"APPROVED FOR RELEASE: 06/05/2000 CIA-RDP86-00513R000102310002-2

S/133/60/000/011/004/023
A054/A029

Computers Used in Controlling the Thermal Conditions of Open-Hearth Furnaces

mental stage, represents an important step forward towards complete automation of the open-hearth furnace which will in time also include the automatic control of the whole workshop. The heat conditions are controlled automatically by impulses, received by the computer from the furnace, while the required changes in the thermal load of the furnace and in the main parameters for each heat condition are carried out manually, taking into account the changes in η and ΔQ or with the aid of statistical data. When extending the computer control system to the operation of the whole workshop, in addition to the momentary values of η and ΔQ the dynamics of their changes have also to be examined and for this purpose data on the fuel consumption of the furnace during idling and other stages, on heat losses, the amount and the velocity of CO liberation of the bath, etc. have to be comiled. The KETI computer was tested on a 430-ton furnace fueled with natural and foundry-coke gas. The calorimetric value of the gas mixture attained 4,500 cal/nm^3. In the experiments 3кп (kp) type steel was melted. The computer received information from ferrodynamic transmitters on the consumption of fuel, air and oxygen and from thermocouples controlling the fume temperature. Upon examining the influence of the

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S/133/60/000/011/004/023
A054/A029

Computers Used in Controlling the Thermal Conditions of Open-Hearth Furnaces

parameters η, ΔQ, the thermal load and the feed of oxygen into the torch, it was found that with the aid of the KETI computer it was possible to establish the optimum intervals of reversals, which could be decreased 2-3 times per casting. In this way the idling time of the furnace during periods of heat exchange, the fuel losses through the chimney and the wear of the reversing mechanisms could be decreased. As a result of the application of the computer control system, the experimental melting time was reduced by 55 minutes and the fuel consumption for one melting could be decreased by 3%, i.e., 10.3 million calories. The C-content of the experimental melt was 0.62% as compared to 0.72% of the conventional melts. The KETI type computer can be used in any automatic system of heat regulation for open-hearth furnaces equipped with ferrodynamic transmitters. There are 4 figures, 1 table and 2 Soviet references.

Card 3/3

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"APPROVED FOR RELEASE: 06/05/2000 CIA-RDP86-00513R000102310002-2

ARTYNSKIY, V. M.

Cand Tech Sci - (diss) "Study of the heat performance of open-hearth furnaces by means of a computer." Kiev, 1961. 13 pp; (Ministry of Higher Education Ukrainian SSR, Kiev Order of Lenin Polytechnic Inst); 120 copies; price not given; (KL, 5-61 sup, 187)

APPROVED FOR RELEASE: 06/05/2000 CIA-RDP86-00513R000102310002-2"

"APPROVED FOR RELEASE: 06/05/2000 CIA-RDP86-00513R000102310002-2

L 47364-66 EWT(e)/EWT(m)/T/EWP(t)/ETI IJP(c) JD/WW/JG/WH

ACC NR: AR6028451 SOURCE CODE: UR/0137/66/000/005/G039/G039

AUTHOR: Zatulovskiy, L. M.; Artyshevskiy, P. P.; Chaykin, P. M.

TITLE: The possibility of using induction annealing at sonic frequencies in equipment for producing semiconductor materials by the method of drawing from molten metal

SOURCE: Ref. zh. Metallurgiya, Abs. 5G294

REF SOURCE: Elektrotermiya. Nauchno-tekhn. sb. vyp. 46, 1965, 15-17

TOPIC TAGS: annealing, induction annealing, metal drawing

ABSTRACT: Calculations showed the advantages of induction annealing, particularly at sonic frequencies, when drawing single crystals by the Chokhral'skiy's method over resistance annealing. Induction annealing makes it possible to bring about effective equalization of the melt temperature owing to electrodynamic stirring. By selecting the current frequency, the profile, and the wall thickness of the crucible, it is possible to use the power output by the height and cross-

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L 47364-66

ACC NR: AR6028431

section of the crucible. By the same means, it is also possible to regulate the circulation of the metal in the crucible. Corresponding magnitudes were determined for the current density and power per unit length of the crucible and the melt as a function of the wall thickness of the graphite crucible during annealing at a frequency of 8000 cps. The problem was solved for two variants for constant magnetic field intensity on the surface of the crucible and for a constant power per unit length of both the crucible and the melt. [Translation of abstract] [FM]

SUB CODE: 11, 14/

Card 2/2 mt

APPROVED FOR RELEASE: 06/05/2000 CIA-RDP86-00513R000102310002-2"

"APPROVED FOR RELEASE: 06/05/2000 CIA-RDP86-00513R000102310002-2

ARTYSZEWICZ, B.

Artyszewicz, B. Fabrykacja wiokien sztucznych sposobem wiskozowym. Pod red. Anastazego Borynca. Warszawa, Panstwowe Wydawn. Techniczne, 1952. 392 p. (Production of artifical fibers by the viscose method. Illus.)

SO: Monthly list of East European Accessions, LC, Vol. 3, No. 1, Jan. 1954, Uncl.

APPROVED FOR RELEASE: 06/05/2000 CIA-RDP86-00513R000102310002-2"

"APPROVED FOR RELEASE: 06/05/2000 CIA-RDP86-00513R000102310002-2

ARTYUSIN, I.; FOFLIN, M.

Electric stand for studying traffic regulations. Avt. transp. 36 no. 6:42 Je '58. (MIRA 11:7)
(Traffic regulations--Study and teaching)

APPROVED FOR RELEASE: 06/05/2000 CIA-RDP86-00513R000102310002-2"

"APPROVED FOR RELEASE: 06/05/2000 CIA-RDP86-00513R000102310002-2

ARTYUGIN, I.M.; GRACHEV, Yu.P.; DAVYDOV, L.N.; DOYNIKOV, Ya.P.; KIRPICHEV, V.I.; LEVENTAL', G.B.; MELENT'YEV, L.A.; MICHURIN, K.I.; NIKONOV, A.P.; SASHONKO, G.I.; STARIKOV, V.G.; FROLOV, V.I.; KHRILEV, L.S.; RABINOVICH, A.L., red.; SOBOLEVA, Ye.M., tekhn. red.

[Technical and economic principles of the expansion of heat supply engineering in power systems] Tekhniko-ekonomicheskie osnovy razvitiia teplofikatsii v energosistemakh. Moskva, Gos. energ. izd-vo, 1961. 318 p. (MIRA 15:3)
(Heat engineering) (Electric power plants)

APPROVED FOR RELEASE: 06/05/2000 CIA-RDP86-00513R000102310002-2"

"APPROVED FOR RELEASE: 06/05/2000 CIA-RDP86-00513R000102310002-2

ARTYUGINA, I.M.

Name: ARTYUGINA, I. M.

Dissertation: The parameters and possible fields of application of closed-cycle gas turbine heating installations

Degree: Cand Tech Sci

Defended at

Affiliation: Acad Sci USSR, Power Inst imeni Academician G. M. Krzhizhanovskiy

Publication

Date, Place: 1956, Leningrad

Source: Knizhnaya Letopis', No 47, 1956

APPROVED FOR RELEASE: 06/05/2000 CIA-RDP86-00513R000102310002-2"

"APPROVED FOR RELEASE: 06/05/2000 CIA-RDP86-00513R000102310002-2

ARTYUGINA, I. M.

BOD. PARAMETERS AND POSSIBLE FIELDS OF APPLICATION OF CLOSED CIRCUIT GAS TURBINE PLANTS OF THE DISTRICT HEATING TYPE. Artyugina, I.M. (Teploenergetika (Heat Pwr Engng, Moscow), Aug. 1957, 28-33). The increase in the size and steam conditions of modern large steam power stations is hampering the development of district heating for small and medium size towns. A scheme is worked out for using a closed circuit gas turbine power station with heat exchangers to heat the water [illegible] district heating circuit. (L.)

APPROVED FOR RELEASE: 06/05/2000 CIA-RDP86-00513R000102310002-2"

"APPROVED FOR RELEASE: 06/05/2000 CIA-RDP86-00513R000102310002-2

ARTYUGINA, I.M.

Technical and economic fuel indices of peak load stations in consolidated electric power systems. Sbor.rab.po vop.elektromekh.no.8: 42-48 '63. (MIRA 16:5)

(Interconnected electric utility systems)
(Electric power plants)

APPROVED FOR RELEASE: 06/05/2000 CIA-RDP86-00513R000102310002-2"

"APPROVED FOR RELEASE: 06/05/2000 CIA-RDP86-00513R000102310002-2

ARTYUGINA, I.M.; KOZYREVA, L.D.

Effect of the mode of operation of a condensing electric power plant on its engineering and economic indices. Sbor. rab. po vop. elektromekh. no.10:40-48 '63. (MIRA 17:8)

APPROVED FOR RELEASE: 06/05/2000 CIA-RDP86-00513R000102310002-2"

"APPROVED FOR RELEASE: 06/05/2000 CIA-RDP86-00513R000102310002-2

ARTYUGINA, Z. D.

Cand Agr Sci - (diss) "Effect of conditions of growing on the variability of morphological and economic-worth indications for sweet peppers (Capsicum annuum L.)." Leningrad-Pushkin, 1961. 20 pp; (Ministry of Agriculture RSFSR, Leningrad Agr Inst); 200 copies; price not given; (KL, 7-61 sup, 250)

APPROVED FOR RELEASE: 06/05/2000 CIA-RDP86-00513R000102310002-2"

"APPROVED FOR RELEASE: 06/05/2000 CIA-RDP86-00513R000102310002-2

ARTYUGINA, Z.D., mladshiy nauchnyy sotrudnik

Effect of growing conditions on the change of certain features in red pepper. Trudy po prikl. bot., gen. i sel. 32 no.3:159-168 '59. (MIRA 14:5)

(Pepper)

APPROVED FOR RELEASE: 06/05/2000 CIA-RDP86-00513R000102310002-2"

"APPROVED FOR RELEASE: 06/05/2000 CIA-RDP86-00513R000102310002-2

ARTYUKH, I. V.

"25 Years of the Ukrainian Institute of Experimental Veterinary Medicine"

SO: Veterinariya, Vol 24, No 10, pp 46-48, Moskva, Oct 1947. uncl

APPROVED FOR RELEASE: 06/05/2000 CIA-RDP86-00513R000102310002-2"

"APPROVED FOR RELEASE: 06/05/2000 CIA-RDP86-00513R000102310002-2

KONTOROVSKAYA, T.M.; BEL'SKAYA, M.K.; ARTYUKH, L.G.; GRETSERSHTEYN, I.M.
SHUNEVICH, M.V.

