"APPROVED FOR RELEASE: 06/09/2000 CIA-RDP86-00513R000307920020-8

SHEVERDYAYEVA, V.M.; BYSTROV, S.P.

Determination of arsenic in arrhenal. Apt. delo 10 no.4:42-45 Jl-Ag '61. (MIRA 14:12)

1. Farmatsevticheskiy fakul'tet I Moskovskogo ordena Lenina meditsinskogo instituta.

(ARSENIC--ANALYSIS)

APPROVED FOR RELEASE: 06/09/2000 CIA-RDP86-00513R000307920020-8"

"APPROVED FOR RELEASE: 06/09/2000 CIA-RDP86-00513R000307920020-8

BYSTROV, S.P.; VARAKINA, A.F.

Production technology for BLO tablets. Apt. delo 11 no.2:57-60 Mr-Ap '62. (MIRA 15:5)

1. Farmatsevticheskiy fakul'tet I Moskovskogo ordena Lenina meditsinskogo instituta imeni I.M.Sechenova.
(TABLETS (MEDICINE)) (ARSENIC OXIDES)

APPROVED FOR RELEASE: 06/09/2000 CIA-RDP86-00513R000307920020-8"

"APPROVED FOR RELEASE: 06/09/2000 CIA-RDP86-00513R000307920020-8

SHEVERDYAYEVA, V.M.; BYSTROV, S.P.

Determination of arsenic in myarsenol and novarsenol. Apt. delo. 11 no.5:71-74 S-O '62. (MIRA 17:5)

1. Farmatsevticheskiy fakul'tet I Moskovskogo ordena Lenina meditsinskogo instituta imeni Sechenova.

APPROVED FOR RELEASE: 06/09/2000 CIA-RDP86-00513R000307920020-8"

"APPROVED FOR RELEASE: 06/09/2000 CIA-RDP86-00513R000307920020-8

BYSTROV, S.P.

Iodometric indicators. Apt. delo 12 no.5:44-50 S-O'63
(MIRA 16:11)

1. Farmatsevticheskiy fakul'tet I Moskovskogo ordena Lenina meditsinskogo instituta imeni I.M.Sechenova.

APPROVED FOR RELEASE: 06/09/2000 CIA-RDP86-00513R000307920020-8"

"APPROVED FOR RELEASE: 06/09/2000 CIA-RDP86-00513R000307920020-8

BYSTROV, S.P.; SHEVERDYAYEVA, V.M.

Denitration of sulfuric acid mineralizers in the determination of arsenic. Apt. delo 13 no.3:47-54 My-Je '64. (MIRA 18:3)

1. Farmatsevticheskiy fakul'tet I Moskovskogo ordena Lenina meditsinskogo instituta imeni Sechenova.

APPROVED FOR RELEASE: 06/09/2000 CIA-RDP86-00513R000307920020-8"

"APPROVED FOR RELEASE: 06/09/2000 CIA-RDP86-00513R000307920020-8

BIRYUKOVA, I.N.; BYSTROV, S.P.

Properties of the product of the interaction of arsenic hydride with mercury chloride.(II). Apt. delo 14 no. 4:53-55 Jl-Ag '65 (MIRA 19:1)

1. I Moskovskiy ordena Lenina meditsinskiy institut imeni I.M. Sechenova. Submitted January 7, 1965.

APPROVED FOR RELEASE: 06/09/2000 CIA-RDP86-00513R000307920020-8"

"APPROVED FOR RELEASE: 06/09/2000 CIA-RDP86-00513R000307920020-8

BYSTROV, S.S.

Diagnostic importance of transudates in the serous cavities in death from drowning; an experimental study. Sud.-med. ekspert.6 no.4:3-9 O-D'63 (MIRA 16:12)

1. Kafedra sudebnoy meditsiny (zav. - prof. A.G. Leont'yev) Leningradskogo pediatricheskogo meditsinskogo instituta.

APPROVED FOR RELEASE: 06/09/2000 CIA-RDP86-00513R000307920020-8"

"APPROVED FOR RELEASE: 06/09/2000 CIA-RDP86-00513R000307920020-8

BYSTROV, S. S.

"Application of Certain Physicochemical Methods in the Objective Study of Decomposition Processes in Corpses. (With a View to the Problems of the Forensic Medicine)." Leningrad Pediatric Medical Inst., Leningrad, 1955. (Dissertation for the Degree of Candidate in Medical Sciences)

SO: Knizhnaya Letopis', No. 22, 1955, pp 93-105

APPROVED FOR RELEASE: 06/09/2000 CIA-RDP86-00513R000307920020-8"

"APPROVED FOR RELEASE: 06/09/2000 CIA-RDP86-00513R000307920020-8

BYSTROV, S.S., kand. med. nauk.

Device for transporting radioactive preparations safely. Vest. rent. i rad. 33 no.6:69-70 N-D '58. (MIRA 12:1)

1. Iz kafedry sudebnoy meditsiny (zav. - prof. A.G. Leont'yev) Leningradskogo meditsinskogo pediatricheskogo instituta.
(RADIATION PROTECTION, appar. & instruments
appar. for transport of radioactive prep. (Rus))

APPROVED FOR RELEASE: 06/09/2000 CIA-RDP86-00513R000307920020-8"

"APPROVED FOR RELEASE: 06/09/2000 CIA-RDP86-00513R000307920020-8

BYSTROV, Sergey Vasil'yevich; ANTIPOV-KARATAYEV, I.N., otv.red.; BONCHKOVSKIY, F.N., otv.red.; BATALOVA, M.A., red.izd-va; FROLOV, P.M., tekhn.red.

[Sagging of loess-type soils in the Vakhsh Valley] Prosadochnye lessovidnye grunty (lessy) Vakhshkoi doliny. Stalinabad, Izd-vo Akad.nauk SSR, 1958. 139 p. (Akademiia nauk Tadzhikskoi SSR. Stalinabad. Trudy, vol. 96). (MIRA 12:12)
(Vakhsh Valley--Loess)

APPROVED FOR RELEASE: 06/09/2000 CIA-RDP86-00513R000307920020-8"

"APPROVED FOR RELEASE: 06/09/2000 CIA-RDP86-00513R000307920020-8

BYSTROV, V.

A brigade of industrial training school graduates. Pref.-tekh.obr. 13 no.6:27 Je '56. (MLRA 9:9)

1.Direktor shkoly fabrichno-zavodskogo obucheniya, no.7, Gor'kovskoy oblasti.
(Gorkiy Province--Technical education)

APPROVED FOR RELEASE: 06/09/2000 CIA-RDP86-00513R000307920020-8"

"APPROVED FOR RELEASE: 06/09/2000 CIA-RDP86-00513R000307920020-8

BYSTROV, V., kapitan 3 ranga

Through the mine fields. Voen.znan. 37 no.4:10-12 Ap '61. (MIRA 14:4)

(Mine sweepers)

APPROVED FOR RELEASE: 06/09/2000 CIA-RDP86-00513R000307920020-8"

"APPROVED FOR RELEASE: 06/09/2000 CIA-RDP86-00513R000307920020-8

BYSTROV, V., podpolkovnik

Powerful firepower of the Soviet Army. Voen. znan. 38 no.10:24-25 O '62. (MIRA 15:10)
(Russia—Army—Artillery)

APPROVED FOR RELEASE: 06/09/2000 CIA-RDP86-00513R000307920020-8"

"APPROVED FOR RELEASE: 06/09/2000 CIA-RDP86-00513R000307920020-8

ZAYKO, N. N;BYSTROV, V. D.

Experimental kinematographic investigation of thrombotic process. Doklady Akad. nauk SSSR 84 no. 5:1053-1055 11 June 1952. (CLML 22:3)

1. Presented by Academician A. I. Abrikosov 15 April 1952. 2. Institute of Experimental Medicine, Academy of Medical Sciences USSR.

APPROVED FOR RELEASE: 06/09/2000 CIA-RDP86-00513R000307920020-8"

"APPROVED FOR RELEASE: 06/09/2000 CIA-RDP86-00513R000307920020-8

ACCESSION NR: AP4025414 S/0029/64/000/003/0014/0014

AUTHOR: By*strov, V.

TITLE: In the air - a miniature helicopter

SOURCE: Tekhnika molodezhi, no. 3, 1964, 14

TOPIC TAGS: jet helicopter, miniature helicopter

ABSTRACT: As an example of the scientific work being carried out by the students in the technical institutes of the RSFSR, the author describes a miniature helicopter designed by Yu. Pyatnitskiy and other students at the Kuyby*shevskiy aviatsionny*y institut (Kuibyshev Aviation Institute) and consisting simply of a seat surmounted by two blades having jet motors at the tips. The fuel rises from the tank into the blades by centrifugal force and is burned in the jets. This simple device shows great promise as a cheap, safe means of transportation. "Photography by G. Gordeyeva." Orig. art. has: 1 figure.

