

BEGIN

REEL NUMBER

123

FROM

EYBL, V.

The influence of detergents (saponates) on the resorption from the digestive tract in warm-blooded animals. 1. Magnesium narcosis after peroral administration of magnesium sulfate and sodium lauryl sulfate. V. Kozlik and V. Byhl (Medical Faculty, Pilsen, Czech.). *Pharmazie* 40, 477-507 (1985). No abstract available. (1) is an active aid to resorption of  $MgSO_4$  from the digestive tract of mice. By simultaneous administration of  $MgSO_4$  with nontoxic doses of I there were obtained: (1) a Mg narcosis from otherwise ineffective doses of  $MgSO_4$ ; (2) reduction of L.D.<sub>50</sub> of  $MgSO_4$  from 8.12 to 3.12 mg./g.; (3) shortening of time lapse to onset of action (narcosis) to 3.4 min.

Gr. M. Hoeking

EYBL, V.

Use of chenta calcium disodium and ethylenediamine tetracetic acid calcium disodium on experimental manganese, cadmium and mercury poisoning. Cesk. fysiол. 8 no.3:183 Apr 59.

1. Farmakologicky ustav fak. vseob. lek. KU, Plzen. Predneseno na III. fysiologickych dnech v Brne dne 14. 1. 1959.

(EDATHAMIL, eff.

on exper. cadmium, manganese & mercury pois. (Cz))

(CHELATING AGENTS, eff.

1,2-diaminocyclohexane N,N,N'-tetracetic acid on exper. cadmium, manganese & mercury pois. (Cz))

(CADMIUM, pois.

exper., eff. of 1,2-diaminocyclohexane N,N,N'-tetracetic acid & edathamil (Cz))

(MANGANESE, pois.

same)

(MERCURY, pois.

same)

ERL, V.; SYKOVA, J.; KOCHER, Z.

EDTA and cobalt poisoning. Cesk. fysiол. 8 no.4:331-332 July 59.

1. Farmakologicky ustav lek. fak. KU, Plzen.  
(EDATHAMIL, pharmacol.) (COBALT, toxicol.)

SYKORA, J.; KOCHER, Z.; EYBL, V.

Effect of CaNa ~~EDTA~~ on the excretion of lead in experimental lead poisoning. (Cm <sup>2</sup>). Cesk. fysiол. 8 no.4:325 July 59.

1. Farmakologicky ustav lek. fak. KU Plzen.  
(EDATHAMIL, pharmacol.) (LEAD POISONING, exper.)

EYBL, V.

Complexons in experimental cadmium poisoning. Cesk. fysiол. 9  
no.1:75 Ja 60.

1. Farmakologicky ustav. fak. vseob. lek. KU, Plzen.  
(CADMIUM toxicol.)  
(CHELATING AGENTS, pharmacol.)

SYKORA, J.;EYBL, V.

Contribution to the metabolism of  $\text{Cd}^{115}\text{Na}_2\text{EDTA}$  &  $\text{Cd}^{115}\text{Na}_2\text{Chenta}$ .  
Cesk. fysiол. 9 no.1:91-92 Ja 60.

1. Krajsky ustav narodniho zdravi, Farmakologickych ustav fak.  
Vseob. lek. Plzen.  
(CHELATING AGENTS, metab.)



EYBL, V.

Toxic effects of  $HgNa_2$  EDTA and  $HgNa_2$  Chenta. Cesk.fysiol. 9 no.3:  
282-283 My '60

1. Farmakologicky ustav lek. fak. KU, Plzen.  
(EDATAMIL toxicol)  
(CHALATING AGENTS toxicol)

## CZECHOSLOVAKIA

EYBL, V., Institute of Pharmacology (Farmakologicky ustav), Faculty of Medicine (Lekarska fakulta), Charles University, Plzen, Prof. Dr Z. KOCHER, director; SYKORA, J., Department for Occupational Diseases (Oddeleni pro choroby z povolani), Faculty Hospital, Plzen, F. HUZL, MD, Candidate of Sciences, director; and MERTL, F., Physics Institute (Fyzikalni ustav), Faculty of Medicine (Lekarska fakulta), Charles University, Plzen, Docent Dr M. PETRAN, Candidate of Sciences, director.

"Effect of Calcium Complexes of Aminopolycarbonic Acids on an Experimental Acute Cadmium Poisoning"

Prague, Pracovni Lekarstvi, Vol XV, No 6, August 1963, pp 234-238.

Abstract [Authors' English summary]: Experiments on mice provided evidence that the best protective effect among calcium complexes of aminopolycarbonic acids in acute experimental CdCl<sub>2</sub> poisoning is offered by CaDTPA. The toxicity of Cd complexes of aminopolycarbonic acids is directly proportional to the stability constant for Cd. In acute experiments on rats Ca complexes of EDTA and DTPA administered by the i.p. route simultaneously with the s.c. administration of Cd<sup>115m</sup>Cl<sub>2</sub> (with carrier) increase significantly the urinary cadmium excretion and reduce markedly the cadmium content of the liver. CaDTPA is significantly more effective. When Ca complexes are administered only 24 hours after the administration of

1/2

L 13256-66

ACC NR: AP6006040

SOURCE CODE: CZ/0053/65/014/004/0293/0293

AUTHOR: Eybl, V.; Sykora, J.; Mertl, F.

ORG: Institute of Pharmacology, Medical Faculty, Charles University, Plzen (Farmakologicky ustav lek. fak. UK); Department of Occupational Disease, SFN, Plzen (Odd. chorob's povolani SFN); Institute of Physics, Medical Faculty, Charles University, Plzen (Fysikalni ustav lek. fak. UK)

TITLE: Transfer of cadmium and cadmium complexes of EDTA and DTPA through the placental barrier [This paper was presented during the Twelfth Pharmacologic Days, Smolenice, 29 Jan 65.]

SOURCE: Ceskoslovenska fysiologie, v. 14, no. 4, 1965, 293

TOPIC TAGS: radioisotope, tracer study, biologic reproduction, pharmacology, animal physiology, organocadmium compound, rat, aliphatic carboxylic acid, chelate compound

ABSTRACT: Study in 3-week pregnant rats given  $Cd^{115m}Cl_2$  with carrier, CaEDTA and CaDTPA and the cadmium radioactive complexes revealed that cadmium chelates easily penetrated the placental barrier and destroyed the fetus. [JPRS]

SUB CODE: 06 / SUBM DATE: none / SOV REF: 001

Card 1/1

L 13241-66 EWA(j)/EWA(b)-2 RO

ACC NR: AP6006049

SOURCE CODE: CZ/0053/65/014/004/0297/0277

AUTHOR: Jonakova, M.; Koutensky, J.; Eybl, V.; Sykora, J.

ORG: Institute of Pharmacology, Medical Faculty, Charles University, Plzen  
(Farmakologicky ustav lek. fak/ UK); Department of Occupational Diseases, SFN, Plzen  
(Odd. chorob z povolani SFN) 55

TITLE: The toxic effects of cadmium complexes of aminopolycarboxylic acids [This paper was presented during the Twelfth Pharmacologic Days, Smolenice, 28 Jan 65.]


SOURCE: Ceskoslovenska fysiologie, v. 14, no. 4, 1965, 297

TOPIC TAGS: toxicology, aliphatic polycarboxylic acid, organocadmium compound, drug effect, pharmacology, blood pressure, respiratory system, chelate compound

ABSTRACT: CdCl<sub>2</sub> and its chelates with EDTA, HEDTA tended to cause hypotension and tachypnea; CdCDTA caused transient hypertension. EKG changes are described.

[JPRS]

SUB CODE: 06 / SUBM DATE: none / ORIG REF: 001

Card 1/1 

L 13238-66 EWT(1)/EWA(j)/EWA(b)-2 RO

ACC NR: AP6006052

SOURCE CODE: CZ/0053/65/014/004/0293/0299

AUTHOR: Koutensky, J.; Eybl, V.; Jonakova, M.; Sykora, J.; Mertl, F.

ORG: Institute of Pharmacology, Medical Faculty, Charles University, Plzen <sup>HO</sup>  
(Farmakologicky ustav lek. fak. UK); Department of Occupational Diseases, SFN,  
Plzen (Odd. chorob z pov. SFN); Institute of Physics, Medical Faculty, Charles <sup>B</sup>  
University, Plzen (Fyzikalni ustav LF UK)

TITLE: Role of cadmium in acute ferritin toxicity <sup>6,44,55</sup> [This paper was presented during the Twelfth Pharmacologic Days, Smolenice, 28 Jan 65.]

SOURCE: Ceskoslovenska fysiologie, v. 14, no. 4, 1965, 298-299

TOPIC TAGS: mouse, pharmacology, cadmium, protein, organoiron compound, toxicology, blood pressure

ABSTRACT: Cadmium-containing crystallized ferritin had an LD<sub>50</sub> of 100 mg /Kg in mice; cadmium is stored in kidneys and spleen; while noncrystallized ferritin lowers blood pressure transiently, crystallized ferritin with cadmium raises it; CaDTA and CaDTPA can solubilize body cadmium and remove it from the body, as shown chromatographically. [JPRS]

SUB CODE: 06 / SUBM DATE: none / OTH REF: 004

Card 1/1

L 13591-66

ACC NR: AP6006085

SOURCE CODE: CZ/0053/65/014/004/0314/0314

AUTHOR: Sykora, J.; Eybl, V.; Jonakova, M.; Koutensky, J. 25 B

ORG: Department of Occupational Diseases SFN, Plzen (Odd. chorob z povolani SFN);  
Institute of Pharmacology, Medical Faculty, Charles University, Plzen (Farmakologicky  
ustav LF, UK)

TITLE: Metabolism of cadmium complexes of aminopolycarboxylic acids [This paper  
was presented during the Twelfth Pharmacologic Days, Smolenice, 28 Jan 65.]

