S/078/62/007/005/009/014
B101/B110

AUTHORS: Grigor'yev, A. T., Sokolovskaya, Ye. M., Pyatigorskaya, L.I., Maksimova, M. Y.

TITLE: Solid-state conversions in alloys of the system chromium-iron

PERIODICAL: Zhurnal neorganicheskoy khimii, v. 7, no. 5, 1962, 1105-1109

TEXT: 60 alloys of electrolytic chromium and iron (up to 80 at% Fe) were investigated by plotting the differential heating curves, contact-free thermal high-temperature analysis, determining hardness and microhardness after 1000 hr tempering and subsequent hardening (1800-400°C in oil, 1300-300°C in H_2O). The phase diagram Cr-Fe was plotted on the basis of these data (Fig. 3). The existence of the five chromium modifications α-ϵ was confirmed. There are 4 figures and 2 tables. The most important English-language references are: P. O. Williams, H. W. Paxton, J. British Iron and Steel, Inst., 185, 358 (1958); P. O. Williams, Trans. Metallurg. Soc., ASME, 212, 497 (1958).

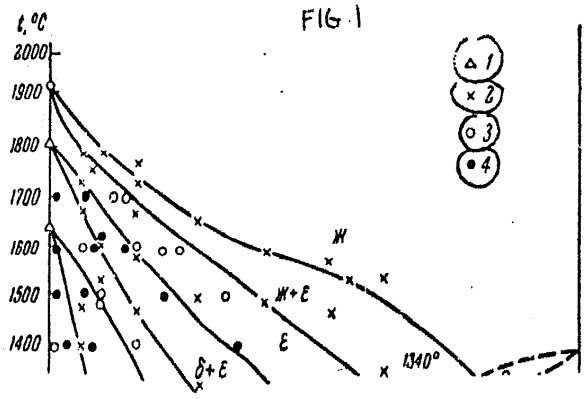
Card 1/3

Polymorphous conversion of ...

khimii, 5, 2640 (1960). Ref. 5: A. T. Grigor'yev, Ye Yuy Pu, Ye. M. Sokolovskaya. Zh. neorgan. khimii, 5, 2642 (1960). Ref. 6: A. T. Grigor'yev, Ye. M. Sokolovskaya, A. T. Nefedov, M. V. Maksimova. Vesten. MGU (in the press)). There are 2 figures, 1 table, and 14 references: 8 Soviet-bloc and 6 non-Soviet-bloc. The four most recent references to English-language publications read as follows: Ref. 7. M. Hansen, K. Anderko, Constitution of binary alloys, 1958; Ref. 8. D. S. Bloom, N. J. Grant, J. Metals, 3, 1009 (1951); Ref. 9: D. S. Bloom, J. W. Putman, N. J. Grant, J. Metals, 4, no. 6 (1952); Ref. 10: C. Stern, N. J. Grant, J. Metals, 7, 127 (1955).

SUBMITTED: December 8, 1960

FIG. 1



Card ~~3/4~~

Polymorphous conversion of ...

were found which are separated by diphase ranges $\alpha+\beta$, $\beta+\gamma$, $\gamma+\delta$, and $\delta+\varepsilon$. Four eutectoid conversions occur at 850, 960, 1140, and 1220°C. X-ray analysis indicated that the solid solution ε of the alloy with 17 % nickel has a body-centered cube with $a = 2{,}879 \pm 3$ kX. In the alloy with 13 % nickel, hardened at 1400°C, with the solid solution $\varepsilon+\delta$ the hexagonal lattice of the solid solution of δ with the parameters $a = 2{,}514$ kX, $c = 6{,}445$ kX, and $\frac{c}{a} = 1{,}62$ was found in addition to the body-centered cube of the solid solution of ε. The alloys with the phases $\alpha+\beta$ and β have a face-centered cube. Alloys with 17 % nickel, hardened at 900°C and more, have a face-centered cube. The results obtained are in good agreement with the data in Refs. 1 - 6 (Ref. 1: A. T. Grigor'yev, L. N. Guseva, Ye. M. Sokolovskaya, M. V. Maksimova. Zh. neorgan. khimii, 4, 2168 (1959). Ref. 2: A. T. Grigor'yev, Ye. M. Sokolovskaya, Yu. P. Simanov, I. G. Sokolova, V. N. Pavlov, M. V. Maksimova. Vesten. MGU, no. 4, seriya II, khimiya, 23 (1960). Ref. 3: A. T. Grigor'yev, Ye. M. Sokolovskaya, Yu. P. Simanov, I. G. Sokolova, M. V. Maksimova, L. I. Pyatigorskaya. Zh. neorgan. khimii, 5, 2136 (1960). Ref. 4: A. T. Grigor'yev, Ye. M. Sokolovskaya, M. V. Maksimova, I. G. Sokolova, N. A. Nedumov. Zh. neorgan.

2

21754

18.1235 1496, 1454, also 1418

S/078/61/006/005/013/015
B121/B208

AUTHORS: Grigor'yev, A. T., Sokolovskaya, Ye. M., Nedumov, N. A., Maksimova, M. V., Sokolova, I. G., and Ye Yuy Pu

TITLE: Polymorphous conversion of chromium and the phase diagram of the system chromium - nickel in the range of concentrated chromium

PERIODICAL: Zhurnal neorganicheskoy khimii, v. 6, no. 5, 1961, 1248 - 1251

X

TEXT: The alloys of chromium with nickel were studied in the range of concentrated chromium by microscopic, thermal and X-ray analyses. Thermal analyses were made by recording the heating and cooling curves of the alloys hardened at 1200°C by means of a ПК-52 (PK-52) pyrometer. The phase diagram of the system chromium - nickel in the range of concentrated chromium was drawn on the basis of microstructural and thermal analyses; it is schematically presented in Fig. 1. Five homogeneous ranges of the solid solutions of α, β, γ, δ, and ε modifications of chromium

Card 1/4

2

Polymorphous Conversions of Chromium in Alloys With Tantalum

87337
S/078/60/005/011/025/025/XX
B015/B060

diagram displays five regions of solid solutions formed by the α-, β-, γ-, δ-, and ε-modifications as well as four two-phase regions α+β, β+γ, γ+δ, and δ+ε which proceed from the points of mutual transition of the chromium modifications: 1830°C ($\varepsilon \rightleftarrows \delta$), 1650°C ($\delta \rightleftarrows \gamma$), about 1300°C ($\gamma \rightleftarrows \beta$), and about 930°C ($\beta \rightleftarrows \alpha$). Four eutectoid transformations were established in the region of the Cr - Ta constitution diagram at 1490°C, 1150°C, 950°C, and 775°C, which are caused by the eutectoid decomposition of the respective solid solutions. X-ray data of the individual phases agree with those yielded by previous investigations. There are 2 figures, 1 table, and 5 Soviet references.

ASSOCIATION: Moskovskiy gosudarstvenny/ universitet, Kafedra obshchey khimii (Moscow State University, Department of General Chemistry)

SUBMITTED: June 6, 1960

Card 2/2

87337

S/078/60/005/011/025/025/XX
B015/B060

18.1235 1045, 1454

AUTHORS: Grigor'yev, A. T., Sokolovskaya, Ye. M., Maksimova, M. V., Sokolova, I. G., Nedumov, N. A.

TITLE: Polymorphous Conversions of Chromium in Alloys With Tantalum

PERIODICAL: Zhurnal neorganicheskoy khimii, 1960, Vol. 5, No. 11, pp. 2640-2642

TEXT: The authors have established in Refs. 1-5 that chromium appears in five modifications in its alloys. In addition to data from Refs. 1, 2, the present article presents the results of a study on the polymorphism of chromium in the constitution diagram Cr - Ta in the chromium-rich region. The specimens prepared in previous experiments (Refs. 1, 2) with 0.2 to 12 wt% Ta were examined. In doing so, the authors applied the thermal method by recording the heating and cooling curves on N. A. Nedumov's device, and the differential heating curves of annealed alloys (up to 1350°C) by a ПК-52 (PK-52) pyrometer. Microhardness was measured, and X-ray analyses were made. The constitution diagram (Fig. 1) was drawn on the basis of microstructural determinations (Fig. 2) and thermal analyses (Table). The

Card 1/2

GRIGOR'YEV, A.T.; SOKOLOVSKAYA, Ye.M.; SIMANOV, Yu.P.; SOKOLOVA, I.G.; MAKSIMOVA, M.V.; PYATIGORSKAYA, L.I.

High-temperature forms of chromium and phase diagram of the system chromium - iron at high temperatures in the region rich in chromium. Zhur.neorg.khim. 5 no.9:2136-2138 S '60. (MIRA 13:11)

1. Moskovskiy gosudarstvennyy universitet, Kafedra obshchey khimii i Kafedra neorganicheskoy khimii.
(Chromium) (Iron)

69541

Investigation of Alloys in the System Palladium - Copper - Chromium

S/078/60/005/05/19/037
B004/B016

and reaches up to 35% Pd. The major part of the diagram is occupied by a mechanical mixture with a binary eutectic line which connects the eutectic points of the systems Cu-Cr and Pd-Cr. In the Pd corner there is a range of solid solution which originates from the system Pd-Cr and is adjacent to the system Pd-Cu as a narrow strip. The range of solid solution increases with increasing temperature. There are 7 figures, 1 table, and 14 references, 3 of which are Soviet.

