

REEL #

ALADZHON, ST. G
to

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ALEKSANDROV, YU. A.

"APPROVED FOR RELEASE: 06/05/2000

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CIA-RDP86-00513R000100810001-0"

ALADZHOV, St.G.; ZHIVKOV, E.S.; PENOV, G.

Our experience with clinical electroretinography. Nauch. tr.
vissh. med. inst. Sofia 42 no.4:91-95 '63

1. Aus der Universitätsaugenklinik (Direktor: Doz. E. Zhivkov)
und dem Physiologischen Institut (Direktor: Prof. T. Gotzev)
des Medizinischen Institutes in Sofia.

*

ACC NR: AP6025539

SOURCE CODE: UR/0079/66/036/001/0161/0162

AUTHOR: Pudovik, A. N.; Ishmayova, E. A.; Aldmerova, R. S.; Aladzhava, I. H. 44
 ORG: Kazan' State University in V. I. Ul'yanov-Lenin (Kazanskiy gosudarstvennyy universitet) B

TITLE: Addition of nucleophilic reagents to 2,3-di(diethylphosphone)-butadiene-1,3

SOURCE: Zhurnal obshchey khimii, v. 36, no. 1, 1966, 161-162

TOPIC TAGS: phosphorus acid, phosphorus compound, exothermic reaction, IR spectrum, potassium compound

ABSTRACT: The addition of nucleophilic reagents: dimethyl- and diethylphosphorous acids, ethyl mercaptan, and diethylamine to butadiene was found to proceed in the presence of alcoholates of the alkali metals. Addition proceeds exothermally in the 1,2-position. 1-Dimethylphosphono-2,3-di(diethylphosphone)butene-3, 1,2,3-tri(diethylphosphone)butene-3, 1-mercaptoethyl-2,3-di(diethylphosphone)butene-3, and 1-diethylamino-2,3-di(diethylphosphone)butene-3 were synthesized; their structures were established by study of their infrared spectra and oxidation with potassium permanganate.

[JPRS: 35,998]

SUB CODE: 07, 20 / SUBM DATE: 21Apr65 / ORIG REF: 001

Card 1/1

UDC: 547.26'118

0976 092.7

L 18274-65

ACCESSION NR: AP5002987

ASSOCIATION: Kazenskiy gosudarstvennyy universitet (Kazan' State University)

SUBMITTED: 01Jul63

ENCL: 00

SUB CODE: CC, CC

NO REF SOV: 002

OTHER: 001

JPRS

Card 2/2

L 9907-43

ACCESSION NR: AP3002623

2

and are stable in storage and distillation. Some of their physical constants and yields are given in table 1 of the Enclosure. The diphosphites enter all reactions characteristic of P(III)-containing compounds; triethylene diphosphite, for example, reacts with an equimolar amount of sulfur to form triethylene bithiophosphate. Reactions of the phosphites with haloalkanes are of general interest. Thus, triethylene diphosphite and bromoethane undergo an Arbuzov rearrangement at 130C to form ethylene ethylphosphonate and dibromoethane, probably by mechanism B as shown in Fig. 1 of the Enclosure. The Arbuzov rearrangement can be used to prepare polymers from the diphosphites. Heating of a diphosphite with an equimolar amount of a dihaloalkane such as dibromoethane or dibromobutane produces highly viscous, resinous P-containing polymers. Heating of a diphosphite with a catalytic quantity of iodoethane produces hard, glassy polymers which are slightly soluble in organic solvents. The preparation and properties of the polymers will be described in greater detail in a separate paper. Orig. art. has: 3 formulas and 1 table.

ASSOCIATION: Kazanskiy gosudarstvennyy universitet (Kazan' State University)

SUBMITTED: 21May62

DATE ACQ: 20Jul63

REF: 02

SUB CODE: 00

NO REF SOV: 009

OTHER: 001

Card 2/12

L 9907-63 EWP(j)/EPF(c)/EWP(q)/EWT(m)/
BDS-AFFTC/ASD-Pr-4/Pc-4-RM/MAY/WW/JD
ACCESSION NR: AP3002623

S/0079/63/033/006/1816/1821

AUTHOR: Pudovik, A. N.; Aladzheva, I. M.

TITLE: Polyphosphites. V. Synthesis and properties of cyclic diphosphites

SOURCE: Zhurnal obshchey khimii, v. 33, no. 6, 1963, 1816-1821

TOPIC TAGS: cyclic diphosphites, phosphorous acid, phosphorous acid esters, 1,3-ethanediol, 1,2-propanediol, 1,3-propanediol, 1,3-butanediol, bis(2-hydroxyethyl) ether, pyrocatechol, polyphosphites, polymers

ABSTRACT: The synthesis and properties of certain cyclic diphosphites having an aliphatic chain or an aromatic ring as the common radical have been studied for the first time. The diphosphites were synthesized in a 50 to 70% yield from the cyclic phosphorochloridites and various glycols or pyrocatechol, with cooling in absolute ethyl ether in the presence of triethylamine. The diphosphites are liquids readily soluble in many organic solvents, react exothermically with water,

Card 1/42

PUDOVIK, A.N.; ALADZHEVA, I.M.

Acetylene-allene-acetylene rearrangements of phosphites with a β, γ -acetylene bond in an ester radical. Zhur.ob.khim. 33 no.2:707-7-8 F '63. (MIRA 16:2)

1. Kazanskiy gosudarstvennyy universitet.
(Phosphorous acid) (Rearrangements (Chemistry))
(Phosphinic acid)

PUDOVIK, A.N.; ALADZHEVA, I.M.

Esters of ethyleneglycoldiphosphorous acid. Zhur.ob.khim. 31 no.6:
2052-2057 Je '61. (MIRA 14:6)

1. Kazanskiy gosudarstvennyy universitet.
(Phosphorous acid)

BEKIAROV, Em., inzh.; ALADZHEM, E., inzh.; ANTONOV, B., inzh.

Use of ferroalloys as electrodes in electric-spark plating.
Mashinostroene ll no.7/8:7-14 J1-Ag '62.

1. Postolainen konsultant, "Mashinostroene" (for Bekiarov).

ALIEDZHAN, M.S.

Treating tuberculous gonitis. Ortop., travm. i protez. 17 no.1:52
Ja-P '56. (MIRA 9:12)

1. Iz travmatologicheskogo otdeleniya (zav. - F.A.Rudenko) Voroshilov-
gradskoy bol'nitsy
(KNEE JOINT--TUBERCULOSIS)

DIMITROV, D., inzh.; VULEVA, Em., inzh.; ALADZHEM, E., inzh.

Influence of geometric factors determining the precision of the universal triple-jaw chuck of the Y-190 type. Mashinostroyeniye 12 no. 11:12-15 N '63.

1. Mashinno-elektrotekhnicheskii institut.

ALADZHEM, Nisim

The Fatherland Front as a tool of the Bulgarian Communist Party in conformity with the objectives and requirements of the strategy.
Godishnik khim tekhn 6 no.1:147-167 '59 (Publ. '60)

ALADZHEM, N.

Modifications of some internal functions of the dictatorship of the proletariat under the conditions of the victorious socialism in Bulgaria. Godishnik khim tekhn 7 no.1/2:349-370 '60 [publ. '61].

ALADZHEM, N.

On the characteristics of the transition to socialism in the People's
Republic of China. Godisnik khim tekhn 5 no.2:117-139 '58 (Publ. '60).

PUDOVIK, A.N.; ALADZHEVA, I.M.

Addition of ammonia and amines to isoprene oxide. Zhur.ob.khim.
28 no.9:2497-2500 S '58. (MIRA 11:11)

1. Kazanskiy gosudarstvennyy universitet.
(Ammonia) (Amines) (Isoprene)

PUDOVIK, A.N.; ALADZHEVA, I.M.