ASSOCIATION: none

SUBMITTED: 00 DATE ACQ: 10Apr64 ENCL: 00

SUB CODE: AC NO REF SOV: 000 OTHER: 000

Card 1/1

APPROVED FOR RELEASE: 06/09/2000 CIA-RDP86-00513R000307920020-8"

"APPROVED FOR RELEASE: 06/09/2000 CIA-RDP86-00513R000307920020-8

BYSTROV, V.D.

MANINA A.A.; BYSTROV, V.D.

Growth and differentiation of skeletal muscles in tissue cultures. Dokl. AN SSSR 103 no.3:499-502 Jl'55. (MLRA 8:11)

1. Institut eksperimental'noy meditsiny. Predstavleno akademikom N.A.Anichkovym.

(MUSCLE
tissue culture, growth & differentiation in)
(TISSUE CULTURE,
of musc., growth & differentiation)

APPROVED FOR RELEASE: 06/09/2000 CIA-RDP86-00513R000307920020-8"

"APPROVED FOR RELEASE: 06/09/2000 CIA-RDP86-00513R000307920020-8

BYSTROV, V.D., DANSKER, V.L.

In vivo photomicrography of vessels of a warm-blooded animal. Lab.delo 4 no.6:53-55 N-D '58 (MIRA 11:12)

1. Iz Instituta eksperimental'noy meditsiny (dir. - prof. D.A. Biryukov) i Leningradskogo neyrokhirurgicheskogo instituta (dir. prof. V.N. Shamov).
(PHOTOMICROGRAPHY)
(BLOOD VESSELS)

APPROVED FOR RELEASE: 06/09/2000 CIA-RDP86-00513R000307920020-8"

"APPROVED FOR RELEASE: 06/09/2000 CIA-RDP86-00513R000307920020-8

SVETLOV, P.G.; BYSTROV, V.D.; KORSAKOVA, G.F.

Morphology and physiology of the early stages in the development of bony fish; data from the film by Sh.D.Galustia and V.D.Bystrov, "The development of the loach (Misgurnus fossilis)". Arkh. anat. gist. i embr. 42 no.1:22-37 Ja '62. (MIRA 15:4)

1. Laboratoriya embriologii (zav. - prof. P.G.Svetlov) i laboratoriya nauchnoy kinematografii (zav. - V.D.Bystrov) Instituta eksperimental'noy meditsiny AMN SSSR. Adres avtorov: Leningrad, P-22, Kirovskiy prosp., 69/71, Laboratoriya embriologii i nauchnoy kinematografii Instituta embriologii AMN SSSR.
(LOACHES) (EMBRYOLOGY--FISHES)

APPROVED FOR RELEASE: 06/09/2000 CIA-RDP86-00513R000307920020-8"

"APPROVED FOR RELEASE: 06/09/2000 CIA-RDP86-00513R000307920020-8

BYSTROV, V.D.; SHUSTROV, A.K.

Cinephotomicrographic study of Toxoplasma gondii in a peritoneal exudate of white mice. Dokl. AN SSSR 165 no.5:1215-1216 D '65. (MIRA 19:1)

1. Submitted February 8, 1965.

APPROVED FOR RELEASE: 06/09/2000 CIA-RDP86-00513R000307920020-8"

"APPROVED FOR RELEASE: 06/09/2000 CIA-RDP86-00513R000307920020-8

ORDA, V.V.; YAGUPOL'SKIY, L.M. [IAhupol's'kyi, L.M.]; BYSTROV, V.F.; STEPANYANTS A.U.

Transmission of the induction effect of SCF_3 - $SOCF_3$ and SO_2CF_3 substituents through the methylene group. Dop. AN URSR no.3:345-348 '65.

(MIRA 18:3)

1. Institut organicheskoy khimii AN UkrSSR.

APPROVED FOR RELEASE: 06/09/2000 CIA-RDP86-00513R000307920020-8"

"APPROVED FOR RELEASE: 06/09/2000 CIA-RDP86-00513R000307920020-8

S/020/60/135/002/029/036
B004/B056

AUTHORS: Yagupol'skiy, L. M., Bystrov, V. F., and Utyanskaya, E. Z.

TITLE: Investigation of the Chemical Shift of the Magnetic Resonance of Fluorine[19] Nuclei in Fluorobenzenes With Fluorine-containing Substituents

PERIODICAL: Doklady Akademii nauk SSSR, 1960, Vol. 135, No. 2, pp. 377-380

TEXT: It was the purpose of the present work to investigate the effect of fluorine-containing substituents upon the electron density distribution in the benzene ring, and to determine the interrelation between the structure of these compounds and their reactivity by means of nuclear magnetic resonance (nmr). The shift in the ring of monosubstituted fluorobenzenes caused by fluorine and referred to the resonance values of fluorine in nonsubstituted fluorobenzene was measured and determined from the equation:

$\delta = (H_X - H_{C_6H_5F}) \cdot 10^6 / H_{C_6H_5F}$. H_X and $H_{C_6H_5F}$ are resonance values of the

Card 1/5

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"APPROVED FOR RELEASE: 06/09/2000 CIA-RDP86-00513R000307920020-8

Investigation of the Chemical Shift of the Magnetic Resonance of Fluorine^{19} Nuclei in Fluorobenzenes With Fluorine-containing Substituents

S/020/60/135/002/029/036
B004/B056

external magnetic field for F^{19} nuclei in the case of substituted (X) and nonsubstituted fluorobenzene. Apparatus and method of measurement are described in Ref. 1. The values for δ are given in Table 1 for various substituents in o-, m- and p-position. The authors discuss the data given in publications for the interrelation between δ and the Hammett constant σ, they compare the values obtained from various calculations, and found that substituents with positive conjunction effect σ_c cause a meta-position, such with negative substitution effect, however, an ortho- or para-position. Tables 3 and 4 compare the values of δ_p, σ_p for the p-position and of δ_m, σ_m for meta-position. Besides, Table 3 gives the light absorption λ_{max} of 4'-substituted dimethylaminoazobenzene, which changes similar to the chemical shift in p-substituted fluorobenzenes, and indicates the existence of uniform electron displacements. There are 4 tables and 9 references: 3 Soviet, 7 US, and 1 French.

Card 2/5

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"APPROVED FOR RELEASE: 06/09/2000 CIA-RDP86-00513R000307920020-8

Investigation of the Chemical Shift of the Magnetic Resonance of Fluorine[19] Nuclei in Fluorobenzenes With Fluorine-containing Substituents

S/020/60/135/002/029/036
B004/B056

ASSOCIATION: Institut organicheskoy khimii Akademii nauk USSR (Institute of Organic Chemistry of the Academy of Sciences UkrSSR). Institut khimicheskoy fiziki Akademii nauk SSSR (Institute of Chemical Physics of the Academy of Sciences USSR)

PRESENTED: June 1, 1960 by V. N. Kondrat'yev, Academician

SUBMITTED: May 25, 1960

Card 3/5

APPROVED FOR RELEASE: 06/09/2000 CIA-RDP86-00513R000307920020-8"

"APPROVED FOR RELEASE: 06/09/2000 CIA-RDP86-00513R000307920020-8

S/020/60/135/002/029/036
B004/B056

Химические сдвиги фтора в бензольном кольце 1)

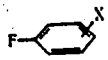

Table 1

Заместитель X 2)	o	м	n	3,4]
SO_2CF_3	−8,7	−4,7	−15,1	
SCF_3	−7,8	−2,3	−4,7	
OCF_3	+17,4	−2,3	+2,8	
$CH{=}CH{-}CF_2$			−2,4	
				+3,9
				−8,6

Legend to Table 1: 1) Chemical shifts of fluorine in the benzene ring; 2) substituent

Card 4/5

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B004/B056

Legend to Tables 3 and 4
1) Substituent,
2) (in alcohol)

Table 4

Заместитель 1)	SO_2CF_3	NO_2	SO_2CH_3	CN	$CF_2(CF_2)O$	$COCH_3$	CF_3
$\delta_п$	—15,1	—10,8	—	—9,6	—8,6	—6,6	—5,1
$\sigma_п$	1,03	0,78	0,72	0,66	0,81	0,50	0,54
$\lambda_{макс}$ (I), мμ (в спирте) 2)	476	475	445	—	450	447	430

Заместитель 1)	SO_2CF_3	NO_2	SO_2CH_3	CN	CF_3
$\delta_м$	—4,7	—3,3	—	—3,0	—2,8
$\sigma_м$	0,79	0,71	0,65	0,56	0,43

Таблица 4

Заместитель 1)	OCH_3	CH_3	SCH_3	F	$CF_2(CF_2)O$	OCF_3	Cl	Br	J	$CH=CH-CF_3$
$\delta_п$	11,4	5,5	—	6,4	3,9	2,8	2,4	2,3	1,2	—2,4
$\sigma_п$	—0,27	—0,17	0,01	0,06	0,36	0,32	0,23	0,23	0,23	0,23
$\lambda_{макс}$ (I), мμ (в спирте) 2)	407	408	419	—	420	419	420	420	—	435

Заместитель 1)	CH_3	OCH_3	SCH_3	OCF_3	SCF_3	J	Br	Cl	F
$\delta_м$	+0,9	—1,3	—	—2,3	—2,3	—2,6	—2,4	—2,1	—3,1
$\sigma_м$	—0,07	0,12	0,15	0,36	0,35	0,35	0,39	0,37	0,34

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9,6000 (1163 ONLY)
5.5800 (1043, 1273, 1282)

20700
S/120/61/000/001/038/062
E032/E114

AUTHORS: Bystrov, V.F., Dekabrun, L.L., Kil'yanov, Yu.N., Stepanyants, A.U., and Utyanskaya, E.Z.

