"APPROVED FOR RELEASE: 09/24/2001 CIA-RDP86-00513R000515420007-7

GLUKHOV, Yu.A.; [illegible]RASHOV, A.A.; MEL'NIKOV, G.P.; SID[illegible], V.A.

Use of an STA telegraph for the derivation of information from a multichannel analyzer. Prib. i tekh. eksp. [illegible] no.2:73-75 Mr-Ap [illegible]. (MIRA 15:5)

1. Institut atomnoy energii AN SSSR.
(Neutrons) (Scintillation spectrometry)

APPROVED FOR RELEASE: 09/24/2001 CIA-RDP86-00513R000515420007-7"

"APPROVED FOR RELEASE: 09/24/2001 CIA-RDP86-00513R000515420007-7

GLUKHOV, Yu. D. (Sevastopol')

Rare case of cholesterol kidney stone. Urologiia 24 no.1:61 Ja-F '59.
(CALCULI, URINARY) (MIRA 12:1)

APPROVED FOR RELEASE: 09/24/2001 CIA-RDP86-00513R000515420007-7"

"APPROVED FOR RELEASE: 09/24/2001 CIA-RDP86-00513R000515420007-7

GLUKHOV, Yu.D., podpolkovnik meditsinskoy sluzhby

Early detection of nephrolithiasis in units. Voen.-med. zhur. no.5: 82-83 My '61. (MIRA 14:9)

(CALCULI, URINARY)

APPROVED FOR RELEASE: 09/24/2001 CIA-RDP86-00513R000515420007-7"

"APPROVED FOR RELEASE: 09/24/2001 CIA-RDP86-00513R000515420007-7

GLUKHOV, Yu.D., polkovnik meditsinskoy sluzhby

Kidney surgery during various periods of acute radiation sickness; an experimental study. Voen.-med. zhur. no.2: 28-31 '65. (MIRA 18:11)

APPROVED FOR RELEASE: 09/24/2001 CIA-RDP86-00513R000515420007-7"

"APPROVED FOR RELEASE: 09/24/2001 CIA-RDP86-00513R000515420007-7

GLUKHOV, Yu.D., polkovnik meditsinskoy sluzhby

Diagnosis and treatment of lesions of the urethra and urinary bladder. Voen.-med. zhur. no.3:77-79 '65. (MIRA 18:11)

APPROVED FOR RELEASE: 09/24/2001 CIA-RDP86-00513R000515420007-7"

"APPROVED FOR RELEASE: 09/24/2001 CIA-RDP86-00513R000515420007-7

TALANTOV, N.V., kand. nauk, dotsent; GLUKHOV, Yu.G., inzh.

Effect of the characteristics of contact yield of machined metal on the wear of cutting tools. Vest. mashinostr. 45 no.4:66-70 Ap '65. (MIRA 18:5)

APPROVED FOR RELEASE: 09/24/2001 CIA-RDP86-00513R000515420007-7"

"APPROVED FOR RELEASE: 09/24/2001 CIA-RDP86-00513R000515420007-7

DONSKIY, D.I., kand.tekhn.nauk; ROZENBERG, L.G., kand.tekhn.nauk; ZUBMAN, V.S., starshiy inzh.; ZHELIKHOVSKAYA, A.I., starshiy inzh.; ZOLYASINSKIY, Z.S., starshiy inzh.; LOBUSHEV, V.D., inzh.. Prinimali uchastiye: GLUKHOV, Yu.I., starshiy mekhanik; GEKOV, S.F., starshiy mekhanik. TIMOSHINA, V.A., red.; MAL'KOVA, N.V., tekhn.red.

[Technical specifications for the inspection and sorting of parts for the MAZ-200 and MAZ-205 motortrucks during overhauling.] Tekhnicheskie usloviia na kontrol'-sortirovku detalei avtomobilei MAZ-200 i MAZ-205 pri kapital'nom remonte. Moskva, Avtotransizdat, 1960. 663 p. (MIRA 13:9)

1. Moscow. Nauchno-issledovatel'skiy institut avtomobil'nogo transporta. 2. Nachal'nik laboratorii remonta dvigateley Nauchno-issledovatel'skogo instituta avtomobil'nogo transporta (for Donskoy). 3. Nauchno-issledovatel'skiy institut avtomobil'nogo transporta (for all, except Timoshina, Mal'kova). (Motortrucks--Maintenance and repair)

APPROVED FOR RELEASE: 09/24/2001 CIA-RDP86-00513R000515420007-7"

"APPROVED FOR RELEASE: 09/24/2001 CIA-RDP86-00513R000515420007-7

GLUKHOV, Yu. N.; ROSH[illegible], [illegible]

"[illegible]," [illegible] Ing, Moscow, Izd-vo AN SSSR, [illegible]. ([illegible] SSSR. [illegible])

Abst.: This article describes the procedure [illegible] experiment with a memory matrix [illegible] conducted in the Laboratory of [illegible] Mechanisms and Systems of the USSR Academy of Sciences. It is indicated that [illegible] were made of K-[illegible] material [illegible] used in the experiment. The [illegible] and inside [illegible] diameters were [illegible] respectively, and the [illegible] height was [illegible]. The authors thank [illegible] for [illegible] the experiment and [illegible] the article [illegible]. There are [illegible] references.

APPROVED FOR RELEASE: 09/24/2001 CIA-RDP86-00513R000515420007-7"

"APPROVED FOR RELEASE: 09/24/2001 CIA-RDP86-00513R000515420007-7

GLUKHOV Yu N.

PHASE I BOOK EXPLOITATION SOV/3671

Akademiya nauk SSSR. Institut elektronnykh upravlyayushchikh mashin

Tsifrovaya tekhnika i vychislitel'nyye ustroystva; [Sbornik]

Tsifrovaya tekhnika i vychislitel'nyye ustroystva; [Sbornik] (Digital Technique and Computing Devices. Collection of Articles) Moscow, Izd-vo AN SSSR, 1959. 184 p. Errata slip inserted. 4,000 copies printed.

Ed.: N.S. Bruk, Corresponding Member, USSR Academy of Sciences; Ed. of Publishing House: G.Ya. Shteynbok; Tech. Ed.: V.V. Volkhova.

PURPOSE: This collection of articles is intended for persons specializing in computer technique.

COVERAGE: Most of the work in this first issue of the Collection of Articles of the Institute of Electronic Control Machines of the Academy of Sciences, USSR, was carried out during 19[illegible], and was dedicated to digital technique. The Institute conducted studies aimed at creating a high-speed memory device of large capacity. One of the results of this work was improvement of the M-2 computer by replacing its static storage device with ferrite memory cores. Other articles concern the use of transistors in digital computers, stability of analog computers equipped with d-c operational amplifiers, and the use of the M-2 computer in solving various problems. Future issues of this collection of articles will present the results of work in digital terminiques in mathematical investigations, and in control machines and systems of control which operate on the principle of digital technique. Some personalities are mentioned in the articles. References accompany some of the articles.

Tsykin, Ya.N., V.V. Voltarnovskiy, M.A. Kartsev, V.P. Konstantinov, and [illegible] Bulatovskiy. Ferrite Memory Device with 4096 Words [illegible] 5

The authors present a general description of the ferrite core memory device. It has a 4096 word capacity, each word consisting of 36 binary bits, two of which are reserve. The access time is about 30 microsec; part of this cycle [illegible] other [illegible] operations. This memory unit is equipped with [illegible] electron tubes and 103 additional tubes are used in the power supply. The specifications constitute a great improvement [illegible] the previous memory device, in which the [illegible] static storage [illegible] the ferrite magnetic iron storage [illegible] capacity [illegible] 36-bit words each, and in which access time was [illegible] or more microsec. It was equipped with [illegible] electron tubes and 150 additional tubes were used in the power supply. The new ferrite core memory device was developed, designed, and [illegible] at the Institute under the general direction of [illegible] Corresponding Member of the Academy of Sciences, [illegible] Many studies were made in [illegible] under the direction of G.V. Rzevskiy. The essential [illegible] of the [illegible] were made under the supervision of M.A. Kartsev by [illegible] V.P. Konstantinov, Ya.N. Glukhov, V.V. Voltarnovskiy, L.V. [illegible] V.P. Konstantinov, Ya.N. Pitlyuk, and P.P. [illegible] technicians I.I. Gilyanova, N.S. [illegible] Natanson, Z.N. Gilyanova and V.S. [illegible] group was under the supervision of A.N. [illegible] and the assembly shop was under the supervision of A.N. [illegible] the mechanical shop of the Institute.

Glukhov, Ya.N. and Ya.N. Pitlyuk. Circuits [illegible] Utilization Used in the Production and Adjustment of Ferrite Memory [illegible] 42

The following [illegible] ferrite [illegible] core memory [illegible] static [illegible] tabulated results [illegible] very [illegible] and showing the [illegible] for reference literature [illegible] the article was written [illegible] carried out such work, and the article was written [illegible] acquired in developing [illegible] was done at the Institute, and the [illegible] to the authors of this article participated in it: V.V. [illegible] Konstantinov, M.Ya. Natanson and V.S. [illegible] There are two references, both Soviet.

Chernov, A.N. Utilization of a Dynamic Trigger Equipped with a Junction Transistor in Arithmetic Device Circuits 42

The author briefly described the results of his investigation of possibilities of developing a dynamic trigger equipped with a junction transistor and utilizing capacitance as the [illegible] device. He concluded that such triggers can be applied in logical circuits and that their main advantage over static triggers is their use of only one transistor instead of two. Their main disadvantage is their low input resistance.

APPROVED FOR RELEASE: 09/24/2001 CIA-RDP86-00513R000515420007-7"

"APPROVED FOR RELEASE: 09/24/2001 CIA-RDP86-00513R000515420007-7

S/799/62/000/002/003/011

AUTHORS: Barilovskiy, V. L., Vagner, E. N., Glukhov, Yu. N., Darsko, A. V., Stupin, E. F.

TITLE: Potential static trigger having a current key with back coupling through logical diode networks.

SOURCE: Akademiya nauk SSSR. Institut elektronnykh upravlyayushchikh mashin. Tsifrovaya tekhnika i vychislitel'nyye ustroystva. no. 2. 1962, 36-43.

TEXT: The paper presents a potential static trigger network utilizing a current key which serves for the making of systems of elements that are fairly fast-acting and are free, to a significant extent, of the shortcomings of other current-switching schemes which require the use of a large number of semiconductor triodes which must be fairly uniform in some of their parameters, such as the voltage between the emitter and the base of the open triode, the base current of the closed triode, and must have fairly elevated values of the current-amplification coefficient, also the unavoidable limitations to the scatter in the values of the resistances and of the stability of the power supply. A circuit diagram of the trigger is shown. The outstanding characteristic of this current key (Author's Certificate no. 130240, entitled "Shaper-inverter") consists in the fact that the collector circuits of its triodes include fairly high ohmic resistors and diodes which on the collectors of the triodes

Card 1/2

APPROVED FOR RELEASE: 09/24/2001 CIA-RDP86-00513R000515420007-7"

"APPROVED FOR RELEASE: 09/24/2001 CIA-RDP86-00513R000515420007-7

of the key affords fixed voltage drops of the order of 5-10 v, which are then amplified by the emitter-repeaters, which employ triodes. These magnitudes of the voltage differences at the trigger output permit one to employ logical diode networks in the construction of computers, an arrangement which reduces significantly the number of transistors employed. A circuit diagram of a logical diode scheme is shown. The frequency characteristics of the network and the design problems of a system of elements are discussed, and the basic requirements for the portions and design elements of the circuitry are set forth. The potential static trigger described in the paper is fairly fast-operating. All of the triodes of the trigger operate in a nonsaturated regime. The fairly large voltage differences afforded by the current key permit the use of the trigger in conjunction with diode circuits. The starting of the trigger and the feedback in it are performed through logical diode networks. There are no reactive elements, since all connections are by DC. A large scatter in the parameters of the transistors and diodes is permissible. The requirements relative to the resistances and the stability of the power supply become more stringent as a result thereof. However, they are readily fulfilled. There are 2 figures and 9 references (8 Russian-language Soviet and 1 English-language: R. K. Richards, Arithmetical operational on digital computing machines, in Russian-language translation, Moscow. Foreign Literature Publishing House, 1957).

APPROVED FOR RELEASE: 09/24/2001 CIA-RDP86-00513R000515420007-7"

"APPROVED FOR RELEASE: 09/24/2001 CIA-RDP86-00513R000515420007-7

S/799/62/000/003/002/008

AUTHORS: Avaliani, Yu.Ye., Alekseyev, Yu.N., Glukhov, Yu.N., Dorokhova, N.A., Tanetov, G.I.

