"APPROVED FOR RELEASE: 06/20/2000 CIA-RDP86-00513R001031710003-5

L 8880-65 EWT(1)/T/EWP(k) Pf-4/Pi-4 ASD(p)-3/ESD(t)/AEDC(a)/ASD(m)-3/ASD(f)/
ACCESSION NR: AP4046471 AFETR S/0032/64/030/010/1239/1241

AUTHORS: Sergeyeva, K. Ya.; Maksimova, M. F.

TITLE: An ultrasonic method of testing operating liquids of hydrosystems to destruction

SOURCE: Zavodskaya laboratoriya, v. 30, no. 10, 1964, 1239-1241

TOPIC TAGS: ultrasonics, hydrosystem, hydraulic system, stability, kinematic viscosity, cavitation/ 4770 radiation generator

ABSTRACT: The authors proposed an ultrasonic means of determining the stability of the functional liquids in a hydraulic system. It was decided that cavitation was the deciding factor in the ultrasonic destruction of a polymer molecule. Tests with a frequency of 500 kilocycles indicated no loss in liquid viscosity up to the point of cavitation. In the current tests ultrasonic frequencies of 18-22 kilocycles were used for 1.5 hours upon a variety of inhibitors and lubricants. The test liquids flowed through a glass container in which they were exposed to ultrasonic vibration from a type 4770 machine. Liquid destruction was determined by a drop in the kinematic viscosity as measured by a capillary viscosimeter. Results indicate that the effect of viscosity drop depends upon the irradiation time and upon the volume of test liquid. These results were tabulated for 5 tests liquids and were

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Card 2/2

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)

APPROVED FOR RELEASE: 06/20/2000 CIA-RDP86-00513R001031710003-5"

"APPROVED FOR RELEASE: 06/20/2000 CIA-RDP86-00513R001031710003-5

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)

APPROVED FOR RELEASE: 06/20/2000 CIA-RDP86-00513R001031710003-5"

"APPROVED FOR RELEASE: 06/20/2000 CIA-RDP86-00513R001031710003-5

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).

APPROVED FOR RELEASE: 06/20/2000 CIA-RDP86-00513R001031710003-5"

"APPROVED FOR RELEASE: 06/20/2000 CIA-RDP86-00513R001031710003-5

MAKSIMOVA, M.K., inzh.

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

(Nylon)

APPROVED FOR RELEASE: 06/20/2000 CIA-RDP86-00513R001031710003-5"

"APPROVED FOR RELEASE: 06/20/2000 CIA-RDP86-00513R001031710003-5

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)

APPROVED FOR RELEASE: 06/20/2000 CIA-RDP86-00513R001031710003-5"

"APPROVED FOR RELEASE: 06/20/2000 CIA-RDP86-00513R001031710003-5

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)

APPROVED FOR RELEASE: 06/20/2000 CIA-RDP86-00513R001031710003-5"

"APPROVED FOR RELEASE: 06/20/2000 CIA-RDP86-00513R001031710003-5

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.P., 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.

APPROVED FOR RELEASE: 06/20/2000 CIA-RDP86-00513R001031710003-5"

"APPROVED FOR RELEASE: 06/20/2000 CIA-RDP86-00513R001031710003-5

MAKSIMOVA, M.P.

MAKSIMOVA, M.P.

Michurin varieties in the Kuba-Khachmus 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)

APPROVED FOR RELEASE: 06/20/2000 CIA-RDP86-00513R001031710003-5"

"APPROVED FOR RELEASE: 06/20/2000 CIA-RDP86-00513R001031710003-5

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: 06/20/2000 CIA-RDP86-00513R001031710003-5"

"APPROVED FOR RELEASE: 06/20/2000 CIA-RDP86-00513R001031710003-5

SOV/62-59-2-34/40

8(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

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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" $\sigma_{eff}$. 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 $\sigma_{eff}$. (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

APPROVED FOR RELEASE: 06/20/2000 CIA-RDP86-00513R001031710003-5"

"APPROVED FOR RELEASE: 06/20/2000 CIA-RDP86-00513R001031710003-5

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)

APPROVED FOR RELEASE: 06/20/2000 CIA-RDP86-00513R001031710003-5"

"APPROVED FOR RELEASE: 06/20/2000 CIA-RDP86-00513R001031710003-5

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)

APPROVED FOR RELEASE: 06/20/2000 CIA-RDP86-00513R001031710003-5"

"APPROVED FOR RELEASE: 06/20/2000 CIA-RDP86-00513R001031710003-5

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: 06/20/2000 CIA-RDP86-00513R001031710003-5"

"APPROVED FOR RELEASE: 06/20/2000 CIA-RDP86-00513R001031710003-5

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S/263/62/000/005/007/010
I007/I207

21.6000

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 $\beta$-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 $4\pi$ 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

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"APPROVED FOR RELEASE: 06/20/2000 CIA-RDP86-00513R001031710003-5

A SPECTRAL METHOD..

