VINOGRADOVA, YE. FEOFILAKTOV, V.

"The Action of Diazobenzene on Alkoylacetylacetic Esters as a Means of Obtaining the Phenylhydrazones of α-Ketonic and α-Amino Acids" Part II. "The Synthesis of Phenylallanine," Zhur. Obshch. Khim, 10, No. 3, 1940. Laboratory of Albumen, Academy of Science USSR. Received 29 August 1939.

Report U-1526, 24 Oct 52.

VINOGRADOVA, Ye.A.; KORSHUN, L.L.; NOTKIN, M.M.

Finishing of particle boards with the PE-219 polyester varnish.
Der.prom. 11, no.3:24-25 Mr '62. (MIRA 15:2)
(Hardboard)
(Varnish and varnishing)

BUDAK, B.M.; VINOGRADOVA, Ye.A.; GLASKO, V.B.; KONONKOVA, G.Ye.; POBORCHAYA, L.V.

Problem of unsteady water movement in a reservoir solved by an electronic computer. Meteor. i gidrol. no.12:14-21 D '63. (MIRA 17:3)

1. Moskovskiy gosudarstvennyy universitet, fizicheskiy fakul'tet.

VINOGRADOVA, Ye.A.

Occurrence of sapropelic deposits and methods for studying their geomorphology. Metod.izuch.sapr.otl. no.1:5-9 '53. (MLRA 10:2)

1. Kafedra torfyanykh mestorozhdeniy Moskovskogo torfyanogo instituta Ministerstva vysshego obrazovaniya.
(Sapropels)

VINOGRADOVA, Ye.A.

Method for studying the mineral composition of sapropelic deposits. Metod.izuch.sapr.otl. no.1:130-142 '53. (MLRA 10:2)

1. Kafedra torfyanykh mestorozhdeniy Moskovskogo torfyanogo instituta Ministerstva vysshego obrazovaniya.
(Sapropels)

15-57-4-4734

Translation from: Referativnyy zhurnal, Geologiya, 1957, Nr 4, p 105 (USSR)

AUTHOR: Vinogradova, Ye. A.

TITLE: Mineralogy of the Bottom Sediments in Lake Nero (Mineralogicheskaya kharakteristika donnykh otlozheniy ozera Nero)

PERIODICAL: Tr. Labor. sapropel. otlozheniy. In-t lesa AN SSSR, 1956, Nr 6, pp 161-167.

ABSTRACT: Sapropel and clay sediments from Lake Nero were studied to determine the mineral content. Quartz is the principal clastic mineral in the light fraction of sapropel, 0.25 mm to 0.05 mm, from a depth of 0.5 m. Its subrounded and acutely angular fragments in places contain needles of apatite and gas vacuoles. Vivianite is concentrated in this fraction. It has marked pleochroism (Ng, dark blue and Np, pale green), negative elongation, and perfect prismatic cleavage. Ng is 1.630 and Np, 1.58. The sapropelitic deposits also con-

Card 1/2

15-57-4-4734

Mineralogy of the Bottom Sediments in Lake Nero (Cont.)

tain authigenic calcite, dolomite, pyrite with colloform structure, and vivianite. Grains of green hornblende are among the most significant of transparent clastic minerals. Some of the hornblende is replaced by chlorite; other contains inclusions of small rounded epidote grains. Large angular fragments of rose almandite, some containing biotite inclusions, are the most abundant garnet representative. Limonite, which formed from other minerals, develops shreddy fragments and small spherical pellets, pseudomorphous after colloform pyrite. Study of the mineral content of the heavy fraction, 0.25 mm to 0.05 mm, of sandy loams and the upper moraine showed a higher quantity of garnet, disthene, and staurolite than in the sapropelitic deposits. Subrounded dark fragments of staurolite contain dark opaque inclusions. The principal mineral of the light fraction, 0.25 mm to 0.01 mm (sic), is quartz. Plagioclase is strongly decomposed. Microcline with grid twinning and the plagioclase intergrowths is similar to the microcline and microcline perthite of the sapropelitic deposits. With increase in the degree of grinding of the material, the plagioclase content increases.

Card 2/2

G. A. G.

S/762/61/000/000/011/029

AUTHORS: Vinogradova, Ye.A., Kokhova, G.M., Lashko, N.F.

TITLE: Phase analysis of heat-treated BT3 (VT3) and BT3-1 (VT3-1) alloys.

SOURCE: Titan v promyshlennosti; sbornik statey. Ed. by S. G. Glazunov. Moscow, 1961, 121-130.

TEXT: The paper comprises a status report on an experimental investigation of the phase composition of the VT3 and VT3-1 alloys of the Ti-Al-Cr-Mo system and the effects thereon of heat treatment. Some of the source data are drawn from Blok, N.I., et al., Zavodskaya laboratoriya, no.2, 1958, 141, and pp.112-120 of the present compendium (Abstract S/762/61/000/000/010/029). At working temperatures the VT3 alloy is found to be two-phase, with an α- (or α'-) phase matrix. During cooling of the alloy from high temperatures (HT), the HT β phase may undergo one of three transformations: (1) During fast cooling the β phase transforms into the metastable phase α'; (2) during fairly slow cooling the β phase transforms into the metastable α' phase and some residual β phase; (3) very slow cooling leads to the eutectoid decomposition $\beta \rightarrow \alpha + TiCr_2$. A residual β phase, enriched with Cr, will also form, both during very slow cooling and in the process of aging. In the latter, the alloying elements are redistributed between the α and the β phase.

Card 1/3

Phase analysis of heat-treated BT3 (VT3)... S/762/61/000/000/011/029

An increase in the aging temperature of VT3 and VT3-1 alloys to 500-550°C enhances the enrichment of the residual β phase with alloying elements. The hardness (H) and ductility (D) characteristics of these alloys can be greatly varied by increases in the aging T after single quenching. The changes in H and D and in the lattice parameters are graphed against T (at 50°C intervals, up to 700-800°). Greatest H and smallest D is obtained upon quenching and subsequent aging at 450-550°. This is attributed to decomposition of the α' phase, separation of a dispersive α phase, and - to some extent - the state of the β phase. Thus, the properties of the two alloys after heat treatment are governed by the state, distribution, and form of the particles of α, α', β, and $TiCr_2$ and the redistribution of the alloying elements, and not by the formation of a metastable ω phase erroneously postulated by others. The tests comprised melts with differing contents of alloying elements, prepared in vacuum arc furnaces with consumable electrodes, in which TΓ-1 (TG-1) Ti and a 50:50 Al-Cr ligature and a 60:20:15 Al-Cr-Mo ligature are fused. The chemical melt composition is tabulated. Phase analysis after 850° quench (α+β-phase region) and 980-990° quench (β-phase region) and 400-700° aging was performed by the powder method (3 full-page tabulations and graph). The total β-phase content did not exceed 8.5% by weight, while the α (or α') content did not go below 90%. A total β-phase quench was not achieved. The hydrogen content, which could possibly have been responsible for brittleness, was within the bounds specified

Card 2/3

by the Technical Specs. No Ti hydride was found. The geometric characteristics of the various phases, including the laminar nature of the β phase, the acicular form of the α' phase, the appearance of an overall basketlike structure, and the segregation of α phase as a continuous edging at the grain boundaries are described in detail. Desirable avenues for future research are outlined. There are 4 tables and 3 figures; 2 Russian-language Soviet references are cited at the beginning of the text.

ASSOCIATION: None given.

34524
S/659/61/007/000/011/044
D217/D303

18.1120

AUTHORS: Lashko, N.F., Popova, N.M., Orekhov, G.N., and Vinogradova, Ye.A.

TITLE: Carbo-boride phases in alloy steels

SOURCE: Akademiya nauk SSSR. Institut metallurgii. Issledovaniya po zharoprochnym splavam, v. 7, 1961, 112 - 121

TEXT: The authors endeavored to find whether carboborides based on carbide phases of the type $Me_{23}C_6$ can exist in steels. Two varieties of carbide of the above type have been found in steels: $Fe_{21}W_2C_6$ and $Cr_{23}C_6$. Therefore, two steels were investigated, each containing one of the $Me_{23}C_6$ types of carbide. The steel 30Х2Н2ВА (30Kh2N2VA) was used as the $Fe_{21}W_2C_6$ containing material, in which this compound forms independently, or together with the carbice Me_3C. Steel ЭИ268 (EI268) was used as a representative steel containing a carbide based on $Cr_{23}C_6$. The steels were melted in a high frequency

Card 1/4

Carbo-boride phases in alloy steels

furnace of 150 kg capacity and cast into ingots weighing 17 kg in such a manner that each ingot should have a definite boron content. The ingots were forged into rods, which were oil-quenched from 1100 °C. They were then tempered at 600° and 700°C for 30 minutes, 1, 10, 100 and 300 hours. For the separation of the anode deposit from specimens of steel 30Kh2N2VA, electrolytic dissolution for 5 hours in an ice-cold solution consisting of 75 g/l KCl + 5 g/l citric acid was used at a low current density (0.02 A/dm^2). The precipitates obtained were analyzed chemically for Fe, Cr and W. For the estimation of B, an anodic deposit was again produced. It was washed with water by decantation, transferred into a conical flask and decomposed with a little H_2SO_4 (1 : 2) with addition of a few drops of H_2O_2. After dissolving the deposit, the solution was boiled until the H_2O_2 was completely decomposed. Small quantities of B were determined calorimetrically, and larger quantities (> 0.1 %) volumetrically. In order to separate the anode deposit from the Cr-Ni steel EI268, anodic dissolution was used in a solution contain-

Card 2/4

S/659/61/007/000/011/044
D217/D303

Carbo-boride phases in alloy steels

ing 75 g/l KCl, 5 g/l $Na_2S_2O_3$, 20 ml/l HCl (1.19) at 20°C, and a current density of 0.02 A/cm^2 for 4 hours. An X-ray investigation was carried out, using the powder method, in Co, Fe and CuKα radiation. It was found that B added to steel 30Kh2N2VA, decreases the solid solubility of Cr and W, and in steel EI268 the solid solubility of Cr. In boron-free 30Kh2N2VA steel, the carbides $(Fe, Cr)_3C$, $(Cr, Fe)_7C_3$ and $Fe_{21}(W, Cr)_2C_6$ form, according to temperatures and duration of tempering. According to the boron content and tempering conditions, the carbo-boride phases $(Fe, Cr)_3(C, B)$, $Fe_{21}(W, C)_2(C, B)_6$ and the carbide phase $Fe_{21}(W, Cr)_2C_6$ form. An EI268 steel containing 0.1 - 0.2 % B, contains a carboboride phase of variable composition, $(Cr, Fe)_2(B, C)$ having a rhombic crystal structure. Alloying steel 30Kh2N2VA with boron causes a decrease in static strength, plasticity and creep resistance at 20°C. The stress to failure at 550°C is higher than that of steel free from B. The mechanical properties of the steel EI268 on testing for static failu-

Card 3/4

Carbo-boride phases in alloy steels

re changed little on alloying it with B up to 0.23 %. The stress to fracture at 550°C of steel EI268 containing 0.018 - 0.25 % B is somewhat higher than that of boron-free steel. There are 6 figures, 7 tables and 3 non-Soviet-bloc references. The references to the English-language publications read as follows: M.E. Nicholson, J. Metals, 9, no. 1 (section 2), 1957; R. Kiessling, Acta Chem. Scand., 3, 1949.

X

Card 4/4

BLOK, N.I.; GLAZOVA, A.I.; LASHKO, N.F.; KURAYEVA, V.P.; MOLCHANOVA, Ye.K.;
Prinimali uchastiye: VINOGRADOVA, Ye.A.; ZVONTSOVA, Ye.V.;
POLYAKOVA, L.V.

Phase analysis of alloys on the titanium basis. Zav. lab. 27
no. 12:1470-1472 '61. (MIRA 15:1)
(Titanium alloys) (Phase rule and equilibrium)

ACCESSION NR: AT4007052 S/2598/63/000/010/0293/0299

AUTHOR: Vinogradova, Ye. A.; Lashko, N. F.; Moiseyev, V. N.

TITLE: Formation of metastable phases and its effect on the properties of alpha and beta titanium alloys

SOURCE: AN SSSR. Institut metallurgii. Titan i yego splavy*, no. 10, 1963. Issledovaniya titanovy*kh splavov, 293-299

TOPIC TAGS: titanium alloy, alpha beta titanium alloy, titanium alloy property, VT-14 titanium alloy, VT-14-1 titanium alloy, phase transformation, metastable phase formation, metastable phase, alloy phase composition

ABSTRACT: The authors point out that the Ti alloys VT-14 and VT-14-1 are characterized by large amounts of stable and metastable β phases, and that rapid quenching of VT-14 leads to the formation of the martensitic α' phase while VT-14-1 (containing more Mo and V) forms α' or α' and β phases depending on the cooling rate. The present paper is devoted to an X-ray analysis of the phase transformations in these two Ti alloys, and to a study of their effect on the mechanical properties of the alloy. The effect of quenching from various temperatures on the mechanical properties of VT-14 is shown in Fig. 1 of the Enclosure, indicating that the strength increases with increasing quenching temperature while the yield point

Card 1/4

ACCESSION NR: AT4007052

passes through a minimum. While investigating the reason for this decrease in yield point, the authors found that the lattice parameter of the β-phase increases with quenching temperature in monolithic samples, but is constant in the β-phase isolated from VT-14 alloys. They therefore conclude that the decrease in yield point of quenched Ti alloys is due to an increase in the amount and stability of the β-phase, which is destroyed during plastic deformation. The authors go on to investigate the effect of destruction of the metastable β- and α''-phases on the phase composition and properties of an α + β Ti alloy, demonstrating that the proportions of the α-, α'-, α''-, β- and ζ-phases in the final alloy depend on the heating temperature and cooling rate. As the heating temperature and cooling rate are increased, the structural metastability of the alloy increases, resulting in turn in a lower yield point and the formation of a metastable β phase which decomposes to the α'' phase and even the α(α') + β phase during subsequent aging. At almost all temperatures, isothermal aging results in a lowered yield point and increased plasticity. Finally, the authors discuss the reversibility of this transformation (β → α'') and the metastable transformations taking place in Ti alloys during plastic deformation (cold rolling); the latter process seems to induce transformation of β into α' and then α'' after quenching from 750C, but the reverse (at least for a deformation of no more than 5%) after quenching from 850C; 20% deformation after quenching from 850C again results in β → α'' transformation. The effect of plastic deformation on the mechanical properties of these metastable

Card 2/4

ACCESSION NR: AT4007052

alloys was somewhat unusual, in that the yield point of an alloy containing 7.1% Mo and 2.3% Al and quenched from 750C decreased and the % elongation increased (both irregularly) with increasing deformation (0-25%). Orig. art. has: 6 tables and 5 figures.