TITLE: A High-Resolution Nuclear Magnetic Resonance Apparatus

PERIODICAL: Pribory i tekhnika eksperimenta, 1961, No.1, pp.122-125

TEXT: The resolution of NMR spectrometers is determined by the following factors: (a) uniformity of the constant magnetic field over the volume of the specimen; (b) stability of the constant magnetic field in time; and (c) frequency stability of the radio-frequency magnetic field. In the NMR spectrometer described in the present paper a resolution of 10^{-7} was achieved, which means that all the above factors remain constant to within 1 in 10^7. The apparatus has been used to record spectra of substances containing hydrogen and fluorene luclei. Chemical shifts and the spin-spin interaction constant can be measured to an accuracy of better than 10%. The spectrometer incorporates a specially designed permanent magnet producing a field of 4530 oe. The magnet has the following features: (a) closed yoke, ensuring maximum rigidity; (b) fine and continuous adjustment of

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20700
S/120/61/000/001/038/062
E032/E114

A High-Resolution Nuclear Magnetic Resonance Apparatus

the parallelism of the working surfaces of the pole-pieces; (c) special coils are located on the poles and are used to modulate and adjust the field; (d) the gap length is 3.2 cm and the diameter of the working surface of the pole-pieces is 22 cm. In order to achieve a highly uniform magnetic field the pole pieces have a thickness of 6 cm and are specially annealed in a hydrogen atmosphere. The working surfaces are plane to within ± 0.5 μ. The relative nonuniformity of the magnetic field in the central region does not exceed 2×10^{-6} over a volume of 1 cm^3. Fig.2 shows the magnetic field chart in the central part of the gap. The probe is illustrated in Fig.3. The substance under investigation is placed in the thin-walled glass ampoule 3 which is rotated at a rate of 10 000 rpm by a small air turbine. The ampoule is held in position by the perspex rotor 2 of the turbine. The lower end of the ampoule is centred by a teflon bush 6 and rests on the perspex plate 7. The body of the probe 5 is made from red copper. The coil is wound on the perspex former 4. The oscillator is quartz stabilized and works on the 3rd

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E032/E114

A High-Resolution Nuclear Magnetic Resonance Apparatus

harmonic of the mechanical oscillations of the quartz resonator. Detailed circuits of the quartz oscillator and various amplifiers etc. are given. Fig.5 shows a typical spectrum obtained for ethyl alcohol. The volume of the specimen was 4 mm^3 and the time taken to record the spectrum was 50 sec. In general, the volume of the specimen lies between 4 and 15 mm^3. Acknowledgements are expressed to K.V. Vladimirskiy for valuable advice.
There are 5 figures and 8 references: 1 Soviet and 7 non-Soviet.

ASSOCIATION: Institut khimicheskoy fiziki AN SSSR (Institute of Chemical Physics, AS USSR)

SUBMITTED: February 2, 1960

Card 3/5

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"APPROVED FOR RELEASE: 06/09/2000 CIA-RDP86-00513R000307920020-8

20700

S/120/61/000/001/038/062
E032/E114

A High-Resolution Nuclear Magnetic Resonance Apparatus

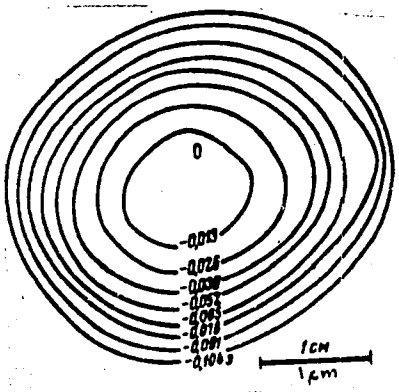

Fig. 2

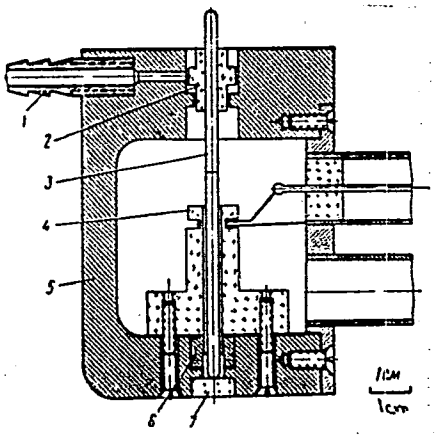

Fig. 3

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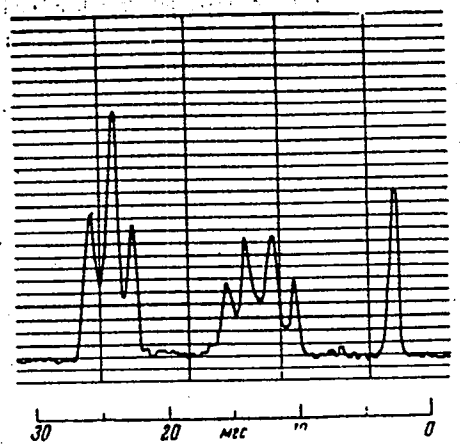
20700
S/120/61/000/001/038/062
E032/E114

A High-Resolution Nuclear Magnetic Resonance Apparatus

Fig. 5



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APPROVED FOR RELEASE: 06/09/2000 CIA-RDP86-00513R000307920020-8"

"APPROVED FOR RELEASE: 06/09/2000 CIA-RDP86-00513R000307920020-8

BYSTROV, V.F.; UTYANSKAYA, E.Z.; YAGUPOL'SKIY, L.M.

Magnetic resonance spectra of F^{19} in aromatic compounds with fluorine-containing substituents. Opt. i spektr. 10 no. 1:138-141 Ja '61. (MIRA 14:1)

(Fluorine--Spectra)

APPROVED FOR RELEASE: 06/09/2000 CIA-RDP86-00513R000307920020-8"

"APPROVED FOR RELEASE: 06/09/2000 CIA-RDP86-00513R000307920020-8

DYUMAYEV, K.M.; SMIRNOV, L.D.; BYSTROV, V.F.

Sterically hindered 3-hydroxpyridines. Report No.1: Synthesis and determination of the structure of some 2,6-dialkyl-4-(N,N-dialkyl) aminomethyl-3-hydroxpyridines. Izv. AN SSSR. Otd.khim.nauk no.5: 883-887 My '62. (MIRA 15:6)

1. Institut khimicheskoy fiziki AN SSSR.
(Pyridine—Spectra) (Steric hindrance)

APPROVED FOR RELEASE: 06/09/2000 CIA-RDP86-00513R000307920020-8"

"APPROVED FOR RELEASE: 06/09/2000 CIA-RDP86-00513R000307920020-8

KOSTYANOVSKIY, R.G.; PAN'SHIN, O.A.; BYSTROV, V.F.

Reaction of N-ethylene iminomethylation. Izv. AN SSSR. Otd.khim. nauk no.5:931 My '62. (MIRA 15:6)

1. Institut khimicheskoy fiziki AN SSSR.
(Ethylene) (Methylation)

APPROVED FOR RELEASE: 06/09/2000 CIA-RDP86-00513R000307920020-8"

"APPROVED FOR RELEASE: 06/09/2000 CIA-RDP86-00513R000307920020-8

KOSTYANOVSKIY, R.G.; BYSTROV, V.F.

Dual-character reactivity of N-ethyleneiminocarbinol. Izv.AN SSSR.Otd.khim.nauk no.8:1488-1491 Ag '62. (MIRA 15:8)

1. Institut khimicheskoy fiziki AN SSSR.
(Methanol) (Imines)

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KOSTYANOVSKIY, R.G.; YUZHAKOVA, O.A.; BYSTROV, V.F.

Reactions of ethyleniminocarbinos with diazo compounds. Izv.AN SSSR. Otd.khim.nauk no.9:1666-1669 S '62. (MIRA 15:10)

1. Institut khimicheskoy fiziki AN SSSR.
(Methanol) (Diazo compounds)

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BYSTROV, V.F.; GAVAR, R.A.

Determination of the structure of organic compounds from proton magnetic resonance spectra. Zav.lab. 28 no.1:46-48 '62. (MIRA 15:2)

1. Institut khimicheskoy fiziki AN SSSR.
(Organic compounds—Spectra)
(Nuclear magnetic resonance and relaxation)

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AFANAS'YEV, V.A.; BYSTROV, V.F.; DEKABRUN, L.L.; KUL'YANOV, Yu.N.; STEPANYANTS, A.U.