ASSOCIATION: Moskovskiy gosudarstvennyy universitet im. M. V. Lomonosova
Khimicheskiy fakul'tet Kafedra obshchey khimii
(Moscow State University imeni M. V. Lomonosov, Chemical Department, Chair of General Chemistry)

SUBMITTED: February 20, 1959

Card 2/2

~~6[illegible]~~ 6954/

S/078/60/005/05/19/037
B004/B016

18.1200

AUTHORS: Grigor'yev, A. T., Sokolovskaya, Ye. M., Altunina, L. N., Maksimova, M. V.

TITLE: Investigation of Alloys in the System Palladium - Copper - Chromium

PERIODICAL: Zhurnal neorganicheskoy khimii, 1960, Vol. 5, No. 5, pp. 1112-1118

TEXT: In the introduction the authors give a survey of publications dealing with the binary component systems of the ternary system Pd - Cu - Cr. They refer to papers by V. A. Nemilov et al. (Ref. 12) and A. A. Rudnitskiy (Ref. 13). Fig. 1 gives the phase diagrams of the binary systems (adjacent to the resultant diagram of the ternary system). The ternary system was investigated in nine sections with a Pd content of between 10 - 90 wt% Pd increasing by 10% each time. The thermal analysis was made by means of an N. S. Kurnakov pyrometer (Fig. 2). Further the microstructure of the alloys was investigated, which were annealed at 800-1,000° and hardened, as well as etched with alcoholic bromine solution (Figs. 3, 4). Their Brinell hardness was determined (Fig. 5), the electric resistance measured at 25° and 100° (Fig. 6), and its temperature coefficient determined (Fig. 7). The experimental data are also summarized in a table. The phase diagram is given in Fig. 1. The range of disintegration in the liquid state, which is observable in the system Cu-Cr, is also maintained in the phase diagram of the ternary system

Investigation of Alloys of the Palladium - Silver - Chromium System

S/078/60/005/04/021/040
B004/B016

25 and 100° was determined by the potentiometric method (Table 1, Fig 6). Therefrom the temperature coefficient of electrical resistance was calculated (Table 1, Fig 7). On the basis of the resultant data the phase diagram (Fig 1) was plotted. The region of decomposition occurring in the Ag - Cr system likewise exists in the ternary system and reaches up to about 42% Pd. The largest part of the diagram consists of a region of mechanical mixing. A eutectic point is assumed to be near the Ag in the Ag - Cr system, which is connected with the eutectic point of the Pd - Cr system by the line of the double eutectic. Part of the diagram in the palladium corner consists of a solid solution resulting from the binary system Pd - Cr and adjoining the system Pd - Ag as a narrow zone. There are 7 figures, 2 tables, and 9 references, 4 of which are Soviet.

ASSOCIATION: Moskovskiy gosudarstvennyy universitet im. M. V. Lomonosova Kafedra obshchey khimii (Moscow State University imeni M. V. Lomonosov, Chair of General Chemistry)

SUBMITTED: January 31, 1959

18.1280

69024

AUTHORS: Grigor'yev, A. T., Sokolovskaya, Ye. M., Zargarova, M. I., Maksimova, M. V.

S/078/60/005/04/021/040
B004/B016

TITLE: Investigation of Alloys of the Palladium - Silver - Chromium System

PERIODICAL: Zhurnal neorganicheskoy khimii, 1960, Vol 5, Nr 4, pp 894 - 901 (USSR)

ABSTRACT: The authors briefly refer to data available in publications on the binary systems Pd - Ag, Ag - Cr, and Pd - Cr and in this connection mention Ye. Ya. Rode (Ref 3), V. G. Kuznetsov (Ref 4), V. A. Nemilov et al. (Ref 5), and A. T. Grigor'yev et al. (Ref 7). To investigate the phase diagram of the ternary system Pd - Ag - Cr alloys of seven sections were prepared with a palladium content between 20 and 80% increasing by 10% each time. Furthermore, the sections with 35.65 and 75% palladium were investigated. Thermal analysis was made by means of an N. S. Kurnakov recording pyrometer. The results are given in table 1 and illustrated in figure 2. The hardness test was carried out by impressing a steel ball of a diameter of 10 mm with a load of 250 kg into the annealed specimens (Table 2, Fig 3). The microstructure (Figs 4,5) was investigated on samples etched by an alcoholic bromine solution. Electrical resistance at

Card 1/2

18.1150 2308, 1471, 1496

8430
S/189/60/000/004/004/006
B002/B060

AUTHORS: Grigor'yev, A. T., Sokolovskaya, Ye. M., Sizanov, Yu. P., Sokolova, I. G., Pavlov, V. N., Maksimova, M. V.

TITLE: High-temperature Modifications of Chromium and the Phase Diagram of the System Chromium - Molybdenum in the Region Rich in Chromium

PERIODICAL: Vestnik Moskovskogo universiteta. Seriya 2, khimiya, 1960, No. 4, pp. 23 - 24

TEXT: A study of the binary system chromium - molybdenum (up to 22 wt% Mo) showed that due to the phase transformations of chromium there arise four zones of mixed crystal formation and three two-phase zones (Fig. 2), having their origin in the transformation points of chromium: 1830°C ($\alpha \rightleftarrows \delta$), 1650°C ($\delta \rightleftarrows \gamma$), and 1300°C ($\gamma \rightarrow \beta$). These transformation points are also found on the heating and cooling curves of chromium iodide (Fig. 1). X-ray analysis of the chilled samples gave the following results: The δ-modification is a body-centered cubic crystal with a = 2.887 ± 3 kX; the δ-phase is hexagonal, and for 13% Mo it has the constants a = 2.754 ± 3 kX and

Card 1/2

c/a = 1.604; the γ-phase is a body-centered cubic crystal with a lattice constant similar to the α-phase; the β-modification is probably a face-centered cubic crystal. Results obtained from studies of the systems Cr-Mo, Cr-W, Cr-Nb, Cr-Ta, Cr-Fe, Cr-Ni, Cr-Co, Cr-Fe-Ni, and Cr-Co-Ni, were communicated to the konferentsiya po zharoprochnym metallam i splavam (Conference on Heat-resistant Metals and Alloys) in April, 1958, and April, 1960, as well as to the VIII Mendeleyevskiy s"yezd (8th Mendeleyev Congress) in March, 1959. There are 2 figures and 2 non-Soviet references.

ASSOCIATION: Kafedra obshchey khimii (Chair of General Chemistry). Kafedra neorganicheskoy khimii (Chair of Inorganic Chemistry)

SUBMITTED: April 2, 1960

Card 2/2

MAKSIMOVA M.V.

crystal lattice, which is in agreement with the fact that a continuous series of solid solutions of chromium and σ-iron form. There are 1 figure and 4 references, 1 of which is Soviet.

ASSOCIATION: Moskovskiy gosudarstvennyy universitet im. M. V. Lomonosova Kafedra obshchey khimii (Moscow State University imeni M. V. Lomonosov, Chair of General Chemistry)

SUBMITTED: January 12, 1959

SOV/78-4-9-38/44

5(2)

AUTHORS: Grigor'yev, A. T., Guseva, L. I., Sokolovskaya, Ye. M., Maksimova, M. V.

TITLE: On Polymorphous Transformations of Chromium in Alloys With Tantalum

PERIODICAL: Zhurnal neorganicheskoy khimii, 1959, Vol 4, Nr 9, pp 2168-2169 (USSR)

ABSTRACT: The cooling curve for liquid chromium determined by N. A. Nedumov (Ref 4) exhibits, in the vicinity of the very distinct maximum corresponding to the crystallization temperature, a second maximum which relates to the transition of chromium into another modification at 1815°. By means of microscopic, thermal, and X-ray analyses the chromium-tantalum alloy was investigated in the range rich in chromium after hardening; The location of the solidus and the limits of solubility of Ta in Cr were checked. 1830° was found to be the temperature of transition between the modifications ε and δ. In contrast with the data obtained by N. Grant (Refs 1, 2) it was found that immediately after freezing chromium does not possess a face-centered but a cubic body-centered

Card 1/2

B-4

Category : USSR/Solid State Physics - Systems

Abs Jour : Ref Zhur - Fizika, No 3, 1957, No 6599

diagram adjacent to the palladium corner, is occupied by the region of the triple solid solution. Palladium increases considerably the mutual solubility of gold and cobalt.

Card : 2/2

MAKSIMOVA, M.V.

E-4

Category : USSR/Solid State Physics - Systems

Abs Jour : Ref Zhur - Fizika, No 3, 1957, No 6599

Author : Grigor'ev, A.T., Sokolovskaya, Ye.M., Budennaya, L.D. Iyutina, I.A., Maksimova, M.V.

