L 01793-66 EWT(d)/EWP(1) IJP(c) BC

ACCESSION NR: AP5021624 UR/0286/65/000/013/0105/0105
621.9—529

AUTHOR: Yashunskiy, R. G.; Pinson, T. B.

TITLE: Programmed-control system. Class 49, No. 172615

SOURCE: Byulleten' izobreteniy i tovarnykh znakov, no. 13, 1965, 105

TOPIC TAGS: programmed control, sequence switch

ABSTRACT: An Author Certificate has been issued for a programmed-control system, consisting of a switching device and counter, which controls the operation of electric motors such as those arranged on the rotating parts of rotor lines (see Fig. 1 of the Enclosure). The switching device is in the form of an insulating ring equipped with segmented current-conducting inserts equal in number to the number of motors being controlled, thus assuring the necessary motor switch-on sequence. This device simplifies the control system and increases its reliability. Orig. art. has: 1 figure. [WH]

ASSOCIATION: none

Card 1/3

L 01793-66

ACCESSION NR: AP5021624

SUBMITTED: 16Jun62 ENCL: 01 SUB CODE: DP, EE

NO REF SOV: 000 OTHER: 000 ATD PRESS: 4085

Card 2/3

L 01793-66

ACCESSION NR: AP5021624

ENCLOSURE: 01

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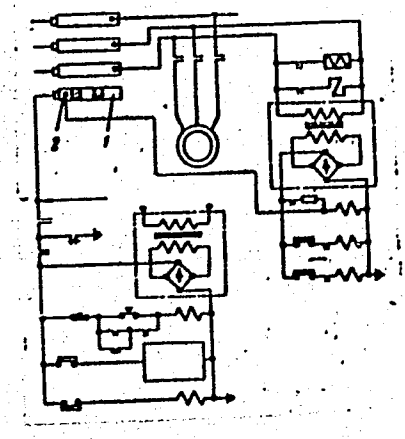

Fig. 1. Programmed-control system

1 - Ring; 2 - segments.

Card 3/3

AUTHOR: Yashunskiy, R.G. and Arkhipov, N.A. 113-58-6-13/16

TITLE: A New Automaton for Controllable Reversal Current in Galvanic Baths (Novyy avtomat dlya reguliruyemogo reversirovaniya toka v gal'vanicheskikh vannakh)

PERIODICAL: Avtomobil'naya promyshlennost', 1958, Nr 6, pp 37-39 (USSR)

ABSTRACT: The NIITAvtoprom elaborated a new process of high-luster copper plating in cyanic electrolytes. Research showed that the best results are obtained by the controllable reversal current. The best way to do it is to switch the current of the excitation winding of a generator with the help of electronic tubes - thiratrons. By the scheme of reversal current elaborated by A.S. Tsege, two independent windings were placed on the poles of generators, one of which served to pass the 110-volt current in one direction and the second - in opposite direction. Calculations showed that it was impossible to fix two 110-volt windings on the generator of the AND-1500/750 and AND-5000/2500 aggregates. In this connection, new schemes of reversal current with one excitation winding were fed by a 110-115 volt current for AND-5000/2500 and AND-1000/500 aggregates. (Table 1) The rectification of the current which feeds the excitation winding of the generators is made by two pairs of thiratrons. For

Card 1/3

A New Automaton for Controllable Reversal Current in Galvanic Baths

AND-5000/2500 and AND-1000/500 type aggregates, the TR1-15/15 and the TR1-5/2 type thiratrons are used respectively. Each pair is connected with the independent winding of the transformer. The cathodes of each pair are connected with the opposite ends of the excitation windings of the generators through the regulating rheostats and accordingly the middle points of the anode windings of the transformer are also connected with the opposite ends. Thus, by the dual ignition of the pair on the left, the current passes through the windings in one direction, and by switching on the pair on the right, it passes through in the opposite direction. At the same time the direction of the magnetic flux of the generator and the current direction in its armature and in the bath are also changed. The rheostats of excitation (1PB and 2PB) permit the regulation of the current in the excitation winding and, consequently, the density of the current in the direct and reversed directions. The alternate connection of the left and right pair of thiratrons is regulated by an electronic time-relay, mounted on a 6H8C tube, by alternate feeding on its circuit of the positive or negative potential in relation to the

A New Automaton for Controllable Reversal Current in Galvanic Baths

cathodes. The feeding of the time relay and the circuits of the thiratrons is made from the circuit of alternate current, with 380 or 220 volts through the transformer 1T, which has as a part of its initial winding the winding of anode voltage, the winding of feeding the tube of the time relay and two windings for feeding the circuits of the thiratrons. The technical characteristics of the transformer are given. The aggregates are built by the Yaroslavskiy elektromekhanicheskiy zavod (The Yaroslavl' Electromechanical Plant). The description and working principle of automaton are given.
There is 1 diagram, 2 tables, 2 photos, 1 figure and 1 Soviet reference.

ASSOCIATION: NIITAvtoprom

Card 3/3 1. Galvanizing--Solutions 2. Electrical current--Control systems --Operation

YASHUNSKIY, R.G., LEVINA, I.I.

Device for automatic regulation of current density in electrolytic baths. Avt. prom. 29 no.4:35-37 Ap '63. (MIRA 16:6)

1. Nauchno-issledovatel'skiy tekhnologicheskiy institut avtomobil'noy promyshlennosti.
(Electric controllers) (Galvanizing)

YASHUNSKIY, R. G.; BOCHEVER, B. G.

Pickups for the recording of production output based on changes in the current machine-tool motor circuit. Avt. prom. 28 no.6: 3-5 Je '62. (MIRA 16:4)

1. Nauchno-issledovatel'skiy institut avtomobil'noy promyshlennosti.

(Electronic instruments) (Production control)

SHULESHKIN, A.V.; YASHUNSKIY, R.G.

Keeping records on and analysing the use of equipment in mass production. Avt.trakt.prom. no.7:3-6 Jl '53. (MLRA 6:8)

1. Ministerstvo mashinostroyeniya.
(Machinery in industry) (Production control)

LASHCHIVER, S.M.; SERGEYEV, S.M.; ROZEN, G.M.; YASHUNSKIY, R.G.

Automatic line for manufacturing the air brake reservoir of the ZIL-130 automobile. Avt.prom. no.3:34-38 Mr '61. (MIRA 14:3)

1. Nauchno-issledovatel'skiy eksperimental'nyy institut avtotraktornogo elektrooborudovaniya i priborov.
(Automobiles--Brakes) (Assembly-line methods)

YASHUNSKIY, R.G.; BOCHEVER, B.G.

Means of mechanization of production control. Avt. prom. 27 no. 5:1-6 My '61. (MIRA 14:5)

1. Nauchno-issledovatel'skiy tekhnologicheskiy institut avtomobil'noy promyshlennosti.
(Automobile industry) (Automation)

TORCHINSKAYA, O.L.; RAZUMOVSKIY, N.O.; YASHUNSKIY, V.G.; BALABUKHA, V.S. USHAKOVA, V.F.

Excretion of radioactive cerium from the body under the influence of triethylenetetraaminehexaacetic and tetraethylenepentoaminoheptoacetic acids. Radiobiologiia 3 no.2:270-275 '63 (MIRA 17:1)

KOST, A. N., TERENT'YEV, A. P., YASHUNSKIY, V. G.

Azacyclo Compounds

Synthesis of 1-oxa-5-azacyclooctane. Vest. Mosk. un. 5, No. 6, 1950.

9. Monthly List of Russian Accessions, Library of Congress, November 1952 1953, Uncl.

YASHUNSKII, V. G.

A. P. Terent'ev, L. A. Yanovskaya and V. G. Yashunskii - "Sulphonation and sulphonic acids of acidophobic compounds. XI. Application of the method of lixiviation for the investigation of the products of sulphonation of pyrrole." (p. 510)

SO: Journal of General Chemistry, (Zhurnal Obshchei Khimii), 1950, Vol. 20, No. 3.

KOST, A.N.; YASHUNSKIY, V.G.

Aleksei Nikolaevich Vyshnegradskii. Uspekhi Khim. 21, 260-4 '52.
(CA 48 no.2:414 '54) (MLRA 5:2)

KOST, A.N., YASHUNSKIY, V. G.

Propionitriles, Vvshnegradskiy Reaction

Anomalous behavior of B - substituted propionitriles in the Vyshenegradskii reaction.
Dokl. AN SSSR 83 no. 1, 1952

Monthly List of Russian Accessions, Library of Congress, August 1952, Unclassified.

YASHUNSKIĬ, V.G.

USSR.

Some derivatives of thiodipropionic acid. A. N. Kost, I. A. Lebedev, and V. G. Yashunskiĭ. *Vestnik Moskov. Univ.* 8, No. 3, *Ser. Fiz.-Mat. i Estestven. Nauk* No. 2, 111-14(1953).—Treating $Na_2S.9H_2O$ (1 mole) with 2 moles CH_2:CHCH dropwise at 15–17°, stirring 4 hrs. at room temp., gave an oily layer which, when extd. with C_6H_6, washed, dried, and distd. yielded 83–6% β,β'-dicyanodiethyl sulfide (I), needles, m. 26°, b_{1-2} 163–4°, n^{25}_D 1.5047, d_4 1.1270. Considerably lower conversions were obtained at faster reaction rates or higher temps. Refluxing I (0.143 mole) 4 hrs. with 100 ml. concd. HCl yielded 90% β,β'-thiodipropionic acid (II), m. 133.5° (from H_2O). The following derivs. of II were obtained by conventional methods: di-Et ester, b_7 148°, n^{25}_D 1.4646, d_{25} 1.0951; di-Bu ester b_{11-12} 194.6°, n^{25}_D 1.4647, d_{25} 1.0326; dianilide, m. 162.5° (from EtOH); di-*p*-toluidide, m. 198.5° (from EtOH).

