"APPROVED FOR RELEASE: Tuesday, August 01, 2000 CIA-RDP86-00513R001342

MAURIT, M.Ye.; SMIRNOVA, G.V.; PARFENOV, E.A.; SARYCHEVA, I.K.; PREOBRAZHENSKIY, N.A.

Complete synthesis of 2,5,7,8-tetramethyl-2-(4,8,12-trimethyltridecyl)-6-oxychromane (vitamin E, α-tocopherol) and its derivatives. Dokl. AN SSSR 140 no.6:1330-1333 O '61. (MIRA 14:11)

1. Moskovskiy institut tonkoy khimicheskoy tekhnologii im. M.V. Lomonosova. Predstavleno akademikom A.N.Nesmeyanovym.
(Tocopherol)

APPROVED FOR RELEASE: Tuesday, August 01, 2000 CIA-RDP86-00513R0013429

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TSIZIN, Yu.S.; PREOBRAZHENSKIY, N.A.

Biphenyl ethers. Part 2: Synthesis of 2-oxy-2',3-dimethoxy-4',5-diformyl biphenyl ether. Zhur. ob. khim. 32 no.1:132-135 Ja '62. (MIRA 15:2)

1. Moskovskiy institut tonkoy khimicheskoy tekhnologii imeni M.V.Lomonosova.

(Ether)

APPROVED FOR RELEASE: Tuesday, August 01, 2000 CIA-RDP86-00513R0013429

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BOGOSLOVSKIY, N.A.; SAMOKHVALOV, G.I.; PREOBRAZHENSKIY, N.A.

Complex lipides. Synthesis of α-(α'-linoleoyl-β-stearoyl)-cephalin. Zhur. ob. khim. 32 no.1:135-137 Ja '62. (MIRA 15:2)

1. Vsesoyuznyy nauchno-issledovatel'skiy vitaminnyy institut.
(Cephalin)

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PREOBRAZHENSKIY, N.A.

S/079/62/032/001/004/016
D213/D302

AUTHORS: Pyatnova, Yu.B., Kovtun, I.A., Pleshakov, M.G., Krayevskiy, A.A., Sarycheva, I.K., and Preobrazhenskiy, N.A.

TITLE: Studies in the synthesis of poly-yne compounds

PERIODICAL: Zhurnal obshchey khimii, v. 32, no. 1, 1962, 138-139

TEXT: Methods of preparing decadi-yne-1,4, and tetradecatriyne-2,5 8-ol-1 are described. The above compounds are intermediates in the synthesis of arachidonic and other unsaturated acids. (1) Chlorobutyne-2-ol-1: Butyne-2-diol 1,4 was treated in pyridine and benzene ((1:1) mixture) at 3-5°C with excess $SOCl_2$ (1.1 equiv.) with temperature being kept at 15-20°C. The yield was 60 %. (2) Octyne-2-ol-1: Prepared in 59 % yield from 1 chlorobutyne-2-ol-4, with n-butyl magnesium bromide, the former being added over 90 mins. The fraction of b.p. 98-100°C/16 mm was collected. (3) 1-Bromo-octyne-2: To octyne-2-ol-1 in dry ether kept at 0 - 2°C, PBr_3 in slight excess and catalytic amounts of pyridine were added over 15 mins. The yield

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Studies in the synthesis of ... S/079/62/032/001/004/016
D213/D302

was 80 %. (4) Decadiyne-1,4: 1 Bromooctyne-2 was reacted with Na acetylenide. The yield was 48 %. (5) Tetradecatriyne-2,5,8-ol-1: To a solution of excess ethyl magnesium bromide in dry ether with cooling to -3-5°C propargyl alcohol in benzene was added over 90 mins. There are 7 references: 3 Soviet-bloc and 4 non-Soviet-bloc. The references to the English-language publications read as follows: W.J. Bailey and E. Fujiwara, J. Am. Chem. Soc., 77, 165, 1955; W.J. Gensler, A.P. Mahadevan and J. Casella, J. Am. Chem. Soc., 78, 63, 1956; J.M. Osbond and J.C. Wickens, Chem. a. Ind., 1959, 1288.

ASSOCIATION: Moskovskoy Institut tonkoy khimicheskoy tekhnologii imeni M.V. Lomonosova(Moscow Institute of Fine Chemical Technology imeni M.V. Lomonosov)

SUBMITTED: January 25, 1961

Card 2/2

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"APPROVED FOR RELEASE: Tuesday, August 01, 2000 CIA-RDP86-00513R001342

MARKARYAN, E.A.; YEVSTIGNEYEVA, R.P.; PREOBRAZHENSKIY, N.A.

Synthesis of β-substituted glutaric acid esters. Zhur. ob. khim. 32 no.1:140-142 Ja '62. (MIRA 15:2)

1. Moskovskiy institut tonkoy khimicheskoy tekhnologii imeni M.V.Lomonosova.

(Glutaric acid)

APPROVED FOR RELEASE: Tuesday, August 01, 2000 CIA-RDP86-00513R0013429

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PYATNOVA, Yu.B.; SMIRNOV, L.D.; VASIL'YEVA, L.V.; MYAGKOVA, G.I.; GOL'TSEVA, Z.V.; YEVSTIGNEYEVA, R.P.; SARYCHEVA, I.K.; PREOBRAZHENSKIY, N.A.

Production of 5,8,11,14-eicosatetraenoic (arachidonic) acid.
Zhur. ob. khim. 32 no.1:142-144 Ja '62. (MIRA 15:2)

1. Moskovskiy institut tonkoy khimicheskoy tekhnologii imeni M.V.Lomonosova.

(Eicosatetraenoic acid)

APPROVED FOR RELEASE: Tuesday, August 01, 2000 CIA-RDP86-00513R0013429

"APPROVED FOR RELEASE: Tuesday, August 01, 2000 CIA-RDP86-00513R001342

SHAKHOVA, M.K.; SAMOKHVALOV, G.I.; PREOBRAZHENSKIY, N.A.

Synthetic studies in the flavonoids field. Part 3: Total synthesis of quercetin-3-β-rutinoside. Zhur.ob.khim. 32 no.2:390-396 F '62. (MIRA 15:2)

1. Vsesoyuznyy nauchno-issledovatel'skiy vitaminnyy institut.
(Rutin)

APPROVED FOR RELEASE: Tuesday, August 01, 2000 CIA-RDP86-00513R0013429

"APPROVED FOR RELEASE: Tuesday, August 01, 2000 CIA-RDP86-00513R001342

POLYACHENKO, V.M.; SAMOKHVALOV, G.I.; PREOBRAZHENSKIY, N.A.

Investigation in the field of complex lipides. Synthesis of (α-oleoyl-β-stearoyl) phosphatidylethanolamine. Zhur.ob.khim. 32 no.2:396-399 F '62. (MIRA 15:2)

1. Vsesoyuznyy nauchno-issledovatel'skiy vitaminnyy institut.
(Cephalins)

APPROVED FOR RELEASE: Tuesday, August 01, 2000 CIA-RDP86-00513R0013429

"APPROVED FOR RELEASE: Tuesday, August 01, 2000 CIA-RDP86-00513R001342

KRAYEVSKIY, A.A.; VOLKOVA, V.I.; PLESHAKOV, M.G.; SARYCHEVA, I.K.; PREOBRAZHENSKIY, N.A.

Complete synthesis of 9,12-octadecadienoic (linoleic) acid. Zhur.ob.khim. 32 no.3:742-745 Mr '62. (MIRA 15:3)

1. Moskovskiy institut tonkoy khimicheskoy tekhnologii imeni M.V.Lomonosova.

(Linoleic acid)

APPROVED FOR RELEASE: Tuesday, August 01, 2000 CIA-RDP86-00513R0013429

"APPROVED FOR RELEASE: Tuesday, August 01, 2000 CIA-RDP86-00513R001342

BALYAKINA, M.V.; ZHDANOVICH, Ye.S.; ZEMSKOVA, A.G.; PREOBRAZHENSKIY, N.A.

Synthetic research in the field of vitamins of the group B_6. Part 3: Synthesis of pyridoxine derivatives containing residues of higher aliphatic acids. Zhur.ob.khim. 32 no.4:1172-1175 Ap '62. (MIRA 15:4)

1. Vsesoyuznyy nauchno-issledovatel'skiy vitaminnyy institut.
(Pyridoxol)

APPROVED FOR RELEASE: Tuesday, August 01, 2000 CIA-RDP86-00513R0013429

"APPROVED FOR RELEASE: Tuesday, August 01, 2000 CIA-RDP86-00513R001342

CHEKMAREVA, I.B.; ZHDANOVICH, Ye.S.; NOVOPOKROVSKAYA, T.S.; PREOBRAZHENSKIY, N.A.

Preparation of β-pyridinecarboxylic acid (nicotinic) amide. Zhur.prikl.khim., 35 no.5:1157-1159 My 62. (MIRA 15:5)

1. Vsesoyuznyy nauchno-issledovatel'skiy vitaminnyy institut.
(Nicotinamide)

APPROVED FOR RELEASE: Tuesday, August 01, 2000 CIA-RDP86-00513R0013429

"APPROVED FOR RELEASE: Tuesday, August 01, 2000 CIA-RDP86-00513R001342

VORONIN, V.G.; TOLKACHEV, O.N.; PREOBRAZHENSKIY, N.A.

Synthetic investigations in the field of curare alkaloids. Part 10: Synthesis of dimethyl ethers (±)- tubocurarine iodides. Izv.vys.ucheb.zav.;khim.i khim.tekh. 5 no.3:449-452 '62. (MIRA 15:7)

1. Moskovskiy institut tonkoy khimicheskoy tekhnologii imeni Lomonosova, kafedra khimii i tekhnologii tonkikh organicheskikh soyedineniy.

(Tubocurarine)

APPROVED FOR RELEASE: Tuesday, August 01, 2000 CIA-RDP86-00513R0013429

"APPROVED FOR RELEASE: Tuesday, August 01, 2000 CIA-RDP86-00513R001342

MOISEYENKO, A.M.; TOLKACHEV, O.N.; PREOBRAZHENSKIY, N.A.

