

MIZINOV, V.; ULITSKIY, P.

Regulating wages of automobile drivers. Sots.trud 4 no.3:50-54
Mr '59. (MIRA 12:4)
(Wages) (Automobile drivers)

MIZINOV, V. N

Transition to the seven-hour labor day and the new wage
system. Avt.transp. 38 no.1:4-6 Ja '60. (MIRA 13:5)

(Wages) (Hours of labor)

MIZINOV, V.

Prepare for the reorganization of wages in time and carefully.
Avt. transp. 38 no. 12:30-32 D '60. (MIRA 13:12)
(Highway transport workers--Wages)

MIZINOV, V. N

Work schedule of drivers with ~~the~~ seven-hour workday. Avt.transp.
39 no.4:30-33* Ap '61. (MIRA 14:5)
(Automobile drivers) (Hours of labor)

MIZINOV, V.; CHERKE, N.; DUENIKOVA, M.

Answering questions on wages. Avt.transp. 40 no.7:34-36 Ap
'62. (MIRA 19:4)

1. Ministerstvo avtomobil'nogo transporta i shosse,nykh dorog
RSFSR.
(Transportation, Automotive) (Wages)

DUBNIKOVA, Mariya Pavlovna; MIZINDV, Vladimir Nikolayevich; CHERKE,
Nina Alekseyevna; YAVLOKOV, V.I., red.; BODANOVA, A.P.,
tekhn. red.

[Wages of automobile drivers] Oplata truda shoferov avto-
mobilei. Moskva, Avtotransizdat, 1963. 107 p.
(MIRA 16:8)

(Wages--Automobile drivers)

KALABUKHOV, F.V.; SEMIKIN, N.V.; SHUL'MAN, A.S.; BRAZOVSKAYA, T.I.;
MIZINOV, V.N.; BASH, M.S.; BRONSHTEYN, L.A.; POLCHANINOV,
P.V.; VERKHOVSKIY, I.A.; KOROL'KOV, A.I.; GERONIMUS, B.L.;
STRYZHKOVA, N.I., red.; GALAKTIONOVA, Ye.N., tekhn. red.

[Principles of the economics of automotive transportation;
for the aid of those studying the economics of automotive
transportation] Osnovy ekonomiki avtomobil'nogo transporta;
v poroshch' izuchaiushchim ekonomiku avtomobil'nogo trans-
porta. Moskva, Avtotransizdat, 1963. 357 p.

(MIRA 17:3)

1. Zaveduyushchiy kafedroy ekonomiki i organizatsii proiz-
vodstva Moskovskogo avtomobil'no-dorozhnogo instituta (for
BronshTEYN).

MIZINOV, Vladimir Nikolayevich; [unclear], Vladimir Pavlovich;
DUBENIKOVA, Mariya Pavlovna; [unclear], Nina Alekseyevna;
KALIBANOV, V.N., red.

[Organization of labor and wages in automotive transporta-
tion; a reference aid. Organizatsia truda i zarplaty na
ty na avtomobil'nom transporte; spravochnoe posobie. Mu-
skva, Transport, 1961. 16 p. (MIRA 18:4)]

MIZINOV, V

New remuneration conditions for workers of the educational
institutions. Avt. transp. 43 no.2:40-41 P 165. (MIRA 18:6)

MIZONOV, I.

For excellent work. Sov.profssoivzy 5 no.8:43 Ag '57. (MLRA 10:8)

1.Brigadir kamenshchikov tresta "Mosstroy-1."
(Moscow--Construction industry)

MIZONOV, V.M.

Establishing conditions for annealing and deformation of nickel
silver strips. TSvet. met.29 no.9:71-74 S '56. (MIRA 9:10)
(Nickel silver--Heat treatment) (Sheet-metal work)

SHPICHIMETSKIY, Ye.S.; ROSEL'BERG, I.L.; LUZENBERG, A.A.; GOLOMOLZINA, Yu.A.
AGAFONOV, A.K.; Primalni uchastiye: MIZONOV, V.M.; GALAKTIONOVA,
G.A.; GAVRILOVA, N.G.; SAMPSONOV, I.P.; KOPEYKA, E.I.; GLEBOV, V.P.

Investigating th darkening of nickel strips during annealing.
Trudy Giprotsvetmetobrabotka no.20:125-135 '61. (MIRA 15:2)
(Nickel--Heat treatment) (Annealing of metals)

MIZONOV, Ye. D. Cand Tech Sci -- (diss) "Study of the Performance
of Vibrat~~or~~^{or} Thread Guides on² Spinning ~~XXXXXX~~ Loom." Mos, 1957.
15 pp 20 cm. (Min ~~o~~ of Higher Education USSR, Mos Textile ~~Inst~~ Inst),
120 copies (KL, 26 57, 108)

MIZONOV, Ye. D.

Vibrating guide on a spinning machine. Tekst. prom. 17 no.4:22-26
Ap '57. (MLRA 10:4)

(Spinning machinery)

MIZONOV, Ye.D.

Vibration in spinning machine runners. Tekst. prom. 17 no.8:26-27
Ag '57. (MLRA 10:9)

(Spinning machinery--Vibration)

MIZONOV, Ye.D., kand. tekhn. nauk.

Improving the operation of spinning machines. Izv. vys. ucheb. zav.;
tekh. tekst. prom. no.1:83-91 '58. (MIRA 11:5)

1. Ivanovskiy tekstil'nyy institut.
(Spinning machinery)

Mizonov Ye.D.
USHAKOV, A.A.; MIZONOV, Ye.D.

Studying the mechanical properties and wear resistance of
impregnated and nonimpregnated cotton belts. Izv. vys. ucheb. zav.;
tekh. tekst. prom. no.2:168-175 '58. (MIRA 11:5)

1. Ivanovskiy tekstil'nyy institut.
(Cotton fabrics--Testing)

MIZONOV, Ye.D.

Feasibility of using bare-bobbin spinning machines. Izv.vys.ucheb.
sav.; tekhn.tekst.prom. no.4:75-85 '59. (MIRA 12:11)

1. Ivanovskiy tekstil'nyy institut.
(Spinning machinery)

MIZONOV, Ye.D., kand.tekhn.nauk; GORODOV, V.V.

Experience operating oscillating thread guides on spinning
machines. Tekst.prom. 20 no.1:34-36 Ja '60.
(MIRA 13:5)

1. Nachal'nik pryadil'nogo tsakha Ivanovskogo melanzhevogo
kombinata (for Gorodov).
(Spinning machinery)

L 32975-66
ACC NR: AP6017521

ENI(m)/ENP(k)/T, EWP(w)/EWP(t)/ETI

SOURCE CODE: IJP(1)

JD/HW
JR/0148/66/000/001/0141/0144

AUTHOR: Kidin, I. N.; Marshaikin, A. N.; Mizonov, Yu. M.; Kachapin, A. A.

ORG: Moscow Institute of Steel and Alloys (Moskovskiy institut stali i splavov)

TITLE: The use of electrothermomechanical working in the production of high-strength wire

SOURCE: IVUZ. Chernaya metallurgiya, no. 1, 1966, 141-144

TOPIC TAGS: electric power source, hot working, high strength metal, drawing, mechanical property, carbide phase, wire, steel

ABSTRACT: A study was done on the electrothermomechanical (etmo) processing of steel wires. Micrographs of etmo wires after tempering showed oriented carbides in the working direction while the deformed austenite exhibited fragmented grains with an oriented substructure characteristic of polygonized metals. For 1 mm diameter wires, strength levels as high as 260 kg/mm² were obtained after etmo, with reductions in area of 40 to 50%. Mechanical properties are given as a function of tempering temperature (from 300 to 600°C) for different thermomechanical treatments and etmo. In no case did the amount of plastic deformation imparted by working exceed 35%. During etmo, the wires were heated 50°/sec by electrical contacts operating from an ac transformer at 60 kv, drawn into wire, spray quenched and subsequently retempered. The strength of etmo wires was

APPROVED FOR RELEASE: 06/14/2000

CIA-RDP86-00513R001134810011-1"

UDC: 621.771.42:621.769

Card 1/2

L 32975-66
ACC NR: AP6017521

about 100 kg/mm² higher than for ordinary quench and temper treatments, due to the suppression of both carbide coagulation and recrystallization. Also, a beneficial structure orientation resulted as evidenced by x-ray patterns. Because the rapid heating maintains more carbon in solid solution, the width of the (110) and (220) lines was greater than for ordinary quench and temper treatments. Since tempering at 500°C decreased the strength from 240 to 170 kg/mm², the effects of cold working by drawing were examined as a means of obtaining better mechanical properties. With 75% deformation the yield stress rose to 240 kg/mm² with a reduction in area of 28 to 32%. Orig. art. has: 5 figures.

SUB CODE: 11/

SUBM DATE: 11Aug65/

ORIG REF: 005

L 32975-66

ACC NR: AP6017521

about 100 kg/mm² higher than for ordinary quench and temper treatments. Due to the super-
 pression of both carbide coagulation and recrystallization. Also, a beneficial struc-
 ture orientation resulted as evidenced by x-ray patterns. Because the rapid heating
 maintains more carbon in solid solution, the width of the (110) and (220) lines was
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 creased the strength from 240 to 170 kg/mm², the effects of cold working by drawing
 were examined as a means of obtaining better mechanical properties. With 75% deforma-
 tion the yield stress rose to 240 kg/mm² with a reduction in area of 28 to 32%. Orig.
 art. has: 5 figures.

SUB CODE: 11/

SUBM DATE: 11Aug65/

ORIG REF: 005

L 06518-60 KWT(m)/SWP(t)/SWP(k) JPD/RT

ACC NR: AP6009514

SOURCE CODE: BR/0413/60/000,005,0031/0031

AUTHOR: Kidin, I. N.; Shirbanyan, A. S.; Pokhberg, Ya. A.;
Marshalkin, A. N.; Burkhanov, S. P.; Marachenko, V. Z.; Mizonov, Yu. M.

ORG: none

TITLE: Fabrication of steel wire. Class 18, No. 179348

SOURCE: Izobreteniya, promyshlennyye obraztsy, tovarnyye znaki,
no. 5, 1966, 31

TOPIC TAGS: steel wire, wire production, austenitizing, deformation,
patenting, cold drawing

ABSTRACT: An Author Certificate has been issued describing a method
for producing steel wire, including electro-contact heating to
austenitizing temperature, reduction, patenting, and cold drawing.
In order to improve the mechanical properties of the wire and reduce
the heat treating cycle, the wire deformation is carried out simul-
taneously with cooling down to 400-450C followed by patenting in air.
[LD]

SUB CODE: 13/

SUBM DATE: 14Dec64/

Card 1/1 BKG

UDC: 621.785.79:621.785.47:621.778.1

"Investigation of the Operation of a Serrated Drum on a Disintegrator."
Cand Tech Sci, Moscow Textile Inst, Min Higher Education USSR, Moscow, 1954.
(KL, No. 1, Jan 55)

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

...A, A.I.

MIZONOVA, A.I.

Serrated drum instead of a beater. Tekst. prom. 14 no.5:20-22
My '54. (MLRA 7:6)
(Cotton machinery)

KUZ'MIN, L.M.; FINKEL'SHTEYN, I.I.; MIZONOVA, A.I.; BELOV, I.F.

Studying the operation of saw-toothed drums in the front section
of single-process pickers during table feeding. Izv.vys.ucheb.sav.;
tekh.tekst.prom. no.2:94-99 '58. (MIRA 11:5)

1. Ivanovskiy tekstil'nyy institut.
(Cotton machinery)

MIZONOVA, A.I.

Optimum distribution of the total draft on the yarn count obtained on the front and rear zone of the RPT-168 roving machine. Izv.vys. ucheb.zav.; tekhn.tekst.prom. no.2:51-57 '60. (MIRA 13:11)

1. Ivanovskiy tekstil'nyy institut.
(Spinning machinery)

KISELEV, A.K.; MIZONOVA, A.I.; MANUSHKINA, E.I.

Effect of the properties and twist of rayon staple fibers on the properties of the yarn. Izv.vys. ucheb.zav.; tekhn.tekst.prom. no.4: 42-49 '60. (MIRA 13:9)

1. Ivanovskiy tekstil'nyy institut im. M.V. Frunze.
(Rayon) (Spinning)

MIZOV, N.

Bulgaria during 1917-1918; 40 years since the Great October.

p. 5 (ZA RODINATA) Vol. 7, no. 8, Aug. 1957,
Sofia, Bulgaria

SO: Monthly Index of East European Accessions (E-AI) LC, Vol. 7, No. 3,
March 1958

PASKOV, D., prof. dr., IOVCHEV, A.; DJAROV, D.; MIZOV, V.; VLACHOV, V.

Pharmacologic action of a new group of synthetic compounds and the connection with their chemical structure. Nauch. tr. vissh. med. inst. Sofia 43 no.4:9-14 '64.

1. Chair of Pharmacology of HMI, Sofia (Director: Prof. D.Paskov).

MIZOYEVA, M.G.

Solar varicella and the role of the immune system. Vest. dermat. i ven. 39 no.4:35-38 '63.

1. Kafedra kozhnykh i venericheskikh bolezney (direktor - prof. Guseynov) Azerbaydzhanskoye nauchno-issledovatel'skoye vrachey (rektor - prof. A. ...)

KA
KOLSNIKOV, G.S.; SMIRNOVA, T.V.; MIZRAKH, I.I.; MIKHAYLOVSKAYA, N.N.;
SHCHERBO, L.I.

