

LAPP, G.B.; POPOVA, D.I.

Calibration of tungsten-rhenium/tungsten-rhenium thermocouples.
Izm. tekhn. no.10:33-34 0 '63. (MIRA 16:12)

ITINA, N.A.; POPOVA, D.I.

Effect of gamma rays on the activity of lymph hearts in developing tadpoles. Mat. po evol. fiziol. 4:240-246 '60. (MIRA 13:10)

(GAMMA RAYS—PHYSIOLOGICAL EFFECT) (LYMPHATICS)

(LARVAE—AMPHIBIA)

L 23618-65 EWT(m)/EWA(d)/EWP(t)/EWP(h) IJP(c) MJW/JD/JG/MLK

ACCESSION NR: AT5002786

S/0000/64/000/000/0218/0220

AUTHOR: Lapp, G. B.; Popova, D. I.

B71

TITLE: Stability of the thermoelectromotive force of tungsten-rhenium thermocouples 27 27

SOURCE: Vsesoyuznoye soveshchaniye po probleme reniya. 2d, Moscow, 1962.
Reniy (Rhenium); trudy soveshchaniya. Moscow, Izd-vo Nauka, 1964, 218-220

TOPIC TAGS: tungsten alloy, rhenium alloy, thermocouple, thermoelectromotive force, thermocouple annealing

ABSTRACT: The authors studied the change in the thermo-emf of alloys of tungsten containing 5, 10, and 20% Re (respectively, VR-5, VR-10, and VR-20) by subjecting the specimens to three consecutive annealing treatments (each time under different conditions). Values of the thermo-emf after each treatment are tabulated as a function of the duration of the annealing (5 min. to 25 hrs.). The VR-5/20 thermocouple was calibrated by means of the melting points of pure copper, nickel, palladium, platinum, and rhodium. Comparison of the calibration with that performed earlier by S. K. Danishevskiy shows an insufficient thermoelectric reproducibility of the experimental batches of alloys.

Card 1/2

L 23618-65

ACCESSION NR: AT5002786

Orig. art. has: 3 tables.

ASSOCIATION: None

SUBMITTED: 05Aug64

NO REF SOV: 001

ENCL: 00

SUB CODE: MM, EM

OTHER: 000

Card 2/2

LOBOVA, B.N.

Significance of vitamin B₁₂ deficiency and its use in compound
treatment of anemias and hypotrophies in young children. Vop.
gemat. v pediat. no.3:163-173 '64. (MIRA 18:7)

POPOVA, D.N.

Positive effect of vitamin B₆ (pyridoxine) on blood indices and weight in children with symptoms of hypotrophy and secondary anemia. Vop. pit. 20 no.6:37-40 N-D '61. (MIRA 15:6)

1. Iz kafedry gospital'noy pediatrii (zav. - deystvitel'nyy chlen AMN SSSR prof. A.F. Tur) Leningradskogo pediatricheskogo meditsinskogo instituta.

(PYRIDOXINE---PHYSIOLOGICAL EFFECT)
(ANEMIA) (BODY WEIGHT)

FOPOVA, Dobra

Use of the heterotic method in growing paprika (*Capsicum annum*) in Bulgaria. *Rost vyroba li* no.2:204-212 F '65.

1. Senior scientific worker, Institute of Plant Production of the Bulgarian Academy of Agricultural Sciences, Sofia. Submitted June 12, 1963.

POPOVA, Dobra; ARANGELOV, Arangel

Application of heterosis method to melons and watermelons.
Selskostop nauka 1 no.10:1087-1090 '62.

POPOVA, Dobra; MIKHOV, At.

Studying heterosis effect and biology in the blossoming of
watermelons. Priroda Bulg 12 no. 5: 98-100 S-0 '63.

POPOVA, Evgenia

Teaching the subjects "Chemical designators" and "Chemical computations" in the 7th grade. Biolog i khim no.6:23-28 '61.

POPOVA, Evgenia

Atomic molecular theory and its application in the explanation
of teaching material on chemistry in the 7th grade. Biol i
khim 6 no.4:23-29 '63.

DOBREV, St.; POPOVA, E.

Furfural obtained from the dehydration of corn cob pentose hydrolyzates.
Khim i industriia 34 no.3:9I-95 '62.

1. Chelen na Redaktsionnata kolegia, "Khimiia i industriia" (for Dobrev).

POPOVA, E.

Electric propulsion in space flight. NTO 3 no. 5:20-21 My '61.
(MIRA 14:5)

1. Institut informatsii AN SSSR.
(Space ships--Propulsion systems)

PISARZHEVSKIY, Oleg; VLADIMIROV, R.; POPOVA, E.

Youth wants to know more about science. Tekh. mol. 28 no. 12:32-
33 '60. (MIRA 13:12)

(Bibliography--Science--Juvenile literature)

ACCESSION NR: AP4019488

S/0078/64/009/003/0654/0659

AUTHOR: Yershov, G. S.; Popova, E. A.

TITLE: Kinetics of a solution of silica in oxide melts

SOURCE: Zhurnal neorg. khimii, v. 9, no. 3, 1964, 654-659

TOPIC TAGS: silica solution, kinetics, solution rate, steel refining, electros slag smelting, silicate free steel, sodium oxide additive, titanium dioxide additive, diffusion process, diffusion rate, diffusion coefficient, steel purification, activation energy, surface tension, slag, flux

ABSTRACT: Synthetic slags and fluxes comprising $\text{CaO-Al}_2\text{O}_3\text{-SiO}_2$ systems are used in refining liquid steel and in electros slag smelting. More information on the solution of SiO_2 in slags of different compositions under different conditions is required from the standpoint of obtaining steels free of silicate inclusions. The rate of solution of SiO_2 in these systems and the solution kinetics of these systems with the addition of Na_2O and TiO_2 were investigated by the method of

Card 1/3

ACCESSION NR: AP4019488

rotating a sample with equally accessible surfaces. P. M. Shurygin, O. A. Yesin, L. N. Barmin. Izv. vuzov, chernaya metallurgiya, No. 1 1962). The amount (V) of material dissolved in a unit time is $V = D \cdot S \frac{c_0 - c}{\delta}$

where D is the diffusion coefficient of the material in the melt, S is the surface of the material to be dissolved, c_0 is the maximum solubility of the material in a given melt at the test temperature, c is the concentration of the material in the melt, and delta is the value of the so-called Nernst diffusion layer. For a disc of radius r, rotating at rate ω in a melt having kinematic viscosity ν , the expression for delta is:

$$\delta = 1.61 \left(\frac{D}{\nu} \right)^{1/2} \sqrt{\frac{\nu}{\omega}}$$

V then becomes:

$$V = 0.62 D^{1/2} \omega^{1/2} \nu^{-1/2} (c_0 - c)$$

The experimental work is in agreement with the equation showing a linear relationship between the rate of solution and the rate of sample rotation. This indicates that the kinetics of SiO_2 solution in oxide melts are determined by diffusion

Card 2/3.

ACCESSION NR: AP1019488

processes. The rate of diffusion of SiO_2 at constant rotation varies with chemical composition of the melt. By increasing SiO_2 content to 10% at the expense of Al_2O_3 and maintaining CaO constant, the solubility of SiO_2 in the melt increases. The diffusion coefficients of different composition melts were calculated according to equation 3. The value of D_{SiO_2} is in the order of 10^{-6} cm^2/sec . Increasing

temperature greatly increases rate of solution. The introduction of TiO_2 or Na_2O to the synthetic slags improved the degree of steel purification, lowered the surface tension of the melt, and lowered the activation energy of the process of solution and diffusion. Orig. art. has: 6 figures, 2 tables and 7 equations.

ASSOCIATION: Institut metallurgii, Ural'skogo filiala Akademii nauk SSSR (Metallurgical Institute, Ural Branch, Academy of Sciences SSSR)

SUBMITTED: 08Feb63

DATE ACQ: 31Mar64

ENCL: 00

SUB CODE: ML,CH

NO. REF. SOV: 004

OTHER: 002

Card 3/3

YEREMEV, G.S.; BOGOMOLVA, E.A.

Diffusion of silicon, aluminum, and magnesium oxides in oxide melts. Zhur. fiz. khim. 38 no.6:1637-1639 Je '62.

(MIRA 18:3)

1. Institut metallurgii Ural'skogo filiala AN SSSR.

KURSANOV, A.L.; KULAYEVA, O.N.; SVESHNIKOVA, I.N.; POPOVA, E.A.;
BOLYAKINA, Yu.P.; KLYACHKO, N.L.; VOROB'YEVA, I.P.

