

RUZIN, M.

807/3/62

MASS: INK ZEMOVIATICE

Konferentsiya po magnitnoy gidrodinamike. Riga, 1958.

Voprosy magnitnoy gidrodinamiki i plazmi (Problems in Magneto-hydrodynamics and Plasma Dynamics); trudy Konferentsii. (Conference) Riga, Izdatvo AN Latvyskoy SSR, 1959. 343 p. Errata ally inserted. 1,000 copies printed.

Sponsoring Agency: Akademiya nauk Latvyskoy SSR. Institut fiziki

Editorial Board: D.A. Frank-Kamenetskiy, Doctor of Physics and Mathematics; Professor A.I. Vol'pert, Doctor of Technical Sciences; V.M. Kuznetsov, Doctor of Physics and Mathematics; Y.Ye. Kalash, Candidate of Physics and Mathematics; Y.G. Vitol, Candidate of Physics and Mathematics; Yu.M. Krut'kin and V.Ye. Kravchenko.

Ed.: A. Svyetl'banas; Tech. Ed.: A. Silyevskiy

PURPOSE: This book is intended for physicists working in the fields of magneto hydrodynamics and plasma dynamics.

COVERAGE: This volume contains the transactions of a conference held in Riga, June 1958, on problems in applied and theoretical magneto-hydrodynamics. The subjects of the conference were the investigation of the basic trends in theoretical and applied magneto-hydrodynamics, establishing contact between the papers being research in different branches of magneto-hydrodynamics, and magneto-hydrodynamic phenomena. More than 150 papers were presented. Similar conferences have been held regularly in the future; the next such conference is scheduled to be held in Riga in June 1960. In this present collection of the transactions of the conference, most of the papers and comments on papers are presented by the authors themselves in an abridged form. The book is divided into two parts: the first part deals with problems in theoretical magneto-hydrodynamics and plasma dynamics, and consists of 35 articles on such aspects of the problem as the application of magneto-hydrodynamics in astrophysics (D.A. Frank-Kamenetskiy), magneto-hydrodynamics and the investigation of cosmic-ray variations (L.I. Dorman), stability of the plasma in a magnetic field (G.F. Gordeyev and A.I. Okunov), the second part, consisting of 33 articles, deals with experimental investigations of magneto-hydrodynamics, including the application of physical simulation for investigation of electromagnetic processes in liquid metals (I.M. Kitcha) and the development of electromagnetic pumps (G.O. Kiril'ov); at the Institute of Physics of the Academy of Sciences, Latvian SSR. Several articles are devoted to induction pumps, electromagnetic crucibles, electromagnetic stirrers for molten metals, and their application in the metallurgical industry including schematic diagrams of their power-supply systems. References are given at the end of most of the articles.

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AVAILABILITY: Library of Congress	JA/ma
Card 12/72	6-80-60

RHEDEY

Hungary /Chemical Technology. Chemical Products and Their Application I-15

Treatment of solid mineral fuels

Abs Jour: Referat Zhur Khimiya, No 9, 1957, 31861

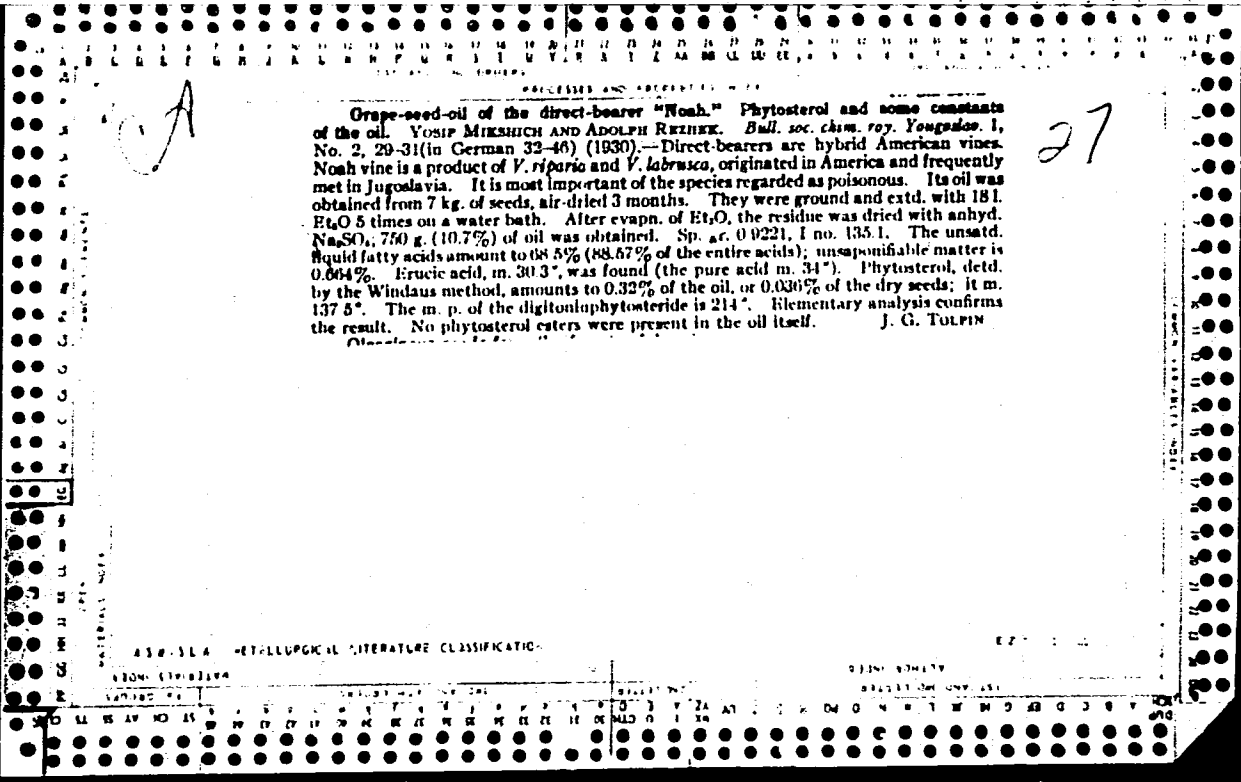
Author : Korosi Sandor, Rhedey Pal

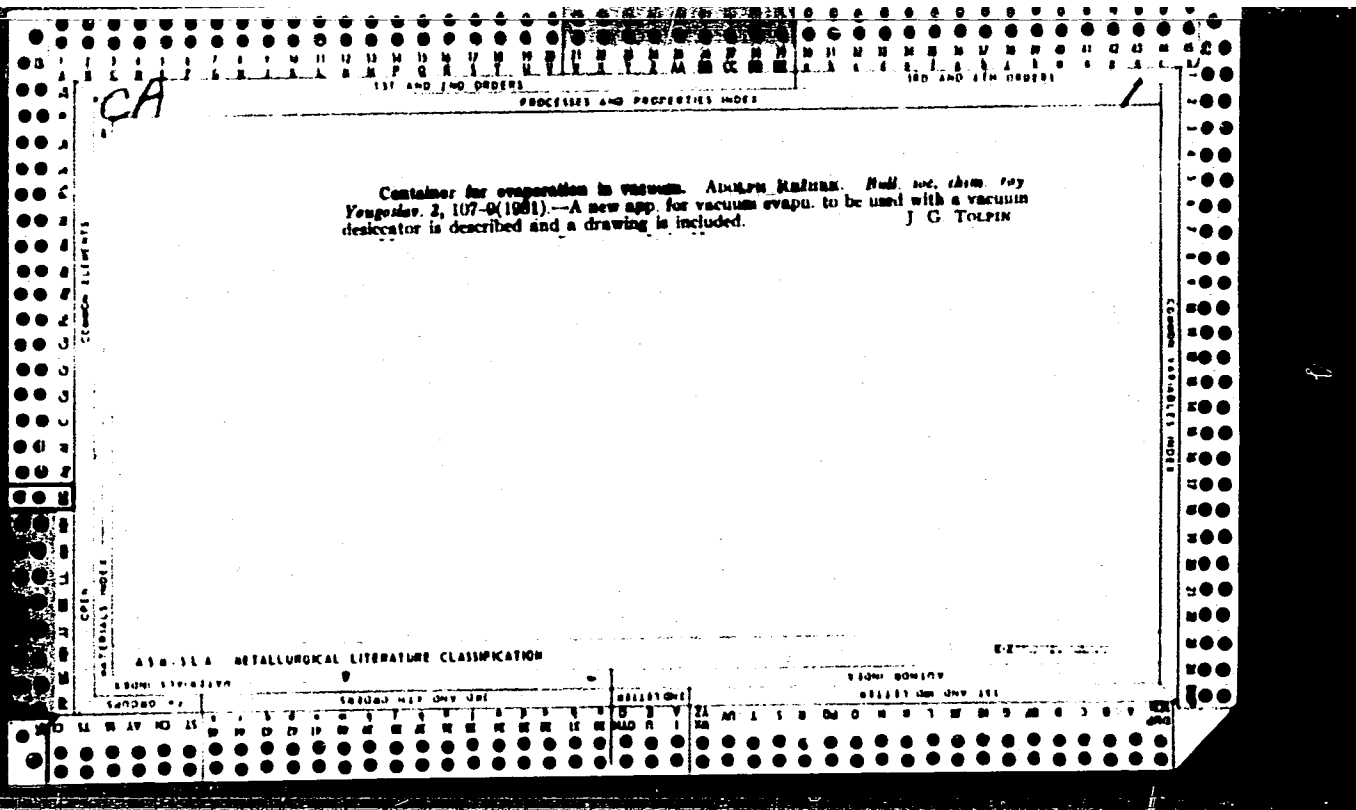
Title : Rapid Determination of the Ash-Content of Mineral Coal by Measuring the Specific Gravity

