15-57-4-5126

Translation from: Referativnyy zhurnal, Geologiya, 1957, Nr 4, p 150 (USSR)

AUTHORS: Andreyev, P. F., Polyakova, N. N.

TITLE: Coefficients of Heat Expansion of Petroleums from the Groznyy Region (Koeffitsiyenty teplovogo rasshireniya neftey Groznenskogo rayona)

PERIODICAL: Tr. Vses. neft. n.-i. geologorazved. in-ta, 1956, Nr 95, pp 422-440

ABSTRACT: Bibliographic entry

Card 1/1

AYRAPET'YANTS, E.Sh., prof.; POLYAKOVA, N.N.

Some regularities of hysteriosis in the spinal cord. Nerv. sist. no.4:61-64 '63 (MIRA 18:1)

1. Fiziologicheskiy institut Leningradskogo universiteta.

Abs Jour : Ref Zhur - Biol., No 14, 1958, No 65819

Author : Polyakova N.N.
Inst : -
Title : The Change in Interoceptive Reflexes Associated with an Increase in the Content of Ammonia in the Blood

Orig Pub : Byul. eksperim. biol. i meditsiny, 1956, 41, No 2, 20-23

Abstract : A study was made of the effect of injecting ammonium salts into the blood upon the course of the basic interoceptive reflexes in cats (under urethane anesthesia) arising in an intestinal loop and urinary bladder and exerting an effect upon blood pressure and respiration. The stimulus employed was inflation of the organ, as well as injection of acetylcholine ($1x10^{-5}$) or KCl solution (1 ml of 0.1%) into the artery of the organ being perfused. Increasing the content of ammonia in the blood caused a reduction or the complete disappearance of interoceptor reflexes. Isolation of the portion of the

Card : 1/2

POLYAKOVA, N.N.

Mechanism of hysteriosis. Nerv. sist. no.5:59-63 '64. (MIRA 18:3)

1. Laboratoriya fiziologii vysshey nervnoy devatel'nosti Leningradskogo gosudarstvennogo universiteta.

Polyakova, N.N.

POLYAKOVA, N.N.

Changes in exteroceptive and interoceptive conditioned reflexes following exclusion of the barrier function of the liver. Fiziol. zhur. 44 no.1:37-44 Ja '58 (MIRA 11:3)

1. Laboratoriya fiziologii vysshey nervnoy deyatel'nosti Fiziologicheskogo instituta im. A.A.Ukhtomskogo Leningradskogo gosudarstvennogo universiteta im. A.A.Zhdanova.

(REFLEX, CONDITIONED,
eff. of Eck's fistula in animals (Rus)
(VEINS, PORTAL SYSTEM, physiology,
eff. of Eck's fistula on conditioned reflex funct. in animals (Rus)
(VENAE CAVAE, physiology,
same)

POLYAKOVA, N.N.

Mechanism of hysteriosis. Report No. 1: Peculiarities in the development of hysteriosis following stimulation of various reflex arcs. Nerv. sist. no. 2:82-88 '60. (MIRA 14:4)
(NERVOUS SYSTEM)

FOLY-KOV, N.N.

Mechanism of hysterionis. Report No.2: The development of hysteriosis following a transverse section of the spinal cord. Nerv. sist. (Leningrad) 2 n.3:69-73 '62. (MIRA 17:7)

1. Laboratoriya fiziologii vysshey nervnoy deyatel'nosti Fiziologicheskogo instituta imeni Ukhtomskogo Leningradskogo gosudarstvennogo universiteta.

POLYAKOVA, N.V.

Rate of penetration of developing substance in the emulsion layer of thick-layer plates. / S. G. Bogdanov and N. V. Polyakova. *Zhur. Nauch. i Priklad. Fot. i Kinematografii* 1, 235-8(1956).—Plates exposed through a graphite step-wedge placed either on the emulsion side or on the glass side were developed in a soln. 0.2*M* in Na_2SO_3, 0.5*M* in the buffer Na_2CO_3 + $NaHCO_3$, 0.008*M* in KBr, and 0.02*M* in one of the following developing substances: amidol, Metol, hydroquinone, *p*-aminophenol, and pyrogallol. Amidol does not penetrate more rapidly than do the other developers used. Rate of penetration depends on min. concn. of developing substance needed to effect development at the depth in question (threshold concn.). This concn. depends on the pH at which the given developer starts its action; the lower the pH the faster the penetration.

V. S. Mihajlov

BOGDANOV, S.G.; POLYAKOVA, N.I.

Penetration speed of the alkali of developer into the emulsion layer of thick layer plates. Zhur. nauch. i prikl. fot. i kin. 2 no.3:187-190 My-Je '57. (MLRA 10:6)

1. Gosudarstvennyy opticheskiy institut im. S.I. Vavilova.
(Photography--Developing and developers)

POLYAKOVA, N.N.

Sensitivity of chemoreceptors of certain organs to ammonia. Fiziol. zhur. 45 no.12:1446-1453 D '59. (MIRA 13:4)

1. From the Laboratory of Higher Nervous Activity, A.A. Ukhtomski Institute, Leningrad University, Leningrad.
(AMMONIUM CHLORIDE pharmacol.)
(BLOOD PRESSURE pharmacol.)
(RESPIRATION pharmacol.)

POLYAKOVA, N. N.

3
4E2d

~~771.033.41:532.72~~

460-

The Velocity of Diffusion of Developing Agents into the Emulsion Layers of Thick Plates. S. G. BOGDANOV and N. N. POLYAKOVA. *Zh. nauch. prikl. Fotogr. Kinematogr.*, 1, Nov.-Dec., 1956, 425-428 (in Russian).—Given the correct pH for development in the depth of a photographic emulsion layer, development should begin directly the concentration of the developing agent reaches a threshold value depending on the redox potential of the agent. If, then, the layer is already brought to this pH before development, all developing agents should begin development equally quickly at the bottom of a thick layer, provided that the developer solutions are equally energetic and that the developing agents diffuse equally rapidly. Experiments are described which confirm this for metol, p-aminophenol, amidol, hydroquinone and pyrogallol

MT

Polyakova, N.N.

Changes in the interoceptive reflexes at an increased ammonia level in the blood. N. N. Polyakova (A. A. Zhdanov State Univ., Leningrad). *Bull. Exptl. Biol. and Med.* 41, 117-20(1956)(English translation); *Byull. Eksptl. Biol. i Med.* 41, No. 2, 20-3(1956).—By using organ dilation, acetylcholine, or KCl as stimuli and detg. the effects on the blood pressure and respiration in cats, it was shown that introduction of NH_4Cl either into the general blood stream or into organs isolated from the general blood stream caused a decrease or a complete suppression of the unconditioned reflex. Anita D. Russo

ANDREYEV, P.F.; POLYAKOVA, N.N.

Coefficient of heat expansion of oils from the Groznyy region. Trudy VNIGRI no.95:422-440 '56. (MLRA 9:12)

(Expansion (Heat))
(Groznyy Province--Petroleum--Analysis)

USSR/Medicine - Physiology FD-2709

Card 1/1 Pub. 33-18/28

Author : Polyakova, N. N.

Title : A simple method for recording defensive motor reflexes in dogs

Periodical : Fiziol. zhur. 41, 103-104, Jan-Feb 1955

Abstract : Describes a method for recording defensive motor reflexes (movements of the extremities) of a dog in which the extremity remains free and the mobility of the dog is unrestricted except by a strap (no mechanical linkage). States the laboratory (see below) is directed by E. Sh. Ayrapet'yanets. Diagram; graphs.

Institution : Laboratory of Physiology of Higher Nervous Activity of the Physiology Institute imeni A. A. Ukhtomskiy of the Leningrad State University imeni A. A. Zhdanov

Submitted : May 31, 1954

POLYAKOVA, N.N.

Modification of interoceptive reflexes consecutive to an increase in blood ammonia. Biul. eksp. biol i med. 41 no.2:20-23 F '56 (MLRA 9:6)

1. Iz laboratorii fiziologii vysshey nervnoy deyatel'nosti (zav.-doktor biologicheskikh nauk E.Sh. Airapet'yants) Fiziologicheskogo instituta imeni A.A. Ukhtomskogo Leningradskogo gasudarstvennogo universiteta imeniy A.A. Zhdanova. Predstavlena akademikom K.M. Bykovym.

(BLOOD
ammonia, eff. on blood pressure responses to intestinal stimulation (Rus))
(AMMONIA, in blood,
eff. on blood pressure responses to intestinal stimulation (Rus))
(BLOOD PRESSURE, physiology,
eff. of intestinal stimulation, relation of responses to blood ammonia (Rus))
(INTESTINES, physiology,
eff. of stimulation on blood pressure, relation of responses to blood ammonia (Rus))

POLYAKOVA, N. N.

AID P - 3494

Subject : USSR/Chemistry

Card 1/1 Pub. 152 - 9/21

Authors : Baklagin, A. I. and N. N. Polyakova

Title : Study of bitumens by means of molecular distillation

Periodical : Zhur. prikl. khim., 28, 622-628, 1955

Abstract : A drawing and description of a somewhat modified Hickman pot still is given. Molecular distillation was carried out at 120-170, 170-220, 220-270, 270-320°C. Petroleum residues of varied origin were distilled, and the method seems to be quite satisfactory for investigating bitumens. One drawing, 5 tables, 2 references, none Russian.

Institution : None

Submitted : D 31, 1953

IVANTSOVA, V.V.

ANDREYEV, P.F.; IVANTSOVA, V.V.; POLYAKOVA, N.N.; SILINA, N.P.