Synanthropic flies and their control in a rural populated center in Kharkov Province. Med.paraz. i paraz.bol. 27 no.6:731-732 N-D '58. (MIRA 12:2)

1. Iz Ukrainskogo nauchno-issledovatel'skogo instituta malyarii i meditsinskoy parazitologii imeni prof. V.Ya. Rubashkina.
(KHARKOV PROVINCE--FLIES)

APPROVED FOR RELEASE: 06/05/2000 CIA-RDP86-00513R000102310002-2"

"APPROVED FOR RELEASE: 06/05/2000 CIA-RDP86-00513R000102310002-2

ABRAMOVA, L.I., kand.tekhn.nauk; BENIN, V.L., kand.tekhn.nauk; ARTYUKH, S.F., inzh.; LITOVSKIY, Yu.A., inzh.; POTAPOVSKIY, I.Ya., inzh.; RIVLIN, M.I., inzh.

Electrohydraulic regulator for a hydraulic turbine. Energomashinostroenie 8 no.10:18-22 O '62. (MIRA 15:11)
(Hydraulic turbines)

APPROVED FOR RELEASE: 06/05/2000 CIA-RDP86-00513R000102310002-2"

"APPROVED FOR RELEASE: 06/05/2000 CIA-RDP86-00513R000102310002-2

38470

S/124/62/000/006/016/023
D234/D308

10.1200

AUTHORS: Artyukh, L. Yu. and Kashkarov, V. P.

TITLE: Propagation of a laminar jet of compressible gas along the surface of a cone

PERIODICAL: Referativnyy zhurnal, Mekhanika, no. 6, 1962, 78, abstract 6B513 (Tr. Kazakhsk. un-ta, 1960, no. 2,41-54)

TEXT: The system of equations describing the propagation of a laminar jet of compressible gas coming out of a small attachment along the surface of a cone, is simplified on the basis of well-known assumptions of the boundary layer theory and is transformed to Dorodnitsyn's variables. The dynamical and the thermal problem in the new variables are separated owing to the assumption about linear dependence of the viscosity coefficient on temperature. The thermal problem is solved for three forms of boundary conditions for temperature: a) The surface of the body is maintained at a temperature equal to that of the medium distant from the body, b) there is no heat exchange at the surface of the body, c) con-

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stant temperature is maintained at the surface of the body. The solution obtained is analyzed and compared with the corresponding solution for the case of an incompressible liquid. In particular, strong influence of excess heat content on the velocity and temperature profiles is indicated; with an increase of excess heat content of the jet the velocity maximum moves away from the surface of the cone and the jet becomes broader. 9 references. [Abstracter's note: Complete translation.]

APPROVED FOR RELEASE: 06/05/2000 CIA-RDP86-00513R000102310002-2"

"APPROVED FOR RELEASE: 06/05/2000 CIA-RDP86-00513R000102310002-2

ARTYUKH, L.; VULIS, L.A.; USTIMENKO, B.P.

Hydrodynamic theory of heat transfer applied to liquids with small Prandtl numbers. Izv.AN Kazakh. SSR Ser.energ. no.2:76-89 '60. (MIRA 13:7)
(Hydrodynamics) (Heat--Transmission)

APPROVED FOR RELEASE: 06/05/2000 CIA-RDP86-00513R000102310002-2"

"APPROVED FOR RELEASE: 06/05/2000 CIA-RDP86-00513R000102310002-2

ARTYUKH, L.Yu.; BULIS, L.; KASHKAROV, V.P.; YARIN, L.P.; ATENKOV, S., tekhn. red.

[Thermal boundary layer problems in the case of heterogenous and diffusion combustion; Conference on Heat and Mass Transfer, Minsk, January 23-27, 1961] Teplovye zadachi pogranichnogo sloia pri geterogennom i diffuzionnom gorenii; soveshchanie po teplo-i massoobmenu, g. Minsk, 23-27 ianvaria 1961 g. Minsk, 1961. 18 p. (MIRA 15:2)

(Boundary layer) (Combustion) (Thermodynamics)

APPROVED FOR RELEASE: 06/05/2000 CIA-RDP86-00513R000102310002-2"

"APPROVED FOR RELEASE: 06/05/2000 CIA-RDP86-00513R000102310002-2

ARTYUKH, L. YU., VULIS, L. A., KOSHKAREV, B. P., and YARIN, L. P.

"Thermal Problems of a Boundary Layer at Heterogenous and Diffusive Combustions."

Report submitted for the Conference on Heat and Mass Transfer, Minsk, BSSR, June 1961.

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"APPROVED FOR RELEASE: 06/05/2000 CIA-RDP86-00513R000102310002-2

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S/170/61/004/003/003/013
B117/B209

AUTHORS: Artyukh, L. Yu., Vulis, L. A., Kashkarov, V. P.

TITLE: Flow of gas around a plate with burning surface

PERIODICAL: Inzhenerno-fizicheskiy zhurnal, v. 4, no. 3, 1961, 39-45

TEXT: The authors investigated the flow of a homogeneous compressed gas around a burning plate. The variation in velocity, temperature, and concentration profiles along the plate was considered in the approximation obtained. The studies were devoted mainly to laminar flow in the boundary layer along the plate. In order to find the "quasi-progressing" profiles u, T, and c, solutions of transcendental equations of the heat theory of combustion are used, which are reduced to the boundary conditions on the surface of reaction. For this purpose, the boundary conditions of the surface of the plate are transformed into the form usually employed in problems of the thermal conditions of combustion. The transcendental equation (8) from Ref. 6 (Vulis, L. A. Teplovoy rezhim goreniya, GEI, M. -L., 1954) $\Phi = \tau/[\tau + \exp(1/\theta_w) = (1/\lambda)[\theta_w - \chi\theta_{\infty} + \beta\tau(\theta_w - \theta_{o\,\infty})]$ was graphically solved

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in a $\Phi - \theta_w$ plane. Figs. 1 and 2 illustrate typical results of these solutions. The schematic representation of the graphically determined results (Fig. 1) gives a clear picture of the dependence of the surface temperature on the velocity of the incoming flow, when the parameters of heat exchange β and of the length x are given and various values of heat generation $\vartheta_4 > \vartheta_3 > \vartheta_2 > \vartheta_1 = 0$ are assumed (B - point of ignition, Π-point of extinction, A and T - adiabatic and heat exchange, respectively). When the values of heat generation are given for two velocities of the incoming flow, the temperature variation along the burning plate shows (Fig. 2) that ignition of the plate takes place, if any at a certain distance from the front edge of the plate. The values of temperature θ_w and of concentration c_w determined by a graphical solution of Eq. (8) according to the coordinate x, make it possible to construct the profiles of u, T, and c in the cross sections of the flow if all the other parameters are given. Fig. 3 shows the profiles for two cross sections (before and after ignition) as an example of such a construction. It was further shown that the state before ignition belongs to a kinetic combustion according to the nature of the process, and after ignition to the diffusion zone. This result is typical of a hysteretic

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Flow of gas around ...

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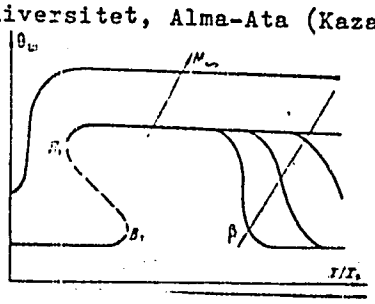
B117/B209

process of an exothermic heterogeneous reaction if combustion takes place only in the vicinity of the diffusion zone. The authors point out that, in principle the obtained solution may be generalized to the case of a burning plate with a turbulent boundary layer. More details about this case will be published in a special paper. From the practical standpoint, the present problem has to be treated as one of the limiting schemes of ignition and burning of bodies which move at high speed through the atmosphere. Mention is made of Dorodnitsyn, Ya. B. Zel'dovich. There are 3 figures and 7 references: 6 Soviet-bloc.

ASSOCIATION: Kazakhskiy gosudarstvennyy universitet, Alma-Ata (Kazakh State University, Alma-Ata)

SUBMITTED: June 21, 1960



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Flow of gas around ...

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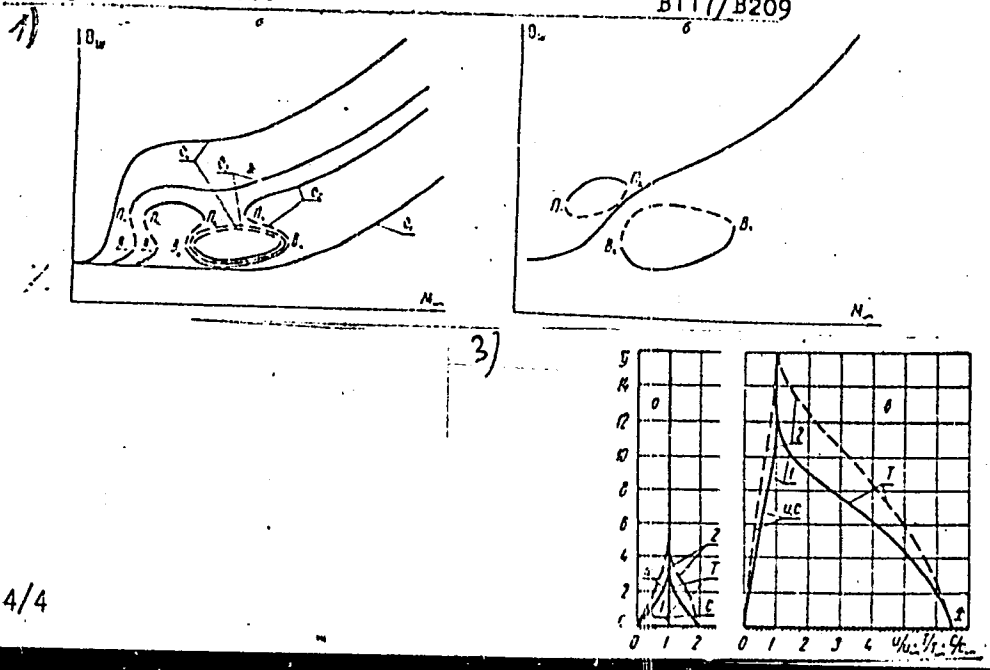

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APPROVED FOR RELEASE: 06/05/2000 CIA-RDP86-00513R000102310002-2"

"APPROVED FOR RELEASE: 06/05/2000 CIA-RDP86-00513R000102310002-2

ARTYUKH, M.

Study of the pharmacological activity of some derivatives of lactic acid hydrazide. Izv. AN Latv. SSR no.5:91-94 '63. (MIRA 17:1)

1. Institut organicheskogo sinteza AN Latviyskoy SSR.

APPROVED FOR RELEASE: 06/05/2000 CIA-RDP86-00513R000102310002-2"

"APPROVED FOR RELEASE: 06/05/2000 CIA-RDP86-00513R000102310002-2

ARTYUKH, M.