Claisen rearrangement of allyl esters of thiophosphoric acid. Zhur.
ob.khim. 30 no.8:2617-2624 Ag '60. (MIRA 13:8)

1. Kazanskiy gosudarstvennyy universitet.
(Phosphorothioic acid)
(Allyl compounds)

PUDOVIK, A. N.; ALADZHEVA, I. M.; SOKOLOVA, I. A.; KOZLOVA, G. A.

Polyphosphites. Part 4: Reactions of dialkyl phosphoryl
chlorides with glycols. Zhur. ob. khim. 33 no.1:102-107
'63. (MIRA 16:1)

1. Kazanskiy gosudarstvennyy universitet.

(Phosphoryl chloride) (Glycols)

PUDOVIK, A.N.; ALADZHEVA, I.M.

Acetylene-allene-diene rearrangements fo diphosphites with a
 β, γ - acetylene bond in a common ester radical. Zhur.ob.khim.
33 no.2:708-709 F '63. (MIRA 16:2)

1. Kazanskiy gosudarstvennyy universitet.
(Diphosphorous acid) (Rearrangements (Chemistry))
(Butadiene)

PUDOVIK, A.N.; KHUSAINOVA, N.G.; ALADZHEVA, I.M.

Reaction of nucleophilic addition to alkynyl phosphinites.
Zhur.ob.khim. 33 no.3:1045-1046 Mr '63. (MIRA 16:3)

1. Kazanskiy gosudarstvennyy universitet.
(Phosphinic acid) (Unsaturated compounds)
(Addition reactions)

PUDOVIK, A.N.; ALADZHEVA, I.M.; YAKOVENKO, L.N.

Synthesis and rearrangement of diethylpropargyl phosphite.
Zhur.ob.khim. 33 no.10:3443-3444 0 '63. (MIRA 16:11)

1. Kazanskiy gosudarstvennyy universitet.

PUDOVIK, A.N.; ALADZHEVA, I.M.

Thermal or "pseudoclaissen rearrangements of allyl and propargyl
esters of phosphorous acid. Dokl. AN SSSR 151 no.5:1110-1113
Ag '63. (MIRA 16:9)

1. Kazanskiy gosudarstvennyy universitet im. V.I.Ul'yanova-Lenina.
Predstavleno akademikom B.A.Arbusovym.
(Phosphorous acid) (Esters) (Rearrangements (Chemistry))

L 17955-35 EWT(m)/EPF(c)/EWP(j) Pc-4/Pr-4 RPL RM
ACCESSION NR: AP5002568 S/0079/64/034/007/2470/2471

AUTHOR: Rudovik, A. N.; Khusainova, N. G.; Aladzhova, I. M.

TITLE: Addition of nucleophilic reagents to the diethyl ester of gamma, gamma-
dimethylallenylphosphinic acid 1

SOURCE: Zhurnal obshchey khimii, v. 34, no. 7, 1964, 2470-2471

TOPIC TAGS: phosphinic acid, ester, catalysis, cyanide compound, isomerization

Abstract: The authors propose that the previously described reactions of nucleophilic reagents with allenyl cyanide should be considered as occurring with its preliminary isomerization to the nitrile of tetrolic acid, to which the nucleophilic reagents are then added. Experiments on the addition of a catalytic amount of sodium ethylate or triethylamine to dialkyl esters of allenylphosphinic acid, resulting in total isomerization of allenylphosphinates to esters of propynylphosphinic acid, confirmed this hypothesis. The addition of methanol and ethanol to the diethyl ester of gamma, gamma-dimethylallenylphosphinic acid produced an addition product to which the structure 1-diethylphosphone-2-alkoxy-3-methylbutene-1 was ascribed. Addition of diethylphosphorous acid to the allene studied produced 1,2-di(diethylphosphone)-3-methylbutene-1. Orig. art. has 4 formulas.

Card 1/2

L 17955-65

ACCESSION NR: AP5002568

ASSOCIATION: Kazanskiy gosudarstvennyy universitet (Kazan' State University)

SUBMITTED: 28feb64

ENCL: 00

SUB CODE: CC, GC

NO REF SOV: 003

OTHER: 002

JPRS

Card 2/2

L 18274-65 EWT(m)/EPF(c)/EWP(j) Pc-4/Pr-4 RM
ACCESSION NR: AP5002987 S/0079/64/031/009/29 07/2910

AUTHOR: Pudovik, A. N.; Aladzheva, I. M.; Patrusheva, N. A.

TITLE: Reaction of chlorides of dialkylphosphorus acids¹ with 2,5-dimethylhexyne-3-diol-2,5

SOURCE: Zhurnal obshchey khimii, v. 34, no. 9, 1964, 2907-2910

TOPIC TAGS: chloride, organic phosphorus compound, chemical reaction

Abstract: The reactions of chlorides of diethyl-, di-n-propyl-, and di-n-butylphosphorous acids with 2,5-dimethylhexyne-3-diol-2,5 (I) were studied. In the reaction of 1 mole of (I) with 2 moles of the dialkyl chlorophosphite in ether solution in the presence of an organic base, followed by distillation of the reaction products under vacuum, the phosphites formed underwent a rearrangement, and 2,5-dimethyl-4-(dialkylphosphone)hexadiene-2,3-diol-5 (A) (20-38% yield) and 2,5-dimethyl-3,4-di(dialkylphosphone)hexadienes-2,4 (7-30% yield) were obtained. These reactions are compared with the analogous reactions of dialkylchlorophosphites with 2-butyne-1,4, producing only conjugated dienes and no allene-type products. The mechanisms of the reactions studied are discussed and the infrared spectra of the reaction products, confirming their structures, are considered. Orig. art. has 6 formulas and 1 table.

Card 1/2

PUDOVIK, A.N.; ALADZHEVA, I.M.; PATRUSHEVA, N.A.

Interaction of dialkylphosphoryl chlorides with 2,5-dimethyl-3-hexyne-2,5-diol. Zhur. ob. khim. 34 no.9:2907-2910 S '64.
(MIRA 17:11)

1. Kazanskiy gosudarstvennyy universitet.

PUDOVIK, A.N.; ALADZHEVA, I.M.; YAKOVENKO, L.N.

Synthesis and rearrangements of propargyl phosphites and allenyl
phosphonates. Zhur. ob. khim. 35 no.7:1210-1217 J1 '65.
(MIRA 18:8)

1. Kazanskiy gosudarstvennyy universitet.

ALADZHOV, V.

Aladzhov, V. - Rukovodstvo po smolodobivaneto. (Sofiya) Zemizdat (1952) 67 p.
(Handbook on the production of resin)

SO: Monthly List of East European Accessions, Library of Congress, Vol. 2, No. 9,
Oct. 1953, Uncl.