Properties and structure of the dispersed organic matter of sedimentray rock. Trudy VNIGRI no.83:171-187 '55.
(Geochemistry) (MLRA 8:10)

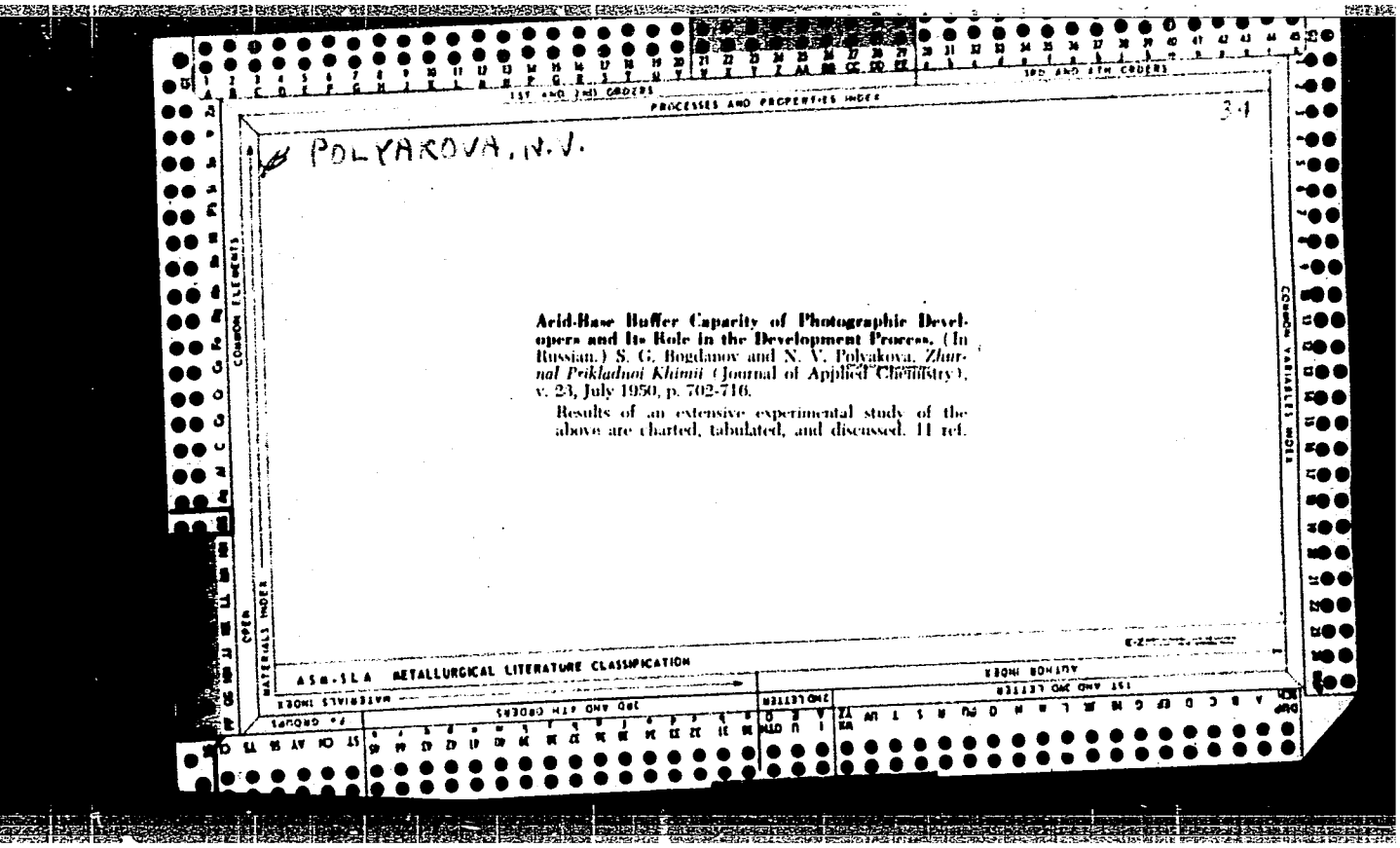
ANDREYEV,P.F.; MASAGUTOVA,D.A.; POLYAKOVA,N.N.; CHERNYSHEVA,A.S.

Some regularities of the occurrence of organic matter in rocks of the middle Miocene in northeastern Caucasus. Trudy VNIGRI no.83:231-273 '55. (MLRA 8:10)
(Caucasus, Northern--Geochemistry) (Caucasus, Northern--Geology, Stratigraphic)

POLYAKOVA, N.V., redaktor; SERGEYEVA, N.A., redaktor; MANINA, M.P., tekhnicheskiy redaktor

[Geophysical prospecting of ore deposits] Geofizicheskaia razvedka rudnykh mestorozhdenii. Moskva, Gos. izd-vo geologicheskoy lit-ry, 1953. 137 p. [Microfilm] (MLRA 7:10)

1. Moscow. Vsesoyuznyy nauchno-issledovatel'skiy institut razvedochnoy geofiziki.
(Prospecting--Geophysical methods)



PROCESSES AND PROPERTIES INDEX

3-1

POLYAKOVA, N. V.

Acid-Base Buffer Capacity of Photographic Developers and Its Role in the Development Process. (In Russian.) S. G. Bogdanov and N. V. Polyakova. *Zhurnal Prikladnoi Khimii* (Journal of Applied Chemistry), v. 23, July 1950, p. 702-716.

Results of an extensive experimental study of the above are charted, tabulated, and discussed. 11 ref.

ASM-SLA METALLURGICAL LITERATURE CLASSIFICATION

CA

Acid-base buffer capacity of photographic developers and its role in the development process. S. G. Bogdanov and N. V. Polyakova. *J. Applied Chem. U.S.S.R.* 23, 741-50(1950)(Engl. translation).—Typical photographic developer formulas have been examd. and their buffer capacity recorded. At high development rates, the alkali in the developer system is unable to diffuse rapidly enough into the emulsion to maintain the original local pH. Therefore, buffer action is necessary if local alkalinity is to be kept at the desired level. Developer activity is thereby maintained at a higher level. Unbuffered developers yield a higher film sensitivity than buffered developers if developed to the same contrast level. Leveling action of a developer is more pronounced at lower buffer capacities. E. J. Pagé

P.A.

Processing: Development, Fixation and After-Treatment

A70 77.023.41

Buffering Power of Photographic Developers. Its Importance in Development. S. G. BOGDANOVA and N. V. PODYAKOVA. *Zh. prikl. Khimii*, 1950, 23, 702-716; *S. et I.P.*, 1951, 22, 345-346. Buffering power, β, is defined by the expression $\Delta B/\Delta pH$, where B is in gram molecules per litre of a base, or strong acid, required to produce a change of pH. This is exemplified with two metol-caustic soda developers, one with, and one without, a borax-boric acid buffer. Sensitometric strips were developed simultaneously in each of these developers, under identical conditions, and it was ascertained that the pH was unchanged after development. In a series of experiments with varying development times it was shown that for equal development times gamma is always less in the unbuffered developer and is a function of log β. The low contrast of fine grain developers is attributed to their poor buffering power. The loss of energy of unbuffered developers is more marked in the absence of agitation. A.J.L.

POLYAKOVA, N.V.

Photo Chem

GA Significance of buffering of developer for development process. S. G. Bogdanov and N. V. Polyakova. *Uspekhi Nauch. Fot., Akad. Nauk S.S.S.R., Otdel. Khim. Nauk* 3, 204–11(1955).—Development rate depends on acid-base buffering capacity. For developers with low capacity, the leveling of development is characteristic. In developers with low buffer capacity the diffusion rate of the alkali in the emulsion is too slow to maintain a const. pH.
Eurilia Mayerle

(1)

BOGDANOV, S.G.; POLYAKOVA, N.V.

Role of the buffer capacity of the developing solution in the development process. Usp.nauch.fot. no.4:202-209 '55.
(MLRA 9:4)
(Photography--Developing and developers)(Buffer action)

POLYAKOVA, N. V., and BOGDANOV, S. G.

"The Influence of the Buffer Capacity of the Developer on the Magnitude of the Light Sensitivity Arising in Development," paper given at the International Conference on Scientific Photography, Cologne, 24-27 Sep 1956.

E-3,068,138

POLYAKOVA, N.V.

POLYAKOVA, N.V.

3

5641* (Russian.) The Rate at Which Agents Penetrate the Emulsion Layer on Thickly Coated Film. Skorost' pronikno-venila proiavliaiushchikh veshchestva v emul'sionnyi sloi tolstosloinykh plastinok. S. G. Bogdanov and N. V. Polinkova. *Zhurnal Nauchnoi i Prikladnoi Fotografii i Kinematografii*, v. 1, Nov.-Dec. 1956, p. 425-428.

Problems connected with the developing of films exposed to the action of ionizing particles. Effects of the chemical composition of the developing agent, its concentration, and pH on the rate of penetration were studied.

POLYAKOVA, N.V.

Compensating developers in the form of dry powders. Zhur. nauch. i prikl. fot. i kin. 8 no.3:206-209 My-Je '63. (MIRA 16:6)

1. Gosudarstvennyy opticheskiy institut imeni S.I. Vavilova.
(Photography—Developing and developers)

MARKOV, I.P.; MARKOV, N.N.; POLYAKOVA, N.V.; YURIN, B.A., red.; ANDREYEVA, L.S., tekhn. red.

[Textile workers trade union; a brief historical sketch] Profsoiuz tekstil'shchikov; kratkii istoricheskii ocherk. [By] I.P.Markov, i dr. Moskva, Profizdat, 1963. 238 p. (MIRA 16:6)

(Textile workers) (Trade unions)

POLYAKOVA, N.V.

Possibilities of isolating funnel facies and diatremes in the Russian Platform by means of magnetic surveying. Inform.sbor. VSEGEI no.45:147-150 '61. (MIRA 14:12)
(Russian Platform--Magnetic anomalies)

POLYAKOVA, N.V.

Division of opaque minerals in thin sections into magnetic and nonmagnetic. Zap.Vses.min.ob-va 90 no.3:338-340 '61.
(MIRA 14:10)

(Minerals--Magnetic properties)

DROBIZHEV, V.Z.; KUKUSHKIN, Yu.S.; PAPIN, L.M.; POLYAKOVA, N.V., red.; BEYLINA, TS.L., tekhn.red.