Hexamethylenimine derivatives. Part 2: Synthesis of hexamethylenimides
of organic acids. Zhur. ob. khim. 27 no.11:3005-3009 N '57.

(MIRA 11:3)

1. Moskovskiy khimko-tekhnologicheskij institut.
(Hexamethylenimid) (Acids, Organic)

11. 11. 11

RESEARCH: ...

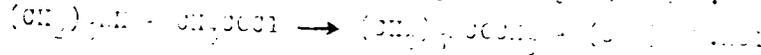
FIELD: ...

RESEARCH: ...

RESEARCH: ...

The hexamethylenimine derivatives ...

Page 1, 2



RESEARCH: ...

... synthesis of hexamethylenimine derivatives ...

RESEARCH: Moscow Chemico-Technological Institute

FIELD: ...

RESEARCH: ...

- 1. Hexamethylenimine-Derivatives
- 2. Hexamethylenimides-Synthesis

Page 1

PETROV, K.A.; YEVDKOV, V.P.; MIZRACH, L.I.; ROMODIN, V.P.

Properties of phosphorus acid amides. Part 3: New method of synthesizing thiophosphites and thiophosphonites. Zhur.ob.khim. 32 no.9:3062-3065 S '62. (MIRA 15:9)
(Phosphoramidothioic acid) (Phosponamidothioic acid)

PETROV, K.A.; YEVDKOV, V.P.; MIZRACH, L.I.

Properties of amides of phosphorus acids. Part 6: Synthesis of 1,2,5-trimethyl-4-piperidyl esters phosphorus acids. Phosphorus analog of "promedol." Zhur.ob.khim. 33 no.4:1246-1251 Ap '63. (MIRA 16:5)

(Phosphorus acids) (Piperidinol)

YEVDAKOV, V. I.; MIZRAKH, L. I.

Interaction of methylpropanoic acid anhydride with hydroxy-
containing compounds. Izv. Akad. Nauk. 34 no.6:1848-1851 Dec '64.
(Mikro 17:7)

L 17045-65 EWI(m)/EPF(c)/EWP(\$)/T PG-4/Pr-A RM
ACCESSION NR: AP5002561 5/0079/64/034/007/2226/2228

AUTHOR: Petrov, K. A.; Basyuk, A. A.; Yevdakov, V. P.; Mizrakh, L. I. 6

TITLE: Thiophosphinites

SOURCE: Zhurnal obshchey khimii, v. 34, no. 7, 1964, 2226-2228

TOPIC TAGS: organic phosphorus compound, organic synthetic process, ester, esterification

Abstract: Alkyl- and arylthiophosphinites were synthesized by the reaction of monoalkyl esters of methyl- and phenylphosphinous acid with phosphorus pentasulfide, in yields of 36-40% of the corresponding thiophosphinite, with an admixture of dithiophosphonates. The thiophosphinites were found to be highly reactive. Reaction of the n-butyl and n-propyl esters of methylthiophosphinous acid with tetraethylmethylenediamine produced previously unknown O-n-butyl- and O-n-propylmethyl-diethylaminomethylthiophosphinates. Sulfuryl chloride converted O-n-propylmethylthiophosphinite to the acid chloride of the n-propyl ester of methylthiophosphinic acid. The ability of thiophosphinites to enter into a transesterification reaction was demonstrated for the first time; transesterification of the ethyl ester of phenylthiophos-

Card 1/2

L 17945-65

ACCESSION NR: AP5002561

phinous acid with n-hexanol produced the n-hexyl ester of phenylthiophos-
phinous acid. Orig. art. has 3 formulas.

ASSOCIATION: none

SUBMITTED: 15Jun63

ENCL: 00

SUB CODE: 00, GC

NO REF SOV: 002

OTHER: 001

JPRS

Card 2/2

L 17536-65 EPA(s)-2/ENT(m)/EPF(c)/EPR/ENP(j)/T PC-4/Pr-4/PS-4/Pt-10 HW/RM
ACCESSION NR: AP4044193 S/0079/64/034/008/2586/2589

AUTHOR: Petrov, K. A.; Kravchenko, V. A.; Yevdakov, V. P.; Mizrakh, L. I.

TITLE: Properties of amides of phosphorus acids. VIII. Phenolysis and alcohol-
ysis of amides of the pentavalent phosphorus acids.

SOURCE: Zhurnal obshchey khimii, v. 34, no. 8, 1964, 2586-2589

TOPIC TAGS: phosphorus acid amide, phenolysis, alcoholysis, pentavalent phosphorus acid

ABSTRACT: The phenolysis and alcoholysis of amidophosphates and amidophosphonates to form the corresponding esters was studied. These reactions with the amides of the pentavalent phosphorus acids were generally slower than with the trivalent phosphorus acids. Phenolysis of diamides of methylphosphonic acid (2:1 molar ratio of phenol: acid) gave diphenylmethylphosphonate, while a 1:1 molar ratio gave mixtures of diphenylmethylphosphonate and monoesters of the monoamides of methylphosphonic acid. Phenolysis of the diamides of phosphoric acid

Card 1/2

L 17536-65

ACCESSION NR: AP4044193

proceeded under more drastic conditions (190-250) and gave low yields of the partial phenolysis products. Phenolysis of the monoamides (e. g. of the diethylamide of the isobutylester of methylphosphonic acid) gave esters in good yields. Alcoholysis was somewhat more difficult than phenolysis. O-n-propyl-N-methylamidomethylphosphonate, heated with n-octanol(1:1) for 6 hours at 200C gave a 60% yield of O-n-octyl-O-n-propylmethylphosphonate. Alcoholysis was slower with lower alcohols, while O-(1,2,5-trimethyl-4-piperidyl)-O-propylmethylphosphonate was formed quantitatively with 1,2,5-trimethyl-4-piperidol at 140-150C. The diamides of the acids of pentavalent phosphorus polycondensed with hydroquinone or with 2,2-di(4-hydroxyphenyl)propane to form non-combustible polyesters. Orig. art. has: 4 equations.

ASSOCIATION: None

SUBMITTED: 15Jun63

ENCL: 00

SUB CODE: IC

NO REF SOV: 008

OTHER: 003

Card 2/2

L 52792-65 INT(m)/EPY(g)/EWP(j) Pc-4/Pr-4 RM
ACCESSION NR: AP5016189 UR/0079/64/034/012/3952/3954

19
B

AUTHOR: Yevdakov, V. P.; Mizrakh, L. I.; Sizova, G. P.

TITLE: Reaction of the anhydride of methylphosphinic acid with certain acids and their salts

SOURCE: Zhurnal obshchey khimii, v. 34, no. 12, 1964, 3952-3954

TOPIC TAGS: phosphinic acid, aliphatic carboxylic acid, aromatic carboxylic acid

Abstract: Continuing an investigation of anhydrides of phosphorus acids, the authors treated methylphosphinic acid anhydride with organic acids and their salts. For both aliphatic and aromatic carboxylic acids, the reaction produced the carboxylic acid anhydride and pyromethylphosphinic acid or the corresponding salt. The reaction can be conducted without a solvent, but is more conveniently conducted in benzene or xylene medium.

ASSOCIATION: none

SUBMITTED: 02Aug63

NO REF SOV: 003

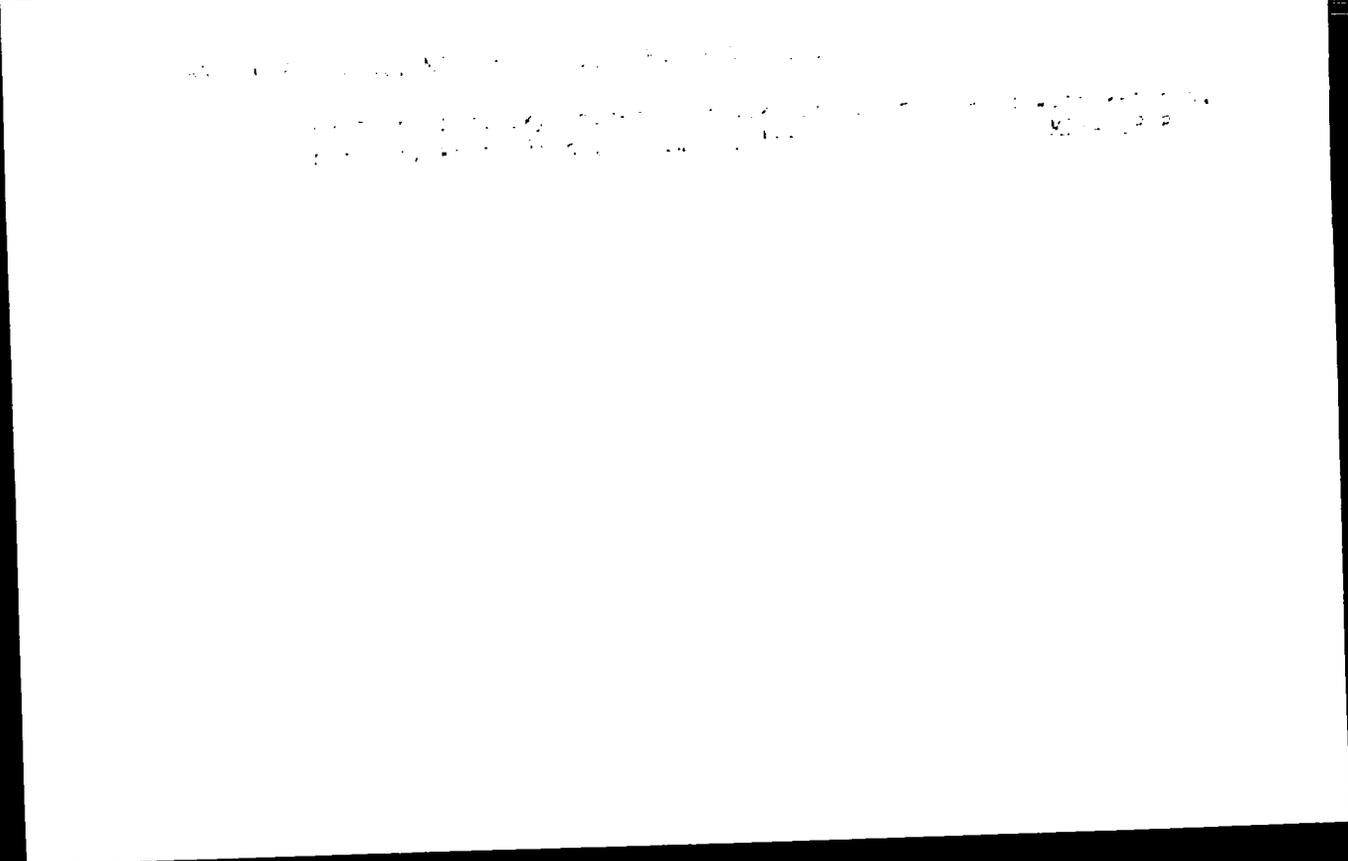
ENCL: 00

OTHER: 003

SUB CODE: OC, GC

JPRS

BA 0
Card 1/1



M. S.

... ..

L 29101-66 EWP(j)/EWT(m) RM

ACC NR: AP6019414

SOURCE CODE: UR/0020/65/162/003/0573/0576

AUTHOR: Evdakov, V. P.; Mizrakh, L. I.; Sandalova, L. Yu.

24
B

ORG: State Scientific Research and Design Institute for the Nitrogen Industry and Products of Organic Synthesis (Gosudarstvennyy nauchno-issledovatel'skiy i proyektnyy institut azotnoy promyshlennosti i produktov organicheskogo sinteza)

TITLE: Reaction between dialkylamides of dialkylphosphoric acid and aldehydes

SOURCE: AN SSSR. Doklady, v. 162, no. 3, 1965, 573-576

TOPIC TAGS: chemical reaction, ether, phosphoric acid, aldehyde

ABSTRACT: The reaction between dialkyl ethers of the dialkylamide of phosphoric acid and aldehydes forms α -aminophosphonates. The product previously found in this reaction is due to traces of water in the reacting mixture. The reaction between the dialkylamide of dialkylphosphoric acid and heptanal in the presence of a 0.5-equimolar or equimolar amount of water gives only about half the yield of aminophosphonate, and α -oxyheptylphosphonate is formed simultaneously. This article was presented by Academician M. I. Kabachnik on 14 November 1964. Orig. art. has: 3 figures, 4 formulas and 1 table

[JPRS]

SUB CODE: 07 / SUBM DATE: 23Oct64 / ORIG REF: 008 / OTH REF: 002

Card 1/1: CC

ACC NR: AP6027085

AUTHOR: Mizrakh, L. I.; Yevdakov, V. I.; ...