LEVCHENKO, G.I., admiral, otvetstvennyy red.; DEMIN, I.A., dots., kand. geogr. nauk, inzh.-kontr-admiral, glavnyy red.; FUMKIN, N.S., polkovnik, zamestitel' otvetstvennogo red.; ABAN'KIN, P.S., admiral, red.; ALAFUZOV, V.A., prof., kand. voenno-morskikh nauk, admiral, red.; ANAN'ICH, V.S., kontr admiral zapasa, red.; ACHKASOV, V.I., kand. istor. nauk, kapitan 1 ranga, red.; BARANOV, A.N., red.; BELLI, V.A., prof., kontr-admiral v otstavke, red.; BESKROVNYY, L.G., prof., doktor istor. nauk, polkovnik zapasa, red.; BOLTIN, Ye.A., kand. voen. nauk, general-mayor, red.; VERSHININ, D.A., kapitan 1 ranga, red.; VITVER, I.A., prof., doktor geogr. nauk, red.; GEL'FOND, G.M., dots., kand. voenno-morskikh nauk, kapitan 1 ranga, red.; GLINKOV, Ye.G., inzh.-kontr-admiral v otstavke, red.; YELISEYEV, I.D., vitse-admiral, red.; ZOZULYA, F.V., admiral, red.; ISAKOV, I.S., prof., Admiral Flota Sovetskogo Soyuza, red.; KAVRAYSKIY, V.V. [deceased], prof., doktor fiz.-mat. nauk, inzh.-kontr-admiral v otstavke, red.; KALESNIK, S.V., red.; KOZLOV, I.A., dots. kand. voenno-morskikh nauk, kapitan 1 ranga, red.; KOMAROV, A.V., vitse-admiral, red.; KUDRYAVTSEV, M.K., general leytenant tekhnicheskikh voysk, red.; LYUSHKOVSKIY, M.V., dots., kand. istor. nauk, polkovnik, red.; MAKSIMOV, S.N., dots., kand. voenno-morskikh nauk, kapitan 1 ranga, red.; OKUN', S.B., prof., doktor istor. nauk, red.; ORLOV, B.P., prof., doktor geogr. nauk, red.; PAVLOVICH, N.B., prof., kontr-admiral v otstavke, red.; PANTELEYEV, Yu.A., admiral, red.; PITERSKIY, N.A., kand. voenno-morskikh nauk, kontr-admiral, red.; PLATONOV, S.P., general-leytenant, red.; POZNYAK, V.G., dots., general leytenant, red.; SALISHCHEV, K.A., prof., doktor tekhn. nauk, (Continued on next card)

LEVCHENKO, G.I.---(continued) Card 2.

red.; SIDOROV, A.L., prof., doktor istor. nauk., red.; SKORODUMOV, L.A., kontr-admiral, red.; SNEZHINSKIY, V.A., prof., doktor voenno-morskikh nauk, inzh.-kapitan 1 ranga, red.; SOLOV'YEV, I.N., dots., kand. voenno-morskikh nauk, kapitan 1 ranga, red.; STALBO, K.A., kontr-admiral, red.; STEPANOV, G.A. [deceased], dots., vitse-admiral, red.; TOMASHEVICH, A.V., prof., doktor voenno-morskikh nauk, kontr-admiral v otstavke, red.; TRIBITS, V.F., kand. voenno-morskikh nauk, admiral, red.; CHERNYSHOV, F.I., kontr-admiral, red.; SHVEDE, Ye.Ye., prof. doktor voenno-morskikh nauk, kontr-admiral, red.; CHURBAKOV, A.I., tekhn. red.; VASIL'YEVA, Z.P., tekhn. red.; VIZIROVA, G.N., tekhn. red.; GOROKHOV, V.I., tekhn. red.; GRIN'KO, A.M., tekhn. red.; KUBLIKOVA, M.M., tekhn. red.; MALINKO, V.I., tekhn. red.; SVIDERSKAYA, G.V., tekhn. red.; CHERNOGOROVA, L.P., tekhn. red.; GUREVICH, I.V., tekhn. red.; BUKHANOVA, N.I., tekhn. red.; NIKOLAYEVA, I.N., tekhn. red.; RADOVIL'SKAYA, E.O., tekhn. red.; TIKHOMIROVA, A.S., tekhn. red.; BELOCHKIN, P.D., tekhn. red.; LOYKO, V.I., tekhn. red.; ROMANYUK, I.G., tekhn. red.; YAROSHEVICH, K.Ye., tekhn. red.

[Sea atlas] Morskoi atlas. Otv. red. G.I. Levchenko. Glav. red. L.A. Demin. [Moskva] Izd. Glav. shtaba Voenno-morskogo flota. Vol.3. [Military and historical. Pt.1. Pages 1-45] Voenno-istoricheskii. Zamestitel' otv. red. po III tomu N.S. Frumkin. Pt.1. Listy 1-45. 1958. _____ [Military and historical maps, pages 46-52]
(Continued on next card)

LEVCHENKO, G.I.---(continued) Card 3.

Voenno-istoricheskie karty, listy 46-52. 1957.

(MIRA 11:10)

1. Russia (1923- U.S.S.R.) Ministerstvo oborony. 2. Nachal'nik
Glavnogo upravleniya geodezii i kartografii Ministerstva vnutrennikh
del SSSR (for Baranov). 3. Chlen-korrespondent Akademii nauk SSSR
(for Kalesnik). 4. Deystvitel'nyy chlen Akademii pedagogicheskikh
nauk RSFSR (for Orlov).

(Ocean---Maps)

~~ALAFUZOV, V.A.,~~ admiral

"Military strategy," edited by Marshal Sokolovskii. Reviewed by
V.A.Alafuzov. Mor. sbor. 46 no.1:88-96 Ja '63. (MIRA 16:1)
(Strategy)

IGNAT'YEVA, G.V.; SARAYEVA, N.T.; KHROMETSKAYA, T.M.; LIDENEVA, A.G.;
MASTYUKOVA, Yu.N.; NESTEROVA, T.P.; ALAFUZOVA, S.B.; YERSHOVA, A.S.;
BARANOVA, T.V.; BEKLEMESHEVA, Ye.D.; SHIPOVA, Ye.P.; SUKHANOVA, R.V.;
KHLIYABICH, G.N.; KHANTSIS, S.S.

Clinical and epidemiological effectiveness of a reduced dose of
 γ -globulin (1.5 ml) in seroprophylaxis of measles. Zhur.mikrobiol.,
epid. i immun. 42 no.12:57-61 D '65. (MIRA 19:1)

1. Moskovskiy institut epidemiologii i mikrobiologii; Institut viru-
sologii imeni Ivanovskogo AMN SSSR; Moskovskaya sanitarno-epidemiolo-
gicheskaya stantsiya; Rybinskaya sanitarno-epidemiologicheskaya
stantsiya; Vladimirskaia sanitarno-epidemiologicheskaya stantsiya i
Ob'yedinennaya detskaya poliklinika, Makhachkala.

IGNAT'YEVA, G.V.; SUMAROKOV, A.A.; LEDENEVA, A.G.; ALAFUZOVA, S.V.

Immunological effectiveness of pertussis-diphtheria-tetanus vaccine. Zhur. mikrobiol., epid. i immun. 40 no.10:58-62 O '63.

(MIRA 17:6)

1. Iz Moskovskogo instituta epidemiologii i mikrobiologii i sanitarno-epidemiologicheskoy stantsii Leningradskogo rayona Moskv.

ALAGA, G.

Yugoslavia (430)

Science-Periodicals

"Neutrino." p. 183. Hrvatsko prirodoslovno drustvo.
GLASNIK MATEMATICO-FIZICKI I ASTRONOMSKI. Zagreb.
(Five no. a year; bulletin on mathematics, physics,
and astronomy issued by the Croatian Society of
Natural Sciences. French, English, or German summaries).
Serijs II, Vol. 7, No. 3, 1952.

East European Accessions List, Library of Congress
Vol. 2, No. 6, June 1953. Unclassified.

SELECTION RULES FOR BETA AND GAMMA PARTICLE
TRANSITIONS IN STRONGLY DEFORMED NUCLEI. G.

Alaga (Univ. of Zagreb, Yugoslavia): Nuclear Phys. 3,
629-711 (1957) Oct

A complete list of selection rules for beta and gamma
particle transitions in strongly deformed nuclei is given.
For the beta decay the list covers all transitions up to the
second forbidden ones, while for the gamma decay the
selection rules are given for the electric and magnetic
dipole, quadrupole, and octupole transitions. References
to the papers making use of the selection rules in classifying
nuclear states and explaining relative beta and gamma
intensities are given at the end of the article. (auth)

1-6m8

1-4E3D

pm8

ALAGA, G.