Effect of lactic acid hydrazides on the central nervous system.
Izv. AN Latv.SSR no.9:111-114 '63. (MIRA 25:12)

1. Institut organicheskogo sinteza AN Latviyskoy SSR.

APPROVED FOR RELEASE: 06/05/2000 CIA-RDP86-00513R000102310002-2"

"APPROVED FOR RELEASE: 06/05/2000 CIA-RDP86-00513R000102310002-2

ACCESSION NR: AP4024552 S/0197/64/000/001/0059/0062

AUTHORS: Artyukh, M.; Fateyev, T.; Zhiv, V.; Shirin, Yu.

TITLE: The effect of monoamineoxidase inhibitors on the convulsive performance of bemegride

SOURCE: AN LatSSR. Izvestiya, no. 1, 1964, 59-62

TOPIC TAGS: analeptic drugs, bemegride, convulsion, monoamine oxidase, monoamine oxidase inhibitor, hydrazide, benzylhydrazide of lactic acid, yprazide, transamine, adrenergic processes, reserpine, pyrogallol, aminazine

ABSTRACT: The present investigation was undertaken to study the relationship between the role of the analeptic drug bemegride in causing convulsions, and the effect of certain monoamineoxidase inhibitors, such as benzylhydrazide of lactic acid, isopropylhydrazide, yprazide, transamine, imypramine, reserpine, and pyrogallol. The tests were conducted using the technique x^2, as described by M. L. Belen'kiy (Elementy* kolichestvennoy otsenki farmakologicheskogo effekta. Riga, 1959), with the participation of the staff of the department of pharmacology of the Riga Medical Institute. In the first series of experiments, conducted on 600 white mice, isopropylhydrazide, benzylhydrazide yprazide, and transamine were injected

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intraperitoneally in respective doses of 100, 25, 100, and 10 mg/kg, following which 20 mg/kg of bemegride were introduced intraperitoneally after 3, 12, 24, or 48 hours. It was observed, that in the 3-hour interval injection all inhibitors facilitated the onset of clonic convulsions. In the 24-hour interval injection only the benzylhydrazide of lactic acid exhibited an enhancing effect on the onset of convulsions, with 16 mice out of 20 being afflicted, as against 8 for the controls. In the second series of experiments, the bemegride was introduced intraperitoneally to mice within one hour following the intraperitoneal administration of 50 mg/kg imypramine or 10 mg/kg aminazine, or within 2 hours after the administration of 50 mg/kg of either ypramine or pyrogallol, or following 3 hours after the administration of either 2.5 mg/kg reserpine or of 200 mg/kg pyrogallol. It was found that reserpine, as well as pyrogallol, facilitated the onset of clonic convulsions by bemegride. In the third series of experiments, 30 mg/kg Bemegride were introduced intraperitoneally to mice after a 3-hour interval following the administration in the same manner of benzylhydrazide of lactic acid, of yprazide, or of transamine. While transamine proved practically ineffective, the administration of benzylhydrazide of lactic acid and of yprazide resulted in a marked increase in the number of mice afflicted with tonic convulsions, with most cases being fatal. It is concluded that the facilitating effect on the onset of tonic convulsions

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ACCESSION NR: AP4024552

seems to be restricted to the monoamineoxidase inhibitors which contain the hydrazine group. Orig. art. has: 2 tables.

ASSOCIATION: Institut organicheskogo sinteza AN Latv. SSR (Institute of Organic Synthesis AN Latvian SSR)

SUBMITTED: 05Jul63 DATE ACQ: 23Mar64 ENCL: 00

SUB CODE: MA NO REF SOV: 001 OTHER: 007

Card 3/3

APPROVED FOR RELEASE: 06/05/2000 CIA-RDP86-00513R000102310002-2"

"APPROVED FOR RELEASE: 06/05/2000 CIA-RDP86-00513R000102310002-2

ARTYUKH, M.; FATEYEV, V.; ZHIV, V.; SHIRIN, Yu.

Influence of monoamine oxidase inhibitors on the convulsive effect of bemegride. Izv.AN Latv.SSR no.1:59-62 '64. (MIRA 17:4)

1. Institut organicheskogo sinteza AN Latviyskoy SSR.

APPROVED FOR RELEASE: 06/05/2000 CIA-RDP86-00513R000102310002-2"

"APPROVED FOR RELEASE: 06/05/2000 CIA-RDP86-00513R000102310002-2

ARTYUKH, N.I.; PATSYRA, O.S.

Experience of leading workers in drugstores. Farmatsev.zhur. 19 no.1:89-91 '64. (MIRA 18:5)

1. Apteka No.63 g. Baryshevki, Kiyevskoy oblasti.

APPROVED FOR RELEASE: 06/05/2000 CIA-RDP86-00513R000102310002-2"

"APPROVED FOR RELEASE: 06/05/2000 CIA-RDP86-00513R000102310002-2

SAKHNO, V.Ye.; ARTYUKH, S.Ye.

Device for the suction of oil vapors. Sbor.rats.predl.vnedr.v proizv. no.1:8 '61. (MIRA 14:7)

1. Trest "Leninruda", rudoupravleniye "Bol'shevik".
(Lubrication and lubricants--Safety measures)

APPROVED FOR RELEASE: 06/05/2000 CIA-RDP86-00513R000102310002-2"

"APPROVED FOR RELEASE: 06/05/2000 CIA-RDP86-00513R000102310002-2

Improvement in the Air-Supply and Pneumatic-Equipment Control Systems, V. N. Artyukh. (Stal', 1956, (12), 1118-1121). [In Russian]. A critical survey is made of systems at present used at Soviet metallurgical works for supplying and using compressed air and the modernization of equipment which has led to a reduction of electricity consumption for com[illegible]

Zhdanovskiy Truboprokatnyy Zavod

APPROVED FOR RELEASE: 06/05/2000 CIA-RDP86-00513R000102310002-2"

"APPROVED FOR RELEASE: 06/05/2000 CIA-RDP86-00513R000102310002-2

ARTYUKH, V.S., inzh.

Redesigning of pilgrim mills. Stal' 25 no.8:734-737 Ag '65. (MIRA 18:8)

1. Zavod im. Il'icha.

APPROVED FOR RELEASE: 06/05/2000 CIA-RDP86-00513R000102310002-2"

"APPROVED FOR RELEASE: 06/05/2000 CIA-RDP86-00513R000102310002-2

SOV/137-59-1-1778

Translation from: Referativnyy zhurnal. Metallurgiya, 1959, Nr 1, p 234 (USSR)

AUTHOR: Artyukh, V. S.

TITLE: A Comparative Evaluation of Feeding Mechanisms Equipped With Pneumatic or Hydraulic Braking Systems (Sravnitel'naya otsenka podayushchikh apparatov s vozdushnym i gidravlicheskim tormozheniyem)

PERIODICAL: V sb.: Prokatn. i trubn. proiz-vo. Moscow, Metallurgizdat, 1958, pp 338-351

ABSTRACT: A presentation of a comparative evaluation of feed mechanisms equipped with pneumatic or hydraulic braking (B) systems. The principal advantage of the new machines lies in their hydraulic B system which permits the fullest utilization of the forces of B and acceleration in order to increase the number of revolutions and the productivity of the mills. The efficiency of the motive power in machines with hydraulic B constitutes 65%, as compared with 27% in machines equipped with pneumatic B. Whereas in pneumatic B the air cushion is only 20% efficient, the efficiency of B in the case of the hydraulic systems constitutes 70%. It was established that

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SOV/137-59-1-1778

A Comparative Evaluation of Feeding Mechanisms Equipped With (cont.)

the following factors are of essential importance: a) Strict synchronization between the feeding machines and the mill combined with an intentional lag in the feed of the hollow blank; b) provisions for the greatest possible B travel. The hydraulic B system possesses good stability and is independent of fluctuations in air pressure, a factor of particular importance in the process of priming. A basic step in modernization of Pilger mills, the adoption of feeding mechanisms with a hydraulic B system, will require a revision of existing groove designs and will necessitate increasing the productivity of soaking pits and replacing the mill-drive motors with more powerful types capable of greater speeds.

B. Ts.

Card 2/2

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"APPROVED FOR RELEASE: 06/05/2000 CIA-RDP86-00513R000102310002-2

ARTYUKH, V.S., inzh.

Protecting rolling mills from overloading. Met. i gornorud. prom. no.3:29-36 My-Je '62. (MIRA 15:9)

1. Zavod imeni Il'icha.
(Rolling mills--Safety appliances)

APPROVED FOR RELEASE: 06/05/2000 CIA-RDP86-00513R000102310002-2"

"APPROVED FOR RELEASE: 06/05/2000 CIA-RDP86-00513R000102310002-2

ARTYUKH, V.S., inzh.

Adopting and modernizing feed mechanisms with hydraulic brakes. Stal' 23 no. 3:247-252 Mr '64. (MIRA 17:5)

1. Zhdanovskiy metallurgicheskiy zavod im. Il'icha.

APPROVED FOR RELEASE: 06/05/2000 CIA-RDP86-00513R000102310002-2"

"APPROVED FOR RELEASE: 06/05/2000 CIA-RDP86-00513R000102310002-2

ARTYUKH, V.S., inzh.; KUZNETSOV, V.P., inzh.

Stabilizing rotation of pilger mills. Stal' 25 no.4:346-348 Ap '65. (MIRA 18:11)

1. Zavod imeni Il'icha i Zhdanovskiy metallurgicheskiy institut.

APPROVED FOR RELEASE: 06/05/2000 CIA-RDP86-00513R000102310002-2"

"APPROVED FOR RELEASE: 06/05/2000 CIA-RDP86-00513R000102310002-2

ARTYUKH, V.S.; VITKEVICH, V.V.; VLASOV, V.I.; KAFAROV, G.A.; MATVEYENKO, L.I.

Distribution of the radio brightness of the Crab nebula on the meter wavelengths derived from observations of lunar occultations on August 4, 1964. Astron. zhur. 43 no. 1:13-19 Ja-F '66 (MIRA 19:2)

1. Fizicheskiy institut imeni P.N. Lebedeva AN SSSR. Submitted April 17, 1965.

APPROVED FOR RELEASE: 06/05/2000 CIA-RDP86-00513R000102310002-2"

"APPROVED FOR RELEASE: 06/05/2000 CIA-RDP86-00513R000102310002-2

L 21481-66 EWT(1)/FBD GW/WS-2

ACC NR: AP6006769 SOURCE CODE: UR/0033/66/043/001/0013/0019

AUTHORS: Artyukh, V. S.; Vitkevich, V. V.; Vlasov, V. I.; Kafarov, G. A.; Matveyenko, L. I.

