S/170/60/003/07/05/01
B012/B054 2231

24.2100

AUTHORS: Nekrashevich, I. G., Bakuto, I. A.

TITLE: Determination of Mean Pressures in the Zone of Electric Pulse Discharge

PERIODICAL: Inzhenerno-fizicheskiy zhurnal, 1960, Vol. 3 No. 7, pp. 60 - 66

TEXT: First the authors point out that the pressure measurements in the discharge zone in the papers (Refs. 1,2) were carried out by methods with considerable shortcomings. Here, they describe their method of the ballistic torsion pendulum for determining the mean pressures in the zone of a single pulse discharge. The method is based on measuring the mechanical pulse (received by the electrode during a discharge) by measuring the pendulum swing. The pendulum is a metallic crosspiece floating in mercury and suspended from a thin steel thread. One electrode is fastened to one arm of the crosspiece. The second electrode is slowly approached to the former until the discharge begins. In the discharge, the pendulum receives a pulse and then turns by a certain angle. This

Card 1/3

angle characterizes the pulse intensity. The rotation is read off by the deviation of the light beam reflected by the mirror on the upper part of the crosspiece. Such a pendulum permits measurements at discharges in any liquid and gaseous dielectric medium, and in the vacuum. In order that this method should not only show the presence of pressures but also determine their order of magnitude, the causes of the mechanical pulse must be studied. For this purpose, it is necessary to determine - at least approximately - the intensity of the pulse of the expanding gas bubble in the time until leaving the electrode area. This problem was set up and solved. Formula (13) is derived. It expresses the dependence of the mechanical pulse on the radius and the grinding angle of the conical electrode. If the radius R_0 is assumed as the radius of the final erosion trace on the electrode, one obtains the dependence of the mechanical pulse on all those variables on which the extension of the erosion trace depends, i.e. the charging energy, the pulse duration, as well as the physical properties of the electrode material and the dielectric medium, etc. Figs. 2 and 3 compare the curves calculated from this formula (13) with the curves measured in the experiment. They show that formula (13) reproduces with sufficient

4

Determination of Mean Pressures in the Zone of Electric Pulse Discharge

S/170/60/003/07/05/011
B012/B054 82231

correctness the principal relation between the physical quantities characteristic of the phenomenon under review; therefore, it may be used for evaluating the mean pressures in the discharge zone. There are 3 figures and 3 references: 1 Soviet, 1 British, and 1 Japanese

ASSOCIATION: Fiziko-tekhnicheskiy institut AN BSSR, g Minsk (Institute of Physics and Technology of the AS BSSR, Minsk)

Card 3/3

88016

9,3250 (1143, 1154, 1331)

S/170/60/00?/0??/0?/0?
B019/B056

AUTHORS: Nekrashevich, I. G., Geller, I. Kh., Tkachev, V. D.

TITLE: Galvanic Effects in Selenium Rectifier Elements

PERIODICAL: Inzhenerno-fizicheskiy zhurnal, 1960, Vol. 3, No. 1?, pp. 1?4-1?8

TEXT: The authors investigated the effect produced by moisture upon selenium rectifiers. In several experimental series, the behavior of the elements in moist and dry air was investigated. The results indicate that by the air moisture in the elements a galvanic EMF is formed, which is produced by the forming of galvanic couples between the lower and the upper electrode and between selenium and the upper electrode. These two couples act within a closed circle of a rectifier element in an opposite direction. These galvanic effects and their changes with a change of the moisture penetrating into the element from outside are considered to be causes of the fluctuations of the return current and of the destruction of selenium rectifier elements. There are 3 figures and 2 tables.

Card 1/2

88016

Galvanic Effects in Selenium Rectifier Elements

S/[illegible]/60/[illegible]
B019/B054

ASSOCIATION: Belorusskiy gosudarstvennyy universitet im. V. I. Lenina, g. Minsk (Belorussian State University imeni V. I. Lenin, Minsk)

SUBMITTED: January [illegible], 1960

X

Card 2/2

MIKRASHEVICH, I.G.; BAKUTO, I.A.

Mechanism of the formation of erosion tracks on electrodes in pulse discharges. Dokl.AN BSSR 4 no.1:7-10 Ja '60. (MIRA 13:6)

1. Predstavlenc akademikom AN BSSR B.I. Stepanovym.
(Electrodes)

NEKRASHEVICH, I.G.; BAKUTO, I.A.

Polar effect of the erosion of metals during an impulsive discharge. Dokl.AN BSSR 4 no.6:241-243 Je '60. (MIRA 13:7)

1. Predstavleno akad. AN BSSR B.I. Stepanovym.
(Electrodes)

NEKRASHEVICH, I.G.; BAKUTO, I.A.

Multiplicity of channels in a single electric discharge. Dokl.AN BSSR 4 no.8:328-331 Ag '60. (MIRA 13:8)
1. Fiziko-tekhnicheskiy institut AN BSSR. Predstavlen akademikom AN BSSR A.N.Sevchenko.
(Electric discharges)

NEKRASHEVICH, I.G.; BAKUTO, I.A.

Ratio between the diameter and depth of an erosion crater formed in a pulse discharge. Dokl.AN BSSR 4 no.10:413-416 '60. (MIRA 13:9)

1. Fiziko-tekhnicheskiy institut AN BSSR. Predstavleno akademikom AN BSSR V.P.Severdenko.

(Electrodes)

S/196/61/000/011/036/042
E194/E155

AUTHORS: Nekrashevich, I.G., and Bakuto, I.A

TITLE: An oscillographic study of current distribution during electrical discharge on a composite electrode

PERIODICAL: Referativnyy zhurnal, Elektrotekhnika i energetika, no.11, 1961, 29-30, abstract 11K 189. (Dokl. AN BSSR v.4, no.12, 1960, 501-504)

TEXT: The article considers the distribution current within the volume of an electrode directly adjacent to the place of contact of the channel of an impulse discharge. The investigations were made on equipment consisting of a composite electrode (two plates separated by a thin layer of mica) and a conical electrode A long artificial line is used to form a square wave-shape current with amplitude of 900 A and duration of 240 m.sec. Both halves of the composite electrode were connected to the line through identical resistances. The recording instrument was an oscillograph type N0-4 (I0-4). The deflecting plates of this cathode-ray oscillograph were connected to the screening wire in each half of the composite electrode. Transfer of the discharge channel

Card 1/ 2

from one half of the electrode to the other causes deflection of the beam on the screen in a direction opposite to the zero line The discharge took place in a bath of industrial kerosine and in air with the electrode wetted with kerosine The oscillogram showed the existence of two types of irregular oscillation channels on the electrode surface oscillations of high frequency and low amplitude and vice versa. The currents in the parallel branches of the discharge surface were always unequal. Oscillations occur at the starter discharge, when almost all the current passes through one of the parallel branches It was not possible from the oscillograms to determine the frequency of transition from one half of the electrode to the other it is nevertheless suggested that these transfers take place at very high frequency (10^8 10^9 sec^{-1}). Here the discharge current passes preferentially through that half of the electrode on which the total residence time of the migrating discharge channel is the greater.

2 literature references.

[Abstractor s note: Complete translation.]

Card 2/2

SHEYKO, V.S.; VIKULIN, P.I.

[redacted]nt for three-phase installations. Izm. tekh. no. 3:44 Mr '61. (MIRA 14:2)
(Electric switchgear)

NEKRASHEVICH, I. [illegible], BAK[illegible], I. A.

Efficiency of the electric spark machining process. Sbor. [illegible] trud. Fiz. [illegible].inst. AN BSSR no.[illegible]96-10[illegible] [illegible]. [illegible]
(Electric metal cutting)

S/571/61/000/007/006/010
I048/I248

AUTHORS: Nekrashevich, I.G., and Mitskevich, M.K.

TITLE: The electric erosion of steel electrodes

SOURCE: Akademiya nauk Belorusskay SSR. Fiziko-tekhnicheskiy institut. Sbornik nauchnykh trudov. no.7. 1961. 101-106

TEXT: Steel electrodes in the erosion RP-3 (RP-3) apparatus having a relaxation RC circuit were unstable in performance with frequent breakdowns caused by the formation of a protective layer on the electrodes; while brass electrodes gave satisfactory results. However, steel electrodes performed satisfactorily when the erosion process was carried out in kerosene, with mechanical vibrations (frequency 28-30 Hertz, amplitude 0.08-0.15 mm.) being applied to one of the electrodes. The relationship between anodic and cathodic erosion is represented by a curve having a nearly hyperbolic shape. From the experimental data the main factor affecting the erosion behavior of steels is the total of the heating and phase transformations, while the electric resistivity, heat capacity, density,

Card 1/2

S/571/61/000/007/006/010
I048/I248

The electric erosion...

and thermal coefficient of resistivity are of much less importance. The erosion resistance of steel X12 (Kh12) will be much higher than that of other steels used as electrode material, due to its higher carbide content and the correspondingly higher heat of dissociation. There is 1 figure.

Card 2/2

NEKRASHEVICH, I.G.; LOYKO, V.I.; TISHKEVICH, M.I.

Use of semiconductor valve elements to measure the intensity of X-ray radiation. Sbor. nauch. trud. Fiz.-tekh.inst. AN BSSR no.7:107-113 '61. (MIRA 15:7)

(Semiconductors) (X rays)

NEKRASHEVICH, I.G., GRAKOV, V.Ye.

Investigating the electric characteristics of an impulsive [illegible] charge with limiting of the metal and plasma contact zone. Sbor. nauch. trud. Fiz.-tekh.inst. AN BSSR no.7:114-[illegible]. (MIRA [illegible]

(Electric discharge through gases)

NEKRASHEVICH, I.G.; BAKUTO, I.A.

Current status of theoretical concepts of the nature of the electric erosion of metals by pulse currents. Dokl.AN BSSR 5 no.5:208-211 My '61. (MIRA 14:5)

1. Fiziko-tekhnicheskiy institut AN BSSR, Kafedra eksperimental'noy fiziki Belorusskogo gosudarstvennogo universiteta imeni V.I.Lenina.
(Metal cutting, Electric)

USSR

Z/037/62/000/005-6/010/049
E073/E139

AUTHORS: Nekrashevich, L.G., and Bakuto, I.A.