TITLE: The arithmetic equipment of a specialized machine.

SOURCE: Akademiya nauk SSSR. Institut elektronnykh upravlyayushchikh mashin. Tsifrovaya tekhnika i vychislitel'nyye ustroystva. no.3. 1962, 14-23.

TEXT: The paper describes an arithmetic equipment (AE) of the parallel type, which operates with 22-digit binary numbers with a fixed decimal point and which performs addition, subtraction, multiplication, division, extraction of the square root, matching, shifting, and transposition of numbers. An acceleration in the multiplicational operations is achieved by the accumulation of the partial products without transitional carry-overs. The system of the elements and the design principles of the AE are briefly examined. The system of elements comprises a static trigger, a potential-impulse gate, and logic diode circuits. All of the elements are made up of semiconductor devices. The network of the AE is presented in skeletal form, which comprises the various equipments that serve to perform the elementary operations in each register, and the equipments that receive numbers from other partial parts of the machine. The operational algorithms of addition, subtraction,

Card 1/3

APPROVED FOR RELEASE: 09/24/2001 CIA-RDP86-00513R000515420007-7"

"APPROVED FOR RELEASE: 09/24/2001 CIA-RDP86-00513R000515420007-7

and division, and the technical methods in the design of the logical circuits which help to realize the algorithms, are similar to those employed in some existing computers, for example, the M-2. Thus, for example, the adding equipment of the AE differs in its logic structure from that employed in the M-2 machine only by the content of cyclic carry-over circuit from the higher digit to the lower digit. While the operation of algebraic matching exhibits certain peculiarities dependent on the character of the problems to be solved, there is nothing interesting from the point of view of engineering. In this operation, the same circuits as those utilized in addition and subtraction are employed. The operation of shifting is also of no additional interest, since it employs the same shifting circuitry employed in multiplication and division. In the multiplication the partial products remain immobile, whereas the multiplicand is shifted to the right. It can be shown that to obtain, in such procedure, an accuracy of no less than a unit of the lowest digit for 22-digit initial figures, it is necessary to have 3 additional digits in the AE prior to rounding off. Extraction of the square root follows almost precisely the same method as that employed in high-school long-hand work, that is, with division of the number into pairs of digits, extraction of the square root of the highest digital pair, and all the other subsequent steps required by the 2-rectangles-cum-small-square method, until the remainder is either zero or smaller than the required accuracy residual. The duration of the extraction of the square root amounts to 112 cadences or 317 μ sec.

APPROVED FOR RELEASE: 09/24/2001 CIA-RDP86-00513R000515420007-7"

"APPROVED FOR RELEASE: 09/24/2001 CIA-RDP86-00513R000515420007-7

The arithmetic equipment of a specialized machine. S/779/62/000/003/002/008

If the number of which the square root is to be obtained has a minus sign, then all the digits go to zero, and the operation comes to a halt. The description of the AE elements comprises the static trigger, the logical diode scheme, and the potential impulse gate, schematic circuits for all of which are shown. A block diagram is shown for a basic (k-th) digit of the AE. The AE described contains approximately 1,000 semiconductor triodes and 4,000 semiconductor diodes, all of which operate in regimes in which current intensities, voltages, and powers do not exceed the rated values. A special cooling system ensures maintenance of all semiconductor devices at room temperature. The circuits employed ensure maintenance of a stable operation of the AE under power-supply-voltage fluctuations of ±10% from nominal values. The electrical power supply of the AE is provided by a 400-cps rotary generator through rectifiers assembled in a 6-phase circuit. The total power requirements of the AE is approximately 0.8 kw. The AE is currently in experimental operation. There are 5 figures and 3 references (2 Russian-language Soviet and the English-language A.A.Robinson, Multiplication in the Manchester University high-speed digital computer. Electronic Engrg., v.25, no.299, 1953).

Card 3/3

APPROVED FOR RELEASE: 09/24/2001 CIA-RDP86-00513R000515420007-7"

"APPROVED FOR RELEASE: 09/24/2001 CIA-RDP86-00513R000515420007-7

SHORSHOROV, M.Kh, kand.tekhn.nauk; SOKOLOV, Yu.V., inzh.; RUSSIYAN, A.V., kand.tekhn.nauk; MATSNEV, E.P., inzh.; KURKINA, N.I.; Prinimali uchastiye: BELOV, V.V., inzh.; SEDYKH, V.S., kand.tekhn.nauk; GLUKHOV, Yu.P., inzh.

Effect of the composition and structure of chromium-nickel steels and alloys on the formation of hot cracks in the weld zone. Svar.proizv. no.4:12-17 Ap '62. (MIRA 15:3)

1. Institut metallurgii im. Baykova (for Shorshorov, Sokolov, Belov, Sedykh). 2. TSentral'nyy nauchno-issledovatel'skiy institut chernoy metallurgii im. Bardina (for Russiyan, Matsnev).
(Chromium-nickel alloys--Metallography)
(Welding--Defects)

APPROVED FOR RELEASE: 09/24/2001 CIA-RDP86-00513R000515420007-7"

"APPROVED FOR RELEASE: 09/24/2001 CIA-RDP86-00513R000515420007-7

GLUKHOV, Zakhar Nikolayevich, Geroy Sotsialisticheskogo Truda ; LAPIDUS, M.A., red.; RAKITINA, Ye.D., red.; PROKOF'YEVA, L.N., tekhn. red.

[Personnel determines the success of an enterprise] Kadry reshaiut uspekh dela. Moskva, Izd-vo sel'khoz. lit-ry, zhurnalov i plakatov, 1961. 166 p. (MIRA 14:8)

1. Sekretar' Mar'inenskogo rayonnogo komiteta Kommunisticheskoy partii Stalinskoy oblasti (for Glukhov)
(Mar'inka District--Communist Party of the Soviet Union--Party work)
(Collective farms--Officials and employees)

APPROVED FOR RELEASE: 09/24/2001 CIA-RDP86-00513R000515420007-7"

"APPROVED FOR RELEASE: 09/24/2001 CIA-RDP86-00513R000515420007-7

The kinetics of wetting and the linear selective corrosion of metals in polyphase systems D. A. Mirlis and A. I. Glukhova. *Compt. rend. acad. sci. U. R. S. S.* **21**, 35[illegible] (1938)(in English), cf. *C. A.* **32**, 8346[illegible]. Corrosion was studied qualitatively in the system Fe aq. H_2S benzine and compared with that in the system Fe H_2O benzine.

In the former system the corrosion was much more pronounced in the benzine phase than in the H_2O phase. Linear-selective corrosion was scarcely detectable in the first system but was easily apparent in the second. The Fe surface is more hydrophilic in the presence of H_2S than in its absence; this results in the formation of a new phase consisting of droplets of an aq. soln. on the surface of the Fe in the benzine phase. The results are of interest in connection with the *corrosion of petroleum-handling equipment.* I. H. Dunkelberger

ASM-SLA METALLURGICAL LITERATURE CLASSIFICATION

APPROVED FOR RELEASE: 09/24/2001 CIA-RDP86-00513R000515420007-7"

"APPROVED FOR RELEASE: 09/24/2001 CIA-RDP86-00513R000515420007-7

PROCESSES AND PROPERTIES INDEX

The kinetics of wetting and the linear selective corrosion of metals in polyphase systems. VIII. Theoretical basis for the protection of metallic equipment from corrosion in storage and transportation of liquid hydrocarbon fuel. D. I. Mirlis and A. I. Glukhova. [illegible] Chem. U. S. S. R. 12, [illegible] in French, [illegible] J. C. A. 33, [illegible]. Corrosion was studied of Fe in straight run gasoline satd. with H_2S, in straight run gasoline satd. with H_2S H_2O in H_2O + gasoline, and in [illegible] H_2S + gasoline, at [illegible]. Corrosion of Fe exposed surface [illegible] 12 [illegible] sq. cm. in the 1st system was [illegible] as the loss in wt. in 6 months, in the 2nd system under the same conditions 205.2 mg. IX. D. I. Mirlis, A. I. Glukhova and E. P. Litvinova. [illegible] in French, [illegible] Corrosion of Fe in H_2O + gasoline, straight-run, cracked and pressure distillate gasolines, and in gasoline in the presence and absence of H_2S showed that [illegible] decreasing the moisture content of gasoline at the moment of its formation sharply decreased the corrosion losses under the conditions of storage and transportation [illegible] corrosion by H_2S was more intensive in straight run gasoline contg. some H_2O than in technical gasolines contg. not too much acid), [illegible] the surface active substances present in tech. gasolines formed a chemically fixed adsorption layer on the metal, and thus protected it from corrosion; however, in the absence of H_2S, in some cases, the layer was not stable enough and then the corrosion was more intensive; in the other cases, mutual [illegible] action of the surface active substances and H_2S promoted [illegible] at the line of phase division. [illegible] of peroxides of short-chain fatty acids in large [illegible] [illegible] action toward metal. [illegible]

APPROVED FOR RELEASE: 09/24/2001 CIA-RDP86-00513R000515420007-7"

"APPROVED FOR RELEASE: 09/24/2001 CIA-RDP86-00513R000515420007-7

***The Rate of Corrosion of Aluminium Depending on the *p*H of the Solution.**

G. V. Akimov and A. I. Glukhova (*Compt. Rend. (Doklady) Acad. Sci. U.R.S.S.*, 1945, **49**, (3), 194–197). (In English). The corrosion of aluminium was studied, in solutions which were 1*N* with respect to Cl^-, SO_4^{--}, or NO_3^-, over a wide range of *p*H values. The rate of corrosion, which was determined gravimetrically, was of the same order in both strongly acid and strongly alkaline regions, and the curve of corrosion rate against *p*H was approx. symmetrical about the neutral region. In neutral and acid solutions, the rate of corrosion was much greater in the presence of Cl^- than in the presence of SO_4^{--}. In strongly alkaline solutions, the corrosion rates in the presence of both ions were similar. The electrode potentials were studied, and results are given graphically. Variation of the electrode potentials with time in the various solutions was also investigated. The similarity of the corrosion rates in strongly acid and strongly alkaline solutions, in spite of a large observed difference in the electrode potentials, is discussed by reference to polarization diagrams. (G. V. B.)

ASM-SLA METALLURGICAL LITERATURE CLASSIFICATION

APPROVED FOR RELEASE: 09/24/2001 CIA-RDP86-00513R000515420007-7"

"APPROVED FOR RELEASE: 09/24/2001 CIA-RDP86-00513R000515420007-7

GLUKHOVA, A. I.

Distr: 4E2c(j)/4E4j/

5

Temperature-resistant mechanically strong polyorgan silicon rubbers. K. A. Andrianov and A. I. Glukhova. *Khim. Prom.* 1957, 347-8.—Block polymers with chains -Me_2Si-O-C(RR_1)- and -Me_2Si-C(RR_1)- were obtained by milling, which were mechanically strong and had high temp. resistance. Their tensile strength (with 5-15% fillers) reached 200 kg./sq. cm., elongation 220%, brittleness temp. −74°. W. M. Sternberg.

1/1

APPROVED FOR RELEASE: 09/24/2001 CIA-RDP86-00513R000515420007-7"

"APPROVED FOR RELEASE: 09/24/2001 CIA-RDP86-00513R000515420007-7

[illegible]VA, A. [illegible]

A. [illegible] Gluknova, [illegible] A. Andrianov, [illegible] [illegible] [illegible] Malushenina, "The Obtaining of a Rubber-Like Substance from the [illegible] Silicoxane."

Report presented at the [illegible] [illegible] and Practical Application of Silicon-Organic [illegible] in [illegible] from 2[illegible]-27 September 19[illegible].
Zhurnal Prikladnoy Khimii, [illegible], [illegible], [illegible]

APPROVED FOR RELEASE: 09/24/2001 CIA-RDP86-00513R000515420007-7"

"APPROVED FOR RELEASE: 09/24/2001 CIA-RDP86-00513R000515420007-7

PHASE I BOOK EXPLOITATION SOV/2[illegible]64

Vsesoyuznoye soveshchaniye po splavam redkikh metallov. 1st, Moscow, 1957

Redkiye metally i splavy; trudy... (Rare Metals and Alloys; Transactions of the First All-Union Conference on Rare-Metal Alloys) Moscow, Metallurgizdat, 1960. 438 p. 3,150 copies printed.