Synthesis of 1-methoxy-3-carbethoxymethyl-2,4-dicarbethoxy-4-hydroxymethyl-1-hexen-5-one. Zhur.ob.khim. 32 no.5:1418-1420 My '62. (MIRA 15:5)

1. Moskovskiy institut tonkoy khimicheskoy tekhnologii imeni M.V.Lomonosova.

(Hexenone)

APPROVED FOR RELEASE: Tuesday, August 01, 2000 CIA-RDP86-00513R0013429

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VOLKOVA, L.V.; SHVETS, V.I.; RYZHENKOVA, S.F.; VARVARINA, N.B.; SMOLOVIK, I.V.; PREOBRAZHENSKIY, N.A.

Lipides. Part 10: Synthesis of mixed α,β-diglycerides containing residues of higher acids of the aliphatic series. Zhur.ob.khim. 32 no.6:1764-1768 Je '62. (MIRA 15:6)

1. Moskovskiy institut tonkoy khimicheskoy tekhnologii im. M.V. Lomonosova.

(Glycerides) (Acids, Fatty)

APPROVED FOR RELEASE: Tuesday, August 01, 2000 CIA-RDP86-00513R0013429

"APPROVED FOR RELEASE: Tuesday, August 01, 2000 CIA-RDP86-00513R001342

SEREBRENNIKOVA, G.A.; SARYCHEVA, I.K., PREOBRAZHENSKIY, N.A.

Lipides. Part 11: Synthesis of triglycerides of soybean oil. Zhur.ob.khim. 32 no.7:2208-2210 Jl '62. (MIRA 15:7)

1. Moskovskiy institut tonkoy khimicheskoy tekhnologii imeni M.V.Lomonosova.

(Glycerides)

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"APPROVED FOR RELEASE: Tuesday, August 01, 2000 CIA-RDP86-00513R001342

BOGOSLOVSKIY, N.A.; SAMOKHVALOV, G.I.; PREOBRAZHENSKIY, N.A.

Complex lipides. Synthesis of α-(α'-linoleoyl-β-stearoyl) phosphatidylcholine (lecithin). Zhur.obshch.khim. 32 no.7:2210-2214 Jl '62. (MIRA 15:7)

1. Vsesoyuznyy nauchno-issledovatel'skiy vitaminnyy institut. (Lecithin)

APPROVED FOR RELEASE: Tuesday, August 01, 2000 CIA-RDP86-00513R0013429

"APPROVED FOR RELEASE: Tuesday, August 01, 2000 CIA-RDP86-00513R001342

SHVETS, V.I.; VOLKOVA, L.V.; PREOBRAZHENSKIY, N.A.

Lipides. Part 12: Synthesis of unsaturated and saturated α,β -diglycerides of different acids. Zhur.ob.khim. 32 no.8:2474-2479 Ag '62. (MIRA 15:9)

1. Moskovskiy institut tonkoy khimicheskoy tekhnologii imeni M.V. Lomonosova.

(Glycerides)

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SHVETS, V.I.; VOLKOVA, L.V.; LUKASHENKO, E.Ye.; PREOBRAZHENSKIY, N.A.

Lipides. Part 13: Synthesis of unsaturated α,β-diglycerides of same or different acids. Zhur.ob.khim. 32 no.8:2479-2482 Ag '62. (MIRA 15:9)

1. Moskovskiy institut tonkoy khimicheskoy tekhnologii imeni M.V. Lomonosova.

(Glycerides)

APPROVED FOR RELEASE: Tuesday, August 01, 2000 CIA-RDP86-00513R0013429

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MAURIT, M.Ye.; SMIRNOVA, G.V.; PARFENOV, E.A.; VINKOVSKAYA, T.M.; PREOBRAZHENSKIY, N.A.

Total synthesis of 3,7,11,15-tetramethyl-1-hexadecen-3-ol (isophytol). Zhur.ob.khim. 32 no.8:2483-2487 Ag '62. (MIRA 15:9)

1. Moskovskiy institut tonkoy khimicheskoy tekhnologii imeni M.V. Lomonosova.

(Hexadecenol)

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ZOTCHIK, N.V.; MIROSHNICHENKO, L.D.; YEVSTIGNEYEVA, R.P.; PREOBRAZHENSKIY, N.A.

Study of the Claisen condensation of esters of levulinic acid and their conversion products. Zhur.ob.khim. 32 no.9:2823-2828 S '62. (MIRA 15:9)

1. Moskovskiy institut tonkoy khimicheskoy tekhnologii imeni M.V. Lomonosova.

(Levulinic acid) (Claisen condensation)

APPROVED FOR RELEASE: Tuesday, August 01, 2000 CIA-RDP86-00513R0013429

"APPROVED FOR RELEASE: Tuesday, August 01, 2000 CIA-RDP86-00513R001342

ZHDANOVICH, Ye.S.; CHEKMAREVA, I.B.; NOVOPOKROVSKAYA, T.S.; PREOBRAZHENSKIY, N.A.

Preparation of β-pyridinecarboxylic (nicotinic) acid amide. Zhur.ob.khim. 32 no.9:2828-2829 S '62. (MIRA 15:9)

1. Vsesoyuznyy nauchno-issledovatel'skiy vitaminnyy institut.
(Nicotinamide)

APPROVED FOR RELEASE: Tuesday, August 01, 2000 CIA-RDP86-00513R0013429

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MIKHNO, S.D.; BEREZOVSKIY, V.M.; ~~PREOBRAZHENSKIY, N.A.~~

Synthesis of γ-formylbutyric ester. Zhur.ob.khim. 32 no.9:2829-2831 S '62. (MIRA 15:9)

1. Vsesoyuznyy nauchno-issledovatel'skiy vitaminnyy institut.
(Glutaraldehydic acid)

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SHAKHOVA, M.K.; BUDAGYANTS, M.I.; SAMOKHVALOV, G.I.; PREOBRAZHENSKIY, N.A.

Synthetic investigations in the field of flavonoids. Part 4: Synthesis of 3-hydroxyflavone of flavonol. Zhur.ob.khim. 32 no.9:2832-2834 S '62. (MIRA 15:9)

1. Vsesoyuznyy nauchno-issledovatel'skiy vitaminnyy institut.
(Flavone)

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TSIZIN, Yu.S.; PREOBRAZHENSKIY, N.A.

Diphenyl ethers. Part 3: Acyl rearrangement in the series of substituted diphenyl ethers. Zhur.ob.khim. 32 no.10:3290-3294 O '62. (MIRA 15:11)

1. Moskovskiy institut tonkoy khimicheskoy tekhnologii imeni M.V. Lomonosova.

(Phenyl ether)
(Rearrangements (Chemistry))

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"APPROVED FOR RELEASE: Tuesday, August 01, 2000 CIA-RDP86-00513R001342

KRAYEVSKIY, A.A.; PYATNOVA, Yu.B.; MYAGKOVA, G.I.; SARYCHEVA, I.K.; PREOBRAZHENSKIY, N.A.

Total synthesis of linoleic, linolenic, arachidonic, and docosatetraen-7,10,13,16-ic acids. Dokl. AN SSSR 146 no.6:1349-1351 O '62. (MIRA 15:10)

1. Moskovskiy institut tonkoy khimicheskoy tekhnologii im. M.V. Lomonosova. Predstavleno akademikom M.I. Kabachnikom. (Acids, Fatty)

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KRAYEVSKIY, A.A.; SARYCHEVA, I.K.; PREOBRAZHENSKIY, N.A.

Synthesis of cis, cis-9,12-octadecadienoic, linoleic acid. Zhur.ob.khim. 32 no.11:3541-3543 N '62. (MIRA 15:11)

1. Moskovskiy institut tonkoy khimicheskoy tekhnologii imeni M.V. Lomonosova.

(Linoleic acid)

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CHERKASOVA, A.A.; YEVSTIGNEYEVA, R.P.; PREOBRAZHENSKIY, N.A.

Synthesis of isomeric 2,3-dimethyl-4-carbomethoxyethylpyrrolines. Zhur.ob.khim. 32 no.11:3544-3549 N '62. (MIRA 15:11)

1. Moskovskiy institut tonkoy khimicheskoy tekhnologii imeni M.V Lomonosova.

(Pyrroline)

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CHERKASOVA, A.A.; YEVSTIGNEYEVA, R.P.; PREOBRAZHENSKIY, N.A.

Synthesis of 2-methyl-3,3-dimethyl-4-carbomethoxyethylpyrroline. Zhur.ob.khim. 32 no.11:3549-3552 N '62. (MIRA 15:11)

1. Moskovskiy institut tonkoy khimicheskoy tekhnologii imeni M.V. Lomonosova.

(Pyrroline)

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ZAPESOCHNAYA, G. G.; PREOBRAZHENSKIY, N. A.

Lipides. Part 14: Synthesis of some triglycerides from cocoa butter. Zhur. ob. khim. 32 no.12:3898-3901 D '62. (MIRA 16:1)

1. Moskovskiy institut tonkoy khimicheskoy tekhnologii imeni M. V. Lomonosova.

(Glycerides) (Cacao butter)

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ZAPESOCHNAYA, G. G.; LESHCHINER, A. S.; SHCHEDRINA, M. M.; RUBTSOV, I. A.; PREOBRAZHENSKIY, N. A.

Lipides. Part 15: Synthesis of some triglycerides from cocoa butter. Zhur. ob. khim. 32 no.12:3901-3906 D '62.
(MIRA 16:1)

1. Moskovskiy institut tonkoy khimicheskoy tekhnologii imeni M. V. Lomonosova.

(Glycerides) (Cacao butter)

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ZAPESOCHNAYA, G. G.; ZVONKOVA, Ye. N.; MITROFANOVA, T. K.; SEREBRENNIKOVA, G. A.; SARYCHEVA, I. K.; PREOBRACHENSKIY, N. A.

Lipides. Part 16: Synthesis of triglycerides, constituents of cocoa butter. Zhur. ob. khim. 32 no.12:3906-3909 D '62. (MIRA 16:1)

1. Moskovskiy institut tonkoy khimicheskoy tekhnologii imeni M. V. Lomonosova.

(Glycerides) (Cacao butter)

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PYSHKINA, G. N.; YEVSTIGNEYEVA, R. P.; PREOBRAZHENSKIY, N. A.

