DOROKHOV, V.N.; RUBAKHIN, V.N.; BIL'GIL'DEYEV, A.S.; DOMANOVSKIY, A.V.

Use of synthetic oils and fatty acids for oil-coating of rabbit pelts. Kozh.-obuv.prom. 2 no.5:15-17 My '60. (MIRA 13:9)
(Hides and skins)

SOLOV'YEV, D.A.; DOROKHOV, V.N.

International Fall Fair in Leipzig. Kozh.-obuv.prom. 3 no.6: 30-31 Je '61. (MIRA 14:8)

1. Direktor pushno-mekhovoy kontory Vsesoyuznogo ob"yedineniya "Soyuzpushnina" (for Solov'yev) 2. Glavnyy inzhener Leningradskoy mekhovoy fabriki (for Dorokhov).
(Germany, East--Fur industry) (Leipzig--Exhibitions)

DOROKHOV, V.N.; CHERNOMORDIK, L.M.

New developments in the equipment of Leningrad Fur Factory No.1.
Kozh.-obuv.prom. 4 no.2:17-20 F '62. (MIRA 15:4)
(Leningrad--Fur industry)

DOROKHOV, V.V.

USSR/Nuclear Physics - Structure and Properties of Nuclei. C-4

Abs Jour : Ref Zhur - Fizika, No 4, 1957, 8706

Author : Demirkhanov, R.A., Gutkin, T.I., Dorokhov, V.V., Rudenko, A.D.

Inst :

Title : Masses of Isotopes H, D, He^4 and C^{12}

Orig Pub : Atom. energiya, 1956, No 2, 21-27

Abstract : A new exact measurement of the masses of the atoms H, D, He^4 and C^{12} has been made. The measurements were carried out with a mass spectrograph developed by Ardennet with the participation of Eger and the authors of this work. The apparatus has double focusing by means of electric and magnetic fields, effected respectively by cylindrical capacitor and a sector magnet. The iron beam is created by a plasma source with single contraction of the discharge. Recording of the mass spectrum is photographic; "Schumann" plates are used. There

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is the possibility of visually observing the spectrum with the aid of an ion-optical converter.

The maximum resolution of the instrument is 100,000 -- 120,000, and the dispersion (roughly calculated) is not less than 2.34 cm percent of relative mass difference. The calibration of the scale of the masses of the instrument is made using photographs of certain basic lines, namely those of the groups

N^{14+} -- $N^{14}H^{+}$ -- $N^{14}H_2^{+}$ -- $N^{14}H_3^{+}$, $C_4^{12}H_3^{+}$ -- $C_4^{12}H_4^{+}$ -- $C_4^{12}H_5^{+}$

and O^{16+} -- $O^{16}H^{+}$ -- $O^{16}H_2^{+}$.

The masses of the atoms H, D, He^4 and C^{12} were found from photographs of the doublets H_2 -- D, D_2 -- H^4, D_3 -- 1/2 $C^{12}H_4$ -- O^{16}. The results are:

USSR/Nuclear Physics - Structure and Properties of Nuclei. C-4

Abs Jour : Ref Zhur - Fizika, No 4, 1957, 8706

H -- 1.008142 ± 10^{-6}, He_4 -- $4.003872 \pm 4 \times 10^{-6}$,

D -- $2.014736 \pm 2 \times 10^{-6}$, and C^{12} -- $12.003820 \pm 5 \times 10^{-6}$.

The data obtained are in agreement with the values determined from the energy balance of the nuclear reactions.

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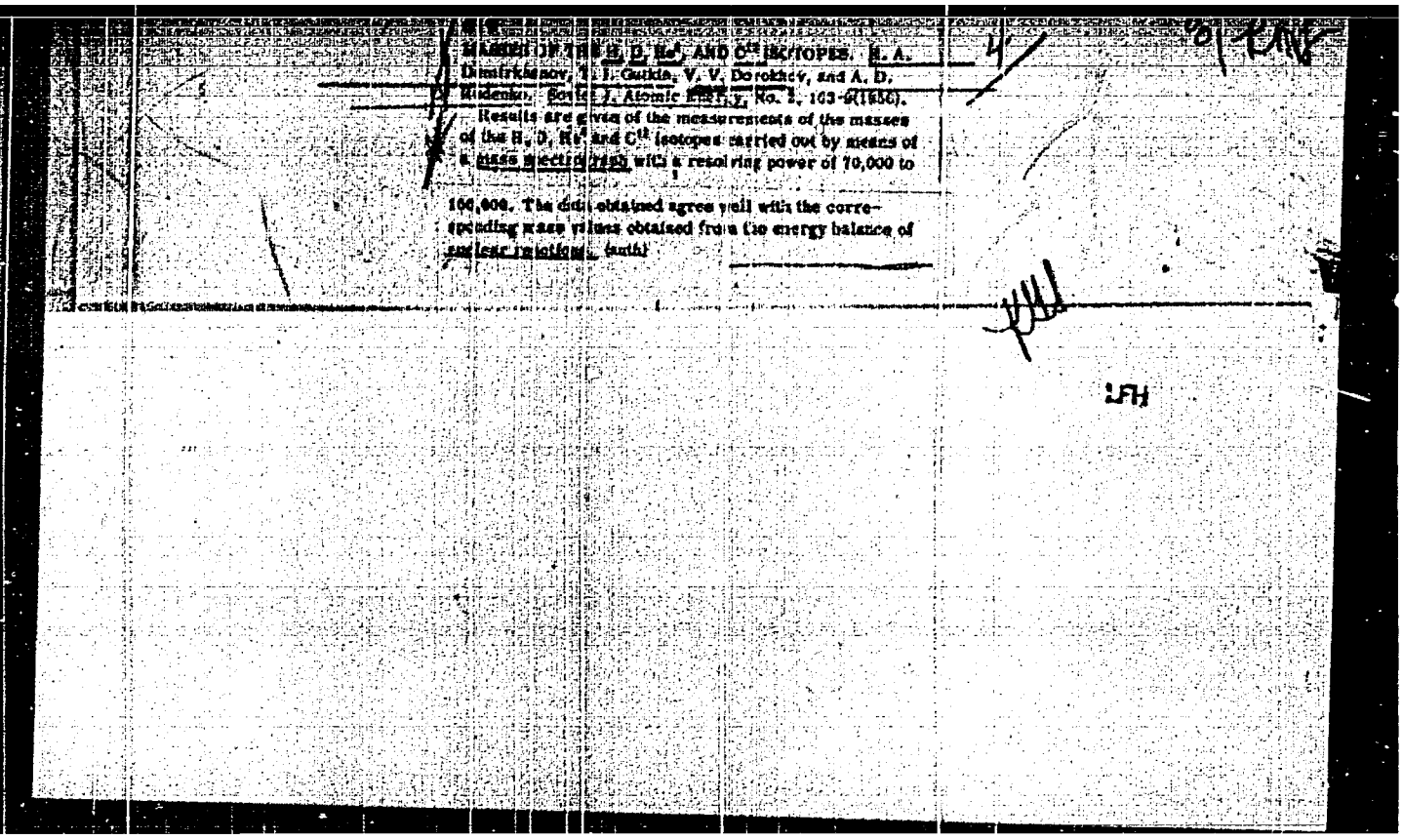

MASSES OF THE H, D, He^4, AND C^{12} ISOTOPES. E. A. Dmitrikanov, I. I. Gurkin, V. V. Dorokhov, and A. D. Nidenko, Sovet. J. Atomic Energy, 1, No. 1, 103-6(1956).

Results are given of the measurements of the masses of the H, D, He^4 and C^{12} isotopes carried out by means of a mass spectrograph with a resolving power of 70,000 to 100,000. The data obtained agree well with the corresponding mass values obtained from the energy balance of nuclear reactions. (auth)

DOROKHOV, V. V.

USSR/Nuclear Physics - Structure and Properties of Nuclei. C-4

Abs Jour : Ref Zhur - Fizika, No 1, 1958, 452

Author : Demirkhanov, R.A., Gutkin, I.I., Dorokhov, V.V.
Inst : -
Title : Mass of the Isotope He^3.

Orig Pub : Atomn. energiya, 1957, 2, No 5, 469-470

Abstract : A mass-spectroscopic determination was made of the mass of the isotope He^3, in a mixture of helium isotopes enriched with He^3 to 99.5%, using a setup previously described (Referat Zhur Fizika, 1957, No 4, 8706). The mass was measured in the doublets H^3 -- He^3 and HD^3 -- He^3. The results of the measurements were checked against the HD -- H^3 doublet. The mass scale was calibrated against the spectrum $N^{14}H$ -- $N^{14}H_2$ -- $N^{14}H_3$. The value obtained for the mass of He^3 is 3.016970 ± 2 atomic units of mass. The data of this

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DOROKHOV, V. V.

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

Abs Jour : Ref Zhur - Fizika, No 1, 1958, 453

Author : Demirkhanov, R.A., Gutkin, I.N., Dorokhov, V.V.
Inst : -
Title : Masses of the Isotopes C^{13}, N^{14}, and N^{15}.

Orig Pub : Atomn. energiya, 1957, 2, No 6, 544-551

Abstract : Results are reported on new mass-spectrographic measurements of the masses of C^{13}, N^{14}, and N^{15}. It is shown that there exists "an internal agreement" for the values of the masses of these isotopes, obtained from various systems of coublets. The measurements were performed under conditions that exclude the systematic errors. A procedure is given for a precision adjustment of the ion-optical system. For the masses of C^{13}, N^{14}, and N^{15}, the values obtained were $13.007491 \pm 3 \times 10^{-6}$, $14.007527 \pm 4 \times 10^{-6}$ and $15.004890 \pm 5 \times 10^{-6}$ atomic units of mass respectively, which is in good agreement with the values

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24(5)

AUTHORS: Demirkhanov, R. A., Gutkin, T. I., Dorokhov, V. V. SOV/56-35-4-13/52

TITLE: Nuclear Bond Energy in the Region of the 82 Proton and 126 Neutron Magic Numbers (Energiya svyazi yader v oblasti magicheskikh chisel po protonam 82 i neytronam 126)

PERIODICAL: Zhurnal eksperimental'noy i teoreticheskoy fiziki, 1958, V. 35, No. 4 pp 917 - 925 (USSR)

ABSTRACT: The authors of the present paper report on ich experimental material which is arranged in a clear manner in tables. By means of a mass spectrograph (resolving power 60000-80000, description in references 4,5) the masses of the following isotopes were measured:
Lead: Pb 204, 206, 207 and 208 (Table 2)
Mercury: Hg 198, 199, 200, 201, 202 and 204 (Table 3)
Thallium: Tl 203 and 205 (Table 4)
Bismuth: Bi 209.
Determination of masses was carried out by direct comparison with the masses of the corresponding

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Nuclear Bond Energy in the Region of the 82 Proton and 126 Neutron Magic Numbers

SOV/56-35-4-13/52

organic compounds, as e.g. for Pb 204 - $C_{16}H_{12}$, Pb 208 - $C_{14}H_8O_2$, Hg 199 - $C_{13}H_{11}O$, Hg 204 - $C_{16}H_{12}$, Tl 203 - $C_{16}H_{11}$, Tl 205 - $C_{16}H_{13}$, Bi 209 - $C_{14}H_{13}N_2$. The masses for the various isotopes are given up to 6 decimals, data given are accurate up to 3-4 decimals. From mass measurements the nucleon bond energies in the nucleus are calculated. The results obtained indicate a shell structure of the nucleus with a well-filled shell of 82 protons and 126 neutrons. The difference of the nuclear bond energy for an even and odd number of nucleons in the nucleus and its smoothing out as the shell is filled up can distinctly be seen. After the shell is filled up with Z= 82 and N= 126, the bond energy of the next neutron is higher than that of the next proton. The energy of two bound neutrons (which yields the Hg 204 nucleus) is greater than the energy of attachment of two protons in the formation of the Pb 204 nucleus. The authors

thank Ye.Ye.Baroni, T.N.Lebsadze, K. A.