Orig Pub: Banyaszati lapok, 1954, 9, No 11, 578-586

Abstract: Description of the use of a semi-automatic, hydrostatic balance of special design, for checking the ash-content of coal, at concentration plants, by means of a weight determination.

Card 1/1





MAINKIN, Kh.M., inzh., REZIKOV, V.I.

Electrical relay centralization of switches and signals. Torf.
prom. 37 no.4:13-14 '60. (MIRA 13:7)

1. Chernoramenskoye transportnoye upravleniye.
(Gorkiy Province--Peat--Transportation)

REZIKOV, V.I.

REZIKOV, V.I.

KBC-MN capacitors. *Tekhn. prom.* 32 no.8:28 '55. (MLRA 9:4)

1. Chernozamenskoye transportnoye upravleniye.
(Condensers (Electricity))

20724

26.1632
26.2312S/022/60/013/006/005/005
C 111/ C 333AUTHOR: Rezikyan, A. M.

TITLE: Ion formation in the cathode part of a glow-discharge

PERIODICAL: Akademiya nauk Armyanskoy SSR. Izvestiya. Seriya
fiziko-matematicheskikh nauk, v. 13, no. 6, 1960, 63-72

TEXT: A gas is assumed to be between two infinite parallel plates (anode and cathode). Through the gas there flows (an electric) current. A delivery of impulses by ions to the electrode does not take place. Independent of the theory of the cathode part the author investigates the question where, for a glow-discharge, the ions arise which reach the cathode. He obtains the relation

$$P_k - P_A = \Delta P = \frac{j}{b^+} \bar{S}_k, \quad (10)$$

where P_k , P_A are the pressure in the neutral gas on the cathode and anode respectively, $j = j^+(x) + j^-(x)$ is the sum of the densities of the stream of ions and electrons, b^+ the ionic mobility and \bar{S}_k the mean length of path of those ions arising in the cathode part and reaching the cathode. From (10) it follows

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20724

Ion formation in the cathode

S/022/60/013/006/005/005
C 111/ C 333

$$\bar{S}_k = 0.133 \frac{\Delta P}{P} \frac{b_1^+}{j} \quad (11)$$

where P--gas pressure in mm Hg-column, b_1^+ the ionic mobility for pressure of 1 mm Hg-column measured in

$\frac{\text{cm}}{\text{sec}}$ / $\frac{\text{v}}{\text{cm}}$ and j measured in $\frac{\text{ma}}{\text{cm}^2}$.

(11) renders possible to determine experimentally the strong point of the formation of those ions formed in the cathode part and reaching the cathode. For argon and P = 5 mm Hg-column the author measured e. g. $\bar{S}_k = 0.08 \text{ cm}$, while the thickness of the cathode fall of the potentials was $d = 0.04 \text{ cm}$, i. e. an essential part of the ions is formed in the glow light of the discharge ($\bar{S}_k > d$).

Card 2/3

Ion formation in the cathode

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S, 022/60/013/006/005/005
C 111/ C 333

There are 2 figures, and 10 non-Soviet-bloc references. The two references to English-language publications read as follows: K. T. Kompton, P. M. Morse. Theory of normal cathode fall in glow discharges. "Phys. Rev.", 30, 305-317, 1927; I. Langmuir. The interaction of electron and positive ion space charges in cathode sheaths. "Phys. Rev.", 33, 954-989, 1929.

ASSOCIATION: Fizicheskiy institut AN Armyanskoy SSR (Physics Institute of the Academy of Sciences Armyanskaya SSR)

SUBMITTED: September 1, 1960

X

Card 3/3

ACCESSION NR: APL010026

8/0022/63/016/006/0117/0124

AUTHORS: Rezikyan, A. M.; Galechyan, G. A.; Galechyan, V. V.

TITLE: Distribution of negative ion partial pressures in a positive column of discharge at low pressures

SOURCE: AN ArmSSR. Izvestiya. Ser. fiz.-matem. nauk, v. 16, no. 6, 1963, 117-124

TOPIC TAGS: negative ion, electrode, plasma, electron, magnetic field, triple collision, partial pressure

ABSTRACT: The positive column has been studied analytically in gases producing negative ions. A two-dimensional problem is considered with distance d between electrodes. For a plasma at rest with no magnetic fields, the sum of the pressures of negative ions N^- , positive ions N^+ , and electrons n^- is given

$$P + N^- kt + N^+ kt + n^- kT = \text{const.}$$

The wall is assumed completely absorbing, and the temperatures of the various

Card 1/3

ACCESSION NR: APL010026

species are given by the inequalities

$$t^+ \ll T, \quad t^- \ll T, \quad t \ll T,$$

where t - neutral gas temperature and T - electron temperature. The number of negative ions forming per unit volume by triple collisions is given by

$$\mu \bar{P}^3 n^-$$

where μ - coefficient of negative ion formation. The plasma is assumed quasineutral; negative ion and electron balance equations are written which, combined with the above equations, lead to a differential equation

$$\frac{1}{\epsilon^2} \frac{d^2 \gamma}{d\Delta^2} + \frac{1}{\epsilon^2} \left(\frac{d\gamma}{d\Delta} \right)^2 = P_w \left[\frac{\gamma^2}{P_w} - \gamma^2 \left(\frac{\mu}{\alpha} - \frac{1}{P_w} \right) + \gamma^2 \frac{\mu}{\alpha} \right]$$

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ACCESSION NR: AP4010026

where $\gamma = P/P_w$ and $\Delta = x/d = E/E_w$. By integrating the latter equation, curves are obtained for the partial pressure of the neutral gas, positive ions, negative ions, and electrons as a function of the positive column radius. Orig. art. has: 30 equations and 4 figures.

ASSOCIATION: Institut radiofiziki i elektroniki AN Armyanskoy SSR (Institute of Radio Physics and Electronics, AN Armonian SSR)

SUBMITTED: 21Nov62

DATE ACQ: 03Feb64

ENCL: 00

SUB CODE: GP

NO REF SOV: 003

OTHER: 001

Card 3/3

REZIKYAN, A.M.; AGABABYAN, K.G.; MARKOSYAN, M.G.

Steady-state characteristic of a magnetron diode. Radiotekh. i
elektron. 10 no.4:689-692 Ap '65. (MIRA 18:5)

REZIKYAN, A.M.; BAKHSHYAN, G.G.

Motion of an electron in mutually opposed inhomogeneous electric and magnetic fields. Izv. AN Arm. SSR. Ser. fiz.-mat. nauk 15 no.3:107-114 '62. (MIRA 15:9)

1. Institut radiofiziki i elektroniki AN Armyanskoy SSR.
(Field theory) (Electrons)

24.6760
26.2312

27760
S/058/61/000/007/064/086
A001/A101

AUTHOR: Rezikyan, A.M.