ORG: Physics Institute im. P. N. Lebedev, Academy of Sciences SSSR (Fizicheskiy in-t Akademii nauk SSSR)

TITLE: On the radio brightness distribution of the Crab Nebula in the meter wavelength region from observations of the lunar occultation of 4 August 1964

SOURCE: Astronomicheskiy zhurnal, v. 43, no. 1, 1966, 13-19

TOPIC TAGS: radio astronomy, radio emission, cosmic radio source, nebula

ABSTRACT: Results are presented of observations of the Crab Nebula during the lunar occultation of 4 August 1964 at wavelengths of 1.4, 5.0, and 7.5 m. The occultation was close to central, and the first phase occurred near culmination. The interference method was used for observation to eliminate background effects. The antenna types used, their distribution, and other details of the radio interferometers are discussed. Since the antennas were fixed, only the first two contacts of the occultation were observed. The observed interference signals

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L 21481-66

ACC NR: AP6006769

2

are shown, and the methods of interpretation and the occultation curves are presented. The derived brightness distribution curves of the Crab Nebula in the direction of the lunar motion (close to the direction of right ascension) are given. The right ascension of the centroid of the radio emission at 7.5 m with respect to the double star is 0"±10", while that at 1.4 and 5.0 m is shifted toward the western boundary of the nebula by 15"±7". Several bright regions were detected and their intensities, spectral indices, and dimensions are given. These results were obtained by comparing the present observations with those of the lunar occultation of 16 April 1964 at 1.4 m in which the lunar motion was directed approximately along the minor axis of the nebula. The authors thank R. D. Dagkesamanskiy for help in the observations and I. M. Dagkesamanskaya for calculating the topocentric coordinates of the Moon, the spatial frequency spectrum, and its variation during occultation. Orig. art. has: 2 formulas, 2 tables, and 6 figures. [04]

SUB CODE: 03/ SUBM DATE: 17Apr65/ ORIG REF: 004/ OTH REF: 007/ ATD PRESS: 4218

Card 2/2 PB

APPROVED FOR RELEASE: 06/05/2000 CIA-RDP86-00513R000102310002-2"

"APPROVED FOR RELEASE: 06/05/2000 CIA-RDP86-00513R000102310002-2

ARTYUKH, YE.I.

1. ARTYUKH, YE. I.: KARYANOVA, EN.I:

2. USSR (600)

4. Epilepsy

7. Treatment of epilepsy. Zhur. nevr. i psikh. 52, no. 11, 1952

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

APPROVED FOR RELEASE: 06/05/2000 CIA-RDP86-00513R000102310002-2"

"APPROVED FOR RELEASE: 06/05/2000 CIA-RDP86-00513R000102310002-2

ARTYUKH, Ye. I.

ARTYUKH, Ye. I: "Disorders to perception in schizophrenia and their pathophysiological significance". L'vov, 1955. Leningrad State Order of Lenin Inst for Advanced Training of Physicians imeni S. M. Kirov, L'vov City Psychoneurological Dispensary. (Dissertations for the Degree of Candidate of Medical Sciences)

SO: Knizhnaya letopis', No. 52, 24 December, 1955. Moscow.

APPROVED FOR RELEASE: 06/05/2000 CIA-RDP86-00513R000102310002-2"

"APPROVED FOR RELEASE: 06/05/2000 CIA-RDP86-00513R000102310002-2

ARTYUKH, Ye. I.

Narusheniya Vospriyatiya pri shizofrenii i ikh patofiziologicheskoye ponimaniye. p. 107

Psikhiatricheskaya klinika i problemy patologii vysshey nervnoy deyatel'nosti. Sbornik trudov Kafedry psikhiatrii., Leningrad. 1957. vol. 2.
resp. ed. I. F. SLUCHEVSKIY.

Chair of Psychiatry.
Leningrad State Inst. Advanced Training of Physicians.

APPROVED FOR RELEASE: 06/05/2000 CIA-RDP86-00513R000102310002-2"

"APPROVED FOR RELEASE: 06/05/2000 CIA-RDP86-00513R000102310002-2

DYMARSKIY, L.A., kand.vet.nauk; ARTYUKH, Ye.I., starshiy laborant

Ascorbic acid cycle in corn at different stages of development.
Veterinariia 35 no.8:77-78 Ag '58. (MIRA 11:9)

1. Khar'kovskiy veterinarnyy institut.
(Ascorbic acid) (Corn (Maize))

APPROVED FOR RELEASE: 06/05/2000 CIA-RDP86-00513R000102310002-2"

"APPROVED FOR RELEASE: 06/05/2000 CIA-RDP86-00513R000102310002-2

ARTYUKH, Ye. S. (Artyukhov)

Artyukh, Ye. S. (Artyukhov) "On new forms of trichocephalosis in ruminants", Sbornik rabot po gel'mintologii (Vsesoyuz. in-t gel'mintologii im. akad. Skryabina). Moscow, 1948, p. 44-50, -Bibliog: 7 items.

SO: U-3042, 11 March 53, (Letopis'nykh Statey, No. 10, 1949).

APPROVED FOR RELEASE: 06/05/2000 CIA-RDP86-00513R000102310002-2"

"APPROVED FOR RELEASE: 06/05/2000 CIA-RDP86-00513R000102310002-2

ARTYUKH, Ye. S.

Artyukh, Ye. S. - "On the fauna of the trichocephalus ruminants of the Moscow Zoo," Trudy Mosk. Zooparka, Vol. IV, 1949, p. 273-77, - Bibliog: 5 items

SO: U-4355, 14 August 53, (Letopis 'Zhurnal 'nykh Statey, No..15, 1949.)

APPROVED FOR RELEASE: 06/05/2000 CIA-RDP86-00513R000102310002-2"

"APPROVED FOR RELEASE: 06/05/2000 CIA-RDP86-00513R000102310002-2

USSR / Zooparasitology. Parasitic Worms. G-2

Abs Jour : Ref Zhur - Biol., No. 8, 1958, No 33949

Author : Artyukh, Ye. S., Gorkovi, B. L., Ignatov, I. D.
Inst : ~~Not given~~
Title : Data on Helminthofauna of the Krasnodar Region. -- Materialy po gelmintofaune Krasnodarskogo kraya.

Orig Pub : Tr. Kubansk. s.-kh. in-ta, 1957, No. 3 (31), 227-229.

Abstract : In 1952-1953, in sheep of the Krasnodar region (based on complete helminthological dissection of 6 and a partial dissection of 52 bodies, and helminthocoprological investigation of 1422 sheep), 26 species of helminths were identified. Most numerous is the nematode group (widely disseminated are Dictyocaulus filaria, Haemonchus contortus). Cestodes frequently encountered are Moniezia expansa, larvae Echinococcus granulosus and Taenia hydatigena. In chickens (50 samples were dissected) a high extensive and intensive invasion by 5 species is noted.

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"APPROVED FOR RELEASE: 06/05/2000 CIA-RDP86-00513R000102310002-2

ARTYUKH, Ye.S., kand.biol.nauk

Fresh-water medusa in the old Kuban' bed. Priroda 49 no.11: 110-111 N '60. (MIRA 13:11)

1. Kubanskiy sel'skokhozyaystvennyy institut, Krasnodar.
(Kuban' Valley--Medusae)

APPROVED FOR RELEASE: 06/05/2000 CIA-RDP86-00513R000102310002-2"

"APPROVED FOR RELEASE: 06/05/2000 CIA-RDP86-00513R000102310002-2

ARTYUKH, Yu.N.; NIKOLENKO, A.F.

New design of a piston for a glass circulating pump. Kin. i kat. 1 no. 4:620-621 N-D '60. (MIRA 13:12)

1. Institut fizicheskoy khimii imeni L.V. Pisarzhevskogo AN USSR.

(Chemical apparatus)

APPROVED FOR RELEASE: 06/05/2000 CIA-RDP86-00513R000102310002-2"

"APPROVED FOR RELEASE: 06/05/2000 CIA-RDP86-00513R000102310002-2

ARTYUKH, Yu.N.; RUSOV, M.T.; STREL'TSOV, O.A.

Kinetics of reduction of ammonia catalysts of various chemical compostion. Ukr.khim.zhur. 28 no.7:825-828 '62. (MIRA 15:10)

1. Institut fizicheskoy khimii im.L.V.Pisarzhevskogo AN UkrSSR.
(Ammonia) (Catalysts) (Reduction, Chemical)

APPROVED FOR RELEASE: 06/05/2000 CIA-RDP86-00513R000102310002-2"

"APPROVED FOR RELEASE: 06/05/2000 CIA-RDP86-00513R000102310002-2

ARTYUKH, Yu.N.; RUSOV, M.T.; STREL'TSOV, O.A.

Heats of activation of the reaction of ammonia decomposition on catalysts of various chemical nature. Part 1: Iron-based catalysts. Kin.i kat. 4 no.1:134-138 Ja-F '63. (MIRA 16:3)

1. Institut fizicheskoy khimii imeni L.V.Pisarzhevskogo AN UkrSSR.
(Heat of decomposition) (Ammonia) (Iron catalysts)

APPROVED FOR RELEASE: 06/05/2000 CIA-RDP86-00513R000102310002-2"

"APPROVED FOR RELEASE: 06/05/2000 CIA-RDP86-00513R000102310002-2

ARTYUKH, Yu.N.; RUSOV, M.T.; STREL'TSOV, O.A.

Heats of activation of ammonia decomposition reaction on catalysts of different chemical nature. Part 2: Cobalt, nickel, copper, and zirconium based catalysts. Kin.i kat. 4 no.2:299-302 Mr-Ap '63. (MIRA 16:5)

1. Institut fizicheskoy khimii imeni L.V.Pisarzhevskogo AN UkrSSR.

(Catalysts) (Ammonia) (Heat of decomposition)

APPROVED FOR RELEASE: 06/05/2000 CIA-RDP86-00513R000102310002-2"

"APPROVED FOR RELEASE: 06/05/2000 CIA-RDP86-00513R000102310002-2

ARTYUKHA, V.S.; YAROSHENKO, I.M.; ISAYENKO, I.I.; BYKOVA, I.G.; KOVTUNA, M.V.; SHTYREVA, Ya.G.