[V.I. Lenin as the leader of our great construction program; collected reminiscences about V.I.Lenin's work in the field of the national economy] V.I.Lenin vo glave velikogo stroitel'stva; sbornik vospominanii o deiatel'nosti V.I.Lenina na khoziaistvennom fronte. Moskva, Gos.izd-vo polit.lit-ry, 1960. 324 p.
(MIRA 13:4)

(Lenin, Vladimir Il'ich, 1870-1924)
(Russia--Economic conditions)

Polyakova, N. V.

Rate of penetration of developer alkali into the emulsion layer of thick-layered plates. S. G. Bogadnov and N. V. Polyakova. *Zhur. Nauch. i Prikład. Fot. i Kinematog.* 2, 187–90(1957); cf. Gauvin, *C.A.* 45, 3269a.—The ds. were measured of plates having emulsions 0.1–0.2 mm. thick, exposed either directly or through the glass and developed in a Metol-sulfite-carbonate developer in which the only cation present was Li, Na, or K. Data are tabulated. The rate of penetration of alkali carbonate into the emulsion is proportional to the diffusion coeff. of the cation.

J. W. Loweberg, Jr.

ANTONOV, I.S.; LISITSYN, V.M.; STASINEVICH, D.S.; TSEKHANSKIY, Yu.V.; POLYAKOVA, N.Ya.

Method for the production of methyl borates. Khim. prom. 40 no.9: 665-667 S '64. (MIRA 17:11)

STASINEVICH, D.S.; POLYAKOVA, N.Ya.

System $H_3BO_3 + 3CH_3OH \rightleftarrows B(OCH_3)_3 + 3H_2O$. Zhur. neorg. khim. 10 no.9:2170-2174 S '65. (MIRA 18:10)

L 16183-65 EWT(m)/EPF(c)/EPR/EWP(j)/T/EWA(h) Pc-4/Pr-4/Ps-4/Peb RPL
ACCESSION NR: AP4045843 WW/RM S/0064/64/000/009/0665/0667

AUTHOR: Antonov, I. S.; Lisitsy*n, V. M.; Stasinevich, D. S.; Tsekhanskiy, Yu. V.; Polyakova, N. Ya.

TITLE: A method of obtaining methylborate

SOURCE: Khimicheskaya promy*shlennost', no. 9, 1964, 665-667

TOPIC TAGS: methylborate, methylborate manufacture, methylborate continuous synthesis, azeotropic mixture, methylborate extraction, mineral oil, methylborate yield

ABSTRACT: A new procedure, applicable to manufacturing conditions, for obtaining methyl borate is described. The arrangement of the equipment is figured. Synthesis is obtained under atmospheric pressure from boiling methanol under continuous addition of a 19-20% boric acid solution in methanol. Separation of the azeotropic mixture starts at 54C; this contains about 75% methylborate. Methylborate is isolated from the azeotropic mixture by extraction with dry mineral oil

Card 1/2

L 16183-65
ACCESSION NR: AP4045843

and evaporated at 200C. Continuous synthesis requires continuous feeding, separation of the azeotropic mixture and addition of warm steam, the latter being regulated automatically upon decrease of pressure in the synthesis column. The production of 1 ton methylborate required 0. 62 tons boric acid and 1 ton methanol (theoretical requirements 0. 594 and 0. 927 tons resp.). Orig. art. has: 3 figures

ASSOCIATION: None

SUBMITTED: 00 ENCL: 00

SUB CODE: GC, MT, IC NO REF SOV: 000 OTHER: 006

Card 2/2

POLYAKOVA, V.E.

Hydrogen exchange current and hydrogen overvoltage on smooth platinum. V. L. Khrushch and N. E. Polyakova. Zhur. Prikład. Khim. (J. Applied Chem.) 22, 801-8(1949).—With Frumkin's relation (C_1, 27, 2385) $\Delta w = \psi_1 - \psi_2$ between the chem. potential difference Δw of H^+ ions in the double layer and in the bulk soln., and the potential ψ_1 (relative to the soln.) at the ion diam. distance from the electrode surface, and Frumkin's concept of the exchange current i_0 defined as the current flowing at equil. potential, in a double layer of small diffuseness and in the absence of sp. adsorption, at the H^+ ion activity a_H, the relation between the overvoltage η and the current intensity i becomes $\eta = (\beta/\alpha)\psi_1 = b \log i/i_0$, where α is a const., $\beta = 1 - \alpha$, and $b = 2.3\ RT/\alpha F$. In strongly acid solns., ψ_1 is negligible, and the equation goes over into Tafel's formula, with Tafel's const. $a = b \log i_0 a_H$, where the exchange current i_0 at unit a_H is $i_0 = i/a_H^{\gamma}$. It follows that the ratio of the exchange currents in solns. of different a_H is equal to the ratio of the a_H to the power β. This conclusion was confirmed by measurements of η as a function of $\log i$ at 25° in H_2SO_4 1.0, 2.0, and 4.0 N. Perfectly straight lines are obtained if the Pt electrode has been preliminarily satd. with H_2 by cathodic polarization over 7-12 days, and the polarization is not interrupted in the course of the measurement. For the 3 above concns., the values of $10^3\alpha$, calcd. from the expt. plots by $\log i_0 = \log i - (\alpha/\beta)\eta$, are 0.117, 0.103, and 0.224 amp./sq. cm.; and the const. $\beta \sim 0.5$, in good agreement with $\alpha \sim 0.5$ calcd. from b. The conclusion that, at const. i, the overvoltage should be a linear function of $\log a_H$, of the form $\eta = \text{const.} - \beta \log a_H$, was confirmed for $i = 10^{-1}$, 10^{-2}, and 10^{-3} amps./sq. cm., giving uniformly for the slope $-\beta = 0.054$, in agreement with the theoretical 0.015. At const. overvoltage, i is proportional to $\sqrt{a_H}$, which was confirmed. Owing to the linearity between $\log i$ (activity coeff.) and $1/T$ for H_2SO_4, the temp. dependence of i_0 is of the form $\log i_0 = M - (B/T)$ (291.6 – 318°K.), and, at const. i and (H^+), $(\partial\eta/\partial T)_i = (2.3\ R/\alpha F) \log i - (2.3\ R/\alpha F)M = \text{const.}$, confirmed by expt. N. Thon

Alex Electrochem, Leningrad U.

POLYAKOVA, N. YE.

POLYAKOVA, N. YE.--"System of Pre-Sowing Treatment of the Soil for Early Spring Grain Crops in the Crop Rotation System of Northwestern Rayons of the USSR." (Dissertations For Degrees In Science and Engineering Defended at USSR Higher Educational Institutions)(29) Min Higher Education USSR, Leningrad Agricultural Inst, Leningrad, 1955

SO: Knizhnaya Letopis' No 29, 16 July 1955

* For the Degree of Candidate in Agricultural Sciences

POLYAKOVA, O.A., kand.veterinarnykh nauk

Use of the fluorescent method of analysis in microbiology. Trudy VIEV 22:142-163 '59. (MIRA 13:10)
(Fluorescence microscopy)

POLYAKOVA, O.A., kand.veterinarnykh nauk

Fluorescent sera and their use in microbiology. Trudy VIEV 26:62-74 '62. (MIRA 16:2)

1. Laboratoriya mikrobiologii i immuniteta Vsesoyuznogo instituta eksperimental'noy veterinarii.
(Serum diagnosis)

POLYAKOVA, O.A., kand.veter.nauk

Use of the fluorescence serologic method for identifying Vibrio fetus. Veterinariia 42 no.11:99-101 N '65.
(MIRA 19:1)

1. Vsesoyuznyy institut eksperimental'noy veterinarii.

L 42183-66 EWT(1)/T JK

ACC NR: AP6005021 (A) SOURCE CODE: UR/0310/65/000/011/0099/0101

AUTHOR: Polyakova, O. A. (Candidate of veterinary sciences)

ORG: All-Union Institute of Experimental Veterinary Medicine (Vsesoyuznyy institut eksperimental'noy veterinarii)

TITLE: The application of the luminescent-serological method in the identification of vibrio fetus

SOURCE: Veterinariya, no. 11, 1965, 99-101

TOPIC TAGS: veterinary medicine, bacterial disease, serum, fluorescence

ABSTRACT: The use of fluorescent antibodies to diagnose vibrio abortion in cattle and sheep was proven to be a less laborious, more rapid (1½--2 hours), and reliable method. This method also provides possibilities of testing contaminated material for alien microflora up to 12 days under all temperature conditions and of identifying dissociated cultures. Cultures of Vibrio fetus were grouped into two types according to morphological and biochemical properties, while saprophyte vibrio was tested as belonging to a different serological group. On this basis highly active specific fluorescent serums (containing isothiocyanate of fluorescein) were prepared for both serum types of V. fetus by using globulin fractions of serums of V. fetus and V. bubulus obtained by hyperimmunization of rabbits with live typed antigen.

UDC: 619:616.981.31-078

Card 1/2

Card 2/2

Abs Jour : Ref Zhur - Biol., No 2, 1958, No 5258

Author : Polyakova, O.A.
Inst : Not given
Title : Fluorescence Microscopy in Diagnosing Tuberculosis and Paratuberculosis.

Orig Pub : Veterinariya, 1957, No 6, 62-66

Abstract : No abstract

Card : 1/1

POLYAKOVA, O.A., kandidat veterinarnykh nauk.

Fluorescence microscopy in the diagnosis of tuberculosis and paratuberculosis. Veterinariia 34 no.6:62-66 Je '57. (MLRA 10:7)

1. Vsesoyuznyy institut eksperimental'noy veterinarii.
(Microscopy) (Tuberculosis) (Johne's disease)

POLYAKOVA, O. A.

"Infectious laryngotracheitis of poultry"
Moscow, Sel'khozgiz, 1951. 56 pages with illustrations.
SO: Vet., May 1952, Unclassified.