TITLE: Ion production in the cathode part of glow discharge (Theoretical part)

PERIODICAL: Referativnyy zhurnal. Fizika, no. 7, 1961, 303, abstract 7Zh90
("Izv. AN ArmSSR. Ser. Fiz.-matem. n.", 1960, v. 13, no. 6, 63-72, Armen. summary)

TEXT: The author starts from the notion that charged particles passing through the gas under action of electric field, transfer a part of their momenta to gas molecules. On this assumption he calculated the pressure gradient created by ion motion in anode-cathode direction in a glow discharge. It is shown that pressure drop of the neutral gas between cathode and anode occurs mainly in the cathode part. On this basis, a method of experimental determination of the mean ion range in a glow discharge is theoretically substantiated for ions arriving at the cathode from the cathode part of discharge. The significance of such an experiment consists in that the knowledge of the origination place of ions arriving at the cathode is very essential for the theory of the cathode part of

4

Card 1/2

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A001/A101

Ion production ...

glow discharge. The presented results of a preliminary experiment show that the mean range of ions arriving at the cathode in discharge in argon at a pressure of 5 mm Hg exceeds twice the thickness of the region of cathode potential drop. There are 10 references.

V. Belyayev

[Abstracter's notes: Complete translation]

4

Card 2/2

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S/022/62/015/003/006/008
D234/D308

AUTHORS: Rezikyan, A.M. and Bakhshyan, G.G.

TITLE: Motion of an electron in crossed inhomogeneous electric and magnetic fields

PERIODICAL: Akademiya nauk Armyanskoy SSR. Izvestiya, v.15, no.3, 1962, 107-114

TEXT: The electric field is the one between two concentric cylinders and the magnetic field is produced by a current flowing in the inner cylinder. The initial velocity of the electron is assumed to be different from 0. An approximate solution of the equations of motion is obtained by replacing an exponential expression by five terms of its series expansion. The electron gains velocity in the axial direction; this may be used for acceleration purposes and there can be a flow of matter in plasma media placed in such fields. There are 5 figures. √B

ASSOCIATION: Institut radiofiziki i elektroniki AN Armyanskoy SSR

Card 1/2

Motion of an electron ...

S/022/62/015/003/006/008
D234/D508

(Institute of Radio Physics and Electronics, AS Arm-
SSR)

JB

SUBMITTED: February 16, 1962

Card 2/2

27761
S/058/61/000/007/065/086
A001/A101

24.6760

AUTHOR: Rezikyan, A.M.

TITLE: Ion production in the cathode part of glow discharge (Experimental part)

PERIODICAL: Referativnyy zhurnal, Fizika, no. 7, 1961, 303, abstract 7Zh91
("Izv. AN ArmSSR. Ser. fiz.-matem. n.", 1961, v. 14, no. 1, 87-96, Armen. summary)

TEXT: The author investigated experimentally the dependence of quantity $q = S_k/d$ (S_k is mean range of ions arriving at the cathode, d is the width of the region of cathode potential drop) on discharge conditions: density of discharge current (0.2 - 2.5 ma/cm²), pressure (0.6-8.0 mm Hg), kind of gas (N₂, H₂ and argon) and diameter of discharge tube (1.8-5.6 cm). The pressure difference between the cathode and anode parts was measured with a diaphragm manometer. The results obtained are explained. (See abstract 7Zh90 for theoretical part of the study.)

V. K.

[Abstracter's note: Complete translation]

Card 1/1

9.3/50 { 1077
1140
1141

83620
S/022/60/013/004/004/004
C111/C222

AUTHORS: Rezikyan, A.M., Agbalyan, Yu.G., and Madatyan, K.A.

TITLE: Gas-Discharge Stabilizer

PERIODICAL: Izvestiya Akademii nauk Armyanskoy SSR. Seriya fiziko-matematicheskikh nauk, 1960, Vol.13, No.4, pp.65-68.

TEXT: The direct-current stabilizer described in (ref.1) consists of a gas-discharge tube being within a solenoid which is series-connected with the discharge interval. The axis of the tube is parallel to the magnetic lines of force. In the discharge interval the anode-cathode charges move on spirals, i.e. they have a tangential component of velocity. Under the influence of them the gas begins to rotate in the tube. For an increase of the discharge current, the magnetic field increases, the trajectory of the charge strains in, the length of the spirals and therewith the resistance of the interval become greater, the current decreases.

In the present paper the authors report on the measurement of the stabilizing coefficient. It is stated that it depends on the magnetic field and that it reaches a maximum for a certain field intensity. The coefficient is smaller than 3. The measurements confirm (in spite of Card 1/2

83620

S/022/60/013/004/004/004
C111/C222

Gas-Discharge Stabilizer

some deviations) the theory developed in (Ref.1). The velocity of rotation of the gas in the tube and its Reynolds number were not determined. Hydrogen and argon were used as gases; here the results differed only by the fact that in the case of hydrogen the stabilization began for a somewhat greater voltage.

There are 3 figures, 1 table and 2 references: 1 1 Soviet and 1 English. X

ASSOCIATION: Institut fiziki AN Armyanskoy SSR (Institute of Physics
of the Academy of Sciences Armyanskaya SSR)

SUBMITTED: September 2, 1959

Card 2/2

REZIKYAN, A.M.; MNATSAKANYAN, K.G.

Illumination system for bubble and Wilson chambers. Prib. i tekhn.
eksp. no.6;115-118 N-D '60. (MIRA 13:12)

1. Fizicheskiy institut AN ArmSSR.
(Ionization chambers)

REZIKYAN, A.M.; AGBALYAN, Yu.G; MADATYAN, K.A.

Gas-discharge stabilizer. Izv. AN Arm. SSR. Ser. fiz.-mat.
nauk 13 no.4:65-68 '60. (MIRA 13:9)

1. Institut fiziki AN ArmSSR.
(Voltage regulators)

Handwritten scribble
REZIKYAN, A.M.

Gas-discharge stabilizer for heavy direct current. Izv. AN Arm. SSR.
Ser. fiz.-mat. nauk 10 no.5:99-106 '57. (MIRA 11:2)

1. Institut fiziki AN ArmSSR.
(Electric currents)
(Electric discharges through gases)

SHIRYAN, I. I.

Dissertation: "Place of Formation of Positive Ions in a Glow Discharge." Cand
Phys-Math Sci, Moscow: Order of Lenin State U imeni M. V. Lomonosov, 9 Jun 54.
Vechernyaya Moskva, Moscow, 31 May 54.

CO: DUK 284, 26 Nov 1954

86755
S/120/60/000/006/031/045
E032/E314

21.5200 (1033, 1191, 1138)

AUTHORS: Rezikyan, A.M. and Mnatsakanyan, K.G.
TITLE: Illuminating System for Bubble and Wilson Chambers
PERIODICAL: Pribory i tekhnika eksperimenta, 1960, No. 6,
pp. 115 - 118

TEXT: Large-volume bubble and Wilson chambers have recently come into use in high-energy nuclear physics. A number of methods of producing uniform illumination have been described (Lofgren et al, Ref. 1; Ballario et al Ref. 2) but they all suffer from the disadvantage that they involve the use of long linear sources of light. Rays leaving such a source are transformed into a parallel beam only in the plane perpendicular to the source and hence uniform illumination is not produced in the direction parallel to the source. In the system described in the present paper, this disadvantage is considerably reduced. The system employed by the present authors is in the form of a cylindrical plano-convex lens made from perspex and consisting of suitably cut perspex sheets glued together as shown in Fig. 1. The perspex layers are

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X

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E032/E314

Illuminating System for Bubble and Wilson Chambers

separated from each other by opaque films. This ensures that the rays are collimated not only in the XZ plane (Fig. 1) but also in the YZ plane. In this arrangement each transparent layer transmits and collimates light emitted not from the entire length of the source but from a part of it, which is determined by:

$$S = 2b + a$$

$$b = \frac{a[r/(1 - 1/n) + d]}{\sqrt{d^2 + a^2}}$$

where a is the thickness of the transparent layer,
n is the refractive index of the material,
d is the thickness of the lens,
S is the length of the source which is being used and
r is the radius of the cylindrical surface of the lens

