KOZINENKO, D.Ye., inzh.; KIRZHBAUM, A.Ya., inzh.

Problems of power engineering in petroleum refining plants. Prom. energ. 19 no.3:16-17 Mr '64. (MIRA 17:4)

20-119-4-30/60

AUTHORS: Kozinenko, I. K., Shilov, Ye. A., Member AS Ukrainian SSR

TITLE: The Kinetics and the Mechanism of the Oxidation of Alcohols and Aldehydes by Active Chlorine (Kinetika i mekhanizm okisleniya alkogoley i al'degidov aktivnym khlorom)

PERIODICAL: Doklady Akademii Nauk SSSR, 1958, Vol. 119, Nr 4, pp. 737 - 740 (USSR)

ABSTRACT: In the course of the present work meta-sulfobenzyl alcohol and meta-sulfobenzaldehyde are used (in form of sodium salts), because these compounds make the observation of the oxidation of the alcohol group or the aldehyde group by active chlorine in an aqueous solution in a pure state possible. The first chapter deals with the oxidation of meta-sulfobenzyl alcohol. In the case of a constant pH value and a larger surplus of meta-sulfobenzyl alcohol the decrease of the titer of active chlorine in the presence of buffer salt obeys the monomolecular equation, which fact points in the direction of a logarithmic anamorphosis. On the other hand, reaction velocity is nearly exactly proportional to the concentration of sulfoalcohol and can, in the general

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The Kinetics and the Mechanism of the Oxidation of Alcohols and Aldehydes by Active Chlorine 20-119-4-30/60

case, be expressed by the equation $-dC/dt = k_2AC$ in the case of constant pH. Here A denotes the concentration of the alcohol and C the concentration of active chlorine. The maxima and minima of this curve are mainly connected with the composition of the solutions of the active chlorine. The data of the experiments discussed are given in form of a table. The experimentally determined as well as the calculated constants agree well with one another within the limits of a considerable interval of pH values. The author believes the following mechanism to be most probable: The oxidation of alcohol passes through the stage of the production of ether of hyperchlorous acid. This hypothesis is, for the time being, of only qualitative character because mathematical utilization of results is difficult. The second chapter deals with the oxidation of meta-sulfobenzaldehyde. The dependence of the velocity of oxidation on the pH value in the presence of a buffer mixture is shown by a diagram. In the acid domain at pH values of from 0 to 5 the curve takes a course similar to that in meta-sulfobenzylalcohol. In the highly acid domain oxidation is brought about by molecular chlorine, and the free

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The Kinetics and the Mechanism of the Oxidation of Alcohols and Aldehydes by Active Chlorine 20-119-4-30/60

hyperchlorous acid acts as a weakly oxidizing agent. After pH~ 4 the velocity of reaction at first increases, but, in contrast to the oxidation of alcohol, it does not pass through a maximum but attains a constant value which does not change within the interval of pH values from 8 to 13. The anions of the salts of the buffer mixture catalyze the reaction. The general kinetic equation for this reaction is explicitly written down and is discussed in short. The last part of this work contains some data concerning the production of samples and the carrying out of experiments. There are 2 figures, 1 table and 9 references, 5 of which are Soviet.

ASSOCIATION: Kiyevskiy politekhnicheskiy institut (Kiyev Polytechnic Institute) Institut organicheskoy khimii Akademii nauk USSR (Institute of Organic Chemistry AS Ukrainian SSR)

SUBMITTED: November 10, 1957

Card 3/3

KOZINENKO, I.K.; SHILOV, Ye.A.

Kinetics and mechanism of reactions between active chlorine and organic compounds. Part 13: Oxidation of the meta-sulfobenzyl alcohol ion. Ukr. khim. zhur. 26 no.2:206-217 '60. (MIRA 13:9)

1. Kiyevskiy politekhn icheskiy institut organicheskoy khimii AN USSR.

(Benzyl alcohol)

KOZINER, A. B.

"The Raising of Large White Breed Replacement Piglets on Semiconcentrated and Concentrated Types of Feeding, Utilizing Udder Massage." Cand Agr Sci, All-Union Sci Res Inst of Animal Husbandry, Moscow, 1953. (RZhBiol, No 2, Sep 54)

Survey of Scientific and Technical Dissertations Defended at USSR Higher Educational Institutions (10)

So: Sum. No. 481, 5 May 55

BELIK, V.F., kand. biolog. nauk; KOZINER, E.P.

Some physiological characteristics of hybrid cucumbers.
Agrobiologiia no.6:940-941 N-D '63. (MIRA 17:2)

1. Nauchno-issledovatel'skiy institut ovoshchnogo khozyaystva, Moskovskaya oblast'.

KOZINER, V. B.

PA 1T80

USSR/Medicine - Physiology
Biometrics

Feb 1947

"The Constancy of Carbo-anhydrase Activity of the Blood in Physical Labor of Maximum Power and Endurance," V B Koziner, 3 pp

"Byul Eksper Med I Biol" Vol XXIII, No 2

Statistical account

1T80

KOZINER, V. B.

KOZINER, V. B. -- "Carbonic (Acid) Anhydrase in the Blood During Muscular Work and Under Altered Respiration Conditions." Sub 12 May 52, Second Moscow State Medical Inst imeni I. V. Stalin. (Dissertation for the Degree of Candidate in Medical Sciences.)

So: Vechernaya Moskva January-December 1952

KOZINER, V.B., kandidat meditsinskikh nauk

Blood plasma substitutes. Zdorov'e 2 no.12:4-5 D '56. (MLRA 9:12)
(BLOOD PLASMA SUBSTITUTES)

KOZINER, V. B.

"Work on the Experimental Therapy of Acute Blood Loss With a Solution of Polyvinylpyrrolidone," by Prof V. B. Koziner, Byulleten' Eksperimental'noy Biologii i Meditsiny, No 3, Mar 56, pp 58-62

Experiments were conducted both on healthy animals and on those with blood loss at the Central Order of Lenin Institute of Hematology and Blood Transfusion, Academy of Medical Sciences USSR. In both cases, arterial blood pressure and respiration (recorded by a kymograph), the activity of the heart (registered by electrocardiograph), and the volume of the circulating blood (recorded with the aid of dye T1824-Evan's blue) were observed. The basic goal of the experiments was to discover if the infusion of the solution of polyvinylpyrrolidone can save the life of an animal deprived of blood to such a degree that death will result without effective treatment. According to the conclusions of the author, the above-mentioned solution is more effective that other similar agents, and the results of the experiments were positive.

The experiments showed that polyvinylpyrrolidone does not cause pathological changes in the work of the cardiovascular system, and even has a stimulating effect on the heart. A solution of it possesses sufficient colloid-osmotic pressure, is retained well in the blood stream, and leads to an increased pressure in the arterial system. Gradual recovery of the normal rhythm and depth of breathing was observed as a result of transfusion. The content of hemoglobin after blood loss and the introduction of the solution was significantly lowered; later it rose and continued to maintain a constant level during the experiment. The hematocrit reading changes in a manner which parallels the change in the hemoglobin level. Experiments showed that 2 hours of observation was sufficient time for the determination of the basic characteristics of the blood substitute in relation to its action on the hemodynamics.

