

S/076/60/034/009/036/041XX  
B020/B056

AUTHORS: Boguslavskiy, L. I. and Damaskin, B. B.  
TITLE: Determination of the Zero Charge Points on Thallium Amalgam  
by Measuring the Differential Capacity  
PERIODICAL: Zhurnal fizicheskoy khimii, 1960, Vol. 34, No. 9,  
pp. 2099-2109

TEXT: The authors applied the method of measuring the differential capacity for determining the zero charge point on a thallium amalgam electrode. The zero charge potentials on thallium amalgam were measured by A. N. Frumkin and A. V. Gorodetskaya (Ref. 8) by means of the electrocapillary curves, by A. N. Frumkin and F. Dzh. Servis (Ref. 9) by the method of the zero solutions, and by A. V. Gorodetskaya and B. N. Kabanov (Ref. 10) by means of the method of contact angles. The results obtained by all three methods gave good agreement, and were used in the present paper for controlling the differential capacity method with respect to amalgam electrodes. For the purpose of measuring the capacity of the amalgam drop electrode, the diagram of the impedance

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Thallium Amalgam by Measuring the Differen- B020/B056  
tial Capacity

bridge, whose principle has been described by D. C. Grahame (Ref. 11) and V. I. Melik-Gaykazyan (Ref. 12) was used with some modifications introduced by one of the authors (Ref. 14). A characteristic feature of differential capacity measurement on the dropping electrode is the change in the double layer and the resistivity of the solution with the growth of the drop. The areas of the drop at the instant when the bridge equilibrium is established may be calculated from the equation

$s = km^{2/3} \tau^{2/3}$  (1).  $m$  is the mass of the amalgam, which flows from the capillary within the time unit;  $\tau$  is the time from the instant of dropping to the establishment of the bridge equilibrium. The coefficient

$k = \sqrt[3]{36\pi/q^2}$ , where  $q$  denotes the density of the amalgam. For determining the time  $\tau$ , an electric clock was used. Switching-in and switching-off the clock was performed automatically by means of a relay, whose diagram is given in Fig.1. A dropping electrode made from thallium amalgam was studied. A platinum sphere served as an auxiliary electrode, whereas a normal calomel electrode was used for reference. The capacity curves of 40% thallium amalgam in 0.9, 0.1, 0.01, and 0.002 N NaF-solutions  
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Determination of the Zero Charge Points on S/076/60/034/009/036/041XX  
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were measured at a frequency of 400 cps. The data obtained are given in Fig. 2. Fig. 3 shows the capacity curves of 40% thallium amalgam, measured in 0.1 and 0.01 N KCl-solutions at frequencies of 400 and 10,000 cps. The dependence of the position of the zero charge point on the concentration of the thallium amalgam was studied by measuring the capacity curves of thallium amalgams diluted to 0.01%, and the results are given in 0.01 NaF-solution in Fig. 4. Also the dependence of the capacity of the double layer of the thallium amalgam on the frequency of the alternating current was measured, and it was found that in the case of diluted amalgam at frequencies of 400 to 10,000 cps no dispersion of the capacity with the frequency occurs, with the exception of the most positive range of the potentials, where the dispersion is interrelated with the pseudocapacity (Fig.5). Fig. 6 shows the capacity curves of 40% thallium amalgam in 0.1 N NaF solution at 50, 400, and 10,000 cps. In Fig. 7, the calculated and experimentally found differential capacity curves of 40% thallium amalgam in 0.002 N, 0.01 N, and 0.1 N NaF-solutions are given for 400 cps. Academician A. N. Frumkin and B. S. Sekovanov are finally thanked. There

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Determination of the Zero Charge Points on S/076/60/034/009/036/041XX  
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tial Capacity

are 7 figures and 20 references: 11 Soviet, 6 US, 1 British, and 2  
German. ✓

ASSOCIATION: Moskovskiy gosudarstvennyy universitet im. M. V. Lomonosova  
(Moscow State University imeni M. V. Lomonosov)

SUBMITTED: January 12, 1959

Card 4/4

S/653/61/000/000/031/051  
I042/I242

AUTHORS: Boguslavskiy, I.I., and Nekhay, S.M.

TITLE: The use of caprone-lined bearings in presses

SOURCE: Plastmassy v mashinostroyenii i priborostroyenii.  
Pervaya resp. nauch.-tekhn. konfer. po vopr. prim:  
plastmass v mashinostr. i priborostr., Kiev, 1959.  
Kiev, Gostekhizdat, 1961, 349-355

TEXT: The Dnepropetrovskiy zavod srednikh gidravlicheskikh i tyazhelykh mekhanicheskikh pressov (Dnepropetrovsk plant of medium hydraulic and heavy mechanical presses) has investigated the replacement of bimetals by caprone in bushings. The clearance between the plunger and the sleeve must be increased to allow for the high coefficient of expansion of caprone. This weakens the dimensional standards and limits the range of the press. Therefore a method was developed

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The use of caprone-lined bearings....

for the construction of steel bushings with a 0.2-0.5 mm inner layer of caprone. The latter is deposited as a powder in the externally heated bushing. Wear was measured by weighing the bushing periodically on an analytical balance with an accuracy of  $10^{-4}$ g. The optimal thickness of the caprone layer is 0.5 mm. The wear resistance of caprone-lined samples is considerably higher than that of cast iron. There are 7 figures and 1 table.

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20361

S/020/61/136/005/022/032  
B.101/B.206

15.8114 also 1164, 1043 1143  
AUTHORS: Berlin, A. A., Boguslavskiy, L. I., Burshteyn, R. Kh.,  
Matveyeva, N. G., Sherle, A. I., and Shurmovskaya, N. A.

TITLE: Some electrophysical properties of polymer complexes of  
tetraethylene cyanide with metals

PERIODICAL: Doklady Akademii nauk SSSR, v. 136, no. 5, 1961, 1127-1129

TEXT: The authors deal with the chelate compounds between tetraethylene cyanide and metals. The infusibility and insolubility of these compounds led to the proposal that coatings and plastics be manufactured from them (Ref. 3). The electrophysical properties of polymeric chelate films chemically bonded to metals, which were obtained by treatment of copper, iron, and nickel sheets with tetraethylene-cyanide vapor, were studied in this paper. The degreased and, in some cases, also electropolished or etched metal foils were exposed to tetraethylene-cyanide vapor at  $10^{-5}$  mm Hg and 150 to 400°C. A film firmly sticking to the metal developed, the thickness of which was calculated from the specific gravity of the

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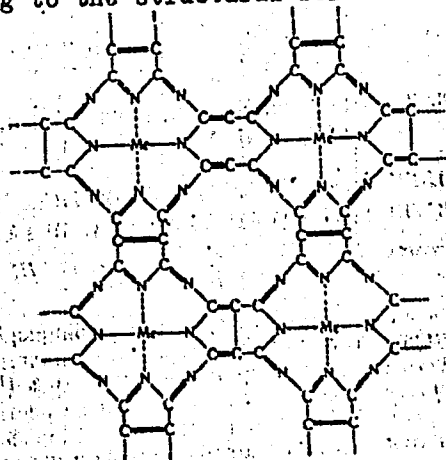
20361

S/020/61/136/005/022/032

B101/B206

Some electrophysical properties ...

polymer and from the weight of the film as being  $5 \cdot 10^{-6}$  -  $3 \cdot 10^{-5}$  cm.  
(Owing to the poor combustibility of the chelate film, microanalysis produced too low carbon values). The infrared spectra of the copper complex, taken by Yu. Sh. Moshkovskiy and N. D. Kostrova, showed the complete absence of maxima in the range  $800 - 2300 \text{ cm}^{-1}$ . A "parquet" structure of the polymer according to the structural formula



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Some electrophysical properties ...

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is concluded therefrom. The electrophysical properties of the films were checked by means of alternating current of 200 cps - 0.2 Mc/sec. The metal covered by the film was immersed in mercury so that the film formed the dielectric of a capacitor, the plates of which consisted of the metal and of mercury. Measurements were made at  $10^{-5}$  mm Hg because the presence of air influenced the results. This effect needs further research. The specific conductivity  $\sigma$ , the film capacitance and its temperature dependence, duration of heating, and the method of metal-surface treatment were determined. The following data are given for films of iron obtained after 3 hr heating at 250°C in tetraethylene-cyanide vapor: film thickness  $3 \cdot 10^{-6}$  cm;  $\sigma = 3 \cdot 10^{-9}$  ohm $^{-1}$ .cm $^{-1}$ ; effective dielectric constant  $\epsilon$  (at 3000 cps) = 7. After further 3 hr of heating,  $\sigma$  increased to  $3 \cdot 10^{-8}$  ohm $^{-1}$ .cm $^{-1}$ , and  $\epsilon$  to 36. Increase of temperature from 250 to 450°C. and heating for 10 hr produced the following values:  $\sigma = 5 \cdot 10^{-8}$  -  $5 \cdot 10^{-6}$  ohm $^{-1}$ .cm $^{-1}$ ,  $\epsilon = 70$ . The sign of the emf indicates that the film possesses p-type conductivity.  $\log \sigma = f(10^3/T)$  is represented in Fig. 2. Measurements between -40 and +220°C yielded two linear sections.

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Some electrophysical properties ...

The first lies between  $-40$  and  $+30^{\circ}\text{C}$  and corresponds to an activation energy of from  $0.07$  to  $0.12$  ev, while the second ( $30$  to  $250^{\circ}\text{C}$ ) corresponds to an activation energy of from  $0.21$  to  $0.28$  ev. The function represented is similar to that obtained for semiconductors with impurity conductivity.  $R$  and  $\epsilon$  as functions of the logarithm of the frequency  $\nu$  between  $400$  cps and  $0.2$  Mc/sec were also measured. Results are shown in Fig. 3. It is noted that  $R$  and the film capacitance decrease with increasing voltage when a constant voltage is applied. When a direct current is conducted through an alcoholic solution of copper sulfate, metallic copper firmly adhering to the film is deposited on the polymer film formed on iron. The high  $\epsilon$  values indicate that the polarization of conductive macromolecules could be in question. The authors are preparing a study on the complex dielectric constant at higher frequencies. There are 4 figures and 3 Soviet-bloc references.