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E032/E314

Illuminating System for Bubble and Wilson Chambers

The opaque films are produced by a dichlorethane solution of black aniline dye. The faces of the perspex layers are wetted with the solution and then pressed against each other for a few hours until they become firmly attached. The pile thus obtained is worked to the required shape and the surface is polished by chromium oxide. For large chambers the illuminating system was made separately from the chamber and was of the form shown in Fig. 2, in which 1 is a glass partition, 2 is a lens, 3 is the illuminator, 4 is the body and 5 is the reflector. The optimum parameters of the illuminating system and the quality of the lenses depend on the working characteristics of each particular chamber. The quality of the lenses also depends on the focal length. For bubble chambers, large focal lengths are undesirable since the illuminating system should be located within the chamber and the glass partition 1 must withstand the full pressure of the liquid. For Wilson chambers a greater focal length can be chosen, i.e. the number of illuminators and lenses can be reduced since the system can be located outside

Card 3/6

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E032/E314

Illuminating System for Bubble and Wilson Chambers

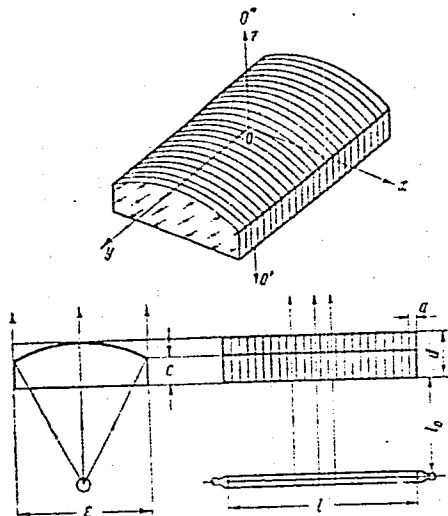
the chamber. The present authors have made three lenses of the above type, using perspex layers with $a = 2.3$ and 10 mm $e = 90$ mm and $\ell = 70$ mm (see Fig. 1). The radius of curvature of the cylindrical surface was $r = 80$ mm and thickness of the lens $d = 60$ mm. Special vacuum tungsten linear filaments (300 mm long) were also prepared and during the measurements the illuminators were diaphragmed so that the length of the diaphragm was equal to that of the lens. For lenses with $a = 2.3$ mm and $c/a = 0.75$ (Fig. 1) the increase in the illumination towards the edges (in the OX direction) did not exceed 6.5% of the average value. With $a = 3$ mm and $a = 10$ mm, the corresponding figure was 9% and 10.4%, respectively. The variation of the illumination with distance along the OX axis is shown in Fig. 3. Similar plots for the OY and OZ directions are shown in Figs. 4 and 5. It was found that the best results were obtained with a lens having $a = 2.3$ mm in the uniformly

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S/12C/60/000/006/051/045
E032/E314

Insulating System For Bubble and Wilson Chambers

Insulated part when the maximum change in illumination does
exceed 5%.



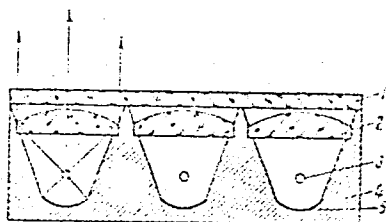
C. 10 5/6

X

80755

S/120/60/000/006/031/045
D032/E314

Illuminating System for Bubble and Wilson Chambers



There are 5 figures, 2 tables and 5 references: 1 Soviet,
2 English.

ASSOCIATION: Fizicheskiy institut AN ArmSSR
(Physics Institute of the AS Armenian SSR)

SUBMITTED: November 16, 1959
Card 6/6

REZIN, M. G.

USSR/Electricity - Motors, Induction

Jun 51

"The Nature of Electromagnetic Phenomena in a Motor With an Arc Stator," M. G. Rezin, Cand Tech Sci, Ural Polytech Inst imeni Kirov

"Elektrichestvo" No 6, pp 25-29

Gives expl curves of space and time distribution of the induction in the air gap and of the currents in the yoke of the machine for motors with arc stators having 6- and 4-pole pairs. Includes an oscillogram of the pulsating currents in the outer and central zones of the arc stator under short-circuit operating conditions.

USSR/Electricity - Motors, Induction
(Contd)

Jun 51

Also presents oscillograms showing the form of the emf in the rotor bars. Submitted 6 Dec 50.

200T12

200T12

BRISKMAN, V.A.; LYUBIMOVA, S.N.; REZIN, M.G.

The stirring of liquid metal in the ladle; theoretical estimate.
Trudy Ural. politekh. inst. no.133:11-16 '63. (MIRA 17:9)

BEZIN, M.G.; GOLUBEV, N.S.

Choice of pole separation and current frequency of the stator.
Trudy Ural. politekh. inst. no.133:68-74 '63. (MIRA 17:9)

REZIN, M.G.; BRISKMAN, V.A.; MASHKAUTSAN, V.V.

Results of the investigation of electromagnetic stirring processes
with the help of laboratory equipment. Trudy. Ural. politekh. inst.
no.133:25-33 '63. (MIRA 17:9)

~~REZIN, M.G.~~; KROPACHEV, G.P.; BURDE, L.V.; SERGEYEV, S.V.; SEMENOV, G.F.;
OSYKHOVSKIY, I.G.; DROBININ, Ya.I.; KOCHNEV, E.K.; MILAYKINA, R.N.
PARAMONOVA, Ye.I.; LIKHACHEV, M.N. [deceased].

"Electric engineering." A.S. Kasatkin, M.A. Perekalin. Reviewed by M. G.
Rezin and others. Elektrichestvo no.7:94-95 J1 '57. (MLRA 10:8)
(Electric engineering)
(Kasatkin, A.S.) (Perekalin, M.A.)

Sov/133/58-9-10/29

AUTHORS: Siunov, N. S. (Dr. Tech. Sciences, Professor), Rezin, M. G. (Candidate Tech. Science), Kholodov, A. I. (Candidate Tech. Sciences, Docent), Osykhovskiy, I. G. (Candidate Tech. Sciences, Senior Lecturer)

TITLE: The Choice of Some Parameters of the Electro-Magnetic Stirrer for an Arc Furnace (Vybor nekotorykh parametrov dugovogo statora elektromagnitnogo peremeshivatelya zhidkoy stali)

PERIODICAL: Stal', 1958, Nr 9, pp 802-806 (USSR)

ABSTRACT: After a brief outline of the principle of operation of an electro-magnetic stirrer and advantages in its use (based on Western literature) the authors consider the problem of choice of some of its main parameters for a given velocity of movement of metal on the bottom of a furnace. The following parameters are considered: number of poles of the stator arc, length of Statov's arc, air gap arc, frequency of the current, length of the core. Theoretical considerations were tested on a model using mercury at room temperature (Fig.5). Good agreement between the calculated and actual velocities of the movement of the metal was obtained. Two designs of electro-magnetic stirrers developed by the

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Sov/133/58-9-10/29

The Choice of Some Parameters of the Electro-Magnetic Stirrer for an Arc Furnace

electrotechnical and electrometallurgical department of the Urals Polytechnical Institute in cooperation with the works UAZ, UZTM and VIZ will be soon introduced into the industry. There are 5 figures.

ASSOCIATION: Ural'skiy politekhnicheskiy institut (Urals Polytechnical Institute)

Card 2/2

SOV/144-58-11-16/17

AUTHORS: Rezin, M. G. (^{Mikhail GRIGORIYEVICH} Cand. Tech.Sci.), Osykhovskiy, I. G. (Senior Lecturer)

TITLE: An Experimental Investigation of the Magnetic Field of a Curved Stator (On an Electric Furnace) (Eksperimental'noye issledovaniye magnitnogo polya dugovogo statora)

PERIODICAL: Izvestiya vysshikh uchebnykh zavedeniy, Elektromekhanika, 1958, Nr 11, pp 134-139 (USSR)

ABSTRACT: Flat or curved stators are often used to stir the liquid steel in arc furnaces. Magnetic systems of this type differ considerably from other kinds of magnetic systems used in furnaces; The main differences can be seen from the schematic diagram of a furnace with a curved stator, given in Fig.1. The rotor consists of molten steel with a magnetic permeability of unity. The lining, which can be up to 900 mm thick, is also non-magnetic. In order to reduce magnetic and electric screening the bottom of the furnace near the stator winding is made of non-magnetic steel of high specific resistance. Thus none of the components of the system are magnetic except the stator. Moreover, the air gap between the stator and the molten steel is very long. A two-phase stator winding is generally used. There is no published experimental data about magnetic fields produced by systems of this kind. The winding construction

