PERESLENI, Ye.M.; SHEYNKER, Yu.N.; ZOSIMOVA, N.P.; POMERANTSEV, Yu.I.

Tautomerism of some derivatives of heterocyclic compounds. Part 5. Zhur. fiz. khim. 37 no.12:2713-2720 D '63. (MIRA 17:1)

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

>(4) SOV/76-33-9-33/37

AUTHORS: Sheynker, Yu. N., Peresleni, Ye. M., Zosimova, N. P., Pomerantsev, Yu. I.

TITLE: On the Tautomerism of Some Derivatives of Heterocyclic Compounds. X. The Tautomerism of Acylated Heterocyclic Amines

PERIODICAL: Zhurnal fizicheskoy khimii, 1959, Vol 33, Nr 9, pp 2096 - 2109 (USSR).

ABSTRACT: The simplest method of changing the amino-form (I) into the imino-form (II) of heterocyclic amines is based on the substitution of an electronegative group (an acid residue, for example) for the hydrogen atom of the amino group. Supposing that the introduction of such acidifying groups of various electronegativity will produce also a proportional variation in the equilibrium between (I) and (II) of the resultant compounds, the acylated amines of the following heterocycles were investigated: pyridine, thiazole, thiadiazole, quinoline, pyrimidine, benzothiazole, and acridine. The residues of the following acids were introduced: acetic, benzoic, monochloro acetic, dichloro acetic, trichloro acetic, trifluoro acetic, methane sulphonic, sulphanilic, benzoyl sulpho, and nitric acid.

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On the Tautomerism of Some Derivatives of Heterocyclic Compounds. X. The Tautomerism of Acylated Heterocyclic Amines SOV/76-33-9-33/37

The authors determined the structure of the resultant compounds as well as their tautomeric form in solutions (water, ethanol, dioxane, n-heptane) from the infrared absorption spectra (spectrometer of the IKS-11 type) in crystalline state and from the ultraviolet absorption spectra (spectrophotometer of the SF-4 type) in solution. The spectra of the amides obtained were compared with their methyl derivatives (with fixed amino- or imino structure), and the characteristic bands in the infrared spectrum of the pure substance were then examined. The compounds under investigation and their melting points are listed. The infrared spectra (Figs 1-3, 7) indicate that all compounds with substituents of strongly acidifying properties exhibit (II) as may be found even better in the ultraviolet spectra (Figs 4-6). The amount of (II) increases with the solvent polarity and depends on the nature of the heterocycle. Acyl amines may assume (I), (II), or may be composed of both. The equilibrium content of (I) and (II) was determined from the ultraviolet spectra, and herefrom the authors calculated the constant of the tautomeric equilibrium (Table 1). The presence of a linear dependence between the tautomeric equilibria

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of two different solvents (as has already been shown by M. I. Kabachnik (Ref 6) confirms that the tautomeric systems under discussion obey the Broensted-Izmaylov rule, i.e. the laws of equilibrium between acid and base. There are 8 figures, 1 table, and 9 references, 8 of which are Soviet.

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

SUBMITTED: November 21, 1958

SOV/76-33-8-26/39

5(4)
AUTHORS: Sheynker, Yu. N., Pomerantsev, Yu. I.

TITLE: On the Tautomerism of Some Heterocyclic Compound Derivatives. IX. Structure of the Salts of Oxyderivatives of the Heterocyclic Series

PERIODICAL: Zhurnal fizicheskoy khimii, 1959, Vol 33, Nr 8, pp 1819-1829 (USSR)

ABSTRACT: Investigations of the infrared spectra (IS) of metallic salts (MS) of some heterocyclic oxycompounds were carried out, the latter being mainly crystalline or, in some cases, dissolved in D_2O or ethanol. The (IS) were photographed by a spectrometer IKS-11 (NaCl-prism). By comparing the (IS) of the salts of monocompounds with the (IS) of the initial oxycompounds as well as of the derivatives methylated at the nitrogen- or oxygen atom (according to the two possible structural forms), it was possible to discuss the presence of an oxy- (or lactim-) structure. Inter alia, the following observations were made: The (MS) investigated contain, both in the crystalline and dissolved states, (IS) without the spectral band of the carbonyl group. They exhibit, for instance, the waves 1600,

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On the Tautomerism of Some Heterocyclic Compound Derivatives. IX. Structure of the Salts of Oxyderivatives of the Heterocyclic Series

1542, 1480, 1430, and 1340 cm^{-1} (Li-, Na-, K-, Ag-, and Ba-salts of 2-oxypyridine), which suggests a lactim structure (LS). The (LS) is characteristic not only of the salts of monoxyderivatives but also of the salts of the polyoxycompounds, such as dioxyquinoxaline, cyanuric acid, and barbituric acid, etc. The formation of (MS) of the α- and γ-oxyderivatives of the N-heterocyclic series comes about by a molecule shift from the lactam- to the lactim structure. In all compounds investigated, the metal atom was added to the oxygen atom, not the nitrogen atom (of the ring). (MS) of metals of different electropositiveness were used. If there were any carbonyl-amide groups in the molecule of the oxycompound, the salt formation took place by a gradual enolization (E) of these groups by a gradual exchange of the hydrogen atoms (H) with the metal atoms (Me). With compounds of a combined oxy-oxo structure (N-dioxyderivatives of pyridazine and phthalizine) the H → Me exchange was restricted to the oxy-group while there was no (E) in the second carbonyl-amide group. The excessive negative charge (caused by the polarization of the O-Me bond) in the crystalline salts, as well as the

On the Tautomerism of Some Heterocyclic Compound Derivatives. IX. Structure of the Salts of Oxyderivatives of the Heterocyclic Series

total negative charge of the salt anions in the solutions, is concentrated at the oxygen atom, not the nitrogen atom (of the ring). The capacity of (E) in the salt formation of the compounds investigated is not due to the heterocyclic structure but also occurs in the case of carbonylamide groupings in an open chain. There are 8 figures and 18 references, 13 of which are Soviet.

ASSOCIATION: Khimiko-farmatsevticheskiy institut im. S. Ordzhonikidze Moskva
(Chemico-pharmaceutical Institute imeni S. Ordzhonikidze, Moscow)

SUBMITTED: February 11, 1958

POMERANTSEV, Dr. Yu. P. (Moscow)

USSR/Electronics - Exhibitions Physics - Particle Counters Jul 53

"Application of Radio Methods in the Economy" (Survey of Exhibts at the 11th All-Union Radio Exhibition)

Radio, No 8, pp 8-11

Describes a number of exhibits in this section of the All-Union Exhibition. Amateurs A.A. Babenko and Ye. P. Karputkin and Dr. Yu. P. Pomerantsev (Moscow) were awarded a first prize for an integrating radio-meter for observations on the heart which employs 2 Geiger-Muller counters at the input and a loop oscillograph at the output.

261T73

POMERANTSEV, Yu. I.

USSR/ Chemistry - Physical chemistry

Card 1/1 Pub. 147 - 11/35

Authors : Sheynker, Yu. N., and Pomerantsev, Yu. I.

Title : About the tautomerism of certain heterocyclic compound derivatives. Part 1. Infrared spectra and structure of hydroxy derivatives of the N- heterocyclic series

Periodical : Zhur. fiz. khim. 30/1, 79-93, Jan 1956

Abstract : The derivation and study of the infrared absorption spectra of N- heterocyclic hydroxy derivatives in solid crystalline state and in solutions are described. The lactam (oxo) structure was found to be characteristic of all alpha- or gamma-monoxy derivatives both in crystalline state and in solution. The compounds investigated (pyridine, quinoline, pyrimidine, pyrazine, pyridazine, quinoxaline, phthalazine, triazine, etc.) were found to be capable of the so-called "lactim-lactam" tautomerism leading to the formation of N- and O-substituted derivatives. Twenty-seven references: 7 USSR, 1 Germ., 11 USA, 2 Swiss, 2 Turk and 4 French (1925-1955). Graphs.

Institution : Chemicopharmaceutical Inst. im. S. Ordzhonikidze, Moscow

Submitted : May 6, 1955

POMERANTSEVA, A. A.

Dissertation: "Stratigraphy of the Lower Mesozoic Coal-Bearing Deposits of Turgay Depression in Accordance With the Flora." Cand Geol-Min Sci, Laboratory of Coal Geology, Department of Geologico-Geographical Sciences, Acad Sci USSR, Leningrad, 1953. Referativnyy Zhurnal--Geologiya, Geografiya, Moscow, Jul 54.

SO: SUM No. 356, 25 Jan 1955

POMERANTSEVA, A. A.

USSR/Geology

Card 1/1

Author : Pomerantseva, A. A.

Title : About the age of the Lower Mezoic coal-bearing deposits in the Turgaysk Strait region.

Periodical : Dokl. AN SSSR, 95, 6, 1287 - 1288, 21 Apr 54

Abstract : The author, by comparing flora of the Turgaysk strait region with those characteristics of the middle Jurassic period, came to the conclusion that the coal-bearing deposit of the Turgaysk strait region should not be older than the lower part of the middle Jurassic strata.

Institution : Geolog. Laborat. of Coal at Acad. of Scs. of the USSR

Submitted : 6 Feb 1954

POMERANTSEVA, A.A.

Studying the Mesozoic flora of Transbaikalia. Trudy VSEGEI no.91: 126-136 '62 (MIRA 18:2)

KARPOV, N.F.; KOLESNIKOV, Ch.M.; KONIVETS, V.I.; BUTOVA, Ye.P.; NEFED'YEVA, L.P.; POMERANTSEVA, A.A.

History of Upper Mesozoic coal accumulations in the Buryat A.S.S.R. Trudy Lab. geol. ugl. no.18:3-218 '63 (MIRA 18:1)

SHVYROV, M.V. (Sochi); KONTOPULO, Ye.G. (Sochi); RUDAKOVA, S.I. (Sochi); POMERANTSEV, A.A. (Sochi)

Treatment of patients with atherosclerotic myocardiosclerosis at the Sochi-Matsesta Health Resort. Vop.kur., fizioter. i lech. fiz. kul't 30 no.5:420-426 S-O '65.