Gerard Aufleger

62

(2)

YA-NOVSKII, V. T.

Chemical Abst.
Vol. 48 No. 5
Mar. 10, 1954
Organic Chemistry

(3)

Anomalous reduction of β-substituted propionitriles by the Vyshnegradskii method. A. N. Kost and V. T. Yanovskii (Moscow State Univ.). *Zhur. Obshchei Khim.* 23, 259–8 (1953); cf. *C.A.* 47, 2687*f*.—Reduction to 3-halo-, hydroxy-, alkoxy-, or mercaptopropionitriles with ROH-Na [Vyshnegradskii method, *J. Russ. Phys. Chem. Soc.* 12, 16 (1880)] leads to anomalous results in that 3-alkoxypropylamines are formed, the alkoxy group being derived from the ROH used. The reaction proceeds by cleavage to CH_2:CHCN, followed by cyanoethylation of the ROH and reduction of the resulting alkoxynitrile. Refluxing 38.2 g. $CH_2(CH_2CH_2Br)_2$ and 17.2 g. NaCN in aq. EtOH 10 hrs. gave, after steam distn. for the removal of unreacted dibromide, 68% pimelonitrile, b_4 159–60°. CH_2:CHCN (21.2 g.) added slowly to 24 g. MeOH and 0.9 g. Na, then heated 1 hr. on a steam bath, gave 78% *MeOCH₂CH₂CN*, b. 163–4°; the *EtO analog*, 70.8%, and *iso-PrO analog*, 71%, were prepd. similarly; *iso-AmO analog*, 75.9%, b_{22} 109–10°. To 121 g. PhOH and 1.5 g. Na was added over 1 hr. 67.8 g. CH_2:CHCN at 130–5° and the mixt. stirred 5 hrs., yielding 52% *PhOCH₂CH₂CN*, m. 62°. CH_2:CHCN (30.8 g.) added over 2 hrs. to 46.5 g. $(CH_2OH)_2$ and 1.8 g. 25% NaOH with cooling gave 47.8% $HOCH_2CH_2OCH_2CH_2CN$, $b_{1.5}$ 111–12°, n^{20}_D 1.4443, d_{20} 1.0703, along with 25 g. *bis(cyanoethylation)product*, b_2 160–71°. To 180 g. $Na_2S.9H_2O$ in 100 ml. H_2O at 10° was added 79.5 g. CH_2:CHCN and the mixt. stirred 4 hrs. at room temp., yielding 85% $S(CH_2CH_2CN)_2$, b_3 178–9°. To 22 g. Na was added a 8.9 g. pimelonitrile in 330 ml. hot BuOH and the mixt. heated rapidly (bath temp. 145°) until the Na had dis-

(OVER)

solved; the usual aq. treatment and steam distn. gave 41.5% *$CH_3(CH_2CH_2CH_2NH_2)_2$*, b_2 91-2°; *Bz deriv.*, m. 123° [cf. Solonina, *J. Russ. Phys. Chem. Soc.* 28, 558(1896)]. Similar reaction of 12.4 g. $O(CH_2CH_2CN)_2$ with 30 g. Na and 430 ml. BuOH gave 55.6% *$BuOCH_2CH_2CH_2NH_2$*, b_{23} 74-6°, b_{754} 169-70°, n_D^{20} 1.4268, d_{20} 0.8532 (*HCl salt*, hygroscopic solid; *picrate*, m. 96°; Bz deriv., b_2 192-5°; *chloroplatinate*, decomp. 199°), also formed in 21.0% yield on reduction of $S(CH_2CH_2CN)_2$ in BuOH. Rapid addn. of 14.1 g. $EtOCH_2CH_2CN$ in 250 ml. hot EtOH to 20 g. Na followed by immediate heating (bath temp. 150-5°) gave 6.95 g. *$EtOCH_2CH_2CH_2NH_2$*, b_{38} 54-5°, n_D^{20} 1.4242, d_{20} 0.8697, and 1.45 g. *$EtOCH_2CH_2CH_2NH(CH_2)_3NH_2$*, b_{12} 116-17°, n_D^{20} 1.4512, d_{20} 0.9040; *picrate*, m. 143°. To a suspension of 14 g. Na dust in MePh was added over 15 min. 11.3 g. iso-$PrO(CH_2)_2CN$ in 60 ml. iso-PrOH, then 40 ml. iso-PrOH to complete soln. of the Na; the usual treatment gave 21.5% *iso-$PrOCH_2CH_2CH_2NH_2$*, b_{53} 74-5°. The *BuO analog* (50%), obtained similarly in BuOH, b_{21} 80-1°; *iso-AmO analog*, prepd. similarly in iso-AmOH, b_{20} 82-3°, n_D^{20} 1.4312, d_{20} 0.8517 (*picrate*, m. 104°). Reduction of 10.5 g. $MeOCH_2CH_2CN$ in BuOH with Na (without other solvent) gave 25.8% *$BuOCH_2CH_2CH_2NH_2$*, also formed in 29.4% yield from $HOCH_2CH_2OCH_2CH_2CN$ in BuOH. Reduction of $PhOCH_2CH_2CN$ with Na in MePh in the presence of EtOH gave 55.5% *$EtOCH_2CH_2CH_2NH_2$*, b_{44} 59-60°. To 8.52 g. $HOCH_2CH_2CN$ in 180 ml. boiling abs. EtOH was added 16 g. Na; the usual treatment gave 2.6 g. $EtOCH_2CH_2CH_2NH_2$, b_{44} 58-9°, and some 1.5 g. nonbasic material; reduction with Na in MePh in the presence of iso-PrOH gave 20% iso-$PrOCH_2CH_2CH_2NH_2$; reduction without solvent in iso-BuOH gave 24.4% *iso-$BuOCH_2CH_2CH_2NH_2$*, b_{20} 65-6°, n_D^{20} 1.4246, d_{20} 0.8448 [*picrate*, m. 100° (from C_6H_6)]; similar reduction in BuOH gave 20% $BuOCH_2CH_2CH_2NH_2$; reduction in MePh in the presence of iso-AmOH gave 30.4% *iso-$AmOCH_2CH_2CH_2NH_2$*, b_{12} 66-7°. Reduction of $ClCH_2CH_2CN$ in MePh in the presence of BuOH gave 68% *$BuOCH_2CH_2CH_2NH_2$*, b_{23} 78-9°, and 8.4% $PrNH_2$.

G. M. Kosolapoff

MF
7-13-54

Chemical Abst.
Vol. 48
Apr. 10, 1954
Organic Chemistry

Syntheses with the aid of ... UX ... of acrylonitrile by the Vyshnegradskii method. ... Yashunskii, A. N. Kost, and A. P. Terent'ev (Mo... State Univ.). *Zhur. Obshchei Khim.* 23, ... (1953); *C.A.* 47, 8663h; 48, 2569i.—To 5.3 g. CH_2:CHCN in ... refluxing ml. abs. EtOH was added over 30 min. 15 g. ... the mixt. was dild. with 100 ml. H_2O after completion of ... reaction, steam-distd. into 10% HCl, and the steam ... tillate further treated with steam and evapd., yielding an oil which, with NaOH under Et_2O, gave 30% *EtOCH₂CH₂CH₂NH₂*, b_{30} 49–50°. To 22 g. Na in 50 ml. hot MePh was added in 0.5 hr. 5.3 g. CH_2:CHCN in 350 ml. iso-BuOH at 140–50°, then 200 ml. H_2O after soln. of the Na, and the product steam-distd. as above, yielding 63.1% *iso-BuOCH₂CH₂CH₂NH₂*, b_{14} 72–3°, and 1.28 g. $PrNH_2$.HCl, m. 156°. A similar reaction in BuOH gave 44.3% *BuOCH₂CH₂CH₂NH₂*, b_{23} 78–9°, b_{11} 71–2°; a lesser proportion of CH_2:CHCN gave a 59.6% yield. Similarly was formed 41.4% *iso-AmOCH₂CH₂CH₂NH₂*, b_{18} 78.5–80.0°.

G. M. Kosolapoff

[illegible], . . .

Dissertation: "Addition Reaction in the Alpha, Beta Unsaturated Nitriles Series." Cand Chem Sci, Moscow Order of Lenin State U imeni M. V. Lomonosov, 5 Jun 54. Vechernyaya Moskva, Moscow, 27 May 54.

SO: SUM 284, 26 Nov 1954

YASHUNSKIY, V.G.

USSR/ Chemistry - Analysis

Card : 1/1

Authors : Terentyev, A. P., Butskus, P. F., and Yashunskiy, V. G.