ASSOCIATION: Institut metallurgii AN SSSR (Metallurgical Institute, AN SSSR)

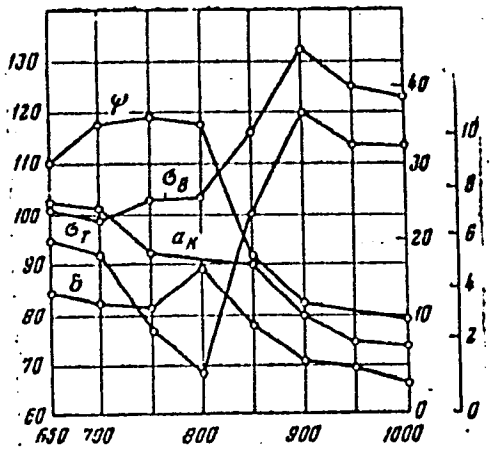
SUBMITTED: 00 DATE ACQ: 27Dec63 ENCL: 01

SUB CODE: MM NO REF SOV: 001 OTHER: 001

Card 3/4

ACCESSION NR: AT4007052

ENCLOSURE: 01



Changes in the mechanical properties of alloy VT-14 after quenching in water from various temperatures.

Ordinate = kg/mm^2 on the left and $kg \cdot m/mm^2$ on the right; abscissa = quenching temperature in °C.

Card 4/4

VINOGRADOVA, Ye.A.; GLAZOVA, A.I.; LASHKO, N.F. (Moskva); Prinimali uchastiye: GUS'KOVA, Ye.I.; POLYAKOVA, L.V.

Using anodic phase isolation for determining the solubility of some elements in the α-phase of titanium alloys. Zhur. fiz. khim. 37 no.12:2734-2739 D '63. (MIRA 17:1)

VINOGRADOVA, Ye.A., kand. fiz.-matem. nauk; KONONKOVA, G.Ye., kand. fiz.-matem. nauk

Experimental study of the transformation of a reservoir release wave on a model of a river type reservoir. Meteor. i gidrol. no.10:46-49 O '65. (MIRA 18:9)

1. Moskovskiy gosudarstvennyy universitet.

DUBROVKIN, V.L.[deceased]; CHEKLINA, Ye.A.; VINOGRADOVA, Ye.A.; TSAREVA, A.M.; POPOV, V.V., prof., red.

[Engineering geology characteristics of loess in the Kursk Magnetic Anomaly] Inzhenerno-geologicheskaia kharakteristika lessovykh porod territorii KMA [By] V.L.Dubrovkin i dr. Moskva, Nedra, 1964. 198 p. (MIRA 18:2)

1. Moscow. Vsesoyuznyy nauchno-issledovatel'skiy institut gidrogeologii i inzhenernoy geologii.

ACCESSION NR: [illegible]

AUTHOR: Vinogradova, Ye. A.; Lashko, N. F.; Tarasenko, G.N.

Card 1/2

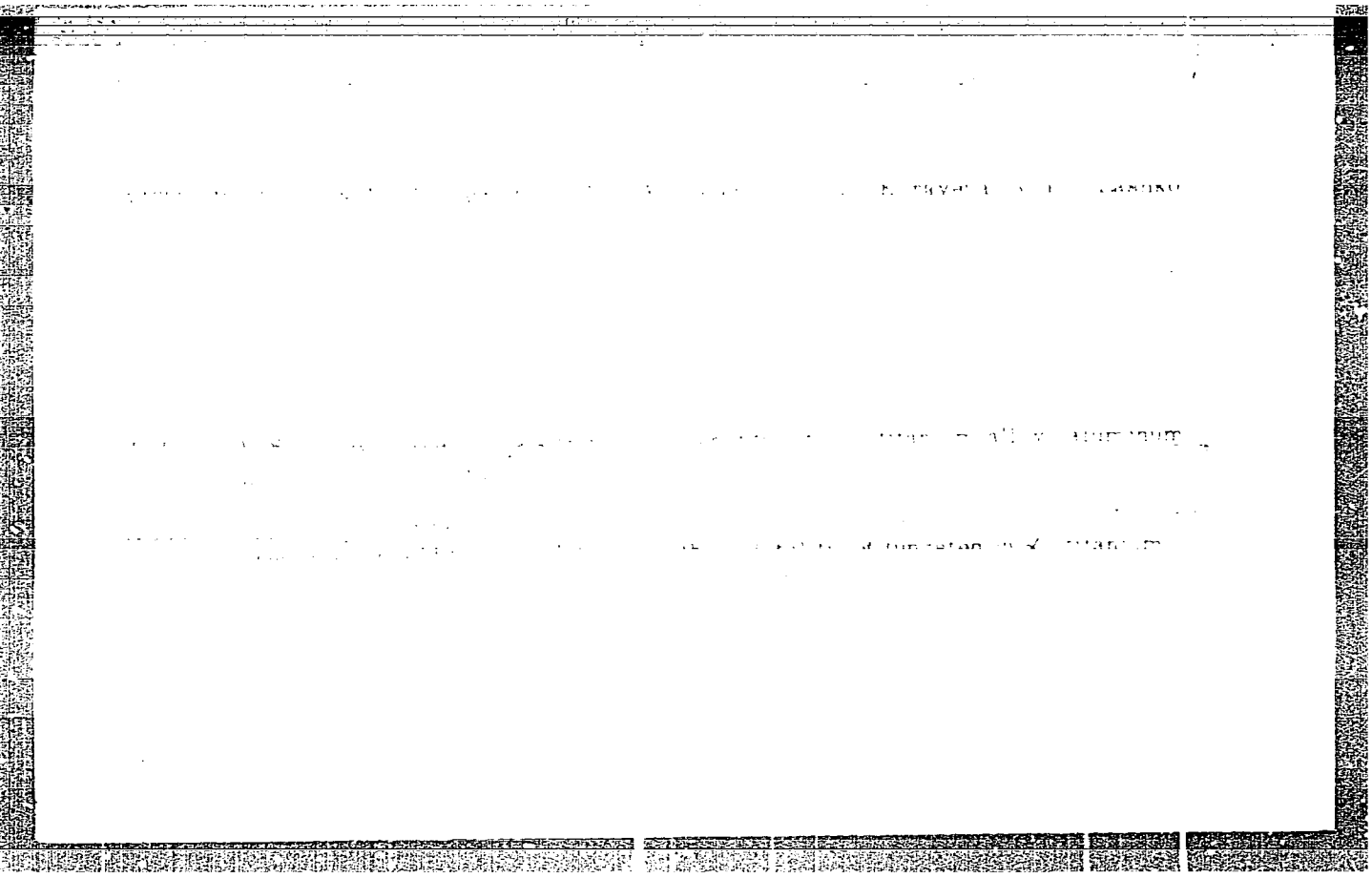
ACCESSION NR: AT5011354

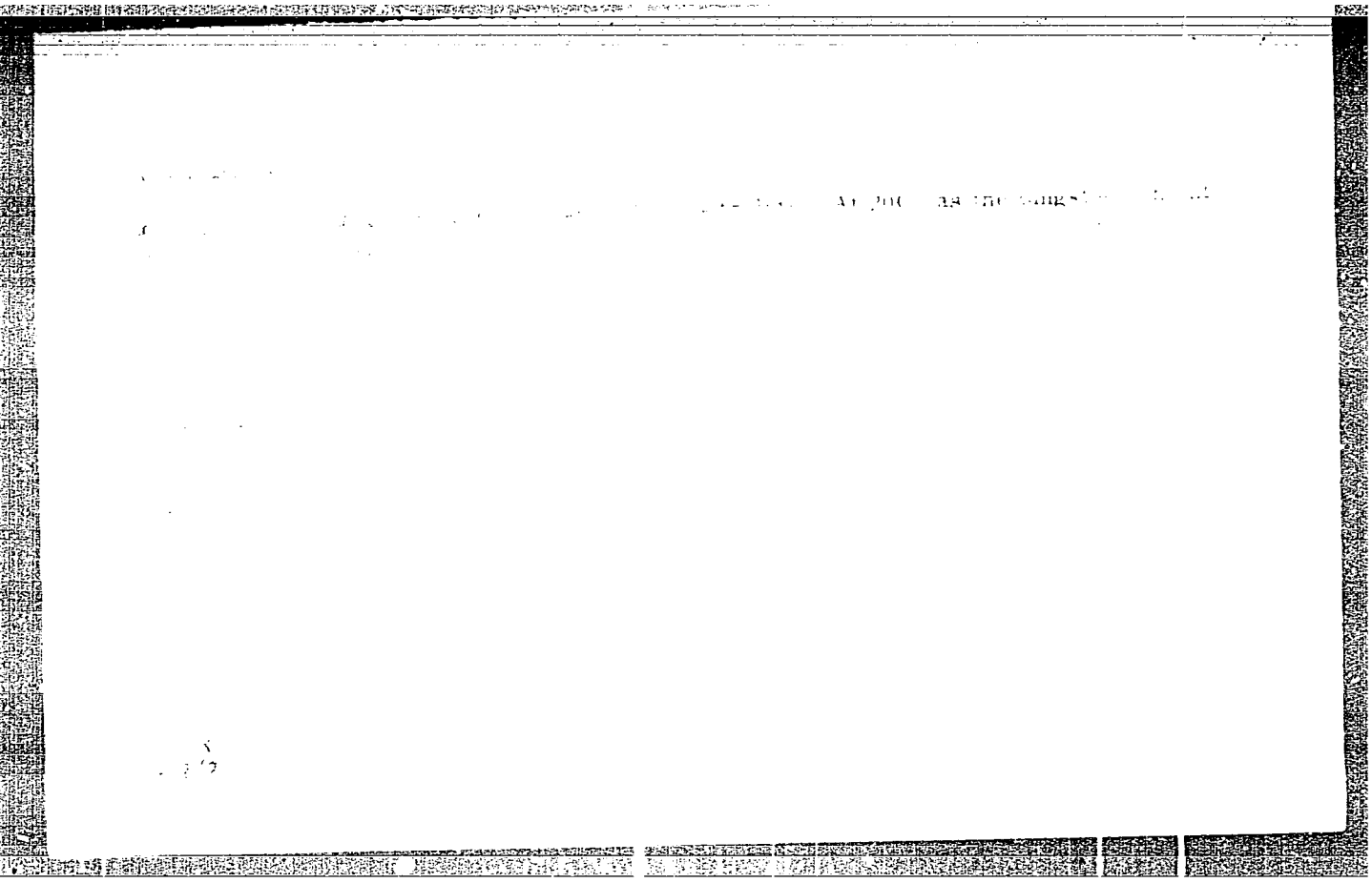
ASSOCIATION: none

SUBMITTED: 17Dec64

NO REF SOV:

Card 2/2





VINOGRADOVA, Ye.B.

Photoperiodic reactivity of the malaria mosquito Anopheles maculipennis messeae Fall. Uch. zap. LGU no.240:52-60 '58. (MIRA 11:9)
(Photoperiodism) (Mosquitoes)

VINOGRADOVA, Ye. B.

Cand Biol Sci - (diss) "Experimental study of the control of seasonal cycles of several blood-sucking mosquitoes." Leningrad, 1961. 17 pp; (Leningrad Order of Lenin State Univ imeni A. A. Zhdanov); 180 copies; price not given; (KL, 7-61 sup, 226)

VINOGRADOVA, Ye.B.

Experimental investigation of ecological factors inducing the imaginal diapause in bloodsucking mosquitoes (Diptera, Culicidae). Ent. oboz. 39 no.2:327-340 '60. (MIRA 13:9)

1. Kafedra entomologii Leningradskogo gosudarstvennogo universiteta i Zoologicheskiy institut Akademii nauk SSSR, Leningrad.
(Mosquitoes) (Insects--Development) (Photoperiodism)

VINOGRADOVA, Ye.B.

Biological differentiation of subspecies of Culex pipiens L. (Diptera, Culicidae). Ent. oboz. 40 no.1:63-75 '61. (MIRA 14:4)

1. Zoologicheskiy institut AN SSSR, Leningrad.
(Mosquitoes)

VINOGRADOVA, Ye.B.

Role of photoperiodism in the seasonal development of the malaria mosquito Anopheles plumbeus Steph (Diptera, Culicidae). Dokl. AN SSSR 142 no.2:481-483 Ja '62. (MIRA 15:2)

1. Zoologicheskiy institut AN SSSR. Predstavleno akademikom Ye.N.Pavlovskim.

(Photoperiodism)
(Mosquitoes)

VINOGRADOVA, Ye.B.

Ecologic regulation of the seasonal cycle in Anopheles bifurcatus L. (Diptera, Culicidae). Dokl. AN SSSR 151 no.5:1204-1206 Ag '63. (MIRA 16:9)

1. Zoologicheskiy institut AN SSSR. Predstavleno akademikom Ye.N.Pavlovskim.

(Insects—Development) (Mosquitoes)

VINOGRADOVA, Ye.B.

Experimental study o factors regulating the occurrence of embryonic diapause in Aedes togoi Theob. (Diptera, Culicidae). Ent. oboz. 44 no.3:527-537 '65. (MIRA 18:9)

1. Zoologicheskiy institut AN SSSR, Leningrad.

VINOGRADOVA, Ye.B.