(MIRA 18:12)

POMCRANTSEVA, A.B.

[Application of] centrifuge for chemical controlling of wine. A. V. Korotkevich and A. B. Pomerantseva. *Vinodelie i Vinogradarstvo S.S.S.R.* 9, No. 2, 31-2 (1949).—The use of a centrifuge for the detn. of sugar (Bertrand, *C.A.* 1, 1630), tartaric acid (as K bitartrate), and lactic acid (I) is described. Five-min. centrifugation at 2500 r.p.m. is sufficient for the purpose. I is detd. as follows: pipet 25 ml. of a dry wine into a 250-ml. cylinder, add $Ba(OH)_2$ to a slightly alk. reaction followed by 2.5 ml. 10% $BaCl_2$, agitate the mixt. for 1-2 min., then fill it with distd. water to 40 ml., then add 95% alc. to 160 ml., divide the soln. into 2 centrifuge tubes, centrifuge, and pour the supernatants into a beaker; take two 60-ml. samples, evap. the alc., transfer the residue into a crucible, dry, ash, and det. the alky. of the ash by adding 10 ml. 0.1*N* HCl (*A*) and titrating back the excess of the HCl soln. with 0.1*N* NaOH (*B* = titration value in ml.): $(A - B) \times 15 = I + AcOH$ (in mg./l.) (*C*); *C* = volatile acids (in mg./l.) = I. — R. Wiesbicki

PARSHIN, K.I., zasluzhennyy vrach; POMERANTSEVA, A.I.; IVANUSHKINA, L.G.; PONOMAREVA, N.F. (Orekhovo-Zuyevo)

Analysis of the results of of dispensary-level observation of textile workers with rheumatism. Sov. zdrav. 19 no. 8:63-67 '60. (MIRA 13:10)

1. Iz terapevticheskogo otdeleniya (zav. - zasluzhennyy vrach RSFSR K.I. Parshin) 1-y gorodskoy bol'nitsy mediko-sanitarnoy chasti khlopchatobumazhnogo kombinata (glavnyy vrach Ye.N. Orlova) Orekhovo-Zuyevo.
(TEXTILE WORKERS--DISEASES AND HYGIENE)
(RHEUMATISC FEVER)

IVANOV, V.S., kand.med.nauk; POMERANTSEVA, A.M., kand.med.nauk

Diagnosis, clinical aspects, and treatment of lichen rubber planus of the mucuous membrane of the oral cavity. Stomatologiia 41 no.5:12-16 S-O '62. (MIRA 16:4)

1. Iz kafedry stomatologii (zav. - prof. I.M.Starobinskiy) TSentral'nogo instituta usovershenstvovaniya vrachey (dir. M.D.Kovrigina) i TSentral'nogo instituta travmatologii i ortopedii.

(LICHEN RUBER) (MOUTH--DISEASES)

POMERANTSEVA, A.M.

Treatment of ulcerative stomatitis. Stomatologiia no.3:18-19 My-Je '55. (MLRA 8:9)

1. Iz kafedry chelyustno-litsevnoy khirurgii i stomatologii (zav.prof. N.M. Mikhel'son) TSentral'nogo instituta usovershenstvovaniya vrachey.(Dir.V.P. Lebedeva)
(VINCENT'S INFECTION, therapy)

POMERANTSEVA, A. M. Cand Med Sci -- (diss) " Hypercementosis and its significance in the clinical ~~treatment~~ of periodontitis and paradentosis," Mos,1957. 10 pp 22 cm. (Min of Health USSR. Central Inst for Advanced Training of Physicians and Central Inst of Traumatology and Orthopedics). 200 copies. (KL, 23-57, 117)

POMERANTSEVA, A.M., assistent

Hypercementosis and its role in the clinical aspects of periodontitis and pyorrhea alveolaris. Stomatologiia 36 no.2:28-30 Mr-Ap '57. (MLRA 10:6)

1. Iz TSentral'nogo instituta usovershenstvovaniya vrachey (dir. V.P.Lebedeva) i TSentral'nogo instituta travmatologii i optopedii prof. N.N.Priorov).
(TEETH--DISEASES)

POMERANTSEVA, A.V.; REZNICHENKO, V.A.

Composition of the mixture of rare earth elements isolated from perovskite. Titan i ego splavy no.8:86-88 '62. (MIRA 16:1)
(Perovskite--Analysis) (Rare earth metals--Spectra)

S/598/62/000/008/001/009
D217/D307

AUTHORS: Pomerantseva, A.V. and Reznichenko, V.A.

TITLE: On the composition of the mixture of rare earth elements separated from perovskite

SOURCE: Akademiya nauk SSSR. Institut metallurgii. Titan i yego splavy. no. 8. Moscow, 1962, Metallurgiya titana, 86 - 88

TEXT: No data concerning the rare-earth-metal contents of perovskite concentrates are available, and an investigation was undertaken in order to rectify this deficiency. The authors first determined the cerium and thorium contents (50.7 and 2.1 %, respectively). The remaining rare earth elements were found after the separation of Ce (as the main component) and Th from the residual trivalent lanthanides. The procedure is described in detail. The results of qualitative spectral analysis show that the composition of the rare earth product is analogous

Card 1/2

POMERANTSEVA, E. [reviewer].

"Fishermen, sea hunters, and hunters." Reviewed by E.Pomerantseva. Sov.etn. no.4:165-167 '53. (MLRA 6:12)

(Arctic region--Folklore)

ZIL'BERMAN, Ye.N.; KOTLYAR, I.B.; POMERANTSEVA, E.G.; OVCHINNIKOVA, L.M.

Some physicochemical bases of the formation of cyclohexanone oximes by hydroxylamine sulfite. Khim.prom. 41 no.7:488-492 Jl '65. (MIRA 18:8)

SMIRNOV, A.N.; POMERANTSEVA E.G.; SPASSKAYA, I.F.

Synthesis of o-alkyl-N, N-akylenealkylsoureas. Zhur. ob. khim. 34 no.11:3570-3575 N '64 (MIRA 18:1)

ZIL'BERMAN, Ye.N.; STRIZHAKOV, O.D.; SVETOZARSKIY, S.V.; POMERANTSEVA, E.G.

Synthesis of ω-aminohydroxamine acids. Zhur. ob. khim. 35 no.5:857-860 My '65. (MIRA 18:6)

KORENMAN, I.M.; SHEYANOVA, F.R.; POMERANTSEVA, E.G.

Metal-containing reagents as fluorescent indicators in the neutralization method. Trudy po khim.i khim.tekh. no.1:125-129 '63. (MIRA 17:12)

GANINA, V.I.; IVCHER, T.S.; POMERANTSEVA, E.G.; PEREPLETCHIKOVA, Ye.M.; ZIL'BERMAN, Ye.N.

Polarographic and spectrophotometric determination of α, β-unsaturated ketones in cyclohexanone. Zav. lab. 30 no.5:541-542 '64. (MIRA 17:5)

L 11521-66 EWT(m)/EWP(j)/T/EWA(c) RPL WW/RM

ACC NR: AP6001871 SOURCE CODE: UR/0190/65/007/012/2150/2155

AUTHORS: Zil'berman, Ye. N.; Pyryalova, P. S.; Pomerantseva, E. G.

ORG: Gor'kiy Polytechnic Institute im. A. A. Zhdanov (Gor'kovskiy politekhnicheskiy institut)

TITLE: Polymerization of malononitrile in presence of hydrogen chloride

SOURCE: Vysokomolekulyarnyye soyedineniya, v. 7, no. 12, 1965, 2150-2155

TOPIC TAGS: polymer, polymerization polycondensation, hydrogen chloride, malonic ester, ether, benzene

ABSTRACT: The low temperature (0--20C) polymerization of malononitrile in presence of HCl was studied. The study is an extension of a previously reported work by Ye. N. Zil'berman and P. S. Pyryalova (Zh. organich. khimii, 1, 983, 1965). The reaction was carried out at 0C and room temperature by passing HCl gas through an ether or benzene solution of malononitrile. The reaction proceeded with a quantitative elimination of NH_4Cl and yielded a mixture of two different polymers. Heating of the resultant polycondensates led to further polycondensation accompanied by further elimination of NH_4Cl and formation of conjugated bonds, as evidenced by EPR spectroscopy. The structure of the polymers was studied by IR and UV spectroscopy. The intrinsic viscosities of the polymers were determined. The experimental results are presented in graphs and tables (see Fig. 1).

Card 1/2 UDC: 66.095.26+678.745

L 11521-66

ACC NR: AP6001871

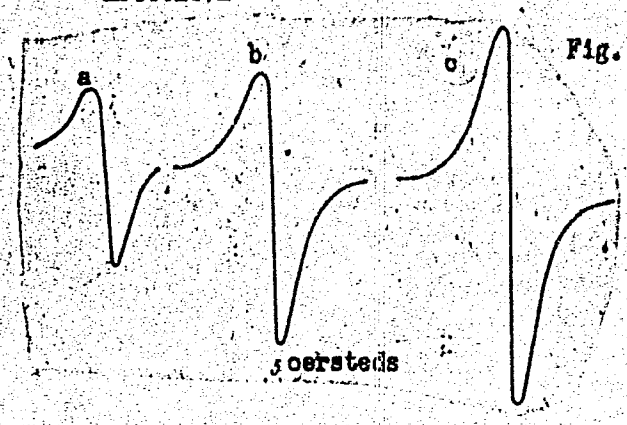

Fig. 1. EPR spectra recorded at equal amplification:
a - polymer heated to 250C (original melting point 94--97C insoluble in benzene) 2×10^{17} spins/g (dark-brown);
b - polymer heated to 350C (original melting point 248--250C insoluble in common organic solvents) 2.7×10^{18} spins/g (black);
c - polymer (b) heated to 450C; 3.4×10^{18} spins/g (black).