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Kovyrzina and V.M.Shoniya for placing the metallographic compounds and the heavy hydrogen at their disposal, and they also express their gratitude to P.S.Brostyuk, M.I. Dzkuya and G.A.Dorokhova for their practical help. There are 2 figures, 9 tables, and 10 references, 4 of which are Soviet.

SUBMITTED: May 17, 1958

AUTHORS: Demirkhanov, R. A., Gutkin, T. I., Dorokhov, V. V. 20-118-6-14/43

TITLE: Masses of Lead Isotopes (Massy izotopov svintsa)

PERIODICAL: Doklady Akademii Nauk SSSR, 1958, Vol. 118, Nr 6, pp. 1103-1104 (USSR)

ABSTRACT: The present paper reports on the results of the measuring of the masses of load isotopes Pb^{204}, Pb^{206}, Pb^{207} and Pb^{209}. These measurements were carried out in connection with the determination of the binding energy of the nucleons in a nucleus in the range of the magic numbers 82 and 126 with respect to the protons and with respect to the neutrons, respectively. All this is connected with the necessary exact definition of the mass of the isotope Pb^{208} which is used as base value for the computation of the masses of heavy isotopes with

$$z \gtrless 82$$

from the data of the nuclear reactions. The measurements were carried out by means of a device described already earlier by the same authors (ref 1). The dissolving power

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of this device amounted in this region to 60,000 - 80,000. In order to increase the accuracy of the measurements the masses of the lead isotopes were determined by immediate comparison with the corresponding mass of hydrocarbons which contain the isotopes H^1, C^{12} and O^{16}. The values obtained here were controlled by the determination of the mass of the lead isotope from various doublets and by the production of lead ions from various compounds. Each value ΔM of the doublet was determined by treatment of 18-20 mass spectrograms (which were photographed on different plates). The results of the measurements are given in a table. Following is shown by the data of this table: Within the measuring error limits a satisfying "inner" connection exists between the mass values detected from various doublets. The results found here confirm the absence of systematic measuring faults and the reliability of the data obtained here. Finally the differences between the present measurements and the earlier ones are pointed out in short.

Masses of Lead Isotopes

20-118 -6-14/43

There are 3 tables and 4 references, 2 of which are Soviet

PRESENTED: September 26, 1957, by L. A. Artsimovich, Member of the Academy of Sciences, USSR

SUBMITTED: July 5, 1957

Card 3/3

21(7), 21(1)

AUTHORS: Demirkhanov, R. A., Gutkin, T. I., Dorokhov, V. V.

SOV/56-36-5-62/76

TITLE: The Mass of the Isotope Pu^{239} (Massa izotopa Pu^{239})

PERIODICAL: Zhurnal eksperimental'noy i teoreticheskoy fiziki, 1959, Vol 36, Nr 5, pp 1595-1596 (USSR)

ABSTRACT: Already in a number of previous papers the authors reported on the mass determinations of lead and uranium isotopes, and they also described the mass-spectrometric device used for these measurments (Refs 1, 3, 4). In the present "Letter to the Editor" they give a report on measurements carried out with Pu^{239} by means of this spectrometer, which has a resolving power of 60,000 - 80,000. For mass determination doublets of various organic compounds were used, which consisted of the already exactly known elements H, C^{12} and O^{16}, viz. alizarin ($C_{14}H_8O_4$, M = 240) and perilen ($C_{20}H_{12}$, M = 252). Ion formation occurred in an arc discharge in helium, the pairs Pu^{239} - organic compound

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The Mass of the Isotope Pu^{239}

were introduced into the discharge by evaporation from special crucibles. The mass differences, ΔM of the doublet and the corresponding mass values of Pu^{239} are:

doublet	M[mME]	mass of Pu^{239}, [ME]
$Pu^{239} - C_{14}H_7O_4$	18.448±0.082	239.128922±92
$C_{19}H_{11} - Pu^{239}$	33.447±0.067	239.128695±74

Mean value: 239.128784±165

The mass of Pu^{239} calculated from nuclear reactions gives 239.128025±155 if a correction of the more accurately known value of Pb^{208} is taken into account, and 239.126999±150 if this correction is not taken into account. It is found that the difference of the masses of Pu^{239} and U^{238} calculated according to the authors' data, when compared with the data obtained from nuclear reactions, amounts to only 0.166±0.250 mME, i. e. that it is still within the limits of errors. It is therefore assumed that the error of ~1 mME is due to an inaccurate Q-value.

The Mass of the Isotope Pu^{239}

SOV/56-36-5-62/76

There are 1 table and 4 references, 3 of which are Soviet.

SUBMITTED: February 2, 1959

Card 3/3

21(8)

AUTHORS: Demirkhanov, R. A., Gutkin, T. I., Dorokhov, V. V.

SOV/20-124-2-16/71

TITLE: The Masses of the Isotopes Th^{232}, U^{234}, U^{235} and U^{238} (Massy izotopov Th^{232}, U^{234}, U^{235} i U^{238})

PERIODICAL: Doklady Akademii nauk SSSR, 1959, Vol 124, Nr 2, pp 301-303 (USSR)

ABSTRACT: Measurement of the masses of Th^{232}, U^{234}, U^{235} and U^{238} made it possible to determine the binding energy of nucleons in the nuclei not only of these isotopes but also of many radioactive isotopes connected with them by the naturally-radioactive series 4n, 4n + 2 and 4n + 3. The exact masses of these isotopes have hitherto not been determined by direct measurements. The authors determined the masses of these isotopes by means of an already previously (Ref 3) described mass-spectrographical device having a resolving power of the order of 60000 - 70000. The masses of the isotopes were determined by direct comparison with the corresponding mass of organic compounds. These organic compounds contained H^1, C^{12} and N^{14}, the masses of which are known.

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The Masses of the Isotopes Th^{232}, U^{234}, U^{235} and U^{238}

SOV/20-124-2-16/71

The substances used for measurements are given; control was carried out by determining the mass of U^{238} from the doublets $C_{19}^{12}H_{10}$-U^{238} and $C_{18}^{12}C^{13}H_9$ - U^{238}. Short reference is made to a second control method. Each doublet was determined by the evaluation of 18-20 mass spectrograms (which had been photographed on different plates). Results of measurements are given by a table. The masses of the isotope U^{238}, which were determined from 2 different doublets, agree well with one another within the limits of measuring errors. The "mean value" calculated by taking account of weight amounts to $M_{U^{238}}=238.127284 \pm 35.10^{-6}$ mass units. The mass values determined by the present paper are lower than the corresponding values determined by nuclear reactions. Also these differences remain within the limits of permissible deviations, an exception being formed only by uranium.

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The Masses of the Isotopes Th^{232}, U^{234}, U^{235} and U^{238}

SOV/20-124-2-16/71

The authors thank Ye. Ye. Baroni and K. A. Kovyrzina for placing heavy hydrogen at their disposal, and they also thank M. I. Dzkuya, G. A. Dorokhova and P. S. Brostyuk for their active help. There are 3 tables and 11 references, 6 of which are Soviet.

PRESENTED: September 26, 1958, by L. A. Artsimovich, Academician

SUBMITTED: August 29, 1958

Card 3/3

89257

S/048/61/025/001/023/031
B029/B063

24.6510

AUTHORS: Demirkhanov, R. A., Gutkin, T. I., Dorokhov, V. V.

TITLE: Masses of heavy atoms and binding energies of nuclei in the range of $174 \leq M \leq 239$

PERIODICAL: Izvestiya Akademii nauk SSSR. Seriya fizicheskaya, v. 25, no. 1, 1961, 124-129

TEXT: The results of mass-spectrographic measurements of nuclear masses in the range of $174 \leq M \leq 239$, carried out for a large number of isotopes with an accuracy of 10^{-7} to $5 \cdot 10^{-7}$, are presented. The mass spectrograph with double focusing used for the purpose had a resolution of 50,000-80,000. The masses of heavy nuclei were measured by the doublet method and with the use of the organic compounds C_nH_m, $C_nC^{13}H_m$, $C_nN_mH_k$, and $C_nO_mN_kH_p$ as standard masses. The question as to whether there is a fine structure in the curve of binding energy in the mass range with $A \sim 200$ can only be answered if the accuracy of measurement is improved by one

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order of magnitude, i.e., to $\Delta M/M \sim 3 \cdot 10^{-7}$, and a discontinuity of ~3 Mev in the binding energy can be established with an accuracy of ~20% if $\Delta M/M \sim 3 \cdot 10^{-6}$. The high degree of accuracy with which the dispersion coefficient can now be measured, and the method developed by the authors make it possible to increase the accuracy of measurement in the respective mass range by a factor of 10-50. In many cases, the mass of the isotope was determined from various doublets, i.e., the "inner agreement" was taken into account. Table 1 contains the masses of the Re, W, Ta, and Hf isotopes and, for comparison, the masses obtained by the mass-spectroscopic method and nuclear reactions. The masses of Re^{185}, Hf^{179}, Hf^{177}, and Hf^{174} were measured for the first time. The mass values of the majority of isotopes measured by the authors are higher than those obtained in Refs. 8 and 9. This is obviously due to the fact that a defective standard mass had been used. A comparison of the present data with similar values obtained by other methods is of particular interest. The results of the present paper are compared in Table 2 with those of other papers. They agree with those published by W. H. Johnson and V. B. Bhahot

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S/048/61/025/001/023/031
B029/B063

(Ref. 17) within the limits of error, but differ from the results obtained from nuclear reactions by about the double error. According to what has been said above, the Q values for the reactions $Hf^{177}(\gamma,n)Hf^{176}$ and $Hf^{179}(\gamma,n)Hf^{178}$ are probably erroneous, or the limits of error in the determination of the Q values of these reactions must be increased two or three times. The nuclear masses of 42 stable isotopes measured by the authors were then used to determine E/A as a function of A (per nucleon) within the range $174 \leq M \leq 210$ (cf. Fig.). In addition, the binding energies of 66 radioactive nuclei were calculated. Table 3 contains the binding energies B_n of the last neutron and B_p of the last proton, and also the pairing energies P_n and P_p of the neutrons and protons, respectively, for the Hf, Ta, W, and Re isotopes. On the strength of these measurements it is possible to establish some rules concerning nuclear energies. The nucleus has a shell structure, and the shell is completely filled at Z = 82 and N = 126. In the case of nuclei with odd A, the binding energy is always lower than in the case of nuclei with even A. At equal values of Z, the shell structure may be derived also

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B029/B063

from the mutual behavior of the (Z+1)th proton and the (N+1)th neutron (Z = 82, N = 126). The binding energy of the last neutron or proton satisfies the law of conservation of parity. The authors thank Ye. Ye. Baroni and his co-workers K. A. Kovyrsina and V. M. Soyfer for several preparations, as well as M. I. Dzkuya and G. A. Dorokhova for assistance. This is the reproduction of a lecture read at the Tenth All-Union Conference on Nuclear Spectroscopy, Moscow, January 19-27, 1960. There are 1 figure, 3 tables, and 21 references: 8 Soviet-bloc and 13 non-Soviet-bloc.

Card 4/10

DEMIRKHANOV, R.A.; DORCKHOV, V.V.