S/263/62/000/005/007/016
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 ± 20%. There are 9 figures and 9 references.

[Abstractor's note: Complete translation.]

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"APPROVED FOR RELEASE: 06/20/2000 CIA-RDP86-00513R001031710003-5

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)

APPROVED FOR RELEASE: 06/20/2000 CIA-RDP86-00513R001031710003-5"

"APPROVED FOR RELEASE: 06/20/2000 CIA-RDP86-00513R001031710003-5

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 $\omega$ populated by an adsorbed Ar atom or $N_2$, $C_2H_5OH$, n-$C_5H_{12}$ 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. $\omega_{Ar}$ 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; $\omega_{n-C_5H_{12}}$ = 54.2;

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$\omega_{C_6H_{12}}$ = 54.5; for sample IV: 15; 24.3; 46.5 and 44.5, respectively. $\omega_{N_2}$ 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 $\omega$ 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 $\omega$ of the two hydrocarbons varies between physical values. The anomalous increase of $\omega$ 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



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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



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"APPROVED FOR RELEASE: 06/20/2000 CIA-RDP86-00513R001031710003-5

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)

APPROVED FOR RELEASE: 06/20/2000 CIA-RDP86-00513R001031710003-5"

"APPROVED FOR RELEASE: 06/20/2000 CIA-RDP86-00513R001031710003-5

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)

APPROVED FOR RELEASE: 06/20/2000 CIA-RDP86-00513R001031710003-5"

"APPROVED FOR RELEASE: 06/20/2000 CIA-RDP86-00513R001031710003-5

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)

APPROVED FOR RELEASE: 06/20/2000 CIA-RDP86-00513R001031710003-5"

"APPROVED FOR RELEASE: 06/20/2000 CIA-RDP86-00513R001031710003-5

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



APPROVED FOR RELEASE: 06/20/2000 CIA-RDP86-00513R001031710003-5"

"APPROVED FOR RELEASE: 06/20/2000 CIA-RDP86-00513R001031710003-5

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)

APPROVED FOR RELEASE: 06/20/2000 CIA-RDP86-00513R001031710003-5"

"APPROVED FOR RELEASE: 06/20/2000 CIA-RDP86-00513R001031710003-5

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)

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"APPROVED FOR RELEASE: 06/20/2000 CIA-RDP86-00513R001031710003-5

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)

APPROVED FOR RELEASE: 06/20/2000 CIA-RDP86-00513R001031710003-5"

"APPROVED FOR RELEASE: 06/20/2000 CIA-RDP86-00513R001031710003-5

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.

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"APPROVED FOR RELEASE: 06/20/2000 CIA-RDP86-00513R001031710003-5

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.

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"APPROVED FOR RELEASE: 06/20/2000 CIA-RDP86-00513R001031710003-5

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

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"APPROVED FOR RELEASE: 06/20/2000 CIA-RDP86-00513R001031710003-5

E-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

APPROVED FOR RELEASE: 06/20/2000 CIA-RDP86-00513R001031710003-5"

"APPROVED FOR RELEASE: 06/20/2000 CIA-RDP86-00513R001031710003-5

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 $\varepsilon$ and $\delta$. 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

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On Polymorphous Transformations of Chromium in Alloys With Tantalum SOV/78-4-9-38/44

crystal lattice, which is in agreement with the fact that a continuous series of solid solutions of chromium and $\sigma$-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

Card 2/2

APPROVED FOR RELEASE: 06/20/2000 CIA-RDP86-00513R001031710003-5"

"APPROVED FOR RELEASE: 06/20/2000 CIA-RDP86-00513R001031710003-5

18.1150 2309, 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. F., 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 1500°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 $\alpha$-modification is a body-centered cubic crystal with a = 2.887 ± 5 kX; the $\delta$-phase is hexagonal, and for 15% Mo it has the constants a = 2.764 ± 5 kX and

Card 1/2

c/a = 1.604; the $\gamma$-phase is a body-centered cubic crystal with a lattice constant similar to the $\alpha$-phase; the $\beta$-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.

