

CHEKALIN, N.A., kand. khim. nauk; ROMANOVA, M.G., kand. khim. nauk

Lightfastness of active dyes. Tekst. prom. 25 no.12:51-53 D '65.  
(MIRA 19:1)

1. Sotrudniki Nauchno-issledovatel'skogo instituta organicheskikh  
poluproduktov i krasiteley.

ABOZIN, V.G.; ROMANOVA, M.G.; BLOKH, N.V.; GREBENKINA, L.G.

Kinetic study of the dyeing of cellulose fibers with vat  
dyes under various alkalinity conditions of the dye bath.  
Izv. vys. ucheb. zav.; tekhn. tekst. prom. no.4:108-115  
'63. (MIRA 16:11)

1. Leningradskiy tekhnologicheskii institut imeni Lensoвета.

ABOZIN, V.G.; ROMANOVA, M.G.

Redox characteristics and dyeing properties of vat dyes, derivatives  
of benzanthrone. Zhur.prikl.khim. 35 no.4:843-849 Ap '62.  
(MIRA 15:4)

1. Kafedra tekhnologii organicheskikh krasiteley Leningradskogo  
tekhnologicheskogo instituta imeni Lensoveta.  
(Dyes and dyeing) (Benzanthracenone)

KRASOVITSKIY, B.M.; PLAKIDIN, V.L.; KHOTINSKAYA, Ye.Ye.; KRAVCHENKO, E.F.;  
GOLOMB, L.M.; ROMANOVA, M.G.

Vat dyes, derivatives of 1,8-naphthoylene-1',2'-benzimidazole-4,5-  
dicarboxylic acid imide. Zhur.prikl.khim. 36 no.6:1330-1335 Je  
'63. (MIRA 16:8)

1. Khar'kovskiy gosudarstvennyy universitet i Rubezhanskiy filial  
Nauchno-issledovatel'skogo instituta organicheskikh poluproduktov  
i krasiteley.  
(Dyes and dyeing) (Benzimidazolecarboxylic acid)

ROMANOVA, M.G.; ABOZIN, V.G.

Determination of the dissociation constants of anthrahydroquinones in nonaqueous media. Zhur.prikl.khim. 36 no.2:435-440 F '63. (MIRA 16:3)

1. Leningradskiy tekhnologicheskii institut imeni Lensoveta.  
(Anthradiol) (Ionization)

ROMANOVA, M.G.; ABOZIN, V.G.

Acid-base properties of leuco compounds of vat substances and simple dyes. Zhur.prikl.khim. 36 no.2:441-446 F '63. (MIRA 1613)

1. Leningradskiy tekhnologicheskii institut imeni Lensoveta.  
(Dyes and dyeing)

RUSSOVA, M.A.; ANTON, V.G.; AMIRANI, B.H.

Acid-base conversion of the leuco compounds of sulfonated vat  
dyes of the dibenzanthrone series. Zhur. prikl. khim. 37 no. 10:  
2268-2278 (1964). (MIRA 17:11)

GOLOMB, L.M.; ROMANOVA, M.G.

New data on the effect of soap on the color of thio-indigo  
dyed products, Tekst.prom, 20 no.1:56-58 Ja '60.

(MIRA 13:5)

(Dyes and dyeing)



1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31 32 33 34 35 36 37 38 39 40 41 42 43 44 45 46 47 48 49 50 51 52 53 54 55 56 57 58 59 60 61 62 63 64 65 66 67 68 69 70 71 72 73 74 75 76 77 78 79 80 81 82 83 84 85 86 87 88 89 90 91 92 93 94 95 96 97 98 99 100

TEST AND THE PROPERTIES

PROCESSES AND PROPERTIES

ea IP

Alterations of wheat gluten in the process of sprouting. N. P. Koz'mina and M. S. Romanova. *Biokhimiya* 3, 378-86 (1938).—The gluten of wheat after the 5th day of sprouting undergoes remarkable mech. changes: it crumbles readily, lacks elasticity, and behaves like the gluten of a flour to which unsatd. acids have been artificially added. Analysis actually shows that the free fat acid content increases from an initial 9.6 to 26.1% on the 5th day of sprouting. After the removal of fat and its hydrolytic products with ether, the gluten of grain in the early stages of sprouting behaves normally. In the later stages, fat-free gluten shows the effect of proteolytic enzymes. H. Cohen

Chair of GRAIN and FLOUR of GRAIN STORING and MILLING INSTITUTE, TOMSK

ASB-3LA METALLURGICAL LITERATURE CLASSIFICATION

FIG. 57-2117

SEARCHED	INDEXED	SERIALIZED	FILED

ROMANOVA, M. S., CAND MED SCI, "<sup>-related</sup>AGE AND INDIVIDUAL  
PECULIARITIES OF PUBIC SYMPHYSIS AND CERTAIN PATHOLO-  
GICAL CHANGES OF PUBIC SYMPHYSIS IN X-RAY <sup>pictures</sup>~~IMAGES~~. (ROENT-  
GENOANATOMIC AND CLINICO-ROENTGENOLOGICAL <sup>study</sup> INVESTIGATION)."  
LENINGRAD, 1959. (MIN OF HEALTH RSFSR, FIRST LENINGRAD  
MED INST IM ACAD I. P. PAVLOV). (KL, 2-61, 219).

ROMANOVA, M.S.

Role of X rays in the treatment of heel pain. Sov. med. 24 no.4:  
132-135 Ap '60. (MIRA 13:8)

1. Iz rentgenovskogo otdeleniya Vyborgskoy mezhrayonnoy bol'nitsy  
(glavnyy vrach - zasluzhennyy vrach RSFSR G.A. Milov, zav. rentgenovskim  
otdeleniye M.S. Romanova).

(X RAYS---THERAPEUTIC USE)

(HEEL BONE---DISEASES)

ROMANOVA, M.S.

Changes in the extremital locomotor apparatus of adult inhabitant  
of the Amur Valley with the Kaschin-Beck disease. Vest. rent. 1  
rad. 40 no. 3:59-60. Mr.-Ap '65. (MIRA 18:6)

1. Kurs rentgenologii i radiologii (zav. M.S. Romanova)  
Blagoveshchenskogo meditsinskogo instituta.

EXCERPTA MEDICA Sec 14 Vol 13/8 Radiology Aug 59

1561 AGE AND INDIVIDUAL CHARACTERISTICS OF THE SYMPHYSIS PUBIS  
(Russian text) : Romanova M. S. Roentgenol. Dept., 1st Leningrad  
Med. Inst. - ARKH. ANAT. GISTOL. I EMBRIOL. 1958, 35/5 (83-88)  
Tables 2 Illus. 5

Roentgenologically determined variations in the normal symphysis pubis in adults are described. Anatomy, development and manifestations of senility of the symphysis pubis were roentgenologically studied. Some main points for differentiating a normal state from an already pathological one were established. Manifestations of senility, both normal and premature, as well as of pathological processes, in the area of the symphysis pubis, are similar to those in hemiarthrosis. The data confirm that the symphysis pubis is a hemiarthrosis and not a synarthrosis.

(1, 14)

ROMANOVA, M.S.

Age factor and individual characteristics of the symphysis pubis;  
roentgenological investigations [with summary in English]. Arkh.  
anat., gist, i embr. 35 no.5:83-88 S-0 '58 (MIRA 11:12)

1. Kafedra rentgenologii (zav. chlen-korrespondent AMN SSSR prof.  
D.G. Rokhlin) I Leningradskogo meditsinskogo instituta. Adres  
avtora: Leningrad, ul. L. Tolstogo, d. 6/8, I Leningradskiy  
meditsinskiy institut.

