POTRUNIN, Boris, master

Every day we assemble the parts for one apartment house. Stroitel' no.8:29 Ag '61. (MIRA 14:8)

1. Moskovskiy domostroitel'nyy kombinat No.1.
(Moscow--Precast concrete)

POTRUSAYEV, A.I.; SAMARIN, A.M.

Quality of steel smelted by the converter-electric furnace method. Izv. vys. ucheb. zav.; chern. met. no.9:50-56 '60.
(MIRA 13:11)

1. Moskovskiy institut stali.
(Steel--Metallurgy)

POTRUSAYEV, A. P.

Cand Tech Sci - (diss) "Study of duplexes as a process, oxygen converter as an electric furnace, and the evaluation of the quality of steel." Moscow, 1961. 15 pp; 1 page of tables; (Academy of Sciences USSR, Inst of Metallurgy imeni A. A. Baykov); 150 copies; price not given; (KL, 7-61 sup, 244)

POTRUSAYEV, A.P

85

PHASE I BOOK EXPLOITATION SOV/5556

Moscow. Institut stali.

Novoye v teorii i praktike proizvodstva martenovskoy stali (New [Developments] in the Theory and Practice of Open-Hearth Steelmaking) Moscow, Metallurgizdat, 1961. 439 p. (Series: Trudy Mezhvuzovskogo nauchnogo soveshchaniya) 2,150 copies printed.

Sponsoring Agency: Ministerstvo vysshego i srednego spetsial'nogo obrazovaniya RSFSR. Moskovskiy institut stali imeni I. V. Stalina.

Eds.: M. A. Glinkov, Professor, Doctor of Technical Sciences, V. V. Kondakov, Professor, Doctor of Technical Sciences, V. A. Kudrin, Docent, Candidate of Technical Sciences, G. N. Oyks, Professor, Doctor of Technical Sciences, and V. I. Yavoyskiy, Professor, Doctor of Technical Sciences; Ed.: Ye. A. Borko; Ed. of Publishing House: N. D. Gromov; Tech. Ed.: A. I. Karasev.

PURPOSE: This collection of articles is intended for members of scientific institutions, faculty members of schools of higher education, engineers concerned with metallurgical processes and physical chemistry, and students specializing in these fields.

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New [Developments] in the Theory (Cont.) SOV/5556

COVERAGE: The collection contains papers reviewing the development of open-hearth steelmaking theory and practice. The papers, written by staff members of schools of higher education, scientific research institutes, and main laboratories of metallurgical plants, were presented and discussed at the Scientific Conference of Schools of Higher Education. The following topics are considered: the kinetics and mechanism of carbon oxidation; the process of slag formation in open-hearth furnaces using in the charge either ore-lime briquets or composite flux (the product of calcining the mixture of lime with bauxite); the behavior of hydrogen in the open-hearth bath; metal desulfurization processes; the control of the open-hearth thermal melting regime and its automation; heat-engineering problems in large-capacity furnaces; aerodynamic properties of fuel gases and their flow in the furnace combustion chamber; and the improvement of high-alloy steel quality through the utilization of vacuum and natural gases. The following persons took part in the discussion of the papers at the Conference: S.I. Filippov, V.A. Kudrin, M.A. Glinkov, B.P. Nam, V.I. Yavoyskiy, G.N. Oyks and Ye. V. Chelishchev (Moscow Steel Institute); Ye. A. Kazachkov and A. S. Kharitonov (Zhdanov Metallurgical Institute); N.S. Mikhaylets (Institute of Chemical Metallurgy of the Siberian Branch of the Academy of Sciences USSR); A.I. Stroganov and D. Ya. Povolotskiy (Chelyabinsk Polytechnic Institute); P.V. Umrikhin (Ural Polytechnic Institute); I.I. Fomin (the Moscow "Serp i molot" Metallurgical Plant); V.A. Fuklev (Central Asian Polytechnic Institute)

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New [Developments] in the Theory (Cont.) SOV/5556

and M.I. Beylinov (Night School of the Dneprodzerzhinsk Metallurgical Institute). References follow some of the articles. There are 268 references, mostly Soviet.

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32597
S/137/61/000/011/026/123
A060/A101

18.3200

AUTHORS: Samarin, A.M., Petrusayev, A.P.

TITLE: Change in the metal composition under oxygen blow-through

PERIODICAL: Referativnyy zhurnal. Metallurgiya, no. 11, 1961, 47, abstract 11V269 (V sb. "Novoye v teorii i praktike proiz-va martenovsk.stali", Moscow, Metallurgizdat, 1961, 379-387, Discuss. 428 - 439)

TEXT: The metal was blown-through in high-frequency furnaces with 10 and 40 kg capacity, and in an experimental 350 kg converter with basic fettling. In the course of the first 5 minutes the Si is oxidized down to traces, Mn by 80%. The oxidation rate of the carbon content at constant O_2 feed rate is not uniform. At the beginning of the blow-through it constitutes 0.2-0.3% C/min and as the blowing continues it grows to 0.25-0.45% carbon/min, and at the end of the blow-through a drop in the decarbonization rate down to 0.1-0.3 % C/min is observed. The effect of O_2 feed rate and the distance between the tuyere and the vat surface upon the sequence and oxidation rates of C content and P content at the end of the blow through was studied in the 40 kg furnace. The rate of O_2 supply varied between 100 and 150 liters/min, and the tuyere distance - between 25 and 40 mm.

Card 1/2

TURKENICH, D.I.; SMOKTIY, V.V.; POTRUSAYEV, A.P.; POGREBNOY, Yu.N.; ALEKSEYEV, L.A.; ZIN'KO, B.F.

Iron oxidation and the degree of oxygen use in converter smelting. Izv. vys. ucheb. zav.; chern. met. 7 no.1:46-51 '64. (MIRA 17:2)

1. TSentral'nyy nauchno-issledovatel'skiy institut chernoy metallurgii.

TURKENICH, D.I.; MIKHAYLOV, V.A.; POGREBNOY, Ya.N.; POTRUSAYEV, A.P.

Intensity of flame radiation above an oxygen-blown converter as parameter for the automatic stoppage of the smelting process. [Sbor. trud.] TSNIICHM no.29:57-64 '63. (MIRA 17:4)

S/148/60/000/009/007/025
A161/A030

AUTHORS: Potrusayev, A.P., and Samarin, A.M.

TITLE: The quality of steel produced in a duplex-process converter-electric furnace

PERIODICAL: Izvestiya vysshikh uchebnykh zavedeniy. Chernaya metallurgiya, no. 9, 1960, 50-56

TEXT: The use of a duplex-process converter-electric furnace had been decided by the XXth congress of the CPSU, and experiments were necessary in view of no previous experience with this method at the USSR plants. The goals were: 1) To study the process in a converter with an oxygen blast, and the process in an electric furnace using the converter steel; 2) To compare the process in the electric furnace with solid charge with the process with the liquid semi-product; 3) To evaluate the quality of steel produced by the duplex-process. Liquid metal for arc furnaces was produced in converters of 40 and 350 kg capacity with the oxygen blast from the top; steel from the first converter was poured into a 100 kg arc furnace and from the second into a 500 kg arc furnace. Open hearth pig iron

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S/148/60/000/009/007/025
A161/A030

The quality of steel...

molten in the 350 kg converter contained 3.86-4.34% C; 1.19-2.63% Mn; 0.29-1.06% Si; 0.095-0.23% P; 0.019-0.050% S; 0.0084-0.0133% N_2. It was melted in an 0.5 ton electric furnace with basic lining and poured into the converter; blasting started at 1280-1320°C in metal, at a rate of 30-60 m^3/ton; blasting lasted 7-13 min. The change in chemical composition of the metal in a small converter was practically the same as in melting in large converters (Fig.1). The electric furnace process was studied in melting ШХ15 (ShKh15) and "45" steel, in 100 kg and 500 kg arc furnaces with basic lining. For ShKh15 steel the charge in the 100 kg furnace consisted of 70-75% scrap metal and 25-30% liquid semi-product; two heats were melted with oxidization with iron ore and gaseous oxygen, and one without oxidizing; four heats were melted with solid metal charge and oxidation for comparison. In the 500 kg furnace two heats were melted with a liquid semi-product; slag mix from lime and fluorspar; the bath was oxidized with iron ore and oxygen. Three heats were melted for comparison with a solid charge and iron ore. The reducing period in both furnaces was carried out with carbide slag and ferrochrome addition directly onto the bath surface. Steel "45" was melted from a liquid semi-product, with slag mix of lime and fluorspar,

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starting oxidization with iron ore and oxygen after the formation of slag. Two heats were melted with solid charge by conventional techniques, with iron ore for oxidizing. The behaviour of nitrogen was different in the two steel types, which may be explained by the difference in the reducing period conditions. The conclusion was made that nitrogen content in ready steel did not depend on the nature of the metal charge. The steel quality was evaluated by macrostructure and mechanical properties. All ingots were solid; the development of the transcrystallization zone did not depend on the composition of the metal charge and oxidizers; the crystalline structure was determined by the tapping temperature; the metal grain size was also not affected by the nature of the charge, it was obviously determined by the final deoxidization (both steel grades were deoxidized with aluminum). The conclusion: steel melted from a liquid semi-product is the same as regards its mechanical properties as steel melted from solid metal. The mean heat time with liquid semi-product was 2 hr 05 min (or 40.7%) shorter than with solid metal in melting ShKh15 steel, and 2 hr 02 min (45%) shorter in melting "45" steel. The electric power consumption was reduced 37.1% and 35.7% respectively. General conclusions: 1) Steel melted from a liquid

The quality of steel...

semi-product is equivalent with steel melted from solid metal in the content of nonmetallic inclusions, oxygen and nitrogen and in its mechanical properties. 2) The duration of heat with liquid semi-product is nearly twice shorter, and the consumption of electric power nearly 40% lower. There are 4 figures and 3 tables.

ASSOCIATION: Moskovskiy institut stali (Moscow Steel Institute)

SUBMITTED: 20 January 1960

POTRUSIL, Bohumil; UHLIR, Jaromir; HANZL, Josef; JURANEK, Bohuslav

Anoxic cardiac arrest in experimental animals. Rozhl. chir. 41 no.5:319-324 My '62.

1. II chirurgicka klinika v Brne, prednosta prof. MUDr. Jan Navratil.
(ANOXIA exper) (HEART ARREST exper)

POTUSIL, Bohumil; UHLIR, Jaromir; HANZL, Josef

Potassium cardiac arrest and the effect of ATP on the course of restored rhythm. Rozhl. chir. 41 no.1:12-18 Ja '62.

1. II chirurgicka klinika university J.Ev.Purkyne v Brne, prednosta prof. MUDr. Jan Navratil.
(POTASSIUM toxicol) (HEART ARREST exper)
(ADENOSINE PHOSPHATES pharmacol)

POTRUSIL, Bohumil; UHLIR, Jaromir; HANZL, Josef

Cardioplegia induced by a combination of syntostigmin with acetylcholine. Scr. med. fac. med. Brunen. 35 no.3:81-85 '62.

1. II. chirurgicka klinika lekarske fakulty university J.E. Purkyne v Brne Prednosta: prof. MUDr. Jan Navratil.
(ACETYLCHOLINE pharmacol) (NEOSTIGMINE pharmacol)
(HEART ARREST experimental)

UHLIR, Jaromir; POTRUSIL, Bohumil; HANZL, Josef; HEJLOVA, Zora; PERESTY, Stanislav; SEDLARIK, Karel; DOLINA, Jiri

Reconstruction of tips of cardiac valves. Rozhl. chir. 41 no.5:306-312 '62.

1. II chirurgicka klinika lekarske fakulty University J.Ev.Purkyne v Brne, prednosta prof. MUDr. Jan Navratil.
(HEART VALVES surg)

UHLIR, J.; POTRUSIL, B.; HANZL, J.; JOBANEK, B.; MACEK, M.; DVORAK, J.,inz.

Contribution to the problem of terylene tissue prostheses. Rozhl. chir.39 no.11:721-726 N'60.

1. II. chirurgicka klinika v Brne, prednosta prof. dr. Jan Navratil I. patologicko-anatomicky ustav v Brne, prednosta prof.dr. Jaroslav Svejda. Vyzkumny ustav pletarsky v Brne.
(ARTERIES surg)

UHLIR, Jaromir; HANZL, Josef; POTRUSIL, Bohumil; JOBANEK, Bohuslav

An experimental contribution to extracardiac circulation. Rozhl. chir. 40 no.7:433-438 Jl '61.

1. II chir. klinika v Brne, prednosta prof. dr. Jan Navratil.

(HEART MECHANICAL)

POTRYAGIN, L. S.

"Some Topological Invariants of Closed Riemannian Manifolds," Iz. Akad. Nauk SSSR, Ser. Matemat., 13, No. 2, 1949.