ASSOCIATION: Institut khimicheskoy fiziki Akademii nauk SSSR (Institute of Chemical Physics, Academy of Sciences USSR). Institut elektrokhimii Akademii nauk SSSR (Institute of Electrochemistry, Academy of Sciences USSR)

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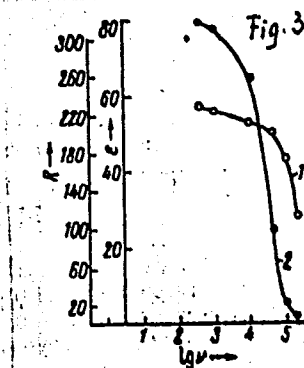
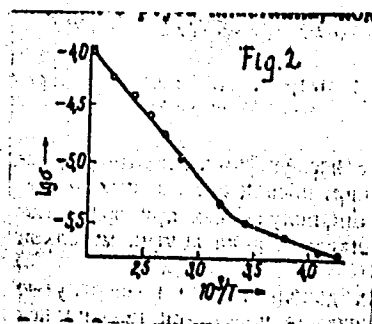
Some electrophysical properties ...

PRESENTED: August 13, 1960, by A. N. Frumkin, Academician

SUBMITTED: August 13, 1960

Card 5/6

Some electrophysical properties ...



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34482  
S/020/62/142/004/019/022  
B101/B110

26.2513 (also 120P)  
AUTHORS: Frumkin, A. N., Academician, Boguslavskiy, L. I., and  
Serebrennikov, V. S.

TITLE: Electrode behavior of thermally treated polyacrylonitrile

PERIODICAL: Akademiya nauk SSSR. Doklady, v. 142, no. 4, 1962, 878 - 880

TEXT: The electrode properties of thermally treated polyacrylonitrile (PAN) strands consisting of some hundred 2 - 3 $\mu$  thick filaments were compared with those of carbon obtained by carbonization of viscose. The potential as a function of log I was measured. An Hg<sub>2</sub>Cl<sub>2</sub> electrode was used as reference electrode in alkaline solution, a normal sulfate electrode in acid solution. Results: in 1 N H<sub>2</sub>SO<sub>4</sub> and H<sub>2</sub> atmosphere, the activity of PAN was much lower than that of carbon. In air, the activity of PAN in 1 N H<sub>2</sub>SO<sub>4</sub> and 1 N NaOH was the same as that of carbon. All processes took an unsteady course on the polymer: potential and polarization increased at constant current. This nonstationary state could not be eliminated even by means of a rotary electrode. It is explained by

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Electrode behavior of thermally...

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oxygen impoverishment of the solution in the micropores. It is assumed that the oxygen bound at first in the form of unstable peroxides is gradually bound irreversibly and more strongly. In oxygen atmosphere in 1 N NaOH, potentials of +280 to +285 v were observed, which were only 25 - 30 mv lower than the reversible potential of  $H_2O$  formation. A continuously changing activation energy  $\Delta E$  of the conductivity was observed on filaments. It resulted therefrom that the potential in 1 N NaOH in the presence of air depended on  $\Delta E$ . In spite of a strong spread of measured values, a minimum (0.04 v) was observed for  $\Delta E \sim 0.32$  v and a maximum (0.14 v) for  $\Delta E \sim 0.44$  v. This difference of about 100 mv corresponds to a change of the reaction rate by three orders of magnitude. The maximum catalytic activity may be connected with the specificity of organic catalysts in biosynthesis.  $\Delta E$  was determined at the Institut poluprovodnikov AN SSSR (Institute of Semiconductors of the AS USSR) in the laboratory of L. S. Stil'bans, from the dependence of conductivity on  $1/T$ . Papers by A. V. Topchiyev, M. A. Geyderikh et al. (DAN, 128, 312 (1959)) and O. V. Krylov, S. Z. Roginskiy (DAN, 118, 523 (1958)) are mentioned. There are 4 figures and 5 references; 4 Soviet and 1 non-Soviet. The reference to the English-language publication reads as follows: J. O'M. Bockris, A. K. Shamshul Huq, Proc. Roy. Soc., A237, 277 (1956).  
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Electrode behavior of thermally...

S/020/62/142/004/019/022  
B101/B110

ASSOCIATION: Institut elektrokhemii Akademii nauk SSSR (Institute of  
Electrochemistry of the Academy of Sciences USSR). Institut  
neftekhimicheskogo sinteza Akademii nauk SSSR (Institute of  
Petrochemical Synthesis of the Academy of Sciences USSR)

SUBMITTED: October 31, 1961

✓

Card 3/3

BOGUSLAVSKIY, L.I.; STIL'BANS, L.S.

Conductance of films of a polymeric complex of tetracyanoethylene with metals. Dokl. AN SSSR 147 no.5:1114-1117 D '62.

(MIRA 16:2)

1. Institut elektrokhemii AN SSSR i Institut polyprovodnikov AN SSSR. Predstavleno akademikom A.N. Frumkinym.

(Organometallic compounds--Electric properties)  
(Ethylene compounds)



L 10378-65 ENT(1)/EPA(s)-2/ENG(k)/ENT(m)/EPF(c)/EAP(j)/1 Pc-4/Pt-4/Pt-10/  
Pz-6 IJP(e)/ASD(s)-3/AFWL/AFETR/ESD(c)/ESD(dp)/ESD(t)/RAEM(t) 17/01

ACCESSION NR: AP4047206

S/0190/64/006/010/1802/1805

AUTHOR: Boguslavskiy, L. I.; Stil'bans, L. S.

TITLE: Study of the conductivity of polymer films at high frequencies

SOURCE: Vysskomolakulyarnyya soyadinaniya, v. 6, no. 10, 1964, 1802-1805

TOPIC TAGS: organic semiconductor, semiconducting polymer, polytetra-  
cyanoethylene, poly(silver tetracyanoethylene), frequency, electrical  
property

ABSTRACT: A study has been made of electrical conduction in the  
polymeric complex of tetracyanoethylene with silver, and in metal-free  
polytetra-cyanoethylene. Thin film ( $6.4 \times 10^{-5}$  and  $5 \times 10^{-6}$  cm, re-  
spectively) specimens were prepared at 300 and 500C by a technique  
described in the original article. Measurements of a-c conductivity  
were performed at frequencies in the range 0.5—200 mcps. Measure-  
ments of the temperature dependence of resistivity were conducted with  
d-c current at 20—300C. It was found that the resistivity and ac-  
tivation energy for conduction of the complex decrease with rising

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ACCESSION NR: AP4047206

frequency. Resistance vs frequency curves, which show a frequency-independent section, were analyzed, and activation energies for conduction determined for d-c and high-frequency a-c currents were compared. It was concluded that d-c measurements alone cannot give a complete picture of the conduction mechanism. Apparently this mechanism is the sum total of the contributions of two mechanisms: 1) carrier transfer from one continuous-conjugation region to another and 2) conduction within the confines of these regions proper, which is characterized for the complex and the metal-free material by an activation energy close to zero. Therefore, in the study of conduction processes in organic polymers, barriers between macromolecules must be taken into account. Orig. art. has: 2 figures, and 1 formula.

ASSOCIATION: Institut elektrokhimii AN SSSR (Institute of Electrochemistry, AN SSSR)

SYNOPSIS: 0406063

ATD PRESS: 1116

SUB CODE: OC, EM

NO REF SOV: 003

OTHER: 001

Card 2/2

ACCESSION NR: AP4039616

S/0076/64/038/005/1118/1125

AUTHOR: Boguslavskiy, L. I. (Moscow); Sherle, A. I. (Moscow); Berlin, A. A. (Moscow)

TITLE: Study of the electrophysical properties of films of polymeric complexes of metal tetracyanoethylene

SOURCE: Zhurnal fizicheskoy khimii, v. 38, no. 5, 1964, 1118-1125

TOPIC TAGS: tetracyanoethylene, metal tetracyanoethylene, tetracyanoethylene polymer, organic semiconductor, semiconducting polymer

ABSTRACT: A study has been made of the electrical properties of films of chelate polymers of tetracyanoethylene with various metals. Films  $10^{-4}$ — $10^{-5}$  m thick were prepared by treating strips of Cu, Mg, Fe, Ni, Ag, Pt, Al, or glass with tetracyanoethylene vapors at 150—450°C and  $10^{-4}$ — $10^{-5}$  mm Hg. Electrical measurements were carried out in the frequency range 20 cycles/sec—200 kcycles/sec with simultaneous application of d-c voltage. Electrical resistivity and its temperature dependence, activation energy for conduction, and dielectric constant were determined. From changes in these parameters

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ACCESSION NR: AP4039616

processes taking place in the formation and heat treatment of the films were observed. The dependence of resistivity and dielectric constant of the films on frequency and d-c voltage are interpreted in terms of the heterogeneous structure model. It is assumed that resistivity and activation energy are essentially due to activation jumps over barriers between macromolecules. The work was carried out at the Institute of Electrochemistry and the Institute of Chemical Physics of the Academy of Sciences USSR. Orig. art. has: 8 figures, 1 table, and 1 formula.

ASSOCIATION: Institut elektrokhimii Akademii nauk SSSR (Institute of Electrochemistry, Academy of Sciences, SSSR); Institut khimicheskoy fiziki Akademii nauk SSSR (Institute of Chemical Physics, Academy of Sciences, SSSR)

SUBMITTED: 18Mar63      DATE ACQ: 19Jun64      ENCL: 00

SUB CODE: 00,EO      NO REF SOV: 006      OTHER: 002

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L 59540-65 ENT(m)/ENP(1)/ENP(1)/I/ENP(t)/ENP(b) Pc-4/Pl-4 DS/JD/RM

ACCESSION NR: AP5016828

UR/0364/65/001/006/0713/0715

621.315.592:547

AUTHOR: Boguslavskiy, L. I.; Rozenshteyn, L. D.