TITLE: Erosion of metals by a pulsed discharge in gases at atmospheric pressure

PERIODICAL: Ceskoslovensky casopis pro fysiku, no.5-6, 1962, 657-662

TEXT: Electric erosion occurs in all types of discharges between metallic electrodes regardless of whether the dielectric between the electrodes is a vacuum, gas, liquid or solid. Erosion occurs also if the electrodes are in direct contact. In all cases there is a marked contraction of the current lines at the spot where the current passes through the electrode surface, which leads to an increase in resistance at the contact area. Although electric erosion of metals is generally considered to be thermal, in some cases there may be other causes: mechanical, thermo-mechanical and electromechanical. Under certain conditions it is possible to observe separation of metal particles as a direct result of the electric field forces. Numerous experiments by various authors have proved that the erosion process is discrete.

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Erosion of metals by [illegible] ...

[illegible]/62/000/00[illegible]/010/011
1073/1139

The theory of the [illegible] therefore be based on this fact. In 1955 the authors [illegible] theory of the thermal nature of electric erosion [illegible] that this erosion was discrete and caused by the [illegible] zones with high current densities in the discrete areas of the electrode surface. It was assumed that at any instant the current did not flow through the entire surface of the electrode that was in contact with the discharge plasma but only through a small high-conductivity puncture in this surface, which migrates along the electrode surface during the discharge. The current density through such a puncture was found to be at least 10^6 to 10^7 a/cm^2, and the size of a puncture does not exceed 10^{-3} to 10^{-4} [illegible]. As a result of over-heating, there is a micro-explosion of a small volume of metal, accompanied by the formation of a conducting contact at another part of the surface. This process is continuously repeated and thus the erosion trace is the result of migration of the conducting metal contact with the discharge channel. If elementary erosion processes are sufficiently rapid, the thermal processes can be expressed separately for each elementary act of erosion by the

Card 2/3

Erosion of metals by a plasma ... A/037/62/000/005-6/010/049
E073/E139

following simplified equation:

$$\frac{r}{t} \quad \ldots \quad j^2$$

This equation fits the experimental facts over a wide range of conditions. In order to state which of the available theories should be applied to given experimental conditions, it is necessary to investigate in detail the physical processes occurring directly at the point of contact between the metal and the plasma.

ASSOCIATION: Fiziko-tekhnicheskiy institut AN BSSR, Kafedra eksperimentalnoy fiziki Gosudarstvennogo universita V.I. Lenina, Minsk
(Physicotechnical Institute AS BSSR, Department of Experimental Physics of the Belorussian State University imeni V.I. Lenin, Minsk)

Card 3/3

S/196/62/000/014/016/046
E194/E155

AUTHORS: Nekrashevich, I.G., and Bakuto, I.A.

TITLE: On the electrical breakdown of dielectrics

PERIODICAL: Referativnyy zhurnal, Elektrotekhnika i energetika, no.14, 1962, 5, abstract 14 B 24. (Dokl. AN BSSR, v.6, no.1, 1962, 26-30)

TEXT: The effect of electrical breakdown of any dielectric is described on the basis of a general energy relationship which allows for the energy expended in forming a new phase. Positive and negative charge-carriers released by ionisation play the part of new phases. With this method it is possible to examine from consideration the concrete mechanism of micro-effects that occur during breakdown. The breakdown conditions that are obtained coincide in form with the Townsend conditions but are of a more general nature. The breakdown strength of a dielectric increases as it passes from the gaseous to the liquid and solid phases. For various solid dielectrics the breakdown strength is the greater, the higher the specific heats of melting and of

Card 1/2

vaporisation and the higher the melting and boiling points of the dielectric.
3 references.

ASSOCIATION: Fiziko-tekhnich. in-t AN BSSR;
(Physicotechnical Institute, AS BSSR).
Belorusskiy gos. un-t im. V.I. Lenina
(Byelorussian State University imeni V.I. Lenin)

[Abstractor's note: Complete translation.]

APPROVED FOR RELEASE: Wednesday, June 21, 2000 CIA-RDP86-00513R00113

NEKRASHEVICH, I.G.; BAKUTO, I.A.

Dependence of the efficiency of an electric erosion unit on the frequency of successive discharge pulses and on the average current intensity. Dokl. AN BSSR 6 no.5:308-310 My '62. (MIRA 15:6)

1. Fiziko-tekhnicheskiy institut AN BSSR. Predstavleno akademikom AN BSSR V.P. Severdenko.
(Electric discharges)
(Electrodes)

S/250/62/006/010/004/006
A062/A126

AUTHORS: Nekrashevich, I. G., Bakuto, I. A.

TITLE: On the possibility of applying a common method for describing the phenomena of an electric break-down and of a plastic deformation of a solid

PERIODICAL: Akademiya nauk BSSR. Doklady. v. 6, no. 10, 1962, 638 - 641

TEXT: To calculate plastic deformations of a solid, the authors propose to use the same general formula they had used previously (article in DAN BSSR, 5, no. 1, 1961) for calculating an electric break-down through a dielectric, because there is an evident analogy between the two kinds of phenomena. The general formula leads to a system of equations which fully describes the considered phenomenon and gives the relation between the applied force (f) and the value (u) of the flow of the substance that participates in the stream of the plastic deformation. The solution of the system in its general aspect presents considerable difficulties. The discussion is therefore limited to a general analysis and a complete solution is given only for a particular case.

Card 1/2

[illegible]
AGL/AIC

On the possibility [illegible]...

ASSOCIATION: Fiziko-tekhnicheskiy Institut AN BSSR (Physico-technical Institute, Academy of Sciences, Byelorussian SSR)

PRESENTED: by A. N. Sevchenko, Academician AN BSSR

SUBMITTED: March [illegible], 1[illegible]

Card 1/2

NEKRASHEVICH, I.G.; LABUDA, A.A.; PLASHCHINSKAYA, R.V.; YERMAKOVA, N.Ye.

Study of the effect of third components by the method of temporal scanning of the emission spectrum. Zhur.anal.khim. 17 no.5: 551-555 Ag '62. (MIRA 16:3)

1. V.I.Lenin Byelorussian State University, Minsk.
(Spectrum analysis)

NEKRASHEVICH, I.G.; LABUDA, A.A.; PLASHCHINSKAYA, R.V.; YERMAKOVA, N.Ye.

Effect of "third" components by the method of scanning the luminescence spectrum with time. Izv. AN SSSR. Ser. fiz. 26 no.7:892-895 Jl '62. (MIRA 15:8)

(Spectrum analysis)

37272

S/057/62/032/005/020/022
B104/B102

24.7800

AUTHORS: Nekrashevich, I. G., and Bakuto, I. A.

TITLE: The dependence of electroerosion on the length of the discharge tract in instruments with RC circuit

PERIODICAL: Zhurnal tekhnicheskoy fiziki, v. 32, no. 5, 1962, 641 - 645

TEXT: With the help of the "migration theory" of electrical erosion (I. G. Nekrashevich, I. A. Bakuto, IFZh, 2, no. 8, 1959) an expression is derived for the mass m knocked out from the metal in one discharge of the capacitor in RC circuit: $m = (V_0 A/S_0^2)\int_0 i^2 dt$. From the equations describing the capacitor discharge the number of discharges per second is obtained in the usual manner. The mass knocked out per second is then:

$M = m\nu = \frac{V_0 A}{S_0^2}\int_0 i^2 dt/RC\ln(U_0/(U_0-U_1))$. This yields after a short calculation the final formula: $M = Gl^2/\ln(l_0/(l_0-l))$, where $G = Dk_1^2k_2^2$, $D = V_0 A/S_0^2 RC$, V_0

Card 1/2

and S_0 are volume and surface of the erosion cavity, A is a constant of the electrode material, k_1 and k_2 are constants, l_0 is the breakdown distance for the potential U_0. The formula gives a good description of the experimental results. There are 2 figures.

ASSOCIATION: Fiziko-tekhnicheskiy institut AN BSSR (Physicotechnical Institute AS BSSR); Kafedra eksperimental'noy fiziki Belorusskogo gos. universiteta im. V. I. Lenina, Minsk (Department of Experimental Physics of the Belorussian State University imeni V. I. Lenin, Minsk)

SUBMITTED: February 6, 1961 (initially)
April 26, 1961 (after revision)

Card 2/2

L 6773-65 EWT(l)/EWT(m)/EPA(w)-2/EEC(t)/EWP(k)/EWP(q)/EWP(b) Pf-4/Pab-24
AEDC(a)/ASD(a)-5/AFWL/SSD/ASD(p)-3/ASD(m)-3/AFETR/RAEM(t) JD/WB

ACCESSION NR: AP4044584 S/0201/64/000/002/0047/0050

92

AUTHORS: Nekrashevich, I. G.; Bakuta, I. A.

TITLE: Mechanical momentum transferred to the electrodes in an electric discharge between bimetallic electrodes

SOURCE: AN BSSR. Izvestiya. Seriya fiziko-tekhnicheskikh nauk, no. 2, 1964, 47-50

TOPIC TAGS: electric arc, electric discharge, arc jet, electroerosion, electron momentum, electrode, biphase alloy

ABSTRACT: An experimental study of the electroerosion effect on composite bimetallic electrodes has shown that this effect is due to the physical properties of all the metals participating in the erosion act. The areas of the erosion craters have been measured, as well as the ballistic-pendulum deflection proportional to the momentum acquired by the electron during a discharge in a liquid.

Card 1/2

L 6773-65

ACCESSION NR: AP4044584

The results obtained are explained in terms of the structure of the discharge channel within the framework of the migration theory previously proposed by the authors (Sb. tr. FTI AN BSSR, No. 1, 1954; IFZh, No. 7, 1960). Orig. art. has: 3 figures.

ASSOCIATION: None

SUBMITTED: 00 ENCL: 00

SUB CODE: EM, GC NR REF SOV: 002 OTHER: 000

Card 2/2

L 25317-65 EWT(l)/EWP(m)/EWT(m)/EWA(d)/EWP(t)/EWP(k)/EWP(b) Pd-1/Pf-4/
JD/HW/DT

ACCESSION NR: AP5003324 S/0201/64/000/004/0132/0135

25
B

AUTHOR: Bakuto, I. A.; Nekrashevich, I. G.