Title : Investigation of the Palladium-gold-Cobalt System

Orig Pub : Zh. neorgan. khimii, 1956, 1, No 5, 1052-1063

Abstract : Thermal-analysis methods and studies of the hardness and the microstructure after annealing and hardening from different temperatures, of the specific electric resistivity, and of its temperature coefficients were all used for the first time to study the Pd-Au-Co triple system. The two-Phase region in the gold-cobalt system spreads extensively into the triple region, which reaches up to 47% Pd at the center of the diagram at room temperature, and is gradually reduced with increasing temperature, reaching 35% Pd at 1000°. The double-eutectic line starts out from the eutectic field of the Au-Co system and extends into the triple system until it reaches a section with 20% Pd. The remaining portion of

Card : 1/2

MAKSIMOVA, M.V.

E-4

Category : USSR/Solid State Physics - Systems

Abs Jour : Ref Zhur - Fizika, No 2, 1957 No 3782

Author : Grigor'ev, A.T., Sokolovskaya, Ye. M., Maksimova, M.V.
Title : Investigation of Alloys of the Gold-Cobalt System

Orig Pub : Zh. neorgan. khimii, 1956, 1, No 5, 1047-1051

Abstract : The microstructure, hardness, electric resistivity, and temperature coefficient of electric resistivity of Au-Co alloys were studied. The initial materials were 99.99% gold and cobalt containing approximately 0.01% carbon. The resulting diagram of state is good agreement with data of other investigators. Increasing the Co content results in a linear increase in the hardness of the alloys in the two-phase region, reaching 145 kg/mm^2 at 98% Co. In the solid-solution region, the hardness drops off towards the pure components, sharply towards Au, and less sharply towards Co. The electric resistivity of the alloys first increases as Co is added, and then varies almost linearly with a slight reduction towards Co. The temperature coefficient of the electric resistivity varies also almost linearly in the two-phase region, and increases with increasing content of Co.

Card : 1/1

MAKSIMOVA, M.P.

Correlation of neutral and alkaline permanganate oxidizability in seawater. Gidrokhim. mat. 38:84-90 '64. (MIRA 18:4)

1. Karel'skiy filial AN SSSR, laboratoriya gidrokhimii, Petrozavodsk.

MAKSIMOVA, M. P.; VASSERBERG, V. E.; BALANDIN, A. A.

Effect of the degree of dehydration of the Al_2O_3 surface on its adsorption properties and elementary areas occupied by adsorbed molecules. Izv. AN SSSR. Otd. khim. nauk no.1:17-21 '63. (MIRA 16:1)

1. Institut organicheskoy khimii im. N. D. Zelinskogo AN SSSR.

(Aluminum oxide) (Dehydration(Chemistry)) (Adsorption)

MAKSIMOVA, M.P.; DATSKO, V.G.

Orientative balance of organic matter in the White Sea. Trudy Kar. fil. AN SSSR no.31:126-131 '61. (MIRA 15:7)
(White Sea--Organic matter)

DATSKO, V.G.; MAKSIMOVA, M.P.

Concentration of dissolved organic matter in waters of the White Sea. Gidrokhim. mat. 30:115-121 '60. (MIRA 13:9)

1. Gidrokhimicheskiy institut AN SSSR, Novocherkassk.
(White Sea--Organic matter)

MAKSIMOVA, M. P., Cand Chem Sci -- "Organic matter and biogenic elements in the waters of the White Sea." Petrozavodsk, 1960. (Hydrochem Inst of Acad Sci USSR) (KL, 8-61, 231)

DATSKO, V.G.; MAKSIMOVA, M.P.

Content of some forms of nitrogen, phosphorus, and silicon in White Sea waters. Gidrokhim.mat. 29:118-130 '59.
(MIRA 13:5)

1. Gidrokhimicheskiy institut Akademii nauk SSSR, Novocherkassk.
(White Sea--Water--Analysis)

DATSKO, V.G.; MAKSIMOVA, M.P.

Relation between values for the permanganate oxidation of White Sea water in neutral and alkaline media. Izv.Kar.i Kol'.fil. AN SSSR no.4:142-145 '59. (MIRA 13:5)

1. Belomorskaya biologicheskaya stantsiya Karel'skogo filiala AN SSSR.
(Permanganate) (Sea water) (Oxidation)

MAKSIMOVA, M.P.

Organic carbon and oxidizability in the waters of Lake Beloye.
Izv. Kar. i Kol'. fil. AN SSSR no.1:71-74 '59. (MIRA 12:9)

1. Belomorskaya biologicheskaya stantsiya Karel'skogo filiala AN SSSR.
(Beloye Lake--Carbon)

Effect of the degree of ...

between the molecules of the adsorbate is equally possible. Hence, the BET (Brunnauer, Emmett, and Teller) equations can be used for Al_2O_3 as its surface is only slightly inhomogeneous. There are 1 figure and 2 tables. The most important English-language reference is: I. B. Peri, R. B. Hannan, J. Phys. Chem., 64, 1526 (1960).

ASSOCIATION: Institut organicheskoy khimii im. N. D. Zelinskogo Akademii nauk SSSR (Institute of Organic Chemistry imeni N. D. Zelinskiy of the Academy of Sciences USSR)

SUBMITTED: April 23, 1962

Card 3/3

Effect of the degree of ...

$\omega_{C_6H_{12}}$ = 54.5; for sample IV: 15; 24.3; 46.5 and 44.5, respectively. ω_{N_2} was almost constant for all Al_2O_3 samples heated to more than 300°C.

Conclusions: The determination of the specific area of Al_2O_3 catalysts by N_2 adsorption is not affected by the degree of surface dehydration. The slight changes of $\omega_{C_2H_5OH}$ do not explain the previously observed (Zh. fiz. khimii, 35, 858 (1961)) large differences of ω when alcohol was adsorbed on Al_2O_3 samples of various origin, which were dehydrated at 500°C. The reduction of $\omega_{C_2H_5OH}$ with increasing dehydration may be explained by formation of highly active oxygen bridges between the aluminum atoms in intensely calcined samples. The ω of the two hydrocarbons varies between physical values. The anomalous increase of ω observed by M. M. Dubinin (Izv. AN SSSR, Otd. khim. n. 1960, 1739) in fluorized silicagels was not observed with Al_2O_3, although interaction

S/062/63/000/001/003/025
B101/B186

AUTHORS: Maksimova, M. P., Vasserberg, V. E., and Balandin, A. A.

TITLE: Effect of the degree of dehydration of the Al_2O_3 surface on its adsorptive properties and on the elementary area of the molecules adsorbed

PERIODICAL: Akademiya nauk SSSR. Izvestiya. Otdeleniye khimicheskikh nauk, no. 1, 1963, 17-21

TEXT: The elementary area ω populated by an adsorbed Ar atom or N_2, C_2H_5OH, $n\text{-}C_5H_{12}$ or C_6H_{12} molecules was determined in Al_2O_3 samples calcined at 300°C (sample I) up to 1000°C (sample IV). The adsorption of Ar and N_2 was measured at -195°C, that of the organic compounds at 25°C. ω_{Ar} was assumed constant at all temperatures and equal to 16.6 $Å^2$. $Å^2$-values found for sample I: $\omega_{N_2} = 17.2$; $\omega_{C_2H_5OH} = 28.2$; $\omega_{n\text{-}C_5H_{12}} = 54.2$;

Card 1/3

VASSERBERG, V.E.; BALANDIN, A.A.; MAKSIMOVA, M.P.

Geometric configuration of adsorbate molecules and the dimensions of elementary surface areas in the adsorption layer. Izv. AN SSSR.Otd.khim. nauk no.10:1865-1868 O '62. (MIRA 15:10)

1. Institut organicheskoy khimii im. N.D.Zelinskogo AN SSSR.
(Adsorption)

S/263/62/000/005/037/039
I007/I207

located above the center of the source; the distance between the lower surfaces of the crystal and the source surface varied from 2 to 11 cm. The paper gives the variation of the dose intensity both with distance and thickness of the filter (for Tl^{204} and Y^{90} sources). The tests ensured an exponential variation of the dose intensity with the distance and the thickness of the filter. Values were obtained for average doses of S^{35}, Tl^{204} and Y^{90} sources calculated to one beta particle; the dependance of the average dose calculated to one beta particle, on the maximum energy of the beta spectrum, was shown graphically. The dependence of the dose as a function of the source shape was stressed upon and the error in determining the dose intensity by scintillation methods was estimated. Thus, the maximum error was found to be $\pm$ 20%. There are 9 figures and 9 references

[Abstractor's note: Complete translation.]