Measures for reducing the amount of compressed air used in the factory. Prom. energ. 11 no.10:24-25 O '56. (MLRA 9:11)
(Compressed air)

APPROVED FOR RELEASE: 06/05/2000 CIA-RDP86-00513R000102310002-2"

"APPROVED FOR RELEASE: 06/05/2000 CIA-RDP86-00513R000102310002-2

SOV/103-19-10-7/12

AUTHORS: Artyukhin, A. Ya., Khanin, V. Z. (Moscow)

TITLE: One-Cycle Magnetic Shift Register (Odnotaktnyy magnitnyy registr sdviga)

PERIODICAL: Avtomatika i telemekhanika, 1958, Vol 19, Nr 10, pp 977-987 (USSR)

ABSTRACT: This is an analysis of the most simple type of scheme of a one-cycle register. On the strength of this analysis this register can be calculated with an accuracy sufficient for practical purposes. The method of calculation presented can also be generalized to a readout about two or more cores. It is shown that a one-cycle register is discriminative with respect to a variation of the duration of the shifting pulse in contrast to a two-cycle register. The backward motion of information taking place in this circuit and the current branch-off in the (n + 1)-th core, when the signal "1" is read out by the n-th core imply a dependence of the shape of the signal at the condenser upon the structure of the information in the register. This feature may lead to difficulties in the synthesis of logical schemes incorporating

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"APPROVED FOR RELEASE: 06/05/2000 CIA-RDP86-00513R000102310002-2

One-Cycle Magnetic Shift Register SOV/103-19-10-7/12

one-cycle registers. The scheme presented in this paper is recommended for use in schemes of ring-counters and of registers of a not-too-wide scope. There are 15 figures, 1 table, and 8 references, 2 of which are Soviet.

SUBMITTED: May 25, 1957

Card 2/2

APPROVED FOR RELEASE: 06/05/2000 CIA-RDP86-00513R000102310002-2"

"APPROVED FOR RELEASE: 06/05/2000 CIA-RDP86-00513R000102310002-2

L 02201-67 EWT(d)/EWT(m)/EWP(w)/EWP(v)/EWP(j)/T/EWP(t)/ETI/EWP(k)/EWP(h)/EWP(1)
ACC NR: AP6030450 (A) SOURCE CODE: UR/0193/66/000/008/0023/0024
IJP(c) JD/WW/WB/EM/DJ/RM

AUTHOR: Kan'kovskaya, Ye. N.; Artyukhin, G. V.; Yeremenko, A. S.

ORG: none

TITLE: Increasing the corrosion resistance of machine parts

SOURCE: Byulleten' tekhniko-ekonomicheskoy informatsii, no. 8, 1966, 23-24

TOPIC TAGS: corrosion resistance, machine building, machine part, check valve, nozzle, teflon

ABSTRACT: The Plastics Laboratory of the Volgograd Scientific Research Institute of Machine-Building Technology in conjunction with the Volgograd Hydrolysis Plant has increased the corrosion resistance of hydrolysis equipment by substituting metal parts with teflon. Bronze and pig iron machine parts exposed to sulfuric acid concentrations from 85 to 0.5% at temperatures from 180 to 200C and at pressures from 15—20 atm were replaced by teflon parts. Teflon nozzles were installed in 8 hydraulic units in the Volgograd Hydrolysis Plant. These nozzles are similar in design to the bronze, except for strengthening of the joint in the teflon nozzle flange. Also, pig iron check valves which operate at temperatures of 18—35C in sulfuric

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ACC NR: AP6030450

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acid concentrations of 74—85% were replaced by teflon valves.[11] Teflon check valves and nozzles are easy to manufacture, have higher resistance to aggressive medium, and have completely impermeable linings. Teflon parts can last 20 times longer than metal ones, as well as save considerable manufacturing costs. Orig. art. has: 1 figure.

SUB CODE: 11, 20/ SUBM DATE: none/

Card 2/2 LC

APPROVED FOR RELEASE: 06/05/2000 CIA-RDP86-00513R000102310002-2"

"APPROVED FOR RELEASE: 06/05/2000 CIA-RDP86-00513R000102310002-2

KULIKOV, A.V., kand.tekhn.nauk; KULIKOV, V.V., kand.tekhn.nauk; ARTYUKHIN, N.F., gornyy insh.

"Prevention and control of endogenous fires by silting in the process of sulfide ore deposit mining" by B.K.Sereda, D.I.Sazhin, K.G.Bubok. Reviewed by A.V.Kulikov, V.V.Kulikov, N.F.Artiukhin. Gor.zhur. no.7:78-79 (MIRA 13:7)
(Mine fires)
(Mining engineering--Safety measures)
(Sereda, B.K.) (Sazhin, D.I.) (Bubok, K.G.)

APPROVED FOR RELEASE: 06/05/2000 CIA-RDP86-00513R000102310002-2"

"APPROVED FOR RELEASE: 06/05/2000 CIA-RDP86-00513R000102310002-2

ARTYUKHIN, P.I.

Category : USSR/Atomic and Molecular Physics - Statistical physics. Thermodynamics D-3

Abs Jour : Ref Zhur. - Fizika, No 1, 1957, No 857

Author : Rabinovich, I.B., Sokolov, N.N., Artyukhin, P.I.

Title : Isotopic Effect in the Vapor Pressure of Liquid Deuterium Compounds.

Orig Pub : Dokl. AN SSSR, 1955, 105, No 4, 762-765

Abstract : An investigation was made of the temperature dependences of the vapor pressure of many deuterium compounds (the parentheses indicate the temperature range in which the given substance was studied): isopropyl (15--80) and n-butyl (20 -- 100) deuterium alcohols (with deuterium in the hydroxyl), $C_6H_5ND_2$ (50 -- 80), acetic acid (15 -- 110), isobutyric acid (50 -- 90), and isovaleric acid (55 -- 110) (with deuterium in the carboxyl).

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"APPROVED FOR RELEASE: 06/05/2000 CIA-RDP86-00513R000102310002-2

SOV/20-120-1-25/63

AUTHORS: Artyukhin, P. I., Gel'man, A. D., Medvedovskiy, V. I.

TITLE: Investigation of the Redox Potentials of Plutonium in Nitric Acid (Issledovaniye okislitel'no-vosstanovitel'nykh potentsialov plutoniya v azotnoy kislote)

PERIODICAL: Doklady Akademii nauk SSSR, 1958, Vol. 120, Nr 1, pp. 98-100 (USSR)

ABSTRACT: The authors determined the formal redox potentials of various plutonium pairs in nitric acid solutions of different concentrations, as well as the dispropotionating of Pu (IV) in nitric acid solutions. The potentials of the pair Pu(IV) - Pu(III) were measured at 25° in a carefully purified nitrogen atmosphere by means of an apparatus already described earlier (Ref 10). These measurements were carried out within the whole range of the ratios of the concentrations of Pu(IV) and Pu(III). The experiments of the direct determination of the potentials of the pairs Pu(VI) - Pu(IV) did not turn out to be successful. The measurement of the formal potentials of the pair Pu(VI) - Pu (IV) was carried out by

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disproportionating of Pu(IV) at low concentrations of nitric acid. This disproportionating of Pu(IV) was carried out at 25°. From the redox potentials measured on conditions of equilibrium and from the values of equilibrium concentrations the formal potentials for the pairs Pu(IV) - Pu(III), Pu(VI)-Pu(IV) and Pu(VI) - Pu(III) are calculated and given in a table. The formal potentials of the pairs Pu(VI) - Pu(IV), Pu(VI) - Pu(III) highly increase with increasing concentration of the hydrogen ions. The potentials of these pairs depend as the fourth power on the concentrations of the ions H^+. The reactions taking place at the electrode are written down. Using these equations the formal potentials of the pairs Pu(VI) - Pu(IV) and Pu(VI) - Pu(III) in 1 N HNO_3 are calculated. The results obtained agree well with those of other authors. Proceeding from the discussed considerations schemes for the formal potentials of plutonium in nitric acid solutions are proposed and given. A diagram shows the changes of the concentrations of Pu(III), Pu(IV) and Pu(VI) with progressing time in 0,40 N HNO_3. In spite of the existing complex formation of Pu(IV) the constants of the velocity of the disproportionating of Pu(IV) in nitric acid

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"APPROVED FOR RELEASE: 06/05/2000 CIA-RDP86-00513R000102310002-2

SOV/20-120-1-25/63

Investigation of the Redox Potentials of Plutonium in Nitric Acid

obtained are the same as in hydrochloric acid. There are 1 figure, 3 tables, and 15 references, 3 of which are Soviet.

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

PRESENTED: December 24, 1957, by I. I. Chernyayev, Member, Academy of Sciences, USSR

SUBMITTED: December 24, 1957

1. Plutonium--Analysis 2. Oxidation-reduction reactions
3. Nitric acid--Applications

Card 3/3

APPROVED FOR RELEASE: 06/05/2000 CIA-RDP86-00513R000102310002-2"

"APPROVED FOR RELEASE: 06/05/2000 CIA-RDP86-00513R000102310002-2

ARTYUKHIN, P.I., Cand Chem Sci --(diss) "Stability of valence states of plutonium in nitric acid solutions." Mos, [Publishing House of the Acad Sci USSR], 1959. 12 pp (Acad Sci USSR. Inst of Physical Chemistry), 175 copies (KL,29-59,126)

APPROVED FOR RELEASE: 06/05/2000 CIA-RDP86-00513R000102310002-2"

"APPROVED FOR RELEASE: 06/05/2000 CIA-RDP86-00513R000102310002-2

5(4)

AUTHORS: Moskvin, A. I., Artyukhin, P. I.

SOV/78-4-3-17/34

TITLE: Determination of the Composition of the Stability Constant of the Ethylene Diamino-tetraacetate Complex of Pu(III) by the Ion Exchange Method (Opredeleniye sostava i konstant nestoykosti etilendiamintetraatsetatnykh kompleksov Pu(III) metodom ionnogo obmena)

PERIODICAL: Zhurnal neorganicheskoy khimii, 1959, Vol 4, Nr 3, pp 591-595 (USSR)

ABSTRACT: The complex formation of plutonium (III) in ethylene diamino-tetraacetic acid (EDTA) by ion exchange was investigated at constant concentration of Trilon-B and at various p_H values. Distribution coefficients were determined of Pu^{3+} in series of 1-molar solution of NH_4Cl on KU-2 at p_H 1.6-1.3. The experimental data are given by tables 1 and 2 and figure 1. From the results it may be concluded that with an increase in the p_H value the concentration of Pu^{3+} in the solution increases under formation of the ethylene diamino-tetraacetic acid complex. In the case of p_H = 2.5 and above Pu^{3+} appears

Card 1/4

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"APPROVED FOR RELEASE: 06/05/2000 CIA-RDP86-00513R000102310002-2

Determination of the Composition of the Stability Constant of the Ethylene Diamino-tetraacetate Complex of Pu(III) by the Ion Exchange Method SOV/78-4-3-17/34