TITLE: Effect of supplementary energy on the plastic flow of a solid

SOURCE: AN BSSR. Izvestiya. Seriya fiziko-tekhnicheskikh nauk, no. 4, 1964, 132-135

TOPIC TAGS: plastic flow, strength of material, yield point, mechanical stress, external energy

ABSTRACT: The authors develop further a method proposed in an earlier paper (DAN BSSR No. 10, 1962) to calculate the change in the ductility of a solid under pressure when, in addition to the work performed on the solid by the mechanical forces, energy is fed to it from an external source, such as ultrasound, radiation, and others. They use this method for a theoretical analysis of this question and conclude, starting from the energy balance equation, that the presence of power absorbed in the solid from an extraneous source facilitates the plastic flow of the substance. The analysis is made for the case when the extraneous

Card 1/2

L 25317-65

ACCESSION NR: AP5003324

power is a small quantity. It is seen from the resultant equations for the flux of matter that there exists a certain finite mechanical stress at which infinite yield is produced. The larger the absorbed power, the larger the mechanical stress at which the yield becomes infinite. This result can be related with the experimental fact that an increase in the plastic deformation force, and also an increase in the yield limit, is obtained when metals are exposed to hard radiation. The results are inconclusive, since under some conditions theory leads to just the opposite conclusion. Orig. art. has: 6 formulas.

ASSOCIATION: None

SUBMITTED: 00 ENCL: 00 SUB CODE: ME

NR REF SOV: 001 OTHER: 000

Card 2/2

MEL'NICHEVICH, I.G.; BAKTO, I.A.

Plastic flow of solids. Dokl. AN BSSR 2 no. [illegible] (MIRA 12:5)

1. Fiziko-tekhnicheskiy institut AN BSSR. Predstavleno akademikom AN BSSR V.P.Severdenko.

NEKRASHEVICH, I.G. [Nekrashevich, I.H.]; BAKUTO, I.A. [Bakuta, I.A.]

Ionization of a gas by electrons. Vestsi AN BSSR. Ser.fiz.-mat. nav. no.2:115-118 '65. (MIRA 19:1)

L 2714-66 EWT(1)/EPA(s)-2 IJP(c) GG

ACCESSION NR: AP5017177 UR/0139/65/000/003/0053/0055

AUTHOR: Mekrashevich, I. G.; Rakuto, I. A. 44,55 21,44,55

TITLE: Concerning electronic breakdown of dielectrics in the presence of a source of nonelectric energy

SOURCE: IVUZ. Fizika, no. 3, 1965, 53-55

TOPIC TAGS: dielectric breakdown, heat balance, ion bombardment

ABSTRACT: An analysis of the energy balance equation in general form is used by the authors to calculate the conditions under which breakdown by electrons takes place in a dielectric which receives energy not only from the electric field but also from another source, such as a source of ionizing radiation. The heat released in the dielectric is assumed to be an additive quantity, and the heat produced by the ions is neglected. The breakdown condition is defined as the flow of infinite current. An analysis of the heat-balance equations and its modifications shows that different variants of breakdown criteria can be obtained, depending on the relations between the parameters of the equations. This is a reflection of the experimentally observed variety in the type of electric breakdown occurring in dielectrics, so that any conclusion concerning the applicability of the theoretical

Card 1/2

L 2714-66

ACCESSION NR: AP5017177 3

results will depend on an analysis of the actual experimental data. Orig. art. has: 8 formulas.

ASSOCIATION: Fiziko-tekhnicheskiy institute AN BSSR (Physicotechnical Institute, AN BSSR) 44,55

SUBMITTED: 08Dec63 ENCL: 00 SUB CODE: EM, NP

NR REF SOV: 005 OTHER: 000

Card 2/2

L 2006-66 EWT(d)/EWT(m)/EWP(w)/EWP(k)/EWP(t)/EWP(b)/EWA(c) EM/JD/HW

ACCESSION NR: AP5017696 UR/0250/65/009/006/0376/0378

AUTHOR: Nekrashevich, I. G.; Bakuto, I. A. 32

TITLE: On the influence of supplementary energy on the plastic flow of solids B

SOURCE: AN BSSR. Doklady, v. 9, no. 6, 1965, 376-378

TOPIC TAGS: plastic flow, plastic deformation, deformation rate

ABSTRACT: The additional energy in question is introduced in the form of ultrasound, shock waves, or heating with electric current connected with partial displacement of matter, and by other means. Analysis of the heat balance equation yields an expression for the stress component due to the supplementary energy, and yields a differential equation for the mass flow. The solution of the latter goes over into the standard Prandtl formula in the absence of supplementary energy. The presence of supplementary energy increases the rate of plastic deformation in proportion to the added energy. This report was presented by V. P. Severdenko. Orig. art. has: 10 formulas.

ASSOCIATION: Fiziko-tekhnicheskiy institut AN BSSR (Physicotechnical Institute, AN BSSR); Belorusskiy gosudarstvenny universitet im. V. I. Lenina (Belorussian State University)

Card 1/2

L 2006-66

ACCESSION NR: AP5017696

SUBMITTED: 05Jun64 ENCL: 00 SUB CODE: ME

NR REF SOV: 001 OTHER: 001

Card 2/2 ADP

L 22269-66 EPF(n)-2/EWT(1)/EIG(1)/EWG(m) IJP(c) AT

ACC NR: AR6005183 SOURCE CODE: UR/0058/65/000/009/G016/G016

SOURCE: Ref. zh. Fizika, Abs. 9G130

AUTHORS: Nekrashevich, I. G.; Tkachenko, V. M.; Urenev, V. I.

TITLE: Time scanning of the process of condensation of matter from a plasma cloud in a condensed discharge

REF SOURCE: Tr. Komis. po spektroskopii. AN SSSR, vyp. 1, 544-550

TOPIC TAGS: electric discharge, discharge plasma, vapor condensation, electrode

TRANSLATION: The scanning method is used to study the process of emission of matter from electrodes in a condensed discharge, and particularly the change of the composition of the emitting vapor with time. Important experimental data are obtained on the kinetics of formation of the vapor cloud of the electrode material.

SUB CODE: 20

Card 1/1 mst

L 25845-66

ACC NR: AR5018682 SOURCE CODE: UR/0196/65/000/007/N005/N005

AUTHOR: Labuda, A.A; Nekrashevich, I.G.; Plashchinskaya, R.V.; Orakov, V.Ye.; Yermakova, N.Ye.

37
B

ORG: none

TITLE: Measuring the temperature in a pulse discharge

SOURCE: Ref. zh. Elektrotekhnika i energetika, Abs. 7B20

REF SOURCE: Tr. Komis. po spektroskopii. AN SSSR, vyp. 1, 1964, 434-441

TOPIC TAGS: [redacted], temperature instrument, optic method, temperature measurement, pulse discharge

TRANSLATION: The optical method for determining high temperatures in stationary sources with axial symmetry (by the Norman-Larens method) is extended to cover cases of pulse discharge. A device was prepared on which experimental research was conducted on the space and time distribution of temperature, taking into account the fact that the process was nonstationary. An earlier deduction regarding the zonal character of excitation and of identifying various spectral lines was confirmed. (From A resume).

SUB CODE: 20/ SUBM DATE: none

Card 1/1

UDC: 537.523.4.536.521

L 23175-66 EWT(m)/ETC(f)/EWA(m)/EWA(d)/T/EWP(t) DS/JD
ACC NR: AP6000634 SOURCE CODE: UR/0407/65/000/001/0016/0019

AUTHOR: Nekrashevich, I. G. (Minsk); Bakuto, I. A. (Minsk)

ORG: none

TITLE: Effect of the initial discharge position upon bimetallic-electrode erosion

SOURCE: Elektronnaya obrabotka materialov, no. 1, 1965, 16-19

TOPIC TAGS: electric discharge, bimetal, electrode, erosion, tin, bismuth, lead, kerosene

ABSTRACT: The results of an experimental study of electric erosion of bimetal electrodes immersed in commercial kerosine are reported. Tin, bismuth, and lead were used in various combinations for bimetal electrodes; the Bi or Fe cathode was cone-shaped with a 38° angle. The cathode-cone point could be moved over the ground end surface of the bimetal anode. Unipolar square 900-amp 200-v pulses were used. Experimental curves show the effect of the cathode-point anode-interface distance upon the (weighed) amount of erosion for Fe and Bi cathodes and Sn-Bi and Pb-Bi anodes, respectively. Formulas based on a "partial migration theory" are derived. Orig. art. has: 3 figures and 11 formulas.

SUB CODE: 09,11,13/ SUBM DATE: none / ORIG REF: 002

Card 1/1

ACC NR: AP6026518 (A,N) SOURCE CODE: UR/0407/65/000/003/0024/0026

AUTHOR: Nekrashevich, I. G. (Minsk); Bakuto, I. A. (Minsk)

ORG: none

TITLE: Investigation of electro-erosion phenomena on the surface of a two-layer electrode