The author set as his goal to facilitate the establishment of the diagnosis of infectious laryngotracheitis on the part of the workers of veterinary bacteriological laboratories, and to assist veterinary specialists with the organization of the measures agaisnt it.

POLYAKOVA, O.A.

AGAPOV, S.I.; FOMINA, A.Ya.; ZHAK, R.M.; POLYAKOVA, O.A.

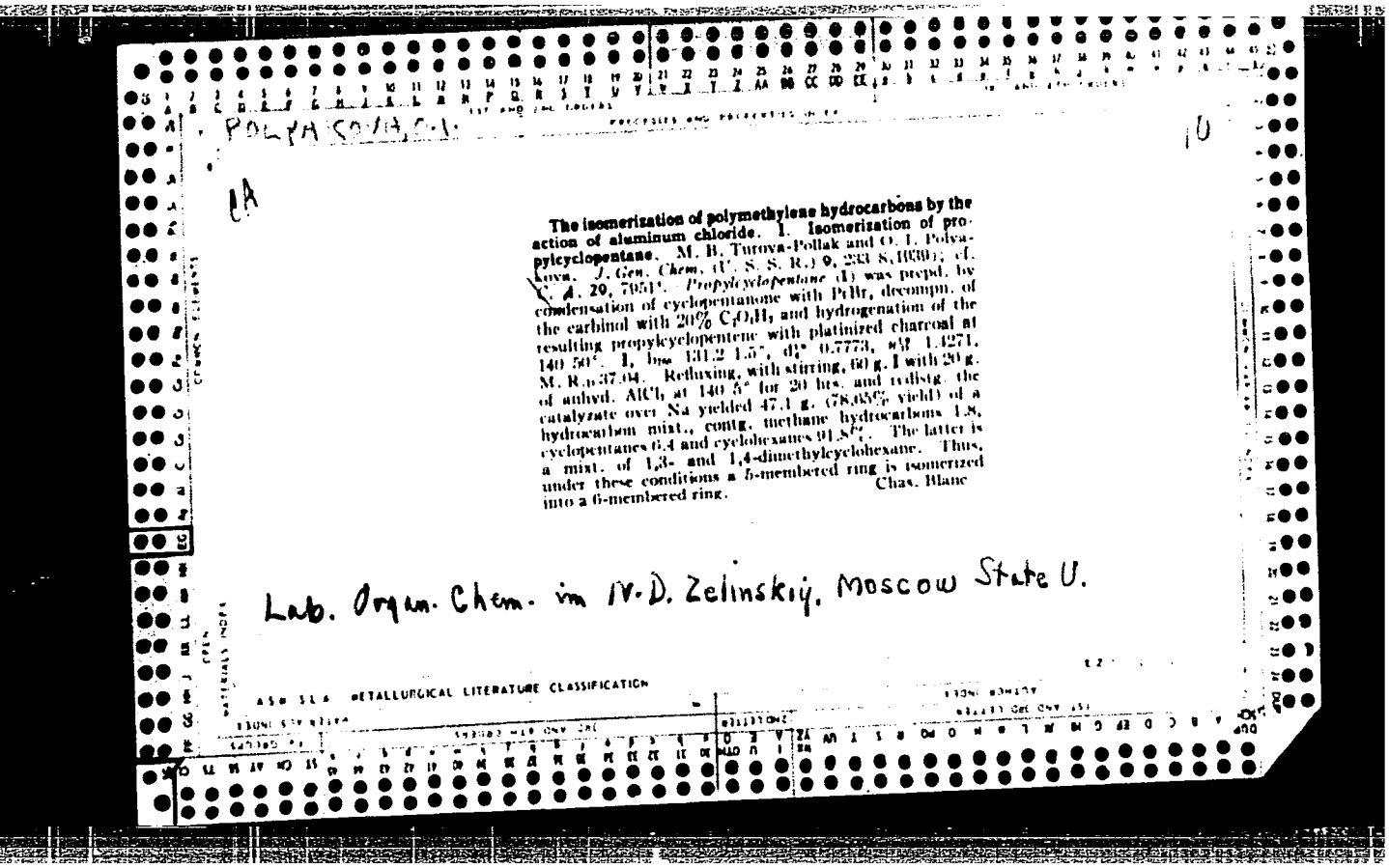
Results of field tests of virus-vaccine against Newcastle disease in poultry. Veterinariia 31 no.2:26-28 F '54. (MLRA 7:2)

1. Vsesoyuznyy institut eksperimental'noy veterinarii.
(Poultry--Diseases)

POLYAKOVA, O. I., TUROVA-POLYAK, M.B.

"Isomerization of Polymethylenic Hydrocarbons Under the Influence of Aluminum Chloride -- I. Isomerization of Propylcyclopentane," Zhur. Obshch. Khim., 9, No. 3, 1939. Laboratory of Organic Chemistry imeni Academician N. D. Zelinskiy, Moscow State University. Received 31 May 1938.

Report U-1517, 22 Oct 1951



POLYA SOVIET-1

10

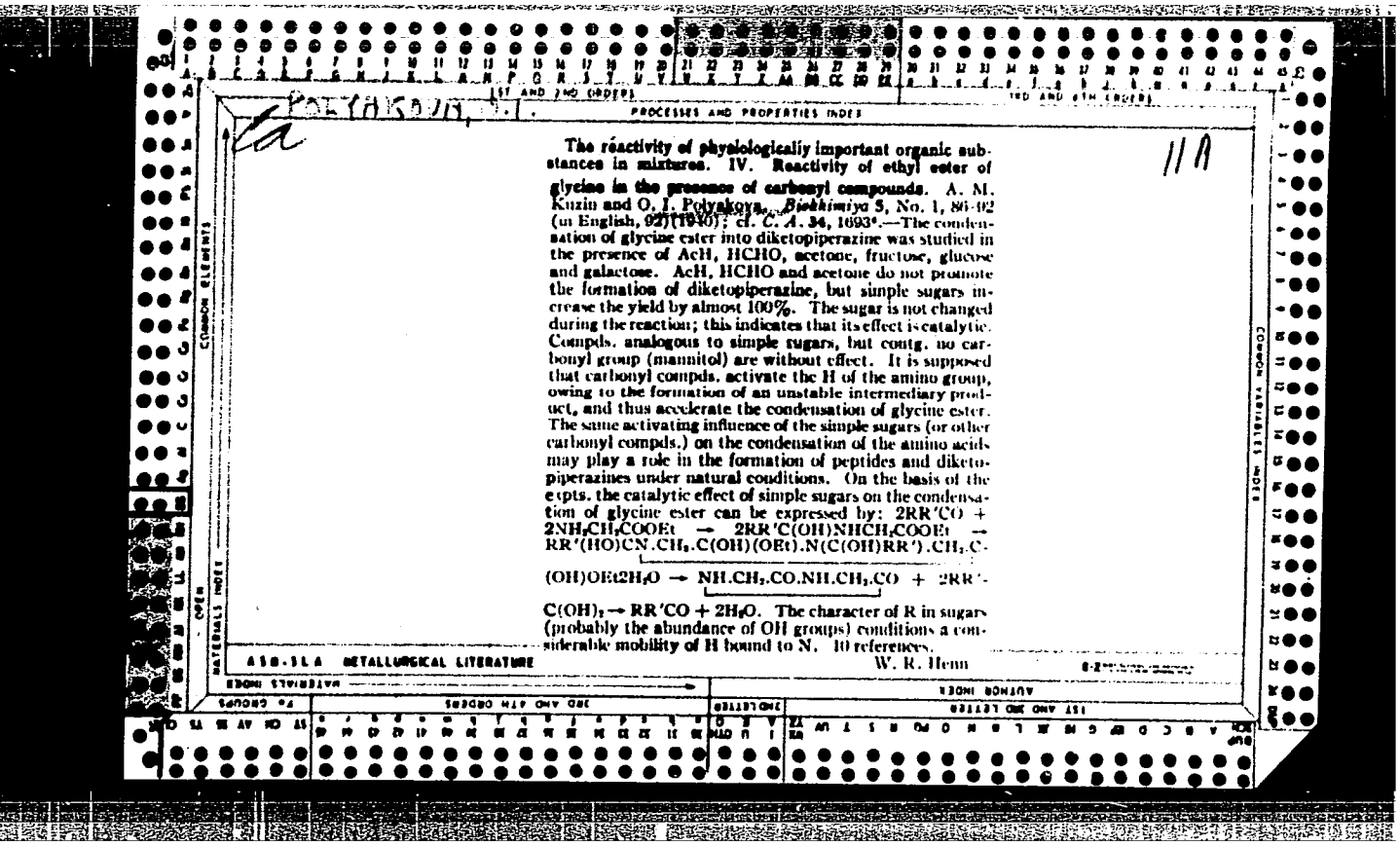
CA

The isomerization of polymethylene hydrocarbons by the action of aluminum chloride. I. Isomerization of propylcyclopentane. M. B. Turova-Polak and O. L. Polyanova. *J. Gen. Chem.* (U. S. S. R.) 9, 233-8 (1939); cf. *C. A.* 29, 7051⁸. *Propylcyclopentane* (I) was prepd. by condensation of cyclopentanone with PrBr, decompn. of the carbinol with 20% $C_6O_4H_2$ and hydrogenation of the resulting propylcyclopentene with platinized charcoal at 140-50°. I, bp 131.2-1.5°, d_4^{20} 0.7773, n_D^{20} 1.4271, M. R$_D$ 37.04. Refluxing, with stirring, 60 g. I with 20 g. of anhyd. $AlCl_3$ at 140-5° for 20 hrs. and redistg. the catalyzate over Na yielded 47.1 g. (78.05% yield) of a hydrocarbon mixt., contg. methane hydrocarbons 1.8, cyclopentanes 6.4 and cyclohexanes 91.8%. The latter is a mixt. of 1,3- and 1,4-dimethylcyclohexane. Thus, under these conditions a 5-membered ring is isomerized into a 6-membered ring.