Restoration of cellular structures and metabolism in yellow
leaves under the effect of 6-benzylaminopurine. Fiziol. rast.
11 no.5:838-847 S-O '64. (MIRA 17:10)

1. Timiriazev Institute of Plant Physiology, U.S.S.R., Academy
of Sciences, Moscow.

EXCERPTA MEDICA Sec 10 Vol 12/10 Obstetrics Oct 59

1796. CHANGES OF THE UTERINE AND VAGINAL EPITHELIUM IN AVITAMINOSIS A (Russian text) - Popova E. A. ARKH. PATOL. 1958. 20/9 (59-68) Illus. 7

In 80 female white rats aged 2 months, of which 40 served as controls, a uterine horn was ligated, incised, and a fragment removed for microscopical examination. Seven days later, the animals were put on a diet without vitamin A. After 4-5 weeks of this diet, manifestations of avitaminosis appeared (xerophthalmia, lack of cleanliness, lack of appetite, weight loss). The animals were killed 5-60 days after the beginning of the experiment and the whole uterus with the vagina was studied histologically, and, in particular, the isolated uterine horn compared with the non-isolated horn. In avitaminosis A the vaginal epithelium showed marked proliferation and cornification; the columnar uterine epithelium presented proliferative and dystrophic phenomena. Both the isolated and the non-isolated uterine horn developed

1796

a stratified pavement epithelium. This metaplasia originated from the subepithelial indifferent cells of the crypts. Brandt - Berlin (V. 10)

YERSHOV, G.S. (Sverdlovsk); POPOVA, E.A. (Sverdlovsk)

Kinetics of the dissolution of silicon, aluminum and magnesium
oxides in fused oxides. Izv. AN SSSR. Met. i gor. delo no.5:
73-79 S-0 '63. (MIRA 16:11)

KULAYEVA, O.N.; CHERNYSHEV, Ye.A.; KAYUTENKO, L.A.; DOLGAYA, M.Ye.;
VOROB'YEVA, I.P.; POPOVA, E.A.; KLYACHKO, N.L.

Synthesis and test of the physiological activity of some compounds
of the kinin series. Fiziol. rast. 12 no.5:902-908 S-0 '65.
(MIRA 19:1)

1. Institut fiziologii rasteniy imeni Timiryazeva AN SSSR, Moskva
i Institut organicheskoy khimii imeni Zelinskogo AN SSSR, Moskva.

YERSHOV, G.S. (Sverdlovsk); POPOVA, E.A. (Sverdlovsk)

Effect of silicon oxide on the crystallization of steel and the formation of nonmetallic inclusions. Izv. AN SSSR. Met. i gor. delo no.5: 18-22 S-O '64. (MIRA 18:1)

KULAYEVA, O.N.; SVESHNIKOVA, I.N.; KLYACHKO, N.L.; POPOVA, E.A.

Reduction of the protein-nucleic acid metabolism in severed leaves
during their virescence under the influence of kinetin. Dokl.
AN SSSR 152 no.6:1475-1478 O '63. (MIRA 16:11)

1. Predstavleno akademikom A.L. Kursanovym.

YERSHOV, G.S. (Sverdlovsk); POPOVA, E.A. (Sverdlovsk)

Reduction of iron and silicon from molten slags by carbon. Izv.
AN SSSR. Met. i gor. dele no.1:32-35 Ja-F '64. (MIRA 17:4)

EXCERPTA MEDICA Sec 5 Vol 12/5 Gen. Path. May 59

1221. CHANGES OF THE UTERINE AND VAGINAL EPITHELIUM IN AVITAMINOSIS A (Russian text) - Popova E. A. - ARKH. PATOL. 1958, 20/9 (59-68) illus. 7

This experiment was carried out in 80 female white rats aged 2 months, of which 10 served as controls. A uterine horn was ligated, incised, and a fragment removed for microscopical examination. Seven days later, the animals were put on a diet without vitamin A. After 4-5 weeks of this diet, manifestations of avitaminosis appeared (xerophthalmia, lack of cleanliness, lack of appetite, weight loss). The animals were killed 5-60 days after the beginning of the experiment and the whole uterus with the vagina was studied histologically, and, in particular, the isolated uterine horn compared with the non-isolated horn. In avitaminosis A the vaginal epithelium showed marked proliferation and cornification; the columnar uterine epithelium presented proliferative and dystrophic phenomena. Both the isolated and the non-isolated uterine horn developed a stratified pavement epithelium. This metaplasia originated from the subepithelial indifferent cells of the crypts.

Brandt - Berlin (V, 10*)

EXCERPTA MEDICA Sec.6 Vol.11/1 Internal Med. Jan 57

POPOVA, E.A.

176. POPOVA E.A. Hosp. No.23 Medsantrud, Moscow *Some data of capillaroscopy in the course of obliterating endarteritis KLIN.MED.(Mosk.) 1955, 32/12 (79) (Russian text)
Capillary changes were detected in early and advanced stages of the disease, even in extremities which were clinically still normal. The capillaries were tortuous, deformed, narrowed, spastic or atonic. The value of capillaroscopy in the early stage of the disease is stressed.
Gaertner - Cracow

Popova, E. A.

Med ✓ Effect of administration of synestrol on the epithelium of the uterus and vagina of rabbits and rats K. A. Popova 1st Med. Inst., Leningrad. Bull. Exptl. Biol. Med. 41, 177-81 (1958) (English translation); Syull. Eksp. Biol. i Med. 41, No. 2, 66-74 (1956). - After administration of Synestrol subcutaneously to rats and rabbits, the single-layered uterine columnar epithelium may undergo conversion into cervical-type epithelium and into stratified squamous epithelium, and, in rabbits, into cancerous tissue. Anna D. Buesc.

KULAYEVA, O.N.; POPOVA, E.A.

Quantitative determination of nucleic acids in plant leaves.
Fiziol. rast. 12 no.3:558-564. Mya-Je '65. (MIRA 18:10)

1. Institut fiziologii rasteniy imeni K.A. Timiryazeva AN SSSR,
Moskva.

POPOVA, E. G.

Preparation of 4-nitro-5,6,7,8-tetrahydronaphthalene-2-
carboxylic acid / E. G. Popova, *Izv. Akad. Nauk SSSR Ser. Khim.* 1958, 2383-4 (1958) English translation - see C.I. 50.
9355z. H.M.R.

577

Paper E. G.

Synthesis of homologs of 1,10-undecynoic acid (10 undecynoic acid). M. Ya. Kraft and E. G. Ponomareva (S. Ordzhonikidze All-Union Chem. Pharm. Sci. Research Inst., Moscow). *Zhur. Obshch. Khim.* 27, 906-8 (1951).—10-Undecenoic acid (9.9 g.) in 20 ml. CS₂ treated below 10° with 8 g. Br in CS₂, the solvent removed after 0.5 hr., the resulting dibromide refluxed 3.5 hrs. with 17.9 g. KOH in 180 ml. EtOH, the EtOH removed, and the soln. dild. and acidified with HCl gave an unstated yield of 10-undecynoic acid, m. 43.5-4.5° (petr. ether); *p*-bromophenacyl ester, m. 67°. Similarly was prepd. 12-tridecynoic acid, m. 57.5°; *p*-bromophenacyl ester, m. 78°. The Grignard reagent from 2.1 g. Mg and 20 g. 1-bromo-10-undecene treated with ice cooling with 19 g. ethylene oxide gave, after standing overnight and the usual aq. treatment, 60% 12-tridecan-1-ol, b.p. 146-54°, which (28.1 g.) treated with 0.8 g. pyridine, 80 ml. Et₂O, and 13.5 g. PBr₃, then refluxed 2 hrs. gave 50% 13-bromo-1-tridecene, b.p. 143.5-5°. This (17.6 g.) refluxed 24 hrs. with 7 g. KCN, 10 ml. H₂O, and 70 ml. EtOH, then treated with 14.5 g. KOH, refluxed 30 hrs., cooled, acidified, with HCl, and extd. with Et₂O gave 75% 13-tetradecynoic acid, m. 28.5° b.p. 143.5-4.5° (from petr. ether). Similarly

2-11 May

Moscow: p-otraslyeniye...
Distr: LE2c(j)/LE3d(LEH)

LOP 22A, E.C.

7
Alkylaminoalkyl esters of L-ascorbic acid and 4-aminobenzoyl-L-ascorbic acid
tetrahydrofuran-2-thiopyran-5-yl acetate, as synthesized by
Sazonova and E. V. Popova, *Chem. Abstr.* 1959, 53, 10844c.

2 4

POPOVA, E. G.

986

Chem Derivatives of 4-hydroxy- and 4-butoxy-5,6,7,8-tetrahydronaphthalene-2-carboxylic acids. S. I. Sergievskaya and E. G. Popova. *Zhurnal Obshchei Khimii* 29: 133-6, 1959.