(PUBIC SYMPHYSIS, radiography

age factor & individual variability (Rus))

(AGING, eff.

on pubic symphysis x-ray picture (Rus))

ROMANOVA, N.

"Individual therapy and the prevention of hysterical,  
hypochondriac and obsessive neuroses" by Karl Leonhard.  
Reviewed by N. Romanova. Zhur. nevr. i psikh. 61 no.7:1112-1113  
'61. (MIRA 15:6)

(NEUROSES)

(PSYCHOTHERAPY)

(LEONHARD, KARL)

ROMANOVA, N., mladshiy nauchnyy sotrudnik

Origin of language. Nauka i zhyttia 12 no.2:56-57 F '63.  
(MIRA 16:4)

1. Institut yazykovedeniya im. Potebni AN UkrSSR.

(Language and languages)



ROMANOVA, N.

Profilaktika boleznei ptits (Prophylaxis of avian diseases) Alma-Ata, 1959, 32 pages with illustrations. (Ministry of Agriculture of Kazakh SSR. Administration of Agricultural Sciences and Propaganda. To assist the Veterinary fel'dsher). Free, 4,000 copies.

ROMANOVA, N.A.

Role of immunological indices in the clinical course and the pathogenesis of dysentery in children. Nauch. trudy Kaz. gos. med. inst. 14:527-528 '64. (MIRA 18:9)

1. Kafedra detskikh infektsiy (zav. - prof. N.P.Kudryavtseva) Kazanskogo meditsinskogo instituta.

GEL'PERIN, N.I.; AYNEHTEYN, V.G.; ROMANOVA, N.A.

Effect of the height of the heat exchanger surface on the  
coefficient of heat transfer in the fluidized bed. him.  
prom. no.2:101-104 F '64. (MIRA 17:9)

GELPERIN, N. I.; AYNISHTEYN, V. G.; ROMANOVA, N. A.

"Hydraulics and heat transfer in a fluidized bed with vertical tube bundles."

report submitted for 2nd All-Union Conf on Heat Transfer, Minsk, 4-12 May  
1964.

Moscow Inst of Light Chemical Technology.

L 15316-65 ESD(gs)

ACCESSION NR: AP4042106

S/0291/64/000/003/0016/0020

AUTHOR: Talipov, Sh. T.; (Tolipov, Sh. T); Abdullayeva, Kh. S.; Romanova, N. A.

TITLE: Photometric determination of gallium with dihydroxy-3,4-phenyl-4'-azobenzene

SOURCE: Uzbekskiy khimicheskiy zhurnal, no. 3, 1964, 16-20

TOPIC TAGS: gallium, photometric determination, coefficient of molar extinction, reaction equilibrium constant, mineral analysis, interfering ion

ABSTRACT: The possibility of determining gallium photometrically using dihydroxy-3,4-phenyl-4'-azobenzene (DPAB) was investigated. At pH 1-3 DPAB forms a flocculent precipitate with Ga; in alkali solution the color is unstable; but at pH 4-6 a bright violet complex is formed with the Ga:DPAB molar ratio of 1:3. Optical density measurements were made at 530-540 millimicrons on an FEK photocolormeter using a #6 light filter. The V. N. Tolmachev method (Trudy\* Instituta khimii Khar'kovskogo universiteta, 8, 65 (1951)), wherein the

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ACCESSION NR: AP4042106

light absorption of a series of colored solutions with different concentrations is measured, was used to determine the molar coefficient of extinction (7109) and the equilibrium constant of the reaction ( $4.3 \times 10^{-5}$ ). The effect of interfering ions Tl, In, Mn, Zn, Sn, Al, V, Cu and Fe, collectively, was examined. 800 micrograms of these metal ions per 40 micrograms of Ga results in 5% or less error in the determination. Ga can be determined photometrically in concentrations of 0.2-20 microgram ml. The method worked out was confirmed by analysis of synthetic mixtures and of Ga-containing minerals. The ore was dissolved in concentrated HCl and HNO<sub>3</sub>. H<sub>3</sub>PO<sub>4</sub> and HCl were added, and Ga was extracted with chloroform. The extract was washed with 6N HCl, the GaCl<sub>3</sub> was reextracted with H<sub>2</sub>O DPAB (0.1% solution in 95% ethanol) and gelatin (0.5%) solutions were added, the optical density was measured and the Ga content determined by comparison with calibrated curves. Orig. art. has: 3 tables, 4 figures and 2 equations and 1 formula.

ASSOCIATION: Tashkentiskiy gosuniversitet im. V. I. Lenina (Tashkent State University)

Card 2/3

L 15316-65  
ACCESSION NR: AP4042106

0

SUBMITTED: 10Jul63

ENCL: 00

SUB CODE: GC

NO REF SOV: 004

OTHER: 001

Card 3/3

ROMANOVA, N.A.; ROMANOV, Yu.A.

Pressure gradients in the equatorial latitudes. Izv. AN SSSR.  
Fiz. atm. i okeana 1 no.11:1141-1150 N '65.

(MIRA 18:12)

1. Institut okeanologii AN SSSR. Submitted May 15, 1965.



ROMANOVA, N.A.; SHISHKOV, Yu.A.

Method of calculating the meridional transport indices of  
heat and cold. Trudy Inst. okean. 57:47-49 '62. (MIRA 16:10)

GEL'PERIN, N.I.; AYNSHTEYN, V.G.; ROMANOVA, N.A.

Method of determining the hydraulic resistance of a  
fluidized bed. Khim. i tekhn. topl. i masel 8 no.9:16-20  
S '63. (MIRA 16:11)

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

GEL'PERIN, N.I.; AYSNTEYN, V.G.; ROMANOVA, N.A.

Hydraulics and heat exchange in a fluidized bed with bundles of  
vertical pipes. Khim.prom. no.11:823-830 '63.      (MIRA 17:4)

GEL'PERIN, N.I.; AYNSHTEYN, V.G.; ROMANOVA, N.A.

Hydraulics and heat transfer in a fluidized bed with an upright  
tube bundle. Khim.prom. no.11:781-788 N '62. (MIRA 16:2)  
(Fluidization--Equipment and supplies)  
(Heat--Transmission)

MOULDER, Y. I.

Development of spelling control habits in primary school children.  
Voprosy psichol. 6 no. 4: 81-82. Leningrad, 1960. (MIRA 19:11)

L. Kafedra pedagogiki Volarskogo i psichologicheskogo  
instituta.  
(Russian language--Orthography and spelling)

ROMANOVA, N.A. (Kazan'); SHAGIDULLINA, A.R. (Kazan')

Interprovince meeting on acute intestinal infections in Ivanovo.  
Kaz.med.zhur. 40 no.5:106-109 S-O '59. (MIRA 13:7)  
(INTESTINES--DISEASES)

I 8980-66 EWT(1) GW  
ACC NR: AP5028353 <sup>44.55</sup> UR/0362/65/001/011/1141/1150 28  
AUTHOR: Romanova, N. A.; Romanov, Yu. A. <sup>44.55</sup> B  
ORG: Institute of Oceanology AN SSSR (Institut okeanologii AN SSR)  
TITLE: Barometric pressure gradients in equatorial regions  
SOURCE: AN SSSR. Izvestiya. Fizika atmosfery i okeana, v. 1, no. 11, 1965, 1141-1150 <sup>12, 44.55</sup>  
TOPIC TAGS: atmospheric pressure, wind profile, oceanography  
ABSTRACT: The article is based on observations made during the International Geophysical Year (1958). The observation stations were chosen in pairs so that the distance between them would be about 500 kilometers and so that the pressure difference between the stations would be characteristic of either the longitudinal or latitudinal components of the pressure gradient at the equator or in equatorial latitudes up to 25°. (See Fig. 1)  
Card 1/3 UDC: 551.542.1  
2

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ACC NR: AP5028353

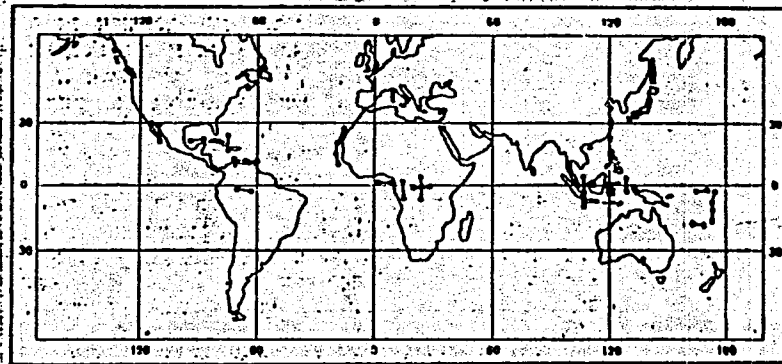


Fig. 1. Distribution of stations.