Sponsoring Agencies: Akademiya nauk SSSR. Institut metallurgii [illegible] Komissiya po redkim metallam pri nauchno-tekhnicheskom sovete.

Ed.: I.N. Chapovalov; Ed. of Publishing House: O.M. Ronzyna; Tech. Ed.: P.G. Islent'yeva.

PURPOSE: This collection of articles is intended for metallurgical engineers, physicists, and workers in the machine-building and metal-processing industries. It may also be used by students of schools of higher education.

COVERAGE: The collection contains technical papers which were presented and discussed at the First All-Union Conference on Rare-Metal Alloys, held in the Institute of Metallurgy, Academy of Sciences USSR in November 1957. Articles on investigations of rare-metal alloys, titanium, and zirconium and the effect of additions of rare metals are presented and discussed along with research on rhenium, vanadium, niobium, and their alloys. The effect of rare-earth metals on properties of magnesium alloys and steels is analyzed. The use of rhenium as a dehydrating catalyst, electroplating material, and [illegible] for making plugs for automobile electrical systems are discussed. Also, the effect of the addition of certain elements [illegible] steel is examined and alloys with special physical properties (high [illegible] semiconductive alloys) are discussed. Tables and [illegible] and bibliographical references accompany each of the articles.

PART II. TITANIUM AND ZIRCONIUM ALLOYS WITH RARE-METAL ADDITIONS

Rare Metals (Cont.) SOV/2[illegible]64

Andreyeva, T.F., A.I. Zhukova, [illegible], and [illegible] Pal'tsev. Corrosion Resistance of Zirconium and Its Alloys [illegible]

PART IV. RARE-EARTH METALS AND THEIR EFFECT ON PRODUCTION OF MAGNESIUM ALLOYS

Bratchikov, D.D., and [illegible]. Rare-Earth Elements and Possibilities of Utilizing Them 171

Ioffe, V.M., T.M. Pegorova, and L.M. Zaidenko. Production of Alloys of Cerium, Aluminum-Cerium, Magnesium-Cerium, High-Melting-Cerium, and Magnesium-Neodymium Addition Alloys by Electrolysis 190

Terekhova, V.F., and Ye.M. Savitskiy. Investigation of Physicochemical Interaction of Rare-Earth Metals with Magnesium, Iron, Chromium, and Titanium 197

Mikheyeva, V.I., and M.Ye. Fiset. Properties of Rare-Earth Metals and Possibilities of Their Practical Utilization 202

Card 5/8

APPROVED FOR RELEASE: 09/24/2001 CIA-RDP86-00513R000515420007-7"

"APPROVED FOR RELEASE: 09/24/2001 CIA-RDP86-00513R000515420007-7

S/[illegible]/000/000/050/051
D235/D30[illegible]

AUTHORS: Kozlovskaya, L. N., Glukhova, A. I., [illegible], K. A. and [illegible], K. [illegible]

TITLE: Thermal stability of materials based on poly-dimethyl-siloxanes

SOURCE: Khimiya i prakticheskoye primeneniye kremneorganicheskikh soyedineniy; trudy konferentsii, no. 6: Doklady, diskussii, resheniye. II Vses. konfer. po khimii i prakt. prim. kremneorg. soyed., Len. 1958. Leningrad, Izd-vo AN SSSR, 1961, 216-220

TEXT: A supplement to the above paper (this publication, no. 2, p. 95). The authors report on materials formed from polydimethyl-siloxanes and fluoro-organic polymers. Such materials can be used at 350°C for 300 hours and at 300°C there is practically no change in the properties after 1,000 hours. After service at 300 - 350°C the mechanical strength is 100 - 110 kg/cm² and the specific elon-

Card 1/3

APPROVED FOR RELEASE: 09/24/2001 CIA-RDP86-00513R000515420007-7"

"APPROVED FOR RELEASE: 09/24/2001 CIA-RDP86-00513R000515420007-7

S/661/61/000/006/050/081
D235/D302

Thermal stability of ...

gation 80 - 100%, the resistance to breakdown after the action of oil for 200 hours at 200°C falls by 40 - 50% and swelling amounts to 20 - 25%; shrinkage after heat treatment is about 5%. The material can be used for packing, sealing, etc.; because it forms few volatile compounds it will find application in vacuum technology. The paper is discussed by the authors and A. L. Klebanskiy (VNIISK, Leningrad), A. A. Berlin (Moscow), V. I. Pakhomov (NIIPM, Moscow) and N. Nadel'man (NIIRP, Moscow). The following topics are discussed: Vulcanization of the polymers; toxicity of the material; the immediate formation at room temperature of polymer fragments on rolling; properties; the mechanism for the formation of polymer fragments by destruction of Teflon and polydimethylsiloxane; and the amount of filler for the material. Vulcanization takes place by breakdown of polymer chains, the formation of benzoyl peroxide and subsequent recombination of the macromolecules; it takes place with respect to fragments of polydimethylsiloxane and not with respect to the fluoro-polymer. The number of volatile compounds is negligible and the material does not cause metallic corrosion. The

Card 2/3

APPROVED FOR RELEASE: 09/24/2001 CIA-RDP86-00513R000515420007-7"

"APPROVED FOR RELEASE: 09/24/2001 CIA-RDP86-00513R000515420007-7

[illegible], [illegible]. --

"The Influence of Temperature on the Corrosion of Stainless Steels in Hydrochloric and Nitric Acids." Cand Phys Sci, Inst of Physical Chemistry, Acad Sci [illegible], 4 Nov 54. ([illegible], 22 Oct [illegible])

Survey of Scientific and Technical Dissertations Defended at [illegible] Higher Educational Institutions ([illegible])

[illegible]: Sum. No. 4[illegible]1, [illegible] May [illegible]

APPROVED FOR RELEASE: 09/24/2001 CIA-RDP86-00513R000515420007-7"

"APPROVED FOR RELEASE: 09/24/2001 CIA-RDP86-00513R000515420007-7

S/081/60/000/014/004/009
A006/A001

Translation from: Referativnyy zhurnal, Khimiya, 1960, No. 14, pp. 303-304
57489

AUTHOR: Glukhova, A.I.

TITLE: Investigation Into Changes of the Microgeometry of Stainless Steel Surfaces During Corrosion Process by the Profilogram Method

PERIODICAL: Tr. In-ta fiz. khimii, AN SSSR, 1959, No. 7, pp. 60-63

TEXT: The effect of temperature on changes in the microgeometry of 2Kh18N9 (2Kh18N9) stainless steel surfaces during corrosion process in HCl (acid) was investigated by taking profilograms. Steel specimens were subjected to quench-hardening with subsequent tempering for 2 hours at 700°C. Four profilograms were taken from different sections of each specimen surface. An analysis of profilogram elements was made for the quantitative evaluation of changes in the surface microprofile after corrosion tests; the elements were the depth, h, and the width, a, of the cavity. Distribution curves of the values depending on the time of tests at 110°C, show that the metal surface becomes increasingly rough in the course of the corrosion process, i.e. cavities with a higher value

Card 1/2

APPROVED FOR RELEASE: 09/24/2001 CIA-RDP86-00513R000515420007-7"

"APPROVED FOR RELEASE: 09/24/2001 CIA-RDP86-00513R000515420007-7

S/081/60/000/[illegible]
A006/A001

Investigation Into Changes of the Microgeometry of Stainless Steel Surface During Corrosion Process by the Profilogram Method

of 1 appear. The increased depth of cavities is an evidence of [illegible] corrosion occurs mainly at the bottom of pittings. Distribution [illegible] value 'a' show that cavities with a slightly higher 'a' value [illegible] corrosion process. Analogous calculations of the values 'l' and [illegible] damages as functions of temperature, show that the number of different [illegible] increases with higher temperatures, i.e. the non-uniformity of [illegible] creases whereas the maximum width of cavities does not increase [illegible] further raise of temperature to 110°C is accompanied by the appearance of wider cavities. Thus the analysis of the profilograms has shown that [illegible] and longer lasting tests entail an increase in the non-uniformity of [illegible] damages.

V. Pakhomov

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

Card 2/2

APPROVED FOR RELEASE: 09/24/2001 CIA-RDP86-00513R000515420007-7"

"APPROVED FOR RELEASE: 09/24/2001 CIA-RDP86-00513R000515420007-7

15.9210

S/124/60/000/006/008/012
A161/A026

AUTHORS: Glukhova, A. I., Andrianov, K. A., Kozlovskaya, L. N.

TITLE: Use of Heat-Resistant Rubber-Like FKS Material in Machines

PERIODICAL: Vestnik mashinostroyeniya, 1960, No. 6, pp. 46-49

TEXT: A new polymer, called ФКС (FKS), is produced in the USSR which has previously been described (Ref. 3). This polymer readily combines with anorganic fillers, and with 33-35% of filler it gives a material for sealings working at high temperatures. There are three grades: FKS-1, FKS-2, and FKS-3, with 55, 45 and 33% of filler, respectively. Compared with heat resistant rubber on silico-organic or other base it has higher mechanical strength, heat resistance, is less affected by kerosene or dichloroethane, and does not deteriorate without air access. Vulcanization for 24 hours in 150 and 200°C lowers its tensile strength and raises the elongation capacity; vulcanization in 250°C increases the tensile strength to 60 kg/cm^2 at a 280% elongation; vulcanization in 300°C has negative effect. Short treatment in 350°C without air access in a press mold under pressure also gives good result and even faster. The behavior

Card 1/2

APPROVED FOR RELEASE: 09/24/2001 CIA-RDP86-00513R000515420007-7"

"APPROVED FOR RELEASE: 09/24/2001 CIA-RDP86-00513R000515420007-7

S/122/60/000/006/008/012
A161/A026

Use of Heat-Resistant Rubber-Like FKS Material in Machines

after vulcanization is described and illustrated by curves (Fig. 4). The production process was developed in cooperation with the Nauchno-issledovatel'skiy institut rezinovoy promyshlennosti (Scientific Research Institute of Rubber Industry) and is now being employed by some chemical works. Three grades are being produced in bands and vulcanized to 2/10 mm plates: FKS-1, FKS-2 and ФКС-2Б (FKS-2B). The latter is not vulcanized because it does not contain any vulcanizing agent. FKS-1 is used for gaskets in long term operations at temperatures from - 70 to + 350°C, for short times (up to 5 hours) at temperatures as high as + 400°C, and as seals for operation in hydrocarbons at temperatures as high as 200°C. The design of seals is illustrated (Fig. 5). FKS-2 has good dielectric properties and may be used for electroinsulating linings, insulation for electric wires operating in 300 and 350°C over long periods and for short time (10 hours) in 400°C. FKS-2 is frequently used for sealing undetachable joints working at 400°C in 2 hour periods. Pressing technology is being developed for producing bushings reinforced with glass fabric (Fig. 7), for high temperature and high pressure work. There are 7 figures, 2 tables and 3 references: 2 English and 1 Soviet.

Card 2/2

APPROVED FOR RELEASE: 09/24/2001 CIA-RDP86-00513R000515420007-7"

"APPROVED FOR RELEASE: 09/24/2001 CIA-RDP86-00513R000515420007-7

GLUKHOVA, A.I.

Effect of temperature on the nature of the corrosive attack on stainless steel in acid solutions. Zhur. prikl. khim. 33 no.8:1853-1861 Ag '60. (MIRA 13:9)
(Steel, Stainless) (Steel--Corrosion)

APPROVED FOR RELEASE: 09/24/2001 CIA-RDP86-00513R000515420007-7"

"APPROVED FOR RELEASE: 09/24/2001 CIA-RDP86-00513R000515420007-7

GLUKHOVA, A. I., ANDRIANOV, K. A., KOZLOVSKAYA, L. N.

Using the FKS heat-resistant rubber-type material in the manufacture of machinery. Vest. mash. 40 no.6:46-49 Je '60. (MIRA 13:8)

(Rubber, Synthetic)

APPROVED FOR RELEASE: 09/24/2001 CIA-RDP86-00513R000515420007-7"

"APPROVED FOR RELEASE: 09/24/2001 CIA-RDP86-00513R000515420007-7

S/080/62/035/005/010/024
D217/D302

AUTHORS: Andreyeva, V. V. and Glukhova, A. I.