Jeam 1239

KOZINER, V.B., kandidat meditsinskikh nauk

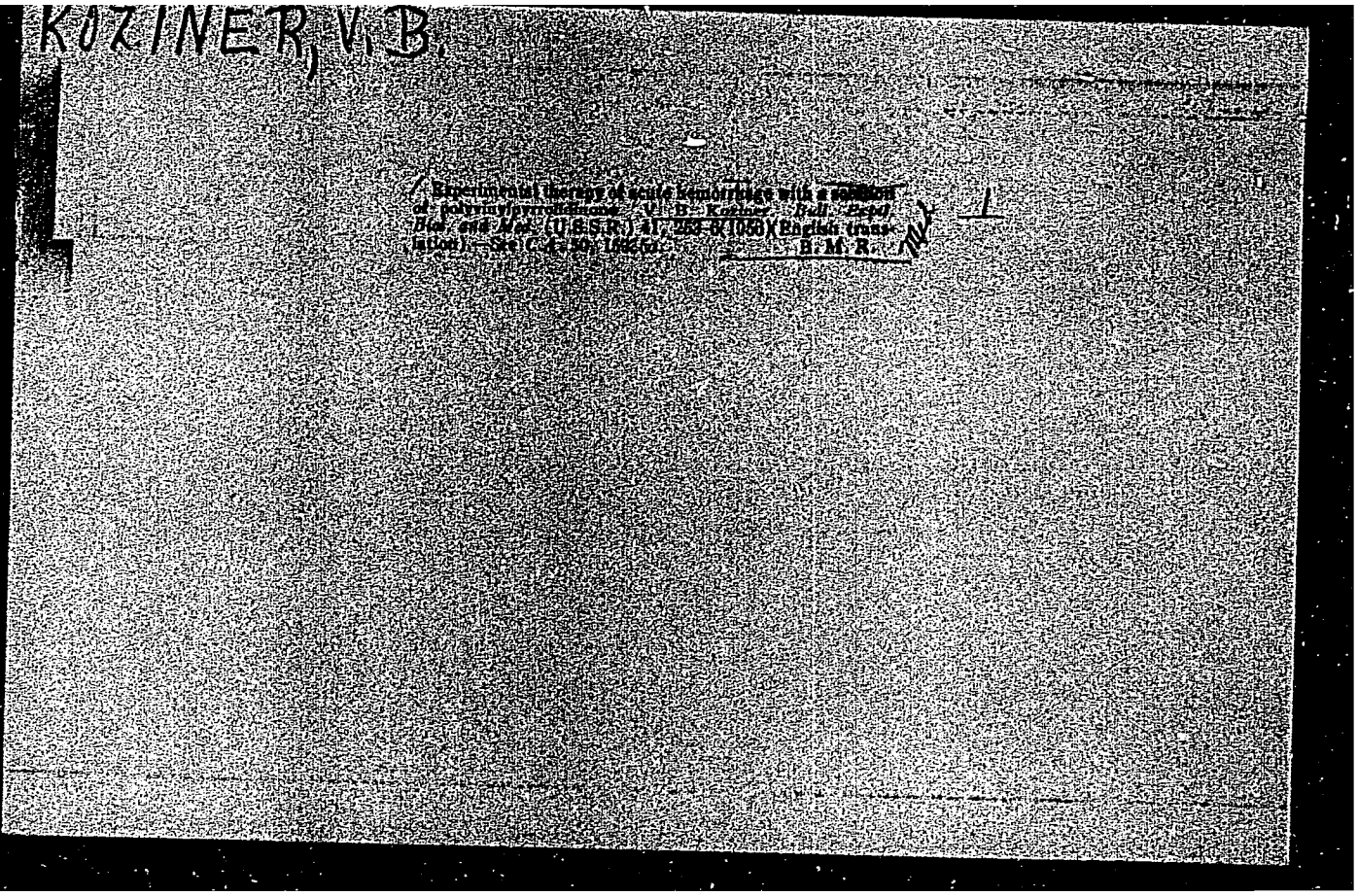
Synthetic blood plasma substitutes. Voen.-med.zhur. no.7:19-25 Jl '56. (MLRA 9:11)
(BLOOD PLASMA SUBSTITUTES)

KOZINER, V.B.

Experimental therapy of acute blood loss with a polyvinylpyrrolidone solution. Biul.eksp.biol. i med. 41 no.3:58-62 Mr '56. (MLRA 9:7)

1. Iz patofiziologicheskoy laboratorii (zav. prof. N.A.Fedorov) TSentral'nogo ordena Lenina instituta gematologii i perelivaniya krovi (dir. chlen-korrespondent AMN SSSR prof. A.A.Bagdasarov) Moskva. Predstavlena deystvitel'nym chlenom AMN SSSR S.Ye. Severinym.

(HEMORRHAGE, exper.
eff. of polyvinylpyrrolidone on acute blood loss)
(POLYVINYLPYRROLIDONE, eff.
on exper. acute blood loss)



KOZINER, V.B.

45. Gas Exchange, Respiration, and Hemodynamics Studied Following Transfusion with Blood Substitutes

"Gas Exchange, Respiratory Function of the Blood, and Hemodynamics Following Partial Replacement of the Blood with Blood Substitutes," by G. V. Derviz, V. B. Koziner and S. A. Lazarevskiy (Moscow), Central Order of Lenin Institute of Hematology and Blood Transfusion (director, Prof A. A. Bagdasarov, Corresponding Member, Academy of Medical Sciences USSR), Patologicheskaya Fiziologiya i Eksperimental'naya Terapiya, Vol 1, No 2, Mar/Apr 57, pp 48-56

Colloidal blood substitutes polyglyukin (a dextran preparation), isoserum, and a heterogeneous protein blood substitute (Belenkiy's therapeutic serum) were injected into dogs following copious bleeding, gas exchange,

respiratory rate, and the hemodynamics were studied. The gas exchange, disturbed by severe blood loss, returns to normal following transfusion by blood substitutes. Polyglyukin and iso-serum restore the disturbed hemodynamics very effectively. (U)

Sum 1434

KOZINER, V.B. (Moskva)

Carboxylmethylcellulose as a plasma substitute in acute hemorrhage. Pat.fiziol. i eksp. terap. 2 no.3:45-46 My-Je '58 (MIRA 11:7)

1. Iz patofiziologicheskoy laboratorii (zav. - chlen-korrespondent AMN SSSR prof. N.A. Fedorov) TSentral'nogo ordena Lenina instituta gematologii i perelivaniya krovi (direktor - deystvitel'nyy chlen AMN SSSR A.A. Bagdasarov).
(BLOOD PLASMA SUBSTITUTES)
(CELLULOSE)

KOZINER, V.B. (Moskva)

Synthetic blood substitute polyvinylpyrrolidone; review of the literature. Pat.fiziol. i eksp.terap. 2 no.6:53-57 N-D '58. (MIRA 12:1)

(POLYVINYLPYRROLIDONE
review (Rus))

KOZINER, V.B.

ROZENBERG, G.Ya.; POKIDOVA, M.V.; KOZINER, V.B.

New synthetic plasma substitute from a cellulose preparation [with summary in English, p.61-62]. Probl.gemat. i perel. krovi 3 no.1: 35-37 Ja-F '58. (MIRA 11:3)

1. Iz Tsentral'nogo ordena Lenina instituta gematologii i perelivaniya krovi (dir. - deystvitel'nyy chlen AMN SSSR prof. A.A.Bogdasarov) Ministerstva zdravookhraneniya SSSR.

(PLASMA SUBSTITUTES, preparation of, carboxymethyl cellulose prep. (Rus))
(CELLULOSE related compounds, carboxymethyl cellulose prep. as plasma substitute (Rus))

KOZINER, V.B., RODIONOV, V.M.

Use of T-1824 dye in determining the volume of circulating blood.
Lab.delo 4 no.3:19-21 My-Je '58 (MIRA 11:5)

1. Iz Instituta biologicheskoy i meditsinskoy khimii (dir. - prof. V.N. Orekhovich) AMN SSSR, Moskva.
(BLOOD VOLUME)

KOZINER, V.B.

Review of R.A. Dymshits' book "Acute blood loss." Pat.fiziol. i eksp. terap. 3 no.6:82-83 N-D '59. (MIRA 13:3)
(HEMORRHAGE) (DYMSHITS, R.A.)

KOZINER, V.B.

Effect of polyglucin on certain indicators of blood coagulation in dogs. Probl.gemat.i perel.krovi 4 no.12:39-44 D '59.
(MIRA 13:4)

1. Iz patofiziologicheskoy laboratorii (zaveduyushchiy - chlen-korrespondent AMN SSSR prof. N.A. Fedorov) TSentral'nogo ordena Lenina instituta gematologii i perelivaniya krovi (direktor - deystvitel'nyy chlen AMN SSSR prof. A.A. Bagdasarov) Ministerstva zdravookhraneniya SSSR.
(DEXTRAN pharmacol.)
(BLOOD COAGULATION pharmacol.)

KOZINER, V.B., kand.med.nauk; MURAZYAN, R.I., kand.med.nauk

Plasma substitute polyglucin. Voen.-med.zhur. no.6:51-55 Je '59. (MIRA 12:9)

(DEXTRAN, related cpds.
polyglucin (Rus))

KOZINER, V.B. (Moskva)

Polyglucin circulation rate and means of the administration. Pat. fiziol.i eksp.terap. 4 no.4:47-52 Jl-Ap '60. (MIRA 14:5)

1. Iz patofiziologicheskoy laboratorii (zav. - chlen-korrespondent AMN SSSR prof. N.A.Fedorov) TSentral'nogo ordena Lenina instituta gematologii i perelivaniya krovi (dir. - deystvitel'nyy chlen AMN SSSR prof. A.A.Bagdasarov) Ministerstva zdravookhraneniya SSSR. (DEXTRAN)

GOL'DMAN, Igor' L'vovich; KOZINER, V.B., kand.med.nauk, nauchnyy red.; GUSAKOVA, A.G., red.; SAVCHENKO, Ye.V., tekhn.red.

[The atom is a doctor] Atom - vrach. Moskva, Izd-vo "Znanie," 1961. 57 p. (MIRA 15:10)

(ATOMIC MEDICINE)

KOZINER, V.B.; GOL'DMAN, I.L.

Histamine in the blood following transfusion of polyglucin. Probl.gemat.i perel.krovi no.5:41-44 '61. (MIRA 14:9)

1. Iz TSentral'nogo ordena Lenina instituta gematologii i pereli-vaniya krovi (dir. - deystvitel'nyy chlen AMN SSSR prof. A.A. Bagdasarov) Ministerstva zdravookhraneniya SSSR.
(DEXTRAN) (HISTAMINE)

KOZINER, V.B. (Moskva)

Restoration of colloid-osmotic pressure, blood volume and serum proteins following hemorrhage and the administration of polyglucin. Pat.fiziol. i eksp. terap. 5 no.3:54-60 My-Je '61. (MIRA 14:6)

1. Iz patofiziceskoy laboratorii (zav. - chlen-korrespondent AMN SSSR prof. N.A.Fedorov) TSentral'nogo ordena Lenina instituta gematologii i perelivaniya krovi (dir. - deystvitel'nyy chlen AMN SSSR prof. A.A.Bagdasarov) Ministerstvo zdravookhraneniya SSSR.

