USSR/Medicine - Histology

Card 1/1 Pub. 22 - 46/56

Authors : Martsinkevich, L. D.

Title : Changes in the blood and about the connecting tissues of birds

Periodical : Dok. AN SSR 99/5, 841-844, Dec 11, 1954

Abstract : The laws characterizing the growth changes in the blood and tissues of domestic birds are explained. The changes in the blood in postnatal onto genesis were established. The discovery of an intravascular erythropoiesis in the blood stream in addition to normal erythroblasts, is announced. Four references: 3-USSR and 1-German (1908-1950). Illustrations.

Institution: State Medical Pediatrics Institute, Leningrad

Presented by: Academician E.N.Pavlovskiy, August 30, 1954

GROMTSEVA, K.Ye.; KNORRE, A.G.; MARTSINKEVICH, L.D.; MIKHAYLOV, V.P.

Evgenii S'l'vievich Danini; 1894-1954 Arkh. anat. gis.. i embr. 32 no.2:6 -65 Ap-Je '55. (MLRA 9:1)

(OBITUARIES,
Danini, Evgenii S.)
(BIOGRAPHIES,
Danini, Evgenii S.,bibliog.)

MARTSINKEVICH, L.D.

USSR/ Medicine - Cytology

Card 1/1 Pub. 22 - 44/50

Authors : Martsinkevich, L. D.

Title : General morphological characteristic and the specificity of blood cells of domestic fowl

Periodical : Dok. AN SSSR 100/1, 167-170, Jan. 1, 1955

Abstract : An analysis is presented on the morphological characteristics and the specificity of blood cells of domestic fowl (chickens, ducks, geese, etc.). Seven references: 5 USSR and 2 USA (1903-1951). Illustrations.

Institution : State Medical Pediatrics Institute, Leningrad

Presented by: Academician E. N. Pavlovskiy, August 30, 1954

MARTSINKEVICH, L.D.

Development and age variations in the elastic stroma of the skin in mammals. Dokl.AN SSSR 11 no.5:1105-1108 D '56.
(MLRA 10:2)

1. Leningradskiy pediatricheskiy meditsinskiy institut.
Predstavleno akademikom Ye.N. Pavlovskim.
(Skin)

MARTSINKEVICH, L.D., kand.biol.nauk

Cellular composition of blood in white-blooded fishes (Chaenichthyidae) of the Antarctic. Inform.biul.Sov.antark.ekep. no.3:67-68 '58. (MIRA 12:4)

1. Pediatricheskiy meditsinskiy institut.
(ANTARCTIC REGIONS--CHAENICHTHYIDAE)
(BLOOD--ANALYSIS AND CHEMISTRY)

MARTSINKEVICH, L.D. (Leningrad, 137, ul.Tekstil'shchikov,5,kv.35)

Characteristics of the blood in white-blooded fish. Arkh. anat. gist. i embr. 41 no.12:75-78 D '61. (MIRA 15:3)

1. Kafedra gistologii i embriologii (zav. - prof. A.G. Knorre) Leningradskogo meditsinskogo pediatricheskogo instituta.
(CHAENICHTHYRIDAE)
(BLOOD CELLS)

LEVINA, M.Ya.; MARTSINKEVICH, L.D.

"Atlas of the microscopic structure of tissues and organs; practical exercises for students in histology" by V.G. Eliseev, IU.I. Afanas'ev, E.F. Kotovskii. Reviewed by M.IA. Levina, L.D. Martsinkevich. Arkh. anat., gist. i embr. 43 no.8:115-119 Ag '16. (MIRA 17:8)

S/068-x/60/000/008/002/003
E071/E435

AUTHORS: Dal', V.I., Doctor of Technical Sciences,
Raskina, L.S., Martsinkevich, L.E. and Artem'yeva, L.N.

TITLE: Isomerization and Separation of Xyloles 1

PERIODICAL: Koks i khimiya, 1960, No.8, pp.44-46

TEXT: The possibility of production of paraxylole (which can be oxidized to terephthalic acid) from technical xylole was investigated. The problem can be divided into two parts: 1) separation of the individual isomers and 2) isomerization of metha- and ortho-xyloles into paraxylole. Laboratory experiments on freezing out the p-isomer were tested at temperatures of -25, -40 and -50°C and retention times of 15, 30, 45 and 60 minutes. It was found that in the absence of o-xylole, the separation of p-xylole takes place satisfactorily at -50°C, namely the yield of p-isomer reaches 18% with its residual concentration in m xylole (filtrate) of 1.6 to 6.8%. Thus the method can be used for the preliminary separation of xyloles, providing the filtrate is submitted to a further separation for which the adsorption method was tried. The possibility of this method of separation was tested using activated carbon of various marks (BAU, KAD and

Isomerization and Separation of Xyloles

KAD ground). The best results were obtained with BAU carbon. It was found that a mixture rich in p-isomer passes through the adsorbent practically unchanged but if the content of p-isomer does not exceed 15% the separation does take place. On passing a mixture through the adsorption column, at first m-isomer is obtained followed by a mixture rich in p-isomer and then again m-isomer (Table 2). Thus, after preliminary separation of p-xylole by freezing, the filtrate can be passed through an adsorption column and a practically pure m-xylole and a fraction rich in p-xylole can be obtained. The former can be passed for the isomerization treatment whilst the latter can be again submitted to the freezing treatment. The isomerization of pure o- and m-xyloles was tested using an apparatus previously described (Ref.2) and an aluminosilicate bead catalyst. The optimum conditions were found to be: temperature 450°C and feed rate 0.6 hr^{-1}. The influence of addition of gaseous hydrocarbons (propane - butane fraction) to the reaction mixture was also tested. The experimental results are given in Table 3. It was found that the addition of gaseous hydrocarbons has a positive effect on the yield of p xylole on

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S/068-x/60/000/008/002/003
E071/E435

Isomerization and Separation of Xyloles

isomerization of m-xylole, and a negative effect on the isomerization of o-xylole. Thus, the isomerization treatment of the above two isomers should be carried out separately. On the basis of experimental results a scheme for the separation and treatment of xyloles is proposed (see figure). This consists of preliminary rectification of technical xylole and isomerization products from isomerization plants of o- and m-xyloles for the separation of lighter and heavier hydrocarbons, fine rectification for the purpose of separation of o-xyloles from the mixture of p and m-xyloles. The former is then passed for the isomerization treatment and the latter mixture is passed for the freezing treatment etc., as described in the experimental part of the work. There are 3 tables, 1 figure and 2 Soviet references.

ASSOCIATION: Dnepropetrovskiy khimiko-tekhnologicheskiy institut (Dnepropetrovsk Institute of Chemical Technology)

Card 3/3

L 42109-65 EPF(c)/EWP(j)/EWA(c)/EWT(m) Pc-4/Pr-4 RM

ACCESSION NR: AP5008717 S/0366/65/001/003/0575/0578

AUTHORS: Burmistrov, S. I.; Martsinkevich, L. E. 24 22 B

TITLE: Alkylation of nitrocresols

SOURCE: Zhurnal organicheskoy khimii, v. 1, no. 3, 1965, 575-578

TOPIC TAGS: alkylation, alcohol, toluene

ABSTRACT: The results of experiments on alkylation of nitrocresols with the ortho-position of nitro- and oxy-groups of isopropyl and cyclohexyl alcohols are presented. The alkylation of 3-nitro-2-oxytoluene by isopropyl alcohol yielded only a mono-alkylation product, the structure of which, as shown by reduction to an amine and acetylization of this product in alkylated acetamidocresol, does not combine with the diazoles. This indicates that the quinogen sites relative to the oxy-groups are all occupied. The structure of the monoalkylation product is thus deduced to be that of 3-nitro-2-oxy-5-isopropyl toluene. Alkylation of 4-nitro-3-oxytoluene yielded a monoalkylation product with a melting point of 103.5-104.5C. The structure, 4-nitro-5-oxy-2-isopropyl toluene, proved to be nitrated to a dinitro state, indicating the presence of the isopropyl group in alkyl-replacement in the para-position of the oxy-group. During mononitration of n-thymole a liquid nitro-compound was obtained that was isomeric with the nitro-product of the above

Card 1/2

L 42109-65
ACCESSION NR: AP5008717

alkyl-replacement. During nitration of this mononitro-compound a dinitro-product was formed, identical to the nitrated 4-nitro-5-oxy-2-isopropyl toluene. This mononitro-compound thus has the structure 6-nitro-5-oxy-2-isopropyl toluene. By analogy, alkylation of nitrocresol by cyclohexanol yields the structure 4-nitro-5-oxy-2-cyclohexyl toluene. The procedures followed and the properties of the products obtained are detailed. Orig. art. has: 1 formula.