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SOV/144-58-11-16/17

An Experimental Investigation of the Magnetic Field of a Curved Stator.

is described. The influence of the number of slots per pole and per phase on the field distribution was studied by making three stators with different numbers of slots, and the construction is described. Field strength determinations were made with d.c. flowing in the winding, the magnetic induction being measured by a search coil of a flux meter as shown in Fig 2. The horizontal and perpendicular components of the field were measured. Distribution curves of the vertical and horizontal components of induction are given in Fig 3 for a stator with 28 slots. Special features of the induction distribution are pointed out and in order to explain them further stators were made with 14 and 8 slots respectively. It was found that whatever the numbers of slots, the induction distribution was saddle-shaped. This is because there is no magnetic rotor. As the distance from the stator to the horizontal plane in which the measurements are made is increased the distribution becomes more sinusoidal. This can be seen from the induction distribution curves given in Fig 4. Distribution curves of the perpendicular and horizontal components of induction for stators with different numbers of slots are given in Fig 5. The perpendicular components are

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SOV/144-58-11-16/17

An Experimental Investigation of the Magnetic Field of a Curved Stator

much the same for all three stators, whilst the horizontal components are different in the three cases. Two possible arrangements of stator relative to the molten material in the furnace are shown in Fig 7. If the centre line of the stator does not coincide with the centre line of the molten metal in the furnace the metal circulates in two flows of different diameters; the rate of flow and the mixing effect are reduced in this case. Therefore, as far as possible the stator winding should be located symmetrically with respect to the molten metal and not with respect to the furnace frame. There are 7 figures and 2 Soviet references.

ASSOCIATION: Kafedra obshchey elektrotekhniki Ural'skogo politekhnicheskogo instituta (Chair for General Electrical Engineering, Urals Polytechnical Institute).

SUBMITTED: July 9, 1958.

Card 3/3

REZIN, M.G., kand. tekhn. nauk, dots.

Compensation of the pulsating fields in a motor with an arc-shaped stator. Trudy Ural. politekh. inst. no.90:44-48 '58.

(MIRA 13:2)

(Electric motors--Design and construction)

REZINA, M. G.

Voprosy Kvantitativnoy Otschislennosti i Plazmennykh Parnykh. Tret'ye Konferentsii po Magnetnoy Hidrodinamike. Riga, 2-10 Iyulya 1959 g. (Problema of Magnetnoy Hidrodinamiki i Plazma 27-meticheskoy Konferentsii po Magnetnoy Hidrodinamike, Riga, 2-10 Iyulya 1959), Riga, 1959, 339 pp.

The majority of the texts of the 55 conference reports and discussions of reports are presented in the source in abridged form. Previously published reports are included there as brief abstracts only. The material published there for the first time (abridged and unabridged) are as follows:

"On Certain Problems in the Designing of Linear Induction Motors," by A. I. Vol'dyk, Tallin, pp 273-277; discussion of the report by L. A. Vayns, Moscow, pp 277-278.

"The Problem of the Electromagnetic Coupling," by R. P. Zhukovskiy, Leningrad, pp 279-294 (Illustrations).

"On the Turbulent Flow of a Liquid Metal Under the Influence of a Revolving Magnetic Field," by I. N. Kirko and G. A. Litvinovskiy, Riga, pp 295-302.

"The Use of Diffused-Field Pumps for Moving Liquid Metals," by A. E. Kiselev, Riga, pp 305-311.

"Design of the Arc Starter for Starting the Metal in an Arc Furnace by Means of Induction," by A. G. Reznik, Smolensk, pp 313-321.

"Peculiar Circuits of Installations for the Electromagnetic Mixing of a Metal in Electric Arc Furnaces," by Ya. I. Boshakov, Leningrad, pp 323-333.

"On the Choice of an Optimal Stator Current Frequency for the Mixing of a Liquid Metal by Means of a Revolving Electromagnetic Field," by E. I. Borzishchuk and N. N. Kalyuzhnik, Leningrad, pp 337-339.

BEZIN, M.G.

Nature of additional losses in a motor with an open-circuited
stator. Trudy Ural. politekh. inst. no.79:113-117 '59.

(MIRA 13:7)

(Electric motors)

ANTIPOV, M.F.; GAVRILOV, B.K.; MILAYKIN, I.F.; PAVLININ, V.M.; REZIN, M.G.

"DC machinery design" by IA.S. Gurin and M.N. Kurochkin.
Reviewed by M.F. Antipov and others. Elektrichestvo no.3:95-96
Mr '62. (MIRA 15:2)

(Electricity machinery---Direct current)
(Gurin, IA.S.) (Kurochkin, M.N.)

L 00347-66 EPA(s)-2/EWT(m)/EPP(n)-2/EWP(t)/EWP(b) JD/WW/JG

ACCESSION NR: AP5016661

UR/0382/65/000/002/0130/0138
669.16+538.4

AUTHOR: Rezin, M. G. ^{44.55}

51
B

TITLE: Development of electromagnetic stirring of liquid metals ^{47.5} fb

SOURCE: Magnitnaya gidrodinamika, no. 2, 1965, 130-138

TOPIC TAGS: liquid metal, MHD flow, electromagnetic mixing, metallurgic process

ABSTRACT: Several methods of electromagnetic stirring of cast iron and steel in pods and converters as used in the Soviet Union are reviewed. The advantages of such stirring are also discussed, in particular, its importance when large amounts of metals are processed. The induction and electric arc processes are compared; the required power and the amount and kind of cooling and other factors are listed. The importance of electro- and hydrodynamic processes in improving metallurgy technology and in development of more economical operations is stressed. A few results of flow tests are presented. Orig. art. has: 4 figures. ^{44.55}

ASSOCIATION: none

SUBMITTED: 31Oct64

ENCL: 00

SUB CODE: MM

NO REF SOV: 005

OTHER: 002

Card 1/1 JW

KROPACHEV, G.P., docent, kand. tekhn. nauk, REZIN, M.G., docent, kand.
tekhn. nauk; DROBININ, Ya.I., assistant; GOLUBEV, N.S., assistant;
PENYAZKOVA, V.P., assistant, KOCHNEV, E.K., starshiy prepodavatel'

Electromagnetic stirring and pumping over of molten steel.
Sber. nauch. trud. Ural. politekh. inst. no.122:226-253 '61.
(MIRA 17:12)

REZIN, M.G.

Factors determining the basic parameters of a stator. Trudy
Ural. politekh. inst. no.133:50-53 '63. (MIRA 17:9)

ACCESSION NR: AT4042312

S/0000/63/003/000/0349/0355

AUTHOR: Briskman, V. A., Mashkautsan, V. V., Rezin, M. G.

TITLE: Simulation of electromagnetic mixing of a metal in the ladle

SOURCE: Soveshchaniye po teoreticheskoy i prikladnoy magnitnoy gidrodinamike. 3d, Riga, 1962. Voprosy* magnitnoy gidrodinamiki (Problems in magnetic hydrodynamics); doklady* soveshchaniya, v. 3. Riga, Izd-vo AN LatSSR, 1963, 349-355

TOPIC TAGS: electromagnetic mixing, electromagnetic stirrer, molten metal mixing, foundry technology

ABSTRACT: The authors discuss the importance and area of applicability of the electromagnetic mixing of metals, calling attention to the numerous advantages of this method. A study was made of the processes involved in the mixing of a melt in ladles by means of a traveling magnetic field. It is noted that this type of mixing can be employed to accelerate and deepen the degassing of the steel during vacuum melting in the ladle, accelerate the reduction of the metal and dissolve the alloying additions during the desulfuration of cast iron in the ladle, etc. A mixing technique employing low-frequency current was adopted, in view of the difficulties that arise when attempting to make use of the conventional 50-

Card 1/5

ACCESSION NR: AT4042312

cycle industrial current. The research described in the paper was conducted on a model geometrically similar to ladles actually in use in the metallurgical industry. The authors note that, in order to achieve physical similarity over the entire range of velocities of practical interest in mixing, the following two determining criteria constitute the sole factors of importance:

$$\Omega^2 = \frac{2\pi\sigma\omega d^2}{c^2}, \tag{1}$$

$$s = 1 - \frac{A_0\sqrt{\rho}}{\omega d} \tag{2}$$

where ω is the circular frequency of the current; A_0 is the linear current load of the stator; d is the characteristic dimension (mean ladle diameter); σ is the electroconductivity; ρ is the density of the liquid metal; and c is the speed of light. When slippage is close to unity, criterion (2) has little effect on mixing. In this case (covering the majority of the measurements made on the model ladle in question), the results can be extended more widely than permitted by expression (2). A sectional diagram of the model is shown in Figure 1 of the Enclosure. The ladle was manufactured of vinylplast, with a casing of non-magnetic steel. Mercury was used as the liquid metal. The depth of the mercury