TITLE: Comparison of the optical and electrical properties of films of polymeric complexes (I) of tetracyanethylene (TCE) with metals

SOURCE: Elektrokimiya, v. 1, no. 6, 713-715

TOPIC TAGS: polymer, tetracyanethylene-Ni complex, tetracyanethylene-Cu complex, film, electrical conductivity, absorption spectrum

ABSTRACT: The role of TCE molecules in electrical conductivity of films of polymeric complexes of TCE with Cu and Ni was studied qualitatively by comparing the changes in electron absorption spectra and in the energy of activation of electrical conductivity as a function of thermal treatment. The films were prepared by reacting vapors of TCE with metal powders supported on quartz at 250°C for 10 hours. Spectra were taken with a CF-4 spectrophotometer. The thermally untreated TCE-Cu polymeric complex is made up of larger molecules than the TCE-Ni complex. After 2-hour thermal treatment of 490°C under  $10^{-5}$  mm Hg the absorption spectra of both

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ACCESSION NR: AP5016828

2  
Cu- and Ni- complexes flattened which indicates an increase in the number of large molecules. The more flattening of the absorption spectra after thermal treatment, the more steep the absorption curve of the untreated complex. For the thermally untreated condition, the absorption curve of TCE-Ni complex is steeper than the absorption curve of the TCE-Cu complex. There is a relationship between thermal dependence of the absorption spectra of TCE-metal complexes and of the energy of activation of electrical conductivity ( $E$ ). For TCE-Cu complex  $E$  (equal to 0.32 eV) does not change due to thermal treatment. For TCE-Ni complex  $E$  dropped from 0.46 to 0.01 eV as a result of thermal treatment. Orig. art. has: 2 figures.

ASSOCIATION: Institut elektrokhemii Akademii nauk SSSR (Institute of Electrochemistry, Academy of Sciences, SSSR); Institut poluprovodnikov Akademii nauk SSSR (Institute of Semiconductors, Academy of Sciences, SSSR)

SUBMITTED: 09Feb65

ENCL: 00

SUB CODE: MT, OP

NO REF SOV: 004

OTHER: 000

*llc*  
Card 2/2

L 40546-65 EPA(s)-2/ENT(m)/EPF(c)/EWG(m)/EPR/EWP(j)/T/EWA(c) Ps-4/Pr-4/  
Ps-4/Pt-10 RPL RWH/WW/RM  
ACCESSION NR: AP5004364 S/0076/65/039/001/0263/0264

AUTHOR: Boguslavskiy, L. I.

TITLE: Electrode action of the tetracyanoethylene polymer complex films in an oxidizing-reducing system

SOURCE: Zhurnal fizicheskoy khimii, v. 39, no. 1, 1965, 263-264

TOPIC TAGS: organic coating, polymeric semiconductor, anode, polytetracyanoethylene, oxidizing agent, reducing agent, catalytic activity, platinum, zirconium / Kaktus amplifier

ABSTRACT: Experiments were performed to ascertain to what extent the catalytic action of some organic polymer semiconductors parallels the action of platinum. The oxidizing-reducing potential of an organic polymer semiconductor was studied at various concentrations of an oxidizing and reducing agent. Electrodes in the form of glass or quartz plates coated with polytetracyanoethylene were used in a 0.5-N solution of ferro-ferricyanide. Measurements were taken with a direct current amplifier "Kaktus." Line 2 in Fig. 1 on the Enclosure shows the electrode potential in respect to the relation between the oxidizing and reducing agent. Line 1 indicates the potential on a platinum electrode.

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ACCESSION NR: AP5004364

noted that the nearly reversible potential was established instantaneously on the electrode under investigation, whereas the oxide-coated electrodes of nickel were found by N. G. Bardina and P. D. Lukovtsev (Dokl. Akad. Nauk SSSR, 1961) to require at least an hour. Orig. art. has: 1 fig.

ASSOCIATION: Akademiya nauk SSSR, Institut elektrokhimii i fizicheskoy khimii, Academy of Sciences SSSR



L 41691-65

EPA(s)-2/ENT(m)/EPF(c)/EPR/ENP(j)/T/EMP(t)/ENP(b)/ENA(c) Pc-4/Pr-4/Ps-4/Pt-7

RPL JD/WW/JW/RM

ACCESSION NR: AP5008913

S/0076/65/039/003/0748/0749

AUTHOR: Boguslavskiy, L. I.

TITLE: Correlation between the change in the contact potential and the electrical properties of films of a polymer complex of tetracyanoethylene on metals

SOURCE: Zhurnal fizicheskoy khimii, v. 39, no. 3, 1965, 748-749

TOPIC TAGS: polymer film, tetracyanoethylene polymer, polymer film conductivity, contact potential, activation energy, copper polymer potential, nickel polymer potential

ABSTRACT: An attempt was made to compare the changes in contact potential, activation energies, electrical conductivity, and resistivity of films on heating, and also to compare these values for films of a polymer complex of tetracyanoethylene with various metals. It was found that in the case of films on copper as well as nickel, when the contact potential changed slightly on heating, the changes in electrical conductivity and activation energy were also slight, and vice-versa. The activation energy of the electrical conductivity, the resistivity, and the difference in the work functions for films on copper, nickel, and a film containing no metal bound in a complex are given for the sake of comparison, the contact potential of the film on nickel being arbitrarily taken as zero.

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L 41691-65  
ACCESSION NR: AP5008913

ASSOCIATION: Institut elektrokhimii, akademiya nauk SSSR (Institute of electro-chemistry, academy of sciences of the SSSR)

SUBMITTED: 04Jan64

ENCL: 00

SUB CODE: MT, EM

NO REF SOV: 004

OTHER: 001

*W*  
Card 2/2

SHABANOV, A.N., prof.; BOGUSLAVSKIY, I.S.

Errors in the diagnosis of cancer of the stomach. Sov.med. 28  
no.4:14-19 Ap '65. (MIRA 18:6)

1. Klinika obshchey khirurgii sanitarno-gigiyenicheskogo fakul'teta  
(zav. - prof. A.N.Shabanov) i Moskovskogo ordena Lenina meditsinskogo  
instituta imeni Sechenova.

BOGUSLAVSKIY, M.A.

BOGUSLAVSKIY, M.A., scientist, cand. voyennykh nauk, polkovnik, voyennyy shturman  
per 703 Plana.

Maneuvering of airplanes in action upon ships. Mor. sbor. 48  
no. 3:61-66 12 165. (MIRA 18:8)

BOGUSLAVSKIY, Moisey Grigor'yeovich; ELIASHOV, Konstantin Pavlovich;

[International System of Units (SI); a textbook for lecturers  
and propagandists] Mezhdunarodnaya sistema edinits (SI); po-  
sobie dlia lektorov i propagandistov. Moskva, Izd-vo stam. rtov  
1965. 56 p. (MIRA 18 9)

BOGUSLAVSKIY, M.G.

Specimen having standard profiles used in checking and graduating  
profile gauges. Trudy VNIIM no.20:75-92 '53. (MIRA 11:6)  
(Gauges--Testing)

BOGUSLAVSKIY, M. G.

B. T. R.  
Vol. 3 No. 5  
May 1954  
Electrochemistry and Electroprocesses

6389\* Test in Production of Master Specimens of Accurate Surface by the Electroforming Method. (Russian.)  
M. G. Boguslavskii. *Stanki i Instrument*, v. 24, no. 11, Nov. 1953, p. 19-20.

Method reproduced surface contour with good accuracy. Specimens are corrosion and wear resistant. Photographs, diagrams.

BOGUSLAVSKIY, M.G.; KAYAK, L.K.

~~XXXXXXXXXX~~  
A wire length-measuring gauge. Izv. tekhn. no. 2:28-31 Mr-  
Ap '55. (MIRA 8:9)

(Measuring instruments)



BOGUSLAVSKIY, M.G., kand.tekhn.nauk; SHUKHMAN, F.G., kand.tekhn.nauk

Semiconductor device for measuring the temperature of the surface  
of dryer cylinders, paper sheet and felt. Bum.prom. 33 no.10:  
9-10 0 '58. (MIRA 11:11)

1. Tsentral'nyy nauchno-issledovatel'skiy institut tsellyuloznoy i  
bumazhnoy promyshlennosti.

(Paper industry--Equipment and supplies) (Thermometers)

Bobu-Lavsky, M.G.

24(0); 5(4); 6(2) PHASE I BOOK EXPLOITATION 30V/2215  
Vsesoyuznyy nauchno-issledovatel'skiy institut metrologii imeni  
D.I. Mendeleeva  
Referaty nauchno-issledovatel'skikh rabot; sbornik No. 2 (Scientific  
Research Abstracts; Collection of Articles, Nr 2) Moscow,  
Standartizdat, 1958. 139 p. 1,000 copies printed.  
Additional Sponsoring Agency: USSR. Komitet standartov, ser 1  
Izmeritel'nykh priborov.

Ed.: S. V. Reabetsina; Tech. Ed.: M. A. Kondrat'yeva.  
PURPOSE: These reports are intended for scientists, researchers,  
and engineers engaged in developing standards, measures, and  
gages for the various industries.