Calculation of the corrections for the analysis of the β -spectra and their application to holmium-166. G. Alaga and B. Jaksic. *Gl. ije mat. fiz. i Astron. Ser II, 12, 61-71 (1957)* (in English); *C.A.* 50, 18444b. — A tensor pseudo-scalar mixt. is used to account qual. for the large $\log ft = 8.1$ value and approx. allowed shape of the $Ho^{166} \rightarrow Er^{164}$ $1/1$ ground state ($0- \rightarrow 0+$) transition. Geo. V. Ascoli

2-4E3C

4E3C

1/

ALAGA, G.

YUGOSLAVIA/Nuclear Physics - Structure and Properties of Nuclei C-4

Abs Jour : Ref Zhur - Fizika, No 8, 1958, No 17506

Author : Alaga G., Jaksic B.

Inst : Faculty, Scientific Institute "Ruder Bosovic" Zagreb,
Yugoslavia

Title : Calculation of the Corrections for the Analysis of the
Spectra and Their Application to Ho^{166} .

Orig Pub : Glasnik mat.-fiz. i astron., 1957, 12, No 1-2, 31-74

Abstract : A detailed analysis is made of the known methods for calculating the β -spectra corrections necessitated by the finite dimension of the nucleus and by the change in the wave function of the electron inside the nucleus. For the case $0^- \rightarrow 0^+$ transition in the decay $\text{Ho}^{166} \rightarrow \text{Er}^{166}$, the calculations have been numerically evaluated. The results of the calculations are given in the form of a series of graphs. The charge distributions inside the nucleus was assumed to be parabolic. The interaction selected was a mixture of P and T variants. Two possibilities are considered: (1) pseudo-scalar coupling

Card : 1/2

YUGOSLAVIA/Nuclear Physics - Structure and Properties of Nuclei C-4

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Abs Jour : Ref Zhur - Fizika, No 8, 1958, No 17506

constant considerably greater than the tensor one; (2) matrix element of the T interaction has an anomalously small value. Assumption (1) does not agree with experiment. Assumption (2) makes it possible to explain the allowed form of the spectrum and the large value of it, which equals 8.1. See also Referat Zhur Fizika, 1957, No 9, 22132.

YUGOSLAVIA/Nuclear Physics - Structure and Properties of Nuclei

C-4

Abs Jour : Ref Zhur - Fizika, No 1, 1959, No 430

Author : Alaga G., Sips L., Tadic D.

Inst : Institute Ruder Boskovic, Zagreb, Yugoslavia

Title : The Influence of the Pseudoscalar Interaction in the Decay of Pr^{144}

Orig Pub : Glasnik mat.-fiz. i astron., 1957, 12, No 3, 207-217

Abstract : A theoretical analysis has been made of the hard component of the beta spectrum of Pr^{144} ($E_0 = 2.99$ Mev, $\log ft = 6.6$), corresponding to a $0^- \rightarrow 0^+$ transition between the ground states of Pr^{144} and Nd^{144} , assuming the TP variant of interaction with supplementary account for the possible influence of the nuclear forces. The beta interaction was used in the following form

$$\langle H \rangle_\beta = -g_T \langle \sigma L_3 \rangle + g_P \langle \sigma r L_3 \rangle f(r, P, \sigma) + \frac{g_P}{2M} \langle \sigma \cdot \nabla L_3 \rangle,$$

Card : 1/3

YUGOSLAVIA/Nuclear Physics - Structure and Properties of Nuclei

C-4

Abs Jour : Ref Zhur - Fizika, No 1, 1959, No 430

performed prior to the discovery of parity non-conservation in β decay. In the remarks it is indicated that, in particular, it is necessary to take into account the possible presence of the A variant. The theoretically-computed form of the β spectrum is obtained for the pure A variant, and this form coincides with the experimental allowed form within 3%.

Card : 3/3

ALAGA, G

Distr: $4E3c/4E3d$

✓ Calculation of some relativistic corrections to the allowed and I -forbidden β -transitions. G. Alaga, L. Sips, and D. Tadic. *Glasnik mat. fiz.* 13(1958), Ser II, 13, 139-58 (1958).—Some values of coupling consts. result in an observable effect on the spectra, half-life, K/β^+ ratio, and angular correlations. By assuming a single particle moving in a static field and by applying the Foldy-Wouthoysen transformation, these corrections were calcd. The corrections are independent of the model. M.W.

4
2

(11)

ALAGA, G. (Zagreb); SIPS, L. (Zagreb); TADIC, D. (Zagreb)

Corrigendum and addendum. Calculation of some relativistic corrections to the allowed and 1-forbidden beta transitions. "Glasnik mat.fiz. i astr.," 13 '58. Glas mat fiz Hrv 16 no.3/4:263-264 '61.

ALAGOVA, Z. S.

5.4600

S/054/60/000/003/008/021
B020/B067

82088

AUTHORS: Materova, Ye. A., Alagova, Z. S.

TITLE: An Attempt of Using Membrane Electrodes in Hydrofluoric Acid Solutions

PERIODICAL: Vestnik Leningradskogo universiteta. Seriya fiziki i khimii, 1960, No. 3, pp. 80-84

TEXT: In the present paper the authors try to use membrane electrodes consisting of ion exchanger resins to investigate HF-solutions. It is known that electrodes consisting of cation exchanger resins give a theoretical hydrogen function in acid solutions in a wide concentration range; in fluoride solutions electrodes consisting of anion exchanger resins show opposite behavior with respect to the F^- ion. Hence reasons exist to assume that membrane electrodes in HF-solutions can be used for measuring the pH and for determining the anion composition. The equilibrium in HF-solutions was investigated by many authors, and it was found that hydrofluoric acid dissociates according to the following scheme:

Card 1/3

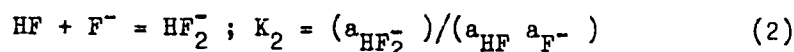
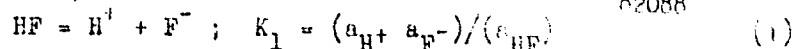
82088

An Attempt of Using Membrane Electrodes in
Hydrofluoric Acid Solutions

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The methods of determining the quantities K_1 and K_2 are given in the monograph by I. G. Ryss (Ref. 5). The authors determined the values of these activity coefficients at 15, 25 and 35°C in a concentration range from 0.001 to 1.0 M. To investigate the hydrogen function in HF-solutions, membrane electrodes consisting of sulfocationites CBC (SBS) and KY -2 (KU-2) were used. The fluorine function was investigated by means of electrodes made of the monofunctional anionite AG-17 (AV-17) and the polyfunctional anionites $\Delta\Delta$ -10П (EDE-10P), AH-2Ф (AN-2F), and MMГ-1 (MMG-1). The hydrogen function of the membrane electrodes was studied in HF-solutions by means of the galvanic cells I and II. The pH values measured for the e.m.f. of cells I and II and for those measured with a hydrogen electrode are listed in Table 1, and graphically shown in Fig. 1. The table shows that, in the concentration range investigated, E_1 remains constant with an accuracy of ± 1 mv. Table 2 shows that

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Hydrofluoric Acid Solutions

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ΔE_{exp} agrees with ΔE^{theor} with an accuracy of some millivolts in the entire concentration range investigated which confirms the hypothesis of the mixed function of membrane electrodes consisting of anion exchanger resins in HF-solutions. There are 1 figure, 2 tables, and 9 references: 5 Soviet, 2 USA, 1 British, and 1 German.

LH

Card 3/3

88259

S/076/60/034/012/011/027
B020/B067

26.1610

AUTHORS: Materova, Ye. A. and Alagova, Z. S.