Chas. Blanc

Lab. Organ. Chem. im N. D. Zelinskiy, Moscow State U.

ASM SLA METALLURGICAL LITERATURE CLASSIFICATION



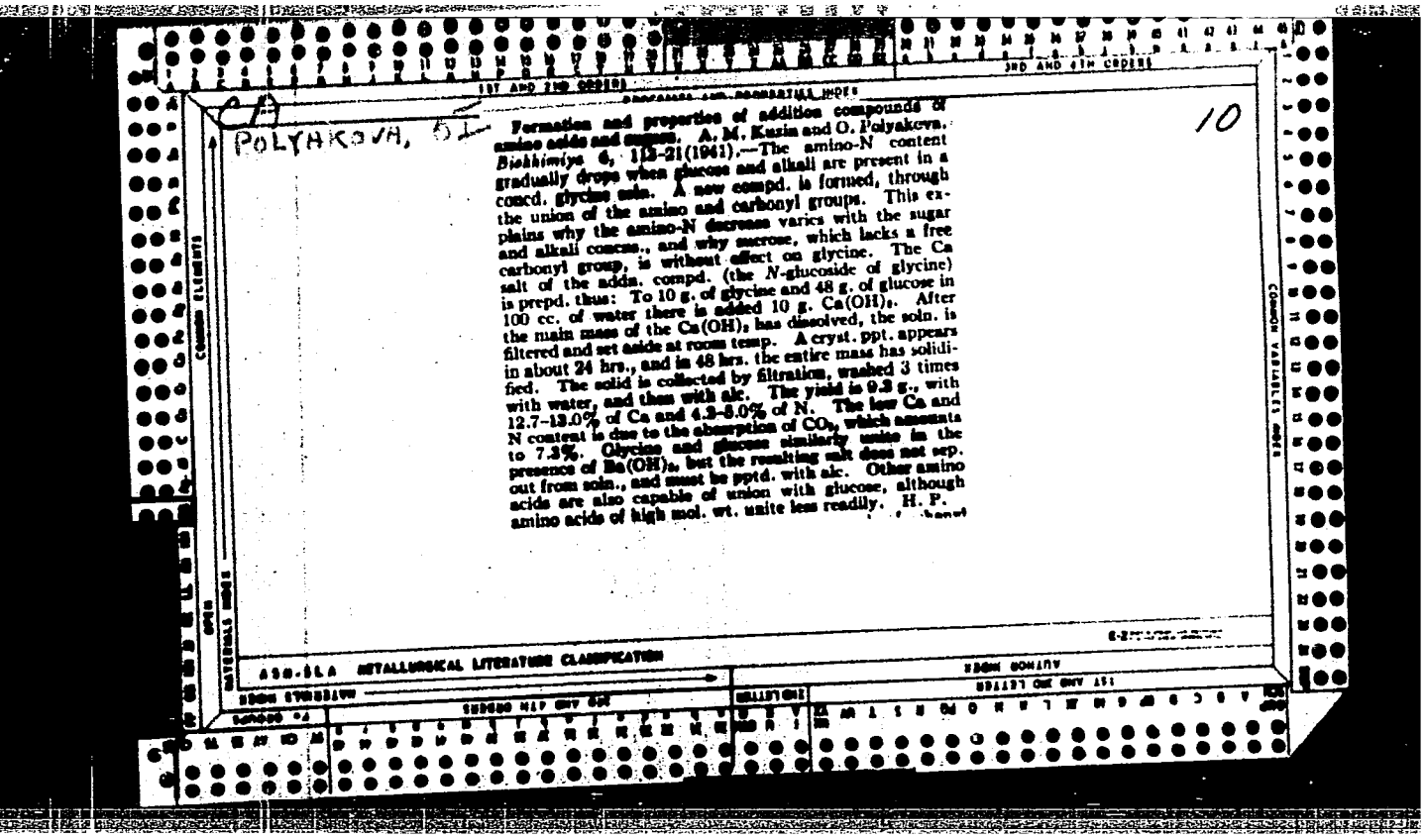
POLYAKOVA, O. I.

PROCESSES AND PROPERTIES INDEX

IIA

The reactivity of physiologically important organic substances in mixtures. IV. Reactivity of ethyl ester of glycine in the presence of carbonyl compounds. A. M. Kuzin and O. I. Polyakova, *Biokhimiya* 5, No. 1, 86-92 (in English, 92) (1940); cf. *C. A.* 34, 1693⁸.—The condensation of glycine ester into diketopiperazine was studied in the presence of AcH, HCHO, acetone, fructose, glucose and galactose. AcH, HCHO and acetone do not promote the formation of diketopiperazine, but simple sugars increase the yield by almost 100%. The sugar is not changed during the reaction; this indicates that its effect is catalytic. Compds. analogous to simple sugars, but contg. no carbonyl group (mannitol) are without effect. It is supposed that carbonyl compds. activate the H of the amino group, owing to the formation of an unstable intermediary product, and thus accelerate the condensation of glycine ester. The same activating influence of the simple sugars (or other carbonyl compds.) on the condensation of the amino acids may play a role in the formation of peptides and diketopiperazines under natural conditions. On the basis of the expts. the catalytic effect of simple sugars on the condensation of glycine ester can be expressed by: $2RR'CO + 2NH_2CH_2COOEt \rightarrow 2RR'C(OH)NHCH_2COOEt \rightarrow RR'(HO)CN.CH_2.C(OH)(OEt).N(C(OH)RR').CH_2.C(OH)OEt2H_2O \rightarrow NH.CH_2.CO.NH.CH_2.CO + 2RR'C(OH)_2 \rightarrow RR'CO + 2H_2O$. The character of R in sugars (probably the abundance of OH groups) conditions a considerable mobility of H bound to N. 10 references.

W. R. Henn

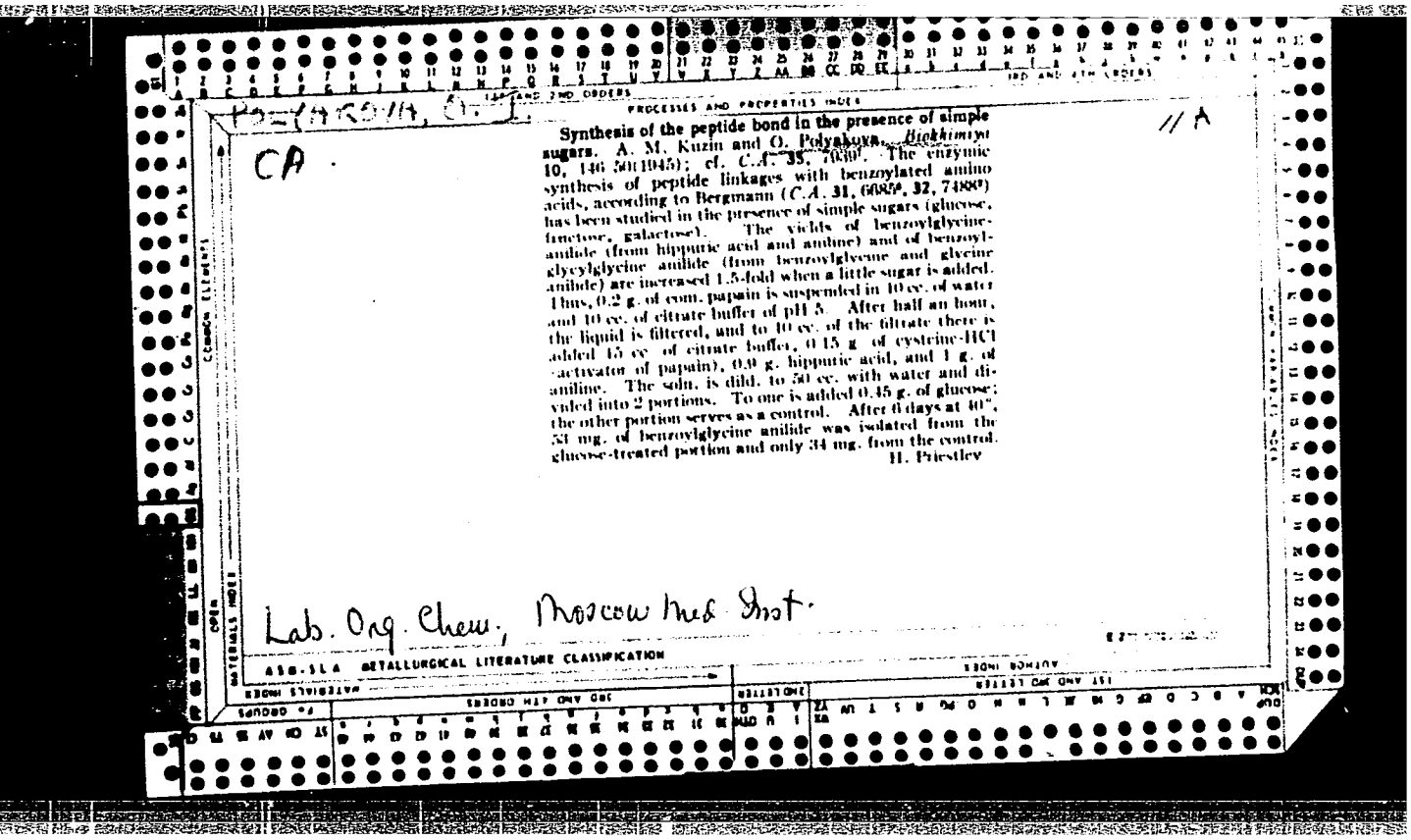


CA

POLYAKOVA, O.