ASSOCIATION: Dnepropetrovskiy khimiko-tekhnologicheskiy institut (Dnepropetrovsk Chemical and Technological Institute)

SUBMITTED: 10Feb64 ENCL: 00 SUB CODE: GC, OC

NO REF SOV: 003 OTHER: 001

Card 2/2

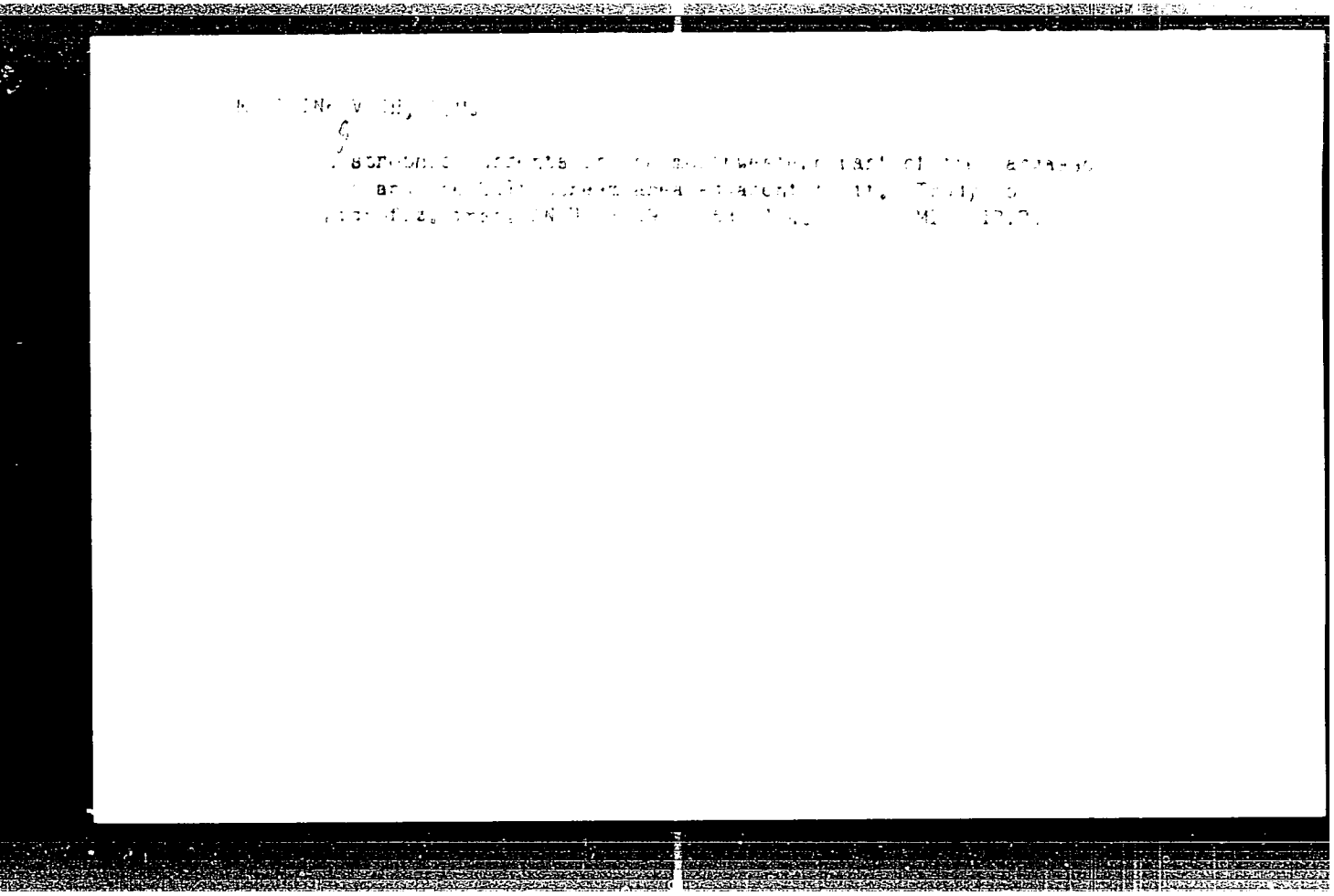
BURMISTROV, S.I.; MARTSINKEVICH, L.E.

Alkylation of nitrocresols. Zhur.org.khim. 1 no.3:575-578 Mr '65.
(MIRA 18:4)

1. Dnepropetrovskiy khimiko-tekhnologicheskiy institut.

AGEN[illegible]OV, V.F., [illegible]

Seventh Atlantic expedition of the Marine Hydrophysical Institute.
Trudy Mor. gidrofiz. inst., [illegible] '64, [illegible]



MARTSINKEVICHUS, A. P.

"Role of Penicillin Therapy in the Combination Treatment of Patients with Acute Appendicitis." Cand Med Sci, Vil'nyus S, Vil'nyus, 1954. (Kazmic., [illegible], Apr 55)

SO: Sum. No. 704, 2 Nov 55 - Survey of Scientific and Technical Dissertations Defended at USSR Higher Educational Institutions (16).

MARTSINKEVICHUS, A.M.

Hemodynamics in ligation of the inferior vena cava in experiment.
Eksper. khir. 5 no. 3:20-25 My-Je '60. (MIRA 14:1)
(VENA CAVA—LIGATURE) (BLOOD PRESSURE)

NORKUNAS, P.I., kand.med.nauk; MARTSINKEVICHUS, A.M., kand.med.nauk

Case of resection of the inferior vena cava. Vest.khir. no.1:140 '62. (MIRA 15:1)

1. Iz Nauchno-issledovatel'skogo instituta onkologii (dir. - kand.med.nauk A. Telichenas) Litovskoy SSR i kafedry obshchey khirurgii (zav. - dotsent A.M. Martsinkevichus) Vil'nyusskogo universiteta im. V. Kapsukasa.
(VENA CAVA—SURGERY)

MARTSINKEVICHUS, A.M. [Mar[illegible]kevi[illegible]us, A.Y.]

Collateral circulation in experimental [illegible] of the inferior vena cava. Eksper. khir. i anest. [illegible]

(MIRA [illegible])

1 Kafedra obshchey khirurgii [illegible] A.M.Martsinkevichus [A.M.Martsinkevichus] i laboratoriya [illegible] eksperimental'noy biologii i meditsiny [illegible] im. Ye.N.Meshalkina Sibirskogo otdeleniya AN SSSR.

MARTS.NKEVICIUS, M.; MOTIEKIENE, L., red.; BANCEVICIUS, P., tekhn. red.

[Long and creative life] Ilgas ir kurybingas zmogaus amzius. Vilnius, Valstybine politines ir mokslines literaturos leidykla, 1961. 28 p. (MIRA 15:3)
(Longevity)

MARTSINKOVSKIY, E.I.; TSVETKOV, N.I.

Using vat dyes and indigosols for dyeing rayon crepe fabrics in mechanical dye becks. Obm. tekh. opyt. [MLP] no.9:20-25 '56.
(MIRA 11:10)

(Dyes and dyeing--Rayon)

MARTSINKONIENE, E.I. [Marcinkoniene, E.I.]; VAYDAKAVICHYUS, A.I. [Vaidakevičius]

Dyeing capron fabrics by the continuous method at high temperatures. Tekst. prom. 19 no.9:46-48 S '59.
(MIRA 12:12)

1. Nachal'niki tsekhov fabriki Kauno Audinyay.
(Dyes and dyeing--Nylon)

MARTSINKONIENE, E.I. [Marcinkoniene, E.]; VAYDAKAVICHYUS, A.I., [Vaidakavicius, A.]

Special processing of rayon fabrics. Tekst.prom. 20 no.5:16-17 My '60. (MIRA 13:8)
(Rayon)

MORGUNOVA, S.A. [Morhunova, S.A.]; MARTSINKOVSKAYA, L.K. [Martsynkovs'ka, L.K.]

Methodology for determining the Norms of Production Costs by the point system. Leh.prom. no.2:82-84 Ap-Je '65. (MIRA 18:10)

ZAZULINA, Z.A.; MARTSINKOVSKAYA, R.N.; ROGOVIN, Z.A.

Synthetic fiber "ftorlon". Tekst. prom. 17 no.5:6-7 My '57.
(Textile fibers, Synthetic) (MLRA 10:6)

BOBROVSKI, Lekh [Bobrowski, Lech]; VIL'GEL'MI, Zdzislav [Wilhelmi, Zdzislaw]; GURSKI, Eugenyush [Gorski, Eugeniusz]; MARTSINKOVSKI, Andzhey [Marcinkowski, Andrzej]; SOLTAN, Andzhey [Soltan, Andrzej]; YASKULA, Maryan [Jaskula, Marian]

Lech, the pressurized electrostatic accelerator. Nukleonika 8 no.1:1-28 '63.

1. Institut yadernikh issledovaniy, Varshava 9 i Varshavskiy universitet, Varshava.

DYUZHEV, G.A.; MARTSINOVSKIY, A.M.; TSIRKEL', B.I.; YUR'YEV, V.G.

Circuit for reading the oscillographic volt-ampere characteristics in a wide range of currents. Prib. i tekh.eksp. 10 no.5:115-117 S-O '65. (MIRA 19:1)

1. Institut poluprovodnikov AN SSSR, Leningrad. Submitted July 10, 1964.

MARTSINOVSKIY, A.M.; TSIRKEL', B.I.; YUR'YEV, V.G.

System for the stabilization and regulation of the cathode temperature. Prib. i tekh.eksp. 10 no.5:238-240 S-O '65. (MIRA 19:1)

1. Institut poluprovodnikov AN SSSR, Leningrad. Submitted July 10, 1964.

L 8623-66 EWT(m)/EWP(j)/EWP(k)/EWP(z)/EWA(c)/ETC(m)/EWP(b)/EWP(e)/EWP(v)/EWP(t)

ACC NR: AP5027045 IJP(c) RM/WH SOURCE CODE: UR/0120/65/000/005/0246/0246

AUTHOR: Dyuzhev, G. A.; Martsinovskiy, A. M.; Smirnov, O. M.; Yur'yev, V. G. 86

ORG: Institute of Semiconductors, AN SSSR, Leningrad. (Institut poluprovodnikov AN SSSR) B

