"APPROVED FOR RELEASE: 07/13/2001 CIA-RDP86-00513R001754820010-3

TANANAYEVA, G.A.

Some characteristics of the paragenesis of pitchblende and calcite. Geol. rud. mestorozh. 5 no.5:55-61 S-O '63. (MIRA 16:11)

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"APPROVED FOR RELEASE: 07/13/2001 CIA-RDP86-00513R001754820010-3

S/078/61/006/004/011/018
B107/B218

AUTHORS: Kozin, L. F., Tananayeva, N. N.

TITLE: Phase diagram of the system indium - mercury

PERIODICAL: Zhurnal neorganicheskoy khimii, v. 6, no. 4, 1961, 909-912

TEXT: As concerns the compounds of the system indium - mercury, the data on composition and melting point are contradictory (Ref. 2: J. Hildebrand. J. Amer. Chem. Soc., 35, 501 (1913); Ref. 3: H. Ito, E. Ogawa, T. Janagase. Nippon-Kinzoku-Gakkay-Schi, B 15, 382 (1951), quoted according to Chem. Abstr., 47, 12194 (1953); Ref. 4: M. Spicer, C. Bannick. J. Amer. Chem. Soc., 75, 2268 (1953)). The present paper offers experimental results concerning the melting-point diagrams of this system. Pure, twice-distilled mercury and indium of 99.999 % purity were used as initial substances. The experimental unit is schematically shown in Fig. 1. Phase transitions were studied according to the heating curves. Temperatures were measured with calibrated mercury and alcohol thermometers (correctly to the first decimal place). For mixtures containing more than 72.5 % of indium, N. S. Kurnakov's pyrometer was used. The experiments led to the

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following conclusions: In the system indium - mercury there are two congruently melting compounds ($InHg_6$ and InHg) and also an incongruently melting compound (In_7Hg). The first dystectic - corresponding to $InHg_6$ - is found at about 14.3 atom% of In (melting point -14.4°C). Miscibility exists between 4.3 and 22.5 atom% of In (alpha phase). The eutectic up to 4.3 atom% of In is found at -38.7°C. The second eutectic occurs at 32.8 atom % of In (melting point -36.7°C). The eutectic straight goes from 22.5 to 48.0 atom% of In. The second dystectic corresponds to InHg (melting point -18.6°C). The miscibility of this beta phase goes from 48 to 51 atom% of indium. The next eutectic is formed at 63 atom% of In (melting point -30.1°C). It ranges from 51 to 86.9 atom% of In. Miscibility exists again between 86.9 and 100 atom% of In (gamma phase). In_7Hg melts incongruently at +65°C. Thus, the data published on $InHg_4$, $InHg_5$, and $In_{11}Hg$ could not be confirmed. The melting point (-23°C) given in Ref. 3 for InHg is lower than that obtained by the present authors. This divergence is explained by the fact that the indium used by the authors of Ref. 3 was not as pure as that used by the present authors who found that an addition of 0.97 wt% of Pb lowers the melting point of InHg by 1.5°C.

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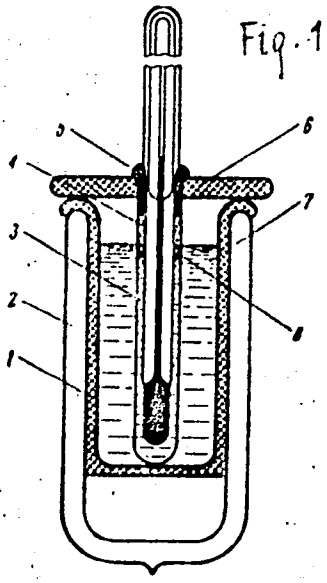
There are 3 figures, 1 table, and 5 references: 1 Soviet-bloc.

SUBMITTED: March 9, 1960

Legend to Fig. 1: 1) Glass vessel embedded in asbestos; 2) Dewar vessel; 3) vessel (12 by 100 mm) containing the substance to be tested; 4) wadding; 5) cork; 6) cover made of asbestos sheet; 7) cooling mixture consisting of acetone and dry ice; 8) thin glycerin layer for protection against oxidation.



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Phase diagram of the system...

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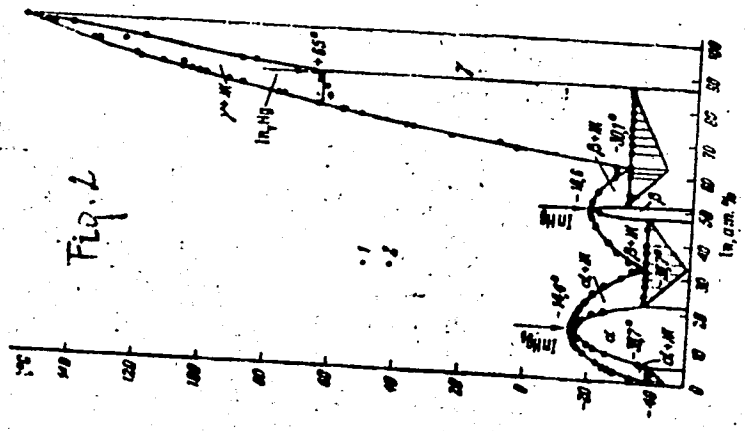
Legend to Fig. 2: a) In, atom%; ж) liquid; 1) data of Spicer and Bannick; 2) data of present authors.



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"APPROVED FOR RELEASE: 07/13/2001 CIA-RDP86-00513R001754820010-3

S/850/62/009/000/009/012
B117/B186

AUTHORS: Kozin, L. F., Tananayeva, N. N.

TITLE: Anodic solution of indium amalgam

SOURCE: Akademiya nauk Kazakhskoy SSR. Institut khimicheskikh nauk. Trudy. v. 9. Alma-Ata, 1962. Elektrokhimiya rastvorov i metallicheskikh sistem, 143-150

TEXT: The behavior of 10% indium amalgam in an electrolytic cell with separated anode and cathode spaces was studied during anodic oxidation. Aqueous solutions of 1 M $HClO_4$, HCl, HBr, H_2SO_4, HSO_3NH_2, and 0.1 M $HClO_4$ + 0.9 M $NaClO_4$ were used as electrolytes. Results: The current yield (depending on the current density) reaches 300% when the current density decreases to infinitely small values. The valence of indium approaches unity, so that indium goes over into the electrolyte as univalent ion. The anodic solution is accelerated and the relative number of the resulting In^+ ions is reduced as the current density increases. In correspondence with this the current density decreases

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considerably, reaching 100% at 24 ma/cm^2. The valence of indium simultaneously increases and indium then goes over into the electrolyte in the form of In^{3+} ions. There are 5 figures and 3 tables.

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L 21609-65 EWT(m)/EPF(n)-2/EWP(j)/T/EWP(t)/EWP(b) Pc-4/Pu-4 IJP(c) ES/JD/
WW/JG/RM

ACCESSION NR: AP5001639 S/0186/64/006/006/0633/0640

AUTHOR: Muzyka, I. D.; Romanenko, E. D.; Tananayeva, N. N.

TITLE: Adsorption of complex uranium compounds from aqueous solutions 32 30 B

SOURCE: Radiokhimiya, v. 6, no. 6, 1964, 633-640

TOPIC TAGS: uranium 27 refining 18, uranium adsorption, uranium complex, activated charcoal, uranyl nitrate, cadmium elimination 27

ABSTRACT: The authors report some of the results obtained in an adsorption and physicochemical study of the system $UO_2(NO_3)_2$ - NaK - H_2O. It was found that the predominant complex present in this system has the composition UO_2K_2. The optimum conditions for the stability of the complex correspond to a pH of 5.5 to 6.5. At pH $\leqslant$ 1.5, the complex decomposes almost completely into its components. The adsorption of this complex on activated charcoal from aqueous solutions was investigated. The complex was found to have a high uranium-adsorbing capacity (about 320 mg of uranium per g of carbon), and can therefore be used for the simultaneous recovery and concentration of uranium from salt systems. The adsorbed uranium may be recovered either by burning off the carbon to obtain uranium oxide, or by desorbing the uranium with a mineral acid such as sulfuric acid. Following the

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desorption, the charcoal may be reused for the absorption of more uranium. The study established the possibility of obtaining uranium compounds of high purity, particularly with respect to cadmium, one of the most harmful impurities in uranium. Orig. art. has: 7 figures.

ASSOCIATION: none

SUBMITTED: 15Sep62 ENCL: 00 SUB CODE: IC

NO REF SOV: 010 OTHER: 004

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"APPROVED FOR RELEASE: 07/13/2001 CIA-RDP86-00513R001754820010-3

S/078/60/005/007/043/043/XX
B004/B060

AUTHORS: Zlomanov, V. P., Tananayeva, O. I., Novoselova, A. V.

TITLE: Vitrification in the TeO_2 - Al_2O_3 System

PERIODICAL: Zhurnal neorganicheskoy khimii, 1960, Vol. 5, No. 7, pp. 1632-1633

TEXT: After giving a survey of Western literature concerning tellurium glass, the authors report on results reached by them so far. They melted TeO_2, supplied by the khimicheskiy zavod im. Voykova (Chemical Works imeni Voykov), which in conformity with ВТУ РУ 1131-55 (VTU RU 1131-55) contained 99.0 - 99.5% TeO_2, in a temperature range of 750-800°C in alundum crucibles supplied by the Podol'skiy zavod ogneuporov (Podolian Plant of Refractories). The time of heating depended on the weighed portion (30 min for 20 g, 120 min for 150 g). Glasses with 93.3-93.9% TeO_2 and 6.4% Al_2O_3 were obtained (Table 1). The aluminum passed over from the crucible material into the melt. Moreover, mixtures of 100 - 85% TeO_2 and

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"APPROVED FOR RELEASE: 07/13/2001 CIA-RDP86-00513R001754820010-3

Vitrification in the TeO_2 - Al_2O_3 System

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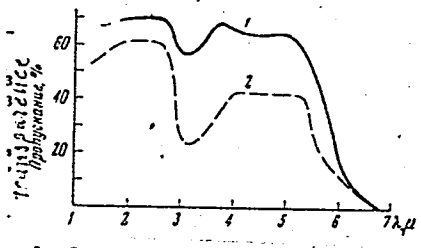
B004/B060

0 - 15% Al_2O_3 were melted in porcelain crucibles at 750 - 800°C. Non-crystallizing glasses were obtained only at TeO_2 concentrations between 90 and 94% (Table 2). The high specific gravity (6 g/cm^3) is pointed out as a drawback. The diathermancy is illustrated in a figure.