TITLE: Study of the Electrode Properties of Anion-exchanging Membranes

PERIODICAL: Zhurnal fizicheskoy khimii, 1960, Vol. 34, No. 12, pp. 2752-2758

TEXT: The authors attempted to study the electrode properties of the anion exchangers of different basicity and different chemical character in halide solutions with special consideration of the chlorine-, bromine, and fluorine functions of the anionite membranes. The electrode membranes were produced from the resins AB-17 (AV-17), OAL, AB-16 (AV-16), ЭДЭ-10Н (EDE-10P), АН-2Ф (AN-2F) and ММГ-1 (MMG-1). To study the chlorine function, electrodes were produced from resins saturated with chlorine ions. The bromine electrode membranes and some fluorine electrodes were produced from chlorine electrodes by introducing them into a 1.0 NaBr or NaF solution. The remaining fluorine electrodes were produced from resins which had been converted into the fluorine form. An AgCl-, AgBr-

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Study of the Electrode Properties of
Anion-exchanging Membranes

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B020/B067

and a sodium-glass electrode served as reference electrodes. The emf of the current circuit with electrode membrane was measured by an ordinary potentiometer. An amplifier with electrometric tube was connected to the current circuit when using glass electrodes. The measuring accuracy was 0.2 - 0.5 mv. Usually, 10 to 12 electrodes of each resin were studied. All experiments were made at room temperature. The results of measurement of the membrane potentials with different galvanic cells are illustrated in Figs. 1-3, by representing emf as a function of the negative logarithm of the mean activity of the electrolyte. The figures on the axis of ordinates refer to the lower curve. For better illustration each of the following curves is displaced in upward direction by 40 mV as compared to the preceding one. The membrane potentials measured by some galvanic cells are given in Tables 1-4. The chlorine function of the anion-exchanging membranes was studied in KCl, NaCl and HCl solutions. Fig. 1 shows that the linear relation obtained between the potential and logarithm of the mean activity of NaCl for all electrodes within the limits of measuring errors holds in a concentration range of 0.005 to 0.5 M with the angular coefficient of the straight line corresponding to the theoretical value. The bromine function of the electrode membranes was studied in NaBr

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Study of the Electrode Properties of
Anion-exchanging Membranes

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solutions. As is shown by Fig. 2 a linear dependence of the electrode potential on the logarithm of the mean activity of NaBr was obtained in the concentration range of from 0.005 to 0.2 mole. The same holds for the fluorine function in the concentration range from 0.05 to 0.8 mole. There are 3 figures, 4 tables, and 12 references: 3 Soviet, 3 US, 4 British, 1 German, and 1 Indian.

ASSOCIATION: Leningradskiy gosudarstvennyy universitet im. A. A. Zhdanova
(Leningrad State University imeni A. A. Zhdanov) X

SUBMITTED: March 19, 1959

Card 3/3

MATEBOVA, Ye.A.; ALAGOVA, Z.S.; KUZNETSOVA, I.N.

Electrode behavior of cation-exchange membranes in solutions of
certain electrolytes with two- and three- charge cations. Vest.
IGU 19 no.16:100-103 '64. (LIRA 17:11)

ALAJBEG, Antun

Conference on more stimulative remuneration of workers held in Banja Luka.
Energija Hrv 10 no. 1/2:59-61. '61

ALAJBEG, Antun

"Problems of electric power distribution in Croatia" published by the Professional Association of Enterprises for the Distribution of Electric Power in Croatia. Reviewed by Antun Alajbeg. Energija Hrv 10 no. 1/2:65-67. '61

ALAJBEG, Antun

Operational and organizational problems of "Elektrodalmacija." Energija
Hrv 10 no. 3/4:122 '61.

ALAJBEG, Antun

Consultations on the projecting and building of electric installations
for the dwellings. Energija Hrv 11 no.9/10:332-334 '62.

ALASOS, K

4948. TESTS IN HUNGARY WITH THE ARTICULATED FRAME DOMEASS COMBINE MINES FU
Alajos, K. (Buryass. Lap. (J. Min., Buda.), June 1955, vol. 10, 308-310).

ALAK, Kh.M., inzh.

Conference on the utilization of automatic and remote control
and relay protection. Elek. sta. 30 no.3:95-96 Mr '59.

(MIRA 12:5)

(Automatic control) (Remote control) (Electric relays)

S/058/62/000/006/120/136
A062/A101

6.4300

AUTHOR: Alakhov, Ye. K.

TITLE: On increasing the precision of phase measurements for centimeter band waves

PERIODICAL: Referativnyy zhurnal, Fizika, no. 6, 1962, 34 - 35, abstract 6Zh229 ("Sb. tr. XIII Leningr. nauchno-tekhn. konferentsii posvyashch. dnyu radio". Leningrad, 1959, 88 - 93)

TEXT: A method is proposed for measuring the phase difference with compensation of phase errors for reducing the measurement errors. A theoretical analysis and an experimental verification show that for a correct choice of the line length and a really attainable travelling wave ratio $n = 0.98$, the general measurement error is $0^{\circ}.5$ instead of 1° as obtained by the usual methods.

V. K.

[Abstracter's note: Complete translation]

Card 1/1

66187

SOV/146-59-2-5/23

~~9(2,9)~~ 9.4220

AUTHOR: Alakhov, Ye.K., Aspirant

TITLE: Device on Reflecting Clystron in Autodyne Conditions
on 3.2 cm Wave for Measuring of Secondary Radiation
Circular Diagrams

PERIODICAL: Izvestiya vysshikh uchebnykh zavedeniy - priborostroy-
eniye, 1959, Nr 2, pp 28-33 (USSR)

ABSTRACT: At the present time, the principle of modelling, where
the object is superseded by a model and the measure-
ments are performed at different ranges of radio-waves,
is widely used for measuring secondary radiation cir-
cular diagrams of one or another reflecting objects.
To this end, a measuring device operating at cm-range
with a generator of a reflecting clystron type has
been designed. In Fig 1, the layout of the new de-
vice is given. Its principal component is the reflect-
ing clystron in autodyne conditions which serves at
the same time as a generator and receiver of radio-
waves. Electromagnetic flux received through an an-
tenna acts upon the autodyne generator which emits a

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SOV/146-59-2-5/23

Device on Reflecting Clystron in Autodyne Conditions on 3.2 cm Wave
for Measuring of Secondary Radiation Circular Diagrams

low-frequency signal, corresponding to the size of the model reflecting surface. The signal enters the amplifier and passes then to the recording meter where the secondary radiation circular diagram is recorded. Autodyne generators are usually characterized by their sensitivity S . Having made the necessary computations, the author concludes that the maximum sensitivity value corresponds to the generation zone edges; for reflecting clystrons of usual industrial types, it lies within the following limits: $S_{\max} = 30 \div 50$ v at $R_n = 20$ kohm, $i_o = 20 \div 25$ ma, where

R_n is the load on the autodyne generator. To check the performance of the new device, an experimental installation has been constructed (Fig 3). It consists of a clystron generator, horn antenna and a vane with the model and a control gauge mounted on it. According to Doppler's effect, the useful signal possessed a periodic character with frequency

Card 2/3

83649

9.6000 (1012, 1024, 1099)
9.1800

S/058/60/000/008/007/009
A005/A001

Translation from: Referativnyy zhurnal, Fizika, 1960, No. 8, p. 332, # 21138

AUTHOR: Alakhov, Ye.K.