Multipurpose spectrometer of nuclear magnetic resonance. Zav.lab. 28 no.1:102-103 '62. (MIRA 15:2)

1. Institut khimicheskoy fiziki AN SSSR.
(Spectrometer)

APPROVED FOR RELEASE: 06/09/2000 CIA-RDP86-00513R000307920020-8"

"APPROVED FOR RELEASE: 06/09/2000 CIA-RDP86-00513R000307920020-8

BYSTROV, V. F.; YUZHAKOVA, O. A.; KOSTYANOVSKIY, R. G.

Gammet constants of the ethylenimine cycle. Dokl. AN SSSR 147 no.4:843-845 D '62. (MIRA 16:1)

1. Institut khimicheskoy fiziki AN SSSR. Predstavleno akademikom V. N. Kondrat'yevym.

(Ethylenimine) (Heterocyclic compounds)

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S/062/63/000/001/009/025
B101/B186

AUTHORS: Bystrov, V. F., Pozdnyakova, T. Ye., Yelizarova, A. N., and Akhrem, A. A.

TITLE: Structural analysis of chemical compounds based on their nuclear magnetic resonance spectra. Communication 2. Determination of the structure and conformation of some substituted cyclopentenones

PERIODICAL: Akademiya nauk SSSR. Izvestiya. Otdeleniye khimicheskikh nauk, no. 1, 1963, 66-74

TEXT: The synthesis of the erythro isomer IA and threo isomer IB of 3,5-dimethyl-5-(α-acetoxyethyl)-Δ^2-cyclopentenone by condensation of 3,5-dimethyl-Δ^2-cyclopentenone with vinyl acetate has already been described (Izv. AN SSSR, Otd. khim. n., in press). That reaction also produced the erythro and threo isomer of 3,5-dimethyl-5-(α-acetoxyethyl)-Δ^3-cyclopentenone (IIA, IIB) and the 2-ethylidene-3,5-dimethyl-Δ^4-cyclopentenone (III). By analyzing the high resolution proton magnetic resonance (p.m.r.) spectra it was possible to define the structure and conformation of IA,

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IB and III as well as of 3,5-dimethyl-Δ^2-cyclopentenone (IV), 3,5-dimethyl-Δ^4-cyclopentenone (V), 3,5-dimethyl-5-vinyl-Δ^2-cyclopentenone (VI), 3,5-dimethyl-5-(α-acetoxyethyl)-cyclopentanone (VIIA, VIIB), 3,5-dimethyl-5-(α-hydroxyethyl)-Δ^2-cyclopentenone (VIIIA, VIIIB), and 3,5-dimethyl-5-(α-hydroxyethyl)-cyclopentanone (IXA) which were synthesized for comparison. The p.m.r. spectra of 0.2-0.5 M solutions in CCl_4 were taken at room temperature and at 20.529 Mc. Hexamethyl disiloxane was used as internal standard. The spectra were analyzed according to J. T. Arnold and M. E. Packard (J. Chem. Phys., 19, 1608 (1951)). The slight difference between the spectra of IA and IB led to the conclusion that there is no structural difference but only a different steric orientation of the groups; this was confirmed by converting IA and IB into VI. Equally, IXA was obtained by hydrogenation from VIIIA as well as from VIIIB. Conclusions: The isomerism is based on a different position of the substituents at the asymmetric C_6 atom. Two steric series are possible with 3 conformations each (Fig. 6). One of these conformations must outnumber the two other. The IR spectra of VIIIA, VIIIB and IXA showed that an intramolecular H bond exists at the hydroxy group of VIIIA and IXA, which is absent in VIIIB.

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Hence, the compounds IA, VIIA, VIIIA and IXA have the structure a with predominant conformation 3a, the isomer compounds IB, VIIB and VIIIB have the structure b with predominant conformation 3b. The structure of III was confirmed by the p.m.r. spectrum. The p.m.r. spectra of IIA and IIB were not taken, since these isomers could not be separated. There are 7 figures and 1 table.

ASSOCIATION: Institut khimicheskoy fiziki Akademii nauk SSSR (Institute of Chemical Physics of the Academy of Sciences USSR); Institut organicheskoy khimii Akademii nauk SSSR (Institute of Organic Chemistry of the Academy of Sciences USSR)

SUBMITTED: June 18, 1962

Fig. 6. Conformations of the rotation isomers of 3,4-dimethyl-(α-hydroxyethyl)-Δ^2-cyclopentenone (VIIIA and VIIIB).

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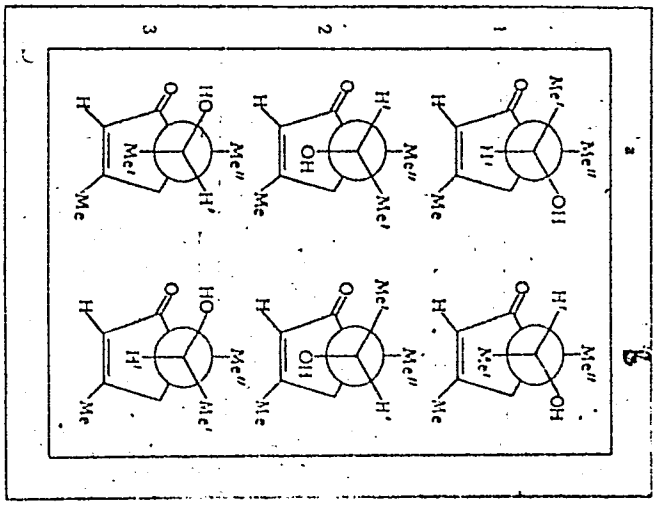
Fig. 6



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KOSTYANOVSKIY, R. G.; BYSTROV, V. F.

α-Aryl-N-ethyleniminocarbinols. Izv. AN SSSR. Otd. khim. nauk no.1:171-173 '63. (MIRA 16:1)

1. Institut khimicheskoy fiziki AN SSSR.
(Ethylenimine) (Carbonyl compounds)

APPROVED FOR RELEASE: 06/09/2000 CIA-RDP86-00513R000307920020-8"

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SMIRNOV, L.D.; LEZINA, V.P.; BYSTROV, V.F.; DYUMAYEV, K.M.

Synthesis of pyridoxine (vitamin B_6) analogs. Izv. AN SSSR. Otd.khim. nauk no.4:752-754 Ap '63. (MIRA 16:3)

1. Institut khimicheskoy fiziki AN SSSR.
(Pyridoxol)

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"APPROVED FOR RELEASE: 06/09/2000 CIA-RDP86-00513R000307920020-8

KOSTYANOVSKIY, R.G.; BYSTROV, V.F.

Structure and dual reactivity of N-ethyleneiminocarbinols.
Dokl.AN SSSR 148 no.4:839-842 F '63. (MIRA 16:4)

1. Institut khimicheskoy fiziki AN SSSR. Predstavleno akademikom V.N.Kondrat'yevym.
(Methanol) (Chemical structure)

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S/020/63/148/005/017/029
B117/B186

AUTHORS: Bystrov, V. F., Dyumayev, K. M., Lezina, V. P., Nikiforov, G. A.

TITLE: Study of the hydrogen bond by the n.m.r. method. Effect of steric hindrances on the hydrogen bond in di-orthoalkylphenols

PERIODICAL: Akademiya nauk SSSR. Doklady, v. 148, no. 5, 1963, 1077 - 1080

TEXT: The steric screening effect of the OH group on the hydrogen bond of some di-orthoalkylphenols was studied by protonmagnetic resonance with the aid of the ЯМР-УС-2 (YaMR-US-2) spectrometer at a frequency of 20.529 Mc at 20 ± 2°C. The chemical shift of the protonmagnetic resonance signals τ was measured in the spectra of 2,6-xylene-, 2,6-diisopropylphenol and ionone(2,6-di-tert-butyl-4-methylphenol) as a function of their concentration in dry, alcohol-free CCl_4, ether, acetone, and triethylamine. The measurements RMS error: ±0.02 showed that the change in the chemical shift of τ due to the OH group may be attributed entirely to the effect of the intermolecular hydrogen bond. When the substances investigated are diluted in ether, acetone and triethylamine, the τ are shifted towards a comparatively weak field, while, when they are diluted in CCl_4 they are shifted

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towards a stronger field. This shows that in the latter case the hydrogen bond between the phenol molecules is weaker. The importance of steric screening (volume of ortho-substituents) for cyclic association, in which mainly tetramers and only small amounts of dimers are formed, was studied in some alkylphenols dissolved in CCl_4. When the number of ortho-substituents is increased, the band of the bound hydroxyl is shifted to higher frequencies and the shift from the H bond $\Delta\tau$ becomes smaller, probably due to its effective elongation. Owing to the weakening of the hydrogen bond the inhibiting activity decreases in the following order: 2,6-dimethyl-, 2,6-diisopropyl and 2,6-di-tert-butylphenyl, and a further growth of the C_6-C_8 radicals is prevented. In di-ortho-alkylphenols, dissolved in CCl_4 at low concentrations the chemical shift of τ on a horizontal section is dependent on the concentration. When the number of ortho-substituents is increased the "saturation" of this dependence takes place in the region of higher concentrations. In 2,6-di-tert-butylphenol and ionone, the shift of the hydroxyl is independent of the concentration. A comparison of the shifts of the hydroxyl signal $\Delta\tau$ on transition from the pure substance to the zeroth phenol concentration showed that the electron cloud of the O-H

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bond is considerably influenced by the substituents. When the alkyl group in o-position is introduced, the effect of the electric dipole field of the C-H bond can be assumed as one of the reasons for the change in the shift of the OH signal. This was confirmed by introducing a methyl group instead of hydrogen. The effect of substituents on the chemical shift of the OH group of phenols is at present being studied in detail. There are 4 figures and 1 table.