Claisen condensation of esters of substituted levulinic acids.
Zhur. ob. khim. 32 no.12:3909-3913 D '62.
(MIRA 16:1)

1. Moskovskiy institut tonkoy khimicheskoy tekhnologii imeni M. V. Lomonosova.

(Levulinic acid) (Claisen rearrangement)

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SEREBRENNIKOVA, G. A.; MITROFANOVA, T. K.; KLYKOV, V. N.; SARYCHEVA, I. K.; PREOBRAZHENSKIY, N. A.

Lipides. Part 17: Synthesis of the glyceride composition of safflower oil. Zhur. ob. khim. 33 no.1:60-62 '63. (MIRA 16:1)

1. Moskovskiy institut tonkoy khimicheskoy tekhnologii imeni M. V. Lomonosova.

(Oils and fats) (Glycerides)

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SEREBRENNIKOVA, G.A.; ZVONKOVA, Ye.N.; ZAPESOCHNAYA, G.G.; SARYCHEVA, I.K.; PREOBRAZHENSKIY, N.A.

Lipides. Part 18: Synthesis of the glyceride constituents of corn oil. Zhur.ob.khim. 33 no.2:437-440 F '63. (MIRA 16:2)

1. Moskovskiy institut tonkoy khimicheskoy tekhnologii imeni M.V.Lomonosova.

(Corn oil) (Glycerides)

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MARKARYAN, E.A.; YEVSTIGNEYEVA, R.P.; PREOBRAZHENSKIY, N.A.

Condensation of esters of β-substituted glutaric acids with tryptamine. Zhur.ob.khim. 33 no.4:1123-1127 Ap '63. (MIRA 16:5)

1. Moskovskiy institut tonkoy khimicheskoy tekhnologii imeni M.V.Lomonosova.
(Glutaric acid) (Tryptamine)

APPROVED FOR RELEASE: Tuesday, August 01, 2000 CIA-RDP86-00513R0013429

"APPROVED FOR RELEASE: Tuesday, August 01, 2000 CIA-RDP86-00513R001342

PYATNOVA, Yu.B.; MYAGKOVA, G.I.; SARYCHEVA, I.K.; PREOBRAZHENSKIY, N.A.

Total synthesis of ethyl ester of 5,8,11,14-eicosatetraenoic (arachidonic) acid. Zhur.ob.khim. 33 no.4:1120-1122 Ap '63. (MIRA 16:5)

1. Moskovskiy institut tonkoy khimicheskoy tekhnologii imeni M.V.Lomonosova.

(Eicosatetraenoic acid)

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"APPROVED FOR RELEASE: Tuesday, August 01, 2000 CIA-RDP86-00513R001342

SHVETS, V.I.; VOLKOVA, L.V.; VASIL'YEVA, V.V.; FILONOVA, L.M.; PREOBRAZHENSKIY, N.A.

Lipides. Part 18: Synthesis of mixed unsaturated α,β-diglycerides. Zhur.ob.khim. 33 no.6:1843-1847 Je '63. (MIRA 16:7)

1. Moskovskiy institut tonkoy khimicheskoy tekhnologii imeni M.V.Lomonosova.

(Glycerides)

APPROVED FOR RELEASE: Tuesday, August 01, 2000 CIA-RDP86-00513R0013429

"APPROVED FOR RELEASE: Tuesday, August 01, 2000 CIA-RDP86-00513R001342

VOLKOVA, L.V.; SHVETS, V.I.; KHANDKAROVA, V.S.; RYZHENKOVA, S.F.; PREOBRAZHENSKIY, N.A.

Lipides. Part 19: Synthesis of optically active D-(—)-α-oleoyl-β- linoleoyl-glycerol. Zhur.ob.khim. 33 no.6: 1848-1851 Je '63. (MIRA 16:7)

1. Moskovskiy institut tonkoy khimicheskoy tekhnologii imeni M.V.Lomonosova. (Glycerides)

APPROVED FOR RELEASE: Tuesday, August 01, 2000 CIA-RDP86-00513R0013429

"APPROVED FOR RELEASE: Tuesday, August 01, 2000 CIA-RDP86-00513R001342

YEVSTIGNEYEVA, R.P.; PYSHKINA, G.N.; LEVANDA, O.G.; PREOBRAZHENSKIY, N.A.

Syntheses of ethyl and n-butyl esters of α -(β -carbomethoxyethyl)-β-methyllevulinic acid. Zhur.ob.khim. 33 no.6: 1839-1843 Je '63. (MIRA 16:7)

1. Moskovskiy institut tonkoy khimicheskoy tekhnologii imeni M.V.Lomonosova.

(Levulinic acid)

APPROVED FOR RELEASE: Tuesday, August 01, 2000 CIA-RDP86-00513R0013429

"APPROVED FOR RELEASE: Tuesday, August 01, 2000 CIA-RDP86-00513R001342

KRAYEVSKIY, A.A.; SARYCHEVA, I.K.; PREOBRAZHENSKIY, N.A.

Higher acids of the aliphatic series. Part 9: Synthesis of cis-, cis-, cis-9,12,15-octadecatrienoic linolenic, acid. Zhur.-ob.khim. 33 no.6:1831-1835 Je '63. (MIRA 16:7)

1. Moskovskiy institut tonkoy khimicheskoy tekhnologii imeni M.V.Lomonosova.

(Octadecatrienoic acid)

APPROVED FOR RELEASE: Tuesday, August 01, 2000 CIA-RDP86-00513R0013429

"APPROVED FOR RELEASE: Tuesday, August 01, 2000 CIA-RDP86-00513R001342

KRAYEVSKIY, A.A.; PLESHAKOV, M.G.; SARYCHEVA, I.K.; PREOBRAZHENSKIY, N.A.

Higher acids of the aliphatic series. Part 10: Synthesis of cis-, cis-, cis-9,12,15-octadecatrienoic, linolenic, acid. Zhur.ob.khim. 33 no.6:1835-1839 Je '63. (MIRA 16:7)

1. Moskovskiy institut tonkoy khimicheskoy tekhnologii imeni M.V.Lomonosova.

(Oxtadecatrienoic acid)

APPROVED FOR RELEASE: Tuesday, August 01, 2000 CIA-RDP86-00513R0013429

"APPROVED FOR RELEASE: Tuesday, August 01, 2000 CIA-RDP86-00513R001342

ZAPESOCHNAYA, G.G.; KOVTUN, I.A.; SARYCHEVA, I.K.; PREOBRAZHENSKIY, N.A.

Synthesis of 1,12-dodecanolide. Zhur.ob.khim. 33 no.7:2133-2136 Jl '63. (MIRA 16:8)

1. Moskovskiy institut tonkoy khimicheskoy tekhnologii imeni Lomonosova.

(Dodecanilide)

APPROVED FOR RELEASE: Tuesday, August 01, 2000 CIA-RDP86-00513R0013429

"APPROVED FOR RELEASE: Tuesday, August 01, 2000 CIA-RDP86-00513R001342

L 17730-65 EWA(b)/EWT(m)/BDS Pa-4 RM

ACCESSION NR: AP3004285 S/0079/63/033/007/2130/2133 59 58

AUTHORS: Filippovich, Ye. I.; Luzgina, V. N.; Yevestigneyeva, R. P.; Preobrazhenskiy, N. A.

TITLE: Studies in the dipyrrylmethene series. 5. Synthesis of asymmetric dipyrrylmethenes and dipyrrylmethanes

SOURCE: Zhurnal obshchey khimii, v. 33, no. 7, 1963, 2130-2133

TOPIC TAGS: dipyrrylmethene, dipyrrylmethane, pheoporphyrin, chlorophyll, pyrrole, Dieckmann reaction, isonitrosomalonic ester

ABSTRACT: This a further study of intermediates for the synthesis of pheoporphyrins related to chlorophyll. Three asymmetric dipyrrylmethenes substituted with methyl, acetyl, carbethoxy, and propionic acid side-chains were prepared by the acid-catalyzed condensation of the appropriate pyrrole aldehyde and 2,5-unsubstituted pyrrole. The use of a halomethylpyrrole instead of the aldehyde gave the corresponding dipyrrylmethane. The feasibility of using meso-substituted carbethoxymethyl compounds to prepare the pheoporphyrin system was demonstrated by the Dieckmann cyclization.

Card 1/2

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L 17730-63

ACCESSION NR: AP3004285

The condensation of isonitrosomalonic ester and the sodium salt of hydroxymethyleneacetoacetic ester with zinc dust provided a simplified synthesis of 3-methyl-2,4-dicarbethoxypyrrole in 30.8% yield. Orig. art. has: no graphics.

ASSOCIATION: Moskovskiy institut tonkoy khimicheskoy tekhnologii im. V. M. Lomonosova (Moscow Institute for Fine Chemical Technology)

SUBMITTED: 29May62 DATE ACQ: 15Aug63 ENCL: 00

SUB CODE: CH NO REF SOV: 001 OTHER: 007

Card 2/2

APPROVED FOR RELEASE: Tuesday, August 01, 2000 CIA-RDP86-00513R0013429

"APPROVED FOR RELEASE: Tuesday, August 01, 2000 CIA-RDP86-00513R001342

ZAPESOCHNAYA, G.G.; SARYCHEVA, I.K.; PREOBRAZHENSKIY, N.A.

Lipids. Part 20: Synthesis of dodecanoic (lauric) acid. Zhur. ob. khim. 33 no.8:2552-2555 Ag '63. (MIRA 16:11)

1. Moskovskiy institut tonkoy khimicheskoy tekhnologii imeni M.V. Lomonsova.

APPROVED FOR RELEASE: Tuesday, August 01, 2000 CIA-RDP86-00513R0013429

"APPROVED FOR RELEASE: Tuesday, August 01, 2000 CIA-RDP86-00513R001342

BEREZOVSKAYA, M.V.; SARYCHEVA, I.K.; PREOBRAZHENSKIY, N.A.