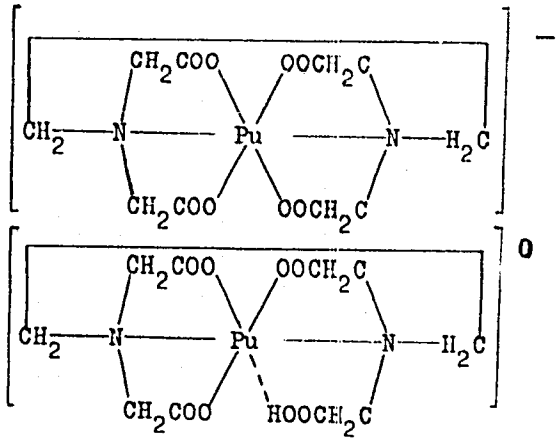
in anionic complex form and is not adsorbed by cationite. In the case of $p_H = 1.25$ no complex is formed. In the p_H range of 1.5-2 the complex ions PuY^- and $PuHY^0$ are formed with the following stability constants: $4.4.10^{-18}$ and $6.2.10^{-10}$. For the thermodynamic stability constant of the complex PuY^- a value of pK = 21 was found. For $PuHY^0$ pK = 11.9 was found. The process of complex formation of Pu^{3+} with ethylene diamino-tetraacetic acid proceeds according to the following reactions: $Pu^{3+} + HY^{3-} \rightleftharpoons PuHY^0$, $Pu^{3+} + Y^{4-} \rightleftharpoons PuY^-$. For the complexes PuY^- and $PuHY^0$ the following structural formulae were suggested:

Card 2/4

APPROVED FOR RELEASE: 06/05/2000 CIA-RDP86-00513R000102310002-2"

"APPROVED FOR RELEASE: 06/05/2000 CIA-RDP86-00513R000102310002-2

Determination of the Composition of the Stability Constant of the Ethylene Diamino-tetraacetate Complex of Pu(III) by the Ion Exchange Method SOV/78-4-3-17/34



The coordination number of plutonium (III) in the complexes was not determined. There are 1 figure, 2 tables, and 6 references, 4 of which are Soviet.

Card 3/4

Inst Physical Chemistry, AS USSR

APPROVED FOR RELEASE: 06/05/2000 CIA-RDP86-00513R000102310002-2"

"APPROVED FOR RELEASE: 06/05/2000 CIA-RDP86-00513R000102310002-2

5(4), 21(1) SOV/78-4-6-18/44

AUTHORS: Artyukhin, P. I., Medvedovskiy, V. I., Gel'man, A. D.

TITLE: The Separation of Pu(IV) and Pu(V) in Nitric Acid Solution (Disproportsionirovaniye Pu(IV) i Pu(V) v rastvorakh azotnoy kisloty)

PERIODICAL: Zhurnal neorganicheskoy khimii, 1959, Vol 4, Nr 6, pp 1324-1331 (USSR)

ABSTRACT: The reaction for the separation of Pu(IV) and Pu(V) was investigated in different nitric acid concentrations. Pu(IV)-solutions were produced with 0, 10, 0.20, 0.30 and 0.40 n HNO_3. The experimental results are given in the figures 1-4. The equilibrium constants and the constants of the rate of separation were computed and are given in table 1. The ions Pu^{4+} and the complex ions $Pu(NO_3)^{3+}$ take part in the separation reaction of Pu(IV). The results of the separation process Pu(V) in nitric acid solutions are given in the figures 7-9. It was found that the rate of separation rises with the increase of the hydrogen ion concentration. The separation of Pu(V) proceeds first according to the reaction

Card 1/2

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"APPROVED FOR RELEASE: 06/05/2000 CIA-RDP86-00513R000102310002-2

$Pu(V) + Pu(V) \underset{K_6}{\overset{K_5}{\rightleftarrows}} Pu(IV) + Pu(VI)$ (16). The Pu(IV) produced reacts easily with Pu(V) according to the reaction

$Pu(IV) + Pu(V) \underset{K_4}{\overset{K_3}{\rightleftarrows}} Pu(III) + Pu(VI)$. The separation reaction proceeds in the case of the presence of small quantities of Pu(III) according to the equation

$$Pu(III)+Pu(V) \underset{K_1}{\overset{K_2}{\rightleftarrows}} 2Pu(IV).$$

The rate of separation is given in figure 11. The constants of the rate of separation are given in table 2. There are 11 figures, 2 tables, and 4 references.

ASSOCIATION: Institut fizicheskoy khimii Akademii nauk SSSR (Institute of Physical Chemistry of the Academy of Sciences, USSR)

SUBMITTED: May 28, 1958

APPROVED FOR RELEASE: 06/05/2000 CIA-RDP86-00513R000102310002-2"

"APPROVED FOR RELEASE: 06/05/2000 CIA-RDP86-00513R000102310002-2

ARTYUKHIN, P.I.; MEDVODOVSKIY, V.I.; GEL'MAN, A.D.

Effect of the α-radiation of plutonium on its valence state in nitric acid solutions. Radiokhimiia 1 no.2:131-135 '59. (MIRA 12:8)

(Plutonium) (Alpha rays)

APPROVED FOR RELEASE: 06/05/2000 CIA-RDP86-00513R000102310002-2"

"APPROVED FOR RELEASE: 06/05/2000 CIA-RDP86-00513R000102310002-2

MEFOD'YEVA, M.P.; ARTYUKHIN, P.I.; GEL'MAN, A.D.

Spectrophotometric study of complex formation by the neptunyl and acetate ions. Radiokhimiia 1 no.3:309-316 '59. (MIRA 12:10)

(Neptunyl compounds) (Complex compounds) (Acetates)

APPROVED FOR RELEASE: 06/05/2000 CIA-RDP86-00513R000102310002-2"

"APPROVED FOR RELEASE: 06/05/2000 CIA-RDP86-00513R000102310002-2

5(4), 21(1)

SOV/78-4-6-19/44

AUTHORS: Gel'man, A. D., Artyukhin, P. I., Moskvin, A. I.

TITLE: Investigation of the Complex Formation of Pentavalent Plutonium in Ethylene-diamine-tetraacetic Acid by the Ion Exchange Method (Issledovaniye kompleksoobrazovaniya pyativalentnogo plutoniya v etilendiamintetraatsetatnykh rastvorakh metodom ionnogo obmena)

PERIODICAL: Zhurnal neorganicheskoy khimii, 1959, Vol 4, Nr 6, pp 1332-1335 (USSR)

ABSTRACT: The complex formation process of Pu(V) in ethylene-diamine-tetraacetic acid was investigated by the ion exchange method. The results of the distribution of the pentavalent plutonium between 0.05 mol-solution NH_4Cl and the cation exchanger with different pH-value are given in table 1. They show that the complex ion PuO_2Y^{3-} is produced in the pH-range 4 - 5 with the instability constant $6.3 \cdot 10^{-11}$. The influence of the pH-value on the distribution of Pu(V) between 0.05 mol solution NH_4Cl and the ion exchanger in the case of presence and absence of Komplexon is given in figure 1. The instability

Card 1/2

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"APPROVED FOR RELEASE: 06/05/2000 CIA-RDP86-00513R000102310002-2

SOV/78-4-6-19/44

Investigation of the Complex Formation of Pentavalent Plutonium in Ethylenediamine-tetraacetic Acid by the Ion Exchange Method

constants of the ADTA-complex ions of Pu(III), Pu(VI) and Pu(V) were compared and given in table 3. The inclination of different plutonium ions to complex formation has the following series:

$$Pu^{4+} > Pu^{3+} > PuO_2^{2+} > PuO_2^{+} .$$

The Pu(IV)-ion and the smaller Pu(V)-ion are most inclined to complex formation with the anion Y^{4+}. There are 2 figures, 3 tables, and 7 references, 4 of which are Soviet.

ASSOCIATION: Institut fizicheskoy khimii Akademii nauk SSSR (Institute of Physical Chemistry of the Academy of Sciences, USSR)

SUBMITTED: April 16, 1958

Card 2/2

APPROVED FOR RELEASE: 06/05/2000 CIA-RDP86-00513R000102310002-2"

"APPROVED FOR RELEASE: 06/05/2000 CIA-RDP86-00513R000102310002-2

5(2) 21(1) SOV/89-7-2-11/24

AUTHORS: Gel'man, A. D., Moskvin, A. I., Artyukhin, P. I.

TITLE: The Compositions and Dissociation Constants of Pu(V) and Pu(III) Complexes with Ethylenediaminetetraacetic Acid (Sostav i konstanty dissotsiatsii kompleksov Pu(V) i Pu(III) s etilendiamintetrauksusnoy kislotoy)

PERIODICAL: Atomnaya energiya, 1959, Vol 7, Nr 2, pp 162 - 163 (USSR)

ABSTRACT: The complex formation of Pu(V) with and without complex-forming ethylene diamine tetra acetic acid (EDTA) was measured with the ion exchange method under the following conditions: KU-2; pH range 3.3 to 5.1; ionic force $\mu = 0.05$ (0.05 M NH_4Cl solution); temperature 20 $\pm$ 1°C. In the examined pH range a complex ion of the type PuO_2Y^{3-} (Y^{4-} = anion of the EDTA) is formed with a dissociation constant K $6.8 \cdot 10^{-11}$. Similarly the complex formation was determined for Pu(III) in the pH range 1.2 to 3.4, in a nitrogen atmosphere $\mu = 1$ (1 M NH_4Cl). The following complex ions are formed: PuY^- and PuHY; their dissociation constants are $4.4 \cdot 10^{-18}$ and $6.2 \cdot 10^{-10}$. By this and earlier data the dissociation constants of the EDTA complexes of the

Card 1/2

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"APPROVED FOR RELEASE: 06/05/2000 CIA-RDP86-00513R000102310002-2

The Compositions and Dissociation Constants of Pu(V) and Pu(III) Complexes with Ethylenediaminetetraacetic Acid SOV/89-7-2-11/24

trivalent transuranic elements (Pu-Cf) can be compared and one may see that with increase of the Z the strength of the complexes of the type MY^- increases, which is easy to understand because of the increase of the ion potential. When the dissociation constants of the complex plutonium ions are being compared it can be established that the tendency of complex formation decreases in the following sequence:

$Pu^{4+} > Pu^{3+} > PuO_2^{2+} > PuO_2^{+}$, i. e. with decrease of the ion potential.

There are 1 table and 6 references, 4 of which are Soviet.

SUBMITTED: January 6, 1959

Card 2/2

APPROVED FOR RELEASE: 06/05/2000 CIA-RDP86-00513R000102310002-2"

"APPROVED FOR RELEASE: 06/05/2000 CIA-RDP86-00513R000102310002-2

ARTYUKHIN, P.I.

GINZBURG, F.L.

