where for all practical purposes the part of $N(\theta)$ leaving the segment $\delta_k x$ can be taken to be

$$\delta_k N(\theta) = N(\theta = \theta_k) \frac{\int_{\delta_k x} \omega dx}{S(\theta = \theta_k)}.$$

The author collected data from an experiment performed in cooperation with N. V. Fedorenko and I. P. Flaks (ZhTF, same volume, p. 49) with two aperture sizes; the cross section curves for the two cases are given on Fig. 2. In Fig. 2, curves 1 and 2 are uncorrected while 3 and 4 are the corrected ones. He considered the agreement as fair, taking into account that the resolving power in the two cases differed by a factor of three. (3) To investigate the influence of the spread of the incoming beam, the author noted that even at the highest obtainable vacuum in the scattering

Analysis of Systematic Error During Small Angle Scattering Investigations

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SOV/57-30-1-9/18

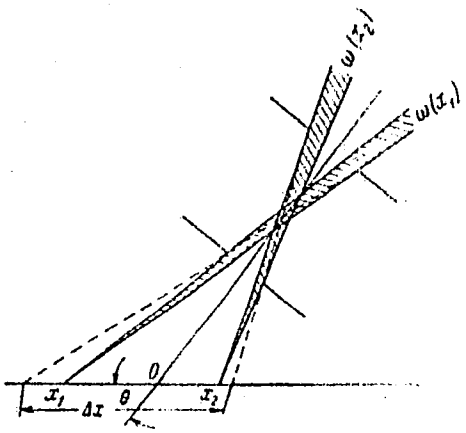

Fig. 1.

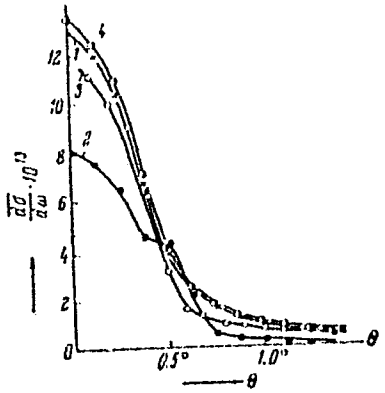

Fig. 2

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chamber, the flow $I(\theta)$ of the incoming particles through the collimator would not be zero for $\theta > 0$. In the previous discussions one should, therefore, replace $N(\theta)$ by

$$\bar{N}(\theta) \approx N(\theta) + pI(\theta), \tag{6}$$

where

$$p = \frac{N(0^\circ)}{I(0^\circ)}.$$

From this, the author derives an expression for the corresponding error in the differential cross section:

$$\delta\left(\frac{d\sigma}{d\omega}\right) \approx + \frac{1}{2}\left[\frac{I(\theta)}{I(0^\circ)}\right] : \left[\frac{N(\theta)}{N(0^\circ)}\right]. \tag{7}$$

Analysis of Systematic Error During Small Angle Scattering Investigations

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During experiments mentioned earlier, the author found that these errors contributed a full +13% at $\theta = 0.125^{\circ}$, but only +1% at $\theta = 0.25^{\circ}$; the error is negligible for higher angles. There is an Appendix in the paper dealing with various forms of the function $S(\theta)$ (Eq. 4a) suitable for computations. Professors D. M. Kaminker and I. P. Skal'ska discussed the work and gave advice. There are 5 figures; 1 table; and 7 references, 3 Soviet, 4 U.S. The U.S. references are: P. R. Jones, J. P. Ziemba, H. A. Moses, E. Everhart, Phys. Rev., 113, 182 (1959); R. J. Carbone, E. N. Fuls, E. Everhart, Phys. Rev., 102, 1524 (1956); E. Everhart, R. J. Carbone, G. Stone, Phys. Rev. 98, 1045 (1955); E. B. Jordan, R. B. Brode, Phys. Rev., 43, 112 (1933).

ASSOCIATION: Physico-Technical Institute AS USSR, Leningrad C. (Fiziko-tekhnicheskiy institut AN SSSR, g. Leningrad)

SUBMITTED: July 20, 1959

Card 9/9

82411

S/056/60/038/03/09/033
B006/B014

24,2120

AUTHORS: Fedorenko, N. V., Flaks, I. P., Filippenko, L. G.

TITLE: Ionization of Inert Gases by Multiply Charged Ions

PERIODICAL: Zhurnal eksperimental'noy i teoreticheskoy fiziki, 1960, Vol. 38, No. 3, pp. 719-725

TEXT: Shervin (Ref. 2) investigated the ionization of hydrogen- and helium molecules by multiply charged ions and found the ionization cross section to be proportional to the square of the primary ion charge. This is in agreement with the theory of collision ionization at high energies, but not with the latest concepts of the mechanism of ionization. With a view to clarifying this point, the authors of the present paper measured the ionization cross sections for single collisions of the ions Ne^+, Ne^{2+}, Ne^{3+}, Kr^+, Kr^{2+}, Kr^{3+}, Xe^+, Xe^{2+}, Xe^{3+}, and Xe^{4+} with the atoms of the gases Ne, Kr, and Xe. The experimental setup had already been described in previous papers (Refs. 4-6). The measuring condenser employed here is closely described, and is schematically shown in Fig. 1. Measurements were made at a gas pressure of 1.10-4 torr,

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Ionization of Inert Gases by Multiply Charged Ions

which in turn was measured by means of an ionization gauge. Saturation currents, I_+ and I_- were measured on the plates of the measuring condenser in order to determine the cross sections. Formula (1) $\sigma_- = zI_-/NlI_0$; $\sigma_+ = zI_+/NlI_0$ can then be used to determine the total cross section of the liberation of electrons (σ_-) and the total cross section of the formation of secondary ions (σ_+); I_0 is the primary current of the beam, z is the multiplicity of the charge of primary ions, N the number of atoms per cm^3 of gas, l is the length of the measuring electrodes. σ_- is interpreted as being the total ionization cross section. It further holds that $\sigma_+ - \sigma_- = \sigma_0 - \sigma_1$, where σ_0 is the "total cross section" for capture, σ_1 the "total cross section" for stripping. In the energy range under investigation, $\sigma_1 \ll \sigma_0$, it holds that $\sigma_+ - \sigma_- \approx \sigma_0$. The relative error obtained when measuring σ_- and σ_+ is estimated as being 20%. Fig. 3 shows the dependence of the total ionization cross sections σ_- as a function of the kinetic energy of primary ions in six diagrams. Figs. 4 and 5 show the same functions for the capture cross

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Ionization of Inert Gases by Multiply Charged Ions S/056/60/038/03/09/033
B006/B014

sections: Fig. 4 offers a comparison between the values obtained by the potential method ($\sigma_+ - \sigma_-$) and by the method of recording fast atoms. Fig. 5 offers a comparison of the potential method with the mass-spectrometric method. Results obtained did not confirm the quadratic law found by Shervin; the diverging results by Shervin are explained by the fact that Shervin did not measure the cross sections at one and the same kinetic energy of the ions. Results given here (voltage range 3-30 kev) indicate that the ionization cross section for equal ion energies is practically independent of the charge of the primary ion. For all ion-atom pairs a continuous growth of the cross section with increasing kinetic energy of the primary ion was observed. Moreover, it was found that results of measurement are in general well described by the formula (equations (5) and (7)) given by O. B. Firsov (Ref. 1). This is illustrated in Fig. 6. The authors finally thank Professor V. M. Dukel'skiy for a discussion, and A. M. Shchenkov for his practical assistance. There are 6 figures and 11 references, 8 of which are Soviet.

ASSOCIATION: Leningradskiy fiziko-tekhnicheskiy institut Akademii nauk SSSR (Leningrad Institute of Physics and Technology of the Academy of Sciences, USSR)

SUBMITTED: September 12, 1959

Card 3/3

25366
S/057/62/032/003/013/019
B139/B102

26.7312

AUTHOR: Filippenko, L. G.

TITLE: Peculiarities in the ionization of heavy atoms and ions

PERIODICAL: Zhurnal tekhnicheskoy fiziki, v. 32, no. 3, 1962, 356-359

TEXT: According to O. B. Firsov (Ref. 1: ZhETF, 36, 1517, 1959), the collision cross section q_i of two atoms is equal to the total ionization cross section σ_i. The experimental cross section $(\sigma_i)_{exp} = \sum_k k\sigma^{ok}$ (σ^{ok} is the cross section of k-fold atomic ionization). If $q_i = \sigma_i$,

$$q_i = (\sigma_i)_{exp} - \sum_k (k - 1)\sigma^{ok} \qquad (2)$$

The author presents the values of $(\sigma_i)_{exp}$ for 19 atomic pairs in the inert gases of Ne, Kr and Xe with marked q_i -values according to Ref. 1. Result: Assuming that $q_i = \sigma_i$, the resulting σ_i values are too high. In some of

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Peculiarities in the ionization...

the collisions, one or more electrons are captured exothermally by an ion. The energy E_{capt} thus liberated has to be added to E_o and according to Firsov's calculations, the ionization cross section would have to increase in such a case. This is, however, not so, because the capture of electrons proceeds at distances of $R \geq 2 - 3$ Å, the portion of the capture energy available for ionizing the atomic torso being small. This explains the fact experimentally verified, that exothermal electron capture is practically without influence on the ionization cross section. O. B. Firsov is thanked for advice. There are 1 figure and 5 Soviet references.