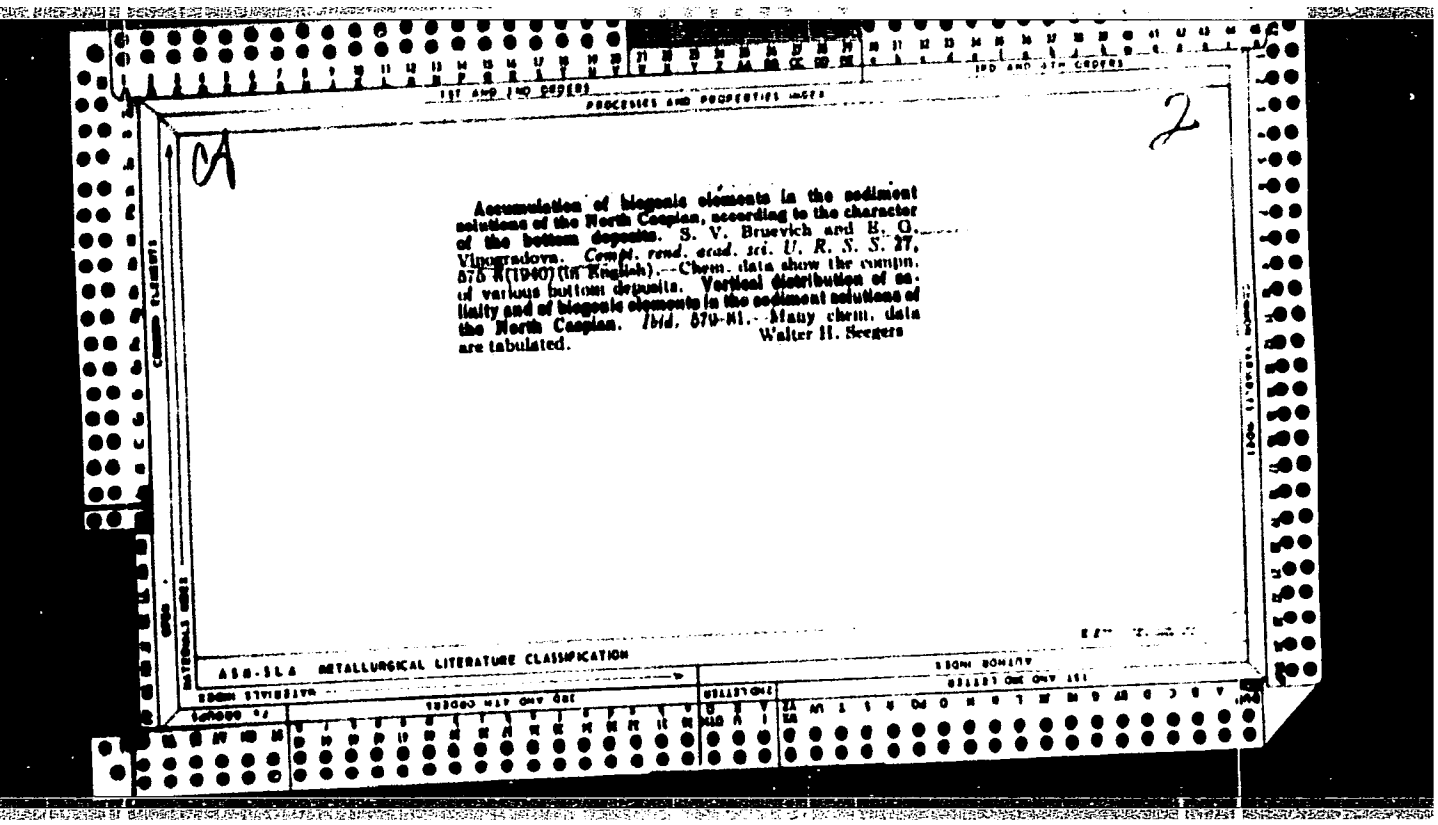
Autogenous development of the ovaries in bloodsucking mosquitoes.
Zool. zhur. 44 no.2:210-219 '65. (MIRA 18:5)

1. Zoologicheskiy institut AN SSSR, Leningrad.

IRODOV, M.V., kand.tekhn. nauk; MAKHINYA, V.M., inzh.; Prinimali uchastiye: VINOGRADOVA, Ye.F.; YELISEYEVA, N.S.

Obtaining improved glycerin from industrial bone fats. Masl.-zhir. prom. 29 no.6:21-24 Je '63. (MIRA 16:7)

1. Vsesoyuznyy nauchno-issledovatel'skiy institut zhirov.
(Glycerol) (Bone products)



CA

2

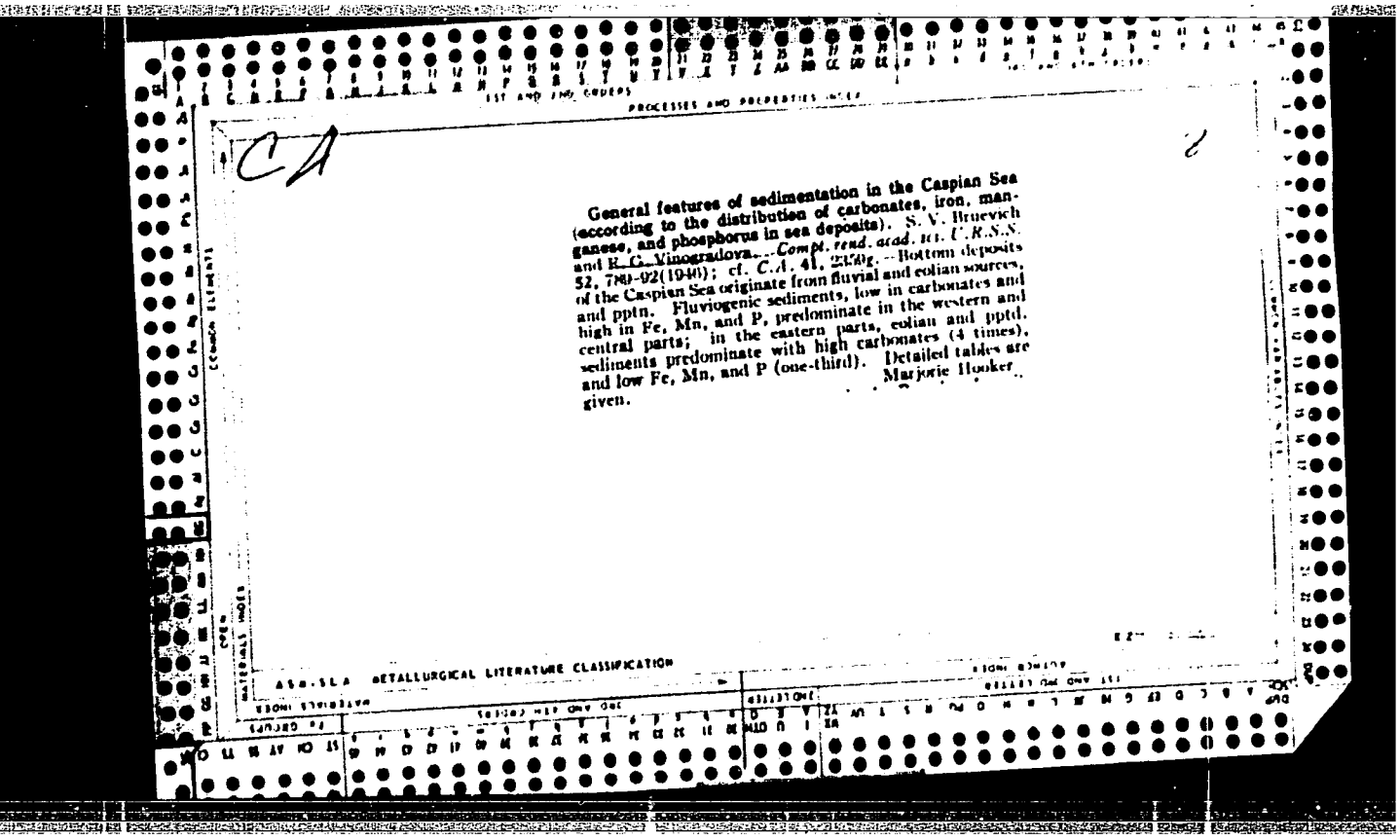
Accumulation of biogenic elements in the sediment solutions of the North Caspian, according to the character of the bottom deposits. S. V. Bruevich and E. G. Vinogradova. *Compt. rend. acad. sci. U. R. S. S.* 27, 876 ff (1940) (In English).—Chem. data show the composition of various bottom deposits. Vertical distribution of acidity and of biogenic elements in the sediment solutions of the North Caspian. *Ibid.* 879–81.—Many chem. data are tabulated.
Walter H. Seegers

CA

Chemical composition of sediment solutions of the Caspian Sea. I. The northern Caspian (from the data of 1939). S. V. Bruevich and E. G. Yevgenyeva (Inst. Marine Fisheries and Oceanography, Moscow). *Gidrokhim. Materialy* (*Hydrochim. Materials*) 13, 129–44 (English summary, 140–7).—The sediment solns. of the northern Caspian contain a great accumulation of the biogenic elements C, N, P, Si, and F in comparison with those of sea water. Accumulation is higher in true mud than in sandy mud and sand. The salinity of the buried sediment solns. is a measure of salinity of the most saline waters of the given part of the sea in the past. Difference was established between the sediment solns. of the bay and those of the open sea. In the open sea there has been observed a decreasing content of CO_2, P, Si, Fe, org. matter, and especially of NH_3, parallel with the changing mech. compn. of the sediments in the direction of decreasing fine-grained fraction. Several tables give the results of chem. analyses for the biogenic substances. II. The northern, middle, and southern parts of the Caspian Sea (according to materials collected in 1935, 1936, and 1940). *Ibid.* 148–52 (English summary, 153–6).—The moisture content of natural bottom deposits is closely connected with the mech. compn. of the deposits. The sp. gr. of the bottom deposits (when dry) approaches 2.5. Carbonate is at its max. in shell sediments, at its min. in the mud. The pH of the sediment solns. of the upper layer of bottom deposits tends to decrease from shell rocks to muds. The vertical distribution of moisture in natural bottom deposits permits estn. of the age of a deposit. Many data are included in the report. Gladys S. Macy

1947

1951

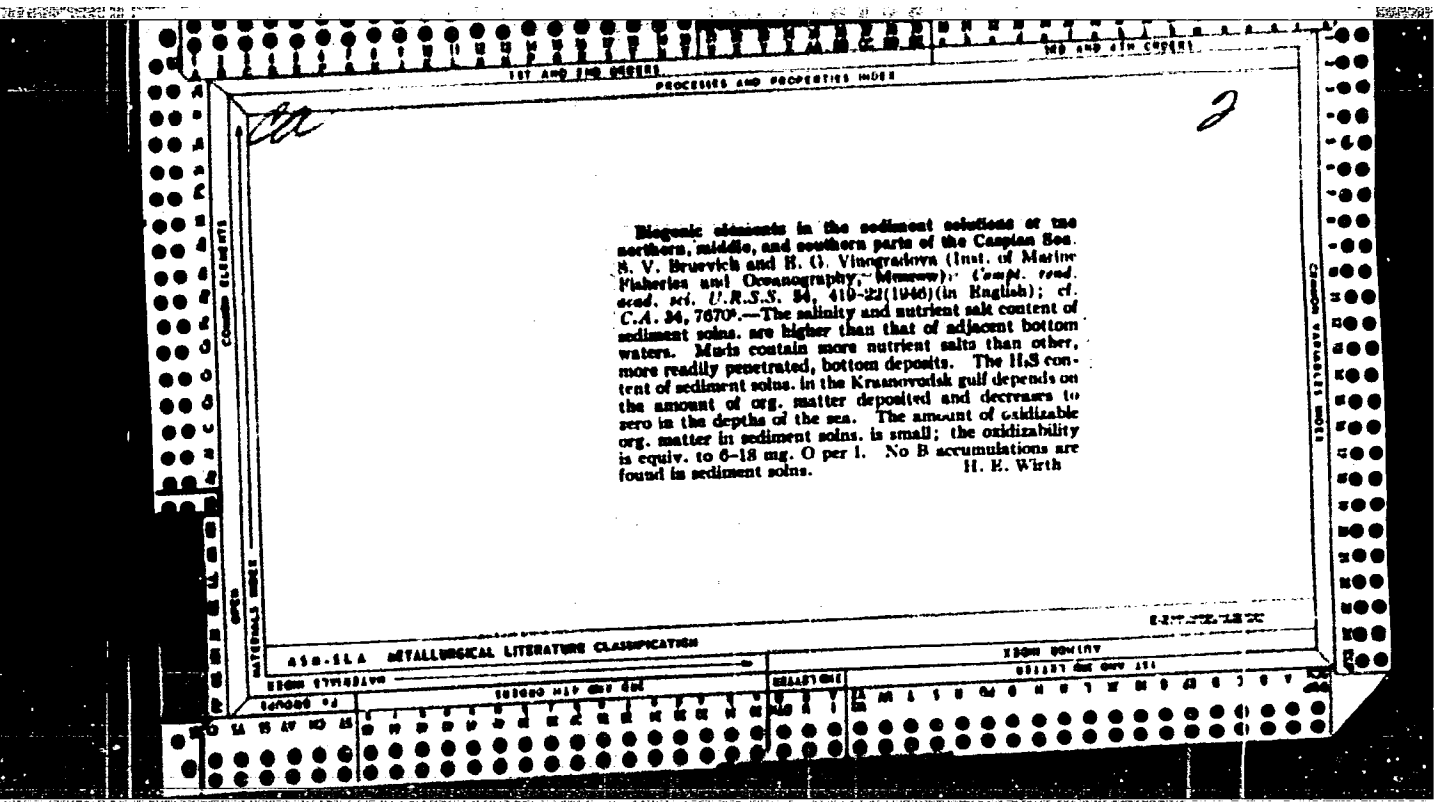


CA

General features of sedimentation in the Caspian Sea (according to the distribution of carbonates, iron, manganese, and phosphorus in sea deposits). S. V. Bruevich and E. G. Vinogradova.—*Compt. rend. acad. sci. U.R.S.S.* 52, 789–92(1946); cf. *C.A.* 41, 2249g.—Bottom deposits of the Caspian Sea originate from fluvial and eolian sources, and pptn. Fluviogenic sediments, low in carbonates and high in Fe, Mn, and P, predominate in the western and central parts; in the eastern parts, eolian and pptd. sediments predominate with high carbonates (4 times), and low Fe, Mn, and P (one-third). Detailed tables are given.

Marjorie Hooker

ASM-SLA METALLURGICAL LITERATURE CLASSIFICATION



PROCESSES AND PROPERTIES INDEX

2

Biogenic elements in the sediment solutions of the northern, middle, and southern parts of the Caspian Sea. S. V. Bruevich and E. G. Vinogradova (Inst. of Marine Fisheries and Oceanography, Moscow); *Compt. rend. acad. sci. U.R.S.S.* 54, 419-22(1946)(in English); cf. *C.A.* 34, 7670⁹.—The salinity and nutrient salt content of sediment solns. are higher than that of adjacent bottom waters. Muds contain more nutrient salts than other, more readily penetrated, bottom deposits. The H_2S content of sediment solns. in the Krasnovodsk gulf depends on the amount of org. matter deposited and decreases to zero in the depths of the sea. The amount of oxidizable org. matter in sediment solns. is small; the oxidizability is equiv. to 6–18 mg. O per l. No B accumulations are found in sediment solns.

