekhnologicheskiy institut, kafedra fizicheskoy i kolloidnoy khimii.

NIZOVA, A.A.

Biological activeness of soils. Pochvovedenie no.10:96-101 '60.
(MIRA 13:10)

1. Leningradskiy sel'skokhozyaystvennyy institut, kafedra pochvovedeniya.
(Soil biology)

NIZOVA, A.A.

Activity of saccharase in the soil. Mikrobiologiia 30 no.1:105-109 Ja-F '61. (MIRA 14:5)

1. Leningradskiy sel'skokhozyaystvennyy institut, Pushkin.
(INVERTASE) (SOIL CHEMISTRY)

MATRUSOV, Ivan Stepanovich; NIZOVA, Alla Mikhaylovna; GALKIN, P.D., red.; SOKOLOVA, R.Ya., tekhn.red.

[Methods of teaching the physical geography of the U.S.S.R.; sixth grade] Metodika prepodavaniia fizicheskoi geografii SSSR, VII klass. Moskva, Izd-vo Akad.pedagog.nauk RSFSR, 1958. 277 p. (Physical geography--Study and teaching) (MIRA 12:1)

AGATOV, P.A.; NIZOVA, I.M.; GALANINA, L.A.

Distribution of nitrogenous substances in the mycelia of Act. violaceus during various intensities of antibiotic synthesis. Mikrobiologiia 30 no.5:877-880 S-O '61. (MIRA 14:12)

1. Institut mikrobiologii AN SSSR.
(ACTINOMYCES VIOLACEUS) (NITROGEN)

AGATOV, P.A.; GALANINA, L.A.; NIZOVA, I.M.

Dynamics of the phosphorus-containing substances of the mycelium of Act. streptomycini Kras. strain LS-1 at various intensity of the synthesis of streptomycin by them. Mikrobiologiia 33 no.1: 23-25 Ja-F '64. (MIRA 17:9)

1. Institut mikrobiologii AN SSSR.

AGATOV, P.A.; GALANINA, L.A.; NIZOVA, I.M.

Dynamics of the nitrogen compounds of the mycelium of Act. streptomycini Kras., strain LC-1, in relation to its varying rate of streptomycin synthesis. Mikrobiologiia 33 no.2: 321-324 Mr-Ap '64. (MIRA 17:12)

1. Institut mikrobiologii AN SSSR.

ACCESSION NR: AT4008698 S/2982/63/000/044/0043/0047

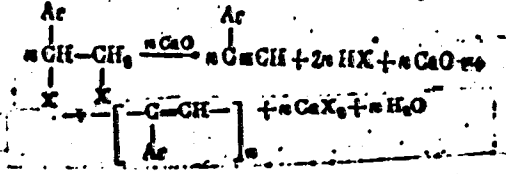
AUTHOR: Paushkin, Ya. M.; Nizova, S. A.; Gayevaya, V. S.

TITLE: Synthesis of high molecular hydrocarbons with conjugated double bonds by dehydrohalogenation polymerization

SOURCE: Moscow. Institut neftekhimicheskoy i gazovoy promy*shlennosti. Trudy*, no. 44,1963. Neftekhimiya, pererabotka nefti i gaza, 43-47

TOPIC TAGS: conjugated polymer, conjugated system containing polymer, polyvinylene hydrocarbons, polyacetylenic hydrocarbons, polymer, poly(phenylacetylene), heat resistant polymer, EPR signal, paramagnetic polymer, vinyl compound polymer, polymerization, dehydrohalogenation, dehydrohalogenation polymerization, vinyls

ABSTRACT: In view of the interesting specific magnetic and electrophysical properties of polymeric hydrocarbons containing conjugated double bonds, the authors studied the formation of polyvinylenes by dehydrohalogenation polymerization at 200C in the presence of excess CaO:



(1)

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ACCESSION NR: AT4008698

The starting compounds were α, β-dibromoethylbenzene, 1,2-dibromoheptane and 1,2-dibromononane. After isolation of the yellow to red to brown polymers, they were subjected to infra-red and electron paramagnetic resonance spectroscopy, as well as determinations of the chemical composition, melting point and molecular weight. The polymers which were soluble in benzene had an average molecular weight of about 1000 and a melting point of 260-290C, while the insoluble polymers did not melt even at 400C. The narrow EPR band indicated the presence of paramagnetic particles in the macromolecule. Orig. art. has: 1 figure, 3 tables and 1 structural formula.

ASSOCIATION: Institut neftekhimicheskoy i gazovoy promy*shlennosti, Moscow (Institute of Petroleum Chemistry and the Gas Industry)

SUBMITTED: 00 DATE ACQ: 16Jan64 ENCL: 00

SUB CODE: OC, MT NO REF SOV: 007 OTHER: 002

2/2

Card

ACCESSION NR: AT4020712 S/0000/63/000/000/0227/0230

AUTHOR: Paushkin, Ya. M.; Nizova, S. A.; Gayevaya, V. S.

TITLE: Preparation of polyvinylene hydrocarbons by a dehydrogenation-dehalogenation-polymerization reaction

SOURCE: Karbotsepnyye vysokomolekulyarnyye soyedineniya (Carbon-chain macromolecular compounds); sbornik statey. Moscow, Izd-vo AN SSSR, 1963, 227-230

TOPIC TAGS: polymerization, polyvinylene, polyvinylene hydrocarbon, polyphenylacetylene, dehydrohalogenation, acryl halide

ABSTRACT: A new method is proposed for the preparation of polyphenylacetylene hydrocarbons in which, in the presence of metallic oxides or hydroxides, acryl halides are dehydrogenated, dehalogenated and polymerized according to the reaction:

$$n\,\mathrm{Ar{-}CH(X){-}CH_2{-}X} \xrightarrow{n\,CaO} \underset{\text{I}}{n\,\mathrm{Ar{-}C{\equiv}CH}} + 2n\,HX + n\,CaO \rightarrow \underset{\text{II}}{[-\mathrm{Ar{-}C{=}CH{-}}]_n} + n\,CaX_2 + n\,H_2O$$

where I and II denote the products of dehydrohalogenation and immediate polymerization, respectively. The procedure is described in detail for the preparation, from

Card 1/2

ACCESSION NR: AT4020712

dibromoethylbenzene in the presence of CaO at 200C, of a polymer mixture with a mean molecular weight of 1100 and a polarization factor of 6-16. The infrared spectrum of the polymer shows a 1600 cm^{-1} band, characteristic of a double bond. The yield of polyphenylacetylenes reaches 67%. Orig. art. has: 3 tables and 1 graph.

ASSOCIATION: MOSKOVSKIY INSTITUT NEFTEKHIMICHESKOY I GAZOVOY PROMY*SHLENNOSTI IM. I. M. GUBKINA (Moscow Institute for Petroleum Chemistry and the Gas Industry)

SUBMITTED: 09Jul62 DATE ACQ: 20Mar64 ENCL: 00

SUB CODE: GC NO REF SOV: 006 OTHER: 001

Card 2/2

L 18376-63 EWP(j)/EPF(c)/EWT(m)/EWP(q)/BDS ASD/ESD-3 Pc-4/Pr-4
ACCESSION NR: AP3005447 RM/WW/JD S/0204/63/003/004/0515/0517

AUTHOR: Paushkin, Ya. M.; Akutin, M. S.; Nizova, S. A.

TITLE: Preparation of polyconjugated systems by the reaction of α, β-dibromides with calcium oxide

SOURCE: Neftekhimiya, v. 3, no. 4, 1963, 515-517

TOPIC TAGS: conjugated polymer, polyvinylene, conjugation, semiconductor, organic semiconductor, dehydrohalogenation, polyphenylacetylene, (1,2-dibromoethyl)benzene, 2,3-dibromopropionitrile, (1,2-dibromoethyl)benzene—2,3-dibromopropionitrile copolymer, copolymer, calcium oxide, EPR, IR, electron paramagnetic resonance, infrared spectrum, α, β-dibromide

ABSTRACT: A method has been proposed for preparing conjugated polymers (polyvinylenes) by dehydrohalogenation of α, β-dibromo organic compounds with metal oxides or hydroxides. The method has been used to synthesize 1) polyphenylacetylene (PPA) from (1,2-dibromoethyl)benzene (I) and 2), evidently for the first time, a copolymer of I and 2,3-dibromopropionitrile (II). Reaction 1 was carried out in the presence of CaO (I/CaO molar ratio, 1/2) at 180, 200, 250,

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L 18376-63
ACCESSION NR: AP3005447 D

or 300C for 2, 4, or 6 hr; the PPA was purified by multiple reprecipitation. The PPA yield was 66—67%. Polydispersity of the PPA prepared at 200C for 6 hr was determined by fractional precipitation. Four fractions were obtained which were yellow to black in color, softened at 175—182 to 250C, and had molecular weights of 600—1600. The average molecular weight was 1000—1100. Reaction 2 was carried out at 200C for 6 hr, with a I/II molar ratio of 1/1. The copolymer was dark brown, slightly soluble in formamide, and highly soluble in concentrated sulfuric, hydrochloric, or phosphoric acid; its softening point was below 450C. The thermomechanical curve for PPA of molecular weight 1600 showed that it can exist in the glassy or liquid state, but not in the high-elastic state. EPR and IR spectra for PPA and the copolymer confirmed their polyconjugated structure. All the PPA fractions except that having the lowest molecular weight showed a narrow EPR signal with an unpaired-electron concentration of 10^{17}/g; in the copolymer this concentration was 2.7×10^{18}/g. The IR spectrum of PPA was identical with those obtained by Yu. Sh. Moshkovskiy, N. D. Kostrova, and A. A. Berlin. (Vysokomol. soyedineniya, 3, 1669, 1961).

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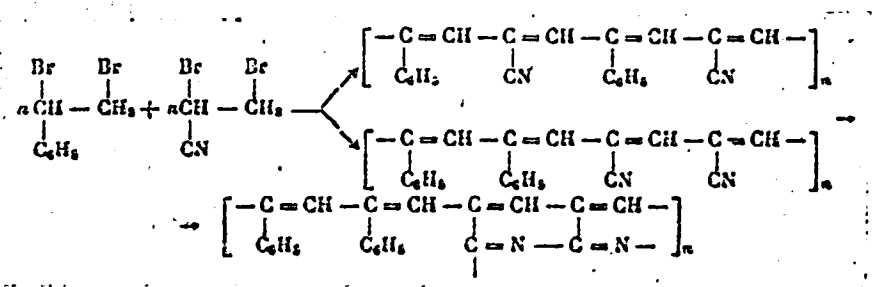
ACCESSION NR: AP5005447

IR spectra suggest the following course for the copolymerization:



It is assumed that by varying the initial dibromo compound, conjugated polymers with various aryl and alkyl side groups can be obtained. Orig. art. has: 2 formulas, 1 table, and 1 figure.