It is suggested that the polycondensation proceeds via trimerization of the malononitrile and formation of substituted diaminopyridines and aminiopyridines, which subsequently undergo polycondensation. Orig. art. has: 1 table, 1 graph, and 4 equations.

SUB CODE: 07,11/ SUBM DATE: 30Jan65/ ORIG. REF: 006/ OTH REF: 004

Card 2/2

NOSOVA, V.; POMERANTSEVA, G.

Life of outstanding people. IUn.tekh.2 no.11:76-78 N '57.
(MIRA 10:11)

(Biography)

POMERANTSEVA, G.

VORONTSOVA, Lyubov' Andreyevna; POMERANTSEVA, G., redaktor; SHUVALOV, I., tekhnicheskiy redaktor

Sof'ia Kovalevskaia, 1850-1891. [Moskva] Izd-vo TsK VLKSM "Molodaia gvardiia," 1957. 340 p. (MLRA 10:10)
(Kovalevskaia, Sof'ia Vasil'evna, 1850-1891)

TIMASHEV, Anatoliy Konstantinovich; POMERANTSEVA, G., redaktor; MOROZOVA, G., tekhnicheskiy redaktor

Voeikov. [Moskva] Izd-vo TsK VLKSM "Molodaia gvardiia, 1957. 286 p. (Voeikov, Aleksandr Ivanovich, 1842-1916) (MLRA 10:4)

POMERANTSEVA, G.

New books of the "Life of outstanding people" series. Nauka i zhizn' 29 no.5:88-89 My '62. (MIRA 15:11)
(Bibliography—Biography)

MOROZOV, Aleksandr Antonovich; Vavilov, S.I., akademik; FILIPPOVA, N. POMERANTSEVA, G.; BOBROV, tekhnicheskiy redaktor.

Mikhail Vasil'evich Lomonosov; 1711-1765. Moskva Izd-vo TsK VLKSM "Molodaia gvardiia", 1955. 926 p. (MLRA 9:5)
(Lomonosov, Mikhail Vasil'evich, 1711-1765)

ZVEREV, S.M., red.; MIKHOTA, G.G., red.; POMERANTSEVA, I.V., red.; MARGOT'YEVA, M.V., red.; Prinimali uchastiye: YEPINAT'YEVA, A.M., red.; BERSON, I.S., red.; PARKHOMENKO, I.S., red.; REYCHERT, L.A., ved. red.; YASHCHURZHINSKAYA, A.B., tekhn. red.

[Deep seismic sounding of the earth's crust in the U.S.S.R.; collection of reports]Glubinnoe seismicheskoe zondirovanie zemnoi kory v SSSR; sbornik dokladov. Leningrad, Gostoptekhizdat, 1962. 494 p. (MIRA 15:8)

1. Soveshchaniye po glubinnomu seysmicheskomu zondirovaniyu zemnoy kory. 1st, Moscow, 1960. 2. Institut fiziki Zemli Akademii nauk SSSR (for Yepinat'yeva, Berzon, Parkhomenko).
(Earth--Surface) (Seismology)

POMERANTSEVA, I.V.

Sound propagation characteristics, structure, and probable composition of the crystalline formation of the earth's crust. Prikl. geofiz. no.38:3-24 '64.

(MIRA 18:11)

POMERANTSEVA, I.V.

Results of work in studying the structure of the crystalline stratum in some southeastern regions of the Russian Platform. Prikl. geofiz. no.31:11-54 '61. (MIRA 15:3)
(Russian Platform--Geology, Structural) (Seismic prospecting)

POMERANTSEVA, I.V.

Structure and possible composition of the crystalline base of the earth's crust. Dokl. AN SSSR 145 no.3:639-641 Jl '62.
(MIRA 15:7)

1. Vsesoyuznyy nauchno-issledovatel'skiy institut geofizicheskikh metodov razvedki. Predstavleno akademikom A.L.Yanshinym.
(Earth--Internal structure)

POMERANTSEVA, I.V.; MOZZHENKO, A.N.; SOKOLOVA, I.A.; YEGORKINA, G.V.

Use of the "Zemlya" seismologic station for the study of the structure of the southeast of the Russian Platform. Dokl. AN SSSR 163 no.1: 171-174 Jl '65. (MIRA 18:7)

1. Submitted December 8, 1964.

ACCESSION NR.: AT4028558 S/2552/64/000/038/0003/0024

AUTHOR: Pomerantseva, I. V.

TITLE: Velocity characteristics, structure and possible composition of the crystalline part of the earth's crust

SOURCE: Moscow. Vsesoyuzny*y nauchno-issledovatel'skiy institut geofizicheskikh metodov razvedki. Prikladnaya geofizika, No. 38, 1964, 3-24

TOPIC TAGS: geology, seismology, earth crust, Mohorovicic discontinuity, basalt crust, granite crust, oceanic crust, continental crust, geosynclinal crust

ABSTRACT: Soviet and foreign literature have been used in a review which discusses: existing concepts concerning the structure of the principal types of the earth's crust; velocity characteristics and structure of the crystalline part of the earth's crust; and composition of the crust. There are five types of crust with different velocity characteristics: three principal types — oceanic, platform and geosynclinal and two intermediate types, between oceanic and platform and between platform and geosynclinal. Each of the five types has its gradients of increase of V_{bound} with depth. The maximum gradient is in the oceanic crust, the minimum in a geosynclinal crust. The V_{bound} value for the crystalline part of the

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ACCESSION NR.: AT4028558

earth's crust of each of the types varies, for an oceanic crust, from 6.6-6.8 to 8.0-8.1 km/sec in the range of depths from 5-7 to 10-15 km; for a platform crust, from 5.5-6.2 to 8.0-8.1 km/sec in the range of depths from 0-10 to 35-40 km; for a geosynclinal crust, from 5.5-6.0 to 8.0-8.1 km/sec in the range of depths from 0-17 to 60-70 km; for a crust transitional between oceanic and platform, from 6.2-6.8 to 8.0-8.1 km/sec in the range of depths from 5-7 to 13-38 km; for a crust transitional between platform to geosynclinal, from 5.5-6.2 to 8.0-8.1 km/sec in the range of depths from 0-10 to 38-70 km. The Mohorovicic discontinuity, despite a very great range of change of depth between the oceans and continents (from 7 to 70 km) is characterized by a constant v_{bound} value averaging 8.0-8.1 km/sec. For the surface of the "basalt" ("gabbro-diabase") layer in both the oceans and on the continents it is best to assume v_{bound} = 6.7-6.8 km/sec. On the continents and in the interior seas this boundary is situated at a depth of 9-13 km, and in the oceans — at a depth of 5-7 km. The range of variations of the depth of this boundary from the platforms of the continents to the floor of the ocean is only about 5-10 km, whereas the depth of the Mohorovicic discontinuity varies for these same regions by more than 30 km. On a global scale the principal gravity effect apparently is created by the relief of the Mohorovicic discontinuity, and to a considerably smaller degree by the boundary with v_{bound}=7.5-7.8 km/sec. At the present time, on the platforms, there is apparently a process of differentiation of the crust into parts which are either rising or subsiding. In

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ACCESSION NR.: AT4028558

zones of deep subsidence of the crust there is a reworking of the crust under the influence of subcrustal matter whose surface tends to remain in the initial position regardless of the rising or subsidence of the crust. In youthful geosynclinal regions this boundary can be downwarped, but at a lesser rate than the above-lying layers. The upper layer of the crystalline crust, situated between the bottom of the sedimentary complex and the boundary with v_{bound} =6.7-6.8 km/sec, called the "granite" boundary, consists of sedimentary metamorphized deposits, usually such as gneisses with intrusions of granites and gabbroic rocks. It should be called the "gneiss-granite" complex. It is characterized by a strong differentiation of rocks by seismic velocities and differences in petrographic composition. Rocks lying between the boundaries with v_{bound} -6.6-7.0 km/sec and v_{bound}-7.1-7.4 km/sec apparently are gabbro and diabase, with a layer of diabases in the upper part. The rocks of the subcrustal layer, lying below the Mohorovicic discontinuity (v_{bound}-8.0-8.1 km/sec) apparently are close in composition to dunites. The rocks lying between the boundary with v_{bound} -6.9-7.4 km/sec and the Mohorovicic discontinuity (v_{bound}-8.0-8.1 km/sec) have a composition intermediate between gabbro and dunites. Orig. art. has: 14 figures.

ASSOCIATION: Vsesoyuzny*y nauchno-issledovatsel'skiy institut geofizicheskikh metodov razvedki (All-Union Scientific Research Institute of Geophysical Prospecting Methods)

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ACCESSION NR.: AT4028558

SUBMITTED: 00 DATE ACQ: 16Apr64 ENCL: 00

SUB CODE: ES NO REF SOV: 014 OTHER: 020

Card 4/4

S/020/62/145/003/013/013
B142/B144

AUTHOR: Pomerantseva, I. V.

TITLE: Structure and possible composition of the crystalline mass of the earth's crust

PERIODICAL: Akademiya nauk SSSR. Doklady, v. 145, no. 3, 1962, 639-641

TEXT: Data available on the propagation velocity of seismic waves along the boundaries (V_b) were used together with studies of the petrographic composition to classify the layers of the earth's crust: (1) The granite layer between sedimentary cover and boundaries with V_b = 6.7-6.8 km/sec, consists of sediments resulting from regional metamorphism, and of acid and basic intrusions. (2) The "basalt" layer above the boundary with V_b = 6.6-6.8 km/sec probably consists of gabbro and diabases (the propagation velocity in true basalts is only 5.0-6.0 km/sec). (3) The subcrust layer lies below the Mohorovicic discontinuity. Its physical properties are very much like those of dunite. There are two figures.

Card 1/2

S/552/61/000/031/002/003
D218/D304

AUTHOR: Pomerantseva, I.V.