CONTENTS: The volume contains 128 reports on standards of measure-  
ment and control. The reports were prepared by scientists of  
institutes of the Komitet standartov, ser 1 izmeritel'nykh  
priborov pri Sovetskom Ministre SSSR (Commission on Standards,  
Measures, and Measuring Instruments under the USSR Council of  
Ministers). The participating institutes are: VNIIM D.I.  
Mendeleeva (All-Union Scientific Research Institute of Met-  
rology imeni D.I. Mendeleeva) in Leningrad; Sverdlovsk branch  
of this institute; VNIIX - Vsesoyuznyy nauchno-issledovatel'skiy  
institut Komiteta standartov, ser 1 izmeritel'nykh priborov  
(All-Union Scientific Research Institute of the Commission  
on Standards, Measures, and Measuring Instruments), created  
from VNIIMP - Moskovskiy gosudarstvennyy institut ser 1  
izmeritel'nykh priborov (Moscow State Institute of Measures  
and Measuring Instruments) October 1, 1955; VNIIPRI -  
Vsesoyuznyy nauchno-issledovatel'skiy institut fiziko-tekhnich-  
eskikh institutov fiziko-tekhnicheskikh izmereniy (All-Union Scientific  
Research Institute of Physico-technical and Radio-engineering  
Measurements) in Moscow; KNIIMP - Khar'kovskiy gosudarstvennyy  
institut ser 1 izmeritel'nykh priborov (Kharkov State Institute  
of Measures and Measuring Instruments); Izmeritel'nykh priborov  
birskiy gosudarstvennyy institut ser 1 izmeritel'nykh priborov  
(Novosibirsk State Institute of Measures and Measuring Instru-  
ments). No personalities are mentioned. There are no references.

14 Pokras, S.I., and M.B. Zil'manzen (KNIIMP). Studying a Screw Pair 14  
15 Siakin, G.S. (KNIIMP). Measuring the Tooth Profile of Large-  
16 Siakin, G.S., and I.I. Babinovskiy (KNIIMP). Investigating In-  
struments and Methods for Measuring Elements of Worm Gears  
16 Gmelovskaya, Ye.P., and M.S. Davydov (KNIIMP). Comparative  
Finish Making of Probe and Contactless Gages for Measuring Surface  
16 Yegorov, Y.A., B.S. Davydov, Y.P. Rumosenko, and T.S. Labutina  
(KNIIMP). Developing a Method for Testing Surface Finish Samples 1/  
and Instruments for Surface Finish Quality Control  
18 Pomplavskiy, M.G. (VNIIM). Making Improved Surface Finish Test  
Samples  
Finishing Methods and Means of  
Chart 5/27

BOGUSLAVSKIY, M.G.; MARENINA, K.N.; FEOFANOV, G.N.

Ultrasonic apparatus for controlling pulp concentration.  
Dum. prem. 33 no.12:10-13 D '58. (MIRA 11:12)  
(Ultrasonic waves--Industrial applications)

BOGUSLAVSKIY, M.G.; PETROV, V.P.

Automatic regulator of the concentration of fibrous materials.  
Priborostroenie no.8:24-25 Ag '60. (MIRA 13:9)  
(Electronic instruments)

S/194/62/000/012/064/101  
D295/D308

AUTHORS: Boguslavskiy, M. G. and Petrov, V. P.

TITLE: Automatic ultrasonic instrument for measuring the concentration of paper pulp

PERIODICAL: Referativnyy zhurnal, Avtomatika i radioelektronika, no. 12, 1962, 19, abstract 12-5-37 p (Tr. Vses. n.-i. in-ta tsellyulozno-bum. prom-sti, no. 47, 1961, 132-150) ✓

TEXT: It is pointed out that, as a consequence of the almost identical densities of water and cellulose, the main factor affecting the attenuation of ultrasonics in a water suspension of cellulose is the scattering of the elastic wave by suspended particles. Measurements of the absorption coefficient of suspensions were carried out at frequencies of 5.15, 6.5, 12.5 and 19 Mc/s for concentrations of 0.01 - 0.4% and various degrees of grinding of cellulose sulphite. A block-diagram of a pulsed device for measuring attenuation is described, and an instrument for measuring

Card 1/2

Automatic ultrasonic instrument ...

S/194/62/000/012/064/101  
D295/D308

the concentration of pulp is considered in detail. The latter consists of a piezoelectric pickup (a quartz slab with a metal diaphragm) mounted on a measuring elbow of the conduit, an electron unit with a rectifier, and a recording and indicating ЭИД (EPD) type instrument. A generator of electric oscillations, operating under pulsed self-modulation conditions, generates pulses with 11 Mc/s carrier frequency and 5 kc/s repetition frequency. The amplifier, consisting of a video amplifier, a detector and a HF amplifier (2 stages) has a gain of 370,000. The instrument enables the concentration of pulp to be determined starting from 0.05%. The error of the instrument is of the order of 0.007% (concentration). / Abstracter's note: Complete translation. /

Card 2/2

BOGUSLAVSKIY, M. G., PETROV, V. P.

Automatic ultrasonic device for measuring the concentration  
of the groundwood. Trudy VNIIB no.47:132-150 '61.  
(MIRA 16:1)

(Paper) (Ultrasonic waves—Industrial applications)

BOGUSLAVSKIY, Moisey Grigor'evich, kand. tekhn. nauk; KREMLEVSKIY,  
Panteleymon Petrovich, kand. tekhn. nauk; OLEYNIK, Boris  
Nikolayevich, kand. tekhn. nauk; CHECHURINA, Yekaterina  
Nikolayevna, kand. tekhn. nauk; SHIROKOV, Konstantin  
Pavlovich, kand. tekhn. nauk; BURDUN, G.D., prof., doktor  
tekhn. nauk, retsenzent; RYSKO, S.Ya., red. izd-va;  
MEDVEDEV, L.Ya., tekhn. red.

[Tables for the conversion of measurement units] Tablitsy pe-  
revoda edinit izmerenii. [By] M.G. Boguslavskii i dr. Moskva,  
Standartgiz, 1963. 116 p. (MIRA 16:12)  
(Weights and measures--Tables, etc.)



~~BOGUSLAVSKIY~~, Moisey Grigor'yevich, kand. tekhn.nauk; KREMLEVSKIY, Panteleymon Petrovich, kand. tekhn. nauk; OLEYNIK, Boris Nikolayevich, kand. tekhn. nauk; CHECHURINA, Yekaterina Nikolayevna, kand. tekhn.nauk; SHIROKOV, Konstantin Pavlovich, kand. tekhn.nauk; BURDUN, G.D., doktor tekhn. nauk, retsenzent; RYSKO, S.Ya., red.izd-va; MEDVEDEV, L.Ya., tekhn. red.

[Tables for the conversion of measurement units] Tablitsy perevoda edinit izmerenii. [By] M.G.Boguslavskii i dr. Moskva, Standartgiz, 1963. 116 p. (MIRA 17:1)

1. Vsesoyuznyy nauchno-issledovatel'skiy institut metrologii im. D.I.Mendeleyeva (for Boguslavskiy, Kremlevskiy, Oleynik, Chechurina, Shirokov).

BOGUSLAVSKIY, M.G.

Determination of temperature corrections for machine part  
dimensions. Izv. tekhn. no.10:19-21 0 '63. (MIRA 16:12)

BOGUSLAVSKIY, M.G.; KAYAK, L.K.

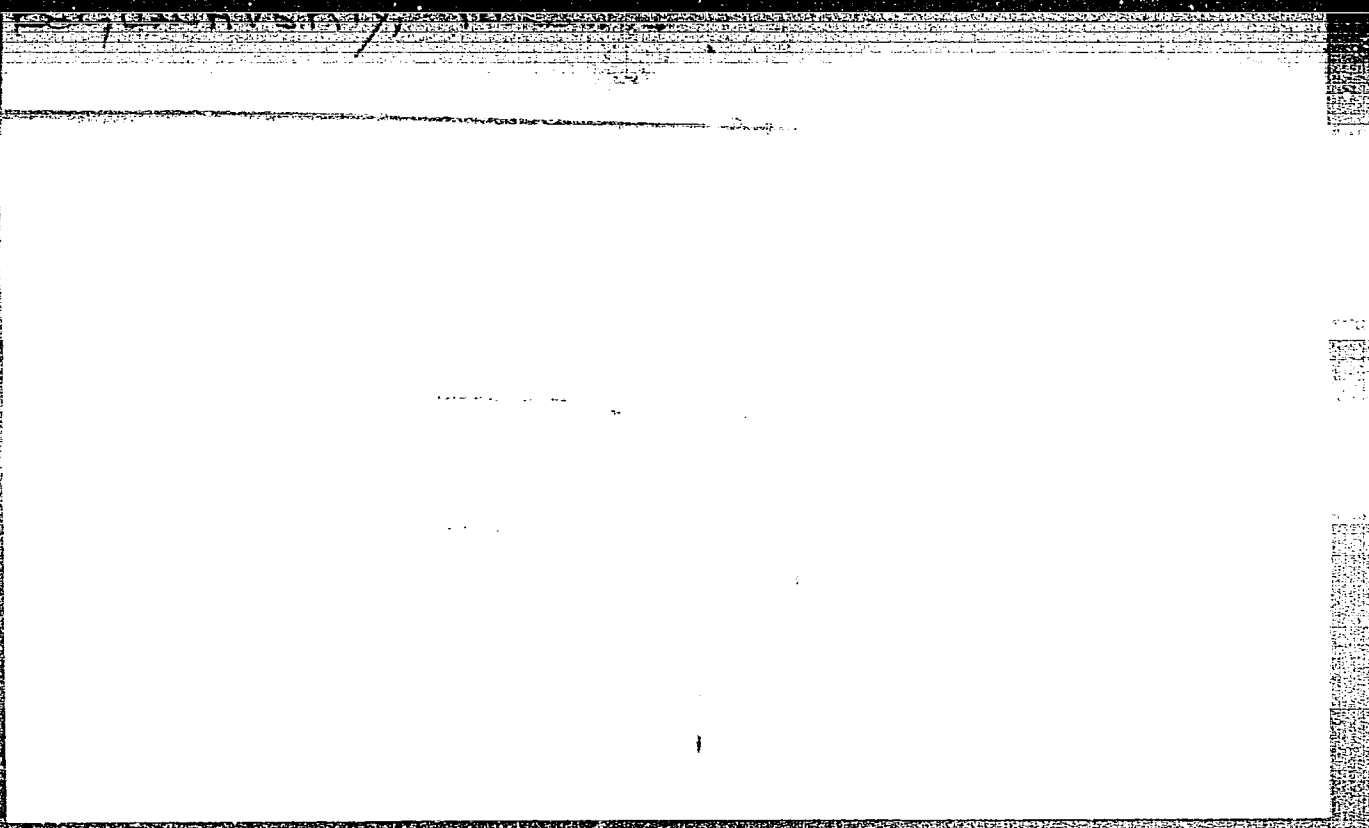
Precision in measuring lengths and angles in the manufacture  
of machinery. Izv.tekh. no. 4:26-28 Ap '64. (MIRA 17:7)

BOGUSLAVSKIY, M.G.