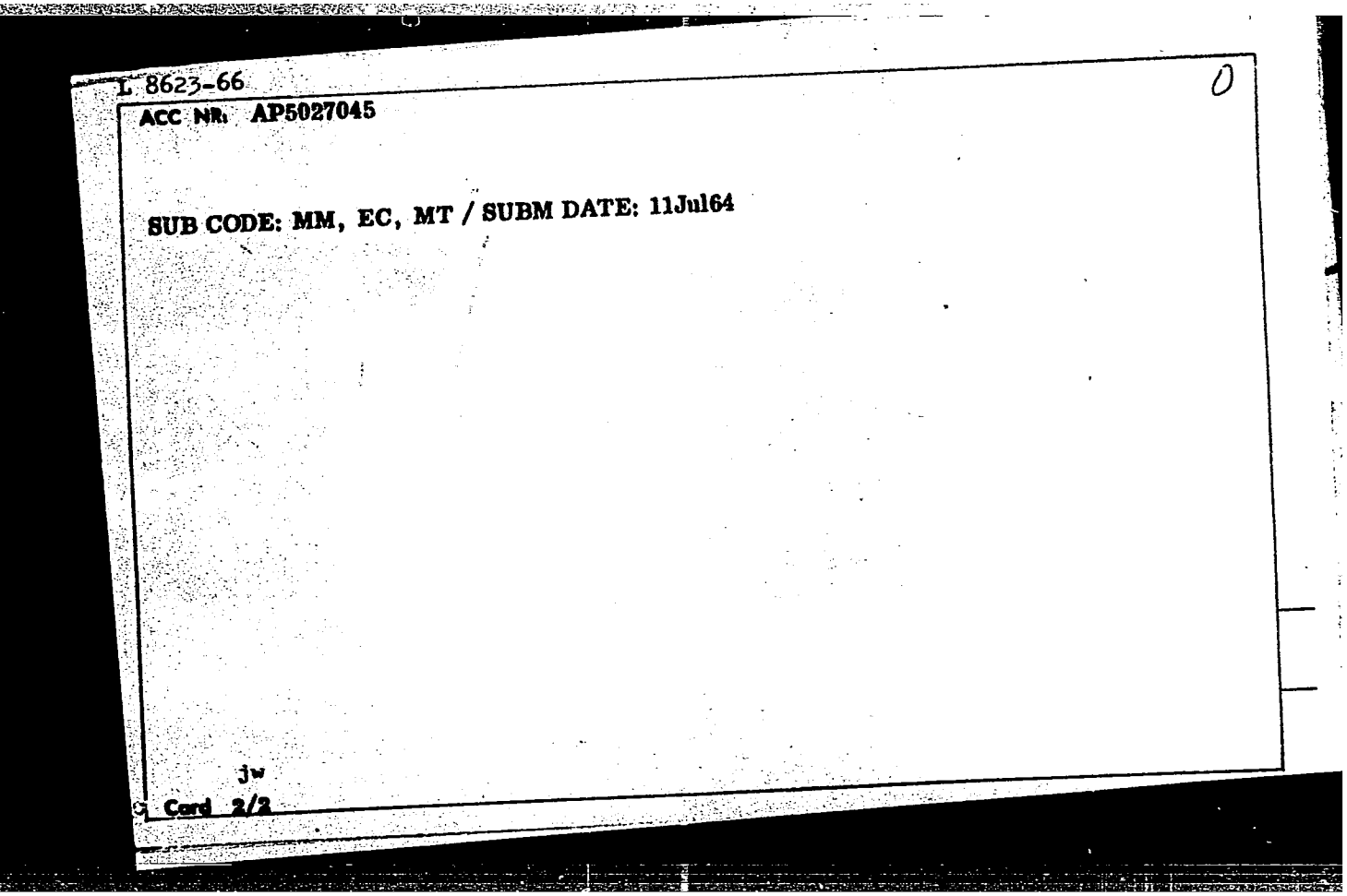
TITLE: The increase in stability of metal-glass joints in cesium vapors

SOURCE: Pribory i tekhnika eksperimenta, no. 5, 1965, 246

TOPIC TAGS: metal joining, oxidation reduction reaction, oxide formation, glass, cesium, glass coating

ABSTRACT: The increased use of cesium vapors in various instruments at relatively high pressures (~0.1 Torr and higher) made necessary the protection of metal-glass joints from the destructive action of cesium. Tests carried out by the authors showed that the preparation of joints with a supplementary thin glass coating of the metal makes them cesium resistant to a certain degree. The metal part is covered by a thin 0.05 — 0.3 mm) glass coating 10 — 30 mm wide (placed across the region of the contemplated joint). When the joint is completed and subjected to cesium vapor, the process of reduction of the oxide film slows down and almost stops some 5 mm from the point of first contact with cesium. This is apparently due to the extreme slowness with which cesium advances over the already reduced auxiliary region of the joint. Detailed recommendations for the actual production of a satisfactory joint of this type are provided. Authors thank Ye. A. Kolenko for valuable advice and help.

Card 1/2 UDC: 666.1.037.5:621.387



L 8623-66
ACC NR: AP5027045

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SUB CODE: MM, EC, MT / SUBM DATE: 11Jul64

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Card 2/2

L 63510-65 EWT(l)/EPA(s)-2/EPF(c)/EEC(k)-2/EPF(n)-2/EWG(m)/EPA(w)-2/
T/EWA(h) Pz-6/Pr-4/Pt-7/Peb IJP(c) JRB/TT/WW/AT
ACCESSION NR: AP5015646 UR/0057/65/035/006/1160/1162

AUTHOR: Dyuzhev, G. A.; Martsinovskiy, A. M.; Pikus, G. Ye.; Yur'yev, V. G.

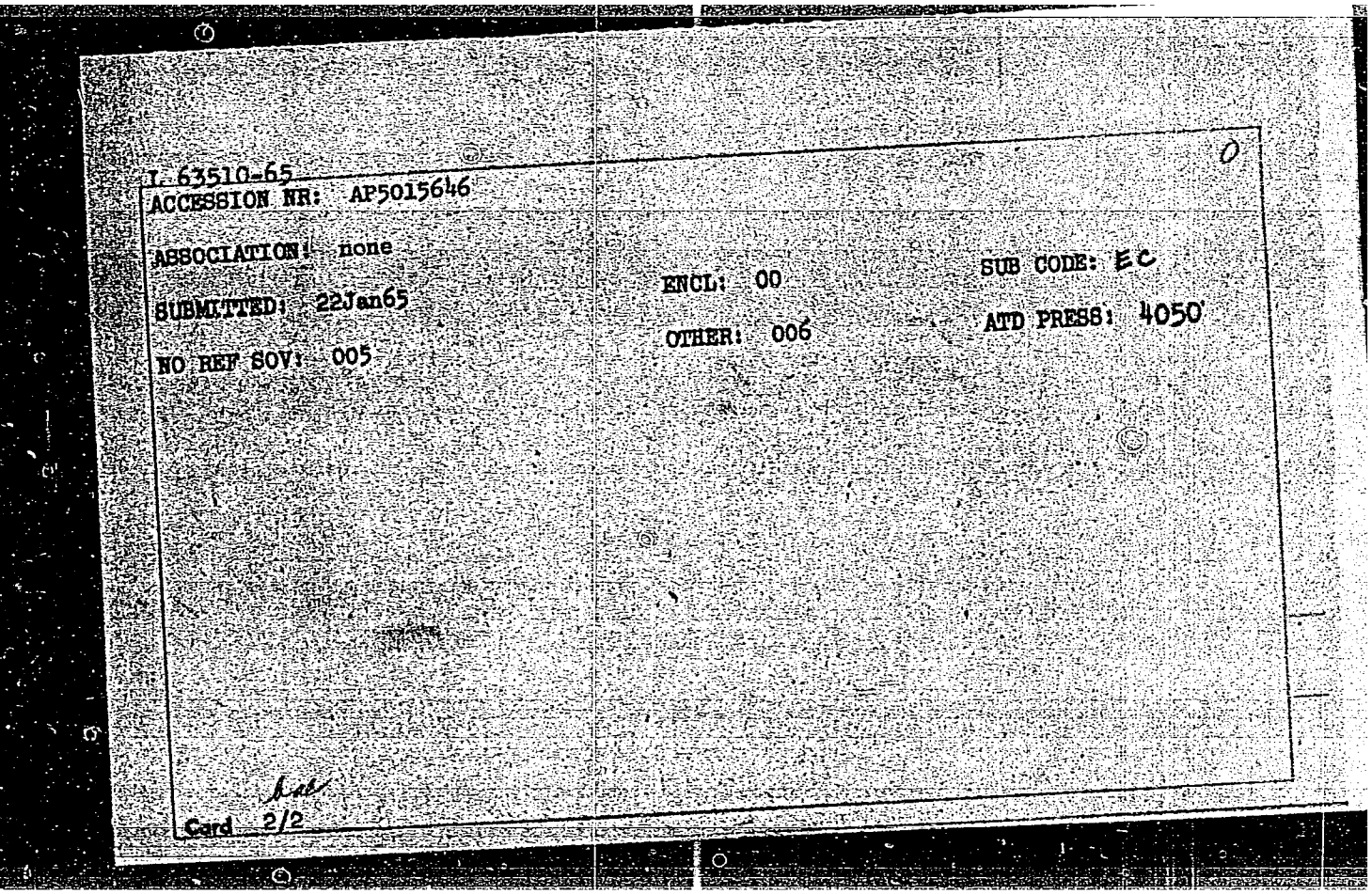
TITLE: On the most effective modes of operation of the thermionic converter

SOURCE: Zhurnal tekhnicheskoy fiziki, v. 35, no. 6, 1965, 1160-1162

TOPIC TAGS: energy conversion, thermionics, space charge, arc mode, thermal emission, thermionic converter

ABSTRACT: The generally accepted view that, if only proper cathode materials could be produced, the direct-path plasma mode (vacuum with compensated space charge) would be the most effective method of thermionic energy conversion is thought to be questionable and arguments are advanced to support the arc mode. The arc mode is considered to be superior in that it makes possible the use of low work-function emitters, whereas in the direct-path mode the space-charge neutralization is accomplished by ions generated in the volume. This advantage can become even more pronounced due to the presence of the anomalous Schottky effect. A comparison of published experimental data on the operation of the two modes demonstrates the superiority of the arc mode for the range of temperatures between 1400 and 2200K. Orig. art. has: 1 figure. [ZL]

Card 1/2



L 63510-65
ACCESSION NR: AP5015646

ASSOCIATION: none

SUBMITTED: 22Jan65 ENCL: 00 SUB CODE: EC

NO REF SOV: 005 OTHER: 006 ATD PRESS: 4050

Card 2/2

ACC NR: AP6013124 SOURCE CODE: UR 0057-66-036 . 4 . . .91

AUTHOR: Dyuzhev, G. A.; Martsinovskiy, A. M.; Moyzhes, B. Ya.; Nikul, S. . .; Tsirkel', B. I.; Yur'yev, V. G.

ORG: none

TITLE: Plasma sounding in thermoemission converters with high pressure cesium vapors. I. Experimental methods and theory

SOURCE: Zhurnal tekhnicheskoy fiziki, v. 36, no. 4, 1966, 679-691

TOPIC TAGS: plasma arc, plasma probe, thermoelectric converter, cesium plasma

ABSTRACT: The equipment for the probing of an isothermal plasma and the experimental data processing are described for the case of a thermoemission converter with high-pressure cesium vapors and small interelectrode gaps. Movable molybdenum probes 0.2 mm in diameter and 7--8 mm long were used. A detailed description of the construction of the probes is given. The measurements were carried out at 1200 and 1900°K cathode temperatures and 10^{-1}--4.0 mm Hg cesium vapor pressures with the cathode and vapor temperature stability of $\pm 2^{\circ}$ and $\pm 0.5^{\circ}$, respectively. The theory of probes in a high-density plasma and the method of processing the probe characteris-

Card 1/2 UDC: 533.9.07

ACC NR: AP6013124

tics are analyzed. Formulas are derived on the concentration, carrier temperature, and the potential distribution in a thermoemission converter in which the plasma is generated by the arc. Orig. art. has: 2 figures and 46 formulas.