05212
SOV/142-2-3-20/27

9(2,3)

AUTHORS: Kulikovskiy, A.A., Potryasay, V.F., Sutyagin, V.Ya., Ryzhkov, A.S.

TITLE: The Terminology in the Field of Transistor Electronics

PERIODICAL: Izvestiya vysshikh uchebnykh zavedeniy, Radiotekhnika, 1959, Vol 2, Nr 3, p 378 (USSR)

ABSTRACT: The authors refer to the article by T.M. Agakhanyan, B.N. Kononov and I.P. Stepanenko, titled "The Terminology in the Field of Transistor Electronics", published in Izvestiya vysshikh uchebnykh zavedeniy, Radiotekhnika, 1958, Vol 1, Nr 4. The authors agree in principle with the suggestions made in the aforementioned article and present some of their own ideas as an addition. For example the Russian terms "baza" (base) and "tranzistor" (transistor) should be sanctioned, although there might be some conflict with the term "poluprovodnikovyy diod" (semiconductor diode) which also belongs to the transistor class. The authors regard the terms "dyrochnyy tranzistor" ('hole' transistor) and "elektronnyy tranzistor" ('electron' transistor) as superflous and recommend the designation p-n-p or n-p-n transistor. Similar suggestions were made for the classification of diode types.

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30500
S/194/61/000/008/049/092
D201/D304

9,4310 (1139, 1143, 1159)

AUTHORS: Potryasay, V.F., Ryzhov, A.S. and Sutyagin, V.Ya.

TITLE: Transistor noise

PERIODICAL: Referativnyy zhurnal. Avtomatika i radioelektronika, no. 8, 1961, 14, abstract 8 D98 (V sb. Poluprovodnik. pribory i ikh primeneniye, v. 5, M., Sov. radio, 1960, 107-158)

TEXT: It is shown that the noise factor F should be taken as the basic factor determining the noise properties of transistor amplifiers. Possibilities are considered of replacing the transistor noise by a noisy four-pole of the equivalent transistor circuit, having internal noise sources. The bloc-diagram is given for measuring the noise parameters. Formulae are given for evaluating F in the region of white noise and at HF from the equivalent circuit of Giacoletto, containing 4 uncorrelated noise sources corresponding to the following: Thermal noise of the ohmic base resistance; shot

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Transistor noise

noise of d.c. and thermal currents through the emitter transition; the shot noise of the collector current component, due to the emitter minority carriers transgressed into the base; the shot noise of the thermal current passing through the collector transition. The circuit applies to the region of white noise. Examples are given of evaluation of F in the region of white and redundant noise and also at HF. A short exposition is given of the direct and modulation method and of the comparison method as used in measuring F. A detailed description is given of the arrangement for measuring the noise factor by the method of comparison of a noise generator with a sinewave generator in the frequency range 0.16-20 and 30 ÷ 100 Mc/s. 14 references. [Abstracter's note: Complete translation]

Card 2/2

FLEYSHER, Solomon Meyyerovich; POTKYASAY, V.F., red.; SHIROKOVA, M.M., tekhn. red.

[New developments in tube-type radio receivers] Novoe v lampovykh radioveshchatel'nykh priemnikakh. Moskva, Gosenergoizdat, 1961. 167 p. (Massovaia radiobiblioteka, no.417) (MIRA 15:7)
(Radio—Receivers and reception)

POTRYASAY, V.F.

PHASE I BOOK EXPLOITATION SOV/4677

Poluprovodnikovyye pribory i ikh primeneniye; sbornik statey, vyp. 5 (Semiconductor Devices and Their Application; Collection of Articles, No. 5) Moscow, Izd-vo "Sovetskoye radio," 1960. 270 p. No. of copies printed not given.

Ed. (Title page): Ya. A. Fedotov; Ed. (Inside book): I. M. Volkova; Tech. Ed.: A. A. Sveshnikov; Editorial Board: Ya. A. Fedotov (Resp. Ed.), N. A. Barkanov, I. G. Bergel'son, A. M. Broyde, Ye. I. Gal'perin (Deputy Resp. Ed.), Yu. A. Kamenetskiy, Yu. L. Konev, A. V. Krasilov, A. A. Kulikovskiy, I. F. Nikolayevskiy, and I. P. Stepanenko.

PURPOSE: This collection of articles is intended for specialists working in the field of semiconductor devices.

COVERAGE: The articles discuss basic transistor parameters, methods of measuring them, and some problems in the use of transistor circuit diagrams. Two of the articles describe the use of semiconductor diodes for parametric amplification. No personalities are mentioned. References accompany 11 of the 12 articles.

TABLE OF CONTENTS:

AVAILABLE: Library of Congress

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KULIKOVSKIY, A.A.; POTHYASAY, V.F.; SUTYAGIN, V.Ya.; HYZHOV, A.S.

Terminology in the field of transistor electronics. Izv.vys. uchab.zav.; radiotekh. 2 no.3:378 My-Je '59. (MIRA 13:2)

1. Voyenno-vozdushnaya inzhenernaya Akademiya im. Prof.N.Ye. Zhukovskogo.
(Transistors--Terminology)

BULANOV, Yuriy Andreyevich; USOV, Sergey Nikolayevich; POTRYASAY, V.F., red.; BORUNOV, N.I., tekhn.red.

[Low-frequency amplifiers and radio-receiving systems] Usiliteli nizkoi chastoty i radiopriemnye ustroistva. Moskva, Gos.energ. izd-vo, 1960. 524 p. (MIRA 13:11)
(Radio--Receivers and reception)

KULIKOVSKIY, Aleksandr Aleksandrovich; BOLOSHIN, Igor' Aleksandrovich; POTRYASAY, Vladimir Filippovich; AKALUNIN, S.A., redaktor; CHERNOV, V.S., tekhnicheskiy redaktor

[Principles in teaching radio receiver design] Osnovy uchebnogo proektirovaniia radiopriemnikov. Pod obshchei red. A.A.Kulikovskogo. Moskva, Gos. energ. izd-vo, 1956. 327 p. (MLRA 10:1)
(Radio--Receivers and reception)

POTRYASOV, V.M.

How we are improving the standard of production. TSement 30 no.1:15-16 Ja-F '64. (MIRA 17:8)

POTAN, A. A.

" On the Problem of the Application of High-Voltage Gas-Filled Rectifier Tubes," pp 97-105, il., 4 ref

Abst: Characteristics of gas-filled tube rectifiers developed in the Leningrad Electrical Engineering Institute are considered. A study is made of the operation of a rectifier circuit under no-load conditions. It is shown that even in such a system, for large phase shifts between the current voltage dependent on the circuit parameters, it is impossible to charge the capacitance to the amplitude value of the voltage of the transformer. A formula is derived for computing critical voltage.

SOURCE: Izvestiya Leningr. Elektrotekhn. In-ta im. V. I. Ul'yanova (Lenina) (News of the Leningrad Electrical Engineering Institute imeni V. I. Ul'yanov/Lenin/), No 30, Leningrad, 1956

Sum 1854

POTSAR, A.A., dotsent, kand.tekhn.nauk

Special thyratrons with a short deionization time. Izv. LETI no.38:219-228 '59. (MIRA 13:8)
(Thyratrons)

POTSAR, A.A., kand.tekhn.nauk, dotsent; CHERNIGOVSKIY, V.V., assistent

Quenching of an arc discharge by a transverse magnetic field.
Izv. LETI 57 no.39:105-111 '59. (MIRA 15:10)
(Electric discharges) (Magnetic fields)

POTSAR, A.A., kand.tekhn.nauk, dotsent; BYSTROV, Yu.A., aspirant

Determination of the time of the development of a discharge in devices with hot cathodes. Izv. LETI no.45:101-111 '61. (MIRA 16:5)
(Electric discharge) (Cathodes) (Electron tubes)

9,4120

S/058/61/000/004/025/042
A001/A101

AUTHORS: Potsar, A.A., Chernigovskiy, V.N.

TITLE: Extinction of arc discharge by a transverse magnetic field

PERIODICAL: Referativnyy zhurnal. Fizika, no 4, 1961, 355, abstract 4Zh111 ("Izv. Leningr. elektrotekhn. in-ta", 1959, v. 39, 105 - 111)

TEXT: Processes taking place in an arc discharge are theoretically considered in a simple manner; it is shown that application of a transverse magnetic field to discharge can lead to its extinction. Moreover, a pressure increase and current increase, which generates an excessive negative charge on the walls, must increase the critical magnitude of magnetic field which extinguishes discharges. Experiments were carried out which corroborated the correctness of the conclusions drawn. The possibility of arc discharge extinction by magnetic fields may, in the authors' opinion, be used for designing powerful gas-discharge devices with a short time of deionization.

V. Belyayev

[Abstracter's note: Complete translation.]

Card 1/1

POTSAR, A.A., kand.tekhn.nauk, dotsent; CHERNIGOVSKIY, V.V., assistent

Ignition of a discharge between cold electrodes in a magnetic field.
Izv. LETI no.45:90-100 '61. (MIRA 16:5)
(Magnetic fields) (Electron tubes) (Electric discharge)

POTSAR, A.A., kand.tekhn.nauk, dotsent

Determination of the thermal operation of an oxide cathode for operation in an electron tube. Izv. LETI no.45:81-89 '61.
(MIRA 16:5)

(Electron tubes) (Cathodes)

DOLGIKH, V.A., starshiy nauchnyy sotrudnik; LAVROV, N.I., kand.tekhn.nauk, starshiy nauchnyy sotrudnik; POTSAR A.A., kand.tekhn.nauk, dotsent

Effect of an electric field in the intermediate electrode on the inverse discharge firing voltage in a high-voltage rectifier. Izv. LETI no.45: 112-119 '61. (MIRA 16:5)
(Electric current rectifiers)

S/058/62/000/004/152/160
A061/A101

9,4120

AUTHORS: Potsar, A. A., Bystrov, Yu. A.

TITLE: Determination of the time of discharge evolution in hot-cathode apparatus

PERIODICAL: Referativnyy zhurnal, Fizika, no. 4, 1962, 33, abstract 4-3-65a ("Izv. Leningr. elektrotekhn. in-ta", 1961, no. 45, 101 - 111)

TEXT: Analytic relations are derived between the period of the first stage of discharge evolution in the pulse thyratron, beginning at the moment the positive grid pulse is fed and continuing until the grid current is increased significantly, and the shape of grid voltage pulse, gas pressure, and interelectrode spacing. Approximate formulas are derived on the following assumptions: the field between the grid and cathode is homogeneous and is not distroted by space charges; the main ionization process is the single-impact ionization of gas atoms by electrons emitted from the cathode. The curves, based on the equations of the period of the first stage of discharge as a function of the pulse amplitude, are confronted with experimental data available in the literature. There are 8 references.
[Abstracter's note: Complete translation] A. R.

Card 1/1

9/4120

37350
S/194/62/000/003/027/066
D256/D301

AUTHORS: Potsar, A. A. and Chernigovskiy, V. V.

TITLE: Ignition of discharge between cold electrodes in a transverse magnetic field

PERIODICAL: Referativnyy zhurnal, Avtomatika i radioelektronika, no. 3, 1962, abstract 3-3-15d (Izv. Leningr. elektrotekhn. in-ta, 1961, no. 45, 90-100)

TEXT: The influence is theoretically considered of a transverse magnetic field on the ignition voltage of an electric discharge between cold electrodes in a gas medium. The ignition voltage U_3 can be determined from the equation:

$$\gamma(U_3/x)U_3 = \frac{U_1}{W_i(U_1)}$$

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S/194/62/000/003/027/066
D256/D301

Ignition of discharge ...

where

$$U_1 = \frac{1}{3}\frac{m}{e}\frac{U_3}{(dH)^2}$$

is the mean velocity of electrons in their motion from the cathode towards the anode along a cycloidal trajectory; $\gamma\frac{U_3}{2}$ is the coefficient of secondary emission of electrons under positive ion bombardment; $W_i(U_1)$ is the ionization probability; d is the distance between the electrodes; H is the strength of the magnetic field. It is borne out from the equation solved graphically that the ignition voltage is a function of the product H.d; this fact resembles the similarity relation in gas discharges, and the relation $U_3 =$ $f(H.d)$ has a minimum with two rising branches similar to the Paschen curves. The presented solution is valid only for pressures corresponding to a high directional component of the electron velocity; with increasing pressure the chaotic component of the velocity increases and the influence of the magnetic field on the discharge

Card 2/3

becomes less significant. For small H·d values the electrons can reach the anode practically without collisions owing to the comparatively large diameter of the cycloidal orbits, and in this case the presence of the magnetic field is in its effect similar to an increased pressure. It is shown that the proposed theory is in agreement with the basic experimental results obtained using a glow-discharge rectifier with a transverse magnetic field. 19 references. [Abstracter's note: Complete translation.]

Card 3/3

42969

S/058/62/000/011/035/061
A160/A101

9.4120

AUTHORS: Potsar, A. A., Bystrov, Yu. A.