Absorption at 3.2μ is caused by moistness absorbed on the surface. The absorption curve was recorded by an ИКС-11 (IKS-11) infrared spectroscopic apparatus. There are 1 figure, 2 tables, and 8 references: 2 Soviet, 1 US, and 5 British.

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"APPROVED FOR RELEASE: 07/13/2001 CIA-RDP86-00513R001754820010-3

Vitrification in the TeO_2 - Al_2O_3 System

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B004/B060

ASSOCIATION: Moskovskiy gosudarstvennyy universitet im. M. V. Lomonosova (Moscow State University imeni M. V. Lomonosov)

SUBMITTED: January 28, 1960

Legend to the figure: Absorption curve of glasses in the infrared range of the spectrum (thickness of specimens 2 mm), 1) glass with 6% Al_2O_3 and 94% TeO_2 from alundum crucible, 2) glass of same composition but melted in porcelain crucible.

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30181

S/078/61/006/012/007/011
B124/B110

52200

AUTHORS: Zlomanov, V. P., Tananayeva, O. I., Novoselova, A. V.

TITLE: Study of the interaction between lead selenide and oxygen

PERIODICAL: Zhurnal neorganicheskoy khimii, v. 6, no. 12, 1961, 2753-2757

TEXT: Continuing an earlier study performed by the authors (Ref. 3: Dokl. AN SSSR 129, 809 (1959)), the composition of the oxidation products prepared by reacting lead selenide with oxygen at temperatures ranging from 500 up to 900°C was established, and the electrical conductivity of the respective products measured. Lead selenide was oxidized in alundum crucibles in the furnace ТГ-2 (TG-2) the temperature of which was controlled with the potentiometer ЭПД-12 (EPD-12). Products obtained were examined by chemical and x-ray techniques. From the results of the two methods, it is obvious that at 500 to 600°C lead selenite forms, while at 600 to 800°C the phase A appears which has not yet been described in literature, in addition to the selenite; this phase is the only reaction product on heating in the air for 2 hours, at 800°C. Evidence is given for the fact that the oxyselenite $2PbO \cdot PbSeO_3$ is concerned here which is based

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on the consistent densities established by pycnometric and x-ray measurements as well as on the identical powder diagrams of oxyselenite synthetically prepared and of the sample. Oxyselenite has a tetragonal body-centered lattice with the parameters a = 3.91 ± 0.01 kX; c = 5.37 ± 0.01 kX. Oxyselenite melts incongruently; the liquid phase appears first at 705 ± 10°C and the bulk of the oxyselenite melts at 740 ± 10°C. $4PbO \cdot PbSeO_3$ forms in the air at 900°C after 2 hours and was also prepared by the oxidation of lead selenide in the air at 1000°C for 1 hour. The parameters of the rhombic body-centered lattice of $4PbO \cdot PbSeO_3$ are: a = 3.90 ± 0.01 kX; b = 3.71 ± 0.01 kX; c = 5.67 ± 0.01 kX. This compound is identical to the phase B described in earlier papers (Ref. 3: see above; Ref. 11: Zh. neorgan. khimii 6, 2261 (1960)) which melts congruently at 780°C. The conductivity of lead selenide oxidized at temperatures above 600°C was measured with a small-size ohmmeter (MOM-3 (MOM-3)) and was $2 \cdot 10^{-8}$ to $2 \cdot 10^{-10}$ $ohm^{-1}cm^{-1}$. V. I. Mikheyev (Ref. 9: Rentgenometricheskiy opredelitel' mineralov (X-ray analyzer for minerals), Gosgeoltekhizdat, 1957, p. 95) is mentioned. Thanks are given to L. M. Kovbe for the performance of the x-ray examinations. There are 1 figure, 4 tables, and

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B124/B110

Study of the interaction...

16 references: 12 Soviet and 4 non-Soviet. The three references to English-language publications read as follows: F. N. Pollard, P. Hanson, W. I. Gedry, Ann. Chem. Acta 20, 26 (1959); D. H. Roberts, J. Electron. and Control 5, 256 (1958); H. Pagel, I. Miers, Ind. Eng. Chem. Anal. Ed. 10, 334 (1938).

ASSOCIATION: Moskovskiy gosudarstvennyy universitet im. M. V. Lomonosova (Moscow State University imeni M. V. Lomonosov)

SUBMITTED: October 12, 1960

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ZLOMANOV, V.P.; POPOVKIN, B.A.; TANANAYEVA, O.I.; NOVOSELOVA, A.V.

Some properties of lead selenite and oxyselenites. Zhur.neorg. khim. 7 no.12:2746-2751 D '62. (MIRA 16:2)

1. Moskovskiy gosudarstvennyy universitet imeni Lomonosova.
(Lead selenite)

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TANANAYKO, M.M.

Physicochemical analysis of systems having ternary colored complexes in solution. A. K. Babko and M. M. Tananaiko. *Ukrain. Khim. Zhur.* 19, 529-43(1953); *Referat. Zhur., Khim.* 1954, No. 30313.—The study concerned complex formation in aq. solns. of Cu^{++}-glycine-salicylate and Cu^{++}-quinoline-salicylate. These systems were subjected to physicochem. analysis in which the optical d. properties were used as characteristics. The investigation was confined to the tetrahedral section corresponding to 0.1*M* soln. For these systems isochrome diagrams were constructed and deviations from additivity of the optical d. values were detd. A method was developed for calcg. deviations from additivity in ternary systems contg. 2 or 3 colored components. To det. the compn. of ternary compds. in soln., a series of solns. corresponding to sections of the triangular compn. diagram was studied. In the system Cu^{++}-glycine-salicylate, no ternary compd. was formed. In this system glycine displaced salicylic acid ions from Cu salicylate and formed a more stable Cu glycine salt. In the system, Cu^{++}-quinoline-salicylate, an intensely colored ternary complex, was formed. In this compd. the ratio of Cu^{++}: quinoline:salicylate was 1:2:2. This compd. was extractable with nonaq. solvents. The compn. of this compd. in a nonaq. phase corresponds to its compn. in an aq. soln.

M. Hosch

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TANANAYKO, M.M.

7

Ternary complexes in the system: metal ion–pyridine–salicylate. A. K. Babko and M. M. Tananaiko. *Ukrain. Khim. Zhur.* 19, 666–71(1953); cf. *C.A.* 48, 3837*i*.—Ternary complexes, some brightly colored and all $CHCl_3$-sol., are formed by Cu^{++} (blue), Co^{++} (rose), Ni^{++} (light blue), Ag^{++}, Zn^{++}, Cd^{++}, and Hg^{++} (colorless). No such complexes are formed by Al^{+++}, Sn^{++}, Pb^{++}, Sb^{+++}, and Bi^{+++}; whereas Mn^{++}, Fe^{++}, and Fe^{+++} form complexes that are not $CHCl_3$-sol. Complexes were prepd. thus: to 2 ml. of 0.1*M* soln. of the metal salt were added 2 ml. of *M* pyridine and 2 ml. of *M* Na salicylate (all aq.). The mixt. was extd. with $CHCl_3$, to sep. the complex quantitatively. For analysis, the $CHCl_3$ soln. was shaken with dil. HNO_3 to bring the metal ion into the aq. phase. The complexes were sol. also in other org. solvents, but $CHCl_3$ was used because it does not also ext. binary salicylate complexes. The optimum pH for complex formation is 4–7. The relative extractibilities of ion complexes in decreasing order are $Hg^{++} > Cu^{++} > Zn^{++}$, $Ni^{++} > Cd^{++} > Co^{++}$. The extinction coeff. and soly. in various org. solvents of the Cu^{++} complex were detd. This reaction should be useful for *analytical sepns.* (as Bi and Cu). Malcolm Anderson

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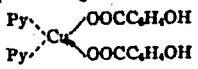
TANANAYKO, M. M.

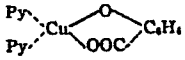
Chemical Abst.
Vol. 48
Apr. 10, 1954
Inorganic Chemistry

(2) 4

Ternary complexes in the system ionic copper-pyridine-salicylate. II. Effect of pH of the solution on the composition of the complexes. A. K. Babko and M. M. Tananaiko. *Zhur. Obshchei Khim.* 23, 1459-64(1953).—The standard mixt. of solns. used in the exptl. program consisted of 2 ml. of 0.05*M* soln. of $CuNO_3$, 4 ml. of 0.05*M* soln. of pyridine and 4 ml. of 0.05*M* soln. of Na salicylate. Solns. of 0.01*N* NaOH and HNO_3 were used in controlling pH. Color densities of the individual solns. were measured with a photometer. There were formed (1) in the range of pH 4.0 to 4.5 a blue complex having the structure;



(2) in the range of pH 5.0 to 5.5 a green complex with the structure



M. O. Holowaty

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TANANAYKO, M.M.

Ternary complexes in the system copper-pyridine-iodine ion. M. M. Tananaiko (T. G. Shevchenko State Univ., Kiev). *Ukrain. Khim. Zhur.* 22, 88-93(1956)(in Russian). —$Cu(NO_3)_2$ was treated with KI and the liberated I reduced with $S_2O_3^{--}$. Treatment of the ppt. with pyridine converted powder-like CuI to a flaky ppt. After filtering, washing, drying, and recrystn. from $CHCl_3$, of the ppt. corresponded to CuPyI. A similar compd. prepd. from Cu^{++} could not be analyzed directly because the dry ppt. decompd. Indirect analysis showed it to be $CuPyI_2$. The solubilities of $CuPyI_2$ and CuPyI in $CHCl_3$ were 17 and 10, CCl_4 0.26 and 0.13, $(CH_2)_2Cl_2$ 7.4 and 4, C_6H_6 2.25 and 5, and isoamyl alc. 0.29 and 0 on the basis of 1 mg. Cu/l ml. of solvent. $CHCl_3$ extd. 93.7% of the Cu^+ complex, 92.7% of the Cu^{++} complex, and 10% of the Cu^{++} pyridine thiocyanate complex. M. Hosch

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TANANAYKO, M.M. [Tananaiko, M.M.]; GORODISKAYA, O.A. [Horodys'ka, O.A.]

Pyridine-iodide complexes of metals. Nauk.zap.Kyiv.un. 16 no.15:109-112 '57. (MIRA 11:11)
(Pyridine) (Iodides) (Complex compounds)

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TANANAYKO, M. M.

TANANAYKO, M. M.