Ocular head with a screen in the form of concentric circumferences.  
Izm. tekhn. no. 12:13-14 D '64. (MIRA 18:4)

"APPROVED FOR RELEASE: 06/09/2000

CIA-RDP86-00513R000206010016-5



APPROVED FOR RELEASE: 06/09/2000

CIA-RDP86-00513R000206010016-5"

BOGUSLAVSKIY, M.M.; VASIL'YEV, I.V.

~~\*\*\*\*\*~~

Compensation of inventors for the utilization of their inventions  
abroad. Izobr. i rats. no.6:19-22 Je '58. (MIRA 11:9)  
(Patents (International law))

BOGUSLAVSKIY, MARK MOISEYEVICH

The legal status of foreigners in the U.S.S.R.,  
by M. Boguslavsky and A. Rubanov. Moscow, Foreign  
Languages Publishing House, ( N. D.)

122 P.

Translation of the original Russian Title. Pravo-  
voye polozheniye inostrantsev v SSSR. Moscow, 1959.

Boguslavskiy, Mikhail Vasil'evich

Mic  
Misc  
12

Operativnaya tekhnika i uchet v gosbanke SSSR [Operational and account-  
ing techniques in the state bank of the USSR]

Moskva, Gosfinizdat, 1946.

445 P. Illus., Diagr., Tables.

Microfilm.



BOGUSLAVSKIY, M. V.

Rechnungsführung und operative Technik in der Staatsbank (Von) M. V. Boguslavskiy  
(und) A. A. Proselkov. Berlin, Die Wirtschaft, 1954.

368 p.

Translation from the Russian, Uchet i Operativnaya v. Gosbanke, Moscow, 1950.

SO: N/5

713.1

.B6

↓  
BOGUSLAVSKIY, M.; PROSELKOV, A.

"Accounting and operational technique in the State Bank."  
Reviewed by M.Boguslavskii, A.Prosekov. Den.1 kred. 18  
no.8:88-91 Ag '60. (MIRA 13:7)  
(Banks and banking--Accounting)



18

ca

THE USE OF OXYGEN IN CHEMICAL INDUSTRY. 1. The use of oxygen in sulfuric acid systems based on oxides of nitrogen. K. Malin. *J. Chem. Ind. (Moscow)* 1933, No. 2, 10-21. Equations are derived for calcg. the increase in production of the chamber process when extra  $O_2$  is added to the gas used. Best results are obtained when the  $O_2$  is added in the  $FeS_2$  burner. II. The question of using oxygen in soda production. N. M. Boguslavskii. *Ibid.* 21-7. Equations are derived to show that the addn. of  $O_2$  to burner producing  $CO_2$  from  $CaCO_3$  decreases the cost. of the fuel and cheapens the whole soda process. H. M. Leicester

ASSOCIATED METALLURGICAL LITERATURE CLASSIFICATION

**BOGUSLAVSKIY, N.M.**

Calculation of the motion of loose material in rotary furnaces,  
particularly calciners. Khim.prom. no.2: 89-97 Mr '56. (MLRA 9:8)  
(Kilns)

3027/2054

Moscow, Goskhimizdat, 1959. 457 p. Russian slip inserted. 4,000 copies printed.

Cooperatively manufacturing materials for the defense industry.

B. I. Volynovich, B. V. Rogovin, Editorial Board: A. P. Vinogradov, B. M. Zaslavskiy, M. S. Ivanov, V. A. Kuznetsov, L. A. Lashchinskaya (Scientific Secretary), B. G. Medvedev, B. D. Mel'nik, A. B. Pashorniy, A. M. Rykachenko (Chief Ed.), and A. V. Zogalov.

will be of interest to the general reader interested in the development and structure of the Soviet chemical industry.

[illegible]

along with the book of manufacturing plastic articles. A special apparatus designed by Dr. M. Hoffmeyer and devised for the cold pressing preparation of viscose solution in one operation is recommended. It is held used to replace the complex, conventional equipment with which articles in viscose. General trends in the technology of synthetic fibers are also discussed. A historical review of synthetic rubber production is given, as well as a summary of outstanding basic elastistics in this field, use of syn rubber in tires and products of synthetic rubber plants. Rubber production and the use of rubber goods are statistically reviewed. Analytical data and references of rubber goods are systematically reviewed, including tires, plastics and lacquers, premodulines for the development of the thermoplastics, natural latex, nitrile rubber, fertilizers, insecticides and herbicides, natural resin, soda, industrial alcohols, radiolysis and resins and decomposition and automatic devices used in them. Analytical processes also discussed. Thirty-eight photographs included in the book show scientific and laboratory views of some basic chemical industry plants, as well as the production of synthetic rubber, and laboratory equipment. Numerous drawings, diagrams, illustrations, and laboratory equipment. Numerous drawings, diagrams, illustrations, and laboratory equipment.

256	<u>Chloroacetic Acid</u> , <u>Alk. Laboratory (domestic)</u> , and <u>E. L. Stearns</u> . The Production of Mineral Fertilizers and Plant Fungicides
257	<u>Cl. Peasey, E. B.</u> The Chemical Mining Industry
258	<u>Ellis, E. H.</u> Sulfuric Acid Production
259	<u>Engelhardt, E. H.</u> The Soda Industry
260	<u>Yalcinsoy, L. H.</u> The Chloride Industry
261	<u>Engelhart, J. L.</u> The Production of Mineral Salts
262	<u>Glendon, H. E.</u> <u>Y. O. Evans</u> , and <u>O. Y. Chubbuck</u> . Chemical Reagents and High-Purity Substances
263	<u>Frederic, H. E.</u> , <u>V. V. Jacobson</u> , <u>L. P. Durling</u> , and <u>E. L. Gibson</u> . The Preparation of Radioactive and Stable Isotopes: A New Branch of Chemical Technology
264	Chemical %6

BOGUSLAVSKIY, N.M.

**DECLASSIFICATION**

603/4575

Костромский по marriage produced with all Vorobeyevs Alibet, 1958.  
Dietrichsberg's mother

**Plasticizers**—polyurethane's, truly low-cost, low volatility (Chemical Industry, Plastics Division of the Conference on the Development of Production Forces in Eastern Alberta), 2nd-4th Mar., 1960, 302 p. (Series: Materials provided; open all forthcoming exhibit) Series fully illustrated, 2,000 copies printed.

Spesializirani Agencija: Anketa i istraživanje  
Kontakt: 011 261 11 11. Dostupno na: [www.anketa.rs](http://www.anketa.rs)

[illegible]

COMMENT: This book is intended for chemical engineers and economic planners concerned with the industrial development of Eastern Siberia.

[illegible]

## Chemical Industry (Cont.)

5269/2008

**INSTITUTE, E.E.** [Corresponding Number, AS (ECON)]

**15**

**Faculty, S.S. Candidate of Technical Sciences (VNIIP),**

255

Red 'Shovels', S.I.

10

~~SECRET~~ SECRET, I.R. (CERN KRYN (State Scientific and Technical Committee on the Council of Ministers KRYN))

15

**Page 10**

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Wynne, H.C.

150

**Professor, SAHODI (Central Wood-Chemical Scientific Research Institute)**

**1.90**

### III. MODIFICATIONS OF THE CONCEPTUAL SECTION

**OF THE COMPTROLLER**

192

**RESEARCH: Library of Congress (1996-2005, 1998)**

0000 10/20

10/25/67

BOGUSLAVSKIY, N.Ye.

A technological production plan of highly aluminous fire-clay  
refractories. Ogneupory 17 no.5:206-210 My '52. (MLRA 8:9)

1. Leningradskiy institut ogneuporov  
(Refractory materials) (Fire clay)



15 (2)

AUTHORS:

Panarin, A. P., Boguslavskiy, N. Ye.

SOV/131-59-10-2/10

TITLE:

Basic Trends in the Development of the "Magnezit" Works

PERIODICAL:

Ogneupory, 1959, Nr 10, pp 437-442 (USSR)

ABSTRACT:

The "Magnezit" Works will be enlarged between 1959 and 1965. The output of highly refractory products is intended to be greatly increased together with a considerable improvement in efficiency and reduction of production cost by extensive mechanization and automation. The raw material of the Kargayskoye and Satkinskoye deposits will be utilized. Further, the manufacturing program of the newly planned departments is discussed in detail. In the second constructional stage, the Works will be supplied with power by the system of Chelyabenergo and the projected thermal power plant (TETs) with three turbogenerators of 6000 kw each; fuel oil and later natural gas are provided for as the main fuel. Conclusions: By the use of dust collectors and by utilizing dust, about 25% of raw material will be saved. The heat of the waste gases of rotary furnaces is intended to be used for the generation of inexpensive electric energy and for the heating of the factory buildings and apartment houses. The process of

Card 1/2

Basic  
Works

Trends in the Development of the "Magnezit"

SOV/131-59-10-2/10

raw-material dressing and baking will be simplified and efficiency will be increased by installing high-duty rotary furnaces of a size of 150x5 m. High-duty tube mills will be installed for the production of fine-ground magnesite fractions and magnesite-chromite mixtures. Further, several tunnel furnaces with a burning temperature of up to 1750° and large air-conditioners are provided. After completion of the second constructional stage, the "Magnezit" Works will be the largest works for refractories throughout the world. There are 2 figures.

