S/130/60/000/011/011/011
A006/A001

The Use of Analytical Computers in the Planning and Analysis of Production Indices in Ferrous Metallurgy

power consumption; 2. to prepare technical and calculational documentation for the subsequent analysis by computers; 3. to develop an accurate system of figures required for the perforation of cards and their subsequent processing; 4. to ensure the sufficient capacity of computing centers which must be equipped with modern machines.

ASSOCIATION: Gosplan SSSR (Gosplan USSR)

Card 3/3

S/032/61/027/009/018/019
B101/B208

AUTHORS: Filippov, S., Zonov, V.

TITLE: Plant laboratories competing for the title of a Collective of Communist Labor. In the central plant laboratory of a machine - building factory

PERIODICAL: Zavodskaya laboratoriya, v. 27, no. 9, 1961, 1168 - 1170

TEXT: [Abstracter's note: It is not stated which factory is concerned. According to the institutions mentioned, it is probably located in the Urals.] It is noted that the equipment of the Central Plant Laboratory (CPL) has recently been improved. A ДФС-10 (DFS-10) quantum meter with electronic computer, ИСП-22 (ISP-22) and ИСП-28 (ISP-28) spectrographs and a УЗМ-10 (UZM-10) ultrasonic device are now available. The extent of the scientific work planned for 1961 was doubled as compared with 1958, and the budget tripled. According to investigations of the metallographic laboratory, casehardening with solid carburizing agents was replaced by gas casehardening in 1960. Parts of the workpiece that are not to be hardened are covered with an anti-cementation paste developed by the

Card 1/4

S/032/61/027/009/018/019
B101/B208

laboratory. The application of gas casehardening reduced the duration of the process by 25%. In cooperation with the Sverdlovskiy proyektno-tekhnologicheskiy institut (Sverdlovsk Design, Planning, and Technological Institute) casehardening was intensified by raising the temperature by 40°C beyond the temperature prescribed. In this way, the output of cementation furnaces was increased by more than one-third. Making use of results obtained by several institutes and by the Chelyabinskiy traktornyy zavod (Chelyabinsk Tractor Plant) and in cooperation with the preservation workshop, slushing oils and lubricants were replaced by volatile inhibitors. 20 t of commercial vaseline are thus saved annually. Together with the division of the chief technologist, the chemical laboratory introduced the electrolytic tinning of radiator tubes in a hydrofluosilicic electrolyte (instead of the hydrofluoboric acid electrolyte hitherto used), which means annual savings of 20,000 rubles. In this year they started repairing casting flaws on surfaces by means of epoxy resins. The chemical laboratory tests ferrous metals for Mn, Si, Ni, P, Cu, Ti, and Al on an ФЭК-М (FEK-M) colorimetric photometer. Aluminum castings are subjected to spectrum analysis only. The physical laboratory introduced physical tests methods; e.g., the thermal workshop tests of pins with coercimeters,

S/032/61/027/009/018/019
B101/B208

and gears, shafts, and springs with a magnetic flaw detector of the Institut fiziki metallov (Institute of Physics of Metals). Machine parts made from 30ХГС (30KhGS) and 65Г (65G) steels may be easily distinguished by means of the "ТЭДС" (TEDS) device, designed by the fizicheskaya laboratoriya Ural'skogo universiteta (Physics Laboratory of the Ural University). High-nickel steels, such as 20Х2Н4А (20Kh2N4A) will be replaced by low-nickel steels, such as 25Х2ГНТА (25Kh2GNTA). Together with the Sverdlovsk plant "Promenergoavtomatika", automatic dosing devices for the carburizing agent in cementation furnaces will be introduced during the current year, and an automatic control system for the carbon potential in cementation will be developed in cooperation with the Vsesoyuznyy proyektno-tekhnologicheskiy institut (All-Union Design, Planning, and Technological Institute). The physical and the chemical laboratory, together with the kafedra liteynogo proizvodstva Ural'skogo politekhnicheskogo instituta im. S. M. Kirova (Department of Foundry Production of the Ural Polytechnic Institute imeni S. M. Kirov), deal with the introduction of automatic rapid tests for molding materials. In galvanic processes, the quality of plating is to be improved by ultrasonics. Bronze is to be partly replaced by caprone. Deficiencies:

S/032/61/027/009/018/019
B101/B208

1) The laboratories are scattered over a wide area of the town; 2) rooms do not meet fundamental requirements; 3) control tests of raw materials for which analyses are already given by the supplier, were doubled in 1960 as compared with 1958; 4) standards for the spectrum analysis of various bronzes and aluminum alloys are wanted. The Laboratoriya standartnykh obraztsov Upravleniya chernykh metallov Sverdlovskogo sovnarkhoza (Laboratory of Standard Samples of the Administration of Ferrous Metals of the Sverdlovsk sovnarkhoz) does not produce them. The CPL competes for the title of a Collective of Communist Labor.

ASSOCIATION: Tsentral'naya laboratoriya mashinostroitel'nogo zavoda (Central Laboratory of a Machine-building Factory) (S. Filippov, Head of the Laboratory); Otdel glavnogo Metallurga (Division of the Chief Metallurgist)(V. Zonov, Official)

YELISEYEV, Aleksey Aleksandrovich; SHNEYBERG, Yakov Abramovich; FILIPPOV, S.M., red.; SEVRYUKOV, P.A., tekhn. red.

[V.V.Petrov; on the 200th anniversary of his birth]V.V.Petrov; k 200-letiiu so dnia rozhdeniia. Kursk, Kurskoe knizhnoe izd-vo, 1961. 78 p. (MIRA 15:8)
(Petrov, Vasilii Vladimirovich, 1761-1834)

FILIPPOV, S.M.

Large-scale increase in the production of iron and steel.
Metallurg 6 no. 1:1-3 Ja '61. (MIRA 14:1)

1. Glavnyy spetsialist Gosplana SSSR.
(Cast iron) (Steel)

KANISHCHEV, Petr Mikhaylovich, inzh.; FILIPPOV, S.M., red.

[Constructing livestock buildings of soil concrete; practices of the "Rodina Khrushcheva" Collective Farm near the village of Kalinovka, Kursk Province] Stroitel'stvo zhivotnovodcheskikh pomeshchenii iz gruntobetona; iz opyta kolkhoza "Rodina Khrushcheva" S. Kalinovki Kurskoi oblasti. Kursk, Kurskoe knizhnoe izd-vo, 1961. 29 p.
(MIRA 17:6)

S/130/62/000/002/001/005
A006/A101

AUTHOR: Filippov, S. M.

TITLE: Five metallurgical bases of Communism

PERIODICAL: Metallurg, no. 2, 1962, 2 - 4

TEXT: General information is presented on the development of metallurgy in the USSR within the coming 20 years. It is intended to produce by 1980 an annual amount of 250 million tons of steel, that is to say four times more than in 1960. This increase will be attained by the development of five metallurgical bases: 1) Ukrainian base; the increased production of non-ferrous metals will be brought about by the organization of 3 large-capacity metallurgical plants in the Kremenchug, Kerch and West-Ukrainian region, and by the development of existing plants; 2) the Ural base; by 1980 steel production will be raised twice; 3) Siberian and Far East base; large capacity plants will be erected, including the West-Siberian, Taysheta, Barnaul, Transbaikalian and other plants; 4) the Kazakhstan base, with new plants at Karaganda and in the Kustanay region; 5) a base in the European region of the USSR will be developed in the region of the Kursk Magnetic Anomaly; existing plants (Novolipetsk, Cherepovets, Novotul'skiy) will be

Card 1/2

Five metallurgical bases of Communism

extended and new high-capacity metallurgical enterprises constructed. Raw materials will be supplied from three basic centers, namely the Kursk Anomaly producing 60 million tons of processed ore per year, Kazakhstan with about 70 million tons, and Siberia supplying about 50 million tons of ore and concentrates. Steel and rolled metal production will be raised by the development of technological processes and equipment. By 1970 it is intended to attain a steelmelting level exceeding the present production of the USA by 65 million tons.

FILIPPOV, S.M.

With a firm step. Metallurg 7 no.9:1-2 S '62. (MIRA 15:9)

1. Glavnyy spetsialist Gosplana SSSR.
(Iron industry) (Steel industry)

RYABIN'KIY, Bronislav Yakovlevich; ADARYUKOV, G.I., inzh., retsenzent; BERLYAND, S.S., inzh., retsenzent; GERASIMENKO, V.A., inzh., retsenzent; GRUDSKIY, V.A., inzh., retsenzent; DASHEVSKIY, Ye.B., inzh., retsenzent; KARPMAN, Ya.I., inzh., retsenzent; KOROLEV, M.N., inzh., retsenzent; KORSAKOV, A.A., inzh., retsenzent; LISENKO, T.P., inzh., retsenzent; PEKILIS, I.B., inzh., retsenzent; REVYAKIN, A.A., inzh., retsenzent; ROMANOVICH, N.D., inzh., retsenzent; FILIPPOV, S.M., inzh., retsenzent; BRUSHTEYN, A.I., red.izd-va; DOBUZHINSKAYA, L.V., tekhn. red.

[Planning and the economics of metallurgical plants] Planirovanie i ekonomika metallurgicheskikh zavodov. Izd.3., perer. i dop. Moskva, Metallurgizdat, 1963. 754 p. (MIRA 16:4)
(Steel industry--Management)

PERTSEV, M.A.; FILIPPOV, S.M.

For a continued expansion of ferrous metallurgy. Metallurg 8 no.1:1-3 Ja '63. (MIRA 16:1)
(Iron and steel plants—Production standards)

FILIPPOV, S.M.

For a further increase of labor productivity in ferrous metallurgy.
Metallurg 8 no.9:1-3 S '63. (MIRA 16:10)

1. Glavnyy spetsialist Soveta narodnogo khozyaystva SSSR.
(Iron industry) (Steel industry)

OVSYANNIKOV, Nikolay Nikolayevich, inzh.; FILIPPOV, S.M., red.; SEVRYUKOV, P.A., tekhn. red.

[Green light to advanced welding methods] Progressivnoi svarke - shirokuiu dorogu. Kursk, Kurskoe knizhnoe izd-vo, 1963. 78 p. (MIRA 17:4)

ORLOV, Vladimir Borisovich, inzh.; [illegible], [illegible], red.

[Aid for the innovator] V pomoshch' ratsionalizatoru. Kursk, Kurskoe knizhnoe izd-vo, 1964. 118 p. (MIRA 18:2)

FILIPPOV, S.M.

For a fuller use of industrial potentialities. Metallurg 10 no.9: 1-2 S '65. (MIRA 18:9)

1. Glavnyy spetsialist Soveta narodnogo khozyaystva SSSR.

SKVORTSOV, S.B.; FILIPPOV, S.M.; YEFREMYCHEV, V.I.