Title : Determination of acrylonitrile with the aid of the cyanethylation reaction

Periodical : Zhur. Anal. Khim., 9, Ed. 3, 162 - 165, May-June 1954

Abstract : Investigations conducted on the cyanethylation of alpha-amino acid derivatives led to the development of a new method for the determination of acrylonitriles, based on the reaction of the latter with glycol. The apparature employed in connection with this new analysis method is described. The new analysis method makes it possible to determine acrylonitrile in colored mixtures containing water and ethylenecyanohydrin with an accuracy of up to ± 1%. Eleven references: 3-USSR, 6-USA, 2-English. Table; drawing.

Institution : The M. V. Lomonosov State University, Moscow

Submitted : Jan. 13, 1954

Yashunskiy, V. G.

USSR/Chemistry - Reduction processes

Card 1/1 Pub. 151 - 20/38

Authors : Terentyev, A. P., and Yashunskiy, V. G.

Title : Study of gamma-dinitrile reduction according to the Vishnegrad method

Periodical : Zhur. ob. khim. 24/2, 291-298, Feb 1954

Abstract : It was found that the Vishnegrad method of reducing nitriles with Na in alcohol can be successfully utilized for the synthesis of certain hardly-accessible cyclic nitrous bases. The conditions and factors affecting the process of cyclization, which is usually followed by the formation of piperidine, was investigated during the reduction dinitrile with glutaric acid in alcohol. Experiments showed that dinitriles of alpha-methyl- and alpha-phenylglutaric acids offer greater yields of cyclic products than non-substituted dinitrile. A method determining the piperidine and ammonia contents in a pentamethylenediamine mixture is described. Fifteen references: 10-USSR; 3-German and 2-USA (1885-1953). Tables; graphs.

Institution : ...

Submitted : July 13, 1953

USSR.

Reduction of γ-dinitriles. A. P. Terent'ev and V. G. Yashunskil. *J. Gen. Chem. U.S.S.R.* 24, 295-300(1954) (Engl. translation).—See *C.A.* 49, 4643d. H. L. H.

YASHUNSKIY, V. G.

Synthesis of acrylic acids with nitriles. XXIII. Preparation of *N*-(γ-alkoxypropyl)-pyrrolidine and -piperidine. V. G. Yashunskii and A. P. Terent'ev (*Zh. obshch. Khim.*, 1955, 25, 2299—2303).—Deriv. of pyrrolidine and piperidine types of pharmacological interest were obtained from alkoxypropylamines and suitable dibromides. By condensation of 1 : 4-dibromobutane and 1 : 5-dibromopentane with a 3-alkoxypropylamine, *tert.*-bases were obtained with pyrrolidine and piperidine rings. 3-Ethoxypropylamine when reacted with ββ-dibromodiethyl ethers gave *N*-(3-ethoxypropyl)morpholine. The following were thus obtained: 1-3′-ethoxy-, 1-3′-*iso*propoxy-, 1-3′-butoxy-, 1-3′-*iso*butoxy- and 1-3′-*iso*pentyloxy-propylpyrrolidine; 1-3′-ethoxypropyl- and 1-3′-butoxypropyl-piperidine; and 1-3′-ethoxypropylmorpholine. A. L. B.

Syntheses with acrylonitrile. XXIV. Comparative reactivity of acrylonitrile with other α,β-unsaturated amines. V. G. Yashunskii, A. P. Terent'ev, and V. I. Shvedov. *J. Gen. Chem. U.S.S.R.* 25, 2345-9(1955)(English translation).—See *C.A.* 50, 9428d. B. M. R.

Chem

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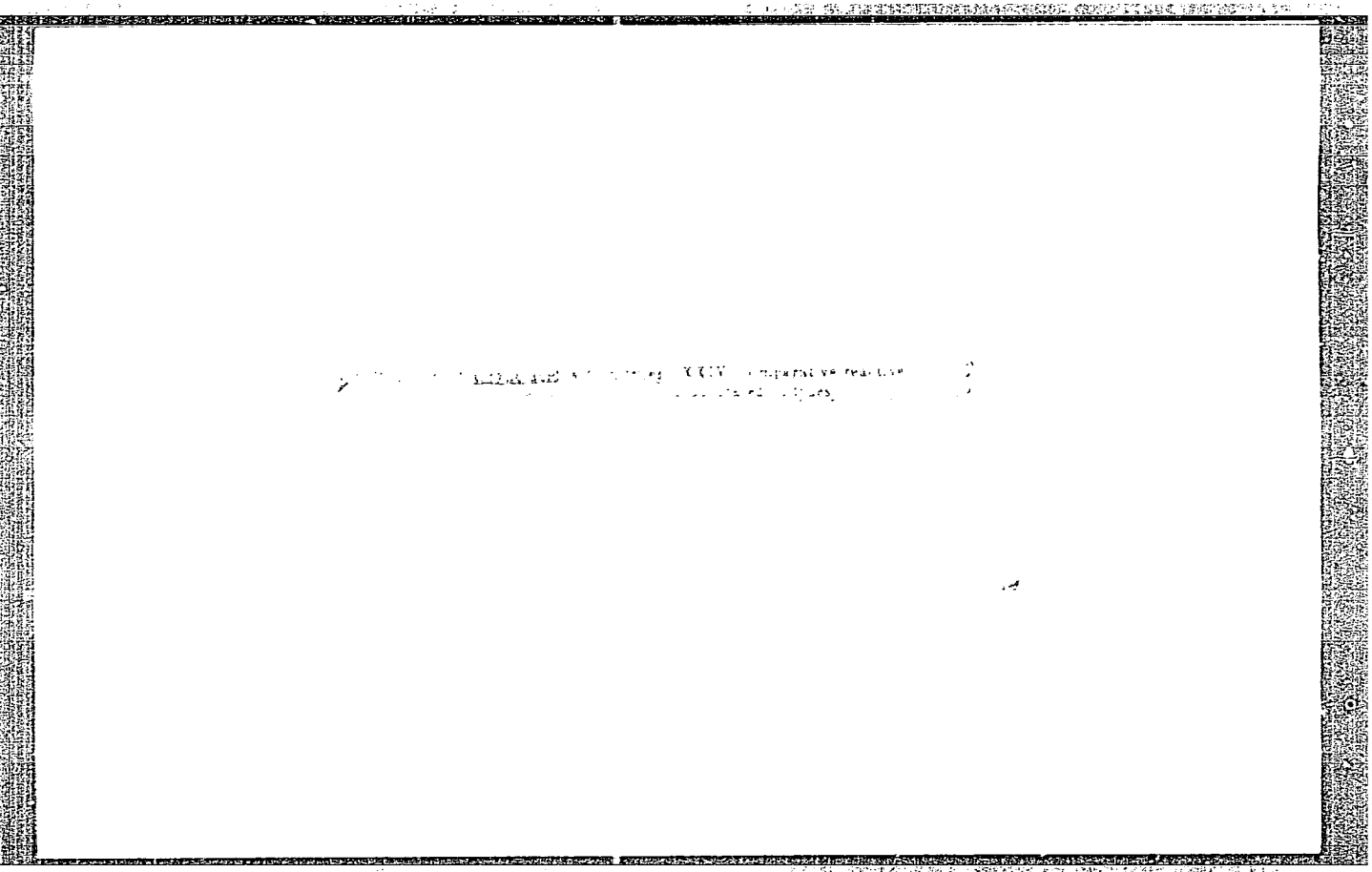


Syntheses with the aid of acrylonitrile XXVI. Synthesis of some β-alkoxypropionamides. [illegible] N. Kost, and A. M. Berlin. J. Gen. Chem. [illegible] 26, 827-30(1956)(English translation).—See C.A. 50, 14686e. XXVII. Reaction of diene synthesis with substituted acrylonitriles. V. G. Yashunskii, A. P. Terent'ev, and Ya. G. Nekhim. Ibid. 831-6.—See C.A. 50, 14587a.