ASSOCIATION: Institut fiziki AN USSR Kiyev (Institute of Physics of AS UkrSSR Kiyev)

SUBMITTED: May 6, 1961 (initially)
July 8, 1961 (after revision)

Card 2/2

L 65143-65 EWT(1) GW

ACCESSION NR: AP5020561 UR/0294/65/003/004/0587/0594 23
536.12.001 21
B

AUTHOR: Filippenko, L. G.

TITLE: Heating of a medium after an underground explosion

SOURCE: Teplofizika vysokikh temperatur, v. 3, no. 4, 1965, 587-594

TOPIC TAGS: underground explosion, ground shock, thermodynamics

ABSTRACT: The article presents a solution to the problem of the heating of a homogeneous and isotropic infinite medium which is deformed by the effect of an [illegible] The possibility of phase transformations [illegible] are [illegible] material, and of an outer zone in which the [illegible] is small. The effects of the explosion are analyzed with the use of Laplace transforms. "In conclusion, the author wishes to express his indebtedness to Candidate in Physical and Mathematical Sciences V. T. Chernoval for his valuable ob-

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L 65143-65

ACCESSION NR: AP5020661

2

servations, and also to Academician of the Academy of Sciences of the Ukrainian Academy of Sciences A. N. Shcherbanya for suggesting the subject and for his interest in the work. Orig. art. has: 25 formulas and 1 figure.

ASSOCIATION: Institut teploenergetiki, AN UkrSSR (Institute of Heat Energy AN UkrSSR)

SUBMITTED: 26Mar64 ENCL: 00 SUB CODE: TD

NR REF SOV: 003 OTHER: 000

Card 2/2

ACC NR: AT7002153 (A) SOURCE CODE: UR/0000/66/000/000/0020/0024

AUTHOR: Shcherban', A. N.; Filippenko, L. G.; Zernyak, T. S.

ORG: Institute of Technical Thermophysics AN UkrSSR (Institut tekhnicheskoy teplofiziki AN UkrSSR)

TITLE: On chemical equilibrium in a gas mixture assuming an arbitrary relationship between volume and pressure

SOURCE: AN UkrSSR. Termodinamika teplovykh dvigateley (Thermodynamics of heat engines). Kiev, Izd-vo Naukova dumka, 1966, 20-24

TOPIC TAGS: chemical equilibrium, gas pressure, gas analysis

ABSTRACT: A system of equations is derived for determining chemical equilibrium in a vessel with adiabatic insulation containing a mixture of gases, assuming that volume is an arbitrary function of pressure. It is shown that this assumption does not introduce any serious analytical complications as compared with the cases where pressure or volume is assumed to be constant even though the enthalpy and internal energy of the system vary with an arbitrary relationship between pressure and volume. At the same time, the numerical values of the thermodynamic parameters may differ considerably. An example is given showing application of the proposed system of equations in determining the composition of a gas mixture after chemical equilibrium is reached in a thermally insulated vessel designed for a linear relationship between volume and pressure. It is shown that equilibrium parameters in actual vessels may differ considerably from those under ideal conditions even with a fairly weak relationship between volume and pressure. Orig. art. has: 9 formulas.

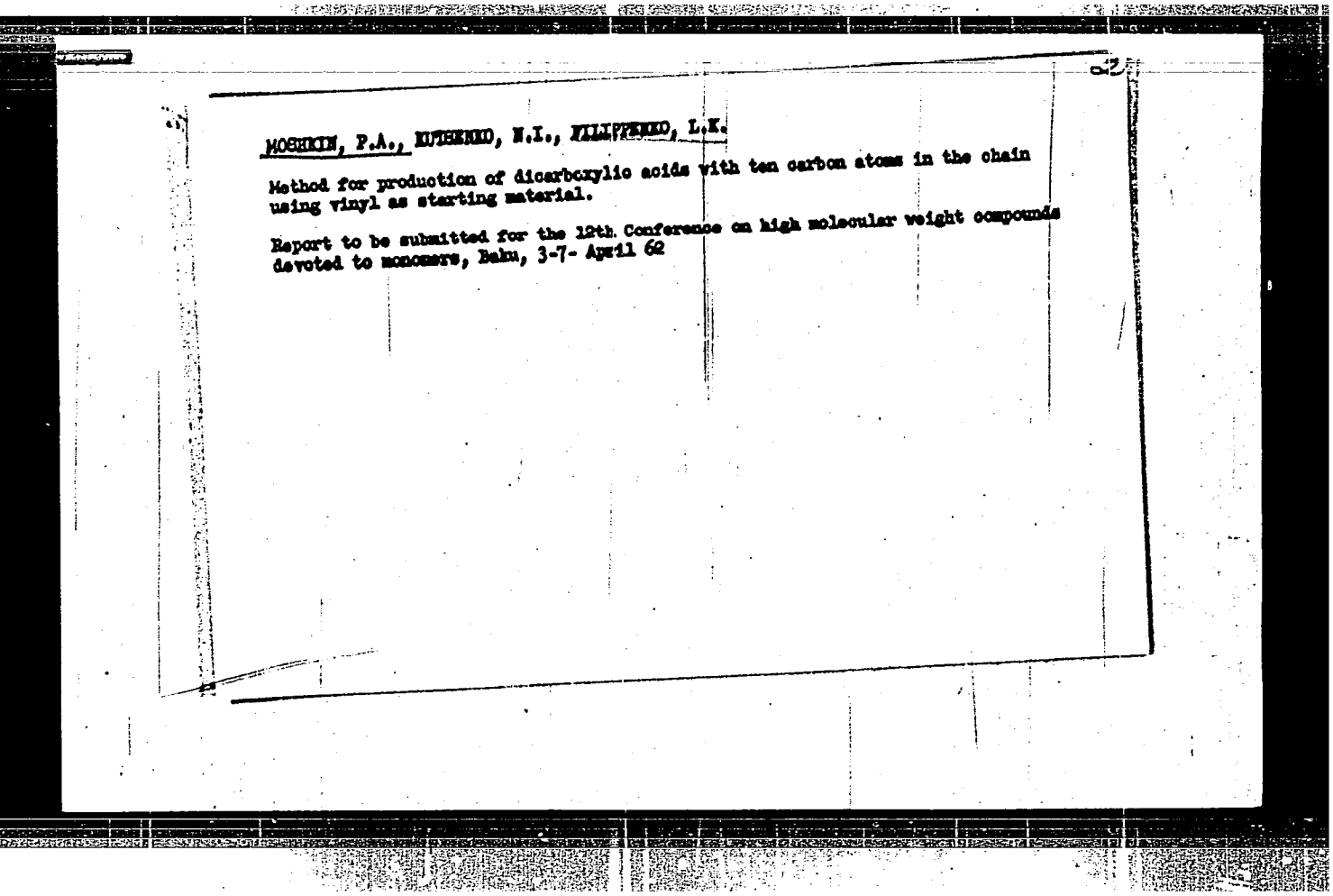
SUB CODE: 20/ SUBM DATE: 12Feb65

Card 1/1

BABANINA, T.I.; FILIPPENKO, L.I.

Effect of electrostatic forces on the collection of dust with fibrous filter materials. Sbor.nauch.trud.Kriv.fil.IGD AN URSR no.1:123-128 '62. (MIRA 16:4)

(Dust collectors)



MOSHKIN, P.A., KUTSENKO, N.I., KILIPTENKO, L.K.

Method for production of dicarboxylic acids with ten carbon atoms in the chain using vinyl as starting material.

Report to be submitted for the 12th. Conference on high molecular weight compounds devoted to monomers, Baku, 3-7- April 62

MOSHKIN, P.A.; KUTSENKO, N.I.; FILIPPENKO, L.K.

Synthesis of a mixture of dicarboxylic acids with ten carbon atoms in the chain. Plast.massy no.7:59-60 '62. (MIRA 15:7)
(Acids, Organic)

KUTSENKO, N.I.; FILIPPENKO, L.K.; KRAVCHENKO, Z.A.; PAPANOVA, M.A.

Synthesis of diethyl ether of ethylene glycol. Zhur. prikl. khim. 38 no.1:214-216 Ja '65. (MIRA 18:3)

1. Nauchno-issledovatel'skiy institut plastmass.

KUKHARSKIY, M.[Kucharski, M.]. ed.; LINDEMAN, Ya.. red.; MAL'CHEVSKIY, Ya.[Malczewski, J.], red.; RABEK, T., red.; SEDOV, L.N.[translator]; FILIPPENKO, L.K. [translator]; DANILEVICH, T.A., red.

[Laboratory work in the chemistry and technology of polymeric materials. Translated from the Polish] Laboratornye raboty po khimii i tekhnologii polimernykh materialov. Moskva, Khimiia, 1965. 393 p. (MIRA 18:7)

SOV/156-58-4-36/49

AUTHORS: Reutov, O. A., Beletskaya, I. P., Filippenko, L. R.