TITLE: Instrument for Measuring the Phase Difference at Points of an
Electromagnetic Field in the Microwave Band

PERIODICAL: Nauchn. tr. Leningr. in-t. tochnoy mekhan. i opt'ki, 1959, No. 29,
pp. 101-110

TEXT: The author describes a method for measuring the phase difference of
oscillations of an electromagnetic field at SHF by the balancing detector method,
when the detector operates in the standing wave range. It is noted that the
accuracy of reading the phase difference can not practically be attained to more
than 1° by the present methods, which use the balancing detector operating on
the basis of travelling waves, because of the difficulties in obtaining high
travelling wave ratios. It is shown that the error of measurements may be
lowered down to ~~a few tenths~~ of one degree, when choosing the proper operation

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83649

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A005/A001

Instrument for Measuring the Phase Difference at Points of an Electromagnetic Field in the Microwave Band

parameters. The error did not exceed 0.5° when the method developed was experimentally verified. There are 10 references.

K.A. Pobedonostsev

Translator's note: This is the full translation of the original Russian abstract.

Card 2/2

S/058/60/000/007/005/014
A005/A001

Translation from: Referativnyy zhurnal, Fizika, 1960, No. 7, p. 309, # 17871

AUTHORS: Shchelkunov, K. N., Alakhov, Ye. K.

TITLE: Measuring Oscillations and Other Small Displacements With the Klystron-Autodyn

PERIODICAL: Nauchn. tr. Leningr. in-t tochnoy mekhan. i optiki, 1959, No. 29, pp. 125-129

TEXT: The authors discuss briefly the possibility of using SHF oscillations for measuring small displacements. Results are presented of an investigation of the method of measuring oscillations or other small mechanic displacements by the klystron autodyn. The measuring apparatus consists of a klystron generator and a waveguide emitter. When the distance between the emitter and the surface, the displacement of which is being measured varies, the total resistance of the klystron load changes, which causes a variation in its anode current. The method is notable for simplicity, and it may be expected that a displacement of the order of some microns may be recorded by this method. ✓

D. N. Klyshko

Translator's note: This is the full translation of the original Russian abstract.
Card 1/1

22740

S/146/61/004/002/001/011
B124/B206

9.6/50

AUTHORS: Zilitinkevich, S. I., Shohelkunov, K. N., Balobey, F. P.,
Alakhov, Ye. K.

TITLE: Device for measuring secondary radiation, operating with a
reflecting clystron-autodyne

PERIODICAL: Izvestiya vysshikh uchebnykh zavedeniy. Priborostroyeniye,
v. 4, no. 2, 1961, 3-9

TEXT: This article describes a device developed at the kafedra radio-
tekhniki Leningradskogo instituta tochnoy mekhaniki i optiki (Department
of Radio Engineering of the Leningrad Institute of Precision Mechanics and
Optics), where the problem of replacing reception- and transmission
channels was radically solved through application of the autodyne
principle by means of a reflecting clystron, the latter serving not only
for generating the emitted oscillations, but also for detecting oscilla-
tions which are received as a consequence of secondary radiation of the
objects concerned. When the object to be investigated is shifted in the
radiation field of the device, the reflected high-frequency energy acts on

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22548

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B124/B206

Device for measuring...

the clystron-autodyne and generates at its output resistance a voltage with Doppler frequency proportional to the energy of the secondary radiant flux. The device for measuring the parameters of secondary-radiation sources was built according to the block diagram shown in Fig. 2. It contains the following main components: 1) the measuring channel consisting of the clystron generator, a directional coupler, an antenna and a measuring amplifier; 2) a system for controlling the clystron-autodyne sensitivity, consisting of a generator for sensitivity control, the clystron-autodyne, a measuring amplifier and a sensitivity-control indicator; 3) a system for controlling the autodyne-generator power output, consisting of a directional coupler, a detector, an amplifier and an indicator for output control; 4) a system for recording the movement parameters of the model, consisting of a device for recording the rotation (electronic counter with rotation indicator) and a velocity recording device (velocity pickup and -indicator); 5) a control panel intended for switching on and adjusting the entire measuring device as well as other devices representing part of the measuring complex, and 6) the current sources. The clystron-autodyne is connected with the antenna and serves for generation, reception and autodyne detecting. In the presence of a

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Device for measuring...

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moving object in the radiation field of the device, the reflected energy passes to the antenna and acts on the clystron autodyne, thus causing working conditions corresponding to the change of its outer high-frequency load. In this way, an intelligence signal with Doppler frequency is generated in the load resistance of the clystron-resonator circuit. For easier calculation of the autodyne-generator reaction on changes of the outer high-frequency load, the notion of sensitivity is introduced with the aid of which the ratio of the signal voltage obtained at the load resistance of the autodyne, to the corresponding change of the outer conductivity of the clystron is denoted, i.e.,

$$S = \frac{U_{\text{sign}}}{\Delta Y_{\text{ext}} / Y_{\text{ext}}} .$$

The analysis of the expression for the sensitivity shows that this strongly depends on the selection of the operating point within the generation zone in the reflecting clystron. The approximate dependence of the sensitivity along the generation zone is given graphically in Fig. 3, from which it can be seen that maximum sensitivity during operation can be obtained at the zone borders, the working conditions of the generator-autodyne being, however, rendered very unstable thereby. For an

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B124/B206

Device for measuring...

increase of the dynamic range of the device and the stability of its operation, the operating point of the clystron within the generation zone must be selected with a sensitivity of 0.8 to 0.9 of the maximum value. The noise level of the device lies at 1 mv, warranting at least equal sensitivity for the receiver channel as for the direct-amplifier-receiver. The voltage pulsation amplitude was reduced by means of suitable filters and a high degree of stability of the supply voltages; a further measure for increasing the sensitivity was the selection of the working frequency band of the measuring channel. Fig. 5 shows a simplified diagram for sensitivity control. The device described mainly serves for measuring the secondary radiation energy, which is required for measuring reflection coefficients of surfaces of different shape, composition and structure, for measuring secondary radiation diagrams of various objects, etc. It can also be used for contactless measurements of displacements and vibrations with small amplitudes, for measuring vibrations with arbitrary maximum frequencies, etc. This study was recommended by the Department of Radio Engineering of the Association. There are 5 figures and 4 Soviet-bloc references.

Card 4/8

22548

Device for measuring...

S/146/61/004/002/001/011
B124/B20

ASSOCIATION: Leningradskiy institut tochnoy mekhaniki i optiki
(Leningrad Institute of Precision Mechanics and Optics)

SUBMITTED: July 8, 1960

Fig. 2: Block wiring diagram of the device. Legend: 1) power indicator, 2) power amplifier, 3) detector, 4) sensitivity-control indicator, 5) sensitivity-control generator, 6) to the recording devices, 7) measuring amplifier, 8) clystron generator, 9) directed coupler, 10) device with movable model, 11) velocity indicator, 12) rotation indicator, 13) counter, 14) from the travel- (rotation angle) pickup, 15) from the velocity- (rpm) pickup, 16) supply sources, 17) control panel.

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22549

S/146/61/004/002/002/011

B124/B206

9.6150

AUTHOR: Alakhov, Ye. K.