Card 3/4

L 18376-63

ACCESSION NR: AP3005447

ASSOCIATION: Moskovskiy institut neftekhimicheskoy i gazovoy promy*shlennosti im. I. M. Gubkina (Moscow Institute of the Petrochemical and Gas Industry); Nauchno-issledovatel'skiy institut plastmass (Scientific Research Institute of Plastics)

SUBMITTED: 20Nov62	DATE ACQ: 06Sep63	ENCL: 00
SUB CODE: CH, MA	NO REF SOV: 001	OTHER: 002

Card 4/4

L 18954-63 EWP(j)/EPF(c)/EWT(m)/BDS ASD Pc-4/Pr-4 RM/WW/MAY

ACCESSION NR: AP3006530 S/0191/63/000/009/0009/0010

AUTHORS: Paushkin, Ya. M.; Nizova, S. A.; Gayevaya, V. S. 69

TITLE: The synthesis of polyvinyl hydradcarbons by means of dehydrohaloid polymerization

SOURCE: Plasticheskiye massy*, no. 9, 1963, 9-10

TOPIC TAGS: polymerization, polyvinyl, dehydrohaloid polymerization, dibromoethylbenzol, dichloroethylbenzol, polyphenylacetylene

ABSTRACT: Authors studied the preparation of polyvinyl compounds by means of dehydrohaloid polymerization of Alpha, Beta-dibromoethylbenzol and Alpha, Beta-dichloroethylbenzol in the presence of oxide salts of metal hydroxides. A new method for the preparation of polyvinyl hydrocarbons by means of interlinking reaction of dehydrohaloid polymerization of the dehalogenized monomeric derivatives has been proposed. Polyphenylacetylene was obtained by the proposed method. Apparently, it is possible to obtain polyhydrocarbons from other haloid and dehalogenized derivatives by the same method.

Card 1/1

NIZOVA, S.A.; PATALAKH, I.I.; PAUSHKIN, Ya.M.

New polyconjugate systems and their electrophysical properties. Dokl. AN SSSR 153 no.1:144-146 N '63. (MIRA 17:1)

1. Institut neftekhimicheskogo sinteza AN SSSR i Institut neftekhimicheskoy i gazovoy promyshlennosti im. I.M. Gubkina. Predstavleno akademikom A.P. Vinogradovym.

NIZOVKIN, A.M.; STEPANYUK, V.D.; STAVITSKIY, D.B.

So that people would be healthy. Veterinariia 42 no.10:10-14 O '65. (MIRA 18:10)

1. Nachal'nik veterinarno-sanitarnoy stantsii, Novosibirsk (for Nizovkin). 2. Direktor veterinarnoy laboratorii, gorod Smela, Cherkasskoy oblasti (for Stepanyuk). 3. Zaveduyushchiy myasomolochnoy i pishchevoy kontrol'noy stantsiyey, gorod Smela Cherkasskoy oblasti (for Stavitskiy).

NIZOVKIN, Georgiy Aleksandrovich, kandidat tekhnicheskikh nauk; GOLOVANOV, A.L., redaktor; SOKOKIN, M.N., redaktor; VERINA, G.P., tekhnicheskiy redaktor

[Mechanization of work of improving foundations of railroad beds] Mekhanizatsiia rabot po ozdorovleniiu osnovnoi ploshchadki zemlianogo polotna. Moskva, Gos.transp.zhel-dor.izd-vo, 1957. 150 p. (MLRA 10:7)

(Railroads--Track)

NIZOVKIN, G.A., kandidat tekhnicheskikh nauk.

Machinery for reconditioning road beds. Put.i put.khoz. no.4:18-19 Ap '57. (MLRA 10:5)

(Railroads--Earthwork)

NIZOVKIN, G.A., kand.tekhn.nauk.

Controlling landslides by means of camouflet mines. Vest. TSNII MPS 16 no.8:34-35 D '57. (MIRA 11:1)
(Explosives) (Landslides)

NIZOVKIN, G.A.; KUL'BITSKIY, V.F.; FILIPPOVA, L.S., red.; VASIL'YEVA, N.N., tekhn. red.

[Mechanization of the engineering geology studies of the bad spots of the roadbed]Mekhanizatsiia inzhenerno-geologicheskikh obsledovanii bol'nykh mest zemlianogo polotna. Moskva, Transzheldorizdat, 1962. 24 p. (MIRA 15:10)
(Railroad engineering) (Boring machinery)

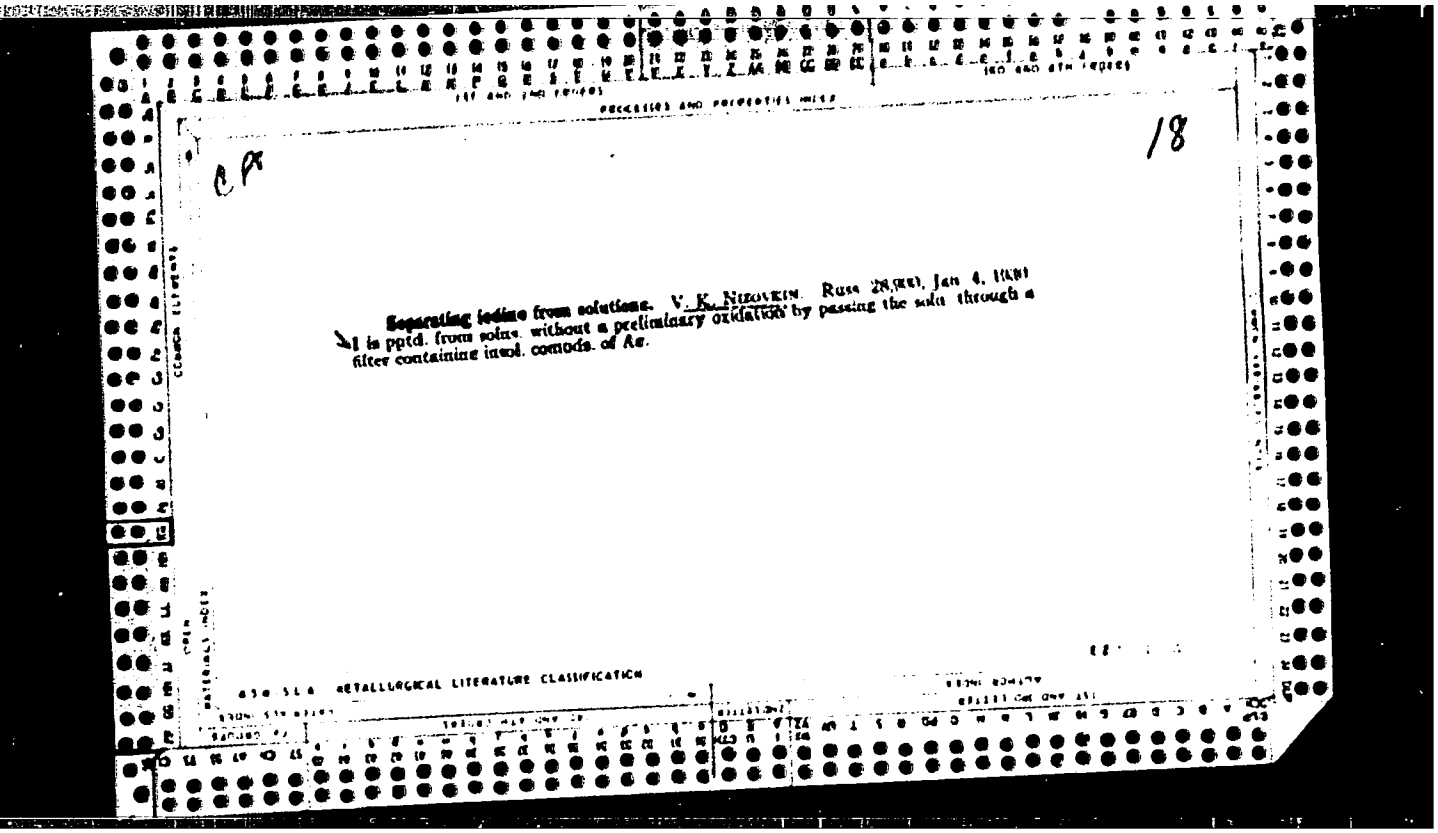
NIZOVKIN, G.A., kand.tekhn.nauk

Drainage by means of drain pipes. Put' i put.khoz. no.7:27-28 '62. (MIRA 15:7)

(Railroads--Maintenance and repair)
(Drainage)

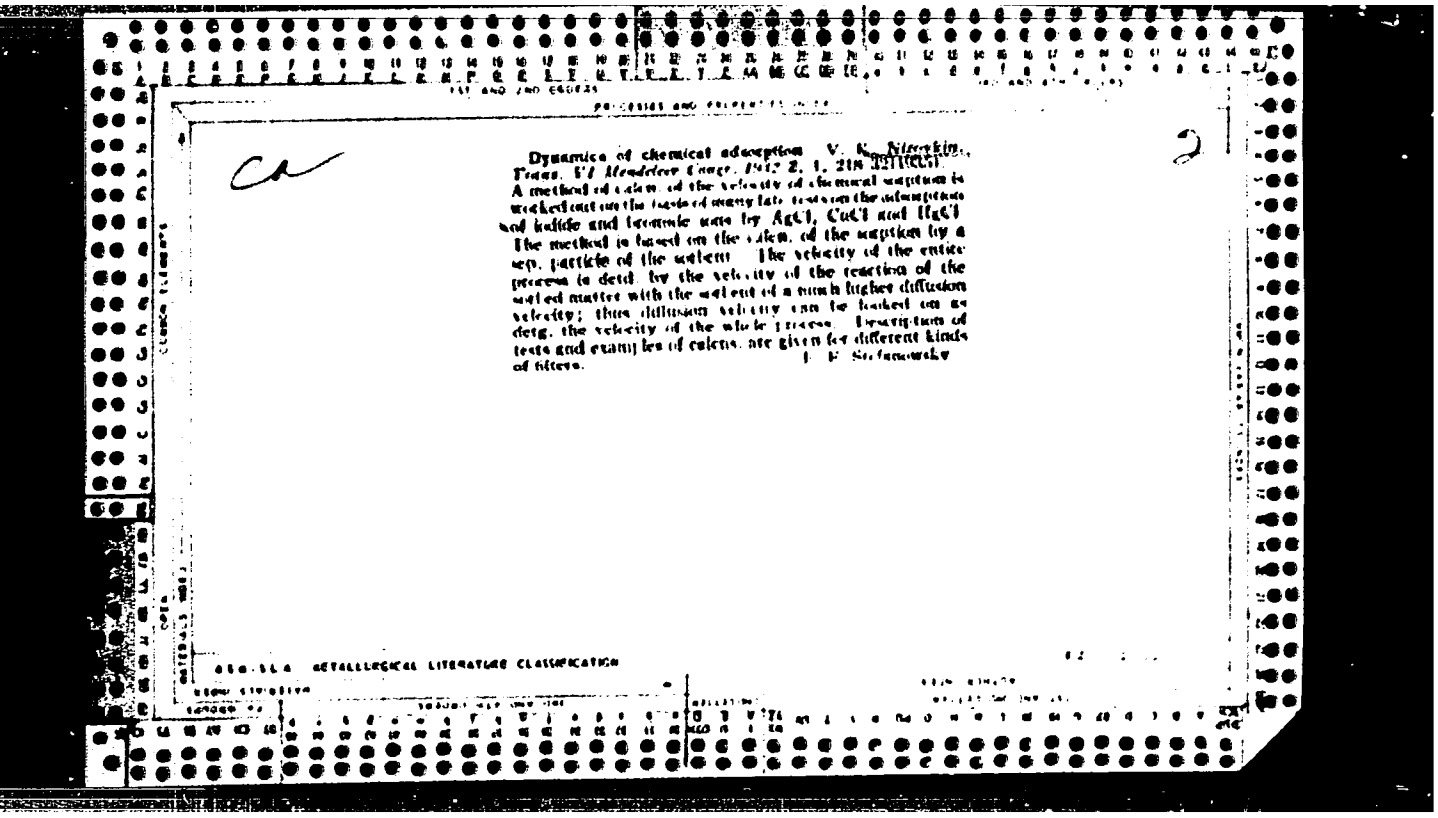
ARUTYUNYAN, S.Z. (Khabarovsk); NIZOVKIN, G.A., kand.tekhn.nauk (Khabarovsk)