(DEXTRAN) (HEMORRHAGE) (BLOOD VOLUME)
(BLOOD PROTEINS) (BLOOD PRESSURE)

GUREVICH, I. B.; KOZINER, V. B. (Moskva)

Action of polyglucin on the heart and the hemodynamics during plethoric transfusion and during acute hemorrhage. Arkh. pat. no.2:42-49 '62. (MIRA 15:2)

1. Iz patofiziologicheskoy laboratorii (zav. - chlen-korrespondent AMN SSSR prof. N. A. Fedorov) i rentgenovskogo otdeleniya (zav. - doktor meditsinskikh nauk I. B. Gurevich) TSentral'nogo ordena Lenina instituta gematologii i perelivaniya krovi (dir. - deystvitel'nyy chlen AMN SSSR prof. A. A. Bagdasarov[deceased]) Ministerstva zdravookhraneniya SSSR.

(HEMORRHAGE) (DEXTRAN--PHYSIOLOGICAL EFFECT)
(BLOOD--CIRCULATION) (HEART)

KOZINER, V.B.

Journal "Patologicheskaia fiziologiia i eksperimental'naia terapiia" for the past five years. Pat. fiziol. i eksp. terap. 6 no.1:89-93 Ja-F '62. (MIRA 15:3)
(PSYSIOLOGY, PATHOLOGICAL--PERIODICALS)

KOZINER, V.B. (Moskva)

Modern artificial blood plasma substitutes. Fel'd. i akush. 27. no.9:58-61 S'62. (MIRA 16:8)
(BLOOD PLASMA SUBSTITUTES)

KOZINER, V.B.

Coronary blood flow following transfusion of blood and blood substitutes. Kardiologiia 3 no.4:83-87 Jl-Ag '63. (MIRA 17:3)

1. Iz patofiziologicheskoy laboratorii (zav. - chlen-korrespondent AMN SSSR prof. N.A. Fedorov) TSentral'nogo ordena Lenina instituta gematologii i perelivaniya krovi (dir. - deystvitel'nyy chlen AMN SSSR prof. A.A. Bagdasarov [deceased]).

KOZINER, V.B.; LAZAREVSKIY, S.A. (Moskva)

Coronary circulation and myocardial gas exchange in replacement of blood loss by polyglucin and blood. Pat. fiziol. eksp. ter. 7 no.5:22-29 S-O'63 (MIRA 17:2)

1. Iz patofiziologicheskoy laboratorii (zav. - chlen-korrespondent AMN SSSR prof. N.A. Fedorov) i biokhimicheskoy laboratorii (zav. - prof. G.V.Derviz) TSentral'nogo ordena Lenina instituta gematologii i perelivaniya krovi (direktor - dotsent A.Ye.Kiselev).

KOZINER, V.B.

Vascular tone in different types of hemothorax [illegible] of blood. Probl. gemat. i perel. krovi 9 no.[illegible]-51 [illegible] (MIRA 18:1)

1. Laboratoriya patologicheskoy fiziologii (zav. - zasluzhennyy [illegible] nyy chlen AMN SSSR prof. N.A. Fedorov) Tsentral'nogo ordena Lenina instituta gematologii i perelivaniya krovi (direktor - dotsent A.Ye. Kiseler) Ministerstva zdravookhraneniya SSSR, Moskva.

KOZINER, V.B.; KOVALENKO, Ye.A.

Oxygen tension in brain tissues in acute hemorrhage and its therapy with blood substitutes and blood. Pat. fiziol. i eksp. terap. 8 no.1:56-58 Ja-F '64. (MIRA 18:2)

1. Laboratoriya patologicheskoy fiziologii (zav. - deystvitel'nyy chlen AMN SSSR prof. N.A.Fedorov) TSentral'nogo instituta gematologii i perelivaniye krovi (dir. - dotsent A.Ye.Kiselev), Moskva.

KOZINER, V.B.

Some characteristics of the blood supply of the brain in substituting the loss of blood with polyglucin and blood. Pat. fiziol. i eksp. terap. 9 no.1:11-16 Ja-F '65.
(MIRA 18:11)

1. Laboratoriya patologicheskoy fiziologii (zav. - deystvitel'nyy chlen AMN SSSR prof. N.A. Fedorov) TSentral'nogo ordena Lenina instituta gematologii i perelivaniya krovi (direktor - dotsent A. Ya. Kiselev), Moskva.

KOZINER, V.B.; PAPUSH, N.D.

Plasma protein fractions following polyglucin substitution in hemorrhage. Probl. gemat. i perel. krovi 10 no.2:37-44 F '64. (MIRA 19:1)

1. TSentral'nyy ordena Lenina institut gematologii i perelivaniya krovi (dir. - dotsent A.Ye. Kiselev) Ministerstva zdravookhraneniya SSSR, Moskva.

L 52229-65 EWG(j)/EWG(r)/EWG(v)/EWG(a)-2/EWG(c)/EWT(1)/FS(v)-3 Pb-4 DD

ACCESSION NR: AP5013399 UR/0239/65/051/005/0547/0553

28

AUTHOR: Kovalenko, Ye. A.; Koziner, V. B.

27

TITLE: Oxygen supply of the brain during circulatory hypoxia

B

SOURCE: Fiziologicheskiy zhurnal SSSR, v. 51, no. 5, 1965, 547-553

TOPIC TAGS: hypoxia, hemodynamics, brain oxygen supply, circulatory hypoxia, brain hemodynamics, dog

ABSTRACT: The dynamics of oxygen tension in brain tissue during circulatory hypoxia was studied. Twelve dogs with platinum electrodes implanted in the brain were used. Oxygen tension was determined polarographically. Catheters were inserted into the aorta, the internal carotid artery, and the femoral vein. Then circulatory and hemic hypoxia were created by drawing off blood in batches, thereby reducing the amount of blood in circulation and lowering blood pressure. It was found that the pO_2 of brain tissue dropped along with blood pressure, lagging a little behind (especially during abrupt drops in blood pressure) due to compensation processes. It is interesting that a similar drop and equalization of pO_2 in brain tissue is observed during rotation in a centrifuge. When still more blood was removed, pathological cardiovascular symptoms appeared. A number of experiments were conducted which reveal the struggle between pathological and compensatory processes of brain

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L 52229-65

ACCESSION NR: AP5013399

hemodynamics. Comparison of changes in oxygen tension in brain tissue and blood showed that the pO_2 of brain tissue depends more on the pO_2 of venous than of arterial blood. The experiments led to the following conclusions. When pO_2 in brain tissue is lowered 40% by decreasing the amount of blood in circulation, independent restoration of the pO_2 in the brain is ensured by the nature of the blood supply of the brain. Prolonged lowering (more than 50%) of the pO_2 in brain tissue, accompanied by blood pressure lowered to 10-15% of the initial) is not compensated. Breathing pure oxygen can raise the level of oxygen tension in brain tissue in this instance. One of the chief factors of survival during hypoxia is oxygen tension in brain tissue and approximately corresponding oxygen tension in venous blood. [JS]
Orig. art. has: 3 figures and 2 tables.

ASSOCIATION: Laboratoriya patologicheskoy fiziologii Tsentral'nogo instituta gematologii i perelivaniya krovi, Moscov (Laboratory of Pathological Physiology, Central Institute of Hematology and Blood Transfusion)

SUBMITTED: 20Jan64 ENCL: 00 SUB CODE: LS

NO REF SOV: 015 OTHER: 001 ATD PRESS: 4009

Card 2/2 mb

KOZINETS, A., inzhener.

Mechanized poultry section on the Zhdanov Collective Farm.
Sel'.stroi. 11 no.10:3-5 O '56. (MLRA 9:12)

1. Kurskiy filial "Rosgiprosel'stroya."
(Belgorod Province--Poultry houses and equipment)

KOZINETS, B.N.

Area of the kernel of an oval. Uch. zap. LGU no.271:83-89 '58.
(MIRA 12:5)
(Mensuration)

L 27783-66 EWT(d)/T/EWP(1) IJP(c) GG/BB/JXT(CZ)

ACC NR: AP6012011 SOURCE CODE: UR/0020/66/167/005/1008/1011

57
56
B

AUTHOR: Kozinets, B. N.; Lantsman, R. M.; Yakubovich, V. A.