APPROVED FOR RELEASE: 06/20/2000 CIA-RDP86-00513R001031710003-5"

"APPROVED FOR RELEASE: 06/20/2000 CIA-RDP86-00513R001031710003-5

18.1280

69024

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

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

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

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69024

Investigation of Alloys of the Palladium - Silver - Chromium System

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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

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1

~~65941~~ 69541

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

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69541

Investigation of Alloys in the System Palladium - Copper - Chromium

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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

APPROVED FOR RELEASE: 06/20/2000 CIA-RDP86-00513R001031710003-5"

"APPROVED FOR RELEASE: 06/20/2000 CIA-RDP86-00513R001031710003-5

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)

APPROVED FOR RELEASE: 06/20/2000 CIA-RDP86-00513R001031710003-5"

"APPROVED FOR RELEASE: 06/20/2000 CIA-RDP86-00513R001031710003-5

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

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Polymorphous Conversions of Chromium in Alloys With Tantalum

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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 1500°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 gosudarstvennyy universitet, Kafedra obshchey khimii (Moscow State University, Department of General Chemistry)

SUBMITTED: June 6, 1960

Card 2/2

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"APPROVED FOR RELEASE: 06/20/2000 CIA-RDP86-00513R001031710003-5

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

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 $\alpha$, $\beta$, $\gamma$, $\delta$, and $\varepsilon$ modifications of chromium

Card 1/4

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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 $\varepsilon$ of the alloy with 17 % nickel has a body-centered cube with a = 2,879 ± 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 $\delta$ 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 $\varepsilon$. The alloys with the phases $\alpha+\beta$ and $\beta$ 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.

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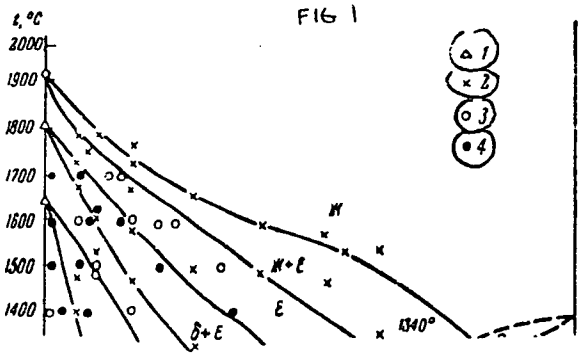
B121/B208

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

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"APPROVED FOR RELEASE: 06/20/2000 CIA-RDP86-00513R001031710003-5

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

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

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

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"APPROVED FOR RELEASE: 06/20/2000 CIA-RDP86-00513R001031710003-5

Solid-state conversions in... S/078/62/007/005/009/014
B101/B110

SUBMITTED: June 23, 1961

Fig. 3. Phase diagram of the system chromium-iron on the basis of the authors' results. (1) Polymorphous conversions; (2) thermal analysis; (3) electrical resistance; (4) one phase; (5) two phases.

Legend: Am.% Fe = at% Fe.

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Solid-state conversions in...

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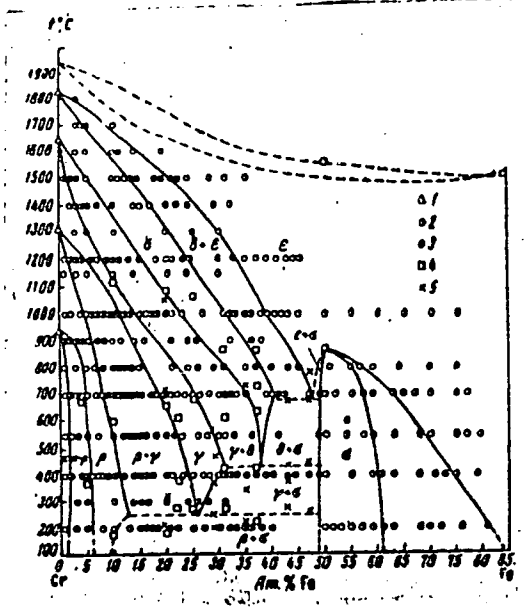