Preventing the formation of dangerous overglazed ice accumulations.
Put' i put.khoz. 9 no.8:31-33 '65.
(MIRA 18:8)



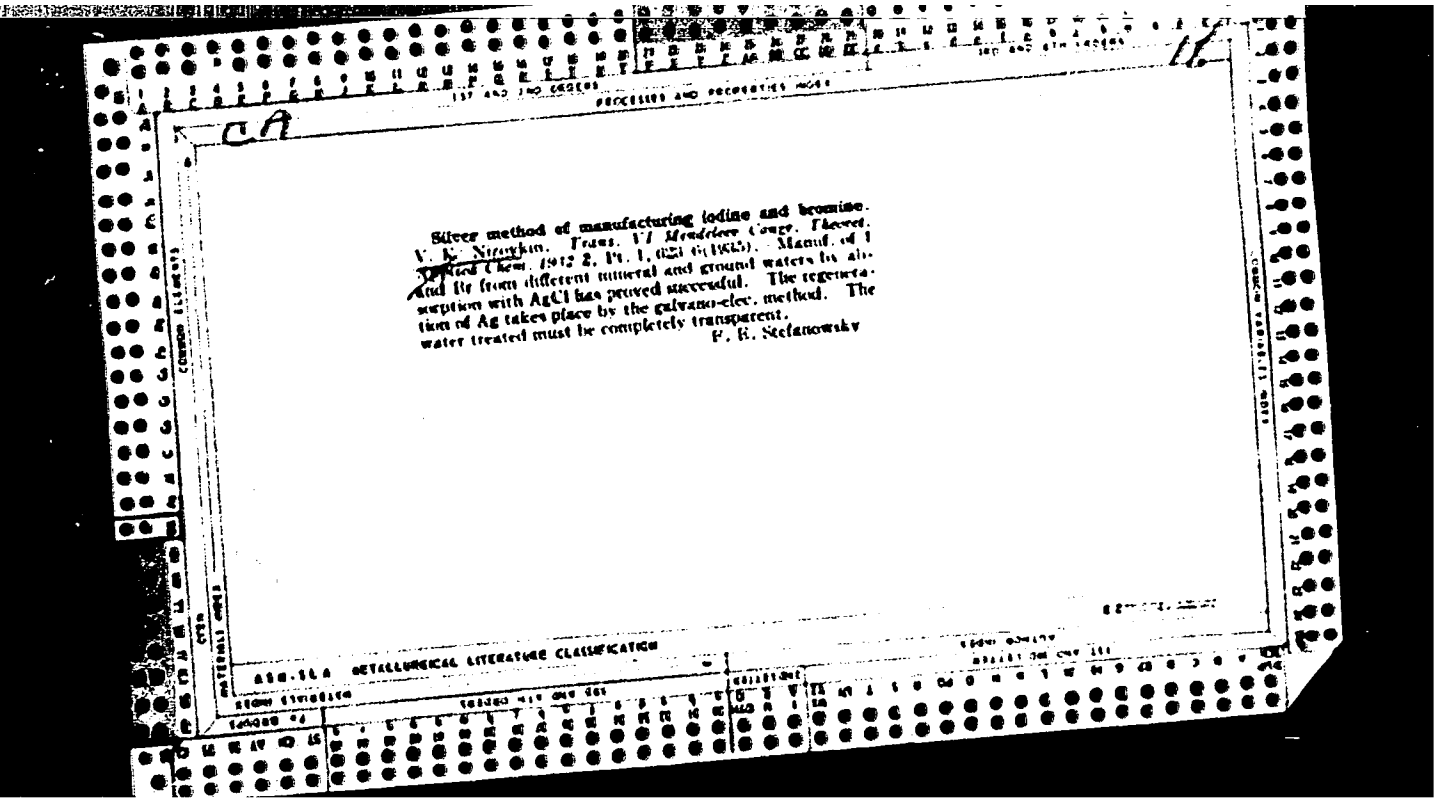
18

Separating iodine from solutions. V. K. NIKOLKIN. Russ 28(RK), Jan 4, 1(KN)
I is pptd. from solns. without a preliminary oxidation by passing the soln through a filter containing insol. comods. of As.

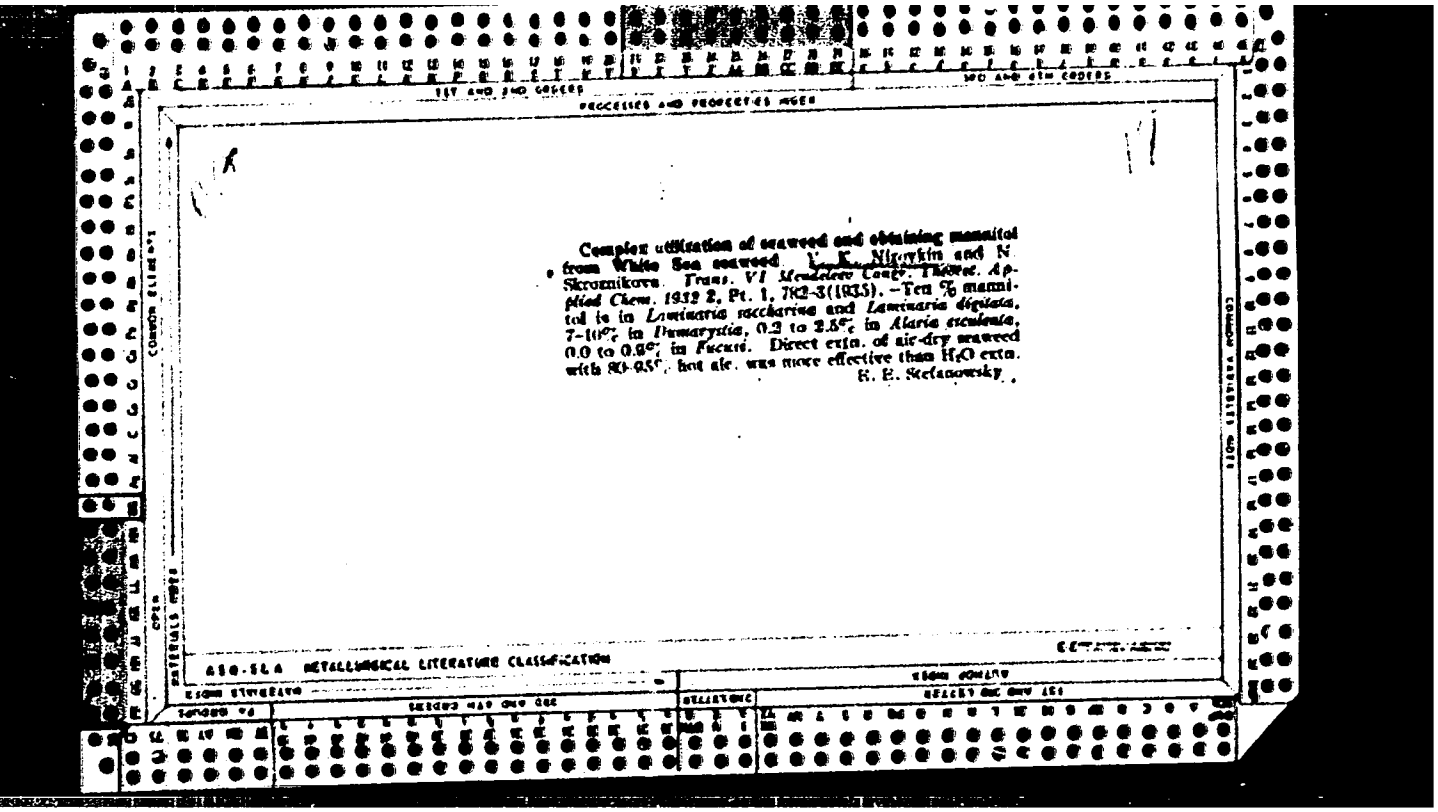


Dynamics of chemical adsorption V. K. Nikrasin, Trans. V.I. Mendeleev Chem. 1947 2, 1, 218 [RUSSIAN]
A method of calculation of the velocity of chemical reactions is worked out on the basis of many late researches on the adsorptions and kinetic and ferromic data by AgCl, CuCl and HgCl. The method is based on the calculation of the reaction by a sep. particle of the system. The velocity of the entire process is determined by the velocity of the reaction of the solid matter with the solvent of a much higher diffusion velocity; this diffusion velocity can be looked on as determ. the velocity of the whole process. Investigations of tests and examples of calculations are given for different kinds of filters.