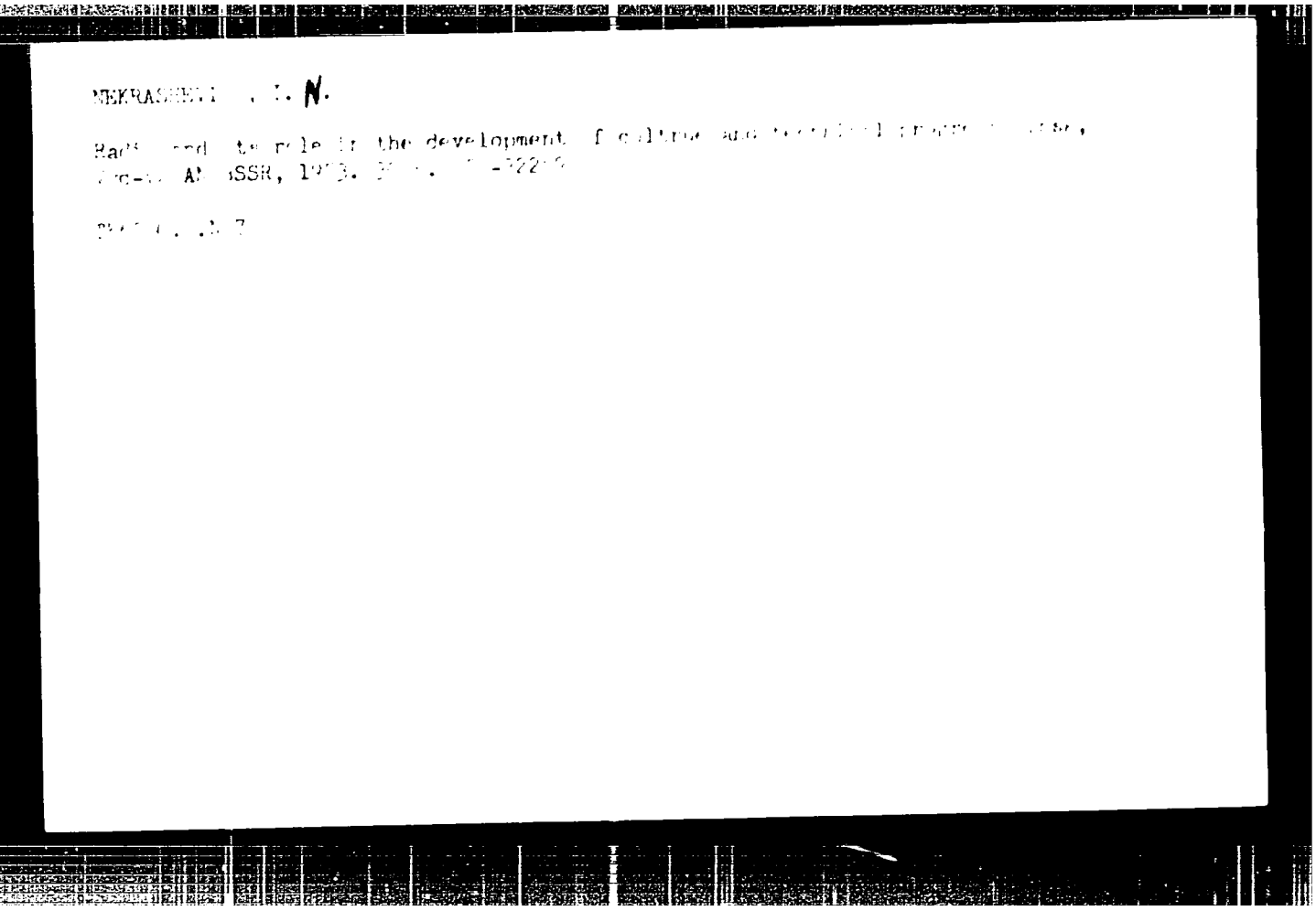
SOURCE: Elektronnaya obrabotka materialov, no. 3, 1966, 24-26

TOPIC TAGS: erosion, electric erosion, spark erosion, metal plating

ABSTRACT: These experiments were conducted: Small copper plates 0.02, 0.17, 0.5, and 1-mm thick were (rosin) soldered with a layer of tin, thus forming bimetal plates. The polished copper surface constituted one electrode; an 8-mm diameter cone-shaped-end Armco-iron rod served as the other electrode. A square 900-amp, 240-μ sec, 200-v impulses were passed between the electrodes immersed in commercial kerosine. Thus, first copper and then tin was subjected to erosion. It was found that the erosion of both electrodes decreased as the copper thickness increased (curves shown). The results are qualitatively expalined by the migration theory of electro-erosion. Orig. art. has: 2 figures and 4 formulas.

SUB CODE: 13, 09 / SUBM DATE: none / ORIG REF: 003

Card 1/1



5. /...
5. /...
5(4), 5(2)

67793
S/064/59/000/07/023/035
B005/B012

AUTHORS: Berokhod, ?. A., Nekrasnevich, L. Ye.

TITLE: ... Graphite Electrode for Measuring the Redox Potential

PERIODICAL: Khimicheskaya promyshlennost', 1959, Nr 7, ... (USSR)

ABSTRACT: The final "dechlorination" of the anolyte in the shops for the mercury electrolysis of aqueous common salt solutions is carried out in an alkaline medium by means of a sodium sulfide solution. A manual control does not guarantee an exact dosing of the sodium sulfide solution. For this reason the automation of this part of the mercury electrolysis is particularly important. The authors used the change in the redox potential of the system as the indicator in controlling the "dechlorination". In measuring this change it is especially difficult to find a suitable indicator electrode, which has to give - together with the auxiliary electrode - reproducible values of the electromotive force under various conditions. Furthermore, the electrode has to be resistant to the action of noxious impurities, and sufficiently sensitive to changes of the redox potential of the system. Experience has shown that platinum

Card 1/2

Use of a Graphite Electrode for Measuring the Redox Potential

67793
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B005/B012

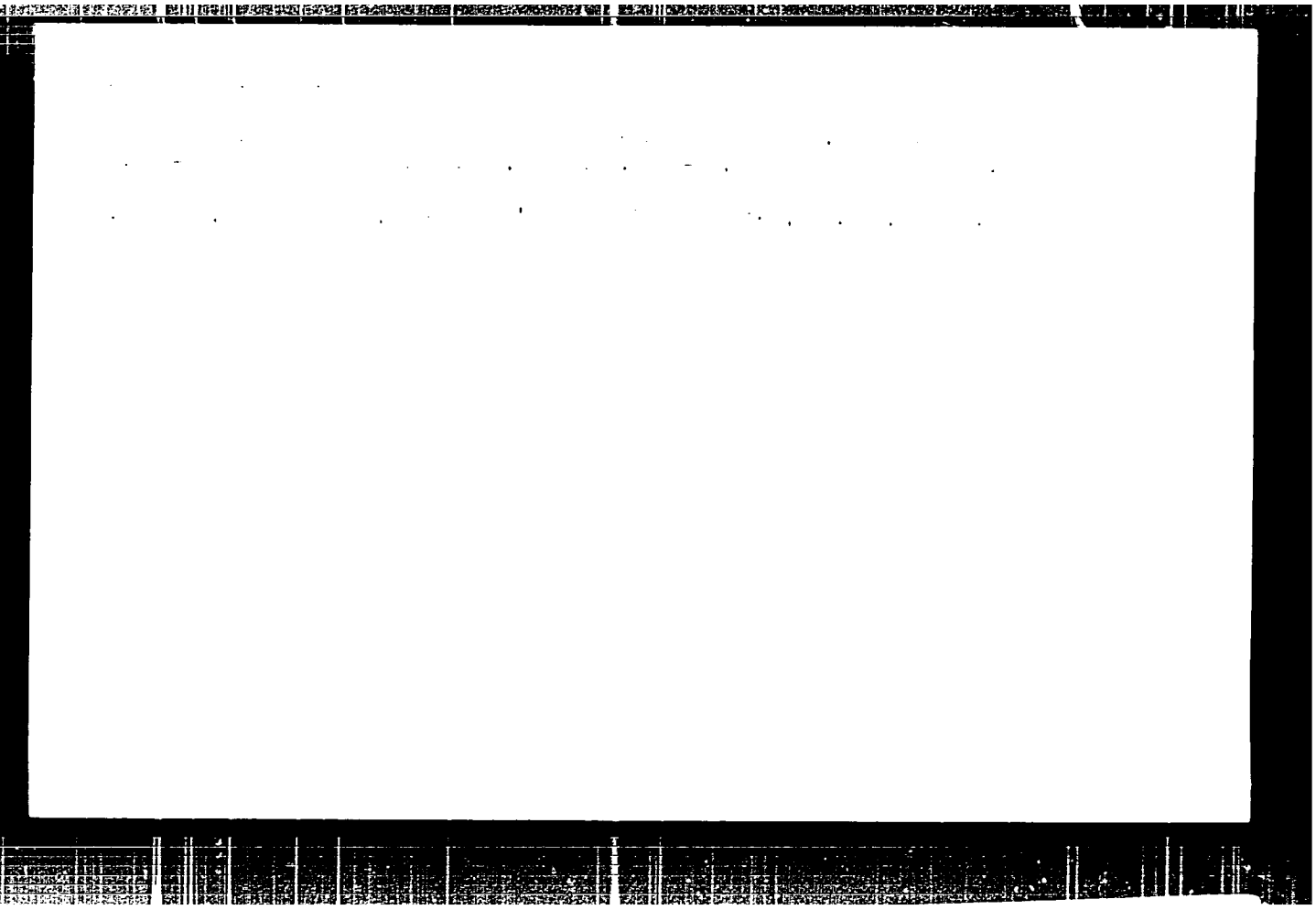
is not suited for use as electrode material. As the result of a thorough study of relevant publications the authors of the present paper selected graphite as the electrode material. Common graphite yields correct results, but on account of its porosity the potential adjusts itself very slowly and only after the electrode has been washed out carefully. In order to reduce porosity, graphite was impregnated with bakelite lacquer which was subsequently polymerized at 130°. At the same time, "igurite" and ATM-1 electrodes were tested. A saturated calomel electrode served as the auxiliary electrode. The electrodes of all three materials investigated yielded very similar values of the electromotive force, the potential adjusted itself almost instantly. By laboratory experiments as well as extensive use in the shops the above indicator electrodes have been shown to have a very long life. The use of the graphite electrode guarantees a reliable dosing of the sodium sulfide solution. A figure shows the excess of sodium sulfide in the anolyte by way of a diagram recorded by an autographic EPD-30 potentiometer. There is 1 figure.

Card 2/2

NEKRASHEVICH, M.A.

True heat capacity of the phenol–water system in the region of critical temperature. [illegible] and M. A. [illegible] C.A. 46, [illegible].—The true heat capacity (C) of a soln. of phenol and water was measured calorimetrically at various temps. between 60 and 70°, including the consolute temp. (t_c). The value of C increases rapidly as t_c is approached from above or below, becoming infinite at t_c. This type of temp. dependence is characteristic of second-order phase transitions; this indicates that C is anomalous at temps. above, as well as below, t_c. The t_c of systems contg. 27, 32, 34, and 44% phenol is 65.3, 68.4, 68.7, and 64.8° resp.

J. W. Loveberg, Jr.



APPROVED FOR RELEASE: Wednesday, June 21, 2000 CIA-RDP86-00513R001136

USSR/Microbiology - Microbes Pathogenic to Man and Animals. F.

Abs Jour : Ref Zhur - Biol., No 15, 1958. 67306

Author : Yanchenko, T.F., Smirnova, M.F., Nekrashevich, N.I., Rogovs'kiy, V.Ya.

Inst :

Title : Research Into the Etiology of Scarlet Fever.

Orig Pub : Mikrobiol. zh., 1957, 19, No 2, 49-56.