Gen. Chem. U.S.S.R. 26, 155-7(1956) (Engl. translation).—
4-Hydroxy-5,6,7,8-tetrahydronaphthalene-2-carboxylic acid (I) (12 g.) in 120 ml. MeOH was treated with 6 ml. H₂SO₄, followed by dry HCl (10% wt. increase) and refluxed 12 hrs., yielding 96% Me ester, m. 127.5-8.5°. I heated with Ac₂O gave the 4-acetate, m. 180-1°. I Me ester refluxed in MeEtCO with BuI and powd. K₂CO₃ 10 hrs. gave 70% Me 4-butoxy-5,6,7,8-tetrahydronaphthalene-2-carboxylate, m. 49-50°, which was used for the remainder of the work. I Me ester refluxed in MeEtCO with BuI and powd. K₂CO₃ 10 hrs. gave 70% Me 4-butoxy-5,6,7,8-tetrahydronaphthalene-2-carboxylate, m. 49-50°, which with the appropriate amine gave the 2-diethylaminoethyl ester, m. 148.5-9.5°, and 2-dimethylaminoethyl ester, m. 125.0°. I Et ester, m. 110-111°; hydrazide, m. 110-111°.

178

Handwritten mark

Popova, E. G.

✓ Some transformations of 1-amino-5,6,7,8-tetrahydro-naphthalene-2-carboxylic acid. S. I. Sergievskaya and E. G. Popova (S. Ordzhonikidze All-Union Chem. Pharm. Research Inst., Moscow). *Zhur. Obshchei Khim.* 25, 2240-2 (1955); cf. C.A. 50, 8569d. — Heating 15 g. 1-amino-5,6,7,8-tetrahydronaphthalene-2-carboxylic acid with 30 ml. Ac₂O 20 min. at 80° gave 81% 2-methyl-7,8,9,10-tetrahydro-3H-naphth[1,2-d]m-oxazin-1-one, m. 122-4° (from EtOH). This (12 g.) kept 2 days with a slight excess of 5% NaOH, filtered, and acidified to Congo red gave 12.9 g. 1-acetamido-5,6,7,8-tetrahydronaphthalene-2-carboxylic acid, m. 183-4° (decompn.) (from ClCH₂CH₂Cl). The same forms from the amino acid and AcCl in pyridine; the same product is obtained from the amino acid on heating with AcOH 3.5 hrs. at 100°. G. M. Kosolapoff

Popova, E. G.

Alkylaminoalkyl esters of 1-amino- and 4-amino-5,6,7,8-tetrahydronaphthalene-2-carboxylic acids. S. I. Sergievskaya and E. G. Popova (S. Ordzhonikidze All-Union Chem. Pharm. Sci. Research Inst., Moscow). *Zhur. Obshchei Khim.* 25, 2488-92 (1955); cf. *C.A.* 39, 701¹; preceding abstr.—Reaction of the acyl chlorides with ω -dialkylaminoalkanois in CaH_2 gave the following esters: 2-diethylaminoethyl 1-nitro-5,6,7,8-tetrahydronaphthalene-2-carboxylate-HCl, m. 172-2°; Me_2N analog-HCl, m. 167-8°; 2-diethylaminoethyl 4-nitro-5,6,7,8-tetrahydronaphthalene-2-carboxylate-HCl, m. 170-3°; Me_2N analog-HCl, m. 181-3°. Heating the free acid with $\text{R}_2\text{N}(\text{C}_2\text{H}_5)_2\text{Cl}$ on *iso*-PrOH gave: 39.8% 3-diethylaminopropyl 1-nitro-5,6,7,8-tetrahydronaphthalene-2-carboxylate-HCl, m. 101-3° (reduced with H over Raney Ni to the 1-amino analog-HCl, m. 186-7°). Similar hydrogenation gave: 2-dimethylaminoethyl 1-amino-5,6,7,8-tetrahydronaphthalene-2-carboxylate-HCl, m. 150-7°; 2-diethylaminoethyl 4-amino-5,6,7,8-tetrahydronaphthalene-2-carboxylate-HCl, m. 154-5°; the Me_2N analog-HCl, m. 195-6°; 3-diethylaminopropyl 1-amino-5,6,7,8-tetrahydronaphthalene-2-carboxylate-HCl, m. 124° (decompn.). Et 4-amino-5,6,7,8-tetrahydronaphthalene-2-carboxylate treated in CaH_2 with $\text{Et}_2\text{N}-\text{C}_2\text{H}_5\text{Cl}$ 5 hrs. at reflux gave Et 4-(2-diethylaminoethyl-amino)-5,6,7,8-tetrahydronaphthalene-2-carboxylate-HCl, m. 162-4°.

G. M. Kosolapoff

Passon E.G.

Some transformations of 1 amino 5,6,7,8 tetrahydro
phthalone 2 carboxylic acid S. I. S. (R.V. K. K. 1911)

AM

POPOVA, E.I.

Determination of the quality of glass sand in geological prospecting operations. Stek. i ker. 19 no.7:41 JI '62.

(MIRA 15:7)

(Sand, Glass)

POPOVA, E.I.

USSR/Chemistry - Surface Active
Agents

1 Jul 52

"The Mechanism of Milling Fine Quartz Grains in Ball Mills," V. I. Klassen, E. I. Popova, All-Union Sci Res Inst of Glass, Moscow

"Dok Ak Nauk SSSR" Vol LXXXV, No 1, pp 149-152

Dry milling of quartz sand is most effective when the mill contains only 20% of vol in balls. Wet milling, however, is most effective at 50%. Dry milling, at optimum conditions, proceeds in an intermittent manner. Addn of surface active agents (sulfate soap and soda) increases the rate of milling. Presented by Acad P. A. Rebinder 29 Apr 52.

224T22

POPOVA, ~~Y. I.~~

Dissertation: "Extensive Enrichment of Glass Sands." Cand Tech Sci, ALL-Union Sci Res
Inst of Glass, Moscow, 1953. (Referativnyy Zhurnal--Khimiya, Moscow, No 4, Feb 54)

SO: SUM 243, 19 Oct 54

HOSECH, C I

Investigation of the possibility of using peat tar for flotation of glass sand. *I. L. Papisov, Trudy Vysokoye Nauch.-Issledovatel. Inst. Stikla 1954, No. 34, 10-19; Referat. Zhur., Khim. 1954, No. 49097.*—Tests on use of peat tar as a cheap substitute for sulfonate soap in flotation of Lyuberetsk sand contg. 0.08-0.11% Fe_2O_3 gave poor results. An effective reagent proved to be crude peat tar treated with 40% H_2SO_4 and dispersed in kerosine or turpentine in

a ratio of 1:2.7 or 1:4, resp. The use of 15 kg. peat tar/ton at 45-50° reduced the Fe_2O_3 content to 0.03-0.05%. Preliminary flotation followed by addnl. grinding to less than 147 μ and then desliming reduced the Fe_2O_3 content to 0.001-0.008%. Double flotation with peat tar produced special purpose and tech. glass of high-light transmission. Peat tar was also tested for flotation of various ores. M. Hosech

10p 100, P.I

Deep beneficiation of glass sands. E. I. Popova,
 Trudy Vsesoyuz. Nauch.-Issledovatel. Inst. Stkls 1954,
 No. 34, 20-33; Referat. Zhur., Khim. 1954, No. 49095.—
 Expts. of grinding glass sand in order to obtain a product
 with not more than 0.01-0.015% Fe₂O₃ showed that the
 optimum conditions for dry grinding are obtained by fill-
 ing 20% of the mill with balls and in wet grinding 50%.
 Addn. of hardness-reducing substances (sulfonate soap 0.3
 and calcined soda 1 kg./ton) raised the intensity of wet
 grinding by 24 and of dry grinding by 12%. Best results in
 removal of impurities were obtained when the sand was
 ground to -147 + 43 μ . Lyubertsik sand was treated in a
 flotation cell, then ground to 147 μ , and deslimed. It was
 next refloated with 1.5 kg./ton sulfonate soap. The Fe₂O₃
 content was thereby reduced to 0.01%. For beneficiat-
 ion of quartz-feldspar sand the 2nd flotation was carried out
 with a cationic reagent (IM-11) in the presence of HF in
 order to remove feldspar. Then it was floated with sulfo-
 nate soap to remove Fe-contg. minerals. This resulted in
 the removal of Al₂O₃ 72-86 and Fe₂O₃ 75-84%. The Fe₂O₃
 content in the sand was thereby reduced to 0.01-0.04%.
 M. Hosen

15(2), 15(6)

SOV/72-59-3-8/19

AUTHORS:

Meytina, V. A., Popova, E. I., Magidovich, V. I.