TITLE: The problem of the mechanism of developing a discharge in sectionalized high-voltage thyratrons

PERIODICAL: Referativnyy zhurnal, Fizika, no. 11, 1962, 26, abstract 11-3-51shch ("Izv. Leningr. elektrotekhn. in-ta", no. 46, 1961, 14 - 22)

TEXT: An investigation was carried out of the mechanism of developing a discharge in sectionalized thyratrons for a case in which the design of intermediate electrodes eliminates the possibility of a direct transit of the electrons from the cathode to the anode. The authors assume that, in this case, there exists a successive discharge firing (beginning with the first one) to the intermediate electrodes. As a result, the voltage between the sections, in which the discharge did not develop yet, will increase, and, at some moment, the whole anode voltage will happen to be applied between the last intermediate electrode and the anode. Within a given time, the velocities of the electrons passing

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POTSAR, A. A., kand. tekhn. nauk, dotsent; BYSTROV, Yu. A., aspirant

Problem concerning the mechanism of the development of discharge in high-voltage sectionalized thyratrons. Izv. LETI 59 no.46: 14-22 '62. (MIRA 15:10)

(Thyratrons)

L 22426-66 EWT(d)/EWP(k)/EWP(l)
ACC NR: AP6013622 SOURCE CODE: UR/0105/65/000/009/0089/0089

AUTHOR: Bogoroditskiy, N. P.; Vinokurov, V. I.; Yermolin, N. P.; Lebedev, A. A.; Potsar, A. A.; Terenin, A. N.; Fremke, A. V.

ORG: none

TITLE: Honoring the 70th birthday of Professor Boris Pavlovich Kozyrev

SOURCE: Elektrichestvo, no. 9, 1965, 89

TOPIC TAGS: academic personnel, electric engineering personnel, IR research, spectroscopy

ABSTRACT: On 1 August 1965 was the 70th birthday of Honored Activist of Science and Engineering RSFSR, Laureate of the State Prize, Dr. Techn. Sci., Professor Boris Pavlovich Kozyrev. Professor Kozyrev's life-work has been inseparably connected since 1921 with the Leningrad Electrical Engineering Institute imeni V. I. Ul'yanov (Lenin), where he rose from the post of assistant to that of full professor - head of the Chair of Principles of Electrovacuum Engineering and Scientific Head of the Problems Laboratory of Radiation Electronics and Vacuum Engineering. Boris Pavlovich Kozyrev has made a series of important scientific contributions to vacuum engineering, optical electronics, and infrared engineering. In 1950 he was awarded the State Prize for the development and introduction of photoptical amplification of weak signals, which contributed to the expansion of research into

UDC: 621.38:535

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T. 22426-66

ACC NR: AP6013622

spectroscopy and infrared engineering in the Soviet Union. The Problems Laboratory which he heads is one of the major Soviet centers of research into thermal radiation sensors which are successfully applied in spectroscopy, atmospheric optics, actinometry, limnology, and studies of the processes of photosynthesis. Professor Kozyrev has at various times been a member of or consultant to scientific and technical councils in different research institutes. He is the author of approximately 150 works and inventions. In addition he is an excellent educator, author of guides and textbooks, faculty dean, the mentor of a large number of graduate students, and a civic-minded person who takes an active part in political and social life. He is the holder of many medals, orders, and other awards. Orig. art. has: 1 figure. [JPRS]

SUB CODE: 09, 20 / SUBM DATE: none

Card 2/2

L 41006-66 EWT(1)/EWT(m)/T IJP(c) DS/AT

ACC NR: AP6018742 SOURCE CODE: UR/0057/66/036/006/1121/1124

AUTHOR: Potsar, A.A.; Solomennikov,G.V.

ORG: Leningrad Electrotechnical Institute im. Ul'yanov (Lenin) Leningradskiy elektrotekhnicheskiy institut)

TITLE: On the temperature conditions in an oxide-coated cathode in a low pressure mercury discharge

SOURCE: Zhurnal tekhnicheskoy fiziki, v. 36, no. 6, 1966, 1121-1124

TOPIC TAGS: cathode, electron tube cathode, barium oxide, temperature control

ABSTRACT: The core and surface temperatures of an oxide coated cathode operating in a low pressure mercury vapor atmosphere were determined as functions of the current drawn from it in order to acquire data that would allow of specifying optimal operating conditions for oxide-coated cathodes in high current applications. The oxide coating was deposited on the plane surface of an indirectly heated base of electrolytic nickel. The core temperature was measured with a thermocouple. To measure the surface temperature of the oxide coating, the near infrared radiation from the surface was focused onto a photoresistor connected into a bridge circuit. The optical device was calibrated against the thermocouple by assuming that the core and surface temperatures were equal when the cathode current was zero. Curves were plotted giving the core and surface temperatures as functions of the cathode current for fixed values

UDC: 537.52

Card 1/2

ACC NR: AR7000950 SOURCE CODE: UR/0275/66/000/011/A022/A022

AUTHOR: Potsar, A. A.; Solomennikov, G. V.

TITLE: Analysis of the work of an oxide cathode in a low-pressure mercury discharge

SOURCE: Ref. zh. Elektronika i yeye primeneniye, Abs. 11A157

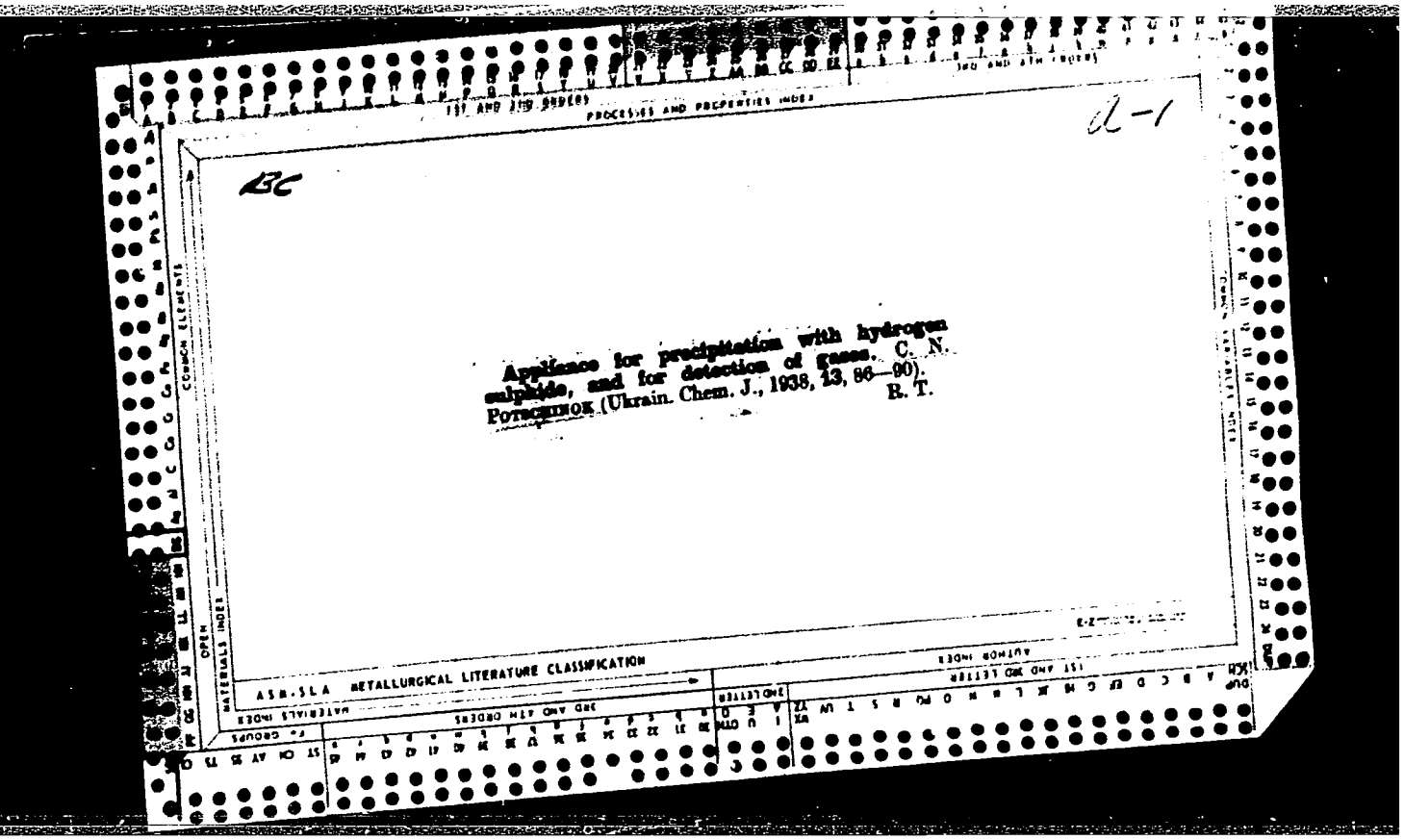
REF SOURCE: Izv. Leningr. elektrotekhn. in-ta, vyp. 56, ch. 2, 1966, 14-18

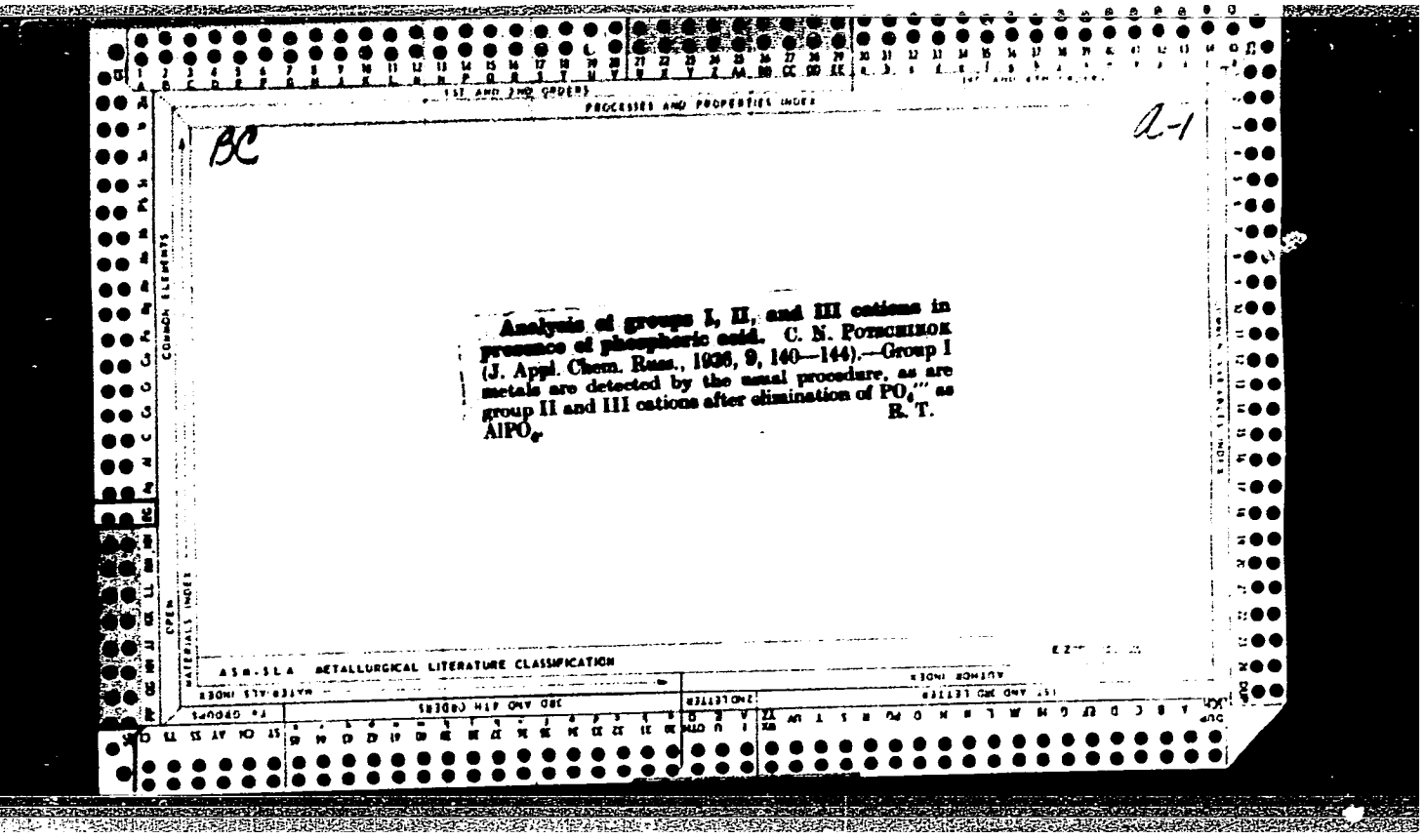
TOPIC TAGS: cathode, oxide cathode, mercury discharge, transverse resistance, low pressure