TITLE: Measuring error and effective range of the device with reflecting clystron under autodyne conditions during the investigation of secondary radiation

PERIODICAL: Izvestiya vysshikh uchebnykh zavedeniy. Priborostroyeniye, v. 4, no. 2, 1961, 10-13

TEXT: Devices for measuring the secondary radiation fields of electromagnetic waves, which are based on the autodyne principle, are characterized by means of the sensitivity S , related to the electromagnetic flux absorbed by them. This flux develops due to reflections from the object investigated (model) with the effective reflection surface σ . In this case the relation $S = (U_g / \lambda D \sqrt{\sigma}) 4\pi \sqrt{\pi r^2}$ (1) holds, where U_g is the voltage of the intelligence signal in the load resistance of the autodyne generator, λ the wave length, D the amplification coefficient of the device antenna and r the distance of the device antenna from the model. X

Card 1/5

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B124/B206

Measuring error and...

$$\sigma = (16\pi^3 r^4 / D^2) (U_s^2 / \lambda^2 S^2) \quad (2)$$

holds therefore for the effective reflection surface. It is assumed that the antenna of the device is well tuned to the high-frequency channel, i.e., $\Gamma_A \approx 0$, where Γ_A is the reflection coefficient of the antenna. The parameters, which mainly influence the size of the measured surface σ are: 1) the sensitivity of the autodyne generator, S ; 2) the amplitude of the signal at its load resistance U_s , and 3) the length of the generated wave λ . All errors of this device during measurement of the effective reflection surface σ can be categorized as follows: 1) those conditional on the application of the autodyne principle, and 2) those caused by the indicator and the generator of the device. For long-time measurements (2 to 3 hr) on a spherical model, the deviations for a selection of the operating point within the generation zone of the clystron with $P_{rad} > 0.1 P_{max}$ amount to 1.0 - 1.5 %, where P_{max} is the energy of high-frequency oscillations in the middle of the zone. For the majority of reflecting clystrons used, the mean sensitivity lies in the range of from $S = 30$ to 40 v at $R_1 = 15$ kilohm and a resonator current $i_r = 20$ to 25 ma. The instability of the wave

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Measuring error and...

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B124/B206

produced by the autodyne-clystron-generator amounts to 0.1 - 0.3 %. A measuring amplifier of the type 28-ИМ (28-IM), an oscilloscope of the type ЭН0-1 (ENO-1) or an automatic recorder of the type "Нейман" ("Neyman") can be used as indicators for determining the voltage of the intelligence signal. This measurement error is further affected by the reaction of the autodyne generator on the voltage change at its electrodes owing to the freed voltage of the intelligence signal in the circuit of its loading impedance R_1 . This measurement error amounts to 1.5 - 2 % with previous calibration of the 28-IM measuring amplifier by means of a standard signal. The total error of measuring the effective reflection surface of the model σ is $|\Delta\sigma/\sigma|_{\max} \approx 8\%$. For determining the effective range of the new device, Eq. (1) is written down in the form $r = \sqrt{\lambda D} \sqrt{\sigma} \sqrt{(S/U_0 4\pi\sqrt{\pi})}$ (4). For given $S_{\text{mean}} = 30$ v and $U_{s \text{ min}} = 0.9$ mv, $r_{\max} \approx 40 \sqrt{\lambda D} \sqrt{\sigma}$ (5) is obtained. For the mentioned ratio signal/noise = 2, the selected quantity $U_{s \text{ min}}$ is determined by the noise level in the loading impedance of the autodyne-clystron generator because of the cathode-current fluctuations. For devices based on a different principle of operation, but also using a

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B124/B206

Measuring error and...

reflecting clystron as generator tube, $r_{rl \max} \approx 30 \sqrt{\lambda D} \sqrt[4]{\sigma}$ (6) holds on the basis of the radiolocation equation (Ref. 6: Bogomolov A. F. Osnovy radiolokatsii (Principles of radiolocation). "Sovetskoye radio", 1954) at a radiation energy $P_{\text{rad}} = 15 \text{ mw}$ and a receiver output $P_{\text{rec min}} = 10^{-8} \text{ w.}$ The effective range of the new device is thus as big as that of devices with crystal detector, but the new device is much simpler. Moreover, the autodyne principle permits the use of a joint transmitting and receiving antenna, which in the devices used so far involves great difficulties. Finally, the biggest possible distance of the antenna of the new device from the model investigated is determined at a given gradient of the high-frequency energy reflected by the model. On the basis of Eq. (5) the following is obtained for horn antennas ($D=70$) and the wavelength λ (cm):

on scale 10	$r \leq 32 \sqrt[4]{0.1 \sigma \lambda^2};$
on scale 20	$r \leq 28 \sqrt[4]{0.1 \sigma \lambda^2};$
on scale 30	$r \leq 20 \sqrt[4]{0.1 \sigma \lambda^2}.$

The smallest possible distance from the model is chosen on the basis of Card 4/5

ALAKHVERDIYEV, G., aspirant.

Possibilities for developing sheep farming in the Ukrainian forest-steppe. Nauka i pered. op. v sel'khoz 8 no.12:49-50 D '58.
(MIRA 12:1)

1. Nauchno-issledovatel'skiy institut zhivotnovodstva lesostepi Poles'ya USSR.

(Ukraine--Sheep)

ALAKHVERDIYEVA, R.A.

Ring model for studying the flow of water and oil toward an imperfect well under static pressure. Trudy VNII 12:368-372 '58.

(MIRA 12:3)

(Oil reservoir engineering) (Hydraulic models)

SVADZHYAN, P.K., doktor biolog.nauk (Sisianskiy raion, Armyanskoy SSR);
MIKAYELYAN, S.T.; ALAKEVERDYAN, O.G., veterinarnyy vrach
(Sisianskiy rayon, Armyanskogo SSR)

Copper sulfate and tin arsenate in sheep monieziasis. Veterinariia
37 no.7:41-42 JI '60. (MIRA 16:2)

1. Zaveduyushchiy veterinarno-bakteriologicheskoy laboratoriyey
Sisianskogo rayona, Armyanskoy SSR (for Mikayelyan).
(Armenia—Tapeworms) (Anthelmintics)
(Armenia—Parasites—Sheep)

ALAKHVERDOV, A. S.

ALAKHVERDOV, A. S. -- "The Effect of Motion on the Growth and Development of Young Hill and Mountain Plants under Conditions of Suburban Agriculture." Moscow Order of Lenin Agricultural Academy imeni K. A. Timiryazev. Moscow, 1955. (Dissertation for the Degree of Candidate of Agricultural Sciences.)

SO: Knizhnaya letopis', No. 4, Moscow, 1956

Country	: USSR	
Category	: Farm Animals.	Q-2
	Cattle.	
Abs. Jour	: Ref Zhur-Sol. 1, no 16, 1960, 74050	
Author	: Alakhverdov, A. S.	
Institut.	: Moscow Academy of Agriculture imeni K. A.*	
Title	: The Effect of Exercise upon Caseous Metabolism in Calves of the Kholmogorskaya Breed.	
Orig Pub.	: Dokl. Mosk. s.-kh. akad. im. K. A. Timiryazeva, 1956, vyp. 25, 272-274	
Abstract	: Active exercise produced a more intensive development of calves by augmenting lung ventilation, absorption of oxygen and discharge of carbon dioxide, as well as by improving the utilization of fodder. The weight of inner organs in calves which were exposed to daily active exercise increased more than in controls which were kept in sheds.	
Card:	1/1	*Timiryazev

ALAKHVERDOV, A.S., kan/. sel'skokhozyaystvennykh nauk

Effect of exercise on the growth and development of young livestock.
Zhivotnovodstvo 20 no.8:61-64 Ag '58. (MIRA 11:10)

1. Zaveduyushchiy kafedroy zhivotnovodstva Plodoovoshchnogo instituta
imeni I.V. Michurina.

(Exercise--Physiological effect)

ALAKHVERDYAN, O. G., SVADJAN, P. K., and MIKAEELYAN, S. T.

SVADZHYAN

"Blue copperas and tin arsenate in the case of sheep monyesiasis."

Veterinariya, Vol. 37, No. 7, 1960, p. 41

*Alakhverdyan - Vet Dr.
Sisian Rayon, Arm. SSR*

MAYOROVA, L.A.; ALAKHVERDYAN, S.A.; YEY, B.N.