TITLE:

On the Extension of the Mineral Raw Material Basis of Feldspathic Rock (O rasshirenii mineral'no-syr'yevoy bazy polevoshpatovykh porod)

PERIODICAL:

Steklo i keramika, 1959, Nr 3, pp 23 - 26 (USSR)

ABSTRACT:

In the USSR at present pegmatite is the main source of feldspars for the glass and ceramic industry. As, however, its deposits are situated at a very great distance from the consumption centers and the need is strongly rising, it is necessary to use granites and other feldspar-containing rocks. (Alaskite, "nephelinsyenite"). These raw materials have not yet been utilized in practice, although the possibilities offered by them have already earlier been recognized. In the years 1956 to 1957, feldspar-containing rocks of some mountain massifs in the Ukraine, Ural, Siberia and Central Asia were investigated by the Institutes NII Stroykeramika, GIS, and IGEM AS USSR. The chemical composition is shown in table 1 and it may be seen from it that this raw material cannot be utilized without dressing. Table 2 shows

Card 1/2

On the Extension of the Mineral Raw Material Basis of
Feldspathic Rock

SOV/72-59-3-8/19

the results of electromagnetic separation of samples from 15 deposits. Their testing in semiporcelain masses and in the glass layer is described next. Water absorption and shrinkage of granite samples as compared to pegmatite at various burning temperatures are given in figures 1 and 2. The works carried out showed the possibility of employing feldspar-containing granites, alaskite and "nephelinsyenite" for semiporcelain masses and glass layers. This means great advantages, as the mentioned materials possess a more stable composition than pegmatite and their deposits are in the proximity of the consumption centers for their greater part. As the deposits of such raw materials are very large, their exploitation can be effected by the aid of modern technique. There are 2 figures and 2 tables.

Card 2/2

15(2)

AUTHORS:

Popova, E. I., Magidovich, V. I.

SOV/72-59-12-10/19

TITLE:

Anorthosites - Perspective Raw Material for Low-alkali Glass⁶

PERIODICAL:

Steklo i keramika, 1959, Nr 12, pp 33 - 35 (USSR)

ABSTRACT:

In past years the Institut stekla (Institute of Glass) worked out the composition of low-alkali glass which is distinguished by a low expansion coefficient, an increased thermal⁵ and chemical resistivity and by good properties of electric insulation. Such kind of glass is used for the first time for mass production of thermally resistant pipes and high-tension insulators. In the USSR these pipes are also produced and a series of new plants for the said production is planned. Further the composition of Nr 13v glass is given which is elaborated by the GIS and was recommended for the manufacture of insulators. In 1957 the Institut geologii rudnykh mestorozhdeniy (IGEM) AN SSSR (Institute of Geology of Ore Deposits (IGEM) of the Academy of Sciences, USSR), the Institute of Glass, and the NIISstroykeramika jointly determined that various rocks with a high content of alumina such as anorthosites may be used in the glass melting- and ceramic production. The largest deposits

Card 1/2

Anorthosites - Perspective Raw Material for Low-alkali Glass SOV/72-59-12-10/19

of anorthosites are found in the Ukraine (Korosten') and in Khabarovsk kray (Dzhugdzhur) of the USSR. Chemical analyses of anorthosites are indicated in the table. The Ukrainian anorthosites have the best prospects as to yield since they are deposited in industrial areas. The use of kaolin, commercial alumina and anorthosite from the technological and economic point of view depends on the following factors: the distance of the raw material deposit to the works, the cost of processing and of raw material concentration as well as on the necessity of adding other components and their quantity. Preliminary calculations show that in using anorthosites a considerable reduction in raw material cost is made possible for the production of low-alkali glass. There is 1 table.

Card 2/2

L 59576-65

ACCESSION NR: AP5015737

UR/0205/65/005/003/0451/0456

577.4 : 577.391

19
B

AUTHOR: Nefedova, A. I.; Popova, E. I.

TITLE: Distribution of Na²² in the components of a body of water

SOURCE: Radiobiologiya, v. 5, no. 3, 1965, 451-456

TOPIC TAGS: radiobiology, radioisotope, sodium 22, hydrobiology, radioactivity

ABSTRACT: The authors studied the uptake of Na²² by various organisms in aquariums. The biological specimens included 7 species of plants: water plantain (*Alisma plantago* L.); water thyme (*Elodea canadensis* Rich.); frogbit (*Hydrocharis morsus ranae* L.); duckweeds (*Lemna minor* L. and *Lemna trisulca* L.); foxtail (*Myriophyllum spicatum* L.), and hornwort (*Ceratophyllum demersum* L.)--and 4 species of molluscs: *Limnaea stagnalis* L.; *Radix auricularia* L.; *Anisus vortex* L., and *Bithynia leachi* L. Na²² was found to have low coefficients of accumulation (ratio of the radioactivity of 1 g of dry substance in the organism to the radioactivity of 1 ml of water) by plants (81-138) and by molluscs (54.5-220). The low levels of accumulation of

Card 1/3

L 59576-65

ACCESSION NR: AP5015737

radiosodium by the hydrobionts and its weak absorption by the ground determine the hydrotropic type of distribution of radiosodium by the basic components in the water; at the end of the experiments an average of about 80% of the radionuclide remained in solution while the other 20% was redistributed between the ground and the hydrobionts. Among the plants, the highest degree of Na^{22} uptake was noted in the frog-bit (activity up to 17×10^6 decay/min; coefficient of accumulation up to 1138); the lowest degree in hornwort (activity 1.5×10^6 decay/min; coefficient of accumulation about 81.5). The molluscs exhibited insignificant species differences in this respect. The bodies of the molluscs invariably contained much more radiosodium than did the shells. The distribution of Na^{22} in bodies of water is very similar to that of its chemical analog--cesium. The latter too is generally characterized by low values of the coefficients of accumulation by aquatic organisms. "The authors thank their coworkers N. V. and Ye. A. Timofeyev-Resovskiy at the Institute of Biology UFAN SSSR for providing working space, and for valuable comments, I. N. Verkhovskaya of the Institute of Biophysics AN SSSR for reviewing the manuscript and advice, and laboratory assistant L. L. Kononova for help with the experiments." Orig. art. has: 2 figures, 1 table.

Card 2/3

L 59576-65

ACCESSION NR: AP5015737

0

ASSOCIATION: Institut biologicheskoy fiziki AN SSSR, Moscow (Institute of Biophysics, AN SSSR); Institut biologii Komi filiala AN SSSR, Syktyvkar (Institute of Biology, Komi Branch, AN SSSR)

SUBMITTED: 06Jul63

ENCL: 00

SUB CODE: LS, NP

NO REF. SOV: 006

OTHER: 000

Card 373

НОСТОВА, А.И.; ПОПОВА, Е.И.

Distribution of Ra^{226} among the components of a body of water.
Radiobiologiya 5 no.3:451-456 1967

1. Institut biologicheskoy fiziki AN SSSR, Moskva; Institut
biologii Komi filiala AN SSSR, Syktyvkar.

VIANOVA, T.A.; PEROVA, I.I. et al.

Lakes of the Pechorskaya tundra floodplain. Izv. Komi fil. Geog.
ob-va SSSR no.9:91-96 '64. (MIRA 18:5)

MAGIDOVICH, V.I., kand.geol.-mineral.nauk; POPOVA, E.I., kand.tekhn.nauk

Lezniki deposit of granites is an important raw materials base
for the silicate industry. Stek. i ker. 21 no.11111-19 N 184.
(MIRA 18:4)

1. Gosudarstvennyy nauchno-issledovatel'skiy elektrokeramicheskiy
institut (for Magidovich). 2. Gosudarstvennyy institut stekla
(for Popova).

POPOVA, E.I.; SMIRNOV, Ye.I.

Methods of controlling raw materials in the manufacture of glass
for the detection of chromite. Stek. i ker. 21 no.11:36-38 N '64.
(MIRA 18:4)

BRATTSEV, A.P.; VLASOVA, T.A.; POPOVA, E.I.; SOLOVKINA, L.N.

Deepwater lake Bol'shaya Gudyr'ya in the valley of the
Pechora River; a limnological essay. Trudy Gidrobiol.
ob-va 12:200-213 '62. (MIRA 15:12)

1. Komi filial AN SSSR, Syktyvkar.
(Bol'shaya Gudyr'ya, Lake--Limnology)

POPOVA, E.I.

Accumulation of radioactive phosphorus by some fresh-water mollusks.
Trudy Komi fil. AN SSSR no.9:53-60 '60. (MIRA 15:1)
(WATER POLLUTION) (PHOSPHORUS ISOTOPES)
(MOLLUSKS)

POPOVA, E. I.