5(4)

AUTHORS: Vasil'yev, V. P., Korableva, V. D., Yatsimirskiy, K. B. SOV/153-58-3-30/30

TITLE: Conference Discussion on the Methods of Investigating the Complex Formation in Solutions (Soveshchaniye-diskussiya po metodam issucheniya kompleksoobrazovaniya v rastvorakh)

PERIODICAL: Izvestiya vysshikh uchebnykh zavedeniy. Khimiya i khimicheskaya tekhnologiya, 1958, Nr 3, pp 173 - 174 (USSR)

ABSTRACT: From February 18 to 21, 1958 a conference discussion took place at the town of Ivanovo; it dealt with the subjects mentioned in the title. It was called on a decision of the VIIth All-Union Conference on the Chemistry of Complex Formations. More than 200 persons attended the conference, among them 103 delegates from various towns of the USSR. At the conference methods of determining the composition of the complexes in solutions were discussed, as well as the methods of calculating the instability constants according to experimental data and problems concerning the influence of the solvent upon the processes of complex formation. [illegible]. In the lecture by A. K. Babko and M. M. Tananayko, "Physical and Chemical Analysis of the Systems with 3 Colored Complexes in the Solution", the results of a systematic investigation in copper-quinoline-salicylate, as well as in copper-pyridine-salicylate systems by means of the optical method were dealt with. In the lecture by Ya. A. Fialkov the idea of a further investigation of the complex formation processes in solutions was developed. Besides the determination of the composition and stability of the complexes also the physical and chemical properties, the chemical nature and the structure of the complex compounds must be investigated.....

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I. I. Alekseyeva and K. B. Yatsimirskiy in their lecture "Investigation of the Polymerization of Iso-Poly Acids in Solutions" mentioned experimental results of the investigation of the polymerization in solutions of molybdic acid. The authors proved that especially the molybdic acid within a certain range of the pH values and the concentrations exists as a number of compounds that can be expressed by an overall formula $MoO_4(HMoO_4)^{n-2}$. In the lecture by N. V. Aksel'rud and V. B. Spivakovskiy investigation results on basic salts taking into account the complex formation in solutions by means of the potentiometric method were mentioned for systems with zinc, cadmium and indium. In the evaluation of their results the authors employed the method of the table difference. The calculation of the consecutive constants was carried out according to the interpolation formula by Newton. M. A. Chepelevtskiy held a lecture on "pH Measurement Method of the Solutions in Combination With the System Analysis of the Solubility Diagram of the System Cu^{2+}-HCl - H_2O in Investigating Complex Copper Compounds in Saturated Solutions". It was found that the substance at the bottom of the liquid is more basic than the solution; furthermore, the increased acidity of the solution from the viewpoint of the formation of hydroxy-chloro complexes in the solution was explained. V. I. Kuznetsov opened the discussion with his lecture; he pointed out the necessity of utilizing the concepts worked out in the investigations of the polymerization in organic chemistry in the chemistry of polynuclear complexes. A. A. Grinberg thinks that the new approach of the hydrolysis

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investigation as developed by the Scandinavian school is of high value. He also pointed to the necessity of studying the kinetics of the polymerisation process and a quantitative determination of the strength of the polymers. A. K. Babko pointed out that the study of the polymer structure was necessary. N. P. Komar' mentioned in his lecture that the rather widely spread polymerisation type according to the scheme "nucleus + chain members" is not obtained in all cases. The following scientists took part in the discussion: V. S. Tolmachev, A. V. Ablov, I. S. Mustafin, I. V. Tananayev and K. B. Yatsimirskiy. A. K. Babko then discussed in his lecture "Methods of Determining the Dissociation Constant of the Complex Groups in Solutions" the main principles of determining the instability constants. N. P. Komar' discussed in his lecture "Calculation Methods of the Instability Constants of the Complex Compounds According to Experimental Data" the possibilities of using the known calculation methods of the instability constants for various cases of the complex formation in solution. If several mononuclear complexes are formed the displacement method by Abegg and Bodlender (completed by A. K. Babko) cannot be recommended for the calculation of the instability constant. The lecturer discussed the dissolution methods of the polynomials proposed by B'yerrum, Leden, Rossotti, Sketchard, Edsolley and other authors. The constants calculated in this way are not very accurate. It was proved that the method of successive approximations can lead to wrong conclusions as to the chemical processes taking place in the system investigated. The most probable value of the physical constants can be obtained by the method of the least squares. S. V. Ptitsyn, Ye. M. Tekster and L. I. Vinogradova described the determination methods of the instability constants of the oxalate complexes of niobium, uranium and iron which are based on the investigation of the equilibrium displacement of the complex formation by silver ions. N. K. Bol'shakova, I. V. Tananayev and G. S. Savchenko held a lecture on "The Role of the Time Factor in the Investigation of the Complex Formation". In the discussion on the lectures A. A. Grinberg mentioned that due to the slow adjustment of the equilibria the methods discussed of determining the instability constants (palladium and cobalt complexes) can often not be employed. A. V. Ablov pointed out the necessity of devising direct methods of proving the existence of intermediate forms in a step-wise complex formation. K. B. Yatsimirskiy mentioned that the instability constants of slowly dissociating complexes can be calculated from thermochemical data. L. P. Adamovich, A. M. Golub among others took part in the discussion on the lectures. A. K. Babko requested inclusion in the next conference on the chemistry of complex compounds a lecture in which various calculation methods of the instability constants should be discussed by the example of actual cases. This should clarify to which divergencies of the values of the constants different methods of evaluating the experimental data can lead. N. P. Komar' stressed that in the determination of the instability constants all chemical equilibria should be taken into account that render complex the complex formation process in the solution, especially the hydrolysis processes of the central ion and the addendum. In the lecture delivered by V. M. Peshkova and A. P. Zozulya "Application of the Distribution Method to the Investigation of the Stability Constants

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of Some Thorium Complex Compounds" results obtained from the experimental investigation of the distribution of thorium compounds in the systems: acetylacetone - benzene - water, and 2-oxy-1,4,-naphthoquinone - chloroform - water were given. From these data the instability constants of the thorium complexes with acetyl-acetone and 2-oxy-1,4-naphthoquinone were calculated. I. V. Tananayev, G. S. Savchenko and Ye. V. Gonchar'ov held a lecture on the application of the solubility method in the determination of the stability of complex compounds in solutions. In this lecture also other methods of investigating complex formation processes in the solution were discussed (pH measurement, measurement of the optical density, as well as of the heat of mixing). B. D. Berezin held a lecture on the "Application of the Solubility Method in Studying the Phthalocyanine Complexes of Metals". He used the determined quantitative characteristics of the reaction of the transition of the phthalocyanides of cobalt, nickel, copper and zinc, as well as of the free phthalocyanine into the sulfuric acid solution for the theoretical reasoning, and as an experimental proof of the existence of

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π-bonds in the complexes investigated. These characteristics also served him as a proof of new electronic formulas of phthalocyanine and its complex derivatives. In the lecture delivered by I. L. Krupatkin on "The Method of the Two Solvents as a Method of Investigating the Formation and Properties of Organic Complexes" it was proved that this method makes it possible to determine the number of complexes formed in the system, their composition and relative stability. V. I. Kuznetsov, A. K. Babko, N. P. Komar', I. S. Mustafin and Ya. I. Tur'yan took part in this discussion. In the lecture delivered by A. A. Grinberg and S. P. Kiseleva on the complex palladium compounds (II) with a coordination number above four it was proved that in the case of a large chlorine and bromine ion excess complexes with the coordination number 5 are formed. The instability constants of these complexes were estimated. L. P. Adamovich mentioned a new manipulation in the spectrophotometric investigation of the complex compounds that can be used in systems with the formation (or predomination) of one single complex. This method makes it possible to determine the composition and instability constant

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of the complex. In the lecture delivered by K. B. Yatsimirskiy and V. D. Korableva the application of the theory of crystalline fields for the determination of the composition and structure of the chloride complexes of cobalt, nickel and copper according to the absorption spectra of these complexes was discussed. It was proved that in a hydrochloric acid concentration above 5 mole/liter in the solution there exists an equilibrium between the tetrahedric and octahedric form of the cobalt chloro complexes. Yu. P. Nazarenko proved in his lecture "The Application of Radioactive Isotopes in the Investigation of the Solvation Equilibrium in Solutions of Complex Compounds" the possibility of using data on the isotope exchange to clarify the structure of the complex and mechanism of the hydration processes. V. Klimov mentioned in his lecture the use of radioactive isotopes in the study of tin and antimony complexes in non-aqueous solutions. A. V. Ablov, V. N. Tolmachev, V. I. Kuznetsov and A. M. Golub took part in the discussion of the lectures. The usefulness of employing the theory of the crystalline fields in explaining the results obtained from the absorption spectra of the com-

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plex compounds was stressed. In the lecture delivered by I. A. Shek on "The Investigation of the Complex Formation by the Method of the Dielectric Permeability and the Polarization" the principles of the methods mentioned were presented. This method was employed for investigating the compounds of the type of the "affiliation" products. The lecture delivered by I. A. Shek and Ye. Ya. Kries "Employing the Method of the Dielectric Constant for Investigating Complex Compounds of the Type of Crystal Solvates in Solutions" dealt with the investigation of the solvates of lanthanum and cerium chlorides with ketones, as well as with the study of the compounds formed in heterogeneous systems with tributyl phosphate and nitric acid. V. F. Toropova gave in her lecture "The Polarographic Method of Investigating the Complex Formation in Solutions" a survey of the applications of the polarographic method in the study of the complex compounds, and illustrated several fine characteristic features of this method. In the lecture delivered by T. N. Shmarokova "The Cryoscopic Method of Investigating the Complex Formation Reactions" a survey of the possibilities of the cryoscopic method was given, and its applicability in the study of several complex compounds of stannic chloride with organic substances was proved. A. M. Golub described the results of his investigations of thiocyanate complexes of several metals. A vivid discussion took place on the lectures held. Ya. A. Fialkov and Yu. Ya. Fialkov considered the cryoscopic method of investigating complex compounds to be of considerable value. K. B. Yatsimirskiy pointed out that the publication of the surveys on individual methods of investigating the complex formation reactions would be desired; this concerns especially the polarographic method. The cryoscopic method should be brought to a level that makes the calculation of the equilibrium constants of the processes to be investigated possible. The problem of the method of evaluating the experimental results becomes more and more important. Many scientists use the instability constants without taking into account the way in which they had been obtained. The calculation methods employed by A. M. Golub are one step back, as compared to those employed at present. In his lecture N. P. Komar' pointed out the extremely great importance of the mathematical evaluation of the results obtained, as well as of the plotting of curves. A. K. Babko suggested selecting one or two systems that are experimentally well investigated, and to evaluate the results obtained according to different methods so that it is possible to check and evaluate them. Ya. I. Tar'yan took part in the discussion. Ya. A. Fialkov discussed in his lecture "The Effect of the Solvent on the Complex Formation Process as Well as on the State of Equilibrium in the Solutions of Complex Compounds" the influence exerted by the solvents upon the molecular state, upon the solvation of the system components, upon the stabilization of the complexes formed in the system, upon the step-wise dissociation of the complexes and upon a number of other processes. The influence exercised by the dielectric constant upon the complex formation process was discussed. It was concluded that a direct relation does not exist, and that the chemical nature of the solvent must be taken into account. A. V. Ablov and L. V. Nagorova held a lecture on "The Spectroscopic Investigation of Nickel Cobalt 'Pyridinates' in Various Solvents". The instability constants of the complexes were determined and it was proved that the