H. E. Wirth

ASB-SLA METALLURGICAL LITERATURE CLASSIFICATION

V[illegible], No. 6.

21494 B[illegible]EVICH, [illegible]; [illegible], [illegible]

[illegible] v [illegible] more ([illegible] [illegible] o;
[illegible], [illegible] i [illegible] v [illegible] osadk[illegible]).
Trudy Vtorogo [illegible] geogr. s"yezda. T. [illegible], 19[illegible],
s. 297 - 304, s. kart.

SO: Letopis' Zhurnal'nykh Statey, No. 2[illegible], Moskva, 1949

1. BRUYEVICH, S. V., VINOGRADOVA, Ye. G.

2. USSR (600)

"Sedimentary Precipitation in the Caspian Sea (according to Distribution of Carbonates, Iron, Manganese, and Phosphorus in Sea Sedimentation)." Trudy vtorogo vsesoyuznego geograficheskogo s'yezda, Volume 11, 1948 (207-304)

9. Meteorologiya i Gidrologiya, No. 3, 1949.
[redacted] Report U-2551, 30 Oct 52.

1. BRUYEVICH, S. V.; VINOGRADOVA, Ye. G.
2. USSR (600)
4. Caspian Sea - Sedimentation and Deposition
7. Deposit formation in the Caspian Sea, Trudy Inst. okean., 3, 1949.

9. Monthly List of Russian Accessions, Library of Congress, February 1953. Unclassified.

FEDOSOV, M.V., kand.khim.nauk; VINOGRADOVA, Ye.G.

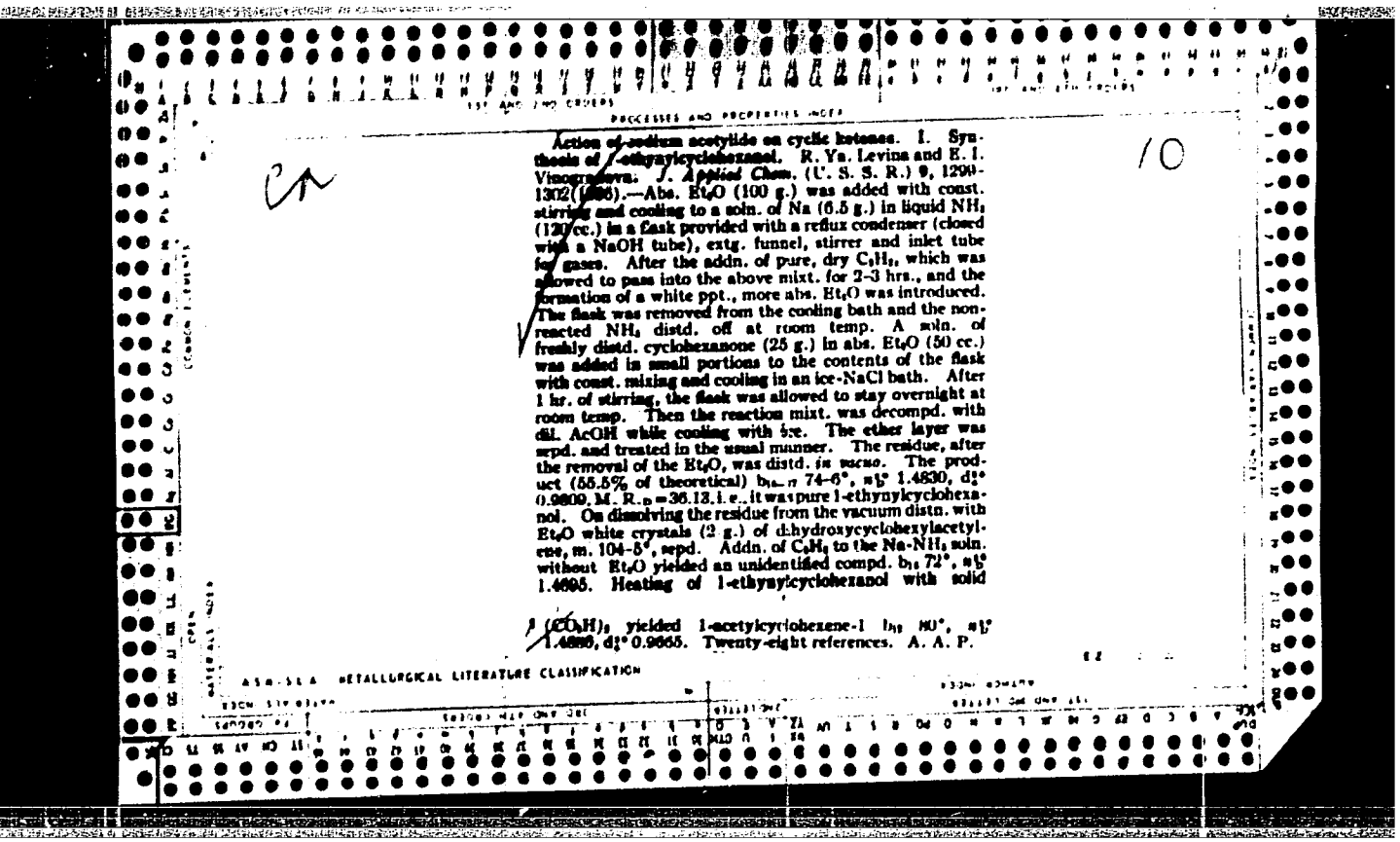
Basic hydrochemical features of the Sea of Azov. Trudy VNIRO 31: 9-34 '55. (MIRA 11:6)

1.Vsesoyuznyy nauchno-issledovatel'skiy institut morskogo rybnogo khozyaystva i okeanografii.
(Azov, Sea of--Hydrology)

VINOGRADOVA, Ye.G., kand.khim.nauk

Hydrochemical conditions of the Sea of Azov during 1951-1953.
Trudy VNIRO 31:62-79 '55. (MIRA 11:6)

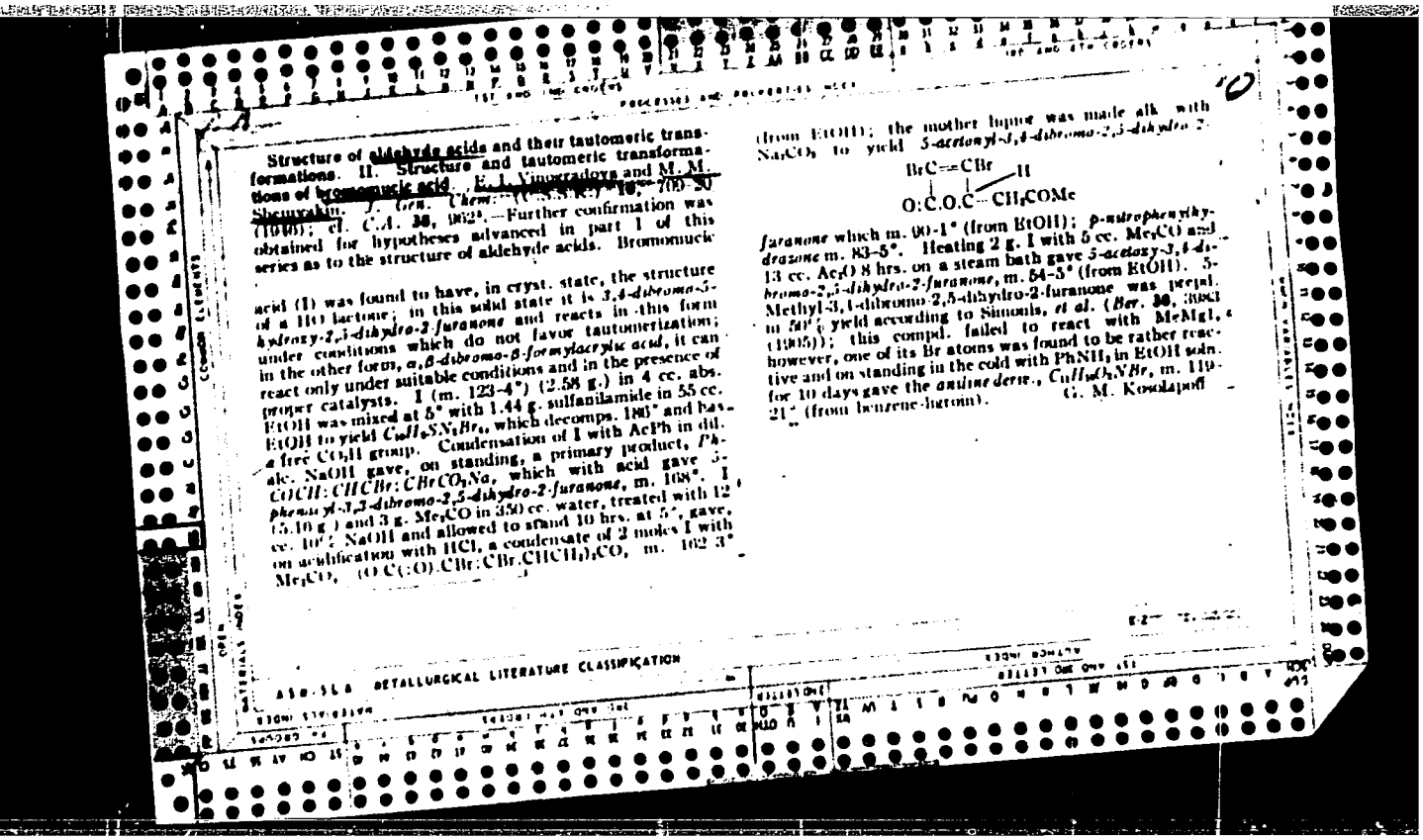
1.Vsesoyuznyy nauchno-issledovatel'skiy institut morskogo rybnogo khozyaystva i okeanografii.
(Azov, Sea of--Water--Composition)



PROCESSES AND PROPERTIES INDEX

Action of sodium acetylide on cyclic ketones. I. Synthesis of 1-ethynylcyclohexanol. R. Ya. Levina and E. I. Vinogradova. *J. Applied Chem.* (U. S. S. R.) 9, 1299-1302(1936).—Abs. Et_2O (100 g.) was added with const. stirring and cooling to a soln. of Na (6.5 g.) in liquid NH_3 (120 cc.) in a flask provided with a reflux condenser (closed with a NaOH tube), extg. funnel, stirrer and inlet tube for gases. After the addn. of pure, dry C_2H_2, which was allowed to pass into the above mixt. for 2-3 hrs., and the formation of a white ppt., more abs. Et_2O was introduced. The flask was removed from the cooling bath and the non-reacted NH_3 distd. off at room temp. A soln. of freshly distd. cyclohexanone (25 g.) in abs. Et_2O (50 cc.) was added in small portions to the contents of the flask with const. mixing and cooling in an ice-NaCl bath. After 1 hr. of stirring, the flask was allowed to stay overnight at room temp. Then the reaction mixt. was decompd. with dil. AcOH while cooling with ice. The ether layer was sepd. and treated in the usual manner. The residue, after the removal of the Et_2O, was distd. *in vacuo*. The product (55.5% of theoretical) b_{16-17} 74-6°, n_D^{15} 1.4630, d_4^{15} 0.9809, M. R.$_D$ = 36.13, i. e., it was pure 1-ethynylcyclohexanol. On dissolving the residue from the vacuum distn. with Et_2O white crystals (2 g.) of dihydroxycyclohexylacetylene, m. 104-5°, sepd. Addn. of C_2H_2 to the Na-NH_3 soln. without Et_2O yielded an unidentified compd. b_{15} 72°, n_D^{15} 1.4695. Heating of 1-ethynylcyclohexanol with solid $(CO_2H)_2$ yielded 1-acetylcyclohexene-1 b_{15} 80°, n_D^{15} 1.4880, d_4^{15} 0.9665. Twenty-eight references. A. A. P.