TITLE: The Symmetrization of Mercury-Organic Salts by Means of Diphenyl Mercury (Simmetrizatsiya rtutnoorganicheskikh soley s pomoshch'yu difenilrtuti)

PERIODICAL: Nauchnyye doklady vysshey shkoly. Khimiya i khimicheskaya tekhnologiya, 1958, Nr 4, pp 754-756 (USSR)

ABSTRACT: In the interaction of mercury-organic salts with mercury diphenyl, symmetric mercury-organic compounds are formed in great yield. The following mercury-organic salts were prepared: acetonyl-mercury chloride, ethyl ester of the α-bromo mercury phenyl acetic acid, ethyl ester of the n-bromo-α-bromo mercury phenyl acetic acid, 3-bromo-mercury-3-benzyl camphor and trans-chloro-vinyl-mercury chloride. The mechanism of the symmetrization of the mercury-organic salts proceeds according to the following scheme:

$$2R_1\ R_2\ R_3CHgX \rightleftarrows (R_1\ R_2\ R_3C)_2Hg + HgX_2$$

$$HgX_2 + (C_6H_5)_2Hg \rightarrow 2C_6H_5HgX.$$

Card 1/2 There are 1 table and 5 references, 4 of which are Soviet.

SOV/156-58-4-36/49

The Symmetrization of Mercury-Organic Salts by Means of Diphenyl Mercury

ASSOCIATION: Kafedra organicheskoy khimii Moskovskogo gosudarstvennogo universiteta im. M. V. Lomonosova (Chair of Organic Chemistry at the Moscow State University imeni M. V. Lomonosov)

SUBMITTED: August 4, 1958

Card 2/2

FILIPPENKO, M.N.

Three cases of meningococcemia in infants with manifestations of acute adrenal insufficiency. Vop.okh.mat. i det. 7 no.12:77-78 D'62. (MIRA 16:7)

1. Iz kafedry detskikh infektsionnykh bolezney (zav.-prof. V.N. Gol'dina) Voronezhskogo instituta.
(ADRENAL GLANDS--DISEASES) (NEISSERIA)
(CHILDREN--DISEASES)

FILIPPENKO, N.M.

Glorious traditions of the Soviet tankers; discussion with Major General N.M. Filippenko (Tank Corps) of the Kantemir Tank Division (guards unit, Order of Lenin, Order of the Red Banner). Voen.znan. 31 no.9:6-7 S '56. (MLRA 9:11)

1. Komandir Gvardiyskoy ordena Lenina Krasnoznamennoy Kantemirovskoy tankovoy divisii, gvardii general-mayorom tankovykh voysk.
(Tanks (Military science))

ZARYA, K.I., okulist; FILIPPENKO, N.M., zootekhnik

Prevention of invalidity in collective farmers suffering from eye diseases. Fel'd. i akush. 28 no.4:27-28 Ap'63. (MIRA 16:8)

1. Kolkhoz "Put' Lenina", Faleshtskiy rayon, Moldavskaya SSR (for Filippenko).

*

LOGVINENKO, T.M.; FILIPPENKO, S.N.

Mechanization of the replacement of railroad ties. Avtom., telem. i sviaz' 4 no.1:25-27 Ja '60. (MIRA 13:4)

1. Nachal'nik Zhmerinskoy distantsii signalizatsii i svyazi Yugo-Zapadnoy dorogi (for Logvinenko). 2. Starshiy inzhener otdela svyazi Glavnogo upravleniya signalizatsii i svyazi Ministerstva putey sobshcheniya (for Filippenko).
(Railroads--Ties)

FILIPENKO, S.N., starshiy inzhener

Exceed the plan on the removal of rail supports. Avtom., telem. i sviaz'. 4 no.5:24 My '60. (MIRA 13:8)

1. Otdel svyazi Glavnogo upravleniya signalizatsii i svyazi Ministerstva putey soobshcheniya.
(Railroads--Rails)

AUTHORS: Filippenko S.V. and Zagurnyy S.I. (Engineers).
TITLE : Automatic butt-welding under a layer of flux of pipes from 150 to 425 mm diameter. (Avtomaticheskaya svarka pod sloyem flyusa stykov trub diametrom ot 150 do 425 mm.) 114-7-10/14
PERIODICAL: "Energomashinostroyeniye" (Power Machinery Construction) 1957, No.7, Vol.3, pp.31-32. (U.S.S.R.)

ABSTRACT : Automatic welding under a layer of flux has radically altered the working conditions of welders and has made it possible to organise flow production of welded parts. The new method has become widely used in many branches of industry including boiler making. Automatic welding under a layer of flux is widely used in the Podol'sk Engineering works imeni Ordzhonikidze. For a long time particular parts including small diameter tubes were welded by hand. However, an automatic welding procedure has been developed and at the present time all annular butt joints on chambers, straight tubes and other parts from 150 to 425 mm diameter of low carbon steel are welded automatically. In developing the construction of the welding head the feed mechanism of semi-automatic device ПШ.-5 was taken as a basis. The equipment has a device for straightening the electrode wire, a mechanism for moving the mouth piece with the welding wire to the right and left of the axis of the weld, and a mechanism for controlling the feed of the electrode wire. The equipment is controlled by a number of push-buttons. The

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Automatic butt-welding under a layer of flux of pipes from 150 to 425 mm diameter. (Cont.) 114-7-10/14

method of shaping the ends of pipes for butt-welding is illustrated in Fig.1. The butt-joints are assembled and tacked down by welding in three or four places. The assembled butt joints are carefully cleaned particularly at the places of tacking down and are then delivered to the automatic welding installation. The method of making the welded joints is described. As the weld gets wider near the top the mouthpiece and welding wire rock further across the axis of the weld. The weld, when complete, lines up smoothly with the parent metal. The conditions of automatic welding of annular joints, the brand of steel, pipe size and comparative data for hand and automatic welding are given in Table 1. The flux is recovered for further use. The mechanical tests applied to welded joints made on theautomatic equipment are given in Table 2. It is concluded that it is obviously advisable to make the welding of pipes and other parts automatic. The main advantages of automatic welding over hand is that the quality of the welding is much better and the output of the welders is increased three or fourfold. There is
2/3 no need to employ very highly qualified welders. Automatic

FILIPPENKO, V.I., mayor med.sluzhby

Isolated lesion of eye vessels in hemorrhagic vasculitis. Sbor. nauch.trud.Kiev.okruzh.voen.gosp. no.4:335-339 '62.
(MIRA 16:5)

(EYE—BLOOD SUPPLY) (EYE—DISEASES AND DEFECTS)

FILIPPENKO, V. I., ZIL'BERMAN, R. I., PLOTKIN, Ya. S. and BAKBARDIN, Yu. V.

"On Eye Injuries".

Voyenno Meditsinskiy Zhurnal, No. 4, 1962

POPOV, R.I.; FILIPPENKO, Ye.S.

Testing protective coatings for coke-plant equipment.
Koks i khim. no.16:35-36 '61. (MIRA 15:2)

1. Dnepropetrovskiy koksokhimicheskiy zavod.
(Coke industry--Equipment and supplies)
(Protective coatings)

SADOVSKIY, G.I., kand.tekhn.nauk; PAKHOMOV, A.S., gornyy inzh.; FILIPPENKOV, A.I., gornyy inzh.

Ways of reducing the work in drawing and hauling ore in the "Zapolyarnyi" Mine. Gor.zhur. no.2:23-26 F '63. (MIRA 16:2)

1. Noril'skiy gorno-metallurgicheskiy kombinat.
(Noril'sk region—Mining engineering—Labor productivity)

BEL'GOVA, M.A.; BOYTSOV, G.V.; KANFOR, S.S.; KOROTKIN, Ya.I.; KUZOVENKOV, B.P.; MAKSIMADZHI, A.I.; NEBYLOV, V.M.; SBOROVSKIY, A.K.; TAUBIN, G.O.; FILIPPEO, M.V.; CHUVIKOVSKIY, G.S.; SHIMANSKIY, Yu.A., akademik, red.; LUCHININOV, S.T., otv.red.; OSVENSKAYA, A.A., red.; KONTOROVICH, A.I., tekhn.red.

[Handbook on structural mechanics of ships] Spravochnik po stroitel'noi mekhanike korablia. Leningrad, Gos.soiuznoe izd-vo sudostroit.promyshl. Vol.3. 1960. 799 p.

(MIRA 14:1)

(Shipbuilding)

FILIPPEO, M.V., kand. tekhn. nauk; PAVLINOVA, Ye.A., kand. tekhn. nauk

Stability of corrugated bulkheads with wavy corrugations under the effect of axial compression. Sudostroenie 28 no.1: 11-12 Ja '62. (MIRA 16:7)

(Bulkheads(Naval architecture)—Testing)

VASIL'YEV, Aleksey Leonidovich; GLOZMAN, Moisey Kalmanovich; PAVLINOVA, Yevgeniya Alekseyevna; FILIPPEO, Maksim Valentinovich; GOMBERG, Ye.M., inzh., retsenzent; KOROTKIN, Ya.I., kand. tekhn. nauk, retsenzent; KONTOROVICH, B.M., nauchn. red.; KLIORINA, T.A., red.