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Fig. 3

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S/659/62/008/000/005/028
I048/I248

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

TITLE: Polymorphous transformations in chromium, and structure of the chromium-based solid solution in the system chromium-iron-molybdenum

SOURCE: Akademiya nauk SSSR. Institut metallurgii. Issledovaniya po zhatoprochnym splavam. v.8. 1962. 42-46

TEXT: An isoplet through the Cr-Mo-Fe system radiating from the Cr corner and representing a fixed 3:1 (st:wt) Fe:Mo ratio was constructed on the basis of microstructural and x-ray analysis data for 33 different alloys. The total Fe+Mo content of the alloys studied did not exceed 45%; the alloy specimens were prepared in a W-arc furnace in argon atmosphere using Ti as the getter, and tempered at 1400-1700°C before the tests. The solidus temperatures were 1750, 1715, 1640, 1620, and 1620°C for the alloys containing 96, 86, 76, 62, and 58% Cr respectively. Three homogenous regions

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I048/I248

Polymorphous transformations...

representing solid solutions based on the $\varepsilon$, $\delta$, and $\gamma$ modifications of Cr were found to exist, together with the $\varepsilon + \delta$ and $\gamma + \varepsilon$ two-phase regions; the $\varepsilon + \delta$ region is associated with the $\varepsilon \rightleftarrows \delta$ transformation at 1830°C, while the $\gamma + \delta$ is associated with the $\gamma \rightarrow \delta$ transformation at 1650°. The simple $\varepsilon$ phase occupies the region beneath the solidus curve, while the $\gamma$ phase occupies the Cr-rich corner at temperatures below 1600°. An x-ray analysis of the 90% Cr alloy quenched from 1500°C showed that the $\varepsilon$ -modification possesses a b.c.c. lattice with a=2.878 kX. There are 4 figures and 1 table.

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MAKSIMOVA, N. A.

USSR / Virology. Human and Animal Viruses. Viruses of the Pox Group. E-3

Abs Jour : Ref Zhur - Biol., No 20, 1958, No 90662

Authors : Marennikova, S. S.; Uspenskiy, F. N.; Maksimova, N. A.

Inst : Moscow Scientific Research Institute for Vaccines and Serums.

Title : An Experiment in the Mass Application of a New Smallpox Vaccine (Egg Vaccine) in the City of Yaroslav.

Orig Pub : Tr. Mosk. n.-i. in-ta vaktsin i syvorotok, 1957, 9, 141-143.

Abstract : No abstract.

Card 1/1



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"APPROVED FOR RELEASE: 06/20/2000 CIA-RDP86-00513R001031710003-5

MIKHEYEV, N.I.; BULYGIN, I.P.; MAKSIMOVA, N.A.; FEDOTOV, V.P.

Apparatus for mechanical testing at temperatures up to 2000°C. Zav.lab. 29 no.3:371-375 '63. (MIRA 16:2)
(Metals at high temperatures)
(Testing machines)

APPROVED FOR RELEASE: 06/20/2000 CIA-RDP86-00513R001031710003-5"

"APPROVED FOR RELEASE: 06/20/2000 CIA-RDP86-00513R001031710003-5

MAKSIMOVA, N.A.

KARTASHEV, A.K., kandidat tekhnicheskikh nauk; GOLOVNYAK, Yu.D., inzhener; ZHIZHINA, R.G., inzhener; MAKSIMOVA, N.A., inzhener.

Physicochemical properties of the sediments of the juice of first carbonation in connection with various methods of preliminary defecation. Trudy TSINS no.4:68-91 '56. (MLRA 10:5)
(Sugar industry)

APPROVED FOR RELEASE: 06/20/2000 CIA-RDP86-00513R001031710003-5"

"APPROVED FOR RELEASE: 06/20/2000 CIA-RDP86-00513R001031710003-5

MAKSIMOVA N.A.

KARTASHOV, A.K.; GOLOVNYAK, Yu.D.; ZHIZHINA, R.G.; MAKSIMOVA, N.A.

Effect of centrifugal pumps on the filtration properties of the juice of first carbonation and the concentrated suspension from sefting tanks. Sakh.prom. 30 no.9:9-14 S '56. (MLRA 10:3)

1. TSentral'nyy nauchno-issledovatel'skiy insitut sakharnoy promyshlennosti.
(Centrifugal pumps) (Sugar industry)

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"APPROVED FOR RELEASE: 06/20/2000 CIA-RDP86-00513R001031710003-5

MAKSIMOVA, N.A.