In all, 22 pairs of stations were selected and 25,351 paired observations were made. Nine pairs of stations were on the equator, of which 4 pairs were longitudinal (in the belt  $2.5^{\circ}\text{N}$ - $2.5^{\circ}\text{S}$ ) and 5 pairs latitudinal, and made 9,756 observations. The remaining 13 pairs were in equatorial latitudes from  $5^{\circ}$  to  $25^{\circ}$  inclusive and made 15,595 observations. The gradients were calculated by the following formula:

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ACC NR: AP5028353

$$A = \frac{\sqrt{b}}{l} = \frac{\sqrt{(P_1 - P_2)^2 - (P_1 - P_2)^2}}{l}$$

where A is the standard; l is the distance between stations; b is a structural function;  $P_1$  and  $P_2$  are standard values of the pressure;  $P_1$  and  $P_2$  are average climatographic values for the same stations. Calculated results are exhibited in a series of figures and tables. Results show that at the equator and up to a latitude of  $5^\circ$ , the standard pressure gradient is  $1.8-1.9 \times 10^{-7}$  (MTC system). With increasing distance from the equator, this value increases and, at latitude  $25^\circ$  reaches  $3.9 \times 10^{-7}$  (in the middle latitudes it is  $8 \times 10^{-7}$ ). Comparison of these values with the order of magnitude of the inertial term shows that, in the solution of various problems in wind dynamics at the equator, the inertial force must be taken into account right up to a latitude of  $25^\circ$ . Orig. art. has: 4 figures and 6 tables.

SUB CODE: ES/ SUBM DATE: 15May65/

ORIG REF: 009

OTH REF: 000

Card

3/3

AUTHORS: Voronkov, M. G., Romanova, N. G. SOV/79-28-3-28/66

TITLE: On the Thermal Addition of Trichlorosilane to Diolefine Hydrocarbons (Termicheskoye prisoyedineniye trikhlorosilana k diolefinovym uglevodorodam)

PERIODICAL: Zhurnal obshchey khimii, 1958, Vol. 28, Nr 8, pp. 2122-2128 (USSR)

ABSTRACT: In the previous paper of the authors (Ref 1) the thermal addition reaction of trichlorosilane to the mono-olefinic hydrocarbons was treated. It was interesting for them to extend this reaction to various diolefine hydrocarbons. There are several indications in publications, mostly of patent character that a thermal and catalytic addition of the trichlorosilane to diolefine hydrocarbons is possible (Refs 2-8). The authors were, however, not able to add the trichlorosilane to a series of diolefines which contain conjugated double bonds in the presence of organic peroxides or under ultraviolet irradiation, since a polymerization of the initial hydrocarbons took place more rapidly than the addition of the trichlorosilane to the double bond. Nevertheless, the reaction could be carried out in the most cases successfully without catalysts at high tem-

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SOV/79-28-8-28/66

On the Thermal Addition of Trichlorosilane to Diolefine Hydrocarbons

peratures and under pressure. Thus the thermal addition of the trichlorosilane to diolefine hydrocarbons with isolated and conjugated double bonds was investigated. In the first case the addition reaction takes a normal course, according to the rule of free radical addition. The addition of the trichlorosilane to 1,3 cyclopentadiene and dicyclopentadiene leads mainly to the formation of bis (trichlorosilyl) cyclopentane. The reaction of the trichlorosilane with 1,3-cyclohexadiene, and above all with dipentene, takes an abnormal course, under formation of a product of the addition to the corresponding cyclomono-olefine product of the "direct catalytic transformation" of the initial hydrocarbon. 6 additive compounds of the trichlorosilane to diolefines are described the most of which were newly synthesized. There are 2 tables and 17 references, 12 of which are Soviet.

ASSOCIATION: Leningradskiy gosudarstvennyy universitet i Institut khimii silikatov Akademii nauk SSSR (Leningrad State University and Institute of Silicate Chemistry, AS USSR)

Card 2/3

SOV/79-28-8-28/66

On the Thermal Addition of Trichlorosilane to Diolefine Hydrocarbons

SUBMITTED: July 4, 1957

Card 3/3

ROMANOVA, N.G.

Clinical aspects of late schizophrenia. Zhur. nevr. i psikh.  
64 no.1:100-107 '64. (MIRA 17:5)

1. Kafedra psikiatrii (zaveduyushchiy - prof. A.V.  
Snezhnevskiy) Tsentral'nogo instituta usovershenstvovaniya  
vrachey, Moskva.

ROMANOVA, N.G.

Clinical aspects of exacerbations of slowly developing  
schizophrenia in old age. Zhur. nevr. i psikh. 64 no.2:250-255  
'64. (MIRA 17:5)

1. Kafedra psikhiatrii (zaveduyushchiy - prof. A.V. Snezhnevskiy)  
TSentral'nogo instituta usovershenstvovaniya vrachey, Moskva.

S/051/63/014/002/026/026  
E039/E120

AUTHORS: Maksakov, B.I., Morozov, A.M., and Romanova, N.G.  
TITLE: Absorption and luminescence spectra of single crystals  
of lead molybdate

PERIODICAL: Optika i spektroskopiya, v.14, no.2, 1963, 312-315

TEXT: Single crystals of  $PbMoO_4$  are grown from a melt. Two types are obtained: transparent slightly yellow discs, and dark yellow rods. Both types are transparent in the ultraviolet, visible and infrared, and luminesce in the visible and near infrared. In the long wavelength region beginning at 500  $m\mu$  the absorption of all the crystals is small and maintains an approximately constant value. The absorption edge for the disc occurs at 3800  $\text{\AA}$  and for the rod at 3900  $\text{\AA}$  (both samples 1 mm thick). The dark yellow type has an additional absorption band with a maximum at 4180  $\text{\AA}$ . Samples 0.19 mm thick do not give qualitatively different results. Luminescence is excited by  $\lambda = 365 m\mu$  at the temperature of liquid nitrogen but not at room temperature. Maximum luminescence occurs in the yellow-green 5300-5400  $\text{\AA}$  and there is some absorption of the short wave part of the luminescence in samples from the rod.  
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Absorption and luminescence spectra...

S/051/63/014/002/026/026  
E039/E120

The additional absorption band in these samples is not connected with the centres of luminescence. For all samples the lifetime of the excited state is  $10^{-5}$  sec and there is no significant difference in their infrared absorption. All the crystals absorb weakly up to  $5.5 \mu$  with a strong absorption band at  $6.3 \mu$ . For wavelengths greater than  $10.5 \mu$  the samples are fully opaque. Single crystals of  $\text{PbMoO}_4$  show 70-75% transmission over the range 0.5 to  $5.5 \mu$  for 1 mm thick samples. Such transparency coupled with a high refractive index makes  $\text{PbMoO}_4$  a good optical material in the visible and infrared. There are 2 figures.