A miniature semiconductor converter for hydrometeorological telemetering systems. Trudy NIIGMP no.12:67-71 '64. (MIRA 18:4)

FILIPPOV, S.P., inzhener; KAZIMOV, A.A., inzhener.

Communications bay for tandem stations. Avtom., telem. i sviaz' no.3:22-24 Mr '57. (MLRA 10:4)
(Telecommunication--Apparatus and supplies)
(Railroads--Communication systems)

FILIPOV, S.P.

KAZIMOV, A.A.; FILIPOV, S.P., konstruktor

Voice answering device. Avtom., telem.i sviaz' 3 no.7: 8-10 Jl '59. (MIRA 12:12)

1. Vedushchiy konstruktor otdela provodnoy zheleznodorozhnoy svyazi Konstruktorskogo byuro TSentral'nogo upravleniya signalizatsii i svyazi Ministerstva putey soobshcheniya (for Kazimov).

(Telephone)

FILIPPOV, S.P.

Expenditure of oxygen and the glycolytic activity of the brain tissue in insulin shock and following its cooping with glucose and adrenaline. Probl. endok. i gorm. 10 no.6:97-101 N-D '64. (MIRA 18:7)

1. Kafedra biokhimii (zav. - prof. S.V.Zakharov) Yaroslavskogo meditsinskogo instituta.

FILIPPOV, S.P.

Sugar uptake and glycolytic activity of brain tissue following administration of various preparations during insulin coma. Probl. endok. i gorm. 11 no.6:87-92 N-D '65. (MIRA 18:12)

1. Kafedra biokhimii (zav. - prof. S.V. Zakharov) Yaroslavskogo moditsinskogo instituta.

ACC NR: AP6036054 SOURCE CODE: UR/0056/66/051/004/1115/1119

AUTHOR: Gudzenko, L. I.; Filippov, S. S.; Shelepin, L. A.

ORG: Physics Institute im. P. N. Lebedev, Academy of Sciences SSSR (Fizicheskiy institut Akademii nauk SSSR)

TITLE: Rapidly recombining plasma jets

SOURCE: Zhurnal eksperimental'noy i teoreticheskoy fiziki, v. 51, no. 4, 1966, 1115-1119

TOPIC TAGS: plasmoid, ionized plasma, plasma decay, plasma jet, adiabatic process, plasma laser

ABSTRACT: The authors consider a plasma jet containing atoms or ions with several discrete levels, the populations of which are much smaller than those given by the Saha formula for a given free-electron density and temperature. They show that a plasma jet of this kind can be used to obtain a relatively dense gas stream with unpopulated lower levels. This is done by making use of the rapid recombination that takes place when the plasma is initially highly ionized and the temperature of the free electrons is abruptly reduced. In this case the populations in the lower levels cannot follow the transitions of the electrons to the upper discrete levels and the resultant nonequilibrium situation (if the free electrons are cooled rapidly enough) can lead to population inversion, thus making it possible to use this gas in a laser

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ACC NR: AP6036054

configuration. This calls for cooling the plasma within a time 10^{-7} -- 10^{-8} sec from 5×10^3 to 10^3 K at a free-electron density 10^{14} -- 3×10^{15} cm^{-3}. In the case of an unmagnetized plasma, analysis shows that, in view of the difficulty of three-dimensional expansion into vacuum under laboratory conditions, any practical utilization of adiabatic cooling for the purpose of producing a large amount of hydrogen with a nonequilibrium population inversion in the atomic levels is hardly realizable. In the case of a magnetized plasma, it is shown that by freezing-in a strong magnetic field in the plasma it is possible to increase greatly the initial plasma pressure and thus intensify the cooling accompanying the expansion into vacuum. However, the required rapid displacement of a strong magnetic field still makes such a procedure difficult. A proposed means of overcoming the difficulty is to produce a device in which a high-velocity magnetized jet of fully ionized hydrogen is introduced into a vacuum with a magnetic field that falls off with distance. Theoretical estimates of the initial-plasma density required for this purpose and possible means of accomplishing a sufficiently rapid decrease of the magnetic field are discussed. The authors thank V. S. Komel'kov, M. I. Pergament, S. B. Pikel'ner, S. I. Syrovatskiy, and S. S. Serevitinov for a discussion. Orig. art. has: 5 formulas.

SUB CODE: 20/ SUBM DATE: 05Mar66/ ORIG REF: 005/ OTH REF: 001/ ATD PRESS: 5106

Card 2/2

USSR/Nuclear Physics - Pions FD-3354

Filippov, S. S.

Card 1/1 Pub. 146-26/28

Author : Filipov S. S.

Title : Hypothesis of Yang-Fermi (Letter to the editor)

Periodical : Zhur. Eksp. i Teor. Fiz., 29, No 5, 707-708, 1955

Abstract : Computation is czrried out on initiative of Prof. Ya. P. Terletskiy of V_0 (depth of potential well) for various $\mathcal{L}$ (rest energy of quanta) and energy E in Mc^2 units on basis of Yang-Fermi assumption that the pion is a system of nucleon-antinucleon in bound form. One US and one USSR references.

Institution : Institute of Nuclear Problems, Acad. Sci. USSR

Submitted : December 18, 1954

Filippov. S. S.

AUTHORS: Osipenkov, V. T., Filippov, S. S. 56-1-33/56

TITLE: The Interaction Cross Sections of Pions With Carbon-Nuclei (Secheniya vzaimodeystviya π-mezonov s yadrami ugleroda)

PERIODICAL: Zhurnal Eksperimental'noy i Teoreticheskoy Fiziki, 1958, Vol. 34, Nr 1, pp. 224-226 (USSR)

ABSTRACT: At first short reference is made to papers dealing with the same subject. The present paper uses the data by R. M. Frank (reference 1) for the calculation of the integral cross section of the elastic and inelastic interaction of pions with carbon-nuclei for meson-energies of from 0 to 350 MeV. This calculation was performed in quasiclassical approximation. For the purpose of estimating the error of the quasiclassical approximation the cross sections were also calculated according to the exact quasiclassical formulae. The results of these calculations are illustrated by 2 diagrams and compared with the results of other authors. Besides the cross sections found in various experimental papers were entered into these diagrams. At high energies the elastic and inelastic cross sections calculated in quasiclassical approximation are 2o to 25% larger than the

Card 1/2

The Interaction Cross Sections of Pions With Carbon-Nuclei 56-1-33/56

cross sections calculated according to the exact quantum-mechanical formulae. The energy dependence of the inelastic cross section calculated with the exact quantum-mechanical formula is in satisfactory agreement with the existing experimental data. But at meson-energies of less than 100 MeV the elastic cross sections calculated here are much smaller than the experimental values. In this range of energy the depth of the potential well used in the calculations is too large. The insufficient amount of experimental data on the elastic scattering does not permit any exact conclusions on the agreement of the calculations with the experiment. The calculation of the integral cross sections for a nucleus with smeared out edge would be of interest. There are 3 figures and 21 references, 6 of which are Slavic.

ASSOCIATION: ~~All-Union~~ Joint Institute for Nuclear Research (Ob"yedinennyy institut yadernykh issledovaniy)

SUBMITTED: August 3, 1957

AVAILABLE: Library of Congress

Card 2/2

GERTSENSHTEYN, M.Ye.; PUSTOVOYT, V.I.; FILIPPOV, S.S.

Hypersound amplification in piezoelectric semiconductors. Radiotekh. i elektron. 8 no.9:1607-1614 S '63. (MIRA 16:9)

1. Fizicheskiy institut im. P.N.Lebedeva AN SSSR.
(Piezoelectric substances)

EWT(1)/EWP(m)/EWA(d)/EPF(k)/EWA(1) Pd-1

ACCESSION NR: AP5014176

JR/0382/65/000/001/0055/0060

533.95 : 536.4 : 621.362

AUTHOR: Filippov, S. S.

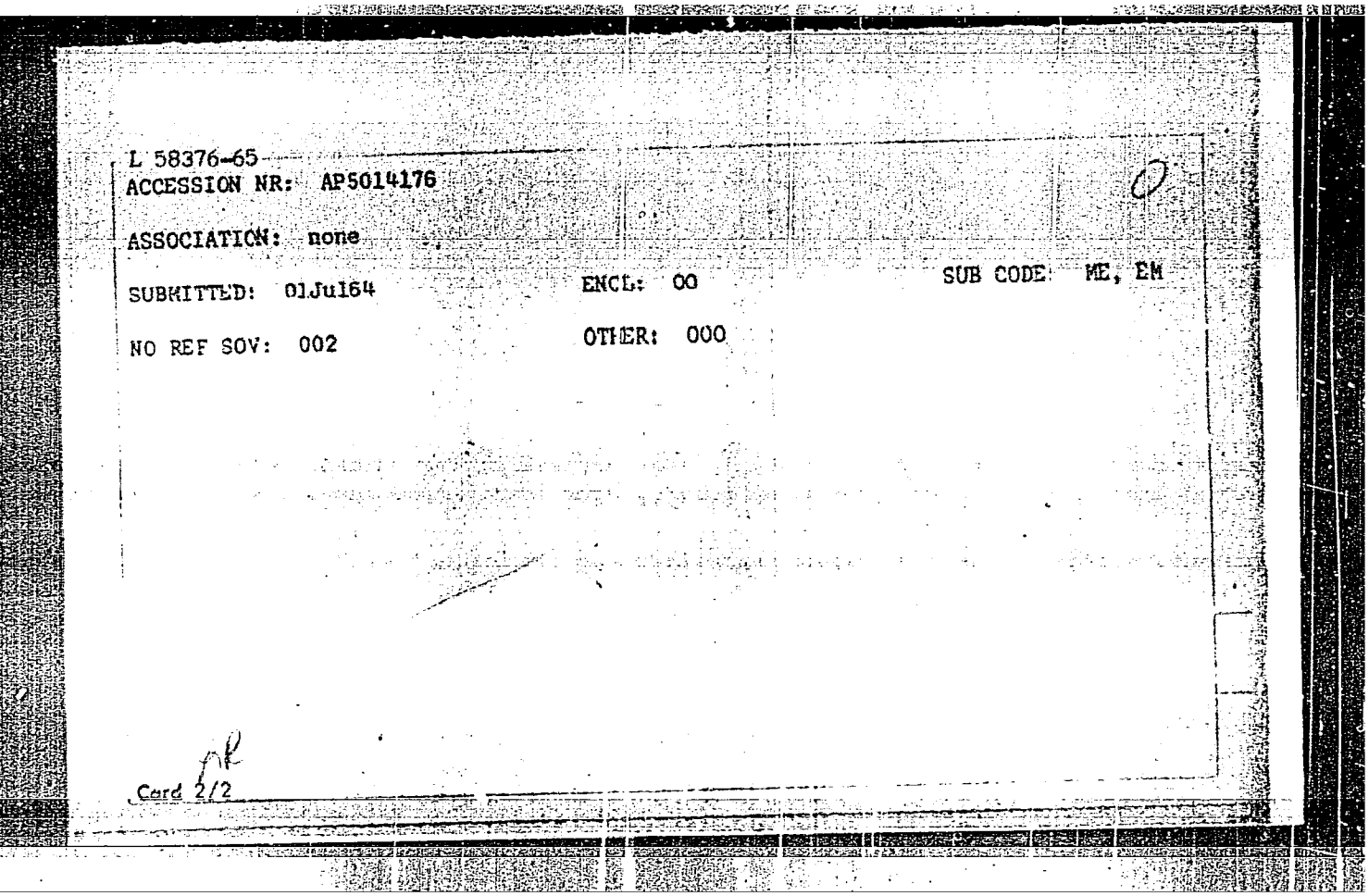
TITLE: Stationary axisymmetric flow of a conducting gas in external electric and magnetic fields in one-dimensional approximation