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Conference Discussion on the Methods of Investigating the Complex Formation in Solutions

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stability of the 'pyridinates' is changed in dependence on the solvent. Ya. I. Tur'yan in his lecture "The Influence of the Solvent Upon the Composition and Stability of Complex Ions" discussed the polarographic investigation method of the chloride and thiocyanate complexes of lead in aqueous ethanol solutions at different content of the non-aqueous solvent and at a constant ionic strength. A step-wise character of the complex formation was found as well as the instability constants of the complexes. The influence of the dielectric constant of the solution on the stability of the investigated complexes was proved. In the lecture by V. P. Vasil'yev on the "Investigation of Aquo Complexes in Mixed Solvents" the main attention was devoted to the necessity of the qualitative recording of the solvation effects in the complex formation. The applicability of the polarographic method in the determination of the composition and stability of the aquo complexes in mixed solvents was proved and experimental material on the thermodynamics of the dissociation of the cadmium-aquo complexes in aqueous ethanol solutions was mentioned. V. N. Tolmachev, V. I. Kuznetsov

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and I. V. Tananayev stressed in their lectures the necessity of a more complete and general investigation of the solvation processes. A. K. Babko and A. M. Golub pointed out the great importance of the investigations of the complex formation equilibria in non-aqueous solutions, and made several critical comments on the lecture by Ya. I. Tur'yan. The following scientists took part in this discussion: L. P. Adamovich, O. I. Khetayanovskiy, A. P. Moskvin and A. G. Mustakhov. At the final meeting of the conference A. A. Grinberg, Corresponding Member, AS USSR, said in his speech that such a conference was very urgent. A detailed discussion of the determination methods of the composition of the complexes, as well as of the method used in the study of the quantitative characteristics of the stepwise complex formation was extremely useful for all who attended this conference.

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BABKO, A.K.; TANANAYKO, M.M.

Study of complex formation in solutions where water enters into the complex. Coblat halide - water system. Ukr. khim. zhur. 24 no.3:298-304 '58. (MIRA 11:9)

1.Kiyevskiy gosudarstvennyy universitet im. T.G. Shevchenko.
(Cobalt chlorides) (Complex compounds)

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"APPROVED FOR RELEASE: 07/13/2001 CIA-RDP86-00513R001754820010-3

BABKO, A.K.; TANANAYKO, M.M.

Ternary complexes in the organic base - metal - rhodanide systems. Ukr. khim. zhur. 24 no.4:499-505 '58. (MIRA 11:10)

1. Kiyevskiy gosudarstvennyy universitet imeni T.G. Shevchenko.
(Systems (Chemistry)) (Complex compounds)

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Soveshchaniye po khimii, tekhnologii i primeneniyu proizvodnykh piridina i khinolina. Riga, 1957

Khimiya, tekhnologiya i primeneniye proizvodnykh piridina i khinolina: materialy soveshchaniya (Chemistry, Technology and Utilization of Pyridine and Quinoline Derivatives; Materials of the Conference) Riga, Izd-vo AN Latviyskoy SSR, 1960. 299 p. Errata slip inserted. 1,000 copies printed.

Sponsoring Agencies: Akademiya nauk Latviyskoy SSR. Institut khimii; Vsesoyuznoye khimicheskoye obshchestvo.

Ed.: S. Bazhanova; Tech. Ed.: A. Klyavinya; Editorial Board: Yu. A. Bankovskiy, Candidate of Chemistry, E. V. Vanaga, Candidate of Chemistry (Resp. Ed.), L. F. Zalukayev, Doctor of Chemistry, and M. M. Kalnyn'.

PURPOSE: This book is intended for organic chemists and chemical engineers.

COVERAGE: The collection contains 33 articles on methods of synthesizing or producing pyridine, quinoline, and their derivatives from natural sources. No personalities are mentioned. Figures, tables, and references accompany the articles.

Vorozhtsov, L. P., and S. I. Kutkevichus [Moskovskiy khimiko-tekhnologicheskiy institut imeni D. I. Mendeleyeva (Moscow Institute for Chemical Technology imeni D. I. Mendeleyev)]. Some Reactions of 3-Hydroxy- 1,2,3,4,-Tetrahydroquinolines 229

Pilyugin, G. T. [Chernovitskiy gosudarstvennyy universitet (Chernovtsy State University)] The Interaction of N-aryl-quinaldine Quaternary Salts With Diazo Compounds 237

Vul'fson, N. S., L. I. Lukashina, and S. L. Davydova (All-Union Scientific Research Institute for Semifinished Products and Dyes, Ministry of the Chemical Industry, USSR). Cyanoacetal and Cyanomethyl Derivatives of Some Nitrogen-Containing Heterocyclic Compounds 243

IV. THE USE OF DERIVATIVES OF THE QUINOLINE SERIES IN ANALYTICAL CHEMISTRY

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Babko, A. K., and M. M. Tananayko [Kiyevskiy gosudarstvennyy universitet imeni T. G. Shevchenko (Kiyev State University imeni T. G. Shevchenko)]. Study of Complex Formation in the System: Metal Ion – Rhodanide (Iodide) – Organic Base 289

Тананайко, М. М.

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TANANAYKO, M.M.

Diantipyrylmethane - chloride complexes of tin. Ukr. khim. zhur. 26 no.3:373-376 '60. (MIRA 13:7)

1. Kiyevskiy gosudarstvennyy universitet im. T.G. Shevchenko.
(Tin compounds) (Methane)

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"APPROVED FOR RELEASE: 07/13/2001 CIA-RDP86-00513R001754820010-3

TANANAYKO, M.M.

Conditions for extracting pyridine-thiocyanide copper complexes with chloroform. Ukr.khim.zhur. 27 no.6:813-817 '61. (MIRA 14:11)

1. Kiyevskiy gosudarstvennyy universitet im. T.G.Shevchenko.
(Copper compounds)
(Extraction (Chemistry))

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BABKO, A.K.; TANANAYKO, M.M.

Complex formation in the system titanium (IV) - diantipyrylmethane - thiocyanate. Zhur.neorg.khim. 7 no.3:562-570 Mr '62. (MIRA 15:3)

1. Kiyevskiy gosudarstvennyy universitet imeni T.G.Shevchenko.
(Titanium compounds) (Thiocyanates)
(Systems (Chemistry))

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"APPROVED FOR RELEASE: 07/13/2001 CIA-RDP86-00513R001754820010-3

BABKO, A.K.; TANANAYKO, M.M.

Equilibrium in the system titanium (IV) - diantipyrylmethane - thiocyanate - ethanol. Zhur.neorg.khim. 7 no.3:571-575 Mr '62. (MIRA 15:3)

1. Kiyevskiy gosudarstvennyy universitet imeni Shevchenko.
(Titanium compounds—Spectra)
(Systems (Chemistry)) (Thiocyanates)

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BABKO, A.K.; TANANAYKO, M.M.

Complex formation in the system titanium (IV) - diantipyrylmethane - pyrocatechol. Zhur. neorg.khim. 7 no.11:2549-2556 N '62. (MIRA 15:12)

1. Kiyevskiy gosudarstvennyy universitet imeni T.G. Shevchenko.

(Titanium compounds)
(Methane)
(Pyrocatechol)

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"APPROVED FOR RELEASE: 07/13/2001 CIA-RDP86-00513R001754820010-3

TANANAYKO, M.M.; NEBYLITSKAYA, S.L.

Extraction photometric determination of titanium in the form of a diantipyrylmethane-rhodanide complex. Zav.lab. 28 no.3:263-265 '62. (MIRA 15:4)

1. Kiyevskiy gosudarstvennyy universitet imeni T.G.Shevchenko. (Titanium--Analysis) (Complex compounds)

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"APPROVED FOR RELEASE: 07/13/2001 CIA-RDP86-00513R001754820010-3

TANANAYKO, M.M.

Complex formation in the system iron (III) -diantipyrylmethane-thiocyanate. Ukr.khim.zhur. 28 no.4:446-452 '62. (MIRA 15:8)

1. Kiyevskiy gosudarstvennyy universitet imeni T.G.Shevchenko.
(Iron compounds) (Thiocyanates)

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TANANAYKO, M. M.; VINOKUROVA, G. N.

Extraction of carbazoline-thiocyanate complexes of metals. Ukr. khim. zhur. 28 no.5:651-652 '62. (MIRA 15:10)

1. Kiyevskiy gosudarstvennyy universitet im. T. G. Shevchenko.

(Complex compounds) (Carbazole) (Thiocyanates)

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TANANAYKO, M.M.

Extraction of ternary complexes (salts of organic bases with acid complexes of metals). Trudy Kom.anal.khim. 14:114-132 '63. (MIRA 16:11)

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ACCESSION NR: AP3002498 S/0073/63/029/006/0566/0571

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AUTHOR: Tananayko, M. M.

TITLE: Investigation of complex formation in the system zirconium-diantipyrylmethane-rhodanide

SOURCE: Ukrainskiy khimicheskiy zhurnal, v. 29, no. 6, 1963, 566-571

TOPIC TAGS: zirconium-diantipyrylmethane-rhodanide complex, non-aqueous solutions

ABSTRACT: Rhodanide complexes of many metals interact with organic radicals forming compounds of the general formula MeA sub m R sub m (methylorganic base-electronegative addend). In this study, the formation of diantipyrylmethane-rhodanide complex of zirconium which can be extracted with chloroform or water is described. The maximum absorption of this complex is at Lambda = 315 millimicrons. The optimum extraction conditions are at 2N HCl, 0.02 mole of diantipyrylmethane, and 0.5 mole of ammonium rhodanide. In water solution the degree of dissociation of the complex decreases, and the addition of acetone or ethanol to the solution does not show improvement. The composition of the complex is determined by the physico-chemical method of analysis of the chloroform extract, and by the

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preparative method. It has the following corresponding formula: (Diant H) sub 2 [Zr(SCN) sub 6]. Orig. art. has: 5 figures.