38039
S/263/62/000/005/007/010
1007/1207

Authors: Aglintsev, K. K., Maksimova, M. P., and Uryayev, I. E

Title: A SPECTRAL METHOD FOR DETERMINING GAMMA-RAY DOSES

Periodical: *Referativnyy zhurnal, Mashinostroyeniye*, no. 5, 1962, 64 abstract 32.5.356 (*Trudy in-tow Kom-ta standartov, mer i izmerit priborov pri Sov. Min. SSSR*, no. 55(115), 1961, 90–98)

Text: Description is given of a method for determining radiation doses from flat β-sources, the method being based on the use of an active electron spectrum. Spectral research was carried out by means of a scintillation beta-spectrometer consisting of a I-C photomultiplier ansd a stilbene crystal 20 mm long and 25 mm in diameter. During the measurements the spectrometer and radiation source were enclosed in a nontranslucent (opaque) container. The efficiency of the measuring unit was determined by comparing the measurement results obtained by the same source and by a 4π counter. Comparison was made of the intensity values of the absorbed dose, by measuring both with the ionization (extrapolation) and the scintillation chambers When using a Tl^{204} source with a working diameter of 38 mm, the intensity values of the dose measured by the above methods at a distance of 9 cm from the source, showed good agreement, with a deviation of only $\pm$ 2.5%. The distribution of the dose field was investigated for a series of beta radiators (S^{35}, Tl^{204}, Y^{90} and I^{131}) of varying working diameter, applied to different supports. In these experiments, the scintillation counter was

Card 1/2

AGLINTSEV, K.K.; MAKSIMOVA, M.P.; URYAYEV, I.A.

Spectral method for determining radiation doses from β-emitters. Trudy inst.Kom. stand., mer i izm. prib. no.55:90-98 '61. (MIRA 16:6)

1. Vsesoyuznyy nauchno-issledovatel'skiy institut metrologii imeni Mendeleyeva.
(Radiation--Dosage) (Beta rays)

APPROVED FOR RELEASE: 06/23/11: CIA-RDP86-00513R001031700049-6

BALON, Z.P.; MAKSIMOVA, M.P.

Comparative list of national standard roentgenometric apparatus. Trudy inst.Kom. stand., mer i izm. prib. no.55:42-54 '61. (MIRA 16:6)

1. Vsesoyuznyy nauchno-issledovatel'skiy institut metrologii imeni Mendeleyeva.

(Radiometer--Standards)

VASSERBERG, V.E.; BALANDIN, A.A.; MAKSIMOVA, M.P. (Moskva)

Adsorption of lower aliphatic alcohols on alumina catalysts and the orientation of the adsorbed molecules. Zhur. fiz. khim. 35 no. 4:858-866 Ap '61. (MIRA 14:5)

1. AN SSSR, Institut organicheskoy khimii im. N.D.Zelinskogo.
(Alcohols) (Adsorption)

SOV/62-59-2-34/40

Orientation of Adsorbed Molecules in the Monomolecular Layer on Oxidizing Catalysts

there is also a plane orientation in addition to the normal one of the adsorbed molecules (hydroxyl groups are oriented towards the surface). The portion of planely oriented molecules is different for various alcohols and catalysts. For this reason it is advisable to introduce instead of the actual size of the elementary place a new term, the "effective specific place" σ_{eff}. It depends on the numerical ratio of the planely and parallelly adsorbed molecules and is different for one and the same alcohol on various catalysts. The variation of the chemical character of the catalyst considerably affects the σ_{eff}. (Table). There are 1 table and 9 references, 6 of which are Soviet.

ASSOCIATION: Institut organicheskoy khimii im. N. D. Zelinskogo Akademii nauk SSSR (Institute of Organic Chemistry imeni N. D. Zelinskiy of the Academy of Sciences, USSR)

SUBMITTED: July 15, 1958

Card 2/2

SOV/62-59-2-34/40

5(3)
AUTHORS: Vasserberg, V. E., Balandin, A. A., Maksimova, M. P.

TITLE: Orientation of Adsorbed Molecules in the Monomolecular Layer on Oxidizing Catalysts (Ob oriyentatsii adsorbirovannykh molekul v monomolekulyarnom sloye na okisnykh katalizatorakh)

PERIODICAL: Izvestiya Akademii nauk SSSR. Otdeleniye khimicheskikh nauk, 1959, Nr 2, pp 363-365 (USSR)

ABSTRACT: In the present paper the authors investigated the adsorption of the lowest saturated alcohols, from C_1 to C_4, of n-pentane and dichloro ethane by differently produced Al_2O_3 -samples and MgO-, ThO_2- and ZnO-catalysts. From the determinations of the adsorption isothermal lines at 25° it was seen that the adsorption in the monomolecular layer is decreasing in the following order: $CH_3OH > C_2H_5OH > n\text{-}C_3H_7OH > n\text{-}C_4H_9OH > i\text{-}C_3H_7OH = i\text{-}C_4H_9OH > s\text{-}C_4H_9OH > t\text{-}C_4H_9OH$. The size of the elementary places occupied by the adsorbed alcohol molecules on the surface depends both on the structure of the alcohol and on the catalyst. It was assumed that at moderate temperature

Card 1/2

MAKSIMOVA, M. P., Cand Agric Sci (diss) -- "The agrobiological properties of varieties of apple trees under the conditions of the Kuba-Khachmas zone". Michurinsk, 1959. 17 pp (Fruit and Vegetable Inst im I. V. Michurin), 100 copies (KL, No 10, 1960, 134)

APPROVED FOR RELEASE: 06/23/11: CIA-RDP86-00513R001031700049-6

MAKSIMOVA, M.P.

MAKSIMOVA, M.P.

Michurin varieties in the Kuba-Khachmas fruit region. Agrobiologiia no.6:121-123 N-D '57. (MIRA 10:12)

1. Kubinskaya opytnaya stantsiya sadovodstva.
(Kuba District--Apple--Varieties)
(Khachmas District--Apple--Varieties)

KHMEL'NITSKAYA, Ye.L., prof., doktor ekon. nauk; VOLKOV, M.Ya., kand. ekon. nauk; BEL'CHUK, A.I., kand. ekon. nauk; IORDANSKAYA, E.N., ml. nauchn. sotr.; MENZHINSKIY, Ye.A.; PAVLOVA, M.A., kand. ekon. nauk; VASIL'KOV, N.F., kand. ekon. nauk; ARDAYEV, G.B., kand. ekon. nauk; VAL'KOV, V.A., kand. ekon. nauk; TIMASHKOVA, O.K., kand. ekon. nauk; ANDREYEV, Yu.K., ml. nauchn. sotr.; PUSHKIN, A.A., ml. nauchn. sotr.; MAKSIMOVA, M.M., kand. ekon. nauk; KIRSANOV, A.V., kand. ekon. nauk; SHEBANOV, A.N., ml. nauchn. sotr.

[Changes in the economic structure of the countries of Western Europe] Izmeneniia v ekonomicheskoi strukture stran Zapadnoi Evropy. Moskva, Nauka, 1965. 433 p. (MIRA 18:9)

1. Akademiya nauk SSSR. Institut mirovoy ekonomiki i mezhdunarodnykh otnosheniy.

MAKSIMOVA, M.M., red.; KOTLYAKOVA, O.I., tekhn. red.

[Transactions of the Soviet Antarctic Expedition]Trudy Sovetskoi antarkticheskoi ekspeditsii, 1955. Leningrad, Izd-vo "Morskoi transport," Vol.17. [Hydrology of offshore Antarctic waters]Gidrologiia pribrezhnykh antarkticheskikh vod; sbornik statei. Pod red. I.V.Maksimova. 1963. 154 p. (MIRA 16:4)

1. Sovetskaya antarkticheskaya ekspeditsiya, 1955-.
(Antarctic regions--Oceanography)

KHMEL'NITSKAYA, Ye.L., doktor ekon. nauk, prof.; LEMIN, I.M., doktor ist. nauk; MAKSIMOVA, M.M., kand. ekon. nauk; GONCHAROV, A.N., kand. ekon. nauk; VASIL'KOV, N.P., kand. ekon. nauk; VAL'KOV, V.V., kand. ekon. nauk; KOLLONTAY, V.M., kand. ekon. nauk; ETINGER, Ya.Ya., kand. ekon. nauk; DALIN, S.A., kand. ekon. nauk; PUSHKIN, A.A., mlad. nauchnyy sotr.; MOROZOV, V., red.; MOSKVINA, R., tekhn. red.

[Economic problems of the "Common Market."]Ekonomicheskie problemy "Obshchego rynka." Moskva, Sotsekgiz, 1962. 510 p. (MIRA 16:3)

1. Akademiya nauk SSSR. Institut mirovoy ekonomiki i mezhdunarodnykh otnosheniy. 2. Institut mirovoy ekonomiki i mezhdunarodnykh otnosheniy Akademii nauk SSSR (for all except Morozov, Moskvina). (European Economic Community)

MAKSIMOVA, M.K., inzh.

Maintenance of nylon fabrics. Tekst.prom. 21 no.3:95 Mr '61.
(MIRA 14:3)

(Nylon)

BELOV, K.A.; VOLKOVA, O.B.; MAKSIMOVA, M.I.; OGLOBLIN, N.D.; LUK'YACHENKO, V.N.; TUL'CHINSKAYA, A.Ya.