ASSOCIATION: Institut khimicheskoy fiziki Akademii nauk SSSR (Institute of Chemical Physics of the Academy of Sciences USSR)

PRESENTED: October 8, 1962, by V. N. Kondrat'yev, Academician

SUBMITTED: September 28, 1962

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BYSTROV, V. F.; POZDNYAKOVA, T. Ye.; YELIZAROVA, A. N.; AKHREM, A. A.

Study of the structure of chemical compounds by nucleic magnetic resonance spectra. Report No. 2: Determination of the structure and conformation of some substituted cyclopentenones. Izv. AN SSSR. Otd. khim. nauk no.1:66-74 '63. (MIRA 16:1)

1. Institut khimicheskoy fiziki AN SSSR i Institut organicheskoy khimii AN SSSR.

(Cyclopentenone--Spectra) (Chemical structure)

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BYSTROV, V.F.; YAGUPOL'SKIY, L.M.; STEPANYANTS, A.U.; FIALKOV, Yu.A.

6 -Constants of substituents with a trifluoromethyl group. Dokl. AN SSSR 153 no.6:1321-1324 D '63. (MIRA 17:1)

1. Institut khimicheskoy fiziki AN SSSR. Predstavleno akademikom V.N. Kondrat'yevym.

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"APPROVED FOR RELEASE: 06/09/2000 CIA-RDP86-00513R000307920020-8

BYSTROV, V.F.; NEYMYSHEVA, A.A.; STEPANYANTS, A.U.; KNUNYANTS, I.L., akademik

Additive relations for chemical shifts in magnetic resonance spectra on F nuclei of fluophosphates and fluophosphonates. Dokl. AN SSSR 156 no. 3:637-640 '64. (MIRA 17:5)

1. Minstitut khimicheskoy fiziki AN SSSR i Voyennaya akademiya khimicheskoy zashchity.

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D'YACHKOVSKIY, F.S.; YAROVITSKIY, P.A.; BYSTROV, V.F.

NMR study of the catalytic system $(C_5H_5)_2TiCl_2 + Al(CH_3)_2Cl$. Vysokom. soed. 6 no.4:659-661 Ap '64. (MIRA 17:6)

1. Bruklinskiy politekhnicheskiy institut, Soyedinennyye Shtaty Ameriki, i Institit khimicheskoy fiziki AN SSSR.

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BYSTROV, V.F.; LEZINA, V.P.

Study of hydrogen bonding by the nuclear magnetic resonance method. Part 2. Opt. i spektr. 16 no.5:790-796 My '64.
(MIRA 17:9)

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"APPROVED FOR RELEASE: 06/09/2000 CIA-RDP86-00513R000307920020-8

BYSTROV, V.F.; LEZINA, V.P.

Use of the nuclear magnetic resonance method in studying hydrogen bonding. Part 3. Opt. i spektr. 16 no.6:1004-1012 Je '64.

(MIRA 17:9)

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"APPROVED FOR RELEASE: 06/09/2000 CIA-RDP86-00513R000307920020-8

BYSTROV, V.F.; GRANDBERG, I.I.; SHAROVA, G.I.

Study of hydrogen bonding by the nuclear magnetic resonance method. Part 4. Opt. i spektr 17 no.1:63-66 Jl '64.
(MIRA 17:9)

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"APPROVED FOR RELEASE: 06/09/2000 CIA-RDP86-00513R000307920020-8

BYSTROV, V.F.; SHULOV, L.M.; KHEYFITS, L.A.; MOLDOVANSKAYA, G.I.

Proton magnetic resonance spectra of terpene phenols prepared by condensation of camphene with phenol and cresols. Zhur. ob. khim 34 no.7:2476-2477 Jl '64 (MIRA 17:8)

1. Institut khimicheskoy fiziki AN SSSR i Vsesoyuznyy nauchno-issledovatel'skiy institut sinteticheskikh i natural'nykh dushistykh veshchestv.

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"APPROVED FOR RELEASE: 06/09/2000 CIA-RDP86-00513R000307920020-8

BYSTROV, V.F.; LEZINA, V.P.; DASHUNIN, V.M.; TOVBINA, M.S.

Structure of organic compounds studied by nuclear magnetic resonance spectra. Part 3: Structure of derivatives of 3-hydroxy-γ-pyrone and some related compounds. Zhur. ob. khim. 34 no.9:2886-2890 S '64. (MIRA 17:11)

1. Institut khimicheskoy fiziki AN SSSR i Vsesoyuznyy nauchno-issledovatel'skiy institut sinteticheskikh i natural'nykh dushistykh veshchestv.

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"APPROVED FOR RELEASE: 06/09/2000 CIA-RDP86-00513R000307920020-8

BYSTROV, V.F.; STEPANYANTS, A.U.; MIRONOV, V.A.

Structure of chemical compounds studied by means of nuclear magnetic resonance spectra. Part 4:Adducts of substituted cyclopentadienes with maleic anhydride and their derivatives. Zhur. ob khim. 34 no.12:4039-4046 D '64 (MIRA 18:1)

1. Institut khimicehskoy fiziki AN SSSR i Institut organicheskoy khimii AN SSSR.

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BYSTROV, V.F.; YERSHOV, V.V.; LEZINA, V.P.

Chemical shift of the hydroxyl signal of ortho-alkylsubstituted phenols. Opt. i spektr. 17 no.4:538-544 O '64.

(MIRA 17:12)

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"APPROVED FOR RELEASE: 06/09/2000 CIA-RDP86-00513R000307920020-8

SMIRNOV, L.D.; LEZINA, V.P.; BYSTROV, V.F.; DYUMAYEV, K.M.

Comparative reactivity of ortho- and para-positions of 3-hydroxypyridine in aminomethylation reaction. Izv. AN SSSR Ser. khim. no.1 198-200 '65. (MIRA 18:2)

1. Institut khimicheskoy fiziki AN SSSR.

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"APPROVED FOR RELEASE: 06/09/2000 CIA-RDP86-00513R000307920020-8

BYSTROV, V.F.; STEPANYANTS, A.U.; MIRONOV, V.A.

Structure of chemical compounds as determined by nuclear magnetic resonance spectra. Part 17: Structure of some derivatives of bicyclo (2,2,1) heptane. Zhur.org.khim. 1 no.2:294-296 F '65. (MIRA 18:4)

1. Institut organicheskoy fiziki AN SSSR i Institut khimicheskoy fiziki AN SSSR.

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BYSTROV, V.F.; LEZINA, V.P.; DASHUNIN, V.M.; BELOV, V.N. [deceased]

Structure of the condensation products of lactones with carbonyl compounds. Zhur.org.khim. 1 no.2:398 F '65.

(MIRA 18:4)

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"APPROVED FOR RELEASE: 06/09/2000 CIA-RDP86-00513R000307920020-8

KOSTYANOVSKIY, R.G.; YUZHAKOVA, O.A.; BYSTROV, V.F.

Conjugation of ethylenimine nitrogen with an activated double bond. Zhur. VKHO 10 no.2:229-231 '65. (MIRA 18:6)

1. Institut khimicheskoy fiziki AN SSSR.

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VASIL'YEV, G.S.; PRILEZHAYEVA, Ye.N.; BYSTROV, V.F.; SHOSTAKOVSKIY, M.F.

Structure of products of the reaction of (alkoxy) alkylthiobutenynes with phosphorus pentachloride. Zhur. ob. khim. 35 no.8:1350-1357 Ag '65. (MIRA 18:8)

1. Institut organicheskoy khimii imeni N.D. Zelinskogo AN SSSR.

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ORDA, V.V.; YAGUPOL'SKIY, L.M.; BYSTROV, V.F.; STEPANYANTS, A.U.