SUBMITTED: August 20, 1962

Card 2/2



ROMANOVA, N.G. (g. Gor'kiy)

Problems of alcoholism in modern French psychiatry. Zhurnev. i psikh.  
59 no.6:752-757 '59. (MIRA 13:1)

(ALCOHOLISM, psychology,  
psychiatric aspects in France (Rus))

ROMANOVA, N.G. (Gor'kiy)

Problems of alcoholism in modern French psychiatry. Zhur.nevr. i  
psikh. 57 no.10:1302-1312 '57\* (MIRA 10:12)  
(ALCOHOLISM,  
psychiatric aspects in France (Rus))

ROMANOVA, N.G.

Candidomycosis in antibiotic therapy, *Pediatrics* 39 no.3:63-65  
My-Je '56. (MIRA 9:9)

1. Iz kafedry gosital'noy pediatrii (zav. - prof. A.F.Tur) Leningrad-  
skogo pediatricheskogo meditsinskogo instituta (dir. - prof. N.T.  
Shutova) i detskoy bol'nitsy Smol'ninskogo rayona Leningrada (glav-  
nyy vrach A.I.Stepanova)

(MONILIASIS, etiol. and pathogen.  
antibiotics, in child)

(ANTIBIOTICS, inj. eff.  
moniliasis in child)

VERBITSKAYA, T.D., ROMANOVA, N.K.

Determination of hypophosphite and phosphite in the  
presence of phosphate. Zav.lab, 26 no.7:818-820 '60.  
(MIRA 13:7)

(Hypophosphite) (Phosphite) (Phosphate)

SUSHILIN, V.A.; ROMANOVA, N.L.; RYABOVA, Ye.G.

Adsorption test for water injection wells. Neft. khoz. 34 no.12:  
36-37 II '56. (MLBA 10:8)

(Oil field flooding)

MURAV'YEV, I.M.; ABDULIN, F.S.; ROMANOVA, N.L.

Using pressure build-up curves for determining the lithologic characteristics of a layer and their effect on the intake properties of injection wells. Neft. khoz. 40 no.7:35-40 J1 '62. (MIRA 17:3)

PAVLOV, A.N., otv. za vypusk; VOLODICHEVA, V.N.; IVANOVA, A.I.; KULAKOV, I.N.; LYAMINA, T.N.; MIT'KINA, L.I.; POZDNYAKOVA, N.P.; RODIONOVA, L.I.; ROMANOVA, N.M.; SOFIYEV, E.S.; CHICHKINA, A.A.; TRESORUKOVA, Z.G.; BOGATYREV, P.P.; BROVKINA, A.I.; IVANOVA, L.D.; IVASHKIN, G.A.; KAMNEV, N.I.; LYSANOVA, L.A.; OZHEREL'YEVA, Z.I.; PAVLOVA, T.I.; TYUTYUNOVA, N.I.; UMNITSYNA, A.P.; ZHIVILIN, N.N.; ALESHICHEV, M.P.; VINOGRADOV, V.I.; YEREMIN, F.S.; KRAVCHENKO, Ye.P.; LOVACHEVA, M.V.; NIKOL'SKAYA, V.S.; MAKHOV, G.I.; SKEGINA, A.V.; TAREYEV, A.V.; KHOLINA, A.V.; BRYANSKIY, A.M.; BURMISTROVA, V.D.; GRIGOR'YEVA, A.M.; LUTSENKO, A.I.; OREKHOVA, Z.V.; TEPLINSKAYA, N.V.; FEOKTISTOVA, V.I.; BUTORIN, I.M.; BOCHKAREVA, L.D.; BURENINA, V.A.; VETUSHKO, A.M.; VIKHLYAYEV, A.A.; SOROKIN, B.S.; TSYBENKO, L.T.; KHLEBNIKOV, V.N.; DUMNOV, D.I.; STEPANOVA, V.A.; MANYAKIN, V.I., red.; VAKHATOV, A.M.; MAKAROVA, O.K., red.izd-va; PYATAKOVA, N.D., tekhn.red.

[Soviet agriculture; a statistical manual] Sel'skoe khoziaistvo SSSR; statisticheskii sbornik. Moskva, 1960. 665 p.

(MIRA 13:5)

1. Russia (1923- U.S.S.R.) Tsentral'noye statisticheskoye upravleniye. 2. Upravleniye statistiki sel'skogo khozyaystva Tsentral'nogo statisticheskogo upravleniya SSSR (for all except Makarova, Pyatakova).

(Agriculture--Statistics)

GENDON, Yu.Z.; ROMANOVA, N.M.

Study of the nature of the S-character of poliomyelitis virus.  
Vop. virus. 10 no.1:41-46 Ja-F '65. (MIRA 18:5)

I. Moskovskiy nauchno-issledovatel'skiy institut virusnykh pre-  
paratov.



ACCESSION NR: AP4043263

S/0203/64/004/004/0808/0811

AUTHOR: Romanova, N. M.

TITLE: Distribution of electrical conductivity within the earth according to data on Dst variations

SOURCE: Geomagnetizm i aeronomiya, v. 4, no. 4, 1964, 808-811

TOPIC TAGS: geomagnetism, terrestrial electrical conductivity, geomagnetic variation, Dst variation, earth conductivity, conductivity depth dependence, electromagnetic induction

ABSTRACT: The conductivity of the earth to depths of 300-400 km differs little from the conductivity of dry rocks, i. e. it does not exceed  $10^{-15}$  emu. At a depth of about 400 km the conductivity increases sharply to  $10^{-12}$  emu, and then with an increase in depth the conductivity K increases continuously. This pattern of distribution of conductivity is typical for the entire earth. It has been postulated by certain authors that the value K in various regions of the earth should differ from the mean value for the entire earth. The author of this paper has investigated electromagnetic induction in rectangular and cylindrical coordinates for the case of a nonuniform distribution of conductivity on the basis of data on D<sub>st</sub> variations (Geomagnetizm i aeronomiya, 1963, 3, No. 3, 552; 1963, 3, No. 5, 968; and 1964, 4, No. 1, 161). This made it possible to determine the conductivity and the

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ACCESSION NR: AP4043263

magnitude of the nonconducting layer for different places in the world. An estimate was obtained of the harmonics of the induced field, and a formula was derived for computing the induced field. The results of a comparison of the observed field and the computed field for Tashkent are shown in Fig. 1 of the Enclosure. This figure shows the coefficients for analysis of  $D_{St}$  variations (solid curve E -- observed, dashed curve I -- observed, dot-dash curve I -- computed) for particular values of K and  $d_n$ . The same was done for 13 observatories in the SSSR. In nearly every case the computed and observed fields coincided. The values of K and d obtained in one of the earlier studies are shown in Figs. 2 and 3 of the Enclosure (Fig. 2 -- conductivity values determined using data on  $D_{St}$  variations,  $K = n \cdot 10^{-12}$  emu; Fig. 3 -- values of the thickness of the nonconducting layer in km). It is shown that the conductivity and thickness of the nonconducting layer vary rather greatly for different observatories. "The authors wish to thank Yu. D. Kalinin and V. N. Bobrov for discussion of the results and L. S. Loginova for assistance in analysis of the data". Orig. art. has: 2 formulas, 3 figures and 1 table.

ASSOCIATION: Institut zemnogo magnetizma, ionosfery i rasprostraneniya radiovoln AN SSSR (Institute of Terrestrial Magnetism, the Ionosphere and Radio Wave Propagation, AN SSSR)

Card

2/6

ACCESSION NR: AP4043263

SUBMITTED: 24Jan64

SUB CODE: ES

NO REF SOV: 007

ENCL: 03

OTHER: 003

Card 3/6

RAYKHER, I.I.; PROTSEROVA, N.M.; ROMANOVA, N.M.; MASTERSKIKH, L.A.