ORG: Lithuanian Scientific Research Institute for Forensic Examinations, Vilnius (Litovskiy Nauchno-issledovatel'skiy institut sudebnoy ekspertizy)

TITLE: Criminalistic examination of similar handwriting by means of electronic computers

SOURCE: AN SSSR. Doklady, v. 167, no. 5, 1966, 1008-1011

TOPIC TAGS: computer application, adaptive pattern recognition, electronic computer, digital computer

ABSTRACT: One of the most difficult tasks in criminalistic examination is the identification of similar handwriting. The present authors developed a program for a learning digital computer which bases the recognition process on learning according to the algorithm which follows a training sequence. The graphical object is first converted into digital form by means of characteristic features. The processing of data is carried out by associating to the stereotype of the handwriting of a given person a sampling of convex sets. Computer recognition of true and forged signatures of the personnel of the Lithuanian Scientific Research Institute for Forensic Examinations (Litovskiy nauchno-issledovatel'skiy institut sudebnoy ekspertizy) was compared with the results of identifications by experts of the Leningrad Scientific Research Laboratory of Forensic Examinations (Leningradskaya nauchno-issledovatel'skaya laboratoriya sudebnoy ekspertizy), of the scientific technical department

Card 1/2 UDC: 519.95

of the UM UOOPLO (nauchno-tekhnicheskiy otdel), and the scientific-technical group of the highway department of the militia MOOP RSFSR (nauchno-tekhnicheskaya gruppa dorozhnogo otdela militsii). Results are shown in Table 1.

Table 1 Handwriting recognition

Signature	Recognition, percent	
	Experts	Machine
Metsyavichyus	58.3; 68.3; 70	88
Shtromas	75.4; 78.9; 80.7	91.2
Chyapas	75.0; 80	84.2
Poshkyavichyus	90.0; 92	100

A more detailed account of the investigation will appear in Symposium No. 2 of the Lithuanian Scientific-Research Institute for Forensic Investigation which planned the study in conjunction with the Computer Center of Leningrad University (Vychislitel'nyy tsenter Leningradskogo universiteta). The authors express their gratitude to the experts of abovementioned institutions. The paper was presented by Academician Smirnov, V. I., 20 Jul 65. Orig. art. has: 1 table.

SUB CODE: 05, 09 / SUBM DATE: 17Jul64 / ORIG REF: 001

KOZINETS, B.N.

An algorithm for the teaching of a linear perceptron. Vych. tekh. i vop. prog. no.3:80-83 '64. (MIRA 18:3)

ARTEMOV, Yu.V.; KOZINETS, B.N.; YAKUBOVICH, V.A.

Effect of impact on a multimass system. Metod. vych. no.2:75-90 '63. (MIRA 18:11)

L 04900-67 EWT(d)/EWP(1) IJP(c) GG/BB/JXT(BF)/GD
ACC NR: AT6022670 SOURCE CODE: UR/0000/66/000/000/0021/0028

AUTHOR: Kozinets, B. N.; Lantsman, R. M.; Sokolov, B. M.; Yakubovich, V. A.

52
B+1

ORG: none

TITLE: Handwriting recognition and discrimination by means of electronic computers

SOURCE: Moscow. Institut avtomatiki i telemekhaniki. Samoobuchayushchiyesya avtomaticheskiye sistemy (Self-instructing automatic systems). Moscow, Izd-vo Nauka, 1966, 21-28

TOPIC TAGS: pattern recognition, automaton, character recognition, computer application

ABSTRACT: The general problem of machine recognition and discrimination of handwriting, the development of the necessary algorithms, and the theoretical principles underlying the process of teaching an automaton handwriting analysis are discussed. The discussion is based primarily on certain theoretical work in this area that has been carried out at the VTs LGU. A detailed explanation is given of the manner in which the handwriting or "graphic" material is converted into a system of numbers suitable for computer processing, and several different metrization techniques are described. The principle of the "dynamic stereotype of writing" (a fundamental assumption of the method proposed) is introduced as a means of neutralizing

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random or deliberate handwriting deviations from an established and quantized standard. The necessary and sufficient conditions for the validity of this hypothesis are stated, and it is shown that algorithms based on this assumption are in all cases much simpler than those which disregard it . Examples are given and an analysis is made of the results of certain machine experiments using the general techniques outlined, including a comparison of the algorithm adopted with others founded on different approaches. The theoretical considerations and experiments described substantiate the possibility in principle of employing computers for the differentiation of similar handwriting styles. Orig. art. has: 8 figures.

SUB CODE: 09,06 / SUBM DATE: 02Mar66/ ORIG REF: 003

Card 2/2

BURTMAN, R.I.; GROMOVA, R.V.; KOZINETS, E.A.

Case of congenital cutaneous reticulosis. Pediatriia no.7:79-82 '61. (MIRA 14:9)

1. Iz kafedry pediatrii (zav. - prof. G.N. Sperenskiy) TSentral'nogo instituta usovershenstvovaniya vrachey i patologoanatomicheskogo otdeleniya Detskoy bol'nitsy imeni Dzerzhinskogo (glavnyy vrach A.N. Kudryashova).
(RETICULO-ENDOTHELIAL SYSTEM—DISEASES)

KOZINETS, G. I.; SUKYASYAN, G. V.

Study on the adaptation of bone marrow cells of the red series transplanted in acute radiation sickness. Med. rad. no.12: 36-40 '61. (MIRA 15:7)

1. Iz radiobiologicheskoy laboratorii (zav. - prof. M. O. Raushenbakh) TSentral'nogo ordena Lenina instituta gematologii i perelivaniya krovi Ministerstva zdravookhraneniya SSSR.

(MARROW—TRANSPLANTATION) (RADIATION SICKNESS)

RAUSHENBAKH, M.O.; SUKYASYAN, G.V.; KOZINETS, G.I.; TSESSARSKAYA, T.P.; NOVIKOVA, M.N.; KAZANOVA, L.I.; CHERNOV, G.A.; LAGUTINA, N.Ia.; CHERTKOV, I.L.

Mechanism of action of the transplantation of bone marrow in irradiated dogs and monkeys. Probl. gemat i perel. krovi 6 no.2:12-20 '61. (MIRA 14:1)
(MARROW--TRANSPLANTATION) (RADIATION SICKNESS)

KOZINETS, G.I.

Use of thymidine labeled with tritium in determining bone marrow cell viability. Med.rad. 6 no.4:55-58 '61. (MIRA 14:12)
(THYMIDINE) (TRITIUM)

KOZINETS, G.I.; FERTUKOVA, N.M.; SHITIKOVA, M.G.

Radioautography of the blood and hemotopoietic organs. Probl. gemat.i perel.krovi no.7:9-13 '61. (MIRA 14:9)

1. Iz tsentral'nogo ordena Lenina instituta gematologii i pereliyaniya krovi (dir. - deystvitel'nyy chlen AMN SSSR prof. A.A. Bagdasarov) Ministerstva zdravookhraneniya SSSR.
(HEMATOPOIETIC SYSTEM--RADIOGRAPHY) (AUTORADIOGRAPHY)

ILYUKHIN, A. V.; KOZINETS, G. I.

Study of the phagocytic activity of transfused leucocytes in the body of the recipient. Probl. gemat. i perel. krovi no.10:54-56 '61. (MIRA 14:12)

1. Iz TSentral'nogo ordena Lenina instituta gematologii i perelivaniya krovi (dir. - deystvitel'nyy chlen AMN SSSR prof. A. A. Bagdasarov [deceased]) Ministerstva zdravookhraneniya SSSR.

(BLOOD--TRANSFUSION) (PHAGOCYTOSIS) (LEUCOCYTES)

BAGDASAROV, A. A., [deceased]; SHITIKOVA, M. G.; POLUSHINA, T. V.; KOZINETS, G. I.; LAGUTINA, N. Ya.; RAUSHENBAKH, M. O., prof.

Comparative study of the action of polyglucin of various molecular weights on the course of acute radiation sickness. Report No. 1: Effect of polyglucin infusions on some blood coagulation indices and hemopoietic processes. Probl. gemat. i perel. krovi no.4:3-8 '62. (MIRA 15:4)

1. Iz TSentral'nogo ordena Lenina instituta gematologii i pereliyaniya krovi (dir. - deystvitel'nyy chlen AMN SSSR prof. A. A. Bagdasarov[deceased]) Ministerstva zdravookhraneniya SSSR.

(DEXTRAN) (RADIATION SICKNESS)
(BLOOD--COAGULATION) (HEMOPOIETIC SYSTEM)

BARKAYA, V. S.; KOZINETS, G. I.

Study of erythropoiesis in thermal burns using radioactive indicators. Probl. gemat. i perel. krovi no.4:51-52 '62. (MIRA 15:4)

1. Iz patofiziologicheskoy laboratorii (zav. - chlen-korrespondent AMN SSSR prof. N. A. Fedorov) TSentral'nogo ordena Lenina instituta gematologii i perelivaniya krovi (dir. - dotsent A. Ye. Kiselev) Ministerstva zdravookhraneniya SSSR.

(BURNS AND SCALDS) (HEMOPOIETIC SYSTEM)
(RADIOACTIVE TRACERS)

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S/241/62/007/002/004/004
I015/1215

AUTHOR: Bagdasarov, A. A. (Deceased), Sukyasyan, G. V., Bogoyavlenskaya, M. P., Kozinets, G. I., Ilyukhin, A. V., and Rausehenbakh, M. S.