SOURCE: Magnitnaya gidrodinamika, no. 1, 1965, 55-60

TOPIC TAGS: magnetohydrodynamics, Reynolds number, conducting gas

ABSTRACT: A set of nonlinear equations is derived and examined for the flow of ionized gas of finite conductivity (σ) in a coaxial channel of a constant and moderately varying cross sections. The set is time-independent and contains terms with external electric (E) and magnetic (B) fields only. The viscous friction and heat exchange are neglected. The investigated region covers flows with small magnetic and large ordinary Reynolds numbers. Parameter $\chi = \sigma KB$, where K is Hall's constant, is used to graph the region where real solutions for the case of constant E and B exist. The solution of this problem yields a leading term in the two-dimensional distribution for axisymmetric flows. Orig. art. has: 12 formulas, 3 figures.

Card 1/2



L 58376-65
ACCESSION NR: AP5014176

ASSOCIATION: none

SUBMITTED: 01Jul64 ENCL: 00 SUB CODE: ME, EM

NO REF SOV: 002 OTHER: 000

Card 2/2

ACC NR: AP7003252 SOURCE CODE: UR/0207/66/000/006/0058/0062

AUTHOR: Sanochkin, Yu. V.; Filippov, S. S. (Moscow)

ORG: none

TITLE: Nonisothermal flow of a plasma in a plane magnetohydrodynamic channel

SOURCE: Zhurnal prikladnoy mekhaniki i tekhnicheskoy fiziki, no. 6, 1966, 58-62

TOPIC TAGS: laminar flow, mhd flow, plasma flow, transport property, temperature dependence, boundary value problem, heat transfer

ABSTRACT: The authors calculate laminar stationary flow of a conducting medium in a plane channel in the presence of a transverse magnetic field, under the assumption that there is no longitudinal heat flow and that all the transport coefficients depend on the temperature. Account is also taken of the viscous energy dissipation. The transverse velocity and temperature distributions are obtained for channel walls maintained at a constant temperature. It is shown that the problem can be formulated in the form of a nonlinear boundary value problem with six dimensionless parameters, which can be solved only by numerical means. The possible boundary conditions for the flow are listed and principal attention is paid to the short-circuited mhd-generator and no-load mhd-generator modes. Temperature and velocity distributions are obtained for several conditions, and account is taken of the influence of the nonisothermal flow on the coefficients of surface friction and heat transfer at the wall. The authors thank M. V. Maslennikov and Yu. S. Sigov for valuable advice when

ACC NR: AP7003252

choosing the numerical method of solution. Orig. art. has: 5 figures and 13 formulas.

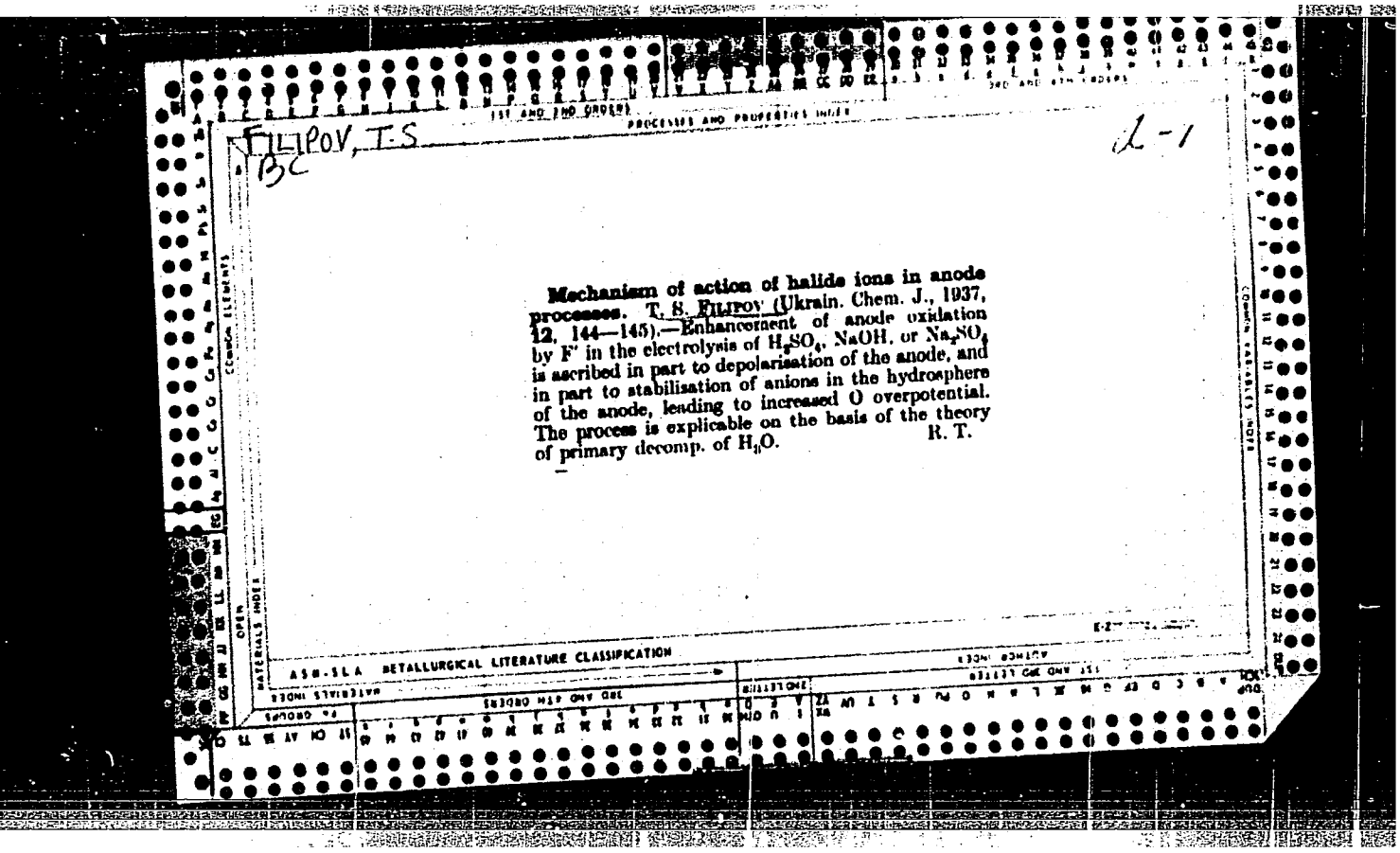
SUB CODE: 20/ SUBM DATE: 18Apr66/ ORIG REF: 002/ OTH REF: 004

Card 2/2

FILIPPOV, T.

KRYLOVA, N.; KOMAROVA, V.; SINITSA, P.:FILIPPOV, T.;

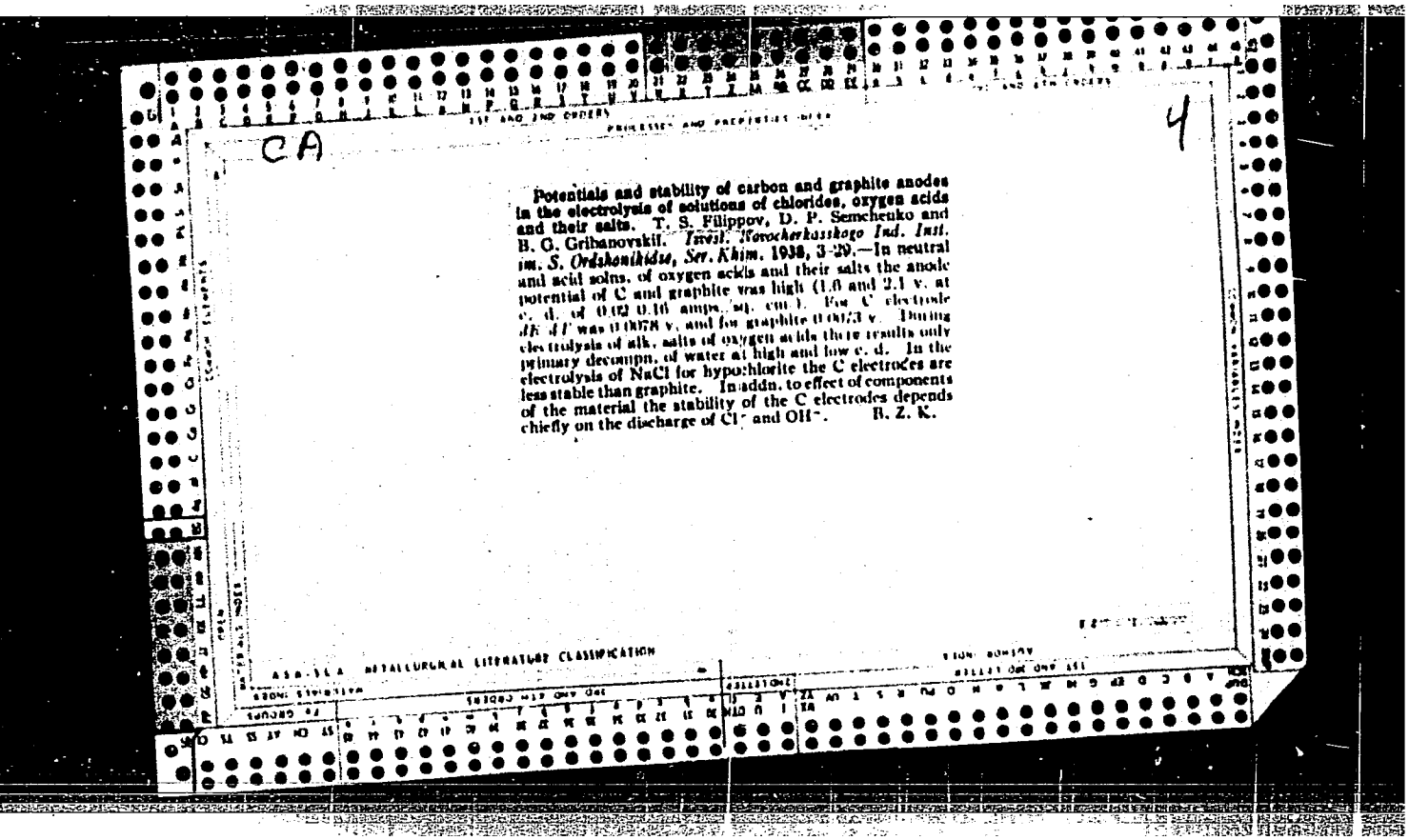
Collection of blood for food at the Siauliai Meat Combine. Mias. ind.SSSR 28 no.1:21-22 '57. (MLRA 10:3)
(Blood) (Siauliai--Slaughtering and slaughterhouses)