Transmission of the induction effect of substituents SCF_3, $SOCF_3$, and SO_2CF_3 through a methylene group. Zhur. ob. khim. 35 no.9:1628-1636 S '65. (MIRA 18:10)

1. Institut organicheskoy khimii AN UkrSSR i Institut khimicheskoy fiziki AN SSSR.

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SMIRNOV, L.D.; LEZINA, V.F.; BYSTROV, V.F.; GUMAYEV, K.M.

Sterically hindered 3-hydroxypyridines. Report No.5: Proton magnetic resonance method and chemical methods of studying the course of reactions of amino- and hydroxymethylation in the 2-alkyl-3-hydroxypyridine series. Izv. AN SSSR.Ser.khim. no.10:1836-1845 '65. (MIRA 18:10)

1. Institut khimicheskoy fiziki AN SSSR.

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"APPROVED FOR RELEASE: 06/09/2000 CIA-RDP86-00513R000307920020-8

LEZINA, V.P.; BYSTROV, V.F.; SMIRNOV, L.D.; DYUMAYEV, K.M.

Electronic structure of 3-hydroxypyridines. Part 1: Proton magnetic resonance spectra and calculation by the methods of molecular orbitals and linear combination of atomic orbitals. Teoret. i eksper. khim. 1 no.3:281-289 My-Je '65

Electronic structure of 3-hydroxypyridines. Part 2: Chemical reactivity of 3-hydroxypyridines. Ibid.:290-294

(MIRA 18:9)

1. Institut khimicheskoy fiziki AN SSSR, Moskva.

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MAGDESIYEVA, N.N.; TITOV, V.V.; BYSTROV, V.F.; LEZINA, V.P.; YUR'YEV, Yu.K.

Structure of β-and bis-β-diketones of the selenophene series.
Zhur. struk. khim. 6 no.3:402-406 My-Je '65.

(MIRA 18:8)

1. Moskovskiy gosudarstvennyy universitet imeni M.V.Lomonosova i Institut khimicheskoy fiziki AN SSSR.

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L 29293-66 EWP(j)/EWT(m)/T RM

ACC NR: AP6019317 SOURCE CODE: UR/0079/65/035/008/1350/1357

AUTHOR: Vasil'yev, G. S.; Prilezhayeva, Ye. N.; Bystrov, V. F.; Shostakovskiy, M. F.

ORG: Institute of Organic Chemistry im. N. D. Zelinskiy, AN SSSR (Institut organicheskoy khimii AN SSSR)

TITLE: Structure of products of the reaction of (alkoxy)alkylthiobutenynes with phosphorus pentachloride

SOURCE: Zhurnal obshchey khimii, v. 35, no. 8, 1965, 1350-1357

TOPIC TAGS: phosphorus chloride, chemical reaction, proton resonance, organic sulfur compound

ABSTRACT: Synthesis by other methods and study of proton magnetic resonance spectra indicated that addition of PCl_5 to 1-alkylthio-(alkoxy)butenynes takes place at the triple carbon-carbon bond with the formation of chlorides of 1-alkylthio(alkoxy)-3-chlorobutadiene- 1,3,4-phosphinic acids. It was established for the first time that addition of alcohols to diacetylene under the conditions of a nucleophilic reaction proceeds stereospecifically with the formation of cis-1-alkoxybutenynes. The reaction of diacetylene with one molecule of a thiol (MeSH) under nucleophilic conditions also resulted in a product (1-Me-thiobutenyne) with a cis-structure. It was shown that in products of the addition of PCl_5 to

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L 29293-66

ACC NR: AP6019317

1-alkylthio(alkoxy)butenynes the hydrogens at 1-C and 2-C are in a trans-position to each other. A mechanism of electrophilic interaction between PCl_5 and 1-alkylthio(alkoxy)butenynes is proposed which explains the cis-trans-isomerization that takes place in its course. Orig. art. has: 4 figures, 5 formulas, and 1 table. [JPRS]

SUB CODE: 07, 20 / SUBM DATE: 29Jun64 / ORIG REF: 007 / OTH REF: 010

Card 2/2

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KHOMUTOV, N.Ye.; BYSTROV, V.I.

Kinetics of anodic processes on platinum in aqueous solutions of phenol. Zhur.fiz.khim. 36 no.10:2246-2247 O '62. (MIRA 17:4)

1. Moskovskiy ordena Lenina khimiko-tekhnologicheskiy institut imeni Mendeleyeva.

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BYSTROV, Vl. (L'vov)

"Searchlight of the Communist Youth League" in the "Progress" Firm. Tekh.mol.31 no.9:26 '63. (MIRA 16:9)

1. Spetsial'nyy korrespondent zhurnala "Tekhnika molodezhi".
(Lvov--Shoe industry--Technological innovations)

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BYSTROV, V.M.

PHASE I BOOK EXPLOITATION SOV/4984

International symposium on macromolecular chemistry. Moscow, 1960.

Mezhdunarodnyy simpozium po makromolekulyarnoy khimii SSSR, Moskva, 14-18 iyunya 1960 g.; doklady i avtoreferaty. Sektsiya III. (International Symposium on Macromolecular Chemistry Held in Moscow, June 14-18, 1960; Papers and Summaries) Section III. [Moscow, Izd-vo AN SSSR, 1960] 469 p. 55,000 copies printed.

Tech. Ed.: F. S. Kashina.

Sponsoring Agency: The International Union of Pure and Applied Chemistry. Commission on Macromolecular Chemistry.

PURPOSE: This book is intended for chemists interested in polymerization reactions and the synthesis of high molecular compounds.

COVERAGE: This is Section III of a multivolume work containing papers on macromolecular chemistry. The articles in general deal with the kinetics of polymerization reactions, the synthesis of special-purpose polymers, e.g., ion exchange resins, semiconductor materials, etc., methods of catalyzing polymerization reactions, properties and chemical interactions of high molecular materials, and the effects of various factors on polymerization and the degradation of high molecular compounds. No personalities are mentioned. References given follow the articles.

Usmanov, Kh. U., U. N. Musayev, and R. S. Tillayev (USSR). The Radiation Method of Copolymerizing Acrylonitrile with Polystyrene and Perchlorovinyl. 170

Rafikov, S. R., G. N. Chelnokova, I. V. Zhuravleva, and F. N. Gribkova (USSR). Oxyethylation of Carbochain and Heterochain Polyamides 184

Santo, I., and K. Gal (Hungary). Grafting Methyl Methacrylate Onto Films of Polyvinyl Alcohol Under the Action of X-Rays 207

Lazar, M., R. Rado, and Yu. Pavlinets (Czechoslovakia). Grafting Methyl Methacrylate Onto Polypropylene and Polyethylene 214

Tutorskiy, I. A., Z. I. Smelyy, and V. M. Bystrov (USSR). The Interaction of Carboxyl-Containing Butadiene-Styrene Rubbers With Polyamides and ε-Caprolactam 224

Kolesnikov, G. S., and Ts'eng Han-ming (USSR). Synthesis

Rado, R., and M. Lazar (Czechoslovakia). The Role of the Source of Free Radicals on Crosslinking in Polyethylene 280

Mladenov, I., I. A. Tutorskiy, and B. A. Dogadkin (USSR). On the Transformations of Carboxyl-Containing Butadiene-Styrene Rubbers and Their Mixtures With ε-Caprolactam Under the Action of Gamma Radiation 293

Rogovin, Z. A., V. A. Derevitskaya, Sun T'ung, Chang Wei-kang, and L. S. Gal'braykh (USSR). Synthesis of New Cellulose Derivatives and Other Polysaccharides 302

Yermolenko, I. N., and F. N. Kaputskiy (USSR). Initiation of the Controlled Synthesis of Modified Celluloses With Oxides of Nitrogen 310

Ivanov, V. I., N. Ya. Lenshina, V. S. Ivanova (USSR). Oxidational Transformations in Chains of Cellulose Molecules 321

Berlin, A. A., Ye. A. Penskaya, and G. I. Volkova (USSR). Mechanicochemical Transformations and Block Copolymerization During the Freezing of Starch Solutions 334

Usmanov, Kh. U., B. I. Aykhodzhayev, and U. Azizov (USSR). Modification of the Properties of Cellulose by Grafting 344

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"APPROVED FOR RELEASE: 06/09/2000 CIA-RDP86-00513R000307920020-8

L 44290-66 EWT(m)/EWP(j) WW/JW/EM

ACC NR: AP6026152 SOURCE CODE: UR/0076/66/040/007/1650/1652

AUTHOR: Shirokikh, P. K.; Bystrov, V. M.; Ponomarev, V. V.; Solntsev, V. A.