[High-strength corrugated ship bulkheads] Prochnye sudovye gofrirovannye pereborki. [By] A.L.Vasil'ev i dr. Leningrad, Sudostroenie, 1964. 315 p. (MIRA 18:3)

L 25558-66 (N) EWT(d)/EWT(m)/EWP(h)/EWP(l) TT/WE

ACC NR: AM6004767 Monograph UR/

Knoring, Semen Davydovich; Pavlinova, YEvgeniya Alekseyevna; Filippeo, Maksim Valentinovich; Shpakov, Vladimir Stepanovich, Shtumpf, Valentin Mikhaylovich

Floating flexible vessels for the transportation of petroleum products; problems of durability and hydrodynamics, and theory and methods of calculation (Plavuchiye elastichnyye yemkosti dlya transportirovki nefteproduktov; voprosy prochnosti i gidrodinamiki, teoriya i metody rascheta) Leningrad, Izd-vo "Sudostroyeniye", 1965. 223 p. illus., biblio. 1,250 copies printed

TOPIC TAGS: ocean transportation, inland vessel data, merchant vessel data, cargo ship, solid statics, hydrodynamics

PURPOSE AND COVERAGE: The book presents the results of investigations of the strength and speed of new means of transportation--floating elastic vessels intended for the transportation of petroleum products and other liquid louds on sea and inland waterways. Experience and design of manufacture of such vessels, accumulated in Soviet and foreign shipbuilding is described. Practical methods for calculating the strength and speed of floating elastic vessels under all principal operating conditions are given. Recommendations on the design and construction of such vessels are presented. The bulk of the investigations reported were made by the authors and are published for the first time. The book is intended for engineering-technical workers in design offices and in the shipbuilding industry, and can also be used by students of shipbuilding institutes and faculties. Authors thank N. P. Plytov, A. L. Koshevoy, B. I.

Card 1/2 UDC: 629.12.011.17

L 25558-66

ACC NR: AM6004767

Golod, R. V. Pyatyshev, and V. YA. Aleksandrov and also Yu. F. Ryabkov for useful remarks, and N. V. Alekseyeva for great help in the calculations and the reduction of the experimental data. The sections of the book devoted to shell strength were written by S. D. Knoring, YE. A. Pavlinova, and M. V. Fillipeo, and the hydromechanic sections were written by V. M. Shtumpf and V. S. Shpakov.

TABLE OF CONTENTS [abridged]:

SUB CODE: 13/ SUBM DATE: 17Sep65/ ORIG REF: 041/ OTH REF: 009

Card 2/2 FW

FILIPPI, Fr. (Tg. Mures)

50 years of activity of the Brasov Meteorologic Station. Natura Geografie 15 no.5:42-43 S-O '63.

FILIPPI, Jiri; VEIGLER, Stanislav

Surface smoothing of machine parts by a ball. Stroj vyr 11 no. 12: 607-610 '63.

1. Sigma, Olomouc, n.p., zavod Lutin.

FILIPPI, P.; BASSI, A.

Adenovirus anginas. Vest. otorin. 22 no.4:58-64 Je-Ag '60.
(MIRA 13:12)

(ADENOVIRUS INFECTIONS)

BAKLANOVA, V.F.; FILIPPKIN, M.A.

Clinical roentgenological variations of megaduodenum in children. Vest. rent. i rad. 40 no.1:12-15 Ja-F '65.
(MIRA 18:6)

1. Kurs detskoy rentgenologii (zav.- dotsent V.F. Baklanova) Tsentral'nogo instituta usovershenstvovaniya vrachey na baze detskoy klinicheskoy bol'nitsy imeni Dzerzhinskogo No.9 (glavnyy vrach A.N. Kudryashova), Moskva.

FILIPPKIN, M.A.; TSYPLENKOV, V.G.

Case of duodenal stenosis as a possible result of antenatal peritonitis with multiple developmental defects. Vest. rent. i rad. 40 no.6:61-62 N-D '65. (MIRA 19:1)

1. Kafedra detskoy rentgenologii (zav. - V.F. Baklanova) TSentral'nogo instituta usovershenstvovaniya vrachey na baze Detskoy klinicheskoy bol'nitsy imeni F.E. Dzerzhinskogo, Moskva.

PHASE I BOOK EXPLOITATION SOV/3527

Filippkin, A. T., K. V. Picheta, and B. A. Konstantinov

Mekhanizatsiya trudoyemkikh ruchnykh otdelochnykh operatsiy v mashinostroyenii (Mechanization of Laborious Hand Finishing Operations in Machine Building) Moscow, 1959. 62 p. 1,500 copies printed.

Sponsoring Agencies: USSR. Gosudarstvennyy nauchno-tekhnicheskiy komitet, and Akademiya nauk SSSR. Institut nauchnoy informatsii. Otdel nauchno-tekhnicheskoy informatsii. Sektor mashinostroitel'noy promyshlennosti.

Tech. Ed.: E. Al'tshuler

PURPOSE: This booklet is intended for technical personnel working in the field of machine part finishing.

COVERAGE: The authors describe briefly the techniques involved in the use of abrasive belt, grinding and polishing, tumbling, hydroabrasive polishing, and power brushing. These efficient methods are not widely used in the USSR because of shortage of production of good abrasive belts. No personalities are mentioned. There are 9 references, 7 English, and 2 German.

Card 1/3

TABLE OF CONTENTS:

Mechanization of Laborious (Cont.) SOV/3527

AVAILABLE: Library of Congress (TJ1160.F5)

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VK/fal
7-8-60

5(1); 25(1) PHASE I BOOK EXPLOITATION SOV/2285

Sladkova, M. V., B. A. Chevela, and V. G. Filippochkin

Novyy sposob primeneniya zhidkogo stekla pri lit'ye po vyplavlyayemym modelyam (New Way for Using Soluble Glass in Investment Casting) Moscow, 1958. 11 p. (Series: Peredovoy opyt proizvodstva. Seriya "Tekhnologiya mashinostroyeniya," vyp. 10. Liteynoye proizvodstvo) 4,000 copies printed.

Sponsoring Agencies: Obshchestvo po rasprostraneniyu politicheskikh i nauchnykh znaniy RSFSR, and Moskovskiy dom nauchno-tekhnicheskoy propagandy im. F. E. Dzerzhinskogo.

Ed.: A. V. Lakedemonskiy; Tech. Ed.: R. A. Sukhareva.

PURPOSE: This booklet is intended for the general reader.

COVERAGE: The author mentions three varieties of water glass: "DS" (dialyzed), "KS" (treated with cationite) and "acetosilicate" (treated with acetone). They were not satisfactory for use in industry as binders in investment casting. At present, water glass diluted with water and treated with an organic reinforcing agent is being used industrially. A detailed description

Card 1/2

FILIPPOS'YAN, S.T.

Heritable variability in certain micro-organisms induced by antibiotics. Zhur.ob.biol. 20 no.6:481-483 N-D '59. (MIRA 13:4)

1. Chair of Genetics, Moscow State University, and Institute of New Antibiotics, Academy of Medical Sciences of the U.S.S.R., Moscow.
(ANTIBIOTICS) (ENTEROBACTERIACEAE)

SHORIN, V.A.; GOL'DBERG, L.Ye.; MURAVEYSKAYA, V.S.; PEVZNER, N.S.; SHAPOVALOVA, S.P.; KUNRAT, I.A.; BELOVA, I.P.; KREMER, V.Ye.; FILIPPOS'YAN, S.T.

Study of the antibacterial activity, toxicity and medicinal properties of methanesulfonates of monomycin and colimycin. Antibiotiki 6 no.10:897-904 O '61. (MIRA 14:12)

1. Institut po izyskaniyu novykh antibiotikov AMN SSSR.
(ANTIBIOTICS) (METHANESULFONIC ACID)

SHORIN, V.A.; ROSSOLIMO, O.K.; STANISLAVSKAYA, M.S.; BLYUMBERG, N.A.; FILIPPOSIYAN, S.T.; LEPESHKINA, G.N.

Antineoplastic activity of the antibiotic olivomycin. Antibiotiki 7 no.3:60-64 Mr '62. (MIRA 15:3)

1. Institut po izyskaniya novykh antibiotikov AMN SSSR.
(ANTIBIOTICS)
(CYTOTOXIC DRUGS)

I

FIL♦PPOS'YANTS, T.T.

Designing apparatus for processes used in extracting penicillin and other antibiotics. Med.prom 12 no.10:12-20 O '58 (MIRA 11:11)

1. Vsesoyuznyy nauchno-issledovatel'skiy institut antibiotikov.
(ANTIBIOTICS)
(DRUG INDUSTRY--EQUIPMENT AND SUPPLIES)

FILIPPOS'YANTS, T.T., PARAMONOVA, Ye.M., PETROV, I.M.

Processing the culture medium in the production of penicillin.
Med.prom. 12 no.12:33-36 D'58 (MIRA 11:12)

1. Vsesoyuznyy nauchno-issledovatel'skiy institut antibiotikov.
(PENICILLIN)
(BACTERIOLOGY--CULTURES AND CULTURE MEDIA)

FILIPPOS'YANTS, T.T.; POZDNYAKOVA, Z.Ye.; PARAMONOVA, Ye.M.