ASSOCIATION: Zavod "Magnezit" (The "Magnezit" Works) (Panarin A. P.).  
Vsesoyuznyy institut  
ogneuporov (All-Union Institute for Refractories) (Boguslavskiy,  
N. Ye.)

Card 2/2

S/131/60/000/06/01/012  
B015/B007

AUTHORS: Stavorko, A. P., Boguslavskiy, N. Ye.

TITLE: The Main Trends in the Development of the Semiluki Works  
of Refractories

PERIODICAL: Ogneupory, 1960, No. 6, pp. 241-244

TEXT: As a result of the further development of the Semilukskiy zavod (Semiluki Works) this plant is going to have six works departments. Department No. 1 is intended to produce standard bricks, and a mechanized raw material depot will be established. The clay will be transported from the pits Sredniy and Yendov-Log by means of cable cars, and from the pits Strelitsa and Bakhcheyevo by means of dump cars. Gas and air supply as well as the transport of dump cars to and from the pits is to be automatically controlled. Department No. 2 is provided for the production of fire-clay and carborundum products. The raw-material depot will be equipped with a crushing machine of the type "Mekhanobr-600" ("Mekhanobr-600"), the pressing plant with three power presses of the type ПМ-630 (PM-630) and the drying department with a tunnel drying plant. The capacity of

Card 1/3.

The Main Trends in the Development of the  
Semiluki Works of Refractories

S/131/60/000/06/01/012  
B015/B007

Department No. 3 is to be considerably extended. The department for the processing of pastes will additionally be equipped with three mixers of the type 115, and the pressing plant with two hydraulic presses of 1,500 t each and two presses of 1,200 t each. In this department two tunnel kilns having a length of 120 m each will be installed. Department No. 4 is provided for the production of high-alumina material, and an additional tunnel kiln of 156 m length as well as a depot for finished products will be established. The briquette department is to be equipped with 1,500 t hydraulic presses and 1,200 t mechanical presses. For the purpose of burning fireclay, cylindrical rotary kilns heated with natural gas and fuel oil are being established. The ground clay is to be transported automatically. Department No. 6 is also intended for the manufacture of high-alumina products, and all production processes are to be mechanized and automatized. Also the building of a tunnel kiln of 135 m length is planned. Department No. 5 is intended to supply the Novo-Lipetskiy metallurgicheskiy zavod (Novo-Lipetsk Metallurgical Plant) with refractories for steel casting. The shaft kilns of department No. 5 are being modernized. The capital expenditure per ton of the production increase amounts to 450 rubles, and the term of amortization is 2 1/2 years. The gross production calculated from the wholesale prices of 1955

Card 2/3

The Main Trends in the Development of the  
Semiluki Works of Refractories

S/131/60/000/06/01/012  
B015/B007

is intended to increase threefold, and the performance per worker by 2.8 times its amount compared to 1959, while the personnel is intended to increase by 20%, and the actual costs are to be lowered by 31%. After being reconstructed, the Semiluki Works will be the largest factory in the Soviet Union that manufactures aluminosilicate- and carborundum products. It will be most modernly equipped, mechanized, and partly automatized, and Department No. 1 will be fully automatized. There are 2 figures. ✓

ASSOCIATION: Semilukskiy ognepornyy zavod (Semiluki Works of Fireproof Materials) Stavorko, A. P.; Vsesoyuznyy institut ogneporov (All-Union Institute of Fireproof Materials) Boguslavskiy, N. Ye.

Card 3/3

MORGULIS, L.A., inzh.; BOGUSLAVSKIY, P.G., inzh.

Further improvement of the operations-flow method of working  
trenches by layers in the Virgin Territory. Stroi. truboprov. 7 no.11:  
17-19 N '62. (MIRA 15:12)

1. Stroitel'noye upravleniye No.2 tresta Soyuzprovodmekhanizatsiya,  
Chelyabinsk.

(Earthwork)

(Aqueducts)

BOGUSLAVSKIY, P.G.

Create high-capacity machinery for trenching in solid rock, Stroi.  
truboprov. 10 no.9:32-34 S '65. (MIRA 18:9)

1. SU-2 tresta Soyuzprovodmekhanizatsiya, Chelyabinsk.

BOGUSLAVSKIY, P.S., Eng.

Compensator for testing precision measuring instruments for alternating current

Elektrichestvo no. 8, 1952



BOGUSLAVSKIY, P.S., inzhener.

Using the compensating method for measuring alternating current with the aid of heated resistance. (From:ETZ, p.547, no.17, 1952, H.J. Schrader). Elektrichestvo no.3:81-82 Mr '54. (NLRA 7:4)  
(Electric measurements)

*BOGUSLAVSKIY, P. S.*

Subject : USSR/Electricity AID P - 655  
Card 1/1 Pub. 24/34  
Author : Boguslavskiy, P. S., Eng.  
Title : Measurement of angular errors of wattmeters (Review of Foreign Periodicals)  
Periodical : Elektrichestvo, 9, 89, S 1954  
Abstract : The author summarizes an article by H. E. Linckh in Deutsche Elektrotechnik, p. 155, No. 6, 1952. 2 diagrams.  
Institution : None  
Submitted : No date

*Boguslavskiy, P. S.*

Subject : USSR/Electricity AID P - 3041  
Card 1/1 Pub. 27 - 28/33  
Author : Boguslavskiy, P. S., Eng.  
Title : ~~Methods of controlling testing transformers~~  
of foreign periodicals)  
Periodical : Elektrichestvo, 7, 147-148, J1 1955  
Abstract : The author summarizes data from three German articles  
on the above subject. Three diagrams, 3 references  
(1954).  
Institution : None  
Submitted : No date

BOGUSLAVSKIY, Pavel Samoylovich, inzhener; UDAL'TSOV, A.N., glavnyy  
redaktor; SHREYBOK, G.Yu., inzhener, redaktor

[Stroboscopic frequency meter] Stroboskopicheskiy chastotomer,  
Tema 1, no.P-56-416. Moskva, Akademiya nauk SSSR, 1956. 21 p.  
(Frequency measurements) (MLRA 10:3)  
(Stroboscope)

BOGUSLAVSKIY, P.S., inzhener.

New instruments for testing insulating materials.  
Elektrichestvo no.11:90-91 N '56.

(MLRA 9:12)

(Electric insulators and insulation--Testing)  
(Electric instruments)

BOGUSLAVSKIY, P.S., inzhener; KUZ'MINSKAYA, M.V., inzhener.

Instrument for testing wattmeters on high-frequency alternating current. Vest.elektroprom. 27 no.6:63-65 Je '56. (MLRA 10:8)

1.Nauchno-issledovatel'skiy institut Ministerstva elektro-  
tekhnicheskoy promyshlennosti.  
(Wattmeter--Testing)

BOGUSLAVSKIY, P.S., inzhener.

Section of instrument manufacturing and automatic equipment.  
Vest.electrom. 27 no.7:77-78 J1 '56. (ISRA 10:8)  
(Counting devices) (Electric instruments)

*Boguslavskiy, P.S.*

105-9-27/32

**AUTHOR:** Boguslavskiy, P.S., Engineer

**TITLE:** New Types of Multivibrators (Novyye tipy strelochnykh chastotomerov)

**PERIODICAL:** Elektrichestvo, 1957, Nr 9, pp. 86-88 (USSR)

**ABSTRACT:** By making use of tuning forks the accuracy of multivibrators increases considerably. Such a tuning fork acts like a parallel resonance work. The indicating device here is a logometer of the electrodynamic system. The tuning fork coils are connected with one of the movable coils in series and the other is connected by a way of the effective resistance. The sensitivity of the measuring device can be increased considerably if the tuning fork coil is connected in series with the second mobile coil of the logometer. It is a disadvantage of this device that it cannot be produced with many ranges and can therefore be used only for controlling a fixed frequency. Secondly, a basic frequency meter scheme is given which is constructed on the basis of the Maxwell scheme and completed by an additional compensation device. A multi-range frequency meter with a narrow measuring range and sufficiently high accuracy is obtained. Thirdly, a scheme of a multivibrator of the detector system is given. The indications of this device depend considerably less upon the shape of the voltage curve of the frequency to be measured.

~~Card 1/2~~



AUTHOR: Boguslavskiy, P.S., Engineer (Sci.Res.Inst.Min.Elec.Ind.)<sup>431</sup>  
TITLE: Methods of measurement and certain instruments for testing electrical machines. (Metody izmereniy i nekotorye pribory dlya ispytaniy elektricheskikh mashin.)  
PERIODICAL: "Vestnik Elektropromyshlennosti" (Journal of the Electrical Industry) 1957, Vol. 28, No. 5, pp. 64 - 68 (U.S.S.R.)  
ABSTRACT: This article describes a number of instruments and methods of measurement that have been developed in recent years and which may be used to study the operation of electrical machines. It appears to be based almost entirely on a study of German literature.  
The Hall effect and instruments based on it are first described. It is shown how measurements may be made of the influence of brush short circuit currents on the magnetic induction in the air gap in the machine. A method is described for measuring the rotor angle by means of a mechanical rectifier. Instruments are described for: measuring the load assymetry of an alternator, recording torque, measuring differences of speed, indicating phase sequence and measuring the resistance of windings without disconnecting them from the circuit.  
10 figures, 8 literature references (7 German, 1 U.S.A.)

-BOGUSLAVSKIY, P.S.

INSTRUMENTATION

"Methods of Measuring the Performance of Electric Machinery and Certain Instruments for this Purpose" by Engineer P. S. Boguslavskiy, Scientific Research Institute of the Ministry of Electric Industry, Vestnik Elektromyshlennosti, No. 5, May 1957, Pages 64 -- 68.