Mass of the isotope Pu^{240}. Zhur. eksp. i teor. fiz. 40 no.4:1033-1034 Ap '61. (MIRA 14:7)

(Plutonium--Mass)

DEMIRKHANOV, R.A.; DOROKHOV, V.V.; DZKUYA, M.I.

Isotope masses and binding energies of nuclei in the region from strontium to ruthenium. Zhur. eksp. i teor. fiz. 40 no.6:1572-1582 Je '61. (MIRA 14:8)
(Nuclei, Atomic)
(Isotopes—Mass)

S/020/62/146/001/008/016
B108/B102

AUTHORS: Demirkhanov, R. A., Dorokhov, V. V., Dzkuya, M. I.

TITLE: The isotope masses of lutecium, ytterbium and thulium

PERIODICAL: Akademiya nauk SSSR. Doklady, v. 146, no. 1, 1962, 72 - 74

TEXT: The isotope masses were measured with a double-focusing mass spectrograph. For reference, doublets formed by ions of the element to be measured and by organic compounds consisting of H^1, C^{12}, C^{13}, N^{14}, O^{16} were used. The spectrograph was able to resolve the masses of C^{12} and C^{13}. The mass of each isotope was calculated from the mass of the doublet. Results show good agreement with those by V. B. Bhanot et al. (Phys. Rev., 120, no. 1, 235, 1960). There are 1 figure and 1 table.

PRESENTED: May 3, 1962 by L. A. Artsimovich, Academician

SUBMITTED: March 26, 1962

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S/020/62/146/001/0[illegible]/016
B10[illegible]/B102

The isotope masses of ...

Table 1.
Legend: m. e. = mass units. (1) Doublet, (2) mass of isotope, (3) average mass (for O^{16}, M = 16); the error refers to the last figures.

M	1		2	3
169	$C_{13}H_{11}N - Tu^{169}$ $Hg^{200} - Tu^{169}Cl^{31}$	151,972±0,061 70,410±0,098	168,987036±62 168,987011±100	168,98702[illegible]±30
168	$C_{13}H_{11}N - Yb^{168}$ $Yb^{170} - Yb^{168}$	147,055±0,103 2001,543±0,200	167,987707±103 167,987635±202	167,987692±30
170	$C_{13}H_{13}N - Yb^{170}$ $C_{12}H_{9}ON - Yb^{170}$ $C_{12}C^{13}H_{11}N - Yb^{170}$	161,892±0,013 125,406±0,150 157,374±0,210	169,989171±43 169,989250±150 169,989207±210	169,98[illegible]178±30
171	$C_{12}H_{9}ON_{2} - Yb^{171}$ $C_{12}C^{13}H_{12}N - Yb^{171}$ $Yb^{172} - Yb^{170}$	119,676±0,270 154,195±0,050 1001,533±0,060	170,990516±270 170,990533±50 170,990711±65	170,9[illegible]
172	$C_{12}H_{9}O_{2}N - Yb^{172}$ $Yb^{174} - Yb^{172}$ $Yb^{173} - Yb^{172}$	103,531±0,060 1000,265±0,226 1002,223±0,118	171,990[illegible]0±60 171,990[illegible]02±230 171,990617±127	171,990[illegible]±70
173	$C_{14}H_{5} - Yb^{173}$ $C_{10}H_{7}O_{3}N - Yb^{173}$ $Yb^{174} - Yb^{173}$	101,062±0,067 102,812±0,063 1001,022±0,050	172,993076±67 172,992[illegible]3±63 172,992922±51	172,992910±50
174	$C_{14}H_{6} - Yb^{174}$ $Yb^{176} - Yb^{174}$	108,342±0,039 2001,634±0,050	173,993312±38 173,993156±100	173,993[illegible]±30
176	$C_{14}H_{8} - Yb^{176}$ $C_{13}H_{6}N - Yb^{176}$	120,018±0,046 107,223±0,100	175,995557±46 175,998772±100	175,9985[illegible]±[illegible]
175	$C_{14}H_{7} - Lu^{175}$ $C_{13}C^{13}H_{6} - Lu^{175}$	114,157±0,037 103,795±0,038	174,[illegible]06272±37 174,996150±30	174,9962[illegible]±[illegible]
176	$C_{14}H_{8} - Lu^{176}$ $Lu^{175} - Lu^{176}$	120,000±0,049 1002,301±0,060	175,995575±50 175,996515±70	175,99[illegible]±3[illegible]

Card 2/2

DEMIRKHANOV, R.A.; DOROKHOV, V.V.; DZKUYA, M.I.

Isotope masses and nucleon binding energies in the rare-earths region ($150 < A < 176$, $63 < A < 71$). Izv. AN SSSR. Ser. fiz. 27 no.10:1338-1356 O '63. (MIRA 16:10)

DEMIRKHANOV, R.A.; DOROKHOV, V.V.; SOLOV'YEV, V.G.

Anomalous binding energy of the last two neutrons in the region N = 84 + 92. IAd. Fiz. 2 no.1:10-13 Jl '65.

(MIRA 18:8)

1. Ob"yedinennyy institut yadernykh issledovaniy.

DEMIRKHANOV, R.A.; DOROKHOV, V.V.; DZKUYA, M.I.

Masses of stable isotopes of neodymium, praseodymium, cerium, and lanthanum. Izv. AN SSSR.Ser. fiz. 29 no.5:857-861 My '65. (MIRA 18:5)

IYERUSALIMSKIY, N.D.; ANDREYEVA, Ye.A.; GRISHANKOVA, Ye.L.; GOLOVLEV, Ye.L.; DOROFHOV, V.V.; ZHUKOVA, L.N.

Study of microflora of refinery waste waters. Prikl. biokhim. i mikrobiol. 1 no.2:163-166 Mr-Ap '65.
(MIRA 18:11)

1. Institut mikrobiologii AN SSSR, Moskva.

L 36092-66 EWT(m)/T WE

ACC NR: AP6015206 (A) SOURCE CODE: UR/0411/65/001/002/0163/0166

AUTHORS: Iyerusalimskiy, N. D.; Andreyeva, Ye. A.; Grishankova, Ye. L.; Golovlev, Ye. L.; Dorokhov, V. V.; Zhukova, L. N.

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B

ORG: Institute of Microbiology, Academy of Sciences, SSSR, Moscow (Institut mikrobiologii Akademii nauk SSSR)

TITLE: A study of the microflora of sewage of petroleum refineries

SOURCE: Prikladnaya biokhimiya i mikrobiologiya, v. 1, no. 2, 1965, 163-166

TOPIC TAGS: bacteria, fuel microorganism, industrial waste, petroleum refining, yeast, aromatic hydrocarbon, diesel fuel, kerosene

ABSTRACT: The results of a study of active slime from petroleum refineries are given. Active slimes from waste phenolic water and from oil traps (purified of petroleum by six-fold extraction by benzene) were studied. Recent and old slimes from oil refinery No. 4 and a sample of slime from the trap of No. 4 were also studied. The specimens were kept in the active state in Sengen's medium at pH 7. From the slimes, 575 cultures were extracted, and 145 other cultures were extracted from similar sources. The mycobacteria were 44%, the bacteria 28%, and yeast 26%. All the bacteria were gram-negative nonspore-forming. They were represented mostly by Pseudomonas and Achromobacter. The yeasts were Candida and Torulopis. All of the extracted microorganisms grew well in pure kerosene, pure paraffin, diesel-fuel distillate, and

Card 1/2 UDC: 622.35+613.663

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ACC NR: AP6015206

paraffin-base petroleum. It was found that only certain mycobacteria and bacteria grow in aromatic hydrocarbons. Orig. art. has: 3 tables.

SUB CODE: 06/11/ SUBM DATE: 18Jan65/ ORIG REF: 003/ OTH REF: 009

LS
Card 2/2

DOROKHOV, V.Ya.

Genesis of platform structures of the second and third orders. Izv.AN SSSR.Ser.geol. 25 no.1:15-27 Ja '60. (MIRA 13:8)

1. Nizhne-Volzhskiy filial Vsesoyuznogo nauchno-issledovatel'skogo geologo-razvedochnogo neftyanogo instituta, g.Saratov.
(Saratov Province--Geology, Structural)

ACC NR: AR6029303 SOURCE CODE: UR/0271/66/000/006/B056/B056

AUTHOR: Dorokhov, Ye. Ya.

TITLE: The optimum frequency of data readout from discrete signal transducers

SOURCE: Ref. zh. Avtomatika, telemekhanika i vychislitel'naya tekhnika, Abs. 6B426

REF SOURCE: Sb. Algoritmiz, proizv. protsessov. Seminar. Vyp. 8. Kiyev, Nauk. dumka, 1965, 16-31

TOPIC TAGS: data readout, data retrieval, discrete automation, optimal control

ABSTRACT: The problem is considered of selecting the frequency of data readout from discrete signal transducers; thereby it is assumed that a certain value of the frequency can lead to data losses. Both data losses caused by equipment failure and structural losses associated with the method and speed of processing the given type of input signals serve as the criterion of system's operation. A method for determining the optimum frequency of data readout is indicated, and the upper and lower limits of the optimum frequency of data readout are shown. Equations are derived which make it possible, for a given magnitude of permissible data losses, to select a definite value of the data processing cycle which would determine the upper limit of the optimum frequency of data readout. [Translation of abstract] 4 illustrations and bibliography of 8 titles. N. S.

SUB CODE: 09,13

Card 1/1 UDC: 681.142.621

BYKHOVSKIY, I.I. (Moskva); DOROKHOVA, A.D. (Moskva); ZARETSKIY, L.B. (Moskva); LUKOMSKIY, S.I. (Moskva)

Some periodic movements and the structure of the phase space of an impact-vibration system with a regularly recovered force. Izv. AN SSSR. Mekh. i mashinostr. no. 2:161-165 Mr-Ap '64. (MIRA 17:5)

BOROVIKOV, Vasiliy Aleksandrovich; KOSAREV, Vladimir Kuz'mich; KHODOT, Georgiy Aleksandrovich; SLAVIN, M.I., kand. tekhn.nauk, retsenzent; DOROKHOVA, A.I., inzh., retsenzent; GESSEN, V.Yu., doktor tekhn. nauk, red.; SOKOLEVA, Ye.M., tekhn. red.

[Electrical networks and systems] Elektricheskie seti i sistemy. Moskva, Gosenergoizdat, 1963. 459 p. (MIRA 16:8)
(Electric lines--Overhead)

USSR/Diseases of Farm Animals. Non-Contagious Diseases. R-2

Abs Jour : Ref Zhur-Biol., No 18, 1958, 83583

Author : Fedorov, B. T.; Mirolyubov, I.I.; Polivanskaya, K. D.; Dorokhova, A. K.

Institute : No institute is given

Title : Steatitis Disease in Minks.

Orig Pub : Karakulevodstvo i zverovodstvo, 1957, No 6, 54-56

Abstract : At one of the sovkhozes for animal breeding, an outbreak of polyavitaminosic steatitis ("yellow fat" disease) occurred among young minks. The disease was characterized by a general depression, by food refusal, by diarrhea with yellow or dark-green feces, sometimes by seizures accompanied by spasms or paralyses. An autopsy of succumbed animals uncovered a well advanced degenerative adiposity. The disease was caused by continuous feedings of fish remnants containing rancid fat to the animals.

Card 1/1

DOROKHOVA, D.V.

Vasomotor lesions in focal inflammatory brain diseases in children. Fiziol.zhur. [Ukr.] 10 no.4:551-554 Jl-Ag '64. (MIRA 18:11)

1. Detskaya psikhonevrologicheskaya klinika i laboratoriya fiziologii vysshey nervnoy deyatel'nosti Ukrainskogo psikhonevrologicheskogo instituta, Khar'kov.