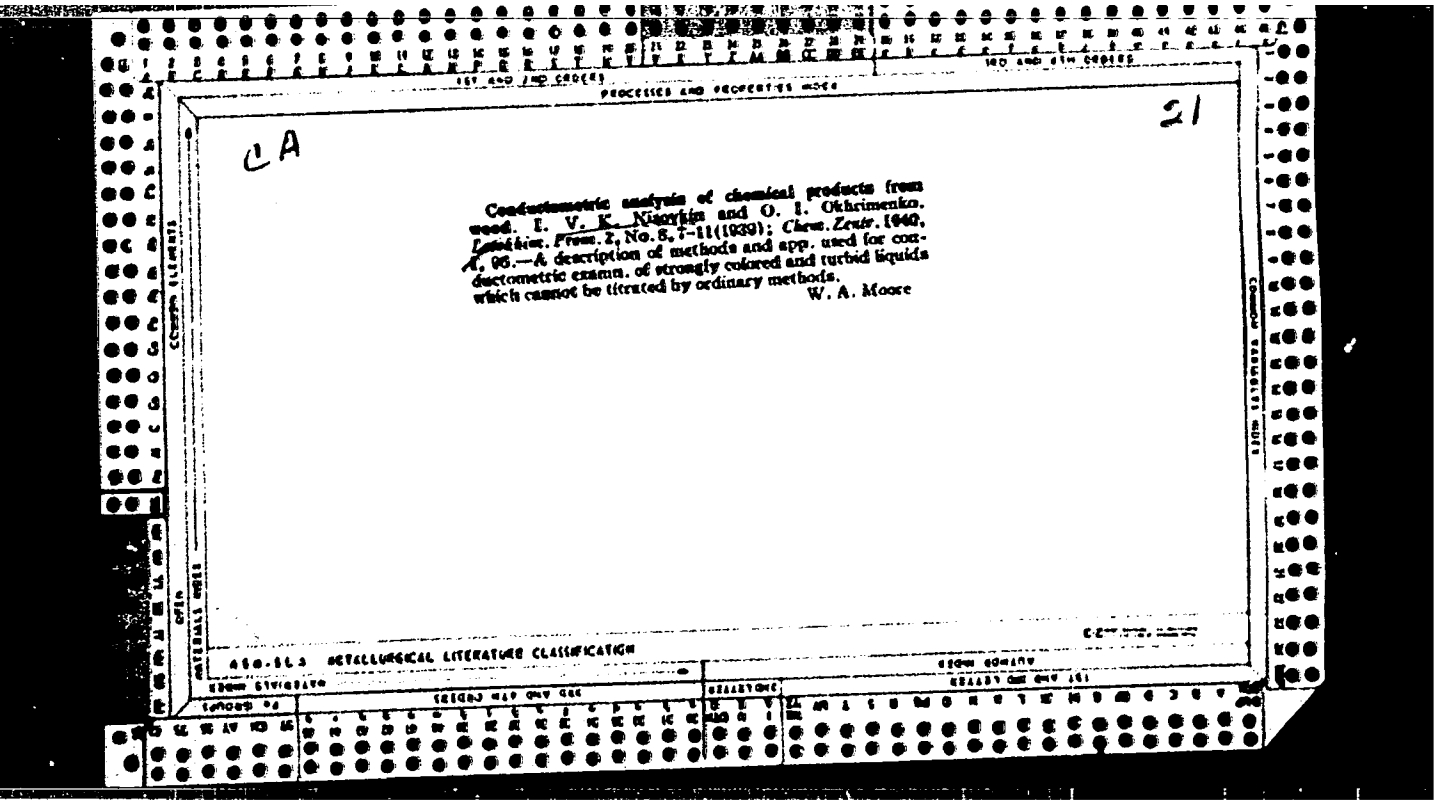
METALLURGICAL LITERATURE CLASSIFICATION



Silver method of manufacturing iodine and bromine. V. K. Nirenkin. Trans. VI Mendeleev Congr. Theoret. Applied Chem. 1932 2, Pt. 1, 632-6(1965). Manuf. of I and Br from different mineral and ground waters by absorption with AgCl has proved successful. The regeneration of Ag takes place by the galvano-elec. method. The water treated must be completely transparent.
P. B. Stefanowsky



Complex utilization of seaweed and obtaining mannitol from White Sea seaweed. V. K. Nizovkin and N. Skvortsikova. *Trans. VI Mendeleev Congr. Theoret. Applied Chem.* 1932 2, Pt. 1, 782-3(1935).—Ten % mannitol is in *Laminaria saccharina* and *Laminaria digitata*, 7-10%; in *Dumaryttia*, 0.2 to 2.5%; in *Alaria esculenta*, 0.0 to 0.9%; in *Fucus*. Direct extn. of air-dry seaweed with 80-95°, hot alc. was more effective than H_2O extn.
R. E. Stefanovsky.

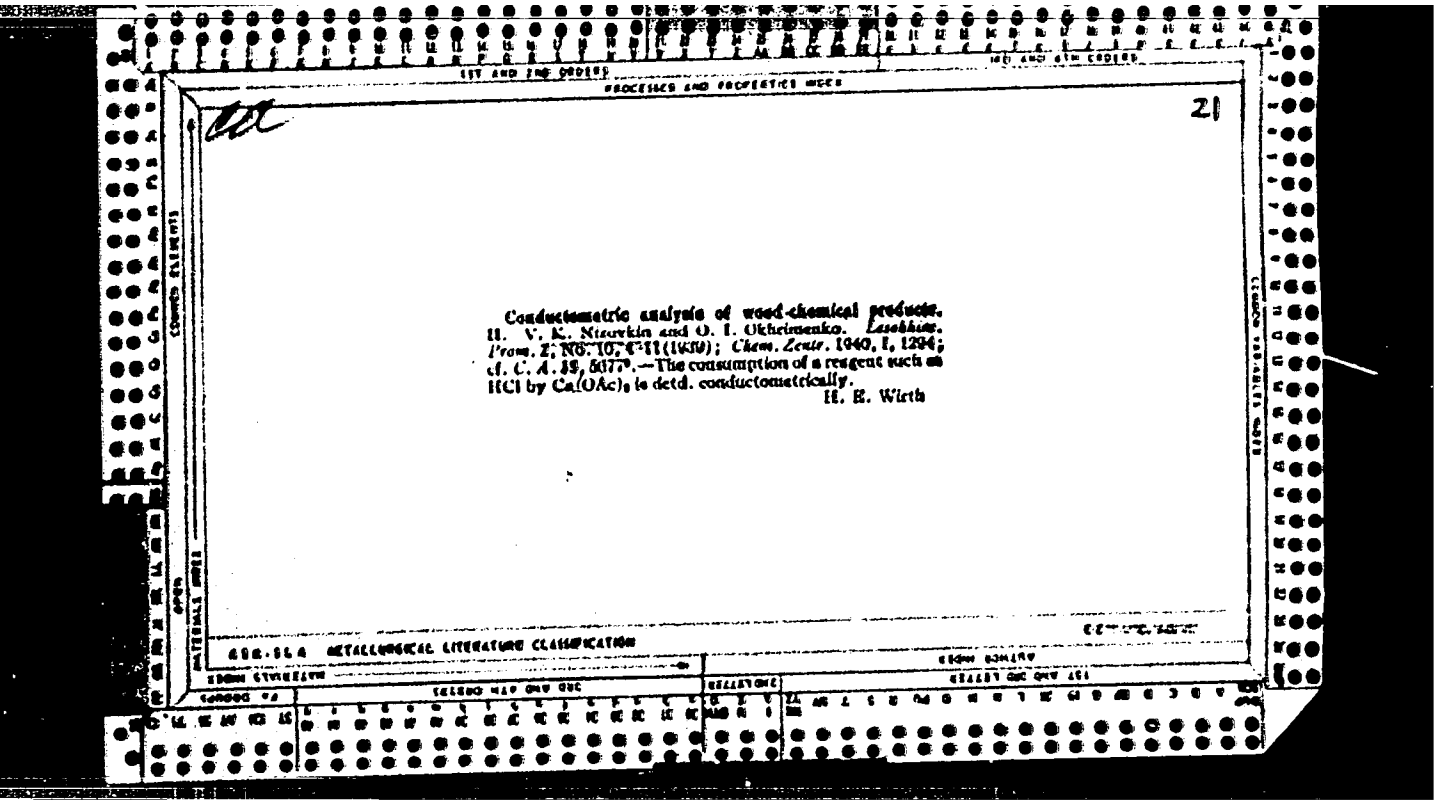


CA

21

Conductometric analysis of chemical products from wood. I. V. K. Nianfin and O. I. Okhrimenko. *Leshkhim. Prom.* 2, No. 8, 7–11 (1939); *Chem. Zentr.* 1940, I, 96.—A description of methods and app. used for conductometric examn. of strongly colored and turbid liquids which cannot be titrated by ordinary methods.

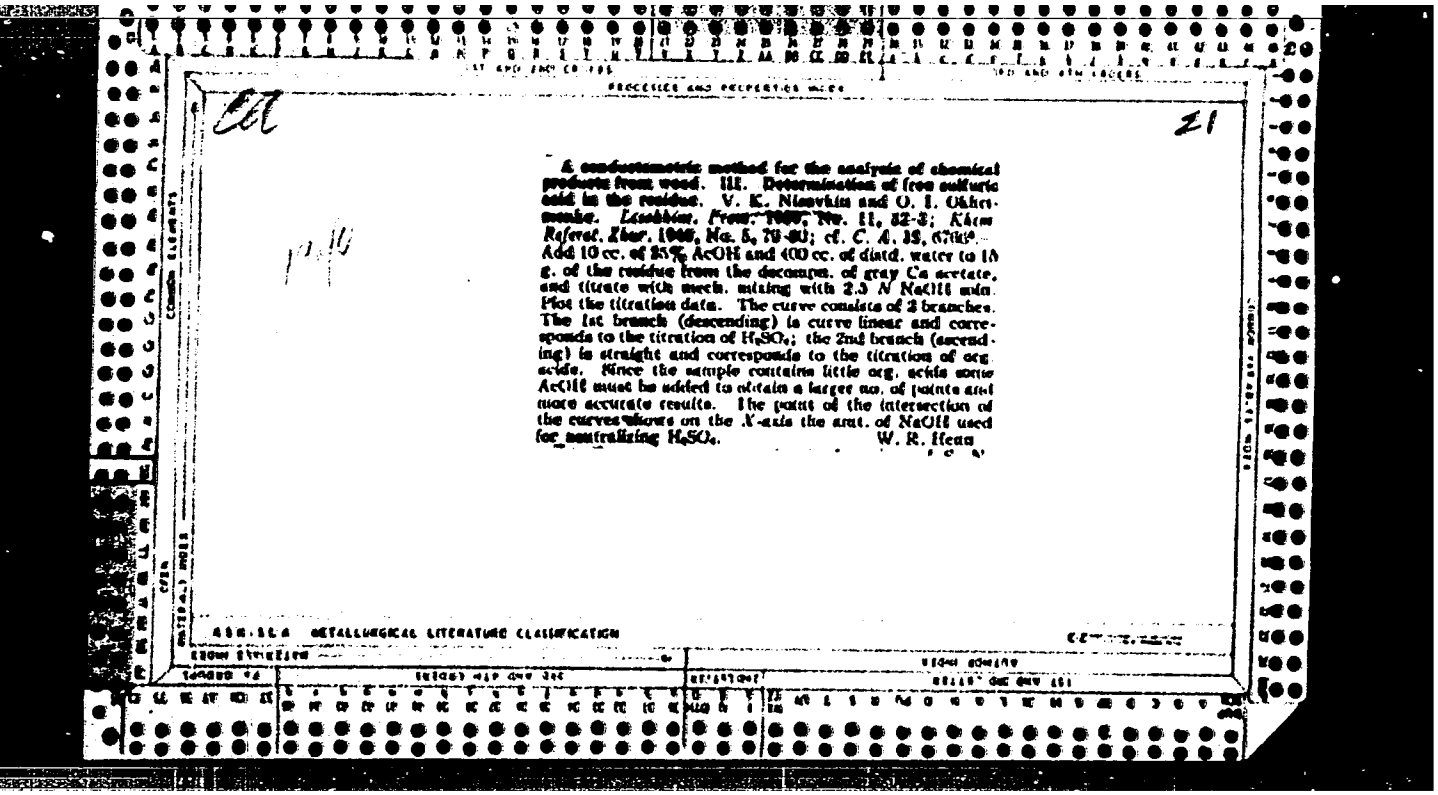
W. A. Moore



21

Conductometric analysis of wood-chemical products. II. V. K. Nizovkin and O. I. Okhrimenko. *Lesokhim. Prom.*, 2, No. 10, 9-11 (1939); *Chem. Zentr.* 1940, I, 1294; cf. *C. A.* 33, 5077⁹.—The consumption of a reagent such as HCl by $Ca(OAc)_2$ is detd. conductometrically.