Description of Several modern methods employed in materials testing (Hall effect instruments etc.), and several illustrated examples on how such modern instruments can be used to improve the performance of electric machinery by providing optimum utilization of the materials.

SOV/110-58-8-21/26

AUTHOR: Boguslavskiy, P.S. (Engineer)

TITLE: Voltmeters with Suppressed Zero (Vol'tmetry s  
podavlenym nachalom predela izmereniya)

PERIODICAL: Vestnik Elektromyshlennosti, 1958, Nr 8, pp 71-74 (USSR)

ABSTRACT: It is often convenient to design an instrument in which the whole scale covers only a small useful range of voltage. This article reviews foreign methods, chiefly German, of achieving this object. Methods using bridge circuits are first reported, including the Siemens 'voltage lens'. The circuit of a General Electric voltmeter of similar kind is shown in Fig 4. The ratio circuit illustrated in Fig 5 is then described. Among series and parallel circuits, particular reference is made to a Siemens recording voltmeter with suppressed zero;

Card 1/2

Voltmeters with Suppressed Zero

SOV/110-58-8-21/26

the circuit is given in Fig 6 and the instrument is illustrated in Fig 7. A parallel-circuit voltmeter is discussed and its circuit shown in Fig 8. The use of a double electromagnetic measuring system is then explained.

There are 3 figures and 3 German references.

1. Voltmeters--Design
2. Voltmeters--Circuits

Card 2/2

SOV/110-20-11-20/20

AUTHOR: Boguslavskiy, P.S. (Engineer)

TITLE: A Conference on Magneto-electric Oscillographs  
(Soveshchaniye po magnitoelektricheskim ostsillografam).

PERIODICAL: Vestnik Elektromyshlennosti, Nr.11, 1958, pp.78-80,  
(USSR)

ABSTRACT: A conference on magneto-electric oscillographs, held in Leningrad, was organised by GOSPLAN USSR, GOSPLAN RSFSR, the directorate of the Instrument Manufacturing Industry of the Leningrad Council of National Economy and the All-Union Scientific Research Institute of Electrical Measuring Instruments. There were 297 participants representing factories, research institutes and colleges in Moscow, Leningrad, Vitebsk, Kishinev and other towns. The conference was opened by M.Ye. Rakovskiy, representing GOSPLAN USSR, who stated that the main developments in the electrical industry during the next seven-year plan would be in atomic physics. Therefore, many new types of measurement would be required. The main object of the conference, he said, was to exchange experience between organisations manufacturing and using

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SOV/110-58-11-28/28

A Conference on Magneto-electric Oscillographs.

A number of successes in Soviet oscillograph production over recent years were noted but the models produced by the 'Vibrator' Works were criticised. The conference stated that on the whole production of oscillographs was lagging and a number of important failings in manufacture were pointed out. The conference recommended GOSPLAN USSR to take steps to develop the manufacture of inertia oscillographs, to set up an Expert Council on oscillographs, and to undertake other measures. The conference recommended a draft nomenclature of magneto-electric oscillographs and their parts.

1. Oscillagaphs--USSR
2. Scientific reports

Card 3/3

USCOMM-DC-60052

SOV/110-58-12-17/22  
An Installation for Testing the Elements of Electro-Magnetic  
Oscillographs

given in Fig 2. It is mainly a switching circuit with provision for connecting a signal-frequency generator, a frequency meter, an ohmmeter, a battery and/or an alternating current supply; variable resistors are provided for calibration purposes. An outline drawing of the equipment is given in Fig 3 and a photograph in Fig 4; the construction and arrangement are described in some detail. The overall dimensions are 600 x 450 x 230 mm. It is claimed that the instrument has proved to be simple and reliable in service. There are 4 figures and 3 tables.

Card 2/2

*BOGUSLAVSKIY, P.S.*

AUTHOR: Boguslavskiy, P.S., Engineer.

110-3-18/22

TITLE: A Discussion on Questions of Electrical Instrument Construction (Diskussiya po voprosam elektropriborostroyeniya)

PERIODICAL: Vestnik Elektropromyshlennosti, 1958, Vol.29, No.3, pp. 70 - 75 (USSR).

ABSTRACT: On December 10 - 13, 1957; there was held in Leningrad the first scientific technical discussion on electrical instrument construction, organised by the Leningrad Scientific Technical Society of the Instrument Industry (Leningradskoye nauchno-tekhnicheskoye obshchestvo priborostroitel'noy promyshlennosti) together with the Technical Science Division of the Ac.Sc. USSR (Otdeleniye tekhnicheskikh nauk AN SSSR), Committee of Standards, Weights and Measuring Instruments of the Council of Ministers of the USSR (Komitet standartov, mer i izmeritel'nykh priborov pri Sovete Ministrov SSSR) and the Instrument Construction Directorate of the Leningrad Council of National Economy (Upravleniye priborostroyeniya Leningradskogo sovnarkhoza).

The following were the main themes of discussion: 1) Various quality criteria of measuring mechanisms; 2) The application of taut-wire suspensions in measuring mechanisms, methods of design, methods of evaluating quality; 3) the evaluation and

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A Discussion on Questions of Electrical Instrument Construction 110-3-18/22

standardisation of errors in instruments; 4) The field of application and design principles of automatic measuring instruments; 5) Current trends in the theory and design principles of instruments; 6) General trends of standardisation in instruments. The meeting was attended by 430 representatives of factories, research institutes and educational establishments of Moscow, Leningrad, Kiev and other towns. There were representatives from Bulgaria, East Germany and Czechoslovakia. The introduction was made by Prof. Ya.G. Shereshev, (VNIIE) who reviewed instrument design and manufacture. The main object of the meeting was a thorough consideration of a small number of questions mainly concerned with direct-reading instruments and automatic measuring devices to determine the trend of work for the next seven years and to formulate basic recommendations for the future plan of development of electrical instrument manufacture.

Speaking on the first theme, Engineer P.B. Usatin (of the Vibrator Works) criticised the classic definition of quality factor and proposed a new expression. Prof. N.N. Resumovskiy (IETI) considered that quality factors are useful and suggested formulae for them. Others taking part in the discussion were

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A Discussion on Questions of Electrical Instrument Construction 110-3-18/22

Engineer Yu.M. Pyatin, Engineer B. Korpachev (Bulgaria), Engineer V.V. Oreshnikov (VNIIEP) and Engineer B.F. Obol'sin (LETI). Prof. R.N. Shumilovskiy of the Moscow Power Institute (MPEI) recommended combined criteria for evaluating the quality of instruments, which idea was opposed by Prof. V.O. Arutyunov (VNIIEP) and Candidate of Technical Sciences Yu.S. Averbukh of the Pachelektropribor Works.

Prof. Hoshke, East Germany, presented a report on "The Dynamic Stability of Electrical Instruments". The report examined in detail the effect of dynamic forces on instruments. Engineer S.M. Pigin of the Vibrator Works spoke on the application of taut-wire suspensions to measuring instruments. At the present time, laboratory instruments of class 0.5 and panel mounting high-sensitivity instruments are made with horizontal taut-wire suspension. Work is being done to develop similar instruments of class 0.2 and panel instruments with a scale angle of  $240^\circ$ . However, not all the problems associated with the design and construction of these suspensions have yet been satisfactorily solved.

Candidate of Technical Sciences N.N. Rimolovskaya of the Vibrator Works briefly gave results of investigations on taut-wire

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A Discussion on Questions of Electrical Instrument Construction

suspensions made of new alloys, the main disadvantages of which are their high resistivity and the difficulty of soldering. Candidate of Technical Sciences A.L. Damskiy of the Vibrator Works mentioned the economy that resulted from the use of taut-wire suspensions. At the present time, Soviet instrument works are preparing for mass production of these suspensions. Prof. N.N. Razumovskiy, Candidate of Technical Sciences V.S. Polozhentsev (VNIIEP), Engineer A.G. Kotova (ZIP), Engineer P.B. Usatin, and others contributed to the discussion.

The third theme of discussion was the evaluation and standardisation of errors in instruments. Major contributions were made by Prof. N.N. Razumovskiy, Candidate of Technical Sciences Ya.S. Averbukh, M.A. Bykov, Candidate of Technical Sciences (VNIIEK), Candidate of Technical Sciences Ye.F. Dolinskiy (VNIIM). Other speakers were Engineer N.A. Chekhonadskiy, Engineer M.M. Levin (TsNIIFTRI), Prof. V.O. Arutyunov and others.

The fourth theme on automatic measuring instruments gave rise to very active discussion. The report of Prof. N.N. Shumilovskiy considered in detail the theory of analysis and synthesis of automatic control devices. Engineer V.N. Khlistunov (VNIIEP)

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110-3-18/22

A Discussion on Questions of Electrical Instrument Construction

discussed the application of analogue-numerical converters in measuring technique. Engineer L.A. Voronkov (GSKB) examined the trends of development of automatic instruments. He considered that laboratory and industrial instruments should follow different course of development. Other participants were A.D. Veysburg (VNIIM), Kavalero G.I., Engineer, Prof. Fremke, Engineer I.P. Polyakov, Engineer A.M. Melik-Shakhnazarov (Az.II), Candidate of Technical Sciences F.Ye. Temnikov, Moscow Power Institute, Engineer V.V. Kovalevskaya and others. Prof. V.O. Arutyunov noted the following tendencies in the development of instruments: 1) Increased accuracy by using more stable elements; 2) Increased reliability and life by increasing resistance to outside influences such as temperature, moisture and vibration; 3) Study of technical-economic questions, which still do not receive sufficient attention in books on design; 4) Improved engineering methods of design and less empiricism; 5) Greater standardisation; 6) Enlarging the frequency range of instruments. Contributions to the discussion were made by Candidate of Technical Sciences L.L. Ornatskiy (Kiev Polytechnical Institute), Prof. I.F. Kulilkovskiy (Kuybyshev Industrial Institute),

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110-3-18/22

A Discussion on Questions of Electrical Instrument Construction

Engineer P.B. Usatin, Engineer B.A. Seliber, (Vibrator Works)  
Prof. A.M. Turichin, (Leningrad Polytechnical Institute).  
Acad. M.P. Kostenko.