Effect of the chemical composition of the reagents, used for coal flotation, on their activity. Koks i khim. no.8:8-12 '62. (MIRA 17:2)

1. Khar'kovskiy politekhnicheskiy institut (for Belov, Volkova, Maksimova). 2. Khar'kovskiy gornyy institut (for Ogloblin, Luk'yanchenko, Tul'chinskaya).

VOLKOVA, O.B., inzh.; RESPYATOV, M.P., kand.tekhn.nauk; Prinimala uchastiye: MAKSIMOVA, M.I.

Composition and properties of alkyl sulfonates obtained from condensates of Shebelinka gas condensate wells. Masl.-zhir.prom. 28 no.3:26-28 Mr '62. (MIRA 15:4)

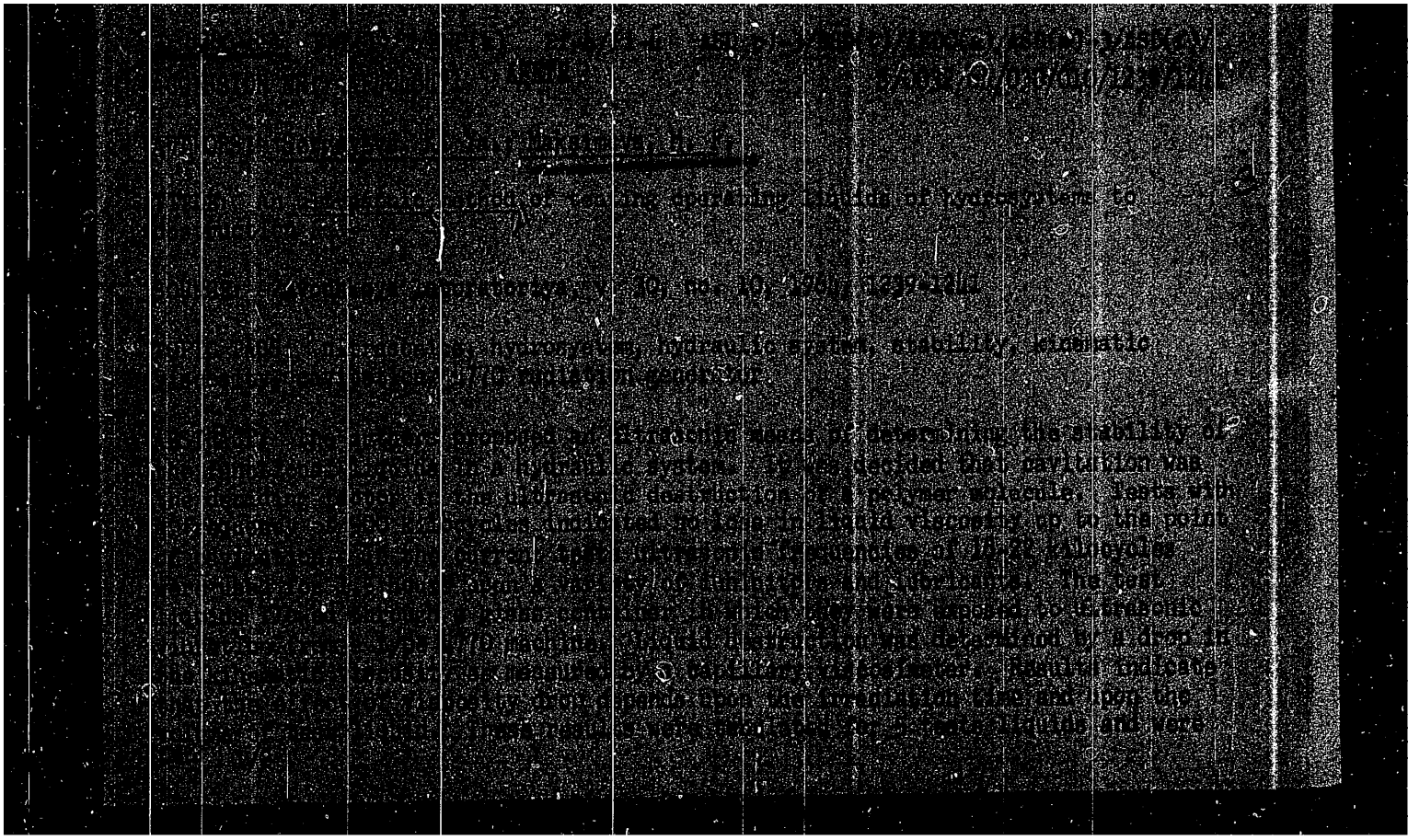
1. Khar'kovskiy politekhnicheskiy institut imeni V.I.Lenina.
(Shebelinka region--Condensate oil wells)
(Cleaning compounds)

BELOV, K.A.; VOLKOVA, O.B.; MAKSIMOVA, M.I.

Production of surface active agents from the Shebelino gas condensate. Khim.i tekh.topl.i masel 5 no.8:34-37 Ag '60. (MIRA 13:8)

1. Khar'kovskiy politekhnicheskiy institut im. V.I.Lenina.
(Shebelino region--Condensate oil wells)
(Surface active agents)

ILLEGIBLE



APPROVED FOR RELEASE: 06/23/11: CIA-RDP86-00513R001031700049-6

1. TSentral'nyy nauchno-issledovatel'skiy institut shelkovoy promyshlennosti.

(Rayon—Cleaning)

MAKSIMOVA, M.A.

Developing the garment industry in the sixth five-year plan. Leg. prom. 16 no.9:4-6 S '56. (MLRA 9:11)
(Clothing industry) (Sewing)

ROGOZKIN, V.A.; MAKSIMOVA, L.V.

Effect of nicotinamide on the level of nicotinamide adenine dinucleotide and nicotinamide adenine dinucleotide glycohydrolase activity in the skeletal muscles and liver. Ukr. biokhim. zhur. 37 no.3:379-385 '65.
(MIRA 18:7)

1. Nauchno-issledovatel'skiy institut fizicheskoy kul'tury, Leningrad.

APPROVED FOR RELEASE: 06/23/11: CIA-RDP86-00513R001031700049-6

MAKSIMOVA, L.V.

Adenosine triphosphate; creatine-phosphotransferase activity in the muscles and blood during muscular activity. Ukr. biokhim. zhur. 37 no.1:131-136 '65. (MIRA 18:5)

1. Section of Biochemistry of the Leningrad Research Institute of Physical Culture.

BERZIN'SH, G.V.; MAKSIMOVA, L.T.; APATSKAYA, N.A.

Finishing furniture parts by the dipping method. Der.prom 5 no.7:25-26 Jl '56. (MLRA 9:9)

1.Rizhskiy mebel'nyy kombinat No.1.
(Riga--Furniture industry)

ZHIGALEV, N.V., inzhener; MAKSIMOVA, L.T.

Device for wood inlay work. Der.i lesokhim.prom.3 no.1:24-25 Ja '54. (MLRA 7:2)

1. Rizhskiy mebel'nyy kombinat No.1. (Marquetry)

MAKSIMOVA, L.P.

Consumption of food by young-of-the-year hybrid carp in ponds of the northwestern U.S.S.R. Trudy sov. Ikht. kom. no.14:41-47 '62. (MIRA 15:12)

1. Gosudarstvennyy nauchno-issledovatel'skiy institut ozernogo i rechnogo rybnogo khozyaystva - (GosNIORKh).
(Russia, Northwestern--Carp)
(Fishes--Food)

Abs Jour: Ref Zhur-Khimiya, No 6, 1957, 19572

is diluted with water up to the mark and photocolorimetered. The error does not exceed 6%. The duration is 30 - 35 min. Cr, Ni, Si, and Tl does not interfere, if their contents did not exceed the Nb content 350, 280, 140 and 2 - 4 times respectively.

Abs Jour: Ref Zhur-Khimiya, No 6, 1957, 19572

added and all is heated 10 min. The solution is transferred into a measuring flask of 50 ml capacity, 10 ml of 6 n. H_2SO_4 are added and the flask is filled up to the mark by adding water. An aliquot portion of the solution is transferred into another flask of 50 ml capacity, 1 ml of a 3% solution of sodium phosphate, 1 ÷ 2 ml of 6 n. H_2SO_4, 4 ml of a 2% solution of $(NH_4)_2$-NoO_4 and 12 ÷ 20 ml of water are added. All is heated to 30° and kept at this temperature to complete the formation of the yellow phosphate-molybdate-niobate complex, after that 15 - 20 ml of 6 n. H_2SO_4 and, 20 - 30 sec. later, 1 ml of a 2% solution of $SnCl_2$ are added. The solution

MAKSIMOVA, L.P.