Abstract : Various laboratory animals were infected with pathological material from patients sick with scarlet fever (the material was first filtered through a No 2 rublev filter). In no case did an animal become diseased. In some cases the animal's blood gave a positive RSK with serum from patients convalescing from scarlet fever. When the material was passed on chicken embryos (an average of 7-8 passages), no changes were observed in the embryo membranes. When the allantois or the amnion membrane was used as an antigene, after one or two passages the RSK was

Card 1/2

E

USSR/Virology. General Problems

Abs Jour : Ref Zhur - Biol., No 4, 1959, No 14623

Author : Yanchenko T.F., Nekrashevich N.I.
Inst : -
Title : A Study of the Possibility of Production of Antiinfluenza Antibodies in Rabbits by the Method of Conditioned Reflexes

Orig Pub : V sb.: Gripp, N., Medgiz, 1958, 110-117

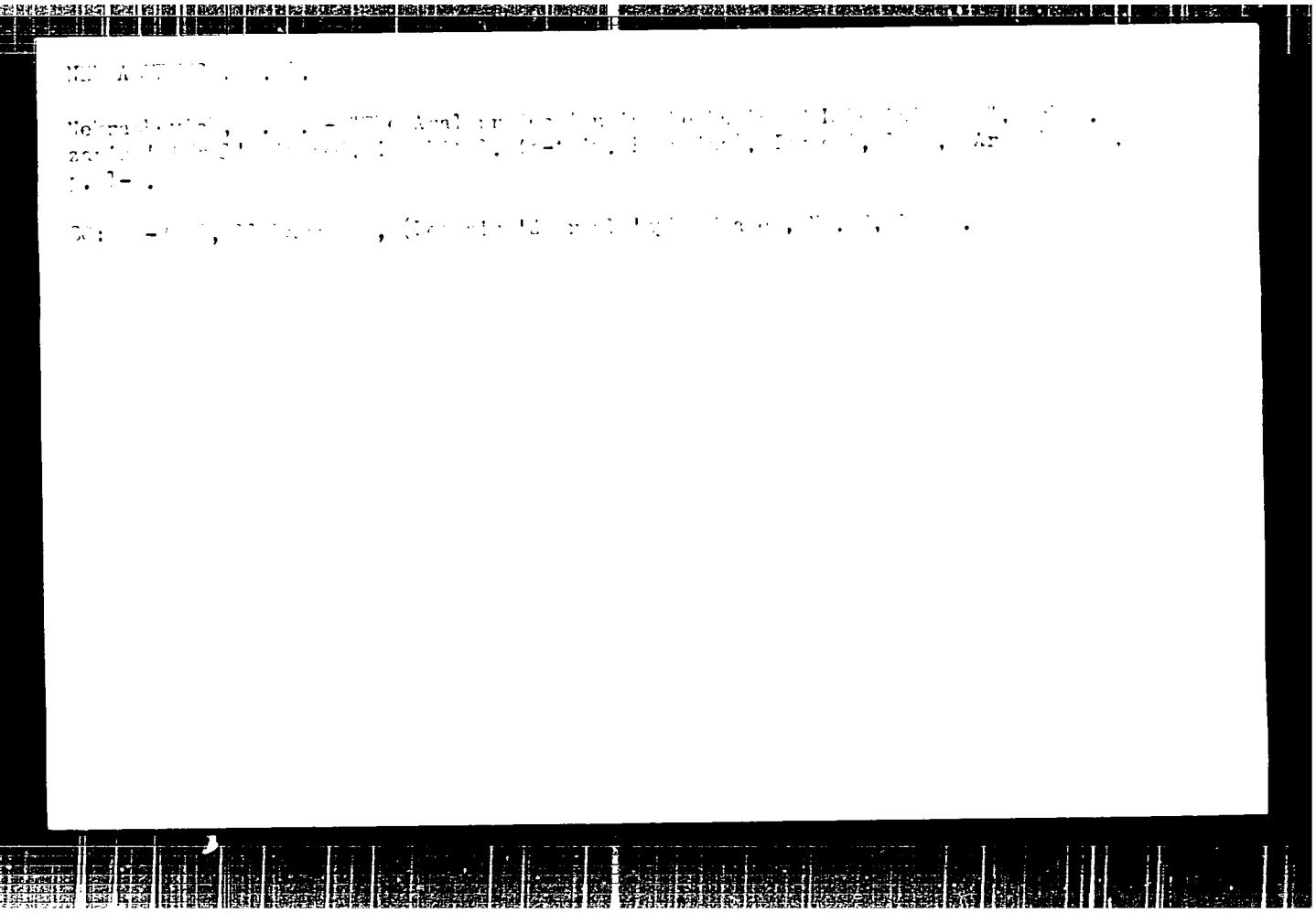
Abstract : In some rabbits it is possible to achieve conditioned reflex formation of antiinfluenza antibodies under conditions of application as a conditioned atimulant of a buzzer for a period of 30 minutes. It was impossible to obtain, in rabbits, a conditioned reflex immunological reaction with short-timed application of a buzzer (for a period of 10 seconds). It is also possible to produce in rabbits, a conditioned reflex from the exteroreceptors of the skin and mucous membrane of the nose for the elaboration of antiinflu-

Card : 1/2

SMIRNOVA, M.F.; SEREDA, V.N.; NEKRASHEVICH, N.I. [Nekrashevych, N.I.]; YANCHENKO, T.F.

Regularities observable in detecing globular bodies in the material from scarlet fever patients. Mikrobiol. zhur. 22 no.3:58-62 '60. (MIRA 13:12)

1. Iz Kiyevskogo instituta epidemiologii i mikrobiologii.
(SCARLET FEVER)



S/185/60/005/003/002/020
D274/D303

26587

24.6731

AUTHORS: Lyubars'kyy, G.Ya., Nekrashevych, O.M. and Rozentsveyg, L.N.

TITLE: A semi-empirical method of calculating the accelerating system of a standing-wave linear proton-accelerator

PERIODICAL: Ukrayins'kyy fizychnyy zhurnal, v. 5, no. 3, 1960, 308-316

TEXT: This investigation was conducted in connection with the design of the linear proton-accelerator at the Physico-technical Institute of the AS UkrSSR. A semi-empirical method was chosen because neither a purely theoretical, nor a "trial-and-error" method would satisfactorily solve the problem. The macroscopic properties of the field in the n-th section of the accelerator are characterized by the mean intensity of the electric field:

$$\bar{E} = \frac{1}{L_n} \int E_z dz \qquad (1)$$

Card 1/5

the integration being carried out over the segment L_n of the resonator-axis which lies in the n-th section. In the following, L_n will be called the period of the accelerating system; L_n increases with n. It is assumed that $\bar{E}$ = const. This can be achieved in practice if the increase in L_n with n is compensated by a corresponding change in other geometrical parameters of the drift tubes; the position of the adjustment discs was chosen as such a parameter. The method involves the following assumptions: a) By dividing the resonator (by means of metal plates normal to the axis) into isolated sections, so that every section contains only one drift tube, and if the position of the adjustment discs is chosen so that the natural frequency f of each section is the same, then it is possible (in the ideal case) to obtain $\bar{E}$ = const. along the entire resonator, f being its natural frequency; b) the fulfilment of condition $\bar{E}$ = const. can be checked by measuring the magnetic field strength near the peripheral surface of the resonator; homogeneity of magnetic field at the periphery is an indication of the "macroscopic" homogeneity of electric field at the axis; c) due to the very small

ratio between the radius of the drift tube and resonator radius, the electric field in the accelerating gaps does practically not differ from the electrostatic field which would arise between the drift tubes as a result of a potential difference $\bar{E}L$; the electrostatic field can be simulated by an electrolytic bath. The motion of the ion beam in the accelerator involves the coefficients:

$$A = \frac{1}{L}\int_{-\frac{L}{2}}^{\frac{L}{2}} E_z(z)\sin\frac{2\pi z}{L}\,dz, \quad B = \frac{1}{L}\int_{-\frac{L}{2}}^{\frac{L}{2}} E_z(z)\cos\frac{2\pi z}{L}\,dz. \qquad (2)$$

T is the period of the accelerating field. It is assumed that the proton traverses the path L during T. Equations are set up for determining A and B; these equations involve an experimentally determined function (by an electrolytic bath) and two integrals which were graphically calculated by means of the Amsler planimeter. The

Card 3/5

length of the drift tubes was calculated by:

$$\frac{dL_n}{dn} = \frac{e}{m}\frac{\bar{E}\lambda^2}{c^2}\sqrt{A_1^2 + B_1^2}\cos\psi_s = 0.489\cdot10^{-4}\bar{E}\ \frac{B}{cm}\ G_n\cos\psi_s \quad (10)$$

where λ is the wave length, ψ - the ion phase on its passage through the middle of the gap, ψ_s - the synchronous ion-phase. The choice of ψ_s is not only limited from below: $\psi_s > 0$, (the condition for phase stability), but also from above: $\psi_s < \psi_{s\ crit.}$ (which is the condition for radial stability); an equation is given for determining $\psi_{s\ crit.}$ as well as a graph with the dependence of $\psi_{s\ crit.}$ on L. The value of ψ_s was taken as equal to $\frac{1}{3}\psi_{s\ crit.}$; the graph shows that $\psi_{s\ crit.}$ is smallest at the first tubes. A concrete example is given illustrating the method. First $\bar{E}$ is found and then L. The dependence of L_n on n was found to be nearly linear. There are 12 figures and 2 Soviet-bloc references.