FILIPOV, T.S
BC

L-1

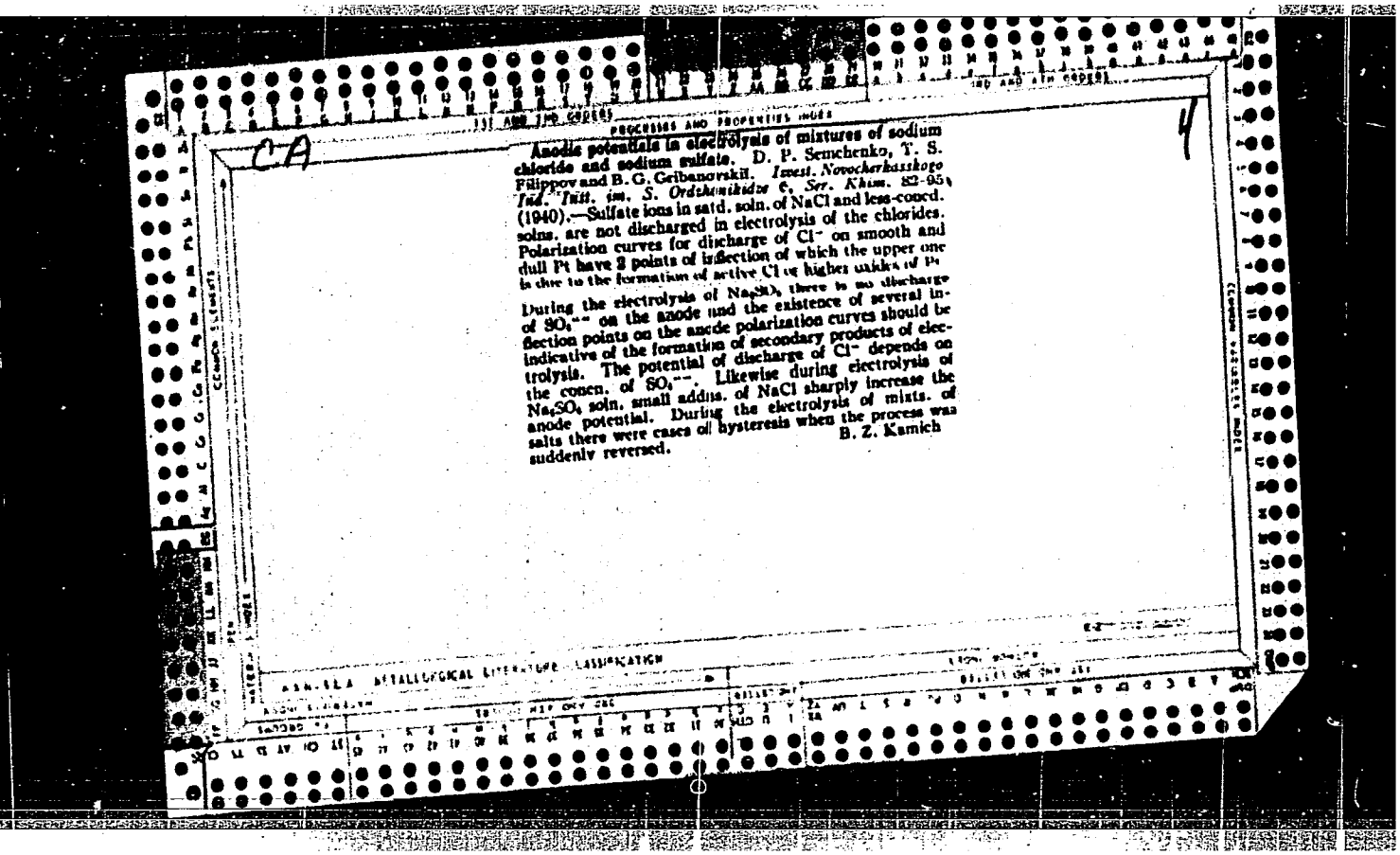
Mechanism of action of halide ions in anode processes. T. S. FILIPOV (Ukrain. Chem. J., 1937, **12**, 144—145).—Enhancement of anode oxidation by F' in the electrolysis of H_2SO_4, NaOH, or Na_2SO_4 is ascribed in part to depolarisation of the anode, and in part to stabilisation of anions in the hydrosphere of the anode, leading to increased O overpotential. The process is explicable on the basis of the theory of primary decomp. of H_2O. R. T.



CA

4

Potentials and stability of carbon and graphite anodes in the electrolysis of solutions of chlorides, oxygen acids and their salts. T. S. Filippov, D. P. Semchenko and B. G. Gribanovskii. *Trudy Novocherkasskogo Ind. Inst. im. S. Ordzhonikidze, Ser. Khim.* 1938, 3-29.—In neutral and acid solns. of oxygen acids and their salts the anode potential of C and graphite was high (1.6 and 2.1 v. at c. d. of 0.02-0.16 amps./sq. cm.). For C electrode *H* 1.1 was 0.0078 v. and for graphite 0.0073 v. During electrolysis of alk. salts of oxygen acids there results only primary decompn. of water at high and low c. d. In the electrolysis of NaCl for hypochlorite the C electrodes are less stable than graphite. In addn. to effect of components of the material the stability of the C electrodes depends chiefly on the discharge of Cl^- and OH^-. B. Z. K.

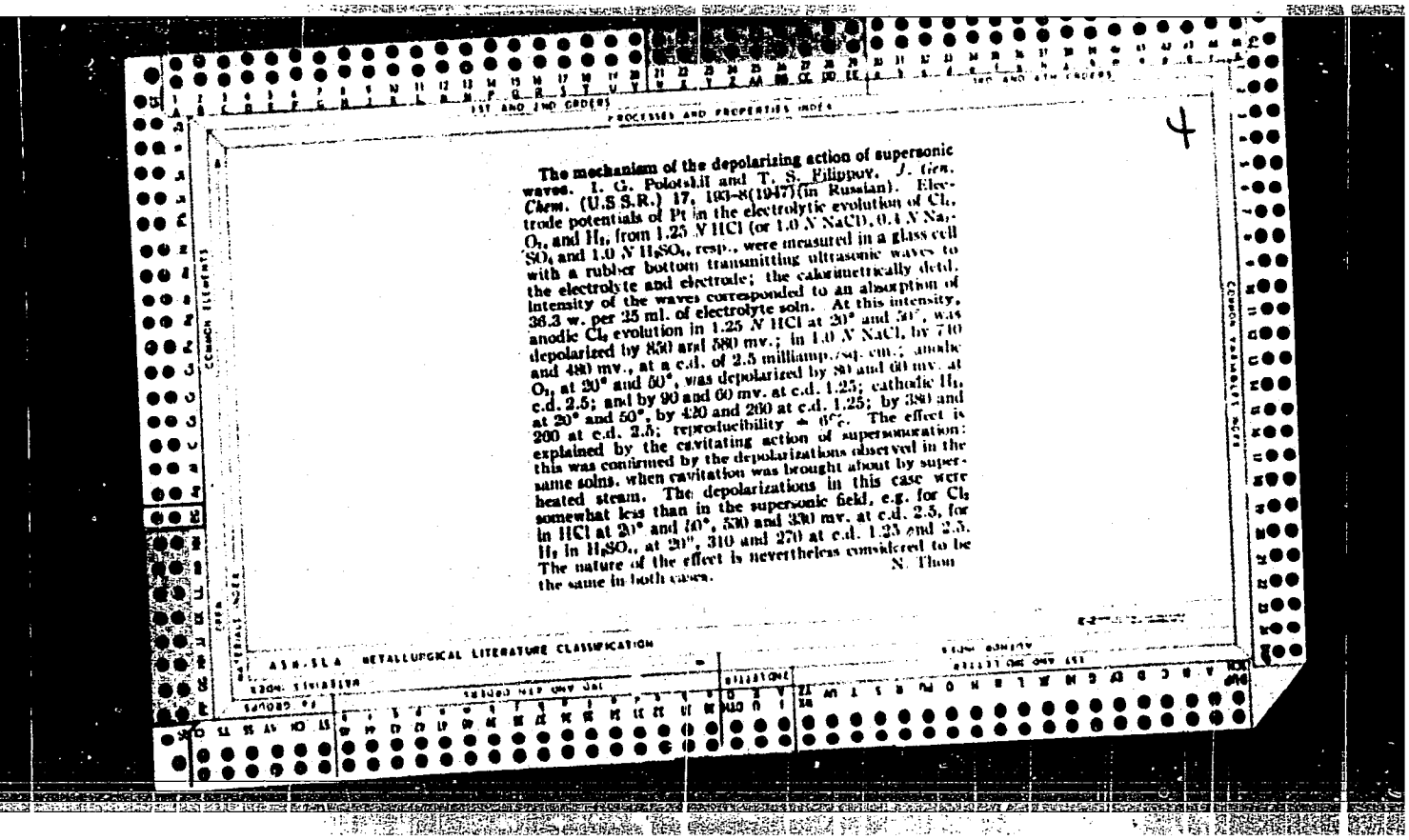


CA

4

Anodic potentials in electrolysis of mixtures of sodium chloride and sodium sulfate. D. P. Semchenko, T. S. Filippov and B. G. Gribanovskii. *Izvest. Novocherkasskogo Ind. Inst. im. S. Ordzhonikidze*, *Ser. Khim.* 82-95 (1940).—Sulfate ions in satd. soln. of NaCl and less-concd. solns. are not discharged in electrolysis of the chlorides. Polarization curves for discharge of Cl^- on smooth and dull Pt have 2 points of inflection of which the upper one is due to the formation of active Cl at higher anodic potentials. During the electrolysis of Na_2SO_4 there is no discharge of SO_4^{--} on the anode and the existence of several inflection points on the anode polarization curves should be indicative of the formation of secondary products of electrolysis. The potential of discharge of Cl^- depends on the concn. of SO_4^{--}. Likewise during electrolysis of Na_2SO_4 soln. small additns. of NaCl sharply increase the anode potential. During the electrolysis of mixts. of salts there were cases of hysteresis when the process was suddenly reversed.