DOROKHOVA, K.Ya.; SOKOLOVA, T.A.

Chemical composition of the layer covering the grains of primary minerals in some mountain-taiga soils of eastern Transbaikalia. Pochvovedenie no.10:34-36 O '63. (MIRA 16:12)

1. Pochvennyy institut imeni V.V.Dokuchayeva.

FRIDLAND, V.M.; DOROKHOVA, K.Ya.; ZHITKOVA, A.I.

Nature of the structure of humid tropical soils (North Vietnam). Dokl. AN SSSR 154 no. 3:707-709 Ja '64. (MIRA 17:5)

1. Pochvennyy institut im. V.V.Dokuchayeva i Ministerstvo sel'skogo khozyaystva SSSR. Predstavleno akademikom I.P.Gerasimovym.

DOROKHOVA, M.A.

Following Valentina Gaganova's example. Transp.stroi. 10 no.3:7 Mr '60. (MIRA 13:6)
(Shipitsina, Anfisa Ivanovna)

CA KOROKHOVA, M.I.

Syntheses of derivatives of α-amino acids. II. New method of synthesis of amides of α-amino acids. V. F. Kucherov and M. I. Dorokhova. *Zhur. Obshchei Khim.* (J. Gen. Chem.) 21, 1485-91(1951); *J. Gen. Chem. U.S.S.R.* 21, 1621-5, 1627-30 (Eng. Translation); cf. Bergmann and Zervas, *C.A.* 20, 5072; preceding abstr.—3-Alkyl-2,5-diketooxazolidines are prepd. from α-(carbobenzyloxyamino) acids with PCl_5; the products with NH_3 yield amides of α-amino acids. The following *N-carbobenzyloxy derivs.* of α-*amino acids* were prepd. conventionally from 10% excess of $PhCH_2OCOCl$ in alk. soln. at 0-3°: DL-*valine* (I), 73.8%, m. 73-3° (from petr. ether); DL-*norvaline* (II), 71%, m. 85-7° (from CCl_4-petr. ether); DL-*leucine* (III), 70%, m. 54-6°; DL-*norleucine* (IV), 74%, m. 106-8° (from CCl_4-petr. ether). To 9 g. I in dry Et_2O was added at −3 to 0° 8.3 g. powd. PCl_5, and the mixt. stirred 15 min. at 0° and 1 hr. at room temp., filtered, and evapd. *in vacuo* with addn. of petr. ether, yielding 90% *3-isopropyl-2,5-diketooxazolidine*, decomp. 80-1° (from Et_2O); on standing in air or on heating it loses CO_2 and forms a high-melting *polymer*, $(C_5H_9ON)_x$. Similarly, II yields *3-propyl-2,5-diketooxazolidine* (V), 84.3%, decomp. 67-9° (from Et_2O), while III gives 80% *3-iso-Bu analog*, m. 48-50°, and IV gives 85% *3-Bu analog*, decomp. 78-80°. Similarly, DL-*N*-(carbobenzyloxy)phenylalanine and PCl_5 in dry Et_2O at 0° gave 72% DL-*N*-(*carbobenzoxy*)*phenylalanyl chloride*, isolated by diln. with petr. ether in the cold; refluxing in Et_2O 1 hr. yields *3-benzyl-2,5-diketooxazolidine*, decomp. 123-5° (from $CHCl_3$). Addn. with cooling of 3.5 g. V to 30 ml. MeOH satd. with

NH_3 at 0°, gives 3.2 g. crude *NH_4 salt of* DL-α-(*carboxyaminovaleramide*, decomp. 100-4°, which, boiled until dissolved in C_6H_6, loses CO_2 and NH_3, yielding 60% DL-*norvalineamide*, m. 67-9°. Similarly were obtained: DL-*valineamide*, 61.5%, m. 77-9°; DL-*norleucineamide*, 65%, m. 90-1° (*NH_4 salt of* α-(*carboxyamino*)*caproamide*, decomp. 108-7°), DL-*leucineamide*, 60%, m. 106-8°; DL-*phenylalanineamide*, 65%, m. 137-9°. III. Synthesis of decarboxydipeptides. *Ibid.* 1491-4.—Extension of the reaction described in paper II of the series showed that amines may be substituted for NH_3 in the reactions with the oxazolidines. Thus, addn. to 3-6 moles of the amine in dry MeOH at about 0° of the 3-alkyl-2,5-diketooxazolidine, followed by 0.5 hr. at 0°, yields on evapn. *in vacuo*, the amine salt of the amide of the corresponding α-(carboxyamino) acid, which, boiled 1 hr. in MeOH, then allowed to stand 1 hr., yields the desired decarboxydipeptide in 80-6% yields. Such a treatment of *3-isopropyl-2,5-diketooxazolidine* (I) (3.3 g.) and 20 ml. 20% $MeNH_2$ in MeOH gave the *$MeNH_3$ salt of* DL-α-(*carboxyamino*)-*N-methylisovaleramide*, decomp. 90-102°.

which yielded 83% *N*-DL-*valyldecarboxyglycine* (DL-α-*amino*-*N-methylisovaleramide*), b_{4} 109–10°; n_D^{20} 1.4712, d_4^{20} 0.9940. Similarly, the 3-Pr analog of I gave 86.3% DL-α-*amino-N-methylvaleramide*, b_4 110–11°, n_D^{20} 1.4703, d_4^{20} 0.9884. The 3-iso-Bu analog of I gave the *MeNH₂* salt of DL-α-(*carboxyamino*)-*N-methylisocaproamide*, decomp. 98–104°, which gave 66% DL-α-*amino-N-methylisocaproamide*, b_4 131°, n_D^{20} 1.4670, d_4^{20} 0.9680. The 3-Bu analog of I gave 60% DL-α-*amino-N-methylcaproamide*, b_4 120–1°, n_D^{20} 1.4685, d_4^{20} 0.9674, which crystallizes on prolonged standing. The 3-benzyl analog of I gave 45% DL-α-*amino-N-methyl-β-phenylpropionamide*, b_4 165–7°, low-melting solid. Similarly, iso-$AmNH_2$ gave with the corresponding oxazolidines: DL-α-*amino-N-isoamylisovaleramide*, 80%, b_4 140–2°, n_D^{20} 1.4620, d_4^{20} 0.9273; *isocaproamide analog*, 84.3%, b_4 150–1°, n_D^{20} 1.4608, d_4^{20} 0.9161. $PhCH_2CH_2NH_2$ similarly gave: DL-α-*amino-N-phenethylisovaleramide*, 85%, b_4 190–1°, n_D^{20} 1.5275, d_4^{20} 1.0376; *isocaproamide analog*, 85%, b_4 170–1°, n_D^{20} 1.5212, d_4^{20} 1.0175 (*HCl salt*, m. 202–3°), and *caproamide analog*, 82%, b_4 175–6°, crystg. on cooling.

G. M. Kosolapoff

DOROKHOVA, M. I.

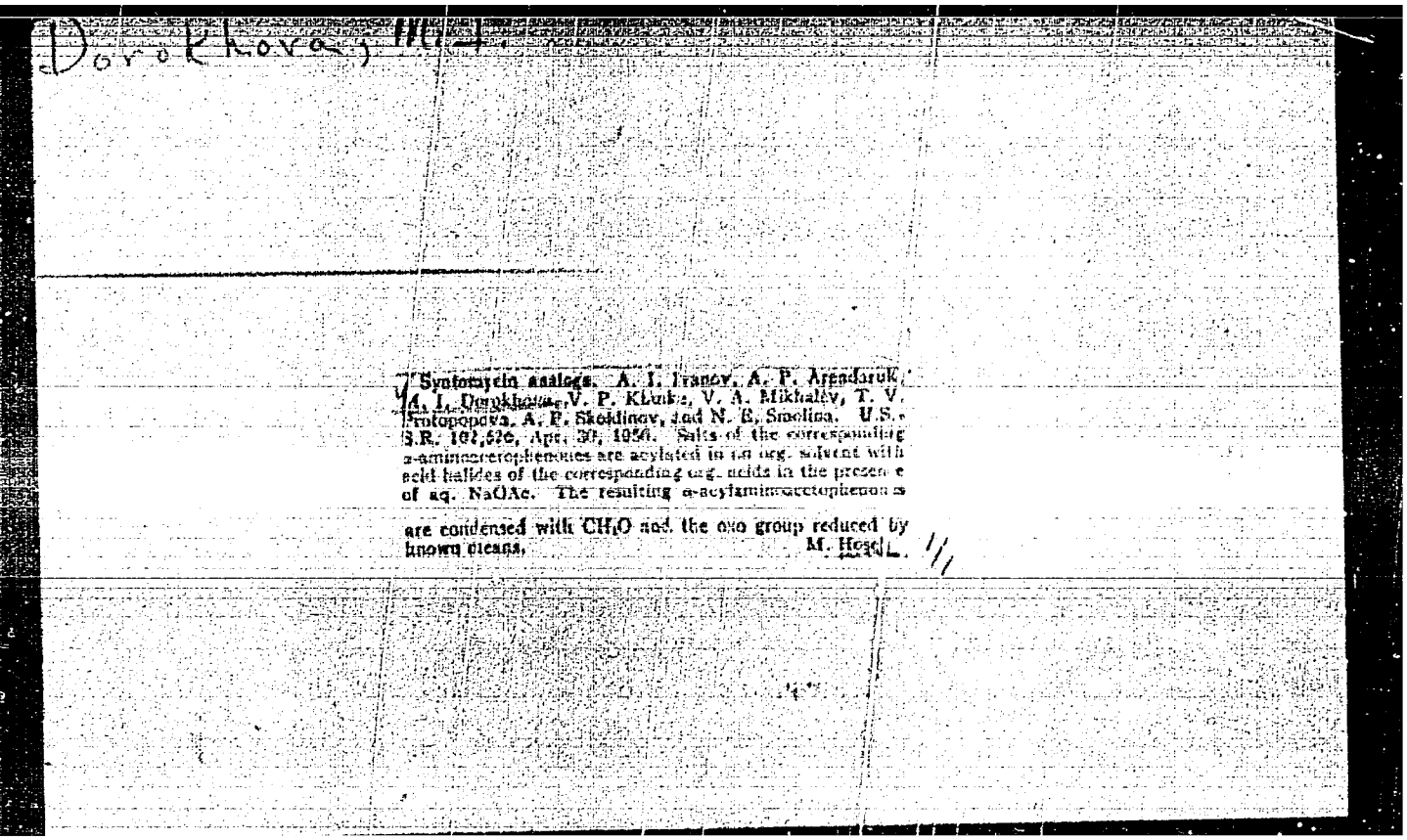
USSR/Chemistry - Pharmaceuticals 11 Feb 53

"The Synthesis of Quinuclidinecarboxylic Acid-(2)," M. V. Rubtsov, M. I. Dorokhova, All-Union Sci-Res Chemicopharmaceutical Inst im S. Ordzhonikidze

DAN SSSR, Vol 88, No 5, pp 843, 844

Worked out a simple 5-step synthesis for quinuclidinecarboxylic acid-(2) starting with γ-picoline and mesoxalic ester. Presented by Acad V. M. Rodionov 28 Nov 52.