On the problem of the gamma globulin content of blood serum of donors  
(electrophoretic and turbidimetric determination). Probl. genat.  
i perel. krovi 5 no.2:52-54 F '60. (MIRA 14:5)

1. Iz biokhimicheskoy korevoy laboratorii Permskogo nauchno-  
issledovatel'skogo instituta vaktsin i syvorotok (dir. A.P.  
Kobyl'skiy).

(GAMMA GLOBULIN)

(BLOOD DONORS)

ROMANOVA, N. N.

ROMANOVA, N. N.: "The distribution of Amphipoda and Cumacea in the northern Caspian as a function of the character and salt content of the soil," Acad Sci USSR. Inst of Oceanology. Moscow, 1956. (Dissertation for the Degree of Candidate in Biological Science.)

Knizhnaya Letopis'  
No 32, 1956. Moscow.

ROMANOVA, N.N.

Variations of the biomass of higher Crustacea in the northern Caspian Sea as observed in the course of several years. Dokl. AN SSSR 109 no.2:393-396 J1 '56. (MIRA 9:10)

1. Vsesoyuznyy nauchno-issledovatel'skiy institut rybnogo khozyaystva i okeanografii. Predstavleno akademikom Ye.N. Pavlovskim. (Caspian Sea --Crustacea)

ROMANOVA, N.N.

Feeding habits and feeding relationships of bottom invertebrates in the northern part of the Caspian Sea. Trudy Gidrobiol. ob-va 13:146-177 '63. (MIRA 16:11)

1. Vsesoyuznyy nauchno-issledovatel'skiy institut morskogo rybnogo khozyaystva i okeanografii, Moskva.

ROMANOVA, N.R.

Guidance and training for the personnel of the Moscow Shipping  
maintenance and operations bases. Rech.transp.16 no.7:10-11 J1 '57.  
(MERA 10:9)

1. Zamestitel' nachal'nika Moskovskogo parokhodstva po kadram.  
(Moscow River--Merchant seamen) (Ships--Maintenance and repair)



AUTHOR: Bomanova, N. N. SOV/20-121-3-43/47

TITLE: Distribution and Ecological Description of North Caspian Amphipoda and Cumacea (Rasprostraneniye i ekologicheskaya kharakteristika severokaspiyskikh Amphipoda i Cumacea)

PERIODICAL: Doklady Akademii nauk SSSR, 1958, Vol. 121, Nr 3, pp. 553 - 556 (USSR)

ABSTRACT: These problems have been very much neglected (Refs 1-5). They are of greatest importance for the understanding of the changes occurring in the nutritive fauna in connection with the regulation of the Volga. The author eliminates 3 groups of higher crustacea which differ with respect to their geographical distribution (Table 1). I. Genera distributed over the entire Caspian Sea (Kaspiyskoye more) which enter the brackish parts of the northern Caspian and the rivers. II. Genera usually distributed over the entire sea which, however, do not live in fresh water. III. Genera which are only typical of the middle and southern sea i.e. both sublittoral and Arctic; they are restricted to deeper water and lower temperatures (Refs 1,4). The II<sup>nd</sup> group is being

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Distribution and Ecological Description of North  
Caspian Amphipoda and Cumacea

SOV/20-121-3-45/47

distinguished for the first time. The 1<sup>st</sup> group can be subdivided as follows: 1) Types occurring along the 12-18 m deep slope of the western and eastern coast of the Northern Caspian. 2) Types occurring in the surf zone. Most of the representatives of the northern Caspian Sea, among them a number of animals living in crowds belong to the types mentioned in point 1. Most types of the genus Pontogammarus belong to the types mentioned in point 2. Almost all crustacea of the second group are restricted to the eastern part of the Northern Caspian. Only few sublittoral types enter the Northern Caspian they live in the southern part of it. By the above mentioned (Table 1) we see that the Caspian crustacea are to a great extent euryhaline. This holds true particularly for group I which occurs at a salt content of 0-13%. The types of group II are not capable of living in fresh water. Group III is stenohaline; one part is eurythermal and other of Arctic origin and therefore stenothermal. Isohaline of 8% is the limit beyond which group III can no more live. Coming from the Caspian Sea only the groups I and

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Distribution and Ecological Description of North  
Caspian Amphipoda and Cumacea

SOV/20-121-3-43/47

II entered the Azov Sea (Azovskoye) and the Black Sea (Chernoye more) (Refs 1,6). From the lacking of group III in the catchment area of the Azov Sea it may be concluded that the salt content in the strait of Kuma-Manytsch (Kuma-Manycheskiy proliv) did not exceed 7<sup>0</sup>/‰. As a result of the toleration of different salt content (euryhalinity) the conclusion may be drawn that in the case of a change of the salt content within the limit of 0-13‰ no important changes of the carcino fauna are to be expected. There are 1 table and 7 references, 7 of which are Soviet.

ASSOCIATION: Vsesoyuznyy nauchno-issledovatel'skiy institut morskogo rybnogo khozyaystva i okeanografii (All-Union Scientific Research Institute of Maritime Fishery and Oceanography)

PRESENTED: April 12, 1958, by I.I. Shmal'gauzen, Member, Academy of Sciences, USSR  
Card 3/4

ROMANOVA, N.N., kand.biolog.nauk

Survival of some amphipods of the Northern Caspian at various  
salinity degrees. Trudy VNIRO 38:277-291 '59. (MIRA 13:4)  
(Caspian Sea---Amphipoda)

ROMANOVA, N.N.

Distribution of benthos in the middle and southern Caspian. Zool.  
zhur. 39 no.6:811-825 Je '60. (MIRA 13:7)

1. All-Union Institute of Marine Fishery Management and Oceanography,  
Moscow.

(Caspian Sea -- Benthos)

ROMANOVA, N.N.

Groups of bottom invertebrates with particular feeding habits in  
the northern part of the Caspian Sea. Vop. ekol. 5:191-193 '62.  
(MIRA 16:6)

1. Vsesoyuznyy nauchno-issledovatel'skiy institut morskogo rybnogo  
khozyaystva i okeanografii, Moskva.  
(Caspian Sea--Invertebrates)

ACC NR: AP7013141

SOURCE CODE: UR/0362/66/002 008 0893 0896

AUTHOR: Romanova, N. N.

ORG: Institute of Physics of the Atmosphere, AN SSSR (Institut fiziki atmosfery AN SSSR)

TITLE: Numerical computations of examples of the propagation of acoustical-gravitational waves from a point source

SOURCE: AN SSSR. Izvestiya. Fizika atmosfery i okeana, v. 2, no. 8, 1966, 893-896

TOPIC TAGS: acoustic wave, gravitation wave, wave propagation, atmospheric physics

SUB CODE: 20,04

ABSTRACT: In the case of an atmosphere over a plane earth with Coriolis force constant it has been shown that two types of waves, acoustical and gravitational, can be formed in the atmosphere. For an isothermal atmosphere the frequencies of the gravitational waves fall in the interval

$$[\frac{1}{2} \sqrt{g/\omega} - 1/c]$$

and the frequencies of the acoustical waves are greater than  $\frac{1}{2} \sqrt{g/\omega}$ . In an earlier study (L. A. Dikiy, Doklady AN SSSR, 143, No. 1, 1962) UDC: 551.511.32

ACC NR: AP7013141

a solution was obtained having the form of a wave propagating from an instantaneous point source. This paper gives the results of numerical computations of this solution with initial conditions of a special form. The numerical computations show that the acoustical part of the influence function attenuates with time far more rapidly than the gravitational part. This can be attributed to the fact that the group velocity of the gravitational waves is considerably less than the acoustical waves and the energy of the gravitational waves is expended more slowly. Orig. art. has: 6 figures and 5 formulas.