H. E. Wirth



& conductometric method for the analysis of chemical products from wood. III. Determination of free sulfuric acid in the residue. V. K. Nimvitin and O. I. Okhremenko. *Leshkhim. Prom.* 1960, No. 11, 32-3; *Khim. Referat. Zhur.* 1960, No. 5, 79-80; cf. *C. A.* 55, 6704i. Add 10 cc. of 25% AcOH and 400 cc. of distd. water to 10 g. of the residue from the decompn. of gray Ca acetate, and titrate with mech. mixing with 2.5 *N* NaOH soln. Plot the titration data. The curve consists of 2 branches. The 1st branch (descending) is curve linear and corresponds to the titration of H_2SO_4; the 2nd branch (ascending) is straight and corresponds to the titration of org. acids. Since the sample contains little org. acids some AcOH must be added to obtain a larger no. of points and more accurate results. The point of the intersection of the curves shows on the *X*-axis the amt. of NaOH used for neutralizing H_2SO_4. W. R. Ifeau

NIZOVKIN, V. K.

Nizovkin, V. K., Khay, D. M., and Krupnova, A. V. "Changing the structure of cellulose during its hydrolysis", Gidroliz. prom-st' SSSR, 1948, No. 5, p. 3-7.

SO: U-2888, 12 Feb. 53, (Letopis' Zhurnal 'nykh Statey, No.2, 1949).

PAVLOVSKIY, Ye.N., general-leytenant meditsinskoy sluzhby, akademik; MIZOVKIN, V.K., dotsent; PERVOMAYSKIY, G.S., polkovnik meditsinskoy sluzhby; [illegible]KHMAN, L.B.; GLAGOLEV, V.V.

New repellent ointment. Voen.-med.zhur. no.7:46-49 Jl '56. (MLRA 9:11)
(INSECT BAITS AND REPELLENTS)

L 34075-66 EWT(m)/T WW/JW/JWD

ACC NR: AP6012863 SOURCE CODE: UR/0127/66/000/004/0058/0060

AUTHOR: Brichkin, A. V. (Professor, Doctor of technical sciences); Zabudkin, L. L. (Candidate of technical sciences); Nizovkin, V. M. (Engineer); Baydalinov, G. A. (Engineer); Yeremin, B. F. (Engineer); Zayats, Ya. S. (Engineer) 40 B

ORG: [Brichkin, Zabudkin, Nizovkin] Kazakh Polytechnic Institute (Kazakhskiy politekhnicheskiy institut); [Zayats, Baydalinov, Yeremin] "Mirgalimsay" Mine (Mirgalimsay rudnik)

TITLE: Industrial tests of igdanits at the "Mirgalimsay" mine

SOURCE: Gornyy zhurnal, no. 4, 1966, 58-60

TOPIC TAGS: explosive, explosive charge

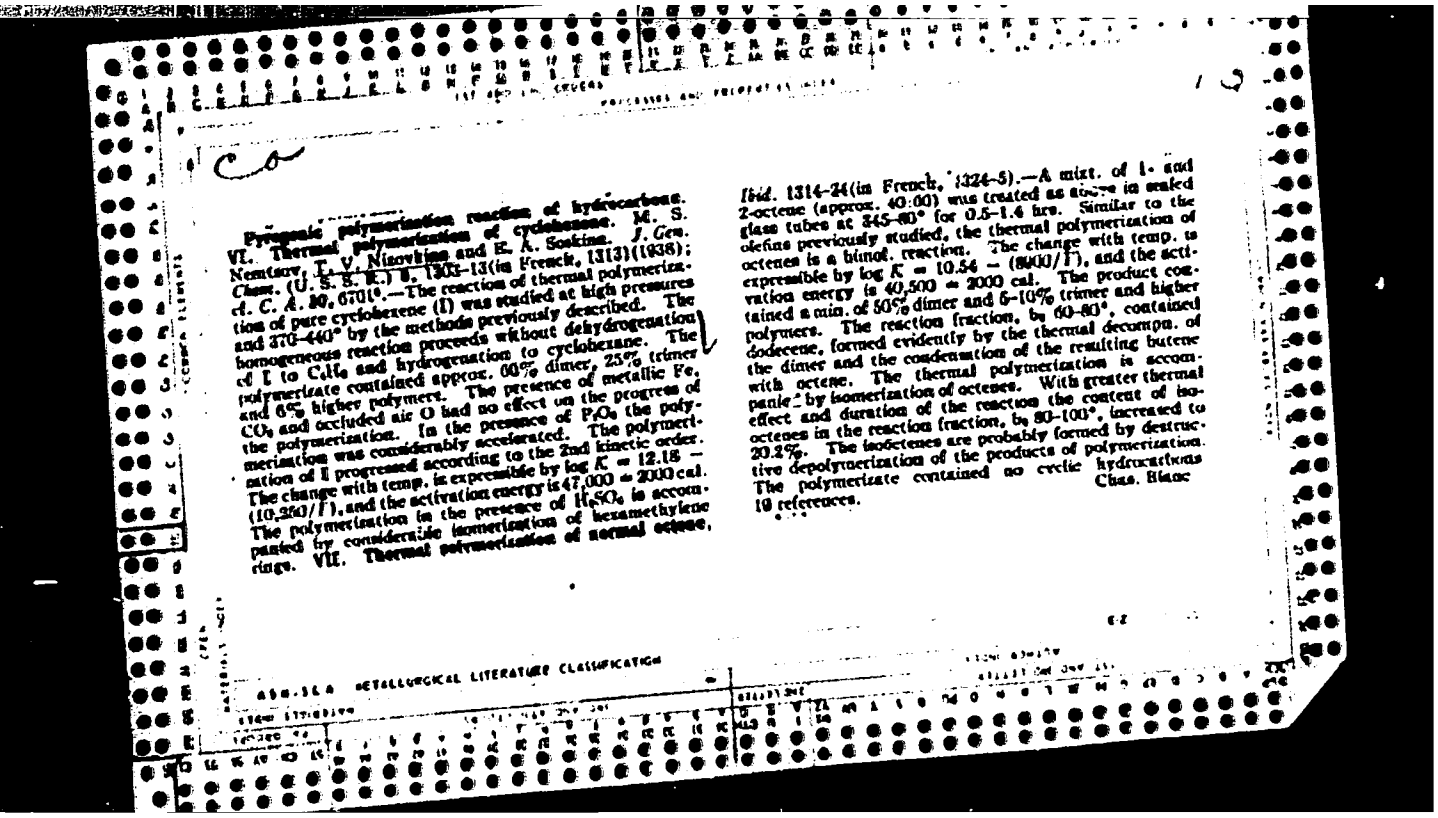
ABSTRACT: In December 1964, tests of igdanits (explosives composed of granulated ammonium nitrate and diesel oil) were begun at the "Mirgalimsay" mine for the purpose of determining the amount of toxic gases formed during their explosion, and the effectiveness of the explosives. The tests showed that the total amount of toxic gases evolved by the igdanits was no greater than in the case of detonite or dinaphthalite. The effectiveness of several types of charging machines was also studied. The substantial advantages of charging blast holes by means of the ZDU-50 machine are listed. The machine gives a charging density of 1.15 g/cm^3; its use for 10 months in 1965 permitted the charging of 20,000 m of blast holes, for which 35,000 kg of igdanit was used, and 95,000 tons of ore was blasted loose. The total savings for this period was 10,200 rubles. Orig. art. has: 2 tables. [08]

SUB CODE: 19/ SUBM DATE: none/ ATD PRESS: 5016 UDC 662.242:622.272

Card 1/1

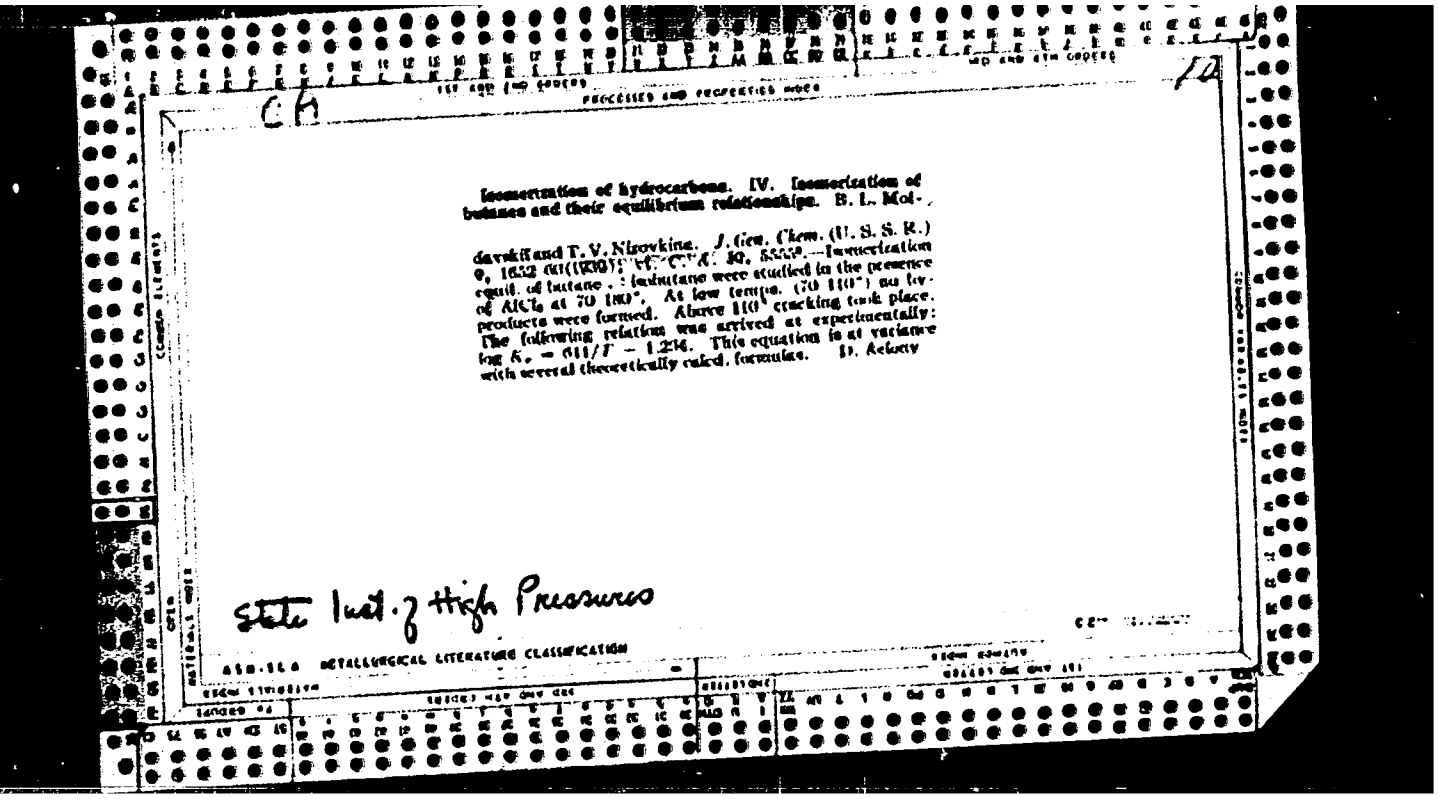
NIZOVKINA, D.V.; SHATALOV, A.A.