B. M. R.

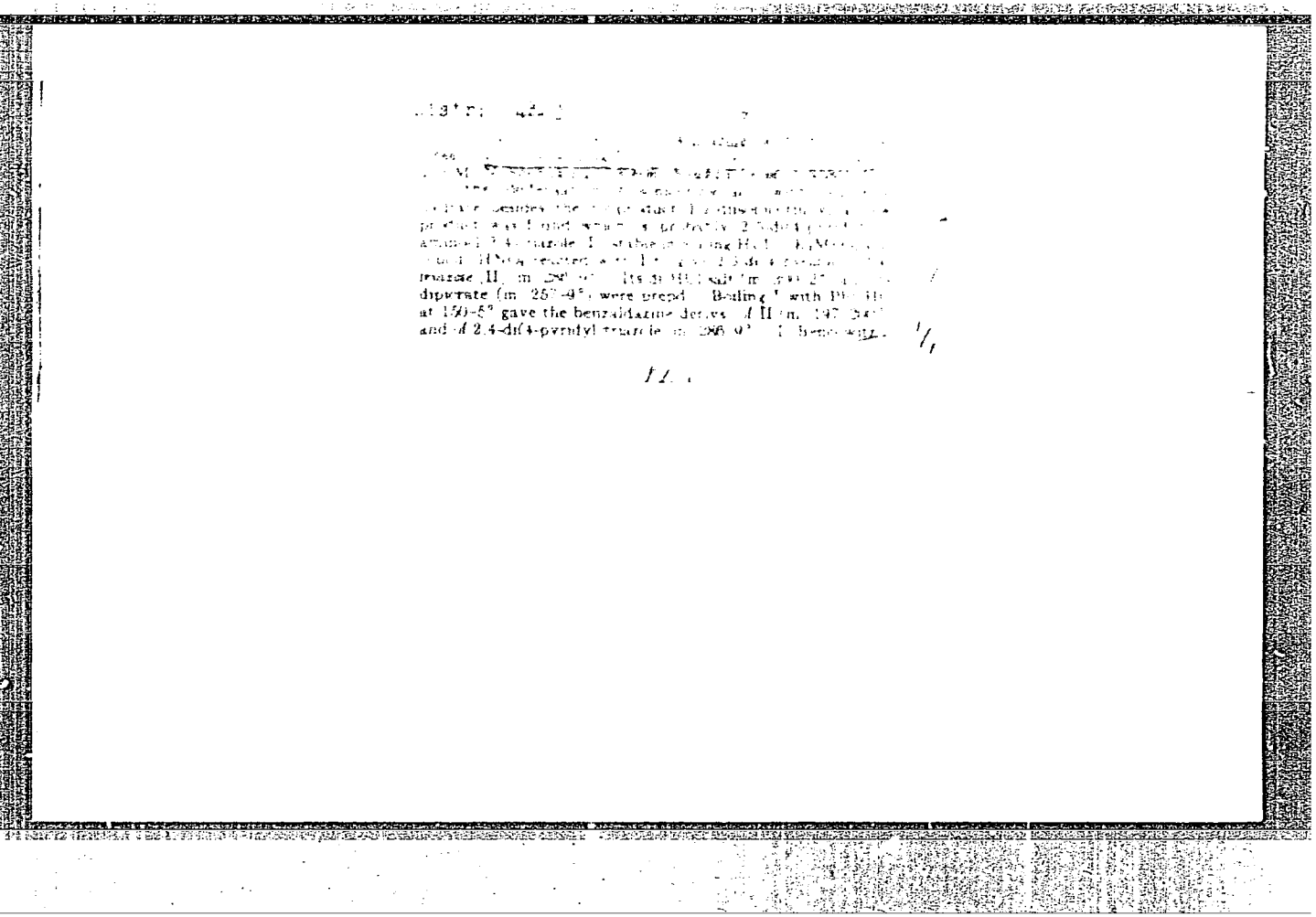
Synthesis with acrylic acid nitrile. XXVII Diene synthesis
[illegible] substituted [illegible]

II

[illegible] III, and [illegible] 1-carboxylic acids were reacted in diene synthesis with [illegible] were mixed mol. ratio of [illegible] and heated at 160-165 for 8 hr. I gave [illegible] 6-endomethylene [illegible] 4-carb[illegible] II gave [illegible] 4 [illegible] 5 [illegible] hexene 1-carboxylic 4-acid hydrolyzed to amide, and secondary condensation products. III (trans-form) converted to 5-phenyl-3, 6-endomethylenecyclohex-1-ene-4-carboxylic acid. By reacting fumaric nitrile at 110° with butadiene and homologues in [illegible] dinitriles of cyclohexene-4, 5-dicarboxylic acid (IV) were obtained. Formation of rubber-like copolymers was also noted. Diamines were obtained by reduction of dinitriles of IV by Na in alcohol.

A. L. H.

1. Moskovskiy gosudarstvennyy universitet.
(Acrylonitrile)



YASHUNSKII, V. G.

3

V "Complexon-IV" and its analogs. V. G. Yashunskii and M. N. Shchukina. *Khim. Nauka i Prom.* 2, 662–3 (1957).—*cis*- (I) and *trans*- (II) -1,2-Diaminocyclohexane were prepd. The expected reaction of I with $ClCH_2CO_2H$ (cf. Schwartzenbach, *et al.*, *C.A.* 44, 648c) did not take place. On the other hand II reacted, giving, *1,2-diaminocyclohexane-N,N,N',N'-tetraacetic acid* (III), the properties of which were identical with those of "complexon-IV" which S. believed was the cis isomer. The *trans-1,2-diaminocyclopentane-N,N,N',N'-tetraacetic acid* (IV) and the corresponding *butane* analog (V) were prepd. by condensation of the respective diamine with $ClCH_2CO_2H$. The values of pK_1, pK_2, pK_3, and the stability consts. of the complex CaX^- of IV were 2.4, 3.3, 7.56, 10.80, and 12.2; and of V 2.7, 2.8, 5.80, 9.75, and 8.0. The corresponding values of ethylenediamine-*N,N,N',N'*-tetraacetic acid (given for comparison) were 1.966, 2.672, 6.161, 10.26, and 10.59. V was the least stable. It was concluded that the essential factor for increased stability of the internal complex of metalocycles was that the amino groups be close to each other and that their free rotation about the C1–C-2 bond be hindered.

I. Bencowitz

YASHUNSKIY, V.G.; PAVLOV, L.N.; YERMOLAYEVA, V.G.; SHCHUKINA, M.N.

By-product of the condensation of isonicotinic acid and hydrazine hydrate. Med.prom. 11 no.12:38-40 D '57. (MIRA 11:2)

1. Vsesoyuznyy nauchno-issledovatel'skiy khimiko-farmatsevticheskiy institut imeni S.Ordzhonikidze.
(ISONICOTINIC ACID) (HYDRAZINE) (TRIAZOLE)

AUTHORS: Yashunskiy, V. G., and Vasilyeva, V. F.

TITLE: Syntheses of Cyclopentanonecarboxylic Acids (Sintezy v ryadu tsiklopentanonkarbonovykh kislot)

PERIODICAL: Zhurnal Obshchey Khimii, 1957, Vol. 27, No. 1, pp. 273-277 (U.S.S.R.)

ABSTRACT: Using diethyl ether of adipic acid as a base and applying the F. Scrm method (3), the authors synthesized a certain ester and condensed it with ethyl ether of gamma-bromovaleric acid. The ketodiester yield was low because of apparent low activity of the bromester. It became possible to attach the side chain to the ester by using ethyl ether of gamma-brom-beta-ethylacrylate in which the Br atom is more mobile due to the presence of the double bond in allyl position. The unsaturated ester was obtained from the reaction of bromsuccinimide with ethyl ether of beta-ethylacrylate in the presence of benzoyl peroxide. Condensation of both esters yielded an unsaturated keto diester which by hydrogenation was converted into another ester and then through saponification and esterification into still another type of ester. The following stage - condensation of this last ester - with cyanacetic acid in the presence of potassium ethylate - produced low yields, probably because of the

sharply reduced reactivity of the keto group of the cyclopentane ring.
The reduced activity of the keto group is explained by the presence in both alpha-carbon atoms of substitutes one of which appeared to be secondary.
There are 8 non-Slavic references.

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

PRESENTED BY:

SUBMITTED: January 30, 1956

AVAILABLE:

Card 2/2

VASIL'YEVA, V.F.; YASHUNSKIY, V.G.

Sulfonation of sydnones. Khim. nauka i prom. 3 no.2:282-283 '58.
(MIRA 11:6)

1. Vsesoyuznyy nauchno-issledovatel'skiy khimiko-farmatsevticheskiy institut im. S.Ordzhonikidze.

(Sydnones) (Sulfonation)

YASHUNSKIY, V. G.,

79-1-48/63

AUTHORS: Yashunskiy, V. G., Shchukina, M. N.

TITLE: Compounds With Complex-Forming Properties (Veshchestva s kompleksoobrazuyushchey sposobnost'yu) I. Synthesis and Structure of "Complexon IV", i.e. 1,2-Diaminocyclohexane--N,N,N',N'-Tetraacetic Acid (I. Sintez i struktura "Kompleksona - IV" - 1,2-diaminotsiklogeksan-N,N,N',N'-tetrauksusnoy kisloty)

PERIODICAL: Zhurnal Obshchey Khimii, 1958, Vol.28, Nr 1, pp.230-234(USSR)

ABSTRACT: The methods described in publications (references 4, 5, 6) are little applicable to the synthesis of 1,2-diaminocyclohexane-N,N,N',N'-tetraacetic acid (formula I), because they give small yields. The authors worked out a more convenient synthesis of this compound by starting from the accessible dimethyl-(or diethyl-)-phthalate. They used Wieland's papers (reference 4) according to which this compound is synthesized from the dihydrazide of cyclohexane-dicarboxylic acid-1,2 (III) according to Curtius. According to the suggested scheme

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79-1-48/63

Compounds With Complex-Forming Properties. I. Synthesis and Structure of "Complexon IV", i.e. 1,2-Diaminocyclohexane-N,N,N',N'-Tetraacetic Acid

the synthesis of "complexon IV" is performed in four stages (the reaction process is given in formulae). The hydrogenation of dimethylphthalate takes place over a nickel catalyst below 50 - 10 atm. at 110 - 140°C without a solvent. On several hours heating the compound (III) is obtained from the hexahydroester with an excess of hydrazine-hydrate. Compound (III) is according to Curtius converted to the dichlorohydrate of 1,2-diaminocyclohexane (II). The final product (I) then results by the influence of monochloracetic acid upon the dichlorohydrate of diamine in the presence of alkali and in all aspects corresponds to "complexon - IV" described in publications. The authors finally succeeded in proving that this "complexon IV" disposes of a trans- and not a cis-trans-figuration as several scientists had maintained. There are 2 tables, and 9 references, 2 of which are Slavic.

SUBMITTED: December 19, 1956

AVAILABLE: Library of Congress

Card 2/2 1. Chemistry 2. Cyclic compounds-Synthesis

79-28-4-45/60

AUTHOR: Yashunskiy, V. G.