KARTASHOV, A.K.; MAKSIMOVA, N.A.; ZHIZHINA, R.G.

More precise complexometric determination of calcium in sugar products. Sakh.prom.31 no.9:54-58 S '57. (MIRA 10:12)

1. TSentral'nyy nauchno-issledovatel'skiy institut sakharnoy svekly.
(Sugar--Analysis and testing) (Calcium--Analysis) (Volumetric analysis)

APPROVED FOR RELEASE: 06/20/2000 CIA-RDP86-00513R001031710003-5"

"APPROVED FOR RELEASE: 06/20/2000 CIA-RDP86-00513R001031710003-5

MAKSIMOVA, N.A.

KARTASHOV, A.K.; GOLOVNYAK, Yu.D.; MAKSIMOVA, N.A.; ZHIZHINA, R.G.

Total alkalinity of first carbonation juice. Sakh. prom. 32 no.2:15-19 F '58. (MIRA 11:3)

1. TSentral'nyy nauchno-issledovatel'skiy institut sakharnoy promyshlennosti.
(Sugar manufacture)

APPROVED FOR RELEASE: 06/20/2000 CIA-RDP86-00513R001031710003-5"

"APPROVED FOR RELEASE: 06/20/2000 CIA-RDP86-00513R001031710003-5

KARTASHOV, A.K.; GOLOVNYAK, Yu.D.; ZHIZHINA, R.G.; MAKSIMOVA, N.A.

Use of polyelectrolytes in the sugar industry. Sakh.prom. 33 no.10:24-29 O '59. (MIRA 13:3)

1. TSentral'nyy nauchno-issledovatel'skiy institut sakharnoy promyshlennosti.
(Sugar manufacture) (Electrolytes)

APPROVED FOR RELEASE: 06/20/2000 CIA-RDP86-00513R001031710003-5"

"APPROVED FOR RELEASE: 06/20/2000 CIA-RDP86-00513R001031710003-5

KARTASHOV, A.K.; GOLOVNYAK, Yu.D.; MAKSIMOVA, N.A.

Investigating the returning of an overcarbonated first saturation juice for defecation under factory conditions. Trudy TSINS no.7:19-24 '60. (MIRA 16:2)

1. Laboratoriya ochistki sokov i fil'tratsii TSentral'nogo nauchno-issledovatel'skogo instituta sakharnoy promyshlennosti. (Sugar manufacture)

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"APPROVED FOR RELEASE: 06/20/2000 CIA-RDP86-00513R001031710003-5

KARTASHOV, A.K.; ZHIZHINA, R.G.; MAKSIMOVA, N.A.

Optimum reaction of the second carbonation juice. Trudy TSIIS no.7:25-49 '60. (MIRA 16:2)

1. Laboratoriya ochistki sokov i fil'tratsii TSentral'nogo nauchno-issledovatel'skogo instituta sakharnoy promyshlennosti. (Sugar manufacture)

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KARTASHOV, A.K.; GOLOVNYAK, Yu.D.; ZHIZHINA, R.G.; MAKSIMOVA, N.A.

Testing the method of multistage defecation-saturation. Trudy TSINS no.7:50-60 '60. (MIRA 16:2)

1. Laboratoriya ochistki sokov i fil'tratsii TSentral'nogo nauchno-issledovatel'skogo instituta sakharnoy promyshlennosti. (Sugar manufacture)

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KARTASHOV, A.K.; IVANOVA, L.K.; MAKSIMOVA, N.A.

Determining glutamic acid content of feed molasses. Trudy TSINS no.7:87-102 '60. (MIRA 16:2)

1. Laboratoriya ochistki sokov i fil'tratsii TSentral'nogo nauchno-issledovatel'skogo instituta sakharnoy promyshlennosti.
(Molasses) (Glutamic acid)

APPROVED FOR RELEASE: 06/20/2000 CIA-RDP86-00513R001031710003-5"

"APPROVED FOR RELEASE: 06/20/2000 CIA-RDP86-00513R001031710003-5

KARTASHOV, A.K.; GOLOVNYAK, Yu.D.; ZHIZHINA, R.G.; MAKSIMOVA, N.A.