Card 4/5

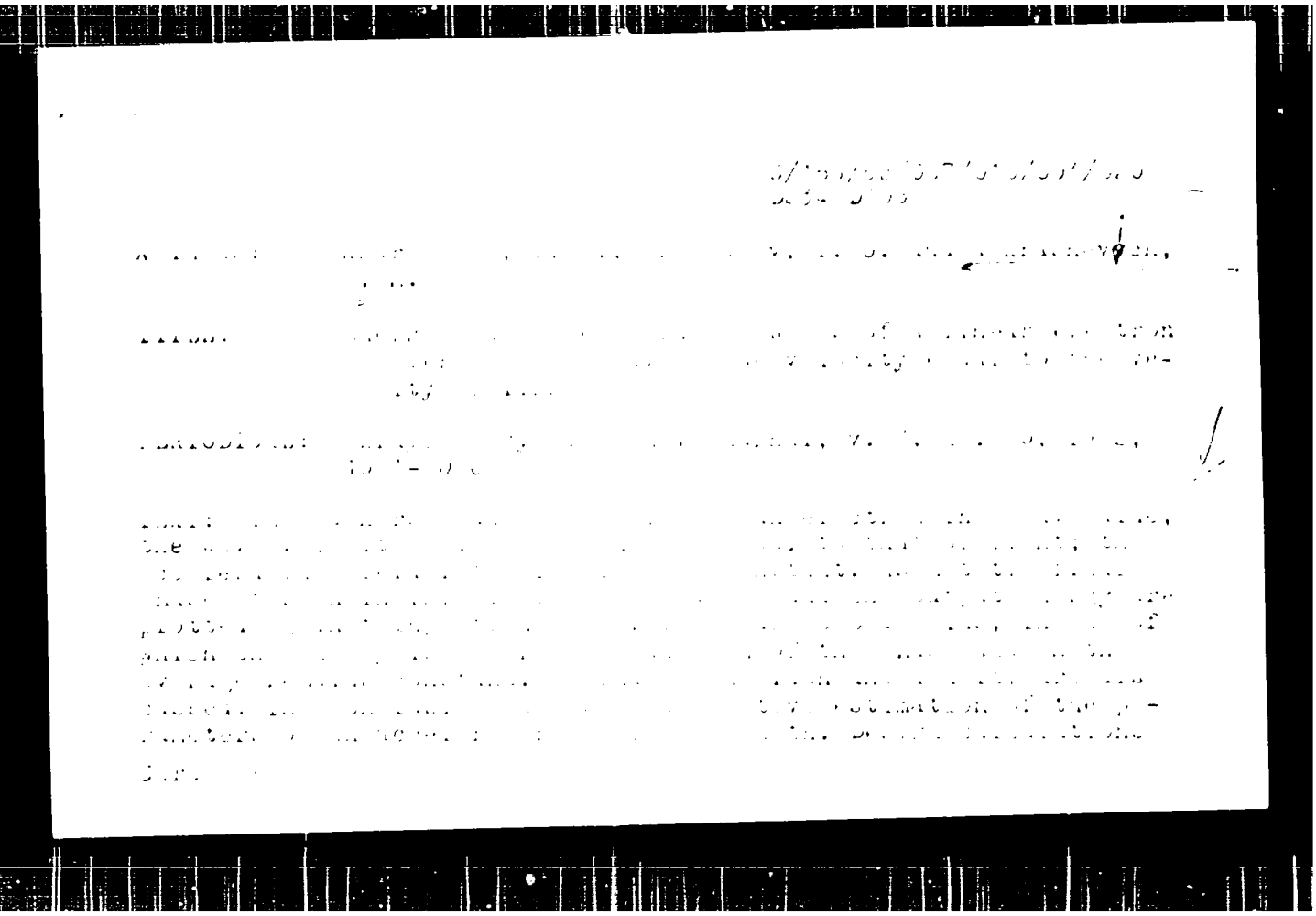
A semi-empirical method 26587

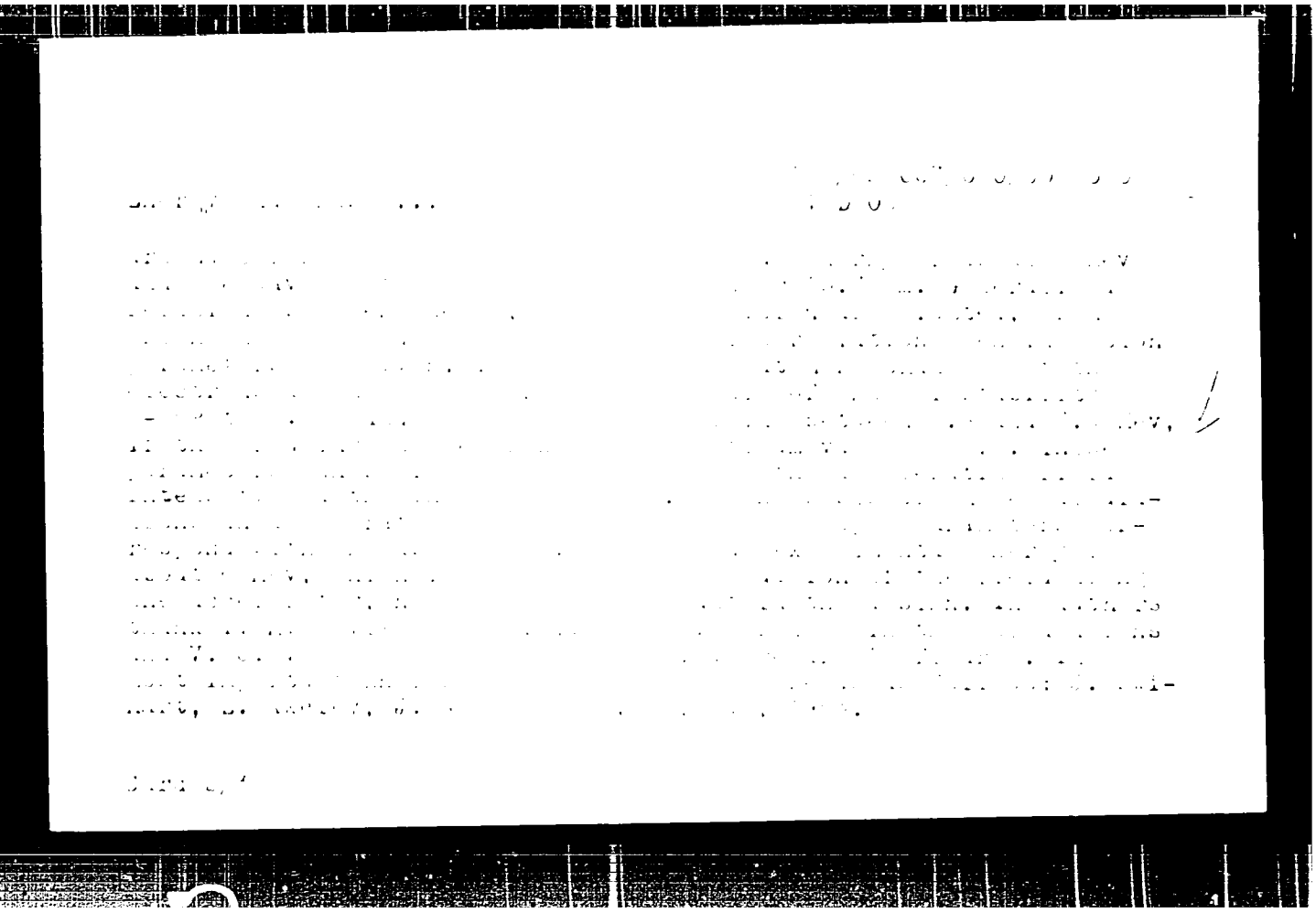
S/185/60/005/003/002/020
D274/D303

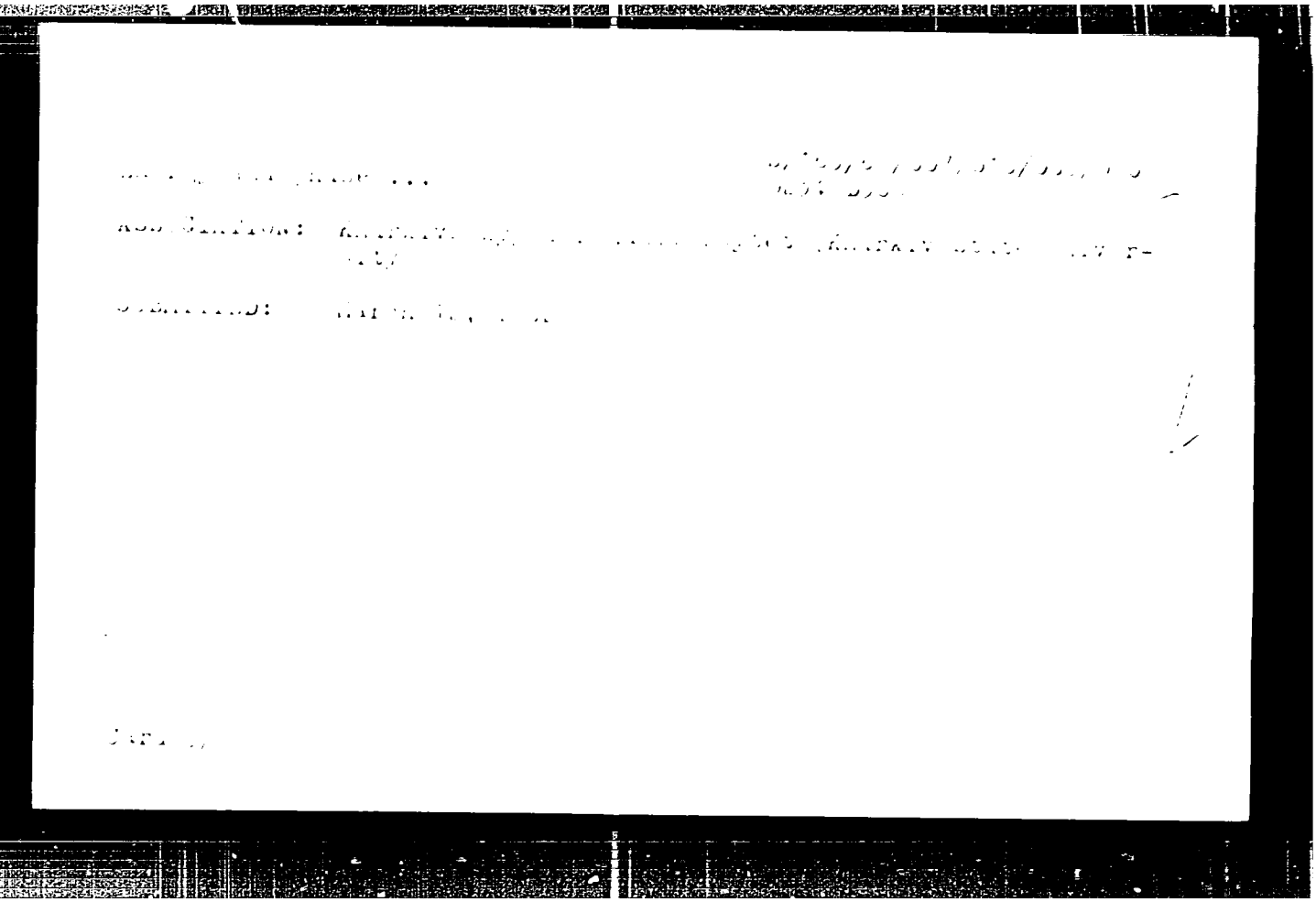
ASSOCIATION: Fizyko-tekhnichnyy instytut AN USSR (Physico-technical Institute AS UkrSSR)

SUBMITTED: August 12, 1959

Card 5/5







USSR/Solid State Physics - Diffusion, Sintering, E-6

Abst Journal: Referat Zhur - Fizika, No 12, 1956, 34768

Author: Lesnik, A. G., Nekrashevich, P. I., Sirik, V.