10

Formation and properties of addition compounds of amino acids and sugars. A. M. Kuzin and O. Polyakova. *Biokhimiya* 6, 113-21(1941).—The amino-N content gradually drops when glucose and alkali are present in a concd. glycine soln. A new compd. is formed, through the union of the amino and carbonyl groups. This explains why the amino-N decrease varies with the sugar and alkali concns., and why sucrose, which lacks a free carbonyl group, is without effect on glycine. The Ca salt of the addn. compd. (the *N*-glucoside of glycine) is prepd. thus: To 10 g. of glycine and 48 g. of glucose in 100 cc. of water there is added 10 g. $Ca(OH)_2$. After the main mass of the $Ca(OH)_2$ has dissolved, the soln. is filtered and set aside at room temp. A cryst. ppt. appears in about 24 hrs., and in 48 hrs. the entire mass has solidified. The solid is collected by filtration, washed 3 times with water, and then with alc. The yield is 9.3 g., with 12.7–13.0% of Ca and 4.3–5.0% of N. The low Ca and N content is due to the absorption of CO_2, which amounts to 7.3%. Glycine and glucose similarly unite in the presence of $Ba(OH)_2$, but the resulting salt does not sep. out from soln., and must be pptd. with alc. Other amino acids are also capable of union with glucose, although amino acids of high mol. wt. unite less readily. H. P.



PROCESSES AND PROPERTIES INDEX

Synthesis of the peptide bond in the presence of simple sugars. A. M. Kuzin and O. Polyakova. *Biokhimiya* 10, 146-50(1945); cf. *C.A.* **35**, 7630⁶. The enzymic synthesis of peptide linkages with benzoylated amino acids, according to Bergmann (*C.A.* **31**, 6085⁸, **32**, 7488⁹) has been studied in the presence of simple sugars (glucose, fructose, galactose). The yields of benzoylglycine-anilide (from hippuric acid and aniline) and of benzoylglycylglycine anilide (from benzoylglycine and glycine anilide) are increased 1.5-fold when a little sugar is added. Thus, 0.2 g. of com. papain is suspended in 10 cc. of water and 10 cc. of citrate buffer of pH 5. After half an hour, the liquid is filtered, and to 10 cc. of the filtrate there is added 15 cc. of citrate buffer, 0.15 g. of cystein-HCl (activator of papain), 0.9 g. hippuric acid, and 1 g. of aniline. The soln. is dild. to 50 cc. with water and divided into 2 portions. To one is added 0.45 g. of glucose; the other portion serves as a control. After 6 days at 40°, 53 mg. of benzoylglycine anilide was isolated from the glucose-treated portion and only 34 mg. from the control.
H. Priestley

Lab. Org. Chem., Moscow Med. Inst.

A58-51A METALLURGICAL LITERATURE CLASSIFICATION

LEYKINA, Ye.S.; POLYAKOVA, O.I.

A simplified method for immunological diagnosis in helminth infections. Part 1: Agglutination reactions with absorbed antigens in the diagnosis of experimental ascariasis and trichinosis in animals. Med.paraz.i paraz.bol. 25 no.2:131-316 Ap-Je '56. (MLRA 9:8)

1. Iz sektora eksperimental'noy parazitologii Instituta malyarii, meditsinskoy parazitologii i gel'mintologii Ministerstva zdravookhraneniya SSSR (dir. instituta - prof. P.G.Sergiyev, zav. sektorom prof. V.P.Pod"yapol'skaya) i iz sektora eksperimental'noy terapii gel'mintozov Vsesoyuznogo instituta gel'mintologii (dir. instituta - akad. K.I.Skryabin, zav. sektorom - prof. D.N.Antipin)

(HELMINTH INFECTIONS, immunol. diag.
agglutination reaction with absorbed antigens in exper. helminth infect.)
(AGGLUTINATION
reaction with absorbed antigens in diag. of exper. helminth infect. & ascariasis)
(TRICHINOSIS, diag.
agglutination reaction with absorbed antigens in exper. trichinosis)

PANASYUK, D.I.; POLYAKOVA, O.I.

Intra vitam diagnosis of early stages of Dictyocaulus infestations in sheep by the use of allergic reactions. Trudy Gel'm. lab. 9:222-224 '59. (MIRA 13:3)

(PARASITES--SHEEP) (NEMATODA) (ANTIGENS AND ANTIBODIES)

POLYAKOVA, O.I., kand. biol. nauk

Biochemical mechanism of the effect of iodine and ditrazine solutions on the enzymes of Dictyocaulus filaria. Trudy VIGIS 11:127-132 '64. (MIRA 18:12)

POLYAKOVA, O.I., kand. biol. nauk; BELYKH, R.A., biolog

Effect of anthelmintics on the phosphorylase and aldolase activity of ascarid muscles. Trudy VIGIS 11:133-138 '64.
(MIRA 18:12)

POLYAKOVA, O.I., kand. biolog. nauk

Enzymes in Dictyocaulus filaria.: metabolism in helminths. Trudy VIGIS 10:227-238 '63. (MIRA 17:9)

POLYAKOVA, O.I.

Transamination and reducing amination in Dictyocaulus filaria.
Biokhimiia 27 no.3:430-436 My-Je '62. (MIRA 15:8)

1. Laboratory of Biochemistry and Physiology of Helminth, All-Union Institute of Helminthology, Moscow.
(NEMATODA) (AMINO GROUP)

POLYAKOVA, O.I., kand.biologicheskikh nauk

Biochemical changes in the organism of sheep in dictyocaulosis.
Trudy VIGIS 6:282-289 '59. (MIRA 15:5)
(Dictyocaulus)
(Parasites--Sheep)

POLYAKOVA, O.I., kand.biologicheskikh nauk

Isolation and chemical investigation of antigens of some helminths. Trudy VIGIS 6:87-91 '59. (MIRA 15:5)
(Antigens and antibodies)
(Worms, Intestinal and parasitic)

ROZOV, B.I.; POLYAKOVA, O.P., nauchnyy red.; MAKEYEV, V.I., red. izd-va; BYKOVA, V.V., tekhn. red.

[Industry's requirements as to the quality of mineral raw materials] Trebovaniia promyshlennosti k kachestvu mineral'nogo syr'ia; spravochnik dlia geologov. Izd.2., perer. Moskva, Gos. nauchno-tekhn. izd-vo lit-ry po geologii i okhrane nedr. No.28. [Bismuth] Vismut. Nauchn. red. O.P.Poliakova. 1961. 36 p. (MIRA 14:10)

1. Moscow. Vsesoyuznyy nauchno-issledovatel'skiy institut mineral'nogo syr'ya.

(Bismuth)

BELYAKOVA, L.T.; MAREYEVA, Z.I.; POLYAKOVA, O.P., nauchnyy red.; NEMANOVA, G.F., red. izd-va; IYERUSALIMSKAYA, Ye.S., tekhn. red.

[Industry's requirements as to the quality of mineral raw materials] Trebovaniia promyshlennosti k kachestvu mineral'nogo syr'ia; spravochnik dlia geologov. Moskva, Gos. nauchno-tekhn. izd-vo lit-ry po geol.i okhrane nedr. No.44. [Arsenic] Mysh'iak. Nauch.red.O.P.Poliakova. Izd.2., perer. 1961. 30 p. (MIRA 14:11)

1. Moscow. Vsesoyuznyy nauchno-issledovatel'skiy institut mineral'nogo syr'ya.

(Arsenic)

POLYAKOVA, O. P., ARKHANGEL'SKAYA, V. V., and TOMSON, I. N.

"Methodological Questions of Mapping Ore-controlling Zones of Increased Jointing and the Technique of Compiling Large Scale Metallogenic-forecasting Maps"

report presented at the First All-Union Conference on the Geology and Metallurgy of the Pacific Ocean Ore Belt, Vladivostok, 2 October 1960

So: Geologiya Rudnykh Mestorozhdeniy, No. 1, 1961, pages 119-127

POLYAKOVA, O.P.

Franckeite from complex tin ores of the Smirnovskoye deposit (eastern Transbaikalia). Trudy Min. muz. no.8:103-107 '57.
(Transbaikalia--Franckeite) (MIRA 11:3)

POLYAKOVA, O.P.

Geocronite from the Smirnovskoye deposit (eastern Transbaikalia).
Trudy Min. muz. no.8:99-102 '57. (MIRA 11:3)
(Transbaikalia--Geocronite)

POLYAKOVA, O.P.

Origin and description of banded ores of the Kadainskoye deposits. Izv.AN SSSR.Ser.geol. 21 no.8:78-90 Ag '56. (MLRA 9:11)

1. Institut geologii rudnykh mestorozhdeniy, petrografii, mineralogii i geokhimii Akademii nauk SSSR, Moskva.
(Ore deposits)

POLYAKOVA, O.P.

Nacrite from fluorite deposits in eastern Transbaikalia.
Izv. AN SSSR. Ser. geol. 30 no. 10:120-125 O '65. (MIRA 18:12)

1. Institut geologii rudnykh mestorozhdeniy petrografii, mineralogii i geokhimii AN SSSR, Moskva. Submitted March 8, 1965.

ARKHANGEL'SKAYA, V.V.; POLYAKOVA, O.P.

Some zones of ore deposition in eastern Transbaikalia and the basic stages of their development. Zakonom. razm polezn. iskop. 5:251-258 '62. (MIRA 15:12)

1. Institut geologii rudnykh mestorozhdeniy, petrografii, mineralogii i geokhimii AN SSSR.
(Transbaikalia—Ore deposits)

POLYAKOVA, O.P.

3(5) PHASE I BOOK EXPLOITATION SOV/2681

Akademiya nauk SSSR. Institut geologii rudnykh mestorozhdeniy, petrografii, mineralogii i geokhimii

Geologiya i rudnyye mestorozhdeniya Dal'nego Vostoka (Geology and Ore Deposits of the Far East) Moscow, Izd-vo AN SSSR, 1959. 94 p. (Series: Its Trudy, vyp. 18) 1,500 copies printed.

Ed.: Ye. A. Radkevich; Ed. of Publishing House: N. R. Kun; Tech. Ed.: A. P. Guseva.

PURPOSE: The publication is intended for mining geologists, geochemists, and mining engineers.