SUB CODE: 20 / SUBM DATE: 21Jun65 / OTH REF: 002 / ORIG REF: 015

Card 2/2

ACC NR: AP6013125 SOURCE CODE: UR/0057/66/036 [illegible] /0703

AUTHOR: Dyuzhev, G. A.; Martsinovskiy, A. M.; Moyzhes, B. Ya.; Pikus, G. Ye.; Yur'yev, V. G.

ORG: none

TITLE: Plasma sounding in thermoemission converters with high-pressure cesium vapors. II. Verification of the probe method. Certain experimental results obtained in the diffusion and arc modes

SOURCE: Zhurnal tekhnicheskoy fiziki, v. 36, no. 4, 1966, 692-703

TOPIC TAGS: plasma probe, plasma arc, plasma diffusion, thermoelectric converter, cesium plasma

ABSTRACT: This paper is a continuation of the theoretical work on the plasma probing which appeared in the same issue of ZhTF (pp. 679-691). The equipment and the data processing methods were checked experimentally using an isothermal plasma which was diffusion- or arc- generated in an interelectrode gap of a thermoemission converter with high-pressure cesium vapor. The experimental results show that in an isothermal plasma with known parameters, the probing method yields data on the electron concentration and the space potential when the length of the free path is smaller

UDC: 533.9.07

Card 1/2

ACC NR: AP6013125

APPROVED FOR RELEASE: 06/14/2000 CIA-RDP86-00513R001032610014-3"

than the probe dimensions. In this connection, elevated values of electron temperature were obtained. The divergence is due to a large thermoelectron emission of the probe and a slow energy transfer between the fast and slow electrons. Measurements carried out in the diffusion mode are in agreement with theory presented elsewhere (Moyzhes, B. Ya., and G. Ye. Pikus, FTT, 2, 756, 1960). Measurements carried out in the arc mode indicate that the cesium plasma generated between the electrodes of a thermoemission converter differs greatly from a plasma in conventional gas-discharge equipment. The electron temperature is low, approximately 2500°K at all the test points of a v-a curve, and the ionization does not exceed 1%. The fact that a plasma in a thermoemission converter remians sufficiently cold can be used to achieve high-efficiency conversion of thermal to electrical energy. The experimental values of the electron temperature and concentration for the arc mode are essentially in agreement with those calculated and presented by Moyzhes et al. (ZhTF, 35, 1621, 1965). In general, the measurements in an isothermal plasma show that the experimental equipment and methods used have yielded satisfactory results and can be used in a study of nonisothermal plasma. The authors thank Yu. M. Kagan, V. I. Perel', and F. G. Baksht for useful evaluation of results and for valuable advice. The authors thank Yu. M. Kagan, V. I. Perel, and F. G. Baksht for useful discussions and valuable advice. Orig. art. has: 12 figures and 1 table.

SUB CODE: 20 / SUBM DATE: 21Jun65 / ORIG REF: 009 / OTH REF: 007

Card 2/2

L 47035-66 EEC(k)-2/EWT(l)/EWT(m)/T/EWP(t)/ETI IJP(c) RTW/TT/AT/WW

ACC NR: AP6031273 SOURCE CODE: UR/0057/66/036/009/1685/1697

AUTHOR: Dyuzhev, G. A.; Baksht, F. G.; Martsinovskiy, A. M.; Moyzhes, B. Ya.; Pikus, G. Ye.; Yur'yev, V. G.

ORG: none

TITLE: Probe-method investigation of the plasma in thermionic converters with high cesium pressure. III. Distribution of the concentration, the electron temperature, and the space potential in the interelectrode gap of thermionic converters

SOURCE: Zhurnal tekhnicheskoy fiziki, v. 36, no. 9, 1966, 1685-1697

TOPIC TAGS: thermionic energy conversion, direct energy conversion, arc discharge, cesium electron tube

ABSTRACT: Specially constructed instruments with movable probes were used in extensive investigations of the operation of a cesium-filled thermionic converter. The investigations were carried out at pressures characteristic of both the diffusion and arc modes. The measurements confirm the theory of the diffusion mode advanced in 1960 by Moyzhes and Pikus (Moyzhes, B. Ye., and Pikus, G. Ye., FTT, 2, 756, 1960). They also show that, at low cathode temperatures, the ionization starts in this mode next to the anode in the region of the anode drop. The transition to the arc mode is accompanied by a redistribution of the potential and a shifting of the ionization region toward the cathode. In the arc mode, a substantial part of the applied volt-

Card 1/2

L 47035-66
ACC NR: AP6031273

age drops on the near-cathode barrier and in the region close to the cathode. Next to the anode and in the anode region there is only a small potential barrier, which vanishes with increasing current. The electron temperature in the gap appears to be almost constant, although it increases slowly with increasing current. At the same time, the carrier concentration increases rapidly when current increases. The values of electron concentration and temperature obtained by the authors agree with those obtained by other researchers in spectral measurements. While they consider their method highly useful and accurate, the authors concede that, unlike optical methods, it does not yield information on the degree of equilibrium in the plasma. Orig. art. has: 9 formulas, 10 figures, and 2 tables. [ZL]

SUB CODE: 20/ SUBM DATE: 04Sep65/ ORIG REF: 009/ OTH REF: 007/ ATD PRESS: 5089

Card 2/2

MARTSINKOVSKIY, B.I

DECEASED
C'1957

1962/4

SEE ILC.

HYGIENE

MARTSINKOVSKIY, David Borisovich; POGREBINSKIY, Valentin Aleksandrovich; KHITAROVA, N.R., red.izd-va; ISLENT'YEVA, P.G., tekhn.red.

[High-capacity converter plants] Konverternye tsekhi bol'shoi proizvoditel'nosti. Moskva, Metallurgizdat, 1961. 204 p. (MIRA 15:5)

(Iron and steel plants)
(Bessemer process)

KARABINOVICH, A.I., inzh.; MARTSINKOVSKIY, D.B., inzh.

Automation and mechanization of processes in converter shops. Mekh.i avtom.proizv. 15 no.11:12-15 N '61. (MIRA 14:11)
(Bessemer process—Technological innovations)
(Automation)

MARTSINKOVSKIY, D.B.

Using ore and scrap metal in the converter process. Metallurg 7 no.3:13-16 Mr '62. (MIRA 15:2)

1. Gosudarstvennyy soyuznyy institut po proyektirovaniyu metallurgicheskikh zavodov.
(Bessemer process) (Scrap metals)

MARTSINKOVSKIY, D.B.; POGREBINSKIY, V.A.

Comparing block-type and linear positioning of large capacity converters. Stal' 22 no.7:606-611 Jl '62. (MIRA 15:7)

1. Gosudarstvennyy soyuznyy institut po proyektirovaniyu metallurgicheskikh zavodov.

(Converters)

MARTSINKOVSKIY, D., inzh.

Maker of steel. Tekh.mol. 30 no.9:19-21 '62. (MIRA 15:9)
(Bessemer process)
(Converters)

PODKOPAYEV, N.F.; VIGDORCHIK, D.Ya.; MARTSINKOVSKIY, I.I.

Calculating gas pipes for the interior of houses. Gas.prom.no.10: 18-24 O '56. (Gas pipes) (MLRA 9:10)

S/122/60/000/002/005/015
A161/A130

AUTHORS: Lysenko, B. M., Candidate of Technical Sciences, Marsinkovskiy, V. A., Engineer

TITLE: Vibration stability of rotors on journal bearings

PERIODICAL: Vestnik mashinostroyeniya, no. 2, 1960, 23 - 24

TEXT: The Laboratoriya gidrodinamiki AN USSR (Hydrodynamics Laboratory of the UkrSSR) has studied the effect of the design and service factors on the stability of machine rotors mounted on fluid-journal bearings. Corresponding Member of AS UkrSSR A. F. Filippov supervised the work. A centrifugal multistage high-pressure pump model was used in the studies, with a maximum rotor velocity of 8,500 rpm. Tests were carried out in the accelerated and deceleration period only, for the equipment did not ensure smooth control of velocity in the entire possible range. The two experimental rotors had similar journal dimensions but different rigidity. The vibration was measured by three indicator gauges at an angle of 120°. The 50-cycle current frequency was used for time scale. The data were recorded with a galvanometer oscillograph MPO-2 (MPO-2). The oscillograms revealed the resonance with appearance of the [illegible] rpm (or natural frequency), for

Card 1/ 3

Vibration stability of rotors in journal bearings

a second time at a further increase of velocity (with a constant amplitude and frequency, regardless of the rpm and with a frequency near the natural frequency of the rotor), and again at the velocity near the treble critical, with the basic harmonic equal to one-third of the given rpm. It is supposed that such a resonant whip must appear also further, at rpm numbers being multiple of the first critical velocity. The mechanism of the whip presents a problem of high interest, but at present it may only be supposed that the axis of the journal describes a conical surface. The analysis of the vibration revealed that the system bearing-rotor is non-linear, and this makes it difficult to investigate. It was stated that short and rigid rotors with a light load on the bearings can develop vibration with frequency equal to one half of rpm at any rpm, but they are not further considered, for the phenomenon is rare in practical operation and not so dangerous. The observation data are compared in a table with the data of other foreign works. It is stated that the measures as suggested in various works can in some cases eliminate the whip, e.g., annular grooves in bearings; changed spaces and angles of contact; variation of the oil viscosity or oil pressure at the intake end of the bearing. But none of those means can ensure dependable stability through a wide velocity range, and the most radical means is the use of special vibration-proof bearing designs some of which are described in Refs. 5, 7 and 12, the best of which have proved to be the bear-

Card 2/3

Vibration stability [illegible]

ings with self-adjusting [illegible]. It [illegible] mon journal bearings, the [illegible] ed. Conclusions: 1) The [illegible] rotary machines [illegible] journal bearings [illegible] bearings have [illegible] on the bearings makes [illegible] against whip is [illegible] 1 table and 19 references: [illegible] the English-language [illegible] oil-film journal [illegible] plied Mechanics", [illegible] [illegible] ible rotors, "Trans. ASME", [illegible] gation of resonant whip "Trans. ASME", [illegible] of shaft alternations [illegible] no. 5, 1956; T. Hawkes, Whirling [illegible] 4648, 1955. Ben Harrop, Vibration [illegible] v. 24, no. [illegible] 1953.