Plasmalogens. Part 1: Synthesis of 1,2-isopropylideneglycerylhepten-1'-yl-1'-oic ether. Zhur.ob.khim. 34 no.2:543-545 F '64. (MIRA 17:3)

1. Moskovskiy institut tonkoy khimicheskoy tekhnologii imeni M.V. Lomonosova.

APPROVED FOR RELEASE: Tuesday, August 01, 2000 CIA-RDP86-00513R0013429

"APPROVED FOR RELEASE: Tuesday, August 01, 2000 CIA-RDP86-00513R001342

S/079/60/030/05/12/074
B005/B002

AUTHORS: Yevstigneyeva, R. P., Gavrina, N. K., Preobrazhenskiy, N. A.

TITLE: Investigations in the Series of Isoquinoline Compounds. XVII. Synthesis of 4',5'-Dimethoxy-7-(1"-methyl-6",7"-dimethoxytetrahydroisoquinolyl)-3,4,5,6,7,8-hexahydrobenz-(1,2:1',2')-quinolizine, or C-Noremetine

PERIODICAL: Zhurnal obshchey khimii, 1960, Vol. 30, No. 5, pp. 1454-1458

TEXT: C-Noremetine differs from the alkaloid emetine by the absence of the ethyl group on C_6. The authors made use of the scheme of emetine synthesis to work out a procedure for the synthesis of C-noremetine (formula VI), in order to be able to draw comparisons between end products and intermediate products obtained in different ways. These comparisons are important for the clarification of certain problems of stereoisomerism of the natural alkaloid emetine. The synthesis worked out runs along the following scheme:

Card 1/5

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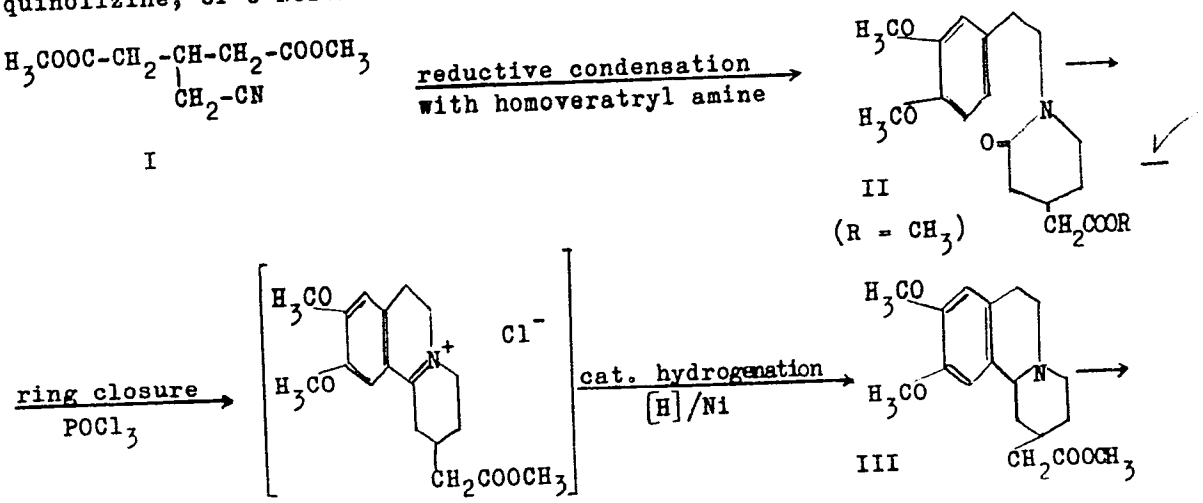
"APPROVED FOR RELEASE: Tuesday, August 01, 2000 CIA-RDP86-00513R001342

Investigations in the Series of Isoquinoline Compounds. XVII. Synthesis of 4',5'-Dimethoxy-7-(1"-methyl-6",7"-dimethoxytetrahydroisoquinolyl)-3,4,5,6,7,8-hexahydrobenz-(1,2:1',2')-quinolizine, or C-Noremetine

S/079/60/030/05/12/074
B005/B002



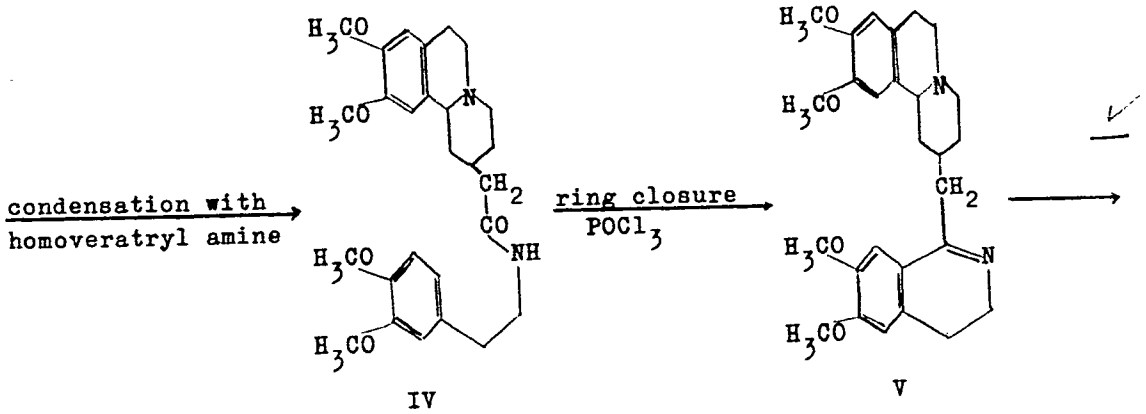
Card 2/5

APPROVED FOR RELEASE: Tuesday, August 01, 2000 CIA-RDP86-00513R0013429

"APPROVED FOR RELEASE: Tuesday, August 01, 2000 CIA-RDP86-00513R001342

Investigations in the Series of Isoquinoline Compounds. XVII. Synthesis of 4',5'-Dimethoxy-7-(1"-methyl-6",7"-dimethoxytetrahydroiso-quinolyl)-3,4,5,6,7,8-hexahydrobenz-(1,2:1',2')-quinolizine, or C-Noremetine

S/079/60/030/05/12/074
B005/B002



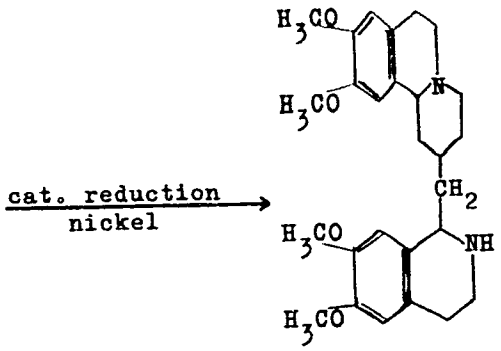
Card 3/5

APPROVED FOR RELEASE: Tuesday, August 01, 2000 CIA-RDP86-00513R0013429

"APPROVED FOR RELEASE: Tuesday, August 01, 2000 CIA-RDP86-00513R001342

Investigations in the Series of Isoquinoline Compounds. XVII. Synthesis of 4',5'-Dimethoxy-7-(1"-methyl-6",7"-dimethoxytetrahydroisoquinolyl)-3,4,5,6,7,8-hexahydrobenz-(1,2:1',2')-quinolizine, or C-Noremetine

S/079/60/030/05/12/074
B005/B002



VI

Card 4/5

APPROVED FOR RELEASE: Tuesday, August 01, 2000 CIA-RDP86-00513R0013429

"APPROVED FOR RELEASE: Tuesday, August 01, 2000 CIA-RDP86-00513R001342

Investigations in the Series of Isoquinoline Compounds. XVII. Synthesis of 4',5'-Dimethoxy-7-(1"-methyl-6",7"-dimethoxytetrahydroisoquinolyl)-3,4,5,6,7,8-hexahydrobenz-(1,2:1',2')-quinolizine, or C-Noremetine

S/079/60/030/05/12/074
B005/B002

Compound I was obtained by selective saponification and decarboxylation of the methyl ester of β-(cyano-, carbethoxy)-methyl glutaric acid, which is an intermediate product in the synthesis of emetine (Ref. 5). An experimental part describes in great detail the procedure followed in the synthesis. Yields and characteristic data concerning the intermediate products are given for each stage of synthesis. There are 5 references: 2 Soviet, 1 English, and 2 German.

ASSOCIATION: Moskovskiy institut tonkoy khimicheskoy tekhnologii (Moscow Institute of Fine Chemical Technology)

SUBMITTED: June 2, 1959

Card 5/5

APPROVED FOR RELEASE: Tuesday, August 01, 2000 CIA-RDP86-00513R0013429

"APPROVED FOR RELEASE: Tuesday, August 01, 2000 CIA-RDP86-00513R001342

TOLKACHEV, O.N.; YAGUBSKIY, E.B.; DOROFEYEVA, L.T.; PREOBRAZHENSKIY, N.A.

Synthetic investigations in the field of curare alkaloids. Part 12: Synthesis of 1-(4'-hydroxybenzyl)-6-methoxy-7-alkoxy-8-bromo-3,4-dihydroquinolines. Zhur.ob.khim. 34 no.2:548-552 F '64.(MIRA 17:3)

1. Moskovskiy institut tonkoy khimicheskoy tekhnologii imeni M.V. Lomonosova.

APPROVED FOR RELEASE: Tuesday, August 01, 2000 CIA-RDP86-00513R0013429

"APPROVED FOR RELEASE: Tuesday, August 01, 2000 CIA-RDP86-00513R001342

TOLKACHEV, O.N.; CHERNOVA, V.P.; KUZNETSOVA, E.V.; BAO FAN-LIN' [Pao Fang-lin]; PREOBRAZHENSKIY, N.A.

Synthetic investigations in the field of curare alkaloids. Part 11: Synthesis of 5-bromo-substituted β-phenylethylamines. Zhur.ob.khim. 34 no.2:545-548 F '64. (MIRA 17:3)

1. Moskovskiy institut tonkoy khimicheskoy tekhnologii imeni M.V.Lomonosova.

APPROVED FOR RELEASE: Tuesday, August 01, 2000 CIA-RDP86-00513R0013429

"APPROVED FOR RELEASE: Tuesday, August 01, 2000 CIA-RDP86-00513R001342

GOLIKOVA, V.S.; MITROFANOVA, T.K.; SHVETS, V.I.; ZUBOV, P.I.; PREOBRAZHENSKIY, N.A.