ASSOCIATION: Kievskiy gosudarstvenny*y universitet im. T. G. Shevchenko (Kiev State University)

SUBMITTED: 23Feb62 DATE ACQ: 12Jul63 ENCL: 00

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"APPROVED FOR RELEASE: 07/13/2001 CIA-RDP86-00513R001754820010-3

TANANAYKO, M.M.; VINOKUROVA, G.N.

Extraction-photometric determination of titanium as a diantipyrylmethane-pyrocatechol complex. Zhur. anal. khim. 19 no.3:316-319 '64. (MIRA 17:9)

1. Kiyevskiy gosudarstvennyy universitet imeni Shevchenko.

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"APPROVED FOR RELEASE: 07/13/2001 CIA-RDP86-00513R001754820010-3

TANANAYKO, M.M.; TSARENKO, G.F.

Extraction-photometric determination of titanium (IV) in the presence of iron (III). Ukr.khim.zhur. 30 no.11:1213-1215 '64. (MIRA 18:2)

1. Kiyevskiy gosudarstvennyy universitet im. T.G.Shevchenko.

APPROVED FOR RELEASE: 07/13/2001 CIA-RDP86-00513R001754820010-3"

"APPROVED FOR RELEASE: 07/13/2001 CIA-RDP86-00513R001754820010-3

TANANAYKO, M.M.; TSARENKO, G.F.

Solubility of compounds formed in the system titanium (IV) - diantipyrylmethane - thiocyanate. Ukr.khim.zhur. 31 no.5:530-533 '65. (MIRA 18:12)

1. Kiyevskiy gosudarstvennyy universitet imeni Shevchenko. Submitted Oct. 10, 1963.

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TANANAYEV, Yu. M.

Dissertation: "Investigation of Heat Loss During the Boiling of Liquids in the Annular Space of Vertical Contour Under Moderate Loads." Cand Tech Sci, Kiev Polytechni Institute, Kiev, 1953. (Referativnyy Zhurnal-Khimiya, No 10, Moscow, May 54)

SO: SOM 318, 23 Dec 1954

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Translation from: Referativnyy zhurnal. Mekhanika, 1957, Nr 5, p 88 (USSR)

AUTHORS: Chernobyl'skiy, I. I., Tananayko, Yu. M.

TITLE: An Investigation of the Heat Transfer to Boiling Water Flowing Through Narrow Annular Openings in the Presence of Moderate Heat Fluxes (Under Conditions Approximating Those in Industrial Evaporators) (Issledovaniye teplootdachi k kipyashchey vode v kol'tsevom prostranstve pri umerennykh teplovykh potokakh)

PERIODICAL: Izv. Kiyevsk. politekhn. in-ta, 1956, Vol 17, pp 61-74

ABSTRACT: An account is given of the results of an experimental investigation made of the heat transfer to boiling water flowing through narrow slit-like annular openings especially made in evaporator-type boiler tubes; atmospheric pressure was maintained in the experiments, and the rate of heat flow q was kept within the moderate range of 20 to 121×10^3 kcal/m^{2}hr -- which approximates the conditions in industrial evaporators. Included is a diagram of the apparatus used for the experiments. The boiler tubes of the apparatus were heated by steam superheated by some 1-2° and maintained at pressures ranging from 1.28 to 2.46 atm abs.; the secondary vapor generated in the

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apparatus circulated in a closed, externally heated system. The boiler tubes used were seamless and exhibited the normal amount of oxidation; they had received no special treatment or processing; their dimensional characteristics were as follows: (in the case of a steel heating surface) diameter d = 27/21,5 mm, length L = 480 mm; (in the case of a copper heating surface) d = 24.5/19.5 mm, L = 603 mm. Investigated in the experiments was the heat transfer to boiling water flowing through 10 annular slit-like openings formed by inserts placed into the boiler tubes, each such insert being firmly held in place by a special type of adapter bushing. The respective clearance widths δ of the 10 test openings ranged from 1.25 to 14 mm. The authors propose formulas for use in calculations of the type involved. They state that the maximum relative error exhibited by the values calculated with these formulas for the heat-transfer coefficient α_2 was 6.8-8.4%. The data obtained by visual observations and the results of the heat-transfer investigation are examined separately. In one set of experiments the usual type of outer shell that encases an evaporator was replaced by a shell made of a special transparent heat-resistant glass so as to permit visual observation of the boiling process in an internally heated system with external slit-like openings. In this set of experiments the clearance width of the openings was 2.75, 6.75, 10.7, and 14 mm successively. It was found that, when the slit-like openings were made narrower,

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the steam bubbles turned out smaller, the flow became severely turbulent, and the amount of steam in it increased. The heat-transfer data obtained by the authors are graphed and tabulated in the paper. Analysis of these data has led them to the following conclusions: 1) For a given width (δ) of the slit-like opening the heat-transfer coefficient α_2 will be the same whether the slit is internal or external; 2) for a given value of said width (δ) the value of the heat-transfer coefficient α_2 is not affected by the nature of the material of which the heating surface consists; 3) when such an opening is reduced in size to the point where its width dimension δ is of the order of the separation (breaking-free) diameter of a steam bubble, the heat-transfer process begins to fall off at a certain "break" in the rate q, which "breaking" rate is a function of the piezometric level of the boiling liquid, of the width of the slit, and, apparently, of the specific properties of the particular boiling liquid involved; 4) as the width of an opening is made smaller (the value of q remaining unchanged), the heat-transfer coefficient α_2 increases with the decreasing temperature of the inner wall surfaces of the opening. In addition, an attempt is made to generalize the results obtained. Into the well-known criterional equations the authors introduce a correctional factor for the opening's width dimension δ ; this enables them to use these equations even when δ is of the order of the separation diameter of the steam bubbles -- a case in which, without the

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correction factor, the use of these equations would result in sizable errors. The paper includes a brief account of the history of this whole problem, and the physical principles involved in the investigated processes are explained. Bibliography: 6 references.

G. Ye. Khudyakov

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SOV/124-57-8-9110

Translation from: Referativnyy zhurnal, Mekhanika, 1957, Nr 8, p 76 (USSR)

AUTHOR: Tananayko, Yu. M.

TITLE: The Heat Transfer During the Boiling of Water Within the Flowing Film (Teplootdacha pri kipenii vody v stekayushchey plenke)

PERIODICAL: Izv. Kiyevsk. politekhn. in-ta, 1956, Vol 17, pp 75-82

ABSTRACT: The paper is devoted to a description of tests for the determination of the heat transfer into the water film (0.25 mm thick) which flows within a vertical pipe under atmospheric pressure. The pipe was externally heated by means of steam. The specific weight-flow rate of the water, G, which runs off in the form of the film, ranged from 20 to 400 kg/m·hr. It was found that under test conditions in which the water boiled within the film two different heat-transfer regimes exist within the flowing film, depending on the magnitude of G. The heat-transfer coefficient from the wall to the film, α, can be expressed by the empirical formula

$$\alpha = 22\, q^{0.527} \quad \text{when} \quad G \geq 150 \text{ kg/m·hr}$$

$$\alpha = 8.15\, q^{0.6} \quad \text{when} \quad G < 150 \text{ kg/m·hr}$$

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The Heat Transfer During the Boiling of Water (cont.)

where q is the specific rate of heat flow. It is noted that α is 10-15% lower when the water boils in the film than when the water boils in the tube.

V. P. Mugalev

Card 2/2

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"APPROVED FOR RELEASE: 07/13/2001 CIA-RDP86-00513R001754820010-3

TANANAYKO, YU.M.

SUBJECT USSR / PHYSICS CARD 1 / 2 PA - 1561
AUTHOR ČERNOBYL'SKIJ, I.I., TANANAJKO, JU.M.
TITLE The Heat Transfer on the Occasion of the Boiling of Liquids in an Annular Gap.
PERIODICAL Žurn.techn.fis, 26, fasc.10, 2316-2322 (1956)
Issued: 11 / 1956

The present work investigates the problems of the intensification of the boiling process with the help of tubes with an annular cross section in the case of natural convection and moderate thermal loads. The influence exercised by the width of the annular gap (more accurately the thickness of the layer of the liquid boiling in the annular gap) upon the intensity of heat transfer is investigated. Investigation was carried out with two experimental orders. In the case of the one of these two devices the annular gap was produced by the introduction of a steam-heated heating tube into the boiling-tube. In the other device the tube was heated from without by means of steam, and the annular cross section was formed by the introduction of a not heated inset into the boiling-tube.

Summary of experimental results: In tubes with annular cross section of the intensity of heat transfer increases with a decrease of the width of the gap down to a certain limit. The coefficient α_2 of heat transfer increases as a result of a modification of the character of the formation of steam in the gap, because, with a decrease of the width of the gap the turbulation of the

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Žurn.techn.fis, 26, fasc.10, 2316-2322 (1956) CARD 2 / 2 PA - 1561

flow increases, the dimensions of the steam bubbles diminish, and heat transfer from the wall is improved. Above all, the heat transfer coefficient increases in such gaps the dimensions of which are of the order of the breaking-off cross section of a steam bubble. Selection of the most suitable width of the gap is influenced by the physical properties of the liquid and by the intensity of the heat flow.
These experimental results can be generalized both by empirical formulae and by a critical equation. Experiments further showed that neither the material of the tube and of the inlets nor the direction of the heating of the annular layer of liquid exercise any influence on the coefficient of heat transfer.

INSTITUTION:

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CHERNOBYL'SKIY, Iosif Il'ich, prof., doktor tekhn.nauk; BONDAR', Alla Grigor'yevna, dotsent, kand.tekhn.nauk; GAYEVSKIY, Boris Antonovich, dotsent, kand.tekhn.nauk; GORODINSKAYA, Sarra Abramovna, dotsent, kand.tekhn.nauk; LADIYEV, Rostislav Yakovlevich, kand. tekhn.nauk; TANANAYKO, Yuriy Martir'yevich, kand.tekhn.nauk; MIRGORODSKIY, Vasiliy Timofeyevich, insh.; STABNIKOV, V.N., prof., doktor tekhn.nauk, retsenzent; FURER, P.Ya., red.