TITLE: Results of research into the structure of crystalline rocks in the earth's crust in some south-eastern regions of the Russian Platform

SOURCE: Moscow. Vsesoyuznyy nauchno-issledovatel'skiy institut geofizicheskikh metodov razvedki. Prikladnaya geofizika, no. 31, 1961, 11-54

TEXT: The present paper reports the results of seismic research into the structure of the earth's crust which was carried out in 1958 along one of the standard regional profiles (profile VII). This profile lies roughly along the line joining Ural'sk and Bugul'ma. In addition to the present author the following persons took part in this work: Leader of the party T.F. Gaynutdinov, operators A.G. Ginodman, Ya.N. Belen'kiy, K. Khasanov and "interpreters" E.D. Tagay, M.V. Margot'yeva, A.P. Pankratov, A.Yu. Pankratova and G.I. Feller. The expedition as a whole was

Card 1/2

FEDYNSKIY, V.V., doktor fiziko-matem. nauk, red.; SHIROKOV, A.S., red.; KOVALEVA, A.A., red.; GRATSIANOVA, O.P., nauchn. red.; BORISOV, A.A., nauchn. red.; FEDYUK, V.I., nauchn. red.; KOTLYAREVSKIY, B.V., nauchn. red.; POMERANTSEVA, I.V., nauchn. red.; MOZZHENKO, A.M., nauchn. red.; LOZINSKAYA, A.M., nauchn. red.; SHNEYERSON, M.B., nauchn. red.; BOGDANOV, A.Sh., nauchn. red.; NIKITSKIY, V.Ye., nauchn. red.; KUDYMOV, B.Ya., nauchn. red.; PETROV, L.V., nauchn.red.; KOMAROV, .S.G, nauchn. red.; GORBUNOV, G.V., nauchn. red.; DUNCHENKO, I.A., nauchn. red.; FEL'DMAN, I.I., nauchn. red.; POMETUN, D.Ye., nauchn. red.; BEKMAN, Yu.K., ved. red.; VORONOVA, V.V., tekhn. red.

[Status and prospects for developing geophysical methods for mineral prospecting] Sostoianie i perspektivy razvitiia geofizicheskikh metodov poiskov i razvedki poleznykh iskopaemykh; materialy. Pod red. V.V. Fedynskogo. Moskva, Gos. nauchno-tekhn. izd-vo neft. i gorno-toplivnoi lit-ry, 1961. 623 p. (MIRA 14:11)

1. Nauchno-tekhnicheskaya geofizicheskaya konferentsiya, Moscow, 1959.
2. Ministerstvo geologii i okhrany nedr SSSR (for Fedynskiy, Petrov).
(Prospecting—Geophysical methods)

L 06141-67 EWT(1) GW

ACC NR: AR6017546 SOURCE CODE: UR/0169/66/000/001/G017/G017

AUTHOR: Pomerantseva, I.V.; Mozzhenko, A.N.; Sokolova, I. A.; Yegorkina, G. V.

TITLE: Regional research with seismological stations "Zemlya" 27 13

SOURCE: Ref. zh. Geofizika, Abs. 1G118

REF SOURCE: Tr. Nizhne-Volzhsk. n.i. in-t geol.i geofiz., vyp.2, 1964, 210-219

TOPIC TAGS: Earth, Earth core structure, ~~Earth~~ upper mantle, ~~structure~~, seismology, earthquake, seismologic station

ABSTRACT: Results are reported on regional research in the SE of the Russian platform concerning methodology for the study of the Earth core structure and upper mantle of the Earth by the seismological stations "Zemlya". With their aid it is possible to record waves on a magnetic film in a frequency range between .5 and 12 cycles. Rewriting of the field data at various frequency filtrations permits frequency analysis of the registered waves. Transformation of frequencies is used with the rewriting, permitting separation of waves with a fraction of a cycle frequency differences. Amplification of the station is 600,000 to 1,000,000. With the aid of the station, a reliable registration of earthquakes with epicentral distances of 11,000 to 14,000 km (Chile, Tonga islands), and explosions of 3t and over at distances of 200-300 km is possible. 1 to 10 events are usually registered during a 24 hour period. Earthquakes with epicentral distances of 200-800 km appear within the Ural region, nearer earthquakes take place wi-

Card 1/2 UDC 550.340

L 06141-67

ACC NR: AR6017546

thin the Russian platform limits. The obtained records of longitudinal, transverse and exchange waves enable the construction of an idea as to the structure of the Earth core and upper mantle. [Translation of abstract].

SUB CODE: 03, 08/

Card 2/2 MLE

GLAZACHEV, Viktor Vasil'yevich, kand. tekhn. nauk; KIVENKO, S.F., retsenzent; POMERANTSEVA, K.I., red.

[Sour milk products] Kislomolochnye produkty. Moskva, Pishchevaia promyshlennost', 1964. 106 p. (MIRA 18:1)

L 12842-63 EWT(1)/EWT(m)/BDS/ES(j) AMD/AFFTC/ASD AR/K
ACCESSION NR: AP3003232 S/0020/63/150/006/1370/1372

AUTHOR: Pomerantseva, M. D.; Ramayya, L. K.

TITLE: Comparison of the injurious effect of fast neutrons and X-rays on the tested of mice

SOURCE: AN SSSR. Doklady*, v. 150, no. 6, 1963, 1370-1372

TOPIC TAGS: fast-neutron injurious effect, X-ray, testes, Fogg-Cowing method

ABSTRACT: In experiments on 3-month-old white mice, the effect of x-irradiation (20-1600 r) on the testes was compared with that of fast-neutron irradiation. Damage was assessed from weight changes and histrologic analysis of the testes (method of Fogg and Cowing). With fast neutrons and x-rays alike, maximal weight loss, irrespective of the dosage, was observed on the 28th day after irradiation. Marked weight loss was observed even after relatively small doses. The weight loss increased with increasing doses. The point at which maximal reduction of each cell type was reached was not a function of the dosage, but recovery was slower after larger doses. On the 28th day the spermatozoa were maximally decreased, while other cell types were starting to regenerate. The histologic

Card 1/2

L 12842-63
ACCESSION NR: AP3003232

changes produced by both types of irradiation were similar. The relative biologic effectiveness of fast neutrons was of the same order when assessed by the weight and histologic criteria. Orig. art. has: 3 figures and 1 table.

ASSOCIATION: Institut genetiki Akademii nauk SSSR (Insititute of Genetics, Academy of Sciences SSSR)

SUBMITTED: 08Jan63 DATE ACQ: 24Jul63 ENCL: 00

SUB CODE: 00 NO REF SOV: 007 OTHER: 005

Card 2/2

POMERANTSEVA, M. D.,

"Influence of Past Neutrons on Frequency of Lethal Mutations in the Reproductive Cells of Male Mice."

report submitted for the 11th Intl. Congress of Genetics, The Hague, Netherlands, 2-10 Sep 63.

POMERANTSEVA, M.D.

Effect of anesthesia and natural hibernation on the radiosensitivity of animals [with summary in English] J. Zhur.ob.biol. 18 no.3:194-207 My-Je '57. (MIRA 10:6)

1. Institut genetiki Akademii nauk SSSR.
(RADIATION SICKNESS) (HIBERNATION) (ANESTHESIA)

POMERANTSEVA, M.D.

Effect of anesthesia on radiation reaction in animals. Trudy Inst. gen. no.24:409-425 '58. (MIRA 11:9)
(ANESTHESIA) (RADIATION--PHYSIOLOGICAL EFFECT)

POMERANTSEVA, M.D.

Reaction of the organism to X irradiation during anesthesia and hibernation. Trudy Inst. gen. no.24:426-434 '58. (MIRA 11:9)
(X RAYS--PHYSIOLOGICAL EFFECT) (ANESTHESIA) (HIBERNATION)

NUZHDIN, N.I.; SHAPIRO, N.I.; POMERANTSEVA, M.D.; KUZNETSOVA, N.N.

Comparative study of the effectiveness of a single and fractional X irradiation of testicles in mice. Zhur.ob.biol. 20 no.3:216-229 My-Je '59. (MIRA 12:8)

1. Institute of Genetics and Institute of Biophysics, Academy of Sciences of the U.S.S.R.
(X RAYS--PHYSIOLOGICAL EFFECT) (TESTICLE)

POMERANTSEVA, M.D.

Remote effects of radiation on testes in mice. Biofizika 5 no. 5:543-545 '60. (MIRA 13:10)

1. Institut genetiki AN SSSR, Moskva.
(TESTICLE) (X RAYS--PHYSIOLOGICAL EFFECT)

NUZHDIN, N.I.; POMERANTSEVA, M.D.; KUZNETSOVA, N.N.

Changes in the radiosensitivity of animals resulting from previous X irradiations. Izv. AN SSSR. Ser.biol. no.6:851-864 N-D '60. (MIRA 13:11)

1. Institute of Genetics, Academy of Sciences of the U.S.S.R. Moscow.

(X RAYS--PHYSIOLOGICAL EFFECT)

ACCESSION NR: AP4015098 S/0205/64/004/001/0129/0135

AUTHOR: Pomerantseva, M. D.; Ramayya, L. K.