ORG: Moscow University im. M. V. Lomonosov, Chemistry Department (Moskovskiy gosudarstvennyy universitet, Khimicheskiy fakul'tet)

TITLE: Heats of combustion and enthalpies of formation of some acetylenic amines

SOURCE: Zhurnal fizicheskoy khimii, v. 40, no. 7, 1966, 1650-1652

TOPIC TAGS: acetylenic amine, heat of combustion, enthalpy of formation

ABSTRACT: The authors have prepared high-purity samples of the following acetylenic amines:

$CH{\equiv}OCH_2NH_2$
$CH{\equiv}OCH_2N(CH_3)_2$
$(CH{\equiv}CCH_2)_2NCH_3$
$(CH{\equiv}CCH_2)_3N$
$CH_2{=}CHC{\equiv}CCH_2N(CH_3)_2$
$(CH_3)_2NCH_2C{\equiv}CCH_2N(CH_3)_2$

The heats of combustion of these amines were determined calorimetrically by a procedure described in the source. The values of the heats of

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L 44290-66

ACC NR: AP6026152

combustion (after the necessary corrections) and the calculated values of enthalpies of formation of the amines are given in Table 1. The calculation procedure is explained in the source. Orig. art. has: 2 tables. [BO]

Table 1.

Compound	$-\Delta U$, cal/g. V = const; T = 293.16C	$-\Delta H$, kcal/mol. p = const; T = 293.16C	ΔH°_{form} kcal/mol T = 293.16C
C_3H_9N	9115,7 9105,3 9110,1 Average 9110,4±3,6	502,2±0,2	49,2±0,2
C_6H_9N	9916,7 9903,9 9914,0 Average 9911,5±5,1	825,0±0,4	47,1±0,4
C_7H_9N	10040,5 10017,8 10048,6 10044,1	1077,4±0,3	111,4±0,3

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L 44290-66

ACC NR: AP6026152

Continuation of Table on card 2/3

C_6H_9N	Average 10045,0±2,7 10273,2 10272,4 10274,7	1348,7±0,1	194,6±0,1
$C_7H_{11}N$	Average 10273,4±0,8 9995,5 10000,8 10005,3 9997,5	1093,0±0,4	58,7±0,4
$C_8H_{16}N_2$	Average 9999,8±3,3 9535,5 9534,1 9532,7 9529,2	1338,6±0,3	39,3±0,3
	Average 9532,9±1,9		

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"APPROVED FOR RELEASE: 06/09/2000 CIA-RDP86-00513R000307920020-8

COUNTRY USSR
CATEGORY Forestry. Forest Management.

ABS. JOUR. Ref Zhur-Biologiya, No.1, 1959, No. 1462

AUTHOR Bystrov, V.N.
INST. Bashkir Agric. Inst.

TITLE Reconstruction of Plantings of Young Trees in the Conditions of Bashkirian ASSR.

ORIG. PUB. Tr. Bashkirsk. s.-kh. in-ta, 1956, 7, 319-328

ABSTRACT Two methods are indicated for reconstruction of low-value young trees - care by tree-fellings and cultivations. The technique is described of tree-felling care for the purpose of reconstruction and its economic foundation; cultivation methods are also described.

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BYSTROV, V.N.; KIROD, R.G.

Staining furniture panels faced with oak veneer in ammonia vapors. Der. prom. 14 no.5:25-26 My '65. (MIRA 18:6)

1. Ivano-Frankovskaya mebel'naya fabrika.

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"APPROVED FOR RELEASE: 06/09/2000 CIA-RDP86-00513R000307920020-8

BYSTROV, V.N.; KIROD, R.G.

Staining of panels veneered with oak sliced veneers using ammonia vapor. Bum. i der. prom. no.4:40-41 O-D '65. (MIRA 18:12)

APPROVED FOR RELEASE: 06/09/2000 CIA-RDP86-00513R000307920020-8"

"APPROVED FOR RELEASE: 06/09/2000 CIA-RDP86-00513R000307920020-8

BYSTROV, V.P.

Partial automatization of the water counterpressure process of sterilization of canned foods in glass containers. Kons.i ov.prom. 15 no.8: 24-25 Ag '60. (MIRA 13:8)

1. Trest "Orgproyekttekhmontazh".
(Food, Canned--Sterilization)

APPROVED FOR RELEASE: 06/09/2000 CIA-RDP86-00513R000307920020-8"

"APPROVED FOR RELEASE: 06/09/2000 CIA-RDP86-00513R000307920020-8

BYSTROV, V.P.; VANYUKOV, A.V.; ZAYTSEV, V. Ya.

Density and molar volume of copper and copper-lead matte.
Izv. vys. ucheb. zav.; tsvet. met. 7 no. 4:60-64 '64
(MIRA 19:1)

1. Moskovskiy institut stali i splavov, kafedra metallurgii i fizicheskoy khimii tsvetnykh metallov.

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"APPROVED FOR RELEASE: 06/09/2000 CIA-RDP86-00513R000307920020-8

ZAYTSEV, V. Ya.; VANYUKOV, A.V.; BYSTROV, V.P.

The wetting of a solid charge mixture with liquid sulfides and the effect of this factor on certain pyrometallurgical processes. TSvet. met. 38 no. 12:47-51 D '65 (MIRA 19:1)

APPROVED FOR RELEASE: 06/09/2000 CIA-RDP86-00513R000307920020-8"

"APPROVED FOR RELEASE: 06/09/2000 CIA-RDP86-00513R000307920020-8

PA 233139

BYSTROV, V. V.

USSR/Metallurgy - Welding, Methods Jul 52

"Automatic Welding of Thin-Walled Containers," V.V. Bystrov, L.I. Blagodatoskiy, Engr

"Avtogen Delo" No 7, pp 14-17

Discusses procedure for welding spare air tanks for locomotives and railroad cars. Describes various devices for automatic welding of longitudinal and circular joints, and for assembling and hydraulic testing of tanks. Methods increased productivity of assembling-welding operations by 42% and resulted in considerable conservation of welding materials and elec power.

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"APPROVED FOR RELEASE: 06/09/2000 CIA-RDP86-00513R000307920020-8

BYSTROV, V.V., aspirant

Taking transverse loads into consideration in calculating traction chains for scraper conveyors. Vop. rud. transp. no.6:93-103 '62. (MIRA 15:8)

1. Donetskiy politekhnicheskiy institut.
(Chains) (Conveying machinery)

APPROVED FOR RELEASE: 06/09/2000 CIA-RDP86-00513R000307920020-8"

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[illegible] (1) [illegible]

[illegible] SOURCE CODE: UR/0413/66/000/015/0094/0094

16

[illegible]: [illegible], B. Ye.; [illegible]nikov, V. S.; Ayzman, Yu. A.; Sokolinskiy, Ye. A.; [illegible]; [illegible]plunov, A. I.; Fedorov, V. N.; Ivanov, A. M.; Malinskiy, S. A.; [illegible]ovskiy, V. V.; Pul'k, V. Kh.; Vysotskiy, Yu. A.; Zamskiy, V. M.; Bystrov, V. V.; [illegible], V. [illegible]; [illegible], I. V.; Yevzerov, D. A.; Germanov, Yu. G.; Maksimov, N. P.; [illegible]yenkov, [illegible] A.; Pishchulin, V. V.

ORG: none

TITLE: Seismic station. Class 42, No. 184466 [announced by "Neftepribor" Factory of the Instrument Manufacture Administration of Mosgorsovnarkhoz (Zavod "Neftepribor" Upravleniya priborostroyeniya Mosgorsovnarkhoza)]

SOURCE: Izobret prom obraz tov zn, no. 15, 1966, 94

TOPIC TAGS: seismologic station, seismologic instrument

ABSTRACT: This Author Certificate presents a seismic station containing a seismic signal detector, a recording amplifier unit, an oscillograph, a magnetic drum recorder, a channel reproduction unit, a control unit, a reproduction amplifier, a multichannel borehole probe, a drum with photographic paper, a retransmitting unit, and a power supply. To increase the reliability when transferring from operation with the method of reflected waves to the method of refracted waves, a filter unit is connected between the first and second stages of the recording amplifier unit. A

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L 10062-67

ACC NR: AP6029933

modulator-demodulator unit and a reel type magnetic recorder are connected in series to the output of the recording amplifier unit. For operation with the method of refracted waves, the filter unit has frequency cutoffs of 7--30 hz, and for operation at sea--frequency cutoffs of 20--50 hz. To increase the reliability of the recorded data with operation by the method of regulated directional reception, a switching unit for the channels to be summed, a static correction unit, and a summing unit are connected in series between the magnetic drum recorder and the reproduction amplifier. To increase the reliability when transferring from operation with the method of reflected waves to seismic logging, a frequency selection unit is connected between the multichannel borehole probe and the magnetic drum recorder. To improve the quality of the recorded material, an electron beam unit for introducing static and dynamic corrections is connected between the reproduction amplifier and the drum with photographic paper.

SUB CODE: 08/ SUBM DATE: 05May65

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APPROVED FOR RELEASE: 06/09/2000 CIA-RDP86-00513R000307920020-8"

"APPROVED FOR RELEASE: 06/09/2000 CIA-RDP86-00513R000307920020-8

SHTOKMAN, I.G., prof.; BYSTROV, V.V., inzh.