Use of diatomaceous earths in the process of filtration of antibiotic culture liquids. Med. prom. 15 no.11:46-50 N '61. (MIRA 15:6)

1. Vsesoyuznyy nauchno-issledovatel'skiy institut antibiotikov.
(ANTIBIOTICS)

FILIPPOTO, W.

(DROGOWNICTWO, VOL 8, No. 7, July 1953, Warsaw, Poland)
"Organizing the Voluntary Road Work" p. 171.

SO: MONTHLY LIST OF EAST EUROPEAN ACCESSIONS, L.C., Vol. 3, No. 4, APRIL 1954

FILIPPOTO, W.

Development of the Social Road Deed in the struggle for improvement of the condition of local roads. (To be contd.) p. 4. DROGOWNICTWO. (Instytut Technikl Budowlanej) Warszawa. Vol. 11. No. 1, Ja. 1956.

SOURCE: East European Accessions List (EEAL), Library of Congress. Vol. 5, No. 7, July 1956.

FILIPPOTO, W.

Development of the Public Road Deed in the struggle for improvement of the condition of local roads. p. 35. (Instytut Techniki Budowlanej) Warszawa Vol. 11, no. 2, Feb. 1956

DROGOWNICTWO

SOURCE: East European Accessions List (EEAL) Library of Congress Vol. 5, no. 8, August 1956

FILIPPOTO, W.

Achievements of the social road deed on local roads. p. 206

DROGOWNICTWO (Wydawnictwa Komunikacyjne) Warszawa, Poland. Vol 14, no. 9, Sept. 1959

Monthly List of East European Accessions (EEAI) LC, Vol. 9, no. 1, Jan. 1960

Uncl.

FILIPPOTO, Wladyslaw, inz.

Leading provinces in the reconstruction of local road networks.
Drogownictwo 17 no.2:36-40 F '62.

L 60272-65 ARG/EED-2/NED-2/EEC(k)-2/EWA(h)/EWG(s)-2/EWP(c)/EWT(d)/EWP(h)/

ACCESSION NR: AP5011211 UR/0018/65/000/004/0093/0095

AUTHORS: Filipov, A. (Engineer, Lieutenant Colonel); Petukhov, S. (Engineer, Lieutenant Colonel)

84
63

TITLE: On the probability of destroying targets

SOURCE: Voyennyy vestnik, no. 4, 1965, 93-95

TOPIC TAGS: rocket, rocket target, rocket trajectory, warhead, fragmentation, ballistics, target surface, target detection

ABSTRACT: This theoretical analysis of destroying aerial targets with zenithal rockets starts with equation $P = P_b \cdot P_{det} \cdot P_p$, where P is the probability of destroying a single target with a single rocket, P_b is the probability of a perfect performance of all the elements involved, P_{det} is the probability of detecting and of continuous tracking of the target, and P_p is the probability of destroying an aerial target with the rocket warhead. Each of the above factors is described, analyzed mathematically, and correlated graphically with the time or distance involved in destroying the target. The process of using a group of rockets is next discussed with special attention given to the scattering of individual rockets from

L 60252-65
ACCESSION NR: AP5011211

the desired trajectory and to the effectiveness of the whole group. The destructive power of warheads at various distances from a target and also the destructive power of rocket fragments is analyzed on an example of the American missile Hawk. The linear scattering velocity of the fragments ($\bar{V}_c$) is obtained from equation $\bar{V}_c = \bar{V}_p + \bar{V}_o$, where $\bar{V}_p$ is the rocket velocity and $\bar{V}_o$ is the specific velocity of a fragment. The latter term is calculated from equation $V_o = \frac{D}{2}\sqrt{\frac{m}{2M}}$. Here D is the velocity of charge explosion in m/sec, m is the mass of charge, and M is the mass of the casing. The American approach to the subject of destroying a group of targets and to the use of nuclear warheads is reviewed, with a consideration of Hawk and Telos missiles. The article is concluded with an analysis of the probability of a single aircraft being destroyed by a single Nike Ajax or Hawk [illegible] this probability does not exceed 0.6-0.8, the use of a group of similar rockets is recommended, with the number of rockets in the group calculated from formula $P_n = 1 - (1 - p)^n$, where n is the number of rockets shot at a single target. Orig. art. has: 5 equations, 3 diagrams, and 2 graphs.

ASSOCIATION: none

SUBMITTED: 00

NO REF SOV: 000

ENCL: 00

OTHER: 000

SUB CODE: GM

Card 2/2

L 39095-66 ENT(m)/T WE

ACC NR: AP6016349 (N) SOURCE CODE: UR/0308/66/000/001/0026/0027

AUTHOR: Filippov, A. (Senior engineer)

ORG: Main Administration of Technical Operation of Merchant Fleet and Ship Repair Yards. (Glavnoye upravleniye tekhnicheskoy ekspluatatsii flota i sudoremontnykh zavodov MMF)

TITLE: Economical consumption of fuel

SOURCE: Morskoy flot, no. 1, 1966, 26-27

TOPIC TAGS: shipbuilding engineering, marine engineering, diesel engine, diesel fuel, FUEL CONSUMPTION

ABSTRACT: In connection with a general campaign for reducing waste and saving fuel in the Merchant Marine, the author discusses some measures taken by various yards, ships and agencies. The results in economical consumption of fuel by the Estonian dry-goods shipping agency is praised and the example of diesel ship "Kalev" is cited for careful treatment of diesel oil and for an addition of a 20-pct ammonia solution. The research conducted by the heat-engineering laboratory of the Black Sea Steamship Agency is also praised. In this connection, the use of phosphate-nitrate method for treating water of high-pressure marine

UDC: 656.61:629.1-6+339.443

Card 1/2

L 39095-66

ACC NR: AP6016349

boiler is discussed and its additional application as a protective measure against intercrystalline corrosion is recommended also for low-pressure boilers. The proper cleaning and painting of hull surfaces is recommended as a measure for reducing the ship resistance and fuel consumption. Some data on losses in speed caused by the increase in resistance are cited in connection with waste in fuel. The conversion of engines from diesel oil to less expensive motor types of fuel oil is recommended especially taking into consideration the eventual increase of diesel oil price in 1966. In conclusion, the crews of the diesel ship "Vilsandi" (Estonian agency) and of the steamer "Spartak" (Northern agency) are praised, while the crew of the steamship "Kronshtadt" (Far East agency) is criticized.

SUB CODE: 21,13/ SUBM DATE: None

Card 2/2 egh

Filippov, A.A.

68-10-11/22

AUTHORS: Sal'nikov, V.V. (Cand.Tech.Sc.) and Filippov, A.A.

TITLE: Some Special Features of the Composition and Method of Processing Benzene in the Gubakha Coke Oven Works (Osobennosti sostava i pererabotki syrogo benzola Gubakhinskogo Koksokhimicheskogo Zavoda)

PERIODICAL: Koks i Khimiya, 1957, Nr 10, pp.42-46 (USSR)

ABSTRACT: The main results of investigations on the technology of processing crude benzene produced in the above works are reported. Crude benzene produced in these works is characterised by an increased content of unsaturated, sulphurous and non-sulphonating compounds which makes processing into pure products more difficult. The difficulty lies in purifying benzene from compounds which react with bromine and from non-sulphonating (saturated) hydrocarbons, due to which the usual technology cannot be applied. A new technological scheme (Fig.3) was developed. Its characteristic features are as follows: (1) separation of head fraction is carried out on mixed benzene-toluene fractions; (2) on final rectification the distillation of benzene is carried out in a continuous manner and of the toluene residues intermittently. During this distillation in addition to standard products some intermediate fractions with increased content of ad-

Card 1/2

FILIPPOV, A.A.

104-4-15/40

AUTHOR: Voskresenskiy, N.A., Egorova, L.V. and Filippov, A.A., Engineers.

TITLE: Corona losses on 400 kV transmission lines. (Poteri na koronu na liniyakh elektroperedachi 400 kV)

PERIODICAL: "Elektricheskie Stantsii" (Power Stations), 1957, Vol. 28, No.4, pp. 54 - 57 (U.S.S.R.)

ABSTRACT: In the present state of the theory of a.c. corona, because of the complexity of the effect and its dependence on numerous external factors, it is not possible to calculate corona losses on transmission line conductors. Experimental lines for the study of this effect have, therefore, been constructed in the USSR and abroad. This article describes an experimental installation consisting of a section of line (analagous with the 400 kV Kuybishev-Moscow line) high voltage transformers and supply equipment. Voltage is supplied by three transformers each with a rated voltage of 750 kV and an output of 750 kVA installed out-of-doors. The transformers may be connected in series to produce a voltage of about 2 000 kV to earth and three-phase connection can be arranged with line voltages of the order of 1 100 kV. The transformers
1/3 are supplied from a 3 MVA alternator driven by a synchronous motor. The experimental section of three phase lines consists

Corona losses on 400 kV transmission lines. (Cont.) 104-4-15/40

of three spans each of 300 m. The minimum clearance to earth at mid span is 10 m, two earth wires are used. Equipment has been provided for heating the wires in order to measure corona losses in conditions of fog and ice formation. A meteorological station has been provided to record atmospheric pressure, temperature and humidity, rainfall intensity and wind strength.