TITLE: Corrosion and electrochemical behavior of alloys of the system zirconium-titanium in hydrochloric acid solutions

PERIODICAL: Zhurnal prikladnoy khimii, v. 35, n. 5, 1962, 992-997

TEXT: The purpose of this investigation, in which the corrosion resistance and the electrochemical properties of binary alloys of the system Zr-Ti, as well as unalloyed Zr and Ti were studied in HCl solution, was to establish general relationships between the behavior of these metals and alloys and a number of factors (alloy composition, concentration and temperature of solution and electrochemical polarization) and to develop new corrosion-resistant alloys. Various concentrations of HCl solution at 20, 40 and 100°C were used in this study. It was found that whereas zirconium remains practically unattacked by HCl up to 100°C at all concentrations, the rate of corrosion of Ti increases considerably with in-

Card 1/3

APPROVED FOR RELEASE: 09/24/2001 CIA-RDP86-00513R000515420007-7"

"APPROVED FOR RELEASE: 09/24/2001 CIA-RDP86-00513R000515420007-7

crease in acid concentration and temperature. Polarization curves, obtained by the potentiostatic method, show that the anodic reactions of titanium readily dissolve in 20% HCl solution at 100°C. Passivation commences at a potential of -0.3 V (on the hydrogen scale). The anodic regions of Ti are passive. For Zr, a passive portion is observed in the anodic region at 40°C. However, at a potential of +0.3 V, the current density increases abruptly and pitting corrosion commences. On increasing the temperature to 100°C, the passive range in the anodic region decreases and at a potential of +0.2 V, the metal becomes active; the corrosion current increases and Zr is completely destroyed. The shape of the polarization curves changes with the nature of the metal and composition of the alloy. The results obtained support the assumption that the composition of the protective surface films of Zr-Ti alloys is a solid solution of mixed oxides, consisting of ZrO_2 and TiO_2. It is concluded that alloying Ti with Zr increases its corrosion resistance in HCl solutions. The higher the Zr content, the higher the stability of the alloy. There are 5 figures, 2 tables and 8 references: 5 Soviet-bloc and 3 non-Soviet-bloc. The references to the English-language

APPROVED FOR RELEASE: 09/24/2001 CIA-RDP86-00513R000515420007-7"

"APPROVED FOR RELEASE: 09/24/2001 CIA-RDP86-00513R000515420007-7

Corrosion and Electrochemical ... S/020/62/[illegible]
D217/D302

publications read as follows: W. B. Blumenthal, "The Chemical Behavior of Zirconium", N.Y., Toronto, London; M. Marghini, F. S. Adams and J. P. Van Rysselberghe, J. Electrochem. Soc., 101, [illegible], 400, (1954); J. B. Cotton and H. Bradley, Chem. Ind. May, 31 (1958).

ASSOCIATION: Institut fizicheskoy khimii AN SSSR (Institute of Physical Chemistry, AS USSR)

SUBMITTED: March 4, 1961

Card 3/3

APPROVED FOR RELEASE: 09/24/2001 CIA-RDP86-00513R000515420007-7"

"APPROVED FOR RELEASE: 09/24/2001 CIA-RDP86-00513R000515420007-7

S/080/62/035/003/011/024
D217/D302

AUTHORS: Glukhova, A. I. and Andreyeva, V. V.

TITLE: Influence of additions of oxidizing agents to hydrochloric acid solutions on the corrosion and electrochemical behavior of zirconium and on alloys of the system zirconium-titanium

PERIODICAL: Zhurnal prikladnoy khimii, v. 35, no. 3, 1962, [illegible]

TEXT: Alloys of the system Zr-Ti were prepared from the metal iodides; the hafnium content of zirconium did not exceed 0.04%. The alloys were cast into a water-cooled copper crucible in an electric arc furnace, with a tungsten electrode, and were then formed at 800°C. The alloys were prepared and their mechanical properties tested in the laboratory under the supervision of A. A. [illegible]. The investigation of the influence of additions of oxidizing agents to HCl solutions on the corrosion and electrochemical behavior of Zr has shown that the potential at which passivation is destroyed depends on the ratio between chlorine-ion content and ions of the

Card 1/3

APPROVED FOR RELEASE: 09/24/2001 CIA-RDP86-00513R000515420007-7"

"APPROVED FOR RELEASE: 09/24/2001 CIA-RDP86-00513R000515420007-7

oxidizing agent (NO_3^- or Fe^{3+}) in the solution. The higher the numerical value of this ratio, the lower will be the positive potential, at which destruction of the protective properties of the film occurs. When the concentration of ions of the oxidizing agent exceeds that of chlorine ions (by 4 - 5 times), no activation of zirconium occurs. The corrosion resistance of Zr in solutions containing chlorine ions, in which the redox potential attains a definite critical value when the formation of easily soluble complex compounds of Zr is facilitated, can be raised by alloying it with Ti. The proportion of Ti in the alloy required to maintain the passive state of the Zr-Ti alloy depends on the concentration of chlorine and oxidizing agent ions. Under experimental conditions, Zr alloys containing from 40% Ti upwards, exhibited a high corrosion resistance. There are 7 figures, 1 table and 6 references: 5 Soviet-bloc and 1 non-Soviet-bloc. The reference to the English-language publication reads as follows: M. Maraghini, J. E. Adams and J. P. Van Rysselberghe, J. Electrochem. Soc., 101, 6, 400, (1954).

APPROVED FOR RELEASE: 09/24/2001 CIA-RDP86-00513R000515420007-7"

"APPROVED FOR RELEASE: 09/24/2001 CIA-RDP86-00513R000515420007-7

Influence of additions ... S/080/62/035/003/011/024
D217/D302

ASSOCIATION: Institut fizicheskoy khimii AN SSSR (Institute of Physical Chemistry AS USSR)

SUBMITTED: March 20, 1961

Card 3/3

APPROVED FOR RELEASE: 09/24/2001 CIA-RDP86-00513R000515420007-7"

"APPROVED FOR RELEASE: 09/24/2001 CIA-RDP86-00513R000515420007-7

L 28407-66 EWT(m)/EWP(w)/EPF(n)-2/EWT(s)/ETI IJP(c) JD/JG/WB/GD

ACC NR: AT6013786 (N) SOURCE CODE: UR/0000/65/000/000/0029/0042

AUTHOR: Glukhova, A. I.; Andreyeva, V. V.; Glazunov, S. G.; Solonina, O. P.; Nikulova, V. F.

ORG: none

TITLE: Study of the corrosion resistance and electrochemical and mechanical properties of alloys of the niobium-titanium system

SOURCE: Korroziya metallov i splavov (Corrosion of metals and alloys), no. 2, Moscow, Izd-vo Metallurgiya, 1965, 29-42

TOPIC TAGS: corrosion resistance, electrochemistry, niobium base alloy, titanium containing alloy, electric potential, mechanical property, metal hydride

ABSTRACT: This is the first in a series of two articles on the same subject: it deals with alloys of the Ti-Nb system containing up to 40% wt. Ti, whereas the second article (same issue, pp 43-58) deals with the same alloys when they contain up to 50% wt. Nb. Mechanical tests of specimens of these alloys showed that the alloys containing 50 and 60% Nb have an ultimate strength of 63 and 68 kg/mm^2, respectively. For the alloy with 70% Nb this strength sharply increases to 78 kg/mm^2, but any further increase in the Nb content is no longer as effective; the increase in hardness follows a similar pattern. Tests of corrosion rate and electrochemical properties in H_2SO_4, HCl, H_3PO_4, HNO_3 and oxalic acids of various concentrations at 40 and 100°C showed that these alloys have a high corrosion resistance in strongly

Card 1/2

APPROVED FOR RELEASE: 09/24/2001 CIA-RDP86-00513R000515420007-7"

"APPROVED FOR RELEASE: 09/24/2001 CIA-RDP86-00513R000515420007-7

L 38667-66

ACC NR: AT6013786

aggressive media and that this resistance increases with increasing Nb content of the alloy, decreases with increasing Ti content and is higher at 40°C than at 100°C. The maximum corrosion of the alloys in acid media was observed for a potential of -100 mv. The corrosion resistance of the alloys is the higher the more positive (from -100 mv upward) is the potential of the metal-acid redox system. In the presence of more negative potentials a hydride layer forms and the metal gets embrittled owing to the diffusion of hydrogen through the metal. A major finding is that the maximum corrosion resistance of these alloys is entirely determined by the corrosion resistance of Nb to a given medium: for example, if the corrosion resistance of pure Nb to a given H_2SO_4 solution at the temperature T is 0.05 g/(m²-hr) then any Nb-Ti alloy, whatever the proportions between these two elements, will not have a higher corrosion resistance than that; thus, the use of Nb-Ti alloys corrosion-resistant in the corresponding media makes it possible to reduce the consumption of such a scarce and expensive metal as Nb, and besides this hardly affects the mechanical properties of the alloys. Orig. art. has: 11 figures and 3 tables.

SUB CODE: 07,11 SUBM DATE: 19Jul65/ ORIG REF: 006/ OTH REF: 002

Card 2/2 ZC

APPROVED FOR RELEASE: 09/24/2001 CIA-RDP86-00513R000515420007-7"

"APPROVED FOR RELEASE: 09/24/2001 CIA-RDP86-00513R000515420007-7

L 17366-66 EWT(m) EWP(w) I EWP(t) ETI IJP(c) JD/WW
ACC NR: AR6028111 SOURCE CODE: UR/0137/66/000/005/I083/I083

AUTHOR: Glukhova, A. I.; Andreyeva, V. V.; Glazunov, S. G.; Solonina, O. P.

TITLE: Investigation of the corrosion resistance and electrochemical and mechanical properties of alloys of the system niobium and titanium

SOURCE: Ref. zh. Metallurgiya, Abs. 5I575

REF SOURCE: Sb. Korroziya met. i splavov. No. 2. M., Metallurgiya, 1965, 29-42

TOPIC TAGS: niobium alloy, titanium niobium alloy, corrosion resistance

ABSTRACT: Niobium alloys with 2—40% titanium have high corrosion resistance in solutions of mineral acids at a temperature of 40C. An increase in titanium content decreases corrosion resistance. Maximum corrosion is observed in acid media at an energy potential of 100 mv. Formation of a hybrid layer and embrittlement of Me occurs at more negative potentials due to diffusion of H in Me. [Translation of abstract] [NT]

SUB CODE: 11/

Card 1/1 afs UDC: 669.293.5

APPROVED FOR RELEASE: 09/24/2001 CIA-RDP86-00513R000515420007-7"

"APPROVED FOR RELEASE: 09/24/2001 CIA-RDP86-00513R000515420007-7

ACC NR: AT7004167 (N) SOURCE CODE: UR/0000/66/000/000/0109/0118

AUTHOR: Glukhova, A. I.; Andreyeva, V. V.

ORG: none

TITLE: Effect of nickel on the corrosion and electrochemical behavior of titanium

SOURCE: AN SSSR. Institut fizicheskoy khimii. Korroziya i zashchita konstruktsionnykh splavov (Corrosion and protection of structural alloys) Moscow, Izd-vo Nauka, 1966, 109-118

TOPIC TAGS: corrosion, corrosion resistance, corrosion protection, titanium nickel alloy, corrosion rate, sulfuric acid

ABSTRACT: A study was made of the effect of nickel on the corrosion and electrochemical behavior of titanium. Samples of titanium and titanium alloyed with 1—50% nickel were tested in sulfuric acid solutions of various concentration for 50 to 100 hours at 40 C. The corrosion rate was calculated from the loss in weight in $g/m^2 \cdot hr$. The study showed that raising the content of nickel from 3 to 13% to titanium increases the corrosion resistance of the alloy in sulfuric

Card 1/2

APPROVED FOR RELEASE: 09/24/2001 CIA-RDP86-00513R000515420007-7"

"APPROVED FOR RELEASE: 09/24/2001 CIA-RDP86-00513R000515420007-7

ACC NR: AT7004167

acid. Titanium alloys containing up to 13% nickel were found to be highly resistant to corrosion at 40 C in solutions containing up to 20% sulfuric acid. An increase in the amount of acid decreases the alloy's resistance to corrosion. Curves showing the relationship between the acidity of the solution and the rate of corrosion indicate two maxima: one at 40% of acid content and the other at 75%. An increase in the amount of nickel in the alloy (up to 20, 30, and 50%) increases the rate of corrosion in the alloy. Apparently the corrosion resistance of Ti—Ni alloys depends greatly on the structure of the alloy. Titanium-nickel alloys subjected to anodic polarization in a sulfuric acid solution change from an active to a passive state, and an increase in the amount of acid leads to an increase in the current density to maintain the passivity. The authors express their gratitude to N. V. Ageyev, Corresponding Member AN USSR and L. A. Petrova, Senior Scientific Associate, Institute of Metallurgy, AN USSR for making available samples of alloys for the study. Orig. art. has: 5 figures and 1 table. [SP]

SUB CODE: 11/SUBM DATE: 27Sep66/ORIG REF: 005/OTH REF: 003/

Card 2/2

APPROVED FOR RELEASE: 09/24/2001 CIA-RDP86-00513R000515420007-7"

"APPROVED FOR RELEASE: 09/24/2001 CIA-RDP86-00513R000515420007-7

ACC NR: AT70041 SOURCE CODE: UR/0000/66/000/000/0178/0190

AUTHOR: Andreyeva, V. V.; Glukhova, A. I.; Dontsov, S. N.; Moiseyeva, I. S.; Mel'nikova, L. V.