SOURCE: Ceskoslovenska fysiologie, v. 14, no. 4, 1965, 314

TOPIC TAGS: biologic metabolism, rat, chelate compound, organocadmium compound,  
aliphatic polycarboxylic acid, chromatography, biochemistry

ABSTRACT: Chromatography of urine of rats given CdCl<sub>2</sub> with or without cadmium  
or calcium chelates or EDTA, CDTA and DTPA. CaCDTA was less apt to form ionic  
complexes with cations in vivo and therefore had little protective effect;  
CdCDTA was more stable in the body. [JPRS]

SUB CODE: 06 / SUBM DATE: none / ORIG REF: 002

Card 1/1 HW

1/1

CZECHOSLOVAKIA

SYKORA, J; EYBL, V

1. Sub Department of Occupational Diseases, Faculty Hospital - (for ?); 2. Pharmaceutical Institute, Karlova University, Pilsen - (for ?)

Prague, Collection of Czechoslovak Chemical Communications, No 1, January 1967, pp 352-357

"Paper chromatography of chelates of ethylenediaminetetraacetic acid."

PAICHL, Premysl; SKRLANT, Lubos; SYKORA, Jindrich. Technicka spoluprae  
EYBLOVA, Marie

Fever caused by inhalation of metal fumes from brass welding.  
Plzen. lek. sborn. 23:115-118 '64

1. Klinika vnitnich chorob lekarske fakulty University Karlovy  
se sidlem v Plzni (prednosta: prof. MUDr. K. Bobek); Oddeleni  
chorob z povolani a prumysove toxikologie Statni fakultni ne-  
mocnice v Plzni (prednosta: prim. MUDr. F. Huzl, CSc.).



MLNARIKOVA, J.; JANKOVA, J.; HUZL, F. Technicka spoluprace: EYBLOVE, M.

Lead poisoning in tender workers. Prac. lek. 16 no.1:24-27  
Ja'64.

1. Oddeleni chorob z povolani a prumyslove toxikologie fa-  
kultni nemocnice v Plzni; vedouci: MUDr. F.Huzl, CSc.

SOV/110-59-3-11/25

AUTHOR: ~~Eybshits, A.G.~~, Engineer

TITLE: The Thermal Design of Direct Current Machine Armatures with Indirect Water Cooling (Teplovoy raschet yakorey mashin postoyannogo toka pri kosvennom vodyanom okhlazhdenii)

PERIODICAL: Vestnik Elektromyshlennosti, 1959, Nr 3, pp 41-45 (USSR)

ABSTRACT: Liquid, particularly water, cooling of electrical machines offers considerable advantages but in d.c. machines direct cooling of hollow conductors cannot be applied and indirect cooling methods are required. This article considers the thermal design of the armature of such a machine. To simplify the calculations it is assumed that: heat given up to the air by the end windings and the active steel of the armature may be neglected; there is no heat exchange between the commutator, the armature and the magnetic system which is alright - provided they are equally cooled; a single coefficient of thermal conductivity is taken for the insulation of the windings. The directions of extraction of heat from a machine armature when indirect cooling is used are given diagrammatically in Fig.1, in this and in

Card 1/3

SOV/110-59-3-11/25

The Thermal Design of Direct Current Machine Armatures with Indirect Water Cooling

Fig.4 the circles represent cooling elements. Fig.2 and 3 give schematic equivalent circuits for the end winding and slot parts of the armatures. Formulae are given for the mean temperature rise in different parts of the armature. Thermal conductivities and resistances with liquid cooling of armatures are then considered. Different methods of cooling the iron are illustrated diagrammatically in Fig.4. Formulae are given for the thermal resistance in the different cases. An evaluation is then made of the effectiveness of water cooling. The mathematical effect of water cooling is to increase the thermal conductivities of different parts of the machine and formulae are given for the amounts by which these conductivities are increased in different cases. The change in the ratio of length to diameter when liquid cooling is used is considered and formulae are given for the changes in machine dimensions. Determination of heat transfer coefficients is then briefly considered and values are calculated for cooling

Card 2/3

SOV/110-59-3-11/25

The Thermal Design of Direct Current Machine Armatures with  
Indirect Water Cooling

water temperatures of + 30 and + 50°C at different rates of flow. It is concluded that the machine with indirect cooling will have a greater ratio of length to diameter than an air cooled machine and that there is then a reduction of size and weight. Indirect water cooling should be most effective in slow running medium-sized and large machines in which commutation conditions are not very difficult and which call for fans and air coolers when normal ventilation systems are used. In water cooled machines conditions of commutation will inevitably be more difficult. Correct choice of insulation thickness on slots and end windings is most important. Experimental work is required to determine the field of application of water cooling in d.c. machines. There are 4 figures.

SUBMITTED: 5th September 1958.

Card 3/3

EYBSHETS, A.G., inzh.

Basic principles of the design of all-purpose high speed asynchronous machines with increased frequency. Elektrotehnika 35 no.12:6-8 D '64. (MIRA 18:4)

EYBUS L. Kh.

EIBUS, L. Kh.

USSR/Nuclear Physics Cosmic rays

Card : 1/1

Authors : Eibus, L. Kh.

Title : Cosmic rays

Periodical : Priroda, 43/7, 10 - 20, July 1954

Abstract : The article recounts the discovery of cosmic rays through their ionizing effect, and their source from outer space through the fact that their effect increases with distance from the earth. It explains their nature as particles, their characteristics and energy running to quadrillions of electron volts. The secondary particles and radiation resulting from collisions are explained. Instruments and methods of experimentation are illustrated. The material is all technically written in a popular style. Drawings; illustrations.

Institution : ....

Submitted : ....

EXCHIN, V A

57-6-8/36 :

AUTHOR  
TITLE

VYATKIN, A.P., EXCHIN, V.A.  
On the Origin of the Fluctuation of Crystal Triode Parameters. II. n-p-n Triodes.  
(K voprosu o prichinakh, vyayvayushchikh raznos parametrov kristallicheskikh triodov. II. Triody n-p-n-tipa. Russian)  
Zhurnal Tekhn. Fiz. 1957, Vol 27, Nr 6, pp 1205 - 1208 (U.S.S.R.)

PERIODICAL  
ABSTRACT

In the present case investigations are carried out which are similar to those described in Part I (Zhurnal Tekhn.Fiz. 1957, Vol 27, Nr 6 , pp 1197) for the triodes of the n-p-n-type. At first donator alloys were selected, for which purpose investigations were carried out with Bi-Pb, Bi+Sn, As-Pb, Sb-Sn, Sb-Pb. It was found that, with respect to the rectifier coefficient, lead-antimony-, and lead arsenic alloys are the best. Further experiments were carried out with a Pb-Sb alloy with eutectic composition (11,2 % Sb). There follows a description of experimental data. It is shown that it is best to produce triodes of the n-p-n type at 700 ° C. At this temperature a considerable dependence of the penetration depth on temperature is observed. Therefore even slight changes of temperature may lead to the fluctuation of some parameters of the triodes. Fluctuation may be to the extent of + 20 %. A general diagram for the determination of the average values of the penetration depth of the Pb-Sb alloy into the germanium is given. The totality of the results mentioned her makes it possible quantitatively to characterize a number of factors which exercise influence on some of the crystal-

Card 1/2

EYCHIS, H.P.

LAVORKO, Pavel Konstantinovich; SERDYUK, V.K., inzhener, redaktor;  
EYCHIS, A.P., inzhener, retsenzent; ZAGOLIN, N.S., redaktor;  
LYKHOTA, N.A., tekhnicheskii redaktor.

[Booklet for chromium platers] Pamiatka po tekhnike bezopas-  
nosti dlia khromirovshchikov. Kiev, Gos.nauchno-tekhn.isd-vo  
mashinostroit.lit-ry, 1955. 39 p. (MLRA 8:11)  
(Chromium plating)





~~LYCHIS, A. P.~~  
LYCHIS, Andrey Petrovich; SERDYUK, V.K., inzhener, redaktor; LAVORKO, P.K.,  
inzhener, redaktor; LYKHOTA, M.A. tekhnicheskii redaktor.

[Safety manual for workers in painting shops] Pamiatka po tekhnike  
bezopasnosti dlia rabochikh okrasochnykh tsekhov. Kiev, Gos.nauchno-  
tekh.nisld-vo mashinostroit.lit-ry, 1957. 72 p. (MLRA 10:6)  
(Painting, Industrial--Safety measures)

POLISHCHUK, Mikhail Petrovich; EYCHIS, A.P., inzh., retsenzent; SOROKA,  
M.S., red.; HUDENSKIY, Ya.V., tekhn.red.

[Booklet on safety measures for sandblast operators] Pamiatka  
po tekhnike bezopasnosti peskonstruishiiku. Kiev, Gos.nauchno-  
tekhn.isd-vo mashinostroit.lit-ry, 1958. 37 p. (MIRA 12:6)  
(Sandblast---Safety measures)

~~EYCHIS, A.P., otv.red.; LAVORKO, P.K., red.; LITVAK, N.I., red.;~~  
SOROKA, M.S., red.izd-va

[Protective, decorative and special coatings for metals]  
Zashchitno-dekorativnye i spetsial'nye pokrytiia metallov.  
Kiev, Gos.nauchno-tekhn.izd-vo mashinostroit.lit-ry, 1959.  
291 p. (MIRA 12:11)

1. Nauchno-tekhnicheskoye obshchestvo mashinnoy promyshlennosti.  
Kiyevskoye oblastnoye pravleniye.  
(Electroplating) (Protective coatings)

PHASE I BOOK EXPLOITATION

SOV/5635

Eychis, Andrey Petrovich

Kristallit; zashchitno-dekorativnoye pokrytiye metallov (Crystallite: Protective and Decorative Covering of Metals) Moscow, Mashgiz, 1961. 142 p. 7,000 copies printed.

Reviewer: N. T. Kudryavtsev, Doctor of Chemical Sciences, Professor;  
Ed.: D. B. Rikberg; Tech. Ed.: M. S. Gornostaypol'skaya; Chief Ed.:  
Mashgiz (Southern Dept.): V. K. Serdyuk, Engineer.

PURPOSE: This book is intended for technical personnel working in the field of protective and decorative coatings.

COVERAGE: The book gives theoretical principles and technical characteristics of using organic dyes and interference coloring in depositing crystallites and different colors and shades on metals. Methods of production and quality control are also discussed. Standard and special equipment for producing crystallites is described and technical and economic characteristics of these coatings are given, as are the most effective areas of application in machine building, instrument

Card-1/-3

Crystallite: (Cont.)

SOV/5635

making, and other branches of the metalworking industry. No personalities are mentioned. There are 39 references, all Soviet.

TABLE OF CONTENTS:

Introduction	3
Ch. I. Basic Principles of Producing Crystallites	
Conditions for the thermocrystallization of thin electrolytic films of tin during their thermal treatment	7
Means of displaying the macrostructure of heat-treating films of tin and selection of optimum conditions for display	44
Production of colored crystallite without using organic dyes	50
Choice of protective films for crystallite	76
Brief conclusions	77
Ch. II. Technology and Equipment	
Variations of technical flow sheets	84
Qualitative requirements for a protective and decorative crystallite coating	135
Means of removing unsuitable crystallite coatings	137
Industrial safety in crystallite production	138

Card-2/3

DIDYUKOV, Zakhar Sil'vestrovich; LYCHIS, A.P., kand.khim.nauk, retsenzent;  
RIKBERG, D.B. red.; GORNOSTAYPOL'SKAYA, M.S., tekhn. red.

[Paint and varnish coatings; manual] Lakokrasochnye pokrytiia;  
spravochnoe rukovodstvo. Moskva, Mashgiz, 1962. 214 p.

(MIRA 15:7)

(Painting, Industrial)

EYCHIS, A.P., kand.tekhn.nauk

New decorative and protective coatings for aluminum. Trudy  
NIIMesttoppoma no.17:193-207 '62. (MIRA 16:5)  
(Aluminum) (Protective coatings)



LAVORKO, P.K.; DIDYUKOV, Z.S., inzh., retsenzent; EYCHIS, A.P.,  
kand. tekhn. nauk, red.; TAIROVA, A.L., red.izd-va;  
EL'KIND, V.D., tekhn. red.; MAKAROVA, L.A., tekhn.red.

[Oxide metal coatings] Oksidnye pokrytiia metallov. Mo-  
skva, Mashgiz, 1963. 185 p. (MIRA 17:1)

PHASE I BOOK EXPLOITATION

SOV/6503

Eychis, Andrey Petrovich, and Berta Yakovlevna Temkina.

Tekhnologiya pov rkhnostnoy obrabotki alyuminiya i yego splavov  
(Methods of Surface Treatment of Aluminum and its Alloys).  
Moscow, Mashgiz, 1963. 253 p. 5200 copies printed.

Reviewer: Z. I. Didyukov, Engineer; Ed.: D. V. Rikberg; Tech.  
Ed.: M. S. Gornostaypolskaya; Chief Ed.: Mashgiz (Southern  
Dept.): V. K. Serdyuk, Engineer.

PURPOSE: This book is intended for engineering personnel of  
coating shops and may also be useful to engineers and designers  
engaged in designing metal structures made from aluminum and its  
alloys.

COVERAGE: The book describes modern processes of surface treatment  
of aluminum and its alloys and various methods of coating  
metallic and nonmetallic materials with aluminum. Besides the  
procedures of protective and decorative coating, attention is  
given in this book to special types of surface treatment such  
as chemical milling, thick anodizing, and photochemical etching,

Card 1/2

Methods of Surface Treatment (Cont.)

SOV/6503

which extend the application range of aluminum as a structural and coating material. No personalities are mentioned. There are 99 references 53 Soviet, 31 English, 10 German, 4 French, and 1 Croatian.

TABLE OF CONTENTS:

Foreword	3
Introduction	5
Physical and Mechanical Methods of Surface Treatment	15
Machining	15
Painting	26
Deposition of plastic coatings	39
Enameling	44
Chemical Methods of Surface Treatment	60
Chemical Milling	60
Chemical polishing	69

Card 2/2

S/081/63/000/003/015/036  
B144/B186

AUTHOR: Eychis, A. P.

TITLE: New protective-decorative coatings on aluminum

PERIODICAL: Referativnyy zhurnal. Khimiya, no. 3, 1963; 389, abstract  
3L152 (Tr. N.-i- in-ta mestn. i toplivn. prom-sti, no. 17,  
1962, 193-207)

TEXT: A method is described for producing a glittering coating reminiscent of hoar frost ("glitter") on the surface of components made of sheet aluminum A1 (AD) and A11 (AD1). The method consists in obtaining a recrystallized texture with decorative properties, with subsequent protection of this texture by transparent films. It has been established that a recrystallization microstructure suitable in practice for decoration is obtained at temperatures of  $\gg 500^{\circ}\text{C}$ ; the effect of the time of heat treatment is insignificant. It is recommended that the recrystallization structure be developed in a solution composed as follows (in ml): HCl 150, HNO<sub>3</sub> 25, H<sub>2</sub>O 150; temperature 20 - 30°C;

Card 1/2

New protective-decorative coatings on ...

S/081/63/000/003/015/036  
B144/B186

etching time 15 - 20 min. It is recommended that the recrystallized structure be protected either by anodizing the articles in 5%  $H_2SO_4$  at  $D_a$  0.5 a/dm<sup>2</sup>, temperature 18°C, for 10 min, or by methacrylic and acrylopistachio varnishes. The flowsheet for the finishing is given. It is shown that in the course of the heat treatment elastic stresses are eliminated and the metal becomes "soft". [Abstracter's note: Complete translation.]

Card 2/2

KADANER, Lev Il'ich, doktor tekhn. nauk; EYCHIS, A.P., kanzl.  
tekhn. nauk, retsenzent

[Electroplating] Gal'vanostegia. Kiev, Tekhnika,  
1964. 310 p. (MIRA 17:12)

PMH, A., ed., Chem. and pharm. mech.; Int. J. Pharm., 1971, 1, 103, 104, 105, 106, 107, 108, 109, 110, 111, 112, 113, 114, 115, 116, 117, 118, 119, 120, 121, 122, 123, 124, 125, 126, 127, 128, 129, 130, 131, 132, 133, 134, 135, 136, 137, 138, 139, 140, 141, 142, 143, 144, 145, 146, 147, 148, 149, 150, 151, 152, 153, 154, 155, 156, 157, 158, 159, 160, 161, 162, 163, 164, 165, 166, 167, 168, 169, 170, 171, 172, 173, 174, 175, 176, 177, 178, 179, 180, 181, 182, 183, 184, 185, 186, 187, 188, 189, 190, 191, 192, 193, 194, 195, 196, 197, 198, 199, 200, 201, 202, 203, 204, 205, 206, 207, 208, 209, 210, 211, 212, 213, 214, 215, 216, 217, 218, 219, 220, 221, 222, 223, 224, 225, 226, 227, 228, 229, 230, 231, 232, 233, 234, 235, 236, 237, 238, 239, 240, 241, 242, 243, 244, 245, 246, 247, 248, 249, 250, 251, 252, 253, 254, 255, 256, 257, 258, 259, 260, 261, 262, 263, 264, 265, 266, 267, 268, 269, 270, 271, 272, 273, 274, 275, 276, 277, 278, 279, 280, 281, 282, 283, 284, 285, 286, 287, 288, 289, 290, 291, 292, 293, 294, 295, 296, 297, 298, 299, 300, 301, 302, 303, 304, 305, 306, 307, 308, 309, 310, 311, 312, 313, 314, 315, 316, 317, 318, 319, 320, 321, 322, 323, 324, 325, 326, 327, 328, 329, 330, 331, 332, 333, 334, 335, 336, 337, 338, 339, 340, 341, 342, 343, 344, 345, 346, 347, 348, 349, 350, 351, 352, 353, 354, 355, 356, 357, 358, 359, 360, 361, 362, 363, 364, 365, 366, 367, 368, 369, 370, 371, 372, 373, 374, 375, 376, 377, 378, 379, 380, 381, 382, 383, 384, 385, 386, 387, 388, 389, 390, 391, 392, 393, 394, 395, 396, 397, 398, 399, 400, 401, 402, 403, 404, 405, 406, 407, 408, 409, 410, 411, 412, 413, 414, 415, 416, 417, 418, 419, 420, 421, 422, 423, 424, 425, 426, 427, 428, 429, 430, 431, 432, 433, 434, 435, 436, 437, 438, 439, 440, 441, 442, 443, 444, 445, 446, 447, 448, 449, 450, 451, 452, 453, 454, 455, 456, 457, 458, 459, 460, 461, 462, 463, 464, 465, 466, 467, 468, 469, 470, 471, 472, 473, 474, 475, 476, 477, 478, 479, 480, 481, 482, 483, 484, 485, 486, 487, 488, 489, 490, 491, 492, 493, 494, 495, 496, 497, 498, 499, 500, 501, 502, 503, 504, 505, 506, 507, 508, 509, 510, 511, 512, 513, 514, 515, 516, 517, 518, 519, 520, 521, 522, 523, 524, 525, 526, 527, 528, 529, 530, 531, 532, 533, 534, 535, 536, 537, 538, 539, 540, 541, 542, 543, 544, 545, 546, 547, 548, 549, 550, 551, 552, 553, 554, 555, 556, 557, 558, 559, 560, 561, 562, 563, 564, 565, 566, 567, 568, 569, 570, 571, 572, 573, 574, 575, 576, 577, 578, 579, 580, 581, 582, 583, 584, 585, 586, 587, 588, 589, 590, 591, 592, 593, 594, 595, 596, 597, 598, 599, 600, 601, 602, 603, 604, 605, 606, 607, 608, 609, 610, 611, 612, 613, 614, 615, 616, 617, 618, 619, 620, 621, 622, 623, 624, 625, 626, 627, 628, 629, 630, 631, 632, 633, 634, 635, 636, 637, 638, 639, 640, 641, 642, 643, 644, 645, 646, 647, 648, 649, 650, 651, 652, 653, 654, 655, 656, 657, 658, 659, 660, 661, 662, 663, 664, 665, 666, 667, 668, 669, 670, 671, 672, 673, 674, 675, 676, 677, 678, 679, 680, 681, 682, 683, 684, 685, 686, 687, 688, 689, 690, 691, 692, 693, 694, 695, 696, 697, 698, 699, 700, 701, 702, 703, 704, 705, 706, 707, 708, 709, 710, 711, 712, 713, 714, 715, 716, 717, 718, 719, 720, 721, 722, 723, 724, 725, 726, 727, 728, 729, 730, 731, 732, 733, 734, 735, 736, 737, 738, 739, 740, 741, 742, 743, 744, 745, 746, 747, 748, 749, 750, 751, 752, 753, 754, 755, 756, 757, 758, 759, 760, 761, 762, 763, 764, 765, 766, 767, 768, 769, 770, 771, 772, 773, 774, 775, 776, 777, 778, 779, 780, 781, 782, 783, 784, 785, 786, 787, 788, 789, 790, 791, 792, 793, 794, 795, 796, 797, 798, 799, 800, 801, 802, 803, 804, 805, 806, 807, 808, 809, 810, 811, 812, 813, 814, 815, 816, 817, 818, 819, 820, 821, 822, 823, 824, 825, 826, 827, 828, 829, 830, 831, 832, 833, 834, 835, 836, 837, 838, 839, 840, 841, 842, 843, 844, 845, 846, 847, 848, 849, 850, 851, 852, 853, 854, 855, 856, 857, 858, 859, 860, 861, 862, 863, 864, 865, 866, 867, 868, 869, 870, 871, 872, 873, 874, 875, 876, 877, 878, 879, 880, 881, 882, 883, 884, 885, 886, 887, 888, 889, 890, 891, 892, 893, 894, 895, 896, 897, 898, 899, 900, 901, 902, 903, 904, 905, 906, 907, 908, 909, 910, 911, 912, 913, 914, 915, 916, 917, 918, 919, 920, 921, 922, 923, 924, 925, 926, 927, 928, 929, 930, 931, 932, 933, 934, 935, 936, 937, 938, 939, 940, 941, 942, 943, 944, 945, 946, 947, 948, 949, 950, 951, 952, 953, 954, 955, 956, 957, 958, 959, 960, 961, 962, 963, 964, 965, 966, 967, 968, 969, 970, 971, 972, 973, 974, 975, 976, 977, 978, 979, 980, 981, 982, 983, 984, 985, 986, 987, 988, 989, 990, 991, 992, 993, 994, 995, 996, 997, 998, 999, 1000.

Heat breaking from acid electrolyte. Int. J. Pharm. no. 3: 31-32  
Hy-Ja 100. (MIPA 10:11)

CH EYCHIS, A. Yu.  
1

3

Dispersion of anthracene and phenanthrene crystals at low temperatures. A. Yu. Elchis. *Izvest. Akad. Nauk S.S.S.R., Ser. Fiz.* 14, 208-10 (1950). — Dispersion measurements were made at a temp. of  $-130^{\circ}$  to extend the dispersion curves closer to the absorption bands in the near ultraviolet. The forces of the oscillators were calcd. to be: anthracene  $\parallel$  to  $b$ -axis of the crystal 0.13 (room temp.), 0.17 ( $-130^{\circ}$ );  $\perp$  to  $b$ -axis 0.04 (both temps.); phenanthrene  $\parallel$  to  $b$ -axis 0.009 and  $\perp$  to  $b$ -axis 0.007. S. Pakswere

1957



CA EYCHYS, A.Yu.

3

Dispersion of light in crystals of phenanthrene. I. V. Rodnikova and A. Yu. Eychis. *Zhur. Eksp. Teor. Fiz.* 20, 69-72 (1950).—In the green Hg 5460 line, the refractive indexes were measured to  $\mu_a = 1.745$  (mean),  $\mu_o = 1.547$  (small). Absorption spectra, measured on flakes 1-8  $\mu$  thick, consist of lines with the elec. vector parallel to the  $b$  axis of the monoclinic crystal (which coincides with the optical  $\mu_a$  axis), termed broad (or strong) components, and lines with the elec. vector perpendicular to  $b$ , termed narrow (or weak) component. The components have similar structures, each one forming 3 groups of bands. The 1st group, lying between 3850 and 3500 A., comprises a few weak absorption bands. The 2nd, more intense group, begins with a strong band at 3400 A. in the broad, and with a band at 3407 A. in the narrow component. The 3rd group, most intense, begins at about 3000 A. The dispersion is expressed by the empirical formulas  $\mu^2 = 2.070 + [0.004 \lambda^2 / (\lambda^2 - 3400^2)] + [0.784 \lambda^2 / (\lambda^2 - 2700^2)]$  for the broad, and  $\mu^2 = 1.920 + [0.003 \lambda^2 / (\lambda^2 - 3400^2)] + [0.380 \lambda^2 / (\lambda^2 - 3000^2)]$  for the narrow component. Hence, the oscillator

strength  $f = B_e m e^2 N^2 \lambda_0^2$ , with the no.  $N$  of molecules, calculated with the aid of the latter constants of Sundarajan (*C.A.* 30, 5480), is  $f = 0.007$  and  $0.007$ , resp., for the broad and the narrow component ( $B_0 = 0.004$  and  $0.003$ ,  $\lambda_0 = 3400$  and  $3000$ , resp.). From previous data on anthracene (Ushelmov, et al. *C.A.* 43, 8781d), the corresponding values are  $f = 0.13$  and  $0.04$  ( $B_0 = 0.08$  and  $0.024$ ,  $\lambda_0 = 3081$  and  $3045$ ). Whereas in the spectrum of anthracene the diffraction spots become increasingly denser in the neighborhood of absorption bands, no such phenomenon is noticeable in phenanthrene. Correspondingly, the dispersion curve of phenanthrene is much less steep than that of anthracene, particularly close to absorption bands. Values of  $f$  in the absorption region 3400-3500 A. are from  $1/4$  to  $1/10$  as large for phenanthrene as in the 1st absorption bands of anthracene. N. Thon

Inst. of Phys., AS Ukr SSR

C EYCHIS, A.YU.

1075618 6270237

Dispersion in crystals of phenanthrene and anthracene at low temperatures. A. Y. Eychis (Acad. Sci. Ukr. S.S.R., Khar'kov). *Zhur. Eksp. Teoret. Fiz.* 20, 471-3 (1950).—The  $n$  were detd. at  $-130^\circ$  and at room temp. on thin plates of anthracene (thicknesses 8.43 and 17.53  $\mu$  at  $-130^\circ$  calcd. for  $-130^\circ$  from the thickness detd. at room temp., assuming isotropic thermal expansion) and of phenanthrene (3.47 and 7.46  $\mu$ ), between 7000 and 4000, and between 7000 and 3500 A., resp., for light polarized with the elec. vector parallel to and perpendicular to the  $b$  axis. The  $n$  curves at  $-130^\circ$  lie above those at room temp. Curves  $n_{\parallel b}$  at  $-130^\circ$  and at room temp. are almost parallel to each other. The  $n_{\perp b}$  curve of anthracene at  $-130^\circ$  is somewhat less steep than at room temp. The oscillator strengths, calcd. from the dispersion curves, at room temp. and at  $-130^\circ$ , are: for anthracene  $n_{\parallel b}$  (absorption band 3000 A.) 0.13 and 0.17; anthracene  $n_{\perp b}$

(2045 A.) 0.04 and 0.04; phenanthrene  $n_{\parallel b}$  (3400 A.) 0.009 and 0.009; phenanthrene  $n_{\perp b}$  (3500 A.) 0.007 and 0.007. Thus, for phenanthrene  $f$  is temp.-independent both  $n_{\parallel b}$  and  $n_{\perp b}$ ; for anthracene, this holds only  $n_{\perp b}$ .

N. Thon

EYCHIS, A. YU.

Absorption Spectrum and Dispersion of Light in Naphthacene Crystals  
Tr. In-ta fiziki AN Ukr SSR, No 5, 1954, pp 137-142

Two absorption bands were found in the vapor spectrum of naphthacene, responding to two electron-oscillatory transitions. The wave numbers of these electronic transitions are  $22,200 \text{ cm}^{-1}$  and  $34,770 \text{ cm}^{-1}$ . In the spectrum of naphthacene solution in ethyl alcohol a longward shift of the order of  $975 \text{ cm}^{-1}$  of the absorption bands was observed. (RZhFiz, No 5, 1955)

SO: Sum. No. 639, 2 Sep 55

S/003/60/000/006/001/001  
B013/B077

AUTHORS: Izbranov, P. D., Komskiy, D. M., Senkevich, Z. E.,  
Eychis, A. Yu.

TITLE: A camera to examine textures

PERIODICAL: Vestnik vysshey shkoly, no. 6, 1960, 84-85

TEXT: This paper describes a camera which has been developed and built in the laboratories of the kafedra fiziki Sverdlovskogo pedagogicheskogo instituta (Department of Physics of the Sverdlovsk Pedagogical Institute) to examine textures. The camera is a modification of that used for roentgenographic examinations of rolled radial and drawn textures; its holding device is interchangeable. Fig. 1 shows such a camera with a holding device for rolled specimens. The base (1) can be levelled by means of three adjustment screws; the motor is mounted on a slide. A screw (3) can be used to change its position along a guided bar (2). (A synchronous motor of the CP-2 (SD-2) type is used to rotate samples which are examined for polycrystals with a PKA (RKA) type X-ray camera). The clamp used for plain samples is mounted with a bar to the slide. The

Card 1/4

A camera to examine textures

S/003/60/000/006/001/001  
B013/B077

holder ends in a rectangular shaft (5) which can be moved freely in the groove of the lead screw with indicator (6) and also acts as a follower, the cam (7) is mounted to the motor shaft. The rotation of the motor lowers and raises the sample. The film holder (8) can be adjusted along the base with a screw (9) in a distance of 20 to 80 mm away from the specimen. A slit (10) is fastened to the front part of the camera and can be shifted as needed by a setscrew (11). The holder and the specimen can be moved into any arbitrary angle with respect to the incident X-ray and can be secured by a nut. The degrees are read off a limbus. A different type of holding device (Fig. 2) is used for cylindrical samples. A threaded sleeve serves as a driving pulley and holder of the specimen. The cam is replaced with a pulley. The quality of pictures made with this camera can be seen in Fig. 3; copper foil is used as a specimen. The picture on the left was done in the K-series with a perpendicular incident ray on a fixed sample, while the picture on the right was taken with the camera described here, with a perpendicular incident ray, too, and it is much sharper. This camera has been used in the Physics laboratory of the Sverdlovsk Pedagogical Institute for 3 years without

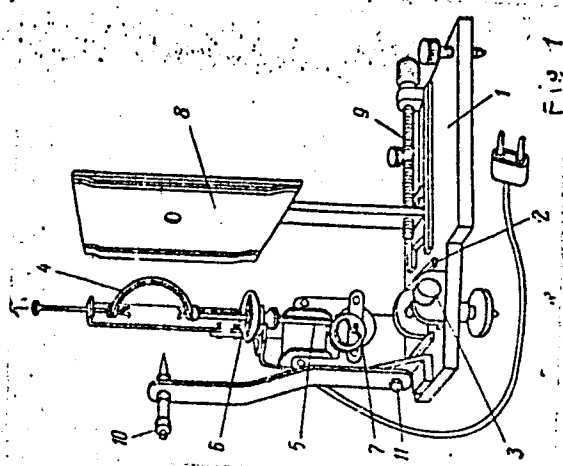
Card 2/4

A camera to examine textures

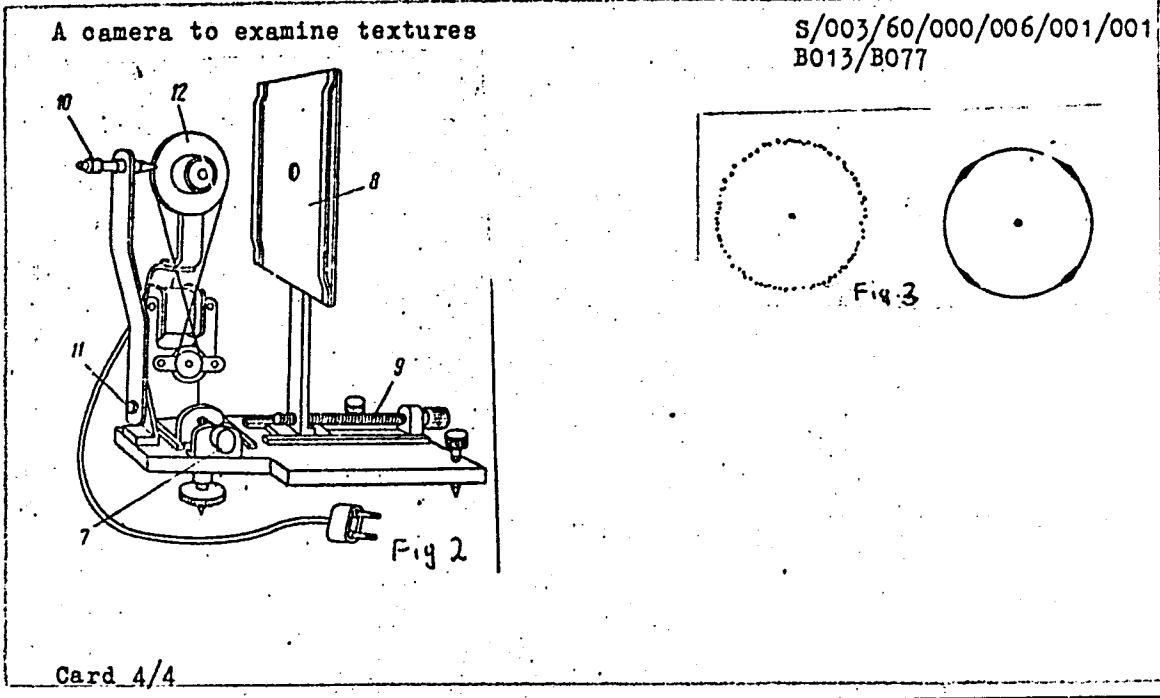
S/003/60/000/006/001/001  
3013/B077

failure. It is mentioned that it is real simple to build such a camera  
in any University.institute. There are.3 figures.

ASSOCIATION: Sverdlovskiy pedagogicheskiy institut (Sverdlovsk  
Pedagogical Institute)



Card 3/4



ACCESSION NR: AP4011501

S/0051/64/016/001/0159/0161

AUTHOR: Eychis, A.Yu.; Skorniyakov, G.P.

TITLE: Optical properties of gallium in the visible region of the spectrum

SOURCE: Optika i spektroskopiya, v.16, no.1, 1964, 159-161

TOPIC TAGS: gallium, gallium mirror, solid gallium, refractive index, absorption, reflection, photoconductivity

ABSTRACT: Among the metals, pure gallium is characterized by high specular luster in both the solid and liquid states. Moreover, gallium mirrors are not significantly impaired as regards reflecting properties as a result of exposure to air. Despite the obvious desirability of this metal for mirrors, the optical properties of gallium have not been adequately studied: there have been only a few measurements of some optical properties in the solid state and some more detailed measurements in the liquid state (J.Nathanson, Phys.Rev.49,887,1936; L.G.Schulz, J.Opt.Soc.Amer.47, 64,1957). Accordingly, in the present work there were measured the optical characteristics of gallium in the form of a bulk polycrystalline mirror. The measurements were carried out by the method of J.R.Beattie (Phil.Mag.46,235,1955) in the spectral

Card 1/2



ACC.NR: AP4011501

range from 4000 to 8000 Å. The average results for five series of measurements of the index of refraction  $n$ , the coefficient of absorption  $k$  and the coefficient of reflection  $R$  are tabulated and shown in Fig.1 of the Enclosure. The data for the solid gallium are compared with the results of Nathanson and Schulz for the liquid metal; significant differences are noted. Also investigated was the photoconductivity as a function of wavelength. The results for the solid specimen is shown by curve 1 in Fig.2 of the Enclosure. Curve 2 in this figure is based on the liquid state data of Schulz. The difference between the behaviors of the photoconductivity and reflection as a function of wavelength in the solid and liquid states is attributed to occurrence of interband quantum transitions, made possible by the energy band structure in the crystalline state. Orig.art.has: 2 figures and 1 table.

ASSOCIATION: none

SUBMITTED: 15Apr63

DATE ACQ: 14Feb64

ENCL: 01

SUB CODE: PH

NR REF SOV: 002

OTHER: 008

Card

2/32

USSR/Pharmacology. Toxicology, Vitamins.

V

Abs Jour: Ref. Zhur. - Biol., No 22, 1958, 102872

Author : Eychis, E. Ye.

Inst : -

Title : The Influence of Thiamine on Vascular Tonus.

Orig Pub: Vrachebn. delo, 1957, prilozh., 39

Abstract: Observations were conducted on 256 sick and healthy humans. The degree of change of arterial pressure (AP) under single introduction of vitamin B<sub>1</sub> depends on the initial level and on the dose of the preparation being introduced. A dose of 5-15 mg in normal tonus induces an increase of AP by 5-10 mm of mercury column, in hypotonia and hypertonia by 20-50 mm. Large doses (50 mg) of B<sub>1</sub> decrease AP in the majority

Card 1/2

12

EYCHIS, E. Ye. Cand Med Sci -- (diss) "Data for the problem of the effect of Vitamin B<sub>1</sub> upon the cardiovascular system." Tomsk, 1958. 11 pp (Tomsk Med Inst), 220 copies (KL, 36-58, 117)

-96-

KRUPINSKI, Jerzy; BIELECKI, Jan; EYCHNER, Wiktor; PIEKUTOWSKA, Barbara;  
WOJTASZEWSKA, Krystyna

The appearance of coronary disease in Poland in the light of diseases  
of the circulatory system. Postepy hig. med. dosw. 15 no.6:641-676  
'61.

1. Z Katedry Organizacji Ochrony Zdrowia AM w Warszawie Kierownik:  
doc. dr. J. Krupinski.

(CORONARY DISEASES statist)  
(CARDIOVASCULAR DISEASES statist)

ASHURKOV, Yevstafiy Borisovich; GALIN, A.V., retsenzent;  
SHCHERBAKOV, V.I., retsenzent; EYDEL', A.S., nauchn.  
red.;

[Preparation for the installation of electrical equipment  
on ships] Podgotovka k elektromontazhnym rabotam na su-  
dakh. Leningrad, Sudostroenie, 1964. 66 p.  
(MIRA 18:1)

EYDEL', L.Z., inzh.

Device for measuring residual current in circuit breakers.  
Elektrichestvo no.10:48-52 0 '60. (MIRA 14:9)

1. Vsesoyuznyy elektrotekhnicheskij institut imeni Lenina, Leningradskiy filial.  
(Electric circuit breakers) (Electric measurements)

EYDEL', L.Z., inzh.

Device using magnetrons for measuring the residual current in switches. Elektrichestvo no.1s68-72 Ja '63. (MIRA 16:2)

1. Leningradskiy filial Vsesoyuznogo elektrotekhnicheskogo instituta im. Lenina.  
(Electric switchgear) (Electric measurements)

EYDELAND, I., inzh.

Simple method for anchoring stressed reinforcements. Stroitel'  
no.5:14 My '58. (MIRA 11:6)  
(Prestressed concrete)



POLUBOTKO, M.; DARDIK, N.; KUZNETSOV, V., instructor.; EYDELAND, I., inzh.

Electrothermal stressing of reinforcements. Stroitel' no. 8:4-6  
Ag '58. (MIRA 11:8)

1. Nachal'nik tekhnicheskogo otdela upravleniya Permstroy (for Polubotko). 2. Direktor zavoda No. 6, Glavmosszhelezobeton, Moskva (for Dardik). 3. Institut Orgstroy, Moskva (for Kuznetsov, Eydeland).  
(Prestressed concrete)

BYDELAND, I.K., inzh.

Using the method of prestressing in reinforcing foundations.  
Nov.tekh.mont. i spets.rab. v stroi. 21 no.4:27-28 Ap '59.  
(MIRA 12:5)

(Prestressed concrete)

(Foundations)

RABINOVICH, S.S., inzh.; BYDELAND, I.K., inzh.

Assembling an aluminum dome with a span of 61 m. Nov. tekhn. mont.  
i spets. rab. v stroi. 21 no.8:25-29 Ag '59. (MIRA 12:10)

1. Orgstroy Ministerstva stroitel'stva BSFSR.  
(Domes) (Aluminum, Structural)

HYDELAND, I., inzh.

Using electric heating in stretching reinforcements.

Stroitel' no.10:7-8 0 '59. (MIRA 13:2)

(Electric heating) (Prestressed concrete)

ARSEN'YEV, L.B., inzh.; BYDELAND, I.K.

Using air ballons in erecting domes and cupolas. Mont.1 spets.  
rab.v stroi. 22 no.3:27-29 Mr '60. (MIRA 13:6)  
(Buildings) (Plastics)

EYDELAND, I.K., insh.

Mechanized waterproofing using synthetic coatings. Prom.  
stroj. 38 no.4:63-3 of cover. '60. (MIRA 13:8)  
(Protective coatings) (Waterproofing)

EYDELAND, I.F., inzh.

Latticed aluminum geodesic dome with a span of 48 m. Mont. i  
spets. rab. v stroi. 23 no.10:27-30 0 '61. (MIRA 14:10)

1. Institut Orgstroy Ministerstva stroitel'stva RSFSR.  
(Aluminum, Structural) (Roofs, Shell) (Domes)

S/051/63/014/002/018/026  
E039/E120

AUTHOR: Eydel'berg, M.I.

TITLE: Luminescence in castor oil under the influence of an alternating voltage

PERIODICAL: Optika i spektroskopiya, v.14, no.2, 1963, 299-300

TEXT: For this investigation a normal electro-luminescence condenser is used with an interelectrode distance of 0.04 mm. The voltage is supplied from a 3Г-10 (3G-10) audio-generator with a step-up transformer and light intensities measured using a ФЭУ-19М (FEU-19M) photomultiplier. The castor oil is purified by filtering hot. As the voltage is increased bright transient luminescent spots appear. These disappear as the voltage is increased and weak stable luminescent spots are observed, the intensity of which increases with strength and frequency of the electric field. With further increase in voltage yellow sparks occur at the breakdown potential. The dependence of intensity on voltage is given by:

$$B = B_0 \exp(-b/U^{1/2}),$$

the slope of which is independent of frequency. As the frequency  
Card 1/2



Luminescence in castor oil under ... S/051/63/014/002/018/026  
E039/E120

is increased the intensity approaches a saturation value (at more than 20 Kc/s). The threshold voltage is independent of frequency between about 2 Kc/s to 20 Kc/s but shows a sharp increase for frequencies less than 2 Kc/s. Luminescence is not stimulated by a constant field right up to breakdown (more than 1000 V). There appears to be a resemblance between this effect and auto-electronic emission in MgO. The average field, however, is insufficient to cause electron emission. As the luminescence occurs at points the potential barrier cannot be uniform over the whole electrode surface. This may be due to surface roughness or impurities. The investigation of this effect is continuing. There are 2 figures.

SUBMITTED: January 9, 1962

Card 2/2

ACCESSION NR: AP4011490

S/0051/64/016/001/0097/0101

AUTHOR: Eydel'berg, M.I.

TITLE: Cathode flash of galvanoluminescence of an anodic oxide film on aluminum in diethyl phthalate

SOURCE: Optika i spektroskopiya, v.16, no.1, 1964, 97-101

TOPIC TAGS: cathode flash, galvanoluminescence, aluminum oxide, aluminum oxide luminescence, diethyl phthalate, electroluminescence, memory effect, surface recombination

ABSTRACT: It is known that incident to passage of an electric current through an electrolytic cell one electrode of which is made of aluminum there is observed emission of radiation from the aluminum, which is attributed to electroluminescence of the anodic oxide film on the Al (A.W.Smith, Canad.J.Phys.37,591,1959; Z.Ruziewicz, Bull.Acad.Polon.Sci.3-4,537,1956). When the cell is connected in opposite polarity (Al is the anode) there is observed an anode glow, the intensity of which decays with time. Reversal of the electric field in the cell gives rise to a brief cathode flash. In the present work the variation in the amplitude of the cathode flash was

Card 1/3

ACC.NR: AP4011490

investigated as a function of the time elapsed after cutting off the back voltage. The electrolytic cell used in the experiments was similar to an electroluminescence capacitor, one electrode of which was oxide coated aluminum, the other a glass plate with a conducting layer of tin dioxide on the inner side. The space between the electrodes was filled with diethyl phthalate ( $\sigma = 3.5 \times 10^{-8} \text{ cm}^{-1} \text{ ohm}^{-1}$ ). In the first experiments the aluminum electrode was technical grade aluminum oxidized in glycerol by passage of current. In a second series of experiments the electrode was an already oxidized aluminum film from a commercial capacitor. The light output was detected by an FEU-19M photomultiplier; the amplified output signal was displayed on an MPO-2 oscillograph. It was found that the amplitude of the cathode flash increases as a result of "rest", i.e., with increase of time after cutting off the back voltage. The application of the "forward" voltage results in a current surge, followed by a minimum corresponding to the cathode flash, then the current rises to a maximum and again falls off. The current fluctuation and flash are not repeated when the forward voltage is reapplied immediately, but the effect does occur again if a rest period intervenes. It is concluded on the basis of analysis of the experimental results that the cathode flash mechanism is associated with surface recombination. "I take this opportunity to express my gratitude to N.A. Lebedev for his interest in

2/3

Card

ACC.NR: AP4011490

the work and discussion of the results." Orig.art.has: 1 formula and 4 figures.

ASSOCIATION: none

SUBMITTED: 04Apr63

SUB CODE: PH

DATE ACQ: 14Feb64

NR REF SOV: 004

ENCL: 00

OTHER: 007

Card 3/3

ACCESSION NR: AP4043012

S/0051/64/017/002/0244/0249

AUTHOR: Eydel'berg, M. I.

TITLE: Galvanoluminescence of an anode oxide film on aluminum in diethylphthalate

SOURCE: Optika i spektroskopiya, v. 17, no. 2, 1964, 244-249

TOPIC TAGS: electrolytic cell anode, luminescence, aluminum, diethylphthalate, anode polarization

ABSTRACT: In view of recent interest in phenomena occurring in the boundary layer between the electrolyte and the oxide in an electric cell, and in the effect of this boundary layer on galvanoluminescence, the author has investigated the effect of reverse connection of an electrolytic cell with organic electrolyte (diethylphthalate) on the cathode flash and of the forward connection on the flare-up of anode glow. The aluminum anode was in the form of commercially

1/2

L 12620-65 EWG(j)/EWT(l)/EWT(m)/EPF(c)/EWP(t)/EPR/ERG(b)-2/EWP(b) Pr-L/  
Pg-1 LJP(c) JD

ACCESSION NR: AP4044856 S/0051/64/017/003/0426/0430

AUTHOR: Eydel'berg, M. I. 6

TITLE: Effect of conductivity of the medium on the electrolumines-  
cence of an anode oxide film on aluminum

SOURCE: <sup>21</sup>Optika i spektroskopiya, v. 17, no. 3, 1964, 426-430 <sup>27 18 27</sup>

TOPIC TAGS: electroluminescence, luminescence, luminescence quench-  
ing, electrolyte, aluminum oxide, electric conductivity

ABSTRACT: In order to interpret the differences between the flareup  
and quenching times of aluminum oxide films in various dielectrics,  
the author made a study of the influence of the conductivity of the  
medium on the kinetics of electroluminescence of an anode oxide film  
on aluminum with increasing conductivity of the liquid in the elec-  
trolytic cell. The electrolytic cell consisted of a glass cuvette  
filled with organic liquid and had two electrodes: aluminum foil from

Card 1/3

L 12620-65

ACCESSION NR: AP4044856

an electrolytic capacitor, and a coating of transparent conducting tin dioxide. The electrodes were separated by mica 0.25 mm thick. The remainder of the apparatus was described by the author in an earlier paper (Opt. i spektr. v. 16, 97, 1964) dealing with the electroluminescence of an anode oxide film on aluminum in diethyl phthalate. The results show that with increasing conductivity of the electrolyte the amplitude of the cathode flare increases, the de-excitation time decreases, and an anode flare is generated and grows. The results point to the conclusion that with increasing conductivity of the medium the parameters of the direct and reverse electroluminescence approach those characterizing electroluminescence in aqueous solutions of electrolytes. The electroluminescence develops in the oxide film of the metal, but since this type of electroluminescence is very closely connected with the flow of current through the oxide film, the conductivity of medium and the presence of a double electric layer on the boundary between the oxide film and the liquid must be taken into account in the interpretation of the lu-

Card 2/3

L 12620-65

ACCESSION NR: AP4044856

minescence kinetics. Orig. art. has: 7 figures.

ASSOCIATION: None

SUBMITTED: 14Oct63

SUB CODE: OP, IC

NR REF SOV: 003

ENCL: 00

OTHER: 003

Card 3/3



L 36432-66 · EWT(m)/EWP(t)/ETI IJP(c) JD

ACC NR: AP6015431

SOURCE CODE: UR/0051/66/020/005/0866/0873

AUTHOR: Eydel'berg, M. I.

ORG: none

TITLE: Polarization phenomena in the electroluminescence of anodic oxide films

SOURCE: Optika i spektroskopiya, v. 20, no. 5, 1966, 866-873

TOPIC TAGS: anode polarization, electroluminescence, semiconducting film, optic brightness

ABSTRACT: An adsorption model of the anodic polarization of a semiconducting oxide film is presented and used to account for electroluminescence polarization phenomena described by the author in an earlier article (Opt. i spektr. 17, 244, 1964). In addition, the dependence of the cathodic peak height of brightness waves is studied as a function of the voltage bias in various media (diethyl phthalate, diethyl phthalate - ethanol mixture, ethanol, acetic acid). The position of this peak is determined by the adsorptive capacity of the semiconducting oxide film, phenomena of storage and re-generation of anodic polarization, and the magnitude of the applied voltage. The model of anodic polarization accounts for both the phenomena established earlier and the performed experiments, but it requires further refinements if more accurate quantitative relationships are desired. Orig. art. has: 5 figures, 1 table, and 13 formulas.

SUB CODE: 20/ SUBM DATE: 01Mar65/ ORIG REF: 003

Card 1/1 *gls*

UDC: 535.376

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27 10

ЕЙДЕЛ'КИНД А. М.

USSR/Chemical Technology - Chemical Products and Their Application. Silicates.  
Glass. Ceramics. Binders, I-9

Abst Journal: Referat Zhur - Khimiya, No 19, 1956, 62297

Author: Bogoroditskiy, N. P., Polyakova, N. L., Kirillova, G. K.,  
Eydel'kind, A. M.

Institution: None

Title: New Varieties of Electrotechnical Ceramics

Original

Periodical: Elektrichestvo, 1954, No 7, 56-60

Abstract: Investigations of the structure of ceramics (C) have shown that they must be regarded as a complex system containing crystalline, glassy, amorphous and gaseous phases. It has been found that electric, physical and mechanical properties of C are determined primarily by their crystalline phase. Studies of crystal formations have made it possible to divide electro-ceramics in 3 groups: polycrystals-dielectrics with high or somewhat decreased dielectric properties (presence or absence of relaxation polarization);

Card 1/2

15(2)

SOV/72-59-11-10/10

AUTHORS:

Bogoroditskiy, N. P., Polyakova, N. L., Eydel'kind, A. M.,  
Prokhvatilov, V. G., Petrova, V. P.

TITLE:

Wollastonite Raw Materials for the Ceramics Industry

PERIODICAL:

Steklo i keramika, 1959, Nr 11, pp 32-39 (USSR)

ABSTRACT:

In the Tadzhikskaya and Uzbekskaya SSR, rich deposits of this mineral have recently been found. Wollastonite  $\text{CaO}\cdot\text{SiO}_2$  consists of 49.25%  $\text{CaO}$  and 51.75%  $\text{SiO}_2$ . As can be seen from the paper by D. S. Belyankin, V. V. Lapin, N. N. Toropov (Footnote 1), K. K. Kolobova in 1941 investigated the system  $\text{CaO}\text{-}\text{SiO}_2$ . Wollastonite has hitherto not been used in Soviet industry. The authors of the present paper studied the wollastonite rocks of the following three deposits: Kansay (Tadzhikskaya SSR), Lyangar (Uzbekskaya SSR), and Kalkkitekhdashkiy (Leningrad oblast'). According to the papers by M. Z. Kantor, V. P. Petrov (Footnote 2), this rock contains small quantities of diopside, garnet, quartz, and calcite. The chemical analysis of the wollastonite rocks of the three deposits is given in table 1. The results of the radiographical and microscopical

Card 1/2

Wollastonite Raw Materials for the Ceramics Industry

SOV/72-59-11-10/18

investigations, as well as the investigation of the electric conductivity, are listed in table 2 for natural wollastonite, and in table 3 for synthesized wollastonite. Table 1 shows the dependence of the inclination tangent of the dielectric losses on the burning temperature of the raw materials. Figures 2-5 show microphotographs of wollastonite rocks and synthesized wollastonite, while figures 6-8 show X-ray pictures of these wollastonites. Furthermore, the electric and physico-mechanical properties of radioceramic materials made of wollastonite are given. Figure 9 represents the results of comparative examinations of the heat resistance of samples of steatite material and wollastonite. As can be seen from these results, the heat resistance of the wollastonite samples is much higher. Investigations showed that the wollastonite rocks from the Kansay and Lyangar deposits can be used as a raw material for the production of electrotechnical and other types of ceramics. There are 9 figures and 3 references, 2 of which are Soviet.

Card 2/2

IOLYAKOVA, N.L.; SMOLIN, P.P.; EYDEL'KIND, A.M.

Ironless talcites from the Kirgitey deposits. Stek. 1 ker.  
17 no.9:28-33 S '60. (MIRA 13:9)

(Talc)

BARABANOV, N.V., kand. tekhn. nauk; NYDEL'KIND, L.Sh., inzh.

Improving the repair of ship hulls. Sudostroenie 25 no.7:40-43  
Jl '59. (MIRA 12:12)

(Ships--Maintenance and repair)

GUNDOBIN, A.A., inzh.; EYDEL'KIND, L.Sh., inzh.

Plans for welded structures for the repair of riveted ships. Sudo-  
stroenie 27 no.12:52-55 D '61. (MIRA 15:1)  
(Ships--Maintenance and repair)

1. EYDEL'KIND, S.G.
2. USSR (600)
4. Stomach - Diseases
7. Therapeutic action of mineral waters of Sokolovogorskiy spring in various diseases of the gastro-intestinal tract. Klin.med. 30 no.8, 1952.

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



EYDEL'KIND, Sima Grigor'yevna

Medical Action of Mineral Water (Sokolovogorskogo) Spring on  
Diseases of the Stomach. (Ulcerous disease, gastrics)

Dissertation for candidate of Medical Science degree. Chair of Propaedeutical  
Internal Diseases (head, Prof. I.I. Tavetkov) and 2nd Clinical Hospital,  
Saratov Medical Institute, 1956

EYDEL'KIND, S.G., assistant

Case of hemochromatosis. Kaz. med. zhur. no. 4:58-59 J1-Ag '60.  
(MIRA 13:8)

1. Iz kafedry gospital'noy terapii (zav. - prof. L.S. Shvarts)  
Saratovskogo meditsinskogo instituta.  
(HEMOCHROMATOSIS)

FRAYNT, I.S., inzh.; EYDEL'MAN, A.M., inzh.

Experience with machinery for removing and assembling molds.  
Stroi. i dor mash. 7 no.6:27 Je '62. (MIRA 15:7)  
(Minsk--Precast concrete)

SALIKHBAYEV, Kh.S.; BOGDANOV, A.N.; ZAKHIDOV, T.Z., akademik, red.; TER-  
NOVSKAYA, R.M., red.; EYDEL'MAN, A.S., red.; KARABAYEVA, Kh.U.,  
tekhn. red.

[Fauna of the Uzbek S.S.R.] Fauna Uzbekskoi SSR. Tashkent, Izd-vo  
Akad. nauk Uzbekskoi SSR. Vol.2. [Birds] Ptitsy. Pt.e. 1961. 271 p.  
(MIRA 14:9)

1. Akademiya nauk Uzbekskoy SSR (for Zakhidov).  
(Birds)

BONDARENKO, O.N.; BUTKOV, A.Ya.; VVEDENSKIY, A.I.; DROBOV, V.P.  
[deceased]; ZAKIROV, K.Z.; KOVALEVSKAYA, S.S.; LITCHEVSKIY,  
I.A.; HABIYEV, M.M.; PAZIY, V.K.; ROZHKOVA, O.I.; CHERNEVA, O.V.;  
KOROVIN, Ye.P., akač., ~~red.~~; MUZAFAROV, A.M., akad., red.;  
EYDEL'MAN, A.S., red.; RAKIMANOVA, M.D., red.; GOR'KOVAYA, Z.P.,  
tekhn. red.

[Flora of Uzbekistan] Flora Uzbekistana. Tashkent, Izd-vo Akad.  
nauk Uzbekiskoi SSR. Vol.5. 1961. 666 p. (MIRA 15:3)  
(Uzbekistan--Dicotyledons)

ISLAMBEKOV, R.K.; TURAKULOV, Ya.Kh., doktor biol. nauk, otv. red.;  
EYDEL'MAN, A.S., red.; KARABAYEVA, Kh.U., tekhn. red.

[Clinical morphological study of endemic goiter using radioactive iodine] Kliniko-morfologicheskoe issledovanie endemicheskogo zoba s primeneniem radioaktivnogo ioda. Tashkent, Izd-vo Akad. nauk Uzbekskoi SSR, 1961. 195 p. (MIRA 15:7)  
(TASHKENT PROVINCE--GOITER) (IODINE--ISOTOPES)

SHUL'TS, V.L., prof., doktor geogr. nauk, otv. red.; EYDEL'MAN,  
A.S., red.; KARABAYEVA, Kh.U., tekhn. red.

[Fedchenko Glacier]Lednik Fedchenko. Tashkent, Izd-vo Akad.  
nauk Uzbekskoi SSR. Vol.2. 1962. 197 p. (MIRA 15:9)

1. Akademiya nauk Uzbekskoy SSR, Tashkent. Institut matematiki.  
(Fedchenko Glacier)

ZAKIROV, Kadyr Zakirovich; GRIGOR'YEV, Yu.S., doktor biol. nauk, otv. red.; EYDEL'MAN, A.S., red.; GOR'KOVAYA, Z.P., tokhn. red.

[Flora and vegetation of the Zeravshan Basin]Flora i rastitel'nost' basseina reki Zeravshan. Tashkent, Izd-vo Akad. nauk UzSSR. Pt.2.[Synopsis of flora]Konspekt flory. 1961. 445 p. (MIRA 15:11)

(Zaravshan Valley--Botany)



SHUL'TS, A.L., kand. khim. nauk, otv. red.; EYDEL'MAN, A.S., red.

[Simultaneous electrode reactions] Sovmestnye elektrodnye re-  
aktsii. Tashkent, Izd-vo AN UzSSR, 1962. 142 p.

(MIRA 15:11)

1. Akademiya nauk Uzbekskoy SSR. Tashkent. Institut khimii.  
(Electrodes) (Electrolysis)

ABDURAZAKOV, A.A.; BEZBORODOV, M.A., akademik; ZADNEPROVSKIY, Yu.A.;  
EYDEL'MAN, A.S., red.; GOR'KOVAYA, Z.P., tekhn. red.

[Glassmaking in Central Asia in ancient times and the medieval  
ages] Steklodelie Srednei Azii v drevnosti i srednevekov'e.  
Tashkent, Izd-vo AN UzSSR, 1963. 239 p. (MIRA 17:3)

1. Akademiya nauk BSSR (for Bezborodov).

KHAMUDKHANOV, M.Z., otv. red.; EYDEL'MAN, A.S., red.; GOR'KOVAYA,  
Z.P., tekhn. red.

[Problems of power engineering, automatic control,  
mechanical and mining engineering] Voprosy energetiki,  
avtomatiki, mekhaniki i gornogo dela. Tashkent, Izd-vo  
AN Uzb.SSR, 1962. 244 p. (MIRA 17:1)

1. Akademiya nauk Uzbekskoy SSR, Tashkent. Otdeleniye tekhnicheskikh nauk. 2. Chlen-korrespondent AN Uzb.SSR (for Khamudkhanov).

ISHCHENKO, I.M.; SLONIM, Yu.M., kand.fiz.-matem.nauk, otv.red.; EYDEL'MAN, A.S.,  
red.; KARABAYEVA, Kh.U., tekhn.red.

[Some eclipsing binary stars in constellations Cygnus, Lacerta, and  
Cepheus.] Nekotorye zatemnennye dvoinye zvezdy v sovezdiiakh Lebedia,  
Iashcherity i Tsafeia. Tashkent, Izd-vo Akad. nauk Uzbekskoi SSR,  
1963. 102 p. (Tashkent. Astronomicheskaiia observatoriia. Trudy, Ser. 2,  
vol. 9). (MIRA 16:9)

LAVROV, N.V., akademik, otv. red.; BAKLITSKAYA, A.V. red.; EYDEL'MAN  
~~A.S.~~ red.; SHAFEYEVA, K.A., red.; KARABAYEVA, Kh.U.,  
tekh. red.

[Materials of the Republic Conference on the Development  
of the Gas Industry of Uzbekistan] Materialy Respublikanskoy  
konferentsii po gazifikatsii Uzbekistana, Tashkent, Izd-vo  
AN UzSSR, 1963. 291 p. (MIRA 16:8)

1. Respublikanskaya konferentsiya po gazifikatsii Uzbekistana,  
Tashkent, 1961. 2. Akademiya nauk UzSSR (for Lavrov).  
(Uzbekistan--Gas, Natural)

ALIYEV, Ya.Yu.; ZAHRAMYY, D.T., doktor tekhn. nauk, otv. red.;  
EYDEL'MAN, A.S., red.

[Carbonylation of organic compounds] Karbonilirovanie or-  
ganicheskikh soedinenii. Tashkent, Nauka, 1964. 203 p.  
(MIRA 17:11)

FAZYLOV, Kh.F.; GRINEVICH, G.A., doktor tekhn. nauk, otv. red.;  
EYDEL'MAN, A.S., red.

[Methods for mode calculations of electrical systems; for  
a unified calculational algorithm] Metody rezhimnykh ras-  
chetov elektricheskikh sistem; s edinomu algoritmu rasche-  
tov. Tashkent, Nauka, 1964. 95 p. (MIRA 16:2)

NABIYEV, M.N., akademik; IBRAGIMOVA, U.I.; IL'YASOV, A.I.; RUBO, V.M.;  
NOVIKOVA, F.V.; GLAGOLEV, Ye.D.; GLAGOLEVA, A.F.; EYDEL'MAN, A.S.,  
red.

[Liquid mixed fertilizers produced by treating phosphates with  
nitric acid] Zhidkie slozhnye duobrenia na osnove azotnokislotoi  
pererabotki fosfatov. Tashkent, Izd-vo "Nauka" UzSSR, 1965.  
402 p. (MIRA 18:8)

1. AN UzbekSSR (for Nabyev). 2. Institut khimii AN UzbekSSR  
(for Ibragimova). 3. Chirchiskiy elektrokhimicheskiy kombinat  
(for Il'yasov).



EYDEL'MAN, A. Ye.

The degree of carbonization of coals in plastometric coordinates. I. L. M. Sapozhnikov and A. E. Ridel'. man. Khim. Tverogo Topka 3, 590-5(1984). It is proposed to det. the suitability of coals for the prepa. of coke by their plastic properties. It is possible to predict the properties of a coal by measuring its plastic layer and plotting the other properties on a diagram. A. A. B.

450-514 METALLURGICAL LITERATURE CLASSIFICATION



EYDEL' MAN, H. Ye.

USSR / Chemical Technology, Chemical Products  
and Their Application

I-15

*Treatment of solid mineral fuels*

Abs Jour: Referat Zhur - Khimiya, No 9, 1957, 31832

Author : Eydel'man A. Ye., Kaznacheyev A. M.

Title : Causes of Emulsification of Naphthalene Oil

Orig Pub: Koks i khimiya, 1956, No 4, 53-54

Abstract: A study was made of the effect of various admix-  
tures in the naphthalene oil, and an analysis  
was also made of the emulsion which is formed  
in large amounts on shaking with alkali. The  
investigations revealed that formation of emul-  
sion is due to Fe, which is formed as a result  
of corrosion of the equipment, when its content  
in the oil exceeds 0.01%. In order to prevent

Card 1/2

EYDEL'MAN A. Ye

AUTHORS: Bendik, A.T. and Eydell'man, A.Ye.

68-58-2-8/21

TITLE: Testing of an Automatic Gas Analyser for the Determination of Benzole Hydrocarbons in Coke Oven Gas (Ispytaniye avtomaticheskogo gazoanalizatora dlyaopredeleniya benzol'nykh uglevodorodov v koksovom gaze)

PERIODICAL: Koks i Khimiya, 1958, Nr 2, pp 38-40 (USSR)

ABSTRACT: A gas analyser of the type OP-3301, developed by the GSKB PGA (Leningrad State Union Design Bureau for Instruments) was tested. The instrument was based on the ability of benzole hydrocarbons to absorb ultra-violet radiation (230 - 270 mμ) proportionally to their concentration. The principle of operation of the instrument is shown in Fig.1. It was found during testing that an extremely careful purification of the gas is necessary otherwise the indications of instruments are considerably too high. Despite most careful purification of gas, a continuous shift of zero point to higher values was observed, caused by hydrocarbons precipitating on the windows of the absorption vessel. There are 3 figures and 2 tables.

ASSOCIATION: Zaporozhskiy koksokhimicheskiy zavod (Zaporozh'ye Coke Oven Works)

AVAILABLE: Library of Congress

Card 1/1

1. Gas analyzers - Design
2. Gas analyzers - Test results
3. Gases - Analysis - Equipment