ACCESSION NR: AT404231z

layer was equal to the mean internal diameter of the ladle (23 cm). Water was poured over the surface of the mercury. The frequency of the stator current was varied from 10 to 200 cycles, with an asynchronous generator employed as the power supply. The methods and instrumentation used in the measurement of fields and velocities in the liquid metal are not described in this article. Three versions were tested, involving different arrangements and connections of the stators: 1. two stators, placed diametrically opposite one another at different sides of the ladle and acting on the melt with forces of identical direction; 2. two stators with forces of opposite direction; 3. one stator. A discussion of the results follows and the authors point out that, on their basis, it is possible to construct a picture of the movement of the liquid metal in the ladle of an industrial mixing unit and to select that version which is most suitable from the metallurgical point of view. When designing a specific installation on the basis of $\delta(\Omega)$ curves with $A = \text{const}$, a function $\delta(\Omega)$ can be plotted for constant power and the optimal frequency for a given ladle thus found. According to the values of $\frac{v}{A_0 \sqrt{\rho}}$, one can determine the linear stator loads which will be necessary

$$\frac{v}{A_0 \sqrt{\rho}}$$

Card

3/5

ACCESSION NR: AT4042312

for the attainment of the required velocities. Orig. art. has: 2 formulas and 4 figures.

ASSOCIATION: none

SUBMITTED: 04Dec63

ENCL: 01

SUB CODE: ME, MM

NO REF SOV: 001

OTHER: 000

Card 4/5

ACCESSION NR: AT4042312

ENCLOSURE: 01

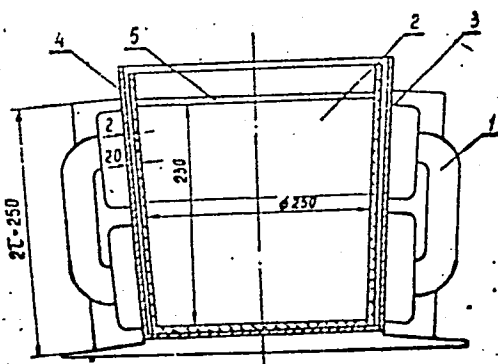


Fig. 1. Model diagram: 1 - stator; 2 - mercury; 3 - lining; 4 - casing; 5 - water.

Card : 5/5

DROBININ, Ya.I.; REZIN, M.G.

New excitation networks for low-frequency generators. Trudy
Ural. politekh. inst. no.124:81-86 '62. (MIRA 16:8)

KOCHNEV, E.K.; REZIN, M.G.

Electromagnetic processes in molten metal-mixing systems.
Trudy Ural. politekh. inst. no.124:105-117 '62.
(MIRA 16:8)

L 16721-63

EWP(q)/EWT(m)/BDS AFFTC/ASD JD

S/124/63/000/004/007/064

AUTHOR: Rezin, M. G.

54

53

TITLE: Electromagnetic mixing of steel in a ladlePERIODICAL: Referativnyy zhurnal, Mekhanika, no. 4, 1963, 10, abstract 4B67
(Sb. Vopr. magnitn. gidrodinamiki i dinamiki plazmy. v. 2. Riga, AN
LatvSSR, 1962, 621-627.

TEXT: In the report (descriptive in nature), under the simplest assumptions two systems assuring the electromagnetic vacuum mixing of steel with degasification are analyzed: 1) an approach envisaging the mixing of the entire batch of steel in a ladle placed in a vacuum chamber; 2) a circulatory system with the degasification of steel in a special small vacuum chamber, whence the molten metal flows continually out of the ladle with the aid of electromagnetic pumps. In 1), with two external stators, two activation methods are possible: cophased and counterphased. During start up on counterphase, (stators' magnetic fields are directed against one another), in the liquid metal one circulatory zone develops, while at cophased starting, there are two such zones, symmetrical with respect to the ladle's axis. Calculations show that a power supply to the stators of 0.315 cps assures good mixing in a ladle 210 cm in diameter (70 tons of metal). The stators' design is such that

Card 1/2

L 16721-63

S/124/63/000/004/007/064

Electromagnetic mixing of

they can function without cooling for 15-20 min., even though the power being fed amounts to 160 kw. The second degassing method has several advantages over the first (the sparging of steel in a vacuum chamber upon entry into it, the continuity of the process etc.) and has a number of disadvantages, making its adoption difficult: 1) the pumping of steel with conduction pumps becomes difficult in view of the problem of contacting the electrode with the liquid metal (graphite electrodes change the composition of the steel); and 2) the electromagnetic induction pumps in view of the peculiarities of steel production (large dimensions etc.) require a very high magnetizing current and hence high linear current loads at the stators' surfaces. In spite of this difficulty, two types of electromagnetic induction pumps were developed; at frequencies of 50 and 16 cps at a depth of liquid steel amounting to 30 and 80 mm, the output 85 and 173 cubic meters/hour at power of 2050 and 1650 kw respectively. V. K. Gretsov.

[Abstracter's note: Complete translation.]

Card 2/2

REZIN, M.G.; DROPACHEV, G.P.; DROBININ, Ya.I.; KOCHNEV, E.K.; GOLUBEV, M.S.

"Electromagnetic metal mixing in steel smelting arc furnaces" by
N.V.Okorokov. Reviewed by M.G.Rezin and others. *Elektrichestvo* no.3:
95-96 Mr '63. (MIRA 16:4)
(Electric furnaces) (Electromagnets) (Okorokov, N.V.)

KOCHNEV, Eval'd Kuz'mich, starshiy prepodavatel'; REZIN, Mikhail
Grigor'yevich, kand.tekhn.nauk, dotsent

Study of devices for electromagnetic transportation of molten
metals. Izv.vys.ucheb.zav.; elektromekh. 5 no.9:963-973 '62.
(MIRA 16:1)

1. Kafedra obshchey elektrotekhniki Ural'skogo politekhnicheskogo
instituta (for Kochnev). 2. Kafedra elektricheskikh mashin
Ural'skogo politekhnicheskogo instituta (for Rezin).
(Liquid metals)

SEMENOV, N.M.; AGAPOV, A.V.; REZINKO, D.S.; ROZHKOV, A.A.

Effect of the severe winter of 1955-1956 on some mammals in
steppes of the Sarpa region [with summary in English]. Zool. zhur.
37 no.8:1223-1227 Ag '58. (MIRA 11:9)

1. Gosudarstvennyy nauchno-issledovatel'skiy institut mikrobiologii
i epidemiologii Yugo-Vostoka SSSR, Saratov i Stalingradskaya
protevochnaya stantsiya.
(Sarpa region--Zoology--Ecology) (Winter)

REZIN, M.G., kand.tekhn.nauk, dotsent; KROPACHEV, G.P., kand.tekhn.nauk,
dotsent; DROBININ, Ya.I., inzh.; KOCHNEV, E.K., inzh.;
GOLUBEV, N.S., inzh.; MASHKAUTSAN, V.V., inzh.

"Physical and mathematical principles of magnetic transportation
of molten metals" by G.A. Ostroumov. Reviewed by M.G. Rezin and
others. Elektrichestvo no.7:91-93 J1 '62. (MIRA 15:7)
(Liquid metals)
(Ostroumov, G.A.)

PARSHIN, A.A., inzh.; REZINK, V.I., inzh.; KHRISTICH, L.M.

New boiler units at the Taganrog Boiler Plant. Bezopasnaia truda v prom. 7
no.1:13-15 Ja '63. (MIRA 16:2)

(Taganrog—Boilers)

MIRONOV, N.P.; NEL'ZINA, Ye.N.; KLIMCHENKO, I.Z.; REZINKO, D.S.; CHERNOVA, N.I.;
DANILOVA, G.M.; SAMARINA, G.P.; RODIONOVA, A.V.

Spatial distribution of fleas in the burrows of the lesser
suslik (*Citellus pygmaeus*) and efficient methods of estimating
their abundance. Zool. zhur. 42 no.3:384-394 '63.