Effect of the reaction of water used for diffusion on the operation of the juice-purification plant. Sakh.prom. 34 no.1: 9-11 Ja '60. (MIRA 13:5)

1. TSentral'nyy nauchno-issledovatel'skiy institut sakharnoy promyshlennosti.
(Sugar manufacture)

APPROVED FOR RELEASE: 06/20/2000 CIA-RDP86-00513R001031710003-5"

"APPROVED FOR RELEASE: 06/20/2000 CIA-RDP86-00513R001031710003-5

KHONIG, P.[Honig, Pieter], red.; GOLOVNYAK, Yu.D., inzh.[translator]; MAKSIMOVA, N.A., inzh. [translator]; ZHIZHINA, R.G., inzh. [translator]; Prinimali uchastiye: TROYNO, V.P. [translator]; GOROKH, V.N.[translator]; BENIN, G.S., kand. tekhn. nauk, red.; VOYKOVA, A.A., red.; KISINA, Ye.I., tekhn. red.

[Principles of sugar technology]Printsipy tekhnologii sakhara. Pod red. G.S.Benina. Moskva, Pishchepromizdat, 1961. 615 p. Translated from the English. (MIRA 15:12)
(Sugar manufacture)

APPROVED FOR RELEASE: 06/20/2000 CIA-RDP86-00513R001031710003-5"

"APPROVED FOR RELEASE: 06/20/2000 CIA-RDP86-00513R001031710003-5

KARTASHOV, A.K.; GOLOVNYAK, Yu.D.; ZHIZHINA, R.G.; MAKSIMOVA, N.A.

Using polyacrylamide in the sugar industry. Sakh. prom. 35 no.11: 17-23 N '61. (MIRA 15:1)

1. TSentral'nyy nauchno-issledovatel'skiy institut sakharnoy promyshlennosti.
(Acrylamide) (Sugar manufacture)

APPROVED FOR RELEASE: 06/20/2000 CIA-RDP86-00513R001031710003-5"

"APPROVED FOR RELEASE: 06/20/2000 CIA-RDP86-00513R001031710003-5

SAPANKEVICH, P.V.; MAKSIMOVA, N.A.; KHOMENKO, B.P.

Effect of aqueous extracts from the rhyzomes of Bermuda grass on the germination of some crop plant seeds and the growth of their rootlets. Agrobiologiia no.6:915-916 N-D '65. (MIRA 18:12)

1. Uchebnoye khozyaystvo "Kommunar" Krymskogo sel'skokhozyaystvennogo instituta imeni M.I.Kalinina.

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"APPROVED FOR RELEASE: 06/20/2000 CIA-RDP86-00513R001031710003-5

L 16865-63 EWT(1)/EWP(q)/EWT(m)/BDS AFFTC/ASD/SSD Pad JD/HW

ACCESSION NR: AR3006309 S/0058/63/000/007/D082/D082

SOURCE: RZh. Fizika, Abs. 7D595

59

AUTHOR: Shamovskiy, L.M.; Maksimova, N.D.

TITLE: Investigation of the properties of the phosphor NaCl-Ni

CITED SOURCE: Sb. Fiz. shchelochnogaloidn. kristallov. Riga, 1962, 194-204. Diskus., 204-205

TOPIC TAGS: phosphor, NaCl-Ni, absorption, luminescence

TRANSLATION: It is found that in NaCl-Ni the absorption in the region 246 mμ and luminescence is due only to that part of the activating impurity which is localized in the structural lattice defects. The local distribution of the glow centers in the structural defects of the lattice is the cause of the growth in the initial brightness of the optical flash in x-ray exposed NaCl-Ni after dark-

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"APPROVED FOR RELEASE: 06/20/2000 CIA-RDP86-00513R001031710003-5

L 16865-63
ACCESSION NR: AR3006309

ness pauses and heating. The question is discussed of the relation of the light sums that are realized in thermal and optical de-excitation. N. Maksimova.

DATE ACQ: 15Aug63 SUB CODE: PH ENCL: 00

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"APPROVED FOR RELEASE: 06/20/2000 CIA-RDP86-00513R001031710003-5

L 19479-63 EWP(q)/EWT(m)/EWP(b)/BDS AFFTC/ASD JD
ACCESSION NR: AT3002221 S/2941/63/001/000/0198/0202

AUTHORS: Shamovskiy, L. M.; Maksimova, N. D.