[Machinery and equipment of chemical industries; principles of theory and design] Mashiny i apparaty khimicheskikh proizvodstv; osnovy teorii i rascheta. Pod red. I.I.Chernobyl'skogo. Moskva, Gos.nauchno-tekhn.izd-vo mashinostroit.lit-ry, 1959. 462 p. (MIRA 13:2)

(Chemical industries—Equipment and supplies)

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"APPROVED FOR RELEASE: 07/13/2001 CIA-RDP86-00513R001754820010-3

CHERNOBYL'SKIY, Iosif Il'ich, doktor tekhn. nauk, prof.; BONDAR', Alla Grigor'yevna, kand. tekhn. nauk, dots.; GAYEVSKIY, Boris Antonovich, kand. tekhn. nauk, dots.; GORODINSKAYA, Sara Abramovna, kand. tekhn. nauk, dots.; LADIYEV, Rostislav Yakovlevich, kand. tekhn. nauk; TANANAYKO, Yuriy Martir'yevich, kand. tekhn. nauk, dots.; MIRGORODSKIY, Vasiliy Timofeyevich, inzh.; FURER, P.Ya., red.; GORNOSTAYPOL'SKAYA, M.S., tekhn. red.

[Machinery and apparatus for the chemical industries; principles of theory and design] Mashiny i apparaty khimicheskikh proizvodstv; osnovy teorii i rascheta. Izd.2., ispr. i dop. Moskva, Mashgiz, 1961. 491 p. (MIRA 14:10)

(Chemical industries—Equipment and supplies)

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"APPROVED FOR RELEASE: 07/13/2001 CIA-RDP86-00513R001754820010-3

CHERNOBYL'SKIY, Iosif Il'ich, doktor tekhn. nauk, prof.; BONDAR', Alla Grigor'yevna, kand. tekhn. nauk, dots.; GAYEVSKIY, Boris Antonovich, kand. tekhn. nauk, dots.; GNATOVSKIY, Vasiliy Ivanovich, kand. tekhn. nauk, dots.; GORODINSKAYA, Sara Abramovna, kand. tekhn. nauk, dots.; LADIYEV, Rostislav Yakovlevich, kand. tekhn. nauk; TANANAYKO, Yuriy Marter'yevich, kand. tekhn. nauk, dots.; MIRGORODSKIY, Vasiliy Timofeyevich, inzh.; STABNIKOV, V.N., doktor tekhn. nauk, prof., retsenzent; SOROKA, M.S., red.; GORNOSTAYPOL'SKAYA, M.S., tekhn. red.

[Machinery and apparatus of the chemical industry]Mashiny i apparaty khimicheskoi promyshlennosti. Pod red. I.I.Chernob yl'skogo. Moskva, Mashgiz, 1962. 521 p. (MIRA 16:2)
(Chemical engineering--Equipment and supplies)

APPROVED FOR RELEASE: 07/13/2001 CIA-RDP86-00513R001754820010-3"

"APPROVED FOR RELEASE: 07/13/2001 CIA-RDP86-00513R001754820010-3

CHERNOBYL'SKIY, I.I. [Chornobyl's'kyi, I.I.], doktor tekhn. nauk; TANANAYKO, Yu.M; VORONTSOV, Ye.G. [Vorontsov, IE.H.]

Measuring the thickness of the film of a down-flowing fluid. Khim. prom. no.4:37-39 O-D '64. (MIRA 18:3)

APPROVED FOR RELEASE: 07/13/2001 CIA-RDP86-00513R001754820010-3"

"APPROVED FOR RELEASE: 07/13/2001 CIA-RDP86-00513R001754820010-3

TANANAYKO, Yu.M., kand. tekhn. nauk

Studying the effect of fluid consumption and thickness of the overflowing film on the coefficient of heat transfer during boiling on a corroded tube. Khim. mashinostr. no.1:59-66 '65. (MIRA 18:9)

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TANANAYKO, P.G.

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"APPROVED FOR RELEASE: 07/13/2001 CIA-RDP86-00513R001754820010-3

TANANIN, V.

AUTHOR: Tananin, V., Honored Technical Instructor, of Professional Technical Education RSFSR 27-1-12/19

TITLE: From my Practice (Iz moyego opyta) Notes of a Master (Zametki mastera)

PERIODICAL: Professional'no-Tekhnicheskoye Obrazovaniye, 1958, # 1, pp 23-25 (USSR)

ABSTRACT: The author remembers his youth, when 17 years ago he joined a FZU school to become a cutter. Comparing his former school with Technical School # 6 (Tekhnicheskoye uchilishche # 6), where he is a technical instructor now, he points out the present abundant equipment compared with those early days. During the last year, 5 training workshops at Technical School # 6 received new equipment; 70% of all machine tools being of modern design.

Relating to contemporary educational questions, the author expresses his opinion that among the students' love for his chosen profession should be developed. Discipline, socialist attitude towards labor, the development of creative initiative and collectivism, and cooperation with the parents are supposed

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From my Practice

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to be essential parts of the education.

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"APPROVED FOR RELEASE: 07/13/2001 CIA-RDP86-00513R001754820010-3

LEYBOVICH, Boris Davydovich; TANANIN, Vladimir Vasil'yevich; ZHIDELEV, M.A., nauchnyy red.; BONDAROVSKAYA, G.V., red.; ABOLEMOV, V.P., red.; BARANOVA, N.N., tekhn. red.

[Methods for training milling machine operators under industrial conditions] Metodika proizvodstvennogo obucheniia frezerovshchikov po metallu. Moskva, Proftekhizdat, 1963. 227 p. (MIRA 16:8)

(Milling machines)
(Metal cutting--Study and teaching)

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"APPROVED FOR RELEASE: 07/13/2001 CIA-RDP86-00513R001754820010-3

KOT, A.G., inzh.; KUTSENOK, R.Yo., inzh.; TANANKO, A.T., inzh.

Separation of molding sand. Mashinostroenie no.1:45 Ja-F '65. (MIRA 18:4)

APPROVED FOR RELEASE: 07/13/2001 CIA-RDP86-00513R001754820010-3"

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S/123/59/000/09/20/036
A002/A001

Translation from: Referativnyy zhurnal, Mashinostroyeniye, 1959, No. 9, p. 109, # 33672

AUTHORS: Palatnik, L. S., Lyubarskiy, I. M., Tananko, I. A.

TITLE: On the Carbide Component in the Case-Hardened Layer of "18ХНВА" (18KhNVA) Steel

PERIODICAL: Tr. Khar'kovsk. politekhn. in-ta, 1958, Vol. 14, pp. 189-193

TEXT: The authors studied the carbide component of the case-hardened layer of 18KhNVA steel after case-hardening at 910-1,000°C and subsequent stages of heat-treatment (two-fold high tempering; high tempering with subsequent oil quenching). The layers of the specimens were electrolytically dissolved and carbide powder was deposited and studied. The investigation was carried out by X-ray analysis using the method of microsections in Fe-radiation. Two carbide phases were detected in the powders: Fe_3C cementite and $(Fe, W, Cr)_{23}C_6$ composite carbide. The composite carbide contained 50-70% Fe and 7-10% Cr. It has a face-centered cubic lattice with the parameter

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A002/A001

On the Carbide Component in the Case-Hardened Layer of "18ХНВА" (18KhNVA) Steel

α = 10.58 Å (d(422) = 2.16 Å; d(600) = 1.244 Å; d(15) = 1.218 Å; d(844) = 1.08 Å). With increasing distance from the specimen surface, the quantity of cementite decreases, while the quantity of composite carbide increases initially and then decreases after passing through a maximum. At a distance of >0.1 mm from the surface, the quantity of composite carbide exceeds the amount of cementite. There are 3 figures and 6 references.

S. A. G.

Translator's note: This is the full translation of the original Russian abstract.

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"APPROVED FOR RELEASE: 07/13/2001 CIA-RDP86-00513R001754820010-3

AUTHORS: Palatnik, L. S. and Tananko, I. A. SOV/126-7-6-6/24

TITLE: X-ray Investigation of Austenite in the Process of Intermediate Transformation

PERIODICAL: Fizika metallov i metallovedeniye, 1959, Vol 7, Nr 6, pp 842-846 (USSR)

ABSTRACT: The authors report an investigation in which intermediate transformation of austenite in 18KhNVA steel was studied with a special Debye-type X-ray camera. The camera (Fig 1) enabled X-ray diagrams from flat or cylindrical specimens at 20-1100°C to be obtained; the heater could be moved easily relative to the specimen, whose rate of heating or cooling could, therefore, be closely controlled. A vacuum (10^{-4} to 10^{-5} mm Hg) was maintained in the tube. A sharp-focus tube of the B. Ya. Pines design (Ref 1) with an iron anode was used. The steels used contained 0.32, 0.70 or 1.20% carbon, with 0.98% W, 4.45% Ni and 1.35% Cr (referred to as 32KhNV, 70KhNV and 120KhNV, respectively) in the form of 20 x 3 x 2 mm plates. The plates, held stationary in the camera, were heated at 25-30°C/min to 900-1100°C, held there for 10-30 min, and cooled at 100-200°C/min to 250-450°C with isothermal periods of

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X-ray Investigation of Austenite in the Process of Intermediate Transformation

3-6 hours. X-ray photographs were taken during the high-temperature soaking and isothermal periods in the intermediate region. The start of the gamma→alpha transformation was noted by the appearance of (211) alpha-phase lines. The structural state of the austenite was characterised by analysis of individual (311) gamma-phase interference spots, a method which has been shown (Refs 4-8) to be very indicative. It was found that isothermal transformation of austenite in the intermediate region leads to break-up of crystallites into smaller structural units, their disorientation and the development of micro-strains. These changes are similar to those in metals during plastic deformation in the forward and reverse martensite transformation. Figs 2 and 3 show regions near the (311) austenite line for the 70KhNV and 32KhNV steels, respectively. There are 3 figures and 8 Soviet references.

ASSOCIATIONS: Khar'kovskiy gosudarstvennyy universitet imeni A. M. Gor'kogo (Khar'kov State University imeni A.M.Gor'kiy) and Politekhnicheskiy institut imeni V.I. Lenina (Polytechnic Institute imeni V. I. Lenin)

SUBMITTED: April 22, 1958

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"APPROVED FOR RELEASE: 07/13/2001 CIA-RDP86-00513R001754820010-3

S/020/60/133/04/18/031
B019/B060

AUTHORS: Palatnik, L. S., Tananko, I. A.