B. Z. Kamich



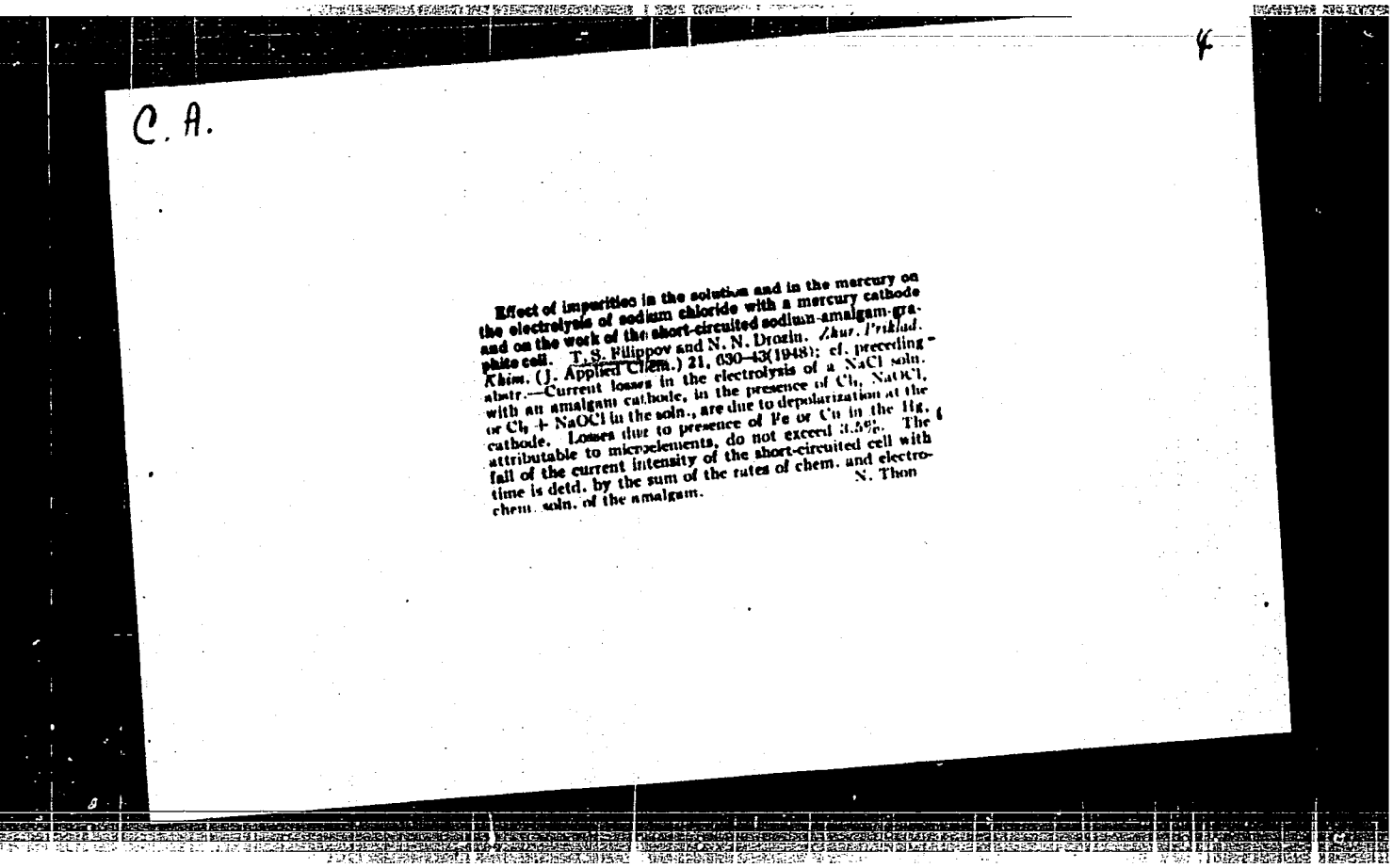
The mechanism of the depolarizing action of supersonic waves. I. G. Polotskii and T. S. Filippov. *J. Gen. Chem.* (U.S.S.R.) 17, 103–8(1947)(in Russian). Electrode potentials of Pt in the electrolytic evolution of Cl_2, O_2, and H_2 from 1.25 *N* HCl (or 1.0 *N* NaCl), 0.4 *N* Na_2SO_4 and 1.0 *N* H_2SO_4, resp., were measured in a glass cell with a rubber bottom transmitting ultrasonic waves to the electrolyte and electrode; the galvanometrically detd. intensity of the waves corresponded to an absorption of 36.3 w. per 25 ml. of electrolyte soln. At this intensity, anodic Cl_2 evolution in 1.25 *N* HCl at 20° and 50°, was depolarized by 850 and 580 mv.; in 1.0 *N* NaCl, by 740 and 480 mv., at a c.d. of 2.5 milliamp./sq. cm.; anodic O_2 at 20° and 50°, was depolarized by 80 and 60 mv. at c.d. 2.5; and by 90 and 60 mv. at c.d. 1.25; cathodic H_2 at 20° and 50°, by 420 and 260 at c.d. 1.25; by 380 and 200 at c.d. 2.5; reproducibility ± 6%. The effect is explained by the cavitating action of supersonication: this was confirmed by the depolarizations observed in the same solns. when cavitation was brought about by superheated steam. The depolarizations in this case were somewhat less than in the supersonic field, e.g. for Cl_2 in HCl at 20° and 40°, 530 and 330 mv. at c.d. 2.5, for H_2 in H_2SO_4 at 20°, 310 and 270 at c.d. 1.25 and 2.5. The nature of the effect is nevertheless considered to be the same in both cases. N. Thon

C. A.

4

Effect of the oxidation products of the electrolysis of sodium chloride with a mercury cathode on the potentials of mercury-sodium amalgams. N. N. Drozin and T. S. Filippova. *Zhur. Prikład. Khim.* (J. Applied Chem.) 21, 1230-9(1948).—In a soln. of NaCl, 300 g./l., the change of the potential φ of a dropping-Na-amalgam electrode produced by the presence of Cl_2 (up to 1.3 g./l.) in the soln. does not exceed 0.02 v.; the effect of Cl_2 increases with decreasing Na content of the amalgam (0.10-0.02%). In a short-circuited Na-amalgam/NaCl soln./C (graphite) cell, or in electrolysis with an external source, the initial current intensity at equal φ of the amalgam is greater in the presence of Cl_2 or of NaOCl in the soln., and increases with the content of depolarizer; on the other hand, φ of the amalgam falls towards the end more strongly the higher is the content of depolarizer. The depolarization $\Delta\varphi$ (difference of φ of the amalgam without and with depolarizer) increases sharply with decreasing current intensity; the depolarizing activity increases in the order Cl_2, NaOCl, NaOCl + Cl_2. The effects of the depolarizers on the potential of the graphite electrode show the same behavior, and $\Delta\varphi$ is approx. of the same order. The electrochem. soln. of concd. amalgam in the short-circuited cell is limited by processes taking place on the graphite electrode. The rate of the electrochem. soln. in the presence of Cl_2 or Cl_2 + NaOCl is strongly increased by stirring; with NaOCl and alkali stirring is without effect. N. Thon

All-Union Inst. Soda Industry, Kharkov



C. A.

4

Effect of impurities in the solution and in the mercury on the electrolysis of sodium chloride with a mercury cathode and on the work of the short-circuited sodium-amalgam-graphite cell. T. S. Filippov and N. N. Drozin. *Zhur. Prikład. Khim.* (J. Applied Chem.) 21, 630–43(1948); cf. preceding abstr.—Current losses in the electrolysis of a NaCl soln. with an amalgam cathode, in the presence of Cl, NaOCl, or Cl + NaOCl in the soln., are due to depolarization at the cathode. Losses due to presence of Fe or Cu in the Hg, attributable to microelements, do not exceed 0.5%. The fall of the current intensity of the short-circuited cell with time is detd. by the sum of the rates of chem. and electrochem. soln. of the amalgam. N. Thon

FILIPPOV, T. S.

Filippov, T. S. - "The work of the Electrochemical Laboratory, (The group for chlorine andcarbon electrodes)", Trudy Vsesoyuz. in-ta sodovoy, prom-sti, Vol V, 1949, p. 36-38.

SO: U-4631, 16 Sept. 53, (Letopis 'nykh Statey, No. 24, 1949).

FILIPPOV, T.S.

Solubility of water in chlorobenzene and ethylbenzene. T. S. Filippov and A. A. Furman. *J. Appl. Chem. U.S.S.R.* [illegible]; *Zhur. Prikład. Khim* 25, 805–7(1952).—An app. consisting of a sealed ampul contg. the sample, in a bath with accurate temp. control, is described for detg. the reciprocal soly. of liquids. The soly. of H_2O in ethylbenzene and in chlorobenzene is given for the temp. range 17.7°–40.5°. Bernard Rubin

FILIPPOV, T.S.

Category: USSR B-12

Abs Jour: R Zh--Kh, No 3, 1957, 7680

Author : Yakovleva, Ye. I., Rozental, K. I., and Filippov, T. S.
Inst : Not given
Title : On the Mechanism of the Electrochemical Formation of Oxygen Compounds with Chlorine at a Smooth Pt Electrode. I. Investigation of the Kinetics of the Electrochemical Oxidation of Cl^- and ClO_3^- Ions by Anode Polarography

Orig Pub: Zh. Fiz. Khimii, 1956, Vol 30, No 4, 937-944

Abstract: The polarographic curves for the anodic oxydation of Cl^- (I), ClO^- (II), ClO_2^- (III) and ClO_3^- (IV) have been recorded with a rotating Pt electrode for the purpose of investigating the mechanism of the electrochemical formation of compounds of oxygen with chlorine by a previously described method (RZhKhim, 1954, 35690). Sharp waves were obtained for I on a background of 0.9N Na_2SO_4 + 0.1N H_2SO_4, for II and III on a background of 1N NaCl, and for IV on a background of 6N $NaClO_4$. The half-wave potential $E_{\frac{1}{2}}$ under these conditions is equal to 1.65, 0.41, 1.07, and 1.72 volts, respectively. The limiting

Card : 1/3

Category: USSR

B-12

Abs Jour: R Zh--Kh, No 3, 1957, 7680

current (i_d) is proportional to the concentrations of I-IV over the concentration range $\sim 10^{-2}$ - 10^{-3}N, in the case of I and IV and 10^{-2} - 10^{-4} N in the case of II and III. For I, i_d increases by about 20 percent when the rate of change of the potential φ is raised from 4 to 32 mv/sec; i_d depends on the condition of the Pt surface and on the pH (for H concentrations under 0.2N). In that range of acidity the pH influences the $E_{\frac{1}{2}}$ of I; the slope of the line $[E, \log (i_d-i)/i]$ increases with increasing pH and becomes constant (160mv) at H concentrations of over 0.2N. In the case of IV a strong dependence of $E_{\frac{1}{2}}$ and i_d on the pH and on the concentration of background ions is observed; i_d is independent of the condition of the surface of the Pt electrode and of the rate of change of φ . The slope of the line $[E, \log (i_d-i)/i]$ is equal to 60-70 mv. The possibility of the polarographic determination of I-IV when present together is shown. It is assumed that in sufficiently concentrated HCl solutions ($1-10^{-1}$ N),

Card : 2/3

-13-

Category: USSR B-12

Abs Jour: R Zh--Kh, No 3, 1957, 7680

I is oxidized to Cl_2; in dilute HCl solutions (10^{-2}-10^{-3} N), I is oxidized to IV, and the reaction involves the active oxygen adsorbed at the Pt surface (RZhKhim, 1954, 35690); it is assumed that the rate of the overall process is determined by the rate of the step in which the Cl^- ions are oxidized by the oxygen adsorbed at the Pt electrode. It is also assumed that the anodic oxidation of IV to ClO_4 proceeds by way of the formation of ClO_3 radicals which are subsequently oxidized by the surface oxygen to ClO_4^-.