The procedure for measuring corona loss is described. In view of the need for high sensitivity a bridge circuit was chosen using sensitive electro-static watt meters. Special measuring cabins are installed on insulated supports with an insulation level to earth of 750-800 kV. Test results are given for corona losses using different wires under different meteorological conditions. Measured and calculated values of capacitance and maximum potential gradients in the three phase condition are tabulated for all the cases of measurement, and average values of corona loss are given as functions of voltage for various meteorological conditions in the form of graphs and a table. It is considered that the classification of weather conditions requires further attention. The period of the tests has extended over two years with one kind of conductor and 9 months with another. There is considerable dispersion of experimental results in good weather, both because

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Corona losses on 400 kV transmission lines. (Cont.) 104-4-15/40

of changes in the surface of the conductors and of changes in the meteorological conditions from one test to another. The scatter of experimental points in bad weather results from variations in actual weather conditions. With both kinds of conductor for a 400 kV line losses at rated voltage in good weather do not exceed 1 kW/km.

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There are 3 figures and two tables.

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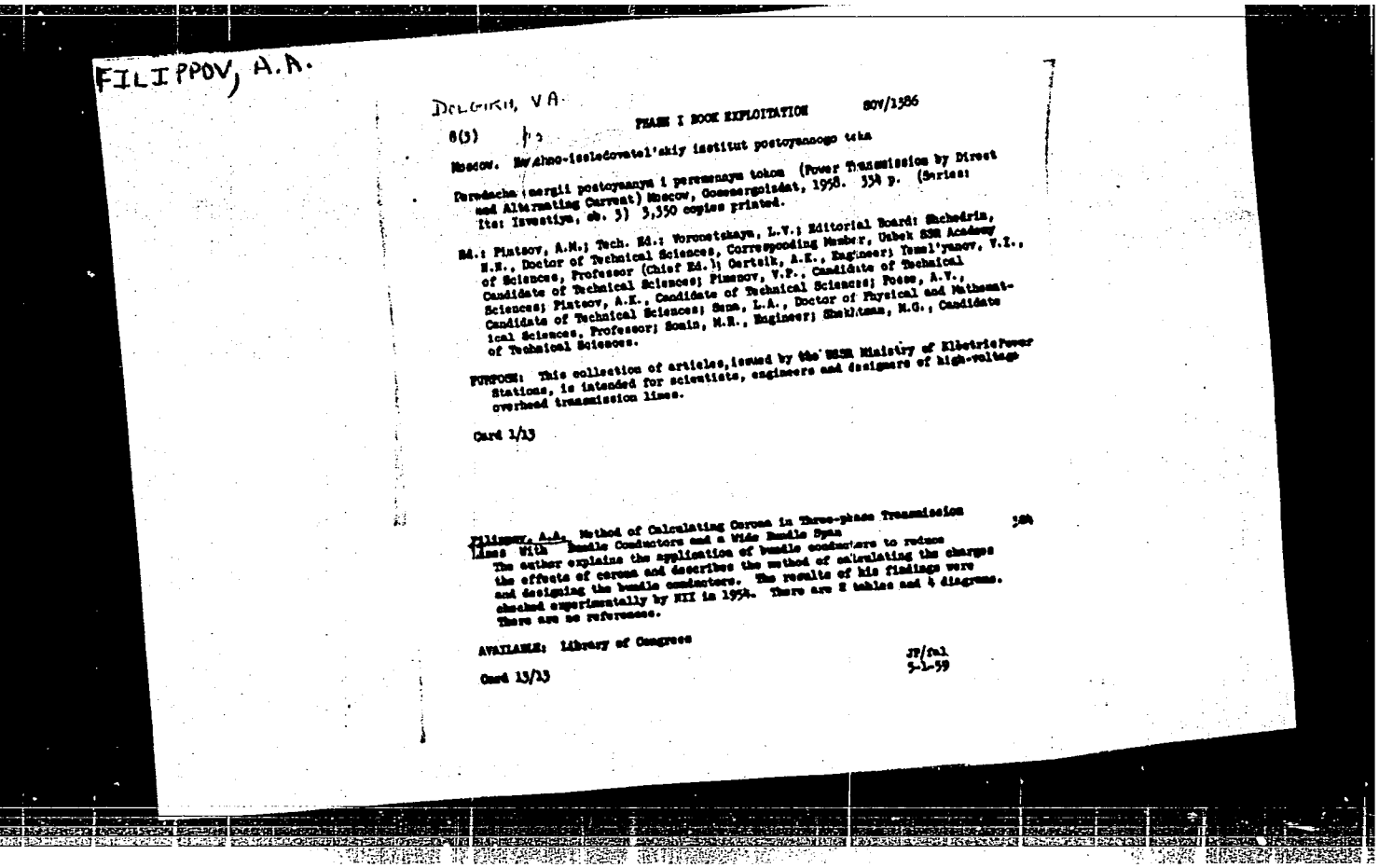

FILIPPOV, A.A.

DOLGINOV, V.A.

SOV/1586

8(5)

PHASE I BOOK EXPLOITATION

Moscow. Nauchno-issledovatel'skiy institut postoyannogo toka

Peredacha energii postoyannym i peremennym tokom (Power Transmission by Direct and Alternating Current) Moscow, Gosenergoizdat, 1958. 334 p. (Series: Its: Izvestiya, sb. 3) 3,350 copies printed.

Ed.: Platsov, A.M.; Tech. Ed.: Voronetskaya, L.V.; Editorial Board: Shchedrin, N.N., Doctor of Technical Sciences, Corresponding Member, Uzbek SSR Academy of Sciences, Professor (Chief Ed.); Gertsik, A.E., Engineer; Temel'yanov, Y.I., Candidate of Technical Sciences; Pimenov, V.P., Candidate of Technical Sciences; Platsov, A.K., Candidate of Technical Sciences; Posse, A.V., Candidate of Technical Sciences; Sune, L.A., Doctor of Physical and Mathematical Sciences, Professor; Somin, N.N., Engineer; Shaklitsan, N.G., Candidate of Technical Sciences.

PURPOSE: This collection of articles, issued by the USSR Ministry of Electric Power Stations, is intended for scientists, engineers and designers of high-voltage overhead transmission lines.

Card 1/13

Filippov, A.A. Method of Calculating Corona in Three-phase Transmission Lines With Bundle Conductors and a Wide Bundle Span 198

The author explains the application of bundle conductors to reduce the effects of corona and describes the method of calculating the charges and designing the bundle conductors. The results of his findings were obtained experimentally by NII in 1954. There are 2 tables and 4 diagrams. There are no references.

AVAILABLE: Library of Congress

JP/fal
5-1-59

Card 13/13

S/112/59/000/016/012/054
A052/A002

Translation from: Referativnyy zhurnal, Elektrotekhnika, 1959, No. 16, p. 60, No. 33934

AUTHOR: Filippov, A. A.

TITLE: On the Calculation of Charges for a Three-Phase Line with Bundle Conductors and a Wide Spacing of Bundles

PERIODICAL: Izv. n.-i. in-ta postoyan. toka, 1958, No. 3, pp. 324-335

TEXT: An increase of the spacing of bundles is an effective measure to raise the throughput of a-c transmission lines. However, corona losses increase at the same time. Methods of calculating corona losses with bundle conductors of a large radius of bundling are given. A solution of a problem for a bundled conductor in form of a regular polygon is given. The effect of cables is disregarded.

A. V. K.

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

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VOSKRESENSKIY, N.A., inzh.; YEGOROVA, L.V., inzh.; TIKHODEYEV, N.N., kand.tekhn.nauk; FILIPPOV, A.A., inzh.

Method for calculating average annual corona losses. Elek.sta. 29 no.1:53-56 Ja '58. (MIRA 11:2)
(Corona (Electricity))

S/149/60/000/006/004/018
A006/A001

AUTHORS: Filippov, A.A., Smirnov, V.I.