Spectral studies of vegetable oils and animal fats. Report No. 1: Infrared spectra of triglycerides. Zhur.org.khim. 1 no.3:433-439 Mr '65. (MIRA 18:4)

1. Moskovskiy institut tonkoy khimicheskoy tekhnologii imeni M.V.Lomonosova i Institut fizicheskoy khimii AN SSSR.

APPROVED FOR RELEASE: Tuesday, August 01, 2000 CIA-RDP86-00513R0013429

"APPROVED FOR RELEASE: Tuesday, August 01, 2000 CIA-RDP86-00513R001342

CHERNOREVA, [illegible]; [illegible], [illegible]; [illegible], [illegible].

Production of β-pyridinecarboxylic (nicotinic) acid. Zhur. prikl. khim. 38 no.1:220-221 Ja '65. (MIRA 18:3)

1. Vsesoyuznyy nauchno-issledovatel'skiy vitaminnyy institut.

APPROVED FOR RELEASE: Tuesday, August 01, 2000 CIA-RDP86-00513R0013429

"APPROVED FOR RELEASE: Tuesday, August 01, 2000 CIA-RDP86-00513R001342

VOLKOVA, L.V.; SHVETS, V.I.; DOROFEYEVA, L.T.; LOBANOVA, S.I.; KONSTANTINOVA, N.V.; PREOBRAZHENSKIY, N.A.

Complex lipids. Synthesis of L and DL α phosphatidyl-N,N (dimethyl) ethanolamines (L and DL α -N,N-dimethylcephalins). Zhur. ob. khim. 35 no.3:550-554 Mr '65. (MIRA 18:4)

1. Moskovskiy institut tonkoy khimicheskoy tekhnologii im. M.V. Lomonosova.

APPROVED FOR RELEASE: Tuesday, August 01, 2000 CIA-RDP86-00513R0013429

"APPROVED FOR RELEASE: Tuesday, August 01, 2000 CIA-RDP86-00513R001342

CHEKMAREVA, I.B.; ZHDANOVICH, Ye.S.; PUSHCHIK, T.A.; PREOBRAZHENSKIY, N.A.

Separation of nicotinamide by the ion-exchange method. Zhur.org. khim. 1 no.2:375-379 F '65. (MIRA 18:4)

1. Vsesoyuznyy nauchno-issledovatel'skiy vitaminnyy institut.

APPROVED FOR RELEASE: Tuesday, August 01, 2000 CIA-RDP86-00513R0013429

"APPROVED FOR RELEASE: Tuesday, August 01, 2000 CIA-RDP86-00513R001342

GOLIKOVA, V.S.; SHVETS, V.I.; MITROFANOVA, T.K.; DOROFEYEVA, L.T.; ZUBOV, P.I.; PREOBRAZHENSKIY, N.A.

Spectral studies of vegetable oils and animal fats. Report No. 2: Infrared spectra of α,β diglycerides. Zhur.org.khim. 1 no.3:439-445 Mr '65. (MIRA 18:4)

1. Moskovskiy institut tonkoy khimicheskoy tekhnologii im. M.V. Lomonosova i Institut fizicheskoy khimii AN SSSR.

APPROVED FOR RELEASE: Tuesday, August 01, 2000 CIA-RDP86-00513R0013429

"APPROVED FOR RELEASE: Tuesday, August 01, 2000 CIA-RDP86-00513R001342

L 11396-67

ACC NR:AP7003652 SOURCE CODE: UR/0079/66/036/008/1380/1382

AUTHOR: Ivashchenko, S. P.; Sarycheva, I. K.; Preobrazhenskiy, N. A.

ORG: Institute of Fine Chemical Technology im. M. V. Lomonosov (Moskovskiy institut tonkoy khimicheskoy tekhnologii)

TITLE: Research in the field of lipids. XXXVI. Synthesis of methylglycerylltriphenylphosphonium chloride derivatives

SOURCE: Zhurnal obshchey khimii v. 36, no. 8, 1966, 1380-1382

TOPIC TAGS: alkylphosphonium salt, organic synthetic process, chromatography

ABSTRACT: Alpha, beta-isopropylidine-alpha'-methylglycerylltriphenylphosphonium chloride, alpha-acetyl-alpha'-methylglycerylltriphenylphosphonium chloride, and alpha, beta-diacetyl-alpha'-methylglycerylltriphenylphosphonium chloride were synthesized from corresponding glycerin derivatives, triphenylphosphine, and benzoyl chloride. In the course of the work, alpha, beta-isopropylidine-alpha'-methoxymethylglycerin, alpha-acetyl-alpha'-methoxymethylglycerin, and alpha, beta-diacetyl-alpha'-methoxymethylglycerin were also prepared and characterized. Conditions of thin-layer chromatography on aluminum oxide were developed for identifying phosphonium salts and intermediate compounds in their synthesis: for the phosphonium chlorides the solvent system 9:1 chloroform-methanol was used, and for the glycerin derivatives ether or ether-petroleum ether mixtures. [JPRS: 33,970]

Card 1/1 jb SUB CODE: 07 / SUBM DATE: 25Jun65 UDC: 547.915.5

APPROVED FOR RELEASE: Tuesday, August 01, 2000 CIA-RDP86-00513R0013429

"APPROVED FOR RELEASE: Tuesday, August 01, 2000 CIA-RDP86-00513R001342

L 11212-67 EWT(m)/EWP(w) IJP(c) EM SOURCE CODE: UR/0124/66/000/001/V089/V089

ACC NR: AR6020078

42

AUTHOR: Preyss, A. K.; Degteva, T. A.

TITLE: Separation of normal stresses in axisymmetric deformation of models during studies by the optical polarization method

SOURCE: Ref zh. Mekhanika, Abs. 1V720

REF SOURCE: Polyarizats. optich. metod issled. napryazheniy, M., Nauka, 1965, 75-81

TOPIC TAGS: model, light polarization, stress analysis, material deformation

ABSTRACT: A method is proposed for isolating normal stresses in the case of the axisymmetric stressed state during studies by the optical polarization method. In using the resultant formula for computing normal stresses, it is sufficient to have the value of the differences between the normal stresses and the tangential stresses obtained by direct transillumination of part of the diametric cross section of the model. Formulas are written out for determining the radial and axial displacements of a point on the diametric cross section. The proposed method is verified on the basis of a problem on compression of a circular cylinder with an annular channel of hyperbolic profile. Comparison of experimental and theoretical stresses showed that the maximum error is less than 10%. The discrepancy between theoretical and experimental data on radial displacement is insignificant. V. D. Kopytov. [Translation of abstract]

SUB CODE: 11, 20

Card 1/1 jb

APPROVED FOR RELEASE: Tuesday, August 01, 2000 CIA-RDP86-00513R0013429

"APPROVED FOR RELEASE: Tuesday, August 01, 2000 CIA-RDP86-00513R001342

ACC NR: AP6033176 SOURCE CODE: UR/0079/66/036/010/1764/1766

AUTHOR: Tolkachev, O. N.; Kvashnina, L. P.; Preobrazhenskiy, N. A.

ORG: Moscow Institute of Fine Chemical Technology imeni M. V. Lomonosov (Moskovskiy institut tonkoy khimicheskoy tekhnologii)

TITLE: Synthetic studies in the area of curare alkaloids. Part 15: Synthesis of monomethyl ester of racemic N,N'-demethylchondodendrine

SOURCE: Zhurnal obshchey khimii, v. 36, no. 10, 1966, 1764-1766

TOPIC TAGS: alkaloid, curare, chemical synthesis

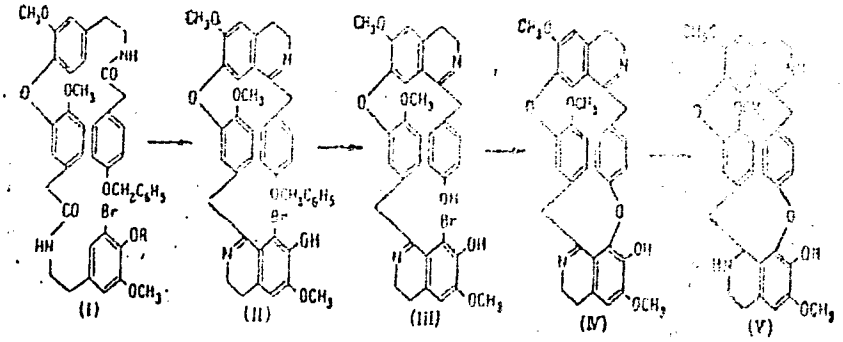
ABSTRACT: In view of the important physiological effect of the alkaloid d-tubocurarine, it appeared of interest to synthesize other (genetically related) alkaloids of tubocurare. The influence of the structural and spatial elements of the molecule on the physiological action of d-tubocurarine could thus be determined. Monomethyl ester of racemic N,N'-demethylchondodendrine (V) was synthesized so that it could be compared with the natural disecondary base chondrofoline. The synthesis was as follows:

Card 1/2 UDC: 547.944.2

APPROVED FOR RELEASE: Tuesday, August 01, 2000 CIA-RDP86-00513R0013429

"APPROVED FOR RELEASE: Tuesday, August 01, 2000 CIA-RDP86-00513R001342

ACC NR: AP6033176



Like the natural alkaloid chondrofoline, the cyclic bases (V) obtained give a negative reaction with Millon's reagent. UV spectra of their hydrochlorides are similar to those of d-tubocurarine. Orig. art. has: 1 figure.

SUB CODE: 07/ SUBM DATE: 07Jun65/ ORIG REF: 001/ OTH REF: 003

Card 2/2

APPROVED FOR RELEASE: Tuesday, August 01, 2000 CIA-RDP86-00513R0013429

"APPROVED FOR RELEASE: Tuesday, August 01, 2000 CIA-RDP86-00513R001342

ACC NR: [illegible] SOURCE CODE: UR/0079/66/036/003/0442/0447

AUTHOR: Kolodkina, [illegible]; [illegible]kevich, A. M.; Preobrazhenskiy, N. A.