(MIRA 17:1)

1. Rostov-on-Don Research Anti-Plague Institute, and Astrakhan
Anti-Plague Station.

REZINKO, D.S.

SEMENOV, N.M.; REZINKO, D.S.

Reaction of lesser susliks (*Citellus pygmaeus* Pall.) to various baits and to methods of setting them out. Zool.zhur.34 no.1:208-215 Ja-F '55. (MIRA 8:3)

1. Gosudarstvennyy nauchno-issledovatel'skiy institut mikrobiologii i epidemiologii Yugo-Vostoka SSSR ("Mikrob") i Stalingradskaya stantsiya Ministerstva zdravookhraneniya SSSR. (Susliks)

S/262/62/000/010/015/024
1007/1207

AUTHOR. Rezinkov, V. D., Puchkov, N. G. and Borovaya, M. S.
TITLE: Calculation of proper concentration of neutralizing additives to motor lube-oils
PERIODICAL Referativnyy zhurnal, otdel'nyy vypusk. 42. Silovyye ustanovki, no. 10, 1962, 68, abstract 42.10.384. In collection "Prisadki k maslam i toplivam". M., Gostoptekhizdat, 1961, 297-304

TEXT: The influence is studied of the degree of concentration of цнатим 339 (tsiatim 339) and внии нп-360 (vnii np-360) additives on coke formation and wear in a four-stroke diesel engine. A method has been devised for determining the proper concentration of neutralizing additives. For the second type of additives to fuels with a varying sulfur-content, used in a Д-38 (D-38) diesel, the predicted values (of concentrations) show good agreement with the experimental data. There are 4 figures and 7 references.

[Abstracter's note: Complete translation.]



Card 1/1

REZINOVSKIY, A. (Kiyev)

Design of a multistage divider. Radio no.3:57 Mr '61.

(MIRA 14:8)

(Electric networks)

REZINSKICH, F. F., PLATONOV, B. P., RABINOVICH, Benedikt V.,

"Thin-walled sand molds"

To be submitted for the 28th International Foundry Congress, Vienna, Austria, 19-24
June 1961.

BEZINSKIY, P.P.

Mechanism of packing by ramming the mixture in a closed flask.
Lit. proizv. no.3:39-42 Mr '65. (MIRA 18:6)

RABIMOVICH, B.V.; PLATONOV, B.P.; REZINSKIKH, F.F.

Thin-walled molds. Lit.proizv. no.7:10-14 JI '61. (MIRA 14:7)
(Molding (Founding))

KANAVETS, P.I.; GESS, B.A.; SPORIUS, A.E.; CHERNYSHEV, A.M.;
MELENT'YEV, P.N.; CHERNYKH, V.I.; KHROMYAK, R.P.;
KHAYLOV, B.S.; BORISOV, Yu.I.; TSYLEV, L.M.; SOKOLOV, V.S.;
Prinimali uchastiye: MARKIN, A.A.; GORLOV, M.Ya.;
VORONOV, Yu.G.; BULAKHOV, K.A.; KREMYANSKIY, V.L.; ARSHINOV,
G.P.; MAZUN, A.Y.; PISARNITSKIY, I.M.; BOKUCHAVA, O.A.;
KIRILLOV, M.V.; TSELUYKO, P.I.; POLYAKOV, G.O.; REZKOV, A.S.;
ZHUCHKOV, M.I.; ROMASHKIN, A.S.; ZUBKOV, A.S.; KOZLOV, N.N.

Pilot plant for the nodulizing of finely ground charge mix-
tures by the method of chemical catalysis, Trudy IGI 22:
93-109 '63.

(MIRA 16:11)

1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31 32 33 34 35 36 37 38 39 40 41 42 43 44 45

1ST AND 2ND ORDERS

PROCESSES AND PROPERTIES INDEX

1ST AND 2ND ORDERS

BC

B-I-L

Unless bronze. M. Ranzov (Vestn. Stand., 1935, No. 1, 21-26).—Data for Al-, Si-, and Mn-bronze are summarised. Mn-bronze has good heat-resistance. Its tensile strength drops from 36 to 26 kg./sq. mm. at 400°.

Cu. Ann. (e)

ASM-A1A METALLURGICAL LITERATURE CLASSIFICATION

1ST AND 2ND ORDERS

1ST AND 2ND ORDERS

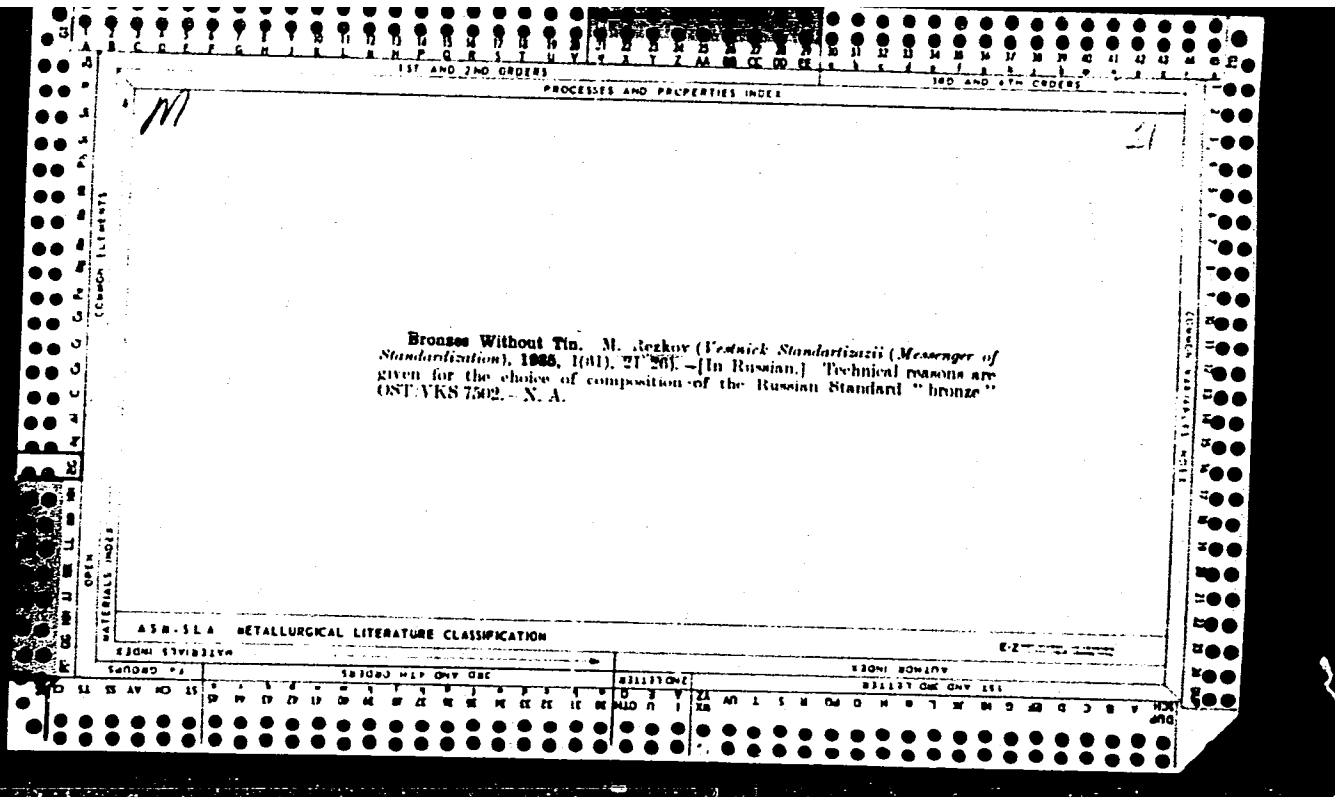
PROCESSUS AND PROPERTIES INDEX

2

Tinless Bronze. M. Rezkov (*Izvestnik Standardizatsii*, 1935, (1), 21-26; *C. Abstr.*, 1935, 20, 3967).—[In Russian.] Examples of tinless "bronzes" are classified as: (1) aluminium "bronzes" having (a) aluminium 5 or 10% (the rest being copper), (b) aluminium 9 and manganese 2%, (c) aluminium 9 and iron 4%, (d) aluminium 10, iron 3, and manganese 1.5%, (e) aluminium 5, 10 and nickel 1-8%, (f) aluminium 7 and silicon 1%; (2) silicon "bronzes" with (a) silicon 3%, (b) silicon 4 or 3 and zinc 4 or 9%, (c) silicon 3 and lead 6%; (3) manganese "bronzes" (manganese 5%). The most important advantage of manganese "bronzes" is its heat resistance: at 400° C. its tensile strength decreases from 36 kg./mm.² only to 26 kg./mm.². S. G.