Material on the hydrobiology of the Kolva River. Trudy Komi fil. AN
SSSR no. 8:69-83 '59. (MIRA 13:11)
(Kolva River—Fresh-water biology)

CH
Nitration of *ar*-tetrahydronaphthalene-2-carboxylic acid and the transformations of 1-nitro- and 4-nitro-5,6,7,8-tetrahydronaphthalene-2-carboxylic acids. S. I. Sergievskaya and E. G. Popova (S. Ordzhonikidze All-Union Sci. Research Chem. Pharm. Inst., Moscow). *Zhur. Obshchei Khim.* 25, 2164-61 (1955).—To 43 ml. HNO₃ (d. 1.5) was added with stirring and cooling over 45 min. 35.2 g. *ar*-tetrahydronaphthalene-2-carboxylic acid at 0°; after 30 min. the mixt. was filtered, yielding 31.1% 1-nitro-5,6,7,8-tetrahydronaphthalene-2-carboxylic acid (I), m. 221° (from CCl₄-CH₂Cl). The mother liquors from purification of this gave the crude 4-nitro analog; this was esterified with EtOH-HCl and the crude product, treated with EtOH, left behind the less sol. Et I ester, m. 107-8°; the soln. was distd. yielding the Et ester of the 4-nitro analog, b. 180-3°; hydrolysis with 0.5N KOH gave 5.4% 4-nitro-5,6,7,8-tetrahydronaphthalene-2-carboxylic acid (II), m. 200° (from MeOH). If the nitration of the carboxylic acid (15 g.) is done in 65 ml. concd. H₂SO₄ with 8.7 g. KNO₃ and 20 ml. H₂SO₄ at 0° there is formed 5 g. I and 0.7 g. II. Hydrogenation of I over Ni in EtOH gave 78% 1-amino-5,6,7,8-tetrahydronaphthalene-2-carboxylic acid (III), decomp. 185°; II similarly gave 4-amino analog (IV), m. 192-3°. These on heating

②

1/2

with Ba(OH)₂ are readily decarboxylated; treatment of the amines with Ac₂O gave, resp., *1-acetamido-5,6,7,8-tetrahydronaphthalene*, m. 158°, and the *4-acetamido analog*, m. un- stated. III diazotized in aq. HCl and heated with much H₂O to 40-50° gave *1-hydroxy-5,6,7,8-tetrahydronaphthalene-2-carboxylic acid*, m. 166.5-7.5°; IV gave the *4-hydroxy analog*, m. 192-4°. I refluxed with EtOH-HCl gave 85% Et ester, b_p 164°, m. 109°; MeOH gave the Me ester, m. 149-50°. I with SOCl₂ gave the acyl chloride, m. 97-8°; amide, m. 218-19.5°; hydrazide, m. 163°. II gave: Et ester, m. 52-2.5°; Me ester, m. 59.5-60°; acid chloride, m. 60-1°; b_p 181-2°, hydrazide, m. 181.5-2°. Hydrogenation of I Et ester over Raney Ni at 20 atm. gave III Et ester (HCl salt, m. 105-7°), which with Ac₂O gave Et *1-acetamido-5,6,7,8-tetrahydronaphthalene-2-carboxylate*, m. 132.5-3.5°. I hydrazide hydrogenated over Raney Ni to III hydrazide, m. 147-8°. II Et ester hydrogenated thus to IV Et ester, m. 85°; II hydrazide gave IV hydrazide, m. 133.5-9.5°; IV with Ac₂O gave *4-acetamido-5,6,7,8-tetrahydronaphthalene-2-carboxylic acid*, decomp. 293°.

G. M. Kowalski

2/2

POPOVA, E.I.; FRIMER, A.I.

Method for measuring the thickness of films. Zav. lab. 23 no.4:
455-457 '57. (MLRA 10:6)
(Films (Chemistry)) (Interferometry)

TIMOFEYVA-RESOVSKAYA, Ye.A.; POPOVA, E.I.; FOLIKARPOV, G.G.

Accumulation of chemical elements by fresh-water organisms from water solutions. Report No.1: Concentration of the radioactive isotopes of phosphorus, zinc, strontium, ruthenium, cesium and cerium by diverse species of fresh-water mollusks [with summary in English]. Biul.MOIP.Otd.biol. 63 no.3:65-78 My-Je '58.

(RADIOACTIVE SUBSTANCES)

(MOLLUSKS)

(MIRA 12:3)

POPOVA E M

ny

Physiobiochemical features of the development of sherry film and its use in production. N. M. Sisakyan, E. M. Popova, N. F. Saenko, M. A. Gerasimov, and M. G. Puchkov. *Biochim. Vinodeliya, Sbornik 4*, 32-55(1963).— Investigation of biochem. processes of viticulture shows that there is a decrease in the wine of the vitamins of group B, suggesting that the vitamins are used by the yeast cells in the nature of an addl. factor of nutrition. Previous observations have shown that the microorganisms of yeast are capable of absorbing vitamins from the surrounding media. Studies were made of (1) microbiol. observations on the intensity of growth and the development of sherry film and its morphological changes at the time of processing wine nitrogenous and bioactive substances; and (2) the biochem. and chem. processes underlying sherry formation. Results of the first tests show that the most favorable conditions for the development of the film is displayed by the mediums in which there has been the addn. of 0.5% yeast autolysis processed at a temp. of -180° , 120 mg./l. ammonia N, and 0.4 mg./l. riboflavin. The amts. of aldehydes, and specifically acetal, are considerably increased in comparison with the control. A second set of tests was performed to eliminate the necessity of the -180° temp. Wines were treated at -180° , -40° , -10° (with a 5-fold

freezing and thawing technique); and holding at 48° for 48 hrs. Yeast in the control sample and in the heated sample generated very slowly. The best activity was noted with -180° treatment with the activity decreasing with an increase in temp. After the treatment a rapid increase in the activity of esterase and peroxidase is noted. After preliminary lab. expts., tests were made in 5 large vats contg. (A) control wine, (B) wine + 0.5% maceration juice, (C) wine + 0.5% yeast autolysis product processed at a temp. of -180° , (D) wine + 80 mg./l. ammonia N, (E) wine + 120 mg./l. ammonia N. All were carefully mixed and inoculated with a layer of sherry yeast No. 93. The condition of the plasma cells were noted at different stages of development of the film. The most rapid growth was observed in (C) and (E). During the first 60 days, the amt. of alc. decreases with the greatest decrease being shown by (B). A decrease in sugar and total and volatile acids is noted with an increase in aldehydes. It is possible to cause sherry formation by introducing to the original wine material other wine material rich in extractable substances, bioactive compounds in the form of maceration juice (I) or yeast autolysis product. Investigations indicate that the greatest effect is obtained by the addn. of I in combination with ammonia. S. B. Radtitz

NIKOLAYEVA, V.G.; DUKHINA, A.Ya.; POPOVA, E.M.; BAYEVICH, Yu.A.;
SARGIN, I.B.; PERCHENKO, A.A.; LEVINSON, G.I.

Carbamide dewaxing of oil fractions. Trudy VNII NP no.7:253-263
'58. (MIRA 12:10)
(Paraffins). (Urea)

5.5300

66564

SCV/81-59-15-54918

Translation from: Referativnyy zhurnal. Khimiya, 1959, Nr 15, p 433 (USSR)

AUTHORS: Popova, E.M., Nikolayeva, V.G.

TITLE: A Method for Determining the Content of Small Quantities of Aromatic Hydrocarbons in Low-Molecular Paraffins

PERIODICAL: Novosti neft. tekhn. Neftepererabotka, 1958, Nr 9, pp 10 - 13

ABSTRACT: A colorimetric method has been developed for determining small quantities of aromatic hydrocarbons (AH) in paraffins and oil-containing paraffins based on Nastyukov's reaction. In the determination of the AH concentration the method of comparing the color of the sample with the color of standard solutions; visually or by means of a colorimeter, can be used. For preparing standard solutions AH separated from paraffin are introduced into pure cetane; standard samples can also be prepared from oil-containing paraffin containing from 5 to 10% AH which is diluted by pure cetane to the necessary AH content in the mixture (0.2; 0.4 ... 1.5%). Into the test tube 2 ml of the solution consisting of 0.5 weight % of formalin

Card 1/2

4

TOKAREVICH, K.N. , POPOVA, E. M.

"Les leptospirosis an nord-est de l'Union Sovietique."

Report submitted to the Second Intl. Symp. on Human and Animal Leptospirosis.
Lublin, Poland 6-8 Dec 1962

POPOVA, E.M.; NIKOLAYEVA, V.G.; SEN'KINA, M.I.