USSR/Analysis of Inorganic Substances G-2

Abs Jour: Ref Zhur-Khimiya, No 6, 1957, 19572

Author : A. A. Popel', L. P. Maksimova
Inst : University of Kazan'
Title : Photocolorimetric Determination of Niobium

Orig Pub: Uch. Zap. Kazansk. Un-ta, 1956, No 5, 86 - 90

Abstract: The method of determination of Nv as phosphate-molybdate-niobate blue (A.A. Davydova, Z.M. Vaysberg, Zavod. laboratoriya, 1947, 9, 1038) is improved. For the determination of Nb in alloy steels, the weighed sample of 0.1 g is dissolved in 8 - 10 ml of 6 n. H_2SO_4. Fe is oxidized by adding several drops of concentrated HNO_3. In order to avoid Nb hydrolysis, 5 ml of 2% HF are

Card 1/3

MAKSIMOVA, L. P.

"Biology of the Monodace of the Sea of Azov." Cand Biol Sci, Moscow Technical Inst of the Fish Industry and Economy imeni A. I. Mikoyan, 5 Mar 54. Dissertation (Vechernyaya Moskva Moscow, 24 Feb 54)

SO: SUM 186 19 Aug 1954

L 19183-63
ACCESSION NR: AR3004208

2

detection the effect of a number of factors affecting the formation of SP has been established and tested. These factors may be divided into those that contribute to the formation of SP (presence of humidity in the mold, additions etc; increase in filling density and hence a decrease in gas permeability of the mold; high temperature of casting), and those which either impair SP formation or completely eliminate it (increasing carbon content in steel, increase in ferrostatic pressure, sufficient thickness of cast walls and qualitative deoxidation of metal in the furnace, with a necessary quantity of aluminum in the ladle). Eight figures, twelve references.

DATE ACQ: 21Jun63 SUB CODE: IE, MA ENCL: 00

Card 2/2

L 19183-63 EWP(q)/EWT(m)/BDS AFFTC/ASD JD

ACCESSION NR: AR3004208 S/0276/63/000/005/G049/G050

SOURCE: RZh. Tekhnologiya mashinostroyeniya, Abs. 5G317

AUTHOR: Babich, Ye. P.; Voloshina, A. S.; Maksimova, L. N.; Saburov, V. P.; Topaller, A. N.

TITLE: Study of causes of formation of sievelike porosity in cast steel

CITED SOURCE: Sb. Liteyn. proiz-vo. Omsk, 1962, 51-74

TOPIC TAGS: sievelike porosity, cast steel, porosity formation, sievelike porosity

TRANSLATION: Results of experiments confirmed the theory of sievelike porosity formation (SP). Conditions for formation of sievelike porosity are: simultaneous presence in liquid steel of hydrogen and ferrous oxide in quantities greater than critical at the time of formation of a hard skin on the cast; as well as a long time interval between filling the mold and skin formation on the surface of the cast. SP has been successfully artificially created by introducing as oxidizer manganese peroxide into normally oxidized steel. A method has been developed for detection of SP by means of etching the cast surface after removing from it a 2 mm. layer. By utilizing the method of artificially obtaining SP and the method of its

Card 1/2

KORYAGIN, K.V.; MAKSIMOVA, L.N.

Substituting emulsions for sizing mixtures. Tekst. prom. 20 no. 11:66-67 N '60. (MIRA 13:12)

1. Master fabriki imeni Krasina (for Koryagin).
(Flax) (Sizing (Textile))

MAKSIMOVA, L.N.

Seasonal freezing of ground in the construction area of the Bratsk Hydroelectric Power Station. Merzl.issl. no.2:33-44 '61.
(MIRA 16:5)
(Bratsk Hydroelectric Power Station--Frozen ground)

5

MAKSIMOVA, L. N.

Frost cracking processes in the soils of the northwestern part of Amur Province. Merzl. issl. no.1:90-99 '61.
(MIRA 16:1)

(Amur Province--Frozen ground)

Synthetic Zeolites: (Cont.) SOV/6246

Card 7/12 3/5

Synthetic Zeolites: (Cont.) SOV/6246

COVERAGE: The book is a collection of reports presented at the First Conference on Zeolites, held in Leningrad 16 through 19 March 1961 at the Leningrad Technological Institute imeni Lensovet, and is purportedly the first monograph on this subject. The reports are grouped into 3 subject areas: 1) theoretical problems of adsorption on various types of zeolites and methods for their investigation, 2) the production of zeolites and methods for their investigation of zeolites. No personalities are mentioned. References follow individual articles.

TABLE OF CONTENTS:

Card 2/12

MAKSIMOVA, L.M.

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PHASE I BOOK EXPLOITATION SOV/6246

Soveshchaniye po tseolitam. 1st, Leningrad, 1961.

Sinteticheskiye tseolity; polucheniye, issledovaniye i primeneniye (Synthetic Zeolites: Production, Investigation, and Use). Moscow, Izd-vo AN SSSR, 1962. 286 p. (Series: Its: Doklady) Errata slip inserted. 2500 copies printed.

Sponsoring Agency: Akademiya nauk SSSR. Otdeleniye khimicheskikh nauk. Komisiya po tseolitam.

Resp. Eds.: M. M. Dubinin, Academician and V. V. Serpinskiy, Doctor of Chemical Sciences; Ed.: Ye. G. Zhukovskaya; Tech. Ed.: S. P. Golub'.

PURPOSE: This book is intended for scientists and engineers engaged in the production of synthetic zeolites (molecular sieves), and for chemists in general.

Card 1/13 3

MAKSIMOVA, L.L.

System of axioms of computation of strict implication. Alg. i log. 3 no.3:59-68 '64 (MIRA 18:1)

MAKSIMOVA, L.I.

Hygienic evaluation of the dust factor in the construction ceramics industry. Uch.zap.Mosk.nauch.-issl.inst.san.i gig. no.8:71-74'61. (MIRA 16:7)
(CERAMIC INDUSTRIES--HYGIENIC ASPECTS)
(LUNGS--DUST DISEASES)

MAKSIMOVA, L. I., Cand. Medic. Sci. (diss) "Hygiene of Labor in Building Ceramics Industry," Moscow, 1961, 19 pp. (Acad. Med. Sci. USSR. Inst. of Labor Hygiene and Industrial Illnesses) 250 copies (KL Supp 12-61, 286).

MAKSIMOVA, L.I.; KURNOSOVA, Ye.F., vrach

Rational utilization of the crèche. Vop. okh. mat. i det. 6 no.8: 66-69 Ag '61. (MIRA 15:1)

1. Glavnyy pediatr Gor'kovskogo oblastnogo otdela zdravookhraneniya (for Maksimova). 2. Yasli No.1 Dzerzhinska Gor'kovskoy oblasti (for Kurnosova).

(DAY NURSERIES)

MAKSIMOVA, L.I.; TSEYTLIN, A.G., prof., nauchnyy rukovoditel'

Basic indices of the physical development in newborn infants in Dzerzhinsk. Pediatriia 4 no.7:54-56 Jl'63 (MIRA 16:12)

1. Glavnyy pediatr Gor'kovskogo oblastnogo otdela zdravookhraneniya (for Maksimova).

KOVALENKOVA, V. K. ; MAKSIMOVA, L. A.

"Some rules governing monomycin biosynthesis."

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

Inst for Search for New Antibiotics, AMS USSR, Moscow.

APPROVED FOR RELEASE: 06/23/11: CIA-RDP86-00513R001031700049-6

LIVSHITS, L.S., kand.tekhn.nauk; POLYAKOVA, R.B., inzh.; MAKSIMOVA, K.I., inzh.

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

L 27421-66

ACC NR: AP6017697

matter in the medium. The increase in content of organic matter in the medium results chiefly from increase in the algal yield and is probably to be ascribed to the entry into the medium of organic matter from the maternal cell that does not take part in the formation of aplanospores and is released at the moment they leave the cell. The authors thank Professor V. N. Sharoshnikov for his attention in this work. Orig. art. has: 2 figures and 3 tables.

[JPRS]

SUB CODE: 06 / SUBM DATE: 14Feb64 / ORIG REF: 005 / OTH REF: 010

Card 2/2

L 27421-66 EWT(1) SCTB DD

ACC NR: AP6017697 SOURCE CODE: UR/0220/65/034/003/0483/0490

AUTHOR: Maksimova, I. V.; Toropova, Ye. G.; Pimenova, M. N.