TITLE: Nature of flash brightness in NaCl-Ni under light stimulation from F-band

SOURCE: Optika i spektroskopiya; sbornik statey. v. 1: Lyuminestsentsiya. Moscow, Izd-vo AN SSSR, 1963, 198-202

TOPIC TAGS: phosphor, irradiation, M-center, recombination, optical flash

ABSTRACT: A study was made of the behavior of x-rayed NaCl-Ni phosphors under continuous and pulsed optical irradiation from the F-band. On the basis of data obtained a new interpretation is proposed of the Parfianovich effect (L. A. Parfianovich. Opt. i spektr. 2, 392, 1957). The experiment performed differed from that of Parfianovich in one respect only: the use of optical rather than thermal irradiation. It was found that under continuous F-center irradiation luminescence brightness diminishes irregularly with nickel concentration. Optical destruction of M-centers further diminishes the subsequent optical flashing, and heating the phosphor to 90-100C after destruction of M-centers results in a sharp increase in optical flash brightness. The enhancement of flashing bright-

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"APPROVED FOR RELEASE: 06/20/2000 CIA-RDP86-00513R001031710003-5

L 19479-63
ACCESSION NR: AT3002221

ness starts after heating the x-rayed phosphor NaCl-Ni. The authors also discuss the electron model of recombination luminescence. Orig. art. has: 5 formulas and 4 figures.

ASSOCIATION: none

SUBMITTED: 03Nov61 DATE ACQ: 19May63 ENCL: 00

SUB CODE: PH NO REF SOV: 004 OTHER: 005

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APPROVED FOR RELEASE: 06/20/2000 CIA-RDP86-00513R001031710003-5"

"APPROVED FOR RELEASE: 06/20/2000 CIA-RDP86-00513R001031710003-5

L 16437-65 EWA(k)/EWT(1)/EEC(t) ESD(gs)/ESD(t)/RAEM(i)/ASD(a)-5/AFETR
ACCESSION NR: AP4048756 S/0051/64/017/005/0790/0792

AUTHOR: Maksimova, N. D.

TITLE: Effect of added illumination in the F-band on the x-ray luminescence of alkali-halide phosphors

SOURCE: Optika i spektroskopiya, v. 17, no. 5, 1964, 790-792

TOPIC TAGS: activated crystal, alkali halide, x ray luminescence, F band, fluorescence quenching, light intensifier

ABSTRACT: The author investigated the effect of additional optical illumination in the F-band on the stationary luminescence of KCl(Tl) and KBr(Tl) excited with x-rays, as a function of the excitation temperature and of the activator concentration in the crystal. The x-ray excitation was from a tube with molybdenum anticathode (12 mA, 45 kV) and at the same time exposed to light in the absorption F-band, transmitted through different filters for the two crystals.

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"APPROVED FOR RELEASE: 06/20/2000 CIA-RDP86-00513R001031710003-5

L 16437-65
ACCESSION NR: AP4048756

The results indicate that F-stimulation under stationary conditions can, depending on the temperature of the experiment or on the concentration of the activator in the phosphor, either increase the probability of nonradiative recombination and quench the luminescence, or on the other increase the number of emission events and intensify the luminescence brightness. Depending on which of the two processes predominate, the total intensity will either increase or decrease. F-stimulation causes emission of part of the light sum stored in the luminor, and in final analysis always quenches the luminescence. The light sum accumulates again after removal of the F-illumination. Although the present results do not actually refute earlier data (Ch. B. Lushchik et al, Tr. IFA AN ESSR, no. 15, 103, 1961) concerning an exciton mechanism for the transfer of energy from the crystal lattice to the luminescence centers, they do show that the method proposed by Lushchik et al. to prove this transfer is not sufficiently well founded. Orig. art. has: 2 figures.

Card 2/3

APPROVED FOR RELEASE: 06/20/2000 CIA-RDP86-00513R001031710003-5"

"APPROVED FOR RELEASE: 06/20/2000 CIA-RDP86-00513R001031710003-5

L 16437-65

ACCESSION NR: AP4048756

ASSOCIATION: None

SUBMITTED: 20Jan64 ENCL: 00

SUB CODE: OP NR REF SOV: 002 OTHER: 000

Card 3/3

APPROVED FOR RELEASE: 06/20/2000 CIA-RDP86-00513R001031710003-5"

"APPROVED FOR RELEASE: 06/20/2000 CIA-RDP86-00513R001031710003-5

L 49276-65 EWT(1)/EWT(m)/EWP(t)/EWP(b) Pi-4 IJP(c) JD
ACCESSION NR: AP5009524 S/0048/65/029/003/0460/0462

25
B

AUTHOR: Maksimova, N.D.; Kosikhin, V.F.