Card 3/3

LYSENKO, B.M., kand.tekhn.nauk; MARTSINKOVSKIY, V.A.; inzh., SERIKOV, S.S., inzh., SHAVRA, B.M., inzh.

Experimental device for studying the vibration resistance of feed pump rotors. Energomashinostroenie 6 no.5:33-35 My '60. (MIRA 13:9)

(Pumping machinery--Vibration)

20167

S/114/61/000/004/002/006
E194/E435

26.2141

AUTHORS: Martsinkovskiy, V.A., Engineer and
Karintsev, I.B., Engineer

TITLE: The Influence of Radial Clearance Glands on the Critical Speed of Feed Pump Rotors

PERIODICAL: Energomashinostroyeniye, 1961, No.4, pp.12-14

TEXT: Feed pump rotors are a complicated oscillatory system for which it is very difficult to provide an accurate theoretical calculation. The only existing method, proposed by Professor A.A.Lomakin (Ref.1) is approximate and a considerable series of experiments were made to assess its accuracy. An experimental feed pump rig was used to test a full-scale rotor of a feed-pump type ПЭ 320-200 (PE 320-200) with two glands which were located either near the middle or adjacent to the bearings. The geometry and type of glands are given in tables 1 and 2. Tests were made with various values of pressure drop across the glands ranging from 0 to 60 atm. The influence of the diameter of single gap and multi-gap glands was investigated on a special single-disc rotor. The first critical speed in air was 2900 r.p.m. for the

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E194/E435

single disc and 2340 r.p.m. for the full-scale rotor. Tests were made in the speed range of 0 to 8500 r.p.m. Rotor vibration was measured by inductive pick-ups recording on an electromagnetic oscillograph. Particular attention was paid to single-gap glands as experience with the feed pumps at the Cherepet power station has shown that they are most reliable in ensuring vibration stability of the rotor. A study was made of the influence on the value of the first critical speed, on the resonance amplitudes and on the unstable conditions of the rotor of the following parameters of single gap glands: the pressure drop on the glands, the radial gap, the length of the gap, the diameter of the gland, the eccentricity of the rotor relative to the gland the place of location of the gland and the shape of the inlet edges of the gland. In both these curves the critical speed in r.p.m. is plotted on the y axis, in curve 1a as a function of pressure drop and in curve 1b as function of the gap length. No influence of the shape of the inlet edges on oscillation of the rotor was found but this shape has a considerable influence on wear of the gland rings which were subject to erosion to a depth of about 1.5 mm after about an hour's working as shown in Fig.2.

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E194/E435

In this figure the place of wear is marked in black. The glands reduce the amplitude of resonance vibrations, particularly when the gap is reduced and the diameter and length of the gland is increased. Unstable conditions, which are most dangerous, also occur with glands but the zones of instability for rotors with glands are much higher than for rotors in air. In the tests instability commenced at speeds of 7000 to 8000 r.p.m. with pressure drops not exceeding 10 atm. At higher pressure drops they disappeared completely. Results have also been obtained on the influence of the critical speed of rotors of the dimensions of individual gaps in 2 and 3 gap glands. The variants of gland tested are given in table 2; the construction and notation used will be seen from Fig.3. In multi-gap glands clearances have different influences in different designs. In Fig.3 if the gap b_2 is reduced the critical speed is reduced, the resonance amplitude is increased and instability becomes worse. The clearances b_1 and b_2 have the opposite effect. The experimental investigations show that glands increase the critical speed of the rotor. The dotted lines in Fig.1 correspond to

critical speeds calculated by the method of Professor A.A.Lomakin for radial gaps in glands of 0.3 mm. In this particular case agreement with experiment is good. In Fig.1b which shows the influence of the gland length on the critical speed for various pressure drops, it will be seen that there is first a marked increase in the critical speed with the length of gland, but later this tails off. This is in general agreement with the theoretical curves. The amplitude of resonance oscillations is much reduced by the presence of a gland so that transition of the rotor through a resonance is not dangerous. Often the amplitudes are so small that the resonance speeds could not be accurately determined from the oscillograms. There must be considerable damping forces both in the glands and in the plain bearings. It is most important to determine these forces. Multi-gap glands differ in principle from single-gap in that they may reduce the critical speed of the rotor as compared with its value in air. Two-gap glands have no advantages over single-gap. The use of a greater number of gaps may be advantageous provided that the even-number clearances are large but the use of such glands will increase frictional losses

The Influence of Radial ...

and the optimum number should be selected on the basis of vibration stability, reduction in volumetric losses and disc friction. The tests show that unstable conditions are dangerous in high pressure feed pumps. It is known that the cause of loss of stability is friction between the rotor and the medium in the glands which sets up forces perpendicular to the line of centres. In multi-gap glands if the clearance b_2 is small, then two and three gap glands can become sources of excitation of vibrations which commence at sub-critical speeds and are maintained over a wide range of speed. Increasing the clearance b_2 avoids these oscillations. It is also concluded that there is no point in increasing the gland length above 60 mm in order to increase the critical speed of the rotor. The greatest effect in increasing the rigidity is obtained with glands near the centre of the rotor and these should, therefore, be used to increase the critical speed. The question of the influences of gland clearances on the critical speed is still open and for clearances of 0.25 to 0.3 mm, which are commonly used, the calculated critical speed of the rotor with a single pair of glands is in satisfactory agreement

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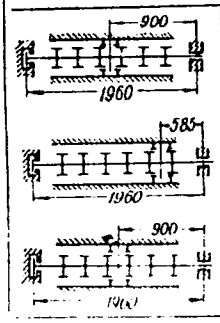
The Influence of Radial ...

with experiment. There are 4 figures, 3 tables and 5 Soviet references.

Table 1.

1 - diagram of gland arrangement
2 - reference number
3 - length of the gland mm
4 - radial gap b mm
5 - notation of the points on the curves of Fig.1a and b.

ТАБЛИЦА 1

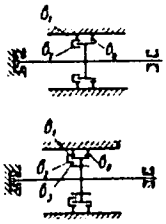
1 Схема расположения уплотнений	2 № п/п	3 Длина уплотнений, мм	4 Радиальный зазор b, мм	5 Обозначение точек	
	1	20	0,10	×	К рис. 1, а
	2	20	0,25	○	
	3	20	0,40	△	
	4	20	0,25	●	
	5	20	0,40	▲	
	6	20	0,75	⌀	
	7	20	1,00	ж	
	8	10	0,10		К рис. 1, б
	9	20	0,10; 0,25; 0,40		
	10	60	0,10		

The Influence of Radial ...

ТАБЛИЦА 2

Table 2.

1 - gland arrangement
2 - notation of the points on the curves of Fig.4a and b.

(1) Тип уплотнений	№ п/п	$l_0=l_1$ мм	$l_2=l_0$ мм	b_0 мм	b_1	b_2	b_3	(2) Обозначение точек	
	1	20	15	0.20	0.25	0.20	0.20	×	К рис. 4, а
	2	20	15	0.20	0.25	0.45	0.20	○	
	3	20	15	0.20	0.25	0.75	0.20	△	
	4	20	15	0.20	0.25	1.00	0.20	□	
	5	20	15	0.20	0.20	0.20	—	●	К рис. 4, б
	6	20	15	0.20	0.20	0.40	—	▲	
	7	20	15	0.20	1.00	1.00	—	■	

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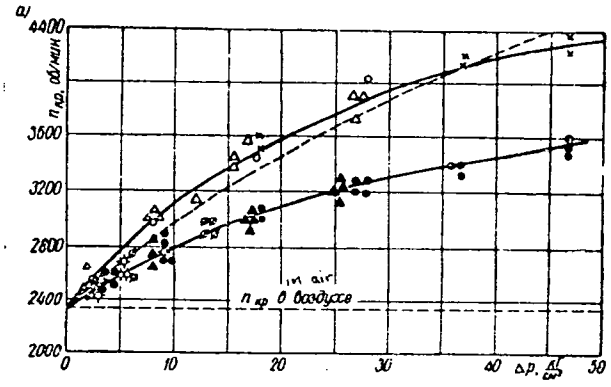
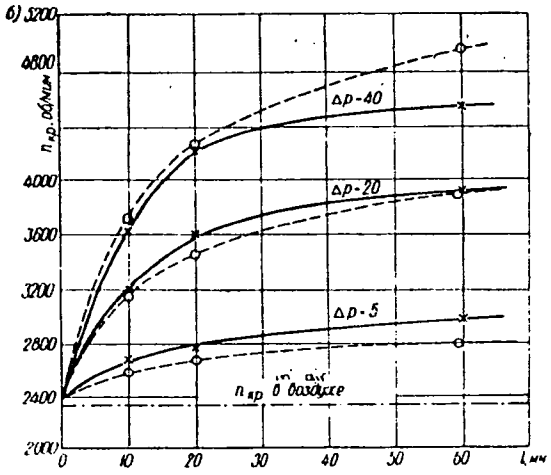
The Influence of Radial ...





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The Influence of Radial ...

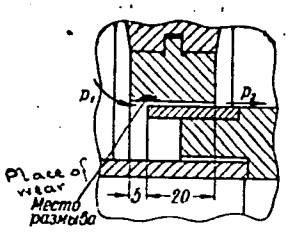

Fig.2.