TITLE: Radiosensitivity change in testicles of X-irradiated mice

SOURCE: Radiobiologiya, v. 4, no. 1, 1964, 129-135

TOPIC TAGS: X-irradiation, testicle radiosensitivity, fractional radiation dose, total radiation dose, radiation dose effect, radiation effect totalization, testicle weight change, testicle histological change, testicle regeneration

ABSTRACT: In the literature testicles have been found to react differently to fractional radiation than other organs in that they totalize radiation dose effects. This study attempts to determine the length of time intervals during which radiation effects may be totalized, the time required for restoration of normal radiosensitivity, and the nature of radiosensitivity at later postirradiation periods. In the first of two experimental series, white male mice were X-irradiated with a single total body dose of 200 r, and in the second series animals were X-irradiated under the same conditions with

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ACCESSION NR: AP4015098

a single 400 r dose (15 ma, 190 kv, filter 0.5 mm Cu + 0.75 mm Al, focal length 50 cm, 33 r/min). Experimental animals of both series were exposed to second radiation doses of 200 r at different intervals ranging from 2 to 140 days. On the same days control groups were irradiated with single 200 r doses for the first time and other groups with single 400 and 600 r doses. Radiation effect indices were histological investigations and weight of testicles compared to body weight on the 28th day after last exposure. Findings show that the effects of first and second radiation doses can be totalized. Testicle weight changes for animals exposed to (200 r + 200 r) and (400 r + 200 r) are the same with 3 to 4 week intervals between the fractional radiation doses as for animals exposed to single 400 r and 600 r doses. 49 to 140 days after 200 r exposure, testicle radiosensitivity is the same as in control animals. 49 to 70 days after 400 r exposure, testicle radiosensitivity is restored to the initial level, but after 98 to 140 days radiosensitivity increases again. Testicle regeneration processes are considerably retarded compared to regeneration processes of the organism as a whole. The different reaction of testicles to fractional radiation doses may be attributed to a specific radiosensitivity caused by slower regenera-

Card 2/3

ACCESSION NR: AP4015098

tion processes. The authors "express profound gratitude to Academician N. I. Nuzhdin for guidance and assistance in carrying out this study." Orig. art. has: 4 figures and 1 table.

ASSOCIATION: Institut genetiki AN SSSR, Moscow (Institute of Genetics, AN SSSR)

SUBMITTED: 11Sep62 DATE ACQ: 12Mar64 ENCL: 00

SUB CODE: LS NR REF SOV: 004 OTHER: 014

Card 3/3

17 (10)

S/020/60/130/06/050/059
B011/B017

AUTHORS: Nuzhdin, N. I., Corresponding Member AS USSR, Pomerantseva, M. D., Kuznetsova, N. N.

TITLE: Increase of the Resistance of Animals to the Effect of Ionizing Radiation as a Result of Previous X-Ray Treatment

PERIODICAL: Doklady Akademii nauk SSSR, 1960, Vol 130, Nr 6, pp 1359 - 1361 (USSR)

ABSTRACT: The authors wanted 1) to investigate the type of the change in radiation sensitivity of animals as a result of previous irradiation; 2) to determine the dependence of the protective effect on the experimental conditions. For this purpose 2.5-month-old (mainly male) white mice were used. The authors studied a) the dependence of the protective effect on the dose of the first irradiation, and b) the same from the period between the first and the second irradiation. The first radiation was made with 8 doses: 15, 25, 50, 100, 150, 200, 250, and 400 r. The dose of the second irradiation was 600 r. The following served as characteristic values of the radiation damage: I. survival of the mice on the 30th day after the second irradiation; II. average lifetime of the perished animals; III. change of the

Card 1/3

body-weight; IV. changes of the characteristic values of the peripheral blood. The following results were obtained: I. A protective effect is achieved by previous irradiation with doses of 50-250 r a fortnight before the second irradiation (Table 1). The maximum protective effect was achieved by a dose of 150 r of the first irradiation (Fig 1). Using 800 r in the second irradiation no protective effect could be achieved. A previous irradiation for 4 times with 50 r at intervals of 1 week produced no protective effect. II. In all cases of an effective protective effect of the first irradiation, the average lifetime of the test animals was somewhat longer than that of the control. III. and IV. No protective effect could be observed. Therefore, the type of protective effect due to previous irradiation differs from the effect produced by chemical protective agents (carbon monoxide, sulfurous compounds, narcotics). In the latter case also a rapid restoration of the body-weight and of the system of blood formation takes place. Among the hypotheses concerning the nature of the protective effect of previous irradiation the authors regard two of them as being the most probable:

POMERANTSEVA, M.D.; RAMAYYE, L.K.

Changes in the radiosensitivity of the testicles of mice exposed to X rays. Radiobiologiia 4 no.1:129-135 '64. (MIRA 17:4)

1. Institut genetiki AN SSSR, Moskva.

20744
21.6300 1138, 1565 S/020/61/137/002/018/020
B103/B215

AUTHORS: Nuzhdin, N.I., Corresponding Member AS USSR, Pomerantseva, M.D. and Kuznetsova, N.N.

TITLE: Comparison of single and fractional action of fast neutrons on the testes of mice.

PERIODICAL: Doklady Akademii nauk SSSR, v. 137, no. 2, 1961, 438 - 440

TEXT: The authors compare the biological action of single and fractional treatment with fast neutrons on the testes of mice. Data published on this problem differ considerably. Above all, the authors studied the total damage caused by fractional treatment. Changes in weight and in the histological aspects of the testes characterized the degree of damage. Fast neutrons were produced by a 100-kw nuclear reactor. The application of a radiation dose of 100 rad was: a) single and total, b) divided into four parts with a total of 25 rad each per day. The animals were killed between the 2nd and 70th day after irradiation. Their testes were fixed with Zenker's liquid as modified by Maksimov [Abstracter's note: not explained in the text], colored, and microscopically studied. Histolo-

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S/020/61/137/002/018/020
B103/B215

as destroyed mature cells were replaced by younger ones. Also in this case, the biological effects of single and fractional doses were practically equal. The authors state that the action of fast neutrons is not reduced by fractional doses. They thank B.M. Isayev, Yu.I. Bregadze and V.A. Kvasov for valuable advice. There are 2 figures, 1 table and 5 references: 3 Soviet-bloc and 2 non-Soviet-bloc. The reference to the English language publication reads as follows: G.J. Neary, R.J. Munson, R.H. Mole, Chronic Radiation Hazards, London, Paris, N.Y., Los Angeles, 1957.

ASSOCIATION: Institut genetiki Akademii nauk SSSR (Institute of Genetics, Academy of Sciences USSR)

SUBMITTED: December 10, 1960

1. Орган	4 Контроль			Доза	2			7		
	5 вес		число животных		5 вес		число животных	5 вес		число животных
	мг	% от веса тела			мг	% от веса тела		мг	% от веса тела	
	6	7	9	10	6	7	8	6	7	9
2. Семенники	191	0,59	10	100 rad	173	0,68	8	156	0,64	8
				25 rad×4	159	0,66	8	151	0,52	6
3. Селезенка	123	0,37	10	100 rad	53	0,21	8	93	0,32	8
				25 rad×4	73	0,31	7	117	0,40	6

Card 3/4

Comparison of single and ...

gical sections were made at different moments after irradiation, on the basis of the types of germinal epithelium cells found in different stages of gametogenesis (method by L.C. Fogg, R.F. Cowing, Cancer Res., 11, 23, 1951, Ref. 4). The authors supplemented these methods by classifying the system into three stages. All cells of the germinal epithelium were divided into five groups: spermatogonia, prespermatocytes, spermatocytes, spermatids, and sperms. Table 1 shows the effect of dividing the 100-rad dose into four fractional doses on the change in the weight of the testis. Hence the authors conclude that the latter is considerably reduced by single and fractional irradiation, i.e., mainly on the 35th day after irradiation. Fast neutrons are 5-6 times as effective as X-rays. The degree of weight reduction is constant regardless whether the 100-rad dose os applied totally or in four portions of 25 rad each. On the 70th day after irradiation the weight of the testes had not been restored. The intensity of regeneration was equal in both experimental groups. As to the spleen, the case was different since its loss in weight was lower with fractional radiation doses (Table 1) and X-rays. Germ cells, starting with the youngest (spermatogonia), gradually disappear under the action of fast neutrons. At a dose of 100 r, spermatic ducts were found to be not completely empty,

Card 2/4

Comparison of single and ...

S/020/61/137/002/018/020
B103/B215

8. Дни после облучения												
21			35			49			70			
♂ вес		число животных	♂ вес		число животных	♂ вес		число животных	♂ вес		число животных	
мг	% от веса тела		мг	% от веса тела		мг	% от веса тела		мг	% от веса тела		
6	7	9	6	7	9	6	7	9	6	7	9	
78	0,27	8	67	0,21	8	95	0,27	6	125	0,36	8	
82	0,27	8	68	0,22	7	89	0,20	6	110	0,36	7	
144	0,50	7	129	0,41	8	125	0,35	6	167	0,49	8	
114	0,38	8	127	0,41	7	138	0,40	6	208	0,68	7	

Table 1: Action of single and fractional radiation doses on the weight of testes and spleen. Legend: 1) organ; 2) testes; 3) spleen; 4) control; 5) weight; 6) mg; 7) % of body weight; 8) days after irradiation; 9) number of animals; 10) dose.

Card 4/4

42689

27.1220

S/747/62/000/000/010/025
D268/D307

AUTHORS: Nuzhdin, N. I., Shapiro, N. I., Pomerantseva, M. D. and Kuznetsova, N. N.

TITLE: A comparative study of the effectiveness of single and fractionated x ray irradiation of testes in mice

SOURCE: Radiatsionnaya genetika; sbornik rabot. Otd. biol. nauk AN SSSR. Moscow, Izd-vo AN SSSR, 1962, 115-132

TEXT: To determine the comparative effectiveness of single and fractionated doses of x rays on testes and its relationship to dose size and the degree of fractionation, 3 month-old male mice were wholebody irradiated at 100 r (single dose; 4 x 26 r at 1-day intervals) and 400 r (single dose 2 x 200 r at 4-day intervals; 4 x 100 r at 2-day intervals; 65.5 r for 6 days and 40 r for 10 days). Testes were also locally irradiated at 1,600 r (single dose; 4 x 400 r at 2-day and at 4-5-day intervals). Spleen, thyroid gland, and leucocytes were also studied to determine the specific reaction of gonads to fractionation. In the 3 series, 491, 111, and 49 ani-

Card 1/2

L 27[illegible]-65 EWG(j)/EWT(m)

ACCESSION NR: AP5000091 S/0205/64/004/006/0810/0817

AUTHOR: Pomerantseva, M. D.