TITLE: Bone marrow transfusion for treatment of depressed hemopoiesis following irradiation

PERIODICAL Meditsinskaya radiologiya, v 7, no. 2, 1962, 68-71

TEXT: The necessity to continue radiation therapy in cases of malignant neoplasms forces one to look for efficient rapidly-acting hemopoiesis-stimulating means. Transfusion of homologous bone marrow was tried first on dogs and monkeys after induction of acute radiation sickness. 80-95% of cells preserved their ability for further division and that hemopoiesis subsequently improved markedly. This method was then tried on 40 patients who received 70 transfusions of homologous bone marrow. This treatment had a marked therapeutic effect in most of the patients, particularly among those with the subacute varieties of hypo- and aplastic anemia. The authors conclude, however, that the small number of cases examined is insufficient for definite evaluation of the therapeutic effect of this method.

SUBMITTED: November 20, 1961

Card 1/1

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S/241/62/007/007/002/006
I015/I215

AUTHOR: Kozinets, G. I., Tsessarskaya, T. P. and Bogoyavlenskaya, M. P.

TITLE: The study of proliferative capacity of hematopoietic cells be means of radioisotopes during radiotherapy

PERIODICAL: Meditsinskaya radiologiya, v. 7, no. 7, 1962, 50-57

TEXT: The effect of chronic irradiation on cell proliferation has not been sufficiently studied. Radioactive P^{32} and C^{14} in glycine were employed for the study of DNA and RNA synthesis, and Fe^{59} for the study of haemoglobin synthesis. Bone marrow from 16 patients subjected to chronic irradiation of 8000-41,000 r was studied "in vitro". Haematologic data obtained from 20 healthy persons served as control. Autoradiography of bone marrow smears showed a decreased incorporation of the labelled atoms in the irradiated individuals. This indicates a decreased synthesis of the nucleic acids and haemoglobin and, consequently, a decreased proliferating capacity of the cells. Similar results were obtained "in vivo" with dogs subjected to chronic daily irradiation at 10 r/day, up to a total dose of 2500-3000 r. Variable impairment of maturation of cells was also apparent. There are 2 figures and 4 tables.

ASSOCIATION: Radiobiologicheskaya laboratoriya zav.-prof. M.O. Raushenbakh Tsentral'nogo ordena Lenina institute gematologii i perelivaniya krovi (Laboratory of Radiobiology (headed by Prof. M. O. Raushenbakh) Order of Lenin Institute of Hematology and Blood Transfusion)

SUBMITTED: October 20, 1961

Card 1/1

41561
S/241/62/010/010/003/007
D296/D307

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AUTHORS: Shitikova, M.G., and Kozinets, G.I.

TITLE: Determination of the survival time of transfused platelets labelled with Cr^{51} in acute radiation sickness

PERIODICAL: Meditsinskaya radiologiya, v. 10, no. 10, 1962, 41-44

TEXT: In recent years, hemorrhages caused by radiation injuries have been treated by platelet transfusion. The optimal interval between repeated transfusions will depend on the survival time of the platelets in the circulation. The author measured the survival time by labelling platelets with Cr^{51} by means of $Na_2Cr^{51}O_4$. Using the chloride of Cr^{51} leads to loss of radioactivity as the trivalent Cr^{51} has a great affinity for plasma proteins; labelling with P^{32} is time consuming and leads to damage to the platelets. All manipulations were carried out in siliconized glassware. 500 ml of stabilized blood were centrifuged, at 1000 rpm, for 30 min. at 2°C, and 150 - 400 uC $Na_2Cr^{51}O_4$ were added to the supernatant liquid containing the platelets. 1 % of the activity became fixed to the plate-

Card 1/3

lets. The specific activity of the preparation used varied between 1.7 and 1 mC per mg Cr^{51}. The mixture was incubated at room temperature for 40 - 50 min and was centrifuged at 2°C for 15 min at 2500 rpm. To eliminate Cr^{51} present in the plasma the centrifugate was resuspended in 10 - 15 ml of fresh plasma and injected into 13 dogs, on the 2nd - 3rd and on the 9th - 10th day after exposure to x-rays (LD_{95}), i.e. before and after the development of hemorrhages caused by the acute radiation sickness. In healthy dogs transfused platelets circulate for 5 - 8 days. When injected 2-3 days after irradiation, the platelets disappear within 3 - 4 days, and platelets injected after the development of hemorrhages (9 - 10th day) circulate for only 2 - 3 days. On the basis of these findings the author holds that for the treatment of hemorrhages accompanying acute radiation sickness, platelet transfusions should be given at intervals not exceeding 2 - 3 days. There are 2 figures.

ASSOCIATION: Radiobiologicheskaya laboratoriya i izotopnaya laboratoriya Tsentral'nogo ordena Lenina instituta gematologii i perelivaniya krovi (Radiobiological and Isotope Laboratory, Central Institute of Hematology and Blood Transfusion, 'Order of Lenin')

KOZINETS, G.I.

Study of the proliferation properties of hematopoietic cells using radioactive indicators; a survey of the literature. Probl.gemat.i perel.krovi no.11:41-48 '62. (MIRA 15:11)

1. Iz radiobiologicheskoy laboratorii (zav. - prof. M.O. Raushenbakh) TSentral'nogo ordena Lenina instituta gematologii i perelivaniya krovi (dir. - dotsent A.Ye. Kiselev) Ministerstva zdravookhraneniya SSSR.

(HEMOPOIETIC SYSTEM) (RADIOACTIVE TRACERS)

LAYTA, L.G.[Laitha, L.G.]; SHEPSHELEVICH, L.L.[translator]; SHITIKOVA, M.G.[translator]; KOZINTS, G.I.[translator]; RAUSHENBAKH, M.O., prof., red.; OMEL'YANENKO, L.M., red.; BUKOVSKAYA, N.A., tekhn. red.

[Use of isotopes in hematology] Primenenie izotopov v gematologii. Moskva, Medgiz, 1963. 101 p. Translated from the English. (MIRA 16:7)
(HEMATOLOGY) (RADIOACTIVE TRACERS)

KOZINETS, G.I.; OSECHENSKAYA, G.V.

Inclusion of C^{14} labeled glycine in the hematopoietic cells of patients with leukemia. Med. rad. 7 no.11:53-59 N'62. (MIRA 16:9)

1. Iz radiobiologicheskoy laboratorii (zav. - prof. M.O. Kaushenbakh) i gematologicheskoy kliniki (zav. - prof. M.S. Dul'tsin) TSentral'nogo ordena Lenina instituta gematologii i perelivaniya krovi.

(LEUKEMIA) (HEMOPOIETIC SYSTEM) (GLYCINE)

KOZINETS, G.I.; TSESSARSKAYA, T.P.

Proliferation and maturation of bone marrow cells in acute radiation sickness. Med. rad. 7 no.12:43-49 D'62.
(MIRA 16:10)

1. Iz radiobiologicheskoy laboratorii (zav. - prof. M.O. Raushenbakh) TSentral'nogo ordena Lenina instituta gematologii i perelivaniya krovi.

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KAZANOVA, L.I.; KOZINETS, G.I.

Cytochemical and radioautographic study of nucleic acids in leukemic cells. Probl. gemat. i perel. krovi 8 no.4:19-22 Ap'63 (MIRA 17:2)

1. Iz tsitologicheskoy laboratorii (zav. - prof. E.I. Terent'yeva) i radiobiologicheskoy laboratorii (zav. - prof. M.O. Raushenbakh) TSentral'nogo ordena Lenina instituta gematologii i perelivaniya krovi (dir. - dotsent A.Ye. Kiselev) Ministerstva zdravookhraneniya SSSR.

KOZINETS, G.I.; TYUBLIANA, M.; FAIRELL, E.

Study of the dynamics of erythropoiesis using thymidine H^3, Fe^{59} and erythropoietin. Med. rad. 8 no.6:60-63 Je '63. (MIRA 17:4)

1. Iz Tsentral'nogo ordena Lenina instituta gematologii i perelivaniya krovi Ministerstva zdravookhraneniya SSSR i Institita Gustava Russi, Frantsiya.

BOGOYAVLENSKAYA, M.P.; ZOTIKOV, Ye.A.; [illegible]; [illegible], G.I.; KUZNYUKOVA, L.I.; GURVICH, I.B.

Mechanism of therapeutic action of bone marrow transfusion in the treatment of radiation sickness. Med. rad. 8 no.6:62-68 Je '63. (MIRA 17:4)

1. Iz radiobiologicheskoy laboratorii (zav. - prof. V.D. Ponomarenkov) i serologicheskoy laboratorii (zav. - kand. med. nauk Ye.A. Zotikov) TSentral'nogo ordena Lenina instituta gematologii i perelivaniya krovi.

ILYUKHIN, A.V.; KOZINETS, G.I.; SUKYASYAN, G.V.

Distribution of transfused leucocytes and cells of the bone marrow in the organs and tissues of the recipient. Probl. gemat. i perel. krovi 8 no.7:46-51 Jl '63. (MIRA 17:10)

1. Iz radiobiologicheskoy laboratorii (zav. -prof. M.C.Raushenbakh) TSentral'nogo ordena Lenina instituta gematologii i perelivaniya krovi (dir. -dotsent A.Ye.Kiselev) Ministerstva zdravookhraneniya SSSR.

FAYNSHTEYN, F.E.; KOZINETS, G.I.; KAZANOVA, L.I.