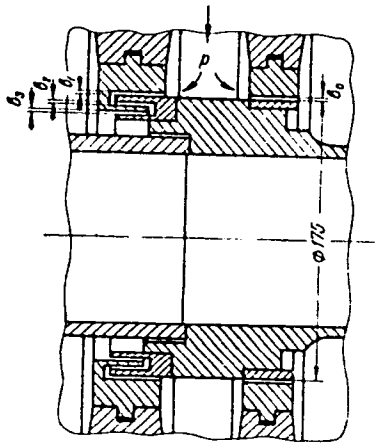

Fig.3.

Card 9/9

MARTSINKOVSKIY, V.A., inzh.

Calculating the elastic and damping forces in slot packings of hydraulic machines. Energomashinostroenie 7 no.11 25-26 N '61. (MIRA 14:11)

(Hydraulic machines)
(Packing(Mechanical engineering))

MARTSINOVSKIY, V.A.; RUDIS, M.A.

Dynamics of rotors of hydraulic machines. Teor. mash. i mekh. no. 98/99:18-27 '64. MIRA 17:9

MARTSINKYAVICHYUS, M. I.: Doc Med Sci (diss) -- "Sleep therapy in the complex treatment of ulcers". Kaunas, 1959. 19 pp (Min Health Lithuanian SSR, Kaunas State Med Inst), 150 copies (KL, No 2, 1960, 124)

MARTSIRKYAVICHYUS, K. I

USSR / Pharmacology and Clinical Physiology of Nervous System.
Other Nervous System Drugs. Behavior.

Abs Jour: Ref Zhur-Biol., No 20, 1958, 93669.

Author : Martsirkyavichyus, K., Myuyzhis, Z.
Inst :
Title : Determination of the Type of the Nervous System.

Orig Pub: Sveikatos apsaugos 1956, No. 1, 7 - 10.

Abstract: No abstract.

Card : 1/1

MARTSINKYAVICHYUS-KLEMENSAS

"Changes in the Properties of Turf Podsolic Soils During Their Cultivation Under Grass Field Rotation Conditions." Cand Agr Sci, Moscow Agricultural Acad imeni K. A. Timiryazev, Moscow, 1954. (RZhBiol, No 3, Feb 55)

SO: Sum. No 631, 26 Aug 55-Survey of Scientific and Technical Dissertations Defended at USSR Higher Educational Institutions (14)

SOV/109-4-1-9/30

AUTHORS: Sluzhotskiy, A.Ye., Vasil'yev A.S. and Martsinovich, V.M.

TITLE: Analysis of the Operation of a Series-type Thyratron Converter (Analiz raboty posledovatel'nogo ionnogo preobrazovateliya)

PERIODICAL: Radiotekhnika i Elektronika, 1959, Vol 4, Nr 1, pp 63 - 69 (USSR)

ABSTRACT: The principles of the operation of a series-type converter is known (Ref 1). Two series converter circuits are shown in Figures 1 and 2. The circuit of Figure 1 employs two thyratrons but is asymmetrical. The circuit of Figure 2 is a push-pull arrangement. The operation of the two circuits is similar and can be analysed in the same manner, provided it is assumed that the capacitances C_1 and C_2 of the circuit of Figure 2 are each equal to half the total capacitance of the circuit of Figure 1. The operation of the circuit of Figure 2 is as follows. During the half-period, when the tube 1 is open, the capacitor C_2 is charged through the network RL_1 and the capacitor C_1 is charged through this network. During the succeeding

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Analysis of the Operation of a Series-type Thyratron Converter

half-period the tube 2 is ignited and the capacitor C_2 is discharged while C_1 is discharged through RL_2. The condition necessary for the operation of the system is that the voltage at the choke at the instant of the ignition of a tube, should be higher than the supply voltage E. The equivalent circuit of the converter of Figure 2 can be represented on a network consisting of L, RC and four switches (see Figure 3) During one of the half-periods, the switches 1-2 of Figure 3 are closed while the switches 3-4 are opened and the current flows in the direction indicated by the arrow in Figure 3. During the next half-period, the contacts 3-4 are closed and the contacts 1-2 are open so that the current flows in the opposite direction. The current in the choke has always the same direction. For the purpose of analysis, it is assumed that the voltage applied to the equivalent circuit is equal to half the source voltage. For each half-period of the supply voltage, the operation of the system can be described by:

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$$\frac{E}{2} = L\frac{di}{dt} + iR + \frac{1}{C}\int i\,dt \qquad (1).$$

Analysis of the Operation of a Series-type Thyratron Converter

If the notation defined by Eq (2) is adopted, Eq (1) can be written in the form of Eq (5). If it is assumed that the network of Figure 3 operates in the oscillatory regime, the solution of Eq (5) is written as:

$$i = Be^{-\frac{R}{2L}t} \sin(\omega_o t + \varphi) \qquad (6)$$

where ω_o is the natural frequency of the network, while the constants B and φ can be determined from the initial conditions. If it is assumed that $\omega_o/\omega = n$, where ω is the frequency of the supply voltage, the initial conditions for the resistor current and for the voltage across the condenser can be written as Eqs (14) and (15), respectively. T in these equations denotes the period of the supply-voltage frequency. From these initial conditions, it follows that φ can be expressed by Eq (17), while B is given by Eq (19) where $k = RT/8L$. The effective normalised current or the voltage across the

 resistance is, therefore, expressed by Eq (24), while the

Analysis of the Operation of a Series-type Thyratron Converter

maximum inverse voltage of the system is expressed by Eq (30). The so-called closing time of the system can be found from Eq (32) where u_L denotes the voltage across the choke, the closing time is defined as the interval between the inception of the switching and the instant when the voltage at the choke becomes equal to the supply voltage. Eq (32) can also be written as Eq (34). The above formulae were used to construct a number of graphs. These are shown in Figures 6, 7, 8. Figure 6 represents the voltage across the resistance as a function of k, Figure 7 shows the closing time characteristics in terms of k while Figure 8 gives the values of the maximum inverse voltage as a function of k. Some experimental measurements were carried out and it was found that the discrepancies between the measured values and the results calculated by means of the formulae were less than 10%. There are 8 figures and 2 references, 1 of which is Soviet and 1 German.

SUBMITTED: April 15, 1957

Card4/4

32077
S/181/61/003/012/011/028
B102/B108

24.7700 (1136, 1164, 1385)

AUTHORS: Martsinovskaya, E G., Matskevich, T L , and Rubanova, G M

TITLE: Secondary electron emission from iodine

PERIODICAL: Fizika tverdogo tela, v. 3, no 12, 1961, 3634 - 3636

TEXT: The coefficients of secondary electron emission, σ and of inelastic reflection, η, as dependent on primary electron energy u_p were determined by means of an arrangement described before (T L Matskevich, E. G Mikhaylova, FTT, 2, 4, 709, 1960). σ and η were measured for $200 \leq u_p \leq 3000$ ev by the method of single pulses. The pressure in the vacuum vessel was $5 \cdot 10^{-8}$ - $1 \cdot 10^{-7}$ mm Hg. The iodine films examined were vapor-plated upon graphite or molybdenum backings $\sigma(u_p)$ and $\eta(u_p)$ were measured at room and nitrogen temperatures, σ and η as functions of the plating time t, i. e. of the film thickness, were also determined. σ_{max} as determined from the $\sigma(u_p)$ curve for I was 1 4 (Fig 2). From the $\sigma(t)$-curves for I upon Mo, the depths from which the slow secondary electrons

Card 1/2

Secondary electron emission

emerge were estimated for u_p = 500, 1000 and 3000 ev. They were 5[illegible] and 1100 Å, respectively. In this estimation it was assumed that [illegible] energy distribution of the inelastically reflected electrons is the [illegible] for both I and Mo. L. N. Dobretsov is thanked for assistance. There [illegible] 4 figures and 3 references: 1 Soviet and 2 non-Soviet. The two refer ences to English-language publications read as follows: E. J. Sternglass: Phys. Rev. 96, 345, 1954; R. N. Xoyarg Trans. Farad. Soc., 35, 1401 [illegible]

ASSOCIATION: Fiziko-tekhnicheskiy institut im. A. F. Ioffe AN SSSR Leningrad (Physicotechnical Institute imeni A. F. Ioffe AS USSR, Leningrad)

SUBMITTED: July 3, 1961

Fig. 1: $\sigma(t)$ and $\eta(t)$ for iodine on graphite at u_p = 2500 ev.

Fig. 2: $\sigma(u_p)$ for iodine (1), graphite (2) and molybdenum (3).

Fig. 3: $\eta(u_p)$ for iodine (1) and graphite (2).

Card 2/[illegible]

MARTSINOVSKAYA, E.G.

Secondary electron emiss[illegible] from [illegible] F[illegible]
6 no.7:2053-2057 Jl '64.

1. Fiziko-tekhnicheskiy institut imeni A.F.Ioffe AN SSSR, Leningrad.

L 49051-65 EPF(c)/EPR/EPA(s)-2/EPA(w)-2/EWP(j)/EWT(l)/EWT(m)/EEC(t)/EWP(t)/EWP(b)/EWA(m)-2/EWP(z) Pc-4/Pi-4/Pr-4/Ps-4/Pt-7/Pz-6 IJP(c) AT/RM/WH/WW

ACCESSION NR: AP5006889 S/0181/65/007/003/0828/0831

AUTHOR: Martsinovskaya, E. G. 15

TITLE: Secondary electron emission of some aromatic hydrocarbons 70 65 B

SOURCE: Fizika tverdogo tela, v. 7, no. 3, 1965, 828-831

TOPIC TAGS: aromatic hydrocarbon, organic emitter, secondary emission, inelastic reflection

ABSTRACT: This is a continuation of a study of secondary electron emission 21 of molecular crystals, started by T. L. Matskevich and the author (FTT v. 2, 709, 1960; v. 3, 3634, 1961), and is devoted to properties of aromatic hydrocarbons of the same class as the previously investigated substance, anthracene. The measurements were made of the coefficient of secondary electron emission and of the coefficient of inelastic reflection of benzene, naphthalene, phenanthrene, and diphenyl films in the range of primary electron energies 200--3000 eV. The method of producing the films, the instruments for the measurements, and the procedure were the same as described earlier. The substrates were molybdenum, graphite, and tantalum. The dependence of the coefficient of secondary emission and of inelas-

Card 1/3

tic reflection were measured as functions of the sputtering time at constant energy of the primary electrons. The results were independent of the substrate material. The values of the maximum secondary emission coefficients varied in a narrow range, from 2.85 for polyethylene to 1.38 for anthracene. The values for benzene, naphthalene, and anthracene, with 1, 2, and 3 benzene rings, respectively, were 1.66, 1.52, and 1.38. The corresponding maximum primary energies were rather low, 200, 300, and 400 eV, respectively. A definite correlation is observed between the value of the coefficient of secondary electron emission and the number of benzene rings in the substance. The effective depth of emergence of slow secondary electrons was found to be 500 ± 100 and 800 ± 200 A for primary electrons for 500 and 3000 eV, respectively, in the case of phenanthrene. The secondary emission was independent of the temperature for all the investigated substances at below-zero temperatures. The coefficients of inelastic reflection were low in the investigated range of primary energies, but larger than expected from the atomic numbers of the elements contained in the measured compound. "The author is deeply grateful to the supervisor of this work, L. N. Dobretsov, for help with the work. Student L. Gulev of the Kalinin Polytechnic Institute participated in the measurement of the secondary electron coefficients and inelastic reflection coefficients for the films of phenanthrene and diphenyl, for which the author is grateful."
Orig. art. has: 4 figures and 1 table.