ORG: none

TITLE: Corrosion resistance, electrochemical and mechanical properties, and microstructure of niobium-tantalum alloys

SOURCE: AN SSSR. Institut fizicheskoy khimii. Korroziya i zashchita konstruktsionnykh splavov (Corrosion and protection of structural alloys) Moscow, Izd-vo Nauka, 1966, 178-190

TOPIC TAGS: niobium ~~tantalum~~ base alloy, ~~niobium~~ tantalum containing alloy, mechanical property, ~~niobium~~ corrosion resistant alloy, recrystallization temperature

ABSTRACT: A series of niobium-tantalum alloys containing 0.24—30.1% of tantalum were cast into ingots and some were forged into bars (7 x 7 mm). To determine the temperature of recrystallization, some of the specimens were annealed for 2 hr at various temperatures. It was found that an increase in tantalum content increases the recrystallization temperature. In specimens containing about 1% tantalum, recrystallization started at 1100C and ended at 1200C, while in those containing 30% tantalum it started at 1200C and ended at 1300C. An increase in tantalum content also increases the strength and ductility of the alloys. For instance,

Card 1/2 UDC: none

APPROVED FOR RELEASE: 09/24/2001 CIA-RDP86-00513R000515420007-7"

"APPROVED FOR RELEASE: 09/24/2001 CIA-RDP86-00513R000515420007-7

ACC NR: AT7004170

an increase of tantalum content from 0.24% to 19.8% in forged specimens resulted in an increase in tensile strength from 607 to 764 Mn/m² and elongation from 18 to 25%. It was also found that the tensile and yield strengths of hot-forged specimens were considerably higher than those of specimens annealed at 1250C for 2 hr. This indicates that there was not sufficient time for recrystallization during forging at 800—1200C. Corrosion tests of niobium, tantalum and niobium-tantalum alloys were carried out in various solutions of sulfuric, hydrochloric and nitric acids. It was found that the corrosion rate of the alloys decreases with increased tantalum content. For instance, the corrosion rate of an alloy containing 5% tantalum in a 40% solution of sulfuric acid was 0.09 $g/m^2 \cdot hr$, while that of an alloy containing 30% tantalum was 0.01 $g/m^2 \cdot hr$. Alloys containing not less than 5% tantalum were found to be completely corrosion-resistant in a 20% solution of hydrochloric acid. This high corrosion-resistance of niobium-tantalum alloys is due to the presence of a protective film of mixed tantalum and niobium oxides, such as Ta_2O_5 and Nb_2O_5. Orig. art. has: 7 figures and 1 table. [TD]

SUB CODE: 11,20/ SUBM DATE: 27Sep66/ ORIG REF: 006/ OTH REF: 003/ ATD PRESS: 5115

Card 2/2

APPROVED FOR RELEASE: 09/24/2001 CIA-RDP86-00513R000515420007-7"

"APPROVED FOR RELEASE: 09/24/2001 CIA-RDP86-00513R000515420007-7

LYAPUSTIN, A.K.; BOZHKO, G.; KONDRAT'YEV, I.; GARBARCHUK, M.I.; MUSTAFAYEV, Z.S.; IBRAGIMOV, R.; ZINOV'YEV, B.; ALEKSEYEV, A.A.; GLUKHOVA, G.; SAZONOV, Yu.; MEDVEDEV, I.D.

In the Soviet Union. Veterinariia 39 no.11:89-96 N '62. (MIRA 16:10)

APPROVED FOR RELEASE: 09/24/2001 CIA-RDP86-00513R000515420007-7"

"APPROVED FOR RELEASE: 09/24/2001 CIA-RDP86-00513R000515420007-7

GLUKHOVA, G.S.

Tissue preparations in stockbreeding. Veterinariia 35 no. 7:82-83 Jl '58. (MIRA 11:7)

1. Direktor Kemerovskoy oblastnoy vetpolikliniki.
(Tissue extracts)

APPROVED FOR RELEASE: 09/24/2001 CIA-RDP86-00513R000515420007-7"

"APPROVED FOR RELEASE: 09/24/2001 CIA-RDP86-00513R000515420007-7

GLUKHOVA, L.A.

New technological process for manufacturing satellite boxes of the differential of the "Volga" automobile. Avt. prom. 29 no.7:31-33 Jl '63. (MIRA 16:8)

1. Gor'kovskiy avtozavod.
(Automobiles—Transmission devices)

APPROVED FOR RELEASE: 09/24/2001 CIA-RDP86-00513R000515420007-7"

"APPROVED FOR RELEASE: 09/24/2001 CIA-RDP86-00513R000515420007-7

NEMODRUK, A.A.; [illegible]NENKOVA, L.P.

Effect of inert diluents on the extraction of uranyl nitrate with tributyl phosphate. Zhur. neorg. khim. 8 no.11: 2618-2623 N '63. (MIRA 17:1)

APPROVED FOR RELEASE: 09/24/2001 CIA-RDP86-00513R000515420007-7"

"APPROVED FOR RELEASE: 09/24/2001 CIA-RDP86-00513R000515420007-7

NEMODRUK, A.A.; GLUKHOVA, L.P.

Reaction of hexavalent uranium with arsenazo III in strongly acid solutions. Zhur. anal. khim. 18 no.1:93-98 Ja '63. (MIRA 16:4)

(Uranium—Analysis) (Arsenazo)

APPROVED FOR RELEASE: 09/24/2001 CIA-RDP86-00513R000515420007-7"

"APPROVED FOR RELEASE: 09/24/2001 CIA-RDP86-00513R000515420007-7

L 60398-65 EWT(m)/EPF(n)-2/EWP(t)/EWP(b) Pu-4 IJP(c) JD/WW/JG

ACCESSION NR: AP5017004 UR/0186/65/007/003/0372/0373
543.063: 546.791.6

AUTHOR: Nemodruk, A.A.; Paley, P.N.; Glukhova, L.P.

TITLE: Determination of small amounts of U(VI) in the presence of large amounts of U(IV)

SOURCE: Radiokhimiya, v. 7, no. 3, 1965, 372-373

TOPIC TAGS: uranium determination, uranium extraction, ammonium vanadate, tributyl phosphate

ABSTRACT: On the basis of data obtained by studying the extractive separation of U(VI) from U(IV), an extraction method for determining small amounts of U(VI) in the presence of large amounts of U(IV) is described. It permits the determination of U(VI) in hydrochloric and nitric acid solutions containing 0.2-500 μg U(VI) per ml in the presence of up to 150 times this amount of U(VI), tributyl phosphate being used to extract U(VI). If it is necessary to determine U(VI) when its content is higher than 10 μg/ml, such solutions are first diluted. The procedure takes 30-35 min. Amounts of SO_4^{2-} greater than 2500 times the U(VI) content lower the results. The influence of other elements interfering with the determination of U(VI) is either negligible or completely absent.

Card 1/2

APPROVED FOR RELEASE: 09/24/2001 CIA-RDP86-00513R000515420007-7"

"APPROVED FOR RELEASE: 09/24/2001 CIA-RDP86-00513R000515420007-7

L 60398-65

ACCESSION NR: AP5017004

except in the case of rare earth metals, which do not interfere if their ratio to U(VI) does not exceed 100. For determining U(IV) in the solution being analyzed, the most suitable method is one involving the titration of U(IV) with a solution of ammonium vanadate in the presence of N-phenylanthranilic acid. Orig. art. has: 1 table.

ASSOCIATION: none

SUBMITTED: 08Aug64 ENCL: 00 SUB CODE: IC

NO REF SOV: 003 OTHER: 000

dm

Card 2/2

APPROVED FOR RELEASE: 09/24/2001 CIA-RDP86-00513R000515420007-7"

"APPROVED FOR RELEASE: 09/24/2001 CIA-RDP86-00513R000515420007-7

GLUKHOVA, N.K.

Spontaneous speech in children at the age of 2 1/2 - 3 1/2 years. Mat. po evol. fiziol. 4:30-36 '60. (MIRA 13:10)
(CHILDREN--LANGUAGE)

APPROVED FOR RELEASE: 09/24/2001 CIA-RDP86-00513R000515420007-7"

"APPROVED FOR RELEASE: 09/24/2001 CIA-RDP86-00513R000515420007-7

GLUKHOVA, N.K.

Formation of the connection between words and objects and words and action in children at the age of 1 1/2 - 3 1/2 years. Mat. po evol. fiziol. 4:37-46 '60. (MIRA 13:10)
(CHILDREN--LANGUAGE)

APPROVED FOR RELEASE: 09/24/2001 CIA-RDP86-00513R000515420007-7"

"APPROVED FOR RELEASE: 09/24/2001 CIA-RDP86-00513R000515420007-7

GLUKHOVA, N.K.

Spontaneous speech in children at the age of 3 1/2 - 7 1/2 years.
Mat. po evol. fiziol. 4:47-56 '60. (MIRA 13:10)
(CHILDREN--LANGUAGE)

APPROVED FOR RELEASE: 09/24/2001 CIA-RDP86-00513R000515420007-7"

"APPROVED FOR RELEASE: 09/24/2001 CIA-RDP86-00513R000515420007-7

L 12055-66 EWT(1)/EWT(m)/ETC(F)/EPF(n)-2/EWG(m)/EWP(t)/EWP(b) IJP(c)

ACC NR: AP6001305 SOURCE CODE: UR/0363/65/001/008/1386/1388

DS/JD/WW/JG/AT/RM

AUTHOR: Tikavyy, V. F.; Glukhova, N. P.

ORG: Belorussian State University im. V. I. Lenin (Belorusskiy gosudarstvennyy universitet)

TITLE: Ion exchange properties of zirconium phosphate in salt melts

SOURCE: AN SSSR. Izvestiya. Neorganicheskiye materialy, v. 1, no. 8, 1965, 1386-1388

TOPIC TAGS: ion exchange, zirconium compound, nitrate

ABSTRACT: Ion exchange on zirconium phosphate was studied in the molten systems $NaNO_3$-$LiNO_3$ and KNO_3-$LiNO_3$ at 370C, and in the system $CsNO_3$-KNO_3 at 400C. The equilibrium melt was analyzed with a flame photometer, and the data were used to calculate the equivalent fraction of the ion in the melt and in the ion exchanger. The experimental exchange isotherms were distinctly S-shaped (see Fig. 1), showing that in the beginning the ion exchanger preferentially absorbs the cation with the smaller radius. However, as this cation saturates the exchanger, the latter begins to adsorb preferentially the cation with the larger radius, and the concentration range in which this occurs increases in the following order: $CsNO_3$-KNO_3 > KNO_3-$LiNO_3$ > $NaNO_3$-$LiNO_3$. The selectivity toward the smaller cation at low concentrations of the latter in $CsNO_3$-KNO_3 and KNO_3-$LiNO_3$ systems is apparently due to the fact that the addition of small amounts of the salt with the smaller cation to the melt of the salt with the larger cation inhibits the migration of the latter and hence decreases its chances of entering

Card 1/2 UDC: 546.831'196:541.183.12

APPROVED FOR RELEASE: 09/24/2001 CIA-RDP86-00513R000515420007-7"

"APPROVED FOR RELEASE: 09/24/2001 CIA-RDP86-00513R000515420007-7

L 12055-66

ACC NR: AP6001305

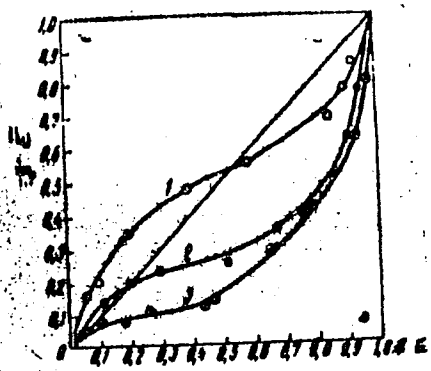

Fig. 1. Exchange isotherms in the systems: 1, $NaNO_3$-$LiNO_3$; 2, KNO_3-$LiNO_3$; 3, $CsNO_3$-KNO_3. E and $\bar{E}$, equivalent fraction of cation with smaller radius in the molten phase and in the ion exchanger respectively.

into the ion exchanger. In the $NaNO_3$-$LiNO_3$ system, the exchanger preferentially adsorbs the ion present in the lower concentration. As in aqueous solutions, zirconium phosphate has a high affinity for Cs^+ and K^+ ions in melts. Orig. art. has: 2 figures.