264T26



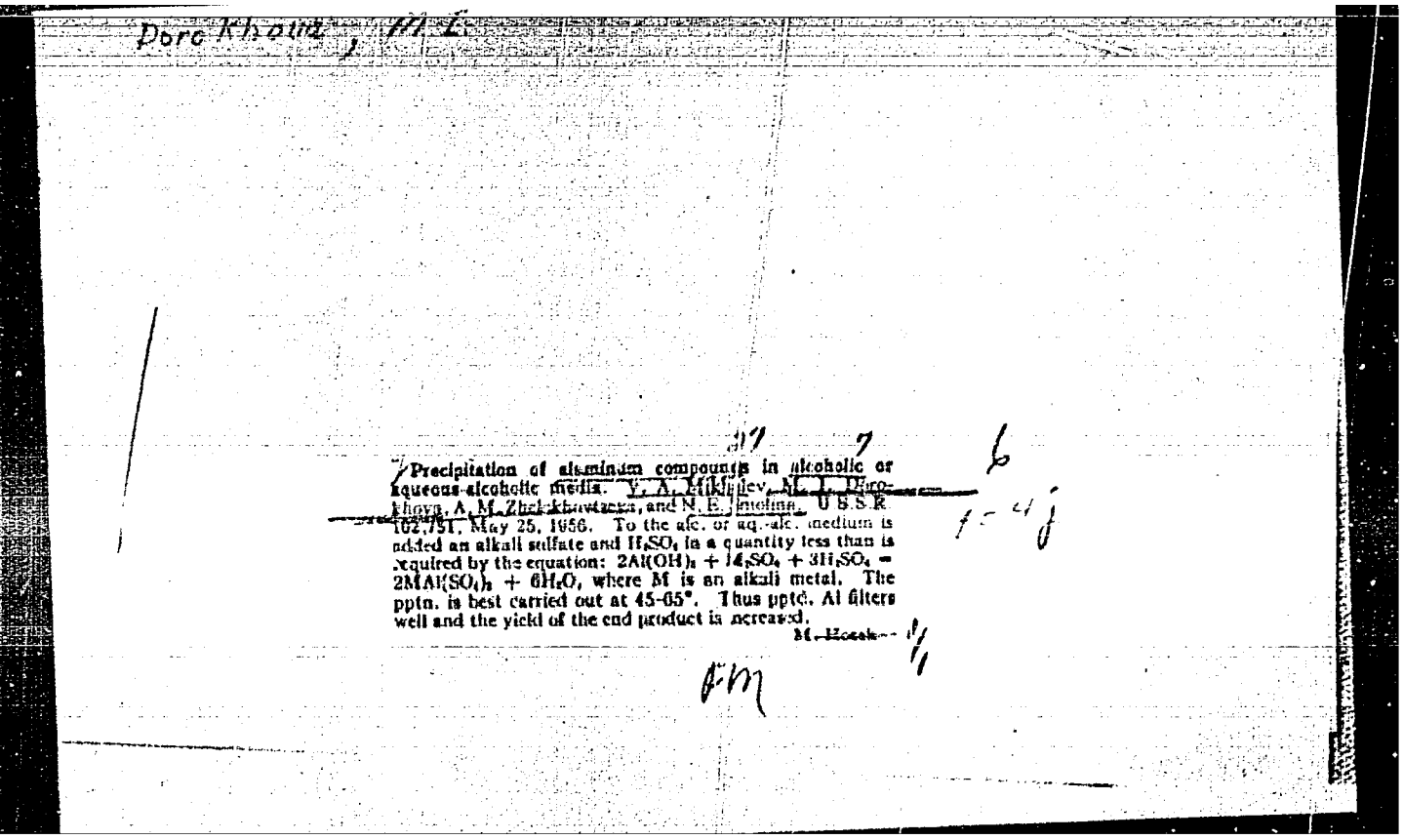
Synthomycin analogs. A. I. Ivanov, A. P. Arendaruk, A. I. Dmukhovs, V. P. Klunts, V. A. Mikhaliev, T. V. Protopopova, A. P. Skoldinov, and N. E. Smolina. U.S.S.R. 102,626, Apr. 30, 1956. Salts of the corresponding α-aminoacetophenones are acylated in an org. solvent with acid halides of the corresponding org. acids in the presence of aq. NaOAc. The resulting α-acylaminoacetophenones are condensed with CH_2O and the oxo group reduced by known means. M. Hoss

Dorokhova

Distr: 4E4j/4E3d/4E2c(j) 7

4-Nitro-α-acetamido-β-hydroxypropiophenone. A. P. Kriндarik, M. L. Dorokhova, V. A. Mikhalev, O. I. Nikolaeva, A. P. Skoldinov, O. D. Smolin, and N. K. Smolina. U.S.S.R. 101,715 May 25, 1955. The title compd. is obtained by the interaction of formaldehyde with [illegible] acetamidoaceto-phenone in the presence of a [illegible] agent such as triethylamine. [illegible]