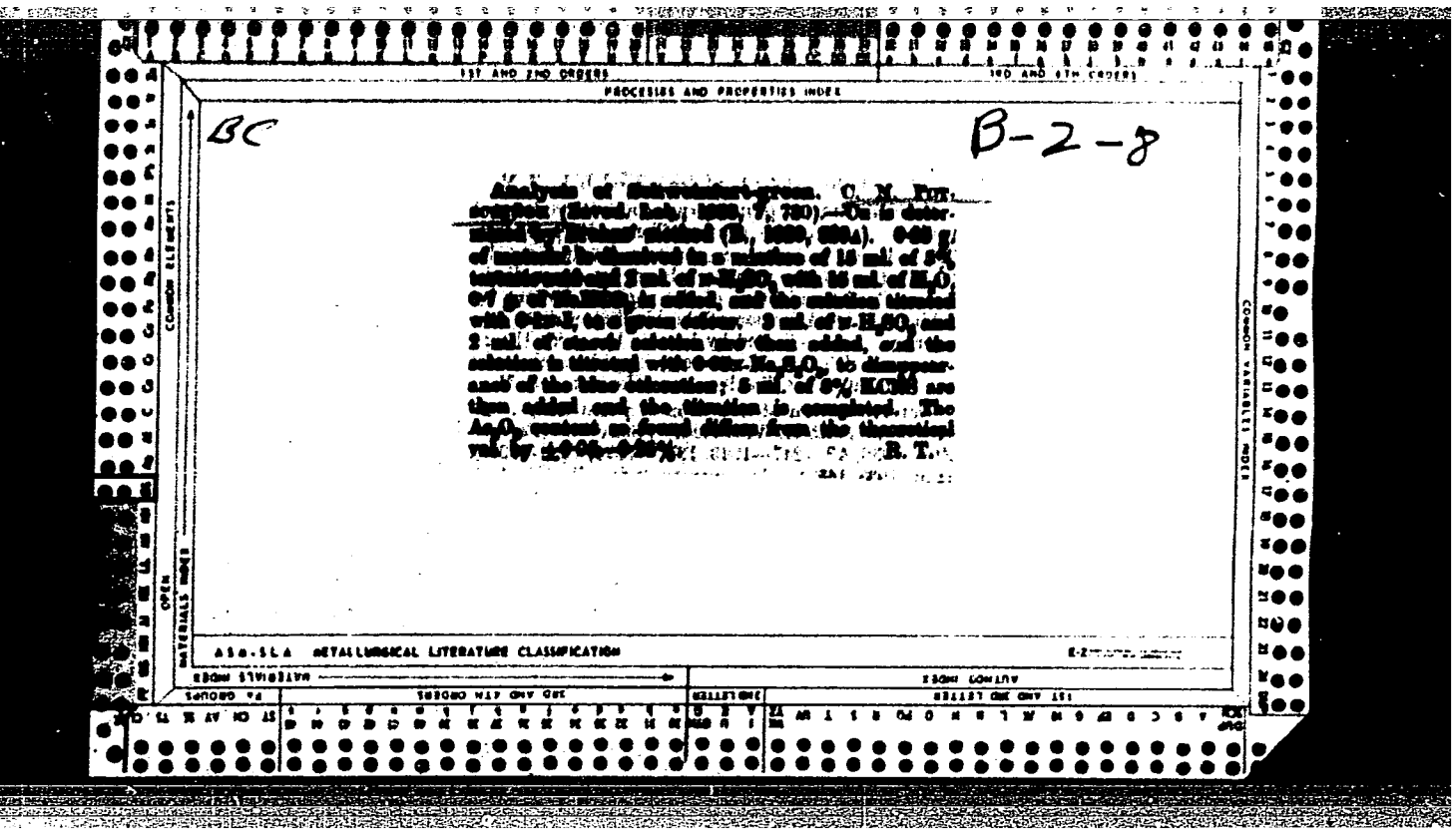
ABSTRACT: An analysis was made to compare the heating of oxide cathodes with pure and with silicon-nickel cores in a low-pressure mercury discharge, and to clarify the role of intermediate and surface layers in transverse cathode resistance. [Translation of abstract] [NT]