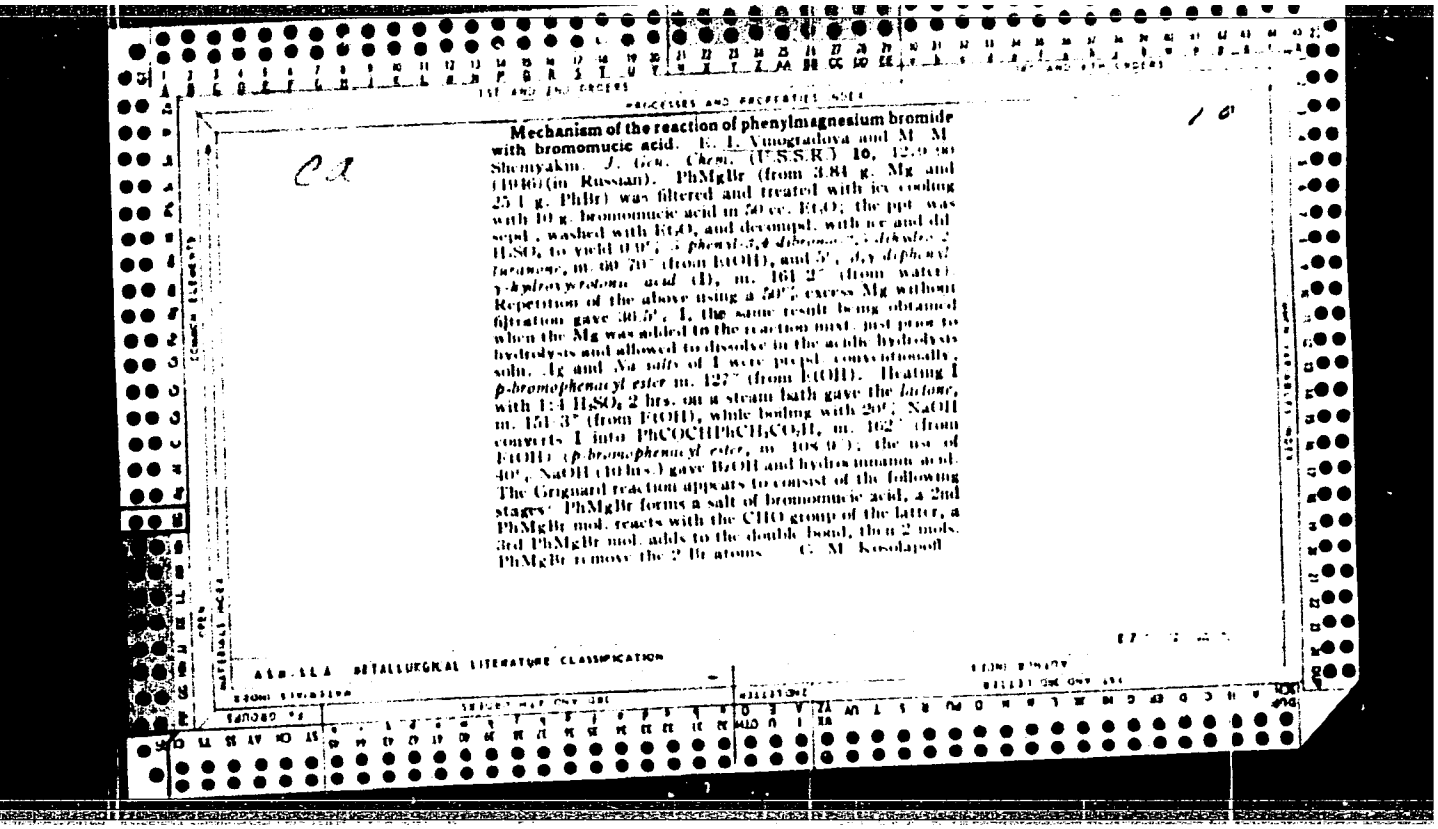
ASM-SLA METALLURGICAL LITERATURE CLASSIFICATION



Structure of aldehyde acids and their tautomeric transformations. II. Structure and tautomeric transformations of bromomuconic acid. E. I. Vinogradova and M. M. Shemyakin. *J. Gen. Chem.* (U.S.S.R.) 10, 702–30 (1940); cf. *C.A.* **34**, 3023.—Further confirmation was obtained for hypotheses advanced in part I of this series as to the structure of aldehyde acids. Bromomuconic acid (I) was found to have, in cryst. state, the structure of a HO lactone; in this solid state it is *3,4-dibromo-5-hydroxy-2,5-dihydro-2-furanone* and reacts in this form under conditions which do not favor tautomerization; in the other form, *α,β-dibromo-β-formylacrylic acid*, it can react only under suitable conditions and in the presence of proper catalysts. I (m. 123–4°) (2.58 g.) in 4 cc. abs. EtOH was mixed at 5° with 1.44 g. sulfanilamide in 55 cc. EtOH to yield $C_{10}H_{10}S_2N_2Br_2$, which decomps. 180° and has a free CO_2H group. Condensation of I with AcPh in dil. alc. NaOH gave, on standing, a primary product, *PhCOCH:CHCBr:CBrCO₂Na*, which with acid gave *5-phenacyl-3,3-dibromo-2,5-dihydro-2-furanone*, m. 108°. I (5.10 g.) and 3 g. Me_2CO in 350 cc. water, treated with 12 cc. 10% NaOH and allowed to stand 10 hrs. at 5°, gave, on acidification with HCl, a condensate of 2 moles I with Me_2CO, $(OC(:O).CBr:CBr.CHCH_2)_2CO$, m. 162.3° (from EtOH); the mother liquor was made alk. with Na_2CO_3 to yield *5-acetonyl-3,4-dibromo-2,5-dihydro-2-furanone* which m. 90–1° (from EtOH); *p-nitrophenylhydrazone* m. 83–5°. Heating 2 g. I with 5 cc. Me_2CO and 13 cc. Ac_2O 8 hrs. on a steam bath gave *5-acetoxy-3,4-dibromo-2,5-dihydro-2-furanone*, m. 54–5° (from EtOH). 5-Methyl-3,4-dibromo-2,5-dihydro-2-furanone was prepd. in 50% yield according to Simonis, *et al.* (*Ber.* **38**, 3083 (1905)); this compd. failed to react with MeMgI, however, one of its Br atoms was found to be rather reactive and on standing in the cold with $PhNH_2$ in EtOH soln. for 10 days gave the *anilino deriv.*, $C_{17}H_{16}O_3NBr$, m. 119–21° (from benzene-ligroin).

G. M. Kosolapoff

A50-51A METALLURGICAL LITERATURE CLASSIFICATION



Mechanism of the reaction of phenylmagnesium bromide with bromomucic acid. E. I. Vinogradova and M. M. Shemyakin. *J. Gen. Chem.* (U.S.S.R.) **10**, 12-9 (1940)(in Russian). PhMgBr (from 3.84 g. Mg and 25.1 g. PhBr) was filtered and treated with ice cooling with 10 g. bromomucic acid in 50 cc. Et_2O; the ppt was suspd., washed with Et_2O, and decompd. with ice and dil. H_2SO_4 to yield 0.9% of *phenyl-3,4 dibromo-* [illegible] *lactone*, m. 69-70° (from EtOH), and 5% of *diphenyl-γ-hydroxycrotonic acid* (I), m. 161.2° (from water). Repetition of the above using a 50% excess Mg without filtration gave 36.5% I, the same result being obtained when the Mg was added to the reaction mixt. just prior to hydrolysis and allowed to dissolve in the acidic hydrolysis soln. Ag and Na *salts* of I were prepd. conventionally. *p-bromophenacyl ester* m. 127° (from EtOH). Heating I with 1:4 H_2SO_4 2 hrs. on a steam bath gave the *lactone*, m. 151-3° (from EtOH), while boiling with 20% NaOH converts I into $PhCOCHPhCH_2CO_2H$, m. 162° (from EtOH) (*p-bromophenacyl ester*, m. 108-9°); the use of 40% NaOH (10 hrs.) gave BzOH and hydrocinnamic acid. The Grignard reaction appears to consist of the following stages: PhMgBr forms a salt of bromomucic acid, a 2nd PhMgBr mol. reacts with the CHO group of the latter, a 3rd PhMgBr mol. adds to the double bond, then 2 mols. PhMgBr remove the 2 Br atoms. C. M. Kosolapoff

VINOGRADOVA, YE. I.

USSR/Chemistry - 1,4-Naphthoquinone Jan 1948
Chemistry - Hydrazine

"Research in the Field of Compounds of Quinoid Structure: II, Reaction of Some Sisulfite Derivatives of P-Naphthoquinone With Substituted Hydrazines," D. A. Bochvar, Ye. I. Vinogradova, Yu. B. Shvetsov, M. M. Shemyakin, Lab of Org Chem, Inst of Biol and Med Chem, Acad Med Sci USSR, and Chair of Anal Chem, Moscow Textile Inst, 11 pp

"Zhur Obshch Khim" Vol XVIII (LXXX), No 1

Study the interrelationship of vaious types of pnaphthoquinone derivative bisulfites containing replaceable hydrazines, and observe the properties of the hydrazines formed. Show fallacies contained in formulas suggested by Palladin for bisulfite produced 2-methyl-1,4-naphthoquinone and by Ufimtsev for bisulfite produced 2-methyl-1,4-naphthoquinone-3-sulfonate

Submitted 14 Jan 1947

PA 64T39

VINOGRADOVA, YE. I.

62/49T8

USSR/Chemistry - Cyclic Compounds Mar 49

"Oxidation and Oxidation-Hydrolysis Conversions of Organic Molecules: IX, Study of Conversion of o-(Alpha-Chloropropionyl) Acids Into Carbocyclic Compounds," Ye. I. Vinogradova, Yu. B. Shvetsov, M. M. Shemyakin, Lab of Org Chem, Inst of Biol and Med Chem, Acad Med Sci USSR, 10 pp

"Zhur Obshch Khim" Vol XIX, No 3 p-507

Made a study of conditions and mechanism of the preparation of 5-and 6-member carbocyclic compounds from o-(alpha-chloropropionyl)-phenylglyoxylic acid. Submitted 2 Nov 47.

62/49T8

VINOGRADOVA, Ye. I. PA 65/49T38

USSR/Chemistry - Phthiocol Apr 49
Ether

"Characteristics of Phthiocol," Ye. I. Vinogradova, Lab of Org Chem, Inst of Biol and Med Chem, Acad Med Sci USSR, 3½ pp

"Zhur Obshch Khim" Vol XIX, No 4, pp 771-4

Describes the preparation of several derivatives of phthiocol: semicarbazone of phthiocol and its mono-sodium salt, and also n-nitrobenzyl ether of the semicarbazone of phthiocol. Submitted 2 Nov 47.

65/49T38

VINOGRADOVA, Ye. I.

191T47

USSR/Chemistry - Biological Sep 51

"Oxidation and Oxidative-Hydrolytic Conversion of Organic Molecules. XVIII. Synthesis and Properties of Certain Quinone Oxides," L. A. Shchukina, Ye. I. Vinogradova, M. M. Shemyakin, Lab Org Chem, Inst Biol and Med Chem, Acad Med Sci USSR

"Zhur Obshch Khim" Vol XXI, No 9, pp 1661-1667

Synthesized several oxides of 1,4-benzoquinones and 1,4-naphthoquinones; studied certain of their properties: namely, their oxidizing ability and their capacity for being converted into esters of the corresponding glycols.

191T47

VINOGRADOVA, YE. I.

211727

by bacteria (G. S. Smith, C. S. Worrel, Arch Biochem, Vol XXVIII, 1, 232, 1950). In the present work, I was synthesized. Gives a description of the synthesis.

211727

It was shown recently, that I is an intermediate product of the enzymatic splitting of chloromycetin

"Dok Ak Nauk SSSR" Vol LXXIX, No 4, pp 601-603

"Synthesis and Properties of Alpha-Dichloroacetylamino-beta-Hydroxy-p-Nitropropiophenone (I)," E. M. Badmaa, Ye. I. Vinogradova, D. M. Vitkovskiy, A. S. Khokhlov, Yu. B. Shvetsov, L. A. Shchukina, Inst of Biol and Med Chem, Acad Med Sci USSR

USSR/Chemistry - Antibiotics 1 Aug 51

VINOGRADOVA, YE. I.

USSR/Chemistry - Antibiotics

21 Sep 52

"Ways of Synthesizing Optically Active Analogs of D-threo-1-(p-nitrophenyl)-2-dichloracetylamino-1, 3-propanediol," M. N. Shchukina, E.M. Bamdas, Ye. I. Vinogradova, M.G. Karapetyan, M. N. Kolosov, A.S.Khokhlov, Yu. B.Shvetsov and L.A. Shchukina, Lab of Org Chem, Inst of Biol and Med Chem, Acad Med Sci USSR

DAN SSSR, Vol 86, No 3, pp 565-568

Of the four stereoisomers of 1-(p-nitrophenyl)-2-dichloracetylamino-1,3-propanediol, only one (the d-threo-isomer) is antibacterially active (chloromycetin, chloramphenicol, levomycetin). To learn the relationship between the structure of these compds and antibacterial activity, more analogs of these compds must be synthesized. Two ways of synthesis have been worked out at present. D-or l-threo-1-(p-nitrophenyl)-2-amino-1,3-propanediol (I) is converted into the N-benzoyl derivative (II) which is reduced to the corresponding amino compd (III). This is diazo group is then substituted in several different ways to form an optically active compd (V). The benzoyl group is then removed from (V) to form the aminodiol (VI) which is dichloracetylated into (VII). The other synthesis also starts with (I) which is reduced to the diamino compound (VIII). This is N-dichloracetylated into the hydrochloride (IX) which is diazotized into (X). (X) is converted into (VII) in the same way as (IV) was into (V). [Reaction schemes are shown in the original paper.] Presented by Acad V. M. Rodionov 14 Jul 52

PA 247T11

SHEMYAKIN, M.M.; BAMDAS, E.M.; VINOGRADOVA, Ye.I.; KARAPETYAN, M.G.; KOLOSOV, M.N.; KHOKHLOV, A.S.; SHVETSOV, Yu.B.; SHCHUKINA, L.A.

Research on the chemistry of chloromycetin (levomycetin). Part 2. Study of the course of synthesis and the synthesis of optically-active analogs of chloromycetin (levomycetin). Zhur.ob.khim. 23 no.11:1854-1867 N '53. (MLRA 6:11)

1. Institut biologicheskoy i meditsinskoy khimii Akademii meditsinskikh nauk SSSR. (Chloromycetin)

SHEMYAKIN, M.M.; BAMDAS, E.M.; VINOGRADOVA, Ye.I.; GUBERNIYEV, M.A.; OREKHOVICH, V.N.; KHOKHLOV, A.S.; SHVETSOV, Yu.B.; SHCHUKINA, L.A.

Research in the chemistry of chloromycetin (levomycetin). Racemization of ℓ-threo-1-(π-nitrophenyl)-2-dichloroacetylamino-1,3-propanediol. Dokl.AN SSSR 94 no.2:257-259 Ja '54. (MLRA 7:1)

1. Chlen korrespondent Akademii nauk SSSR (for Shemyakin). 2. Deystvitel'nyy chlen AMN SSSR (for Orekhovich). 3. Institut biologicheskoy i meditsinskoy khimii Akademii meditsinskikh nauk SSSR. (Racemization) (Propanediol)

SHEMYAKIN,M.M.; KOLOSOV,M.N.; KARAPETYAN,M.G.; HAMDAS,E.M.; SHEVTSOV, Yu.B.; VINOGRADOVA,Ye.I.; SHCHUKINA,L.A.

Investigation of the chemistry of chloramphenicol (levomycetin). Synthesis of new optically active analogs of chloramphenicol (levomycetin). Zhur.ob.khim.25 no.6:1199-1206 Je'55. (MLRA 8:12)

1. Institut biologicheskoy i meditsinskoy khimii Akademii meditsinskikh nauk SSSR.

(Chloramphenicol)

ACC NR: AP7003653 SOURCE CODE: UR/0079/66/036/008/1391/1405

AUTHOR: Shemyakin, M. M.; Vinogradova, Yo. I.; Feygina, M. Yu.; Aldanova, N. A.; Shvetsov, Yu. B.; Fonina, L. A.