Rapid methods of analysis of wash liquids in the purification
of gas-turbine residual fuels. Khim.i tekhn.topl.i masel 7
no.7:62-65 J1 '62. (MIRA 15:9)
(Petroleum as fuel) (Emulsions)

BEREZHNOY, A.I.; BRODSKIY, Yu.A.; BRONSHTEYN, Z.I.; VEYNERG, K.L.;
GALDINA, N.M.; GLETMAN, B.A.; GINZBURG, D.B.; GUTOP, V.G.;
GUREVICH, L.R.; DAUVAL'TER, A.H.; YEGOROVA, L.S.; KOTLYAR,
A.Ye.; KUZYAK, V.A.; MAKAROV, A.V.; POLLYAK, V.V.; POPOVA,
E.M.; PRYANISHNIKOV, V.P.; Sentyurin, G.G.; SIL'VESTROVICH,
S.I., kand. tekhn. nauk, dots.; SOLOMIN, N.V.; TEMKIN, B.S.;
TYKACHINSKIY, I.D.; SHIGAYEVA, V.F.; SHLAIN, I.B.; EL'KIND,
G.A. [deceased]; KITAYGORODSKIY, I.I., zasl. deyatel' nauki i
tekhniki RSFSR, doktor tekhn. nauk, prof., red.; GOMOZOVA,
N.A., red.izd-va; KOMAROVSKAYA, L.A., tekhn. red.

[Handbook on glass manufacture] Spravochnik po proizvodstvu
stekla. [By] A.I.Berezhnoi i dr. Pod red. I.I.Kitaigorodskogo
i S.I.Sil'vestrovicha. Moskva, Gosstroizdat. Vol.2. 1963.
815 p. (MIRA 16:12)

(Glass manufacture)

NIKOLAYEVA, V.G.; RYABOV, M.N.; IVANYUKOV, D.V.; POPOVA, E.M.; SAMGIN, I.B.;
ZLOTNIKOV, L.Ye.; DZHINCHARADZE, V.M.; SEN'KINA, M.I.; Prinsipali
uchastiye: KRYMOVA, N.N.; MALINOV, V.K.

Refining of heavy residual fuels by washing and separation.
Khim.i tekhn.topl.i masel 7 no.5:26-31 My '62. (MIRA 15:11)

1. Vsesoyuznyy nauchno-issledovatel'skiy institut po pererabotke
nefti i gazov i polucheniyu iskusstvennogo zhidkogo topliva,
Moskovskiy neftepererabatyvayushchiy zavod i Vsesoyuznyy nauchno-
issledovatel'skiy i konstruktorskiy institut khimicheskogo mashino-
stroyeniya. 2. Moskovskiy neftepererabatyvayushchiy zavod (for
Krymova, Malinov).

(Petroleum as fuel)

Preparation of individual paraffins from the 200 to 150
fraction of Russian petroleum
~~... ..~~
~~... ..~~
... .. were used from the fraction ...
... .. Individual components were
present ... and the total of the α
paraffins was 16% of the fraction. The kerosine-gasoline
fraction of the same crude oil contained from 9% to 32%
n-paraffins. It was shown that deparaffinizing with area of petro-
leum is accompanied by complex reaction not only with
n-paraffins but also with aromatics and some o and m hydro-
carbons.
A. P. Kostikov

0000

Handwritten initials

POPOVA, E. M.

The kerosine-gasoline fractions (200-350°) of Romash-
 kinsk petroleum from Devonian formations. V. G. Niko-
 laev and E. M. Popova. *Khim. i Tekhnol. Topiva* 1958,
 46, 8, 12. The kerosine-gasoline fraction was sepd.
 into aromatic, naphthenic, n-paraffinic and isoparaffinic
 components by vacuum distn., a column of 100 theoretical
 plates being used and for each group the following proper-
 ties were detd.: boiling range, f.p., d., viscosity, n, aniline
 point, η , S, and cetane no.

Fuel 2

10/10

11/11

L 35528-65 ENT(m)/EPF(c)/T Pr-4 WE
ACCESSION NR: AP5008181

s/0286/65/000/005/0058/0058

AUTHORS: Nikolayeva, V. G.; Popova, E. M.; Perchenko, A. A.; Lysenko, M. M.; Sen'kina, M. I. 17
B

TITLE: A method for lowering the congealing temperature of fuels. Class 23, No. 168829

SOURCE: Byulleten' izobreteniy i tovarnykh znakov, no. 5, 1965, 58

TOPIC TAGS: fuel, temperature shift, oil, solidification

ABSTRACT: This Author Certificate presents the application of vat remnants of fatty acids neutralized with magnesium to lower the congealing temperature of fuels.

ASSOCIATION: none

SUBMITTED: 25 Aug 62

ENCL: 00

SUB CODE: IE, FP

NO REF SOW: 000

OTHER: 000

Card 1/1

POPOVA, E. K., BOZHAREVICH, E. P., VASILEVYNA, L. D., ANOSSENKOVA, N. I.,
DAYTER, A. B.

"Materials for the further study of the local Q-fever focus in
the Leningrad oblast." p. 140

Desyatoye Soveshchaniye po parazitologicheskim problemam i
prirodnoochagovym bolezniam. 22-29 Oktyabrya 1959 g. (Tenth Conference
on Parasitological Problems and Diseases with Natural Foci 22-29
October 1959), Moscow-Leningrad, 1959, Academy of Medical Sciences
USSR and Academy of Sciences USSR, No. 1 254pp.

Leningrad Inst. of Epidemiology Microbiology and Hygiene

ПОПОВА, Э. М.

"Anthropurgic foci of leptospirosis infection in the northwest." p. 161

Desyatoye Soveshchaniye po parazitologicheskim problemam i prirodnoochagovym boleznyam. 22-29 Oktyabrya 1959 g. (Tenth Conference on Parasitological Problems and Diseases with Natural Foci 22-29 October 1959), Moscow-Leningrad, 1959, Academy of Medical Sciences USSR and Academy of Sciences USSR, No. 1 284pp.

Leningrad Inst. of Epidemiology and Microbiology and Hygiene

L 23323-66 EWT(1)/EWA(h)

SOURCE CODE: UR/0109/66/011/004/0750/0752

ACC NR: AP6011456

AUTHOR: Averbakh, V. S.; Vlasov, S. N.; Popova, E. M.; Sheronova, N. M.

ORG: none

31
B

TITLE: Experimental study of a mirror-type beam waveguide 25

SOURCE: Radiotekhnika i elektronika, v. 11, no. 4, 1966, 750-752

TOPIC TAGS: beam waveguide, waveguide mirror, millimeter wave propagation

ABSTRACT: A study has been made of the characteristics of a mirror-type waveguide consisting of reflectors in the form of 150 x 210 mm sections shaped as ellipsoids of revolution. The principal radii of curvature were $R_x = 50$ cm and $R_y = 100$ cm. The mirror reflectors were made by deposition of a layer of silver on an epoxy base. They were mounted parallel to each other at a distance of 50 cm and spaced in such a way that the center of each mirror coincided with the focal points of the preceding and succeeding mirrors. The angle of incidence was 45° . The array consisted of eight mirrors with rectangular aperture masks which when shifted could vary the Fresnel parameter c . The transmission coefficient of the waveguide was determined by the effectiveness of excitation and reception and the value of the energy loss during reflection. Theoretical calculations indicated that the upper limit of the excitation coefficient for the primary power mode of a waveguide with a rectangular radiating horn was 0.91 for $c = 3.5$ and 0.84 for $c = \infty$. Three types of radiators operating at

Card 1/2

UDC: 621.372.833.1.01

AD PRESS:
4232

POPOVA, E.N.; MOKHOVA, T.M.

Functional and structural changes in the central nervous system
under the influence of nivaline. Zhur. vys. nerv. deiat. 14 no.2:
337-345 Mr-Apr '64. (MIRA 17:6)

1. Institute of Brain, U.S.S.R. Academy of Medical Sciences,
Moscow.

POPOVA, E.N.

Some data on the effect of eserine on the cerebral cortex of white rats. Report No.1: Effect of eserine on conditioned reflex activity. Biul. eksp. biol. i med. no.2:72-78 F '61. (MIRA 14:5)

1. Iz laboratorii tsitoarkhitektoniki (zav. - prof. Ye.P.Kononova) Instituta mozga (dir. - deystvitel'nyy chlen AMN SSSR S.A.Sarkisov) AMN SSSR, Moskva. Predstavlena deystvitel'nym chlenom AMN SSSR S.A.Sarkisovym.
(PHYSIOSTIGMINE) (CONDITIONED RESPONSE)

POPOVA, E.N., kand.biologicheskikh nauk; P REOBRAZHENSKAYA, N.S., doktor
med.nauk; STANKEVICH, I.A., doktor med.nauk

Results of a conference on the "Structure and function of the
human analyzer in ontogeny." Vest. AMN SSSR 15 no.6:85-90 '60.
(MIRA 14:4)

(~~BRAIN~~—LOCALIZATION OF FUNCTIONS)

ПОПОВА Е. Н.