ORG: All-Union Scientific Research Vitamin Institute (Vsesoyuznyy nauchno-issledovatel'skiy vitaminnyy institut)

TITLE: Adenosine phosphates and their derivatives

SOURCE: Zhurnal obshchey khimii, v. 36, no. 3, 1966, 442-447

TOPIC TAGS: phosphate, nonmetallic organic derivative, phosphorylation, chemical synthesis, ion exchange resin/Dowex-1 ion exchange resin, Sephadex A-25 ion exchange resin

ABSTRACT: The phosphorylation of derivatives of adenosine and its phosphates was studied for further development of preparative syntheses of these compounds. Adenosine 2',3'-O-isopropylidene-5'-phosphomorpholide, adenosine-5'-monophosphate, and adenosine-2'(3'),5'-diphosphate were synthesized, and methods of their purification and isolation were studied. P^1-Diphenyl-P^2-morpholide pyrophosphochloride and -morpholide phosphodichloride were used as phosphorylating agents. Ion-exchange resins were used for isolation and purification: Dowex-1 and Sephadex A-25. Orig. art. has: 4 figures and 1 table. [JPRS]

SUB CODE: 07 / SUBM DATE: 23Jan65 / ORIG REF: 001 / OTH REF: 011

Card 1/1

UDC: 547.962.32

APPROVED FOR RELEASE: Tuesday, August 01, 2000 CIA-RDP86-00513R0013429

"APPROVED FOR RELEASE: Tuesday, August 01, 2000 CIA-RDP86-00513R001342

L 28878-66

ACC NR: AP6018838 SOURCE CODE: UR/0079/65/035/003/0554/0556

AUTHOR: Shvets, V. I.; Morozova, S. F.; Volkova, L. V.; Preobrazhenskiy, N. A. 24 B

ORG: Moscow Institute of Fine Chemical Technology im. M. V. Lomonosov (Moskovskiy institut tonkoy khimicheskoy tekhnologii)

TITLE: Investigations in the field of complex lipids. Synthesis of alpha-(alpha'-linolenoyl-beta-linoleoyl)glycerylphosphorylethanolamine, Cephalin)

SOURCE: Zhurnal obshchey khimii, v. 35, no. 3, 1965, 554-556

TOPIC TAGS: organic synthetic process, organic phosphorus compound

ABSTRACT: A highly unsaturated alpha-cephalin: alpha-(alpha'-linolenoyl-beta-linoleoyl)glycerylphosphorylethanolamine -- was synthesized through a series of steps. The basic starting materials were beta-monoglycerides, produced by acylation of alpha, alpha'-benzylideneglycerin, followed by removal of the benzylidene group by hydrolysis with boric acid. The benzylidene method prevented saturation of the cis-C=C bonds of the acyl radicals, while avoiding subsequent catalytic hydrogenolysis. [JPRS]

SUB CODE: 07 / SUBM DATE: 27Jan64 / ORIG REF: 003 / OTH REF: 003

Card 1/1 CC

UDC: 547.426:548.915

APPROVED FOR RELEASE: Tuesday, August 01, 2000 CIA-RDP86-00513R0013429

"APPROVED FOR RELEASE: Tuesday, August 01, 2000 CIA-RDP86-00513R001342

YURKEVICH, A.M.; KOLOKINA, I.I.; PREOBRAZHENSKIY, N.A.

2',3'-Phenylboric ester of adenosine in the synthesis of adenosine-5-monophosphate. Dokl. AN SSSR 164 no.4 [illegible]-830 O '65. (MIRA 18:10)

1. Vsesoyuznyy nauchno-issledovatel'skiy vitaminnyy institut. Submitted March 30, 1965.

APPROVED FOR RELEASE: Tuesday, August 01, 2000 CIA-RDP86-00513R0013429

"APPROVED FOR RELEASE: Tuesday, August 01, 2000 CIA-RDP86-00513R001342

LUK'YANOV, A.V.; LYUTIK, A.I.; SHVETS, V.I.; PREOBRAZHENSKIY, M.A.

Studies of the synthesis of lipoid compounds. Dokl. AN SSSR 165 no.1:121-124 N '65. (MIRA 18:10)

1. Moskovskiy institut tonkoy khimicheskoy tekhnologii im. M.V. Lomonosova. Submitted April 8, 1965.

APPROVED FOR RELEASE: Tuesday, August 01, 2000 CIA-RDP86-00513R0013429

"APPROVED FOR RELEASE: Tuesday, August 01, 2000 CIA-RDP86-00513R001342

PREOBRAZHENSKIY, Nikolay Aleksandrovich; NIKOLAYEV, V.R., red.

[They hear again] Oni slyshat vnov'. Moskva, Izd-vo "Znanie," 1965. 15 p. (Novoe v zhizni, nauke, tekhnike. VII Seriia: Biologiia i meditsina, no.18)

(MIRA 18:8)

APPROVED FOR RELEASE: Tuesday, August 01, 2000 CIA-RDP86-00513R0013429

"APPROVED FOR RELEASE: Tuesday, August 01, 2000 CIA-RDP86-00513R001342

PREOBRAZHENSKIY, N. D.

Praktika rastochnogo dela. Moskva, Mashgiz, 1940. 268 p.

Boring practice.

SO: Manufacturing and Mechanical Engineering in the Soviet Union, Library of Congress, 1953.

APPROVED FOR RELEASE: Tuesday, August 01, 2000 CIA-RDP86-00513R0013429

"APPROVED FOR RELEASE: Tuesday, August 01, 2000 CIA-RDP86-00513R001342

PREOBRAZHENSKIY, N. F., KALISTOVM N. G., L'VOV, S. G. and KALIK, I. A.

"Bookkeeping and Control in Communications," 2nd edition - edited by Prof. Ya. M. Gal'perin, Svyaz'izdat, Moscow, 1950.

Translation- No. 464, 26 Sep 1955.

APPROVED FOR RELEASE: Tuesday, August 01, 2000 CIA-RDP86-00513R0013429

"APPROVED FOR RELEASE: Tuesday, August 01, 2000 CIA-RDP86-00513R001342

PRESBRAZHENSKIY, G.A.; PRESBRAZHENSKIY, N.G.; KRASIL'NIKOVA, A.M.

Methodology of the spectra analysis of diesel engine crankshaft oil. (MIRA 18:8)
Trudy OMIIT 38:155-164 '62.

APPROVED FOR RELEASE: Tuesday, August 01, 2000 CIA-RDP86-00513R0013429

"APPROVED FOR RELEASE: Tuesday, August 01, 2000 CIA-RDP86-00513R001342

L 15545-66 EWT(1)/ETC(F)/EPF(n)-2/EWG(m) IJP(c) AT

ACC NR: AP6002083 SOURCE CODE: UR/0139/65/000/006/0067/0074

AUTHORS: Preobrazhenskiy, N. G.; Senina, A. V.; Senina, S. V.

ORG: Siberian Physicotechnical Institute im. V. D. Kuznetsov (Sibirskiy fiziko-tekhnicheskiy institut)

TITLE: Calculation of the source function for an optically dense plasma layer 21,44,55

SOURCE: IVUZ. Fizika, no. 6, 1965, 67-74

TOPIC TAGS: plasma radiation, spectral line, plasma density, variational method, optic density

ABSTRACT: In view of the importance of the knowledge of the source function for the calculation of the contours and integral intensities of the emitted spectral lines and of the total energy lost by the plasma in a discrete spectrum, and in view of the incomplete development of methods of finding this function, the authors describe certain characteristic features of the calculation of the source function with the aid of the Ritz variational method, for an inhomogeneous optically-

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L 15545-66

ACC NR: AP6002083

dense plasma. Special attention is paid to the dependence of this function on the frequency and on the optical thickness of the layer, and the accuracy of the variational procedure. Methods of calculating the line contour with allowance for deviations from the Maxwellian distribution and for the contribution made by various interaction processes and correlations to the broadening are presented. An expression is derived for the density as a function of the optical transmission of the layer, for the case of contours of the Doppler, dispersion, Voigt, and 'statistical-wing' type. Although the errors of the method are appreciable, they do not exceed 100 per cent, and better accuracy is expected when the choice of trial functions is made more precise. This will be the subject of a separate article. Orig. art. has: 2 figures and 28 formulas.

SUB CODE: 20/ SUBM DATE: 11Mar64/ ORIG REF: 008/ OTH REF: 006

Card 2/2

APPROVED FOR RELEASE: Tuesday, August 01, 2000 CIA-RDP86-00513R0013429

"APPROVED FOR RELEASE: Tuesday, August 01, 2000 CIA-RDP86-00513R001342

PREOBRAZHENSKIY, N.G.

Practical sch e for a new method of additions accounting for reabsorption and inhomogeneity of the source. Izv. SO AN SSSR no.7 Ser. khim. nauk no.2:145-148 '64 (MIRA 18:1)

1. Sibirskiy fiziko-tekhnicheskiy institut. Tomsk.

APPROVED FOR RELEASE: Tuesday, August 01, 2000 CIA-RDP86-00513R0013429

"APPROVED FOR RELEASE: Tuesday, August 01, 2000 CIA-RDP86-00513R001342

L 5418-66 EWT(1)/T LJP(c)

ACC NR: AP5025086 SOURCE CODE: UR/0368/65/003/003/0209/0216

AUTHORS: Preobrazhenskiy, N. G.; Ravodina, O. V.; Terpugova, N. S.