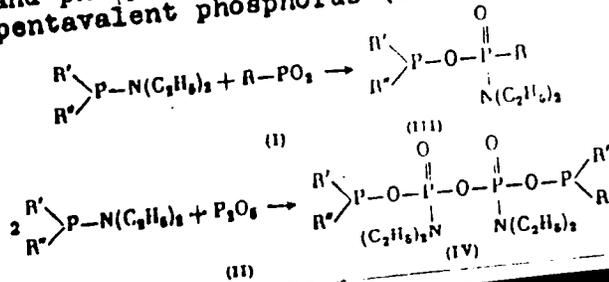
ORG: none

TITLE: Amides and anhydrides of phosphoric acids of tri- and pentavalent phosphorus. Synthesis and some properties

SOURCE: Zhurnal obshchey khimii, v. 35, no. 1, 1965, 1871-1876

TOPIC TAGS: phosphorus compound, organic acid, acetic anhydride, chemical bonding, phosphoric acid, phosphinic acid, reaction mechanism, anhydrides

ABSTRACT: The reaction of compounds containing a P-III-N bond with anhydrides of acids of pentavalent phosphorus was studied. Anhydrides of phosphoric and phosphinic acids (I, II) react with amides of phosphorous and phosphinous acids to form mixed anhydrides of acids of tri- and pentavalent phosphorus (III and IV):

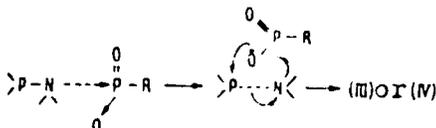


UDC: 546.183.541.2.02

Card 1/2

ACC NR: AP6027085

A similar shift of the dialkylamide group and formation of a $P^{III}-O-P^V$ bond are observed when di- and triamides of acids of tri-valent phosphorus are involved in the reaction. The mechanism of formation of mixed anhydrides (III) and (IV) most probably consists in a nucleophilic attack of the free electron pair of nitrogen, followed by a heterolytic cleavage of the $P^{III}-N$ bond:



Data of the analysis of the synthesized compounds (III) and (IV) and their constants are tabulated. Certain conversions (hydrolysis, alcoholysis, etc.) were carried out in order to demonstrate the structure of these compounds and to study their properties. The mixed anhydrides were found to have good phosphorylating properties. Orig. art. has: 2 tables. [JPRS: 36,828]

SUB CODE: 07 / SUBM DATE: 29Jun64 / REF REF: 145 / IN APP: 13

Card 2/2

L 21507-00 ENT(M)/ESP(J) RM

ACC NR: AP0021677

SOURCE CODE: UR/0079/66/036/003/0469/0475

AUTHOR: Mizrahi, L. I.; Yevdakov, V. P.

ORG: none

37
B

TITLE: Investigation in the fields of amides and anhydrides of phosphorus acids. III. Hydrolysis and acidolysis of derivatives of phenylphosphinous acid

SOURCE: Zhurnal obshchey khimii, v. 36, no. 3, 1966, 469-475

TOPIC TERMS: organic phosphorus compound, organic amide, hydrolysis, nonmetallic organic derivative, chemical decomposition, hydrogen sulfide, esterification, chemical synthesis

ABSTRACT: Anhydrides of phenylphosphinous and phenylthiophosphinous acids were produced by the reaction of the dichloride and tetraethyldiamide of phenylphosphinous acid with water and hydrogen sulfide, respectively. The anhydrides produced were apparently pentamers. Treatment of the anhydride of phenylphosphinous acid with water yielded phenylphosphinic acid. Through the addition of sulfur, the anhydrides were converted to anhydrides of phenylphosphinic and phenyldithiophosphinic acids, respectively, which reacted with alcohols to form monoalkyl esters of the corresponding acids. The reactions of the anhydride of phenylthiophosphinous acid with bromine and sulfonyl chloride are discussed. Orig. art. has: 2 tables. [JPRS]

SUB CODE: 07 / SUBM DATE: 21Dec63 / ORIG REF: 006 / OTM REF:

APPROVED FOR RELEASE: 06/14/2000 CIA-RDP86-00513R001134810011-1

Card 1/1

UDC: 547.558.1

11791-07 ENT(m)/ENT(j) RM
ACC NO: A17003660

SOURCE CODE: UR/0079/66/036/008/1451/1454

AUTHOR: Sandalova, L. Yu.; Mizrahi, L. I.; Yevdokov, V. P.
ORG: State Scientific Research and Planning Institute of the Nitrogen Industry
and products of Organic Synthesis (Gosudarstvennyy nauchno-issledovatel'skiy i
proyektnyy institut azotnoy promyshlennosti i produktov organicheskogo sinteza)
TITLE: Research in the field of amides and anhydrides of phosphorus acids.
KI. Interaction of amides of phosphorus acids with alpha-diketones
SOURCE: Zhurnal obshchey khimii, v. 36, no. 8, 1966, 1451-1454
TOPIC TAGS: amide, ketone, organic phosphorus compound
ABSTRACT: 1,2-cyclohexanedione, 1,2-diacetyl, and found to react with amino-
phosphites to form cyclic aminophosphoranes. In addition to the phosphite, an
an unsaturated amino ketone was also formed. A similar reaction was also indicated,
indicating the formation of the corresponding amidophosphite. The
aminophosphoranes underwent hydrolysis, splitting off an amine and forming
the corresponding ketocyclohexyl phosphate. The amidophosphoranes were found
to enter into an alcoholysis reaction with cleavage of the P-N bond, and
retention of the pentacovalent structure. The authors thank I. A. Il'kov and
A. V. Upadyshev for taking the infrared spectra. [JPRS: 38,970]

SUB CODE: 07 / SUBM DATE: 02Jun65 / ORIG REF: 006 / OTH REF: 001

UDC: 547.448.1

ACR 10 APR 1971

DOCID: UR 0023 06 171 5 1116 1119

AUTHOR: IZRAELI, L. I.; ZILBERMAN, M. S.; YEVGENOV, V. I.

FROM: Scientific Research Institute of the Nitro Industry and Products of Organic Synthesis (Vysokomol'skiy nauchno-issledovatel'skiy i proizvodnyy institut azotnoy promyshlennosti i produktov organicheskogo sinteza)

TITLE: Reaction of aminophosphorans with acid anhydrides. Mixed esters of 2,3,4-trimethyl-5-hydroxy-2-pentene

ADDRESS: AN SSSR. Doklady, v. 171, no. 5, 1966, 1116-1119

KEYWORDS: acetic anhydride, ester, chemical reaction, phthalic anhydride, amide derivative

DESCRIPTOR: 07

ABSTRACT: Aminophosphorans with the propionyl ring were interacted with acid anhydrides to produce mixed esters of 2,3-butene-2-dione, apparently formed by regrouping of intermediate acyl derivatives with opening of the propionyl ring. Acyl derivatives of pentavalent phosphorus were not detected in the reaction products of aminophosphorans with various anhydrides of mono- and dicarboxylic acids. A small amount of the product was obtained when anhydride was added dropwise to the acid anhydride and the solution was distilled.

"APPROVED FOR RELEASE: 06/14/2000 CIA-RDP86-00513R001134810011-1"

Card 1.2

UDC: 547.443+547.374+547.425

6230 2121

ACR 10 APR 1971

after mixing for 20-25 minutes. The constants and yield of the resultant esters are tabulated. In the case of acetic anhydride, the reaction mix was heated for 30 minutes at 60°C. Interaction with phthalic anhydride was heated for 100 minutes at 60°C. Complete absorption of the anhydride was observed for 20 minutes at 60°C in the case of acetic anhydride. In the reaction with phthalic anhydride, a 2% yield of the product was produced in addition to the main mixed ester. In the reaction with acetic anhydride, a 2% yield of N,N-dimethylacetamide is produced in addition to the ester. The resultant data on physical properties and reaction rates agree satisfactorily with the data in the literature. The authors are sincerely grateful to A. V. UPADYONOVA and I. A. TITOVA for taking the infrared spectra. This article was presented by Academician M. I. Kabac'mik on 9 March 1966. Orig. art. has: 4 formulas and 1 table. JPRS: 40,351

ACC NR: AP6035686 (A,N) SOURCE CODE: UR/0413/00/000/027/11-11

INVENTOR: Mizrakh, L. I.; Yevdakov, V. P.; Sandalova, L. Yu.

ORG: none

TITLE: Preparation of mixed esters of α -enediols containing phosphorus. Class 12, No. 186471 [announced by State Design and Planning Scientific Research Institute of the Nitrogen Industry and Products of Organic Synthesis (Gosudarstvennyy nauchno-issledovatel'skiy i proyektiruyemyy institut azotnoy promyshlennosti i produktov organicheskogo sinteza);

SOURCE: Izobreteniya, promyshlennyye obraztsy, tovarnyye znaki, no. 13, 1966, 31

TOPIC TAGS: ^{organic} phosphorus compound, mixed ester, indole, ^{acid anhydride} acetic anhydride

ABSTRACT: In the proposed method, mixed esters of α -enediols containing phosphorus are obtained by the reaction of aminophosphoranes with acid anhydrides.

[WA-50; CBE No. 14] [PO]

SUB CODE: 07/ SUBM DATE: 05Aug65

Card 1/1

UDC: 547.26.118.07

ACC NR: AP7012441

SOURCE CODE: UR/0413-66 000 013 0040 0040

AUTHOR: Yevdakov, V. P.; Mizrakh, L. I.; Sandalova, L. Yu.

ORG: none

TITLE: Method for preparing salts of amido acid of pentavalent phosphorus. Class 12, No. 185914 [Announced by State Scientific Research and Design Institute of the Nitrogen Industry and Products of Organic Synthesis]

SOURCE: Izobreteniya, promyshlennyye obraztsy, tovarnyye znaki, no. 13, 1966, 40

TOPIC TAGS: amine salt, amino acid, organic amide, organic phosphorus compound

SUB CODE: 07

ABSTRACT: A method is claimed for the preparation of salts of amido acids of pentavalent phosphorus, in which mixed anhydrides of tri- and pentavalent phosphorus acids are treated with amides. [JPRS: 40,422]

Card 1/1

UDC: 547.419.1.07

0932 1393

SHVARTSMAN, Ya.S.; BELINSKIY, V.M.; ZHAMERICHEV, S.S.; MIZRAKHI, Ya.I.

Importance of enteropathogenic intestinal bacteria in the etiology
of intestinal disorders in adults. Zhur.mikrobiol., epid. i immun.
32 no.11:139-140 N '61. (MIRA 14:11)
(INTESTINES--DISEASES) (ESCHERICHIA)

MIZRAKHI, Ya. I., mayor meditsinskoy sluzhby

Device for loading the ionization chamber of the DK-2
type dosimeter. Voen.-med. zhur. no.8:86 '62. (MLA 16:9)
(RADIOMETRY)

ARDASHEV, A.B.; MIZROKH, L.I., nachal'nik planovogo otdela tresta.

For effective organization of construction work. Gor.khoz. Mosk.
29 no.12:9-11 D '55. (MLBA 9:3)

1. Upravlyayushchiy trestom "Moszhilgoostroy" (for Ardashev).
(Moscow--Construction industry)

N L 13071-66 EWT(m)/EWP(w)/T/ENP(t)/EWP(k)/EWP(b)/EWA(c) JD/HW 1
 ACC NR: AP5028578 SOURCE CODE: UR/0148/65/000/011/0136/0149
 AUTHOR: Kidin, I. N.; Marshalkin, A. N.; Gokhberg, Ya. A.; Marchenko, V. Z.; 46
Mizonov, Yu. M.; Kachapin, A. A. 45

ORG: Moscow Institute of Steel and Alloys (Moskovskiy institut stali i splavov) B
 TITLE: Effect of the deformation of austenite prior to patenting on the properties
 of carbon-steel wire

SOURCE: IVUZ. Chernaya metallurgiya, no. 11, 1965, 136-140

TOPIC TAGS: carbon steel, wire, rupture strength, plasticity, metal drawing, metal
heat treatment, material deformation, ultimate strength, fatigue strength

ABSTRACT: The authors present the results of an experimental method for improving
 the strength and plasticity of carbon-steel wire by combining its thermomechanical
 treatment with sorbitizing and cold deformation by drawing. In view of the difficul-
 ties that might be encountered when thermomechanical treatment is combined with
 deformation by drawing (possibility of rupture, etc.), the thermomechanical treatment
 included deformation of the austenite by rolling prior to sorbitizing. The wire was
 heated by the electrocontact method at the rate of 50 and 400°C/sec prior to its sor-
 bitizing. Following thermomechanical treatment (TMO) with deformation by rolling,
 (60% reduction of area) the strength of 2.5-mm diameter wire proved to be 28 kg/mm²
 higher than following conventional patenting, and there was also some increase in

Card 1/2

UDC: 669.14:621.771.42

L 13071-66

ACC NR: AP5028578

plasticity which may be attributed to the onset of initial stages of recrystallization and the formation of a polygonal structure of the α -phase. On cold drawing of patented wire following its TMO the ultimate strength continually increases with increasing draft. When the draft reaches 84%, ultimate strength rises to 260 kg/mm^2 , which is some 110% higher than immediately after TMO. The improvement in plasticity is such that the wire can be bent 25-28 times instead of 8-10 times and twisted 33-35 times instead of 8-12 times. This new method of producing high-strength wire dispenses with the need of employing the patenting process based on the use of lead and salt baths, makes it possible to obtain a wire with higher mechanical properties than following conventional patenting and cold drawing, increases by a factor of 2 or 3 the rate of heat treatment and markedly expands the possibilities for its automation. Orig. art. has: 2 tables, 4 figures.

SUB CODE: 11, 13/ SUBM DATE: 12Apr65/ ORIG REF: 004/ OTH REF: 001

VAYNSHTOK, Izmail Samuilovich; MIZROKHI, Yu.N., inzh., red.; KOL'TSOV, P.Ye., inzh., red.; MOROZOVA, M.N., red. izd-va; GERASIMOVA, Ye.S., tekhn. red.

[Ultrasound and its use in machine manufacturing] Ul'trazvuk i ego primeneniye v mashinostroyeni. Moskva, Gos. nauchno-tekhn. izd-vo mashinostroyeni. lit-ry, 1958. 139 p. (MIRA 11:7)
(Machinery industry) (Ultrasonic waves--Industrial applications)

MIZROKHI, YU N.