ORG: Institute of the Chemistry of Natural Compounds, AN SSSR (Institut khimii prirodnykh soyedineniy AN SSSR)

TITLE: Synthesis and antibacterial activity of valinomycin analogs

SOURCE: Zhurnal obshchey khimii v. 36, no. 8, 1966, 1391-1405

TOPIC TAGS: bactericide, organic synthetic process

ABSTRACT: In a study of the relationship between the structure and biological effects of depsipeptides related to valinomycin, the authors synthesized a series of its linear and cyclic analogs, differing in chain length or size of ring, as well as in the nature and configuration of the hydroxy and amino acid residues. The optically active linear depsipeptides were synthesized by a method developed earlier by the authors for the total synthesis of valinomycin, consisting of gradual construction of the depsipeptide chain by the creation first of esters, then of amide bonds. The activity of the depsipeptides was found to depend upon the presence and size of the ring, as well as on the nature and configuration of the amino and hydroxy acid residues. All of the investigated cyclotetra- and cycloоctadepsipeptides had no activity at all, whereas many cyclododecadepsipeptides possessed substantial activity; the activity again disappeared for

Card 1/2 UDC: 547.982.466

0926 0273

L 11397-67
ACC NR: AP7003653

cyclohexadecadepsipeptides. The structure of the radicals and configuration of the amino acid residues in the valinomycin molecule could be varied substantially (on a limited portion of the chain) without any significant loss of activity. However, a change in the structure of the radical or configuration of the hydroxy acid residues usually led to an almost total destruction of the antimicrobial activity. It was concluded that the antibiotic activity of depsipeptides is evidently associated with their interaction with the lipoproteins of the cell membranes, expressed in the ability of these compounds to selectively induce active transport of potassium ions (but not of sodium ions) into animal mitochondria. Orig. art. has: 1 figure and 14 tables. [JPRS: 38,970]

SUB CODE: 06,07 / SUBM DATE: 12Jul65

Card 2/2 jb

BOCHKAREV, V.N.; FUCHKOV, V.A.; VUL'FSON, N.S.; SHEMYAKIN, M.M.; OVCHINNIKOV, Yu.A.; KIRYUSHKIN, A.A.; IVANOV, V.T.; VINOGRADOVA, Ye.I.; ALDANOVA, N.A.

Depsipeptides. Part 51: Mass spectrometric study of cyclotetradepsipeptides of regular structure. Khim.prirod.soed. 1:52-58 '65. (MIRA 18:6)

1. Institut khimii prirodnykh soyedineniy AN SSSR.

SHEMYAKIN, M.M., akademik; VINOGRADOVA, Ye.I.; FEYGINA, M.Yu.; ALDANOVA, N.A.; OLADKINA, V.A.; SHCHUKINA, L.A.

Synthesis of optically active depsipeptides. Dokl. AN SSSR 140 no.2:387-390 S '61. (MIRA 14:9)

1. Institut khimii prirodnykh soyedineniy AN SSSR.
(Peptides)

RYABOVA, I. D.; PAVLENKO, I. A.; VINOGRADOVA, Ye. I.; OVCHINNIKOV, Yu. A.; ALDANOVA, N.A.; KIRYUSHKIN, A. A.; IVANOV, V. T.; FEYGINA, M. Yu.

"Antimicrobial activity of depsipeptides."

report submitted for Antibiotics Cong, Prague, 15-19 Jun 64.

Inst for Chemistry of Natural Compounds, AS USSR, Moscow.

SHEMYAKIN, M. M.; VINOGRADOVA, Ye. I.; FEYGINA, M. Yu.; ALDANOVA, N. A.; OVCHINNIKOV, Yu. A.; KIRYUSHKIN, A. A.

Depsipeptides. Part 16: Paths in the synthesis of optically active linear depsipeptides. Zhur. ob. Khim. 34 no.6:1782-1797 Je '64. (MIRA 17:7)

1. Institut khimii prirodnykh soyedineniy AN SSSR.

AL'BREKHT, Vladimir Georgiyevich, doktor tekhn.nauk, prof.; SMIRNOV, Aleksey Ionovich, kand.tekhn.nauk; PETROVA, Vera Nikolayevna, inzh. Prinimali uchastiye: VINOGRADOVA, Ye.I., inzh.; SKVORTSOV, O.S., inzh.; CHUPRIKOV, S.A., inzh. BYKHOVSKAYA, S.N., red.izd-va; MAKSIMOVA, V.V., tekhn.red.

[Selecting the types of superstructure for railroad tracks in open pit mines] Vybor tipov verkhnego stroeniia zheleznodorozhnykh putei v kar'erakh. By V.G.Al'brekht, A.I.Smirnov, V.N.Petrova. Pod obshchei red. A.I.Smirnova. Moskva, Gosgortekhizdat, 1962. 198 p. (MIRA 15:5)
(Mine railroads)

SMIRNOV, A.I., kand.tekhn.nauk. Prinimali uchastiye: PETROVA, V.N., inzh.; ANASHKINA, L.M., inzh.; VINOGRADOVA, Ye.I., inzh.; ZAN'KO, V.I., tekhnik. GOLOVANOV, A.L., inzh., red.; BOBROVA, Ye.N., tekhn.red.

[Selection of outside transportation for industrial enterprises] Vybor vneshnego transporta promyshlennykh predpriiatii. Moskva, Gos.transp.zhel-dor.izd-vo, 1959. 135 p. (Trudy Vsesoiuznogo nauchno-issledovatel'skogo instituta zheleznodorozhnogo transporta) (MIRA 12:5)

(Railroads, Narrow-gauge)
(Transportation, Automotive)

SHEMYAKIN, M.M.; SHCHUKINA, L.A.; VINOGRADOVA, Ye.I.; KOLOSOV, M.N.; VDOVINA, R.G.; KARAPETYAN, M.G.; RODIONOV, V.Ya.; RAVDEL', G.A.; SHVETSOV, Yu.B., BAMDAS, E.M.; CHAMAN, Ye.S.; YERMOLAYEV, K.M.; SEMKIN, Ye.P.

Research data on sarkomycin and its analogues. Part 1: Synthesis of dihydrosarkomycin and its antipode. Zhur. ob. khim. 27 no.3:742-748 Mr '57. (MLRA 10:6)

1. Institut biologicheskoy i meditsinskoy khimii Akademii meditsinskikh nauk SSSR.

(Sarkomycin)

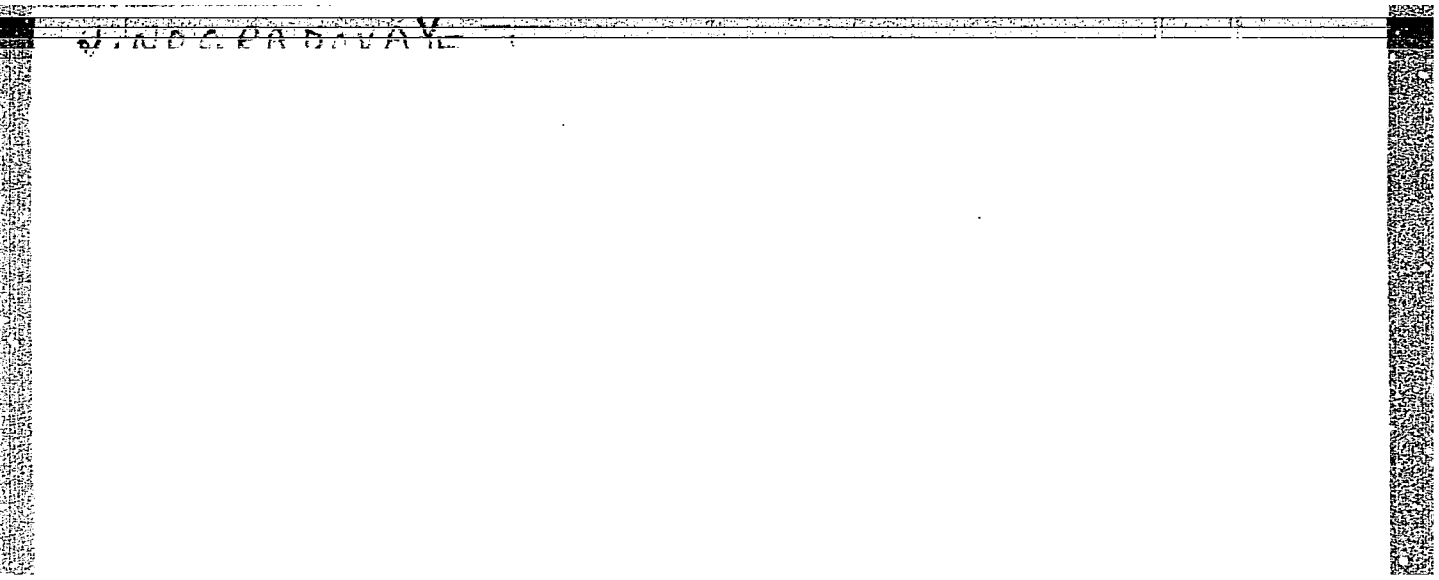
VINOGRADOVA, YE. I.

SHEMYAKIN, M.M.; RAKHIL', G.A.; CHAMAN, Ye.S.; SHVETSOV, Yu.B.; VINOGRADOVA, Ye.I.

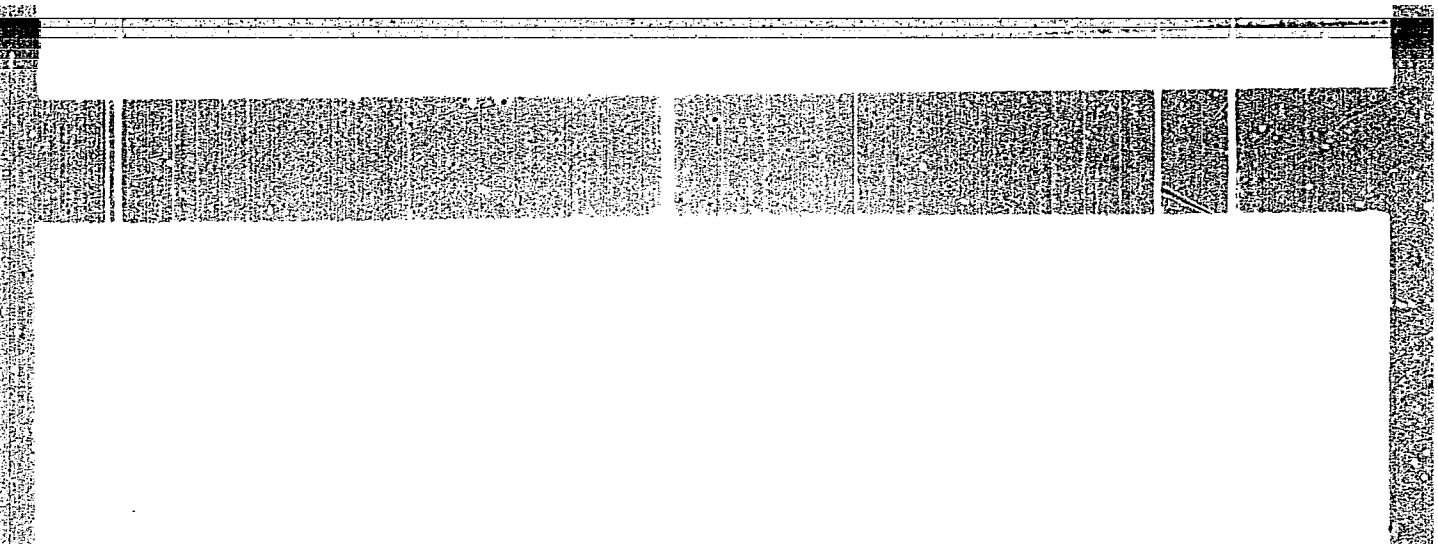
Synthesis of racemic sarkomycin. Izv. AN SSSR. Otd. khim. nauk no.8:1007 Ag '57. (MIRA 11:2)

1. Institut biologicheskoy i meditsinskoy khimii Akademii meditsinskikh nauk SSSR.

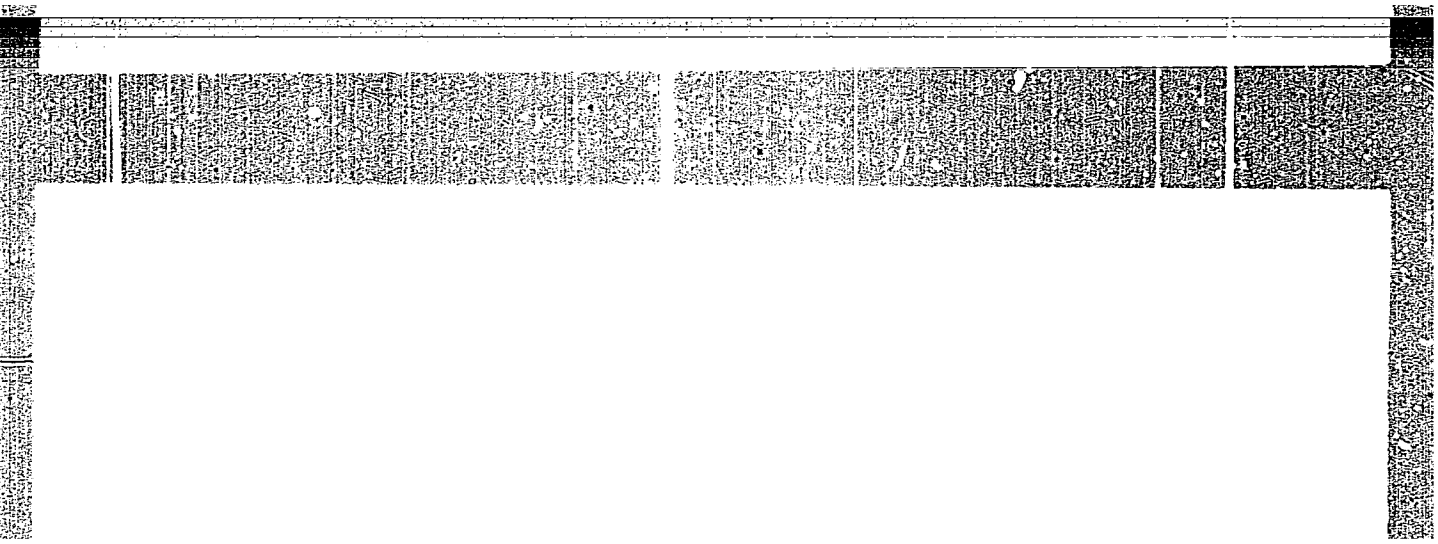
(Sarkomycin)