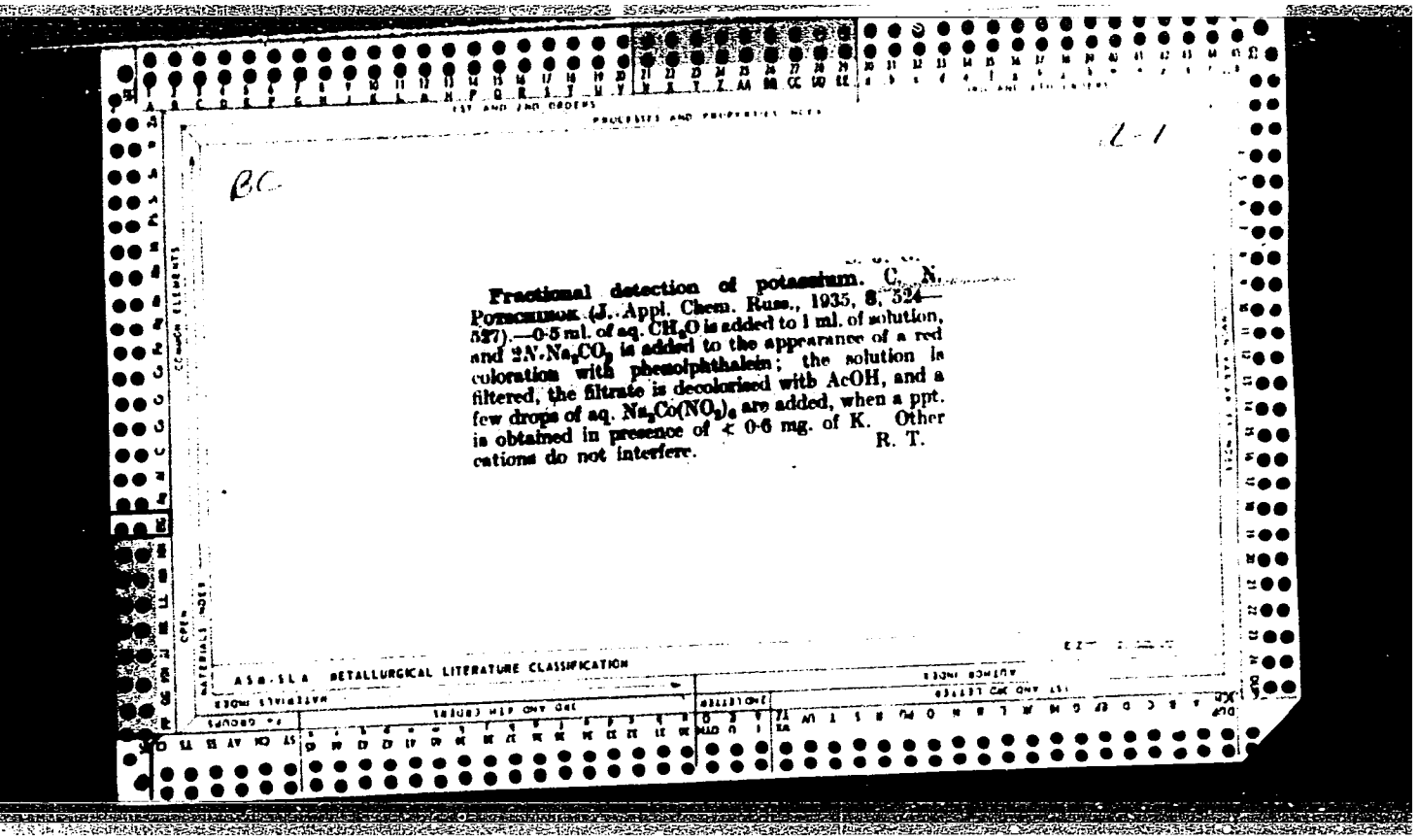
SUB CODE: 11, 20/

Card 1/1 UDC: 537.525





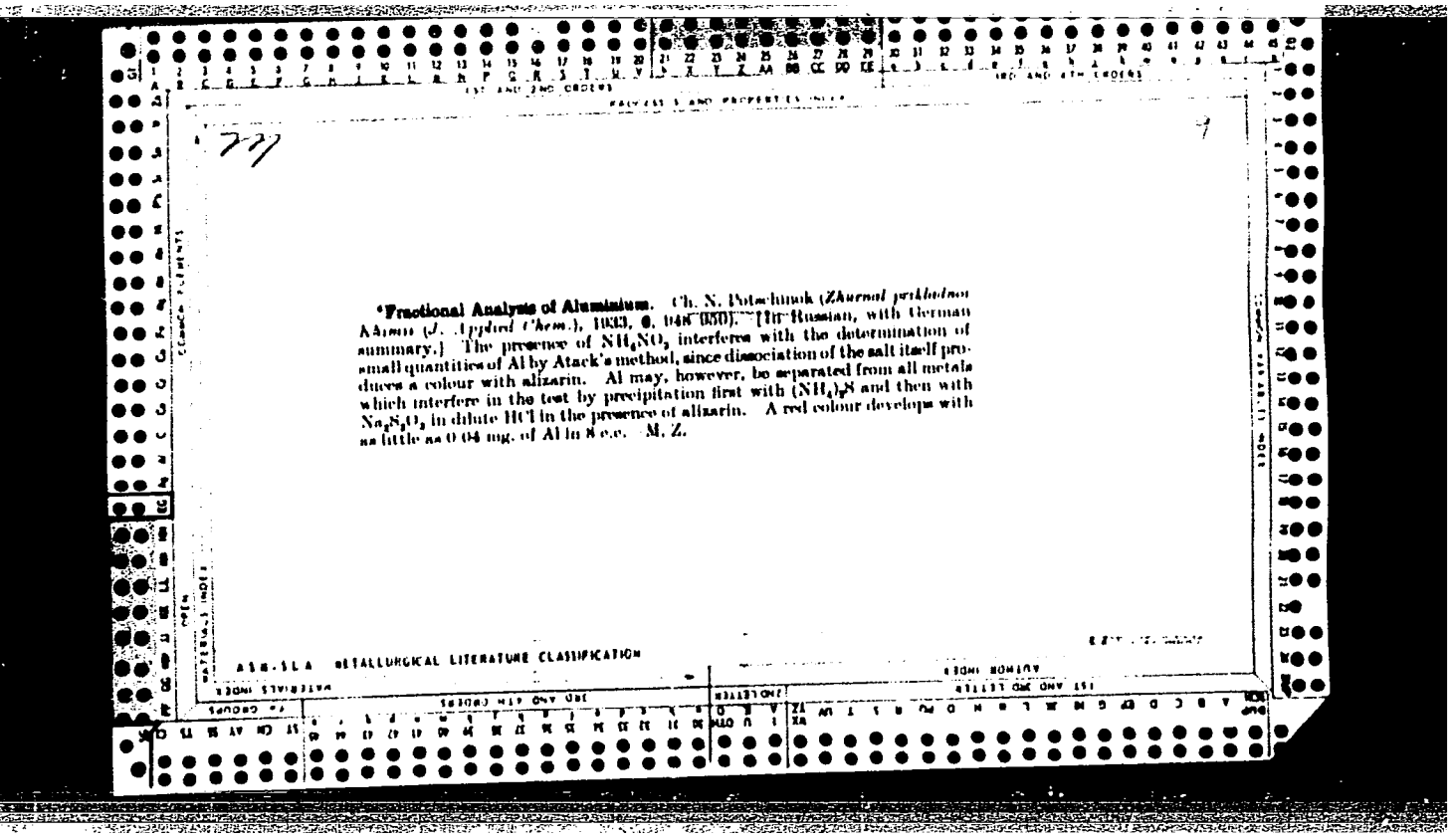




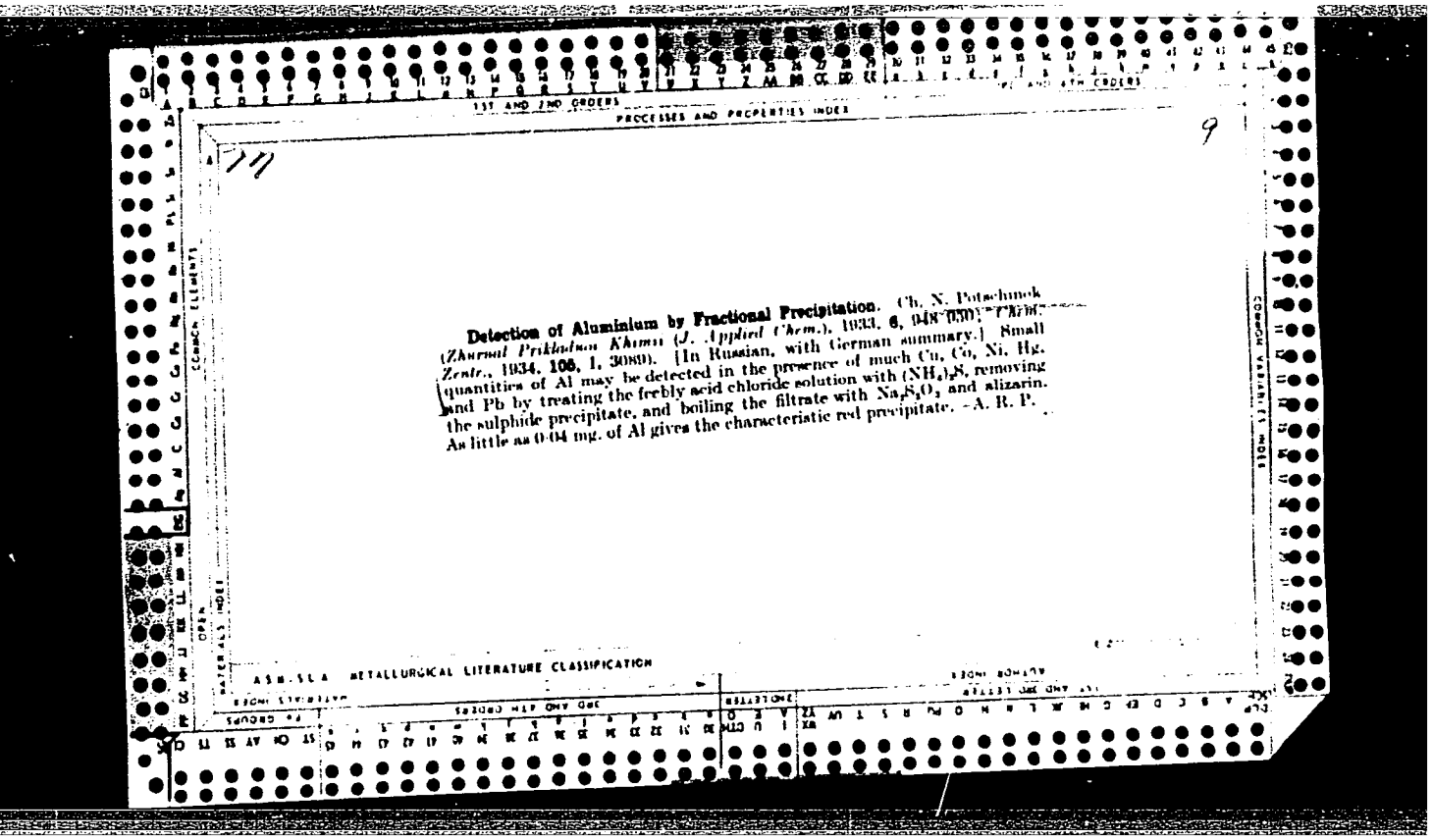
BC

L-1

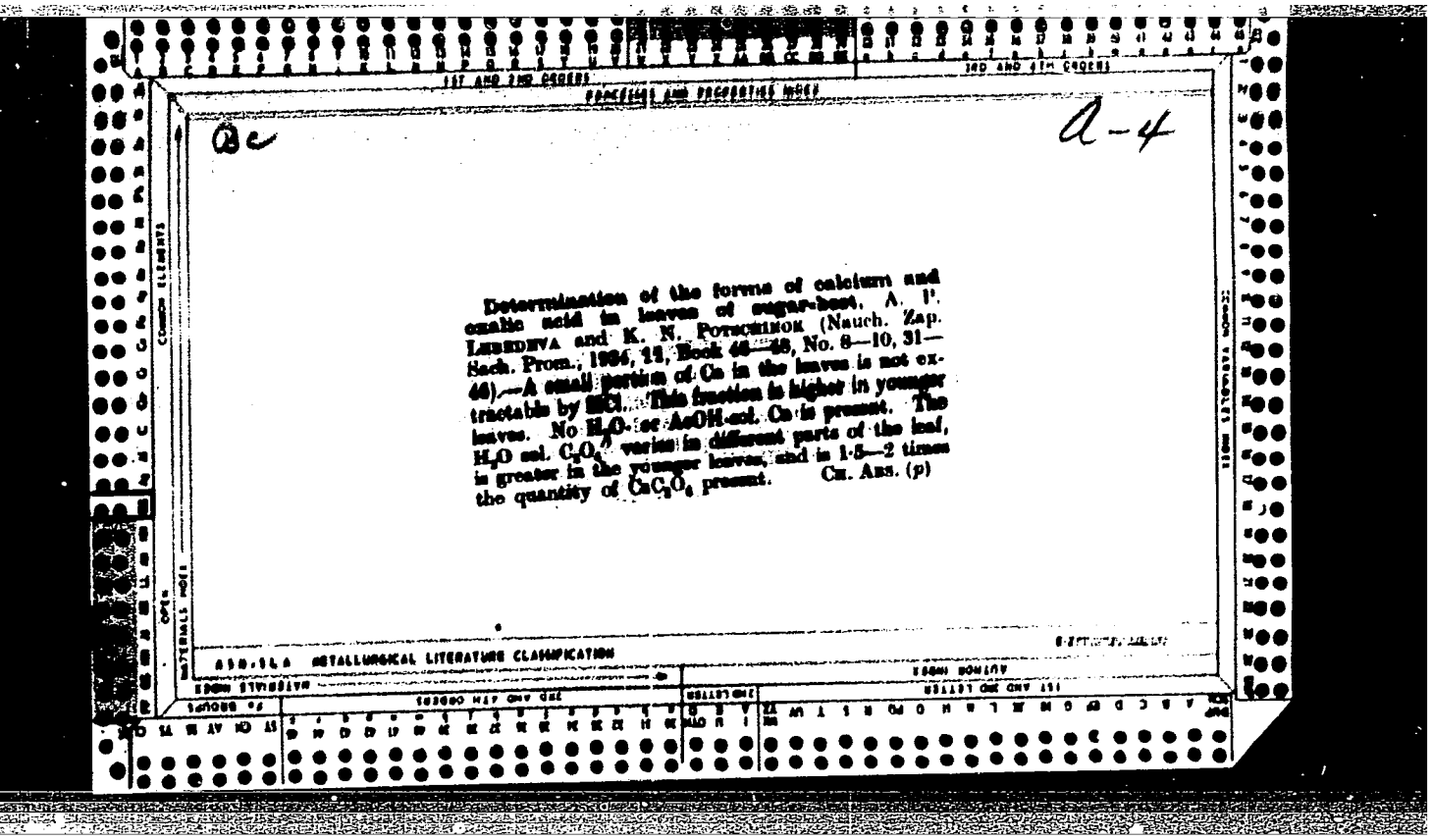
Fractional detection of potassium. C. N. Potschinok (J. Appl. Chem. Russ., 1935, 8, 524—527).—0·5 ml. of aq. CH_2O is added to 1 ml. of solution, and 2*N*-Na_2CO_3 is added to the appearance of a red coloration with phenolphthalein; the solution is filtered, the filtrate is decolorised with AcOH, and a few drops of aq. $Na_3Co(NO_2)_6$ are added, when a ppt. is obtained in presence of < 0·6 mg. of K. Other cations do not interfere. R. T.



Fractional Analysis of Aluminium. Ch. N. Potschinok (*Zhurnal prikladnoi Khimii* (*J. Applied Chem.*), 1933, **6**, 948–950). [In Russian, with German summary.] The presence of NH_4NO_3 interferes with the determination of small quantities of Al by Atack's method, since dissociation of the salt itself produces a colour with alizarin. Al may, however, be separated from all metals which interfere in the test by precipitation first with $(NH_4)_2S$ and then with $Na_2S_2O_3$ in dilute HCl in the presence of alizarin. A red colour develops with as little as 0·04 mg. of Al in 8 c.c. M. Z.



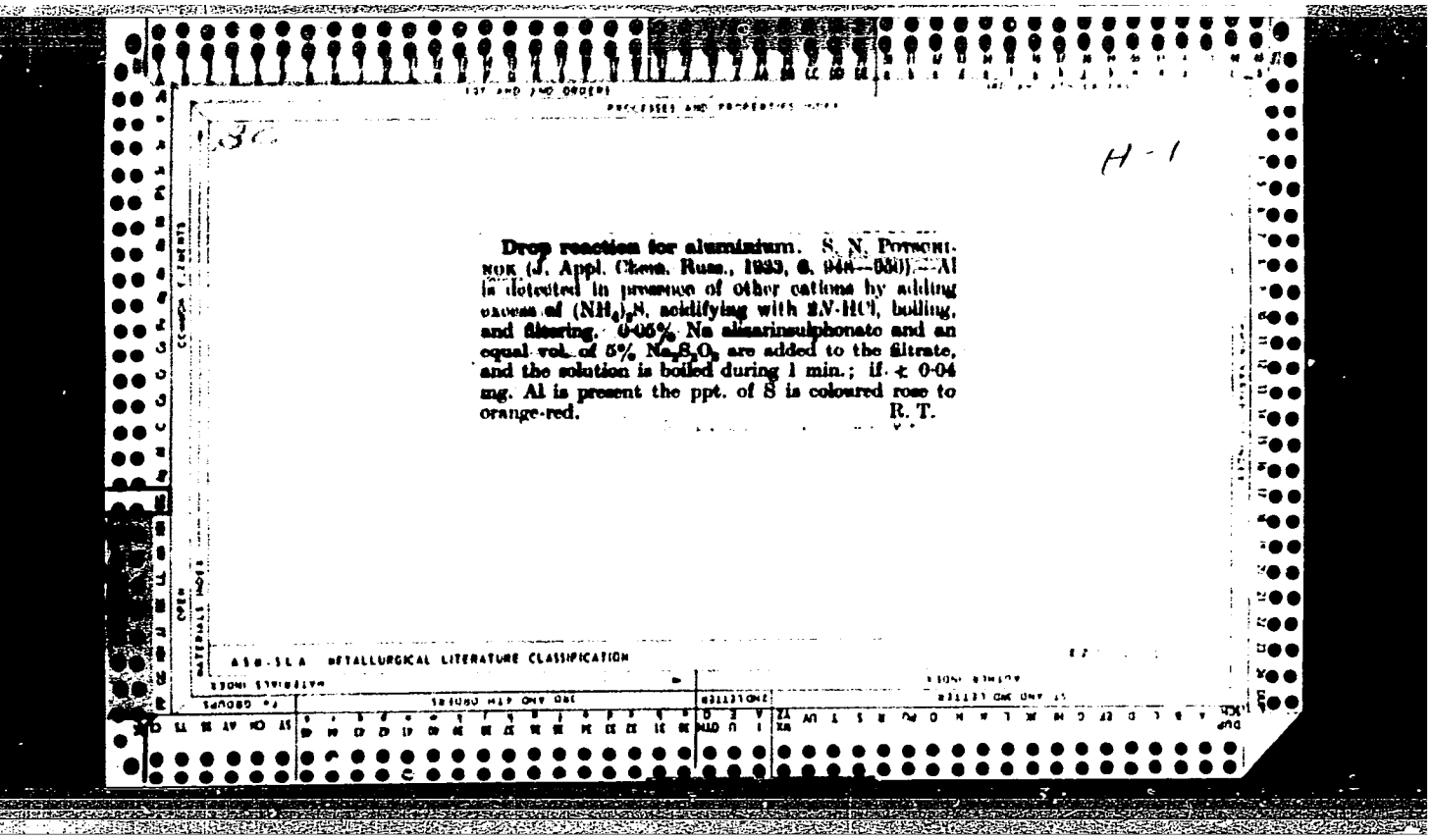
Detection of Aluminium by Fractional Precipitation. Ch. N. Potschinok (*Zhurnal Prikladnoi Khimii* (*J. Applied Chem.*), 1933, **6**, 948–950). [In Russian, with German summary.] Small quantities of Al may be detected in the presence of much Cu, Co, Ni, Hg, and Pb by treating the feebly acid chloride solution with $(NH_4)_2S$, removing the sulphide precipitate, and boiling the filtrate with $Na_2S_2O_3$ and alizarin. As little as 0·04 mg. of Al gives the characteristic red precipitate. —A. R. P.



Qc

a-4

Determination of the forms of calcium and oxalic acid in leaves of sugar-beet. A. P. LEBEDEVA and K. N. PORSHNIKOV (Nauch. Zap. Sach. Prom., 1936, 11, Book 46—48, No. 8—10, 31—46).—A small portion of Ca in the leaves is not extractable by HCl. This fraction is higher in younger leaves. No H_2O- or AcOH-sol. Ca is present. The H_2O sol. C_2O_4'' varies in different parts of the leaf, is greater in the younger leaves, and is 1·5—2 times the quantity of CaC_2O_4 present. Ch. Abs. (p)



H-1

Drop reaction for aluminium. S. N. Ponomarenok (*J. Appl. Chem. Russ.*, 1933, **6**, 948—950).—Al is detected in presence of other cations by adding excess of $(NH_4)_2S$, acidifying with 2*N*-HCl, boiling, and filtering. 0·05% Na alizarinsulphonate and an equal vol. of 5% $Na_2S_2O_3$ are added to the filtrate, and the solution is boiled during 1 min.; if $<$ 0·04 mg. Al is present the ppt. of S is coloured rose to orange-red. R. T.