TITLE: Substances With Complex-Forming Properties (Veshchestva s kompleksoobrazuyushchey sposobnost'yu) II. Trans-1,2-Diaminocyclopentane-N,N,N',N'-Tetraacetic Acid and Trans-1,2-Diaminocyclobutane-N,N,N',N'-Tetraacetic Acid (II. Trans-1,2-diaminotsiklopentan-N,N,N',N'-tetrauksusnaya kislota i trans-1,2-diaminotsiklobutan-N,N,N',N'-tetrauksusnaya kislota)

PERIODICAL: Zhurnal Obshchey Khimii, 1958, Vol. 28, Nr 4, pp. 1056-1059 (USSR)

ABSTRACT: The author showed in an earlier publication (ref 1) that the "complexon IV" - 1,2-diaminocyclohexane-N,N,N',N'-tetraacetic acid (I) possesses trans-configuration. In order to investigate the influence of the structure of the complexons on the capability of forming complexes the author synthesized the analogous compounds, most closely connected with compound (I), which were not described in publications: Trans-1,2-diamino-cyclopentane-N,N,N',N'-tetraacetic acid (II) and trans-1,2-diaminocyclobutane-N,N,N',N'-tetraacetic acid (III). The acid

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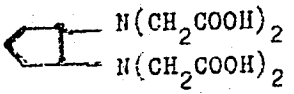
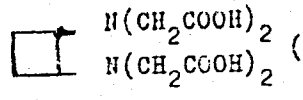
Substances With Complex-Forming Properties
II. Trans-1,2-Diaminocyclopentane-N,N,N',N'-Tetraacetic Acid and Trans-1,2-Diaminocyclobutane-N,N,N',N'-Tetraacetic Acid

of formula II crystallized with 1 molecule of crystal water which did not split off on heating in vacuum into 100°. The acid of formula III contains no crystal water.

(II)  $\cdot H_2O$  (III)

Both tetracarbonxylic acids were obtained by condensation of the corresponding diaminehydrochloride with monochloroacetic acid in the presence of lye. The dihydrochloride of trans-1,2-diaminocyclopentane was synthesized from the ethyl ester of cyclopentanone-2-carbonic acid by conversion into the nitroso compound, formation of dioxim and its reduction with metallic sodium in alcohol (ref 2). The dihydrochloride of trans-1,2-diaminocyclobutane was produced according to Curtius' reaction from the dihydracide of trans-cyclobutane-dicarbonxylic acid (1,2), which was obtained from the corresponding diester

Substances With Complex-Forming Properties
II. Trans-1,2-Diaminocyclopentane-N,N,N',N'-Tetraacetic Acid and Trans-1,2-Diaminocyclobutane-N,N,N',N'-Tetraacetic Acid

(ref 3). The potentiometric titration of both tetracarboxylic acids in the presence and in the absence of calcium ions showed that these complexons according to their properties are closely connected with compound (I), and also supply stable intra-complex salts, especially with calcium. These compounds have the composition CaX^{2-}(X... residueof tetra-carboxylic acid). Based on the potentiometric titration the dissociation constants and the stability constants of the calcium complexes of the synthesized complexons could be computed. They are mentioned in the paper. It was found out that at least two factors cause an increase of stability of similarly built intra-complex metallic compounds: the approach of the amino groups in the molecule of the diamine and its free versatility with respect to the irbinding C_1-C_2. In the compound I the cyclohexane ring causes an approach of the amino groups. Therewith the possibility of

Substances With Complex-Forming Properties
II. Trans-1,2-Diaminocyclopentane-N,N,N',N'-Tetraacetic Acid and Trans-1,2-Diaminocyclobutane-N,N,N',N'-Tetraacetic Acid

mixing these groups with each other is essentially decreased. Nevertheless it takes place because the cyclohexane ring can appear as "tub" and as "chair". In the compound II the plane cyclopentane ring causes a retirement of the amino groups from each other however, they remain stably bound. As was shown in the experimental example with Ca^{2+} ions, the compounds I and II possess about the same complex-forming properties, in compound III the amino groups are still further distanced from each other, whilst there is an random free versatility.
The potentiometric titration in the presence of calcium ions showed that the value of the stability constants of the calcium complex of compound III is essentially lower than in compound I.
The syntheses mentioned in the paper described in an experimental part.
There are 1 figure, 2 tables, and 4 references, 1 of which is Soviet

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79-28-4-45/60

Substances With Complex-Forming Properties
II. Trans-1,2-Diaminocyclopentane-N,N,N',N'-Tetraacetic Acid and Trans-1,2-Diaminocyclobutane-N,N,N',N'-Tetraacetic Acid

ASSOCIATION: Vsesoyuznyy nauchno-issledovatel'skiy khimiko-farmatsevticheskiy institut
(All-Union Chemical Pharmaceutical Scientific Research Institute)

SUBMITTED: February 7, 1957

Card 5/5

AUTHOR: Yashunskiy, V. G. 79-28-5-56/69

TITLE: Substances With Complex-Forming Capabilities (Veshchestva s kompleksoobrazuyushchey sposobnost'yu) III. Cis-1,2-Diaminocyclohexane (III. Tsis-1,2--diaminotsiklogeksan)

PERIODICAL: Zhurnal Obshchey Khimii, 1958, Vol. 28, Nr 5, pp. 1361-1364 (USSR)

ABSTRACT: Earlier (reference 1) the author showed that the "complexon-IV" represents the trans-1,2-diaminocyclohexane--N, N, N', N'-tetraacetic acid and that it is obtained by the condensation of trans-1,2-diaminocyclohexane with monochloracetic acid. It was of interest to synthetize the cis-isomer of the mentioned "complexon". However, there had been no data in publications on the presence of a cis-1,2-diaminocyclohexane from which this complexon could be obtained. Just the very moment when the given work was finished, a short report was published (reference 2) on the synthesis of the cis-1,2-diaminocyclohexane by cleavage of the cis-hexahydrobenzimidazolon (reference 3).

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Substances With Complex-Forming Capabilities 79-28-5-56/69
III. Cis-1,2-Diaminocyclohexane

In the present work the synthesis of the cis-1,2--diaminocyclohexane is described according to the reaction by Curtius (Kurtsiusa) as well as according to the reaction by Shmidt (reference 1) (see reaction scheme). It was found that under the action of the hydrazine hydrate on the esters of the cis- and trans--cyclohexanedicarboxylic acids-1,2 on heating up to 120 - 130° C only the dihydrazide of the trans--cyclohexanedicarboxylic acid-1,2 is formed. The cis-dihydrazide is only obtained at room temperature. After the reaction according to Curtius the cis-1,2-diaminocyclohexane was obtained from the cis-dihydrazide of the cyclohexanedicarboxylic acid-1,2; the former was characterized in more detail by its derivatives. The same compound was also synthetized according to Shmidt from cis-cyclohexanedicarboxylic acid. There are 7 references, 2 of which are Soviet.

Card 2/2 AV Sci. Chem Pharm Research Inst.

YASHUNSKIY, V.G.

Complexons and their use. Med.prom. 13 no.4:29-35 Ap '59.
(MIRA 12:6)

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

SAMOILOVOVA, V.G.; YERMOLAYEVA, V.G.; GORTINSKAYA, T.V.; YASHUNSKIY, V.G.; SHCHUKINA, M.N.

Synthesis of asterol and other derivatives of aminotoxibenzthiazoles. Med. prom. 13 no.5:23-26 My '59. (MIRA 12:7)

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

SOV/79-29-8-59/81

5(3)
AUTHORS: Yashunskiy, V. G., Vasil'yeva, V. F., Tikhonova, L. I., Shchukina, M. N.

TITLE: Substances With a Complex-forming Capacity. IV. Trans-1,2-diaminocyclohexene- and 1-Phenylethylenediamine-N,N,N',N'-tetraacetic Acids

PERIODICAL: Zhurnal obshchey khimii, 1959, Vol 29, Nr 8, pp 2709 - 2712 (USSR)

ABSTRACT: The authors previously reported on the synthesis and investigation of the complex-forming capacities of some alicyclic 1,2-diaminetetraacetic acids of a trans-configuration (Refs 1,2). In order to complement this series the compound (I) was synthesized. The initial product for the synthesis of this compound was the dimethyl ester of the cis-cyclohexene-(4)-dicarboxylic acid-1,2 obtained by the condensation of butadiene with the anhydride of maleic acid. When this cis-diester is heated with hydrazine hydrate without solvent the trans-dihydrazide forms (Ref 1). The latter was transformed according to Curtius into the dichlorohydrate of the hitherto

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unknown trans-1,2-diaminocyclohexene-(4) which was treated with an excess of chloroacetic acid in an alkaline medium which led to the compound (I). In order to investigate the influence of the substitutes on the complex-forming capacity of the complexons of the ethylenediaminetetraacetic acid series the compound (II) obtained from 1,2-diaminoethylbenzene by two different methods was synthesized (Ref 3, and Rodionov, Ref 4). The tetraacetic acid could only be synthesized by heating 1,2-diaminoethylbenzene with an excess of bromoacetic acid in the presence of caustic soda at 40°. Thus two compounds hitherto not described were synthesized: trans-1,2-diamino-cyclohexene-(4)-, and 1-phenylethylenediaminetetraacetic acid. The complex-forming capacity of the synthesized compounds was determined chromatographically (Ref 5) by way of comparison with ethylenediaminetetraacetic acid. By this method it was shown that the new complexons have a complex-forming capacity of the same order as ethylenediaminetetraacetic acid. The table shows the result of these chromatographic determinations.