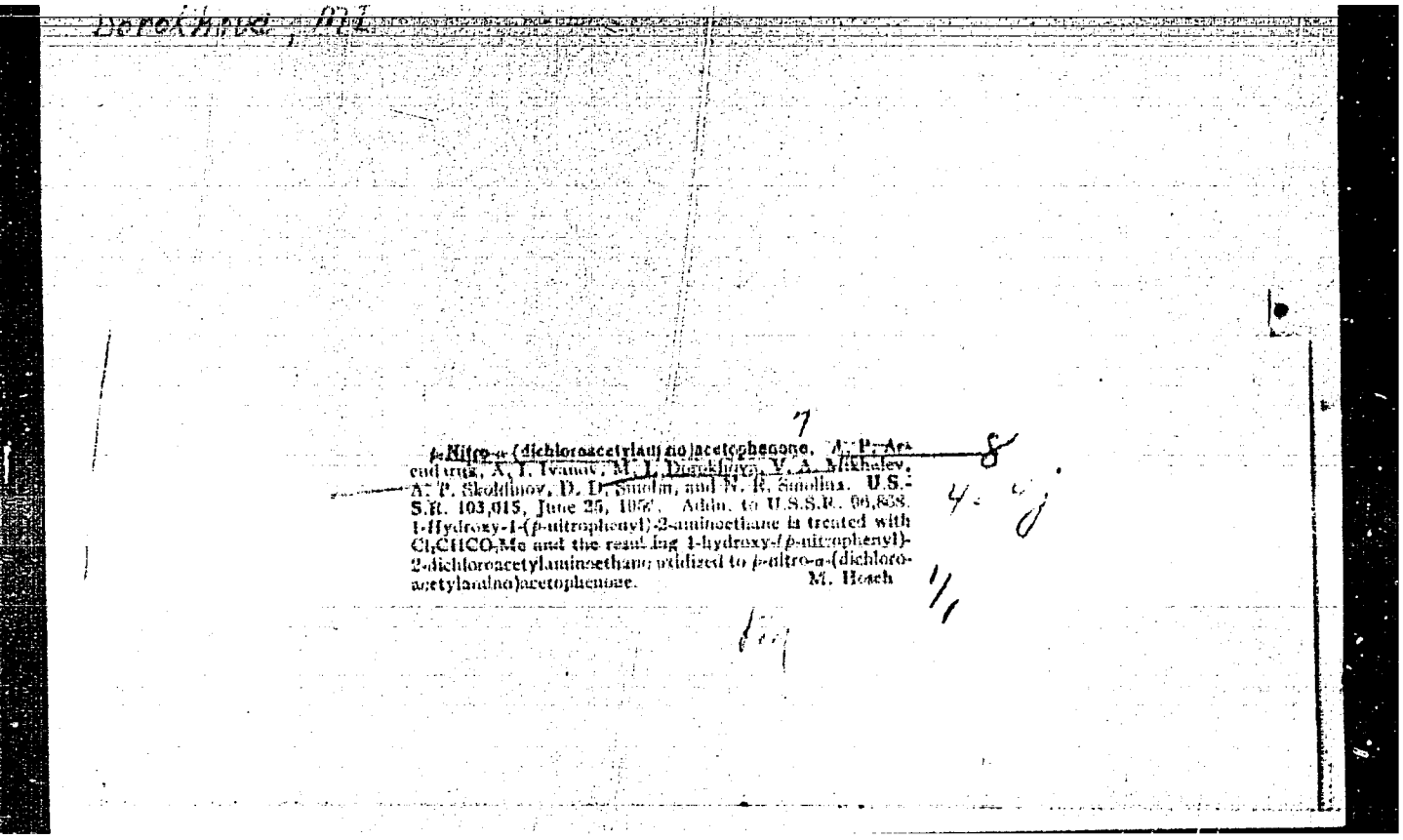
2



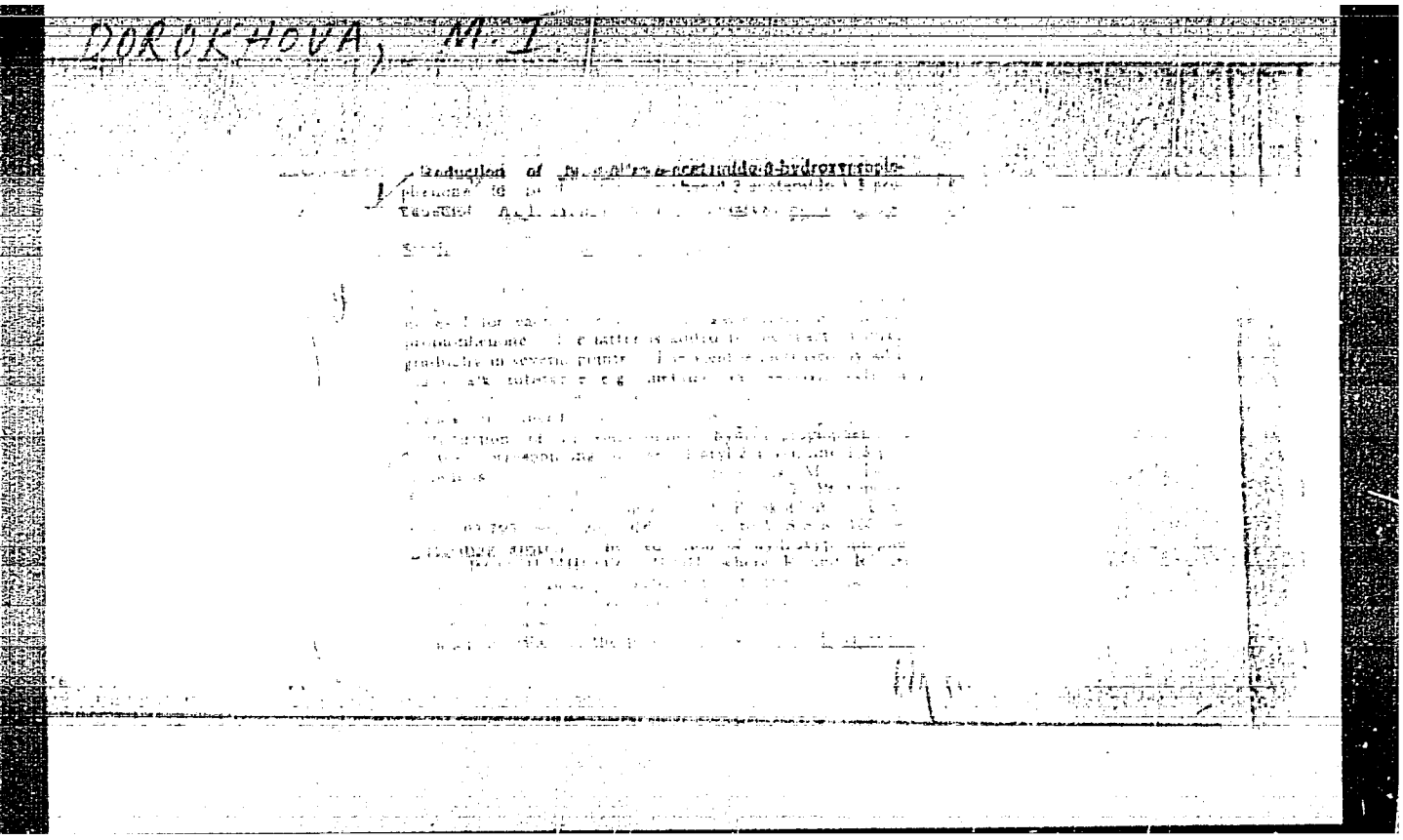
Doc Rhoad, III E

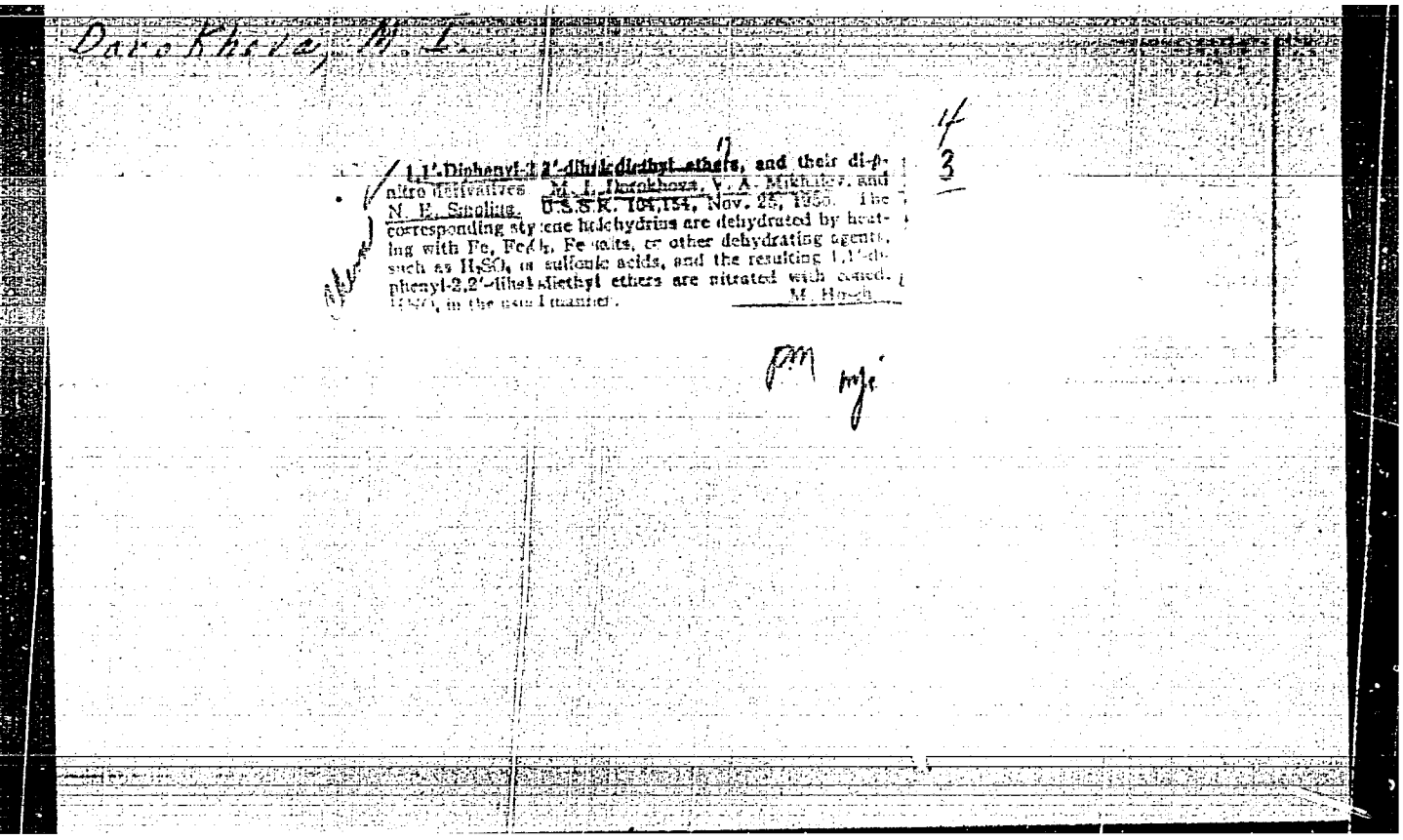
Precipitation of aluminum compounds in alcoholic or aqueous-alcoholic media. V. A. Mikhailov, M. I. Pirogova, A. M. Zhabrova, and N. E. [illegible]. U.S.S.R. 102,751, May 25, 1956. To the alc. or aq.-alc. medium is added an alkali sulfate and H_2SO_4 in a quantity less than is required by the equation: $2Al(OH)_3 + M_2SO_4 + 3H_2SO_4 = 2MAl(SO_4)_2 + 6H_2O$, where M is an alkali metal. The pptn. is best carried out at 45-65°. Thus pptd. Al filters well and the yield of the end product is increased.

M. Hosek



p-Nitro-ω-(dichloroacetylamino)acetophenone. A. P. Arendrnik, A. I. Ivanov, M. I. Dyatklova, V. A. Mikhalev, A. P. Skoldinov, D. D. Smolin, and N. R. Smolina. U.S.S.R. 103,015, June 25, 1957. Addn. to U.S.S.R. 96,858. 1-Hydroxy-1-(*p*-nitrophenyl)-2-aminoethane is treated with Cl_2CHCO-Me and the resulting 1-hydroxy-(*p*-nitrophenyl)-2-dichloroacetylaminoethane oxidized to *p*-nitro-ω-(dichloroacetylamino)acetophenone. M. Hoch





Dar Khrie, M. L.

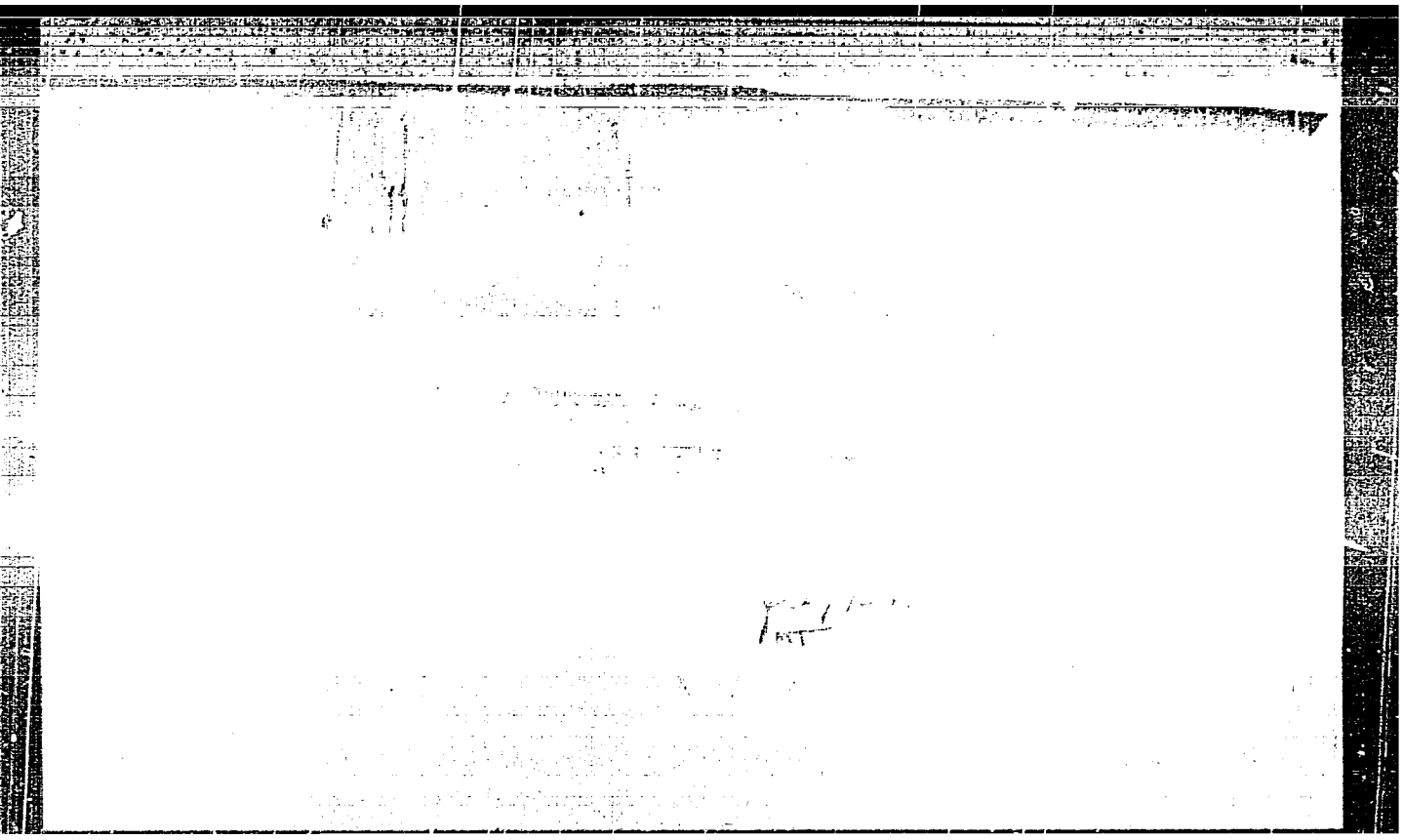
1,1'-Diphenyl-2,2'-dihydroxydiethyl ethers, and their di-p-nitro derivatives. M. L. Dar'khova, V. A. Mikhlina, and N. E. Smolina. U.S.S.R. 104,154, Nov. 25, 1955. The corresponding styrene hydrins are dehydrated by heating with Fe, FeCl$_3$, Fe salts, or other dehydrating agents, such as H_2SO_4, in sulfonic acids, and the resulting 1,1'-diphenyl-2,2'-dihydroxydiethyl ethers are nitrated with cond. HNO_3 in the usual manner. M. Hirsch

4
3

DOROKHOVA, M. I.

Dorokhova, M. I. -- "Investigation of Certain Transformations of Simple Ethers of Styrol Halohydrins." All-Union Sci Res Chemicopharmaceutical Inst imeni S. Ordzhonikidze. Moscow, 1956. (Disseration For the Degree of Candidate in Chemical Sciences.)

So: KNIZHNAYA Letopis', No. 11, 1956, pp 103-114



DOROKHOVA, M. I.

Distr: 4E4j

Phenothiazine series. II. Synthesis of 10-(N-methyl-3-piperidylmethyl)phenothiazines. S. V. Zhuravlev, A. N. Gritsenko, and M. I. Dorokhova. *Zhur. Obshchei Khim.* 27, 1685-9(1957); cf. C.A. 51, 6021*h*; Nieschulz, *et al.* C.A. 49, 7*[illegible]*f.—Refluxing 16.6 g. Et nicotinate with 18.9 g. PhSO$_3$Me and 25 ml. dry Me$_2$CO 2-2.5 hrs. gave after addn. of Et$_2$O 94.5% quaternary salt, m. 72-4°, which hydrogenated in EtOH over Pt at atm. pressure to 70.5% *Et N-methylhexahydronicotinate*, b$_{14}$ 92-4°, n_D^{20} 1.4490. This (94.2 g.) in 100 g. iso-AmOH and 163 ml. MePh was added to 12.5 g. powd. Na in MePh at reflux yielding after aq. treatment 56.9% *N-methyl-3-piperidylcarbinol*, b$_{14}$ 109-11°, n_D^{20} 1.4760. This treated with dry HCl in CHCl$_3$ followed by SOCl$_2$ and heating 2 hrs. on a steam bath gave 91.4% *N-methyl-3-piperidylmethyl chloride HCl salt*, m. 168-9°, which with NaOH gave the *free chloride* (I), b$_3$ 58-60°, n_D^{20} 1.4723. A stream of dry CO$_2$-free air was passed 1 hr. through 0.3 g. Na in 200 ml. liquid NH$_3$ and 0.1 g. Fe(NO$_3$)$_3$; the mixt. was then treated with 1.4 g. Na and stirred 1 hr. and the resulting suspension of NaNH$_2$ treated with 12 g. phenothiazine; when a red soln. formed, 9 g. I was added and after 2 hrs. NH$_3$ was distd. and the residue heated 4 hrs. to 130-40°; after refluxing 1 hr. with MePh the mixt. was treated with H$_2$O and dil. HCl, yielding *10-(N-methyl-3-piperidylmethyl)phenothiazine HCl salt*, m. 228-9°, in 12.54 g. yield; *free base*, b$_{0.4}$ 190-3°. Similarly, 2-chlorophenothiazine gave *10-(N-methyl-3-piperidylmethyl)-2-chlorophenothiazine*, m. 56-8°; *HCl salt*, m. 210-11°.