PHASE I BOOK EXPLOITATION SOV/3528

Moscow. Dom nauchno-tekhnicheskoy propagandy
Primeneniye ultrazvuka v promyshlennosti, sbornik statey (Industrial Use of Ultrasound. Collection of Articles) Moscow, Mashgiz, 1959. 301 p. 8,000 copies printed.

Sponsoring Agency: Obanchestvo po rasprostraneniyu politicheskikh i nauchnykh znaniy RAN. Ed. (Title page): V.P. Rozdrev, Doctor of Physical and Mathematical Sciences, Professor; Ed. (Inside book): O.S. Kochetova, Engineer, and Instrument Manufacturing (Mashgiz); N.V. Pokrovskiy, Engineer.

PURPOSE: This book is intended for engineers and technicians engaged in the application of ultrasonics in machinery manufacture and in other branches of industry.

COVERAGE: This is a collection of papers read at the first all-Union conference on the use of ultrasonics in industry. Attention is focused mainly on the description of ultrasonic equipment for flaw detection. The effect of ultrasound on hard material and on metal-cryogenic processes is also discussed. No personalities are mentioned. References accompany many of the papers.

PERSONNEL: M.G. Kozan, Candidate of Technical Sciences, Doctor of Technical Sciences, Decent. Design and Construction of Vibrators for Ultrasonic Machining. 64

Bulubeva, I.M., Candidate of Technical Sciences, Decent. Design and Construction of Technical Sciences; and Ya.P. Skvitskiy, Candidate of Technical Sciences. Magnetic Alloys for Ultrasonic Applications. 77

Makarov, I.O., Engineer. Methods of Making Design Calculations for Bar-Type Exponential Ultrasonic Concentrators. 91

Golyamina, I.P., Use of Ferrites as Ultrasonic-wave Radiators. 102

Semenikov, Yu.B., Engineer. Method of Transforming Input Resonance of a T-Bar Radiator. 115

Sirotyuk, N.O., Engineer. Maching a Generator of Electric Oscillation with a Quartz Resistor Drifted by Electric Generator Circuit. 125

Lysalin, B.M., Engineer. Characteristics of the Ultrasonic Machining of Metals. 129

Misirevskiy, M.M., Candidate of Technical Sciences; and A.A. Zavad (Leningrad Metal-Products Plant) in the Ultrasonic Drilling of Holes in Quartz Plates. 136

Yoshenko, F.Ye., Doctor of Technical Sciences, Professor, and M.I. Kozlov, Engineer, and V. Avr. Yanova. She Profile of Ultrasonic Machining of Materials. 140

Tovbin, I.I., Candidate of Physical and Mathematical Sciences. Properties of Alloys. 149

Effect of Elastic Vibrations on the Crystallization and Processing of Alloys. 163

Maglazarov, I.M., Candidate of Chemical Sciences. Effect of Ultrasonic Vibrations on the Process of Crystallization. 174

Shaykova, D.S., Candidate of Technical Sciences. Ultrasonic Flaw Detection. 184

Yermolov, I.N., Engineer. Ultrasonic Instruments Developed for Testing of Materials for the Measurement of Thickness and Flaw Detection. 191

Gubanov, M.A., Candidate of Technical Sciences. Ultrasonic Section of Plates in Massive Metals. 223

Yegorov, M.M., Ultrasonic Inspection of Castings in Electric and Remelted Steel Products. 240

Babalin, N.V., Engineer. Design of Piezoelectric Transducers for Ultrasonic Flaw Detectors. 243

87441

S/112/60/100/1024/100/100

AG05/AG01

Supersonic Treatment of Hard and Brittle Materials

tion frequency f. The problem is considered on the relation between the treatment duration and the grain size d. An empirically found relation between the treatment duration and the depth h is proposed

$$t = k \frac{S h^{1/3}}{2 A d f}$$

where k is a coefficient. The experimental unit is described for cutting diamonds by ultrasonic waves. A metallic revolving disk serves as tool, the article (diamond) is fixed to the concentrator end. It is reported on structural corrections introduced into the pilot unit. There are 4 references.

V R K

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

11100

25244

S/122/60/000/003/010/015
A161/A130

AUTHORS: D'yachenko, P.Ye., Professor, Doctor of Technical Sciences, and Mizrokhi, Yu.N., Engineer

TITLE: Cutting diamonds with ultrasound and rotating disc

PERIODICAL: Vestnik mashinostroyeniya, no. 3, 1960, 60 - 61

TEXT: The experiment unit described and illustrated in a schematic diagram works by combined action of ultrasound and a fast rotating disc. The ultrasound head with a diamond dust container (2) is fixed on a table (1). The head casing (3) on a roller base (4) is moved horizontally by a weight (5). The head includes a horizontal 40 x 40 mm cross-section vibrator (6) of 120 mm length, a concentrator (7), and an arbor (8) 8 mm in diameter and 10 mm in length. The diamond (9) is soldered into the arbor. The vibrator is held by a knife clamp (10). The container (2) is attached with two bolts to a flange on the concentrator. The disc (11) from stainless steel, 0.2 mm thick and 40 mm in diameter, is on a vertical spindle (12). A diamond 3.8 mm wide and 3 mm thick was cut through in 30 min with 500 g pressure and 800 rpm of the disc, and 35 micron double vibration amplitude. Another diamond of the same width was cut 1.5 mm deep in 10 min with 150

X

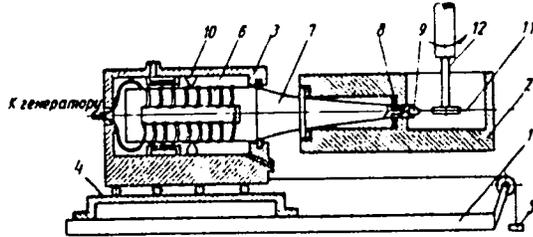
Card 1/2

X

S/122/60/000/003/010/015
A161/A130

25244
Cutting diamonds with ultrasound and rotating disc

micron amplitude. This means that the new method takes 5-7 min for cutting through 1 mm diamond, comparing to 25-30 min usual. It was stated in experiments that the vibrating element always wears faster than stationary, and this was the reason why diamond was soldered to the arbor. The Institut mashinovedeniya AN SSSR (Institute of Science of Machines AS USSR) has produced such a unit at an industry plant. It is used for regular production. There is 1 figures.
Fig.



D'YACHENKO, P.Ye. (Moskva); MIZROKHI, Yu.N. (Moskva)

Ultrasonic cutting of diamonds. Izv.AN SSSR.Otd.tekh.nauk.
Mekh.i mashinostr. no.3:167-168 ~~My~~-Je '60.

(MIRA 13:6)

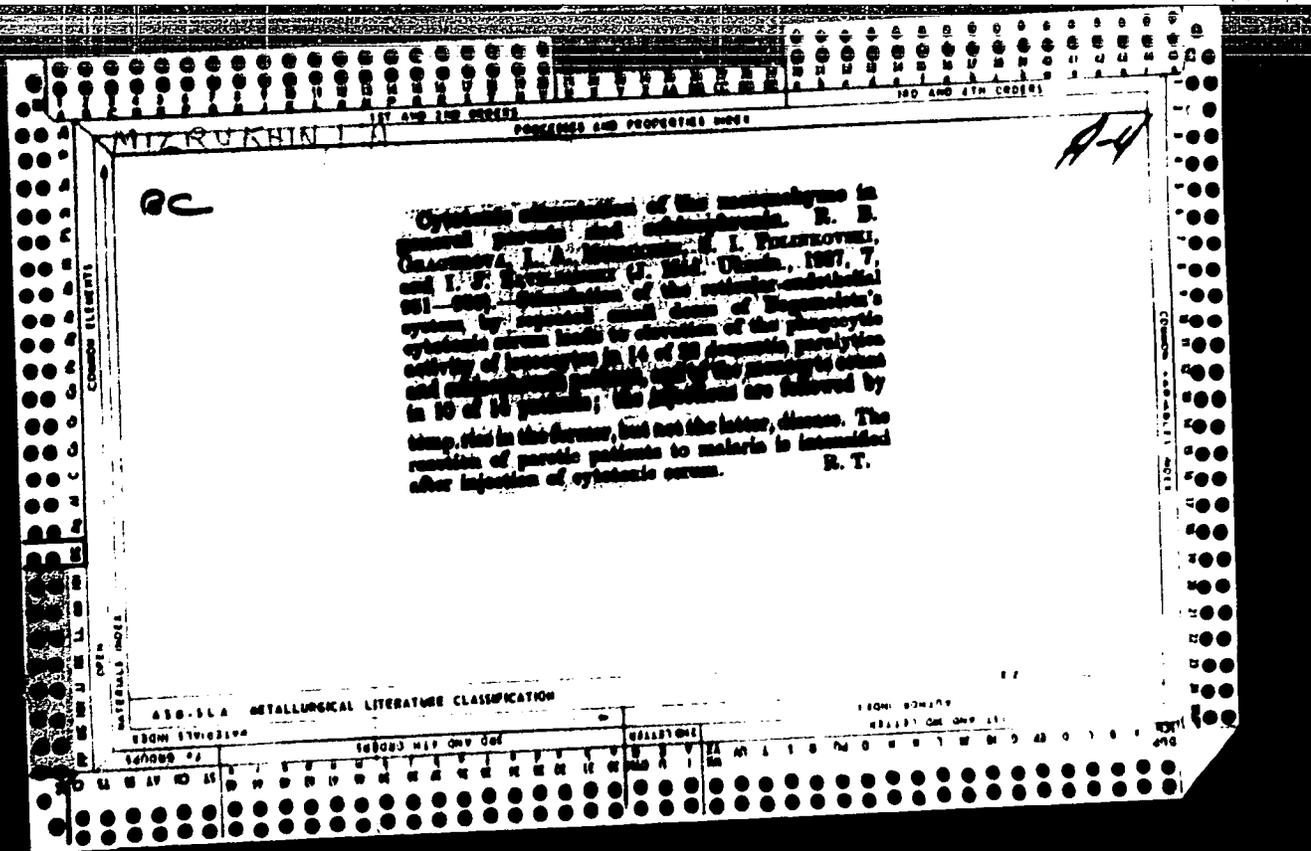
(Diamond cutting industry)

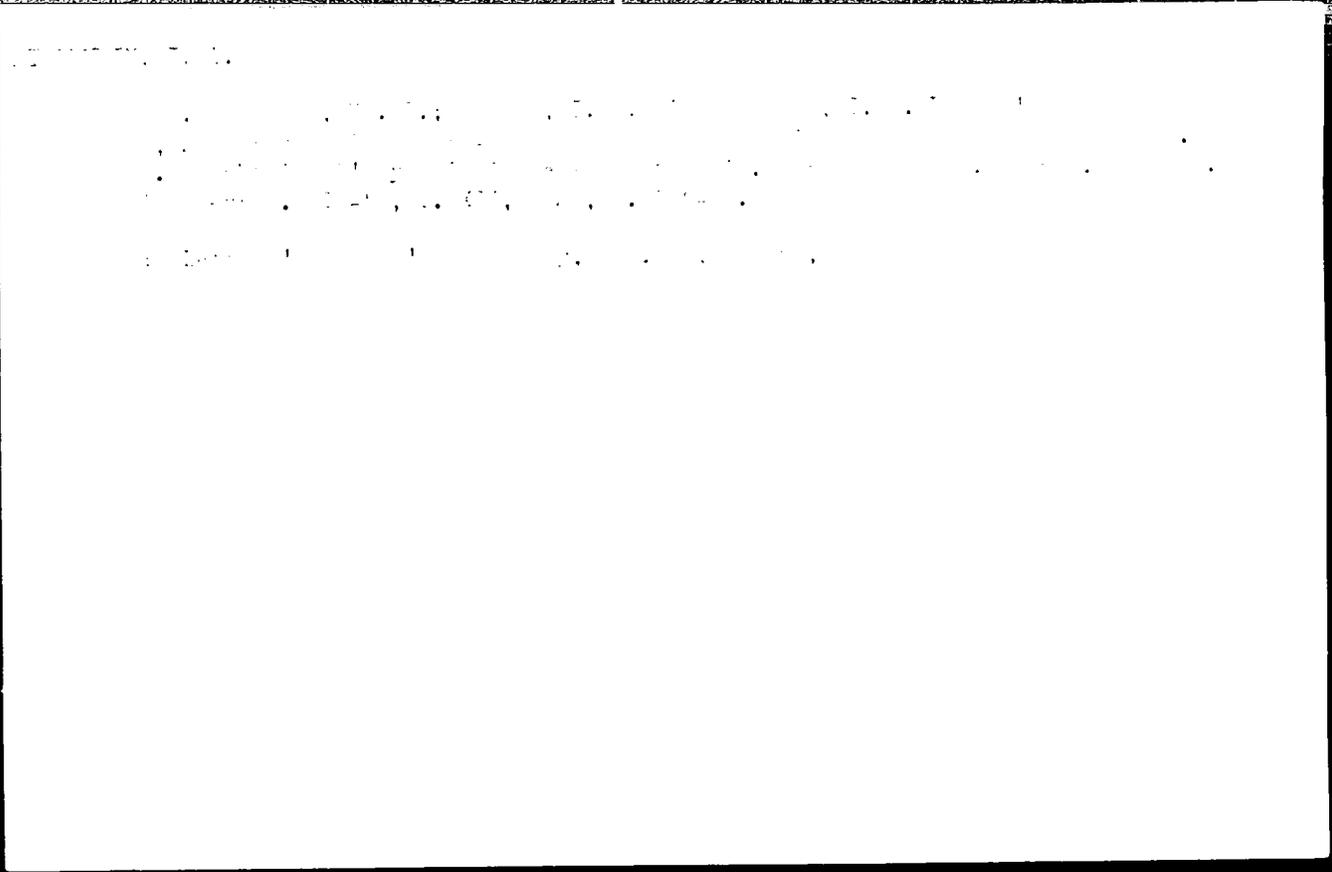
(Ultrasonic waves--Industrial applications)

MIZROKHIN, B.