TITLE: Genetic effectiveness of different types of ionizing radiation 14

SOURCE: Radiobiologiya, v. 4, no. 6, 1964, 810-817

TOPIC TAGS: X-ray irradiation, relative biological effectiveness, white mouse, ionizing radiation, fast neutron irradiation, proton irradiation, gamma irradiation, radiation effect, genetic effect, radiation induced mutation, sperm, chromosome aberration

ABSTRACT: The relative biological effectiveness (RBE) of several qualitatively different types of radiation was determined in experiments on white mice. The following types of radiation were compared: fast neutrons, protons with 600 Mev energy, Co^{60} gamma rays, and X-rays (190 kv). The frequency of dominant lethal mutations in sex cells of male mice served as an index of genetic effectiveness. Also, the degree of testicle radiation injury was determined by weight and histological changes. Dose-effect curves

Card 1/3

were plotted for each type of radiation. Radiosensitivity of different types of sex cells was also studied. Findings show that on the basis of dominant lethal mutation frequencies in mature sperms and degree of testicle injury, fast neutrons are 5-6 times more effective than Co^{60} gamma rays and almost 4 times more effective than X-rays. Using the same indices, protons with a 660 Mev energy are about half as effective as X-rays. The dependence of dominant lethal mutation frequencies in the spermatids on dose was close to exponential for all the radiation types in the investigated range of doses. Spermatids genetically were 2.5 times more radiosensitive than sperms to the effects of protons and gamma rays and 1.8 times more radiosensitive to the effects of fast neutrons. Thus, the RBE of fast neutrons in its genetic effect on spermatids is somewhat lower. On the basis of genetic effectiveness and testicle injury indices, RBE of fast neutrons is considerably higher, but on the basis of radiation sickness symptoms, the RBE of fast neutrons and gamma rays is approximately the same. "The author expresses her gratitude to Yu. I. Bregadze for conducting fast neutron dosimetry."
Orig. art. has: 6 figures and 1 table.

ACCESSION NR: AP5000091

ASSOCIATION: Institut genetiki AN SSSR, Moscow (Genetics Institute AN SSSR)

SUBMITTED: 26Dec63 ENCL: 00 SUB CODE: LS

NR REF SOV: 014 OTHER: 010

Card 3/3

POMERANTSEVA, M.D.; RAMAYYA, L.K.

Relative biological effectiveness of various ionizing radiations: injury of the testes and the frequency of the occurrence of dominant lethal mutations in sex cells of mice. Trudy Inst. gen. no.32:162-176 '65.

Radiosensitivity of the testes of newborn mice. Ibid.:192-199

(MIRA 18:10)

L 8204-66 EWT(m)
ACC NR: AT5024251 SOURCE CODE: UR/2670/65/000/032/0192/0199

AUTHOR: Pomerantseva, M. D.; Ramayya, L. K.

ORG: Institute of Genetics, Academy of Sciences SSSR (Institut genetiki, Akademiya nauk SSSR

TITLE: Radiosensitivity of the testes in newborn mice

SOURCE: AN SSSR. Institut genetiki. Trudy, no. 32, 1965. Deystviye ioniziruyushchikh izlucheniy na rastitel'nyy i zhivotnyy organizmy (Effect of ionizing radiation on plant and animal organisms), 192-199

TOPIC TAGS: radiation biologic effect, biologic reproduction, animal physiology, mouse, spermatogenesis

ABSTRACT: In this group of experiments, newborn, male, white mice (1 day old) were subjected to x-ray irradiation in doses of 20—800 rad with dose powers of 4—130 rad/min. Mice were killed after 30 and 90 days, and the degree of injury to their testes from irradiation was determined. These results were compared with data obtained in previous experiments with irradiation of mature mice. It was found that the testes of newborn mice are more radiosensitive than adult gonads. This difference increases with increased radiation dose. The difference in radiosensitivity between young and adult mice was most clearly expressed

Card 1/2

with doses above 200 rad, and is chiefly manifested in the slower recovery rate of younger animals. Comparative histological analysis of the testes of mice irradiated when newborn and adult showed that this increased radiosensitivity was characterized by the presence in 30-day old males of undifferentiated cells in the seminiferous tubules. This type of cell is completely absent in unirradiated animals of the same age. The presence of undifferentiated cells is perhaps explained by a lag in the development of the testes in irradiated animals, or it may be connected with general depression of the entire organism. In spite of their radiosensitivity, however, the testes of newborn mice have a great recovery capacity. Even with a dose of 800 rad, 3 months after irradiation all types of spermatogenic cells, including mature sperm, were found in the seminiferous tubules. During irradiation of newborn mice the dose causing irreversible suppression of spermatogenesis is considerably higher than $LD_{50/30}$ and probably even exceeds the absolute lethal dose. This experiment and others with embryos show that as the testes develop and differentiation of sexual cells takes place, their recovery capacity after irradiation increases. Orig. art. has: 4 figures and 3 tables.

[JS]

SUB CODE: LS/ SUBM DATE: none/ ORIG REF: 007/ OTH REF: 007

POMERANTSEVA, M.D.

Genetic effectiveness of different kinds of ionizing radiation. Radiobiologiia 4 no.6:810-817 '64. (MIRA 18:7)

1. Institut genetiki AN SSSR, Moskva.

POMERANTSEVA, M.D.; RAMAYYA, L.K.

Genetic consequences of the action of fast neutrons on sexual cells in male mice. Dokl. AN SSSR 151 no.1:203-205 Jl '63. (MIRA 16:9)

1. Institut genetiki AN SSSR. Predstavleno akademikom A.N.Belozerskim.

(NEUTRONS—PHYSIOLOGICAL EFFECT) (SPERMATOZOA)

POMERANTSEVA, M.D.; RAMAYYA, L.K.

Comparison of the harmful effect of fast neutrons and X rays on the tests in mice. Dokl. AN SSSR 150 no.6:1370-1372 Je '63. (MIRA 16:8)

1. Institut genetiki AN SSSR. Predstavleno akademikom A.N.Belozerskim.

(X RAYS--PHYSIOLOGICAL EFFECT) (NEUTRONS) (TESTICLE)

L 64184-65 EWT(m)/EPF(c)/EWP(j)/T/EWA(c) RPL WW/RM
ACCESSION NR: AP5021553 UR/0286/65/000/013/0019/0019
547.419.5.07

AUTHOR: Belikova, Z. V.; Golubtsov, S. A.; Pomerantseva, M. G.

TITLE: A method for producing organosilicon monomers which contain the β-(carboperfluoro-1,1-dihydrobutoxy)-ethyl group. Class 12, No. 172321

SOURCE: Byulleten' izobreteniy i tovarnykh znakov, no. 13, 1965, 19

TOPIC TAGS: organosilicon compound, silicone, fluorinated hydrocarbon, monomer, silane esterification

ABSTRACT: This Author's Certificate introduces a method for producing organosilicon monomers which contain the β-(carboperfluoro-1,1-dihydrobutoxy)-ethyl group by using chlorosilanes with heating to 70-160°C. The method is simplified by interacting the chlorosilanes with perfluoro-1,1-dihydrobutyl acrylate in the presence of a ternary catalyst: tributylamine, tetramethylethylene diamine and copper monochloride.

ASSOCIATION: Organizatsiya gosudarstvennogo komiteta po khimii (Organization of the State Committee for Chemistry)

SUBMITTED: 29Apr64
NO REF SOV: 000
ENCL: 00
OTHER: 000
SUB CODE: MT, GC

Card 1/1

L 22441-65 EWT(m)/EPF(c)/EPR/EWP(j)/T Pc-4/Pr-4/Ps-4 RPL WW/RM
ACCESSION NR: AP5000484 S/0062/64/000/011/2068/2069

AUTHOR: Belyakova, Z. V.; Pomerantseva, M. G.; Andrianov, K. A.; Golubtsov, S. A.; Popeleva, G. S. 31 B

TITLE: Obtaining γ-trifluoropropylalkenylchlorosilanes and their interaction with hydride chlorosilanes

SOURCE: AN SSSR. Izvestiya. Seriya khimicheskaya, no. 11, 1964, 2068-2069

TOPIC TAGS: Grignard addition reaction, gamma trifluoropropylalkenylchlorosilane, methyldichlorosilane, dimethylchlorosilane, gamma trifluoropropyldivinyldichlorosilane

ABSTRACT: The vinyl and allyl title compounds were prepared by Grignard addition reaction of methyldichlorosilane or dimethylchlorosilane with γ-trifluoropropyldivinyldichlorosilane in accordance with the following formulas:

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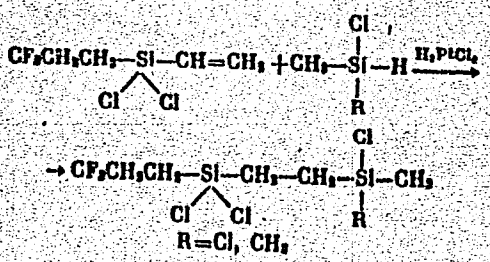

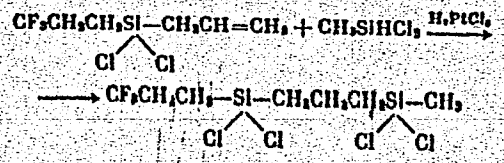

The yields are about 30%. The interaction of γ-trifluorochloropropane with magnesium and allyltrichlorosilane gave only γ-trifluoropropylallyldichlorosilane at a 9.2% yield, that of γ-trifluorochloropropane with magnesium and vinyltrichlorosilane gave 32% γ-trifluoropropylvinyldichlorosilane and 25% bis (γ-trifluoro-

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ACCESSION NR: AP5000484

propyl)vinylchlorosilane. Orig. art. has: 2 formulas

ASSOCIATION: None

SUBMITTED: 26Sep63 ENCL: 00 SUB CODE: GC, OC

NR REF SOV: 000 OTHER: 000

Card 3/3

BELYAKOVA, Z.V.; POMERANTSEVA, M.G.; ANDRIANOV, K.A.; GOLUBTSOV, S.A.
POPELEVA, G.S.