TITLE: Ordering of the Second Kind in Austenite by Intermediate Transformation

PERIODICAL: Doklady Akademii nauk SSSR, 1960, Vol. 133, No. 4, pp. 821-824

TEXT: The authors made X-ray analyses of the high-temperature state of austenite in coarsely crystalline samples of steels with 0.32%, 0.70%, and 1.20% carbon, with all three alloys having the same percentage of the following elements: 1.35% Cr, 0.98% W, and 4.45% Ni. The samples were X-rayed in a special high-temperature vacuum chamber, and it was possible to study the austenite during the incubation period and during the $\gamma \rightarrow \alpha$ conversion. The first part of the paper then deals with the alteration of the γ interference reflexes on cooling down to the intermediate temperature range and at the $\gamma \rightarrow \alpha$ decay. It was found that by diffusion of hydrogen the originally homogeneous austenite was separated into two solid γ-solutions with different carbon concentration and

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Ordering of the Second Kind in Austenite by Intermediate Transformation

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different stability with regard to the $\gamma \rightarrow \alpha$ decay. The variation in the free energy induced thereby is shown in Fig. 2. The authors relate the lamination of austenite caused by the microdiffusion of the carbon to a specific regulation process of the second kind of the solid solution, in which process the free energy of the alloy is reduced. Details of this regulation process are discussed and it is stated that the experimental proof of the ordering of the second kind is difficult. Several models are discussed and it is pointed out that ordering processes, particularly in austenite, are possible only in the undercooled state below the Curie point and with sufficiently high mobility of the atoms of the dissolved element. The processes accompanying the ordering of the second kind in austenite are finally discussed. There are 2 figures and 9 references: 8 Soviet and 1 German.

ASSOCIATION: Khar'kovskiy gosudarstvennyy universitet im. A.M. Gor'kogo (Khar'kov State University imeni A. M. Gor'kiy)
Khar'kovskiy politekhnicheskiy institut im. V.I. Lenina (Khar'kov Polytechnic Institute imeni V. I. Lenin)

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"APPROVED FOR RELEASE: 07/13/2001 CIA-RDP86-00513R001754820010-3

Ordering of the Second Kind in Austenite by Intermediate Transformation

S/020/60/133/04/18/031
B019/B060

PRESENTED: April 11, 1960, by S. A. Vekshinskiy, Academician

SUBMITTED: June 9, 1960

Card 3/3

APPROVED FOR RELEASE: 07/13/2001 CIA-RDP86-00513R001754820010-3"

"APPROVED FOR RELEASE: 07/13/2001 CIA-RDP86-00513R001754820010-3

TANANKO, I. A., CAND TECH SCI, "INVESTIGATION OF THE PROCESS OF CONVERTING AUSTENITE IN AN INTERMEDIATE REGION." DNEPROPETROVSK, 1961. (MIN OF HIGHER AND SEC SPEC ED UKSSR, DNEPROPETROVSK ORDER OF LABOR RED BANNER METALLURGICAL INST IM I. V. STALIN). (KL, 3-61, 220).

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"APPROVED FOR RELEASE: 07/13/2001 CIA-RDP86-00513R001754820010-3

LYUBCHENKO, A.P.; SHERMAN, D.G.; TANANKO, I.A.

Modeling the process of cast iron modification on transparent crystals. Fiz. met. i metalloved. 16 no.3:378-384 S '63. (MIRA 16:11)

1. Khar'kovskiy zavod transportnogo mashinostroyeniya imeni V.A.Malysheva.

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"APPROVED FOR RELEASE: 07/13/2001 CIA-RDP86-00513R001754820010-3

IVANOVA, L.P.; BOBRO, Yu.G.; TANANKO, I.A.

Intermediate transformations in cast iton alloyed with alumium.
Izv. vys. ucheb. zav.; chern. met. 7 no.7:202-209 '64
(MIRA 17:8)

1. Khar'kovskiy politekhnicheskiy institut.

APPROVED FOR RELEASE: 07/13/2001 CIA-RDP86-00513R001754820010-3"

"APPROVED FOR RELEASE: 07/13/2001 CIA-RDP86-00513R001754820010-3

BOBRO, Yu.G.; TANANKO, I.A.

Investigating the crystallization of the liquid phase of aluminum cast iron. Lit. proizv. no.6:24-26 Je '64. (MIRA 18:5)

APPROVED FOR RELEASE: 07/13/2001 CIA-RDP86-00513R001754820010-3"

"APPROVED FOR RELEASE: 07/13/2001 CIA-RDP86-00513R001754820010-3

ACC NR: AR6029508 SOURCE CODE: UR/0137/66/000/006/I054/I054

AUTHOR: Shumakov, Yu. I.; Tananko, I. A.

TITLE: Tempering cycle of 2Kh13L steel alloyed with 1.0% nickel

SOURCE: Ref. zh. Metallurgiya, Abs. 6I369

REF SOURCE: Vestn. Khar'kovsk. politekhn. in-ta, no. 5(53), 1965, 3-5

TOPIC TAGS: tempering, steel, mechanical property / 2Kh13L steel

TRANSLATION: A study was made of cast 2Kh13L steel, containing (wt %): C--0.20-0.23, Si--0.31-0.50, Mn--0.41-0.61, S--0.023-0.030, P--0.020-0.024, Cr--13.44-14.20, Ni--0.82-1.0. Tempering was done directly after casting, as well as after preliminary normalization at 1050°C. Tempering of the steel at temperatures below 700-720°C for 4-8 hr did not produce the necessary hardness (about 22 R_c) and a_k (5-6 kg/cm^2). The best combination of mechanical properties was obtained by a two-step temper: 730°C for 4 hr, after which the furnace temperature was reduced to 650°C and the steel was held for 1 hr; afterward the samples were air cooled. V. Olenicheva.

SUB CODE: 11,13 UDC: 669.15.018.8

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"APPROVED FOR RELEASE: 07/13/2001 CIA-RDP86-00513R001754820010-3

SOKOLOV, V.M. Prinimal uchastiye MYSHETSKAYA, Ye.N.; SHUROV, S.I., red.; BASHLAVINA, G.N., red.; BIBIK, A.Ye., red.; ZASLAVSKIY, I.I., red.; KONDRAT'YEV, B.A., red.; MYASISHCHEVA, Ye.I., red.; SOLOV'YEV, A.I., red.; STROYEV, K.F., red.; SCHASTNEV, P.N., red.; TANANKOVA, A.I., red.; TEREKHOV, N.M., red.; LOBZOVA, N.A., red.

[Atlas of Moscow Province] Atlas Moskovskoi oblasti. Moskva, 1964. 12 p. (MIRA 18:3)

1. Russia (1923- U.S.S.R.) Glavnoye upravleniye geodezii i kartografii.

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"APPROVED FOR RELEASE: 07/13/2001 CIA-RDP86-00513R001754820010-3

TANANKOVA, A. I.

ISAKOV, I.S., prof., admiral flota, otv.red.; PETROVSKIY, V.A., dotsent, kand.voyenno-morskikh nauk, kontr-admiral, red. [deceased]; DEMIN, L.A., dotsent, kand.geograf.nauk, inzh.-kapitan 1 ranga, glavnyy red.; BARANOV, A.N., red.; BERG, L.S., akademik, inzh.-mayor, red.; BOLOGOV, N.A., dotsent, kontr-admiral v otstavke, red.; VITVER, I.A., professor, doktor geograf.nauk, red.; GRIGOR'YEV, A.A., akademik; YEGOR'YEV, V.Ye., zasluzhennyy deyatel' nauki, prof., doktor voyenno-morskikh nauk, kontr-admiral v otstavke, red.; ZIMAN, L.Ya., prof., red.; ZUBOV, N.N., prof., doktor geograf. nauk, inzh.-kontr-admiral v otstavke, red.; KAVRAYSKIY, V.V., prof., doktor fiziko-mat.nauk, inzh.-kontr-admiral v otstavke, red.; KALESNIK, S.V., prof., doktor geograf.nauk, red.; KUDRYAVTSEV, M.K., general-leytenant tekhn.voysk, red.; LAMYKIN, S.M., kapitan 1 ranga, red.; MATUSEVICH, N.N., zasluzhennyy deyatel' nauki i tekhniki, prof., doktor fiziko-mat.nauk, inzh.-vitse-admiral v otstavke, red.; [deceased]; MESHCHANINOV, I.I., akademik, red.; MILENKI, S.G., red.; ORLOV, B.P., prof., doktor geograf.nauk, red.; PANTELEYEV, Yu.A., vitse-admiral, red.; SNEZHINSKIY, V.A., dotsent, kand.voyenno-morskikh nauk, inzh.-kapitan 1 ranga, red.; SALISHCHEV, K.A., prof., doktor tekhn.nauk, red.; TRIBUTS, V.F., admiral, red.; FOKIN, V.A., vitse-admiral, red.; SHVEDE, Ye.Ye., prof., doktor voyenno-morskikh nauk, kontr-admiral, red.; SHULEYKIN, V.V., akademik, inzh.-kapitan 1 ranga, red.; PAVLOV, V.V., inzh.-polkovnik, red.; VOLKOV, F.G.,

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ISAKOV, I.S.---(continued) Card 2.
podpolkovnik, pomoshchnik glavnogo red. po izd-vu; SEDOV, N.Ye., kapitan 2 ranga, uchenyy sekretar'; VOROB'YEV, V.I., kapitan 1 ranga, red.kart; MIGALKIN, G.A., inzh.-kapitan 1 ranga, red.kart; GAPONOVA, A.A., red.kart; GONCHAROVA, A.I., red.kart; GORBACHEVA, N.Ye., red.kart; GRYUNBERG, G.Yu., red.kart; DUROV, A.G., red. kart; YERSHOV, I.B., red.kart; ZIL'BERSHER, A.B., red.kart; KASTAL'SKAYA, N.I., red.kart; KUBLIKOVA, M.M., red.kart; MAKAROVA, V.N., red.kart; MOROZOVA, A.F., red.kart; PAVLOVA, Ye.A., red. kart; POCHUBUT, A.N., red.kart; ROMANOVA, G.N., red.kart; SMIRNOVA, L.V., red.kart; SMIRNOVA, L.N., red.kart; TANANKOVA, A.I., red. kart; YANEVICH, M.A., red.kart; YASINSKAYA, L.F., red.kart; VASIL'YEVA, Z.P., tekhn.red.; VIZIROVA, G.N., tekhn.red.; GOLOVANOVA, A.T., tekhn.red.; GOROKHOV, V.I., tekhn.red.; MALINKO, V.I., tekhn. red.; SVIDERSKAYA, G.V., tekhn.red.; CHERNOGOROVA, L.P., tekhn.red.; FURAYEVA, Ye.M., tekhn.red.

[Marine atlas] Morskoi atlas. Otv.red. I.S. Isakov. Glav.red. L.A. Demin. Izd. Morskogo general'nogo shtaba. Vol.1 [Navigation geography] Navigatsionno-geograficheskii. Zamestitel' otv. red. po I tomu V.A. Petrovskii. 1950. 83 maps. (MIRA 12:1)

(Continued on next card)

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ISAKOV, I.S.---(continued) Card 3.
1. Russia (1923- U.S.S.R.) Voyenno-morskoye ministerstvo.
2. Nachal'nik Morskogo kartograficheskogo instituta voyenno-morskikh sil (for Lamykin). 3. Deystvitel'nyy chlen Akademii pedagogicheskikh nauk RSFSR (for Orlov). 4. Nachal'nik Gidrograficheskogo upravleniya voyenno-morskikh sil (for Tributs). 5. General'nyy gosudarstv. direktor topograficheskoy sluzhby (for Baranov). 6. Direktor topograficheskoy sluzhby (for Milenki).
(Ocean--Maps) (Harbors--Maps)

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TANANOV, A., starshiy prepodavatel'

Students in practice. Grazhd. av. 21 no.9:10-11 S '64.