Institution: None

Title: Diffusion of Nitrogen in Steels Alloyed with Chromium and Manganese

Original Periodical: Nauk. zap. Kiivs'k. un-tu, 1955, 14, No 8, 125-126

Abstract: Evaporation in vacuum was used to investigate diffusion of nitrogen in iron-chromium alloys (4.71% chromium) and iron-manganese (2.21% manganese). Plates 100-800 mu thick were made of the alloys. The nitriding of the plates of the alloy was carried out in a stream ammonia in 2 stages: at 650° for 30 hours, and at 750° until a concentration of nitrogen of 10-11% by volume was obtained in the plate. With this, the activation energy of the diffusion of nitrogen in the iron-chromium-nitrogen alloy was found to be E_a = 70 kcal/mol, and in the iron-manganese-nitrogen it was found to be E_a = 15 kcal/mol. For the diffusion of nitrogen in pure iron, E_a is 23 kcal/mol. This difference in the activation energies is used by the authors to explain the high strength of the nitrided layer of steel alloyed with chromium and manganese.

/ ор /

ACC NR: AP6027312 SOURCE CODE: UR/0428/66/000/002/0091/0098

AUTHOR: Hrachykhin, L. I.; Nekrashevich, Ya. I.

ORG: none

TITLE: Measuring coefficients of argon absorption in a shock tube

SOURCE: AN BSSR. Vestsi. Seryya fizika-matematychnykh navuk, no. 2, 1966, 91-98

TOPIC TAGS: absorption coefficient, plasma wave absorption, monochromatic radiation, gas chromatography, argon, shock tube

ABSTRACT: It is important to know the light-emissive and absorptive capacities of a hot gas at high temperature. Therefore, methods must be experimentally developed to measure the coefficients of plasma absorption at different temperatures and pressures. This work sets forth two methods of finding the monochromatic coefficients of absorption in reference to the shock tube. The first method is based on use of the self-illumination of the emitting volume by means of a single mirror; the second, on finding the relative light-emissive intensity of a heated gas of various densities. Measurements were made in a steel shock tube with chromium-plated interior permitting the greatest possible use of a low-pressure glass chamber. Argon was the gas employed. This paper proposes a simple and comparatively accurate (15%) method of measuring the absorption coefficients of hot gases in a shock tube. Measurements of this coefficient for argon at ~10,700 K in the spectral range of

ACC NR: AP6027312

4000—6000 Å are in good agreement with the results of L. M. Biberman and G. E. Norman (J. Quant. Spectrosc. Transfer, 3, 221, 1963). Simultaneous registration of different wavelength regions (using quantometer-like equipment) with direct temperature measurements in each experiment gives more accurate results than Biberman and Norman. It is found that under certain experimental conditions up to $M_s \sim 8$ a sample of the hot gas with the reflected shock wave along the tube axis is a homogeneous plasma. The authors thank M. A. El'yashevich for interest in the work and useful advice. Orig. art. has: 9 formulas, 2 tables, and 3 figures.

SUB CODE: 07/ SUBM DATE: 04Oct65/ ORIG REF: 002/ OTH REF: 008

Card 2/2

Z/037/62/000/005-6/022/049
E140/E562

AUTHORS: Nekrashevich, Ye. G. and Bakuto, Ye. A.

TITLE: On the electric breakdown of dielectrics

PERIODICAL: Československý časopis pro fysiku, no.5-6, 1962, 583-589

TEXT: Electric breakdown in an arbitrary dielectric is discussed from the energy point of view. The author starts from the general Fourier equation in which, in addition to the term characterizing the action of the spatial thermal source, he introduces another term, characterizing the creation of particles of the material, which have a certain critical energy value. An analysis of the equation and its integration for two limiting cases lead to results which characterize the electric breakdown of dielectrics. A puncture criterion is derived. The most general dependence of the puncture strength on the state and on the physical properties of the dielectric is determined. The general method used for analysing puncture effects can be successfully applied also to other analogous processes such as the plastic creep of solids etc.

Card 1/2

On the electric breakdown of dielectrics Z/037/62/000/005-6/022/049
E140/E562

ASSOCIATION: Fyzikalne-technicky ustav AV BSSR, Katedra experimentalni fysiky Beloruske statni university, Minsk
(Physicotechnical Institute, AS BSSR, Department of Experimental Physics, Belorussian State University, Minsk)

Card 2/2

NEKRASIUS, S.; STEPONAVICIUS, A.; BULKA, Br., red.; LUKOSEVICIUS, St., tekhn. red.

[Collective farm as a school of communism for peasants] Kolukis - komunizmo mokykla valstietijai. Vilnius, Valstybine politines ir mokslines literaturos leidykla, 1962. 50 p. (MIRA 16:7)
(Lithuania--Collective farms)

9. Monthly List of Russian Accessions, Library of Congress, _____ 1953, Incl.

NEKRASOV, A., kandidat tekhnicheskikh nauk.

Economical prefabricated foundations. Sel'.stroi. 11 no.5:11-13 My '56. (MLRA 9:9)
(Foundations) (Precast concrete construction)

NEKRASOV, A., kand. tekhn. nauk.

Equipment for making precast reinforced concrete in construction yards. Sel'. stroi. 14 no.11:26-27 N '59 (MIRA 13:3)
(Precast concrete)

NEKRASOV, A., kand.tekhn.nauk

Principles of the efficient planning and using of precast reinforced concrete in rural construction. Sbor. nauch. soob. NIIsel'stroia no.2:38-67 '60. (MIRA 15:5)
(Reinforced concrete construction) (Farm buildings)

NEKRASOV, A., kand.tekhn.nauk

Hollow precast reinforced concrete elements for farm buildings.
Na stroi.Ros. no.1:26-28 Ja '61. (MIRA 14:6)
(Precast concrete construction) (Farm buildings)

NEKRASOV, A., kand. tekhn. nauk

Construction of multipurpose frame farm buildings. Sel'. stroi. 18 no.5:7-9 My '63. (MIRA 16:6)

(Farm buildings—Design and construction)
(Precast concrete construction)

KUZ'MIN I.; NEKRASOV, A.

Year-round operation of a port. [illegible]

1. Nachal'nik Khabarovskogo [illegible] porta (for Kuz'min).
2. Nachal'nik kommercheskogo otdela Khabarovskogo [illegible] porta (for Nekrasov).

NEKRASOV, A.A.

Organization of temprorary inspection offices in rural regions of the Latvian S.S.R. Izm.tekh. no.8:60-61 Ag '62.
(MIRA 16:4)

(Latvia--Measuring instruments--Testing)

NEKRASOV, A.A.

USSR/Biology - Botany

Card 1/1 Pub. 86 - 23/37

Authors : Voroshilov, V. N.; and Nekrasov, A. A.

Title : Asiatic euryale

Periodical : Priroda 43/10, 108-109, Oct 1954

Abstract : A description is given of the regions in East Asia where the euryale grows wild, along with some facts about the physiology and characteristics of this plant itself, the seeds of which are used for food in India and China and, to some extent, for medicinal purposes in the latter country. Illustrations.

Institution: ... MAIN Botanical Garden, Acad Sci USSR

Submitted : ...

NEKRASOV, A.A.

Water chestnut. Priroda 44 no.10:126-128 O'55. (MLRA 8:12)

1. Sotrudnik Glavnogo botanicheskogo sada Akademii nauk SSSR.
(Aquatic plants)

KRASOV, A.A.

Floating salvinia. Priroda 46 no.3:114-115 Mr '57. (MLRA 10:3)

1. Glavnyy botanicheskiy sad Akademii nauk SSSR.(Moskva).
(Aquatic plants)

VOROSHILOV, V.N.; DAYEVA, O.V.; YEVTYUKHOVA, M.A.; YEGOROVA, Ye.M.; KUZNETSOV, V.N.; KUL'TIASOV, I.V.; NEKRASOV, A.A.; SUKOVA, V.P.; TA[illegible]A, T.I. **Prinimali uchastiye BELOVAYA, Yu.N.;** KHRYCHEVA, G.P.; TSITSIN, N.V., akademik, otv. red.; ASTROV, A.V., red. izd-va; LAUT, V.G., tekhn.red.

[Native plants of the U.S.S.R.; brief summary of introduction work in the Main Botanical Garden of the Academy of Sciences of the U.S.S.R.] Rasteniia prirodnoi flory SSSR; kratkie itogi introduktsii v Glavnom botanicheskom sadu Akademii nauk SSSR. Moskva, Izd-vo Akad. nauk SSSR, 1961. 359 p. (MIRA 15:3)

1. Moscow. Glavnyy botanicheskiy sad.
(Plant introduction) (Moscow--Botanical gardens)

NEKRASOV, A.A.

Propagation of [illegible] seed [illegible]
sada no.[illegible]

1. Glavnyy botan[illegible]

NEKRASOV, A.D.

"A History Of The Microscope And Microscopic Research In 18th Century Russia" (p. 10) by A.D. Nekrasov and S.I. Sobol

SO: Journal of General Biology (Zhurnal Obshchei Biologii) Vol. XI, 1950, No. 4

NEKRASOV, A.D.

First embryological work of I.I.Mechnikov and Nikolai Vagner's discovery of pedogenesis in cecidomyiids. Trudy Inst.ist.est. 4:315-324 '52.
(MLRA 6:7)
(Pedogenesis)

1. [redacted]KRASOV, A. D. and BERNADINER, G. P.

2. USSR (600)

4. Tanks

7. Construction of an underground sedimentation tank. Engs. Biul.stroi.tekh. 9 no. 22, 1952.

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

NEKRASOV, A.D.