Today's photography section will be a club of photographers tomorrow.
Sov.foto 21 no.5:43 My '61. (MIRA 14 5)

1. Fotokorrespondent zhurnala "Zhenshchiny Uzbekistana"
(Photography--Societies, etc.)





MIZBUKHIN, I. A.

[Sleep therapy] Likuvannia snom. Kyiv, Derzh. med. vid-vo URSR,
1952. 174 p. (Biblioteka likaria, 9) (MLRA 10:2)
(SLEEP--THERAPEUTIC USE)



DYACHENKO, S.S.; VOLKOVA-SHARAVS'KA, N.M.; MIZRUKHIN, I.A.

Effect of prolonged interrupted sleep on formation of agglutinins.
Medych.zhur.24 no.1:7-15 '54. (MLRA 8:10)

1. Kiivs'kiy medichniy institut im. akad. O.O.Bogomol'tsya, kafedry
mikrobiologii i psikhatrii.

(AGGLUTINATION,

eff. of prolonged sleep on agglutinin form)

(SLEEP, effects,

on agglutinin form)

MIZRUKHIN, Isak Aronovich

Academic degree of Doctor of Medical Sciences, based on his defense, 24 February 1955, in the Council of Kiev Order of Labor Red Banner Med Inst imeni Bogomolets, of his dissertation entitled: "Treatment of Psychic Ailments with Sleep."

Academic degree and/or title: Doctor of Sciences

SO: Decisions of VAK, List no. 1, 7 Jan 56, Byulleten' MVN SSSR, Incl. JPRS/NY-548

DYACHENKO, S.S.; VOLKOVA-SHARAVSKAYA, N.M.; MIZRUKHIN, I.A.

Phagocytic activity of blood leucocytes as affected by prolonged interrupted sleep. *Fiziol.zhur.* [Ukr.] 1 no.6:19-27 N-D '55.

(MLRA 10:1)

1. Kiivs'kiy medichniy institut imeni akademika O.O.Bogomol'tsya, kafedri mikrobiologii i psikhatrii.

(LEUCOCYTES) (PHAGOCYTOSIS) (SLEEP—THERAPEUTIC USE)

USSR/Human and Animal Physiology (Normal and Pathological). Nervous System. Human Electroencephalogram.

T

Abs Jour: Ref Zhur-Fiol., No 17, 1958, 79982.

Author : Britvan, Ya. M.; Mizrukhn, I.A.

Inst :

Title : On the Changes of the Electroencephalogram During Catatonic and Paranoid Forms of Schizophrenia.

Orig. Pub: Sb. nauchn. tr. Vinnitsk. med. in-ta, 1957, 10, 68-75.

Abstract: Changes of EEG in patients with catatonic and paranoid forms of schizophrenia were similar, and consisted of a general decrease of cortical activity, frequent absence of a-rhythm, strengthening of b-rhythm; often, of the appearance of sharp waves and peak-like fluctuations. During the action of light stimulation and nitroglycerin administration, there was no reaction.

MIZRUKHIN, I.A., prof., doktor med.nauk

Psychoses in virus influenza. Vop. klin. nevr. i psikh. no.2:311-317 '58.

(INFLUENZA)

(PSYCHOSES)

(MIA 14:10)

MIZRUKHIN, I.A., doktor med.nauk, prof. (g.Vinnitsa).

The nature of hypnosis. Nauka i zhyttia 9 no.6:29-30
Je '59.

(HYPNOTISM)

(MIRA 12:8)

VITTE, N.K.; MIZRUKHIN, I.A.; TOPCHIYEVA, Ye.P.

Registration of cerebral and cardiac bioelectric potentials in schizophrenics during sleep. Zhur.nevr. i psikh. 59 no.4:416-421 '59.
(MIRA 12:6)

1. Kafedra psikhiatrii (zav. - prof.I.A.Mizrukhin) i kafedra fiziologii (zav. - prof.N.K.Vitte) Vinnitskogo meditsinskogo instituta.

(SCHIZOPHRENIA, physiol.

ECG & EEG during sleep (Rus))

(ELECTROCARDIOGRAPHY, in var. dis.

schizophrenia, during sleep (Rus))

(ELECTROENCEPHALOGRAPHY, in var. dis.

same)

(SLEEP, physiol.

ECG & EEG in schizophrenics (Rus))

VITTE, N.K., prof.; MIZRUKHIN, I.A., prof.; TOPCHIYEVA, Ye.P., kand.med.
nauk

Change in thermoregulation in schizophrenics during treatment with
aminazine. Vrach. delo no.4:97-100 Ap '61. (MIRA 14:6)

1. Kafedra psikhatrii (zav. - prof. I.A.Mizrakhin) i kafedra
normal'noy fiziologii (zav. - prof.N.K.Vitte) Vinnitskogo medi -
binskogo instituta.
(SCHIZOPHRENIA) (CHLORPROMAZINE) (BODY TEMPERATURE)

MIZRUKHIN, I.A., prof.; TURKEVICH, O.M., zaslužhenny vrach UkrSSR,
DANILYUK, S.I.; MEL NIKOVA, M.R.

Benzohexonium treatment in arteriosclerotic psychosis. Vrach.
delo no.24151-152 F 63. (MIRA 1963)

1. Kiyevskaya psikhonevrologicheskaya bol'nitsa imeni akademika
I.P. Pavlova.

(HEXONIUM--THERAPEUTIC USE) (ARTERIOSCLEROSIS)
(PSYCHOSES)

MIZRUKHIN, I.A., prof.; TURKEVICH, O.M., zaslužhenny vrach UkrSSR,
DANILYUK, S.I.; MEL NIKOVA, M.R.

Benzohexonium treatment in arteriosclerotic psychosis. Vrach.
delo no.24151-152 F 63. (MIRA 1963)

1. Kiyevskaya psikhonevrologicheskaya bol'nitsa imeni akademika
I.P. Pavlova.

(HEXONIUM--THERAPEUTIC USE) (ARTERIOSCLEROSIS)
(PSYCHOSES)

MIZSER, Jeno

Increasing the technical level by atomic propulsion. Jarmu mezo
gep 4 no.1:12-15 Ap '57.

MIZSEI, Miklos

Automatic ultraviolet wave hydrolysis system. Viznyfi koz. no.3:392-396 1957.

HUNGARIAN
 Journal: Analytical Chemistry. Analysis of Organic Substances
 No. 1957: Ref Kozr - Khim., No 3, 1957, No. 15145
 Author: Gyenes, T.; Mizsei, A.; Szabo, L.
 Institution: Hungarian Academy of Sciences
 Title: Colour Tests and Determination of Noradrenalone Hydrochloride in Nonaqueous Medium in the Presence of Adrenalone Hydrochloride
 Reference: Acta chim. Acad. scient. hung., 1958, 16, No 1, 380-402
 Abstract: It was established that noradrenalone hydrochloride (NH), under the effect of oxidizers in nonaqueous media (pyridine, dimethylformamide), forms colored compounds. Adrenalone hydrochloride (AH) does not produce such compounds, but its presence increases the color intensity formed by NH. 5 ml. of a 4% solution of HgCl₂ in pyridine are added to a solution of 0.003-0.03 mg. of N and of 2 mg. of AH in 1 ml. of pyridine, the mixture is shaken,

pp: 1/2

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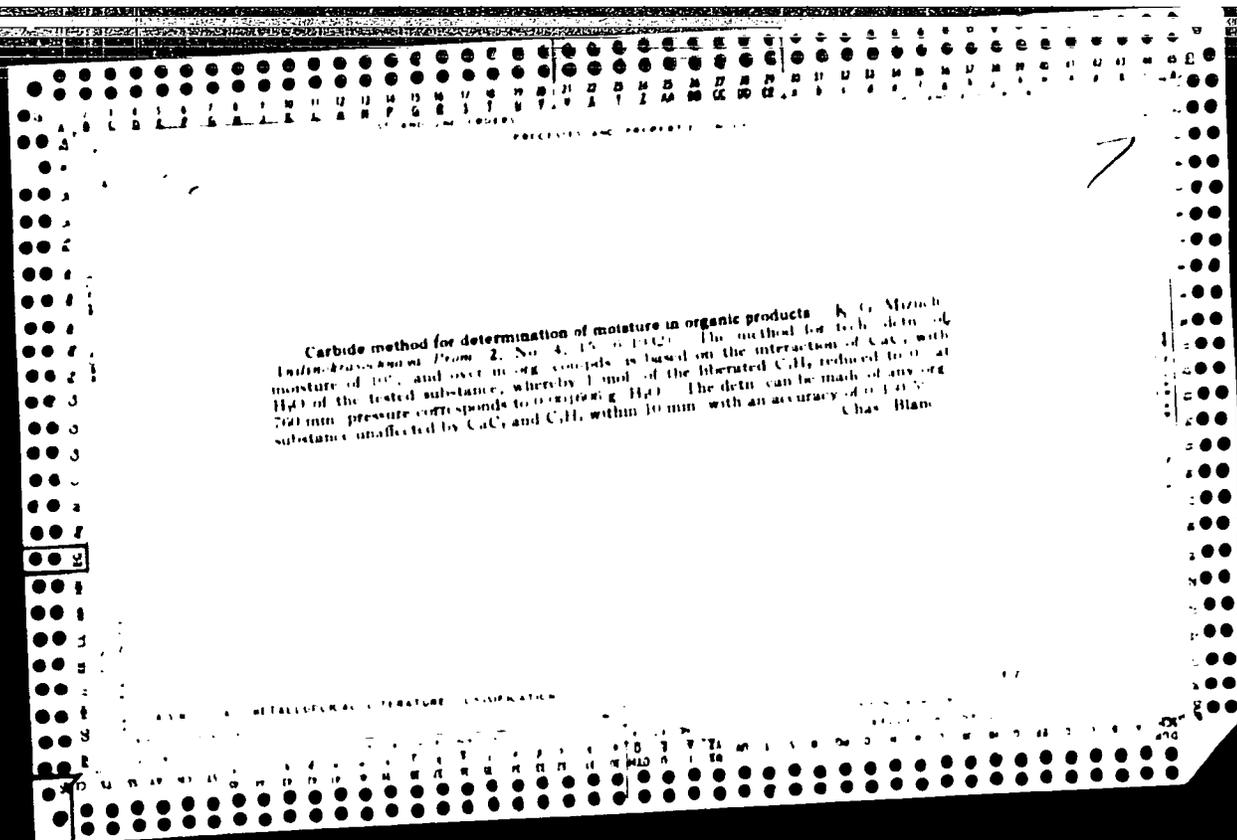
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MIZSEF, J.

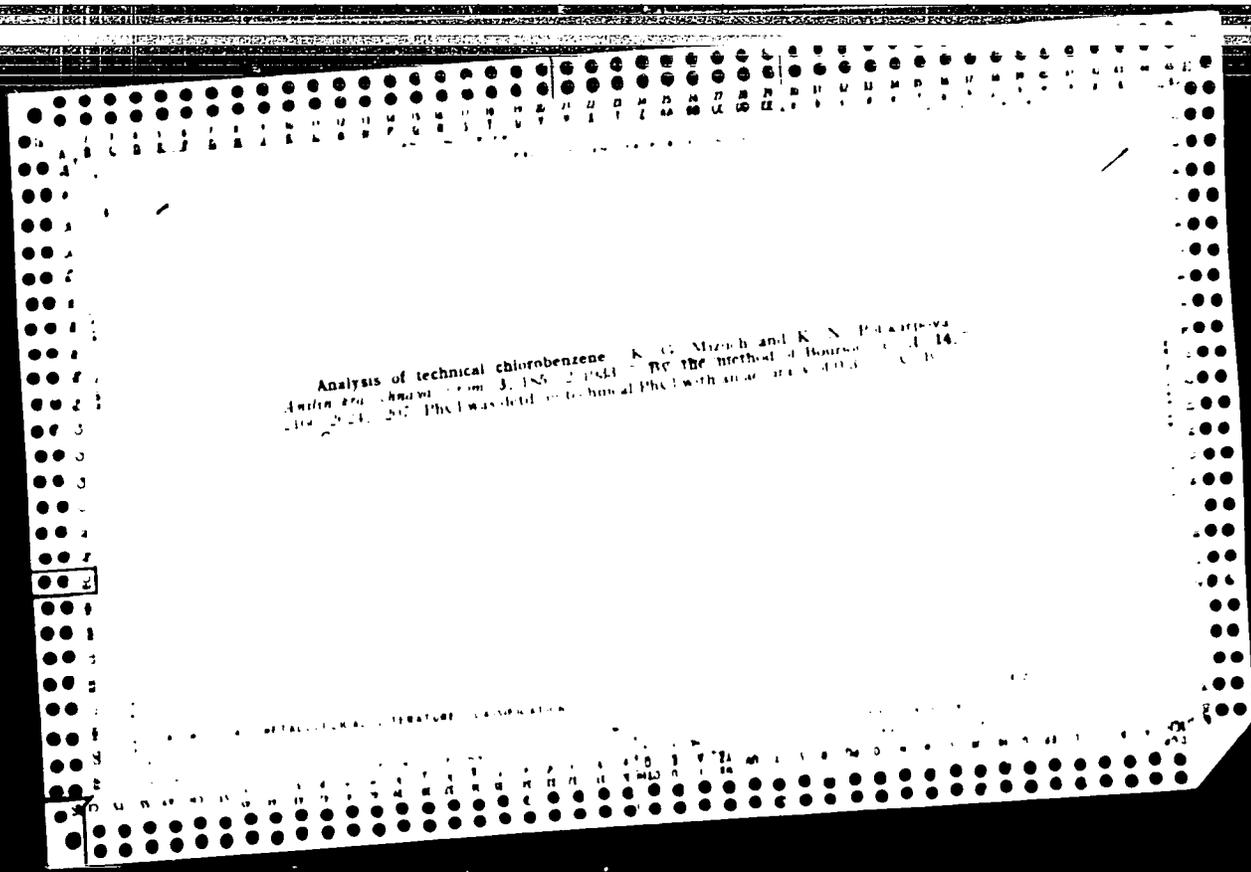
Replacement of cadres in our shipbuilding industry, p. 254.