SUB CODE: 07, 11 / SUBM DATE: 20May65 / ORIG REF: 004 / OTH REF: 010

Card 2/2

APPROVED FOR RELEASE: 09/24/2001 CIA-RDP86-00513R000515420007-7"

"APPROVED FOR RELEASE: 09/24/2001 CIA-RDP86-00513R000515420007-7

GLUKHOVA, N.V.

Formation of ice mounds and barriers. Trudy AANII 267:150-152 '64 (MIRA 18:3)

APPROVED FOR RELEASE: 09/24/2001 CIA-RDP86-00513R000515420007-7"

"APPROVED FOR RELEASE: 09/24/2001 CIA-RDP86-00513R000515420007-7

G[illegible]UKHOVA, N. V.

[illegible]limatic characteristics of the conditions of the autumn vegetation of winter rye in Kuybyshev Province. Sbor. rab. Kuib. gidromet. obser. no.2:75-84 '65. (MIRA 18:10)

APPROVED FOR RELEASE: 09/24/2001 CIA-RDP86-00513R000515420007-7"

"APPROVED FOR RELEASE: 09/24/2001 CIA-RDP86-00513R000515420007-7

DYUDINA, Z.T.; GLUKHOVA, P.V. (Moskva)

Elimination of trachoma in the village of Tin'govatovo. Fel'd i akush. 24 no.8:33-36 Ag '59. (MIRA 12:12)
(TIN'GOVATOVO--CONJUNCTIVITIS, GRANULAR)

APPROVED FOR RELEASE: 09/24/2001 CIA-RDP86-00513R000515420007-7"

"APPROVED FOR RELEASE: 09/24/2001 CIA-RDP86-00513R000515420007-7

ACC NR: AR6033792 SOURCE CODE: UR/0058/66/000/007/E103/E103

AUTHOR: Glukhova, T. I.; Grabov, V. M.; Ivanov, G. A.; Popov, A. M.

TITLE: Electrical properties of quasi-binary alloys (Bi-Sb)-Te

SOURCE: Ref. zh. Fizika, Abs. 7E773

REF SOURCE: Uch. zap. Leningr. gos. ped. in-ta im. A. I. Gertsena, v. 265, 1965, 234-241

TOPIC TAGS: Hall effect, thermoelectromotive force, bismuth alloy, antimony alloy, tellurium alloy, temperature dependence, quasibinary alloy, binary alloy, conduction band

ABSTRACT: On the basis of investigation of the Hall effect, the specific resistance (ρ) and the thermoelectromotive force, a study is made of the structure of the conduction band in single and polycrystalline alloys (Bi-Sb)-Te, containing 3, 6, 8, 10, 15, and 20 at % of Sb, and 0.1, 0.2, and 0.3 at % of Te. It is found that the addition of T lowers ρ, while the addition of Sb raises it in comparison with the ρ of initial Bi-Sb alloys. The values of effective electron masses found (m^*) correspond to the values m^* in the initial alloys. Depending on the concentra-

Card 1/2

APPROVED FOR RELEASE: 09/24/2001 CIA-RDP86-00513R000515420007-7"

"APPROVED FOR RELEASE: 09/24/2001 CIA-RDP86-00513R000515420007-7

ACC NR: AR6033792

tion of Sb at 300K, the character of the m* changes is in accord with the data of Smith [RZhFiz., 1963, 7E617], obtained at 1.3K, which indicates a low temperature dependence of m* of the alloys investigated. [Translation of abstract] [GC]

SUB CODE: 20, 11/

Card 2/2

APPROVED FOR RELEASE: 09/24/2001 CIA-RDP86-00513R000515420007-7"

"APPROVED FOR RELEASE: 09/24/2001 CIA-RDP86-00513R000515420007-7

GLUKHOVA, P.V.

Use of lidase in trachoma with a consideration of biochemical changes in the palpebral conjunctiva (clinical-experimental study). Vest.oft. no.1:23-30 '62. (MIRA 15:11)

1. Nauchno-issledovatel'skiy institut glaznykh bolezney imeni Gel'mgol'tsa (nauchnyy rukovoditel' - kand.med.nauk A.V. Roslavtsev) i biokhimicheskaya laboratoriya (nauchnyy rukovoditel' - doktor biol.nauk B.S. Kasavina) TSentral'nogo instituta travmatologii i ortopedii.
(TRACHOMA) (HYALURONIDASE)

APPROVED FOR RELEASE: 09/24/2001 CIA-RDP86-00513R000515420007-7"

"APPROVED FOR RELEASE: 09/24/2001 CIA-RDP86-00513R000515420007-7

GLUKHOVA, V.A. [translator]; KUDRYAVTSEV, V.A. [translator]; MITBREYT, B.A. [translator]; MUDROV, B.G. [translator]; SHANTANOV, S.K. [translator]; SOKOLOV, D.S., red.; ROMANOVICH, G.P., red.; BELEVA, M.A., tekhn.red.

[Regional stratigraphy of China] Regional'naia stratigrafiia Kitaia. Pod red. i s predisl.D.S.Sokolova. Moskva, Izd-vo inostr.lit-ry, 1960. 657 p. Translated from the Chinese. (MIRA 13:6)
(China--Geology, Stratigraphic)

APPROVED FOR RELEASE: 09/24/2001 CIA-RDP86-00513R000515420007-7"

"APPROVED FOR RELEASE: 09/24/2001 CIA-RDP86-00513R000515420007-7

GLUKHOVA, V.A.[translator]; KUDRYAVTSEV, V.A.[translator]; MARKOV, M.S.[translator]; MOISEYEVA, V.M.[translator]; KELLER, B.M., red.; ROMANOVICH, G.P., red.; KHAR'KOVSKAYA, L.M., tekhn. red.

[Ancient rocks of China]Drevneishie porody Kitaia; sbornik statei. Moskva, Izd-vo inostr.lit-ry, 1962. 305 p. Translated from the Chinese and English. (MIRA 15:9)
(China--Geology)

APPROVED FOR RELEASE: 09/24/2001 CIA-RDP86-00513R000515420007-7"

"APPROVED FOR RELEASE: 09/24/2001 CIA-RDP86-00513R000515420007-7

APPROVED FOR RELEASE: 09/24/2001 CIA-RDP86-00513R000515420007-7"

"APPROVED FOR RELEASE: 09/24/2001 CIA-RDP86-00513R000515420007-7

L 16727-63 EPA(b)/EWT(1)/BDS AFFTC/ASD Pd-4

S/124/63/000/004/014/064 58

AUTHOR: Alekseyev, A. D., and Glukhova, V. I.

TITLE: Study of hydromonitoring jets with initial diameter from 51 to 102 mm

PERIODICAL: Referativnyy zhurnal, Mekhanika, no. 4, 1963, 69, abstract 4B467 (Tr. Tsentr. n.-i. gornorazved. in-ta, no. 49, 1962, 58-81.)

TEXT: Results are adduced of the experimental studies conducted by the TSNIGRI from 1958-1959, with water-monitoring jets with an initial diameter from 51 to 102 mm. In the tests, we used the GMN-250 monitor equipped with a set of nozzles having diameters of 51, 63, 76, 89 and 102 mm. The tests were conducted at water pressures at the inlet to the nozzle ranging from 20 up to 120 m of water col. and at distances from the section of the water-monitor's nozzle to the target amounting to 3, 5, 7.5, 10, 12.5, 15 and 20 meters.

The tests showed that the impact force of a jet from the hydraulic monitor increases as the diameter of the nozzle and the water pressure at the inlet to the nozzle. With increased distance from the nozzle's section to the target, the impact force of the jet increases in the sector from 0 to 5 m, remains almost unchanged for the sector for 5 to 10 m, and begins to decline at an increase in distance above 10 m, i.e. the maximum impact force of the jet occurs within the limits of its

Card 1/2

APPROVED FOR RELEASE: 09/24/2001 CIA-RDP86-00513R000515420007-7"

"APPROVED FOR RELEASE: 09/24/2001 CIA-RDP86-00513R000515420007-7

L 16727-63

S/124/63/000/004/014/064

0

Study of hydromonitoring .....

already partially perturbed part. The distance corresponding to the maximum impact force of the jet depends on the jet's diameter and on the initial water pressure.

Studies were conducted of the dependence of the diameter of the compact part of the jet upon the nozzle's diameter and the initial pressure in the jet. It was revealed that the mean specific pressure of the jet for all nozzles increases with increase in head to a certain minimum value, whereupon at subsequent increase in head, the pressure will remain constant or will start to drop. It is shown that even a slight deterioration in machining the inside nozzle surface substantially lowers (up to 30-35%) the quality of the jet, lowering its effectiveness. Yu. Lashkov.

[Abstracter's note: Complete translation.]

Card 2/2

APPROVED FOR RELEASE: 09/24/2001 CIA-RDP86-00513R000515420007-7"

"APPROVED FOR RELEASE: 09/24/2001 CIA-RDP86-00513R000515420007-7

F-1

USSR / Microbiology. General Microbiology

Abs Jour Ref Zhur - Biol., No 1, 1958, No 551

Author Glukhova, V.L., Lebedeva, A.A.

Inst : Not Given

Title : Casein Hydrolysate Nutrient Medium for Gonococcus Cultivation

Orig Pub : Tr. Tomskogo n.-i. in-ta vaktsin i syvorotok, 1956, 8, 291-293

Abstract : The medium was tested in production of gonococcus vaccine instead of the formerly used Bailey agar with addition of ascitic fluid. A tryptic casein hydrolysate (hydrolysis for 3-6 days) with a content of 400-600 mg% amino nitrogen was diluted with an infusion of rabbit meat or the heart muscle of large horned cattle to an amino nitrogen content no less than 250 mg% and 1% glycerine, 1% peptone, 0.5% food sugar and 1.5% agar added. pH of the medium 7.4-7.5. Gonococci were grown for 25 hours. The yield of the microbial mass per liter of tested medium averaged 1.6 l of gonovaccine; from 1 liter of control ascite-agar -- 0.9 liter. The cost of

Card 1/2

APPROVED FOR RELEASE: 09/24/2001 CIA-RDP86-00513R000515420007-7"

"APPROVED FOR RELEASE: 09/24/2001 CIA-RDP86-00513R000515420007-7

USSR / Microbiology. General Microbiology F-1

Abs Jour Ref Zhur - Biol., No 1, 1958, No 551

the vaccine thus obtained was about 4.8 that of vaccine from the ascite medium. The morphological, biological and biochemical characteristics of gonococci were unchanged.

Card 2/2

APPROVED FOR RELEASE: 09/24/2001 CIA-RDP86-00513R000515420007-7"

"APPROVED FOR RELEASE: 09/24/2001 CIA-RDP86-00513R000515420007-7

GLUKHOVA, V.M.

New species of the genus Gyrodactylus Nordm. (Monogenea) from White Sea flounders. Trudy Zool. inst. 18:36-38 '55.(MLRA 9:2) (White Sea--Trematoda) (Parasites- Flounders)

APPROVED FOR RELEASE: 09/24/2001 CIA-RDP86-00513R000515420007-7"

"APPROVED FOR RELEASE: 09/24/2001 CIA-RDP86-00513R000515420007-7

GLUKHOVA, V. M.

GLUKHOVA, V. M. "The Fauna and Ecology of the 'Kokretsy' of the Karelo-Finnish SSR." Zoological Inst, Acad Sci USSR. Academic Council. Leningrad, 1956. (Dissertation for the Degree of Candidate in Biological Science)

So: Knizhnaya Letopis', No. 19, 1956.

APPROVED FOR RELEASE: 09/24/2001 CIA-RDP86-00513R000515420007-7"

"APPROVED FOR RELEASE: 09/24/2001 CIA-RDP86-00513R000515420007-7

USSR / Human and Animal Morphology, Normal and Pathological. S
Pathological Anatomy.

Abs Jour : Ref Zhur - Biol., No 8, 1956, No 36043

Author : Glukhova, V. M.
Inst : Not Given
Title : Talc Granulomas and the Possibility of the Utilization of Talc in Surgery.