A forgotten priority of I.I.Mechnikov and I.S.Raevskii. Trudy Inst.ist. est. 5:275-280 '53. (MLRA 6:7)
(Larvae)

NEKRASOV, A.D., professor.

Curious example of sexual selection. Priroda 42 no.11:103-105 N '53.
(MLRA 6:11)
(Natural selection)

NEKRASOV, Aleksey Dmitriyevich; PARAMONOV, A.A., otvetstvennyy red.; BELKIN, R.I., red.; KISELEVA, A.A., tekhn.red.

[Charles Darwin] Charlz Darwin. Moskva, Izd-vo Akad.nauk SSSR, 1957. 469 p. (MIRA 11:1)
(Darwin, Charles Robert, 1809-1882)

USSR/Oil Supply Jan 1947

"The Moscow Oil Supply," A.G. Nekrasov, 5 pp

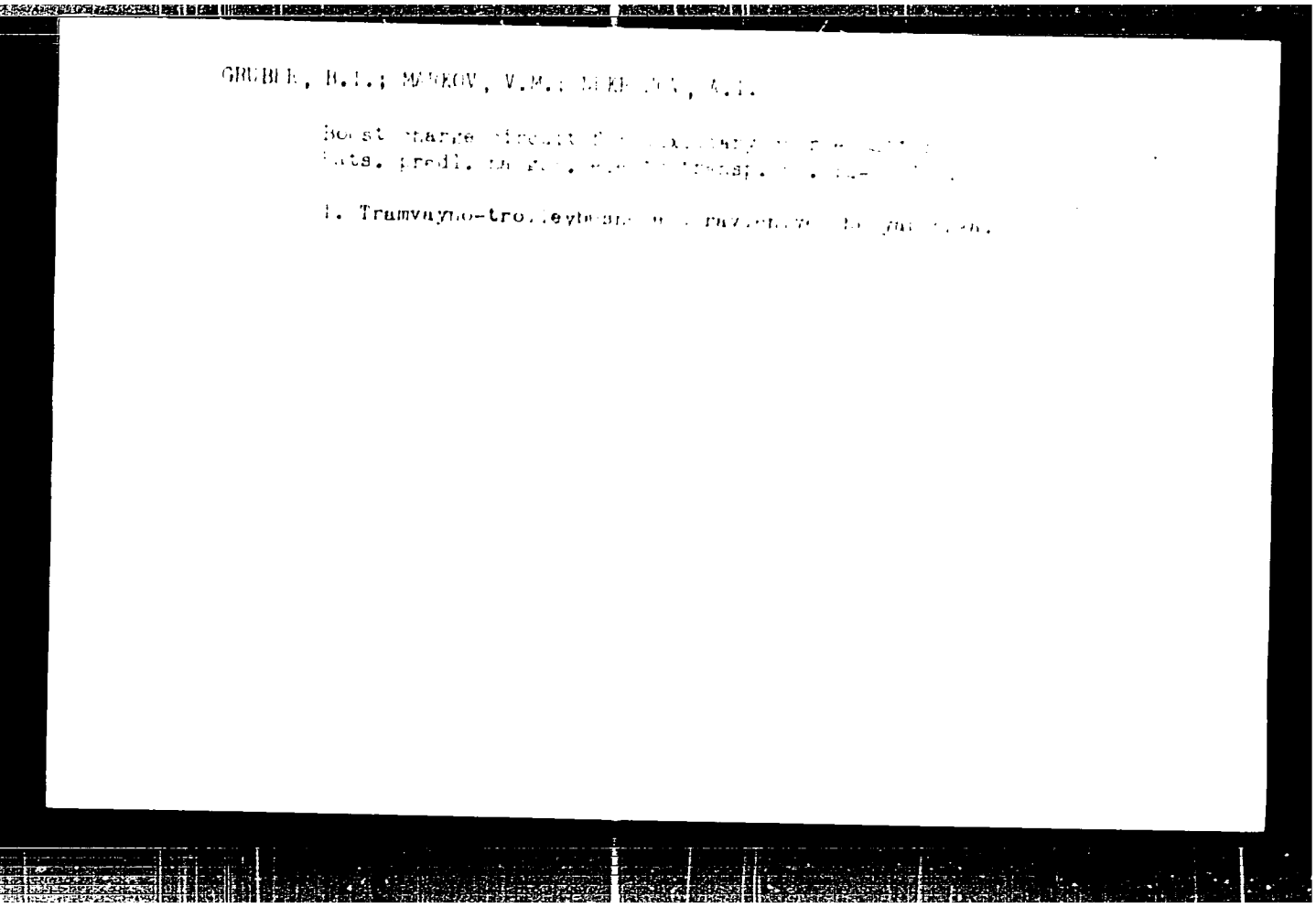
"Neftyanoye Khozyaystvo" Vol XXV, No 1

Historical and statistical account with bibliography.

475

VOLOKH, V.A.; [illegible]

Using styrene-acryl resin in repair [illegible]
no.4:12 Ap'64 (MIRA 17:?)



GRUBER, B.I.; MOSKOV, V.M.; [illegible], A.I.

[illegible]

1. Trumvaysko-trolleybusnoye [illegible].

NEKRASOV, A.M., inzh.; SEREBRENNYY, G.V., inzh.

Principal trends in the development of electric power [illegible] bution networks. Izv. vys. ucheb. zav.; energ. 8 no. [illegible] (MIRA 18:11) N '65.

1. Otdel elektrifikatsii Gosplana SSSR.

YERMAKOV, V.S.; SPIRIN, S.A.; CHIZHOV, D.G.; UGORETS, I.I.; LAVRENENKO, K.D.; SMIRNOV, G.V.; CHUPRAKOV, N.M.; MKHITARYAN, S.G.; ASMOLOV, G.L.; KOTILEVSKIY, A.M.; MOLOKANOV, S.I.; SYROMYATNIKOV, I.A.; FAYERMAN, S.Ts.; SOKOLOV, B.M.; KOMISSAROV, Yu.P.; MALYUTIN, I.P.; POBEDAYLO, K.M.; MORYAKOV, A.V.; MELAMED, M.F.; KUMSISASHVILI, P.G.; GAMKAVAYA, L.A.; LIVSHITS, B.M.; NEKRASOV, A.M.

Moisei Vul'fovich Safro; obituary. Elek.sta. 24 no.11:60 N '53. (MLRA 6:11)

(Safro, Moisei Vul'fovich, ?-1953)

YERMAKOV, V.S.; KLOCHKOV, I.M.; CHIZHOV, D.G.; KOGTEV, G.I.; LAVRENEN-KO, K.D.; KRASOV, A.M.; SPIRIN, S.A.; VERKLOV, N.D.; KOTILEVSKIY, D.G.; SMIRNOV, G.V.; MARINOV, A.M.; MAKSIMOV, A.A.; IVANOV, N.I.; KUNOV, A.P.; CHUPRAKOV, N.M.; AVTONOMOV, B.V.; STROMYATNIKOV, I.A.; MOLOKANOV, S.I.; FAINMAN, S.TS.; GORSHKOV, A.S.; GOL'DENBERG, P.S.; SOKOLOV, B.M.; MA-KUSHKIN, Ya.G.; MIKHITARYAN, S.G.; RASSADNIKOV, Ye.I.; GRUDINSKIY, P.G.; POMICHEV, G.I.; SHCHERBININ, B.V.; ZAYTSEV, V.I.; KOKOREV, S.V.; KLYU-SHIN, N.P.; PESCHANSKIY, V.I.; SAFRAZBEKYAN, G.S.; i dr...

IUrii Prokhorovich Komissarov; obituary. Elek.sta. 25 no.5:60 My '54.
(Komissarov, IUrii Prokhorovich, 1910-1954) (MLRA 7:6)

NEKRASOV, A.M.; MEN'SHIKOV, N.S., inzhener, redaktor; SOKOLOVA, L.V., tekhnicheskiy redaktor.

[Laying out air ducts] Razmetka vozdukhoprovodov. Moskva, Gos. nauchno-tekhn. izd-vo mashinostroit. lit-ry, 195[illegible]. [illegible]

(MLRA [illegible])

(Air pipes)

Subject : USSR/Electricity AID P - 3018

Card 1/1 Pub. 27 - 5/33

Author : Nekrasov, A. M., Eng.

Title : Basic technical problems in development of electric power stations and power systems

Periodical : Elektrichestvo, 7, 21-24, Jl 1955

Abstract : The author enumerates the problems which have to be solved in order to increase the rate of electrification. These include: the further development of automation, increase of pressure and temperature of steam boilers, increase of unit capacity of turbo- and water-wheel-generators, further development of power systems, and better organization of construction work, etc.

Institution : Technical Administration of the Ministry of Electric Power Stations, USSR.

Submitted : My 25, 1955

AID P - 3911

Subject : USSR/Electricity

Card 1/2 Pub. 26 - 8/32

Authors : Nekrasov, A. M. and M R. Sonin, Engs

Title : Experiment in high voltage d-c power transmission

Periodical : Elek.sta., 7, 26-32, Jl 1955

Abstract : The advantages of transmitting electric energy in direct current is discussed The author analyzes, however, the resulting increased cost in power and equipment. The equipment used and the operation of an experimental d-c transmission line supplying industrial installations is presented in detail This line includes transformer, rectifier and invertor substations and a double 200 kv line The results of this experiment are briefly discussed, and some recommendations are made. Seven photos and diagrams

Elek.sta., 7, 26-32, Jl 1955 AID P - 2911

Card 2/2 Pub. 26 - 8/32

Institution : None

Submitted : No date

PAVLENKO,A.S.; YERMAKOV,V.S.; UGORETS,I.I.; SMIRNOV,M.S.; CHIZHOV,D.G.; KOGTEV,G.I.; BAUSIN,A.P.; VINTER,A.V.; NEKRASOV,A.M.; LAVRENENKO, K.D.; KRYLOV,N.A.; KERTSELLI,L.I.

Sergei TSalikovich Faerman; obituary. A.S.Pavlenko and others. Elek.sta.26 no.10:62 O '55. (MLRA 8:12)
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[illegible]

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Nikolai Alekseevich Andreev. Energetik 4 no.9:40 S '56. (MLRA 9:10)
(Andreev, Nikolai Alekseevich, 1896-1956)