(JAPMIVEK ES CEPEK, Budapest, Vol. 1, no. 8, Aug. 1954.)

SO: Monthly list of East European Accessions, (EEAL), LC, Vol. 4, No. 1, Jan, 1955,
Uncl.

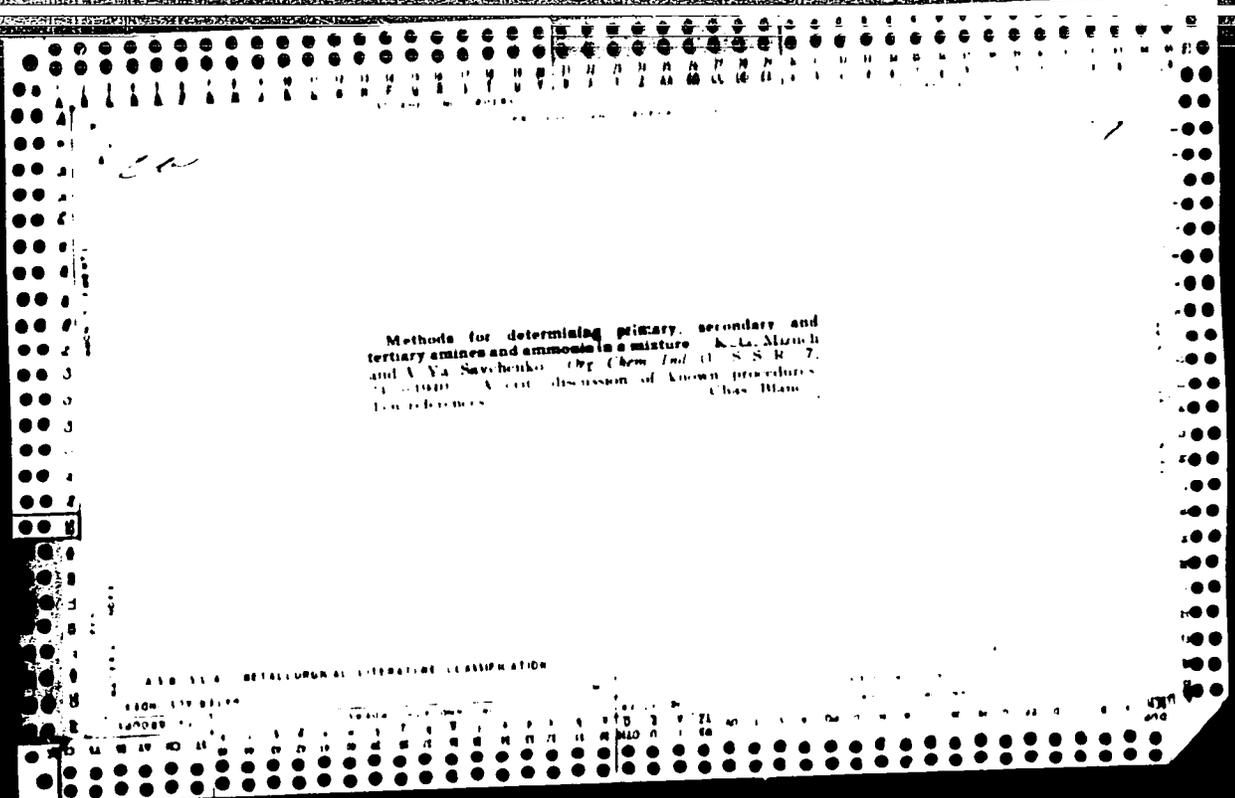


Carbide method for determination of moisture in organic products K. G. Mizuk
Industrialscience Press 2, No. 4, 15, 6 (1962). The method for the determination of
moisture of 10% and over in org. compounds is based on the interaction of CaC₂ with
H₂O of the tested substance, whereby 1 mol. of the liberated C₂H₂ reduced to 0.1 at
760 mm. pressure corresponds to 0.0909 g. H₂O. The detn. can be made of any org.
substance unaffected by CaC₂ and C₂H₂, within 10 min. with an accuracy of 0.14%
Chas. Blanc



Determination of para isomers in the mixtures of chloroanilines and nitrochlorobenzenes K. G. Mizukh and A. Ya. Savchenko. *Antimirovskaya Prom.* 4, 204 (1940). To det. p-ClC₆H₄NH₂ in the presence of o-ClC₆H₄NH₂ dissolve 0.1-0.5 g of the mixt. in 20 cc of anhyd. Et₂O, add with stirring if necessary 25 cc 5% HClO₄ in Et₂O, filter through a Schott X-2 filter, wash the ppt. with 50-75 cc of 5% HClO₄ in Et₂O, dissolve the ppt. in hot H₂O, dil. to 250 cc., cool to 5°C., add 10 cc. 20% KBr and titrate with 0.1 N KIO₃. The accuracy of the method is within 0.1-0.2% depending on the quantity of the para isomer in the mixt. To det. p-ClC₆H₄NO₂ in the presence of o-ClC₆H₄NO₂ dissolve 0.5-1 g of the mixt. in 10 cc. Et₂O in a 250 cc. Erlenmeyer flask provided with a glass tube condensed so on long and a short glass tube sealed with a stopper rubber tubing, add 60 cc. H₂O and 8-10 cc. concd. HCl and then carefully, Zn dust, heat 15 min. transfer the mixt. to a flask, make up with H₂O to 200 cc., remove 20 cc., make slightly alk. to litmus, set the balance with Et₂O, dry, filter through a dry filter, wash the filter with anhyd. Et₂O, dil. with Et₂O to 200 cc. and proceed as above. The accuracy of the method is within 1% of the para isomer. Chas. Blum

ASB 534 METALLURGICAL LITERATURE CLASSIFICATION



Methods for determining primary, secondary and
tertiary amines and ammonia in a mixture K. L. Mizoch
and A. Ya. Savchenko, *Eng. Chem. Ind. (U.S.S.R.)*, 7,
1968, 1000. A critical discussion of known procedures.
References Chas. Blane

PROCESSES AND PROPERTIES INDEX

7

ca

Determination of benzoylbenzoic acid and its derivatives. A. Ya. Savchenko and K. G. Mizuch. *Zhuravskaya Lab. 9, 1101-2(1940)*.—Dissolve 0.3-0.8 g of benzoylbenzoic acid (sol. salt or equiv. amt. of accurately neutralized acid) in a small amt. of water, add 50 ml. of 0.1 N AgNO₃, dil to 50 ml., shake and allow to settle for 15-50 min. Filter and use 50 ml of filtrate for detg. Ag by the Volhard method. In detg. benzoylbenzoic or toluylbenzoic acids the soln. should be cooled in ice for an hr to decrease the soly of the Ag salt. Cooling is not necessary in the case of chlorobenzoylbenzoic acid.

B. Z. Kamich

METALLURGICAL LITERATURE CLASSIFICATION

FROM STRIP

FROM STRIP

FROM STRIP

PROCESSES AND PROPERTIES INDEX

10

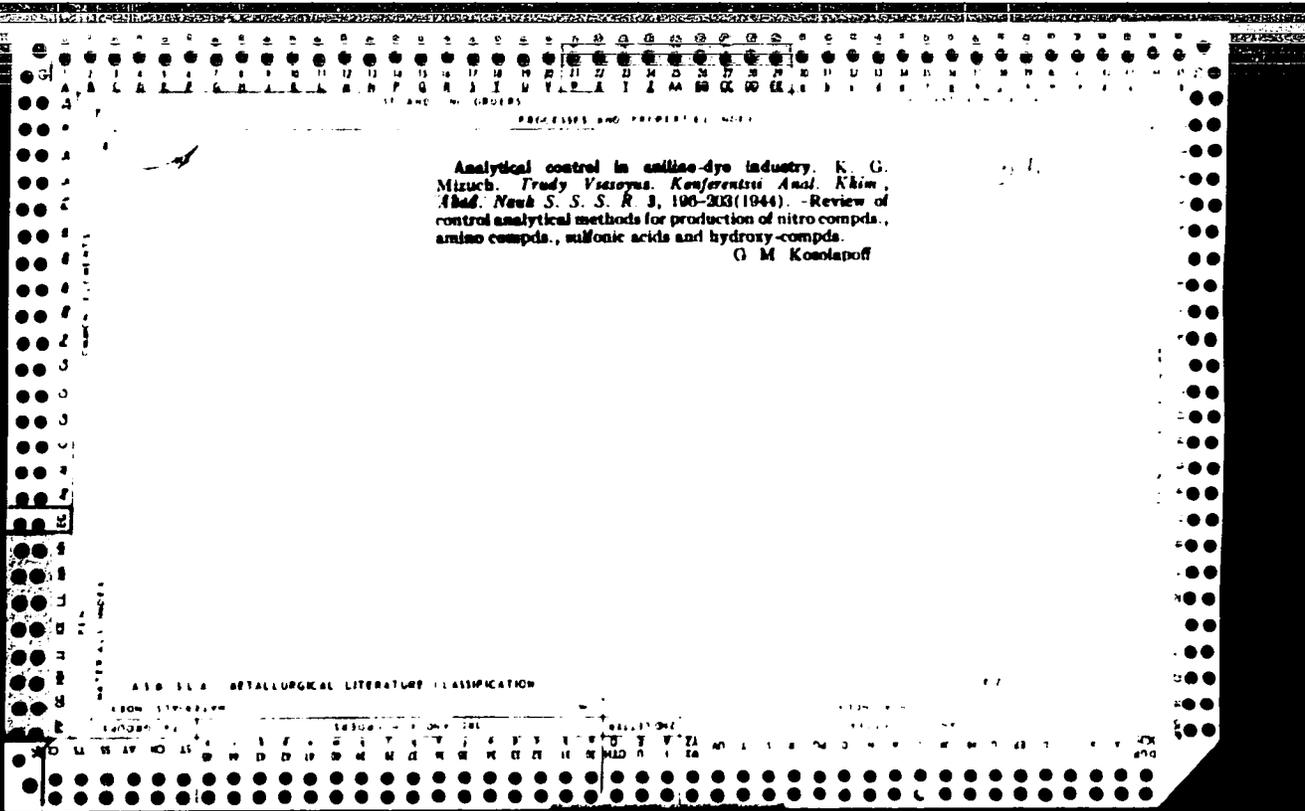
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Carbazole and its derivatives I. Structure of carbazolemonosulfonic acid. K. G. Mizuh, *J. Gen. Chem.* (U.S.S.R.) 10, 841-51 (1940). Carbazole-3-sulfonic acid (I) was prepd. and compared with the com. carbazolemonosulfonic acid. The 2 acids and their arylamine deriva. proved to be identical. To prep 1.3-34 g carbazole, m 244-6°, and 18 g KSCN in 200 ml of 90% AcOH were treated with 3.19 g Br in AcOH at 6-10° for 0.5 hr and then with 2.23 g Br at 20° for 2 hrs. The ppt., formed on adding H₂O, was filtered, dried and oxid. with alc. in the Soxhlet app. Carbazole-3-thiocyanate (II) was sepd. from the 3,3-dithiocyanate in the mixt. by fractional crystn. from alc. Pure II, m 111.7-12.7°, can be best obtained by successive recrystn. from C₆H₆ + CCl₄, cf. G. and M. N. A. Jevic, m 121.2°. II proved to be identical with the product formed by reacting diazotized 3-aminocarbazole with KSCN and decomg. with Cu powder by the Sandmeyer reaction. Reduction of II in HCl + AcOH with Zn dust on a water bath gave 80% of 3-mercaptocarbazole, m 100.5-202°, oxidized in AcOH with H₂O₂ at 25-40° to 1,4-dibromo-NH₂ salt, m 215.6-0.5°, 1,4-dibromo-NH salt, m 224.7°, 1,4-dibromo-NH₂ salt, m 231.2°, 2,4-dibromo-NH₂ salt, m 231.2°. The structure of carbazole dithiocyanate is being investigated. II. Bromination of carbazole and carbazole-3-sulfonic acid. K. G. Mizuh and A. Ya. Savchenko, *Ibid.* 5:2-4. Contrary to Vauzel (*Z. anorg. allgem. Chem.* 14, 781 (1901)), carbazole reacts in AcOH + HCl with 1, 2 and 3 mols. Br in the form of bromate-bromide reagent at 35° without oxidation to give corresponding Br substitution products in the 5- and 6-position to the NH group by analogy with arylamines. Reaction with 1 mol. Br formed 45.76% bromocarbazole, 40.57% di-bromo-carbazole (I) and some unreacted carbazole. With 2 mols. Br 85.10% I and some mono- and tribromo-carbazoles (II) formed. With 3 mols. Br a mixt. of isomeric II (chiefly 1,3,6-tri-Br deriv.) was formed. Bromination of carbazole-3-sulfonic acid with 3 mols. Br gave 1,3,6-tri-bromocarbazole-3-sulfonic acid, hydrolyzed with 1 mol. Br to bromocarbazole, m 178.80°, converted with 1 mol. Br to 1,3,6,8-tetrabromocarbazole, m 230.5-1.5° (m 220°). Lindemann and Mühlhaus, *C. A.* 20, 403. C. B.