L 49051-65
ACCESSION NR: AP5006889

ASSOCIATION: Fiziko-tekhnicheskiy institut im. A. F. Ioffe AN SSSR, Leningrad (Physicotechnical Institute, AN SSSR)

SUBMITTED: 17Sep64 ENCL: 00 SUB CODE: SS, OC

NR REF SOV: 003 OTHER: 000

Card 3/3

MARTSINOVSKAYA, Ye. N.

MARTSINOVSKAYA, Ye.N.: "Disturbances to the generalizing function of speech in the formation of time connections in mentally backward children". [illegible], [illegible]. Academy of Pedagogical Science RSFSR, Scientific Inst for Defect Ped. (Dissertations for the Degree of Candidate of Pedagogical Sciences).

SO: Knizhnaya letopis' No. [illegible], [illegible] October 1956, Moscow.

MARTSINOVSKAYA, Ye.N.

Interaction of articulatory and digital kinesthesias in deaf children. Vop. psikhol. 8 no.1:101-112 Ja-F '62. (MIRA 15:4)

1. Institut defektologii Akademii pedagogicheskikh nauk RSFSR, Moskva.
(MUSCULAR SENSE) (CHILDREN, DEAF)

DYUZHEV, G.A.; MARTSINOVSKIY, A.M.; PIKUS, G.Ye.; YUR'YEV, V.G.

Most effective operating conditions for thermionic converters.
Zhur. tekh. fiz. 35 no.6:1160-1162 Je '65. (MIRA 18:7)

L 11258-66 EWT(1)/EEC(k)-2/ETC(F)/EPF(n)-2/EWG(m)/T/EWA(h) IJP(c) TT/WH/AT

ACC NR: AP5028321 SOURCE CODE: UR/0057/65/035/011/2054/2064

AUTHOR: Dyuzhev, G. A.; Martsinovskiy, A. M.; Pikus, G. Ye.; Tsirkel', B. I.; Yur'yev, V. G.

ORG: none

TITLE: Investigation of the volt-ampere characteristics of thermionic converters

SOURCE: Zhurnal tekhnicheskoy fiziki, v. 35, no. 11, 1965, 2054-2064

TOPIC TAGS: direct energy conversion, thermionic energy conversion, thermionics

ABSTRACT: The volt-ampere characteristics of cesium-filled thermionic energy converters were examined both in the diffusion and arc modes of operation. Plane-parallel diodes with interelectrode spacings of 0.02—2 mm and electrode surfaces of 0.3—0.8 cm^2 were used in all the experiments. At the diffusion mode, the characteristics conformed with theoretical data (B. Ya. Moyzhes and G. Ye. Pikus, FTT, 2, 4, 756, 1960). At high temperatures, the transition to the arc mode took place smoothly, which is explained by the presence during the experiments of an accelerating field at the emitter. The fact that even the smallest arc current was close to the emission current was also attributed to this accelerating field. The absence of saturation in the volt-ampere characteristics was thought to be connected with the anomalous Schottky effect arising as the result of the cathode barrier. Orig. art. has: 6 formulas and 9 figures. [ZL]

Card 1/2 UDC: 537.523.5

L 11258-66
ACC NR: AP5028321

SUB CODE: 10 / SUBM DATE: 08Feb65/ ORIG REF: 006/ OTH REF: 003/ ATD PRESS: 4178

Card 2/2

FRISMAN, E.V.; MARTSINOVSKIY, A.A.; DOMNICHEVA, N.A.

Optical anisotropy of macromolecules of polystyrene derivatives. Vysokom. soed. 2 no.8:1148-1153 Ag '60. (MIRA 13:9)

1. Fizicheskiy institut Leningradskogo gosudarstvennogo universiteta.

(Styrene)

S/057/62/032/006/020/022
B108/B102

26.1640

AUTHORS: Martsinovskiy, A. M., Pikus, G. Ye., Sonin, B. E., and Yur'yev, V. G.

TITLE: Effect of electrode barriers on the electrical conductivity of a cesium plasma

PERIODICAL: Zhurnal tekhnicheskoy fiziki, v. 32, no. 6, 1962, 770 - 772

TEXT: In an earlier paper (FTT, II, no. 4, 756, 1960) a method was proposed for determining the scattering cross section from measurements of the electrical conductivity of a cesium plasma. It was not considered, however, that the electron work function depends on temperature and pressure of the Cs vapor. In order to explain the effect of the electrode barriers, the authors of the present paper used a special arrangement with movable electrodes to measure the dependence of the plasma resistivity R on the length d of the gap between the electrodes. It was found that R increases linearly with d. Measurements with d = 0 showed that at high temperatures there is an additional resistance owing to a layer of cesium adsorbed on the electrodes. This layer increases the work function. This

Card 1/2

Effect of electrode barriers...

is also the reason why the efficiency of plasma thermocells decreases. It is therefore necessary to increase pressure in these cells in order to reduce the work function. There are 2 figures.

ASSOCIATION: Institut poluprovodnikov AN SSSR, Leningrad (Institute of Semiconductors AS USSR, Leningrad)

SUBMITTED: November 21, 1961

UKLEBA, A.N., inzh.; MARTSINOVSKIY, B.I.

New method of fastening and connecting ammeters and voltmeters to distribution boards. Energetik 8 no.2:14-16 F '60.
(MIRA 13:6)

(Electric meters)

ALEKSEYEV, S.A.; ZHMAKIN, D.F.; KEREKESH, V.V.; MALOV, A.N.; MARTSINOVSKIY, P.L.; MOLOTOK, A.V.; NESMELOV, V.A.; TEVEROVSKIY, P.A.; KHISIN, R.I.; DELITSIN, A.A., retsenzent; SOKHNOVSKIY, M.A., retsenzent; STEFANOV, V.P., retsenzent; STOROZHEV, M.V., retsenzent; TALANOV, P.I., retsenzent; FAL'KEVICH, A.S., retsenzent; CHERNUSHEVICH, V.A., retsenzent; KHISIN, R.I., red.; GAL'TSOV, A.D., red.; VOL'SKIY, V.S., red.; STRUZHESTRAKH, Ye.I., red.; SEMENOVA, M.M., red. izd-va; MODEL', B.I., tekhn. red.

[Manual for the establishment of norms in the machinery industry in 4 volumes] Spravochnik normirovshchika-mashinostroitelia v 4 tomakh. Moskva, Gos. nauchno-tekhn. izd-vo mashinostroit. litry. Vol.3. [Establishing norms for founding, stamping, welding, painting, metal plating, and woodwork] Normirovanie liteinykh, kuznechnykh, shtampovochnykh, svarochnykh, lakokrasochnykh rabot, metallopokrytii i derevoobrabotki. 1962. 671 p. (MIRA 15:4)

(Machinery industry—Production standards)

MARTSINOVSKIY, V.Ye.; SAKHAROVA, P.K.

Problem of dysentery control. Pediatriia, Moskva no.3:26-28 May-June 1953. (CIML 25:1)

1. Docent for Martsinovskiy. 2. Of the Department of Epidemiology (Head -- Prof. V. D. Solov'yev) of Second Moscow Medical Institute imeni I. V. Stalin and of the Municipal Sanitary Epidemiological Station (Head Physician -- M.S. Sokolovskiy).

MARTSINOVSKIY, V. Ye., dotsent; STAROVEROVA, A.G.

Analysis of activities of specialized nursery homes for children infected with chronic forms of dysentery. Pediatriia no.2:50-54 Mr-Ap '54. (MLRA 7:6)

1. Iz kafedry epidemiologii II Moskovskogo meditsinskogo instituta imeni I.V.Stalina (zav. prof. V.D.Solovyev) i iz Moskovskoy gorodskoy sanitarno-epidemiologicheskoy stantsii (glavnyy vrach M.S. Sokolovskiy)

(DYSENTERY, in infant and child,
*specialized nursery homes for child. with chronic dysentery in Russia)

OVES, Il'ya Semenovich, kand. tekhn. nauk; SAPOZHNIKOV, Il'ya Zinov'yevich; MARTSINSKIY, A.F., inzh., retsenzent; KONDRASHOV, A.V., inzh., retsenzent; SHERBAKOV, S.N., nauchn. red.; MORSKOY, L.K., red. izd-va; RODIONOVA, V.M., tekhn. red.

[Organization of the supply and replenishment of materials and equipment for construction] Organizatsiia material'no-tekhnicheskogo snabzheniia i komplektatsii stroitel'stva; opyt raboty Glavmosstroiia. Moskva, Gosstroiizdat, 1963. 213 p. (MIRA 16:12)
(Construction industry--Management)

MARTSINYAK, A. I.

MARTSINYAK, A. I. "The Development of Theory and Equipment and the Determination of the Value of the Acceleration of Gravity by the Absolute Method in Terms of a Rod Falling in Vacuo." Commission on Standards, Measures, and Measuring Instruments, Council of Ministers USSR. All-Union Sci Res Inst of Metrology imeni D. I. Mendeleyev. Leningrad, 1956. (Dissertation for the Degree of Candidate in Technical Science)

So: Knizhnaya Letopis', No. 19, 1956

MARTSINYAK, A.I.