COVERAGE: This collection of articles deals with the characteristics of various polymetallic ore deposits in the (Soviet) Far East. Individual articles discuss sulphostannates in Southern Primor'ye and Zabaykal'ye, skarns, sulfides, and aplitic dikes. No personalities are mentioned. References accompany each article.

TABLE OF CONTENTS:

Card 1/3

Geology and Ore Deposits of the Far East (Cont.) SOV/2681

Card 2/3

TOMSON, I.N.; IVANOV, I.B.; KONSTANTINOV, R.M.; LOBANOVA, G.M.; POLYAKOVA, O.P.

Absolute age of Mesozoic magmatic complexes and ore formations in eastern Transbaikalia. Izv. AN SSSR. Ser. geol. 28 no.12:31-40 D'63. (MIRA 17:2)

1. Institut geologii rudnykh mestorozhdeniy, petrografii, mineralogii i geokhimii AN SSSR, Moskva.

TOMSON, I.N.; KONSTANTINOV, R.M.; POLYAKOVA, O.P.; IVANOV, I.B.; YESIKOV, A.D.

Upper Mesozoic hydrothermal cycles in eastern Transbaikalia in light potassium-argon and lead-isotope dating. Izv. AN SSSR Ser. geol. 29 no.7:3-11 Jl '64 (MIRA 18:1)

1. Institut geologii rudnykh mestorozhdeniy, petrografii, mineralogii i geokhimii AN SSSR, Moskva.

YESIKOV, A.D.; TOMSON, I.N.; KONSTANTINOV, R.M.; POLYAKOVA, O.P.

Isotope composition of ore lead from various type deposits in eastern Transbaikalia. Geokhimiia no.7:791-800 Jl '65.
(MIRA 18:11)

1. Institut geologii rudnykh mestorozhdeniy, petrografii, mineralogii i geokhimii AN SSSR, Moskva. Submitted June 11, 1964.

TOMSON, I.N.; KONSTANTINOV, K.M.; POLYAKOVA, O.P.

Genetic series of ore formations in Transbaikalia. Geol rud. mestorozh. 6 no.2:38-51 Mr-Ap '64. (MIRA 17:6)

1. Institut geologii rudnykh mestorozhdeniy, petrografii, mineralogii i geokhimii AN SSSR, Moskva.

TROFIMOV, N.N.; POLYAKOVA, O.P.; MALINOVSKIY, Ye.P.

Lead-zinc deposits of the Smirnovskoye ore field. Trudy IGEM no.83:161-201 '63. (MIRA 16:11)

POLYAKOVA, O.P.

Lead-zinc deposits of the Kadaya ore field. Trudy IGEM no.83: 265-318 '63. (MIRA 16:11)

POLYAKOVA, O.P.

Decomposition of sulfostannates in ores of the Smirnovskoye deposit (Transbaikalia). Trudy IGEM no.18:46-53 '59.
(MIRA 12:10)

(Transbaikalia--Tin ores)

ACC NR: AP7000996 (A,N) SOURCE CODE: UR/0439/65/044/010/1571/1573

AUTHOR: Polyakova, P. Ye,; Bobrova, S. I.

ORG: Biological Institute, Siberian Branch, Academy of Sciences, SSSR, Novosibirsk (Biologicheskiy institut Sibirskogo otdeleniya Akademii nauk SSSR)

TITLE: Fauna and ecology of blood-sucking mosquitoes (Dipyera, Culicinae) in the southern part of Tomsk oblast

SOURCE: Zoologicheskiy zhurnal, v. 44, no. 10, 1965, 1571-1573

TOPIC TAGS: animal parasite, mosquito, disease vector, entomology, biologic ecology/Tomsk oblast

ABSTRACT: Twenty-three species of mosquitoes were identified in the southern part of Tomsk oblast (Western Siberia) in May-September, 1962. (See Table 1). Collections were made in

Card 1/3 UDC: 595.771 Culicinae: 591.9+591.5(571.16)

Table 1. Species composition of mosquitoes in southern Tomsk oblast (1962)

Species	Number caught			
	Larval	♂♂	♀♀	Total
1. Anopheles maculipennis Mg.	8	3	2	13
2. Culiseta alaskaensis Ludl.	—	—	2	2
3. C. ochroptera Peus.	4	—	—	4
4. Aedes caspius dorsalis Mg.	—	—	—	—
5. Ae. punctor Kirby	70	13	5366	5449
6. Ae. communis Deg.	92	12	6460	6564
7. Ae. diantaeus H. D. K.	60	18	1059	1137
8. Ae. intrudens Dyar	6	4	154	164
9. Ae. hexodontus Dyar	12	—	8	20
10. Ae. pullatus Coq.	—	—	5	5
11. Ae. cataphylla Dyar	—	—	51	51
12. Ae. excrucians Walk.	11	26	46	83
13. Ae. cantans Mg.	17	0	232	249
14. Ae. riparius D. K.	—	1	—	—1
15. Ae. flavescens Müll.	—	4	—	4
16. Ae. beklemishevi Den.	122	—	—	122
17. Ae. cinereus Mg.	11	2	71	84
18. Ae. rossicus D. G. M.	—	—	—	—
19. Ae. vexans Mg.	—	—	14	14
20. Culex modestus Fic	17	—	—	17
21. C. apicalis Adams.	30	—	—	30
22. C. pipiens L.	2	—	—	2
23. Mansonia richiardii Fic.	—	—	63	63
Total	462	83	13 533	14 078

Card 2/3

ACC NR: AP7000996

pine forests along the Ob' River. Maximum numbers of mosquitoes were recorded from late May to mid-July. Peak populations varied with the species, however. *Aedes communis* was most numerous in early June and *Aedes punctor* in late June: *Aedes communis* mosquitoes made up 48.0% of the population, and *Aedes punctor* 40.0%. Mosquitoes were most active in the morning and evening hours. It was established that the most favorable temperatures for mosquito activity are between 80°C and 25°C. [JS]

Orig. art. has: 1 table and 2 figures
[WA-50; CBE No. 14]

SUB CODE: 06/ SUBM DATE: none/ ORIG REF: 005

Card 3/3

ACC NR: AP7001089 (A,N) SOURCE CODE: UR/0439/66/045/005/0775/0775

AUTHOR: Verzhutskiy, B. N.; Polyakova, Ye. V. (Deceased)

ORG: East Siberian Biological Institute, Siberian Branch, Academy of Sciences SSSR, Irkutsk (Vostochnosibirskiy biologicheskiy institut Sibirskogo otdeleniya Akademii nauk SSSR)

TITLE: The sawfly *Hoplocampa ephippiata* Knw., a pest of Siberian apple trees

SOURCE: Zoologicheskiy zhurnal, v. 45, no. 5, 1966, 775

TOPIC TAGS: parasitology, ANIMAL ~~plant~~ parasite, ~~plant pest~~, AGRICULTURE CROP, PLANT INJURY

ABSTRACT: A pest of Siberian apple trees, studied in Pribaykal'ye in 1952--1953, has recently been identified as *Hoplocampa ephippiata* Knw., not the sawfly species *Hoplocampa testudinea* Kl., as previously supposed. *Hoplocampa ephippiata* differs from the related species both morphologically (it is darker and smaller) and biologically. Although *Hoplocampa ephippiata* has been found only in the Irkutsk rayon, it is apparently as widely distributed as the Siberian apple tree, i.e., from the southern part of Eastern Siberia to the Far East. [WA-50; CBE No. 14] [JS]

SUB CODE: 06/ SUBM DATE: none/ ORIG REF: 001/ OTH REF: 001

Card 1/1 UDC:none

POLYAKOVA, P.Ye.

Fauna of bloodsucking mosquitoes(Diptera, Culicidae) in the lower Ob'Valley. Trudy Biol. inst. Sib. otd. AN SSSR no. 10:97-101 '63. (MIRA 17:5)

[illegible], V. I., [illegible]

Fauna and ecology of [illegible] in the Lower Ob' Valley. Izv. Sib. AN SSSR ser. biol.-med. nauk no. 12 [illegible]

(MIRA 18:3)

1. Biologicheskiy institut Sibirskogo otdeleniya AN SSSR, Novosibirsk.

POLYAKOVA, P.Ye.; BOBROVA, S.I.

Fauna and ecology of blood-sucking mosquitoes (Diptera, Culicinae) in southern Tomsk Province. Zool.zhur. 44 no.10:1571-1573 '65. (MIRA 18:11)

1. Biologicheskiy institut Sibirskogo otdeleniya AN SSSR, Novosibirsk.

[illegible], M.Yu., kand. tekhn. [illegible]; VOLKOVITSKIY, G.I., kand. tekhn. nauk; KOLESNIK, S.F., kand. [illegible] nauk; KOVALENKO, Yu.Ye., kand. tekhn. nauk; LEVINA, M.I., inzh.; POLYAKOVA, P.K., inzh.

Manufacturing hollow railroad axles from centrifugally cast billets. Proizv. trub no.12:133-140 '64.

(MIRA 17:11)

POLYAKOVA, R. B.

USSR/Metals - Welding Jul 50

"Gas Pressure Welding of Small-Deameters Pipes," Engineers A. S. Fal'kevich, R. B. Polyakova, Sci Res Inst of Stroyneft'

"Avtogen Delo" No 7, pp 16-18

Data on investigation of technology of subject welding, performed on improved stand of SGP-3 type (described by T. A. Vladimirskiy and M. S. Nikitin in "Avtogennoye Delo" No 12, 1949). Pipes of 33,5-88.5 mm (1-3in) were satisfactorily welded by gas-pressure method. Strength of welded joints is not lower than that of base metal.

167T62

POLYAKOVA, R. B., Engr

PA 167T63

USSR/Metals - Welding Jul 50

"Inspecting Welded Joints of Gas Pipelines With Gamma Rays," R. B. Polyakova, Engr

"Avtogen Delo" No 7, pp 18-19

Introduces gamma-ray method developed by S. T. Nazarov at Moscow Higher Tech School for application of radiography to inspection of welded joints in pipelines, using ampoule of mesothorium as source of radiation. Describes acceptance standards. Method appraised for convenience in application under field conditions.