Orig Pub : Novy khirurg. arkhiv, 1956, No. 5, 49-52.

Abstract : Talc was injected into the abdominal cavity and internal organs of dogs, with subsequent anato-histological investigations within a month. The formation of a great number of adhesions was observed in the abdominal cavity; the development of oval, densely elastic formations with indistinct border lines, dependent upon the quantity of talc (10-30 mg), was noted in the omentum, subcutaneous and perinephric cellular tissues. Macroscopically, they

Card 1/2

36

APPROVED FOR RELEASE: 09/24/2001 CIA-RDP86-00513R000515420007-7"

"APPROVED FOR RELEASE: 09/24/2001 CIA-RDP86-00513R000515420007-7

GLUKHOVA, V.M.

Biting midges of the genus Culicoides Latr.(Diptera, Heleidae) in Karelia [with summary in English]. Ent.obozr.36 no.1:248-251 '57. (MLRA 10:4)

1.Zoologicheskiy institut Akademii nauk SSSR, Leningrad.
(Karelia--Diptera)

APPROVED FOR RELEASE: 09/24/2001 CIA-RDP86-00513R000515420007-7"

"APPROVED FOR RELEASE: 09/24/2001 CIA-RDP86-00513R000515420007-7

GLUKHOVA, V.M.

Gonotrophic cycle in midges of the genus Culicoides (Diptera, Heleidae) in the Karelian A.S.S.R. [with summary in English]. Paraz. sbor. 18:239-254 '58. (MIRA 12:3)

1.Zoologicheskiy institut AN SSSR i Institut biologii Karel'skogo filiala AN SSSR.
(Karelia--Diptera)

APPROVED FOR RELEASE: 09/24/2001 CIA-RDP86-00513R000515420007-7"

"APPROVED FOR RELEASE: 09/24/2001 CIA-RDP86-00513R000515420007-7

GLUKHOVA, V. M.

Ways of attacking observed in in midges of the genus Culicoides Latr. (Diptera, Heleidae) [with summary in English]. Ent. obozr. 37 no. 2:330-335 '58. (MIRA 11:7)

1. Zoologicheskiy institut Akademii nauk SSSR, Leningrad.
(Diptera)

APPROVED FOR RELEASE: 09/24/2001 CIA-RDP86-00513R000515420007-7"

"APPROVED FOR RELEASE: 09/24/2001 CIA-RDP86-00513R000515420007-7

GLUKHOVA, V.M.

"Fauna of Azerbaijan. Diptera. Black flies (family Simuliidae)" by Sh.M.Dzhafarov. Reviewed by V.M.Glukhova. Ent.obozr. 40 no.3 719-720 '61. (MIRA 15:3)

(Azerbaijan--Black flies) (Dzhafarov, Sh.M.)

APPROVED FOR RELEASE: 09/24/2001 CIA-RDP86-00513R000515420007-7"

"APPROVED FOR RELEASE: 09/24/2001 CIA-RDP86-00513R000515420007-7

GLUKHOVA, V.M.

Biting midges (Diptera, Heleidae) of Karelia. Trudy Zool.inst. 31:197-249 '62. (MIRA 16:1)
(Karelia--Heleidae)

APPROVED FOR RELEASE: 09/24/2001 CIA-RDP86-00513R000515420007-7"

"APPROVED FOR RELEASE: 09/24/2001 CIA-RDP86-00513R000515420007-7

[illegible], V.M.; BEKZINA, L.N. [deceased]

Biting midges (Diptera, Ceratopogonidae) in the floodplain of the middle course of the Kacha River, Krasnoyarsk Territory. Ent. obozr. 42 no.[illegible] [illegible]. (MIRA 17:8)

1. Zoologicheskiy institut AN SSSR, Leningrad.

APPROVED FOR RELEASE: 09/24/2001 CIA-RDP86-00513R000515420007-7"

"APPROVED FOR RELEASE: 09/24/2001 CIA-RDP86-00513R000515420007-7

APPROVED FOR RELEASE: 09/24/2001 CIA-RDP86-00513R000515420007-7"

"APPROVED FOR RELEASE: 09/24/2001 CIA-RDP86-00513R000515420007-7

GLUKHOVA, V. K. Cand Med Sci -- (Diss) "The Effect of Brucellosis on the Menstrual and Generative Functions of the Female Organism." Stalingrad, 1956. 14 pp 20 cm. (Stalingrad State Medical Inst), 150 copies (KL, 18-57, 98)

APPROVED FOR RELEASE: 09/24/2001 CIA-RDP86-00513R000515420007-7"

"APPROVED FOR RELEASE: 09/24/2001 CIA-RDP86-00513R000515420007-7

GLUKHOVA, V.N.

An unusual case of gigantic hydrocephalus. Sov.med. [illegible] no.2:126 F '58. (MIRA 11:4)

1. Iz akushersko-ginekologicheskoy kliniki (zav. - prof. Ya.G. Bukhanov) Stalingradskogo meditsinskogo instituta.
(HYDROCEPHALUS, case reports
gigantic, unusual case (Rus))

APPROVED FOR RELEASE: 09/24/2001 CIA-RDP86-00513R000515420007-7"

"APPROVED FOR RELEASE: 09/24/2001 CIA-RDP86-00513R000515420007-7

KUZNETSOV, V.V.; GINEKOVA, Yu.V.

Extraction-photometric determination of monosulfonic acids of naphthalene in process sulfo masses. Zav. lab. 31 no.11: 1324-1325 '65. (MIRA 19:1)

1. Dorogomilovskiy khimicheskiy zavod imeni Frunze.

APPROVED FOR RELEASE: 09/24/2001 CIA-RDP86-00513R000515420007-7"

"APPROVED FOR RELEASE: 09/24/2001 CIA-RDP86-00513R000515420007-7

L-57757-65 EWP(z)/EWA(c)/EWT(m)/EWP(b)/T/EWA(d)/EWP(t) IJP(c) MJW/JD/JG

ACCESSION NR: AR5012752 UR/0276/65/000/003/0003/0003
669.715

SOURCE: Ref. zh. Tekhnologiya mashinostroyeniya. Svodnyy tom, Abs. 3026

AUTHOR: Glukhoverov, V. M.

TITLE: The influence of rare earth metals on the crystalline lattice parameters of casting aluminum alloy ALIOV

CITED SOURCE: Tr. Novosibirsk. s.-kh. in-ta, v. 24, no. 2, 1963, 33-35

TOPIC TAGS: aluminum, casting, alloy, crystalline lattice, rare earth metal, mischmetal, precipitation hardening/ ALIOV aluminum alloy

TRANSLATION: The crystalline lattice parameters of an alloy change as the percent content of the rare earth metals is increased. The diminution of the crystalline lattice parameter of an alloy within a given temperature interval causes a decrease in the coefficient of the linear expansion, and this improves the technical and economic indexes of the motor work. An addition of 0.02-0.2% of mischmetal to the alloy bears no influence on the precipitation hardening, while an addition of 0.2-0.95% of mischmetal is helpful in the course of precipitation hardening.

Card 1/2

APPROVED FOR RELEASE: 09/24/2001 CIA-RDP86-00513R000515420007-7"

"APPROVED FOR RELEASE: 09/24/2001 CIA-RDP86-00513R000515420007-7

L-57757-65

ACCESSION NR: AR5012752

SUB CODE: MM ENCL: 00

Card 2/2

APPROVED FOR RELEASE: 09/24/2001 CIA-RDP86-00513R000515420007-7"

"APPROVED FOR RELEASE: 09/24/2001 CIA-RDP86-00513R000515420007-7

L 57756-65 EWT(m)/EWA(d)/EPR/EWP(t)/EWP(z)/EWP(b) Pg-4 IJP(c) MJW/JD/JG

ACCESSION NR: AR5012753 UR/0276/65/000/003/G009/G009
669.715

SOURCE: Ref. zh. Tekhnologiya mashinostroyeniya. Svodnyy tom. Abs. 3G91

AUTHOR: Glukhoverov, V. M.

TITLE: The influence of rare earth metals on the specific electric resistivity of alloy AL10V

CITED SOURCE: Tr. Novosibirsk. s.-kh. in-ta, v. 24, no. 2, 1963, 51-53

TOPIC TAGS: rare earth element, resistivity, mischmetal, piston, thermal expansion/AL10V alloy

TRANSLATION: The specific resistivity of an alloy changes upon the addition of rare earth elements. It is proper to use alloy AL10V with a 0.2% addition of mischmetal as a piston material because its electric resistivity is lowered by 1% and its

APPROVED FOR RELEASE: 09/24/2001 CIA-RDP86-00513R000515420007-7"

"APPROVED FOR RELEASE: 09/24/2001 CIA-RDP86-00513R000515420007-7

lowered by 10-20% as compared with the alloy without the admixture.

SUB CODE: IE ENCL: 00

Aluminum Alloy 21

Card 1/1

GLUKHOVEROV, V.M.

Effect of additions of rare-earth metals on the wear resistance of pistons made of the AL10V alloy. Trakt. i sel khozmash. no.8:44-45 Ag '65. (MIRA 18:10)

1. Novosibirskiy sel'skokhozyaystvennyy institut.

APPROVED FOR RELEASE: 09/24/2001 CIA-RDP86-00513R000515420007-7"

"APPROVED FOR RELEASE: 09/24/2001 CIA-RDP86-00513R000515420007-7

ZARSKIY, I.A., inzh.; GLUKHOVETS, G.N., inzh.

Bridge cranes for servicing construction yards. Energ.stroi. no.4:51-55 '59. (MIRA 13:8)

1. Proyektnoye byuro tresta "Donbassenergostroy".
(Cranes, derricks, etc.)

APPROVED FOR RELEASE: 09/24/2001 CIA-RDP86-00513R000515420007-7"

"APPROVED FOR RELEASE: 09/24/2001 CIA-RDP86-00513R000515420007-7

S/032/60/026/05/18/063
B010/B005

AUTHORS: Ginzburg, V. L., Glukhovetskaya, N. P.

TITLE: Determination of Silicon and Other Impurities in Selenium

PERIODICAL: Zavodskaya laboratoriya 1960, Vol. 26, No. 5, pp. [illegible]

TEXT: N. N. Danilova and L. A. Lerner collaborated in the experimental part of the present investigation. A spectrum analysis for determining impurities in selenium was worked out. The calibration samples used were produced by fusing together Si and Se; less Si was used than corresponds to the stoichiometric ratio in the compound $SiSe_2$. Thus, it was possible to obtain a chemically stable mixture of $SiSe_2$ and Se. By increasing the addition of Se, a series of calibration samples was produced up to a Si content of $2 \cdot 10^{-4}$%. Silicon was determined according to the following spectral lines: Si 2516.12A (from $1 \cdot 10^{-4}$ to $3 \cdot 10^{-3}$% of Si), Si 2881.58A (from $2 \cdot 10^{-4}$ to $2 \cdot 10^{-2}$% of Si), Si 2514.33A (from $1 \cdot 10^{-3}$ to $5 \cdot 10^{-2}$% of Si), Si 2435.16A (from $1 \cdot 10^{-2}$ to $3 \cdot 10^{-1}$% of Si). The calibration samples for determining the other impurities in selenium were also prepared by fusing together the initial alloy with pure selenium. The initial alloy was

Card 1/2

APPROVED FOR RELEASE: 09/24/2001 CIA-RDP86-00513R000515420007-7"

"APPROVED FOR RELEASE: 09/24/2001 CIA-RDP86-00513R000515420007-7

Determination of Silicon and Other Impurities in Selenium

S/032/60/026/03/18/063
B011/B005

produced at the institut "Gintsvetmet" ("Gintsvetmet" Institute) and contained 1% each of Cu, Pb, Mg, Al, Ag, As, Fe, Sb, Ni, Bi, Te, as well as the selenides of Cd, Hg, Sn, Cu, Ni, and/or their melts with selenium. The samples, as well as the calibration samples, were granulated and fused into the crater of the carbon electrode (Fig. 2). There are 3 figures and 4 non-Soviet references.

ASSOCIATION: Institut obshchey i neorganicheskoy khimii im. N. S. Kurnakova Akademii nauk SSSR (Institute of General and Inorganic Chemistry imeni N. S. Kurnakov of the Academy of Sciences, USSR)

Card 2/2

APPROVED FOR RELEASE: 09/24/2001 CIA-RDP86-00513R000515420007-7"

"APPROVED FOR RELEASE: 09/24/2001 CIA-RDP86-00513R000515420007-7

S/051/62/012/003/003/016
E032/E314

AUTHORS: Ginzburg, V.L. and Glukhovetskaya, N.P.