ORG: Soil Biology Faculty, Moscow State University im. M. V. Lomonosov (Biologo-pochvennyy fakul'tet Moskovskogo gosudarstvennogo universiteta)

TITLE: Release of organic matter by green algae grown in mineral media

SOURCE: AN SSSR. Mikrobiologiya, v. 34, no. 3, 1965, 483-490

TOPIC TAGS: algae, chlorella, plant development, microbiology

ABSTRACT: When Chlorella pyrenoidosa and Chlorella vulgaris are grown in liquid mineral media, a substantial amount of organic matter accumulates in the filtrate, the amount increasing with the yield of algae. The ratio of the amount of organic matter in the medium to the amount of organic matter in the cells changes in the course of algal development. During the first two days, when the yield is small, the organic matter of the filtrate is about 30% of that in the cells. This value then decreases, ranging from 5 to 10% throughout the development of the culture. Light intensity and temperature have no appreciable effect on the accumulation of organic matter in the medium. Different species of chlorella release into the medium approximately the same amount of organic matter per unit of biomass. Cell autolysis is not the main reason for the accumulation of organic

UDC: 582.232-113.5

Card 1/2

L 27405-66 EWT(1) SCIB DD

ACC NR: AP6017704 SOURCE CODE: UR/0220/65/034/002/0344/0349

AUTHOR: Maksimova, I. V.; Fedenko, Ye. P. 34

ORG: Biology-Soil Faculty, Moscow State University im. M. V. Lomonosov (Biologo-pochvennyy fakul'tet Moskovskogo gosudarstvennogo universiteta) B

TITLE: Effect of the redox potential on the development of bacteria in cultures of algae

SOURCE: AN SSSR. Mikrobiologiya, v. 34, no. 2, 1965, 344-349

TOPIC TAGS: chlorella, bacteria, plant growth, bacteriology

ABSTRACT: During the cultivation of Chlorella vulgaris together with the saprophytic bacteria Bacillus cereus and Pseudomonas ovalis isolated from the microflora accompanying the algae, the redox potential rH_2 of the medium tended to increase. When the rH_2 of a combined culture of C. vulgaris and B. cereus increased to 29 from the initial value of 27, the number of B. cereus decreased abruptly. Reduction of the rH_2 to 17-23 by the addition of sodium thioglycolate eliminated the toxic action of the algae on the bacteria: the propagation of the bacteria was then stimulated by the growth of the algae. Similar relations were found in connection with the combined cultivation of C. vulgaris and Ps. ovalis: the propagation of Ps. ovalis was stimulated at rH_2 15-17 and suppressed at rH_2 20-23 in combined cultivation with C. vulgaris. The authors thank Professor I. L. Rabotnova and Professor V. N. Shaposhnikov for their valuable advice during the discussion of the results. Orig. art. has: 3 figures and 1 table. [JPRS]

SUB CODE: 06 / SUBM DATE: 14Feb64 / ORIG REF: 003

UDC: 576.8.095.38

Card 1/1

MAKSIMOVA, I.V.; PIMENOVA, M.N.

Effect of antibiotics on the growth of some representatives of the unicellular green algae. Mikrobiologiia 31 no.4:646-653 Jl-Ag '62. (MIRA 18:3)

1. Biologo-pochvennyy fakul'tet Moskovskogo gosudarstvennogo universiteta imeni Lomonosova.

APPROVED FOR RELEASE: 06/23/11: CIA-RDP86-00513R001031700049-6

The effect of antibiotics ...

S/220/62/031/005/002/002
D291/D308

SUBMITTED: April 24, 1961

Card 3/3

the growth of Chlorella. These were as follows: penicillin, 500 γ/ml.; laevomycetin, 35 γ/ml.; colimycin, 5 γ/ml.; and tetracyclin, 25 γ/ml.. No adverse effect on the photosynthesis of the algae was caused by these concentrations. The possibility of adaptation of Chlorella to relatively high concentrations of antibiotics in the growth medium was explored. Some evidence of adaptation, as measured by a more gradual reduction in growth than that occurring in control cultures subjected to an identical antibiotic treatment, was noted. A detailed study was made of the effect of laevomycetin (at a concentration of 25 γ/ml.) on mixed algal-bacterial cultures. It was observed that the rates of reproduction of B. cereus and Ps. ovalis were greatly reduced, while the growth of A. harthlebii was completely inhibited. No adverse effects on Chlorella were noted and the activity of the antibiotic remained constant during several days of observation. There are 3 figures and 4 tables.

ASSOCIATION: Biologo-pochvenyy fakultet Moskovskogo gosudarstvennogo universiteta im. M.V. Lomonosova (Faculty of Biology and Soil Science, Moscow State University im. M.V. Lomonosov)

41590

S/220/62/031/005/002/002
D291/D308

AUTHORS: Maximova. I.V. and Pimenova, M.N.

TITLE: The effect of antibiotics on the growth of Chlorella vulgaris and associated microflora in a joint culture

PERIODICAL: Mikrobiologiya, v. 31, no. 5, 1962, 904-909

TEXT: The effect of various concentrations of several antibiotics on the growth of Chlorella vulgaris strain 87 and colonies of Pseudomonas ovalis, Achromobacter harthlebii and Bacillus cereus, cultured in modified Craig-Trellis medium in 250 ml flasks, was studied; the cultures were continuously stirred and an air-CO_2 mixture was bubbled through. It was observed that the antibiotic concent rations capable of inhibiting the growth of Chlorella were considerably less when the cultures were subjected to continuous stirring. With the exception of nistatin, all the antibiotics tested were found to be capable of inhibiting bacterial growth at concentrations which did not retard

Card 1/3

39211

S/220/62/031/002/004/004
I018/I218

Also 2906

AUTHOR: Pimenova, M. N., Maksimova, I. V. and Balitskaya, R. M.

TITLE: Studies on the composition of microflora accompanying algae during their mass cultivation in open reservoirs

PERIODICAL: Mikrobiologiya, v. 31, no. 2, 1962, 332–338

TEXT: Occasionally bacterial contaminants may amount to 50% of the total population of a reservoir inoculated with *Chlorella vulgaris* and *Ankistrodesmus*. The bulk of contaminant bacteria are non-sporeforming organisms belonging to the following four genera: *Pseudomonas*, *Flavobacterium*, *Acromobacter* and *Serratia*. Pseudomonads prevail. The number of sporeforming bacteria is usually small but they tend to increase under conditions unfavorable for the growth of algae. Oligonitrophils are frequently present and the presence of cellulose decomposing bacteria was also noted. Fungi are infrequently encountered, being mainly represented by organisms belonging to the genus *Trichoderma*. Nitrifying bacteria and *Azotobacter* were not detected. Bacteria found in reservoirs inoculated with *Chlorella* are more numerous than those present in reservoirs inoculated with *Ankistrodesmus*.

ASSOCIATION: Biologo-pochvennyy fakul'tet Moskovskogo gosudarstvennogo universiteta im. M. V. Lomonosova (Department of Soil Biology, Moscow State University, im. M. V. Lomonosov)

SUBMITTED: June 16, 1961

Card 1/1

COUNTRY : USSR
CATEGORY :

ABS. JOUR. : RZBiol., No. 3 1959, No. 10039

AUTHOR : Maksimova, I. V.
INST. :
TITLE : Pigment System of Purpuric Bacteria and the Role of Bacterial Pigments in Photosynthesis

ORIG. PUB. : Uspekhi sovrem. biol., 1958, 45, No 1, 14-27

ABSTRACT : Review. Bibliography. 55 titles.

CARD: 1/1

17

MAKSIMOVA, I.V.

Variations in the degree of heterotrophy in Rhodopseudomonas palustris as induced by light of various intensity [with summary in English]. Izv.AN SSSR Ser.biol. 23 no.2:202-210 Mr-Ap '58. (MIRA 11:4)

1. Moskovskiy gosudarstvennyy universitet im. M.V. Lomonosova, Biologo-pochvennyy fakul'tet.
(LIGHT--PHYSIOLOGICAL EFFECT) (BACTERIA, AUTOTROPHIC)

MAKSIMOVA, I.V.

Photoautotrophic and photoheterorophic development of purple bacteria at various intensities of light. Nauch. dokl. vys. shkoly; biol. nauki no.2:139-146 '58. (MIRA 11:10)

1. Predstavlena kafedroy mikrobiologii Moskovskogo gosudarstvennogo universiteta imeni M.V. Lononosova.
(BACTERIA, CHROMOGENIC) (LIGHT--PHYSIOLOGICAL EFFECT)

F-1

USSR/Microbiology - General Microbiology.

Abs Jour : Ref Zhur - Biol., No 3, 1958, 9782

Author : Maksimova, I.V.

Inst : -

Title : Action of Light of Different Spectral Composition on Development and Some Metabolic Properties of Purple Bacteria.

Orig Pub : Dokl. AN SSSR, 1957, 112, No 4, 766-768

Abstract : It was established that Rhodopseudomonas palustris can grow when illuminated by a portion of the spectrum absorbed by carotenoid pigments. The cell yield at 450-550 mμ (which corresponds to carotenoid absorption) is greater than at 580-600 mμ (which corresponds to a small maximum of bacteriochlorophyll absorption). The number of cells, however, is considerably increased in the portion of the spectrum at 770-870 mμ where the maximum of the second region of bacteriochlorophyll absorption is located,

Card 1/2

USSR/Microbiology - General Microbiology

Abs Jour : Ref Zhur - Biol., No 3, 1957, 9781

Author : Maksimova, I.V.

Inst :

Title : Effect of Light Intensity on Some Properties of Metabolism of Purple Bacteria.