21 (0), 5 (0)

AUTHOR: Shchebetkovskiy, V. N. SOV/89-7-2-17/24

TITLE: All-Union Symposium on Radiochemistry (Vsesoyuznyy simposium po radiokhimii)

PERIODICAL: Atomnaya energiya, 1959, Vol 7, Nr 2, pp 175-176 (USSR)

ABSTRACT: A symposium was held in Leningrad from 3 to 5 March 1959. More than 200 participants from different institutes in Moscow, Leningrad, Kiyev, Novosibirsk, Tbilisi and Gor'kiy attended it. Twentyeight papers were read. The following are mentioned: I. Ye. Starik: On the problem of the molecular state of micromasses of radioactive elements in solutions; I. Ye. Starik, N. I. Ampelogova, F. L. Ginzburg, L. I. Il'menkova, I. A. Shul'skiy, L. D. Sheydin: Condition of radioactive elements occurring in microconcentrations of solutions (Zr, Am, Pa, Po). M. N. Yakovleva, M. A. Shurshalina: Application of the dialysis method for examination of uranium carriers in natural bodies of water; Y. I. Paramonova, Ye. F. Latyshev: Complex formation of the multivalent ruthenium with chlorine ions. K. B. Zaborenko, A. V. Zaval'skaya, V. V. Fomin: Determination of the composition and the instability constants by ion exchange of the cerium oxalate complexes. A. I. Moskvin: Complex formation of plutonium and americium with the anions of ethylene diamine tetra acetic acid (EDTA) and oxalic and phosphoric acid. A. N. Trofimov, L. N. Stupanova: A new method for the determination of ion charges of radioactive elements in solutions by application of ion exchanging resins of different swelling capacities. N. B. Vysokoostrovskaya, A. N. Trofimov, B. N. Sikol'skiy: Confirmation of the non-existence of complex formation between potassium and EDTA by application of the ion exchange and the potentiometric methods. V. M. Vdovenko, Ye. A. Smirnova: Determination of the conditions of compounds to be extracted in the organic phase (hydration of uranyl nitrate with ester). V. M. Vdovenko, N. F. Aleksayeva: Degree of hydration of nitric acid in dibutyl ether of the diethylene glycol. V. M. Vdovenko, A. S. Kriwokhatskiy: Degree of solvation of the nitric acid in the dibutyl ether of the diethylene glycol. A. K. Lavrukhina: Determination of the dependency of the distribution coefficients between the organic and the watery phases in order to determine the condition of the substance in the solution and to fixate the concentration range at which complex formation starts. Y. I. Kuznetsov, P. D. Tikov lectured on extraction of hexavalent tungsten with aniline from hydrochloric media. An. N. Nesmeyanov on substitution of hydrogen in benzol by the recoil atoms P^{32}, As^{76} and Sb^{124}. B. G. Dzantiyev lectured on the recoil atoms from the reactions of $Li^{6}(n,\alpha)T$, $N^{14}(n,p)C^{14}$ in a medium of cyclic hydrocarbons. D. I. Artyukhin lectured on the influence of the NO_3 and H^+ ions on the reduction velocity of hexavalent plutonium under the influence of its own α-radiation. In the course of thorough discussions it was established that the comprehension of the condition of radioactive elements in solution are of eminent importance for the whole range of radio chemistry. More studies have to be made in this field as were made before. A better coordination of all the institutes which are occupied with this problem will yield good results in the future.

Card 1/3

Card 2/3

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"APPROVED FOR RELEASE: 06/05/2000 CIA-RDP86-00513R000102310002-2

ARTYUKHIN, P.I.

Composition of hafnium salicylates. Zhur. neorg. khim. 9 no.6: 1485-1486 Je '63 (MIRA 17:8)

1. Institut neorganicheskoy khimii Sibirskogo otdeleniya AN SSSR.

APPROVED FOR RELEASE: 06/05/2000 CIA-RDP86-00513R000102310002-2"

"APPROVED FOR RELEASE: 06/05/2000 CIA-RDP86-00513R000102310002-2

ARTYUKHIN, P.I.

Composition of zirconium salicylates. Izv. SO AN SSSR N. 7 Ser. khim. nauk no.2:141-143 '64 (MIRA 18:1)

1. Institut neorganicheskoy khimii Sibirskogo otdeleniya AN SSSR, Novosibirsk.

APPROVED FOR RELEASE: 06/05/2000 CIA-RDP86-00513R000102310002-2"

"APPROVED FOR RELEASE: 06/05/2000 CIA-RDP86-00513R000102310002-2

GIL'BERT, E.N.; PRONIN, V.A.; ARTYUKHIN, P.I.; VALOV, P.M.

Extraction separation of carrier-free Co^{57} from an irradiated target. Radiokhimiia 7 no.3:358-359 '65. (MIRA 18:7)

APPROVED FOR RELEASE: 06/05/2000 CIA-RDP86-00513R000102310002-2"

"APPROVED FOR RELEASE: 06/05/2000 CIA-RDP86-00513R000102310002-2

L 35838-66 EWT(m)/EWP(t)/ETI IJP(c) JD

ACC NR: AP6016128 SOURCE CODE: UR/0289/66/000/001/0138/0139

AUTHOR: Artyukhin, P. I.; Gil'bert, E. N. Pronin, V. A.

ORG: Institute of Inorganic Chemistry, Siberian Branch of the AN SSSR, Novosibirsk (Institut neorganicheskoy khimii, Sibirskogo otdeleniya AN SSSR)

46

TITLE: Activation determination of impurities in gallium

39

27

B

SOURCE: AN SSSR. Sibirskoye otdeleniye. Izvestiya. Seriya khimicheskikh nauk, no. 1, 1966, 138-139

TOPIC TAGS: gallium, quantitative analysis, neutron irradiation, CHEMICAL PURITY

ABSTRACT: A sample of gallium weighing 100 mg was placed in a quartz ampoule which was then sealed and irradiated with a stream of slow neutrons, 1.8×10^{13} N/cm^2-sec, for 8 hours. After irradiation, the gallium together with the carriers (about 10^{-5} grams of each element) was dissolved in aqua regia and the solution was evaporated to dryness. The precipitate formed was dissolved in 10 ml concentrated hydrochloric acid. The gallium was extracted three times from the solution obtained. The aqueous phase containing the impurity elements was evaporated three times in a mixture of nitric and hydrofluoric acids, almost to dryness.

Card 1/2

UDC: 543.53

APPROVED FOR RELEASE: 06/05/2000 CIA-RDP86-00513R000102310002-2"

"APPROVED FOR RELEASE: 06/05/2000 CIA-RDP86-00513R000102310002-2

ACC NR: AP6016128

The precipitate was dissolved in a small amount (5-10 drops) of 6 N HF and the solution was introduced into a Teflon column filled with Dowex-1 anion exchange resin in the F'-form. Determinations were made for the following metals: cobalt, copper, indium, zinc, arsenic, tellurium, and tin. The analytical results are shown in a table. Orig. art. has: 1 figure and 1 table.

SUB CODE: 07 / SUBM DATE: 22May65

Card 2/2

APPROVED FOR RELEASE: 06/05/2000 CIA-RDP86-00513R000102310002-2"

"APPROVED FOR RELEASE: 06/05/2000 CIA-RDP86-00513R000102310002-2

L 2138-66

ACC NR: AP5026986 SOURCE CODE: UR/0020/65/164/005/1044/1045

AUTHOR: Artyukhin, P. I.; Gil'bert, E. N.; Peshchevitskiy, B. I.; Pronin, V. A.; Nikolayev, A. V. (Corresponding member AN SSSR)

ORG: Institute of Inorganic Chemistry, Siberian Department, Academy of Sciences, SSSR (Institut neorganicheskoy khimii Sibirskogo otdeleniya Akademii nauk SSSR)

TITLE: Investigation of the extracting properties of 2,2'-dichlorodiethyl ether (Chlorex)

SOURCE: AN SSSR. Doklady, v. 164, no. 5, 1965, 1044-1045

TOPIC TAGS: extraction, separation, ion

ABSTRACT: In the course of searching for new extracting agents, it appeared profitable to investigate the properties of β,β'-dichlorodiethyl ether (Chlorex). It was expected to behave differently from diethyl ether, because of the presence of two chlorine atoms in the molecule. It was found to extract Sb(V) and Fe(III) well, Sn(IV), Te(IV), In(III) slightly, and Zn(II), Cu(II), Co(II), Mn(II), Cr(III), As(V), and Ag(I) practically not at all. The partition coefficients are given in tabular form. Orig. art. has: 1 table and 1 figure. [VS]

SUB CODE: OC, GC / SUBM DATE: 10Apr65/ ORIG REF: 001/ OTH REF: 003/
ATD PRESS: 4123

Card 1/1 dg UDC: 542.61

APPROVED FOR RELEASE: 06/05/2000 CIA-RDP86-00513R000102310002-2"

"APPROVED FOR RELEASE: 06/05/2000 CIA-RDP86-00513R000102310002-2

L 05202-67 EWT(m)/EWP(t)/ETI IJP(c) JD

ACC NR: AP7000761

SOURCE CODE: UR/0289/66/000/001/0088/0090

AUTHOR: Pronin, V. A., Gil'bert, E. N. and Artyukhin, P. I.

ORG: Institute of Inorganic Chemistry, Siberian Department, AN USSR, Novosibirsk

23
B

TITLE: Determination of impurities in thallium by the neutron activation method

SOURCE: AN SSSR. Sibirskoye otdeleniye. Izvestiya. Seriya khimicheskikh nauk, no. 1, 1966, 88-90

TOPIC TAGS: thallium, sorption, gamma spectrometer

ABSTRACT: The gamma-spectrometry method was combined with the rapid chemical separation of impurities to determine Sb, Ga, Fe, In, Zn, Cu, Co, As, Te, and Sn in thallium. The authorss' study of the extraction equilibria in the system beta, beta'-dichlorodiethyl ether ('khloreks')-water solutions of hydrochloric acid for a large number of elements indicated that Tl can be removed by extraction with khloreks from 3N HCl, while Sb, Ga, and Fe can be separated from the remaining micro-impurities by extraction from 9-10N HCL. The Co, Cu, In, Zn, As, Tl, and Sn impurity elements can be divided into two groups on the bases of different sorption capacity of fluoride complexes on anionite. Sn, As, and Te, with a concentration of 5-3 N HF are sorbed on the anionite whereas Co, Cu, In, and Zn freely pass through the column. Nuclear-physical characteristics of the elements Co, In, Zn and Cu as well as Sb, Ga, and Fe, permit their identification without further chemical separation. Orig. art. has: 2 figures and 2 tables. [JPRS: 37,177]

Card 1/2 SUB CODE: 07/SUBM DATE: 26Apr65/ORIG REF: 005 UDC: 543.53

0923 1939

APPROVED FOR RELEASE: 06/05/2000 CIA-RDP86-00513R000102310002-2"

"APPROVED FOR RELEASE: 06/05/2000 CIA-RDP86-00513R000102310002-2

L 34076-66 EWT(m)/EWP(t)/ETI IJP(c) JD

ACC NR: AP6012908 SOURCE CODE: UR/0075/66/021/004/0504/0505

AUTHOR: Artyukhin, P. I.; Gil'bert, E. N.; Pronin, V. A.