Substances With a Complex-forming Capacity. IV. Trans-1,2-diaminocyclohexene- and 1-Phenylethylenediamine-N,N,N',N'-tetra-acetic Acids

SOV/79-29-8-59/81

The results of the investigation of complexon (II) show that the presence of the phenyl radical beside one of the amino groups of ethylenediaminetetraacetic acid has but little effect upon the complex-forming capacity. There are 1 table and 6 references, 5 of which are Soviet.

SUBMITTED: July 5, 1958

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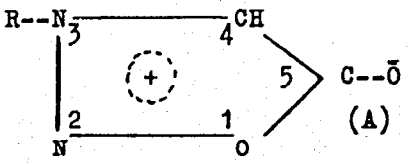
5(3) SOV/79-29-8-60/81

AUTHORS: Yashunskiy, V. G., Vasil'yeva, V. F., Sheynker, Yu. N.

TITLE: On the Aromatic Properties of Sydnones

PERIODICAL: Zhurnal obshchey khimii, 1959, Vol 29, Nr 8, pp 2712-2718 (USSR)

ABSTRACT: Among the so-called mesoine compounds the sydnones are of particular interest since they are highly reactive. Of special importance is their capacity of replacing the hydrogen in position 4 (Ref 2), especially by chlorine and bromine (Refs 2, 3).



On the strength of these data it was assumed that the sydnones are of aromatic nature. In the pentacyclic ring there are totally 7 π electrons in the state 2pZ; one of them may be given to the exocyclic oxygen atom so that a certain negative charge concentrates on it, while 6 π electrons remain in the ring which contains a great positive charge. These latter 6 π electrons form

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the aromatic system. However, experimental data hitherto obtained do not suffice to confirm this assumption. In this connection the present investigations were carried out. The authors sulphurized a series of sydnones with dioxan-sulphotrioxide in a dichloroethane solution at 20-40°. The reaction took place with the 3-phenyl-, 3-(p-methoxyphenyl)-, 3-(p-ethoxyphenyl)-, 3-(m-chlorophenyl)-, and 3-ethylsydnone. The three latter compounds have hitherto been unknown. They were obtained by reaction of the corresponding N-nitroso-α-amino acids with the anhydride of acetic acid. The treatment of the reaction mass after sulphurization was the usual one. The sulphonic acids were separated out in the form of their barium salts from which the benzylthiuronium derivatives of the acids were prepared. The second reaction characteristic of aromatic compounds which was carried out here was the mercurization reaction. During the treatment of the aqueous-alcoholic solution of the 3-phenylsydnone with $HgCl_2$ two compounds were separated:

4-chloro-(3-phenylsydnone)-mercury and di-4-(3-phenylsydnone)-mercury. During the mercurization of the 3-phenylsydnone with mercury acetate a considerable quantity of 4-acetatemercury-3-phenylsydnone was separated which was then transformed,

with salt solution, into the chloromercurysydnone and its symmetric derivative. The easiness with which the hydrogen atom in the sydnones can be replaced by the sulpho group and mercury thus confirms the aromatic nature of these compounds. Another factor which indicates an aromatic character are the infrared absorption spectra of the sydnones. The presence of the spectral bands corresponding to the carbonyl group is therefore not in agreement with the structural formula of the sydnones hitherto assumed. There are 1 figure and 7 references, 1 of which is Soviet.

ASSOCIATION: Vsesoyuznyy nauchno-issledovatel'skiy khimiko-farmatsevticheskiy institut imeni S. Ordzhonikidze (All-Union Scientific Chemo-pharmaceutical Research Institute imeni S. Ordzhonikidze)

SUBMITTED: July 5, 1958

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77924
SOV/79-30-2-75/78

AUTHORS: Vasil'yeva, V. F., Yashunskiy, V. G., Shchukina, M. N.

TITLE: Letters to the Editor. Concerning the Reaction of Sydnones With Derivatives of α, β-Unsaturated Acids

PERIODICAL: Zhurnal obshchey khimii, 1960, Vol 30, Nr 2, p 698 (USSR)

ABSTRACT: Sydnones on heating with nitriles and esters of α, β-unsaturated acids undergo cleavage and yield derivatives of pyrazoline and pyrazole, accompanied by evolution of the carbon dioxide. while the reaction of sydnones with unsaturated esters yields esters of substituted pyrazolinecarboxylic acids, the reaction of sydnones with nitriles yields only substituted pyrazoles. In both cases, probably, the formation of esters or nitriles of substituted pyrazolinecarboxylic acids takes place. However, the cyano group in these

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Letters to the Editor. Concerning the Reaction of Sydnones With Derivatives of α, β-Unsaturated Acids

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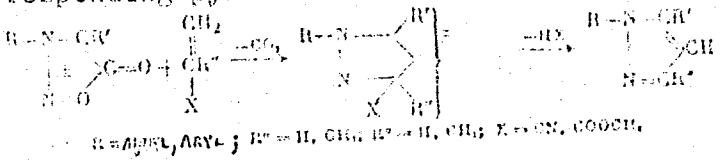
compounds is easily removed by heating; this causes the conversion of cyanopyrozolines into corresponding pyrazoles.



R = Alkyl, Aryl; R' = H, CH3; R'' = H, CH3; X = CN, COOCH3

The addition of derivatives of unsaturated conjugated acids to sydnones occurs in such a way that the β-carbon atom of ethylene bond is directed toward the carbon atom of sydnone, and α-atom of the same bond, toward the unsubstituted nitrogen atom. Heating 3-phenylsydnone with excess acrylonitrile yields 1-phenylpyrazole (yield 80%). The structure of the obtained compounds was confirmed by spectral analysis, as well as by comparison with literature data. There is 1 German reference.

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Letters to the Editor. Concerning the Reaction of Sydnones With Derivatives of α, β-Unsaturated Acids

77924
SOV/79-30-2-75/78

ASSOCIATION: S. Ordzhonikidze All-Union Scientific Research Chemical and Pharmaceutical Institute (Vsesoyuznyy nauchno-issledovatel'skiy khimiko-farmatsevticheskiy institut imeni S. Ordzhonikidze)

SUBMITTED: October 26, 1959

Card 3/3

YASHUNSKIY, V.G.; VASIL'YEVA, V.F.

Synthesis of 3-isopropyl- and 3-phenylisopropylsydnones and of the corresponding substituted hydrazines. Zhur.ob.khim. 30 no.8:2754-2756 Ag '60. (MIRA 13:8)

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

S/079/60/030/012/006/027
B001/B064

AUTHORS: Yashunskiy, V. G., Smolin, D. D., Yermolayeva, V. G., and Shchukina, M. N.

TITLE: Substances Capable of Complex Formation. V. 2,2'-Diamino-diethyl Ether-N,N,N',N'-tetraacetic Acid

PERIODICAL: Zhurnal obshchey khimii, 1960, Vol. 30, No. 12, pp. 3916-3918

TEXT: The authors continue their studies (Ref. 2) of the synthesis of complexons by synthesizing 2,2'-diamino-diethyl ether-tetraacetic acid; this synthesis has hitherto not been described. It may, however, be assumed that this complex was obtained on the basis of data of an English patent (Ref. 3) from 2,2'-diamino-diethyl ether by carboxymethylation. Several experiments had failed before the complex was obtained by reacting 2,2'-diamino-diethyl ether. The diamino ether was obtained from 2,2'-dichloro diethyl ether with the diphthalimide derivative by the reaction of Gabriel (Ref. 4), however, the 2,2'-di(phthalimido)-diethyl ether was split off by boiling with an alcohol solution of hydrazine hydrate and subsequent treatment with hydrochloric acid which simplified the reaction and led to an

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abruptly increasing yield. The diamine was separated as dichloro hydrate and reacted with monochloro acetic acid. The reaction was normal and took place in alkaline medium (Ref. 2). Since it was not possible to precipitate tetra acid by acidifying the reaction mass, which is the case with some other complexons, two methods of precipitation were applied. The cationite KU-2 was used for the first one applied in the study of Ref. 5. By the latter method the reaction mixture was acidified until the acid reaction toward Congo red as indicator had been reached and, after the separation of sodium chloride from the solution, the monosodium salt of the complexon precipitated with methanol and purified by repeated precipitation with methanol from water. There are 6 references: 2 Soviet, 1 US, 1 Swiss, 1 German, and 1 British.

ASSOCIATION: Vsesoyuznyy nauchno-issledovatel'skiy khimiko-farmatsevticheskiy institut imeni S. Ordzhonikidze (All-Union Chemical and Pharmaceutical Scientific Research Institute imeni S. Ordzhonikidze)

SUBMITTED: January 11, 1960

YASHUNSKIY, V.G.; SHCHUKINA, M.N.; YERMOLAYEVA, V.G.; SAMOYLOVA, O.I.

Synthesis of imizine hydrochloride, N-(3-dimethylaminopropyl)-iminodibenzyl. Med. prom. 15 no.12:10-13 D '61. (MIRA 15:2)

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

TREGUBENKO, I.P.; YASHUNSKIY, V.G.; SEMENOV, D.I.