EXCERPTA MEDICA Sec 5 Vol 12/3 Gen. Path. Mar 59

885. MORPHOLOGICAL CHANGES OF THE FIBROUS STRUCTURES OF LOOSE CONNECTIVE TISSUE FOLLOWING STIMULATION OF THE CEREBRAL CORTEX (Russian text) - Popova E. N. - ARKH. PATOL. 1958, 20/6 (43-47) illus. 4

The occurrence of certain morphological changes in the fibrous structures of the loose connective tissue after removal of the cerebral cortex was demonstrated in an earlier article. The present experiments were performed on 50 male white rats aged from 2.5 to 3 months. Chronic irritation of the cerebral cortex was achieved by suturing a Marley flap under the dura on top of the cerebral convexity. After 6 hours to 90 days patch preparations (technique of Jasvain) were obtained from the deep layer of the subcutis of the abdominal wall and stained according to Van Gieson, Mallory, Maximov and with orcein. A marked increase of the argyrophilic and a slight swelling of the collagenic fibres could be determined after as little as 2 days but was most obvious after 30 days. After 60 days and more, silver staining of the argyrophilic fibres was difficult; they were transformed into collagenic fibres; the elastic fibres became thinner. The argyrophilic fibres of the loose connective tissue react fastest to the chronic cerebral irritation.

Brandt - Berlin

POPOVA, E.N.

Effect of partial removal and irritation of the cerebral cortex on the condition of fibrous structures of the loose connective tissue. Dokl. AN SSSR 119 no.3:591-593 Mr '58. (MIRA 11:6)

1. Moskovskiy gosudarstvennyy pedagogicheskiy institut im. V.I. Lenina. Predstavleno akademikom I.I. Shmal'gauzenom.
(CEREBRAL CORTEX) (CONNECTIVE TISSUES)

POPOVA, E.N. (Moskva)

Morphological changes of the fibrous structures of the areolar connective tissue following stimulation of the cerebral cortex. [with summary in English]. Arkh.pat. 20 no.6:43-47 '58 (MIRA 11:7)

1. Iz kafedry gistologii (zav. - prof. V.I. Sukharev) Moskovskogo gosudarstvennogo pedagogicheskogo instituta imeni V.I. Lenina.

(CONNECTIVE TISSUE, physiology,

eff. of cerebrocortical stimulation, morphol.aspects (Rus))

(CEREBRAL CORTEX, physiology,

eff. of stimulation on connective tissue morphol. (Rus))

AUTHOR: Popova, E. N. 20-119-3-56/65

TITLE: The Condition of Fibrous Structures of the Loose Connective Tissue, as Affected by Partial Removal and Irritation of the Cortex of the Large Hemisphere (Vliyaniye chastichnogo udaleniya i razdrazheniya kory bol'shikh polushariy mozga na sostoyaniye voloknistykh struktur rykhloy soyedinitel'noy tkani)

PERIODICAL: Doklady Akademii Nauk SSSR, 1958, Vol. 119, Nr 3, pp. 591-593 (USSR)

ABSTRACT: It was found in the course of the last years that the disturbance of the trophic function of the central nervous system which occurs due to the operations mentioned in the title, does not only lead to considerable shifts of the chemical processes in tissues and organs (Refs. 1,3,9) but also to the change of activity of the cellular elements of various tissues among others also of those of the loose connective tissue (Refs. 6-8, 10,11). In the latter tissues not only cellular elements but also the fibrous structures of the interstitium participate in the processes of metabolism. Their changes in the case

Card 1/4

The Condition of Fibrous Structures of the Loose
Connective Tissue, as Affected by Partial Removal
and Irritation of the Cortex of the Large Hemispheres

20-119-3-56/65

the elastic fibers become thinner. If the vortex is irritated the argyrophil fibers grow thicker and their number increases; the collagenic fibers swell. The state of elastic fibers hardly changes. If irritation is carried out for a longer period (60-75 days and more) the upper layers of the vortex become atrophic. This produces a similar effect on the fibers as the removal of the cortex. The disturbance of synthesis of the ribonucleic acid in the cellular elements of the loose connective tissue takes place earlier than the changes of the fibrous structures. Therefore, the latter changes must be regarded as secondary in connection with the change of the trophic function of the brain. It can be concluded from the results of the above described work and the data of technical literature (Refs. 7,12,14) that the irritation of the cortex causes a state of excitation in the cortex itself and in the deeper seated sections of the nervous system; the functional activity of the

Card 3/4

POPOVA, E.N.

Condition of the fibrous structures of the loose connective
tissue in aseptic inflammation. Dokl. AN SSSR 117 no.4:710-712
D '57. (MIRA 11:3)

1. Moskovskiy gosudarstvennyy pedagogicheskiy institut im. V.I.
Lenina. Predstavleno akademikom I.I. Shmal'gauzenom.
(CONNECTIVE TISSUES)

Popova, E. N.

20-4-47/52

AUTHOR:

Popova, E. N.

TITLE:

On the Problem of the State of the Fibrous Structures of the Loose Connective Tissue With Aseptic Inflammation (K voprosu o sostoyanii voloknistykh struktur rykhloy soyedinitel'noy tkani pri asepticheskom vospalenii).

PERIODICAL: Doklady AN SSSR, 1957, Vol. 117, Nr 4, pp. 710-712 (USSR)

ABSTRACT:

Numerous works are devoted to the inflammable new formation of the connective tissue (references 3 to 7, and others). After some works, the collagen fibers change in the initial stages of aseptic inflammation. Argyrophile fibers are formed, which later convert into collagen ones. Within the literature available to her, the author found no data on the problem referred to in the title. 25 white male rats, 90 to 150 grams of weight, and 3,5 to 4 months old, were used as experimental objects. An aseptic inflammation was provoked by the introduction of sterile celloidin platelets below the skin of the belly. The animals were killed after 6, and 12 hours, as well as 1 to 5 and after 10 days from the beginning of the inflammation. The state of the connective tissue at these fixed dates, is described in detail. It results from the results that the "melting" of the argyrophile fibers

Card 1/2

On the Problem of the State of the Fibrous Structures of the Loose Connective Tissue With Aseptic Inflammation 20-4-47/52

takes place in the center of an aseptic inflammation in early stages (according to a designation by A. I. Smirnova), it follows a loosening, separation into individual fibrils, and apparently a resorption of the collagen fibers and a degeneration of the elastic fibers. Fibrin participates in the formation of collagen fibers during the stage of cicatrization. There are 4 figures, and 9 references, all of which are Slavic.

ASSOCIATION: Pedagogical Institute of State, imeni V. I. Lenin, Moscow (Moskovskiy gosudarstvennyy pedagogicheskiy institut im. V. I. Lenina).

PRESENTED: July 31, 1957, by I.I. Shmal'gauzen, Academician

SUBMITTED: July 30, 1957

AVAILABLE: Library of Congress

Card 2/2

POPOVA, E.N.; BOGOLEPOV, N.N.

Changes in the neurons in some portions of the brain under the effect of nivaline. *Biul. eksp. biol. i med.* 59 no. 5:104-109 '65. (MIRA 18:11)

1. Laboratoriya neyrofarmakologii (zav. - prof. S.A.Sarkisov) Instituta mozga (direktor - deystvitel'nyy chlen AMN SSSR prof. S.A.Sarkisov) AMN SSSR, Moskva. Submitted December 25, 1963.

POPOVA, E.N.

Effect of partial decortication on the morphology of fibrous structures of the areolar tissue. Nauch. dokl. vys. shkoly; biol. nauki no.1:43-47 '60.
(MIRA 13:2)

1. Rekomendovana kafedroy gistologii i kafedroy anatomii i fiziologii cheloveka i zhiivotnykh Moskovskogo gosudarstvennogo pedagogicheskogo instituta im. V.I. Lenina.
(CEREBRAL CORTEX) (CONNECTIVE TISSUES)

17 (1)

AUTHOR:

Popova, E. N.