167T63

POLYAKOVA, R. B.

USSR/Engineering - Welding, Processes Sep 51

"Investigation of Welding Pipes by the Gas-Pressure Process," A. S. Fal'kevich, R. B. Polyakova, Engineers, NIIStroyneft'.

"Avtogen Delo" No 9, pp 7-11

Presents results of investigating most essential technological parameters for welding pipes and expts for automatization of process. Discusses butt prepn, magnitude and time of pressure application, effect of flame compn on quality of weld, effect of heating time on quality and efficiency of welding, influence of heating temp on welding process. Gives Schematic diagram of automatization. 202T34

MA

*377-K. Investigation of Parameters of the Gas Pressure Welding of Tubes. (In Russian.) A. S. Fal'kevich and R. B. Poliakova. *Avtogennoe Delo*, v. 22, Sept. 1951, p. 7-11.

Butt welding of low-carbon steel tubing by the gas-pressure method. Use of automatic equipment. Data are tabulated and charted. (K2, CN)

ASM

1

377-K. Investigation of Parameters of the Gas Pressure Welding of Tubes. (In Russian.) A. S. Fal'kevich and R. B. Poliakova. *Avtogennoe Delo*, v. 22, Sept. 1951, p. 7-11.

Butt welding of low-carbon steel tubing by the gas-pressure method. Use of automatic equipment. Data are tabulated and charted. (K2, CN)

1. FAL'KEVICH, A. S., Eng.; POLYAKOVA, N. B., Eng.; BAKHRAKH, L. R., Eng.

2. USSR 600

4. Oxyacetylene welding and cutting

7. Examination of the technology of gas pressure welding of large diameter pipes, Avtog. delo, 24, No. 1, 1953.

9. Monthly List of Russian Accessions, Library of Congress, April 1953, Uncl.

KISLYUK, F.I., doktor tekhnicheskikh nauk; MAZEL', A.T. kandidat tekhnicheskikh nauk; FAL'KEVICH, A.S. inzhener; ANUCHKIN, M.S., kandidat tekhnicheskikh nauk; LIVSHITS, L.S. kandidat tekhnicheskikh nauk; NEYFEL'D, I.Ye., inzhener; BAKHRAKH, L.P., inzhener; POLYAKOVA, P.B., inzhener.

Welding with electrode cluster. Section of the All-Union Scientific Engineering Technological Association of Welders in the All-Union Scientific Research Institute for Petroleum Industry Construction. Avtog. delo 24 no.6:30 Je '53. (MLRA 6:5)

(Electric welding)

POLYAKOVA, R.B.

FAL'KEVICH, A.S.; POLYAKOVA, R.B.; BAKHRAKH, L.P.

Investigating the technology of gas pressure welding of large diameter pipes. Trudy VNII Stroinefti no.4:46-62 '56. (MLRA 10:1)

(Pipe, Steel--Welding)

POLYAKOVA, R.B.

LIVSHITS, L.S., kandidat tekhnicheskikh nauk; BAKHRAKH, L.P., inzhener; LUNIN, I.I., inzhener; POLYAKOVA, R.B., inzhener.

Arc welding of high-pressure pipelines. Trudy VNIISTROINEFT' no.7: 108-124 '56. (MLRA 9:11)

(Pipe, Steel--Welding)

S/096/62/000/011/005/006
E193/E383

AUTHORS: Gotlib, Ye.A., Polyakova, R.B. and Yashchenko, Ya.V., Engineers

TITLE: Welding of austenitic steels ЭИ-695Р (EI-695R) and ЭП-17 (EP-17)

PERIODICAL: Teploenergetika, no. 11, 1962, 63 - 67

TEXT: Steels EI-695R (containing 0.08-0.11% C, 0.47-0.60% Si, 1.40-1.46% Mn, 13.9-14.3% Cr, 19.1-19.2% Ni, 2.68-2.75% W, 0.96-1.08% Nb, 0.005% B, 0.01% S and 0.02% P) and EP-17 (containing 0.10-0.11% C, 0.18-0.28% Si, 1.31-1.35% Mn, 16.51% Cr, 13.22-13.67% Ni, 2.27-2.40% W, 0.62-0.77% Nb, 0.005% B, 0.006% S and 0.016% P) were specified as materials for the steam pipe of the boiler ПК-31 (PK-31), the latter material being considered more suitable for parts of the conduit operating under supercritical conditions of steam, temperature and pressure. Before the boiler could be fabricated, it was necessary to determine the optimum welding procedure and to train the welders; the results of this work are described in the present paper. The metal-arc welding technique was used to make test butt-joints

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in tubes of the following sizes: 32 x 7.5 mm and 76 x 18 mm for steel EI-695R; 76 x 16.5 mm for steel EP-17. Since the main object of the investigation was to establish conditions under which the proneness of the welds to develop hot cracks could be eliminated, several electrodes were used in the tests; these are listed in Table 2 together with the chemical analysis of weld deposits obtained with these electrodes. Single-V bevel was used in the case of thin-walled tubes, both single-V and single-U bevels, with an included angle of 20 or 30°, being tried in preparing the edges of thick-walled tubes. After the deposition of each bead weld, the weld was cooled to about 100 °C and the slag residues were carefully removed before the next run. Various welding schedules were tried, each in three variants: 1 - without a backing ring; 2 - with a removable copper ring; 3 - with a metal ring which was left after welding. The quality of the weld was determined metallographically, more than 100 microsections having been examined. Based on the results of these experiments, the following optimum conditions were established: 1 - single-V bevel with the included angle of 60-70° should be used for welding

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EI-695R steel tubes (32 mm in diameter, 75 mm wall thickness). A permanent backing ring should be used and the root welds should be made with the АЖ -13-15 (AZh-13-15) electrodes, 2.5 mm in diameter; 2 - for joining EI-695R steel tubes, 76 x 18 mm in size, U-shaped bevel with the included angle of 30° should be used; a permanent backing ring should be employed for making the root weld; both V- and U-shaped bevels can be used for joining EP-17 steel tubes of this size because welds made with the TsT-10 electrodes are less prone to hot cracking; 3 - a minimum current (not exceeding 60 - 75 A with electrodes 2.5 mm in diameter, or 80 - 100 A with electrodes 3 mm in diameter) should be used; the crater in the weld should be filled in before the electrode is changed and the arc should be broken at a distance of 8 - 10 mm from the crater; narrow welds should be deposited almost without transverse movement of the electrode; each weld, after cooling to 60 - 70 °C, should be cleaned with an abrasive wheel. These recommendations were followed in the fabrication of the steam superheater and the steam conduit pipe of the boiler PK-31. Destructive and non-destructive tests showed that no cracking occurred in the welds,
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all of which conformed to the quality standards set by the process-control specifications. Several conclusions were reached. 1) Although satisfactory metal-arc welded butt-joins in tubes, made of the new austenitic steels EI-695R and ER17, can be obtained, the welding technique employed requires great care and rigorous control at every stage of the fabrication process. As a result, the technique is time-consuming, and its use can be economically justified in the manufacture of experimental plant only. 2) The austenitic electrodes АЖ-13-18 (AZh-13-18) and AZh-13-15 cannot be recommended for welding tubes of steel EI-695R under industrial conditions. Strongly adhesive slag formed by these electrodes has to be carefully removed after each run and even then it cannot be guaranteed that hot cracks will not occur. Further development work is required to change the nature of the slag formed by these electrodes and to eliminate the tendency of the welds to hot cracking. 3) The ЦТ-16 (TsT-16) electrodes can be recommended for welding steel EP-17 tubes. There are 7 figures and 3 tables.

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Investigation of the welded joints of steampipes from 1Kh18N12T austentic steel. Elek. sta. 32 no.7:21-25 Jl '61. (MIRA 14:10)
(Steampipes)

S/137/61/000/012/096/149
A006/A101

AUTHOR: Polyakova, R.B.

TITLE: Welding high-pressure pipeline butts on ceramic backing rings

PERIODICAL: Referativnyy zhurnal. Metallurgiya, no. 12, 1961, 21, abstract 12E119 (V sb. "Energ. str-vo", 1 (1), Moscow-Leningrad, 1959, 102-106)

TEXT: Information is given on results of investigating the welding of high-pressure pipeline butts on removable ceramic backing rings. The investigations were made on grade 20, 12 Х1МФ (12Kh1MF) and 12 МХ (12MKh) steel pipes. The pipe diameter was 133-325 mm; the walls were 13 - 36 mm thick. The ceramic backing rings were manufactured from a compound containing in %: sand 36; loam 35; refractory clay 8; sawdust 4; water glass 12; water 5. 1) The possibility is shown of producing high-quality joints on removable ceramic backing rings. The manufacture of these rings is simple and the materials used are non-scarce and cheap; this makes the use of the rings extremely expedient. 2) The ceramic rings can be easily machined on the assembly spot and adjusted to the internal diameter of the pipe to be butt-welded. Therefore additional machining of the

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internal pipe surface is not necessary, if there is a difference in the internal diameters within the tolerance range. 3) As the ceramic backing rings are easily removed, they can be employed for pipelines of any length, for closing butts, which amount to 15 - 20% of the total number of butts, and for bent sections. 4) Best results in the formation of the root layer for pipes with > 20 mm thick walls are assured by U-shaped beveling (bevel angle 16 - 18°, blunt 2 mm) and a 2 mm gap. The structural dimensions of a butt weld with the use of ceramic rings reduce the built-up metal by 25-30% as compared to the method of welding on fixed metal rings employed at present.

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[Abstracter's note: Complete translation]

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EFROS, L.S.; POLYAKOVA, R.P.; ARGITTI, M.G.

Derivatives of piazthiole and piazselenole. Part 7: Monohydroxy derivatives. Zhur.ob.khim. 32 no.2:516-521 F '62. (MIRA 15:2)

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(Benzothiadiazole)
(Benzoselenadiazole)