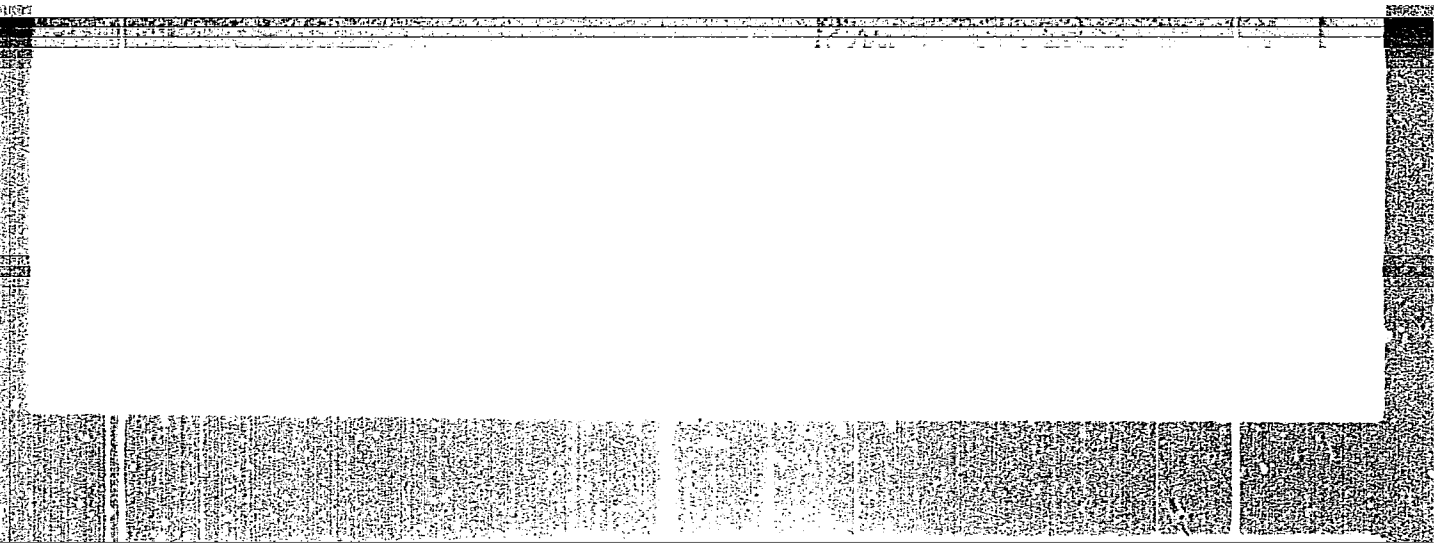
APPROVED FOR RELEASE: 09/01/2001 CIA-RDP86-00513R001860010010-4"



APPROVED FOR RELEASE: 09/01/2001 CIA-RDP86-00513R001860010010-4"



APPROVED FOR RELEASE: 09/01/2001 CIA-RDP86-00513R001860010010-4"



APPROVED FOR RELEASE: 09/01/2001 CIA-RDP86-00513R001860010010-4"

USSR/Biology - Wheat May/Jun 50
Vernalization

"Length of Time Required for Vernalization of Winter Wheat in Relation to Period When Seed is Harvested," S. I. Koryukayev, Ye. I. Vinogradova, Leningrad State Sel Sta

"Agrobiol" No 3, pp 67-69

Experiments on DS 2444-2, Dyurabl', and Borovichskaya, varieties of winter wheat. Seed harvested before full maturity requires shorter period for vernalization; when planted without being vernalized first produces more earing plants than completely mature seed under same conditions. Two tables.

170T2

AL'TMARK, A.M.; VINOGRADOVA, Ye.I.; POCHINKO, R.Ye.

Prolonged sleep therapy of psychiatric cases. Zhur.nevr.i psikh. 54 no.1:17-21 Ja '54. (MLRA 7:1)

1. Gor'kovskaya psikhonevrologicheskaya bol'nitsa Ministerstva zdravookhraneniya RSFSR. (Sleep) (Psychoses) (Neuroses)

SHUV, Izrail' Isaakovich; VINOGRADOVA, Ya.K., nauchnyy redaktor; MIKHAYLOVA, T.M., redaktor; DMITRIYEVA, M.I., tekhnicheskiy redaktor

[General technology of footgear; a summary] Obshchaia tekhnologiia obuvi; konspekt. Moskva, Gos.nauchno-tekhn.izd-vo M-va legkoi promyshl. SSSR, 1957. 129 p. (MLRA 10:10)
(Shoe industry)

ASHRATOVA, Sofiya Komalevna; VINOGRADOVA, Ye.K., retsenzent; GRACHEVA, A.V., red.; KHAKHIN, M.T., tekhn.red.

[Finishing the edges of shoe uppers] Otdelka kraev detalei verkha obuvi. Moskva, Gos.nauchno-tekhn.izd-vo lit-ry po legkoi promyshl., 1959. 183 p. (MIRA 13:5)
(Shoe manufacture)

Vinogradova Ye. K

OKHOTIN, M.V., professor, doktor khimicheskikh nauk; LEVINA, R.S.; VINOGRADOVA, Ye.K.

Studying the process of crystallization of silica glass by means of annealing. Stek.i ker. 11 no.6:8-11 Je '54. (MLRA 7:6)
(Glass manufacture--Chemistry)

VINOGRADSKAYA, Ye. L.

"Higher Accuracy in Diagram Construction of Isothermal Disintegration of Austenite" Tr. In-ta Fiziki AN Latv. SSR, No 5, 1953, 35-54

A simple magnetrometric equipment is described for studying the disintegration process of austenite and allowing one to plot the initial and terminal curves of disinte gration with 2 to 3% accuracy. Two zones of high stability of austenite were found at about 450 and 600°, and two zones of low stability at about 400 and 500°. The type of disintegration curves did not depend on frequency. (RZhFiz, No 11, 1955)

VINOGRADOVA, YE.N.

137-58-5-11174

Translation from: Referativnyy zhurnal, Metallurgiya. 1958, Nr 5. p 325 (USSR)

AUTHORS: Vinogradova, Ye.N., Ivanova, V.A.

TITLE: Diethyldithiophosphate Acid Employed in the Removal of Copper, Cadmium, Lead, and Bismuth from Zinc, as Well as in the Process of Polarographic Determination of Germanium in Presence of Arsenic (Primeneniye dietilditiofosfatnoy kisloty dlya otdeleniya primesey medi, kadmiya, svintsa i vismuta v tsinke i pri polyarograficheskom opredelenii germaniya v prisutstvii mysh'yaka)

PERIODICAL: Vestn. Mosk. un-ta. Ser. matem., mekhan., astron., fiz., khimii, 1957, Nr 3, pp 237-245

ABSTRACT: The process of separation of Cu, Cd, Pb, and Bi impurities from Zn is based on the fact that diethyldithiophosphate acid, $(C_2H_5O)_2PSSH$ (I), causes these elements to form precipitates which are poorly soluble in water, but readily soluble in non-polar solvents. Cu, Cd, and Pb precipitates are formed in acidic, as well as in neutral and alkaline solutions and are withdrawn with ether, the acidity of the medium remaining the same. Bi forms a complex compound which is insoluble in water and

Card 1/3

Diethyldithiophosphate Acid Employed (cont.)

which passes into the ether layer only in acidic media with a pH no greater than 3.2. Salts of Fe and Zn do not precipitate out under these conditions, and ions of these elements do not appear in the ether extract. In the course of analysis, a 50-cc portion of a 10% Zn solution, containing 0.002% each of Cu, Pb, Cd, Bi, and Fe, is diluted with 50 cc of 2-N HCl. 50 cc of the mixture obtained are treated with 25 cc of 0.050-N I and are then twice extracted with ether. The ether contained in the extract is driven off; after treating the residue with 1 cc of HNO_3 and evaporating it almost to dryness, HCl is added and the evaporation procedure is repeated. After dissolving the residue in a mixture of 3-5 drops of concentrated HCl and 5 cc of water, the solution is placed into a 25-cc flask to which 10 cc of a 44% sodium tartrate solution are added together with 1 cc of CH_3COOH (1:2) and 10 drops of a 0.2% solution of methyl red; the level is raised to a predetermined mark by means of adding water, O_2 is removed by a stream of H_2, and the Cu, Cd, Pb, and Bi are polarographed. The process of determination is accomplished by the method of increments, the error being equal to 1.6-4.9%. It is established that in the presence of Ge As can be completely precipitated by the action of I. I is added to a solution in which the Ge-As ratio is 1/500 and the concentration is 3 N in terms of HCl, in an amount which is approximately three times greater than the As content. After filtering out the As precipitate and washing it in

Diethyldithiophosphate Acid Employed (cont.)

5 cc of I, the filtrate is neutralized with a base in the presence of phenolphtalein, and the volume is brought to 50 cc by a 0.05-M KCl solution in a borate buffer (pH 8.37). Under these conditions a well defined polarographic step is obtained for the Ge ($E_{1/2}$=1.4 v), while the magnitude of the current remains a linear function of the concentration. No concurrent precipitation of Ge and As was observed.

N.G.

1. Zinc--Purification 2. Metals--Reduction 3. Germanium--Determination
4. Arsenic--Applications

Card 3/3

MIKHAYLOV, V.D., otv. red.; ROZENTAL', I.L., otv. red.; PCHELINTSEVA, G.M., red.; VINOGRADOVA, Ye.M., red.; VLASOVA, N.A., tekhn. red.

[Some problems in the physics of elementary particles and of the atomic nucleus] Nekotorye voprosy fiziki elementarnykh chastits i atomnogo iadra. Otvet. red. V.D.Mikhailov i I.L. Rozental'. Moskva, Gosatomizdat, 1962. 134 p.
(MIRA 15:7)

1. Moscow. Inzhenerno-fizicheskiy institut.
(Particles (Nuclear physics)) (Nuclei, Atomic)

[illegible], M.I.; [illegible], Ye.M.

Effect of ions [illegible] on the [illegible] in the method of analysis polarographic with [illegible]. Zhur. anal. khim. 20 no.10:1064-1068 '65. (MIRA 18:11)

1. M.V. Lomonosov Moscow State University.

L 11688-66 EWT(m)/T/EWP(t)/EWP(b) IJP(c) JD
ACC NR: AP6005879 (A) SOURCE CODE: UR/0075/65/020/010/1064/1068

AUTHOR: Kamenev, A. I.; Vinogradova, Ye. N.

ORG: Moscow State University im. M. V. Lomonosov (Moskovskiy gosudarstvennyy universitet)

TITLE: Effect of certain factors on anodic peaks of copper and lead in the method of amalgam polarography with accumulation

SOURCE: Zhurnal analiticheskoy khimii, v. 20, no. 10, 1965, 1064-1068

TOPIC TAGS: polarographic analysis, copper, lead, surface active agent, electrolyte, electrode, mercury alloy, silver, gold, platinum

ABSTRACT: The behavior of trace quantities of lead and copper was studied on stationary mercury electrodes with gold, silver, and platinum contacts. Experimental data showed that in the combined determination of both metals, the best results are obtained with a silver contact. Another important advantage of this contact is that it is less likely to form intermetallic compounds with elements such as cadmium, gallium, zinc, etc. Use of a mercury electrode with a silver contact made it possible to increase the sensitivity of the determination of lead and copper con-

Card 1/2

siderably. It was found that surface-active agents affect the determination of lead, but have almost no effect on that of copper; a method is proposed for preparing a supporting electrolyte which permits one to obtain reproducible results. The dependence of the peak height of lead on the temperature, accumulation time, and potential of preelectrolysis during the preparation of the background electrolyte solution was determined. It is shown that lead in amounts on the order of $1.6 \cdot 10^{-6}$% and copper in amounts of about $1.4 \cdot 10^{-5}$% (coefficient of variation 27 and 7% respectively) can be determined in high-purity NaCl in a background electrolyte consisting of 0.2 M HCl + xM NaCl. Orig. art. has: 2 figures, 7 tables.

SUB CODE: 07/ SUBM DATE: 15Jun64/ ORIG REF: 007/ OTH REF: 002

EVK

L 24221-66 EWT(m)/EWP(t) IJP(c) JD

ACC NR: AP6009436 UR/0075/66/021/003/0320/0322

AUTHOR: Kamenev, A.I.; Vinogradova, Ye.N.

ORG: Moscow State University im. M.V. Lomonsov (Moskovskiy gosudarstvennyy universitet)

TITLE: Reproducibility of determination of bismuth on a film-type electrode in the method of amalgam polarography with accumulation

SOURCE: Zhurnal analiticheskoy khimii, v.21, no.3, 1966, 320-322

TOPIC TAGS: quantitative analysis, bismuth, polarographic analysis, electrode

ABSTRACT: For the determination of a number of micro-impurities by the method of amalgam polarography, there has previously been proposed the use of a mercury film-type electrode with accumulation which permits increasing the sensitivity of the method by one to two times. The present article reports a study of several factors on the height of the anode peak and on the reproducibility of determination of bismuth on a film-type electrode. The studies were made on a PA-2 polarograph (sensitivity 3.6 x 10-9 a/mm, rate of potential 5 mv/sec). A saturated calomel electrode was used as a comparison electrode. Each bismuth determination was made at least three times against a background of 0.2 molar HCl. The solution was agitated by a magnetic agitator and a stream of purified nitrogen.

Card 1/2

L 22529-66
ACC NR: AP6009436

The stilling time of the solution was 2 minutes. The quartz cell with a capacity of 20 ml was placed in a box made of organic glass and was thermostatted (15 ± 0.2°). The film-type mercury electrode was a silver wire 0.5 mm in diameter and 6 mm long. The wire was amalgamed electrolytically in a saturated solution of $Hg_2(NO_3)_2$ for 2 minutes at a current strength of 1 ma (the thickness of the film was about 2 microns). After deposition of the mercury film, the electrode was carefully washed in triple distilled water, put into the solution under investigation, and accumulation was carried out for the required time. The working solutions, 5×10^{-5} mole/liter solutions in 1.2 molar HCl. The initial 5×10^{-3} mole/liter bismuth solution was obtained by dissolving high purity metallic bismuth. A table shows the height of the anode peak for bismuth as a function of the accumulation potential and a second table shows the effect of the accumulation time on the height of the anode peak for bismuth. Results showed that the error in determination of bismuth concentrations of the order of 10^{-10} mole/liter by this method did not exceed 25%. Orig. art. has: 2 figures and 3 tables.