[JPRS: 40,291]

Card 2/2



PARSHIN, A.V.; ROMANOVA, N.N.; USTINOVA, L.B.

Methods for lowering the time constant of the input circuit  
of electrometric amplifiers. Prib. i tekhn. eksp. 9 no.3:88-94  
My-Je '64 (MIRA 18:1)

Background noise of wide-band electrometric amplifiers.  
Ibid.:94-102

1. Leningradskiy politekhnicheskii institut.

ACCESSION NR: AP4041024

S/0120/64/000/003/0088/0094

AUTHOR: Parshin, A. V.; Romanova, N. N.; Ustinova, L. B.

TITLE: Methods for reducing the time constant of the input circuit of electrometric amplifiers

SOURCE: Pribory\* i tekhnika eksperimenta, no. 3, 1964, 88-94

TOPIC TAGS: amplifier, electrometric amplifier, electrometric amplifier time constant

ABSTRACT: Two methods of correcting the transient response of electrometric amplifiers are described: (1) a correcting filter in the negative-feedback circuit and (2) a positive feedback. As the correction efficiency does not depend on the circuit type but rather on the order of the equation describing the circuit and on the number of independent correction parameters, both methods promise almost equal results. The reduction of the output-signal rise time is limited by: (a) the

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ACCESSION NR: AP4041024

feedback-loop gain value K and its frequency dependence; (b) the spurious feedbacks; and (c) the nonexponential nature of the charge-discharge phenomena in the distributed capacitance of the input (high-megohm) resistor R. In amplifiers actually tested, a minimum rise time of 1.5 msec, with  $R = 10^{11}$  ohms, was attained; this time was limited by the value  $K = 500$ . Orig. art. has: 7 figures, 11 formulas, and 2 tables.

ASSOCIATION: Leningradskiy politekhnicheskii institut im. M. I. Kalinina  
(Leningrad Polytechnic Institute)

SUBMITTED: 25Jun63

ENCL: 00

SUB CODE: EC

NO REF SOV: 001

OTHER: 005

Card

2/2

ROMANOVA, N. P., Candidate of Med Sci (diss) -- "Pathological-anatomical changes in the brain of dogs after terminal states caused by acute blood loss and poisoning by carbon monoxide (Experimental investigation)". Moscow, 1959. 18 pp (Inst of Higher Nervous Activity of the Acad Sci USSR) (KL, No 21, 1959, 121)

FA 53169

ROMANOVA, N. F.

USSR/Medicine - Helminthology  
Medicine - Nematodes

Feb 1947

"A Study of the Development Cycle of Echinuria  
Unclinata Rud., a Nematode Parasite in the  
Stomach of Natatores," N. P. Romanova, Helmintho-  
logical Lab, Moscow Zool Garden, 2 pp

"CR Acad Sci" Vol IV, No 4

Research report on life cycle of Echinuria unclinata,  
parasite infesting ducks, geese, and swans. Para-  
site gains entrance into body of daphniae, especial-  
ly Daphnia pulex and D. magna, and infestation of  
natatores results from ingestion of infested  
daphniae. In alimentary canal, Echinuria larvae

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USSR/Medicine - Helminthology (contd) Feb 1947

leave daphniae and penetrate proventriculus of  
natatores, where they become sexually matured after  
51 days. Submitted by K. I. Skryabin, 12 Aug 1946.

53169

ROMANOVA, N. P.

Romanova, N. P. "The biology of cyatostomes, parasites in the respiratory tract of emu ostriches", Sbornik rabot po gel'mintologii (Vsesoyuz. in-t gel'mintologii im. akad. Skryabina), Moscow, 1948, p. 189-94.

S0: U-3042, 11 March 53, (Letopis'nykh Statey, No. 10, 1949).

Rozanova, M. P. - "Helminthic Fauna of Arshara sheep (*Ovis polski karelini*) of the Moscow soc," Trudy Mosk. zooparka, Vol. I, 1949, p. 27-72

SC: U-4355, 14 August 53, (Letopis 'Zhurnal 'nykh Statey, No. 15, 1949)

SPASSKIY, A. A., ROMANOVA, N. P.

Worms, Intestinal and Parasitic

New data on the fauna of parasitic worms of Ondatra Zibethica (L.) Trudy Gel'm. lab.  
no. 5, 1951.

Monthly List of Russian Accessions, Library of Congress, September 1952. UNCLASSIFIED.



ROMANOVA, N.P.; POKROVSKIY, Y.S.

Treatment of river beavers in the case of trvassosiosis.  
Trudy VNIO no.13:217-222 '53. (MLRA 7:5)  
(Nematoda) (Parasites--Beavers)

ORLOV, I.V.; ROMANOVA, N.P.; SKRYABIN, K.I., akademik.

Investigation of the developmental cycle of nematodes (*Travassosius rufus* Khalil, 1922), a gastric parasite of beavers. Dokl.AN SSSR 91 no.3:703-704 JI '53. (MLRA 6:7)

1. Akademiya nauk SSSR (for Skryabin). (Nematoda) (Parasites--Beavers)

ROMANOVA, N.P., kand. biol. nauk; ZHIGUNOVA, R.A.

Treating cestodiasis in wild animals with arecoline. Sbor. trud.  
Mosk. zoop. no.1:141-144 '56. (MIRA 10:11)  
(Arecoline) (Cestoda) (Cats)

ROMANOVA, N.P., kand. biol. nauk.

Studying methods of destroying ascarid eggs in cages of large predatory animals. Sbor. trud. Mosk. zoop. no.1:145-149 '56.  
(Moscow--Zoological gardens--Disinfection) (MIRA 10:11)  
(Ascarids and ascariasis)  
(Electric apparatus and appliances)

MOZGOVOY, A.A.; ROMANOVA, N.P.

Study of Ascaridata of birds and reptiles in the Moscow Zoo. Trudy  
Gel'm.lab. 8:77-84 '56. (MLEA 9:8)

(Moscow--Ascarios) (Parasites--Birds)  
(Parasites--Reptiles)

ROMANOVA, N.P.

CHIRKOVA, A.F., ROMANOVA, N.P., SHMAL'GAUZEN, V.I.

The epidemiology of alveolar echinococcosis in the tundra zone of European Russia. Med. paraz. i paraz. bol. 27 no.2:150-152  
Mr-Apr '58 (MIRA 11:5)

1. Iz Vsesoyuznogo nauchno- issledovatel'skogo instituta zivotnogo syr'ya i pushniny TSentrosoyuza.  
(ENCHINOCOCOSIS, epidemiology  
alveolar echinococcosis in Russia (Rus))  
(LUNGS, diseases  
alveolar echinococcosis, epidemiol. in Russia (Rus))

SMIRENSKAYA, Ye.M., ROMANOVA, N.P.

Oxygen therapy during the resuscitative period following clinical death [with summary in English]. *Biul. eksp. biol. i med.* 46 no.9  
66-71 S'58 (MIRA 11:11)

1. Iz Instituta grudnoy khirurgii (dir. - akademik A.N. Bakulev)  
i Laboratorii eksperimental'noy fiziologii po ozhivleniyu organizma  
(zav.- prof. V.A. Negovskiy) AMN SSSR, Moskva. Predstavlena  
deystvitel'nym chlenom AMN SSSR V.N. Chernigovskim.

(RESUSCITATION,

oxygen. ther. after clin. death in dogs (Rus))

ROMANOVA, N.P.