34

ORG: Institute of Inorganic Chemistry, SO AN SSSR, Novosibirsk (Institut neorganicheskoy khimii)

B

TITLE: Radioactive determination of impurities in antimony

19

21

SOURCE: Zhurnal analiticheskoy khimii, v. 21, no. 4, 1966, 504-505

TOPIC TAGS: antimony, ~~neutron activation analysis~~, trace analysis, NEUTRON IRRADIATION, HIGH PURITY METAL, CHEMICAL PURITY

ABSTRACT: A neutron activation method of determining microimpurities in high-purity antimony involving extraction and ion exchange is proposed. After irradiation with neutrons, the antimony matrix was removed by extraction with β,β'-dichlorodiethyl ether, and the impurities Co, Cu, Zn, In, As, Sn, and Te, which remain in the aqueous phase, were separated chromatographically on columns with the Dowex 1 anion exchange resin. The radiochemical purity of the separated impurities was checked with a gamma spectrometer. The activity of the separated elements was measured with an end-window counter. To introduce a correction for the loss of the impurity elements during the chemical operations, the chemical yield of the elements was determined (Zn - 86%, Sn - 48%, Co - 79%, In -62%, As - 86%, Cu - 88%, Te - 45%). The lower chemical yield for Sn, Te, and In is due to the better extractability of these elements with the dichlorodiethyl ether. A series of parallel analyses of highly pure antimony was carried out, and the following average data were obtained: Co - 6.6×10^{-6}%, Cu - 6.0×10^{-6}%,

Card 1/2

UDC:543.53

APPROVED FOR RELEASE: 06/05/2000 CIA-RDP86-00513R000102310002-2"

"APPROVED FOR RELEASE: 06/05/2000 CIA-RDP86-00513R000102310002-2

L 34076-66

ACC NR: AP6012908

Zn - 1.0×10^{-6}%, In - 7.2×10^{-5}%, As - 8.2×10^{-5}%, Te - 3.6×10^{-5}%, Sn - 1.9×10^{-5}%. Orig. art. has: 1 figure.

SUB CODE: 07 / SUBM DATE: 01Feb65 / ORIG REF: 005

Card 2/2

APPROVED FOR RELEASE: 06/05/2000 CIA-RDP86-00513R000102310002-2"

"APPROVED FOR RELEASE: 06/05/2000 CIA-RDP86-00513R000102310002-2

ARTYUKHIN, V. I.

1ST AND 2ND ORDERS

PROCESSES AND PROPERTIES INDEX

3RD AND 4TH ORDERS

Etching iron. V. I. Artyukhin. Russ. 44,765, Oct. 31, 1935. Iron is etched in H_2SO_4 contg. up to 0.5% (by vol.) or finely ground sunflower-oil pressings.

ASM-SLA METALLURGICAL LITERATURE CLASSIFICATION

APPROVED FOR RELEASE: 06/05/2000 CIA-RDP86-00513R000102310002-2"

"APPROVED FOR RELEASE: 06/05/2000 CIA-RDP86-00513R000102310002-2

ARTYUKHIN, V.I.

CA

26

Method of determination of aromatic hydrocarbons in turpentine substitute. V. I. Artyukhin. *Zavodskaya Lab.* 7, 804 (1938). Improvements in the Soviet standard methods of detn. and calcn. of the results are tentatively recommended.

Chas. Blanc

ASM SLA METALLURGICAL LITERATURE CLASSIFICATION

APPROVED FOR RELEASE: 06/05/2000 CIA-RDP86-00513R000102310002-2"

"APPROVED FOR RELEASE: 06/05/2000 CIA-RDP86-00513R000102310002-2

ARTYUKHIN, V.I.

CA

7

Determination of aromatic hydrocarbons in light kerosene by the method of aniline points. V. I. Artyukhin and Ts. L. Gramovskaya. *Zavodskaya Lab.* 8, 728-30 (1939).—In detg. the aromatic content of light kerosene by the method of aniline points the following precautions should be observed to obtain accurate results: (1) only

ASM-SLA METALLURGICAL LITERATURE CLASSIFICATION

APPROVED FOR RELEASE: 06/05/2000 CIA-RDP86-00513R000102310002-2"

"APPROVED FOR RELEASE: 06/05/2000 CIA-RDP86-00513R000102310002-2

22(1)

SOV/3-59-4-5/42

AUTHOR: Artyukhin, V.I., Candidate of Technical Sciences, Docent, Director

TITLE: The Cooperation of Vuzes in Organizing Education Without the Student Discontinuing Work

PERIODICAL: Vestnik vysshey shkoly, 1959, Nr 4, pp 21-22 (USSR)

ABSTRACT: One of the forms of training in higher technical schools according to the new system of higher education will be to study without discontinuing work during the first 2 courses. For these 2 years the student's work must correspond to the specialty chosen by him. However, not every town possesses industrial enterprises which conform to specialties of the institute located in that particular town. Therefore, scores of students of the Penza Polytechnical Institute pass their practical training at L'vov plants while students of the L'vovskiy politekhnicheskiy institut (L'vov Polytechnical Institute) and other institutes proceed to installations in Penza. The author suggests that at the next admittance of students in August 1959 the Penza Institute

Card 1/2

APPROVED FOR RELEASE: 06/05/2000 CIA-RDP86-00513R000102310002-2"

"APPROVED FOR RELEASE: 06/05/2000 CIA-RDP86-00513R000102310002-2

SOV/3-59-4-5/42

The Cooperation of Vuzes in Organizing Education Without the Student Discontinuing Work

accomodate 1 or 2 groups in the plants of Penza whose specialty does not correspond to those of the Penza Institute, but agrees with the specialty of other institutes, e.g. the L'vov Polytechnical. In its turn the vtuz which has industrial bases in the specialties of the Penza Institute will accept an equal number of students and arrange their training without the students discontinuing work for 2 years.

ASSOCIATION: Penzenskiy politekhnicheskiy institut (Penza Polytechnical Institute)

Card 2/2

APPROVED FOR RELEASE: 06/05/2000 CIA-RDP86-00513R000102310002-2"

"APPROVED FOR RELEASE: 06/05/2000 CIA-RDP86-00513R000102310002-2

L 61430-65 EWT(d)/EPA/EWT(1)/EWT(m)/EWP(w)/EWP(f)/EWG(v)/EWP(c)/EWP(v)/T/
EWP(k)/EWP(1)/ETC(m) WW/EM

ACCESSION NR: AP5019067 UR/0256/65/000/012/0094/0094

AUTHORS: Vybornov, B. I.; Vasil'yev, A. F.; Fal'kov, O. N.; Artyukhin, V. I. 51

TITLE: Apparatus for inspecting the blades of turbines and compressors with surface ultrasound waves. Class [illegible]

SOURCE: Byulleten' izobreteniy i tovarnykh znakov, no. 1[illegible], 1965, [illegible]

TOPIC TAGS: turbine blade, compressor blade, inspection method, ultrasound wave

[illegible]

[illegible] a reservoir and [illegible] outflow [illegible] and a pressure valve. The latter allows the flow of [illegible] figure.

ASSOCIATION: none

SUBMITTED: 05Sep61 ENCL: 01 SUB CODE: PR

NO REF SOV: 000 OTHER: 000

Card 1/2

APPROVED FOR RELEASE: 06/05/2000 CIA-RDP86-00513R000102310002-2"

"APPROVED FOR RELEASE: 06/05/2000 CIA-RDP86-00513R000102310002-2

L 62420-65

ACCESSION NR: AP5019067 ENCLOSURE: 01

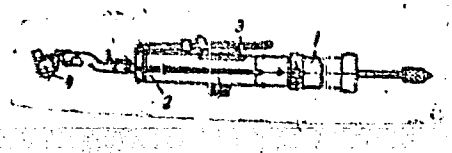

Fig. 1.

1- shaped handle; 2- reservoir with an outflow duct; 3- pressure valve; 4- head

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SOKOLOV, D.V.; LITVINENKO, G.S.; ARTYUKHIN, V.I.

Stereochemistry of nitrogen heterocycles. Part 10: Steric directivity in hydrogenation of isomers of 2-methyl-4-ketodecahydroquinoline. Reduction of isomers of 1-benzoyl-2-methyl-4-ketodecahydroquinoline by aluminum isopropylate. Izv.AN Kazakh. SSR. Ser.khim. no.1:75-82 '61. (MIRA 16:7)

(Heterocyclic compounds) (Stereochemistry)

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ARTEM'YEV, P., kand.tekhn.nauk; ARTYUKHIN, Yu., inzh.

Self-unloading ships for the transportation of pulverized materials [from foreign journals]. Rech.transp. 19 no.1:54-56 Ja '60. (MIRA 13:5)

(Ships--Equipment and supplies)
(Cargo handling)

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ARTYUKHIN, Yu.G., inzh.

Possibility of using gas jet units for pneumatic transportation. Trudy LIIVT no.26:249-255 '59. (MIRA 14:9)
(Pneumatic-tube transportation)

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ARTYUKHIN, Yu.G., inzh.

Applying the theory of turbulent jets to the analysis of hydraulic ejection processes. Trudy LIVT no.68:43-52 '64. (MIRA 18:11)

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L 47145-66 EWP(w) EM

ACC NR: AR6000723 SOURCE CODE: UR/0124/65/000/009/V012/V013

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B

AUTHOR: Artyukhin, Yu. P.

TITLE: Strength and stability of singly connected circular plate in a temperature field

24

SOURCE: Ref. zh. Mekhanika, Abs. 9V92

REF SOURCE: Sb. Itog. Nauchn. konferentsiya Kazansk. un-ta za 1963 g. Sekts. matem., kibernet. i teoriya veroyatn., mekhan. Kazan', 1964, 129-130

TOPIC TAGS: stress distribution, differential equation, temperature distribution, thin plate

ABSTRACT: Large deflections of a circular plate are investigated. The plate is placed under the action of a uniform pressure q and nonuniform axially symmetric heating. The expression of the temperature is taken to be of the form

$$t = T_0\left[a\left(\frac{\rho}{R}\right)^n + b\left(\frac{\rho}{R}\right)^{n-1}\right] + \frac{t_1}{h} z,$$

where ρ and z are the cylindrical coordinates; h is plate thickness; T_0, a, b, n, t_1 are constants. An approximate method is used for the solution, proposed by H. M. Berger for determining large deflections and stresses in plates (J. Appl. Mech., 1955, 22. No. 4, 465--472--RZhMekh, 1957, No. 2, 2191). To a first approximation the stress

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