Card : 3/3 -14-

FILIPPOV, T.S.

B-12

USSR/Physical Chemistry - Electrochemistry.

Abs Jour : Referat Zhur - Khimiya, No 6, 25 March 1957, 18722

Author : Elina, L.M., Borisova, T.I., and Filippov, T.S.
Inst : RZhKaim, 1957, 7680
Title : On the Mechanism of Electrochemical Formation of Oxygen Compounds of Chlorine Upon a Smooth Platinum Electrode. II. Investigation of the Process of Oxidation of Chlorine-ion by the Method of Alternating Currents.

Orig Pub : Zh. fiz. khimii, 1956, 30, No 6, 1282-1290

Abstract : The authors examined the mechanism of anode oxidation of Cl^- ion in acid solutions, upon smooth Pt-electrode, by the methods of measuring capacitance (C) and resistance in alternating current of different frequency (10-2000 hc), and by taking polarization curves. The presence of a sharp maximum in the region of potentials (E) (+1.4) - (+1.5) v. (n.v.e.) upon the curve (C,E) measured in an acidified solution of Na_2SO_4 containing 0.1 n. HCl,

Card 1/2

Abs Jour : Referat Zhur - Khimiya, No 6, 25 March 1957, 18722

shows that in this region (E) a reaction of oxidation of Cl^- to Cl_2 is going on. At lower concentrations of Cl^- in this region (E) the same reaction is going on, but in this case there is a slowed down diffusion of Cl^- toward the anode which is proved by the absence of a sharp maximum on the curve (C,E) at frequencies of 200 hc and up. The maximum on the capacitance curve at E = (+1.7)-(+1.9) v. is connected, in accordance with the opinion of the authors, with the formation of ClO_4^-. Interdependence of the degree of Pt oxidation and of the progress of Cl^- oxidation is investigated. It is shown that the presence of Cl^- puts the brake on the oxidation of Pt and that Cl^- oxidation is connected with the higher surface oxides of Pt which participate in this reaction. Corresponding reactions are schematically given.

Communication I: see RZhKhim, 1957, 7689.

FILIPPOV T. S.

~~USACHEV, D. N.~~

5(4) PHASE I BOOK EXPLOITATION SOV/2216

Soveshchaniye po elektrokhimii. 4th, Moscow, 1956.

Trudy...: [sbornik] (Transactions of the Fourth Conference on Electrochemistry: Collection of Articles) Moscow, Izd-vo AN SSSR, 1959. 868 p. Errata slip inserted. 2,500 copies printed.

Sponsoring Agency: Akademiya nauk SSSR. Otdeleniye khimicheskikh nauk.

Editorial Board: A.N. Frumkin (Resp. Ed.) Academician, O.A. Yesin, Professor, S.I. Zhdanov (Resp. Secretary), B.N. Kabanov, Professor, S.I. Zhdanov (Resp. Secretary); B.N. Kabanov, Professor, Ya. M. Kolotyrkin, Doctor of Chemical Sciences; V.V. Losev, P.D. Lukovtsev, Professor; Z.A. Solov'yeva; V.V. Stender, Professor; and G.M. Florianovich; Ed. of Publishing House: N.G. Yegorov; Tech. Ed.: T.A. Prusakova.

PURPOSE: This book is intended for chemical and electrical engineers, physicists, metallurgists and researchers interested in various aspects of electrochemistry.

COVERAGE: The book contains 127 of the 138 reports presented at the Fourth Conference on Electrochemistry sponsored by the Department of Chemical Sciences and the Institute of Physical Chemistry, Academy of Sciences, USSR. The collection pertains to different branches of electrochemical kinetics, double layer theories and galvanic processes in metal electrodeposition and theoretical electrolysis. Abridged discussions are given at the end of each division. The majority of reports not included here have been published in periodical literature. No personalities are mentioned. References are given at the end of most of the articles.

Card 12/34

TYRSIN, S.M., gornyy inzh; FILIPPOV, T.Ye., gornyy inzh.

Drainage operations at the Sokolovka ore deposit. Gor.zhur. no.11:21-24 N '48. (MIRA 11:11)

1. Sokolovsko--Sarbayskiy gorno-obogatitel'nyy kombinat.
(Sokolovka(Kustanay Province)--Mine drainage)

FILIPPOV, T.Yu. (Kiyev)

Theoretical and practical aspects of a young science; "Kibernetika," no.1. Reviewed by T.IU. Filippov. Priroda 54 no.3:122-123 Mr '65. (MIRA 18:4)

FILIPPOV, V. (g. Balkhash)

"Beshbarmak" served in the wrong way. Sov. profsoiuzy 18 no.18:34-35 S '62. (MIRA 15:9)
(Dzhezkazgan—Nonferrous metal industries)

FILIPPOV, V. Engr. Major

"Preparation of Airplane De-Icers for Flight"

FILIPPOV, V.

AID P - 1561

Subject : USSR/Aeronautics

Card 1/1 Pub. 135 - 14/18

Author : Filippov, V., Enginner Lt. Col.

Title : Forces acting on blades of helicopter rotors

Periodical : Vest. vozd. flota, 2, 74-82, F 1955

Abstract : The author explains briefly the mechanism of the attachment of the blades. He analyses forces acting on the rotor in two different conditions of operation: namely, in an axial flow and in oblique flow. He explains briefly the special features of rotor design due to the action of dynamic and aerodynamic forces. Diagrams, graphs, photos, formulae

Institution: None

Submitted : No date

FILIPPOV, V., general-mayor inzhenerno-tekhnicheskoy sluzhby

Air transportation of the future. Av.i kosm. 44 no.2:60-64 '62. (MIRA 15:3)
(Aeronautics, Commercial)

FILIPOV, V., Eng.

Electric Power Plants

Results of the work of public power plants in 1952 and the impending objectives, Zhil.-kom. khoz. 3, No. 1, 1953.

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

FILIPPOV, V.

Prepare electric power plants for fall and wintertime operation.
Zhil.-kom.khoz. 4 no.6:5-6 '54. (MLRA 7:10)
(Electric power distribution)

Filippov, V.

FILIPPOV, V.

[Cost analysis of industrial products] Analiz sebestoimosti promyshlennoi produktsii. Moskva, Gosfinizdat, 1955. 130 p.
(Manufactures--Costs) (MLRA 8:12)

Filippov.

FILIPPOV, V.

From the work practice of the central accounting office of a regional economic council. Bukhg.uchet. 14 [i.e.16] no.9:7-13 '57. (MIRA 10:10)
(Moscow Province--Industries--Accounting)

FILIPPOV, V., inzhener.

Strict economy in management of municipal electric networks. Zhil.-kom. khoz. 3 no.5:6-8 My '53. (MLRA 6:7)
(Electric power distribution)

SHOR, L.; FILIPPOV, V.

Leningrad scientists help Kaliningrad physicians. Zdrav. Ros. Feder. 4 no.8:27-28 Ag '60. (MIRA 13:9)

1. Iz Kaliningradskogo oblzdravotdela.
(KALINGRAD--MEDICINE--STUDY AND TEACHING)

FILIPPOV, V.

Stereophonic radio-phonograph system. Radio no.6:26-28 Je '63.

(Stereophonic sound systems)

1. FILIPPOV, V.
2. USSR (600)
4. Automobile Drivers
7. Beginning of the road. Klub 2, no. 2, 1953.

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

FILIPPOV, V.

Centralized haulage in Baku. Avt.transp. 33 no.6:12-13 Je '55.
(MLRA 8:10)
(Baku--Transportation, Automotive)

FILIPPOV, V.

More attention to the maintenance of automobiles. Avt.transp. 35 no.3:3-4 Mr '57. (MLRA 10:5)
(Automobiles--Maintenance)

FILIPPOV, V.

Organizing radio communications in automotive transportation.
Avt. transp. 36 no.8:10-12 Ag '58. (MIRA 11:9)
(Radio in automotive transportation)

FILIPPOV, V.

In the Technical Council of the Ministry. Avt.transp. 38 no.1:51 Ja '60. (MIRA 13:5)
(Transportation, Automotive)

L 23877-66 EWT(l)/EWT(m)/EPF(n)-2/T/ETC(m)-6 WW/DJ/WE

ACC NR: AP6009922 (A,N) SOURCE CODE: UR/0413/66/000/004/0117/0117

AUTHOR: Bakharev, A. P.; Tumanova, A. S.; Lisitsyn, A. A.; Rodnikov, V. A.; Pozharov, M. A.; Rezvov, K. M.; Smirnov, M. P.; Latysh, V. S.; Kryuchkov, V. Ye.; Filippov, V. V.; Keller, U. U.; Kislov, V. G.; Gryaznov, Yu. A.; Koshman, E. I.; Mos'kin, V. A.; Polonskiy, S. N.; Fedoseyev, N. I.; Lavrov, L. I.