ORG: none

TITLE: Formation of spectral line shape with asymmetrical self-reversal

SOURCE: Zhurnal prikladnoy spektroskopii, v. 3, no. 3, 1965, 209-216

TOPIC TAGS: spectrometry, line self reverse, spectral line intensity, spectrum line, spectrum analysis

ABSTRACT: The present paper is a continuation of work reported previously by N. S. Gorbacheva and N. G. Preobrazhenskiy (Opt. i spektr., 15, 453, 1963). The factors determining the spectral line shape with asymmetrical self-reversal were investigated. It was found that the line shape could be described in terms of four parameters ϕ_1, ϕ_2, ϕ_3, and ϕ_4 (see Fig. 1). The relationships between these parameters and the optical density and inhomogeneity of the radiating layer, the Voigt parameter, and the shifts and half-widths of emission and absorption lines

UDC: 543.42

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"APPROVED FOR RELEASE: Tuesday, August 01, 2000 CIA-RDP86-00513R001342

L 5418-66

ACC NR: AP5025086

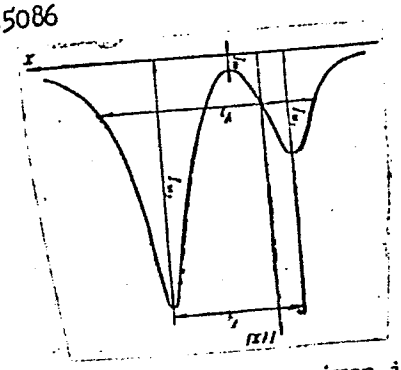

Fig. 1
Parameters in terms of which the line shape I (x) is described. $\phi_1 = I_{M_1}/I_{M_2}$, $\phi_2 = I_m/I_{M_2}$, ϕ_3 line width measured at half-line width of the smaller maximum, ϕ_4 the distance between maxima

were determined. The results are given in tabular form. Orig. art. has: 9 tables, 1 graph, and 13 equations.

SUB CODE: OP/ SUBM DATE: 12Jan65/ ORIG REF: 005/ OTH REF: 005

BVK

Card 2/2

APPROVED FOR RELEASE: Tuesday, August 01, 2000 CIA-RDP86-00513R0013429

"APPROVED FOR RELEASE: Tuesday, August 01, 2000 CIA-RDP86-00513R001342

GORBACHEVA, N.S.; PREOBRAZHENSKIY, N.G.

Asymmetric self-reversed contour of a spectral line as a source of information on the properties of a plasma. Opt. i spektr. 15 no.4:453-456 O '63. (MIRA 16:11)

APPROVED FOR RELEASE: Tuesday, August 01, 2000 CIA-RDP86-00513R0013429

"APPROVED FOR RELEASE: Tuesday, August 01, 2000 CIA-RDP86-00513R001342

PREOBRAZHENSKIY, N.G.

Higher accuracy in measuring the optical thickness of a layer. Izv.vys.ucheb.zav.; fiz.no. 2:49-52 '64. (MIRA 17:6)

1. Sibirskiy fiziko-tekhnicheskiy institut pri Tomskom gosudarstvennom universitete imeni Kuybysheva.

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S/0139/64/000/002/0049/0052

ACCESSION NR: AP4036557

AUTHOR: Preobrazhenskiy, N. G.

TITLE: On improving the accuracy in measuring optical thickness of a layer

SOURCE: IVUZ. Fizika, no. 2, 1964, 49-52

TOPIC TAGS: line absorption, nonhomogeneity, optical thickness, intensity distribution, emission line,, optical density

ABSTRACT: The determination of optical thickness of high temperature emitters (radiators), such as a plasma, was investigated, using a modified form of line absorption measurements described by S. E. Frish and O. P. Bochkova (Vestn. LGU, No. 4, 73, 1962). The effect of film (layer) nonhomogeneity on the ratio $\tilde{I}/I$ has been investigated where $\frac{\tilde{I}(u)}{I(u)} = \frac{\tau}{\tau} \exp[-2npQ(u)]$; $\tilde{I}$, I - light beam intensity with and without absorption, p - actual optical thickness of film Q(u) - P(u)/P(o), P(u) - intensity distribution on absorption or emission lines. This equation shows that for a translucent source the effect of nonhomogeneity is negligible. The H. Bartels (Z. Phys. 125, 597, 1949) limit functions are used to obtain two integral

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ACCESSION NR: AP4036557

expressions of the above ratio as general solutions of the linear absorption problem for a pair of sources with different optical densities. Special solutions are obtained for P(u) arbitrary and with Doppler contours. Orig. art. has: 11 formulas.

ASSOCIATION: Sibirskiy fiziko-tekhnicheskiy institut pri Tomskom gosuniversitete imeni V. V. Kuyby*sheva (Siberian Physicotechnological Institute at Tomsk State University)

SUBMITTED: 14Jan63 DATE ACQ: 05Jun64 ENCL: 00

SUB CODE: OP NO REF SOV: 005 OTHER: 003

Card 2/2

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"APPROVED FOR RELEASE: Tuesday, August 01, 2000 CIA-RDP86-00513R001342

S/0139/64/000/001/0132/0137

ACCESSION NR: AP4020307

AUTHOR: Preobrazhenskiy, N. G.

TITLE: On the calculation of characteristic resonance fluorescence in optical orientation of atoms. 1

SOURCE: IVUZ. Fizika, no. 1, 1964, 132-137

TOPIC TAGS: resonant fluorescence, optical orientation, photon, matrix operator, radiation diffusion, multiple emission

ABSTRACT: A critical study was made of calculation methods used in the analysis of multiple re-emission of atom photons in an optical orientation process. The fluorescence matrix operator is introduced with components proportional to the population probability of original group sublevels. The evaluation of the buildup and decay of resonant fluorescence by this operator is shown to be impossible. The idealized probability (P_k) calculation method of W. Hawkins (Phys. Rev. 98, 478, 1955) is discussed by which one can formulate a weighted average from the fluorescence components of all the ensembles. This is given by Poisson's distribution

$$P_k = \frac{G^k \exp(-G)}{k!}.$$

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For a given optical density of an active substance layer, the above formula leads to a very low value for L/G, the mean free path. The radiation diffusion theory of R. Seiwert (Ann. Phys. 7F., 5, 4, 1959) is also reviewed, and it is suggested that there exists the necessity to derive a more precise theory of fluorescence resonance applicable to a wide range of problems of binary resonance in gaseous systems. Orig. art. has: 19 equations.

ASSOCIATION: Sibirskiy fiziko-tekhnicheskiy institut pri Tomskom gosuniversitete imeni V. V. Kuyby*shova (Siberian Physicotechnical Institute, Tomsk State University)

SUBMITTED: 23Aug62 DATE ACQ: 31Mar64 ENCL: 00

SUB CODE: GP NO REF SOV: 009 OTHER: 018

Card 2/2

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"APPROVED FOR RELEASE: Tuesday, August 01, 2000 CIA-RDP86-00513R001342

ACCESSION NR: AP4042976 S/0051/64/017/001/0008/0015

AUTHOR: Preobrazhenskiy, N. G.

TITLE: Model of optically dense plasma with generalized source function. I. Contour and integral intensity of the spectral line

SOURCE: Optika i spektroskopiya, v. 17, no. 1, 1964, 8-15

TOPIC TAGS: plasma spectral line, line spectrum, spectrum intensity, discharge plasma

ABSTRACT: In view of various shortcomings of earlier models, the author proposes a phenomenological theory in which a new source function is introduced, chosen to satisfy the following requirements: (a) generality as good as in the earlier models; (b) ability to account for differences in the geometrical dimensions of the radiation zone; (c) ability to describe cases when the density of the excited atoms near the discharge-tube wall differs noticeably from

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zero; (d) ease of comparison with the source function calculated by solving the transport equation; (e) ability to yield the principal expressions for the plasma spectrum characteristics. The model permits also the treatment of the contraction of a discharge column and cases of a Townsend electron density gradient. The present part of the article is devoted to the determination of the contour and the integral line intensity. Comparison with other models will be presented in the future. Orig. art. has: 1 figure, 25 formulas and 1 table. "I am deeply grateful to N. A. Prilezhayeva for a discussion of the results."

ASSOCIATION: None

SUBMITTED: 28Oct63 ENCL: 00

SUB CODE: OP NR REF SOV: 008 OTHER: 016

2/2

APPROVED FOR RELEASE: Tuesday, August 01, 2000 CIA-RDP86-00513R0013429

"APPROVED FOR RELEASE: Tuesday, August 01, 2000 CIA-RDP86-00513R001342

S/051/63/014/003/004/019
E039/E120

AUTHOR: Preobrazhenskiy, N.G.

TITLE: The extension of the limits of application of the linear absorption method

PERIODICAL: Optika i spektroskopiya, v.14, no.3, 1963, 342-350

TEXT: An attempt is made to extend the theory by taking into account the effect of possible non-uniformities in the plasma cloud. Formulas are derived which apply to the general problem of linear absorption in a non-uniform plasma layer. Particular cases are also discussed in detail; the Doppler contour, the dispersion contour and the contour of lines with a combination of collisional and Doppler effects. The accuracy of the method is discussed in detail and it is concluded that for a Doppler contour the optical density can be obtained with an accuracy of 10 - 15% while for a dispersion contour the accuracy is 15 - 20%. A simple analytical method of finding the optical density for lines with hyperfine structure is described. The final result is given by the formula:

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$$M_1^{(2)}(p_1, p_2, \gamma) = \frac{1}{p_1 + p_2}\left[(p_1 + \alpha p_2)M_1(p_1 + \alpha p_2) + p_2 M_1(p_2) - \alpha p_2 M_1(\alpha p_2)\right] \quad (33)$$

where p_1 and p_2 are optical densities of two components;

$$p_1 = \beta p_2, \quad \alpha = (2/\pi) \text{ arc ctg } \gamma, \quad (31)$$

M_1 is given by:

$$M_1(x) = e^{-x}\left[J_o(ix) - iJ_1(ix)\right]; \quad \lim_{x \to \infty} M_1(x) = \sqrt{\frac{2}{\pi x}} \quad (17)$$

p_1 and p_2 are easily calculated from the integral values of linear absorption $R^{(2)}$ given by:

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$$R^{(2)} = 1 + g \left[2 \frac{(\alpha+\beta)M_1 \left[2p_2(\alpha+\beta)\right] + M_1(2p_2) - \alpha M_1(2\alpha p_2)}{(\alpha+\beta)M_1 \left[p_2(\alpha+\beta)\right] + M_1(p_2) - \alpha M_1(\alpha p_2)} - 1 \right] \quad (34)$$

This equation is valid when liner possess more than two hyperfine components.
There are 2 figures and 2 tables.