Colloidal coagulation of F centers in NaCl crystals. Nauk povid. no.1:12-13 '56. (MIRA 11:4)
(Sodium chloride) (Crystal lattices)



Pyrogenic polymerization reaction of hydrocarbons. VI. Thermal polymerization of cyclohexene. M. S. Nemtsov, I. V. Nisovtina and E. A. Soskina. *J. Gen. Chem. (U. S. S. R.)* 8, 1303–13(in French, 1313)(1938); cf. *C. A.* 30, 6701⁸.—The reaction of thermal polymerization of pure cyclohexene (I) was studied at high pressures and 370–440° by the methods previously described. The homogeneous reaction proceeds without dehydrogenation of I to $C_{12}H_{22}$ and hydrogenation to cyclohexane. The polymerizate contained approx. 60% dimer, 25% trimer and 6% higher polymers. The presence of metallic Fe, CO_2 and occluded air O had no effect on the progress of the polymerization. In the presence of P_2O_5 the polymerization was considerably accelerated. The polymerization of I progressed according to the 2nd kinetic order. The change with temp. is expressible by $\log K = 12.18 - (10,250/T)$, and the activation energy is 47,000 ± 2000 cal. The polymerization in the presence of H_2SO_4 is accompanied by considerable isomerization of hexamethylene rings. VII. **Thermal polymerization of normal octene,** *ibid.* 1314–24(in French, 1324–5).—A mixt. of 1- and 2-octene (approx. 40:60) was treated as above in sealed glass tubes at 345–80° for 0.5–1.4 hrs. Similar to the olefins previously studied, the thermal polymerization of octenes is a bimol. reaction. The change with temp. is expressible by $\log K = 10.54 - (8400/T)$, and the activation energy is 40,500 ± 2000 cal. The product contained a min. of 50% dimer and 5–10% trimer and higher polymers. The reaction fraction, b. 60–80°, contained dodecene, formed evidently by the thermal decompn. of the dimer and the condensation of the resulting butene with octene. The thermal polymerization is accompanied by isomerization of octenes. With greater thermal effect and duration of the reaction the content of isooctenes in the reaction fraction, b. 80–100°, increased to 20.2%. The isooctenes are probably formed by destructive depolymerization of the products of polymerization. The polymerizate contained no cyclic hydrocarbons. Chas. Blanc
19 references.

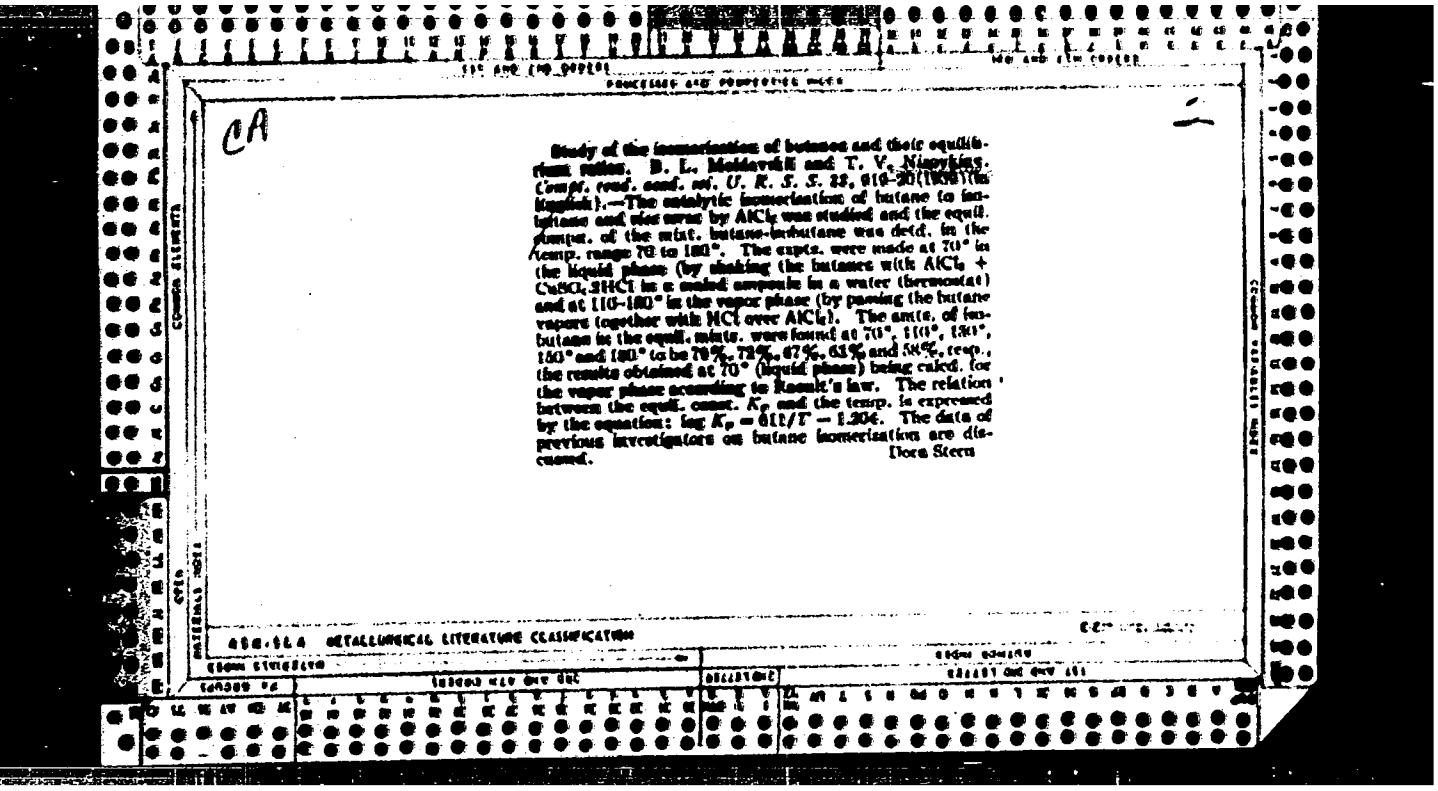
METALLURGICAL LITERATURE CLASSIFICATION



Isomerization of hydrocarbons. IV. Isomerization of butanes and their equilibrium relationships. B. L. Moldavskii and T. V. Nizovkina. *J. Gen. Chem. (U. S. S. R.)* 9, 1632 (1939); *C. A.* 33, 5555⁹.—Isomerization equil. of butane ⇌ isobutane were studied in the presence of $AlCl_3$ at 70–180°. At low temps. (70–110°) no isoproducts were formed. Above 110° cracking took place. The following relation was arrived at experimentally: $\log K_p = 611/T - 1.216$. This equation is at variance with several theoretically calcd. formulas. D. Kelley