Use of naphthamon in the treatment of ancylostomiasis.
Zdrav. Turk. 7 no.4:32-33 Ap'63. (MERIA 16:6)

1. Iz Ashka badskogo instituta epidemiologii i gigiyeny (dir.
dotsent Ye.S.Popova).
(ANTHELMINTICS) (HOOKWORMS)

YEY, B.N.; ALAKHVERDYANTS, S.A.; MAYOROVA, L.A.

Role of vegetables and fruits in the epidemiology of geohelminthiasis
under climatic conditions prevailing in Ashkhabad. Zdrav. Turk. 3
no.4:26-27 J1-Ag '59. (MIRA 13:2)

1. Iz Ashkhabadskogo instituta epidemiologii i gigiyeny (nauchnyy
rukovoditel' - dotsent Ye.Ya. Gleyberman).
(ASHKHABAD--WORMS, INTESTINAL AND PARASITIC)
(FOOD, RAW--HYGIENIC ASPECTS)

YEY, B.N., starshiy nauchnyy sotrudnik; AGADZHANOV, R.A., mladshiy nauchnyy
sotrudnik; ALAKHVERDYANTS, S.A., mladshiy nauchnyy sotrudnik;
DASHKOVA, Ye.M., mladshiy nauchnyy sotrudnik; MAYOROVA, L.A.,
mladshiy nauchnyy sotrudnik; SHTOK, E.Sh., mladshiy nauchnyy sotrudnik

Experience in the sanitary and hygienic evaluation of agricultural
sewage farms in Ashkhabad. Gig. i san. 25 no. 12:18-20 D '60.
(MIRA 14:2)

1. Iz Ashkhabadskogo instituta epidemiclogii i gigiyeny.
(SOIL MICRO-ORGANISMS) (SEWAGE IRRIGATION)

YEY, B.N.; ALAKHVERDYANTS, S.A.; KARIMOV, Z.M.

Improving the biological method of applying predatory helmintho-
phagous fungi in ancylostomiasis. Izv. AN Turk. SSR. Ser. biol.
nauk no.1:70-72 '61. (MIRA 14:8)

1. Ashkhabadskiy institut epidemiologii i gigiyeny.
(HOOKWORM DISEASE) (FUNGI, PREDATORY)

YEY, B.N.; ALAKHVERDYANTS, S.A.; MAYOROVA, L.A.

Epidemiology of ascariasis in Ashkhabad. Zdrav. Turk. 5 no.6:12-
14 N-D '61. (MIRA 15:2)

1. Iz Ashkhabadskogo instituta epidemiologii i gigiyeny (dir. -
dotsent Ye.S.Popova).
(ASHKHABAD--ASCARIDS AND ASCARIASIS)

ALAKHVERDYANTS, S.A.; YEY, B.N.; MAYOROVA, L.A.

Sanitary and helminthological evaluation of vegetables, greens,
and fruits under the climatic conditions of Ashkhabad. Med.
paraz.i paraz.bol. no.3:288-289 '61. (MIRA 14:9)

1. Iz Ashkhabadskogo instituta epidemiologii i gigiyeny (dir.
Ye.S. Popova).

(ASHKHABAD—PRODUCE TRADE—HYGIENIC ASPECTS)
(ASHKHABAD—WORMS, INTESTINAL AND PARASITIC)

YEY, B.N.; ALAKHVERDYANTS, S.A.

Preparations with spores of predatory fungi destructive to helminths
for controlling the larvae of pathogenic nematodes. Izv.AN Turk.
SSR.Ser.biol.nauk no.4:81-83 '62. (MIRA 15:9)

1. Ashkhabadskiy institut epidemiologii i gigiyeny.
(NEMATODA--BIOLOGICAL CONTROL) (FUNGI, PREDATORY)

ALAKIN, A.I.; NIKITIN, B.N.; TSAREVSKAYA, N.P.

Using rare earths for tinting glass. Stek. i ker. 18 no. 3:33-34
Mr '61. (MIRA 14:5)

(Rare earths) (Glass, Colored)

IVLIYEVA, A.M., kand.ekon.nauk; ALAKIN, P.M., inzh.; BULOV, A.A., inzh.

Economic basis of prospective types of cargo carrying vessels for
the Northern Steamship Company. Trudy LIT no.65:26-35 '64.
(MIRA 18:10)

5.3610

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S/020/60/131/06/35/071
B011/B005

AUTHORS: Ponomarev, A. A., Maslennikova, N. P., Alakina, N. V., Krivenko, A.P.
TITLE: Synthesis and Some Catalytic Transformations of Primary Furan Amines
PERIODICAL: Doklady Akademii nauk SSSR, 1960, Vol. 131, No. 6, pp. 1355 - 1358

TEXT: The authors thoroughly studied one of the ways of synthesizing primary furan amines: the reductive amination of saturated and unsaturated aldehydes and ketones in the presence of ammonia. They succeeded in establishing that the following is achieved by hydrogenation under pressure in ammoniacal-alcoholic solution in the presence of Raney nickel: not only α - β -mono-unsaturated furan ketones but also diene ketones can be easily transformed into corresponding primary furan amines (yields up to 86%, and 84%, respectively, of the theoretical yields). Also saturated furan ketones (acetyl furan) with a carbonyl group in position 1 on the furan ring are smoothly transformed into primary furan amines. No hydrogenation of the furan ring occurs. This showed the general character of this reaction leading to primary amines with a position of the amino group 1, 3, and 5 in the side chain in good yields (see Scheme). Table 1 shows the most important properties and analyses of the amines produced. It also lists some physical constants of the

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Synthesis and Some Catalytic Transformations of
Primary Furan AminesS/020/60/131/06/35/071
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N-acetyl derivatives of these amines. These derivatives are easily formed from the amines under action of acetic anhydride (yields up to 94%). Table 2 shows properties of tetrahydrofuran amines and their N-acetyl derivatives. They are formed from the N-acetyl derivatives of furan amines by hydrogenation in di-oxane, and can be saponified. The presence of the furan-, or tetrahydrofuran ring, respectively, and of the amino group was confirmed by UV and IR spectra recorded by A. D. Peshekhonova. Furan- and tetrahydrofuran amines were further used by the authors for synthesizing pyrrolisidine- and dihydrodipyrrol derivatives. These nitrogen heterocycles are contained in many alkaloids. The following substances were used for these experiments of intramolecular cyclization: 1-(α -furyl)-3-aminopropane, 1-(α -furyl)-3-aminobutane, 2-furfurylaminocyclohexane, and 1-(α -tetrahydrofuryl)-2-aminobutane. Pure aluminum oxide, and an aluminum oxide activated with thorium dioxide (formula and preparation by Yu. K. Yur'yev), were used as catalysts. Cyclization proceeded according to the scheme indicated. The yields in dihydrodipyrrols attained 32%, those in pyrrolisidine 50% of the theoretical yields (Table 3). The investigations are being continued. There are 3 tables and 3 references.

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Synthesis and Some Catalytic Transformations of
Primary Furan Amines

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ASSOCIATION: Saratovskiy gosudarstvennyy universitet im. N. G. Chernyshevskogo
(Saratov State University imeni N. G. Chernyshevskiy) 4

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SUBMITTED: December 25, 1959

Card 3/3

ALAKOZ, A.K.

Method of controlling the hypoxic syndrome. Vrach.delo no.12:
1307-1308 D '56. (MIRA 12:10)

1. Pervaya oblastnaya bol'nitsa D'vova.
(ANOXEMIA) (OXYGEN--THERAPEUTIC USE)

ALAKOZ, A.K.

Electrosphygmography or arteriopsizography as a method in
clinical research. Vrach, delo no. 4:421 Ap '58 (MIRA 11:6)

1. Pervaya L'vovskaya bol'nitsa oblastnoy lechebnoy komissii.
(SEHYGMOGRAPH)