SUBMITTED: May 8, 1962

APPROVED FOR RELEASE: Tuesday, August 01, 2000 CIA-RDP86-00513R0013429

"APPROVED FOR RELEASE: Tuesday, August 01, 2000 CIA-RDP86-00513R001342

KREOBRAZHENSKIY, A.G.

PHASE I BOOK EXPLOITATION SOV/6181

Ural'skoye soveshchaniye po spektroskopii. 3d, Sverdlovsk, 1960. Materialy (Materials of the Third Ural Conference on Spectroscopy) Sverdlovsk, Metallurgizdat, 1962. 197 p. Errata slip inserted. 3000 copies printed.

Sponsoring Agencies: Institut fiziki metallov Akademii nauk SSSR. Komissiya po spektroskopii; and Ural'skiy dom tekhniki VSNTO.

Eds. (Title page): G. P. Skornyakov, A. B. Shayevich, and S. G. Bogomolov; Ed.: Gennadiy Pavlovich Skornyakov; Ed. of Publishing House: M. L. Kryzhova; Tech. Ed.: N. T. Mal'kova.

PURPOSE: The book, a collection of articles, is intended for staff members of spectral analysis laboratories in industry and scientific research organizations, as well as for students of related disciplines and for technologists utilizing analytical results.

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APPROVED FOR RELEASE: Tuesday, August 01, 2000 CIA-RDP86-00513R0013429

"APPROVED FOR RELEASE: Tuesday, August 01, 2000 CIA-RDP86-00513R001342

COVERAGE: The collection presents theoretical and practical problems of the application of atomic and molecular spectral analysis in controlling the chemical composition of various materials in ferrous and nonferrous metallurgy, geology, chemical industry, and medicine. The authors express their thanks to G. V. Chentsova for help in preparing the materials for the press. References follow the individual articles.

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Sherstkov, Yu. A., and L. F. Maksimovskiy. Investigation of the dependence of the total intensity of spectral lines on the concentration of elements in an arc-discharge plasma 4

APPROVED FOR RELEASE: Tuesday, August 01, 2000 CIA-RDP86-00513R0013429

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Preobrazhenskiy, N. G. New version of the reabsorption method for measuring absolute atom concentrations in plasma 8

Prilezhayeva, N. A. Some excitation features of gas mixtures in low-pressure discharges 12

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Zykova, N. M., and G. Ye. Zolotukhin. Effect of the kind of substance and arc current on the size of cathode and anode spots 20

Zolotukhin, G. Ye., N. M. Zykova, and T. A. Kravchenko. Temperature measurement in the "white spot" region of metallic electrodes in the current of an ac arc 23

APPROVED FOR RELEASE: Tuesday, August 01, 2000 CIA-RDP86-00513R0013429

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PREOBRAZHENSKIY, N.G.

Extending the applicability of the linear absorption method. Opt. i spektr. 14 no.3:342-350 Mr '63. (MIRA 16:4)
(Plasma (Ionized gases)) (Absorption spectra)

APPROVED FOR RELEASE: Tuesday, August 01, 2000 CIA-RDP86-00513R0013429

"APPROVED FOR RELEASE: Tuesday, August 01, 2000 CIA-RDP86-00513R001342

PREOBRAZHENSKIY, N.G.

Effect of the reabsorption of radiation on the operation of quantum amplifiers and generators. Izv. vys. ucheb. zav.; fiz. no.5:177-178 '62. (MIRA 15:12)

1. Sibirskiy fiziko-tekhnicheskiy institut pri Tomskom gosudarstvennom universitete imeni V.V. Kuybysheva.
(Masers)

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"APPROVED FOR RELEASE: Tuesday, August 01, 2000 CIA-RDP86-00513R001342

PREOBRAZHENSKIY, N.G.
~~Shrestkov, Yu.A.~~

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PHASE I BOOK EXPLOITATION SOV/6181

Ural'skoye soveshchaniye po spektroskopii. 3d, Sverdlovsk, 1960. Materialy (Materials of the Third Ural Conference on Spectroscopy) Sverdlovsk, Metallurgizdat, 1962. 197 p. Errata slip inserted. 3000 copies printed.

Sponsoring Agencies: Institut fiziki metallov Akademii nauk SSSR. Komissiya po spektroskopii; and Ural'skiy dom tekhniki VSNTO.

Eds. (Title page): G. P. Skornyakov, A. B. Shayevich, and S. G. Bogomolov; Ed.: Gennadiy Pavlovich Skornyakov; Ed. of Publishing House: M. L. Kryzhova; Tech. Ed.: N. T. Mal'kova.

PURPOSE: The book, a collection of articles, is intended for staff members of spectral analysis laboratories in industry and scientific research organizations, as well as for students of related disciplines and for technologists utilizing analytical results.

COVERAGE: The collection presents theoretical and practical problems of the application of atomic and molecular spectral analysis in controlling the chemical composition of various materials in ferrous and nonferrous metallurgy, geology, chemical industry, and medicine. The authors express their thanks to G. V. Chentsova for help in preparing the materials for the press. References follow the individual articles.

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Materials of the Third Ural Conference (Cont.) SOV/6181

Preobrazhenskiy, N. G. New version of the reabsorption method for measuring absolute atom concentrations in plasma 8

Prilezhayeva, N. A. Some excitation features of gas mixtures in low-pressure discharges 12

Shtutman, M. N., V. P. Avdeyenko, V. M. Shul'man, and T. A. Yeremeyeva. Investigation of pulse-discharge features 15

Zykova, N. M., and G. Ye. Zolotukhin. Effect of the kind of substance and arc current on the size of cathode and anode spots 20

Zolotukhin, G. Ye., N. M. Zykova, and T. A. Kravchenko. Temperature measurement in the "white spot" region of metallic electrodes in the current of an ac arc 23

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"APPROVED FOR RELEASE: Tuesday, August 01, 2000 CIA-RDP86-00513R001342

PREOBRAZHENSKIY, N.G.

Calculating the characteristics of resonance fluorescence in the optical orientation of atoms. Part 1. Izv. vys. ucheb. zav.; fiz. no.1:132-137 '64. (MIRA 17:3)

1. Sibirskiy fiziko-tekhnicheskiy institut pri Tomskom gosudarstvennom universitete imeni V.V.Kuybysheva.

APPROVED FOR RELEASE: Tuesday, August 01, 2000 CIA-RDP86-00513R0013429

"APPROVED FOR RELEASE: Tuesday, August 01, 2000 CIA-RDP86-00513R001342

AUTHOR: Preobrazhenskiy, N.G. SOV/51-6-1-27/30

TITLE: On the Distribution of Intensity Along a Contour of a Self-Reversible Spectral Line (O raspredelenii intensivnosti po konturu spektral'noy linii, sposobnoy k samoobrashcheniyu)

PERIODICAL: Optika i Spektroskopiya, 1959, Vol 6, Nr 1, pp 120-121 (USSR)

ABSTRACT: The theory of a non-uniform source of light developed by Cowan and Dieke (Ref 6) gives the distribution of intensity along a reversible spectral line contour by means of the following equation

$$J(u) = J_0 P(u) e^{-\mu} \Gamma(n+1) \sum_{j=0}^{\infty} \frac{\mu^{2j}}{\Gamma(n+2j+1)} \qquad (1)$$

here $u = \nu - \nu_0$ where ν_0 is the frequency corresponding to the centre of the line; the function $P(u)$ de[illegible]ces the line contour for an infinitely thin emitting layer; n [illegible]e degree of non-uniformity of the source; $\mu = p_0 P(u)/P(0)$ where p_0 is an absorption parameter which is proportional to the average concentration of absorbing atoms along the cross-section of the discharge, to the oscillator strength of the line and to the thickness of the emitting layer of plasma; Γ stands

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"APPROVED FOR RELEASE: Tuesday, August 01, 2000 CIA-RDP86-00513R001342

SOV/51-6-1-27/30

On the Distribution of Intensity Along a Contour of a Self-Reversible Spectral Line

for the gamma-function. The present author derives a simpler approximate formula which gives the same intensity distribution but is valid only for $1 < n < 2$, which is the range of n met in arc discharges. The author's formula is given in Eq 3:

$$J(u) = J_0 P(u) e^{-\mu} (n + 1) \left(\frac{\sinh \chi}{\mu}\right)^n \qquad (3)$$

where $\chi = \operatorname{arch}\left(\sqrt[n]{\cosh \mu}\right)$. Eq 3 can be applied without any restrictions for calculation of $J(u)$ in the interval $1 < n < 2{,}2$, and up to $n = 2.6$ if an error of up to 6% can be tolerated. The paper is entirely theoretical. There are 6 references, 4 of which are Soviet, 1 English and 1 German.

SUBMITTED: August 10, 1958

Card 2/2

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"APPROVED FOR RELEASE: Tuesday, August 01, 2000 CIA-RDP86-00513R001342

PREOBRAZHENSKIY, N.G.

Mutual space distribution of radiating and absorbing atoms in the plasma of arc discharges. Izv.vys.ucheb.zav.; fiz. no.2:129-134 '59. (MIRA 12:8)

1. Sibirskiy fiziko-tekhnicheskiy institut pri Tomskom gosuniversitete im. V.V.Kuybysheva.
(Electric discharges through gases)

APPROVED FOR RELEASE: Tuesday, August 01, 2000 CIA-RDP86-00513R0013429

"APPROVED FOR RELEASE: Tuesday, August 01, 2000 CIA-RDP86-00513R001342

PREOBRAZHENSKIY, N.G.

Full intensity of a spectral line radiating in an optically dense source of heterogeneous light. Izv.vys.ucheb.zav.; fiz. no.3: 84-94 '59. (MIRA 12:10)

1. Sibirskiy fiziko-tekhnicheskiy institut pri Tomskom gosuniversitete imeni V.V.Kuybysheva.
(Light--Spectra)

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"APPROVED FOR RELEASE: Tuesday, August 01, 2000 CIA-RDP86-00513R001342

PREOBRAZhENSKIY, N. G., Cand Phys-Math Sci — (diss) "Certain questions on the spectroscopy of an impervious plasma," Leningrad, 1960, 12 pp (Leningrad State Univ im A. A. Zhdanov) (KL, 36-60, 113)

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