Orig Pub : Dokl. AN SSSR, 1957, 112, No 3, 545-548

Abstract : Rhodopseudomonas palustris on a mineral medium with H_2S increases only at light intensity above 7 thousand erg/cm^2/second, while on media with organic compounds bacteria speedily begin development at a light intensity of 2-3 thousand erg/cm^2/second, and at a light intensity above 12 thousand erg/cm^2/second an "illumination inhibition" occurs; this phenomenon is not observed when bacteria are grown on mineral media. As the light intensity increases the consumption of organic substances (acetic, propionic acids) is decreased per unit of cell yield,

Card 1/2

Moscow State Univ.

MAKSIMOVA, I.V. (Moskva).

Pigment system of purple bacteria and the role of bacterial pigments in photosynthesis. Trudy Inst. okean. 23:14-27 '57. (MIRA 11:3)
(Bacteria, Chromogenic) (Photosynthesis)

MAKSIMOVA, I. V. Cand Biol Sci -- (diss) "The effect of light of various intensities and spectral composition ~~on some peculiarities~~ upon certain features of the metabolism of purple bacteria" (with diagrams) Mos, 1957. 19 pp 20 cm. (Mos Order of Lenin and Order of ~~Labor Red~~ LABOR Red Banner State Univ im M. V. Lomonosov), 100 copies

(KL, 20-57, 87)

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APPROVED FOR RELEASE: 06/23/11: CIA-RDP86-00513R001031700049-6

MAKSIMOVA, I.V.; TOROPOVA, Ye.G.; PIMENOVA, M.N.

Release of organic substances by green algae, grown on mineral media. Mikrobiologiia 34 no.3:483-490 My-Je '65.
(MIRA 18:11)

1. Biologo-pochvennyy fakul'tet Moskovskogo gosudarstvennogo universiteta imeni M.V.Lomonosova.

ACCESSION NR: AP4031822

$FeSO_4$, 0.005 g/l; $CaCl_2$, 0.011; EDTA, 0.1 g/l, and Arnon microelement solutions, A_4 (1 ml) and B_7 (1 ml). Scenedesmus and Ankistrodesmus algae were grown in a nutrient medium consisting of $Ca(NO_3)_2 \cdot 4H_2O$, 2.0 g/l; K_2HPO_4, 0.36 mg/l; $MgSO_4 \cdot 7H_2O$, 0.2 g/l; $FeSO_4$, 0.005 g/l; EDTA, 0.1 g/l, and Arnon microelement solutions, A_4 (1 ml) and B_7 (1 ml). The initial pH of the medium ranged from 5.3 to 5.6. Air containing 2% CO_2 was bubbled through the suspension continuously (that is, 24 hours per day). TBS-30 lamps with a light intensity of 2000 lux at 27—28C were used for illumination. The experiments which were conducted through 1961 and 1962 produced quite similar data. No seasonal periodicity was observed in the development of algae grown under laboratory conditions. The number of cells was determined monthly in the 7- and 10-day yields with a difference not exceeding 20—30%. Orig. art. has: 5 figures.

ASSOCIATION: none

SUBMITTED: 31Jan63 DATE ACQ: 07May64 ENCL: 00

SUB CODE: LS NO REF SOV: 010 OTHER: 001

Card 2/2

ACCESSION NR: AP4031822 S/0220/64/033/002/0221/0223

AUTHOR: Shaposhnikov, V. N.; Pimenova, M. N.; Maksimova, I. V.; Zhdannikova, Ye. N.; Ramenskaya, A. A.

TITLE: Seasonal periodicity in the growth of green algae under laboratory conditions

SOURCE: Mikrobiologiya, v. 33, no. 2, 1964, 221-223

TOPIC TAGS: algae cultivation, Chlorella vulgaris, Chlorella ellipsoidea, Scenedesmus obliquus, Scenedesmus quadricauda, Ankistrodesmus falcatus

ABSTRACT: A two-year study was made of the growth of algae under laboratory conditions, that is, constant composition of medium, temperature, and illumination. The investigations were conducted with pure cultures of Chlorella vulgaris (strain 87), Chlorella ellipsoidea, Scenedesmus obliquus, Scenedesmus quadricauda, and Ankistrodesmus falcatus. The nutrient medium for Chlorella consisted of KNO_3, 1.82 g/l; K_2HPO_4, 0.42 g/l; $MgSO_4 \cdot 7H_2O$, 0.96 g/l;

Card 1/2

MAKSIMOVA, I.V.; LASTOCHKINA, K.D.

Causes of death of bacteria in growing algal cultures. Report No.1 Characteristics of the growth of Bacillus cereus and Pseudomonas ovalis in developing cultures of green protococcal algae. Vest. Mosk. un. Ser. 6; Biol., pochv. 19 no.3:40-47 My-Je '64. (MIRA 17:12)

1. Kafedra mikrobiologii Moskovskogo universiteta.

ZHDANNIKOVA, Ye.N.; PIMENOVA, M.N.; MAKSIMOVA, I.V.; BALITSKAYA, R.M.

Preservation of algal collections; lasting preservation of protococcal algae on agar slants and in sand at 3-4° C. Vest. Mosk.un.Ser.6: Biol., pochv. 19 no.1:45-49 Ja-F '64.
(MIRA 17:4)

1. Kafedra mikrobiologii Moskovskogo universiteta.

MAKSIMOVA, I. V., Cand Med Sci -- (diss) "Influence of oxygen therapy on lipoids, lipoprotein and protein fractions of the blood in atherosclerotic and hypertonic patients." Leningrad, 1960. 14 pp; (Ministry of Public Health RSFSR, Leningrad Medical Inst of Sanitation and Hygiene); 300 copies; price not given; (KL, 29-60, 127)

MAKSIMOVA, I.V.

Effect of oxygen inhalation on the lipid metabolism of rabbits during starvation. Trudy LSGNI 48:134-139 '59. (MIRA 14:2)
(LIPID METABOLISM) (OXYGEN--PHYSIOLOGICAL EFFECT)
(STARVATION)

APPROVED FOR RELEASE: 06/23/11: CIA-RDP86-00513R001031700049-6

MAKSIMOVA, I.V.

Effect of oxygen inhalation on the level of cholesterol, proteins, and lipoproteins in the blood serum in patients with hypertension and arteriosclerosis. Trudy LSGNI 48:121-133 '59. (MIRA 14:2)
(CHOLESTEROL) (BLOOD PROTEINS) (HYPERTENSION)
(ARTERIOSCLEROSIS) (OXYGEN--PHYSIOLOGICAL EFFECT)

APPROVED FOR RELEASE: 06/23/11: CIA-RDP86-00513R001031700049-6

MAKSIMOVA, I.V.

Change in the blood cholesterol level in atherosclerosis and hypertension under the influence of oxygen therapy. Sov.med. 23 no.1:50-52 Ja '59. (MIRA 12:2)

1. Iz fakul'tetskoy terapevticheskoy kliniki (zav. - prof. A.A. Kedrov) Leningradskogo sanitarno-gigiyenicheskogo meditsinskogo instituta.

(ARTERIOSCLEROSIS, blood in
cholesterol, eff. of oxygen inhalation ther. (Rus))
(HYPERTENSION, blood in
same)
(CHOLESTEROL, in blood
in arteriosclerosis & hypertension, eff. of oxygen inhalation ther. (Rus))
(OXYGEN, ther. use
inhalation inarteriosclerosis & hypertension, eff. on blood cholesterol (Rus))

MAKSIMOVA, I.V.

Effect of oxygen inspiration on cholesterinemia in atherosclerosis and hypertension. Trudy LSGMI 40:72-78 '58.
(MIRA 12:8)

1. Fakul'tetskaya terapevticheskaya klinika Leningradskogo sanitarno-gigiyenicheskogo meditsinskogo instituta (zav. klinikoy - prof.A.A.Kedrov).

(OXYGEN, effects,
on blood cholesterol in hypertension & arteriosclerosis (Rus))
(CHOLESTEROL, in blood,
eff. of oxygen in hypertension & arteriosclerosis (Rus))
(HYPERTENSION, blood in,
cholesterol, eff. of oxygen (Rus))
(ARTERIOSCLEROSIS, blood in,
same)

referred to]. Dehydrochlorination conditions for the methyl ether have been more rigorous, viz., 8 hrs heating at 10-20 atm (Ref.2). The constants of 3-propoxy-pentene-2 obtained are: boiling point 125-126°C, n_D^{20} 1.4080, d_{20}^{20} 0.7841, MR = 40.313 (calculated), 40.30 (obtained) [Abstracters note: the latter is a misprint and should read 4.30], bromine number 125 (calculated), 122.4 (obtained), empirical formula $C_8H_{16}O$; constants for 3-butoxy-pentene-2 are: boiling point 146-147°C, n_D^{20} 1.4145, d_{20}^{20} 0.7926, MR 44.93 (calculated), 44.81 (obtained), bromine number 112.6 (calculated), 111.2 (obtained), empirical formula $C_9H_{18}O$. There are 5 tables and 5 Soviet references.

SUBMITTED: June 9, 1960

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