ASB-SLA METALLURGICAL LITERATURE CLASSIFICATION

E-2



REZKCV, Mikhail Alekseyevich, jt. au.

The standards of non-ferrous metals and alloys. vyp. 1- Moskva, Standartizatsiia
i ratsionalizatsiia, 1933-

AZOS, S.; AREF'YEV, A.; ARTAMONOV, I.; BABINA, I.; BEREHOVSKIY, V.; BLOZHEKO, V.;
BRAVERMAN, A.; BYKHOVSKIY, Yu.; VINOGRADOVA, M.; GALANKINA, Ye.;
GIL'DENGERSH, F.; GLOBA, T.; GREYVER, N.; GORDON, G.; GUL'DIN, I.;
GULYAYEVA, Ye.; GUSHCHINA, I.; DAVYDOVSKAYA, Ye.; DAMSKAYA, G.;
DERKACHEV, D.; YEVDOKIMOVA, A.; YEGUNOV, V.; ZABELYSHINSKIY, I.;
ZAYDENBERG, B.; AZMOSHNIKOV, I.; ITKINA, S.; KARCHEVSKIY, V.;
KLUSHIN, D.; KUVINOV, Ye.; KUZNETSOVA, G.; KURSHAKOV, I.;
LAKERNIK, M.; LEYZEROVICH, G.; LISOVSKIY, D.; LOSKUTOV, F.;
MALEVSKIY, Yu.; MASLYANITSKIY, I.; MAYANTS, A.; MILLER, L.;
MITROPANOV, S.; MIKHAYLOV, A.; MYAKINENKOV, I.; NIKITINA, I.;
NOVIN, R.; OGNEV, D.; OL'KHOV, N.; OSIPOVA, T.; OSTRONOV, M.;
PAKHOMOVA, G.; PETKER, S.; PLAKSIN, I.; PLETENEVA, N.; POPOV, V.;
PRESS, Yu.; PROKOF'YEVA, Ye.; FUCHKOV, S.; REZKOVA, F.; RUMYANTSEV, M.;
SAKHAROV, I.; SOBOL', S.; SPIVAKOV, Ya.; STRIGIN, I.; SPIRIDONOVA, V.;
TIMKO, Ya.; TITOV, S.; TROITSKIY, A.; TOLOKONNIKOV, K.; TROPIMOVA, A.;
FEDOROV, V.; CHIZHIKOV, D.; SHEYN, Ya.; YUKHTANOV, D.

Roman Lazarevich Veller; an obituary. TSvet. met. 31 no.5:78-79
My '58.

(MIRA 11:6)

(Veller, Roman Lazarevich, 1897-1958)

KOST'YANOVSKIY, I.A.; PRILUTSKIY, G.Ya.; SHTERN, M.A.; GORELIK, G.N.;
REZKOVA, F.I.

Introducing a new method for the production of zinc oxide for
needs of the paint and other branches of industry. A.K.
Evdokimova, M.V. Potapov, A.K. Shakhnazarov. Remarks by I.A.
Kostianovskii and others. Authors' response. TSvet.met. 35
no.12:69-72 D '62. (MIRA 16:2)

1. Gosudarstvennyy institut po proyektirovaniyu predpriyatiy
nikelevoy promyshlennosti (for Kost'yanovskiy, Prilutskiy).
2. Gosudarstvennyy nauchno-issledovatel'skiy i projektnyy
institut lakokrasochnoy promyshlennosti (for Shtern, Gorelik).
3. Gosudarstvennyy institut po proyektirovaniyu predpriyatiy
promyshlennosti tsvetnoy metallurgii (for Rezkova).
(Zinc oxide) (Evdokimova, A.K.)
(Potapov, M.V.) (Shakhnazarov, A.K.)

FRANEK, J.; PROCHAZKA, O. Technical assistance; REZKOVA, Vera

Fluorescent antibody demonstration of *Pasteurella tularensis*.
Folia microbiol. (Praha) 10 no.2:77-84 Mr '65.

1. Military Institute of Hygiene, Epidemiology and Microbiology,
Prague.

FRANPK, J.; WOLFOVA, Jarmila. Technical assistance: REZKOVA, Vera

Use of the immunofluorescence method in an epidemic focus of
tularemia. Folia microbiol. (Praha) 10 no.2:85-92 Mr 1965.

1. Military Institute of Hygiene, Epidemiology and Microbiology
Prague; District Station of Hygiene and Epidemiology, Louny.

REZKOVA-MOURALOVA, H., Mudr.

The concept of physical education as a scientific medical specialty.
Cesk. zdravot. 7 no.10:612-617 N '59

1. Ministerstvo zdravotnictvi, odbor lecebne preventivni pece.
(PHYSICAL EDUCATION AND TRAINING)

SANDA, J., Inž. Arch.; BOHAC, V., Inž. Arch.; REZKOVA-MOURALOVA, H., MUDr.

Patho-anatomical department in regional hospitals. Cesk. zdravot.
7 no.7:366-373 Aug 59

1. Ministerstvo zdravotnictví.
(HOSPITALS) (PATHOLOGY)

REZKOVA-MOURALOVA, H., MUDr.; WUNSCHOVA, B., MUDr.

Improvement in medical care for mentally ill, Cesk. zdravot. 6 no.2:
81-84 Mar 58.

1. Ministerstvo zdravotnictvi - odbor lecebne preventivni pece.
(MENTAL DISORDERS, prev. & control
in Czech., improvement (Cz))

REZI, Vlastimil

Determining the chinalines by gas-liquid chromatography.
Chem prum 12 no.5:246-247 My '62.

1. Vyzkumny ustav pro koksocbeni, Tirovy navody, Ostrava.

EXCERPTA MEDICA Sec.2 Vol.9/10 Physiology, etc. Oct56

4803. REZLER D. and MARTÍNEK K. 3. Vnitřní Klin., Brněnské Univ., Endo-
krinol. Odd. KÚNZ, Brno. *Léčení thyreotoxikosis chloristanem draselným.
Treatment of thyrotoxicosis with $KClO_4$, VNITŘ. LEK. 1956,
2/3 (269-271) Tables 1

$KClO_4$ was administered to 29 patients with thyrotoxicosis of different severity,
including 5 patients with toxic adenoma. The daily dose was 4 X 200 mg. In 5 pa-
tients the treatment was stopped because of side-effects. Of 24 patients under
treatment for 42 days to 8 months, 2 did not respond. The condition improved in
13 patients and 9 were well compensated. The greatest success was observed in 5
patients with toxic adenoma. (VI, 2)

CZECHOSLOVAKIA/Human and Animal Physiology - Internal Secretion. T-7
The Thyroid.

Abstr Jour : Ref Zhur - Biol., No 10, 1958, 34363

Author : Rezler, Dusan; Spurny, Ivan

Inst :

Title : Treatment of Thyrotoxicosis with Potassium Perchlorate.

Orig Pub : Vnitri lekarstvi, 1957, 3, No 12, 1089-1095

Abstract : For 2-16 months, 11 patients with Basedow's disease, 31 patients with toxic adenoma, and 137 patients with thyrotoxicosis of medium severity were given internally 0.2 gr of potassium perchlorate 4 times daily. Best results were obtained in patients of the 3rd group, who recovered almost completely. In the 2nd group the obtained results were not as favorable as in the 3rd group. It is recommended that methylthiouracil (0.5 gr 3 times daily) should be administered simultaneously. -- V.V. Yazvikov

Card 1/1

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$KClO_4$ was administered to 29 patients with thyreotoxiosis of different intensity, including 5 patients with toxic adenoma. The daily dose was 4 X 200 mg. In 5 patients the treatment was stopped because of side-effects. Out of 24 patients under treatment for from 42 days to 8 months, 2 did not respond. The condition improved in 13 patients and 9 were well compensated. The greatest success was observed in 5 patients with a toxic adenoma. (VI, 2)

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