TITLE: Aftereffects of F band illumination of x ray irradiated alkali halide phosphors /Report, 12th Conference on Luminescence held in L'vov, 30 Jan-5 Feb 1964/

SOURCE: AN SSSR. Izvestiya. Seriya fizicheskaya, v. 29, no. 3, 1965, 460-462

TOPIC TAGS: luminescence, luminescent crystal, alkali halide, x ray, phosphorescence, secondary process, fluorescence quenching

ABSTRACT: The authors have investigated the effect of pulsed illumination with F band radiation on the x-ray excited phosphorescence of a number of alkali halide phosphors. Different effects were observed, depending on the phosphor. In KCl:Tl, NaCl:Tl, KCl:Ag, NaCl:Ag, KBr:Ag, and NaBr:Ag, illumination with a flash of F band radiation increased the intensity of the phosphorescence. In KCl:Tl the intensity of this secondary phosphorescence decreased as the primary phosphorescence decayed, i.e., the weaker the primary phosphorescence at the time of illumination with F band radiation, the weaker the secondary phosphorescence; in NaCl:Tl it did not. In KBr:Tl and KBr:In the F band radiation quenched the phosphorescence. In NaBr:Tl

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"APPROVED FOR RELEASE: 06/20/2000 CIA-RDP86-00513R001031710003-5

L 49276-65

ACCESSION NR: AP5009524

and NaBr: In the F band radiation flash temporarily quenched the phosphorescence, i.e., the intensity of the primary phosphorescence decreased sharply and subsequently returned to its normal value. Possible explanations of all these effects are discussed briefly, but the authors refrain from advancing a final explanation until more experimental date become available. Orig. art. has: 3 figures.

ASSOCIATION: None

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

NR REF SOV: 004 OTHER: 000

Card 2/2

APPROVED FOR RELEASE: 06/20/2000 CIA-RDP86-00513R001031710003-5"

"APPROVED FOR RELEASE: 06/20/2000 CIA-RDP86-00513R001031710003-5

L 61673-65 EWT(1) Pi-4 IJP(c)

ACCESSION NR: AP5011117 UR/0051/65/018/004/0637/0643
535.3771 548.0: 620.192

18
B

AUTHOR: Shamovskiy, L. M.; Maksimova, N. D.

TITLE: Investigation of thermoluminescence of x-irradiated alkali-halide phosphors

SOURCE: Optika i spektroskopiya, v. 18, no. 4, 1965, 637-643

TOPIC TAGS: thermoluminescence, alkali halide phosphor, recombination, x irradiation, activator center

ABSTRACT: The thermoluminescence and optical flashing were investigated under pulsed illumination in the F-band. It was found that the optical flash increases without time lag, and decreases in two stages, the slowly damped component (second-

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"APPROVED FOR RELEASE: 06/20/2000 CIA-RDP86-00513R001031710003-5

without time lag, and decreases in two stages, the slowly damped component (secondary phosphorescence) lasting as much as 5 minutes. In KCl(Tl) this phosphorescence decreases with decreasing primary phosphorescence at room temperature. Subsequent heating causes it to rise and go through a maximum near +85C, where a new thermoluminescence peak is observed, credited to $V_2$ centers. The phenomena observed are explained on the basis of the hole scheme of recombination luminescence, wherein the radiation of the light sum stored in alkali-halide phosphors following x-

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L 61673-65

ACCESSION NR: AP5011117

irradiation is the result of recombination of holes with electrons localized in the activator luminescence centers. The phosphorescence observed immediately after excitation corresponds to thermal release of the holes from shallow levels and their recombination with atomic luminescence centers produced during the course of excitation. The thermoluminescence peaks correspond to release of electron-hole pairs from the capture levels and their recombination on the activator luminescence cen-

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ters. Orig. art. has: 4 figures and 1 formula.

ASSOCIATION: None

SUBMITTED: 07Jun63 ENCL: 00 SUB CODE: OP, NP

NR REF SOV: 010 OTHER: 001

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