Accelerating the elimination of yttrium, cerium, and lead from the organism with the aid of ethylenediaminetetraacetic acid, diethylenetriaminepentaacetic acid and the diamindiethyl ester of tetraacetic acid. Biokhimiia 26 no. 1:177-187 Ja-F '61. (MIRA 14:2)

1. Laboratory of Biophysics, Institute of Biology, the Ural Branch of Academy of Sciences of the U.S.S.R., Sverdlovsk, and Union Research Chemo-Pharmaceutic Institute, Moscow.
(ACETIC ACID) (METALS IN THE BODY) (EXCRETION)

VASIL'YEVA, V.F.; YASHUNSKIY, V.G.; SHCHUKINA, M.N.

Formation of substituted pyrazoles in the reaction of sydnones with α,β-unsaturated nitriles. Zhur.ob.khim. 31 no.5:1501-1504 My '61. (MIRA 14:5)

1. Vsesoyuznyy nauchno-issledovatel'skiy khimiko-farmatsevticheskiy institut imeni S.Ordzhonikidze.
(Pyrazole) (Nitrile) (Sydnone)

YASHUNSKIY, V.G.; SAMOYLOVA, O.I.; SHCHUKINA, M.N.

Substances with complex-forming properties. Part 6: Synthesis of cyclic analogs of nitrilotriactic and ethylenodiaminotetraacetic acids. Zhur.ob.khim. 31 no.7:2316-2321 Jl '61. (MIRA 14:7)

1. Vsesoyuznyy nauchno-issledovatel'skiy khimiko-farmatsevticheskiy institut imeni S. Ordzhonikidze.
(Acetic acid) (Ring formation)

YASHUNSKIY, V.G.; SIDORENKO, V.V.

2-Aminothiazolediacetic acid and 2-amino-6-methocybenzothiazolediacetic acid. Met. poluch. khim. reak. i prepar. no.6:80-82 '62. (MIRA 17:5)

1. Vsesoyuznyy nauchno-issledovatel'skiy institut khimicheskikh reaktivov i osobo chistykh khimicheskikh veshchestv.

YASHUNSKIY, V.G.; PERESLENI, Ye.M.; SHEYNKER, Yu.N.

Spectroscopic study of the structure and properties of sydnone imines. Izv. AN SSSR. Ser.fiz. 26 no.10:1295-1298 '62. (MIRA 15:10)

1. Vsesoyuznyy nauchno-issledovatel'skiy khimiko-farmatsevticheskiy institut im. S.Ordzhonikidze.
(Sydnone imine--Spectra)

YASHUNSKIY, V.G.; YERMOLAYEVA, V.G.

Sydnones and sydnone imines. Part 7: 3-Isopropyl- and 3-cyclohexylsydnone imines and sulfanylamino derivatives of the sydnone imine series. Zhur. ob. khim. 32 no.1:186-191 Ja '62. (MIRA 15:2)

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

YASHUNSKIY, V.G.; VASIL'YEVA, V.F.; KHOLODOV, L.Ye.; SHCHUKINA, M.N.

Sydnones and sydnone imines. Part 8: Polymethylene-bis-3-sydnone imines. Zhur. ob. khim. 32 no.1:192-195 Ja '62. (MIRA 15:2)

1. Vsesoyuznyy nauchno-issledovatel'skiy khimiko-farmatsevticheskiy institut imeni S.Ordzhonikidze,
(Sydnone imine)

YASHUNSKIY, V.G.; KHOLODOV, L.Ye.

Sydnones and sydnone imines. Part 9: Study of the formation of 4,4'-dimethylethylene-bis-3-sydnone imine. Zhur.ob.khim. 32 no.3:865-869 Mr '62. (MIRA 15:3)

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

VASIL'YEVA, V.F.; YASHUNSKIY, V.G.; SHCHUKINA, M.N.

Sydnones and sydnone imines. Part 10: Reaction of 3-phenyl- and 3-phenyl-4-methylsydnones with methyl acrylate. Zhur.ob. khim. 32 no.5:1446-1451 My '62. (MIRA 15:5)

1. Vsesoyuznyy nauchno-issledovatel'skiy khimiko-farmatsevticheskiy institut imeni S.Ordzhonikidze.
(Sydnone) (Acrylic acid)

YASHUNSKIY, V.G.; SHEYNKER, Yu.N.

Sydnones and sydnone imines. Part 11: Study of the structure of sydnone imines by means of infrared spectra. Zhur.ob.khim. 32 no.5:1681-1687 My '62. (MIRA 15:5)

1. Vsesoyuznyy nauchno-issledovatel'skiy khimiko-farmatsevticheskiy institut imeni S.Ordzhonikidze.
(Sydnone imine--Spectra)

YASHUNSKIY, V.G.; PERESLENI, Ye.M.

Sydnones and sysnone imines. Part 12: Ultraviolet spectra of sydnone imines. Zhur.ob.khim. 32 no.5:1687-1690 My '62. (MIRA 15:5)

1. Vsesoyuznyy nauchno-issledovatel'skiy khimiko-farmatsevticheskiy institut imeni S.Ordzhonikidze.
(Sydnone imine--Spectra)

VASIL'YEVA, V.F.; YASHUNSKIY, V.G.

Sydnones and sydnone imines. Part 13: Interaction of 3-methyl- and 3-ethysydnones with methyl ester of acrylic acid. Zhur.ob.khim. 32 no.9:2888-2893 S '62. (MIRA 15:9)

1. Vsesoyuznyy nauchno-issledovatel'skiy khimiko-farmatsevticheskiy institut imeni S. Ordzhonikidze.
(Sydnone) (Acrylic acid)

YASHUNSKIY, V.G.; VASIL'YEVA, V.F.; SHCHUKINA, M.N.

Reactions of sydnones with unsaturated compounds. Zhur.ob.khim. 32 no.9:3107 S '62. (MIRA 15:9)
(Sydnone) (Unsaturated compounds)

YASHUNSKIY, V.G.; SAMOYLOVA, O.I.; DYATLOVAM N.M.; LAVROVA, O.Yu.

Substances with complex-forming capacity. Part 7: N,N,S-mercaptoethylaminotriacetic acid. Zhur.ob.khim. 32 no.10:3372-3378 O '62. (MIRA 15:11)

1. Vsesoyuznyy nauchno-issledovatel'skiy khimiko-farmatsevticheskiy institut imeni S. Ordzhonikidze i Vsesoyuznyy nauchno-issledovatel'skiy institut khimicheskikh reaktivov.
(Acetic acid) (Complex compounds)

YASHUNSKIY, V.G.; KHOLODOV, L.Ye.

Sydnones and sydnone imines. Part 14: Synthesis of p-phenylene-bis-3-sydnone and 3-sydnone imine. Zhur.ob.khim. 32 no.11:3661-3665 N '62. (MIRA 15:11)

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

YASHUNSKIY, V. G.

Sydnones and sydnone imines. Part 15: Synthesis of 3-(dialkylaminoalkyl)sydnone imines. Zhur. ob. khim. 33 no.1:192-195 '63. (MIRA 16:1)

1. Vsesoyuznyy nauchno-issledovatel'skiy khimiko-farmatsevticheskiy institut imeni S. Ordzhonikidze.

(Sydnone imine)

MAYRANOVSKIY, V.G.; KHOLODOV, L.Ye.; YASHUNSKIY, V.G.

Sydnones and sydnone imines. Part 16: Polarographic investigation of sydnone imines. Zhur.ob.khim. 33 no.2:347-353 F '63. (MIRA 16:2)

1. Vsesoyuznyy nauchno-issledovatel'skiy khimiko-farmatsevticheskiy institut imeni S.Ordzhonikidze.
(Sydnone imine) (Polarography)

KHOLODOV, L.Ye.; YASHUNSKIY, V.G.

Sydnones and sydnone imines. Part 17: Opening of the ring of sydnone imines under the effect of hydrochloric acid. Zhur. ob.khim. 33 no.10:3409-3412 O '63. (MIRA 16:11)

1. Vsesoyuznyy nauchno-issledovatel'skiy khimiko-farmatsevticheskiy institut imeni S.Ordzhonikidze.

VASIL'YEVA, V.F.; YASHUNSKIY, V.G.

Interaction of N-acyl derivatives of sydnone imines with acrylonitrile. Zhur.ob.khim. 34 no.2:702-703 F '64. (MIRA 17:3)

1. Vsesoyuznyy nauchno-issledovatel'skiy khimiko-farmatsevticheskiy institut imeni S.Ordzhonikidze.

YASHUNSKIY, V.G.; FEDOROVICH, V.S.; KHOLODOV, L.Ye.

Synthesis of 3-alkyl sydnone imines. Zhur. VKHO 8 no.5: 583-584 '63. (MIRA 17:1)

1. Vsesoyuznyy nauchno-issledovatel'skiy khimiko-farmatsevticheskiy institut imeni Sergo Ordzhonikidze.

YASHUNSKIY, V. G.; SAMOYLOVA, O. I.; KHOLODOV, L. Ye.

Sydnones and sydnone imines. Part 21: Salt-forming properties of N.-acyl derivatives of sydnone imines. Zhur. ob. Khim. 34 no.6:2050-2058 Je '64. (MIRA 17:7)

1. Vsesoyuznyy nauchno-issledovatel'skiy khimiko-farmatsevticheskiy institut imeni S. Ordzhonikidze.

VASIL'YEVA, V. F.; YASHUNSKIY, V. G.