Radioautographic and cytochemical examination of hemopoietic cells in aplastic and hypoplastic anemias. Probl. gemat. i perel krovi no.10:19-24 '63 (MIRA 18:1)

1. Iz gematologicheskoy kliniki (zav. - prof. M.S. Dil'tsin), radiobiologicheskoy laboratorii (zav. - prof. M.O. Raushenbakh) i tsitologicheskoy laboratorii (zav. - prof. E.I. Terent'yeva) TSentral'nogo ordena Lenina instituta gematologii i perelivaniya krovi (dir. - dotsent A. Ye. Kiselev) Ministerstva zdravookhraneniya SSSR.

FEDOROVA, L.I.; GRIGOR'YEVA, O.V.; KOZINETS, G.I.

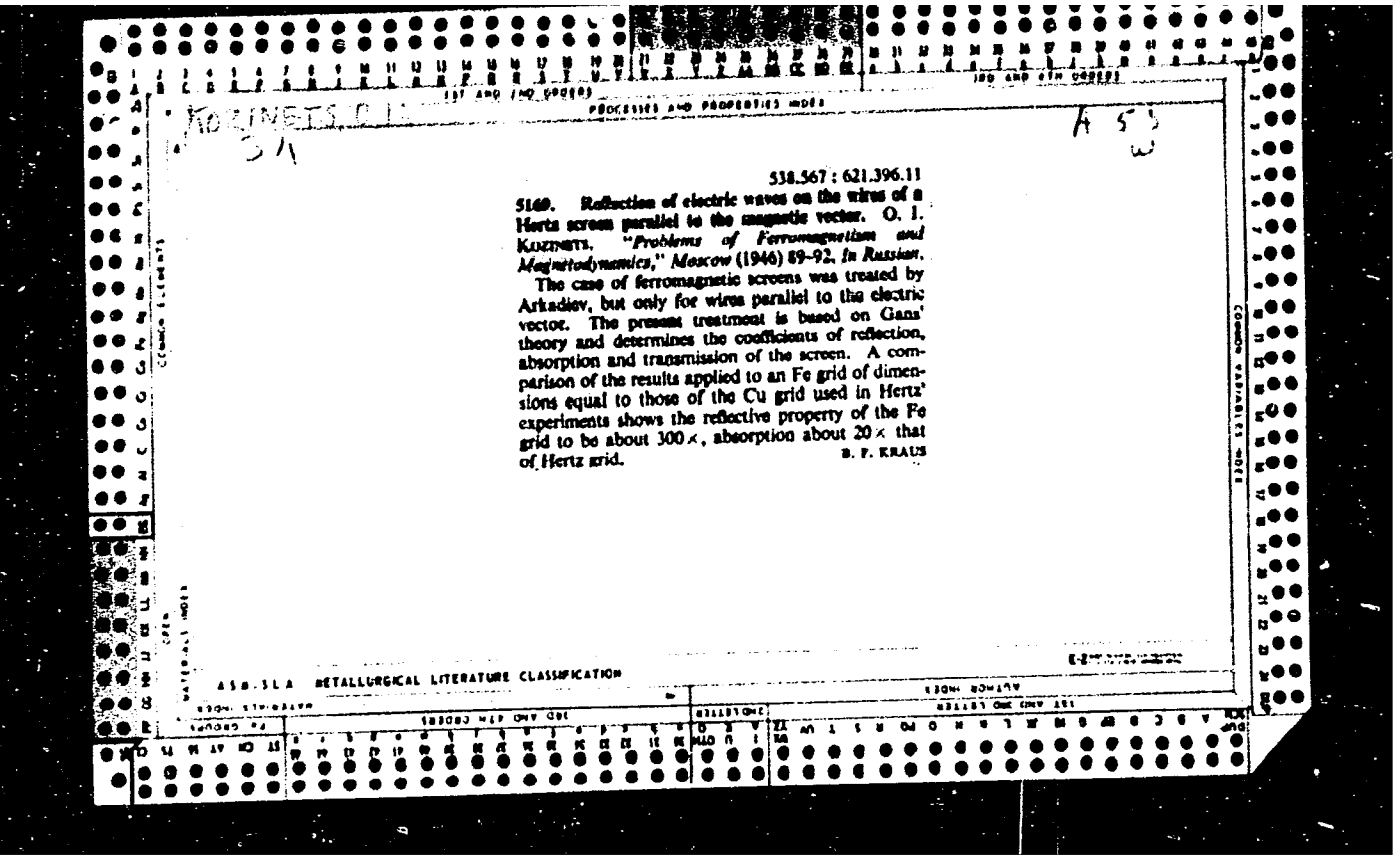
Preparation of plasma by formation of increased pressure in flasks. Probl. gemat. i perel. krovi 9 no.3:57-58 Mr '64.
(MIRA 17:10)

1. TSentral'nyy ordena Lenina institut gematologii i perelivaniya krovi (dir.- dotsent A.Ye. Kiselev) Ministerstva zdravookhraneniya SSSR.

KIHTBAYA, Yu.K., doktor tekhn. nauk; KUZNETS, M.F., kand. [illegible]; VEBER, G., ekonomist

Economic effectiveness of the "Taganrozhets" self-propelled chassis. Trakt. i sel'khozmash. no.11:23-26 N '65.

1. Ukrainskaya sel'skokhozyaystvennaya akademiya.



538.567 : 621.396.11

5169. **Reflection of electric waves on the wires of a Hertz screen parallel to the magnetic vector.** O. I. KUZNETS. "*Problems of Ferromagnetism and Magnetodynamics*," *Moscow* (1946) 89–92. *In Russian.*

The case of ferromagnetic screens was treated by Arkadiev, but only for wires parallel to the electric vector. The present treatment is based on Gans' theory and determines the coefficients of reflection, absorption and transmission of the screen. A comparison of the results applied to an Fe grid of dimensions equal to those of the Cu grid used in Hertz' experiments shows the reflective property of the Fe grid to be about 300 ×, absorption about 20 × that of Hertz grid.

B. F. KRAUS

KOZINETS, O. I.

"Determination of the Mass of Nuclear Fragments Released by Retarded Neutrons," Usp. Fiz. Nauk, 35, No.4, 1948

Kozinets, O. I.

9 H

IRM

Investigation of the parameters of uranium-graphite heterogeneous systems by the prism method. L. V. Groshev, O. I. Kozinets, V. B. Lazareva, K. D. Tolstov, B. [illegible] Feinberg, I. M. Frank, F. L. Shapiro, and I. V. Shtranikh. *Sessiya Otd. Nauk S.S.S.R. po Mirnomu Ispol'zovaniyu Atomnoi Energii, Zasedaniya Otdel. Fiz.-Mat. Nauk* 1955, 21-50 (English summary, 51-2).—The buckling, x^2, the multiplication factor k, and the thermal utilization factor θ in a U-graphite heterogeneous system with const. slug diam. were investigated as a function of the U concn., C, in a Cd-shielded prism of 180 × 180 × 420 cm. The equidistant channels in the graphite could be filled either with U slugs or graphite rods. C in the prism was varied by removing metal from the channels. At at. concn. of $N/Nc = 0.013$, corresponding to a spacing of about 20 cm., is the arbitrary unit. About half of the channels were of larger diam. so that an air gap existed around the slugs; by moving the slugs from one channel into a wider one, the gap effect could be measured. The values of x^2 and k were detd. according to the exponential method; both had a max. at $C = 0.8$, and were 0 at $C = 0.3$, and 1 at $C = 1.0$. θ was obtained from Cd-ratio measurements; a formula was derived $(1 - \theta)/\theta = (\epsilon/C) - h$, where ϵ and h are consts. This agreed with the results of the diffusion theory, k/θ is a linear function of C; by extrapolating to $C = 0$ k can be split into two empirical factors η and φ. η is the no. of neutrons generated per thermal neutron captured; it is 1.34 ± 0.02. φ is the probability of fission neutrons reaching the thermal-energy region. Thus $1 - \varphi$ is the radiation capture in U, partially compensated by epicadmium U^{238} fission. It is a linear function of C. Both air gaps and H_2O gaps were tried for cooling. At $C < 1.5$ H_2O has a neg. effect on k and at >1.5 a pos. one; the air gap influences θ mostly, but both gap effects of air or H_2O were smaller than anticipated from the elementary diffusion theory; this is simply due to the one-velocity-group treatment, which is mathematically insufficient.

Werner Jacobson

(2)

Kozlnets, O. I.