G. M. Kosolapoff

MIKHALEV, V.A.; DOROKHOVA, M.I.; SMOLINA, N.Ye.; ZHELOKHOVTSEVA, A.M.; IVANOV, A.I.; ARENDARUK, A.P.; GALCHENKO, M.I.; SKORODUMOV, V.A.; SMOLIN, D.D.

Styrene as raw material for the production of synthomycin and levomycetin. Part 1: Synthesis of p-nitro-α-acylaminoacetophenones. Antibiotiki, 4 no.2:21-24 Mr-Ap '59. (MIRA 12:7)

1. Vsesoyuznyy nauchno-issledovatel'skiy khimiko-farmatsevticheskiy institut imeni S. Ordzhonikidze (for Mikhalev, Dorokhova, Smolina, Zhelokhovtseva). 2. Institut farmakologii i khimioterapii AMN SSSR (for Skoldinov, Ivanov, Arendaruk, Galchenko, Skorodumov, Smolin).

(CHLORAMPHENICOL, prep. of.
synthesis from styrene through p-nitro-α-acylaminoacetophenones (Rus))
(VINYL COMPOUNDS
styrene, use in chloramphenicol synthesis through p-nitro-α-acylaminoacetophenones (Rus))
(KETONES
p-nitro-α-acylaminoacetophenones, intermediate in chloramphenicol synthesis from styrene (Rus))

MIKHALEV, V.A.; DOROKHOVA, M.I.; SMOLINA, N.Ye.; ZHELOKHOVTSEVA, A.M.; TIKHONOVA, O.Ya.; SKOLDINOV, A.P.; ARENDARUK, A.P.; SMOLIN, D.D.; GOLOVKINA, T.V.; SLONOVA, L.A.

Styrene as an initial product for synthomycetin and levomycetin production. Part 2: Synthesis of p-nitroacetophenone and p-nitro-α-bromacetophenone. Antibiotiki 4 no.4:21-24 Jl-Ag '59. (MIRA 12:11)

1. Vsesoyuznyy nauchno-issledovatel'skiy khimiko-farmatsevticheskiy institut imeni S.Ordzhonikidze (for Mikhalev, Dorokhova, Smolina, Zhelokhovtseva, Tikhonova). 2. Institut farmakologii i khimioterapii AMN SSSR (for Skoldinov, Arendaruk, Smolin, Golovkina, Slonova).

(CHLORAMPHENICOL chem)
(KETONES chem)

MIKHALEV, V.A.; DOROKHOVA, M.I.; SMOLINA, N.Ye.

Mechanism of conversions of α-acylamino-β-oxypropiophenones into the corresponding benzoyl acetyls. Part 2: Synthesis and cleavage of α-benzenesulfamidoacrylophenones. Zhur. ob. khim. 30 no.11:3714-3718 N'60. (MIRA 13:11)

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

MIKHALEV, V.A.; DOROKHOVA, M.I.; SMOLINA, N.Ye.; TIKHONOVA, O.Ya.

β-Haloalkyl amines and products of their transformations.
Part 1: Reaction of bis(β-chloroethyl)amine with α-oxides.
Zhur. ob. khim. 34 no.11:3716-3719 N '64 (MIRA 18:1)

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

L 41024-65

ACCESSION NR: AP5008502 S/0286/65/000/006/0130/0130

AUTHORS: Mikhalev, V. A.; Vlasov, A. S.; Dorokhova, M. I.; Moskalik, Ya. K.; Smolina, N. Ye.; Tikhonova, O. Ya.; Shagalov, L. B.

TITLE: A method of preparing 3,4-bis-(n)-diethylaminoethoxy-(phenyl)-hexane. Class 30, No. 152540

SOURCE: Byulleten' izobreteniy i tovarnykh znakov, no. 6, 1965, 130

TOPIC TAGS: hexane, chloride, pharmacology

ABSTRACT: This Author Certificate presents a method of producing 3,4-bis-(n)-diethylaminoethoxy-(phenyl)-hexane by interaction between synestrol and diethylaminoethyl chloride in alcohol in the presence of alkali agents with subsequent distillation of the alcohol, addition of water, and extraction by an organic solvent such as ether. In order to increase the yield of the desired product and to suppress the by-products of the reaction, diethylaminoethyl chloride and the alkali agent are introduced gradually, in several doses, either in solid form or in alcohol solutions. Production of the pharmaceutical preparation is effected by widely accepted methods. In order to reduce danger and to facilitate

Card 1/2

L 41024-65
ACCESSION NR: AP5008582

the process, a diethylaminoethyl chloride salt is used, such as chlorhydrate. The process is also facilitated and simplified by using caustic potash or caustic soda as the alkali agent. To prevent excessive dilution of the reaction mass, the excess solvent is distilled simultaneously with introduction of the alcohol solutions of the reaction products. For all the synestrol to react, 150-170% of the theoretically computed diethylaminoethyl chloride required is used.

ASSOCIATION: none

SUBMITTED: 13Nov61 ENCL: 00 SUB CODE: OC, IS

NO REF SOV: 000 OTHER: 000

Card 2/2

MIKHALEV, V.A.; DOROKHOVA, M.I.; SMOLINA, N.Ye.; TIKHONOVA, O.Ya.

β-Haloalkyl amines and their transformation products. Part 2: Derivatives of N', N''-dispirotripiperazinium. Zhur.org.khim. 1 no.3:460-464 Mr '65. (MIRA 18:4)

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

L 61194-65 EWP(e)/EPA(s)-2/EWT(m)/EPF(c)/EWP(i)/EPA(w)-2/EWP(j)/T/EWP(b)
Pc-4/Pq-4/Pr-4/Pt-7 WW/JAJ/RM/WH

ACCESSION NR: AP5019028 UR/0286/65/000/012/0063/0063
666.266.3

AUTHOR: Leko, V. K.; Dorokhova, M. L.

TITLE: Glass for glass ceramic materials. Class 32, No. 172001

SOURCE: Byulleten' izobreteniy i tovarnykh znakov, no. 12, 1965, 63

TOPIC TAGS: glass, glass ceramic pyroceram, sitall, semiconductor

ABSTRACT: An Author Certificate has been issued for a glass for glass ceramics. To produce glass ceramics with an electronic conductivity of 10^{-9} to 10^{-12} $ohm^{-1}.cm^{-1}$, the glass is formulated to contain: 30—50% SiO_2, 5—15% TiO_2, 5—25% Al_2O_3, 30% max B_2O_3, 10—20% MgO, 15% max CaO, 3% max Na_2O, 4% max K_2O, and 2—10% Al [6M]
metal.

ASSOCIATION: none

SUBMITTED: 27Mar64 ENCL: 00 SUB CODE: MT

NO REF SOV: 000 OTHER: 000 ATD PRESS: 4052

Card 1/1

ZHUKOVSKIY, V.I.; DOROKHOVA, M.P.; ZAREMBA, N.Ye.; DYKMAN, D.G.; BOYS, G.V.

Data of the thermographic investigation of barium titanate with some admixtures. Izv. AN SSSR Ser. fiz. 24 no.10:1294-1295 O '60. (MIRA 13:10)

(Barium titanate)

DOROKHOVA, N. A.

PHASE I BOOK EXPLOITATION SOV/3671

Akademiya nauk SSSR. Institut elektronnykh upravlyayushchikh mashin

Tsifrovaya tekhnika i vychislitel'nye ustroystva; [Sbornik]
(Digital Technique and Computing Devices; Collection of Articles)
Moscow, Izd-vo AN SSSR, 1959. 184 p. Errata slip inserted.
4,000 copies printed.

Ed.: N.S. Brukhovets, Corresponding Member, USSR Academy of Sciences;
Ed. of Publishing House: O.Yu. Shteynbok; Tech. Ed.: V.V.
Volchkova.

PURPOSE: This collection of articles is intended for persons specializing in computer technique.

COVERAGE: Most of the work in this first issue of the Collection of Articles of the Institute of Electronic Control Machines of the Academy of Sciences, USSR, was carried out during 1958-1959, and was dedicated to digital technique. The Institute conducted studies aimed at creating a high-speed memory device of large capacity. One of the results of this work was improvement of the M-2 computer by replacing its static storage device with ferrite memory cores. Other articles concern the use of transistors in digital computers, stability of analog computers equipped with d-c operational amplifiers, and the use of the M-2 computer in solving various problems. Future issues of this Collection of articles will present the results of work in digital machines and in mathematical investigations, and in control machines and techniques which operate on the principle of digital systems of control. Personalities are mentioned in the articles. No personalities are mentioned in the articles. References accompany some of the articles.

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Dorokhova, N.A., and A.B. Zaikind. One of Surface-Barrier Transistors Used in Circuits With Direct Coupling 57
A small lot of the first Soviet-made surface-barrier transistors was tested, at the Laboratory of Control Machines and Systems, in separate circuit elements with direct coupling. The authors give an account of the operating principle and methods of the simplest analysis of performance of such circuits and conclude that such circuits require less power and are much simpler in production than those equipped with ordinary transistors. There are 3 references: 2 English and 1 Soviet.

Zaikind, A.B., and L.Ya. Chumakov. Transistorized Digital Frequency Meter 66
A frequency meter using a gnerator of standard frequency with quartz stabilization was developed at the Laboratory of Control Machines and Systems. This meter was used for measuring s-c. 50-cps Network frequency with errors not exceeding ±0.05 cps within a range of 50±1.5 cps. The frequency meter is equipped with P2b transistors and its power consumption is about 350 mw. It was found that the application of digital technique permitted attainment of a high degree of stability.

Makontsev, O.V. Study of the Technological Spread of Parameters in Transistors 72
The measurements of parametric spread made by the author demonstrate that this spread occur independently of each individual parameter. The results of measurements were processed statistically. There are five references, all Soviet (one of these is a translation).

Makontsev, O.V. Instability of Transistor Characteristics and Parameters 87
The author presents the results of experimental testing of the parameters and characteristics of P4, P6, P8, and P15-type transistors

Lenov, N.N. Stability of Electronic Simulation Circuits Equipped With D-C Amplifiers 94
The author discusses ways of obtaining stable simulation circuits for solving problems by analog computers equipped with operational d-c amplifiers with strong feedback. Such circuits are widely used for analyzing dynamics of automatic control systems. The author studies stability conditions of circuits used for the solution of problems described by differential or integral-differential equations. These problems are solved with the time-delay units of the analog computer, on which the problem variables have been instrumented in the form of transients in the circuit. Problems in which the independent time variable does not appear are solved in the inertialess units. The author analyzes some typical equations, presents their block diagrams, and finds conditions for stability. There are seven references: 6 Soviet (one of which is a translation) and 1 English.