Morphological changes in the brain and internal organs of dogs following prolonged direct heart massage. Vest. khir. no.10: 85-88 '64. (MIRA 19:1)

1. Iz laboratorii eksperimental'noy fiziologii po ozhivleniyu organizma (zav. - prof. V.A. Negovskiy) AMI SSSR.



ROMANOVA, N.P. (Moskva)

Morphological changes in the brain and internal organs  
after prolonged hypotension. Arkh. pat. 10:57-64 '62.

(MIRA 17:1)

1. Iz laboratorii eksperimental'noy fiziologii po ozhivleniyu  
organizma (zav. - prof. V.A. Negovskiy) AMN SSSR.

ROMANOVA, N.P.

Pathophysiology and treatment of terminal states. Vest. AMN SSSR  
14 no. 5: 87-90 '59. (MIRA 14:5)  
(DEATH (BIOLOGY)) (RESUSCITATION)

ROMANOVA, N.P.

Histopathological changes in dogs' brains revived after carbon  
monoxide poisoning. Sud.-med.ekspert. 2 no.4:13-19 O-D '59.

(MIRA 13:5)

1. Laboratoriya eksperimental'noy fiziologii po ozhivleniyu  
organizma (zav. - prof. V.A. Negovskiy) AMN SSSR.  
(CARBON MONOXIDE--PHYSIOLOGICAL EFFECT)

ROMANOVA, N.P.

Dynamics of histopathological lesions of the brain in experimental hypoxia. N.P. Romanova. Zhur. nevr. i psikh. 56 no.1:49-55 '56.

(MLRA 9:4)  
1. Laboratoriya eksperimental'noy fiziologii po oshivleniyu organizma (sav. professor V.A. Negovskiy) AMN SSSR.  
(ANOXEMIA) (BRAIN--DISEASES)

ROMANOVA, N.P., kand. biol. nauk; RYZHIKOV, K.M., kand. biol. nauk.

Helminths in swans of the Moscow zoological Garden. Sbor. st. Mosk.  
zoop. no.2:108-116 '58. (MIRA 11:12)  
(Moscow--Worms, Intestinal and parasitic)  
(Parasites--Swans)

BOMANOVA, N.P., kand. biol. nauk; IZRAILEVICH, V.I.

Treating ascariasis in anthropoid apes. Sbor. st. Mosk. zool.  
no.2:120-121 '58.

(MIRA 11:12)

(Parasites--Orangutans) (Ascarids and ascariasis)

(Santonin)

ROMANOVA, N. P. and SMIRENSKAYA, Ye. M.

"Kislородnaya Terapiya,"

report presented by Negovskiy, V. at the Federation Aeronautique Internationale (FAI),  
Moscow, 25-31 May 1959.

ROMANOVA, N.S.

Documentary materials of K.E. TSiolkovskii in the Moscow section of  
the Archives of the Academy of Sciences of the U.S.S.R. Vop. 1st.  
est. i tekhn. no.6:50-51 '59. (MIRA 12:6)  
(TSiolkovskii, Konstantin Eduardovich, 1857-1935)



EXCERPTA MEDICA Sec.8 Vol.10/7 Neurology, etc. July 57  
*Romanova, N. S.*

3156. ROMANOVA N. S. Lab. of Exper. Physiol. of Resuscitation of the Organism, Moscow *The dynamics of the histopathological changes in the brain in experimental hypoxia (Russian text)* Z. Nevropat. Psikhiat. 1956, 56/1 (49-55) Illus. 5

The morphological changes in the brain of dogs, resuscitated after clinical death of different duration (from 2-8 min.), caused by acute haemorrhage were studied. The restoration of vital functions was carried out by the method of V. A. Negovski and co-workers, by pumping the blood in the arteries towards the heart and artificial respiration - insufflation of air into the lungs by an apparatus. A histological examination of the brains of 25 dogs, resuscitated and thereupon killed in different periods from the moment of clinical death (several minutes - 32 days) was carried out. The staining was done by the methods of Nissl, Snesarer (for astrocyte glia, connective tissue and argyrophile granulation), Bielschowsky, haematoxylin-eosin. The microglia was stained by the Migagawa method modified by Alexandrovskaya. In every case sections were taken from the frontal, parietal, temporal and occipital lobes, from the visual area, corpus striatum, cornu Ammonis, pons, medulla oblongata and cerebellum. The investigations carried out showed that the process of changes in the brain in conditions of hypoxia takes its course in several stages. Immediately after clinical death the changes were characterized by acidophilia, swelling, karyocytolysis, enlargement and sticking together of the argyrophile granules, the swelling of the blood-vessel endothelium, little perivascular oedema, some swelling of cells of the astrocyte glia. In 3 hr. after clinical death a dusty tigroid was added to the picture. 15-21 hr. afterwards the changes were still more marked, the nerve cells were in a state of diffuse tigrolysis, many cells in a state of karyocytolysis, a part of the cells of the astrocyte glia lost their dendrites. The central acidophilia was preserved. In 36-48 hr. one could notice some single signs of recovery; the tigroid reappeared as lust-like particles. At the same time vacuolation appeared reaching sometimes considerable degrees. In still later periods the vacuolation decreased, the number of unchanged cells increased. It is concluded that brain-cells are capable of recovery even after a severe hypoxia.

Golland - Moscow

## EXCERPTA MEDICA Sec 5 Vol. 10/9 Pathology Sept 57

2688. ROMANOVA N.S. Lab. of Exper. Physiol. of Resuscitation of the Organism, Moscow. \* The dynamics of the histopathological changes in the brain in experimental hypoxia (Russian text) Z. NEURO-PAT. PSIKHIAT. 1956, 56/1 (49-55) illus. 5

The morphological changes in the brain of dogs, resuscitated after clinical death of different duration (from 2-8 min.), caused by acute haemorrhage were studied. The restoration of vital functions was carried out by the method of V.A. Negovski and co-workers, by pumping the blood in the arteries towards the heart and artificial respiration - insufflation of air into the lungs by an apparatus. A histological examination of the brains of 25 dogs, resuscitated and thereupon killed in different periods from the moment of clinical death (several minutes - 32 days) was carried out. The staining was done by the methods of Nissl, Snesarar (for astrocyte glia, connective tissue and argyrophile granulation), Bielschowsky, haematoxylin-eosin. The microglia was stained by the Migagawa method modified by Alexandrovskaya. In every case sections were taken from the frontal, parietal, temporal and occipital lobes, from the visual area, corpus striatum, cornu Ammonis, pons, medulla oblongata and cerebellum. The investigations carried out showed that the process of changes in the brain in conditions of hypoxia takes its course in several stages. Immediately after clinical death the changes were characterized by acidophilia, swelling, karyocytolysis, enlargement and sticking together of the argyrophile granules, the swelling of the blood-vessel endothelium, little perivascular oedema, some swelling of cells of the astrocyte glia. In 3 hr. after clinical death a dusty tigroid was added to the picture. 15-21 hr. afterwards the changes were still more marked, the nerve cells were in a state of diffuse tigrolysis, many cells in a state of karyocytolysis, a part of the cells of the astrocyte glia lost their dendrites. The central acidophilia was preserved. In 36-48 hr. one could notice some single signs

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of recovery; the tigroid re-appeared as dust-like particles. At the same time vacuolation appeared reaching sometimes considerable degrees. In still later period the vacuolation decreased, the number of unchanged cells increased. It is concluded that brain cells are capable of recovery even after a severe hypoxia.