State Inst. of High Pressures

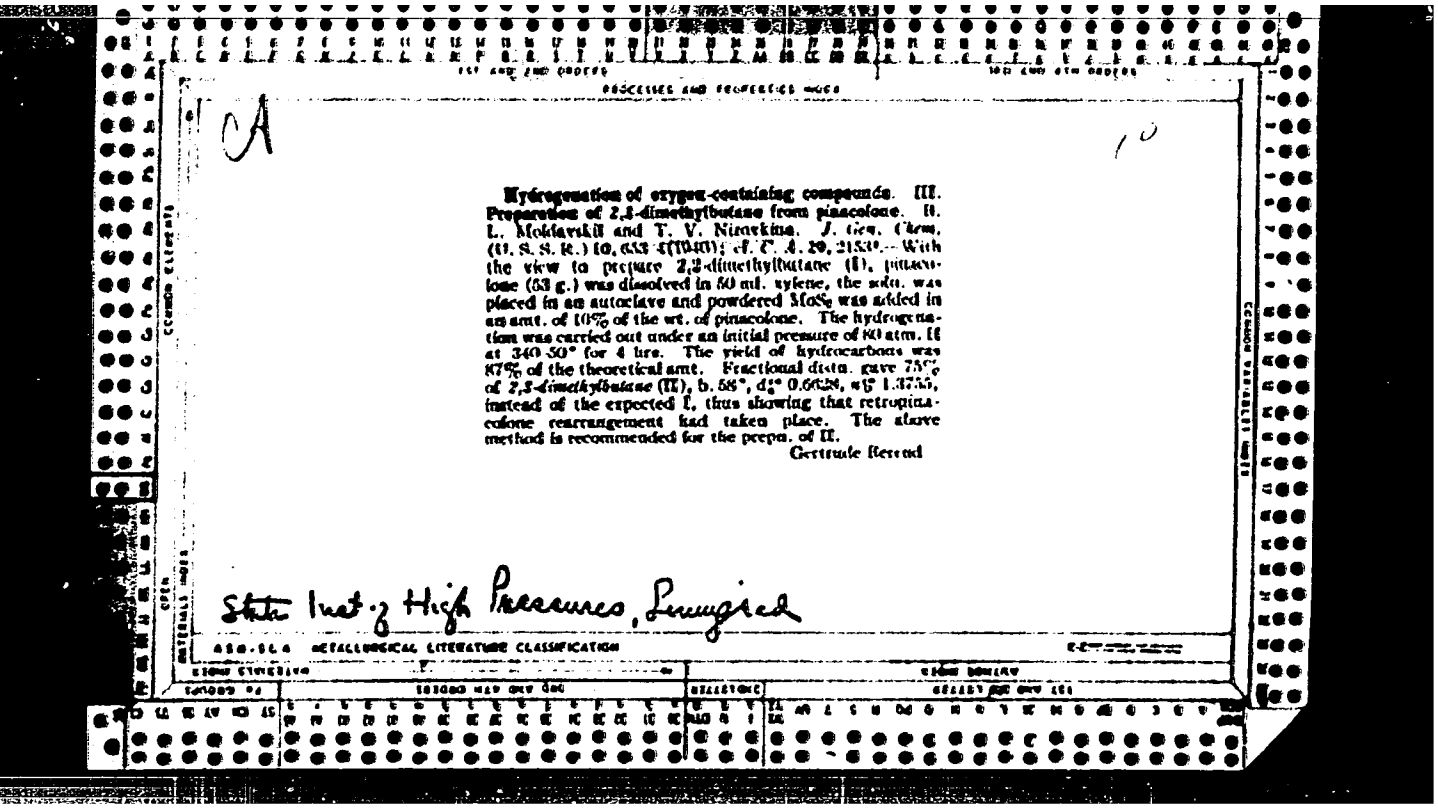
METALLURGICAL LITERATURE CLASSIFICATION



CA

Study of the isomerization of butanes and their equilibrium ratios. B. L. Moldavskiĭ and T. V. Nagibina. *Compt. rend. acad. sci. U. R. S. S.* 23, 919-20(1939)(in English).—The catalytic isomerization of butane to isobutane and vice versa by $AlCl_3$ was studied and the equil. compns. of the mixt. butane-isobutane was detd. in the temp. range 70 to 180°. The expts. were made at 70° in the liquid phase (by shaking the butanes with $AlCl_3$ + $CuCl_2.2HCl$ in a sealed ampoule in a water thermostat) and at 110-180° in the vapor phase (by passing the butane vapors together with HCl over $AlCl_3$). The amts. of isobutane in the equil. mixts. were found at 70°, 110°, 130°, 150° and 180° to be 79%, 72%, 67%, 63% and 58%, resp., the results obtained at 70° (liquid phase) being calcd. for the vapor phase according to Raoult's law. The relation between the equil. const. K_p and the temp. is expressed by the equation: $\log K_p = 611/T - 1.30$. The data of previous investigators on butane isomerization are discussed.

Dora Stern



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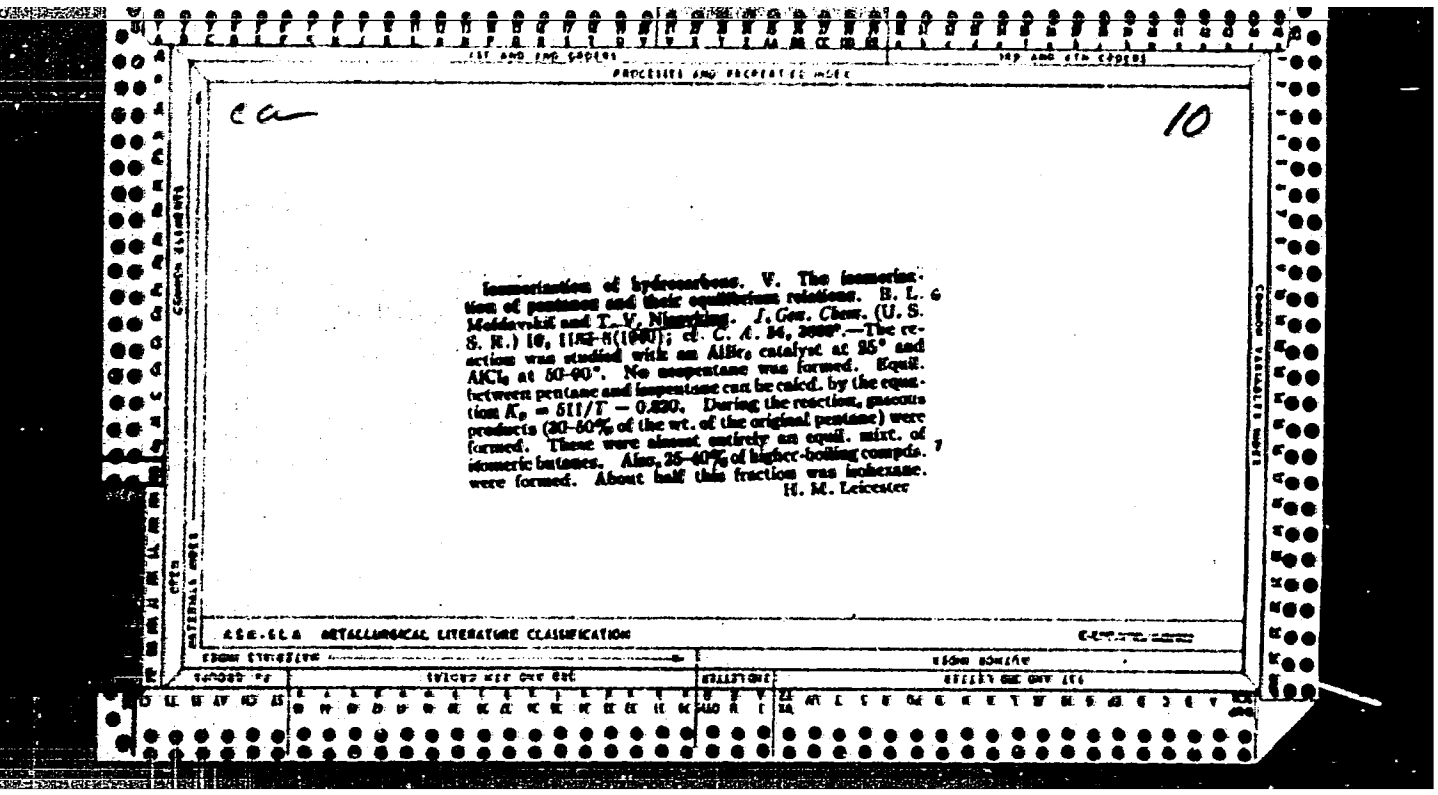
10

Hydrogenation of oxygen-containing compounds. III. Preparation of 2,3-dimethylbutane from pinacolone. B. L. Moldavskii and T. V. Nimerkina. *J. Gen. Chem. (U. S. S. R.)* 10, 633-4(1940); cf. *C. A.* 29, 2153⁹.—With the view to prepare 2,3-dimethylbutane (I), pinacolone (53 g.) was dissolved in 50 ml. xylene, the soln. was placed in an autoclave and powdered MoS_2 was added in an amt. of 10% of the wt. of pinacolone. The hydrogenation was carried out under an initial pressure of 80 atm. H at 340-50° for 4 hrs. The yield of hydrocarbons was 87% of the theoretical amt. Fractional distn. gave 75% of *2,3-dimethylbutane* (II), b. 58°, d_4^{20} 0.6626, n_D^{20} 1.3755, instead of the expected I, thus showing that retropinacolone rearrangement had taken place. The above method is recommended for the prepn. of II.

Gertrude Herrod

State Inst. of High Pressures, Leningrad



10

Isomerization of hydrocarbons. V. The isomerization of pentanes and their equilibrium relations. B. L. Moldavskii and T. V. Nimytina. *J. Gen. Chem.* (U. S. S. R.) 10, 1183-8(1940); cf. *C. A.* 34, 3088⁹.—The reaction was studied with an $AlBr_3$ catalyst at 25° and $AlCl_3$ at 50-90°. No neopentane was formed. Equil. between pentane and isopentane can be calcd. by the equation $K_p = 511/T - 0.820$. During the reaction, gaseous products (20-50% of the wt. of the original pentane) were formed. These were almost entirely an equil. mixt. of isomeric butanes. Also, 25-40% of higher-boiling compds. were formed. About half this fraction was isohexane.
H. M. Leicester

NIZOVKINA, T.

"Izomerization of Hydrocarbons. VI. Investigation of By-products, formed in the Izomerization of Butanes and Pentanes under the Influence of Aluminium Halides and the Mechanism of their Function." Moldavsky, B., Nebylova, E. and Nizovkina, T. (p. 343)

SO: Journal of General Chemistry (Zhurnal Obshchoi Khimii) 1944, Volume 14, no. 4-5.

NIZOVKINA, T. V.

Methylation of hydrocarbons of the olefin series. B. L. Moldavskii, T. V. Nizovkina, and V. R. Zharkova (Leningrad High Pres. Inst.). J. Gen Chem (U.S.S.R.) 16, 427-34 (1946)— In a study of El'tekov's methylation reaction (J. Russ. Phys. Chem. Soc. 10, 86 (1878) of olefins by MeI in the presence of PbO, it was found that PbO causes side reactions of oxidative type with reduction of the oxide to Pb. It was also found that MgO may be substituted for PbO and MeCl for MeI. 2-Methyl-2butene (60 g.) 51 g. MeCl. and 120 g. PbO were heated in an autoclave 8 hrs. at 280-90°; this resulted in the formation of 55 g. Pb and 26 g. $PbCl_2$, while the org. products were composed of 65 g. amylenes, 11.6 g. hexeneheptenes, and 16% diamylenes. Distn. through a Podbielniak column indicated the presence of isomeric amylenes in the 1st fraction, due to isomerization, while in the higher fractions there were indications of the presence of 2,3-dimethyl-2-butene, b. 73°; 2,3,3-trimethyl-1-butene, b. 78°; and 2,3-dimethyl-1-butene, b. 55-8°. Repetition of the expt. at 265° for 10 hrs., using 71 g. 2-methyl-2-butene, 252 g. MeCl. and 80 g. MgO, gave similarly 23% amylenes, 27.5% hexenes, and 31% heptylenes, with 14.3 g. undistd. residue; fractionation of the products gave the same distribution as above. Use of mixed butenes instead of2-methyl-2-butene (the mixt. used consisted of 1-butene 25%, 2-butene 69%, and isobutylene 6%), gave 54.5% C_5-C_7, olefins, which contained 3-methyl-1-butene and 2-methyl-2-butene, besides the products listed above; quant. sepn. was not performed. G. M. Kosolanoff

NIZOVKINA, T. V.

PA 64/49T10

USSR/Chemistry - Alcohol Jun 49
Chemistry - Esterification

"Kinetics of the Acid-Free Esterification of Ethyl Alcohol," T. V. Nizovkina, B. N. Bolgov, Chair of Org Chem Faculty, Leningrad Ord of Lenin State U, 11½ pp

"Zhur Obshch Khim" Vol XIX, No 6

On a cupric catalyst containing 50% activator and at 140-200°, the basic product obtained from the passage of ethyl alcohol is ethylacetate. Effect of the latter and acetaldehyde on the rate of esterification can be expressed by a formula relating this rate to partial pressures and [redacted]. 64/49T10

USSR/Chemistry - Alcohol (Contd) Jun 49

coefficients of adsorption of ethyl alcohol, ethylacetate, and acetaldehyde. Mixtures of ethyl alcohol and acetaldehyde are formed both at the expense of the alcohol and the aldehyde, showing that acetaldehyde is an intermediate product in esterification with this particular catalyst. Submitted 1 Oct 47.