64
B

ORG: none

TITLE: A sectional high-pressure fuel pump. Class 46, No. 179124

SOURCE: Izobreteniya, promyshlennyye obraztsy, tovarnyye znaki, no. 4, 1966, 117

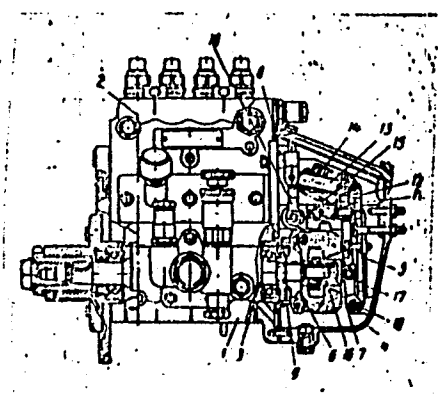
TOPIC TAGS: engine fuel pump, internal combustion engine, high pressure pump

ABSTRACT: This Author's Certificate introduces: 1. A sectional high-pressure fuel pump for internal combustion engines. The pumping elements and camshaft are located in the pump housing. The unit also contains a general-purpose regulator with weights mounted on a hub which is fitted loosely onto the camshaft. These weights operate a clutch which is connected to the fuel pump rod by a lever mechanism. The hub with the weights is connected to the camshaft by a helical spring element for stable operation of the pump under given conditions. 2. A modification of this pump in which the lever mechanism is made up of two levers mounted on a common axis. One of these levers

UDC: 621.43.031

Card 1/3

is connected to the pump rod drawbar and the other is connected to the regulator spring. The lever fastened to the drawbar is also coupled with another spring which



1--housing; 2--pumping element; 3--camshaft; 4--general-purpose regulator; 5--weights; 6--hub; 7--regulator clutch; 8--rod; 9--helical spring element; 10--common axis; 11 and 12--control levers; 13--drawbars; 14--regulator spring; 15--extra spring; 16--stem; 17--clutch cavity; 18--control lever

moves this lever to increase fuel feed during starting of the engine. 3. A modification of this fuel pump in which the regulator clutch is mounted on the stem of the camshaft and prevented from rotating by lugs on one of the levers which fit into grooves on the clutch. The clutch cavity bounded by the end of the shaft is filled with oil for damping. 4. A modification of this pump in which the additional spring coupled with the lever mechanism has its other end connected to the motor control lever so that the spring is cut of operation when the control lever is moved to the minimum idling speed position after the motor is started. 5. A modification of this pump in which the lever is connected to the pump rod

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ACC NR: AP6009922 O

drawbar by an eccentric to change the cyclic feed of the pump during regulation without changing the speed conditions of the regulator.

SUB CODE: 13/ SUBM DATE: 13Apr62/ ORIG REF: 000/ OTH REF: 000

Card 3/3 dda

ACC NR: AN6034952 (N) SOURCE CODE: UR/9008/66/000/265/0003/0003

AUTHOR: Filippov, V. (Lieutenant general; Chairman of sports committee)

ORG: Ministry of Defense, SSSR (Ministerstvo oborony SSSR)

TITLE: Grow rugged, powerful soldiers [New regulation on physical training issued]

SOURCE: Krasnaya zvezda, no. 265, 15 Nov 66, p. 3, cols 5-7

TOPIC TAGS: military training, military policy, military personnel

ABSTRACT: The Soviet armed Forces have introduced a new regulation governing physical training. The regulation prescribes exercises for rocket, land, aviation, naval and air-defense forces, and provides for training troops to withstand special conditions, i.e. long-duration trips on all types of transportation, including airplanes, helicopters, vessels, and prolonged tours of duty at equipment and instruments. To study the new regulation, the Sport Committee of the Ministry of Defense held a meeting of experts in physical training from all of the military services.

SUB CODE: 15/ SUBM DATE: none

Card 1/1

FILIPPOV, V., inzhener-kapitan

A good beginning is a running start for the matter. Komm. Vooruzh. Sil 46 no.4:71-76 F '65. (MIRA 18:5)

1. Zamestitel' nachal'nika otdela komsomol'skoy raboty Glavnogo politicheskogo upravleniya Sovetskoy Armii i Voyenno-Morskogo Flota.

KUZNETSOV, Nikolay Sergeyevich; ANISIMOV, Nikolay Nikitovich; FILIPPOV, V.A., kand. ped. nauk, red.; OSELEDETS, Z.M., red. izd-va; SHERSTNEVA, N.V., tekhn. red.; KOROBKOVA, N.I., tekhn. red.

[Drawing and mechanical drawing]Cherchenie i risovanie. Moskva, Gosstroiizdat, 1962. 314 p. (MIRA 16:1)
(Mechanical drawing)

FILIPPOV, V. A.

"Investigation of the Peculiarities of Commuting and Certain Problems of Its Organization and Planning." Cand Tech Sci, Moscow Automobile and Road Inst imeni Molotov, Min Higher Education USSR, Moscow, 1954. (KL, No. 4, Jan 55)

Survey of Scientific and Technical Dissertations Defended at USSR Higher Educational Institutions (12)
SO: Sum. No. 556, 24 Jun 55

FILIPPOV, V.A., Kandidat tekhnicheskikh nauk.

Investigation of some characteristics of motorbuses operated on city and suburban routes. Trudy MADI no.19:68-79 '56.

(MLRA 10:1)

(Motorbuses)

SOSYANTS, Vasiliy Georgiyevich; FILIPPOV, Valentin Aleksandrovich; YUDIN, Vasiliy Aleksandrovich; DUBROVIN, G.A., red.; RACHEVSKAYA, M.I., red.izd-va; LELYUKHIN, A.A., tekhn.red.

[Traffic organization, signaling, and block systems] Organizatsiia dvizheniia, signalizatsiia i blokirovka. Moskva, Izd-vo M-va kommun.khoz.RSFSR, 1960. 211 p. (MIRA 13:11)

(Rapid transit) (Traffic engineering)
(Street railways--Signaling--Block systems)

FILIPPOV, V.A., inzh.

Intensification of the drying process of coal flotation concentrates in drum-type gas driers. Obog. i brik.ugl. no.28:15-30 '62.
(MIRA 17:4)

FILIPPOV, V.A.

Absolute age of the granitoids of the central Kalba Range. Vest. AN Kazakh.SSR 21 no.2:59-62 F '65. (MIRA 18:3)

MASLITSKIY, V.D.; CHERNYAK, Yu.G.; FILIPOV, V.A.; IVANOV, Yu.P., SHTYRLV, P.A.

Mastering the operation of highly-efficient tubular dryers at the Karaganda Central Ore Dressing Plant. Ugol' 39 no.12:51-53 D '64. (MIRA 18:2)

FILIPPOV, V.A.

Age of rare-metal mineralization of the Kalba Range.
Sov.geol. 8 no.11:28-33 N '65.

(MIRA 19:1)

1. Altayskiy otdel Instituta geologicheskikh nauk imeni K.I.Satpayeva AN Kazakhskoy SSR.

ROZIN, V.V., polkovnik meditsinskoy sluzhby, kand.med.nauk; FILIPPOV, V.A., inzh.-podpolkovnik, kand.tekhn.nauk; AMELINA, A.V.

Some current problems in radiotherapy. Voen.-med. zhur. no.6:40-42 Je '61. (MIRA 14:8)

(RADIOTHERAPY)

DANILOV, A.A.; KRYMSKIY, G.F.; FILIPPOV, V.A.

Results of studying the quantity γ_{eff} in the differential spectrum of π^--meson production. Trudy IAFAN SSSR. Ser. fiz. no.4:41-48 '62. (MIRA 15:12)

(Cosmic rays)
(Mesons--Spectra)

CHIRKOV, N.P.; FILIPPOV, V.A.; SHAFER, G.V.

Eleven-year variations on cosmic ray intensity. Trudy IAFAN SSSR. Ser. fiz. no.4:122-131 '62. (MIRA 15:12)
(Cosmic rays)
(Sun spots)

FILIPPOV, V.A.

Structural and genetic characteristics of and geochemical criteria for rare metal pegmatites. Izv. AN Kazakh. SSR. Ser. geol. 21 no.5:34-44 S-O '64. (MIRA 18:5)

EWG(j) EWT(m)/FCC/T IJP(c) GS

ACCESSION NR: AT5006962 S/0000/64/000/000 0011/0020

AUTHOR: Filippov, V. A.; Shafer, G. V.

TITLE: Spatial-temporal characteristics of Forbush decreases in the neutron component

SOURCE: AN SSSR. Yakutskiy filial. Institut kosmofizicheskikh issledovaniy i aeronomii. Geo- i geliofizicheskiye effekty v kosmicheskikh luchakh i polyarnykh siyaniyakh. Geo- and heliophysical effects in cosmic rays and polar auroras. Izd-vo Nauka, 1964, 11-20

TOPIC TAGS: cosmic ray, Forbush decrease, cosmic ray variation, cosmic ray neutron component

ABSTRACT: A study has been made of the mean latitude dependence of Forbush decreases. Data on the cosmic ray neutron component for 37 stations in the world [illegible] in the study, and mean amplitudes for 11 storms were determined. [illegible] of the effect at Ottawa [illegible] near station. Fig. 1 of the Enclosure shows [illegible] of Forbush decreases on geomagnetic latitude. It is seen that there [illegible] varying with latitude $\lambda \sim 60^{\circ}$. [illegible]

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L 39974-65

ACCESSION NR: AT5006962

50%. If a study is made of the dependence of amplitude on the cutoff energy, the observed plateau in the latitude effect curve can be related to a primary particle of energy less than approximately 1 Bev. The necessary formulas for determining the energy spectrum of Forbush decreases are presented. It is shown that the spectrum of variations of primary particles in the region of energies up to 15 Bev which were subjected to the effect at the time of magnetic storms can be represented in the form $-\frac{dD(\mathcal{E})}{D(\mathcal{E})} = -a\mathcal{E}^{-\alpha}$, where $a = 0.46 \pm$ [illegible]; $\alpha = 1.4 \pm$ [illegible] $\mathcal{E} \leq 15$ Bev. The shape of the spectrum [illegible] remains practically the same [illegible]

$$\frac{\delta D(\varepsilon)}{D(\varepsilon)} = -a \begin{cases} 1, & \text{if } \varepsilon < \varepsilon_0, \\ \left(\frac{\varepsilon_0}{\varepsilon}\right)^{\alpha}, & \text{if } \varepsilon \geqslant \varepsilon_0, \end{cases}$$

where $\alpha = -0.8 \pm 0.2$; $a = 0.23 \pm 0.06$ and $\mathcal{E}_0 = 2.5 - 3.5$ Bev. Fig. 2 of the Enclosure shows the dependence of the amplitudes of Forbush decreases on the [illegible] primary particles. The study reveals that [illegible] dependence of the same sign as the ordinary cosmic-ray latitude effect. The [illegible] distribution of the commencement of Forbush decreases indicates

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L 39[illegible]

ACCESSION NR: AT5006962

a dependence on the time of the commencement at the Greenwich meridian. In the case of daytime commencements the decrease begins earlier at the stations of the eastern hemisphere; in the case of night time commencements -- at the stations of [illegible]. The distribution of the [illegible] over [illegible] greater [illegible] the eastern hemisphere. Orig. art. has: 6 formulas, 5 figures and 3 tables.