A58-SLA METALLURGICAL LITERATURE CLASSIFICATION

1ST AND 2ND ORDERS

PROCESSES AND PROPERTIES INDEX

03C

Chemical composition of antitoxic diphtheria
serum. A. G. Fomchevskova and M. P. Pono-
mareva (J. Microbiol., Epidemiol., Immunobiol.
U.S.S.R., 1935, 14, 203—206).—Immunisation of
horses with diphtheria toxin leads to changes in
general metabolism, notably of N and lipins. Blood-
protein increased slightly, involving an increase in the
globulin at the expense of the albumin fraction; the
total fat in blood is almost doubled and residual N
diminishes. Ch. Abs. (p)

ASM-SLA METALLURGICAL LITERATURE CLASSIFICATION

L 5216-66 EWT(d)/T IJP(c)
ACC NR: AP6000394 SOURCE CODE: GE/0025/65/008/008/0478/0481

AUTHOR: Potschwadek, B.

ORG: Radiology Clinic, Rostock University (Radiologisches Klinik der Universtitat Rostock)

TITLE: Counting statistics

SOURCE: Kernenergie, v. 8, no. 8, 1965, 478-481

TOPIC TAGS: statistics, error statistics, radiology, radioisotope, medical research

ABSTRACT: The relative error for preset counts, preset time, or extremizing is calculated from general points of view as they are valid in medical isotopic laboratories. The results may ever be represented in the form $\epsilon\sqrt{TQ} - 1 = 0$, which shows that the best technique is the method or condition of measuring yielding the highest value of Q. Q is calculated for some conditions occurring in practice and the values are compared. Orig. art. has: 4 figures, 4 formulas. [NA]

SUB CODE: MA, LS / SUBM DATE: 27Apr65 / ORIG REF: 001 / OTH REF: 001

Card 1/1

09010533

PHASE I BOOK EXPLOITATION SOV/5179

Alma-Ata, Kazakhstan. Universitet.

Issledovaniya prohlemov perenosa. Voprosy teorii otnositel'nosti (Study of Transfer Processes. Problems in the Theory of Relativity) Alma-Ata, 1959. 296 p. Errata slip inserted. 1,000 copies printed. (Series: Its Trudy)

Sponsoring Agency: Ministerstvo vysshego obrazovaniya SSSR and Kazakhskiy gosudarstvennyy universitet im. S.M. Kirova.

Editorial Board: V.P. Kashkarov, N.D. Kosov, and N.M. Petrova; Resp. Ed.: L.A. Vulis; Tech. Ed.: L.D. Kashkarov.

PURPOSE: This collection of articles is intended for research physicists and engineers. It can also be used by instructors and students at universities.

COVERAGE: The articles of this collection contain the results of 19 studies in transport problems and the general theory of relativity made from 1956 to 1959 by the staff of the kafedra obshchey fiziki i teoreticheskoy fiziki Kazakhskogo universiteta im. S.M. Kirova (Department of General Physics and Theoretical Physics of the S.M. Kirov Kazakh State University). The articles are arranged in two groups. Group one contains 16 articles concerning the research activity of the teplofizicheskaya laboratoriya pri kafedre obshchey fiziki (Heat Physics Laboratory of the Department of General Physics) in the investigation of transport processes of matter, impulse and energy; group two contains three articles reporting on studies of the Department of Theoretical Physics on problems of the theory of relativity. Article one of the collection is an introduction and reviews the problems of transport processes and gives a fairly detailed bibliography of contributions of members of physics department of Kazakh State University. No personalities are mentioned. References accompany each article.

TABLE OF CONTENTS:

II. PROBLEMS OF THE THEORY OF RELATIVITY

AVAILABLE: Library of Congress (QC71.A45)

Card 5/5

JA/dwm/gmp
7-29-61

L 33152-65 EWT(d)/EWT(l)/EEC(a)/EWP(m)/EWT(m)/FS(v)-3/EEC(j)/EWP(w)/EEC(r)/EWG(v)/EWA(d)/EWP(v)/EWP(k)/EWA(h) Po-4/Pe-5/Pq-4/Pf-4/Pg-4/Peb EM/GW

ACCESSION NR: AP5005428 S/0317/64/000/003/0006/0008

AUTHOR: Potseluyev, A. (Engineer, Major)

TITLE: Stabilization of the motion of rockets. Stability and stabilization

SOURCE: Tekhnika i vooruzheniye, no. 3, 1964, 6-8

TOPIC TAGS: rocket aerospace vehicle, rocket aircraft, rocket vertical motion, stability condition, static stability

ABSTRACT: The fundamental principles of rocket stabilization and stability are discussed. The relationship between the rocket's center of mass (CM) and its center of pressure (CP) determines the rocket stability. If the two coincide, the rocket is in neutral equilibrium. If the CP is in front of the CM, the rocket is in unstable equilibrium, and a deflection of the rocket from the initial direction increases the static aerodynamic moment (M_{st}), upsetting the rocket. If the CP is aft of the CM, M_{st} always decreases the angle of attack, and the rocket is in equilibrium. Rocket tail-fins shift the CP rearward and act as effective stabilizers for uncontrolled and relatively small controlled rockets. In large ballistic rockets the relative position of the CP and CM changes during flight. M_{st}

Card 1/2

L 33152-65

ACCESSION NR: AP5005428

which is proportional to the square of the rocket speed and to the air density, also changes. Thus the rocket stability is low during the stages of slow speed takeoff and travel in the upper rarefied atmosphere. The ratio of the CM-CP distance to the rocket length is the static stability margin which determins rocket stability. If small, the rocket is under-stabilized; if large, over-stabilized. The simplest static stabilization eliminates the influence of random perturbations. Irregularities in the rocket contour, producing an auxiliary aerodynamic force, and eccentricities of the motor thrust can cause deflections from the rocket trajectory. In the upper atmosphere, aerodynamic stability is not effective. Rocket motion, when the rocket has a relatively large rotational kinetic energy in respect to the CM, is the sum of the regular precession and the precessional-nutational motion. When this energy is small, librational (fluctuating) motion of this rocket in respect to a stable position arises. Spinning a rocket about its longitudinal axis increases the stability. This method cannot be used for large rockets which may be damaged by the necessary spin speed. Special automatic stabilizing instruments are used for these rockets. Orig. art. has: 3 figures.

ASSOCIATION: none

SUBMITTED: 00 ENCL: 00 SUB CODE: GM, MI

NO REF SOV: 000 OTHER: 000

Card 2/2

POTSELUYEV, A., inzhener-mayor; GORDEYEV, A., inzhener-polkovnik, kand. tekhn. nauk

Stabilizing the motion of rockets. Tekh. i vooruzh. no.3:6-11 Mr '64. (MIRA 17:8)

ACC NR: AP6033944 SOURCE CODE: UR/0280/66/000/004/0170/0173

AUTHOR: Kochetkov, V. T. (Moscow); Potseluyev, A. V. (Moscow)

ORG: none

TITLE: Synthesis of an optimum nonlinear control system based on the criterion of maximum probability

SOURCE: AN SSSR. Izvestiya. Tekhnicheskaya kibernetika, no. 4, 1966, 170-173

TOPIC TAGS: automatic control system, automatic control theory, nonlinear control system

ABSTRACT: A method for parameter selection for a control system of a given configuration under the influence of random disturbances is given. The maximum probability criterion of satisfying the limiting conditions, imposed upon the output coordinates of the system is utilized. The following system of differential equations describes the motion of the object and the control system:

$$\frac{dY_i}{dt} = f_i(t, Y_1, Y_2, \ldots, Y_n, \lambda_1, \lambda_2, \ldots, \lambda_m, p_1, p_2, \ldots, p_l), \quad i = 1, 2, \ldots, n, \qquad (1)$$

where Y_i are the coordinates of the object's motion and those of the control system; $p_1, \ldots, p_l$ are the parameters to be selected; and $\lambda_1, \ldots, \lambda_m$ are the random variables,

the probability characteristics of which are given. The coordinate limiting conditions can be expressed by a system of inequalities:

$$U_i(t) \leqslant Y_i(t) \leqslant V_i(t), \quad i = 1, 2, 3, \ldots, g, \qquad (2)$$

where $U_i(t)$ and $V_i(t)$ are the given limiting functions, and $g \leq n$ is the number of coordinates subject to these limitations. In many cases the lower limit $U_i(t)$ does not exist. Then system (2) can be simplified

$$Y_i(t) \leqslant V_i(t), \quad i = 1, 2, \ldots, g. \qquad (3)$$

Using a computer, a solution set for system (1) may be found

$$\{Y_i(t, \mu_{1k_1}, \mu_{2k_2}, \ldots, \mu_{mk_m})\}, \quad k_i = 0, 1, 2, \ldots, q; \ldots; k_m = 0, 1, 2, \ldots, q, \qquad (4)$$

where q is the order of the approximating polynomial, then the characteristic function of the output coordinates deviations may be computed as

$$X(t) = \prod_{i=1}^{g} \frac{1}{2}\left[1 - \frac{Y_i(t) - V_i(t)}{|Y_i(t) - V_i(t)|}\right] \frac{1}{2}\left[1 + \frac{Y_i(t) - U_i(t)}{|Y_i(t) - U_i(t)|}\right]. \qquad (5)$$

It is obvious from (5) that the characteristic function $X(t)$ under certain assumptions may assume one of two states: $X(t) = 1$ if (2) is satisfied; $X(t) = 0$ if even one of the inequalities (2) is violated. The probability of the event, that during the time interval $t_1 \leq t \leq t_2$ the inequalities (2) will not be violated is calculated from the

formula

$$P(t_1, t_2) = \lim_{\substack{N\to\infty \\ \gamma\to 0}} M\left[\prod_{k=0}^{N} X(\tau_k)\right], \quad (6)$$

where $\gamma = \max|\tau_{k+1}-\tau_k|; \tau_k$ is the instant of time, described by the relation

$$\tau_0 = t_1 < \tau_1 < \tau_2 < \ldots < \tau_N = t_2.$$

For sufficiently large N

$$P(t_1, t_2) \approx M\left[\prod_{k=0}^{N} X(\tau_k)\right], \quad (7)$$

i. e., the probability $P(t_1, t_2)$ is approximately equal to the mathematical expectation of the function

$$\Phi(t_1, t_2) = \prod_{k=0}^{N} X(\tau_k). \quad (8)$$

To find the mathematical expectation $M[\varphi(t_1, t_2)$ it is necessary, using (4), to find the solutions of set (5)

$$\{X(\tau_k, \mu_{1k_1}, \mu_{2k_2}, \ldots, \mu_{sk_s})\}, \quad (9)$$

$$s = m + n; \quad k_1 = 0, 1, 2, \ldots, q; \quad k_s = 0, 1, 2, \ldots, q,$$

which is utilized to compute the set

$$\{\Phi(t, \mu_{1k_1}, \mu_{2k_2}, \ldots, \mu_{rk_r})\}, \quad (10)$$

$$r = m + n + N; \; k_1 = 0, 1, 2, \ldots, q; \ldots; k_r = 0, 1, 2, \ldots, q.$$

ACC NR: AP6033944

The mathematical expectation of function (t_1, t_2) can be determined with sufficient degree of accuracy from the expression

$$M[\Phi(t_1, t_2)] \approx \sum_{k_1, k_2, \ldots, k_r} \Phi_{k_1, k_2, \ldots, k_r} \prod_{j=1}^{r} \rho_{jk_j}, \quad (11)$$

where ρ_{jk_j} is the Christoffel number. The selection of optimal system parameters on the basis of maximum probability of satisfying conditions (2), i. e.,

$$\max \{P(t_1, t_2)\} \approx \max_{p \in B} \left\{ \sum_{k_1, k_2, \ldots, k_r} \Phi_{k_1, k_2, \ldots, k_r} \prod_{j=1}^{r} \rho_{jk_j} \right\}, \quad (12)$$

or on the basis of minimum probability of coordinate's departure from region (2), i.e.,

$$\min \{1 - P(t_1, t_2)\}. \quad (13)$$

The expression (12) can be written in general form as

$$P(t, p_1^*, p_2^*, \ldots, p_l^*) = \max_{p \in B} \{P(t, p_1, p_2, \ldots, p_l)\}, \quad (14)$$

where $p_1^*, p_2^*, \ldots, p_l^*$ are the optimum parameters. A computer can be used to solve this equation. An example of application of the described method is included. Orig. art. has: 3 figures, 14 formulas.