SUB CODE: 07/ SUBM DATE: 06May65/ ORIG REF: 010

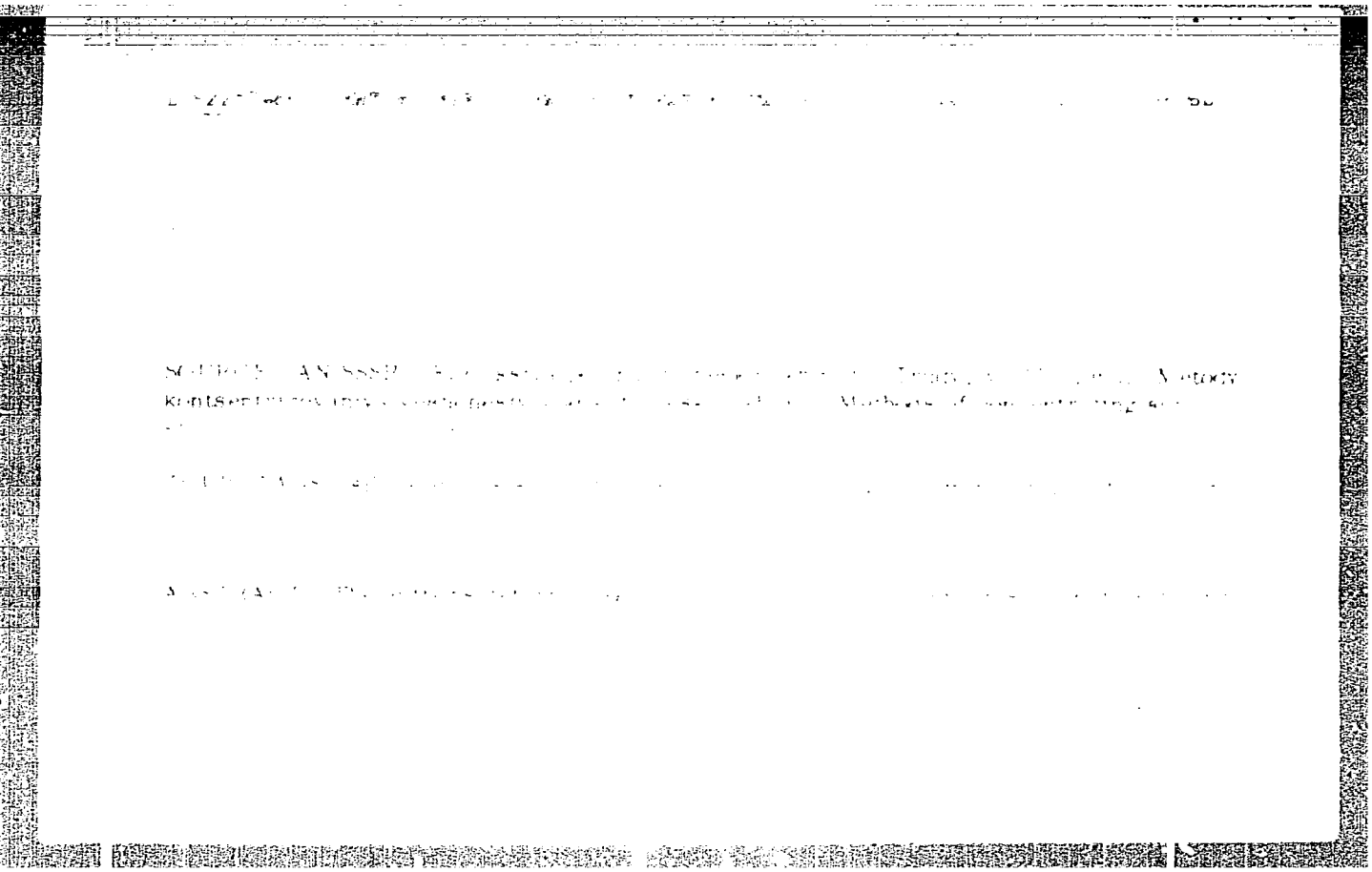
Card 2/2 BLG

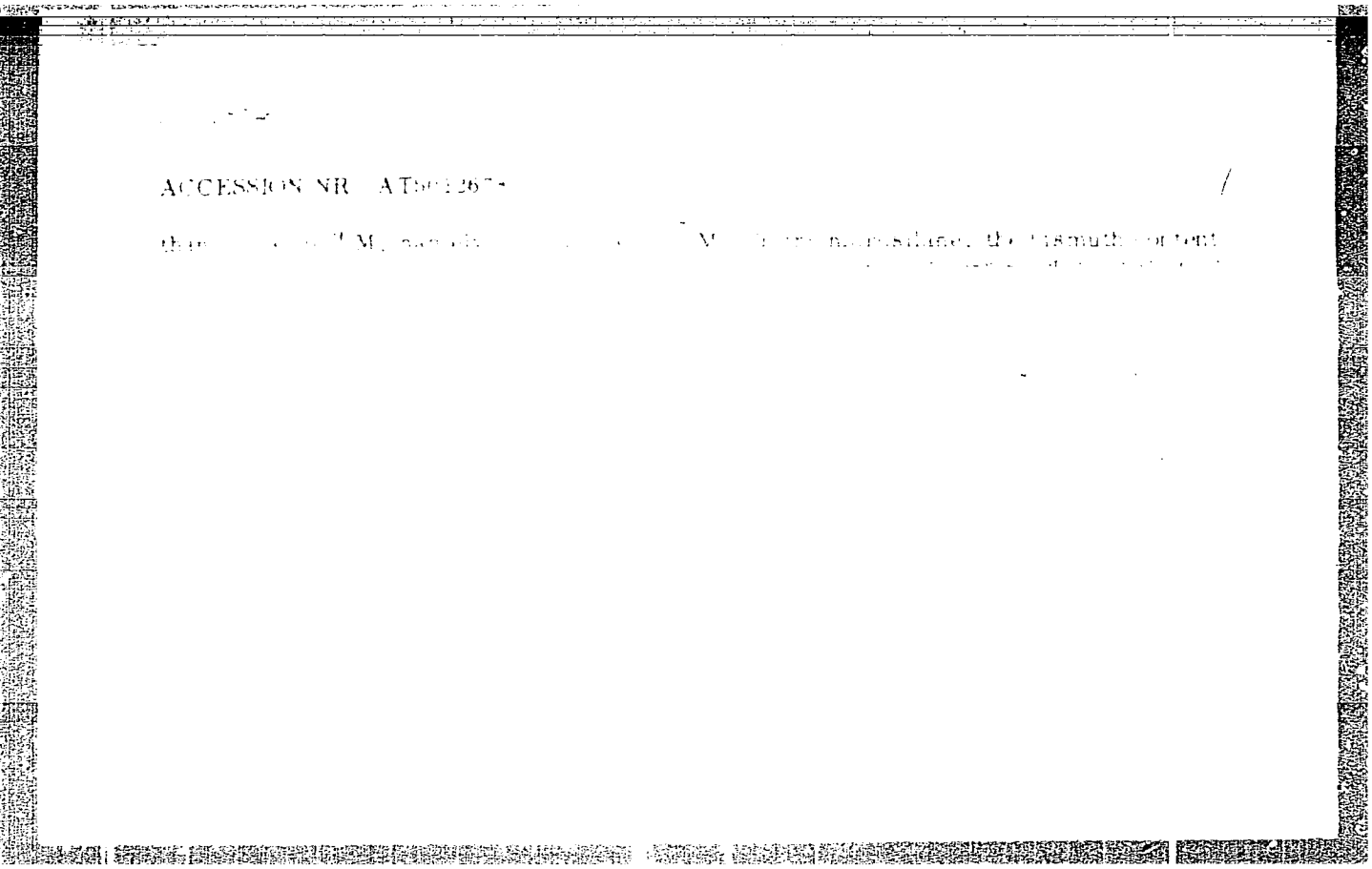
VASIL'YEVA, L. N.; VINOGRADOVA, Ye. N.

Dependence of the concentration of metal in the mercury drop on the time of enrichment with account of solution depletion. Zav. lab. 28 no.12:1428-1429 '62. (MIRA 16:1)

1. Moskovskiy gosudarstvennyy universitet im. M. V. Lomonosova.

(Metals—Analysis) (Polarography)
(Electrodes, Dropping mercury)





ACCESSION NR: AT5012677

VINOGRADOVA, Ye.N.; KAMENEV, A.I.

Determination of microimpurities in SiO_2 and trichlorosilane by the method of amalgam polarography with storage. Trudy Kom. anal. khim. 15:175-178 '65. (MIRA 18:7)

[illegible], A.I.; [illegible]

Effect of the contact [illegible] and temperature on the anodic peaks of bismuth and antimony. Vest.Mosk.un.Ser.2:Khim. 20 no.3:76-77 My-Je '65. (MIRA 18:8)

1. Kafedra analiticheskoy khimii Moskovskogo universiteta.

L 3579-66 EWT(m)/T/EWP(t)/EWP(b) LJP(c) JD

ACCESSION NR: AP5024810 UR/0032/65/031/010/1180/1182

546.48 : 543.253

AUTHOR: Vinogradova, Ye. N.; Kamenev, A. I.; Lisenkova, N. V.

TITLE: Determination of cadmium in salts by the oscillographic cumulative amalgam polarography method

SOURCE: Zavodskaya laboratoriya, v. 31, no. 10, 1965, 1180-1182

TOPIC TAGS: polarographic analysis, electronic measurement, electrochemical analysis

ABSTRACT: The oscillographic version of the cumulative amalgam polarography method is used for determining $n \cdot 10^{-6}$% Cd impurity in KCl, K_2SO_4, KNO_3, KI, KCNS, NaCl, NH_4Cl, and $K_2C_2O_4 \cdot H_2O$. A model TsLA-02 oscillographic polarograph was used with a suspended mercury electrode and a silver contact. The standard was a saturated calomel electrode. A magnetic mixer and nitrogen agitation were used. Accumulation was a function of the concentration of cadmium in the solution in 5 to 30 minutes at a potential of -1.0 volt with respect to the saturated calomel electrode. A fresh mercury drop was used for each determination, with three trials for each measurement. Capacitive current effects were eliminated by proper selection of the

Card 1/2

L 3579-

ACCESSION NR: AP5024810

potential delivery rate. A linear relationship was found between the height of the anode peak and cadmium concentration from $1.0 \cdot 10^{-9}$ to $5.0 \cdot 10^{-8}$ g-ions/l, with a base electrolyte of 0.1-m. KCl. A similar relationship was observed between the height of the cadmium peak and accumulation time for polarographic analysis of $5.0 \cdot 10^{-9}$ m/l of Cd and accumulation time from 10 to 30 minutes. The experimental data are tabulated. Orig. art. has: 2 tables.

ASSOCIATION: Moskovskiy gosudarstvennyy universitet (Moscow State University)

SUBMITTED: 00 ENCL: 00 SUB CODE: IC, OP

NO REF SOV: 005 OTHER: 001

Card 2/2

VINOGRADOVA, Ye.N.; GALLAY, Z.A.; FINOGENOVA, Z.M.; ALIMARIN, I.P., prof., otv. red.; KOROBTSOVA, N.A., red.; CHISTYAKOVA, K.S., tekhn. red.

[Methods of polarographic and amperometric analysis] Metody poliarograficheskogo i amperometricheskogo analiza. Moskva, Izd-vo Mosk. univ., 1963. 298 p. (MIRA 16:12)

1. Chlen-korrespondent AN SSSR (for Alimarin).
(Polarography) (Conductometric analysis)

VINOGRADOVA, Ye.N., IOBST, K.

Removal of ultraminute quantities of heavy metal impurities from solutions of neutral salts to be used as polarographic background. Zav.lab. 26 no.7:796-797 '60. (MIRA 13:7)

1. Moskovskiy gosudarstvennyy universitet im. M.V. Lomonosova.
(Polarography) (Metals) (Salts)

VINOGRADOVA, Yevgeniya Nikolayevna; MARTYNOV, Mikhail Stepanovich; OHLOV, Viktor Grigor'yevich; POTAPOV, Vladimir Pavlovich; BOROVOY, N.Ye., red.; KHITROVA, N.A., tekhn.red.

[Experience in the transportation of farm produce] Opyt perevozok sel'skokhoziaistvennykh gruzov. Moskva, Vses.izdatel'sko-poligr. ob"edinenie M-va putei soobshcheniia, 1960. 55 p. (MIRA 13:10)

(Farm produce--Transportation)

VINOGRADOVA, Yevgeniya Nikolayevna; KONDRASHKOVA, S.F., redaktor; LOMILINA, L.N., tekhnicheskiy redaktor

[Methods for determining the concentration of hydrogen-ions] Metody opredeleniia kontsentratsii vodorodnykh ionov. Izd. 2-e, ispr. i dop. [Moskva] Izd-vo Mosk. univ. 1956. 154 p. (MLRA 10:4)
(Hydrogen-ion concentration)

VASIL'YEVA, L.N.; VINOGRADOVA, Ye.N.

Determination of ultrasmall amounts of gallium, zinc, and cadmium in aluminum of high purity by the method of anodic voltamperometry on a stationary mercury electrode. Zhur.znal.khim. 18 no.4:454-459 Ap '63. (MIRA 16:6)

1. Moskovskiy gosudarstvennyy universitet imeni M.V.Lomonosova.
(Metals—Analysis) (Voltammetry)

VINOGRADOVA, Ye.N.; VASIL'YEVA, L.N.

Determination of ultrasmall amounts of tin, bismuth, and antimony in high purity aluminum by the method of anodic volt-ampere measurement on a stationary mercury electrode. Zhur.anal.khim. 17 no.5:579-584 Ag '62. (MIRA 16:3)

1. Gosudarstvennyy nauchno-issledovatel'skiy institut tsvetnykh metallov, Moskva.
(Aluminum--Analysis) (Metals--Analysis)
(Electrochemical analysis)

L 28712-65 EWT(m)/EWG(m)/T/EWP(t)/EWP(b) IJP(c) RWH/JD

ACCESSION NR: AT5004073 S/3127/63/000/05-/0062/0067

AUTHOR: Vinogradova, Ye. N.; Ignat'yev, Yu. N.; Vasil'yeva, L. N.

TITLE: Determination of trace amounts of cadmium

SOURCE: IVSP. Gosudarstvennyy komitet po khimii. Metody analiza khimicheskikh

ABSTRACT: The authors continued their investigation of a polarographic determination

Card

L 28712-65

ACCESSION NR: AT5004073

this electrode, the authors recorded the height of the cadmium peak versus the cadmium

ASSOCIATION: MGU

SUBMITTED: 06May63 ENCL: 00 SUB CODE: IC