METALLURGICAL LITERATURE CLASSIFICATION

FROM SOURCE

CLASS. ON QV 101



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PROCESSES AND PROPERTIES NOTES

Carbazole and its derivatives IV Selective action of acylating substances on N-hydroxymethyl carbazole

G. Mizuch and E. M. Geller, *Vysokomol. Soedin. Ser. B*, *Chem. Acad. Sci. USSR Div. Chem. Inst. for Org. Intermediates and Dyes, Moscow*, *Appl. Chem. U.S.S.R.*, 1960, 11, 1905, in Russian, *Chem. Abstr.* 55, 25009 (1961). Hydroxymethyl carbazole, $C_{12}H_{11}NO$, and Ag_2O heated 40 min. at 180° gives 15% yield of 20% purified product, mp 158-159° (lit. 158-159°), which like its analogs, decomposes when heated by hydrolysis to yield CO_2 . The hydrolysis product is 1-hydroxymethyl carbazole, mp 158-159° (lit. 158-159°). When the reaction is carried out with Ag_2O in the presence of the hydroxymethyl carbazole, the yield of the product is 100%. The hydrolysis product is 1-hydroxymethyl carbazole, mp 158-159° (lit. 158-159°). When the filtrate from the reaction of 1-hydroxymethyl carbazole with Ag_2O is allowed to stand at 180° for 1 hour, the rate of reaction is considerable, especially at 180°. The hydrolysis product is 1-hydroxymethyl carbazole, mp 158-159° (lit. 158-159°). With Ag_2O and $AgCl$ this gives 100% yield of 1-hydroxymethyl carbazole, mp 158-159° (lit. 158-159°). Summary data: m. 158-159°. An analogous reaction with *N*-hydroxymethyl carbazole, mp 158-159° (lit. 158-159°) with Ag_2O gives 100% and with $AgCl$ 100% of the product, m. 158-159°. Thus the course of the reaction depends both on the acylating and the acylated groups.

ASB 51.4 METALLURGICAL LITERATURE CLASSIFICATION

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FROM 83676

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Carbazole and its derivatives. III. Action of dialkyl sulfates on sodium 3-carbazolesulfonate. K. G. Mizuch and Ya. M. Geiler (Voroshilov Chem. Tech. Inst. Dye Intermediates, Moscow). *J. Gen. Chem. (U.S.S.R.)* 17, 821 (1941), cf. C.A. 42, 5656. Pure neutral R_2SO_4 do not alkylate or sulfonate *Na* 3-carbazolesulfonate (I). 1 (8.07 g.), 22.7 g. Me_2SO_4 , and 20 cc. $MePh$ gently refluxed 3.5 hrs. yielded 69% unchanged I; similar results were obtained with Et_2SO_4 . When 8.07 g. I, 22.7 g. Me_2SO_4 , 20 cc. $MePh$, and 0.54 g. H_2O were treated as above, the reaction mass was deep violet, after evapn. of the $PhMe$ and Me_2SO_4 , the residue, dlkd. with H_2O and neutralized with Na_2CO_3 , gave 6.55 g. of a mixt., m. 214-19°, of mixed di-*Me* esters of carbazolesulfonic acids; no I was found. The crude di-*Me* esters were hydrolyzed by alc. $NaOH$, freed of $EtOH$, and the products were heated in sealed tubes with 7% HCl 8 hrs. to 165-70°, crystals of the resulting mixt. from $PhMe$ gave carbazole and 0

methylcarbazole in the ratio of 2:1. It was impossible to completely identify the components of the Me_2 or Et_2 ester mixt. since crystals led to hydrolysis and loss of all but ester of 3,6-carbazolesulfonic acid, which are colorless solids, insol. in H_2O , do not react with 4-(ONC_2H_4OH) in H_2SO_4 , and decamp on heating. di-*Me* ester, long needles (from dry $MeOH$), decamp 215-0°, di-*Et* ester, long needles (from dry $MeOH$), decamp 222-3° (rapid heat) or 211-12° (slow heating), or 222-3° (rapid heat) (slow heating). Addn. of increasingly greater amts. of H_2O or H_2SO_4 favors the formation of such ester mixts. Similar promotion of the reaction was obtained with Et_2SO_4 , which was heated 3 hrs. to 170° before the reaction; the more stable Me_2SO_4 did not show such an effect. The mechanism of the γ -alkylation is not clear, but the sulfonating action is caused by the monoalkyl sulfates produced by the action of either H_2O or H_2SO_4 on R_2SO_4 . G. M. Kosolapoff

ABSTRACT OF METALLURGICAL LITERATURE CLASSIFICATION

MIZUCH, K. G.

Chemical Abstr.
Vol. 48
Apr. 10, 1954
Organic Chemistry

Reaction of organoarsenic compounds with derivatives of 3,4-dihydro-3-alkyl-2H-1,2-benzoxazines. K. G. Mizuch, Ya. M. Voroshilov Inst. Org. Intermediates and Dyes, Moscow. *Zhur. Obshch. Khim.* 21, 801-4 (1951). (1612-2000). 3,4-dihydro-3-alkyl-6-alkyl (or aryl)-2H-1,2-benzoxazines with opening of the benzoxazine ring and formation of 2-(dialkylaminoethyl)-4-alkyl(or aryl)phenols. The reaction is run with a 2-4 fold excess of $RMgX$ and during the mixing the temp. is kept at -5 to +5°, then at reflux for a brief period. The products are either extrd. with Et_2O or filtered from the mixt. Thus were obtained the following 2- $RR'R''N(tert-Bu)C_6H_4OH$ [$R = cyclohexyl$; $R' =$ yield (%), and m.p. shown]: Me , 82.2-85.4° (from $MeMgI$); *isopentyl*, 70-63.2-4° (from $iso-BuMgBr$); *i-butyl*, 85.5, 46.3-7.5° (from Cl_2CH-CH_2MgBr); RC_6H_4 , 87, 101.2-1.8° (from $RMgBr$); $PhCH_2$, (1), 83.5, 137-7.5° (from $PhMgBr$); and $PhCH_2CH_2$, 130.5-7.2° (from $PhCH_2Cl$); 4,2- $Ph(R'PhCH_2)N(C_6H_4)OH$, 02.8, 117.2-17.8° (from $PhMgBr$). I was also obtained from $RNHCN, Ph.HCl$, paraformaldehyde, *p-tert-BuC_6H_4OH, KOH , and $EtOH$ by heating on a steam bath. G. M. Kosolapoff*

GT-GrL No. 45

Mizushima, K. and Geller, T. M. (K. E. Voroshilov Scientific Research Institute of Organic
By products and Dyes). The reactions of some esters of carbonic acids. 807-10

Akademiya Nauk S.S.S.R., Doklady Vol. 79 No. 5

Mizuch, K.G.

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Reaction of organomagnesium compounds with derivatives of 3,4-dihydro-3-alkyl-2H-1,3-benzoxazines. K. G. Mizuch. *J. Gen. Chem. U.S.S.R.* 23, 901-3(1953) (Engl. translation).—See *C.A.* 48, 3982f. H. L. H.

MIZUCH, K.G.; LAPINA, R.A.

Peretherification of dialkylaminomethylalkyl ethers. *Zhur.ob.khim.* 23 no.9: 1512-1518 S '53. (MLBA 6:10)

1. Gosudarstvenny Nauchno-issledovatel'skiy institut organicheskikh poluproduktov i krasiteley im. K.Ye.Voroshilova. (Ethers)

MIZUCH, K. G.

Transetherification of dialkylaminomethyl alkyl ethers and dialkylaminomethyl alkyl sulfides. R. A. Lapina and K. G. Mizuch. J. Gen. Chem. (U.S.S.R.) 24, 1301-2 (1954) (English transl.).--See C.A.B. 49, 13211g. U.S.S.R.

(1)

MS-854

MIZUCH, K. G.

USSR/Chemistry

Card 1/1 : Pub. 151 - 25/42

Authors : Lapina, R. A., and Mizuch, K. G.

Title : Re-etherification of dialkylaminomethylalkyl ethers and dialkylaminomethylalkyl sulfides

Periodical : Zhur. ob. khim. 24/9, 1605-1608, Sep 1954

Abstract : The reaction of re-etherification of dialkylaminomethylalkyl ethers and dialkylaminomethylalkyl sulfides was investigated. The possibility of obtaining dialkylaminomethylalkyl sulfides from the reaction of dialkylaminomethylalkyl ethers with mercaptanes was established. The exchange of the alkoxy and sulfhydryde groups, which takes place during the heating of the ether-sulfide mixture, is explained. Four references: 2-USA and 2-USSR (1921-1953).

Institution : The K. E. Voroshilov Scientific Research Institute of Organic Semi-Products and Dyes

Submitted : April 2, 1954

Mizuch, K. G.

Reactivity of dialkylaminoethyl alkyl ethers and of compounds similar to them in structure. K. G. Mizuch and R. A. Lapina. J. Gen. Chem. U.S.S.R. 28, 657-0 (1958) (English translation) - See C.A. 50, 14744c. H. M. B.

AM

MIZUCH, K. G.

20 5

Photosensitive emulsion layers. S. M. Levi, O. K. Smirnov, K. G. Mizuch, and N. M. Kasatkin. U.S.S.R. 105,727, June 28, 1957. Water-sol. (hydroxymethyl)melamine ethers of mono- or dibasic aces. are incorporated into a photosensitive emulsion in order to combine the tanning and plasticizing effects. M. Hosh

AM

MIZUCH, K.G.

Reaction of acyl chlorides with some hydroxylated compounds. K. G. Mizuch, N. M. Kasatkin, and T. M. Gelfer (K. S. Vorozhnikov Sci. Research Inst. Org. Intermediates and Drugs, Moscow). *Zhur. Obshchei Khim.* 27, 189-65 (1957).

To 9.9 g. *N*-hydroxymethylcarbazole suspended in CCl_4 was added in 15 min. 7.7 g. $BzCl$, 8.7 g. pyridine, and 20 ml. CCl_4 ; after 6 hrs. at 40° , the cooled mixt. was filtered yielding 11.7 g. insoluble solid; evapn. of filtrate gave 6.7 g. *N*-benzoyloxymethylcarbazole, m. $97.9-8.4^\circ$. The insol. matter after extrn. with MePh gave on evapn. of the ext. 0.5 g. starting material, while the insol. portion heated with Me_2CO gave a residue of 1.23 g. carbazole; the Me_2CO soln. gave *N*-hydroxymethylcarbazole, m. $129.2-30^\circ$, after heating with H_2O ; heating with aq. NaOH gave some pyridine and acidification of the alk. soln. gave *N,N'*-dicarbazolymethane. The oily residue obtained on evapn. of the Me_2CO ext. above was apparently *N*-chloromethylcarbazole pyridinium salt, oil, d_4^{20} 1.0496, n_D^{20} 1.5260, which yields AgCl on treatment with $AgNO_3$. Treatment of 18.8 g. *N*-hydroxymethylstearamide (I) in CCl_4 at 40° with 12 g. $PhSO_2Cl$, and 12 g. pyridine, and heating 3 hrs. at 65° gave on cooling 35.4 g. crude product, which gave stearamidomethylpyridinium chloride (II), m. $134.7-5^\circ$ (from Me_2CO) (cf. Weaver, et al., *C.A.* 46, 3494b), which warmed with dil. H_2SO_4 yields distearamidomethane, m. $137.4-7.6^\circ$. I with $BzCl$ in pyridine- CCl_4 at 60° gave II, which also formed from I and $SOCl_2$ under similar conditions. *N*-Hydroxymethylphthalimide with $PhSO_2Cl$ in pyridine at $62-4^\circ$ in 3 hrs. gave *N*-phthalimidomethylpyridinium chloride, m. $227-8^\circ$ (from $BuOH-Me_2CO$). When 3.85 g. *N*-hydroxyethylphthalimide was treated in CCl_4 with 3.5 g. $BzCl$ and 10 g. pyridine and heated 6 hrs. at 65° there formed *N*-benzoyloxymethylphthalimide, m. $136.8-7.8^\circ$ (from $MeOH$), also formed by the action of Bz_2O in pyridine. Pyridine (2.2 g.) in 50 ml. CCl_4 was satd. with dry HCl, excess HCl removed

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MIZUCH, K.G. & KASATKIN, N.M. Gelfer T.M.

by dry air stream, 1 drop pyridine added followed by 4.12 g. *N*-hydroxymethylphthalimide in 20 ml. CCl_4 ; after 3 hrs. at 60° no evidence of reaction was observed. Addn. of 3.6 g. $BzCl$, with cooling to 3.8 g. *N*-2-hydroxyethylphthalimide (III) in 10 ml. pyridine followed by 0.5 hr. on a steam bath and quenching in ice gave 4.1 g. *N*-2-benzoyloxyethylphthalimide, m. $110.2-16.6^\circ$ (from $MeOH-Me_2CO$). $PhSO_2Cl$ (4.9 g.) with 4.77 g. III in 50 ml. pyridine 1 day at room temp. gave 5.3 g. $PhSO_2CH_2CH_2N(CO)C_6H_4$, m. $138-8.5^\circ$ (from $MeOH$). To $PhMgBr$ from 19.8 g. $PhBr$ was added 9.49 g. *N*-2-benzoyloxyethylcarbazole and after refluxing 3 hrs. the mixt. treated with aq. NH_4Cl yielding 71.3% *N*-2-hydroxyethylcarbazole, m. $79.6-80.5^\circ$, and 62.2% Ph_2CO . Addn. of 31.2 g. $PhSO_2Cl$ with cooling to 70 ml. pyridine, stirring 0.5 hr., cooling to 5° , adding 22.93 g. *p*- $AcNHCH_2H_2SO_3CH_2OH$, heating 2 hrs. at 75° , and stirring 5 hrs. gave on the following day 20.65 g. *p*- $AcNHCH_2H_2SO_3CH_2O.SPh$, m. $185.2-6.5^\circ$ (from $BuOH$), on diln. of the filtrate with H_2O ; the pyridine-insol. ppt. (4.16 g.) was 1,1'-methylenebis(pyridinium chloride), a solid (from aq. $BuOH$), isolated as a monohydrate; picrate, decomp. 346° , also formed from $PhSO_2Cl$ in pyridine with paraformaldehyde in 5 hrs. at 75° . Heating 3.48 g. CH_2Br_2 in 10 ml. pyridine 5 hrs. at 100° gave 78.3% 1,1'-methylenebis(pyridinium bromide), m. $235-9^\circ$; picrate, m. $245-6.5^\circ$ (cf. King, *C.A.* 42, 2973c).