SUB CODE: 09,12/ SUBM DATE: 09Mar65/ ORIG REF: 006

Card 4/4

POTSELUYEV, V. (Kemerovskaya obl.)

Selsyn system constructed by radio amateurs. Radio no.4:23 Ap '63. (MIRA 16:3)

(Servomechanisms)

BOLDIN, P.V.; POTSELUYEV, V.I.; RUBINCHIK, B.M.; SMIRNOVA, V.V.; ARTYUKHIN, V.A., red.izd-va; TIKHANOV, A.Ya., tekhn. red.

[Foundry equipment; a catalog] Liteinoe oborudovanie; katalog. Moskva, Mashgiz, 1963. 242 p. (MIRA 16:11)

1. Moscow. Gosudarstvennyy nauchno-issledovatel'skiy institut liteynogo mashinostroyeniya i liteynoy tekhnologii.
(Foundries--Equipment and supplies)

[redacted], P.V.; POTSELUYEV, V.I.

Standard types of casting machines. Standartizatsiia 26 no.5:20-23 My '62. (MIRA 15:7)

(Foundries—Equipment and supplies)

POTSELUYEV, V.S.

Treatment of tuberculosis patients by the nondrainage method following partial resection of the lungs. Uch. zap. Stavr. gos. med. inst. 12:227-228 '63. (MIRA 17:9)

1. Krasnodarskiy krayevoy protivotuberkuleznyy dispanser (glavnyy vrach zasluzhennyy vrach RSFSR A.I. Ukrainchenko), nauchnyy rukovoditel' zaveduyushchiy kafedroy obshchey khirurgii Stavropol'skogo gosudarstvennogo meditsinskogo instituta prof. Yu.S. Gilevich.

POPKOVA, G.A.; POTSELUYEVA, L.M.

Vascular characteristics of the spinal cord in swine. Trudy Inst. eksp. biol. AN Kazakh. SSR 11:86-93 '65.

(MIRA 18:10)

BELOSHAPKO, P.A., prof. [deceased]; MARTYNSHIN, M.Ya.; DYUZHINOVA, V.M.; IGNATOVA, V.D.; POTSELUYEVA, S.I.; TOLSTOVA, M.I.

Features of the course and management of labor in breech presentation. Akush.i gin. 36 no.5:28-34 S-O '60. (MIRA 13:11)

1. Iz Instituta akusherstva i ginekologii (dir. - chlen-korrespondent AMN SSSR prof. P.A. Beloshapko [deceased]) AMN SSSR.
(LABOR (OBSTETRICS))

POTSELUYEVA, V. A.

Razvitiye Cysticercus Pisiformis V Organizme Krolikov, "Works on Helminthology" on the 75th Birthday of K. I. Skryabin, Izdat, Akad. Nauk, SSSR, 1953, p. 564
Veterinary Inst. Kaz Filial Vaskhnil

POTSELUYEVA, V. A.

Potseluyeva, V. A.

"A study of the Phenomena of Immunity in Cysticercosis of Rabbits." Acad Sci Kazakh SSR. Inst of Zoology. Alma-Ata, 1955. (Dissertation for the Degree of Candidate in Biological Sciences)

SO: Knizhnaya Letopis' No. 2 , 2 July 1955

USSR G
: Zooparasitology - Parasitic Worms

USSR/Zoo. JOUR. : RZBiol., No. 19 1958, No. 86306

AUTHOR : Potseluyeva, V.A.
INST. : Veterinary Institute of the Kazakh Affiliate of*
TITLE : The Problem of the Importance of the Dietary Regime in the Development of Immunity to Cysticercosis in Rabbits
ORIG. PUB. : Tr. In-ta Vet. Kazakhsk. fil. VASKhNIL, 1957, Vol.8, 381-388
ABSTRACT : no abstract

*VASKhNIL (All Union Academy of Agricultural Science imeni Lenin)

CARD: 1/1

Potseluyevskiy, A.A.

112-1-344

Translation from: Referativnyy Zhurnal, Elektrotekhnika, Nr.1, 1957, p.58

AUTHOR: Potseluyevskiy, A.A.

TITLE: On certain regularities in the processes of stream flow in river basins (O nekotorykh zakonomernostyakh v protsessakh stoka na rechnykh basseynakh)

PERIODICAL: Uch.zap.Turk.un-ta, 1955, issue 4, pp 157-160, (Turkmen SSR)

ABSTRACT: This is a critical review of the work of A.V. Ogiyevskiy "On certain regularities in the processes of stream flow in river basins" (Gidrometeoizdat [Hydrometeorological Publication], 1945). An example is given demonstrating that, contrary to the opinion of Ogiyevskiy, the maximum discharge of high water is not always obtained by multiplying the highest ordinates of the yield by the corresponding catchment areas. The author maintains that the assumptions accepted by Ogiyevskiy are virtually equivalent to the assumption that the reservoir has a rectangular form and that there is a uniformity of yield.

N.A.K.

Card 1/1

Potseluyko, V.A.

USSR/ Laboratory Equipment. Apparatuses, Their Theory, I Construction and Application.

Abs Jour: Referat. Zhur.-Khimiya, No. 8, 1957, 27355.

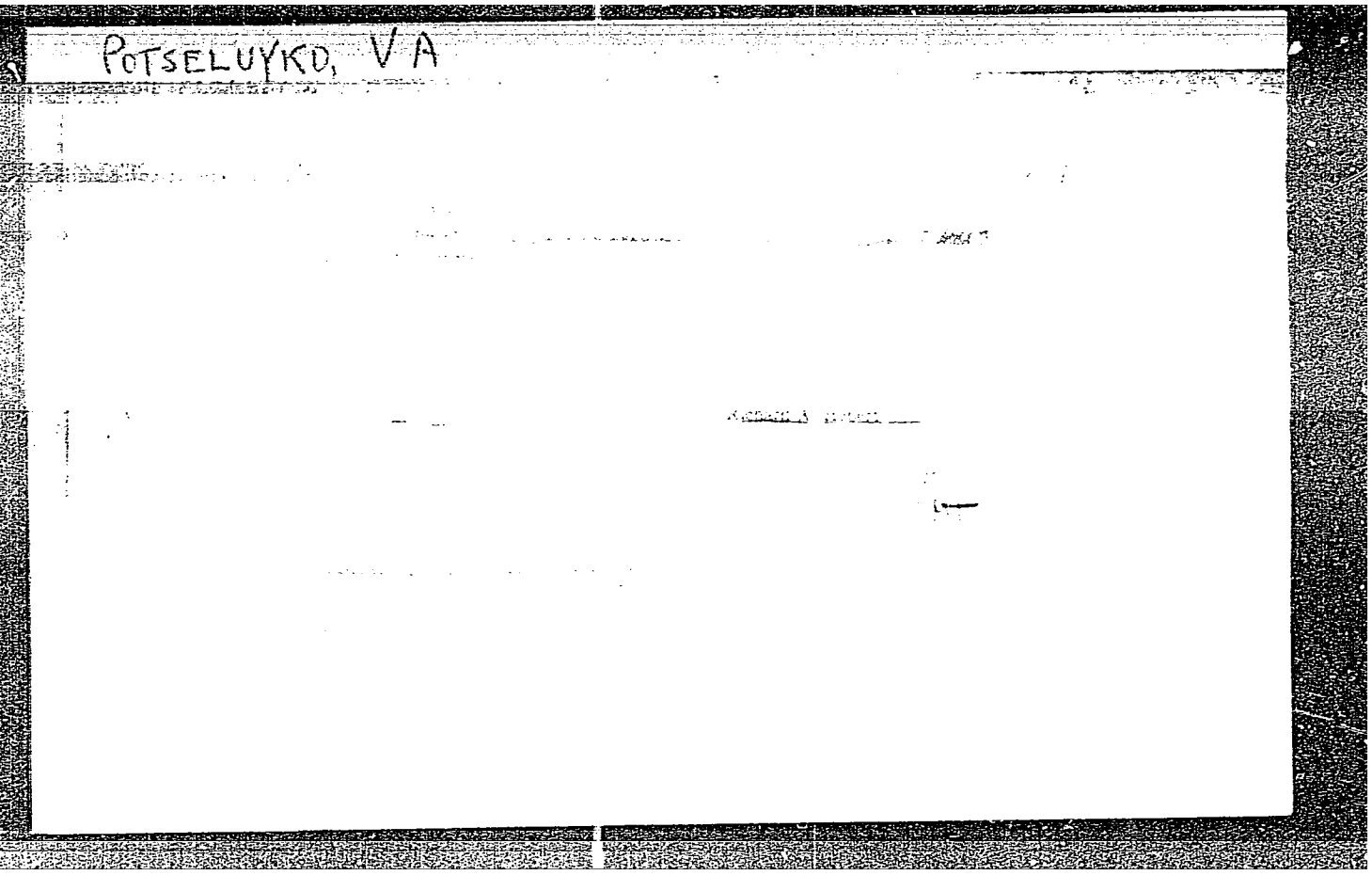
Author : L.A. Vulis, N.D. Kosov, V.A. Potseluyko.

Title : Determination of Heat Conduction Factor of Loose Materials by Malmgren-Shuleykin Method.

Orig Pub: Zh. tekhn. fiziki, 1956, 26, No. 1, 85 - 89.

Abstract: no abstract.

Card 1/1



Potseluyko, V.M.

5(1) PHASE I BOOK EXPLOITATION SOV/1659

Akademiya nauk Kazakhskoy SSSR, Alma-Ata.

Issledovaniya fiziokhimicheskikh protsessa topok i pechey (Investigation of the Physical Bases of Operational Processes of Combustion Chambers and Furnaces) Alma-Ata, Izdat AN Kazakhskoy SSR, 1957. 369 p. 800 copies printed.

Additional Sponsoring Agency: Alma-Ata. Kazakhskiy gosudarstvennyy universitet im. S.M. Kirova.

Ed. (Title page): L.A. Vulis, Doctor of Technical Sciences, Professor; Ed. (Inside book): D.M. Glazyrina; Tech. Ed.: Z.P. Korolkina.

PURPOSE: This book is intended for a wide circle of scientists and industrial engineers.

COVERAGE: The twenty-nine articles of this collection report on experimental and theoretical investigations of different physical phenomena which constitute an integral part of the complex operational processes of modern combustion engineering equipment, and also, the entire process applicable to different types of burners and furnaces (cyclone combustion chambers, muffle burners, laminar and turbulent jets of liquids and compressible gas. Part II reviews methods of modeling combustion processes (light, hydraulic and electrical), enthalpy, temperature measurement, calorimetry, etc. Part III relates to different problems and theories of fuel combustion and special operational features of combustion and furnace equipment. No personalities are mentioned.

POTSELUYKO, V.A.

536.212.3

[illegible] ON THE DETERMINATION OF THE TEMPERATURE DEPENDENCE OF THERMAL CONDUCTIVITY. L.A. Yuz and V.A. Potseluyko.

Zh. tekh. Fiz., Vol 26, No 1, 76-87 (1956) In Russian

A procedure for determining the true mean temperature in thermal conductivity measurements by the steady state and transient heat flow methods is described. It is a successive approximation procedure in which the most likely shape of the temperature dependence of thermal conductivity is first selected and then modified (or verified) by an analysis of experimental data. The following results are reported for sand in the range 20-300°C: thermal conductivity $\lambda = \lambda_0(1 + \alpha t)$, where $\alpha = (1.2 \pm 0.1) \times 10^{-3}$ deg^{-1} and $\lambda_0 = (10.3 \pm 0.8) \times 10^{-4}$ cal/(cm.sec.deg) by the stationary method and $\lambda_0 = (10.2 \pm 0.2) \times 10^{-4}$ cal/(cm.sec.deg) by the transient method. Heat capacity in the range 0-250°C is $0.17(1 + 2.4 \times 10^{-4}t)$ cal/(g.deg); and thermal diffusivity $3.8(1 - 10^{-4}t) \times 10^{-3}$ cm^2/sec.

A.Gelbtuch

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Translation from: Referativnyy zhurnal, Elektrotekhnika, 1959, No. 13, p. 20, # 26300

AUTHOR: Potseluyko, V. A., Trofimenko, A. T.