Preparation of γ-trifluoropropylalkenylchlorosilanes and their reaction with chlorisilane hydrides. Izv. AN SSSR Ser. khim. no.11:2068-2069 N '64 (MIRA 18:1)

COLUBTSOV, S.A.; BELYAKOVA, Z.V.; POMERANTSEVA, M.C.

Cleavage of siloxanes by silicon tetrachloride. Zhur. ob. khim. 35 no.6:1044-1048 Je '65. (MIRA 18:6)

Reaction of silane hydrides with allyl chloride. Ibid.:1048-1052

DUDKIN, Oleg Borisovich; KOZYREVA, Lidiya Vasil'yevna; POMERANTSEVA, Nataliya Georgiyevna; IVANOV, T.N., kand. geol.-miner. nauk, otv. red.; SEMENOVA, Ye.A., red.izd-va; VINOGRADOVA, N.F., tekhn. red.

[Mineralogy of the apatite deposits in the Khibiny Mountains] Mineralogiia apatitovykh mestorozhdenii Khibinskikh tundr. Moskva, Izd-vo "Nauka," 1964. 235 p. (MIRA 17:3)

POMERANTSEVA, N.G.

Fibrous sphene in the Khibiny Tundras. Mat. po min. Kol'. poluost. 3:151-155 '62. (MIRA 17:3)

BUSSEN, I.V.; POMERANTSEVA, N.G; ZITTA, Ye.F.

Dike of alkaline lamprophyre from Karnasurt Mountain (Lovozero Tundras). Vop. geol. i min. Kol'. poluos. no.3:234-240 '60. (MIRA 13:9)

(Lovozero Tundras--Lamprophyre)

LIBERMAN, S.G.; PETROVSKIY, V.P.; SINITSIN, K.D.; DOLGOVSKIY, V.V., otv. za vyp.; POMERANTSEVA, N.V., otv. za vyp.; RYBAKOVA, L.G., tekhn. red.

[Recent development in the technology of the production of dry livestock feeds] Novoe v tekhnologii proizvodstva sukhikh zhivotnykh kormov. Moskva, TSentr. in-t nauchno-tekhn. informatsii pishchevoi promyshl., 1962. 40 p. (MIRA 16:4)
(Feeds)

ISKANDARYAN, A.K., kand. khim. nauk; POMERANTSEVA, N.V., otv. za vypusk; MANVELOVA, Ye.S., tekhn. red.

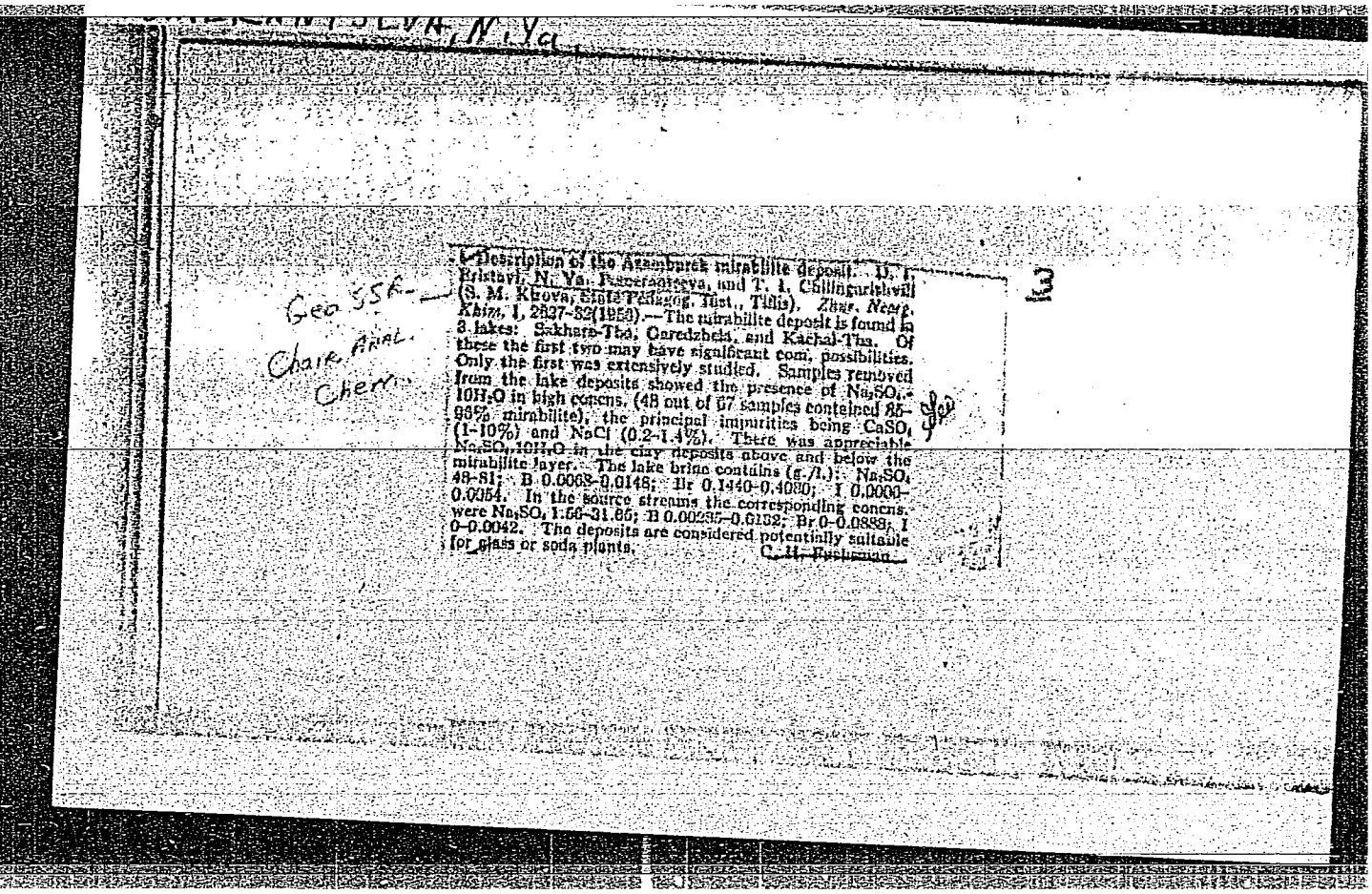
[Pigmentation of salt meat products and its prevention] Pigmentatsiia solenykh miasoproduktov i ee preduprezhdenie. Moskva, 1962. 25 p. (MIRA 16:4)

1. Moscow. TSentral'nyy institut nauchno-tekhnicheskoy informatsii pishchevoy promyshlennosti.
(Meat, Salt)

GORBATOV, V.M.; ISKANDARYAN, A.K.; ADZHYAN, M.P.; POMERANTSEVA, N.V., otv. red.; MANVELOVA, Ye.S., tekhn. red.

[Meat research in the U.S.A.] Issledovanie miasa v SShA. Moskva, 1962. 26 p. (MIRA 16:1)

1. TSentral'nyy institut nauchno-tekhnicheskoy informatsii pishchevoy promyshlennosti. 2. Vsesoyuznyy nauchno-issledovatel'skiy institut myasnoy promyshlennosti (for Gorbatov, Iskandaryan, Adzhyan).
(United States--Food research) (Meat)



Description of the Arambarek mirabilite deposit. D. I. Eristavi, N. Ya. Pancraatieva, and T. I. Chilingarishvili (S. M. Kirova, Sixth Pedagog. Inst., Tiflis). *Zhur. Neorg. Khim.*, 1, 2827-32(1956).—The mirabilite deposit is found in 3 lakes: Sakhara-Tba, Caredzheta, and Kachal-Tba. Of these the first two may have significant com. possibilities. Only the first was extensively studied. Samples removed from the lake deposits showed the presence of $Na_2SO_4 \cdot 10H_2O$ in high concns. (48 out of 57 samples contained 85–95% mirabilite), the principal impurities being $CaSO_4$ (1–10%) and NaCl (0.2–1.4%). There was appreciable $Na_2SO_4 \cdot 10H_2O$ in the clay deposits above and below the mirabilite layer. The lake brine contains (g./l.): Na_2SO_4 48–81; B 0.0068–0.0148; Br 0.1440–0.4080; I 0.0000–0.0054. In the source streams the corresponding concns. were Na_2SO_4 1.56–31.86; B 0.00235–0.0152; Br 0–0.0888; I 0–0.0042. The deposits are considered potentially suitable for glass or soda plants. C. H. Fuchsman

POMERANTSEVE, N. YA.

USSR/Cosmochemistry - Geochemistry. Hydrochemistry.

Abs Jour : Ref Zhur - Khimiya, No 9, 1957, 30391 D.

Author : Eristavi, D.I., Pomerantseve, N.Ya., Chilingarishvili,T.I.
Inst :
Title : Description of Azamburskoye Mirabilite Deposit

Orig Pub : Zh. neorgan. khimii, 1956, 1, No 11, 2627-2632

Abst : In 1955 a study was conducted of one of the three mirabilite lakes (Sukhare-Tba) of the Azamburskoye deposit in Kakhetiya. Lacustrine siltyclay sediments of an area of about 0.7 km^2, are enclosed in Tertiary sedimentary rocks and enclose, in their turn, a lenticular body of mirabilite 0.1-6.5 m thick. Thus the lenticular body of mirabilite is not connected with the lake itself, which is in the process of drying up and consists of mirabilite brine and mud. Limits of chemical composition of mirabilite (in %): $Na_2SO_4 \cdot 10H_2O$ 77.40-95.24, NaCl 0.24-1.38, $CaSO_4$ 1.31-10.80, $MgSO_4$ up to 0.44, insoluble residue 1.47-9.28 (including

Card 1/2

AL'TZITSER, V.S.; TUGOV, I.I.; ROGOV, V.M.; POMERANTSEVA, T.K.