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Measurement of temperature effects in uranium-graphite subcritical systems. B. P. Ad'yasevich, O. I. Kozlnets, K. D. Tolstov, I. M. Frank, F. L. Shapiro, and E. V. Shtrankh. *Sessiya Akad. Nauk S.S.S.R. po Mirnomu Ispol'zovaniyu Atomnoi Energii, Zasedaniya Otdel. Fiz.-Mat. Nauk* 1955, 132–54(English summary, 154–5).—The temp. effects on the multiplication const. $k_\infty = \eta\varepsilon\theta$ and also on all the factors thereof were investigated by two 120 × 120 × 200 cm. prisms, each in its own thermostat, heated to 300–450°. U-graphite (I) lattices were used with slug diams. of 32–7 mm. with various U concns. (c). A Ra-Be and a Po-Be neutron source were employed. The thermal utilization factor θ was measured by the Cd ratio method; a pos. temp. effect was found which increased with decreasing U concn. and was greater in the presence of cooling H_2O. This effect was already predicted by the elementary diffusion theory, but the theory furnished too high values in the absence and too low values in the presence of H_2O. This discrepancy was due to the fact that θ increased when the neutrons were cooled in H_2O upon entering the slug. The pos. effect on θ increased also if the cooling was extended over a layer of I adjacent to the slug. At identical U concns. the θ of a heterogeneous system can be increased over that of a homogeneous one by inhomogeneously heating the moderator. In order to evaluate correctly the temp. effect on the p escape probability, p, cold H_2O and H_2O at 80° were circulated alternately through the slugs, the temp. of the I being kept const. The variation of p was obtained from exponential measurements of the buckling χ^2 and from measurements of the influence of heating on the epi-Cd neutron d. in the vicinity of the source. The temp. effect of the p-integral is found to be $\partial p/p\,\partial t = (1.95 \pm 0.4) \times 10^{-4}$ per degree. The temp. effect on k_∞ was detd. by measuring χ^2 by the exponential method. The temp. changes of ν_1 (no. of neutrons generated/no. of neutrons captured) were calcd. from the changes of ε and θ and from the temp. effect on k_∞. It was found that ν_1 has a neg. temp. effect, which is roughly proportional to the variation of the mean energy of the thermal neutrons, caused by the heating of the system: $\partial\nu_1/\nu_1\,\partial\varepsilon = -(37 \pm 0)$ %/e.v.

Werner Jacobson

41432

S/120/62/000/005/003/036
E032/E314

AUTHORS: Kozinets, O.I., Shapiro, F.L. and Shtranikh, I.V.

TITLE: A linear ion-buncher

PERIODICAL: Pribory i tekhnika eksperimenta, no. 5, 1962, 25 - 28

TEXT: This paper describes an ion-buncher in which a monoenergetic ion beam is converted into bunches of monoenergetic ions. The principle of the device is illustrated in Fig. 2. Suppose that ions of velocity V_o enter the buncher at $x = 0$. In order to bunch the ions between $t = 0$ and $t = t_H$, the velocity of each ion must be increased by $V = V_\Phi - V_o$ at the appropriate time t and the corresponding coordinate $x = V_\Phi (t - t_H)$, where t_H is the instant at which the ion collection begins. This means that the electric field should travel along the axis of the buncher with the velocity V_Φ. The voltage front $U(x)$ is at rest in the coordinate system moving with the velocity V_Φ and if the height of this front eU

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is equal to $1/2\ mV^2$, or somewhat less, then in this system of coordinates the ions are slowed down to zero or some small finite velocity, i.e. they are bunched on the crest of the voltage wave. The bunching coefficient is given by

$$V'/V = \sqrt{1 - eU_{max}/E} \quad ; \quad E = \frac{1}{2} mV^2 \qquad (3)$$

where V' is the ion-drift velocity on the crest of the voltage wave. If the height of the voltage wave eU is greater than $1/2\ mV^2$, then the ions are reflected from it, the length of the beam is unaltered but the time spread is reduced by a factor equal to $\left[2(V_\Phi/V_0) - 1\right]$. This type of buncher can be used with the aid of an axial set of apertures in which the axial field U is of the form

$$U = 0 \quad \text{for} \quad x_{lab} > V_\Phi(t - t_H),$$

$$U = U_{max}/d\left[x_{lab} - V_\Phi(t - t_H)\right] \text{ for } V_\Phi(t-t_H)-d \leqslant x_{lab} \leqslant V_\Phi(t-t_H),$$

$$U = U_{max} \text{ for } x_{lab} < V_\Phi(t - t_H) - d \qquad (6).$$

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A linear ion-buncher

S/120/62/000/005/003/036
E032/E314

For deuterons of energies between 0.6 and 5 kV, linear bunching ratios of 6-7 can be obtained for $V_{\Phi} = 10^8$ cm/sec, initial length of beam 10 cm, voltage "rise length" of 5 cm and initial energy spread of 50 eV. The corresponding time-bunching ratios are 25 - 9.5. Multiple bunching is also possible, at least, in principle. There are 2 figures and 1 table.

ASSOCIATION: Fizicheskiy institut AN SSSR
(Physical Institute of the AS USSR)

SUBMITTED: January 13, 1962

Card 3/3

KOZINETS, P.;ALLENDORF, A., glavnyy konstruktor

Using wooden shields in constructing trench silos. Sel'. stroi. 13 no. 9:13- S '58. (MIRA 11:10)

1. Direktor Vladimirskogo filiala "Rosgiprosel'stroya" (for Kozinets). (Silos)

2337. [illegible], P. V., The dynamic action of a locomotive on the track in the case of wear of tires (in Russian), *Trudy [illegible] put'ekh*. [illegible], 183-189, 1954; *Ref. Zh. Mekh.* 1956, Rev. no. 2690.

Test curves are given of the character of the wear of the wheel tires of locomotives of the series FD and SO after a run of the order of 10,000 km, and the formula for these curves are presented in the form of a trigonometric series.

Further, the oscillation of the dynamic loading on the rail is determined having regard to the elasticity of the springs and of the rail. A general formula of the dynamic load on the track is suggested, according to which the curves of the loading were plotted in the case of different velocities of motion, calculated for a locomotive of the series FD.

This analysis explains the causes of unsteady motion of a locomotive at a speed above 35 km/h and shows that the dynamic load on the rail from the leading wheels may reach a considerable value, of the order of 7 to 9 T.

[illegible] Referativnyi Zhurnal M. E. Kelsel, USSR

Translation, courtesy Ministry of Supply, England

137-58-2-3121

KOZINETS, P.V.

Translation from: Referativnyy zhurnal, Metallurgiya, 1958, Nr 2, p 127 (USSR)

AUTHORS: Kozinets, P.V., Dmitruk, Ya.N.

TITLE: Wear of Locomotive Tires and Repair by Hard Surfacing (Iznos parovoznykh bandazhey i ispravleniye ikh naplavkoy)

PERIODICAL: Tr. Khar'kovsk. politekhn. in-ta, 1956, Vol 10, Nr 3, pp 91-99

ABSTRACT: Hard surfacing with a thin electrode wire, using a flexible-electrode semi-automatic PSh-5 welder, following a pre-heat to 300-350°C, is recommended for restoration of worm tires (T) to their full profile. On edging with Sv-10G2 electrode wire containing about 1.8 percent Mn, uniform resistance to wear of the weld metal and the T metal is provided. This method of repairing T prevents the formation of cracks in the fused-on metal and in the zone of heat effect. Employment of this method of hard-surfacing increases locomotive runs between overhauls by as much as 10 percent. The best results in surfacing local T wire is by a two-arc procedure employing 2-mm electrode wire, and also by multi-electrode automatic submerged sufacing, making it possible to regulate the chemical composition of the weld metal by the use of wires of different grades, while permitting high rates of production. I.V.

Card 1/1

1. Hard surfacing--Applications 2. Locomotive tires--Hard surfacing 3. Welding--Equipment

Kozinets, P.V.

SUBJECT: USSR/Welding. 135-4-9/15

AUTHORS: Kozinets, P.V., Engineer, Veretnik, L.D., Engineer, and Trubachev V.A., Engineer.

TITLE: Straightening the Body of Diesel Locomotive "ТЭ-3" (Pravka kuzovov teplovozov ТЭ-3).

PERIODICAL: "Svarochnoye Proizvodstvo", 1957, # 4, pp 24-25 (USSR).

ABSTRACT: The article describes the new method for straightening out the bulges, caused by wel ing warpage, when the steel sheets of the body are welded to the frame of the diesel locomotive "ТЭ-3", which is used at the Khar'kov Transport Machine Building Plant. The methods formerly applied, consist of corrugating the sheet edges or of symmetrical heating, or electric riveting instead of welding, had disadvantages that compelled to seek other solutions of the problem. It was found a better method to heat a bulge by torch to dark cherry-red in spots of 8-10 mm diameter 24-40 mm apart, depending on the size of the bulge, and cooling the heated spots by a stream of compressed air from the opposite side, but the new method, which is in use at the present time is still a better solution. It consists of spot-heating by a graphite electrode with a special holder connected to a "СТЭ-3"

Card 1/2

135-4-9/15

TITLE: Straightening the Body of Diesel Locomotive "TE-3" (Pravka kuzovov teplovozov TE-3).

transformer. There is no need to cool the metal from the other side, the work is done fast and without any fixtures. The bulges disappear nearly completely, i.e. the bulging may be 1 mm in 1 m length, whereas 3 mm in 1 m is permissible by the technical conditions. The graphite electrode leaves no traces on the metal surface.

The method is recommended for the procuction of buses, all-metal railway cars and similar constructions.

The article contains 2 sketches.

ASSOCIATION: Khar'kovskiy Zavod transportnogo machinostroyeniya. (Khar'kov Transport Machine Building Plant).

PRESENTED BY:

SUBMITTED:

AVAILABLE: At the Library of Congress.

Card 2/2

KOZINETS, P.V.