00000-000-000

TITLE:

On the Problem of the Neuronic Structure of the Cortical
Ending of the Optic Analyzer in White Rats (2 years)
neyronnoy stroynoy korbkovoye kontse zritel'nogo analizatora
beloy krysy)

PERIODICAL:

Doklady Akademii nauk SSSR, 1959, Vol 125, Pt 5,
pp 1130-1134 (USSR)

ABSTRACT:

This paper deals with the central part of the ending of the analyzer mentioned in the title, which has hitherto not been investigated. The investigation of the neuronal structure of the cerebral cortex of rats will considerably complete the knowledge obtained by the cytoarchitectonic method (Refs 2, 11-13). The author used the chart of V. N. Syvatukhina. She chose the central part of the optic cortex, the area occipitalis centralis (apparently a homologue of the field 17 of Brodmann). Young pubescent male rats, 4-10-month-old, in the case of which the growth of the neurons has already ceased, were used for the experiments (Ref 14). It is known that the visual power of white rats is weak (Refs 15, 17). The relative similitude of the structure of the optic cortex

Card 1/3

On the Problem of the Neuronic Structure of the
Cortical Ending of the Optic Analyzer in White Rats

307/30-125-5-13/61

corresponds here to its functional importance (Fig 1). The main mass of the neurons of the central part of the core of the optic analyzer is formed by pyramid-shaped neurons (Fig 2). Besides such neurons, there are many atypical neurons (Figs 10, 16) as well as in the case of other mammals. There are transitions between the typical pyramid-shaped and the atypical neurons (Figs 2:4, 5). The occurrence of these transitions indicates a less considerable differentiation of the neurons of the upper layer of the cortex of rats than is the case with higher animals. In the Laboratoriya neyrogistologii (Laboratory of Neurohistology) of the Institute mentioned in the Association this was confirmed by a conventional anatomical method. The differentiation of the neurons into individual types is more distinctly marked in the lower layer of the cortex. The author compares furthermore the structure of the optic cortex of rats with that of rabbits which have a different manner of living. There is a similarity with respect to the structure of the neurons as well as in cytoarchitecture. However, the optic cortex of rabbits is much wider since the upper layers are larger. The layers II,

Card 2/7

On the Problem of the Neuronic Structure of the
Cortical Ending of the Optic Analyzer in White Rats

SOV/20-125-5-48/61

though not divided into sublayers, is better developed than that of rats; there are more stellar neurons, which differ greatly by size and shape. This indicates apparently that the visual power of rabbits is better developed. The behavior of these two rodents confirms this assumption (Ref 1). Rabbits are possibly able to distinguish colors, which was proved by the method of conditioned reflexes, though only within a narrow range of the spectrum. Rats are not able to distinguish colors (Ref 17). These differences are assumed to be related to the surface of the optic cortices of rats and rabbits (Ref 2). There are 2 figures and 17 references, 10 of which are Soviet.

ASSOCIATION: Institut mozga Akademii meditsinskikh nauk SSSR (Institute of Cerebral Research of the Academy of Medical Sciences, USSR)

PRESENTED: December 20, 1958, by I. I. Shmal'gauzen, Academician

SUBMITTED: December 10, 1958
Card 3/3

POPOVA, E.N. (Moskva - 147, B.Rogozhskiy per., d.3/5, kv.38)

Some structural aspects of the cortical end of the visual and motor analyzers in white rats. Arkh.anat.,gist. i embr. 36 no.6:11-15 Je '59. (MIRA 12:9)

1. Institut mozga AMN SSSR (dir. - deystv.chlen AMN SSSR prof.S.A.Sarkisov).

(CEREBRAL CORTIX, anat. & histol.

cortical ends of visual & motor analyzers in white rats (Rus))

POPOVA, E.N.

Some data on the effect of eserine on the cerebral cortex of white rats. Report No.2: Changes in neurons and synapses of the rat cerebral cortex under the influence of the eserine. Biul. eksp. biol. i med. 53 no.1:107-112 Ja '62. (MIRA 15:3)

1. Iz laboratorii tsitoarkhitektoniki (zav. - prof. Ye.P. Kononova) Instituta mozga (dir. - prof. S.A. Sarkisov) AMN SSSR, Moskva. Predstavlena deystvitel'nyim chlenom AMN SSSR S.A. Sarkisovym.

(PHYSOSTIGMINE)
(CEREBRAL CORTES--INNERVATION)

POPOVA, E.V.

High production method for the oxycetylene cutting of pipe details. Nov.tekh.-ont.i spets.rab.v stroi. 21 no.7:20 J1 '59.
(MIRA 12:10)

1. Lyuberskiy zavod montazhnykh zagotovok.
(Gas welding and cutting) (Pipe cutting)

POPOVA, E. V., KRUGLIKOV, A. M., SHAL'NEVA, A. M., GIZACHEVA, V. M.,
TITROVA, A. I., ZAITSEV, A. A., POMEROVSKAYA, E. V., LYASHENKO, V. D.

"The sources of leptospirosis infection in nature (according to
the Stavropol' region materials)." p. 254

Desyatoye Soveshchaniye po parazitologicheskim problemam i
prirodnouchagovym boleznyam. 22-29 Oktyabrya 1959 g. (Tenth Conference
on Parasitological Problems and Diseases with Natural Foci 22-29
October 1959), Moscow-Leningrad, 1959, Academy of Medical Sciences
USSR and Academy of Sciences USSR, No. 1 254pp.

Inst. of Vaccines and Sera and Regional Sanitary-Epidemiological Station/Stavropol'

VYSOCHIN, V.A., inzh.; POPOVA, E.Ya., inzh.

Quantitative analysis of fatty acid mixtures by the chromatographic method on Russian made paper. Report No. 1. Masl.-zhir. prom. 27 no.9:21-24 S '61. (MIRA 14:11)

1. Tsentral'naya nauchno-issledovatel'skaya laboratoriya zhirovoy promyshlennosti Mosgorsovnarkhoza.
(Acids, Fatty--Analysis) (Paper chromatography)

USSR/Farm Animals. Swine.

Q-2

Abs Jour: Ref Zhur - Biol., No. 22, 1953, 101199

Author : Popova, F.G.

Inst : Penza Agricultural Institute

Title : The Structure of the Brachial Plexus and of Nerves Branching From It in Piglets.

Orig Pub: Sb. tr. Penzensk. s.-kh. in-ta, 1956, vyp. 1, 198-229

Abstract: Studies carried out on twelve 1-2-month-old piglets of the Large White breed showed that their brachial plexus (BP) is formed by ventral branches of the last 4 cervical nerves and of 1 thoracic nerve. BP consist of 2 rows of loops, a lateral (4 loops) row, and a medial (2 loops) row. BP nerves branch out from the loops not only craniocaudally, but also in layers which

Card 1/2

USSR/Farm Animals. Swine.

Q-2

Abs Jour: Ref Zhur - Biol., No. 22, 1958, 101199

APPROVED FOR RELEASE: 08/25/2000 CIA-RDP86-00513R001342420016-8"

forms 3 rows. Laterally situated nerves innervate deeper located muscles. A chart showing branchings of dorsal BP nerve branches is supplied, which also shows the distribution of cutaneous nerves. The spinal cord nerves are connected with the truncus sympathicus as they enter BP. The 7th and 8th cervical nerves are also supplementarily connected with the truncus sympathicus before it enters the stellate node. The 1st thoracic nerve is connected with the truncus sympathicus, as well.

Card 2/2

AGEYEVA, A.P.; AKSENOVA-CHERKASOVA, A.S., aspiranka; VELIKANOV, L.N., bibliotekar'; GAVVA, F.M.; GIRENKO, P.D., Geroy Sots. truda; GUBANOV, M.M., pensioner; GUS'KOVA, T.K., nauchnyy sotr.; DAVYDOV, A.G., prepodavatel'; DANILEVSKIY, V.V., prof., dvazhdy laureat Stalinskoy premii; DOVGOPOL, V.I., laureat Stalinskoy premii; YELOKHIN, M.F.; YERMAKOV, A.D.; IVANOV, V.G., prepodavatel'; KOVALEVICH, V.K.; KOVALEVSKAYA, Ye.S., zhurnalistka; PANKRATOV, A.G.; POPOVA, F.M.; URYASHOV, A.V.; FEDORIN, I.M., kand. ist. nauk; FILIPPOV, F.R.; CHUMAKOV, N.P.; SHEPTAYEV, K.T., zhurnalist; VAS'KOVSKIY, O.A., kand. ist. nauk, retsenzent; KULAGINA, G.A., kand. ist. nauk, retsenzent; GORCHAKOVSKIY, P.L., prof., doktor biol. nauk, retsenzent; BAKHMUTOVA, V., red.; SAKNYN', Yu., tekhn. red.

[Nizhniy Tagil]Nizhniy Tagil. Sverdlovsk, Sverdlovskoe knizhnoe izd-vo, 1961. 294 p. (MIRA 16:1)

1. Nizhne-Tagil'skiy krayevedcheskiy muzey (for Ageyeva, Gus'kova).
 2. Zaveduyushchiy gorodskim otделom narodnogo zdravookhraneniya, Nizhniy Tagil (for Velikanov).
 3. Zaveduyushchiy gorodskim sel'skokhozyaystvennym otделom goroda Nizhniy Tagil (for Gavva).
 4. Nachal'nik upravleniya stroitel'stvom Sverdlovskogo sovnarkhoza (for Girenko).
 5. Deystvitel'nyy chlen Akademii nauk Ukr. SSR, Leningradskiy politekhnicheskii institut (for Danilevskiy).
- (Continued on next card)

KONDRAT'YEV, G.G.; POPOVA, F.M.

Organization of the prevention of mycoses of the foot under
industrial conditions. Vest.derm.i ven. 34 no.8:45-48 '60.
(MIRA 13:11)

1. Iz kafedry kozhnykh i venericheskikh bolezney (zav. - prof.
G.G. Kondrat'yev) Omskogo meditsinskogo instituta imeni M.I.
Kalinina.

(MEDICAL MYCOLOGY) (FOOT-DISEASES)