Manufacture of water pipes of secondary polymer materials for agriculture. Biul.tekh.-ekon.inform.Gos.nauch.-issl.inst.nauch.i tekh.inform. 16 no.8:23-25 '63. (MIRA 16:10)

1. PONTRAMTSEVA T. Ya.

2. USSR (600)

4. Lime

7. Storage period of ground quicklime. Stroi, prom. 30 No. 4, 1952. Gor'kovskiy Inshenerno-Stroitel'nyy

9. Monthly List of Russian Accessions, Library of Congress, August 1952, Unclassified.
Institut im. V. P. Chkalova

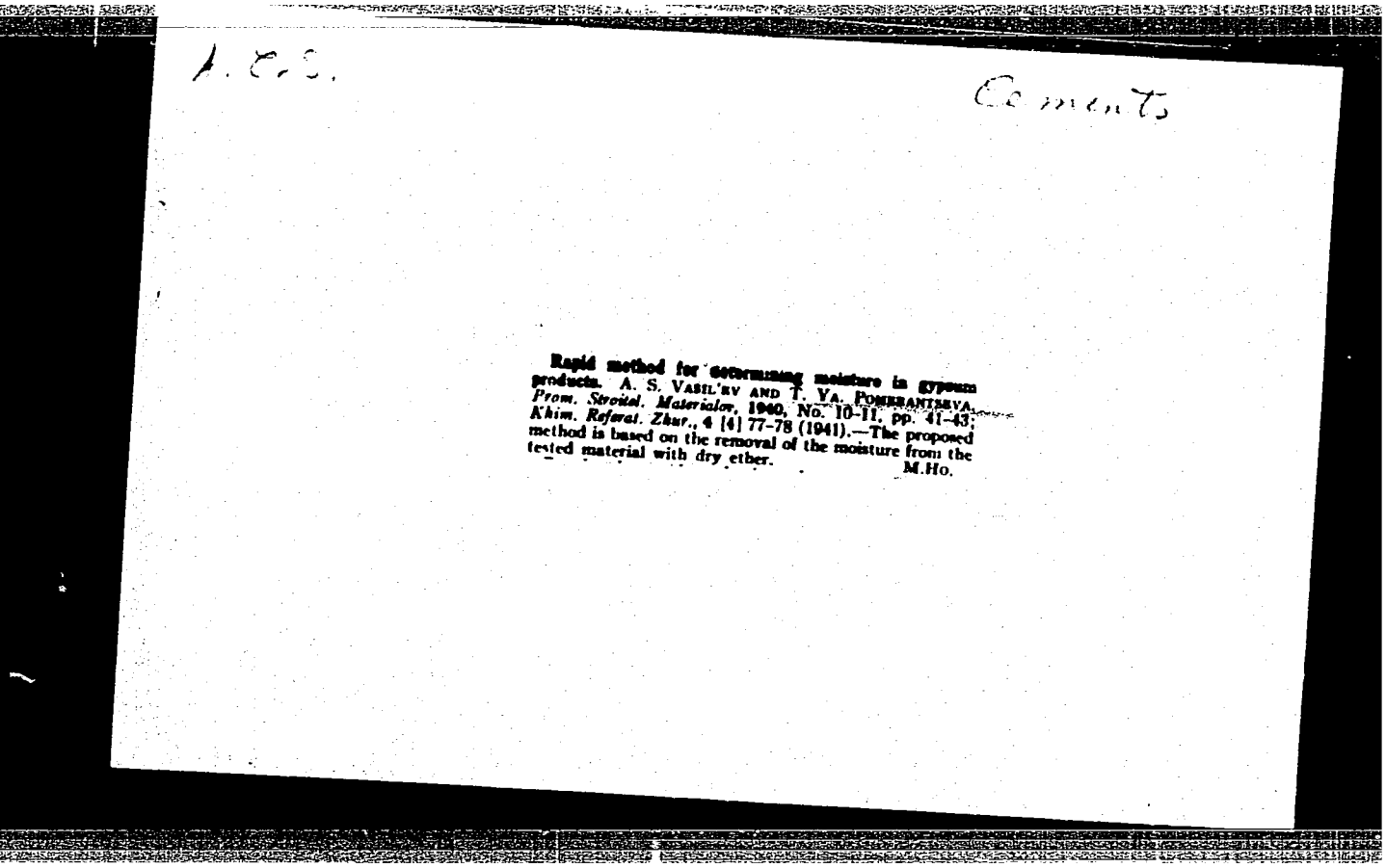
POMINOVA, Galina Ivanovna; SHCHERBAKOV, N.G., red.; NIKOLAYEVA, I.I., red.izd-va; KORNYUSHINA, A.S., tekhn.red.

[Rafts on rivers and lakes] Rechnye i ozernye ploty. Moskva, Goslesbumizdat, 1959. 96 p. (MIRA 13:6)
(Lumber--Transportation)

PONCAROVA, Zdena; VYBORNY, Josef

Retroperitoneal rupture of the duodenum. Rozh. chir. 34 no.2: 103-109 F '60.

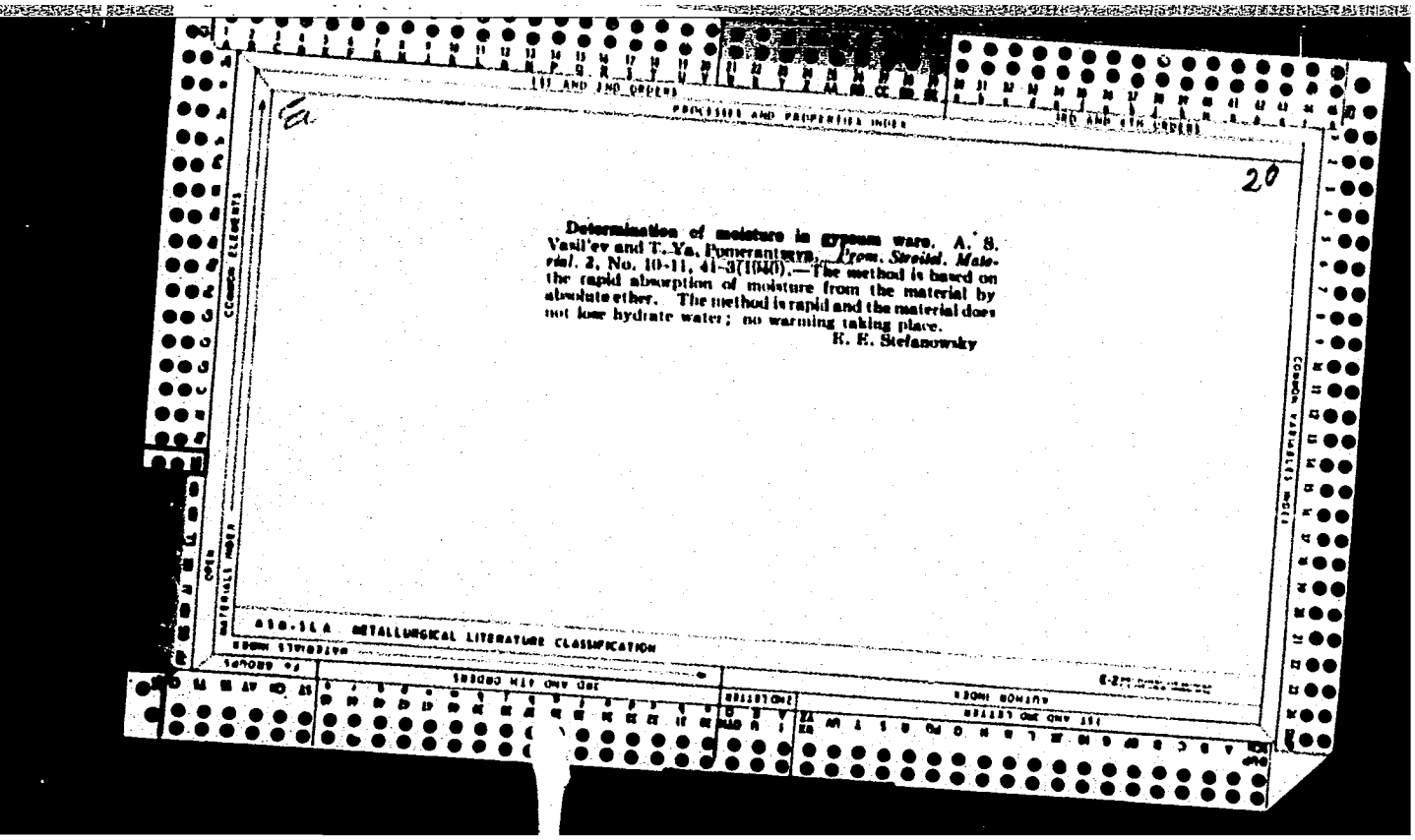
1. Chirurgicka klinika fakulty detskeho lekarstvi Karlovy university v Praze, prednosta doc. dr. Zdenek Vahala.
(DUODENUM wds. & inj.)



A.E.S.

Cements

Rapid method for determining moisture in gypsum products. A. S. VASIL'EV AND T. YA. POMERANTSEVA. *Prom. Stroitel. Materialov*, 1940, No. 10-11, pp. 41-43; *Khim. Referat. Zhur.*, 4 [4] 77-78 (1941).—The proposed method is based on the removal of the moisture from the tested material with dry ether. M.Ho.



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Determination of moisture in gypsum ware. A. S. Vasil'ev and T. Ya. Pomerantseva. *Trans. Struktol. Materiál.* 2, No. 10-11, 41-3(1940).—The method is based on the rapid absorption of moisture from the material by absolute ether. The method is rapid and the material does not lose hydrate water; no warming taking place.

R. E. Stefanowsky

POMERANTSEVA, V.

The cultural worker among machine operators. Sov.profsoiuzy 4 no.12:48-50 D '56. (MLRA 10:1)

1. Predsedatel' komissii po kul'turno-massovoy rabote rabodhkoma Roykinskoy Mashinno-traktornoy stantsii.
(Machine-tractor stations) (Trade unions)