Solenko, T.A. Solving [illegible]

S/799/62/000/003/002/008

AUTHORS: Avaliani, Yu.Ye., Alekseyev, Yu.N., Glukhov, Yu.N., Dorokhova, N.A., Tanetov, G.I.

TITLE: The arithmetic equipment of a specialized machine.

SOURCE: Akademiya nauk SSSR. Institut elektronnykh upravlyayushchikh mashin. Tsifrovaya tekhnika i vychislitel'nyye ustroystva. no.3. 1962, 14-23.

TEXT: The paper describes an arithmetic equipment (AE) of the parallel type, which operates with 22-digit binary numbers with a fixed decimal point and which performs addition, subtraction, multiplication, division, extraction of the square root, matching, shifting, and transposition of numbers. An acceleration in the multiplicational operations is achieved by the accumulation of the partial products without transitional carry-overs. The system of the elements and the design principles of the AE are briefly examined. The system of elements comprises a static trigger, a potential-impulse gate, and logic diode circuits. All of the elements are made up of semiconductor devices. The network of the AE is presented in skeletal form, which comprises the various equipments that serve to perform the elementary operations in each register, and the equipments that receive numbers from other partial parts of the machine. The operational algorithms of addition, subtraction,

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and division, and the technical methods in the design of the logical circuits which help to realize the algorithms, are similar to those employed in some existing computers, for example, the M-2. Thus, for example, the adding equipment of the AE differs in its logic structure from that employed in the M-2 machine only by the content of cyclic carry-over circuit from the higher digit to the lower digit. While the operation of algebraic matching exhibits certain peculiarities dependent on the character of the problems to be solved, there is nothing interesting from the point of view of engineering. In this operation, the same circuits as those utilized in addition and subtraction are employed. The operation of shifting is also of no additional interest, since it employs the same shifting circuitry employed in multiplication and division. In the multiplication the partial products remain immobile, whereas the multiplicand is shifted to the right. It can be shown that to obtain, in such procedure, an accuracy of no less than a unit of the lowest digit for 22-digit initial figures, it is necessary to have 3 additional digits in the AE prior to rounding off. Extraction of the square root follows almost precisely the same method as that employed in high-school long-hand work, that is, with division of the number into pairs of digits, extraction of the square root of the highest digital pair, and all the other subsequent steps required by the 2-rectangles-cum-small-square method, until the remainder is either zero or smaller than the required accuracy residual. The duration of the extraction of the square root amounts to 112 cadences or 317 μ sec.

The arithmetic equipment of a specialized machine. S/779/62/000/003/002/008

If the number of which the square root is to be obtained has a minus sign, then all the digits go to zero, and the operation comes to a halt. The description of the AE elements comprises the static trigger, the logical diode scheme, and the potential impulse gate, schematic circuits for all of which are shown. A block diagram is shown for a basic (k-th) digit of the AE. The AE described contains approximately 1,000 semiconductor triodes and 4,000 semiconductor diodes, all of which operate in regimes in which current intensities, voltages, and powers do not exceed the rated values. A special cooling system ensures maintenance of all semiconductor devices at room temperature. The circuits employed ensure maintenance of a stable operation of the AE under power-supply-voltage fluctuations of ±10% from nominal values. The electrical power supply of the AE is provided by a 400-cps rotary generator through rectifiers assembled in a 6-phase circuit. The total power requirements of the AE is approximately 0.8 kw. The AE is currently in experimental operation. There are 5 figures and 3 references (2 Russian-language Soviet and the English-language A.A.Robinson, Multiplication in the Manchester University high-speed digital computer. Electronic Engrg., v.25, no.299, 1953).

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DOROKHOVA, N.A.

Mycotrophic nutrition of grasses. Biul.MOIP.Otd.biol. 70 no.2:119-
125 Mr-Ap '65. (MIRA 18:6)

BURNASHEV, M.S.; CHERPURNOV, V.S.; KUBRAK, I.F.; DOROKHOVA, N.I.

Materials on fishes of the Sasyk (Kunduk) lagoon collected in the summer of 1956. Uch.zap.Kiah.un. 32:63-72 '58. (MIRA 13:6)
(Sasyk Lagoon--Fishes)

IVANOV, B.I.; DOROKHOVA, N.P.; BOROZDINA, Ye.V.; KOSAREVA, Ye.A.

Dephenolizing the phenol waters of the "Slantsy" Combine with a mixture of n-butyl ether and isopropyl ether. Trudy VNIIT no.12:266-270 '63. (MIRA 18:11)

DOROKHOVA, V.

Main task is to improve guidance. Prof.-tekh.obr. 18 no.12:26 D '61. (MIRA 14:12)

1. Zamestitel' nachal'nika otdela kadrov i uchebnykh zavedeniy sovnarkhoza, Murmansk.
(Murmansk Province--Vocational education)

SLONOV, M.N.; AKIMOV, V.V.; DOROKHOVA, V.S.

Epidemiologic characteristics of tick-borne encephalitis in Maritime Territory. Med. parazit. i paraz. bol. 33 no.2: 169-177 Mr - Ap '64 (MIRA 18:1)

1. Otdel entomologii (zav. - prof. V.N. Beklemishev [deceased]) Instituta meditsinskoy parazitologii i tropicheskoy meditsiny imeni Ye.I. Martsinovskogo (direktor - prof. P.G. Sergiyev) Ministerstva zdravookhraneniya SSSR, Moskva, i Primorskaya kraevaya sanitarno-epidemiologicheskaya stantsiya (glavnyy vrach V.V. Akimov).

L 38466-66 EWT(1)/T JK

ACC NR: AP6029183 SOURCE CODE: UR/0016/66/000/005/0008/0013

AUTHOR: Shestakov, V. I.; Mikhayeva, A. I.; Polenova, I. N.; Dorokhova, V. S. 33 B

ORG: Vladivostok Institute of Epidemiology, Microbiology and Hygiene (Vladivostokskiy institut epidemiologii, mikrobiologii i gigiyeny); Regional Sanitary Epidemiological Station (Krayevaya sanitarno-epidemiologicheskaya stantsiya)

TITLE: Prevention of Japanese encephalitis in Primorskiy Kray

SOURCE: Zhurnal mikrobiologii, epidemiologii i immunobiologii, no. 5, 1966, 8-13

TOPIC TAGS: encephalitis, insect control, mosquito, disease control

ABSTRACT: In Khasanskiy Rayon, where Japanese encephalitis is endemic, systematic measures have been carried out since 1960 to control the mosquito vectors of the disease (C. tritaeniorhynchus G., C. bitaeniorhynchus G., C. pipiens L., A. togoi Theob., A. esoensis Jam.) and to protect the population from mosquito bites. The breeding places were spayed from airplanes with DDT aerosols (10% dust and 50% paste). The best results were obtained by antilarval treatment of the biotopes in the early spring. The people were protected from insect bites with dimethylphthalate, repudin, and diethyltoluamide. The latter proved to be the most effective repellent. Orig. art. has: 3 tables. [JPRS: 36,932]

SUB CODE: 06 / SUBM DATE: 22Jul65 / ORIG REF: 005 / OTH REF: 001

Card 1/1 mc UDC: 616.988.25-022.395.7-084(5.1.63)

DOROKHOVA, Ye. I.

"Certain Methods of Dietetic Therapy of Cardiovascular Patients," from the book Theses of the Reports of the Scientific Session of the Military Medical Academy im. S. M. Kirov, Tezisy Dokladov Nauchnoy Sessi, 29 Oct-2 Nov, 1956, Leningrad.

DOROKHOVA, Ye.I.; NIKITIN, V.P., dotsent (Leningrad)

Diet therapy in hypertension. Klin.med. 38 no.12:34-38 D '60.
(MIRA 14:2)

1. Iz kafedry obshchey terapii (nach. - deystvitel'nyy chlen AMN SSSR prof. N.N. Savitskiy) Voyenno-meditsinskoy ordena Lenina akademii imeni S.M. Kirova.

(HYPERTENSION) (DIET IN DISEASE)

SHAKHOVA, Z.F.; DOROKHOVA, Ye.N.

Rapid method of photometric determination of silicon in cast iron and steels. Vest. Mosk. un. Ser. 2: Khim. 20 no.2:77-78 Mr-Ap '65. (MIRA 18:7)

1. Kafedra analiticheskoy khimii Moskovskogo universiteta.

SHAKHOVA, Z.F.; DOROKHOVA, Ye.N.

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Zhur. neorg. khim. 10 no.9:2060-2064 S '65. (MIRA 18:10)

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Photometric determination of chromium based on the fading-out of silicomolybdenic acid coloration. Vest. Mosk. un. Ser. 2: Khim. 19 no.5:77-80 S-O '64. (MIRA 17:11)

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DOROKHOVA, Z.M.

Clinical aspects and morphology of brain injuries in peace time. Vopr. neirokhir. 17 no.61:6-15 N-D '53. (MLRA 6:12)

1. Iz Leningradskogo nauchno-issledovatel'skogo neyrokhirurgicheskogo instituta i. professor A.L.Polenova.
(Brain--Wounds and injuries)

YAKOVLEVA, G.S.; DOROKHOVA, Z.M.

State of anti-influenza immunity in the interepidemic and epidemic periods from 1958 to 1959. Trudy LSGMI 66:283-285 '62.
(MIRA 17:4)

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Preparation of acetic acid by the oxidation of hydrocarbons. Khim. prom. [Ukr.] no.1:43-44 Ja-Mr'63 (MIRA 17:7)

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1. DOROLEVA, N. I., Docent; BOYARINOVA, N. YE.

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Standardization of portable sprinkling irrigation installations.
Szabvany kozl 15 no.12:272-274 D '63.

DOBOS, Alajos, okleveles mernok, egyetemi adjunktus; DOROMBY, Laszlo, okleveles mernok; FEKETE, Istvan, dr., okleveles mernok; RESKOVITS, Miklos, okleveles mernok.

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1.No.1 Chair of Hydraulic Engineering, Technical University of Building and Transportation, Budapest (for Dobos).
2.Directorate of Bacs-Kiskun County State Farms (for Doromby, Fekete and Reskovits).

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1. No. 1 Chair of Hydraulic Engineering, Technical University of Building and Transportation, Budapest (for Dobos).
2. Directorate of Bacs-Kiskun County State Farms (for Dolomby, Fekete and Reskovits).

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Modernizing the equipment of plants producing reinforced concrete products and large wall blocks. Stroi. i dor. mashinostr. no.4:18-20 Ap '58. (MIRA 11:4)

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DORONENKO, F.G.; SMIRNOV, N.I.

Efficient width of an EKG-8 mined working face. Izv.AN Kazakh.SSR. Ser.gor.dela no.2:41-49 '59. (MIRA 13:4)
(Strip mining) (Excavating machinery)

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Weight of trip and the MKG-8 excavator front at the Komsomolskiy Mines. Izv. AN Kazakh. SSR. Ser.gor.dela no.2:39-44 '60. (MIRA 13:10)
(Karaganda Province--Copper mines and mining) (Strip mining)

DORONENKO, F.G.

Determining the width of the broken-up rock depending on the basic parameters of boring and blasting operations as exemplified by the Kounradskiy Mine. Trudy Inst. gor. dela AN Kazakh. SSR 6:76-81 '60. (MIRA 13:12)
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Use of low-cost explosives in strip mining. Trudy Inst. gor. dela AN Kazakh. SSR 6:205-208 '60. (MIRA 13:12)
(Explosives) (Strip mining)