Determining the absolute value of gravity acceleration by observing the fall of a rod in a vacuum. Izm.tekh.no.5:11-15 S-O '56. (MLRA 10:2)
(Gravity)

AGALETSKIY, B.M.; YEGOROV, K.N.; MARTSINYAK, A.I.; YANOVSKIY, B.M., prof. red.; ARUTYUNOV, V.O., doktor tekhn.nauk, prof., otvetstvenny red.; MATVEYEVA, A.Ye., tekhn.red.

[Absolute determination of the acceleration of gravity at the All-Union Scientific Research Institute of Metrology.] Absoliutnye opredeleniia uskoreniia sily tiazhesti v punke VNIIM. Moskva, Gos. izd-vo standartov "STANDARTGIZ." 1958. 89 p. (Leningrad. Vsesoiuznyi nauchno-issledovatel'skii institut metrologii. Trudy no.32) (MIRA 11:11)

1. Direktor Vsesoyuznogo nauchno-issledovatel'skogo intituta metrologii im. D.I. Mendeleyeva (for Arutyunov).
(Gravity)

SOV/169-59-5-4487

Translation from: Referativnyy zhurnal, Geofizika, 1959, Nr 5, pp 30 - 31 (USSR)

24.4200

AUTHORS: Agaletskiy, P.N., Yegorov, K.N., Martsinyak, A.I.

TITLE: The Absolute Determinations of the Acceleration of Gravity at the VNIIM Station

PERIODICAL: Tr. Vses. n.-i. in-ta metrol., 1958, Nr 32 (92), 91 p, 111.

ABSTRACT: Determinations of the absolute value of g, carried out in Washington (1936) and in Teddington (1938) yielded discrepancies of up to 20 mgal in comparison with the Potsdam system. Such large discrepancies were considered to have resulted from inaccuracies in method and insufficient evaluations of systematic errors of the measurement. Therefore, the Research Institute of Metrology in Leningrad paid a special attention to the detailed clarification of the nature of the sources of systematic errors and the methods for their exclusion, when developing the methods for fundamental determination of g. The studies were begun in 1940, interrupted by the war, and finished in 1956

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The measurements were carried out by way of three independent methods: 1) joined fall of bodies; 2) free fall of a body; 3) swinging pendulums Three swinging pendulums with various reduced length of 40, 60 and 75 cm were used in the measurements. The rods of the pendulums were made of fused quartz glass, the bobs of brass bars. The two ends of the pendulum rods were provided with grooves covered with quartz plates. This way, openings were formed at the ends of the rods, inside of which cushions of hard glass were put on the quartz plates. All the parts made of quartz and glass were connected by the forces of molecular cohesion. The pendulums were swinging alternately within a copper vacuum vessel on fixed knife-edges produced of a special tool steel. The whole set-up was placed on concrete posts in a room the temperature of which was maintained constant by conditioning The distances between the support bearings of the pendulums have been determined with a gaging machine, with an error which did not exceed 0 6 μ . The swinging period has been determined by using the signals of a standard generator, the maximum error of which is smaller than 3.10^{-8} sec The duration of swinging in each individual experiment was 15 - 20 min. The adjusted value of g from

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The Absolute Determinations of the Acceleration of Gravity in the VNIIM Station

the observations of thw swinging pendulums was found to be 981.9187 ± 0.0004 cm/sec^2. Using the method of joined fall, the falling was observed in the staircase of the building of the Institute of Metrology; a metallic cylinder was falling from a height of 14 m. Within the cylinder and simultaneously with the cylinder, a brass frame was falling. Magnetic recorders fixed on the falling cylinder, slided along the vertical steel wires and marked magnetic marks on the wires during the fall of the cylinder. The recorders were operated by pulses from a stable generator with a frequency of 62.5 cps. The same pulses caused the flashing of an inertia-free bulb which illuminated a slit within the cylinder. The image of the slit was projected onto a photographic plate fixed on the frame falling within the cylinder. As the air of atmospheric pressure was within the cylinder, the results of observation were corrected for the effect of air. The temperature of the various sections of the steel wires was determined by means of some thermocouples. Prior to measuring the distances between the magnetic marks, the wires were strewn with iron filings forming on them characteristic strokes. The measuring of the wires was carried out by means of a calibrating tape and a metric standard on a horizontal stand. The strokes formed on the photographic plate of the falling

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frame, were measured by means of a gaging machine. The value of g was computed from the position of the frame in relation to the marks on the wires and was adjusted by the method of the least squares from 21 falls; the result was 981.9215 $\pm$ 0.0016 cm/sec^2. Using the method of free fall of a body, a metric rod was falling within an evacuated copper vessel. A photoemulsion coated the plane opposite faces of the quartz parts of the rod, and the image of the immovable slit, periodically illuminated by the flashes of an inertia-free bulb, was projected onto the photoelumsion. The bulb was operated by the pulses from a quartz timekeeper with the transformed frequency of 125 and 250 cps. The setup was placed in the gravimetric basement of the Institute where the fluctuations of temperature are very small. Fifteen falls of the rod were observed. The distances between the marks on the emulsion layer of iron were determined by means of the gaging machine. After carrying out the necessary corrections, the values of g were adjusted by the method of least squares. The final result of these experiments amounts to 981.9224 $\pm$ 0.0020 cm/sec^2. The values of g for the point of the investigations in the

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Potsdam system amounted to 981.9308. Therefore, the new determinations of g differ from the value in this system by 12.6 mgal (for the pendulums), by 9.3 mgal (for the joined fall of bodies), and by 8.1 mgal (for the free fall of a body). Bibl. 34 titles.

Yu.S. Dobrokhotov

MARTSINYAK, A.I.

Using the method of a free fall of bodies in determining the acceleration due to gravity. Trudy VNIIM no.37:42-48 '59. (MIRA 13:4)

(Gravity)

S/115/60/000/008/003/013
B019/B063

AUTHORS: Yegorov, K. N., Martsinyak, A. I.

TITLE: Determination of the Absolute Value of the Gravitational Acceleration for the Location of the VNIIM

PERIODICAL: Izmeritel'naya tekhnika, 1960, No. 8, pp. 10-11

TEXT: The Vsesoyuznyy nauchno-issledovatel'skiy institut metrologii imeni D. I. Mendeleyeva (VNIIM) (All-Union Scientific Research Institute of Metrology imeni D. I. Mendeleyev) carried out research work from 1947 to 1960 for the determination of gravitational acceleration g. g was determined with torsional pendulums according to the joint fall of two bodies (P. N. Agaletskiy's method) and according to the free fall of a quartz rod (A. I. Martsinyak's method). This work was, for the major part, finished in 1956, and the results were discussed at the Ninth General Assembly of the International Union of Geodesy and Geophysics which was held in Toronto in September, 1957. The high scientific value of this work was recognized at this conference. Further experiments were made from

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1957 to 1959 by Agaletskiy's and Martsinyak's methods, in which bearing plates of molten quartz were used for the pendulums instead of glass plates. These experiments were intended to show that the results of measurement did not depend on the material of the bearing plates. g was determined from the free fall of a quartz rod in such a way that light pulses of a certain frequency incided upon the quartz rod which was coated with a photosensitive layer. g was then calculated from the increasing spacing of the blackenings. 245 values were determined by these methods with an average of 981.9192 cm/sec^2. A value of 981.919±0.003 cm/sec^2 is recommended for metrological work. A value of 59°55'06" is given for the latitude of the location of the VNIIM (Leningrad); the longitude is +2.7" west of Pulkovo, and the height above sea-level is 3.5 m. There are 1 table and 5 Soviet references.

Card 2/2

ACC NR: AP6021480 SOURCE CODE: UR/0413/66/000/011/0106/0106

INVENTOR: Martsinyak, A. I.

ORG: None

TITLE: An installation for checking and calibrating accelerometers. Class 42, No. 182424 [announced by the All-Union Scientific Research Institute of Metrology im. D. M. Mendeleyev (Vsesoyuznyy nauchno-issledovatel'skiy institut metrologii)]

SOURCE: Izobreteniya, promyshlennyye obraztsy, tovarnyye znaki, no. 11, 1966, 106

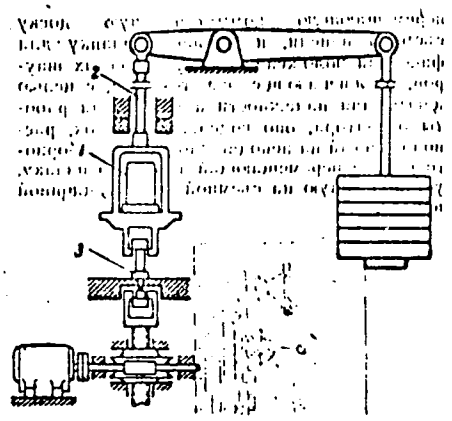
TOPIC TAGS: accelerometer, test facility, quality control

ABSTRACT: This Author's Certificate introduces an installation for checking and calibrating accelerometers. The unit contains a framework for holding the instrument to be checked, a deformable elastic element fastened to the framework, a loading element connected to the deformable elastic element, and a tripper for releasing the framework. The device is designed for reducing the time required for acceleration to reach a predetermined value during the initial period of motion and for simplifying the operation of releasing the framework. The tripper is made in the form of a rod which has a collar and a groove and is connected to the framework. Completing the tripper mechanism is a breaking device consisting of a stop and a power unit.

 UDC: 531.768.089.68

APPROVED FOR RELEASE: 06/14/2000 CIA-RDP86-00513R001032610014-3"

ACC NR: AP6021480



1—instrument being tested; 2—deformable elastic element, 3—connection link

SUB CODE: 13, 20/ SUBM DATE: 31Mar65

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1. [illegible], I. [illegible].

2. USSR (6[illegible])

4. Concrete Construction

7. [illegible] of [illegible] concrete, Sbr. i. [illegible], 1[illegible].

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

MARTSINYUK, V., inzhener-polkovnik

Thoroughly prepare for exercises on stream crossing. Tyl i snab. Sov. Voor. Sil 21 no.7:75-79 Jl '61. (MIRA 14:8)
(Stream crossing, Military)