G. M. Kasatkin

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Conference on the Application of Textile-Auxiliary Substances
of Chemical Fibers

On investigation of the effect of the introduction of textile auxiliary substances (for example, on the surface active substances, detergents, etc.) P. I. Ivanov (Izv. VNIIV) on the effect of production textile auxiliary substances at the Institute of Textile Technology (VNIIV) on the application of auxiliary substances in the production of chemical fibers by introducing the data into the spinning solutions; F. I. Kovskaya (VNIIV) on the study of the effect of textile auxiliary substances on the physical-mechanical properties of rayon; V. M. Rysakova (TsNKhB) on the effect of different signs of textile auxiliary substances on the properties of artificial and synthetic staple fibers in cotton-spunners; M. V. Filatova (TsNKhB) on the protective action of static electricity during processing of wool and artificial fibers in wool spinning equipment; P. A. Polonskiy (TsNKhB) on the relation between the electrifiability of different fibers and the tensions arising during their processing; E. I. Tille (German Democratic Republic) on the application of auxiliary substances in the production of artificial fibers.

Card 2/3

NOV 1953-4-1-21731

Conference on the Application of Textile-Auxiliary Substances in the Industry
of Chemical Fibers

During the discussion it was learned that the industry of artificial fibers did not have the necessary assortment of textile auxiliary substances which is due to a lack of production capabilities, of theoretical investigations and of the experimental base for synthesizing and testing auxiliary substances. The exchange of information is also insufficient.

The following associations are mentioned in the article:
Vsesoyuznoye khimicheskoye obschestvo imeni D.I. Mendeleyeva (All-Union Chemical Society imeni D.I. Mendelejev), Gosplan SSSR (State Plan Commission of the USSR), Gosudarstvennyy komitet po kaimii (State Committee for Chemistry), VNIIV, NICPIK, VNIIZh (Khimicheskii zavod imeni Baturina (Chemical Plant imeni Baturin), TsNKhB, TsNIIshersti (Central Scientific Research Institute of Wool), TsNIIshelnk (Central Scientific Research Institute of Silk), GNTK

Card 3/3

L 44152-6: EWI(1)/EJC (M/D) SOURCE CODE: UR/0000/66/000/000/0067/0072
ACC NR: AT6026923

AUTHOR: Mizun, Yu. G.

ORG: none

TITLE: Classification of ionospheric storms

SOURCE: AN SSSR. Kol'skiy filial. Polyarnyy geofizicheskiy institut. Vysokoshirotnyye issledovaniya v oblasti geomagnetizma i aeronomi (High-latitude studies in geomagnetism, aeronomy). Moscow, Izd-vo Nauka, 1966, 67-72

TOPIC TAGS: magnetic storm, ~~anomalous absorption~~, geomagnetic storm, ^{solar} corpuscular ^{radiation} ~~Forbush effect~~, ^{solar activity}

ABSTRACT: In an earlier paper A. S. Bezprozvannaya classified ionospheric magnetic storms as F and FD storms on the basis of the following considerations: 1) anomalous absorption during the F storm covers less than one fifth of the whole duration and during the FD storm more than one fifth of the duration; 2) geomagnetic storms with sudden commencement are associated with ionospheric F storms in 77% of cases and geomagnetic storms with gradual commencement with FD storms in 73% of cases; 3) FD storms recur after 27 days, 1/2 of storms are F storms are pre-dominant during high solar activity. Geomagnetic storms with sudden commencement occur when the earth is struck by the front of a corpuscular stream. When the side

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ACC NR: AT6026923

of the corpuscular stream strikes the earth a geomagnetic storm with gradual commencement occurs. In the present paper, Yu. G. Mizun repeated the investigation of the same data and criticized conclusions reached by Bezprozvannaya. The criticism is based on the appearance of the Forbush effect and the change of critical frequency in the F2 layer. An encounter of the earth with the front of corpuscular stream may cause a geomagnetic storm of sudden commencement and also a storm of gradual commencement. The author rejects the F and FD storm classification. According to him, the perturbed period lasts from the time the earth enters into the corpuscular stream until it leaves. Physical interactions between the magnetosphere and ionosphere on one side and the magnetic field of the plasma flux on the other side cannot be studied on the basis of selected data where quiet periods are eliminated. Ionospheric magnetic perturbations can be investigated by taking into consideration all periods of the ionospheric state, inasmuch as the earth is in the corpuscular stream. Orig. art. has: 4 figures and 1 table. [EG]

SUB CODE: 04/2/ SUBM DATE: 21Apr66/ ORIG REF: 002/

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L 04159-67 EWT(d)/EWT(1)/EEC(k)-2/FCC GD/GW/MS-2
ACC NR: AT6026927 SOURCE CODE: UR/0000/66/000/000/0102/0111

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E+1
1

AUTHOR: Mizun, Yu. G.

ORG: none

TITLE: Selection of the optimal operating frequencies for communication by reflection of radio waves from the F2 layer with the use of the function of communications insurance

SOURCE: AN SSSR, Kol'skiy filial, Polyarnyy geofizicheskiy institut, Vysokoshirotnyye issledovaniya v oblasti geomagnetizma i aeronomii (High-latitude studies in geomagnetism and aeronomy). Moscow, Izd-vo Nauka, 1966, 102-111

TOPIC TAGS: radio communication, signal frequency, frequency selection, F layer, radio wave propagation

ABSTRACT: On the basis of a probability investigation of the distribution of critical frequencies of the F2 layer, conclusions are drawn concerning the advantage of predicting the probability of accomplishing radio communication by reflection of radio waves from the F2 layer on the maximal receiving frequency of F2. It is shown that this probability is determined by the function

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ACC NR: AT6026927

where P is the probability of reflection of radio waves from the F2 layer, F is the distribution function of a random sequence of values $f_0 F2$. The function R is called the function of communication ensurance by means of the F2 layer. The function obtained gives the probability of accomplishing communication by means of the F2 layer at a given frequency. But it is stipulated that the value of R is calculated from the data of vertical sounding of the ionosphere. In this case it is necessary to take into account that according to the procedure of calculation when reflection of radio waves of the F2 layer is absent in vertical sounding, radio communication by means of the F2 layer is also absent on a line with a reflection point at the point of sounding. Obviously this will not always correspond to reality. Therefore, the values of R can be somewhat underestimated. If the F2 layer is shielded by the E_s layer, communication by means of the F2 layer is also impossible. However, in this case it is necessary to bear in mind that communication is possible by means of the E_s layer. But the fact cannot be disregarded that the frequencies of shielding of the F2 layer by the E_s layer increase with an inclined incidence. Consideration of these factors can help to refine the values of the function F and, consequently, of R .
Orig. art. has: 10 figures.

SUB CODE: 04,17/ SUBM DATE: 21Apr66/ ORIG REF: 002

APPROVED FOR RELEASE: 06/14/2000

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ACC NR: AP7

AUTHOR: Mizun, Yu. G.

SOURCE CODE: UR/0203/66/006/006/1110/1111

ORG: Polar Geophysical Institute, Kola Branch, AN SSSR (Polyarnyy Geofizicheskiy institut Kol'skogo filiala AN SSSR)

TITLE: Vertical drift of ionization in the F layer of the ionosphere

SOURCE: Geomagnetizm i aeronomiya, v. 6, 1966, 1110-1111

TOPIC TAGS: ionosphere, ionospheric electron density, ionospheric inhomogeneity

ABSTRACT: Changes in the effective height of the lower boundary of the F layer (h'F) in the ionosphere, and in the critical frequency of the F2 layer (f2F2) during the ionospheric disturbance periods of 22-30 March, 15-17 June and 21-31 October 1958 were studied. The study was based on data collected by ionospheric stations located near the geomagnetic meridians at 0° and 180°. Changes in Δh'F during the first day of the 22 October storm which started at 03 hr, 15 min are shown in Fig. 1; they are based on data from stations at 0° (left) and 180° (right). Angle φ is equal to the geomagnetic latitude of the ionospheric station. Circles 0, 1, and 2 pass through heights h = 0, 50, and 100 km. The Δh'F above the F2 layer increased until the sudden beginning of the

Card 1/2

UDC: 550.388.2

ACC NR: AP7002201

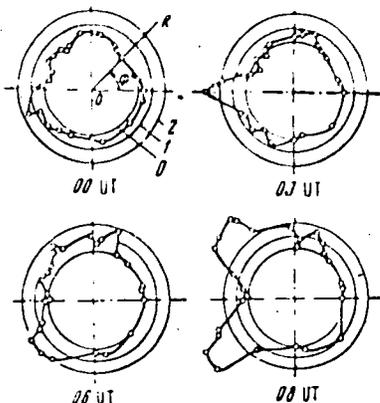


Fig. 1. Changes in Δh'F during the first day of the 22 October 1958 ionospheric storm.

storm. Such increases took place in the night ionosphere (20-24 hr LT); heights up to 200 km were observed for the storms of 25-26 October, 6-7 June and 29-30 March. In all of these cases the rises occurred in the night side of the ionosphere while the index R₃ rose from 1 to 6-8. Vertical drift of ionization above the equator should increase the f₂F₂...

MIZUNKA, Piotr, inz.

Rumanian and Czechoslovak power networks connected by a
400 kv transmission line. Energetyka Pol 18 no.3:83-84
Mr'64

MIZUNOV, G. P. Cand Agr Sci -- (diss) ^{in Russian} "Biological Characteristics
of Cultivated and ~~(Certain)~~ Wild ^{- growing} ~~Perennial Onions.~~ Perennial Onions."
Mos, 1957. 20 pp 20 cm. (Mos Order of Lenin Agricultural Academy
im K. A. Timiryazev), 120 copies (KL, 25-57, 116)

USSR/Cultivated Plants - Potatoes, Vegetables, Melons.

Abstr Jour : Ref Zhur - Biol., No 3, 1958, 1385
Author : Mizunov, G.P.
Inst : Moscow Agricultural Academy imeni K.A. Timiryazev.
Title : On the Problem of the Biology of the Perennial Onion.
Orig Pub : Dokl. Mosk. s.-kh. akad. imeni K.A. Timiryazeva, 1956,
No 28, 269-274
Abstract : Experiments conducted in the Vegetable Testing Station of
the TSKhA from 1951-1956 on the study of the perennial
onion group have indicated the possibility of classifying
all onions as either late-ripening or early-ripening.
It has been determined that in the raceme first the cen-
tral flowers begin to blossom and then the peripheral
ones. The early-ripening may vary in their ability to have
a secondary (autumnal) flowering. The early-ripening

MIZUNOV, G.P.

Secondary flowering in perennial onions. Bot. zhur. 43 no.4:577-579
Ap '58. (MIRA 11:6)

1. Moskovskaya sel'skokhozyaystvennaya akademiya im. K.A.
Timiryazeva. (Onions) (Plants, Flowering of)

MIZURIN, I., slesar'

Tool for cutting paronite packings. Ma stroi. Mosk. 2 no.9:27
S '59. (MIRA 13:2)

1. Mekhanicheskiy zavod tresta Mospodsemstroy No.1.
(Cutting machines)

M. ZUKIN, S. P.

PLANE I BOOK EXPLORATION 507/3491 507/11-3-109

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Moscow, Aviatstomoy Institut Lening Sverdlovskiy
 Aviatstomoye priborostroyeniye i avtomatika; shornik statey (Instrument Making
 and automatic Systems in Aviation, Collection of Articles, Moscow, Sverdlovskiy,
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 M. I. B. A. Ryabov, Doctor of Technical Sciences, Professor; Ed. of Publishing
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 Avia, Engineer.

PURPOSE: This book is intended for scientific and technical personnel in the field
 of instrument making and automation, and for students of technical schools of
 higher education.

CONTENTS: The book is a collection of 10 articles describing certain aspects of
 aircraft automatic control and regulation and aviation instrument making. The
 articles consist of parts of the authors' dissertations or descriptive results
 of scientific research work of the Department of Aircraft Instruments and
 Automatic Systems of the Moscow Aviation Institute. References are given at
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