TITLE: Dependence of the intensity of spectral lines on the effective ionization potential of an arc

PERIODICAL: Optika i spektroskopiya, v. 12, no. 3, 1962, 344 - 349

TEXT: The authors report an experimental study of the dependence of the intensity of the spectral lines of various elements on the amount of alkali metals introduced into an arc discharge. The existence of this dependence was discovered in 1937 by S.A. Borovik and T.F. Borovik-Romanova (Ref. 1 - DAN SSSR, 20, 555, 1937) and D. Webb (Ref. 2 - Nature, 139, 248, 1937). The theoretical explanation was supplied by S.L. Mandel'shtam (Ref. 3 - DAN SSSR, 18, 559, 1938; Ref. 4 - Zavodsk. Laboratoriya, 6, 597, 1940; Ref. 5 - Vvedeniye v spektral'nyy analiz (Introduction to Spectral Analyses)) and others. However, it is stated that a complete quantitative study of this phenomenon has not so far

Card 1/3

APPROVED FOR RELEASE: 09/24/2001 CIA-RDP86-00513R000515420007-7"

"APPROVED FOR RELEASE: 09/24/2001 CIA-RDP86-00513R000515420007-7

S/051/62/012/005/005/016
E032/E314

Dependence of ....

been available. In the present work, the alkali elements were introduced into a carbon dust in small amounts (10^{-4} - 10^{-2}) and the mixture was inserted into a recess in the lower electrode. The alkali elements were usually in the form of oxides or chlorides. In each case the effective ionization potential was computed using a formula reported by O.P. Semenov (Izv. AN SSSR, Ser. Fiz., 9, 715, 1945 - Ref. 9) and A.A. Rusanov (Spectral analysis of ores and minerals - Gosgeolizdat, 1946 - Ref. 10). Plots are reproduced giving the intensity of various lines as a function of the effective ionization potential of a carbon arc. It is found that both for spectral lines of neutral and singly-ionized atoms the intensity plotted as a function of temperature exhibits a well-defined maximum which occurs at a temperature lower than that of the carbon arc, whose ionization potential is of the order of 11.3 eV. The position of the maxima and the general form of the curves are very similar to the curves computed theoretically by Mandel'shtam (Ref. 3). It is concluded that

Card 2/3

APPROVED FOR RELEASE: 09/24/2001 CIA-RDP86-00513R000515420007-7"

"APPROVED FOR RELEASE: 09/24/2001 CIA-RDP86-00513R000515420007-7

Dependence of ....

S/051/62/012/003/003/016
E032/E314

the point of view adopted by Semenov (Ref. 8 - Izv. vyssh. uchebn. zaved. MVO, fizika, no. 2, 103, 1959) is erroneous. The present experimental results also show that lines with close excitation potentials belonging to elements with different ionization potentials have different intensity-versus-temperature curves, i.e. they are not homologous. For example, Pb and Zn lines (2833 and 3073 A) are found to exhibit this behaviour. It is pointed out that two lines are homologous if both the excitation and ionization potentials are the same. Acknowledgments are expressed to V.G. Koritskiy, S.M. Rayskiy and V.A. Fabrikant for advice and interest. Acknowledgments are also expressed to N.N. Danilova and L.A. Lerner, who took part in the experiments. There are 6 figures and 1 table.

SUBMITTED: February 27, 1961

Card 3/3

APPROVED FOR RELEASE: 09/24/2001 CIA-RDP86-00513R000515420007-7"

"APPROVED FOR RELEASE: 09/24/2001 CIA-RDP86-00513R000515420007-7

S/051/62/013/006/026/027
E039/E120

AUTHORS: Ginzburg, V.L., and Glukhovetskaya, N.P.

TITLE: Notes on the article by O.P. Semenova and M.A. Levchenko. ("Dependence of the effective ionisation potential on the concentration of easily ionised impurities in the arc discharge")

PERIODICAL: Optika i spektroskopiya, v.13, no.6, 1962, 881-882

TEXT: In previous work on the intensity of the spectral lines of many elements present in arcs of elements with low v_i, the calculation of $v_{i\,eff}$ of the arc plasma is made on the assumption that the degree of ionisation of easily ionised elements is far from 1. Observations show that this is more correct than the proposals of O.P. Semenova and M.A. Levchenko (Opt. i spektr., v.13, 1962, 610). Comparison of the spectrum of a high purity carbon arc with that from an arc containing 0.003-0.005% metal impurity shows that in the former the spark lines C II 2837.602 and C II 2836.71 are clearly seen while in the latter these lines are absent. This shows that the arc temperature is lowered by the presence of the impurities. The substitution of Na, Ca or Li

card 1/2

APPROVED FOR RELEASE: 09/24/2001 CIA-RDP86-00513R000515420007-7"

"APPROVED FOR RELEASE: 09/24/2001 CIA-RDP86-00513R000515420007-7

Notes on the article by ... S/051/62/013/006/026/027
E039/E120

results in equal changes in intensity of the spectral lines of the elements if the quantities of these elements correspond with their v_i and atomic weights. This dependence of the intensity of spectral lines on the content of Na (Ca etc) shows that there is no threshold and is in agreement with the theoretical work of S.L. Mandel'shtam (DAN SSSR, v.18, 1938, 559). Quantitative calculations on arc processes are only approximate and the arc temperatures are taken to be average values. Our estimate of the range of values for $v_{i\ eff}$ at 7 - 9 eV for the majority of spectral lines of the elements is confirmed not only by the theoretical work of Mandel'shtam but also by direct observation. For example in the determination of impurities in selenium $v_{i\ eff}$ is practically equal to v_i selenium, i.e. 9.75 eV. When Na is added to the upper electrode there is an increase in intensity of spectral lines of a series of elements. The intensity passes through a maximum and decreases again at large concentrations of Na. This increase in sensitivity enables many impurities in selenium to be determined. Similar results are reported by other authors.

SUBMITTED: July 3, 1962

Card 2/2 [Abstractor's note: Abridged translation

APPROVED FOR RELEASE: 09/24/2001 CIA-RDP86-00513R000515420007-7"

"APPROVED FOR RELEASE: 09/24/2001 CIA-RDP86-00513R000515420007-7

S/075/62/017/009/005/006
E071/E436

AUTHORS: Ginzburg, V.L., Glukhovetskaya, N.P., Danilova, N.N.

TITLE: A spectrochemical method for the determination of impurities in selenium

PERIODICAL: Zhurnal analiticheskoy khimii, v.17, no.9, 1962, 1096-1100

TEXT: A method of determination of small amounts of impurities by their preliminary concentration and subsequent spectral analysis is proposed. The concentration is carried out by distilling a sample of selenium placed on a powdered carbon support at 315°C in a stream of nitrogen oxides. Selenium distils off in the form of SeO_2 while impurities remain in the carbon powder which is then submitted to spectral analysis on carbon electrodes. To increase the sensitivity of the determination of impurities in carbon powder, sodium chloride (0.6%) or potassium chloride (0.3%) are added to the concentrates. The degree of recovery of various elements in the concentrates was tested. According to the degree of recovery the elements were divided into three groups: 1) 70 to 80%, Au, Mg, Sn, Sb, Bi, Te, Al, Cu, Ag; 2) 40 to 50% Cd, As, Fe, Pb, Ti, Mn;

Card 1/2

APPROVED FOR RELEASE: 09/24/2001 CIA-RDP86-00513R000515420007-7"

"APPROVED FOR RELEASE: 09/24/2001 CIA-RDP86-00513R000515420007-7

A spectrochemical method ... S/075/62/017/009/005/006
E071/E436

3) 20% Cr and Ni. For the elements of the 3rd group, the method cannot be used. There are 4 figures and 1 table.

ASSOCIATION: Institut obshchey i neorganicheskoy khimii im. N.S.Kurnakova AN SSSR Moskva (Institute of General and Inorganic Chemistry imeni N.S.Kurnakov AS USSR, Moscow)

SUBMITTED: November 20, 1961

Card 2/2

APPROVED FOR RELEASE: 09/24/2001 CIA-RDP86-00513R000515420007-7"

"APPROVED FOR RELEASE: 09/24/2001 CIA-RDP86-00513R000515420007-7

S/032/62/028/006/012/025
B101/B138

AUTHORS: Ginzburg, V. L., Glukhovetskaya, N. P., and Lerner, L. A.

TITLE: Increasing the sensitivity of the spectral determination of impurities in selenium

PERIODICAL: Zavodskaya laboratoriya, v. 28, no. 6, 1962, 682 - 684

TEXT: By adding NaCl (ionization potential V_i = 5.1 ev), the $V_{i\ eff}$ of the arc plasma may be controlled in such a way that the sensitivity of the impurity determination is increased considerably. Calibration curves ΔS against log C were plotted for selenium samples with impurity standards in the presence of carbon powder containing various NaCl additions in the counterelectrode. The dependence of the intensity of the spectral lines on $V_{i\ eff}$ was determined. $V_{i\ eff}$ = 7 - 8 ev, achieved by carbon powder with 1% Na (= 2.5% NaCl), was the optimum. The sensitivity increase results from the ratio $\Delta C = C_{without\ NaCl}/C_{NaCl}$. For the elements investigated, the following ΔC values were found: Te 0.46; Hg 0.20; As 0.50; Cd 0.30; Mg 5.0; Ni 2.2; Al 5.5; Au 5.0; Pb 4.0; Bi 2.5; Cu 5.0; Ti 50;

Card 1/2

APPROVED FOR RELEASE: 09/24/2001 CIA-RDP86-00513R000515420007-7"

"APPROVED FOR RELEASE: 09/24/2001 CIA-RDP86-00513R000515420007-7

S/032/62/028/006/012/025
B101/B138

Increasing the sensitivity...

Sb 1.0. The brightness of the Cd, Hg, Te, and As lines is not increased when reducing the selenium arc temperature because of the high ionization potential of these elements ($V_i \geqslant 8.6$ ev). There are 2 figures and 1 table.

ASSOCIATION: Institut obshchey i neorganicheskoy khimii im. N. S. Kurnakova Akademii nauk SSSR (Institute of General and Inorganic Chemistry imeni N. S. Kurnakov of the Academy of Sciences USSR)

Card 2/2

APPROVED FOR RELEASE: 09/24/2001 CIA-RDP86-00513R000515420007-7"

"APPROVED FOR RELEASE: 09/24/2001 CIA-RDP86-00513R000515420007-7

GINZBURG, V.L.; GLUKHOVETSKAYA, N.F.; LERNER, L.A.

Fluorination of samples in spectral analysis. Zav. Lab. 29 no.6:684-685 '63. (MIRA 16:6)

1. Institut obshchey i neorganicheskoy khimii imeni N.S. Kurnakova AN SSSR.
(Spectrum analysis) (Fluorination)

APPROVED FOR RELEASE: 09/24/2001 CIA-RDP86-00513R000515420007-7"

"APPROVED FOR RELEASE: 09/24/2001 CIA-RDP86-00513R000515420007-7

L 11366-65 EWG(j)/EWP(e)/EWT(m)/EPF(c)/EPF(n)-2/EPR/EWP(t)/EWP(b) Pz-6/Ps-4/
Pu-4 AWFL/SSD MJW/JD/WW/JG/AT/WH

ACCESSION NR: AP4044896 S/0032/64/030/009/1082/1084

AUTHOR: Glukhovetskaya, N. P.; Larner, L. A.

TITLE: Spectrochemical determination of impurities in boron

SOURCE: Zavodskaya laboratoriya, v. 30, no. 9, 1964, 1082-1084

TOPIC TAGS: boron, high purity boron, amorphous boron, crystalline boron, boron spectrochemical analysis, impurity determination

ABSTRACT: A spectrochemical method for analyzing high-purity amorphous or crystalline boron is described. The method comprises two consecutive steps. In the first, chemical, step, impurities are concentrated by simultaneously oxidizing boron and distilling off boron oxide formed in a water vapor stream at 500C for the amorphous or 600—650C for the crystalline form. The apparatus for oxidizing and removing boron is described. Graphite boats were found to be the most suitable for carrying out this operation. Other boat materials tested were quartz, boron nitride, BNC alloy, corundum, and copper. Oxygen alternating with water vapor may also be used for oxidation of amorphous boron. The residual concentrate of impurities is collected in

Card 1/2

APPROVED FOR RELEASE: 09/24/2001 CIA-RDP86-00513R000515420007-7"