TITLE: On Kinetics and Thermodynamics of Chlorination Reactions of Selenides and Tellurides of Copper and Precious Metals

PERIODICAL: Izvestiya vysshikh uchebnykh zavedeniy, Tsvetnaya metallurgiya, 1960, No. 6, pp. 55-64

TEXT: Chlorination is one of the means of separating selenium and tellurium from non-ferrous and precious metals. It can be used as a technological basis for processing anode slimes and other semiproducts of the metallurgical industry. Due to the low boiling temperatures of selenium and tellurium, their extraction into chloride sublimate will depend on the stability in chlorine atmosphere and the chlorination rate of those compounds in the form of which selenium and tellurium are present in the initial materials. The probable form of Se and Te in anode slimes can be determined from their composition and the magnitude of energy of the crystalline lattice of the compounds. E.S. Sarkisov's method was used to calculate the energy of crystalline lattices of selenides and tellurides of copper, silver, platinum and palladium. A comparison of their values shows that in platinoid

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S/149/60/000/006/004/018
A006/A001

On Kinetics and Thermodynamics of Chlorination Reactions of Selenides and Tellurides of Copper and Precious Metals

slimes selenium and tellurium are partially present in the form of selenides and tellurides of platinum and palladium. When studying the thermodynamics of chlorination reactions of selenides and tellurides of copper, silver, platinum and palladium, the possibility and intensity of the reactions is determined from the magnitude and sign of the isobaric-isothermal potential. The authors carried out thermodynamical calculations of changes in the isobaric-isothermal potential of chlorination reactions of selenides and tellurides in a temperature range of 100-500°C, using the equation of first approximation $\Delta Z^{o}_{T} = \Delta H^{o}_{298} - T \Delta S^{o}_{298}$, and data given by A.F. Kapustinskiy (Ref. 13), Venner, Latimer (Ref. 14), and K.B. Yatsimirskiy (Ref. 10). A comparison of values of chlorination reactions, ΔZ, shows that under similar conditions telluride chlorination will prevail, and among the selenides, platinum and palladium will chlorinate least. In the presence of sodium chloride, chlorination reactions of platinum selenide and telluride proceed with the formation of a complex compound Na_2PtCl_6. The chlorination reaction of corresponding compounds of palladium is most probably accompanied by the formation of $PdCl_2$. Kinetics of chlorination reactions was studied with synthetic selenides

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S/149/60/000/006/004/018
A006/A001

On Kinetics and Thermodynamics of Chlorination Reactions of Selenides and Tellurides of Copper and Precious Metals

and tellurides of copper, silver, platinum and palladium. Values of apparent activation energy of the chlorination reaction of these compounds were determined. The rate of chlorination reactions was investigated on an installation shown in Figure 1. A batch of 100 mg selenide or telluride is mixed with sodium chloride and crushed charcoal in a 1:1:1 proportion and put into a quartz boat which was placed in a reaction tube. After evacuating the air from the tube by argon, the electric furnace was switched on. During heating, argon was passed through the tube at a rate of 2 liters/hr. The temperature in the reaction space was measured over the middle of the boat. At a steady temperature, a T-pipe was turned to receive the chlorine which was passed into the reaction tube from a gasmeter at a constant rate of 4.5 liters/hr. Chlorination of selenides lasted from 2 minutes to 4 hours; tellurides were chlorinated for up to 2 hours. Constant values of chlorination reaction rates of selenides and tellurides are calculated by an equation for the reaction of the first order

$$K = \frac{1}{\Delta\tau} - \ln \frac{q_n}{q_k}$$

where q_n and q_k are the amounts of selenide (telluride) after 2 and 15 minutes

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On Kinetics and Thermodynamics of Chlorination Reactions of Selenides and Tellurides of Copper and Precious Metals

chlorination respectively; $\Delta\tau$ is a period of 13 minutes during which a change in weight of the substance from q_n to q_k takes place. Figure 3 shows the logarithm of the experimental constant of the chlorination reaction rate of selenides and tellurides as a function of the inverse value of absolute temperature. The experimental points for each reaction are well located on the straight line whose formula corresponds to the Arrenius equation

$$\ln K = -\frac{A}{T} + B$$

where A is the tangent of the inclination angle of the straight line to the abscissa axis - $\frac{1}{T}$ connected with the activation energy by the equation $E = AR$. The experiments show that tellurides of copper platinum and palladium and copper selenides are unstable compounds and are affected by chlorine already at 80-100°C. At 200-250°C the chlorination reaction is practically completed within 30 to 60 minutes. Chlorination reaction of selenide and telluride of silver begins at 200°C and is completed at 300°C. Platinum and palladium selenides are most stable in chlorine atmosphere and their interaction begins at 250 and 300°C respectively.

S/149/60/000/006/004/018
A006/A001

On Kinetics and Thermodynamics of Chlorination Reactions of Selenides and Tellurides of Copper and Precious Metals

Full chlorination is attained at 450-500°C. For a series of selenides, such as Ag_2Se, PtSe, Cu_2Se and a number of tellurides, such as Ag_2Te, PtTe, Cu_2Te, a dependence was determined of the apparent activation energy and the thermal effect of reaction chlorination: $E = A - \frac{1}{2}\Delta H$. A connection was established between the values of crystalline lattice energy and activation energy of chlorination reaction of selenide and telluride of the same metal. A higher value of activation energy of the chlorination reaction corresponds to a higher value of the crystalline lattice energy.

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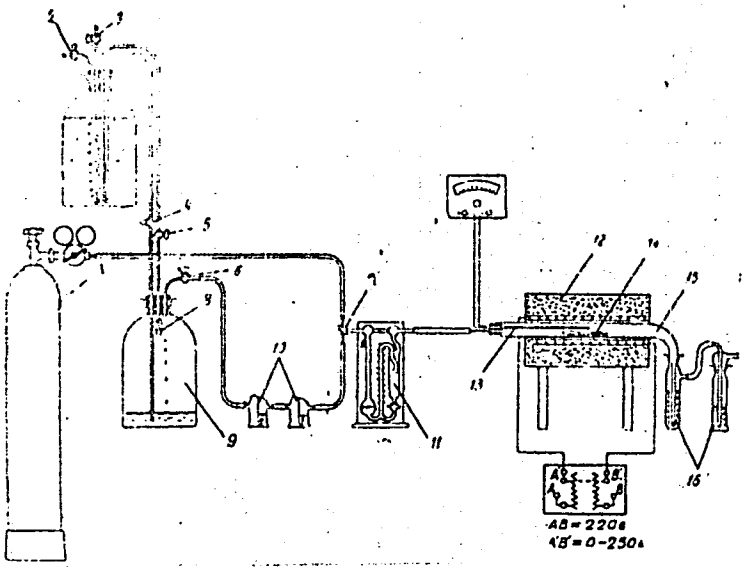

Figure 1: Schematic diagram of an installation for studying the chlorination reaction rates of selenides and tellurides. 1-cylinder with argon; 2-3,4,5,6,7-taps; 8-overflow container; 9-20l cylinder with NaCl solution; 10-vials with concentrated H_2SO_4; 11-rheometer designed by Leybovskiy (Ref. 19); 12-electric furnace; 13-platinum platinum-rhodium thermocouple; 14-quartz boat; 15-heat resistant glass tube; 16-containers with HCl solution.

S/149/60/000/006/004/010
A006/A001

On Kinetics and Thermodynamics of Chlorination Reactions of Selenides and Tellurides of Copper and Precious Metals

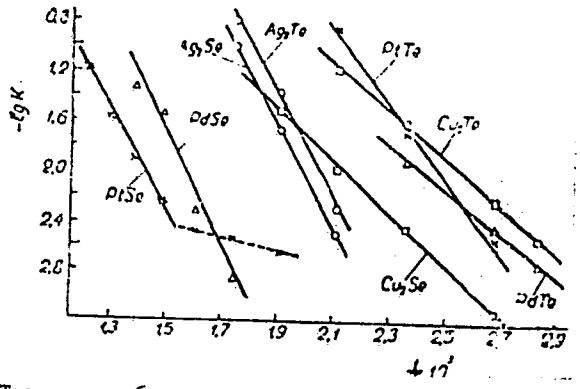

Figure 3: Dependence of the logarithm of the constant of chlorination reaction rate of selenides and tellurides of copper, silver, platinum and palladium on the inverse value of absolute temperature.

There are 6 tables and 3 figures and 21 references: 17 Soviet and 4 English.

ASSOCIATIONS: Ural'skiy politekhnicheskiy institut (Ural Polytechnic Institute); Kafedra metallurgii tyazhelykh tsvetnykh metallov (Department of Metallurgy of Heavy Non-Ferrous Metals)

[illegible]: May 9, 1960

FILIPPOV, A.A.; FAYNGOL'D, S.G.; AYZENBERG, L.G.;

Industrial mastering of the process of the production of polyacrylamide at the Yasinovka By-Product Coking Plant. Koks i khim. no.10:7-9 '60. (MIRA 13:10)

1. Yasinovskiy koksokhimicheskiy zavod.
(Yasinovka—Acrylamide)

FILIPPOV, A.A.

Some features of the accumulation of hoarfrost on electric power transmission lines. Izv. NIIPT no.5:228-235 '60. (MIRA 14:1)
(Electric lines--Overhead)

FILIPPOV, A.A.; FAYNGOL'D, S.G.; Prinimali uchastiye: POPOVA, A.S.; ZEN'KOVSKAYA, S.I.

Production of ammonium sulfate of impoved quality. Koks. i khim. no. 3:42-44 '61. (MIRA 14:4)

1. Yasinovskiy koksokhimicheskiy zavod.
(Ammonium sulfate)

FILIPPOV, A.A.

Methods for obtaining voltage waves with an amplitude up to 2 Mv. corresponding in shape to the internal overvoltage of a.c. and d.c. power transmission lines. Izv. NIIPT no.8:367-390 '61.
(MIRA 15:7)

(Electric power distribution)
(Electric insulators and insulation--Testing)

STEPINA, N.I.; FILIPPOV, A.A.

Some problems concerning the methodology for studying the electrical strength of long air gaps subject to the action of a.c. voltages. Izv. NIIPT no.9:241-250 '62. (MIRA 15:12)
(Electric power distribution) (Electric discharges)

GUTMAN, Yu.M.; STEPINA, N.I.; FILIPPOV, A.A.