VERETNIK, Lev Davydovich, inzh.; KOZINETS, Pavel Vasil'yevich, kand. tekhn. nauk; MEHENTSEV, Sergey Pavlovich, inzh.; KHUTORYANSKIY, N.M., red.; BOBROVA, Ye.N., tekhn. red.

[Compressors driven by diesel locomotives] Teplovoznye kompressory. Moskva, Gos. transp. zhel-dor. izd-vo, 1958. 62 p. (MIRA 11:7)
(Compressors) (Diesel locomotives)

KOZINETS, P.V.; KARTASHOV, I.N.; KAGANOVSKIY, A.I.; GESYUK, Z.M.; SASIN, I.F.; NAYMAN, G.M., inzh., retsenzent; LIPCHUK, A.M., kand. tekhn.nauk, red.; GALANOVA, M.S., red. izd-va; EL'KIND, V.D., tekhn. red.

[Technology of diesel locomotive construction] Tekhnologiia teplovozostroeniia. [By] P.V.Kozinets i dr. Moskva, Mashgiz, 375 p. (MIRA19:10)
(Diesel locomotives--Design and construction)

ZHUK, A.S.; GRES'-EDEL'MAN, V.Ye.; CHEBOTAREVA, Ye.V.; KOZINETS, R.G.; ROZINA, Ts.S.; POLONSKAYA, Ts.L.

The effect of penicillin therapy on immunologic changes in scarlet fever. Pediatriia, no.5:23-26 S-O '55. (MLRA 9:2)

1. Iz skarlatinoznoy laboratorii (zav.-kandidat meditsinskikh nauk B.Ye. Gres'-Edel'man) Khar'kovskogo nauchno-issledovatel'skogo instituta imeni Mechnikova (dir.-kandidat biologicheskikh nauk G.P. Cherkas) i 8-y infektsionnoy bol'nitsy (glavnyy vrach Ye. V. Chebotareva)

(SCARLET FEVER, ther.
penicillin, eff. on immunity)
(IMMUNITY
in scarlet fever, err. of penicillin)

KOZINETS, T. Ye., Cand Biol Sci -- (diss) "Comparative anatomic and microchemical study of the Bruchus-weevil of wheats growing under various conditions." L'vov, 1958. [1], 16 pp (Acad Sci UkSSR, Inst of Botany), 120 copies (KL, 15-58, 114)

L 09994-67

ACC NR: AR6017576 SOURCE CODE: UR/0196/66/000/001/N008/N008

9

AUTHOR: Kozinets, V. P.; Tayts, N. Yu.

TITLE: Overheating of permanently fixed parts in electrical contact devices

SOURCE: Ref. zh. Elektrotekhnika i energetika, Abs. 1N36

REF SOURCE: Elektrotermiya. Nauchno-tekhn. sb., vyp. 44, 1965, 53-57

TOPIC TAGS: vacuum furnace, heat treating furnace

TRANSLATION: A universal method of calculating energy and thermal parameters in the overheating of permanently fixed materials of constant cross sections in high-temperature, direct-action vacuum furnaces is presented. This method can be used for calculations in the heat treatment of blanks of high melting alloys which oxidize readily. Differential equations and graphs are given to describe the accuracy of the calculations under various heating conditions with a maximum error of 5% in determining the applied potential and 3.5% in more exact calculations. V. Khristianovich.

SUB CODE: 13

UDC: 621.365.38:66.041.8

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L 26392-66 EPF(n)-2/EWT(1)/ETC(m)-6

ACC NR: AP6007184 SOURCE CODE: UR/0170/66/010/002/0182/0187

AUTHORS: Kozinets, V. P.; Tayts, N. Yu.

ORG: All-Union Institute of the Pipe Industry, Dnepropetrovsk (Vsesoyuznyy institut trubnoy promyshlennosti)

TITLE: The heating of long objects in straight-through electric-contact apparatus

SOURCE: Inzhenerno-fizicheskiy zhurnal, v. 10, no. 2, 1966, 182-187

TOPIC TAGS: heating, heat balance, steel, heat loss, integral equation, resistivity, electric resistance

ABSTRACT: A method of calculating the electric and heat parameters in straight-through electric-contact apparatus is described (see Fig. 1). The equation

$$K\int_0^{\tau_k} = \frac{1}{g^4+2h^2}\left(\frac{g}{2}\ln\left[\frac{\theta^2-g\theta+g^2/2-h}{\theta^2+g\theta+g^2/2+h}\right]-\frac{g^2-2h}{\sqrt{g^2+4h}}\times\right.$$

$$\left.\times\operatorname{arctg}\frac{2\theta+g}{\sqrt{g^2+4h}}-\frac{g^2+2h}{2\sqrt{4h-g^2}}\ln\left[\frac{2\theta-g-\sqrt{4h-g^2}}{2\theta-g+\sqrt{4h-g^2}}\right]\right)\Bigg|_0^{\theta_k}$$

is valid for most metals. The heating time is calculated by the formula

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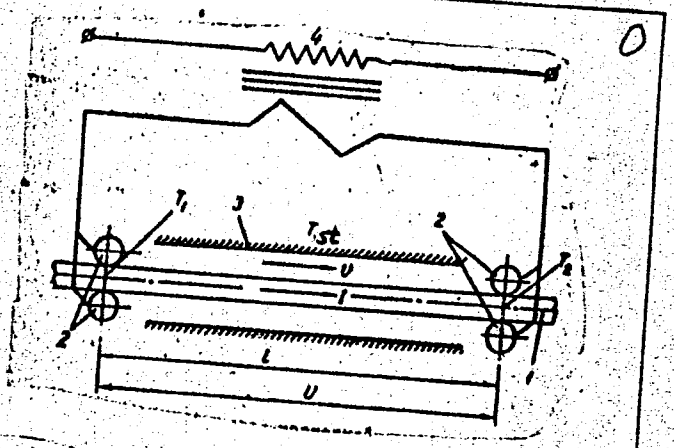
Fig. 1. Schematic diagram of apparatus.



$$\tau_R = \frac{c\gamma R}{9{,}8\sigma_s T_{cr}^3}(K_2 - K_1)$$

and the electric power introduced in segment l is calculated by the formula

$$N = \Omega H Q_{ex}.$$

The thermal efficiency of the process is

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0

$$\eta = \Delta\theta/KH\Omega,$$

In the above formulas: K is the time number, Ω is the current number, R is the controlling dimension, θ_Δ is a number characterizing the resistivity, and H is the resistance number. The calculated and experimental data are compared for the example of heating a steel tape. The calculation errors are small. This method can be used to calculate the heating of objects of any material. Orig. art. has: 12 formulas and 1 figure.

SUB CODE: 20, 09/ SUBM DATE: 12Apr65/ ORIG REF: 005/ OTH REF: 002

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L 36372-66 EWT(m)/T/EWP(t)/ETI IJP(c) JD

ACC NR: AR6009957 SOURCE CODE: UR/0137/65/000/012/D012/D012

AUTHOR: Kozinets, V. P.; Tayts, N. Yu.

52
B

TITLE: Heating rigidly fixed parts in an electrocontact unit

SOURCE: Ref. zh. Metallurgiya, Abs. 12D96 *

REF SOURCE: Elektrotermiya. Nauchno-tekhn. sb., vyp. 44, 1965, 53-57

TOPIC TAGS: mathematic method, electric equipment, vacuum furnace, metal heat treatment, refractory alloy

ABSTRACT: A universal method has been proposed for calculating energy and thermal parameters in the heating of rigidly fixed parts with a constant cross section in high-temperature direct-action vacuum furnaces. The method is applicable for the calculation of heat treatment of different types of parts made of refractory and easily oxidized alloys of various grades. Differential equations and diagrams are given in the original article, providing the accuracy of approximate calculations with a maximum error of 5% and for more accurate calculations, 3.5%, for different heat treatments in determining the values of the voltage used. *(From RZh elektrotekhn) [Translation of abstract] [NT]

vacuum heat treatment 18

SUB CODE: 13, 11/

Card 1/1 UDC: 621.771.2

S/181/62/004/002/027/051
B101/B102

AUTHORS: Gindin, I. A., Kozinets, V. V., and Starodubov, Ya. D.

TITLE: Comparison of structural changes in nickel caused by deformation at 4.2 and 300°K and by subsequent creeping

PERIODICAL: Fizika tverdogo tela, v. 4, no. 2, 1962, 465-469

TEXT: Experiments with high-purity nickel (99.994%) tempered at 800°C and $3 \cdot 10^{-6}$ mm Hg and subsequently deformed by 3.5% at 4.2 or 300°K by stretching are reported. Some of the specimens were subsequently kept at room temperature for 80 - 100 hrs and subjected to creep tests at 700°C and constant pressure (2.8 kg/mm^2), while others were heated from 4.2°K to 700°C within 1.5 - 2 min and likewise subjected to creep tests. Both stretching and creeping were carried out with machines described in FMM, 7, 794, 1959. A sharply focused X-ray tube, designed by B. Ya. Pines (Ostrofokusnyye rentgenovskiye trubki i prikladnoy rentgenostrukturnyy analiz (Sharply Focused X-ray Tubes and Applied X-ray Analysis) GITTL,

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