Golland - Moscow (VIII,5)

STARIKOVA, Ye.V.; DOBRYAKOVA, N.Ye.; KOROBKO, V.A.; AL'TMAN, A.A.;  
ROMANOVA, N.V., vedushchiy redaktor; POLOSINA, A.S., tekhnicheskii  
redaktor

[Methods of testing petroleum products] Metody ispytaniia nefte-  
produktov. Moskva, Gos. nauchno-tekhn. izd-vo neftianoi i gorno-  
toplivnoi lit-ry, 1953. 389 p. [Microfilm] (MLRA 7:9)  
(Petroleum products--Testing)

ZEL'MAN, S.P.; ROMANOVA, N.V., redaktor; POLOSINA, A.S., tekhnicheskij redaktor.

[Centralized supply of petroleum products to machine-tractor stations, state farms, and tractor crews; experience of workers at the Kolomna Petroleum Base] Tsentralizovannoe snabzhenie nefteproduktami MTS, sovkhozov i traktornykh brigad; opyt kollektiva Kolomenskoi neftebazy. Moskva, Gos. nauchno-tekhn. izd-vo neftianoi i gorno-toplivnoi lit-ry, 1954. 36 p. (MIRA 8:1)

(Petroleum industry)

SOKOLIN, G.L., redaktor; ROMANOVA, N.V., redaktor; TROFIMOV, A.V.  
tehnicheskii redaktor.

[Progressive work methods at petroleum industry construction sites] Peredovye metody rabot na stroikakh neftianoi promyshlennosti. Moskva, Gos.nauchno-tekhn.izd-vo neftianoi i gorno-toplivnoi lit-ry, 1954. 62 p. (MLBA 8:11)

1. Moscow. Tsentral'naya normativno-issledovatel'skaya stantsiya po stroitel'stvu "T<sub>0</sub>NISSTROINEFT".  
(Petroleum engineering) (Building)

BAYSH, L.G.; MIKITIN, V.A.; CHINAREV, A.I., kandidat tekhnicheskikh nauk, retsenzent; ROMANOVA, N.V., redaktor; POLOSINA, A.S., tekhnicheskiiy redaktor

[Measuring the consumption and level of fluids and gases in petroleum refining] Izmerenie raskhoda i urovnia zhidkostei i gazov v neftepererabotke. Moskva, Gos. nauchno-tekhnicheskoe izd-vo neftianoi i gorno-toplivnoi lit-ry, 1954. 222 p. (MLRA 8:4)  
(Petroleum engineering) (Measuring instruments)

L 21024-66 EWT(m)/T/EWP(t) IJP(c) JD/JG/GS

ACCESSION NR: AT5017278

UR/0000/65/000/000/0227/0230

AUTHOR: Orlova, G.M.; Yerofeyev, S.K.; Romanova, N.V.

15  
BT1

TITLE: Kinetics of chemical etching of single-crystal gallium arsenide in hydrochloric acid solutions of hydrogen peroxide

SOURCE: Leningrad. Universitet. Khimiya tverdogo tela (Chemistry of solids). Leningrad, Izd-vo Leningr. univ., 1965, 227-230

TOPIC TAGS: gallium arsenide, hydrogen peroxide, chemical etching, semiconductor etching

ABSTRACT: The study of the dissolution kinetics of GaAs was continued in acid solutions of H<sub>2</sub>O<sub>2</sub>. A 0.7 N H<sub>2</sub>O<sub>2</sub> solution was used in 0.02, 0.06, 0.12, 0.23, 1.01, 1.93, and 3.17 N HCl. The dissolution rate of GaAs was determined (in mole · cm<sup>-2</sup> · sec<sup>-1</sup>); from the temperature dependence of this rate, the activation energy  $\epsilon_A$  (in kcal/mole) and the preexponential factor  $C_e$  in the equation

$$w = C_e \exp \left( - \frac{\epsilon_A}{RT} \right)$$

(in mole · cm<sup>-2</sup> · sec<sup>-1</sup>) were calculated. The character of the etching process was found to  
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ACCESSION NR: AT5017278

differ substantially from the dissolution in alkaline solutions of hydrogen peroxide, and was largely determined by the acid content. In the range from 0.12 to 1.93 N HCl, the chemical etching is determined by the rate of the heterogeneous chemical reaction and is independent of HCl concentration. In more dilute HCl solutions, a considerable influence on the dissolution rate of GaAs is exerted by the formation of a film of amphoteric gallium hydroxide. Orig. art. has: 2 figures and 1 table.

ASSOCIATION: None

SUBMITTED: 02Mar65

ENCL: 00

SUB CODE:

NO REF SOV: 003

OTHER: 000

Card

2/2 BK

L 60418-65 EWT(1)/EWT(m)/T/EWP(t)/EWP(b)/EWA(h)/EWA(c) Pz-6/Peb IJP(c)

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ACCESSION NR: AT5017277

UR/0000/65/100/000/0218/0226

AUTHOR: Orlova, G.M.; Yerofeyev, S.K.; Romanova, N.V.

37  
34  
3+1

TITLE: Kinetics of chemical etching of single-crystal gallium arsenide in alkaline hydrogen peroxide solutions.

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SOURCE: Leningrad. Universitet. Khimiya tverdogo tela (Chemistry of solids). Leningrad, Izd-vo Leningr. univ., 1965, 218-226

TOPIC TAGS: gallium arsenide, hydrogen peroxide, chemical etching, semiconductor etching

ABSTRACT: 0.1, 0.5, and 0.7 N solutions of hydrogen peroxide in 0.02-1.0 N NaOH were used to etch single-crystal GaAs at 20-45C. The rate of the chemical reaction w (in mole · cm<sup>-2</sup> · sec<sup>-1</sup>) was determined, and from the temperature dependence of this rate, the activation energy of dissolution ε<sub>A</sub> (in kcal/mole) and preexponential factor C<sub>e</sub> in the equation

$$w = C_e \exp \left( - \frac{\epsilon_A}{RT} \right)$$

(in mole · cm<sup>-2</sup> · sec<sup>-1</sup>) were calculated per structural unit of GaAs. It was found that

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when the NaOH concentration decreases in the range 0.02-0.1 N the etching rate depends on the stirring of the solution and is largely determined by the rate of diffusion. The 0.1-0.25 N NaOH solutions were intermediate between those above 0.25 N NaOH, where the dissolution of GaAs is determined by the rate of the oxidation reaction, and those from 0.02 to 0.1 N, where the dissolution rate is chiefly determined by the diffusion. The maximum dissolution rate was observed in 0.1-0.25 N NaOH solutions, where this rate can be expressed as a function of hydrogen peroxide concentration by the equation  $w = k [H_2O_2]^x$ . At 45C, the values of x for 0.25, 0.5, and 1.0 N NaOH were 1.3, 1.2, and 1.1, respectively. "Single-crystal gallium arsenide oriented along the <111> direction was provided by Yu. M. Burdukov (FTI); gallium and arsenic were determined by O. V. Il'inskaya." Orig. art. has: 7 figures and 1 table.

ASSOCIATION: None

SUBMITTED: 02Mar65

ENCL: 00

SUB CODE: IC, GC

NO REF SOV: 006

OTHER: 006

Card 2/2 *ellp*

CHEREMISOV, M.M., red.; ROMANOVA, N.V., vedushchiy red.; TROFIMOV, A.V.,  
tekh. red.

[For an increase in output from present industrial space operational  
experience of the collective of the Leningrad Machine Plant of the  
Ministry of the Petroleum Industry] Za uvelichenie vypuska produk-  
tsii s sushchestvuiushchikh proizvodstvennykh ploshchadei; opyt  
raboty kollektiva Leningradskogo mekhanicheskogo zavoda Minister-  
stva nefianoi promyshlennosti. Moskva, Gos. nauchno-tekh. izd-  
vo neft. i gorno-toplivnoi lit-ry, 1954. 55 p. (MIRA 11:9)  
(Efficiency, Industrial) (Machine-shop practice)