64/49T10

DOLGOV, B.N.; NIZOVKINA, T.V.; MOZZHUKHINA, L.V.

Formation of phenols in catalytic condensation of acetone with acetaldehyde. Zhur. Obshchey Khim. 22, 950-3 '52. (MLRA 5:8)
(CA 47 no.14:6890 '53)

1. A. Zhdanov State Univ., Leningrad.

NIZOVKINA, T. V.

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Organic Chemistry

The formation of phenols in the catalytic condensation of acetone with acetaldehyde. III. B. M. Dolgov, T. V. Nizovkina, and L. V. Moiseenkova (Zhdanov State Univ., Leningrad). *J. Gen. Chem. U.S.S.R.* 22, 1003-6(1952) (Engl. translation).—See *C.A.* 47, 6890*h*. H. L. H.

Nizovkina, T.V.

USSR

Mechanism of reaction of esterification of ethyl alcohol on copper catalysts. II. Effects of space velocity. B. N. Dolgov, T. V. Nizovkina, and I. M. Stroiman (A. A. Zhdanov State Univ., Leningrad). *Sbornik Statei Obshchei Khim.* 2, 1283-92(1953); cf. *C.A.* 43, 8252*a*.—Dehydrogenation and esterification reactions (formation of AcH and EtOAc) of EtOH over Cu catalysts has a diffusional character and depends on the rate of supply of EtOH to the catalyst surface. While the space velocity of the charge exerts no effect at all on the conversion of EtOH (up to 1000), the amount of reacted EtOH rises steadily as the feed is increased from 0.05 to 0.25 millimoles per g. of catalyst per min.; the amount for AcH formed rises similarly with increased feed rate, although there is a tendency to level off at higher rates of feed. III. Effect of temperature. *Ibid.* 1293-6.—The catalysis of EtOH over Cu catalyst was studied in 180-280° range. It was shown that the temp. coeffs. (10°) for the dehydrogenation and esterification reactions are 1.19 and 1.18, resp., being lower than those of purely chemical reactions. The temp. coeffs. approach those expected for diffusional processes.

G. M. Kosolapoff

NIZOVKINA, T. V.; DOLGOV, B. N.; and STROYMAN, I. M.

Study of the Reaction Mechanism of Etherification of Ethyl Alcohol on Copper Catalysts. II. Effect of Temperature, page 1293, Sbornik statey po obshchey khimii (Collection of Papers on General Chemistry), Vol II, Moscow-Leningrad, 1953, pages 1680-1686.

Chair of Organic Chemistry, Leningrad State U

NIZOVKINA T. V.

81

Mechanism of the reaction of esterification of ethyl alcohol on copper catalysts. IV. Successive transformations of alcohol into acetaldehyde and ethyl acetate along the length of the catalyst layer. B. N. Dolgov, T. V. Nizovkina, and I. M. Stroilmatt (Leningrad State Univ.). *Zhur. Obshchei Khim.* 25, 497–503 (1955). *J. Gen. Chem. U.S.S.R.* 25, 467–70 (1955) (Engl. translation); cf. C.A. 49, 5201i. — Examn. of the products isolated after a passage of EtOH over the Cu-promoted catalyst at various space-velocities and with varying lengths of the catalyst layer at 220° and at 240°, showed that the content of AcH rises at first to a max., then sharply declines with longer catalytic path. The EtOAc content rises steadily. Thus, the initial catalyst length serves mainly to form AcH from EtOH, the conversion of AcH to EtOAc being a second step reaction. The max. yield of EtOAc after a passage through a given length of catalyst bed can be used for characterization of the activity of a given catalyst with respect to dehydrogenation of EtOH. The results are shown graphically, and formulas are derived for the content of the products in the mixt. at time t, on the basis of the reaction rate constants.

G. M. Kovalioff

Nizovkina, T. V.

CH

Mechanism of reaction of esterification of ethyl alcohol on copper promoted catalysts. V. Influence of hydrogen on the reaction rate. B. N. Dolgov, T. V. Nizovkina, and I. M. Strelman (Leningrad State Univ.). *Zhur. Obshchei Khim.* 25, 685-7(1955); *J. Gen. Chem. U.S.S.R.* 25, 661-4(1955)(Engl. translation); cf. *C.A.* 49, 5284i.—Addn. of H to the reaction mixt. of EtOH with a Cu catalyst (*loc. cit.*) does not alter the degree of conversion of EtOH, which fact may be explained by the mechanism of this reaction according to which the diffusion coeff. of the reactants in the mixt. is increased by the presence of H. In expts. performed at 220° with different space velocities of the reactants, the presence of H reduces the yield of AcH somewhat but raises the yield of EtOAc. The diffusion coeff. of EtOH at the different H partial pressures was calcd. according to Gilliland's empirical formula (cf. *C.A.* 28, 4643³); at a molar ratio of EtOH–H of 4.4:1 the coeff. is 0.247, at 2.3:1 it is 0.261, at 1.1:1 it is 0.332, and at 0.6:1 it is 0.350. This growth of the diffusion rate is sufficient to explain the influence of H on the reaction. G. M. Kosolapoff

(2)

MIZOVKINA, T.V.

DOLGOV, B.N.; MIZOVKINA, T.V.; STROYMAN, I.M.

Study of the mechanism of etherification of ethyl alcohol on promoted copper catalysts. Part 5. Effect of hydrogen on the rate of reaction. Zhur.ob.khim. 25 no.4:693-697 Ap '55. (MLRA 8:7)

1. Leningradskiy Gosudarstvennyy universitet.
(Etherification) (Ethyl alcohol) (Catalysts, Copper)

NIZOVKINA, T. V.

PHASE I BOOK EXPLOITATION 614

Golodnikov, Gennadiy Vladimirovich, Nizovkina, Tat'yana Vsevolodovna and Ryskal'chuk, Apollinariya Terent'yevna

Praktikum po organicheskomu sintezu (Practical Work in Organic Synthesis) Leningrad, Izd-vo Leningrad. univ-ta, 1957. 187 p. 6,080 copies printed.

Sponsoring Agency: Leningrad. Universitet.

Ed. (title page): Dolgov, B.N., Professor; Ed. (inside book): Shchemeleva, Ye.V.; Tech. Ed.: Vodolagina, S.D.

PURPOSE: This manual is intended for the use of chemistry students taking a laboratory course in organic synthesis.

COVERAGE: This manual is presented as a guide to practical laboratory work in organic synthesis. It is divided into three parts. The first part is devoted to general methods and procedures of laboratory work in this field. Particular attention is given to

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fractional distillation, fractionating columns, steam distillation, reduced-pressure distillation, recrystallization, and the determination of melting points. Instructions are given for keeping records, safeguarding against accidents, what to do in case of fire, first aid in case of burns, glass cuts; etc. The second part describes the synthesis of organic compounds. The syntheses are divided according to types of reaction. For each type of reaction a few examples are given distinguished one from the other according to methods of separation and treatment of organic compounds produced. The third part of the manual includes supplementary syntheses which are given to laboratory students as finals. Every synthesis described in the manual has been checked and proved many times over during many years by the faculty of organic chemistry at the Leningrad State University. There are no personalities and no references.

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NIZOVKINA, T.V

5(3) PHASE I BOOK EXPLOITATION SOV/2924

Bolotov, Boris Aleksandrovich, Vyacheslav Aleksandrovich Komarov, and Tat'yana Vsevolodovna Nizovkina

Prakticheskiye raboty po organicheskomu katalizu (Practical Studies in Organic Catalysis) [Leningrad] Izd-vo Leningr. univ., 1959. 194 p. Errata slip inserted. 4,120 copies printed.

Sponsoring Agency: Leningrad. Universitet. Redaktsionno-izdatel'skiy sovet.

Resp. Ed.: B. N. Dolgov, Professor; Ed.: Ye. V. Shchemeleva; Tech. Ed.: Ye. G. Zhukova.

PURPOSE: This book is intended for the personnel of scientific research institutes and factory laboratories. It will be of interest to teachers and students of advanced courses in chemistry and chemical technology vuzes. It may also be used as a manual to aid in setting up and performing various

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operations with catalytic methods, and in organizing effective work practices.

COVERAGE: The book describes the principal apparatus used to produce catalytic reactions at normal and higher pressures, methods of producing and studying catalysts, and the methods of producing those catalytic reactions which embrace the main branches of organic catalysis. The authors thank K. P. Katkova, I. M. Stroyman, Ye. A. Chernikova, N. P. Usacheva, and R. M. Adrov. References accompany each chapter.

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D243/D303

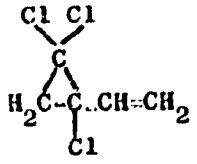
5.3832

AUTHORS: D'yakonov, I.A., Nizovkina, T.V. and Kornilova, T.A.

TITLE: Reaction of dichlorocarbene with chloroprene

PERIODICAL: Zhurnal obshchey khimii, v. 32, no. 2, 1962, 664-665

TEXT: The authors wished to confirm that dichlorocarbene, on reacting with chloroprene, joins in the 1,2 position. Investigation showed that this occurred, 1,2, 2-trichloro-1-vinylcyclopropane (I) being formed - a colorless liquid which darkens in air and forms a solid polymer. B.p. = 63-63.5° at 25 mm Hg; d_4^{20} = 1.3330, n_D^{20}=1.5007. On ozenization of (I) or its oxidation by aq.$KMnO_4$ (II) was obtained which is described for the first time; m.p. = 94-95°C (from hexane).



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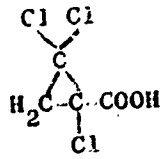
D243/D303

Reaction of dichlorocarbene ...

It is concluded that of the two chloroprene double bonds, the bond at the 1,2 position is more nucleophilic than that at the 3,4 position. The steric factor which depends on the presence of a chlorine atom at the second carbon atom of the chloroprene molecule, does not play an important role in determining the reaction's direction. There are 10 references: 3 Soviet-bloc and 7 non-Soviet-bloc. The 4 most recent references to the English-language publications read as follows: M.Orchin and E.C. Herrick, J.Org.Ch.,24,139 (1959); A. Ledwith and R.M. Bell, Chem.a. Ind., 1959; 459; W.E. Parham and E.E.Schweitzer, J.Org.Ch.,24,1733(1959); W.V. Doering and W.A. Henderson, J.Am.Chem.Soc., 80, 5274,(1958).



(II)

ASSOCIATION: Leningradskiy gosudarstvennyy universitet (Leningrad State University)

SUBMITTED: July 14, 1961

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D'YAKONOV, I.A.; NIZOVKINA, T.V.; GREBENKINA, V.M.

Addition of the carbethoxycarbene to chloroprene.
Zhur.ob.khim. 32 no.10:3450 O '62. (MIRA 15:11)

1. Leningradskiy gosudarstvennyy universitet.
(Carbene) (Chloroprene)