ASSOCIATION: Institut kosmofizicheskikh issledovaniy i aeronomii, Yakutskiy [illegible] AN SSSR (Institute of Space Research and Aeronomy, Yakutsk Branch)

SUBMITTED: 23Oct64 ENCL: 03 SUB CODE: ES

NO REF SOV: 008 OTHER: 002

Card 3/6

L 49797-65 EEC-2/EWT(d)/FSS-2/EEC(k)-2/EWG(v)/EED-2/EWA(c) Pn-4/Po-4/Pe-5/
Pq-4/Pg-4/Pk-4/Pl-4 IJP(c) BC
ACCESSION NR: AP5010196 UR/0373/65/000/001/0168/0172

65
B

AUTHOR: Filippov, V. A. (Moscow)

TITLE: Stability of motion of asymmetric gyroscopes with radial correction

SOURCE: AN SSSR. Izvestiya. Mekhanika, no. 1, 1965, 168-172

TOPIC TAGS: gyroscope, stability condition, ellipsoid, Euler equation

ABSTRACT: The stability of motion of an asymmetric gyroscope with radial correction was analyzed. It is assumed that the axis of natural rotation of the gyroscope is along a principal axis of inertia, but it is not assumed that the ellipsoid of inertia about the points of suspension is an ellipsoid of rotation. The principal moments of inertia A,B and C are given by the Euler equations

$$Ap' + (C - B)qr = Mx, \qquad p = \varphi' + \alpha' \sin\beta$$

$$Bq' + (A - C)pr = My, \qquad q = \beta' \sin\varphi + \alpha' \cos\beta \cos\varphi$$

$$Cr' + (B - A)pq = Mz. \qquad r = \beta' \cos\varphi - \alpha' \cos\beta \sin\varphi .$$

The various angles are shown in Fig. 1 on the Enclosure. The moment of external force is $M = M_1 + M_2 + M_3$, where M_1 is the correcting moment, M_2 is the moment

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of rotation, and M_3 is the moment of resistance. These are related by

$$A\frac{d\omega}{d\varphi} = [f_1'(\omega_0) - f_2'(\omega_0)]\frac{\omega}{\omega_0}$$

$$B\frac{dq}{d\varphi} = (C-A)r + \frac{k}{\omega_0}(\alpha\sin\varphi - \beta\cos\varphi) - \frac{m}{\omega_0}q$$

$$C\frac{dr}{d\varphi} = (A-B)pq + \frac{k}{\omega_0}(\alpha\cos\varphi + \beta\sin\varphi) - \frac{m}{\omega_0}r$$

$$\frac{d\alpha}{d\varphi} = \frac{1}{\omega_0}(q\cos\varphi - r\sin\varphi), \qquad \frac{d\beta}{d\varphi} = \frac{1}{\omega_0}(q\sin\varphi + r\cos\varphi).$$

The use of the Hurwitz criterion yields the inequalities

$$u\mu > 1, \quad \frac{2\sigma - u + 1}{v} + v\mu^2 > 0, \quad u\mu - 2(u-1)\sigma > 0$$

$$\frac{1-u+v}{v} + v(\mu-\sigma)^2 > 0, \quad \frac{2u}{v}[(u-1)^2 + v^2\mu^2]\mu\sigma - [(u-1)^2 + u^2v\mu^2]\sigma^2 > 0$$

where the dimensionless parameters u, v, μ, and σ are defined by

$$u = \frac{B+C}{A}, \quad v = \frac{BC}{A^2}, \quad \mu = \frac{An}{BC\omega_0}, \quad \sigma = \frac{Ak}{BC\omega_0^2}.$$

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Card 3/4

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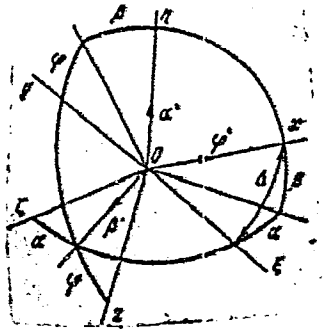

Fig. 1

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FILIPPOV, V.A. [Filippov, V.O.]

Study of the dehydrogenase, catalase and peroxidase activity of phage-resistant variants of S. gallinarum-pullorum. Mikrobiol. zhur. 26 no.2:63-68 '64. (MIRA 18:8)

1. Chernovitskiy gosudarstvennyy meditsinskiy institut, kafedra mikrobiologii.

FILIPPOV, V.P. (Volgograd)

Some theorems on the nonseparability of B-sets of lower classes. Izv. vys. ucheb. zav.; mat. no.4:147-153 '65. (MIRA 18:9)

L 14646-66 EWT(1) GW
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29
27
B+1

AUTHOR: Ab, E. A.; Gordin, V. L.; Levitin, A. I.; Filippov, V. A.

ORG: none

TITLE: A portable source of ultraviolet radiation

SOURCE: USSR. Gosudarstvennyy geologicheskiy komitet. Osoboye konstruktorskoye byuro. Geofizicheskaya apparatura, no. 26, 1965, 44-48

12,44,55 12,44,55

TOPIC TAGS: UV light source, spectral distribution

ABSTRACT: The authors describe a portable radiation source designed for operation in the UV region of the spectrum at about 254 and 320-400 mμ. The spherical envelope of the tube is made from ordinary uviol glass and is about 15 mm in diameter with a wall thickness of the order of fractions of a millimeter. The radiation spectrum of the tube may be expanded by coating the inside of the envelope with a phosphorescent material which emits radiation in the desired spectral region. If part of the surface of the envelope is left uncoated (a "window"), the same tube may be used for bidirectional radiation in different spectral regions. Optimum supply fre-

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quency was found to be of the order of 100 Mc. A power of the order of 12 w and a frequency of about 100 Mc gave a surface radiation density in the 254 mμ range approximately fifty times that of BUV-15 tubes (15 w) and nearly equal to the surface density for PRK tubes. Application of L-33 phosphor increases emission in the 320--400 mμ with a surface radiation density approximately 30-40 times that of the UFO-4A tube which has similar spectral distribution. An increase in tube power is not recommended since it may darken or melt the glass of the envelope. Tables and curves are given illustrating the characteristics of spectral distribution for emission from these tubes. The authors are sincerely grateful to L. A. Khutsishvili and N. N. Klimenko for their participation in this work. Orig. art. has: 3 figures, 2 tables.

SUB CODE: 20/ SUBM DATE: 00/ ORIG REF: 004/ OTH REF: 001

Card 2/2

FILIPPOV, V.A., inzh.

Exhaust fans for tube dryers. Ugol' 38 no.6:51-52 Je '63.
(MIRA 16:8)
(Coal preparation plants—Equipment and supplies)
(Exhaust systems)

FILIPPOV, V.A., inzh.

Drying fines in drier-tubes. Sbor.inform. po obog. i brik. ugl. no.2:25-31 '57. (MIRA 11:5)
(Coal preparation) (Drying apparatus)

SKLOVSKAYA, A.A., otv. red.; DREMAYLO, P.G., inzh., zam. otv. red.; KAMINSKIY, V.S., kand. tekhn. nauk, zam. otv. red.; AVETISYAN, A.N., red.; BRILLIANTOV, V.V., kand. tekhn. nauk, red.; GALIGUZOV, N.S., kand. tekhn. nauk, red.; GORLOV, I.P., red.; GREBENSHCHIKOV, V.P., red.; DAVYDKOV, M.I., red.; ZVENIGORODSKIY, G.Z., red.; KARPOVA, N.N., red.; KOZKO, A.I., red.; MARUSEV, P.A., red.; PONOMAREV, I.V., red.; POPUTNIKOV, F.A., red.; SOKOLOVA, M.S., kand. tekhn. nauk, red.; TURCHENKO, V.K., red.; FILIPPOV, V.A., red.; YUSIPOV, A.A., red.; YAGODKINA, T.K., red.; MIRONOVA, T.A., red. izd-va; LOMILINA, L.N., tekhn. red.; MAKSIMOVA, V.V., tekhn.red.

[Technological trends in coal preparation] Tekhnicheskie napravleniia obogashcheniia uglei. Moskva, Gos.nauchno-tekhn. izd-vo lit-ry po gornomu delu, 1963. 120 p. (MIRA 16:10)

1. Gosudarstvennyy proyektno-konstruktorskiy i nauchno-issledovatel'skiy institut po obogashcheniyu i briketirovaniyu ugley. 2. Gosudarstvennyy proyektno-konstruktorskiy i nauchno-issledovatel'skiy institut po obogashcheniyu i briketirovaniyu ugley (for Yagodkina, Brilliantov).
(Coal preparation)

FILIPPOV, V.A. [Filippov, V.O.]

Comparative study of water-soluble proteins in the initial and phage-resistant variants of Salmonella gallinarum-pollorum by paper electrophoresis method. Mikrobiol. zhur. 26 no.3:31-36 '64. (MIRA 18:5)

1. Chernovitskiy meditsinskiy institut, kafedra mikrobiologii.

KOGAN, A.Ya., kand.sel'skokhoz.nauk; FILIPPOV, V.D.

Possibilities for animal husbandry on the "Pobeda" State Farm.
Zhivotnovodstvo 24 no.5:37-42 My '62. (MIRA 16:10)

1. Direktor sovkhoza "Pobeda" Novgorodskoy oblasti (for Filippov).

FILIPPOV, V. M., STOLETOV, V. N., SHESTAKOV, S. V., GLAZER, V. M.,

"The Biochemistry of Dissociation of Bacillus brevis GB."

report submitted for the 11th Intl. Congress of Genetics, The Hague, Netherlands, 2-10 Sep 63

L 20332-63 EPF(c)/EWT(m)/BDS AFFTC/APGC Pr-4 BW/WW/DJ

ACCESSION NR: AT3001996 S/2664/61/000/000/0247/0253

AUTHORS: Drushinina, A. V.; Tsiguro, T. A.; Filippov, V. F. B

TITLE: The mechanism of the action of additives. Effect of basic types of additives on the operational properties and the oxidation process of oils in an internal-combustion engine.

SOURCE: Prisadki k maslam i toplivam; trudy nauchno-tekhnicheskogo soveshchaniya. Moscow, Gostoptekhizdat, 1961, 247-253.

TOPIC TAGS: lubricant, lubrication, oxidation, antioxidation, inhibitor, engine test, Ba, Zn, phenol, phenolate, amine, phosphite, tributylphosphite, residue, varnish, compatibility, piston ring, wear, IT9-2, GAZ-51, MK-22, DS-11, DF-1, TsIATIM-339, carbonyl, ketone.

ABSTRACT: Engine tests were performed to investigate the mechanism of the action of antioxidation additives. One additive (A) each was selected from the phenolic (n-mpem-octylphenolate of Ba), the amine (phenyl- α -naphthalene), and the phosphite (tributylphosphite) types. Tests with and without these A's were run in the internal-combustion engines IT9-2 and GAZ-51 to study the changes undergone by the oils and their chemical structural groups of hydrocarbons (HC). Most

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