Stability of traction chains of mine conveyors under the action of transverse loads. Izv. vys. uch. zav.; gor. zhur. 5 no.6: 89-94 '62. (MIRA 15:9)

1. Donetskiy ordena Trudovogo Krasnogo Znameni politekhnicheskiy institut. Rekomendovana kafedroy gornozavodskogo transporta.
(Chains) (Mechanical wear) (Conveying machinery)

APPROVED FOR RELEASE: 06/09/2000 CIA-RDP86-00513R000307920020-8"

"APPROVED FOR RELEASE: 06/09/2000 CIA-RDP86-00513R000307920020-8

BYSTROV, Ye.D; VASIL'YEVA, L.S.

Continuous administration of bromide for acceleration of the production of the system of conditioned reflexes. Fizol.zh.SSSR 36 no.5:530-535 Sept-Oct 50. (CIML 20:4)

1. Physiological Laboratory of the Central Roentgenological, Radiological, and Cancer Institute, Leningrad.

APPROVED FOR RELEASE: 06/09/2000 CIA-RDP86-00513R000307920020-8"

"APPROVED FOR RELEASE: 06/09/2000 CIA-RDP86-00513R000307920020-8

BYSTROV, Ye. D.

"The Cortical Effect on the Unconditioned Food Reflex During Normal Activity of the Cerebral Cortex and After Gamma Ray Action on the Brain." Cand Biol Sci, Leningrad State U, Leningrad, 1953. (RZhBiol, No 6, Nov 54)

Survey of Scientific and Technical Dissertations Defended at USSR Higher Educational Institutions (11)

SO: Sum. No. 521, 2 Jun 55

APPROVED FOR RELEASE: 06/09/2000 CIA-RDP86-00513R000307920020-8"

"APPROVED FOR RELEASE: 06/09/2000 CIA-RDP86-00513R000307920020-8

BYSTROV, Ya.F., kapitan 3-go ranga

Patriotic training of sailors in combat and revolutionary traditions. Mor. sbor. 47 no.5:14-18 My '64.

(MIRA 18:6)

APPROVED FOR RELEASE: 06/09/2000 CIA-RDP86-00513R000307920020-8"

"APPROVED FOR RELEASE: 06/09/2000 CIA-RDP86-00513R000307920020-8

BYSTROV, Ye. N.

3

The determination of Act X from its emanation in the presence of considerable quantities of Th X. B. N. Bystrov. *Compt. rend. acad. sci. U.R.S.S.* 52, 117-10 (1946)(in English).—An air stream is passed at moderate velocity through the active sample of Th X and Act X and then through two ionization chambers of 1000 ml. each which differ in electrostatic capacity and sensitivity. The air speed is adjusted so that the α-activity caused by Tn will be the same in both ionization chambers. Since only the difference in ionization currents in the two chambers is detd., the app. is now insensitive to Tn. Any measured current is due to An, which decomp. completely in the first chamber. With an air-stream velocity of 104 cu. cm./sec., sensitivities of 6×10^{-16} g./division/min. for Act X and 8.4×10^{-1} g./division/min. for Th were attained.

Peter M. Bernays

ASM-SLA METALLURGICAL LITERATURE CLASSIFICATION

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"APPROVED FOR RELEASE: 06/09/2000 CIA-RDP86-00513R000307920020-8

Bystrov, Ye. N.

BYSTROV, Ye.N.

Evaluating the dispersion of carbon black on the basis of data from electron micro-copic investigations. Gaz.prom. no.12:20-26 D '57. (MIRA 11:1)

(Electron milcroscopy) (Carbon black)
(Particle size determination)

APPROVED FOR RELEASE: 06/09/2000 CIA-RDP86-00513R000307920020-8"

"APPROVED FOR RELEASE: 06/09/2000 CIA-RDP86-00513R000307920020-8

BYSTROV, Ye.N.

Method for determining the specific surface of furnace and thermal process gas blacks. Gaz. prom. no.6:39-44 Je '58. (MIRA 11:6)
(Carbon black) (Surface chemistry)

APPROVED FOR RELEASE: 06/09/2000 CIA-RDP86-00513R000307920020-8"

"APPROVED FOR RELEASE: 06/09/2000 CIA-RDP86-00513R000307920020-8

KALASHNIKOV, B.P.; BYSTROVA, Yu.A.

Radioisotope diagnosis of eye tumors and possibilities of its improvement. Med. rad. 9 no.2:17-23 D '64.

(MIRA 18:12)

1. Tsentral'nyy nauchno-issledovatel'skiy rentgeno-radiologicheskiy institut Ministerstva zdravookhraneniya SSSR.

APPROVED FOR RELEASE: 06/09/2000 CIA-RDP86-00513R000307920020-8"

"APPROVED FOR RELEASE: 06/09/2000 CIA-RDP86-00513R000307920020-8

BYSTROV, Yu. A., Cand. Tech. Sci. (diss) "Investigation of Process of Development of Charge in High-Voltage Devices with Incandescent Cathode," Leningrad, 1961, 12 pp. (Leningrad Elec. Eng. Inst.) 200 copies (KL Supp 12-61, 264).

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"APPROVED FOR RELEASE: 06/09/2000 CIA-RDP86-00513R000307920020-8

S/194/62/000/004/037/105
D201/D308

9,3150

AUTHORS: Potsar, A. A. and Bystrov, Yu. A.

TITLE: Determining the time of growth of the discharge in directly heated tubes

PERIODICAL: Referativnyy zhurnal, Avtomatika i radioelektronika, no. 4, 1962, abstract 4-3-65a (Izv. Leningr. elektrotekhn. in-ta, 1961, no. 45, 101-111)

TEXT: Analytical relationships between the duration of the first stage of discharge growth in a pulse thyratron and the shape of the grid voltage pulse, gas pressure and electrode spacing are derived, the first stage being considered as starting with the application of a positive grid pulse and going on up to the instant of considerable increase of the grid current. In order to derive approximate formulas, the following assumptions were made: The field between cathode and grid is uniform, not distorted by space charges; the basic ionization process consists of a single ionization by collision of gas atoms by electrons leaving the cathode.

Card 1/2

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"APPROVED FOR RELEASE: 06/09/2000 CIA-RDP86-00513R000307920020-8

Determining the time ... S/194/62/000/004/037/105
D201/D308

The graphs of dependence of the first stage discharge duration on the amplitude of the pulse as obtained from the computed formulas are compared with experimental data given in literature. 8 references. /Abstracter's note: Complete translation./

Card 2/2

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"APPROVED FOR RELEASE: 06/09/2000 CIA-RDP86-00513R000307920020-8

42969

S/058/62/000/011/035/061
A160/A101

9.4120

AUTHORS: Potsar, A. A., Bystrov, Yu. A.

TITLE: The problem of the mechanism of developing a discharge in sectionalized high-voltage thyratrons

PERIODICAL: Referativnyy zhurnal, Fizika, no. 11, 1962, 26, abstract 11-3-51shch ("Izv. Leningr. elektrotekhn. in-ta", no. 46, 1961, 14 - 22)

TEXT: An investigation was carried out of the mechanism of developing a discharge in sectionalized thyratrons for a case in which the design of intermediate electrodes eliminates the possibility of a direct transit of the electrons from the cathode to the anode. The authors assume that, in this case, there exists a successive discharge firing (beginning with the first one) to the intermediate electrodes. As a result, the voltage between the sections, in which the discharge did not develop yet, will increase, and, at some moment, the whole anode voltage will happen to be applied between the last intermediate electrode and the anode. Within a given time, the velocities of the electrons passing

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through this last intermediate space, must change from the maximum magnitude, which is determined by the anode voltage, to the speed determined by the intensity of the discharge burning in the device. To confirm the hypothesis brought forth, an investigation was conducted on the distribution of the electrons by their speeds, which arrive at the anode of the sectionalized thyratron during the discharge generation. The investigations were carried out with a model of a thyratron, on the anode-end-surfaces of which were made two openings for the lead of the electrons from the last intermediate space. Having penetrated to the space beyond the anode, the beam of the electrons hit the fluorescent screen serving as an indicator of the magnitude of the electron deflection under the action of the magnetic field which was established between the screen and the thyratron anode. Considering the analytical expression for the distribution of the field along the path of the electrons, the authors determine their highest velocity by the minimum magnitude of the beam deflection on the screen. It was determined that this velocity corresponds to the magnitude of the voltage blanked by the thyratron. This confirms, to a certain extent, the said hypothesis on the successive firing of a discharge to the intermediate electrodes in the sectionalized thyratrons. There are 3 references.
[Abstracter's note: Complete translation]

M. G.

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"APPROVED FOR RELEASE: 06/09/2000 CIA-RDP86-00513R000307920020-8

BYSTROV, Yu. A., aspirant

Development of a discharge with a hot cathode in the presence of a linearly varying voltage. Izv. LETI 59 no.46:29-41 '62. (MIRA 15:10)

(Electron tubes) (Electric discharges)

APPROVED FOR RELEASE: 06/09/2000 CIA-RDP86-00513R000307920020-8"