The following took part in the discussion on the present trends in instrumentation. Prof. A.Ye. Kaplyanskiy (VVIA), Candidate of Technical Sciences R.R. Kharchenko (MEI), Engineer Khodeyev, Candidate of Technical Sciences M.A. Bykov and others. It was decided to ask Gosplan USSR to get VNII EP in the first half of 1958 to work out a future range of electrical instruments.

The last theme "General Trends of Standardisation in Electrical Instruments" was introduced by Vice-president of the Committee of Standards, Weights and Measuring Instruments, Prof. G.D. Burdin. At present, there are 22 Soviet Standards on measuring instruments. At the beginning of 1958, standard [OCT 1845-52, which is the main standard for all electrical instruments, will be revised. The following participated in the discussion: Candidate of Technical Sciences Ya.S. Averbukh, Candidate of Technical Sciences N.I. Tyurin (VNIIK), Engineer P.B. Usatin, Engineer Zatserkivnyy, Engineer N.M. Martynenko (ZIP), Engineer Gorshenin (from Kazan'), Candidate

card6/7 of Technical Sciences D.I. Zorin (VNIIK), Engineer G.R. Salman

110-3-18/22

A Discussion on Questions of Electrical Instrument Construction

(Vibrator Works), Engineer G.I. Kavalerov, Engineer M.M. Kachkin (Leningrad Council of National Economy), Engineer Yu.I. Shendler, Gosplan USSR and others.

ASSOCIATION: NII EP

SUBMITTED: October 17, 1957

AVAILABLE: Library of Congress

Card 7/7  
1. Electrical equipment-Development

8(2)

SOV/105-59-5-21/29

AUTHOR: Boguslavskiy, P. S., Engineer

TITLE: New Apparatus for Checking Measuring Transformers. (Novaya apparatura dlya poverki izmeritel'nykh transformatorov)

PERIODICAL: Elektrichestvo, 1959, Nr 5, pp 83-86 (USSR)

ABSTRACT: This is an abstract of the following two papers in German:  
Brendler, W., A New Portable Transformer Measuring Device With Direct Error Indication According to the Difference Method. Deutsche Elektrotechnik (German Electrotechnics), 1957, Nr 7, p 333. - Keller, A., A New Portable Transformer Measuring Device According to the Compensating Method, ETZ-A, 1957, Vol 78, Nr 4, p 150. There are 7 figures and 2 references.

Card 1/1

BOGUSLAVSKIY, P.S., inzh.

Exhibition of Danish electronic measuring devices. Vest. elektroprom.  
32 no.3:76-79 Mr '61. (MIRA 15:6)  
(Denmark--Electronic instruments) (Moscow--Exhibitions)



BOGUSLAVSKIY, P.S., inzh.

Exhibition of Japanese machinery and devices. Elektrotekh-  
nika 34 no.11:74-77 N '63. (MIRA 17:2)

BOGUSLAVSKIY, P.S., inzh.

Exhibition of British electronic instruments. Elektrotehnika  
34 no.9:77-80 S '63. (MIRA 16:11)

BOGUSLAVSIY, Pavel Samoylovich; BARANOV, A.M., red.

[German-Russian dictionary on electric measurement  
technique] Nemetsko-russkii slovar' po elektroizmeri-  
tel'noi tekhnike. Moskva, Sovetskaia entsiklopediia,  
1964. 376 p. (MIRA 17:11)

BOGUSLAVSKIY, P. Ya., Engineer Cand Tech Sci

Dissertation: "Calculation of the Structural Members  
of Turbine under Conditions of Creep."

29/12/50

Moscow Order of Lenin Power Engineering Inst  
imeni V. M. Molotov.

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Sum 71

BOGUSLAVSKIY, P. Ya.

AID P - 2321

Subject : USSR/Engineering

Card 1/1 Pub. 110-a - 2/17

Authors : Varshavskiy, D. P., P. Ya. Boguslavskiy, Kand. of Tech. Sci. and Polumordvinova, I. G., Eng.

Title : Determining the creep of machine elements by using the method of analogies on appropriate models

Periodical : Teploenergetika, 5, 9-16, My 1955

Abstract : The use of models made of copper and steel for testing the effects of creep in various machine parts and elements is discussed. Theoretical calculation and experimental results are illustrated with stress-strain diagrams. Three Russian references, 1874-1948.

Institution : Moscow Branch of the Central Turbine-Boiler Institute

Submitted : No date

\*Creep During Torsion P. Va. Institute  
Nov 5 5 55 P. 1956

Creep of Semi-Annular Laminæ

96-58-2-11/23

practically independent of the material from which the semi-annulus is made. The most important variables that characterise the behaviour of semi-annular laminæ are shown in Fig.3, as functions of the relative dimensions. The dotted lines correspond to stated analytical expressions and follow curves with sufficient accuracy.

To compare theoretical and experimental results, tests were made on four pairs of semi-annular laminæ made of lead, copper and steel. The pairs were freely supported on the outer radius and loaded around the periphery of the central aperture. Deflections were measured by indicators. The tests on copper and steel laminæ are described in an article in Teploenergetika, 1955, no.5. The dimensions of the lead specimens and other necessary data are tabulated. Calculated and experimental values for all the specimens are compared in Fig.6. The assumption that the angle of rotation of the section does not depend on its radius is confirmed in practice. There is good agreement between theory and experiment. Where divergence is observed, it probably results from non-uniform distribution of the load.

Card2/3 There are 6 figures, 1 table and 6 references, 4 of which are Russian and 2 English.

Creep of Semi-A nular Laminar

96-58-2-11/23

ASSOCIATION: MO TsKTI

AVAILABLE: Library of Congress

Card 3/3

1. Laminates-Creep 2. Diaphragms (Mechanics)-Stresses



BOGUSLAVSKIY, P. E.

Sposoby usileniia metallokonstruktsii mostovykh kranov. Moskva, Mashgiz, 1943. 67 p. diags.

At head of title: Vsesoiuznyi nauchno-issledovatel'skii institut pod'emno-transportnogo mashinostroeniia.

Methods of reinforcing the metal structures of travelling cranes.

DLC: TJ1363.B74

SO: Manufacturing and Mechanical Engineering in the Soviet Union, Library of Congress, 1953.

BOGUSLAVSKIY, P. YE.

"Experimental Investigations of the Metal Constructions of Cranes."  
Sub 12 May 47, Moscow Order of the Labor Red Banner Higher Technical School  
imeni N. E. Bauman *(and Tech Sci)*

Dissertations presented for degrees in science and engineering in  
Moscow in 1947

SO: Sum No. 457, 18 Apr 55

1. BOGUSLAVSKIY, P.E.
2. USSR (600)
4. Cranes, Derricks, Etc.
7. Theoretical and experimental research on the dynamic coefficients for traveling crane bridges, P.E. Boguslavskiy, (Izd.) VNIPTMASH no. 1, 1949.
9. Monthly List of Russian Accessions, Library of Congress, APRIL 1953, Uncl.

*BOGUSLAVSKIY, P. Ye.*

BABKIN, S.I., kandidat tekhnicheskikh nauk; BALAKSHIN, B.S., professor, doktor tekhnicheskikh nauk; BEYZEL'MAN, R.D., inzhener; BELYAYEV, V.N., kandidat tekhnicheskikh nauk; BIRGER, I.A., kandidat tekhnicheskikh nauk; BOGUSLAVSKIY, P. Ye., kandidat tekhnicheskikh nauk; BOROVICH, L.S., kandidat tekhnicheskikh nauk; VOL'KIR, A.S., professor, doktor tekhnicheskikh nauk; GONIKBERG, Yu.M., inzhener; GORODETSKIY, I.Ye., professor, doktor tekhnicheskikh nauk; GORDON, V.O., professor; DIMENTBERG, F.M., kandidat tekhnicheskikh nauk; DOSCHATOV, V.V., inzhener, IVANOV, A.G., kandidat tekhnicheskikh nauk; KIMASOSHVILI, R.S., professor; KODNER, D.S., kandidat tekhnicheskikh nauk; KOLOMIYTSYEV, A.A., kandidat tekhnicheskikh nauk; KRUTIKOV, I.P., kandidat tekhnicheskikh nauk; KUSHUL', M.Ya., kandidat tekhnicheskikh nauk; LEVENSON, Ye.M., inzhener; MAZYRIN, I.V., inzhener; MALININ, N.N., kandidat tekhnicheskikh nauk; MARTYNOV, A.D., kandidat tekhnicheskikh nauk; MIBERO, N.Ya., kandidat tekhnicheskikh nauk; NIKOLAYEV, G.A., professor, doktor tekhnicheskikh nauk; PETRUSEVICH, A.I., doktor tekhnicheskikh nauk; POZDNYAKOV, S.N., dotsent; PONAMOREV, S.D., professor, doktor tekhnicheskikh nauk; PRIGOROVSKIY, N.I., professor, doktor tekhnicheskikh nauk; PRONIN, B.A., kandidat tekhnicheskikh nauk; RESHETOV, D.N., professor, doktor tekhnicheskikh nauk; SATEL', E.A., professor, doktor tekhnicheskikh nauk; SERENSEN, S.V.; SLOBODKIN, M.S., inzhener; SPITSYN, N.A., professor, doktor tekhnicheskikh nauk; STOLBIN, G.R., kandidat tekhnicheskikh nauk; TAYTS, B.A., kandidat tekhnicheskikh nauk; TETEL'BAUM, I.M., kandidat tekhnicheskikh nauk; UMANSKIY, A.A., professor, doktor tekhnicheskikh nauk; FEODOS'YEV, V.I., professor, doktor tekhnicheskikh nauk;

(Continued on next card)