Sydnones and sydnone imines. Part 22: Reaction of vinyl ethers with 3-phenylsydnone. Zhur. ob. Khim. 34 no.6:2059-2061 Je '64. (MIRA 17:7)

1. Vsesoyuznyy nauchno-issledovatel'skiy khimiko-farmatsevtskiy institut imeni S. Ordzhonikidze.

CHERNOV, V.A.; YASHUNSKIY, V.G.

Antiblastic activity of sydnone imines in vitro. Dokl. AN SSSR 155 no.1:216-219 Mr '64. (MIRA 17:4)

1. Vsesoyuznyy nauchno-issledovatel'skiy khimiko-farmatsevticheskiy institut im. S.Ordzhonikidze. Predstavleno akademikom M.M. Shemyakinym.

YASHUNSKIY, V.G.; FEDOROVICH, V.S.

Sydnones and sydnone imines. Part 23: Bromination of sydnone imines. Zhur. ob. khim. 34 no.9:3075-3078 S '64. (MIRA 17:11)

1. Vsesoyuznyy nauchno-issledovatel'skiy khimiko-farmatsevticheskiy institut imeni S. Ordzhonikidze.

DYATLOVA, N.M.; SELIVERSTOVA, I.A.; YASHUNSKIY, V.G.; SAMOYLOVA, O.I.; Prinimala uchastiye Dobrynina, N.A.

Complexons. 1,3-Diaminopropanol-2-N,N,N'N'-tetraacetic acid. Zhur. ob. khim. 34 no.12:4003-4007 D '64 (MIRA 18:1)

1. Vsesoyuznyy nauchno-issledovatel'skiy institut khimicheskikh reaktivov i osobo chistykh khimicheskikh veshchestv "IREA" i Vsesoyuznyy nauchno-issledovatel'skiy khimiko-farmatsevticheskiy institut im. Ordzhonikidze.

KHOLODOV, L.Ye.; YASHUNSKIY, V.G.

Syndnones and sydrone iamines. Part 27: Kinetics and mechanism of thermal and hydrolytic splitting of syndrone imine chlorides. Zhur. ob. khim. 35 no.9:1551-1561 S '65. (MIRA 18:10)

1. Vsesoyuznyy nauchno-issledovatel'skiy khimiko-farmatsevticheskiy institut imeni S.Ordzhonikidze.

KHOLODOV, L.Ye.; YASHUNSKIY, V.G.

Sydnones and sydnone imines. Part 28: 4-Aryl-substituted sydnone imines. Zhur. org. khim. 1 no.11:2063-2068 N '65. (MIRA 18:12)

1. Vsesoyuznyy nauchno-issledovatel'skiy khimiko-farmatsevticheskiy institut imeni S. Ordzhonikidze. Submitted July 27, 1964.

YASHUNSKIY, V.G., doktor khim. nauk

Complex-forming agents and their use in medicine. Zhur. VKHO 10 no. 6:679-683 '65 (MIRA 19:1)

ZOTOVA, S.A.; YASHUNSKIY, V.G.

Sydnones and sydnone imines. Part 30: Sydnone-4-carboxylic acids and their derivatives. Zhur. org. khim. 1 no. 12: 2218-2222 D '65 (MIRA 19:1)

1. Vsesoyuznyy nauchno-issledovatel'skiy khimiko-farmatsevticheskiy institut imeni Ordzhonikidze. Submitted December 28, 1964.

DYATLOVA, N.M.; YASHUNSKIY, V.G.; SIDORENKO, V.V.; LAVROVA, O.Yu.; LASTOVSKIY, R.P.

Synthesis and study of new complexons containing heteroatoms in cyclic compounds. Trudy IREA no.25:83-90 '63.

Synthesis and study of new selective ion-exchange resins. Ibid.:91-99

(MIRA 18:6)

KHOLODOV, L.Ye.; ALEKSEYEV, V.V.; YASHUNSKIY, V.G.

Polarography of N-nitroso-N-substituted α-amino nitriles, initial compounds in the synthesis of sydnone imines. Zhur.fiz.khim. 39 no.7:1566-1571 Jl '65. (MIRA 18:8)

1. Vsesoyuznyy nauchno-issledovatel'skiy khimiko-farmatsevticheskiy institut.

YASHUTKIN, G.F.

KLIMOVITSKIY, Z.L., inzh.; MEL'NIKOV, L.A. inzh.; YASHUTKIN, G.F., inzh.

Automatic welding of steam turbine diaphragms in a protective atmosphere of carbon dioxide. Svar.proizv. no.11:46-49, 3 of cover N '57. (MIRA 10:12)

1. Bryanskiy mashinostroitel'nyy zavod.
(Steam turbines--Welding) (Protective atmospheres)

BETANELI, A.M., kand. med. nauk; BESHKENADZE, G.Ye.; YASHVILI, A.A.

Removal of the transverse colon in a patient following stomach resection performed by the Hofmeister-Finsterer method. Khirurgiia 38 no.12:108-109 D '62. (MIRA 17:6)

1. Iz khirurgicheskogo otdeleniya Kutaysskoy gorodskoy bol'nitsy No.2 (glavnyy vrach A.S. Dzotsenidze).

YASHVILI, A. I.

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Nopyye priyemy proyektirovaniya sostavov gidrotyekhni p chyeskcgo byetona. Trudy IV Vsyesoyuz. konf - tsii po byeony I Zhyelepobyeon. Konstruktsiyam. Ch. 3. M.L. 1949, s. 166 - 72

4. Energyetika

A. Obshchiye voprosy. Tyeplotyekhnika v tsyelom

SO. LETOPIS No. 34

YASHVILI, B.P.

Cytological examination of a burned surface. Soob.AN Gruz.SSR 23 no.4:493-500 O '59. (MIRA 13:5)

1. Nauchno-issledovatel'skiy institut perelivaniya krovi imeni G.M.Nukhadzе, Tbilisi. Predstavleno akademikom K.D. Eristavi.
(BURNS AND SCALDS)

YASHVILI, G. I.

USSR/ Chemical Technology. Chemical Products and Their Application. Pesticides I-7

Abs Jour : Referat Zhur - Khimiya, No 4, 1957, 12408

Author : Goguadza V.P., Pkhiedze T.A., Enukidze I.Ya., Yashvili G. I.

Inst : Tbilisi Chemico-Pharmaceutical Scientific Research Institute

Title : Concerning the Isolation of a Concentrated Light Insecticidal Preparation from Pyrethrum (Chrysanthemum cinerariaefolium).

Orig Pub : Sb. tr. Tbilissk. n.-i. khim.-farmatsevt. in-ta, 1955, 7, 123-132

Abstract : Description of the recovery of the oleoresin (I) from dried flowers of Dalmatian daisy with anhydrous dichlorethane (II) at room temperature and at the boiling temperature of II. Ca chloride (III), placed in the current of boiling I decreases the activity of I, while

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Abs Jour : Referat Zhur - Khimiya, No 4, 1957, 12408

blue vitriol (BV) and tikha-askane clay (TA) enhance its activity. With TA an insecticidal dust is also obtained. Treatment with isoamyl alcohol or methanol (IV) in the presence of BV resulted in lowering of the activity of I, while IV used in the presence of III increases the activity. Alcoholic solutions are clarified with basic Pb acetate.

YASHVILI, G.M.

YASHVILI, G.M. -- "Some Investiations in the Chemistry of N-Substituted Carbohydrates." Published by the Georgian State Publishing House for Medical Literature, Azerbaydzhan State U imeni S.M. Kirov. Tbilisi, 1955
(Dissertation for the Degree of Candidate in Chemical Sciences.)

SO: Knizhnaya Letopis', No 9, 1956

USSR/Chemical Technology - Chemical Products and Their Application. Fats and Oils. Waxes. Soap. Detergents. Flotation Reagents. I-10

Abs Jour : Ref Zhur - Khimiya, No 1, 1958, 2738

Author : Gogudze, V.P., Yashvili, G.M.
Inst : -
Title : Preparation of Foaming Agents by Condensation of Starch Degradation Products with Amines and Amino Acids.

Orig Pub : Zh. prikl. khimii, 1957, 30, No 4, 618-623

Abstract : A study was made of the possibility of synthesizing new kinds of foaming agents by interaction of carbonyl groupings with amino group so as to combine hydrophobic and hydrophilic portions of the molecules of the surface active agent. It was found that interaction of starch degradation products with aniline and O-amino benzoic acid, at 180°, results in the formation of surface-active condensation products that are foaming agents the

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USSR/Chemical Technology - Chemical Products and Their Application. Fats and Oils. Waxes. Soap. Detergents. Flotation Reagents. I-10

Abs Jour : Ref Zhur - Khimiya, No 1, 1958, 2738

frothing properties of which are similar to those of the saponins derived from tea seed and licorice root.

TBILISSKIY NAUCHNO-ISSLEDOVATEL'SKIY KHIMIKO-FARMATSEVTICHESKIY INST.

Card 2/2

YASHVILI, G.V.

Promising species of parasitic fungi of the genus Ascherscnia. Zashch.rast. ot vred. i bol. 9 no.11:46-47 '64.
(MIRA 18:2)

1. Zaveduyushchiy biologicheskoy laboratoriyey Gruzinskogo instituta zashchity rasteniy.