TITLE: On the Investigation of a Temperature Field by the Method of Electrothermal Analogy

PERIODICAL: V. sb.: Issled. fiz. osnov rabochego protsessa topok i pechey, Alma-Ata, AN KazSSR, 1957, pp. 242-251

TEXT: The Laplace equation does not only describe a steady heat conduction process, but also the distribution of the electric potential in conductors, which makes it possible to study the heat conduction process on an electric model, in which the electric field simulates the temperature field of the specimen. It is also possible to use the analogy between the elementary laws of heat and electrical conduction. In the present investigation, the method of electrical thermal analogy is used to solve two problems: 1. The heat emission of a rib of trapezoidal shape under third-order boundary conditions. The

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On the Investigation of a Temperature Field by the Method of Electrothermal Analogy

analytical solution of this problem is connected with great difficulties. The model consists of 2 different liquid electrolytes, divided by a glass partition wall with a number of "bridges" conducting the current from one electrolyte to the other. The partition wall simulates the surface limiting the temperature field, while the external - in respect to the partition wall - electrolyte is the thermal resistance. The measurements were conducted with a conventional bridge circuit. The results obtained show that an inadequate accuracy is inherent to the analytical methods. 2. The investigation of the temperature field of a cylinder of finite length with the purpose of uncovering the effect of losses at the butts in a device for the determination of the thermal coefficient. A description of the model and the methods used for processing the results is given. The effect of the butts on the temperature field in the mean section depends on the ratio of the length of the cylinder to its diameter. This effect disappears at the ratio value of $\geqslant 5$; it becomes noticeable at ~3. The possibility was obtained to select an efficient position for placing the soldering points of thermocouples in a laboratory device, and the possibility

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On the Investigation of a Temperature Field by the Method of Electrothermal Analogy

to estimate distortions of the temperature field. It is pointed out that there is a possibility to develop a new type of thermal protection for cylindrical devices of finite length.

A. A. D.

Translator's note: This is the full translation of the original Russian abstract.

Card 3/3

POTSELUYKO, V.A.

8145. DETERMINATION OF THERMAL CONDUCTIVITY OF FRIABLE MATERIALS BY THE MAL'MGREN-SHULEIKEN METHOD. L.A.Vulis, N.D.Kosov and V.A. Potseluiko. Zh. tekh. Fiz., Vol. 26, No. 1, 85-9 (1956). In Russian.

Thermal conductivity of various sands and magnesia was determined by a transient heat flow method consisting of measuring the temperature difference Δt at two concentric cylindrical surfaces a small distance (Δr) apart. A line heat source at the axis of the cylinder is first energized and later de-energized, the outer surface of the cylinder being kept at a constant temperature. Δt will thus at first rise and then decrease until $\Delta t \approx 0$. Thermal conductivity is found, on the assumption that it is independent of temperature, from $\lambda = Q/S\int_0^\infty(\Delta t/\Delta r)d\tau$, where Q is the heat passing through a surface of area S, and τ is time. The apparatus is described.

A.Gelbtuch

VULIS, L.A.; KOSOV, N.D.; POTSELUYKO, V.A.

Determination of the heat conductivity coefficients for loose materials by Mal'mgren-Shuleikin's method. Zhur.tekh.fiz.26 no.1:85-89 Ja '56. (MLRA 9:6)
(Heat conduction)

VULIS, L.A.; POTSELUYKO, V.A.

Determination of the temperature depencence of heat conductivity coefficients. Zhur.tekh. fiz.26 no.1:76-84 Ja '56. (MLRA 9:6)
(Heat--Conduction)

[illegible], V. A.

"Certain [illegible] of [illegible], [illegible]
Conductors." [illegible], [illegible],
30 Sep 54. (KP, 17 Sep 54)

SO: [illegible], [illegible] Mar 55

POTSEPKINA, R.M.

Determination of small quantities of alkoxy groups in silicon-organic compounds. S. V. Svavitskii, E. A. Bondarevskaya, and R. M. Potsepkina. *J. Anal. Chem. USSR* [illegible] English translation [illegible]

BONDAREVSKAYA, Ye.A.; SYAVTSILLO, S.V.; POTSLPKINA, K.I.

Determination of alkoxy groups in some heteroorganic compounds. Trudy Kom.anal.khim. 13:178-183 '63. (MIRA 16:5)
(Alkoxy groups) (Organometallic compounds)

P. TSEPKINA R.N.

307/75-14-4-25/30

5(3)
AUTHORS: Bondarevskaya, Ye. A., Syavtsillo, S. V., Potapkina, R. N.

TITLE: Determination of Ethoxyl Groups in Some Organosilicon and Organoaluminum Compounds

PERIODICAL: Zhurnal analiticheskoy khimii, 1959, Vol 14, Nr 4, pp 501-505 (USSR)

ABSTRACT: The authors used for the determination of ethoxyl groups in organosilicic and organoaluminum compounds the property of these substances to hydrolyse in the presence of acids or bases. The formed ethyl alcohol can be quantitatively determined according to the conventional methods (Refs 5-9). The weighed-in sample of the substance to be analysed is mixed with a 5% solution of potassium bichromate and sulfuric acid (1:1) and heated for 30 minutes over boiling water with continuous backflow. After cooling a 10% iodine solution is added and the separated iodine is titrated after 5 minutes with a 0.1 N solution of sodium thiosulfate. A blank test is conducted parallel to the main experiment. The accuracy and the sensitivity of this determination method for different concentrations of ethyl alcohol is listed in table 1. The authors also examined whether the

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oxidation of the formed ethyl alcohol in the presence of diphenyl-diethoxy-silane is quantitative. The results are listed in table 2. The results show that the sensitivity of the method is 0.1 - 0.3 % and the accuracy is up to 12% (relative). Table 3 lists the results of several analyses of organosilicon compounds with various ethoxyl group content. The principle of this method was also applied for the determination of admixtures of diethyl ethoxyaluminum in triethyl aluminum. The method had to be somewhat modified as triethyl aluminum oxidizes violently in air. The paper gives a description and an illustration of the apparatus with which the weighed-in sample can be kept in an air-free atmosphere until the end of the hydrolysis. By this method the authors determined the ethoxyl group content in triethyl aluminum and admixtures of diethyl ethoxy aluminum to triethyl aluminum. Some of the results are listed in table 4. Table 5 compares the results of this method with the results of the determination of ethoxyl groups with hydriodic acid (Ref 3). This comparison shows that both methods yield reproducible results. There are 1 figure, 5 tables, and 9 references, 6 of which are Soviet.

SUBMITTED: May 19, 1958
Card 2/2

SOV/75-14-4-25/30

5(3)

AUTHORS: Bondarevskaya, Ye. A., Syavtsillo, S. V., Potsepkina, R. N.

TITLE: Determination of Ethoxyl Groups in Some Organosilicon and Organoaluminum Compounds

PERIODICAL: Zhurnal analiticheskoy khimii, 1959, Vol 14, Nr 4, pp 501-503 (USSR)

ABSTRACT: The authors used for the determination of ethoxyl groups in organosilicic and organoaluminum compounds the property of these substances to hydrolyse in the presence of acids or bases. The formed ethyl alcohol can be quantitatively determined according to the conventional methods (Refs 5-9). The weighed-in sample of the substance to be analysed is mixed with a 5% solution of potassium bichromate and sulfuric acid (1:1) and heated for 30 minutes over boiling water with continuous backflow. After cooling a 10%-iodine solution is added and the separated iodine is titrated after 5 minutes with a 0.1 N solution of sodium thiosulfate. A blank test is conducted parallel to the main experiment. The accuracy and the sensitivity of this determination method for different concentrations of ethyl alcohol is listed in table 1. The authors also examined whether the

oxidation of the formed ethyl alcohol in the presence of diphenyl-diethoxy-silane is quantitative. The results are listed in table 2. The results show that the sensitivity of the method is 0.1 - 0.3 % and the accuracy is up to 12% (relative). Table 3 lists the results of several analyses of organosilicon compounds with various ethoxyl group content. The principle of this method was also applied for the determination of admixtures of diethyl ethoxyaluminum in triethyl aluminum. The method had to be somewhat modified as triethyl aluminum oxidizes violently in air. The paper gives a description and an illustration of the apparatus with which the weighed-in sample can be kept in an air-free atmosphere until the end of the hydrolysis. By this method the authors determined the ethoxyl group content in triethoxy aluminum and admixtures of diethyl ethoxy aluminum to triethyl aluminum. Some of the results are listed in table 4. Table 5 compares the results of this method with the results of the determination of ethoxyl groups with hydriodic acid (Ref 3). This comparison shows that both methods yield reproducible results. There are 1 figure, 5 tables, and 9 references, 6 of which are Soviet.

SUBMITTED: May 19, 1958
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L 34205-65 EWT(1)/EWT(m)/EPF(c)/EPF(n)-2/EWG(m)/EPR/EWP(j)/T/EPA(bb)-2/EWA(1)
Pc-4/Pr-4/Ps-4/Pi-4/Pc-4 RPL WW/JW/RM

ACCESSION NR: AP5005845 S/0075/65/020/002/0249/0252

AUTHOR: Terent'yev, A.P.; Bondarevskaya, Ye. A.; Potsepkina, R.N.; Syavtsillo, S.V.

TITLE: Analysis of phenylphenoxysilanes and phenyldiphenyloxysilanes

SOURCE: Zhurnal analiticheskoy khimii, v. 20, no. 2, 1965, 249-252

TOPIC TAGS: silicoorganic compound, silicon determination, phenoxysilane determination, phenoxy group

ABSTRACT: Phenylphenoxysilanes $(C_6H_5)_nSi(OC_6H_5)_{4-n}$ and phenyldiphenyloxysilanes $(C_6H_5)_nSI(OC_6H_4C_6H_5)_{4-n}$ are used as high-temperature heat carries in technology, and their analysis is therefore of interest. The authors developed a simple and rapid method of determining phenoxy groups in phenylphenoxysilanes by fusion with potassium hydroxide in a stainless steel test-tube heated with a burner. The phenol formed can be determined iodometrically or bromometrically, the latter technique being preferred; silicon is determined acidimetrically. The analysis of phenyldiphenyloxysilanes was carried out by using the bromide-bromate method in a medium of glacial acetic acid and HCl. Both procedures are described in detail, and formulas are given for the calculation of % OC_6H_5, % Si, and % $OC_6H_4C_6H_5$. "The phenylphenoxysilanes and phenyldiphenyloxysilanes were synthesized, isolated in the pure form, and kindly supplied

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ACCESSION NR: AP5005845

to us by A. G. Kuznetsova." Orig. art. has: 2 tables and 3 formulas.

ASSOCIATION: none

SUBMITTED: 17Feb64 ENCL: 00 SUB CODE: OC

NO REF SOV: 002 OTHER: 003

Card 2/2

POTSHEBA, T.L., entomolog

Red house ants. Zashch. rast. ot vred. i bol. 7 no.1:45-47 '62. (MIRA 15:6)
(Ants)

LAGIDZE, R.M.; POTSKHVERASHVILI, B.S.

Alkylation of cumol by 1,3- and 1,4-butanediol diacetates in the presence of $AlCl_3$. Sooh. AN Gruz. SSR 19 no.4:429-436 O '57.
(MIRA 11:5)

1. Institut khimii im. P.G. Melikishvili AN GruzSSR, Tbilisi. Predstavleno chlenom-korrespondentom AN GruzSSR G.V. TSitsishvili.
(Cumol) (Alkylation) (Butanediol)

POTSKHISHVILI, O., inzh.

New processes in the production of pepsin. Mias. ind. SSSR 30 no.3:46 '59. (MIRA 12:9)

1.Tbilisskiy myasokombinat.
(Tiflis--Pepsin)

POTSKHISHVILI, T., arkhitektor (Tbilisi); SHAROYAN, A., inzh. (Tbilisi)

Department store for southern regions. Sov. torg. 36 no.11: 59-60 N '62. (MIRA 16:1)

(Georgia department stores)

LAGIDZE, R.M.; POTSKHVERASHVILI, B.S.

Alkylation of ethylbenzene, o-xylene, and phenol with 1,3- and 1,4-butanediol diacetates in the presence of anhydrous $AlCl_3$. Soob. AN Gruz. SSR 19 no.6:685-692 D '57. (MIRA 11:6)

1.Institut khimii im. P.G. Melikishvili AN GruzSSR, Tbilisi. Predstavleno chlenom-korrespondentom AN GruzSSR G.V. TSitsishvili.
(Alkylation)

POTSKHVERASHVILI, R.S.

USSR

Condensation reactions of the diacetates of 1,3- and 1,4-butanediols with benzene and toluene in presence of anhydrous aluminum chloride. R. M. Lagidze and R. S. Potskhverashvili (P. G. Melikishvili Inst. Chem., Acad. Sci. Georgian S.S.R., Tiflis). *Soobshcheniya Akad. Nauk Gruzin. S.S.R.* 14, No. 8, 473-80(1953).—MeCH(OAc)CH_2CH_2OAc (Ia), C_6H_6, anhyd. $AlCl_3$ (1:3:2.25 moles, resp.) were condensed during 12-14 hrs. at higher temps. than those previously used (cf. *C.A.* 46, 3972*b*). Besides the products previously obtained 7-acetyl-1-methylhydrindene (I) [which by treatment with Zn-Hg and acid yielded 1-methyl-7-ethylhydrindene (attempts to reduce I over Pd-C were unsuccessful)] and *o*-$PhCHMeCH_2CH_2C_6H_4Ac$ were isolated. Similar condensation reactions of Ia and 1,4-butanediol diacetate (IIa) occur in toluene. Ia yields the following: