Production of Goods From Fluoroplast-4. Investigation of the Preforming Process

54-8-2/19

(reference 9) about the computation of the press process of dry refractory materials as well as the papers about the preforming process in press powders were taken into consideration (reference 10). The purpose of present paper was the detection of the optimum specific pressure in the preforming from the pulverulent fluoroplast-4, as well as the detection of the optimum thermal retardation of the tablets at this pressure. As criteria for the optimum pressures and preforming times the variations of the linear dimensions and of the specific weight of the pressed samples were chosen. It is shown that the preforming from the pulverulent fluoroplast-4 at specific pressures of not below 300 kg/cm<sup>2</sup> and not above 750 kg/cm<sup>2</sup> is to be carried out. It is shown that a thermal retardation under pressure is necessary in the preforming. For the investigated dimensions of the unworked pieces a formula

 $T = A \frac{H}{D}$ 

Card 2/3

was found. This determined the dependence of the amount

Production of Goods From Fluoroplast-4. Investigation of the Preforming Process

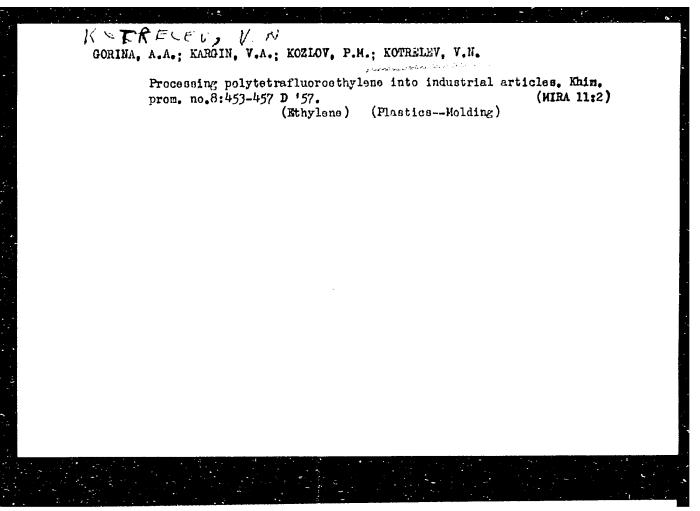
64-8-2/19

of the thermal retardation of the height and diameter of the unworked pieces. T - optimum thermal retardation of the unworked pieces of fluoroplast-4 under the preforming pressure, in minutes. A - constant (in the polymers investigated here it amounted to 7,7 - 9,1) H- the height of the unworked piece. D - diameter of the unworked piece.

There are 4 figures, 2 tables, and 11 references, 2 of which are Slavic.

AVAILABLE: Library of Congress

Card 3/3



NOTRELEY, V., kand. tekhn. neuk; ZARUBITSKIY, A., inzh.

Determining the free formidants content of melamine-and-ureaformeldehyde resins and press-powders. Stroi. mat. 4 no. 7:32-33
J1 '58.

(Formeldehyde)

(Gums and resins)

#### "APPROVED FOR RELEASE: 08/23/2000 CIA-RDP86-00513R000825420005-5

79-28-3-45/61 Kotrelev, V. N., Rubtsova, I. K. AUCHORS:

On the Reaction of Allyloxyethanol With Monovinylethers (O TITLE:

vzaimodeystvii alliloksietanola s prostymi vinilovymi efirami)

Zhurnal Obshchey Khimii, 1958, Vol. 28, Nr 3, pp. 770-771 PERIODICAL:

(USSR)

By many single syntheses and investigations Shostakovskiy and ABSTRACT:

his collaborators showed that acetals can be obtained by the reaction of monovinylethers with compounds containing the hydroxylgroup (reference 1). The synthesis of the acetyls which contain in their composition an unsaturated radical are described in detail (reference 2). The present investigation was conducted with the aim of synthesizing the acetals by means of allyloxyethanol and of investigating their capability for a common polymerization. The synthesis of the mentioned acetals was carried out from monovinylethers and allyloxyethanol according to the method of Shostakovskiy (see reaction process). It is known that the acetals of allyl alcohol are neither capable of polymerizing with respect to the radical

nor to the ion mechanism, but that they are easily capable of Card 1/2

On the Reaction of Allyloxyethanol With Monovinylethers

79-28 3-45/61

forming commonly forming net-like polymers. The authors investigated the capability of the allyloxyethanol acetals for common polymerization with methylmethacrylate at a ratio 10:90 in the presence of benzoylperoxide. In all cases solid, colorless and transparent polymers were obtained; some of them were of increased heat resistance (compared with polymethylmethacrylate). The following acetals unknown until now were synthesized and described: ethylallyloxyethylacetal, isopropylethylallyloxyethylacetyl, n-butylallyloxyethylacetyl and diallyloxyethylacetyl of acetaldehyde. There are 1 table and 4 references which are Soviet.

ASSOCIATION:

Nauchno-issledovatel'skiy institut plasticheskikh mass (Scientific Research Institute for Plastic Materials)

SUBMITTED:

February 14, 1957

Card 2/2

PESIN, L.M.: KOTRELEV, V.N.; ZARUBITSKIY, A.Ye.; SECALEVICH, P.Ye.

The influence of some melamine impurities on its condensation with formaldehyde. Zhur. prikl. khim. 31 no.1:146-148 Ja '58.

(Melamine) (Condensation (Chemistry))

(Formaldehyde)

SHOSTAKOVSKIY, M.F.; KOTRELEY, V.H.; KOCHKIN, D.A.; KUZNETSOVA, G.I.; KALININA, S.P.; BORISENKO, V.V.

Synthesis and various conversions of tin and silicon organic compounds. Zhur. prikl. khim. 31 no.9:1434-1436 S '58. (MIRA 11:10)

1. Institut organicheskoy khimii AN SSSR i Gosudarstvennyy nauchnoissledovatel skiy i proyektnyy institut promyshlennosti plasticheskikh mass.

(Tin organic compounds) (Silicon organic compounds)

KOCHKIN, D.A.; KOTRELEV, V.N.; SHOSTAKOVSKIY, M.F.; KALININA, S.P.; KUZNETSOVA; G.T., BORISENKO, V.V.

Tin organic polymers. Vysokom. soed. 1 no.3:482-484 Mr '59. (MIRA 12:10)

1. Nauchno-issledovatel'skiy institut promyshlennosti plasticheskikh mass.

(Polymers) (Tin organic compounds)

KOCHKIN, D.A.; KOTRELEV, V.N.; KALININA, S.P.; KUZNETSOVA, G.I.; LAYNE, L.V.; CHERVOVA, L.V.; BORISOVA, A.I.; BORISENKO, V.V.

Organotin monomers and polymers. Vysokom.soed. 1 no.10: 1507-1513 0 '59. (MIRA 13:3)

1. Mauchno-issledovatel'skiy institut plasticheskikh mass. (Tin organic compounds) (Polymers)

"APPROVED FOR RELEASE: 08/23/2000 CIA-RDP86-00513R000825420005-5

|--|

S/191/60/000/011/002/016 B013/B054

15.8101

Zernova, K. I., Kirpichnikova, V. V., Kotrelev, N. N.,

Kuz'mina, S. Ya.

TITLE:

AUTHORS:

Aging of Polyethylene and Its Mixtures With Polyisobutylene

Under Atmospheric Conditions

PERIODICAL:

Plasticheskiye massy, 1960, No. 11, pp. 4 - 8

TEXT: The present paper deals with the aging of polyethylene and its mixtures with polyisobutylene. Samples of ethylene and its mixtures with polyisobutylene at a ratio of 90:10 ((NOB-90) - POV-90), 67:33 (POV-67), and polyisobutylene at a ratio of 90:10 ((NOB-90) - POV-90), 67:33 (POV-67), and 50:50 (POV-50) were subjected to fatigue tests in the open air under different climatic conditions in the central part of the USSR, on the coast of the BarentsSea and of the Black Sea, and in Central Asia. The test conditions are sufficiently characterized by the meteorological data of the regions concerned (Table 1). Mechanical characteristics, fatigue strength and elongation, were determined, and thermomechanical properties as well as structural changes were studied. In all materials of the group mentioned,

Card 1/3

### APPROVED FOR RELEASE: 08/23/2000 CIA-RDP86-00513R000825420005-5'

#### 88546

Aging of Polyethylene and Its Mixtures With Polyisobutylene Under Atmospheric Conditions S/191/60/000/011/002/016 B013/B054

a noticeable deterioration of mechanical properties was observed during the tests: a decrease in strength and a considerable drop in relative elongation. A higher polyisobutylene content reduced the resistance of the polymeric mixture of atmospheric factors. It was found that higher temperatures accelerated the aging of the material, and that a continuous and intense exposure to sunlight greatly increased the degree of aging. Zhurkov's apparatus, modified by Kanavets (Ref. 2), was used to study the thermomechanical properties. The thermomechanical curves showed: 1) The range of elasticity was missing in all curves; 2) after two years of aging, the temperature of transition to the viscous state shifted slightly towards lower temperatures; 3) after aging the curves for all materials showed a character different from that before aging. This indicates the formation of reactive groups due to chemical changes during aging. The strong decrease in elongation, starting in all polyethylene - polyisobutylene mixtures after 6 - 8 months already, indicates the predominance of the destruction process during aging. The structural changes during aging were studied by infrared spectroscopy, and the formation of aldehyde groups was ascertained. Like other hydrocarbons, polyethylene oxidizes

Aging of Polyethylene and Its Mixtures With Polyisobutylene Under Atmospheric Conditions

S/191/60/000/011/002/016 B013/B054

during aging with formation of peroxides which decompose and give secondary decomposition products, aldehydes, carbon dioxide, etc. (Ref. 1). The tests showed that polyethylene and its mixtures with polyisobutylene cannot be used longer than 3-4 months in the mentioned characteristic areas under atmospheric conditions (in the open air) because of their low resistance to solar radiation. There are 10 figures, 1 table and 4 Soviet references.

Card 3/3

S/191/61/000/003/005/015 B124/B203

15.8114

Kotrelev, V. N., Kalinina, S. P., Kuznetsova, G. I.

AUTHORS:

Polymers on the basis of ferrocene and its derivatives

PERIODICAL: Plasticheskiye massy, no. 3, 1961, 24-26

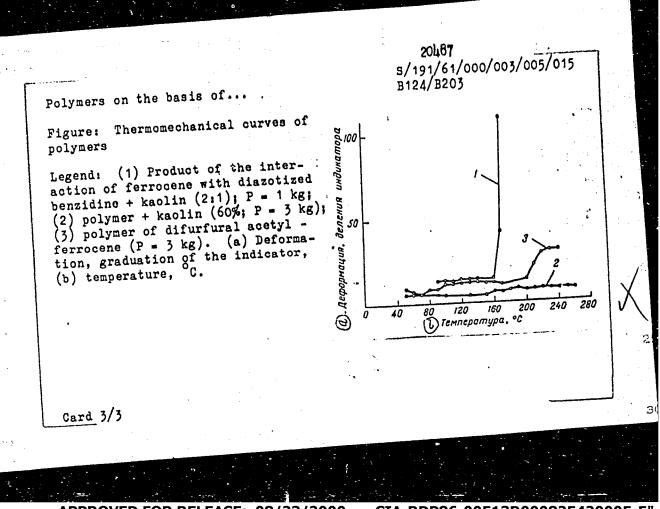
TEXT: The authors obtained resins and the corresponding molding powders from some products containing a ferrocenyl residue. It was attempted to obtain polymers through interaction of ferrocene with diazotized benzidine and polymerization of unsaturated ferrocenyl ketones. The reaction of ferrocene with diazotized benzidine was conducted in the manner described in publications for the arylation of ferrocene with diazo compounds (Ref. 5: A. N. Nesmeyanov, E. G. Perevalova, R. V. Golovnya, O. A. Nesmeyanova, DAN SSSR, 27, 459 (1954); E.O.Fischer, D. Sens, Z.Naturforsch., 9a, 386 (1954); Ref. 6: G. D. Broadhead, P. L. Pauson, J.Chem.Soc., 1955, 367). In the reaction with diazotized benzidine, however, a mixture of products was formed which could not be separated. Ferrocene and benzidine were reacted in different molar ratios (1:3; 1:1, 2:1), and gave mixtures with different solubilities and Card 1/3

Polymers on the basis of ...

S/191/61/000/003/005/015 B124/B203

melting points; but it was not possible to isolate pure substances. An attempt has also been made to obtain high-molecular compounds on the basis of unsaturated ferrocenyl ketones. For this purpose, the reaction of 1,1-diacetyl ferrocene with furfural was performed. The mixture was heated in methylene chloride and alcohol in the presence of lye at molar ratios of 1;2 and 1:1 between 1,1-diacetyl ferrocene and furfural. With 1:1, it was possible to produce a polymer. The thermomechanical properties of the resulting polymers as determined with a consistemeter 3 Soviet-bloc and 3 non-Soviet-bloc. The reference to the English-Janguage publication reads as follows: L. E. Coleman, M. D. Rausch,

Card 2/3



APPROVED FOR RELEASE: 08/23/2000 CIA-RDP86-00513R000825420005-5"

26290 s/190/61/003/008/003/019 B110/B220

15.8150

Shostakovskiy, M. F., Kotrelev, V. N., Kalinina, S. P., AUTHORS:

Kuznetsova, G. I., Layne, L. V., Borisova, A. I.

TITLE:

Organotin monomers and polymers. IV. Synthesis and conversion

of tin-containing esters of acrylic and cinnamic acids

PERIODICAL:

Vysokomolekulyarnyye soyedineniya, v. 3, no. 8, 1961,

1128-1130

TEXT: The present paper deals with the synthesis of organotin derivatives of cinnamic and acrylic acids. The synthesis was performed by a method developed by the authors. The vaporous alkyl halide was reacted in a tube furnace or autoclave with an Sn-Mg alloy in the presence of various solvents and catalysts. The alkyl-halide tin compounds formed were saponified with lye to the corresponding hydroxy derivatives, and then the esters were obtained by reaction with acrylic or cinnamic acid. 1) Triethyl-stannyl acrylate (C2H5) SnOCOCH=CH2, was obtained from a 50% aqueous solution of acrylic acid at 5-10°C by adding triethyl stannol. The white crystalline

Card 1/3

26290 S/190/61/003/008/003/019 B110/B220

Organotin monomers and polymers ...

precipitate (melting point  $102^{\circ}$ C) could be dissolved in organic solvents. 2) In the same way, tributyl-stannyl acrylate was obtained from hexabutyl stannous oxide and acrylic acid. 3) The triethyl-stannyl ester of cinnamic acid was obtained from cinnamic acid and hexaethyl stannous oxide according to the equation  $(C_2H_5)_6Sn_2O + 2C_6H_5 = CHCOOH \longrightarrow 2(C_2H_5)_3SnOCOCH = CHC_6H_5 + H_2O$ . The organotin compounds obtained polymerize easily, and form transparent solid copolymers with styrene and methyl methacrylate. The thermomechanical properties of some polymers and copolymers are shown in Fig. 2. There are 2 figures and 3 Soviet references.

ASSOCIATION: Nauchno-issledovatel'skiy institut plasticheskikh mass

(Scientific Research Institute of Plastics)

SUBMITTED: September 1, 1960

Card 2/3

15.8150

26291 S/190/61/003/008/004/019 B110/B220

AUTHORS:

Shostakovskiy, M. F., Kotrelev, V. N., Kuznetsova, G. I., Kalinina, S. P., Layne, L. V., Borisova, A. I.

TITLE:

Studies on the synthesis and conversions of organotin monomers and polymers. V. Study of the formation of organotin polymers as a function of the polymerization conditions, and some physicochemical properties of organotin polymers

PERIODI CAL:

Vysokomolekulyarnyye soyedineniya, v. 3, no. 8, 1961, 1131-1134

TEXT: The present study deals with the yield in polymers of triethyl-stannyl methacrylate and acrylate as a function of polymerization time, temperature, initiation, and concentration. Benzoyl peroxide, azoisobutyric acid dinitrile, or triethyl-benzyl ammonium chloride served as initiators. The results are shown in Fig. 1. The composition of the copolymer from triethyl-stannyl methacrylate and methyl methacrylate was studied for initial molar ratios of the components of 1:1, 1:4, and 1:12. At an initial

Card 1/5

26291 S/190/61/003/008/004/019 B110/B220

Studies on the synthesis and ...

ratio of 1:1, the components of the copolymer were approximately equal. The composition was, however, 5:1 when the initial ratio had been 1:4. It is concluded that organotin compounds polymerize more slowly than methyl methacrylate. Experimental results: 1) The region of strong deformation of organotin methacrylates is found at higher temperatures than that of the corresponding acrylates. 2) The temperature of initial deformation decreases considerably with increasing size of the alkyl radicals. The dielectric properties of copolymers are listed in Table 1. The copolymer of triethyl-stannyl methacrylate with methyl methacrylate was easily hydrolyzed by alkalis. It is, however, stable in water, dilute HCl, and dilute H2SO4. Papers of M. M. Koton et al. (Ref. 4: Mezhdunarodnyy simpozium po

makromolekulyarnoy khimii, Moskva, June, 1960, I sektsiya, p. 167. (International Symposium on High Molecular Chemistry, Moscow) are mentioned. There are 2 figures, 2 tables, and 4 Soviet references.

ASSOCIATION:

Nauchno-issledovatel'skiy institut plasticheskikh mass (Scientific Research Institute of Plastics). Institut organicheskoy khimii AN SSSR (Institute of Organic Chemistry AS USSR)

Card 2/5

KOTRELEV, V.N.; "ARUBITSKIY, A. Ye.

Method for the quantitative determination of melamine by sublimation. Zav.lab. 27 no.10:1207-1208 '61. (MIRA 14:10)

1. Institut plasticheskikh mass i Nauchno-issledovatel'skiy institut novykh stroitel'nykh materialov Akademii stroitel'stva i arkhitektury SSSR.

(Melamine)

SHCHERBATENKO, V.V.; MIKULINSKAYA, L.R.; BEGANSKAYA, L.S.; ZUBKOV, I.A.; GRINEVICH, K.P.; KOTRELEV, V.H.; VOLODIH, P.A.

Use of organosilicon compounds and fluoroplast in the baking industry. Trudy TSNIKHP no.8:85-88 \*60. (MIRA 15:8)
(Bakers and bakeries-Equipment and supplies)
(Protective coatings)

TIKHOMIROVA, N.S.; ZERNOVA, K.I.; KOTRELEV, V.N.

Some methods of evaluating plastic lining materials in their relation to corrosive liquids. Plast. massy no.12:40-45 '62. (MIRA 16:1)

(Plastics) (Corrosion-resistant materials)

CIA-RDP86-00513R000825420005-5" APPROVED FOR RELEASE: 08/23/2000

ACCESSION NR: AP3001579

\$/0191/63/000/006/0026/0029

AUTHOR: Akutin, M. S.; Kotrelev, V. N.; Kovarskaya, B. M.; Kostryukova, T. D.; Tarasov, V. V.; Sidnev, A. I.; Rodin, E.; Nitohe, O. N.; Nayman, N. B.

TITLE: Casting of polycarbonates under pressure.

SOURCE: Plasticheskiye massy, no. 6, 1963, 26-29

TOPIC TAGS: Diflon, polycarbonate, thermal oxidation

ABSTRACT: The change in molecular weight and mechanical properties of a poly-carbonate "Diflon" under laboratory oxidation and on pressure-casting was studied. Polycarbonates are destroyed more rapidly by pressure casting than by thermal oxidation. Apparently, this acceleration is combined with the presence of mechanical destruction. The minimum amount of time and temperature for transforming the polymer to the viscous-flowing state should be used in order to reduce the extent of destruction. Orig. art. has: 9 figures, 1 table and 1 equation.

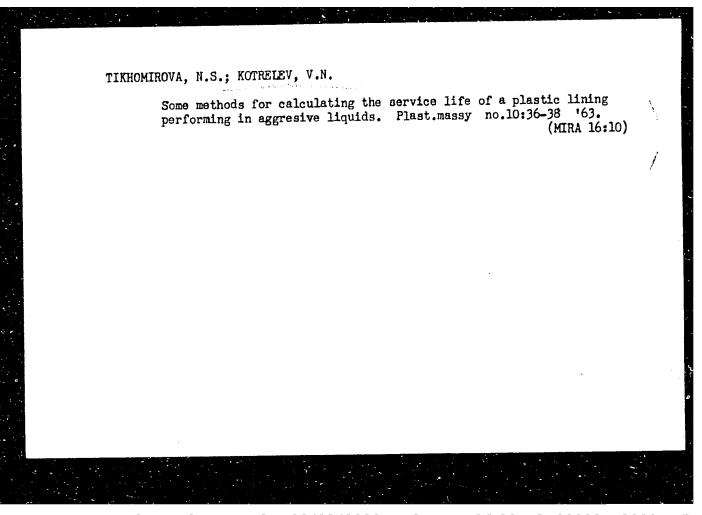
ASSOCIATION: none

SUBMITTED: 00

DATE ACQ: OLJu163

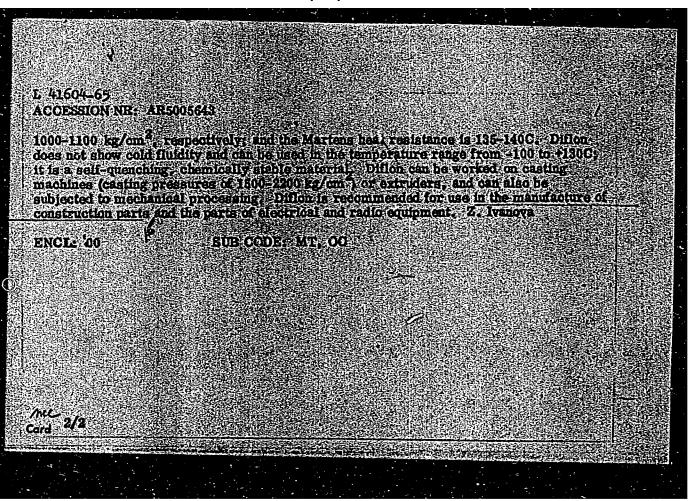
ENCL: 00

Card 1/2



### "APPROVED FOR RELEASE: 08/23/2000 CIA-RDP86-00513R000825420005-5

1,41604_65 ENT(#)/EIP(6) C	64-4 DM B/0081/64/000/022/5039/5089 2/4	
ACCESSION NR. AX5005641		
SOURCE: Ref. zh. Khimiya, Abs	2624	
ATTROR: Kotrolov V-N.; Kosto	rukova (Y.D.; Bestamilibyy, I.B.; Tarasov, V.V.	
TITLE: The properties, propessi	ns and use of polycarbonates (6	
	e plasta mass v mashinostr. i priborostr. Minak. 1964.	
163-172		
	neals; polycarbonate mechanical property, polycarbonate	
working radio part manuactural	heals, polycarrogate mechanical diphenyl carbonate/ phosgene, transesterit cation, diphenyl carbonate/	
Diffor polycarponate		
TRANSLATION: The "Diffion" by	and of polycarbonate can be obtained by the direct. with phosgans or by the transestarification of diphenyl. Thirton has a molecular weight of up to 200,000, a	
enonitie of avily of 1.0, a denoted		
secon/cm²; the tensile compre	The specific impact uniquities of 800-700, 800-900 and sessing strength are 600-700, 800-900 and	
Card 1/2		
CIIO ~ -		
		ري. د د د



TOORGO OF ENT(s)/EPF(s)/BR(s)/FF PASIFFELT THE STOOR STOOK S

meter; and the secondary structure was emissioned by sicrophotographing brittle cleavage sections of sumples kept fol 2 firs, in [Iquid nitrogen. The state of subjections of the polycithonates was found to be closely related to the chain's chemical composition the more complex and bulky chains of PK-2 developing pourly ordered subribous structural patterns, inferior to the more perfect spheroilitic aroutural patterns of PK-1. The former, however, exhibited greater impact (50-160 kg/cm; and lensite (800 kg/cm;) strength than the latter. The polymer (supple was provided by the Endown technology of Macromolecular Kniyarnykh sevedimenty HTMPT (Department of the Fachnology of Macromolecular Champounds, MEDIL). Originate high 7/ffgures.  MINERATION: Some Supplement of the Fachnology of Macromolecular Champounds, MEDIL). Originate high 7/ffgures.	L 40989-65 ACCESSION RR: AP5006563	
ERCT.: 00 SUB CODE: MT.  ED. BEE SOV: 003  CTHER: 002	molecular order tiness of the molecular order tiness of the the chair's chemical compositioned developing poorly ordered and perfect spheroites arrunture greater impact (40-160 kg/cm latter The polymer neeple tilyarnyth seyedinenty HENTE Tampounds, HENTE Cels ar	Ample int 2 him in liquid microgen. The state of polycationstes was found to be closely related to long the sorte complex and only chains of PK-2 crained structural patterns interfor to the more patterns of PK-1. The former, however, exhibited and feesile (800 kg/cm) attempth them the seas provided by the Eafedra tekinologii vysokomolections are the patterns.
And And	Supervision (O)	
	d A	

L 5298-66 EWT(m)/EPF(c)/EWP(j)/T RPL WW/JW/RM  ACC NR: AP5025037 SOURCE CODE: UR/0286/65/000/016/0084/0084	<b>3</b>
AUTHORS: Kotrelev, V. N.; Opolovenkov, A. F.; Kalinina, S. P.; Kuznetsova, G.  I.; Salvina, M. Ye.; Gusikova, O. I.; Nagornaya, Yu. F.; Akutin, H. S.	
ORG: none  TITLE: A method for obtaining grafted polymers. Class 39, No. 173949 /announced by State Scientific Research Institute of Plastics (Goswarstvennyy nauchnosissledovatel skiy institut plastmass)	
SOURCE: Byulleten' izobreteniy i tovarnykh znakov, no. 16, 1965, 84 TOPIC TAGS: polymer, grafted polymer, plastic, monomer, vinyl, fluorine	
ABSTRACT: This Author Certificate presents a method for obtaining grafted polymers by grafting vinyl polymers to fluorine-containing polymers in the presence of an initiator. Cerium ammonium nitrate is used as the initiator.	
SUB CODE: MT, GC SUBM DATE: 11Feb63/ ORIG REF: 000/ OTH REF: 000  Card 1/1 C UDC: 678.743.41 66.097.3:546.39	
. O9010603	

### "APPROVED FOR RELEASE: 08/23/2000

CIA-RDP86-00513R000825420005-5

RM IJP(c) EWT(m)/EWP(j)L 08795-67

ACC NR: AP6030847

UR/0191/66/000/009/0020/0022 SOURCE CODE:

AUTHOR: Kolesnikov, G. S.; Kotrelev, V. N.; Kostryukova, T. D.; Lyamkina, Z. V.; Pechenkin, A. A.; Smirnova, O. V.; Korovina, Ye. V.

ORG: none

TITLE: Film materials based on polycarbonate "ilon"

SOURCE: Plasticheskiye massy, no. 9, 1966, 20-22

TOPIC TAGS: polycarbonate plastic, synthetic material, polymer, dielectric layer, polymer dielectric, dielectric material .

ABSTRACT: Physicomechanical, structural, and dielectric properties of the polycarbonate "ilon" films prepared from 1,1-di-(4-oxyphenyl)-cyclohexane and phosgene were studied in the temperature range from 60 to 210°C. It was found that the tensile strength of the ilon films was a function of the molecular weight of the polycarbonate. The softening point of the ilon films was found to be approximately 160-170°C. It was also found that the structure of the ilon films is less regular than that of the "diflon"-films [diflon is a brand name of a commercial polycarbonate resin]. It was found that ilon films exhibit constant dielectric properties in the range from -60 to +170°C. It is concluded that the ilon films are superior to diflon films for application as dielectric films. Orig. art. has: 5 figures and 2 tables.

SUB CODE: 11/ SUBM DATE: 00/ ORIG REF: 003/ OTH REF:

Card 1/1 nst

678 673 41 5 06-416 UDC:

**APPROVED FOR RELEASE: 08/23/2000** 

CIA-RDP86-00513R000825420005-5"

#### "APPROVED FOR RELEASE: 08/23/2000 CIA-RDP86-00513R000825420005-5

ACC NR: AP7002973 (A) SOURCE CODE: UR/0413/66/000/024/0069/0069

INVENTOR: Kotrelev, V. N.; Ostroumov, B. D.; Opolovenkov, A. F.; Krasnov, V. A.

ORG: none

TITLE: Method of preparing a chemical composition from fluoroplast 40. Class 39, No. 189571

SOURCE: Izobreteniya, promyshlennyye obraztsy, tovarnyye znaki, no. 24, 1966, 69

TOPIC TAGS: plastic, teflon, polytetrafluoroethylene, fluorocarbon plastic resultations of the plastic plants of the plants of t

ABSTRACT: An Author Certificate has been issued for a method of preparing a composition based on ftoroplast-40 (an unidentified fluorocarbon plastic). The technological properties of the composition are improved by adding up to 10% of polytetrafluoroethylene to the ftoroplast-40 during processing. [Translation]

SUB CODE: 11/SUBM DATE: 18Dec64/

UDC: 678, 743, 41-139

#### KOTRIKADZE, N.S.

Variation in the chemical composition of Tiflis mineral waters. Soob.AN Gruz.SSR 24 no.5:547-554 My 160. (MIRA 13:8)

l. Geologicheskiy institut AN GruzSSR. Predstavleno akademikom A.I. Dzhanelidze.

(Tiflis-Mineral waters)

# APPROVED FOR RELEASE: 08/23/2000 CIA-RDP86-00513R000825420005

KOTRIKOV, Kim Pavlovich, starshiy prepodavatel

Determination of the frequency characteristics of an asynchronous motor with frequency regulation. Izv.vys.ucheb.zav.; elektromekh. 5 no.3:277-284 162.

1. Kafedra elektricheskikh mashin Odosskogo vysshego inzhenernogo morskogo uchilishcha.
(Electric motors, Induction)

## KOTRIKOV, Kim Pavlovich, starshiy prepodavatel'

Bffect of the saturation of the magnetic circuit of an asynchronous machine on its characteristics with presence of frequency regulation.

1zv. vys. ucheb. zav.; elaktromekh. 5 no.12:1372-1378 '625 (MIRA 16:6)

1. Kafedra elektricheskikh mashin vysshego inzhenernogo morskogo uchilishcha.

(Bleatric motors, Induction)

### KOTRIKOV, K.P., inzh.

Effect of the magnitude of magnetic flux on the heating of a frequency regulated induction motor. Izv. vys. ucheb. zav.; energ. 6 no.9:30-36 S 163. (MIRA 16:12)

1. Odesskoye vyssheye inzhenernoye morskoye uchilishche. Predstavlena sektsiyey elektromekhaniki i avtomatiki nauchnoy konferentsii.

KOTRIKOV, K.P., starshiy prepodavatel'

Frequency starting of asynchronous motors. Sid. sil. ust. no.2:153-162 '63. (MIRA 17:1)

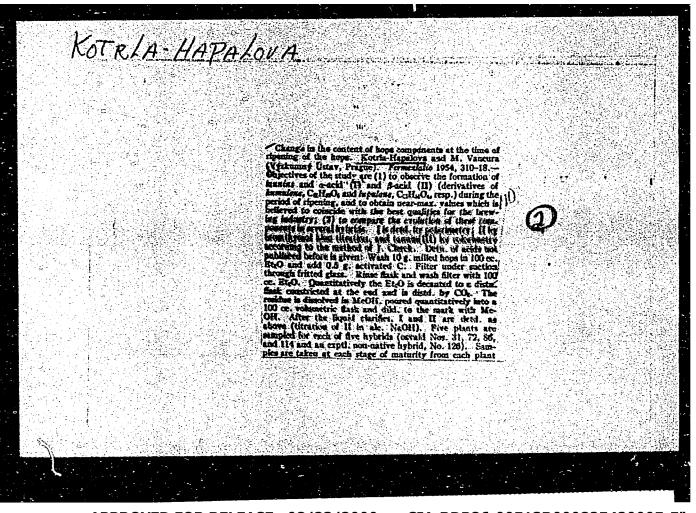
1. Odesskoye vyssheye inzhenernoye morskoye uchilishche.

KOTRIKOV, Kim Farlovcia, ntarakty propodavatel:

Circle diagram of an asymphonous motor with varying frequency.

Izv. vys. ucheb. mav.; elektromekh. 7 no.2:166-173 '64.

(MIRA 17:4)



KOTRLA-HAPALOVA, M.

CZECHOSLOVAKIA / Chemical Technology. Chemical Products and Their Application. Fermentation Industry.

Abs Jour : Ref Zhur - Khimiya, No 3, 1957, No 10235

Author : Kotrla-Hapalova, M.

Inst : Not given
Title : The Lowering of the Brewing Qualities of Hops Infested by

Rot

Orig Pub : Kvasny prumysl, 1956, Vol 2, No 3, 52-55.

Abstract : The negative effect of rot (Pharadon humuli) on the quali-

ty of hops has been confirmed by organoleptic tests on beer

produced from rot-infested hops.

Card : 1/1

KO APEROVEDA BRELEASE: 108/23/2000

CIA-RDP86-00513R000825420005-1

Affect of some constituents, especially the calledge, of malt extract on course of hegaleging. V. Salet, M. Kotris-Hapalovs and M. Vancura (Bressale, 1946, 56, E. 189—196).—The properties prep. Collapulin is chosen (in preference to four other prep.) for experions to the effects of modification of the wort proteins. The best results (with average hore additions) as requires utilisation of the hop-litters and the general quality of the resulting best are obtained with the use of 1 g of the prep. per l. the smallest amount tried) of first wort, which gives a ratio of the Lundin protein fractions A: B: C of 5: 2: 4—5 in the wort, and 1: 1—2: 4—7 in the best. The proteolytic preps appears also to have an amylolytic effect on the complex carbohydrates. Collapulin increases colloidal and biological stability, but excessive pptn. of the proteins of high and medium mod, wt. tends to spoil the taxto of the hear. P. S. Asur.

~ //·

### KOTRLA - HAPALOVA, M.

Influence of furnacemia sensitivates and proteins of horse on best proteins. V. Saha, M. Kottis Hapatore and M. Vandura (Areaster), 1856, 186 B., 261 — 1869.—The valuit of experimental furnative of 1864, 186 B., 261 — 1869.—The valuit of experimental threwings continus the improvement of the quality of the resulting beer (in roomerises) with normally hopped beer) by the separate use in equivalent amounts of the instante bitter + tamins hop-fraction. Understable effects on tests, retentled in solution of bitters, colour and biological stability result from additions (together with the bitters + tannins) of an extract of the hops obtained after removal of the bitters and tannins. These extracts contain the formogenite and protein constituents (amounting to ~10%) of the hops; although > 20% of their total amount passes into solution during hop-buling; their presence has an undesirable effect on the outcome. The final hop-resided left after the extraction with water) has a less undesirable effect on beer quality. These results explain the (previously observed) undesirability of exhaustive extraction of hops during boiling (cf. 1.S.F.A. Abstr., 1935, it, 181).

P. S. Arup, T. S. A

# KOTRLA- HAPALOVA, MILENA

СZECHO**ЯРРКОУСЮЛЕОК RELIEASE/ 98/12/3/2009**oduc **СІА/RDP86-0051/3/R000825420005-5** 

Their Application, Part 3. - Fermentation Industry.

: Ref Zhur - Khimiya, No 7, 1958, 22991

Author Milena Kotrla-Hapalova

Inst : Experimental Cooking of Hops Treated with Phosphorous Title

Insecticides.

Orig Pub : Kvasny prumysl, 1957, 3, No 6, 122-125; 2nd and 3rd pp.

of cover.

Abstract The safety of the use of organophosphorus insecticides (cistox, methacystox (I) and ekatox (II)) mixed with cupricol (III) was investigated with experimental cooking. It was established that the preparations produced a weakly stimulating action on the formation process of tanning

substances of hops, and that I and II produced a weak inhibiting action on the formation of bitter substances.

Card 1/2

### KotRLA-GAPALOrd

'CZECHOSLOVAKIA/Chemical Technology - Fermentation Industry.

н.

Abs Jour

: Ref Zhur - Khimiya, No 16, 1958, 55474

Author

Salach, Kotrla-Gapalova, Vanchura

Inst

barach, kourra-daparova

Title

The Effect of Chemical Composition of Water upon the

Quality of Beer and Wort.

Orig Pub

Kvasny prumusl, 1958, 4, No 1, Priloha, 1-9.

Abstract

In studying the conditions needed for the rational utiliration of hops in the process for preparing wort, an investigation was made on the effect of different water hardness, i.e., total, temporaty and permanent hardness. It was found that the ratio of calcium and magnesium salts, particularly bicarbonates to sulfates and chlorides, depends on a change in pH. The optimum ratio of temporary to permanent hardness is 1:1. The value of a total hardness has a smaller magnitude. Magnesium bicarbonate has a greater undesirable effect upon the process

Card 1/2

### APPROVED FOR RELEASE POR 25/25/2000 ment CTAPR DP86 00513R000825420005-5

Abs Jour : Ref Zhur - Khimiya, No 16, 1958, 55474

for preparing wort (with hops added), and on the quality of beer than does calcium bicarbonate. An excess of the latter significantly reduces the unfavorable effect of magnesium bicarbonate. The need for more detailed information on permanent hardness is pointed out (in particular, the determination of calcium type salts). Water having a high temporary hardness causes the pH to increase and favors the formation of bitter substances in hops in the so-called molecular form, as a result of which beer acquires a sharp bitter taste.

Card 2/2

#### KOTRLA-HAPALOVA, M.

Objective determination of beer bitters. (To be contd.) p. 177.

KVASNY PRUMYSL. (Ministerstvo potravinarskeho prumyslu) Praha, Czechoslovakia. Vol. 5, no. 8, Aug. 1959.

Monthly List of East European Accessions (EEAI) LC Vol. 8, no. 11, Nov. 1959. Uncl.

CIA-RDP86-00513R000825420005-5"

APPROVED FOR RELEASE: 08/23/2000

Chiective determination of heer bitter, p. 200

MARCH PARENT. (Ginistenctve petrovinouskeho prvogolu)
Prvha, dzeckoslovekia Vol. 5, no. 0, Sept. 1950.

Menthly Liet of Hast European accession, (UVAI), Lt., Vol. 0, No. 12, Boc. 1959
Uncl.

ACC NRI AP6024088

SOURCE CODE: CZ/0082/66/000/001/0042/0047

AUTHOR: Kolar, O.; Behounkova, L.; Klobusicka, M.; Kotrle, M.

37

ORG: Neurological Clinic/headed by Professor, Doctor J. Hrbek, Doctor of sciences/, Medical Faculty, FU, Olomouc (Neurologicka klinika lekarske fakulty FU); Microbiological Institute/headed by Docent, Doctor E. Marsalek/, Medical Faculty, FU, Olomouc (Mikrobiologicky ustav lekarske fakulty FU); Department of Experimental Cytology, SAV/headed by Academician I. Stanek/, Bratislava (Oddeleni experimentalni cytologie SAV); Histological and Embryological Institute, Medical Faculty, FU/headed by Docent, Doctor M. Obrucnik, Candidate of sciences/, Olomouc (Histologicky a embryologicky ustav lekarske fakulty FU); [Kolar] Faculty Hospital, Olomouc (Fakultni nemocnice)

TITLE: Problem of immunological reactions connected with mononuclear cells in the cerebrospinal fluid in the course of subacute encephalitis Dawson-Pette-Doring-van Bogaert [This paper was presented at the 8th Pediatric Neurology Days held in Stary Smokovec in 1964 as well as at the Biological Days held in Prague in 1964.]

SOURCE: Coskoslovenska neurologie, no. 1, 1966, 42-47

TOPIC TAGS: immunology, central nervous system, encephalitis, experiment animal, antigen, cell physiology, neurology

ABSTRACT: An attempt was made to transfer late hypersensitivity from 12 patients to guinea pigs. The antigen used was an extract from the brain tissue of a deceased patient who suffered from subsolute Dawson-Fette-Dorig-van Bogaert encephalitis. A positive reaction to cerebrospinal fluid of patients was found in 50% of the guinea- pigs. Late Cord 1/2

015

16 53

L 32997-66

ACC APPROVED FOR RELEASE: 08/23/2000 CIA-RDP86-00513R000825420005-5 hypersensitivity was transferred only in 1 of 22 cases. Experiments with tissue cultures from fetal brain indicated that in addition to mononuclear cells originating from blood elements and leptomeningeal structures, elements originating in brain or spinal cord tissue should be expected in the cerebrospinal pathways in subscute cases of the discussed encephalitis. Immuno-logical function of fluid mononuclear cells in transferring late hypersensitivity by the cerebrospinal fluid are discussed. [Based on authors' Eng. abst.] [JPRS]

SUB CODE: 06 / SUBM DATE: 20Jul64 / ORIG REF: 008 / SOV REF: 002 OTH REF: 010

Card 2/2

KOLAR, O.; BEHOUNKOVA, L.; KLOBUSICKA, M.; KOTRLE, M.

The problem of immunological reactions connected with mononuclear cells in the cerebrospinal fluid in the course of subacute encephalitis Dawson-Pette-Doring-van Bogaert. Cesk. neurol. 29 no.1:42-47 Ja 166.

```
MICHALEC, C., RNDr.; KOCNA, A., MUC.; KOTRLIK, J., MUC.

Lipid metabolism. I. Datermination of total, free, and esterified cholesterol in blood serum in carcinomas and in liver diseases.

Cas. lek. cesk. 91 no.26:767-771 27 June 52.

1. Ustr. laboratore SFN, Praha; predn. prof. dr. J. Horejsi.

(NEDPLASMS, blood in, cholesterol, determ.)

(LIVER, diseases, liver cholesterol in, determ.)

(CHOLESTEROL, in blood, in cancer & liver dis., determ.)

(BLOOD, cholesterol, in cancer & liver dis., determ.)
```

DULICEK, K.; KOTRLIK, J.

Contribution to the importance of observing the level of serum transaminases during recovery from infectious hepatitis. Cas. lek. Cesk. 104 no.46:1279 19 N \*65.

1. Infekcni klinika lekarske fakulty Karlovy University v Hradci Kralove (prednosta prof. dr. J. Cndracek).

### APPROVED FOR RELEASE: 08/23/2000 CTA-RDP86-00513R000825420005-

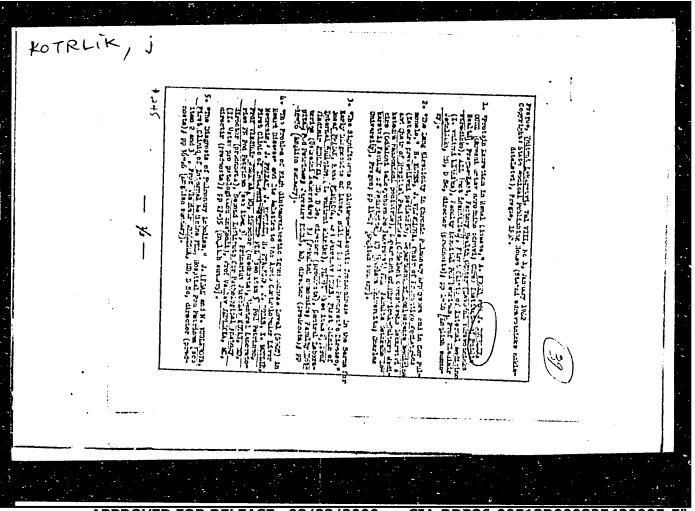
CZECHUSLOVAKIA UDC 616.831.9-002.022.71.252-02:616.711-002.1

KOTRLIK, J.; PECHACEK, M.; Clinic of Infectious Diseases, Medical Faculty, Charles University (Infekcni Klinika Lekarske Fakulty KU), Hradec Kralove, Head (Prednosta) Prof Dr J. OHDRACEK.

"Staphylococcal Meningitis Caused by Osteomyelitis of the Spine."

Praguo, Casopis Lekaru Ceskych, Vol 105, No 27-28, ly Jul 66, pp 720 - 722

Abstract /Authors! English summary modified 7: A case of purulent staphylococcal meningitis in a young man is described. The condition resulted from osteomyelitis of vertebrae L2 and L3 with an atypical course. The patient died. Attention is drawn to the necessity of early diagnosis and therapy of meningeal affections. 11 Western, 3 Czech, 1 Polish reference. (Manuscript received Apr 65).



ONDRACEK, Jaroslav; KOTRLIK, Jiri

Leukocytic reaction to an antigenic stimulus in different age groups. Sborn. ved. prac. lek. fak. Karlov. Univ. 9 no.1: 363-368 '64.

1. Infekcni klinika (prednosta: prof. MUDr.J. Ondracek) Karlovy University v Hradci Kralove.

HERCUT, Vladimir; VONDRACKOVA, Anna; SANDA, Zdenek; KOTRLIK, Jiri; PEGHACK, Miroslav.

Fatal herpetic encephalitis. Anatomical and virological findings. Sborn. ved. prac. lek. fak. Karlov. Univ. 8 no.4:433-442 '65.

1. Patologicko-anatomicky ustav (prednosta: prof. MUDr.
A. Fingerland, DrSc.).; Ustav lekarske mikrobiologie (pre-nosta: MUDr. O. Vejbora); Interni oddeleni nemocnice v Jicine (prednosta: doc. MUDr. Z. Sanda, CSc.) a Infekcni klinika (prednosta: prof. MUDr. J. Ondracek) Karlovy University v Hradci Kralove.

KOTRLIK, Jirl; PECHACEK, Miroslaw

Contribution to the problem of lyssa prevention. Scorn. ved. prac. lek. fak. Karlov. Univ. 8 no.52591-594 '65.

1. Infekcni klinika (prednosta - prof. MUDr. J. Ondracek) Krajskeho ustavu narodniho zdravi v Hradci Kralove.

#### KOTRLY, Alois; TARCZYNSKI, Stefan

Filariinae Stiles, 1907 in the subcutaneous tissue of dear Cervus elaphus L. in Poland and Czechoslovakia and its taxonomical postition. Wiadomosci parazyt., Warsz. 4 no.5-6:721; Engl. transl. 722 1958.

 Vyzkumny Ustav Lesa a Hyslivosti Csl. AZV Zbraslav i z Zakladu Parazytologii i Chor. Inw. SCGW w Warszawie. (FILARIASIS.

Filariinae infect. of deer (Pol))
(ANIMAIS, dis.

deer, Filariinae infect (Pol))

KOTRLY, Alois, inc.

Parasites of chamois in Jeseniky Mountains. Iesnictvi 8 no.11:941-956 N 62.

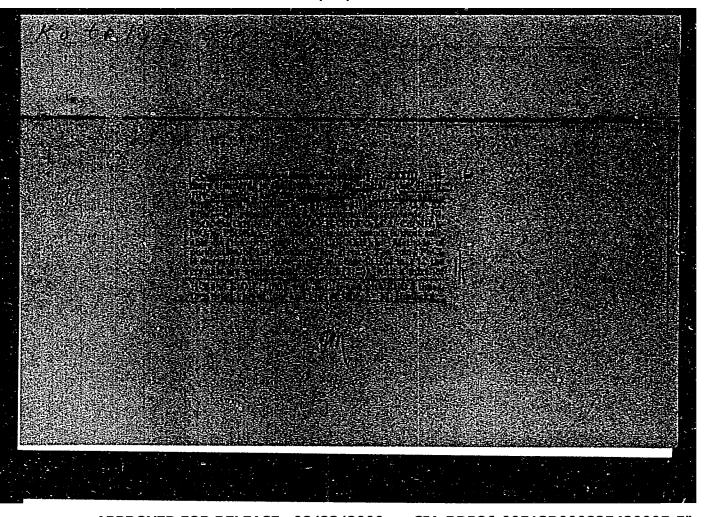
1. Vyzkumny ustav lesniho hospodarstvi a myslivosti, Zbraslav nad Vltavou.

PAV, Jaromir, MVDr.; KOTRLY, Alois, inz.; ZAJICEK, Dalibor, MVDr.

Contribution to the helminthofauna in wild boars (Sus scrofa L.) in reservations and free forests. Les cas 9 no.3:251-260 Mr 163.

1. Vyzkumny ustav lesniho hospodarstvi a myslivosti, Zbraslav; Statni veterinarni ustav, Praha.

"APPROVED FOR RELEASE: 08/23/2000 CIA-RDP86-00513R000825420005-5

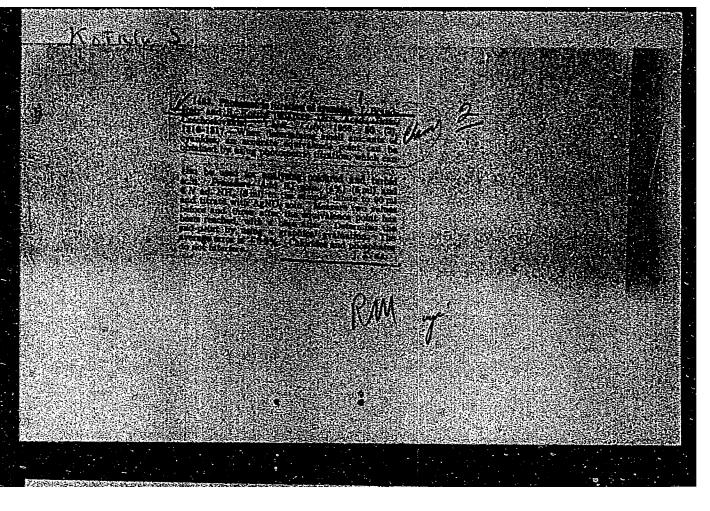


APPROVED FOR RELEASE: 08/23/2000 CIA-RDP86-00513R000825420005-5"

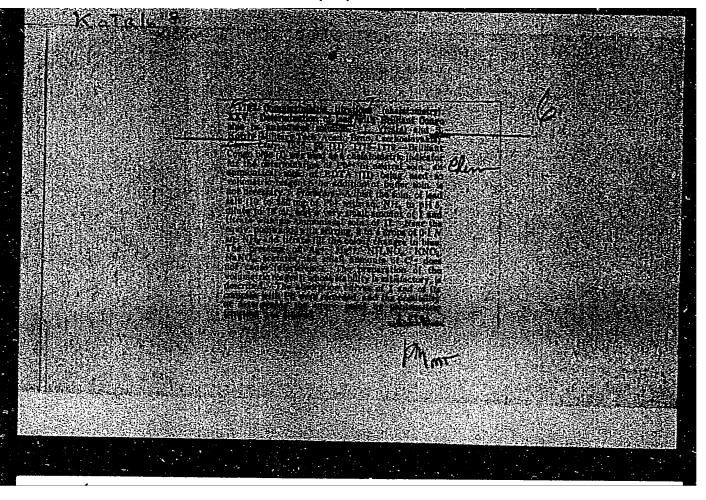
Kotrly, S.

Soviet work in chelatometry. P. 88 SOVETSKA VEDA: CHEMIE. (Ceskoslovenska akademie ved. Chemicka sekce) Praha. Vol. 6, no. 1, 1956

Source: EEAL - LC Vol. 5. No. 10 Oct. 1956



"APPROVED FOR RELEASE: 08/23/2000 CIA-RDP86-00513R000825420005-5



KOTKLY 5

OZECHOSLOVAKIA / Analytical Chemistry. Analysis of E-2 Inorganic Substances.

Abs Jour: Ref Zhur-Khimiya, 1958, No 17, 57142.

Author: Vresial J., Havir J., Brandstetr J., Kotrly S.

Inst: Not given.

Title: Separation of Phosphates and Fluorides by Preci-

pitation of their Silver Salts.

Orig Pub: Chem. listy, 1957, No 9, 1762-1764.

Abstract: Conditions of quantitative separation of large quantities of PO<sub>||</sub>3" from F" by means of precipitation of the former as Ag<sub>3</sub>PO<sub>||</sub> have been investigated. For the purpose of reducing solubility of Ag<sub>3</sub>PO<sub>||</sub>, and in order to improve its precipitation, it is necessary to employ sufficiently large excess of Ag<sup>+</sup> and an optimum pH of the solution of ||.5.

Card 1/5

8

#### APPROVED FOR RELEASE: 08/23/2000 CIA-RDP86-00513R000825420005-5

CZECHOSLOVAKIA / Analytical Chemistry. Analysis of E-2 Inorganic Substances.

Abs Jour: Ref Zhur-Khimiya, 1958, No 17, 57142.

Abstract: The alkalization of solution after the precipitation of Ag<sub>3</sub>PO<sub>4</sub>, proposed by Fennell (Ref Zhur-Khimiya, 1956, 43545) does not produce the desired effect. During the performance of this analysis, the solution is neutralized to phenolphthalein, then is treated with 1 n solution of AgNO<sub>3</sub>, and after all of the Ag<sub>3</sub>PO<sub>4</sub> has been precipitated out, 1-2 cc AgNO<sub>3</sub> is added. The acid, formed during the precipitation step, is neutralized with 0.3 n NaOH solution up to the point when a brown precipitate appears, followed by the dilution with water up to

 ${\tt F}\cdot$ 

KOTRLY STANISLAU

CZECHOSLOVAKIA/Analytical Chemistry - Analysis of

Inorganic Substances.

Abs Jour : Ref Zhur - Khimiya, No 8, 1958, 24773

Author Inst Kotrly Stanislav

Title

: Complexometric Titration (Chelatometry). XXVIII. Microde-

termination of Lead Using Dithizone as Indicator.

Orig Pub

: Chem. listy, 1957, 51, No 4, 730-734; Sb. chekhosl. khim.

rabot, 1957, 22, No 6, 1765-1770

Abstract

: For a complexometric titration of Pb tuse is made of 0.01-0.0001 M solutions of ethylenediamine tetracetic acid (I) neutralized with ammonia. More dilute solutions of I contain about 50% C<sub>2</sub>H<sub>3</sub>CH to ensure a constant content of C<sub>2</sub>H<sub>3</sub>OH in the solution being titrated. As an indicator is used dithizone (II) in the form of a saturated aqueous solution. Titration is effected in an aqueous alcohol (40-60% C<sub>2</sub>H<sub>2</sub>OH) or aqueous acetone (50% acetone) media,

Card 1/3

lution of urotropine (III) (140 g of purest III and 560 ml 1 N HNO; in 1 liter). Concentration of Pb in the solution being titrated

APPROVED FOR RELEASE 198/23/290 red CTA RDP85-00513R000825420005-

thions of alkali and alkaline-earth metals, as well as Mg<sup>2</sup>, Cd<sup>2</sup>, Zn<sup>2</sup>, Ag<sup>+</sup>, Hg<sup>2</sup>, Co<sup>2</sup>, Ni<sup>2</sup>, Bi<sup>3</sup> and other cations interfere. In the presence of the interfering cathions Pb<sup>2</sup> is extracted with a solution of II (0.4 g II in 1 liter CHCl<sub>3</sub>) at pH 9.5. The majority of the interfering cathions are masked in the course thereof by means of ammonium citrate, KCN and NH<sub>2</sub>OH<sub>2</sub>HCl. Separation of Pb from Bi, Sn(2+) and Tl(1+) is very difficult. The complex

Card 2/3

CZECHOSLOVAKIA/Analytical Chemistry - Analysis of Inorganic Substances.

Abs Jour : Ref Zhur - Khimiya, No 8, 1958, 24773

of Pb<sup>2+</sup> with II is decomposed by shaking with dilute HNO<sub>3</sub> (1:100) and an aliquot portion of the resulting solution (20 ml) is prepared for titration by addition of C<sub>2</sub>H<sub>5</sub>CH and 5 ml of a solution of III (140 g III and 120 ml 1 N HNO<sub>3</sub> in 1 liter). Determinable minimum of Pb is 40 y . Communication XXVII see RzhKhim, 1958, 24705.

E-2

KOTRLY, S.; HAVIR, J.

"Automatic reservoir for water purified by ion exchange resins."

p. 557 (Chemicke Listy, Vol. 52, no. 3, Mar. 1958, Praha, Czechoslovakia)

Monthly Index of East European Accessions (EEAI) LC, Vol. 7, ho. 9, September 1958

GOUNTAY : Czechoslovakia (1909) 5 E-1
GABUGORY : RZKhim., No. 22 1959, No. 78260

### APPROVED FOR RELEASE 08/23/2000 ... GIA-RDP86-00513R000825420005-

idet. : Not given

Complexometric Titrations (Chelatometry). XXXIII
Principal Substances Used in Complexometry

Principal Substances Used in Complexometry.

XXXIV. Chromazurol S as an Indicator for the

0219. PUE. : Collection Gzechoslov Chem Commun, 22, 360-369, 632-634: no 3, 700-707 (1959)

33MFACT : See RZhKhim, 1953, No 17, 57115, 57137: No 12, 73701. For Communication XXXII see RZnKhim, 1958, No 24, 31349.

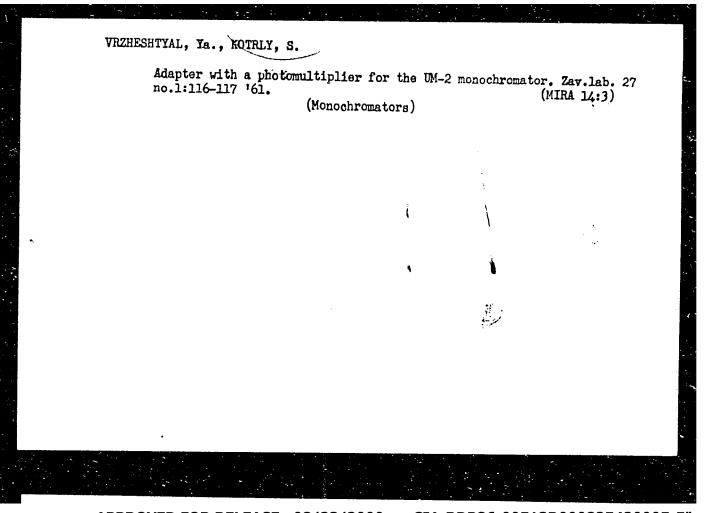
Kotrly, S.; Malat, M. and Tenorova, M.; and Houda, M., Koerol, J., Bazant. v., and Fribil, R.

Determination of Thorium, Nickel, Cerium, and Lanthanum, XXXV. The Indirect Determination of Aluminum with Xylenol Orange

74.73: 1/4

Complexemetric titrations (chelatometry). XLVII. Microdetermination of bismuth and lead by gradual titration with xylenol orange as indicator; study of changes in the color of the indicator by the photometric titration method. Coll Cz Chem 25 no.4:1048-1164 Ap '60. (EEAI 9:12)

1. Technische Hochschule fur Chemie, Pardubice und Militatische Akademie "A.Zapotocky", Brno. (Chelatometry) (Bismuth) (Lead) (Xylenol prange) (Indicators and test papers) (Photometry)



#### KOTRLY, Stanislav

Theory of photometric microtitrations. Pt.1. Sbor VSChT Pardubice Pt.2:49-62 163.

1. Department of Chemistry, College of Science, Baghdad, Iraq. Present address: Chair of Analytic Chemistry, Higher School of Chemical Technology, Pardubice.

L 30914-66 EWT(m)/ETC(f)/T

ACC NR: AP6022913

SOURCE CODE: CZ/0038/66/000/001/0020/0020

AUTHOR: Kotrnoch, Josef; Stepanek, Karel

39

ORG: Nuclear Power Station, Skoda Plant, Plzen (Zavod Jaderne elektrarny, Skoda)

TITLE: Investigation of gas mixing in a bundle of fuel rods

SOURCE: Jaderna energie, no. 1, 1966, 20

TOPIC TAGS: gas flow, nuclear reactor component

ABSTRACT: The article is an abstract of the authors' report No Ae 696/Dok. Mixing of gases flowing parallel to a bundle of rods 15 mm dia was investigated. The experiments were made at a pressure of 7 kg/m² and at 70°C. The method used is based on the application of Freon 12. Curves of constant concentration of freon are shown in

SUB CODE: 18 / SUBM DATE: none

Card 1/1 10

UDC: 621.039.5 A1 621.039.534.34

APPROVED FOR RELEASE: 08/23/2000

CIA-RDP86-00513R000825420005-5"

DOSEN, Doka; KOTROSAN, Radica

Fate of patients with active tuberculosis detected in 1957 during mass radiography in Zrenjanin. Tuberkuloza no.1:79-87 162.

1. Bolnica za lecenje tuberkuloze pluca, Zrenjanin, (v.d. upravnik: dr M. Momirov) Zdravstveni dom zeleznicara, Zrenjanin, (upravnik: dr M. Glumac).

(TUBERCULOSIS PULMONARY)

KOTROVSKIY, H.M.; TRACHENKO, A.N.

Mechanized pneumatic feeding of samples for rapid analysis. Zav.lab. 28 no.6:756-757 162. (MIRA 15:5)

1. Hachal nik TSentral noy laboratorii avtomatiki Makeyevskogo metallurgicheskogo zavoda imeni Kirova (for Kotrovskiy).
2. Hachal nik TSentral noy khimisheskoy laboratorii Makeyev.

skogo metallurgicheskogo zavoda imeni S.M. Kirova (fer Tkachenke),

(Makeevka - Metallurgical analysis) (Pneumatic - Make transportation)

KOTHOVSKIY, H. M.

Kotrovskiy, H. M., Kuchminskiy, M. F. and Kostogryzov, V. S.

"Heating overs of rolling shops with acicular-type recuperators," Trudy Stalinskopo obl. otd-niya VNITOM, No 1, 1242, p, 110-16

SO: U-5241, 17 December 1.53, (Letonis 'Zhurnal 'nykh Statey, No. 25, 1749)

PHASE I Treasure Island Bibliographic Report

BOOK Authors: KOTROVSKII, M.M. and KOSTOGRYZOV, V.S.

Full Title: AUTOMATIC CONTROL OF THERMAL PROCESSES IN THE METALLURGICAL INDUSTRY Transliterated Title: Avtomaticheskoe regulirovanie teplovykh proteessov

metallurgicheskogo proisvodstva.

Publishing Data

KOTKOVSKIY, M.M.

Originating Agency: None.

Publishing House: State Publishing House of Scientific-Technical Literature on

Ferrous and Nonferrous Metallurgy.

Date: 1952.

No. pp.: 410

No. copies: 5,500

Editorial Staff

Editor: Lvov, M.A.

Technical Editor: None.

Call No.: TN667.K6

Editor-in-Chief: None. Appraiser: None.

Text Data

Coverage: The work describes automatic control apparatuses used in metallurgical processes. The basic principles of the control of temperatures, gas pressures, flow of air and liquids, and fuel-air ratio are explained. The control of major parameters is related mainly to various metallurgical processes. However, these principles, in general, are applicable not only to metallurgical processes but technological processes as

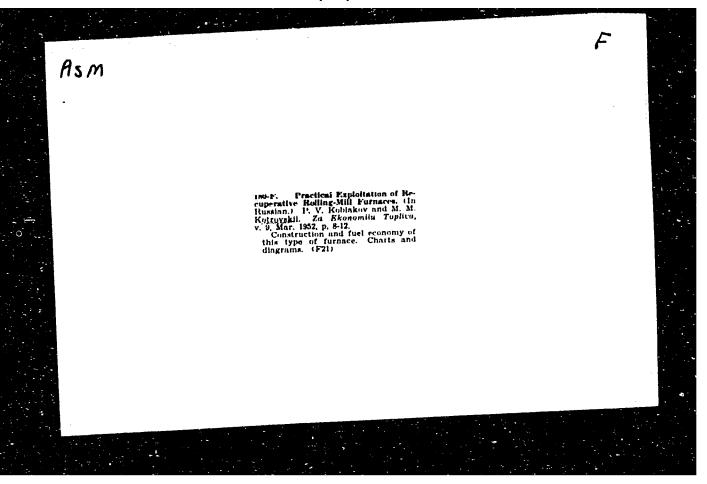
well. Diagram.

Purpose: A textbook for designers and technical personnel of metallurgical

shops equipped with automatically controlled installations.

Facilities: None.

No. Russian References: 37. Available: Library of Congress.



**Sov**/133/58-9-26/29

AUTHORS: Dement'yev, V. M. and Kotrovskiy, M. M. (Engineers)

TITLE: A Study of the Process of Cooling of Ingots (Izucheniye protsessa okhlazhdeniya slitkov)

PERIODICAL: Stal', 1958, Nr 9, pp 847-851 (USSR)

ABSTRACT: Temperatures of the surface of ingots before placing them into soaking pits was regularly measured. This was found impracticable and a study of the cooling of ingots in ingot moulds, after stripping and during transport to the soaking pits was carried out. The temperature of the surface of ingots above 800°C was measured with an optical pyrometer and below 800°C with a thermocouple. On the basis of the results obtained cooling curves were constructed. From the cooling curves, tables and nomograms were made from

Card 1/2

## APPROVED FOR RELEASE: 08/23/2000 CIA-RDP86-00513R000825420005-5

A Study of the Process of Cooling of Ingots

which the surface temperatures of ingots can be determined from the time passed between teeming and arrival of ingots to the soaking pits with sufficient accuracy. There are 5 figures and 1 table.

ASSOCIATION: Makeyevskiy metallurgicheskiy zavod (Makeyevka Metallurgical Works)

BORNATSKIY, Iven Ivenovich; KOTROVSKIY, Mikhail Mikhaylovich; YARGIN, Aleksandr Pavlovich; LEBZDZY, A.I., red.; YABLONSKAYA, L.V., red.izd-va; MIKHAYLOVA, V.V., tekhn.red.

[First assistant steelmaker in open-hearth furnace plants]
Pervyi podruchnyi stalevara na martenovskikh pechakh. Moskva,
Gos.nauchno-tekhn.izd-vo lit-ry po chernoi i tsvetnoi metallurgii,
1959. 365 p. (MIRA 12:12)

(Open-hearth process)

18.3200

77604 SOV/133-60-2-4/25

AUTHOR:

Kotrovskiy, M. M., Paramonov, V. G. (Engineers)

TITLE:

Effect of Port Size on Productivity of Open-hearth Furnaces Output

PERIODICAL:

Stal', 1966, Nr 2, pp 111-117 (USSR)

ABSTRACT:

The investigation of performance of the 370-ton open-hearth furnace ports of various designs, when feeding oxygen into the flame (with air enrichment up to 24%) was carried out on two groups of furnaces "A" and "B". Group "A": charge 370 ton, volume of gas

checkers 116 m $^3$ , volume of air checkers 165 m $^3$ . Gr. "B": Charge 370 ton, volume of gas checkers 163 m $^3$ ,

volume of air checkers 224 m<sup>3</sup>, the height of smokestack 100 m. To determine the most rational dimensions of the port the following points were investigated: (1) The area of gas outlet into the flue; (2) height of gas port over threshold of the door; (3) angle

Card 1/7

## APPROVED FOR RELEASE: 08/23/2000

### CIA-RDP86-00513R000825420005-5

Effect of Port Size on Productivity of Open-hearth Furnaces Output

7760+ SOV/133-60-2-4/25

of inclination of the roof (in the air duct); (4) angle of inclination of the gas port bottom in the flue; (5) the angle of incidence of air flow and gas flow; (6) angle of inclination of flue roof along the generatrix; (7) distance to the point of contact of gas flow with the bath; (8) height of air gap between the roof of ports and the flue; (9) length of "fore-chamber"; (10) ratio of cross sectional areas of flame and gas door; (11) ratio of flame door height to its average width; (12) height of "air dam" over charge door's bridge. As a result of investigation the most rational dimensions are given in Table 1. The established correlations are only effective under analogous working conditions. At present the ports of 370ton furnaces are designed with consideration for the established optimum parameters for both groups "A" and "B". The design of ports is shown in Fig. 6. Research continues to determine the effects of individual parameters of ports on the productivity of open-hearth furnaces.

Effect of Port Size on Productivity of Open-hearth Furnaces Output

77604 SOV/133-60-2-4/25

Table 1. The effect of main rational parameters of "Venturi-type" ports on productivity of 370-ton open-hearth furnaces, and a comparison of these parameters with typical parameters (Giprostal') and with those used by the plant.

(1) A rea of gas door,  $m^2(2)$  ratio of gas door height to its width (3) height of gas hearth bottom over the bridge (hb) (4) angle of inclination of rhombic roof of port ( $\varphi$ ) (5) angle of inclination of gas hearth bottom and flue ( $\gamma$ ) (6) angle of inclination of flue roof along generatrix ( $\alpha$ ) (7) angle of incidence of air flow and gas flow ( $\psi$ ) (8) height of air gap between the roof of ports and the flue, mm (9) length of "forechamber", mm (LF) (10) flame

Card 4/7

Effect of Port Size o Productivity of Open-hearth Furnaces (atput

77604 SOV/133-60-2-4/25

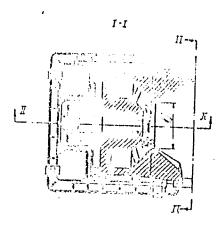
door (a) area, m (b) height, mm (H) (c) upper width, mm (K) (d) lower width, mm (U) (11) ratio of flame door height to its average width (12) ratio of areas of flume and gas doors (13) height of "air dam" over charge door bridge, mm (14) distance from the point of gas flow contact with the bath to flue, m. There are 1 table; and 6 figures.

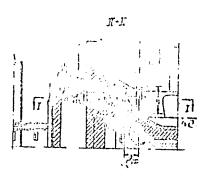
Card 5/7

APPROVED FOR RELEASE: 08/23/2000 Effect of Fort Size on Productivity of Open-hearth Furnaces Output

CIA-RDP86-00513R000825420005-5

77604 80V/133-60-2-4/25



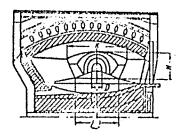


Effect of Port Size on Productivity of Open-hearth Furnaces Output

77604 SOV/133-60-2-4/25

Fig. 6. Design of 370-ton open-hearth furnace port with rational parameters.(D) width of gas door. For other designations see Table 1.

Д-Д



Ched 7/7

DEMENT'YEV, V.M.; KOTROVSKIY, M.M.; NEKHLEBAYEV, Yu.P.

Roasting limestone in a fluidized bed. Metallurg 5 no.6: 12-14 Je '60. (MIRA 13:8)

1. Makeyevskiy metallurgicheskiy savod. (Ore dressing) (Fluidisation)

KOTROVSKIY, M.M., inzh.; GELLER, G.Ya., inzh.

Automation of temperature conditions in open-hearth furnaces.
Stal' 22 no.9:855-858 S '62. (MIRA 15:11)

1. Makeyevskiy metallurgicheskiy zavod.
(Open-hearth furnaces) (Automation)

KOTROVSKIY, M.M., inzh.; GELLER, G.Ya., inzh.

Automatic centralized control of heat conditions in blooming mill regenerative scaking pits. Stal\* 22 no.12:1131-1134 D \*62.

(MIRA 15:12)

1. Makeyevskiy metallurgicheskiy zavod.
(Furnaces, Heating) (Automatic control)

KOTROVSKIY, M.M.; URUNBEGLIK, N.N.; CHERNIKOV, V.A.

Automation of the sintering process. Metallurg 8 no.6:8-10

Je \*63. (MIRA 16:7)

1. Makeyevskiy metallurgicheskiy zavod.
(Sintering) (Automation)

KOTROVSKIY, M.M.; SHKLYAR, M.S.; SUKHACHEVA, N.V.

Losses of blast furnace blast. Stal! 22 no.6:500 Je !62. (MIRA 16:7)

l. Makeyevskiy metallurgicheskiy zavod. (Blast furnaces)

KOTROVSKIY, M.; SVETLICHNYY, I.

Automation of the gas mixing station of the 850 mill. Metallurg 9 no.11:31 N .64. (MIRA 18:2)

1. Makeyevskiy metallurgicheskiy zavod.

KOTROVSKIY, M.M.; KOPELEV, D.D.; BRAZHNIKOV, M.A.

Automation of the exhaust section of a sintering plant. Met. i
gornorud. prom. no.2:72-73 Mr-Ap '65. (HIRA 18:5)

Investigation of the efficiency coefficients in the solid solution system AISb-GaSb. I. I. Burdiyan. (10 minutes).

[Investigation of some properties of indium arseno-telluride doped with bismuth. D. V. Gitzu, S. I. Radautsan. (Not Presented)].

Physico-chemical properties of the pseudo-binary alloys of arsenic with indium telluride. B. P. Kotrubenko, V. I. Lange, T. I. Lange.

Study of the anisotropy of microhardness of some semiconducting compounds. D. V. Gitzu, V. I. Lange, T. I. Lange. (Presented by D. V. Gitzu--15 minutes).

Report presented at the 3rd National Conference on Semiconductor Compounds, Kishinev, 16-21 Sept 1963

ACCESSION NR:

s/0048/64/028/006/1007/1009

AUTHOR: Kotrubenko, B. P.; Lange, V. N.; Lange, T. I.

TITLE: Physicochemical properties of alloys of the indium arsenide-

TOPIC TAGS: indium arsenic tellurium system, indium arsenide tellurium alloy, alloy physicochemical property, alloy electrical proper-

ABSTRACT: Polycrystalline specimens of indium arsenide containing 0.00, 0.10, 0.20, 0.50, 1.00, 2.00, 5.00, 10.0, 15.0, and 20 at% Te have been prepared by direct fusion of the initial components. Their structure was investigated, and the thermal expansion coefficient, density, microhardness, electric conductivity and, Hall coefficient were determined. X-ray diffraction patterns showed that a diamondtype structure exists in alloys with up to 20 at% Te. The microhardness of all the alloys is about the same,  $350 \pm 10 \text{ kg/mm}^2$ , which fact indicates that no substantial changes occur in the atom location Card 1/2

## APPROVED FOR RELEASE: 08/23/2000 CIA-RDP86-00513R000825420005-5

ACCESSION NR: AP4441366

or in the nature of the bonds between them. The electric conductivity and the charge carrier concentration increase sharply with an increase in Te content up to about 1.0% and then decrease somewhat. Changes in the thermal expansion coefficient and density correlate well with the changes in the electron concentration; the former have their minima at about the same tellurium content at which the charge carrier concentration in the alloy is the highest. From the results. of the study it appears that, in spite of a sharp difference in the structure of the initial components, the indium arsenide-tellurium section with up to about 10 at% cellurium has a region of solid solutions with a diamond-type lattice adjoining indium arsenide. Orig. art. has: 2 figures.

ASSOCIATION: Laboratoriya poluprovodnikovy\*kh soyedineniy Akademii nauk MoldSSR (Laboratory of semiconducting compounds, Academy of Sciences, MoldSSR)

SUBMITTED: 00

ATD PRESS: 3052

ENCL:

SUB CODE: MM

NO REF SOV: 005

OTHER: 002

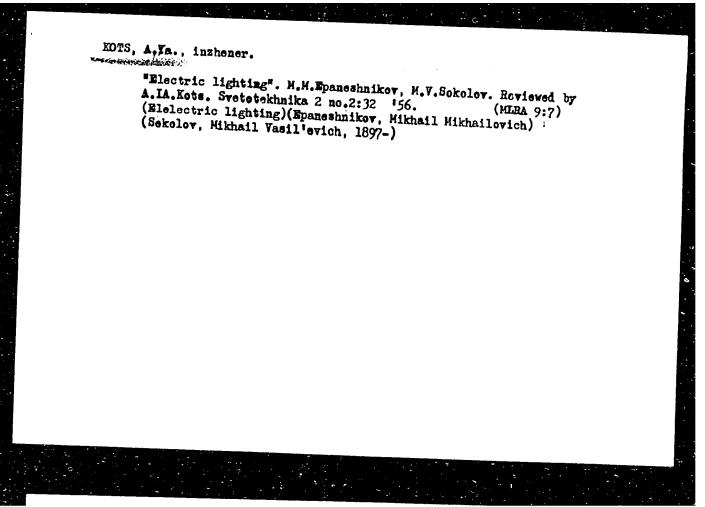
KOTS, A. F.

Kots, A. F. "The Russian 'Krechet' in the light of Darwinism", Okhrana prirody, 1948 (on the cover: 1949), No. 6, p. 66-79.

SO: U-3261, 10 April 53, (Letopis 'Zhurnal 'nykh Statey, No. 11, 1949).

KOTS, Anatoliy Yakovlevich; ASHKENAZI, G.I., redaktor; FRIDKIN, A.M., tekhnicheskiy redaktor.

[Electric lighting of power plants] Iskusstvennoe osveshchenie elektricheskikh stantsii. Moskva, Gos. energ. izd-vo, 1954. 183 p. (MLRA 7:12) (Electric power plants) (Electric lighting)



KOTS, A.Ya., inshener.

Lighting system for 35-220kv outdoor distribution substations.

Svetotekhnika 2 no.4127-28 Jl '56. (MERA 9:10)

1.Teploelektroproyekt.
(Electric lighting) (Electric substations)

Lighting standards. Svetotekhnika 2 no.5:24-25 S '56.

(MLRA 9:11)

1. Teploelektroproyekt.

(Electric lighting--Standards)

# Possible use of reflector luminaries produced by the "Gosteasvet" factory for industrial illumination. Svetetekhnika 3 no.3:27-28 Mr '57. (MLRA 10:3) 1. Teploelektroproyekt. (Lighting) (Reflectors)

KOTS, A.Ya., inzhener.

Illuminating the area of the main control board. Svetotekhnika 3
(MIRA 10:5) (MLRA 10:5)

1. Trest po proyektirovaniyu izyskaniyam teplo- i elektrostantsiy. setey i podstantsiy. (Lighting) (Electric power plants)

AUTHOR: Kots, A.Ya., Engineer. 104-4-14/40

TITLE: The main questions of lighting arrangements for power stations of super-high output. (Osnovnye voprosy ustroystva osveshcheniya sverkhmoshchnykh elektrostantsii)

PERIODICAL: "Elektricheskie Stantsii" (Power Stations), 1957, Vol. 28, No.4, pp. 51 - 54 (U.S.S.R.)

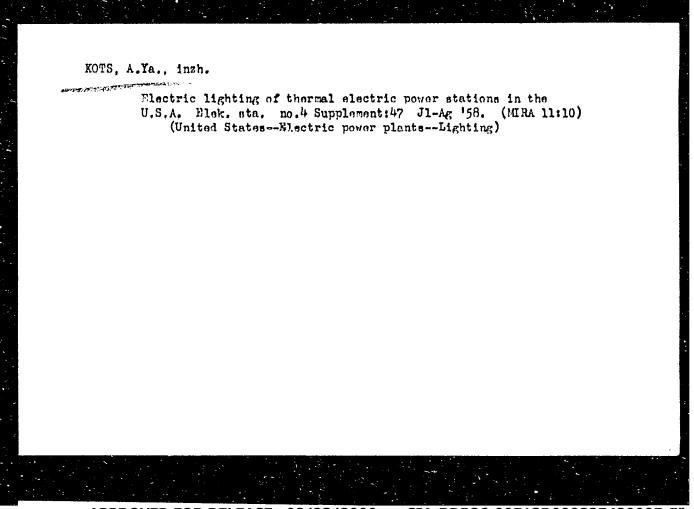
ABSTRACT: The problem of lighting a large power station is considered in the light of an analysis of operating experience at 30 stations. Until 1950, the supply to power station lighting systems was usually from 2 special lighting transformers of which one was a spare. In 1950, it was decided to provide lighting supply from the house service transformers which reduces the cost of the lighting installation. However, the voltage on the house service busbars varies inconveniently for lighting purposes and it is here recommended to have a special lighting transformer using a power transformer as a reserve. The decision of 1950 should be revised. Emergency lighting of power stations is usually provided from accumulators and it is necessary to restrict the emergency lighting load so that the accumulator installation is not too big.

Emergency lighting should be provided only in the main buildings, on the main control board, in the boiler house, the

## APPROVED FOR RELEASE: 08/23/2000 CIA-RDP86-00513R000825420005-5

The main questions of lighting arrangements for power stations of super-high output. (Cont.)

104-4-14/40 machine room and so on and the emergency lighting should be provided mostly in the form of local lighting at the most important working places. Some accidents still result from operating the emergency lighting from the accumulators for too long a period. Portable inspection lamps operating from 12 - 36 volts are often supplied from 220 V plug sockets by means of portable stepdown transformers and it is recommended to install a 12 V power system with plug sockets throughout the main building (where portable lamps are most used) instead of only in certain parts of the boiler house. Sub-stations of 35 -220 kV are lit either by floodlights or by lighting fittings and there is no general agreement as to which is best. However, floodlights have a number of economic advantages, use less cable and are more convenient in operation, and should generally be used for sub-stations up to 220 kV. However, 400 kV sub-stations are so extensive that it is difficult to light them by floodlights and a combination of floodlights and fittings is recommended. In those parts of the power station where high levels of illumination are required the use of fluorescent 2/3 lamps is recommended because of their high luminous efficiency and long life, although the installation costs are, of course,



# "APPROVED FOR RELEASE: 08/23/2000 CIA-RDP86-00513R000825420005-5

Lighting boiler units in electric power plants. Syetotekhnika
4 no.4:20-21 Ap '58. (MIRA 11:4)

1.Tepoelektroproyekt. (Electric lighting)

# "APPROVED FOR RELEASE: 08/23/2000 CIA-RDP86-00513R000825420005-5

Lighting of electric power plants in the Federal Republic of Germany. Svetotekhnika 4 no. 8:30-31 Ag '58. (MIRA 11:7)

(Germany, West--Electric power plants--Lighting)

KOTS, A.Ya., insh.

Installing lighting wiring in hot rooms. Svetotekhnika 4 no.9:25 S | 58. (MIRA 11:8)

1. Vsesoyuznyy gosudarstvennyy institut po proyektirovaniyu teplovykh elektrostantsiy.

(Mectric lighting-Viring)

ROTS, A.ya.

AUTHOR: Kots, A.Ya., Engineer

94-3-1/26

TITLE:

Make More Extensive Use of Luminescent Lighting (Shire

vnedryat' lyuminestsentnoye osveshcheniye)

PERIODICAL: Proymshennaya Energetika, 1958, vol.13, no.3, pp.1-3 (USSR).

ABSTRACT: Luminescent (fluorescent) lamps are not widely used in the USSR for industrial lighting, partly because of the peculiarities of the existing lighting standards, the low unit output of luminescent lamps, the complex circuits, and the inefficiency and high coat of the fittings, which are largely hand-made. The existing standards require that when luminescent lamps are used, the illumination level shall be 2.5 to 5 times that required of incandescent lamps, so that the power output stays about the same. However, the committee concerned with matters of construction has approved new lighting standards, effective on January 1, 1959, in which the difference between the illumination levels for luminscent and incandescent lamps is much reduced. The article gives comparative costs of different kinds of lighting. The cost per installed kW is worked out and then the cost of a given level of illumination.

The first cost of luminescent lamps exceeds that of incandescent Cardl/2 lamps, but the running costs are lower. It is concluded that

P. PELEASE: 08/23/2000

CIA-RDP86-00513R000825420005

EUTS, Anatoliy Yakovlevich; ASHKENAZI, G.I., red.; ASANOV, P.M., tekhn.red.

[Lighting of power plants and substations] Osveshchenie elektricheskikh stantsii i podstantsii. Moskva, Gos.energ.izd-vo. 1959.

(KIRA 12:12)

(Electric power plants)

(Lighting)

(Electric substations)