Discharge voltages of air and line insulation subject to the action of switching surges with simplest form. Izv. NIIPT no.9:251-273 '62. (MIRA 15:12)

(Electric power distribution) (Transients (Electricity))
(Electric insulators and insulation)

L 17813-65 EPA(s)-2/EWT(m)/EPF(c)/EWG(v)/EPR/EPA(w)-2/EWP(j) Pc-4/Pe-5/
Pab-10/Pr-4/Ps-4/Pt-10 WW/RM
ACCESSION NR: AP5000416 S/0104/64/000/008/0053/0057

AUTHOR: Stepina, N. I. (Engineer); Filippov, A. A. (Candidate of technical sciences)

TITLE: Switching-surge breakdown voltages of air insulation

SOURCE: Elektricheskiye stantsii, no. 8, 1964, 53-57

TOPIC TAGS: air insulation, air insulation electric strength switching surge breakdown voltage

ABSTRACT: The results of an experimental investigation of the electric strength of various airgaps at 40-260 cps switching surges are reported. The airgaps investigated were: rod-plane, rod-rod, ring-plane, ring-ring, wire-support, and wire-plane. The test voltage was obtained from two cascade-connected transformers that could develop an overall amplitude of up to 2,000 kv. Actual 50% breakdown voltage and rms deviation values for all above electrodes, with

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L 17843-65
ACCESSION NR: AP5000416

1.5--5-m separations, are tabulated. These conclusions are reported: (1) The 50% switching-surge breakdown voltages are close to those occurring with a gradual rise of commercial-frequency (50 cps) voltage; (2) Rms deviation in the probability distribution is 3--5 times higher in the surge-voltage case than in the commercial-voltage case; (3) The 50% breakdown voltage increases as the frequency decreases from 260 to 40 cps; (4) At 75 cps, the positive-polarity breakdown voltage is higher if it was preceded by a negative-polarity half-wave; at 260 cps, no negative-polarity effect is noticeable; (5) The negative-polarity breakdown voltage is much higher than the positive-polarity voltage in the case of unsymmetrical airgaps. Orig. art. has: 5 figures and 1 table.

ASSOCIATION: none

SUBMITTED: 00 ENCL: 00

SUB CODE: EE NO REF SOV: 005 OTHER: 000

Card 2/2

VOKALEK, Ya., [Vokalek, J.], inzh.; KUCHERA, Ya. [Kucera, J.], kand. tekhn. nauk; GUTMAN, Yu.M., inzh.; TIKHODEYEV, N.N., kand. tekhn. nauk; FILIPPOV, A.A., kand. tekhn. nauk

Discharge voltages of line insulation during switching surges. Elek. sta 36 no.4:55-63 Ap '65. (MIRA 18:6)

1. Nauchno-issledovatel'skiy institut energetiki Chekhoslovatskoy Sotsialisticheskoy Respubliki (for Vokalek, Kuchera). 2. Nauchno-issledovatel'skiy institut postoyannogo toka (for Gutman, Tikhodeyev, Filippov).

ACC NR: AP7001319 SOURCE CODE: UR/0057/66/036/012/2203/2206

AUTHOR: Filippov, A.A.

ORG: none

TITLE: Application of the type IAB-451 schlieren camera to the investigation of pre-discharge phenomena in long air gaps

SOURCE: Zhurnal tekhnicheskoy fiziki, v. 36, no. 12, 1966, 2203-2206

TOPIC TAGS: spark gap, spark discharge, air, schlieren photography,

ABSTRACT: The author has observed predischarge phenomena (Trichel pulses, streamers, and leaders) in 0.5 to 1.0 m air gaps at atmospheric pressure between a plane and a hyperbolic electrode with the aid of a Soviet type IAB-451 schlieren camera. The schlieren were photographed directly and were also observed with the aid of an electron-optical image converter and recorded with a photomultiplier. It was possible to observe Trichel pulses, streamers and leaders, and very clear photographs of streamer schlieren were obtained. From the variation of the photomultiplier anode current with position of the Foucault knife edge in the focal plane of the schlieren camera it was possible to determine the radius of the streamer channel shadow, the air density within the channel, and the thickness of the region of the channel within which the air density varies. The streamer channels were found to expand and cool much more slowly

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UDC: 537.52

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ACC NR: AP7001319

than was calculated on the basis of hydrodynamics and heat conductivity. From this it is concluded that only a small fraction of the energy developed in the streamer appears as translational and rotational energy of the molecules. The experimental results are regarded as preliminary; the principal conclusion of this paper is that valuable information concerning predischarge phenomena can be obtained with the aid of the schlieren technique. Orig. art. has: 3 figures.

SUB CODE: 20,14 SUBM DATE: 27Dec65 ORIG. REF: 006 OTH REF: 001

Card 2/2

SALTANOV, V.; FILIPPOV, A.

Practice in establishing work norms on the "Maiskii" State Farm. Biul. nauchn. inform.: trud i zar. plata 5 no.9:19-21 '62. (MIRA 15:10)

(Kaliningrad District (Moscow Province)—State farms—Production standards)

FILIPPOV, A., inzhener-podpolkovnik, kand.tekhn.nauk

Warhead of an antiaircraft guided missile and its action on target. Voen. vest. 42 no.10:80-82 O '62. (MIRA 15:10)
(Guided missiles)

FILIPPOV, A., mayor

Conference of efficiency experts. Voen.-inzh.zhur. 97 no.2:37 F '53. (MIRA 12:4)
(Odessa--Military engineers)

LUCHIN, A.; FILIPPOV, A.; POPOV, N.

How we prepared for work with the new wage schedules.
Sots. trud no.12:76-79 D '56. (MLRA 10:2)

1. Nachal'nik byuro organizatsii truda i zarabotnoy platy staleliteynogo tsekha Nevskogo mashinostroitel'nogo zavoda imeni Lenina. (for Luchin).
(Wages)

FILIPPOV, A. (g. Stalingrad)

Improve working conditions of the deaf-mutes. Prom.koop. 12 no.11:24 N '58. (MIRA 11:11)

1. Predsedatel' prezidiuma oblastnogo otdela Vserossiyskogo obshchestva glukhonemykh.
(Stalingrad Province--Deaf--Employment)

FILIPPOV, A.

Speed up construction of buildings serving cultural needs in villages. Sel'. stroi. 15 no.1:8-9 Ja '61. (MIRA 14:3)

1. Zamestitel' Ministra kul'tury RSFSR.
(Clubhouses) (Libraries, Rural)

FILIPPOV, A.

Economize fuel! Mor.flot 26 no.1:26-27 Ja '66.

(MIRA 19:1)

1. Starshiy inzhener Glavnogo upravleniya tekhnicheskoy ekspluatatsii flota i sudoremontnykh zavodov Ministerstva morskogo flota SSSR.

FILIPPOV, A., inzhener

Marine boiler damage. Mor. flot 15 no.7:28-29 Jl '55.
(Boilers, Marine) (MIRA 8:9)

FILIPPOV, A., inzhener.

Using a vibrating separator for grading grain. Muk.-elev.prom. 23 no.2:12-14 F '57. (MLRA 10:5)
(Grain-handling machinery)

FILIPPOV, A.; PEVZNER, I.

Basic tasks in designing standard garages. Avt.transp. 33 no.12: 13-14 D '55. (MLRA 9:3)

1. Giproavtotrans.

(Garages)

FILIPPOV, A.

New standard plans. Avt.transp. 34 no.1:31 Ja '56. (MLRA 9:5)

1. Glavnyy inzhener Giproavtotransa.
(Garages) (Automobiles--Repairing)

FILIPPOV, A.

State Institute for the Design and Planning of Motor Vehicle Repair and Automotive Transportation Establishments. Avt.transp. 37 no.1: 54 Ja '59. (MIRA 12:2)

1. Glavnyy inzhener Giproavtotransa.
(Transportation, Automotive)

FILIPPOV, A., shtukatur

Using clay mortars in plastering walls. Sel'.stroi. 14 no.6:5 Je '59. (MIRA 12:9)

1. Kerest'skiy lesopunkt Novgorodskogo lespromkhoza.
(Clay) (Plastering)

GEL'FOND, S. (g.Odessa); SHIGANOV, A. (g.Chernigov); SMETANINA, Z., pryadil'-shchitsa, udarnik kommunisticheskogo truda; DIL'DIN, M., rabochiy; SKRIPKIN, P. (g.Ulan-Ude); FILIPPOV, A. (g.Petropavlovsk); CHERNYKH, Vl. (g.Kursk)

From letters to the editors. Sov. profsoiuzy 16 no.21:54-57 N '60. (MIRA 13:10)

1. Fabrika imeni Balashova, g.Ivanovo (for Smetanina). 2. Sovkhoz "Teplichnyy", Moskovskaya obl. (for Dil'din).
(Trade unions)

FILIPPOV, A. (Tashkent)

Synthetic dyes. Nauka i zhizn' 27 no. 4:77-78 Ap '60. (MIRA 14:5)

(Dyes and dyeing)

BESKROVNYY, I.G., dotsent, kandidat tekhnicheskikh nauk; FILIPPOV, A.A., dotsent, kandidat tekhnicheskikh nauk

Problems of standard norms for locomotive fuel consumption. Trudy TASHIIT no.3:112-126 '51. (MLRA 8:10)
(Locomotives--Fuel consumption)