1. Irkutskiy politekhnicheskiy institut. (MIRA 17:10)

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"APPROVED FOR RELEASE: 07/13/2001 CIA-RDP86-00513R001754820010-3

ACC NR: AP7003638 SOURCE CODE: UR/0380/67/000/001/0128/0132

AUTHOR: Tananov, A. I. (Moscow)

ORG: none

TITLE: Investigation of microstructural characteristics of the transition region of two-layer steel by the methods of high-temperature metallography

SOURCE: Mashinovedeniye, no. 1, 1967, 128-132

TOPIC TAGS: metallographic examination, hardness, mechanical property, steel, steel microstructure, alloy steel, bimetal / ST-3 steel, KH18N10T steel

ABSTRACT: The microstructural properties of the boundary region in the bi-layer steel (St-3 + Kh18N10T) were investigated by high-temperature metallography. The steel specimens were subjected to various thermal treatments, and the microhardness and nature of the interlayer region under these conditions were determined. The metallographic investigations were carried out after the method of M. G. Lozinskiy (Stroyeniya i svoystva metallov i splavov pri vysokikh temperaturakh. Metallurgizdat, 1963). The experimental results are presented graphically (see Fig. 1). It was found that at low temperatures the presence of a boundary between the two layers may increase the mechanical strength of the specimen. At high temperatures, however, the presence of the boundary layer leads to formation of microcracks in the specimen.

Card 1/2

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ACC NR: AP7003638

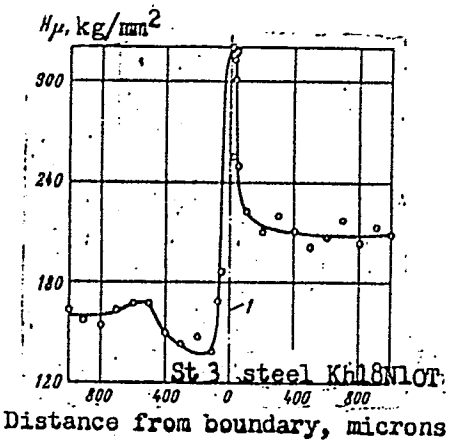

Fig. 1. Distribution of microhardness H_{μ} in the transition region of two-layer steel St-3 + Kh18N10T. 1 - boundary layer

This work was carried out under the direction of M. G. Lozinskiy. Orig. art. has: 1 table and 3 graphs.

SUB CODE: 11/ SUBM DATE: 07May66/ ORIG REF: 006

Card 2/2

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SEMENOV, V.T.; TANANYKHIN, N.A.

Mechanization of the manufacture of heaving cards. Put' i put.khoz. 7 no.7:41 '63. (MIRA 16:10)

1. Zamestitel' nachal'nika Biyskoy distantsii puti Zapadno-Sibirskoy dorogi (for Semenov). 2. Nachal'nik putevoy kolonny Biyskoy distantsii puti Zapadno-Sibirskoy dorogi (for Tananykhin).

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"APPROVED FOR RELEASE: 07/13/2001 CIA-RDP86-00513R001754820010-3

TANANYKIN, N.I.

Tomoscopic and tomographic construction for the stand of a MRZ roentgenologic apparatus. Vest. rent. i rad. no.6:64-67 N-D '54. (MLRA 8:1)

1. Iz rentgenodiagnosticheskogo otdeleniya Dorozhnoy bol'nitsy stantsii Chelyabinsk (nach. bol'nitsy O.D.Shil'nikova)
(ROENTGENOGRAPHY, apparatus and instruments, tomoscopic & tomographic appar. for standard stands)

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"APPROVED FOR RELEASE: 07/13/2001 CIA-RDP86-00513R001754820010-3

TANANYKIN, N.I.

Two cases of melorheostosis. Vest. rent. i rad. 32 no.1:45-46 supplement '57 (MLRA 10:5)

1. Iz rentgenovskogo otdeleniya dorozhnoy bol'nitsy stantsii Chelyabinsk Yuzhno-Ural'skoy zheleznoy dorogi.
(OSTEOPETROSIS, case reports)

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"APPROVED FOR RELEASE: 07/13/2001 CIA-RDP86-00513R001754820010-3

TANANYKIN, N.I.; PLOTNIKOV, G.S.

Problem of urethrovenous reflux. Urologiia 25 no.2:34-39 Mr-Ap '60. (MIRA 13:12)

(CONTRAST MEDIA) (GENITOURINARY SYSTEM--RADIOGRAPHY)

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"APPROVED FOR RELEASE: 07/13/2001 CIA-RDP86-00513R001754820010-3

TANANYKIN, N.I.

Method and technique of serial single-stage on tomography. Vest. rent. i rad. 38 no.6:52-56 N-D '63. (MIRA 17:6)

1. Iz kafedry rentgenologii i radiologii (zav.- dotsent A.G. Suntsov) Chelyabinskogo meditsinskogo instituta.

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GENADINNIK, I.S., kand.med.nauk; TANANYKIN, N.I.; MARKOV, V.M.

Diagnosis of osteochondrodystrophy. Pediatriia 42 no.1: 70-75 Ja'63. (MIRA 16:10)

1. Iz kafedry detskikh bolezney (zav. - kand.med.nauk N.S. Tyurina) Chelyabinskogo meditsinskogo instituta.
(LIPOCHONDRODYSTROPHY)

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"APPROVED FOR RELEASE: 07/13/2001 CIA-RDP86-00513R001754820010-3

TANANYKIN, N.I.; GENADINNIK, I.S., kand. med. nauk

Single-stage multilayer tomography of the normal heart and large thoracic vessels in children. Pediatriia 42 no.6: 51-57 Je'63 (MIRA 17:1)

1. Iz kafedry rentgenologii i radiologii (zav. - dotsent A.G. Suntsov) Chelyabinskogo meditsinskogo instituta.

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"APPROVED FOR RELEASE: 07/13/2001 CIA-RDP86-00513R001754820010-3

GENADINNIK, I.S., kand.med.nauk; TANANYKIN, N.I.; KUZNETSOV, A.A.

Significance of one-stage multilayer tomosplenoportography in the diagnosis of tumors of the organs of the epigastric region. Vest.rent.i rad. 40 no.5:30-34 S-O '65.

(MIRA 18:12)

1. Kafedra obshchey khirurgii (zav. - dotsent P.M.Tarasov) i kafedra rentgeno-radiologii (zav. - dotsent A.G.Suntsov) Chelyabinskogo meditsinskogo instituta.

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"APPROVED FOR RELEASE: 07/13/2001 CIA-RDP86-00513R001754820010-3

TANANYKIN, V.; SILANT'YEV, G.

Practical help to production. NTO 4 no.9:19-20 S '62. (MIRA 16:1)

1. Predsedatel' soveta Nauchno-tekhnicheskogo obshchestva Sarbayskogo rudnika (for Tananykin). 2. Uchenyy sekretar' soveta Nauchno-tekhnicheskogo obshchestva Sarbayskogo rudnika (for Silant'yev).

(Kustanay Province—Iron mines and mining)

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"APPROVED FOR RELEASE: 07/13/2001 CIA-RDP86-00513R001754820010-3

TANANAYKO, M.M.

Diantipyrylmethane-thiocyanate complexes of molybdenum (V). Zhur. neorg. khim. 9 no.3:608-614 Mr '64. (MIRA 17:3)

1. Kiyevskiy gosudarstvennyy universitet im. T.G. Shevchenko.

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TANAS, Fulop, dr.

Some theoretical problems of health organization. Orv. hetil. 103 no.29:1345-1348 22 Jl '62.

1. Debreceni Orvostudomanyi Egyetem, Egeszsegugyi Szervezestani Csoport.

(PUBLIC HEALTH ADMINISTRATION)

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"APPROVED FOR RELEASE: 07/13/2001 CIA-RDP86-00513R001754820010-3

TANASACHE, J.

Protection of bats. p. 183.
(Ocrotirea Naturii, No. 2, 1956, Bucuresti, Rumania)

SO: Monthly List of East European Accessions (EEAL) Lc. Vol.6, No. 8, Aug 1957. Uncl.

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"APPROVED FOR RELEASE: 07/13/2001 CIA-RDP86-00513R001754820010-3

NEGREA, A.; BOTOSANEANU, L.; NEGREA, St. (Banat); TABACARU, I.; SERBAN, E.; DANCAU, D.; AVRAM, S. (Cernisoara); DECU, A. (Oltenia); DECU, V. (Oltenia); DUMITRESCU, M.; ORGHIDAN, T. (Cheile Virghisului); TANASACHE, J.; GEORGESCU, M. (Dobrogea)

Contribution to the study of mollusks in Rumanian caves. Pt. 3. Studii cerc biol anim 15 no.3:333-342 '63.

1. Comunicare prezentata de M.A. Ionescu, membru corespondent al Academiei R.P.R.

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MOTAS, C.; TANASACHI, J.

Two rare Hydrachnellae (Acari), so far unknown in Rumania.
Rev biol 7 no.3:409-422 '62.

1. Institut für Speologie der Akademie der RVR.

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"APPROVED FOR RELEASE: 07/13/2001 CIA-RDP86-00513R001754820010-3

TANASE, D.

Tanase, D. - Central heating with 110-V electric resistance for drilling wells. p.339.

SO: Monthly List of East European Accession s List (EEAL) LC, Vol 4, No. 11 November 1955, Uncl.

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"APPROVED FOR RELEASE: 07/13/2001 CIA-RDP86-00513R001754820010-3

TANASE, Dinu

Advanced labor methods and initiatives which appeared in the Rumanian socialist competition. Munca sindic 6 no.11:6-10 N '62.

1. Activist, Sectia Economica, Consiliul Central al Sindicatelor.

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TANASE, D., profesor (Bucuresti)

Propounded problems: 5194. Gaz mat B 13 no.3:172 Mr '62.

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"APPROVED FOR RELEASE: 07/13/2001 CIA-RDP86-00513R001754820010-3

Tanase, Gh.

Concerning the course of building economy. Probleme econ 15 no.8:155-159 Ag '62.

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