PROTSENKO, G.A.

SHRINKO, Aleksandr Semenovich, kand.tekhn.nauk; PROTSENKO, Galina Aleksandrovna; SHELEKHTIN, Aleksandr Vital'yevich, kand.tekhn. nauk; GOL'MAN, A.B., otvetstvennyy red.; ANDREYEV, S.P., tekhn.red.

[Dust elimination in plants engaged in crushing, separating and concentrating iron ore] Obespylivanie vozdukha na dorbil'no-sortirovochnykh i obogatitel'nykh fabrikakh zheleznoi rudy. Khar'kov, Gos. nauchno-tekhn.izd-vo lit-ry po chernoi i tsvetnoi metallurgii, 1957. 162 p. (MIRA 11:4)
(Dust--Removal) (Ore dressing)

SERENKO, A.S., STANISLAVSKIY, Ya.M., KHAZAN, G.L., KHIZHNYAKOVA, L.N., OSETINSKIY, T.G., PROTSENKO, G.A., BARANENKO, A.A., MARCHENKO, N.I. KOTSYUBENKO, V.K., NESTRUGINA, Z.F., NERUBENKO, A.B., PYEHTINA, O.N. KRYLOVA, V.K., KOCHKINA, V.N. (Khar'kov).

Hygienic working conditions and the development of pneymoconiosis among workers in iron ore sintering plants. Gig.truda i prof.zab. 2 no.2:17-20 Mr-Ap'58. (MIRA 11:6)

1. Ukrainskiy nauchno-issledovatel'skiy institut gigiyeny truda i profzabolevaniy.
(LUNGS--DUST DISEASES)
(IRON AND STEEL WORKERS--DISEASES AND HYGIENE)

SOV/137-59-1-887

Translation from: Referativnyy zhurnal. Metallurgiya, 1959, Nr 1, p 118 (USSR)

AUTHOR: Protsenko, G. A.

TITLE: Labor Sanitation Problems Encountered in Welding Operations Employing Mn Electrodes as Well as in Automatic Submerged-arc Welding (Voprosy gigiyeny truda pri svarke margantsevymi elektrodami i avtosvarke pod flyusom)

PERIODICAL: V sb.: Vopr. gigiyeny truda i profzabolevaniy v gornorudn., khim. i mashinostroit. prom-sti. Kiyev, Gosmedizdat UkrSSR, 1958, pp 124-128

ABSTRACT: A presentation of the results of an investigation dealing with the effects of Mn on the health of operators working in an electrical-welding shop of a large machinery plant. Measures are recommended for the purpose of improving working conditions of the operators engaged in electrical welding with high-grade electrodes, as well as in automatic submerged-arc welding.

V. K.

Card 1/1

PROTSENKO, G.P

Effect of copper on the photocolorimetric determination of bismuth with thiourea. G. P. Protsenko. *Abornik Studenchesk. Nauch. Rabot Rostov. Gosudarst. Univ.* 2, 87-92 (1953); *Referat. Zhur., Khim.* 1954, No. 15030.—The analyzed soln. should contain 0.4-0.6 g. equiv./l. HNO_3, and the concn. of Cu should not exceed 0.1 of the concn. of Bi. The calibration curve must be constructed from solns. contg. the same quantities of Cu and HNO_3. M. Hoseh

PROTSENKO, G. P.; KOVALENKO, P. N.

Determination of nickel and molybdenum present together. Zav. lab. 28 no. 1:23-25 '62. (MIRA 15:2)

1. Rostovskiy gosudarstvennyy universitet.
(Nickel—Analysis) (Molybdenum—Analysis)

L 12308-66 EWT(m)/EWP(t) LJP(c) JD/HW/JG/GS

ACC NR: AT6005600 SOURCE CODE: UR/0000/64/000/000/0136/0140

AUTHOR: Kovalenko, P. N. (Professor); Protsenko, G. P.

ORG: Rostov State University (Rostovskiy gosudarstvennyy universitet)

TITLE: Determination of molybdenum and tungsten in the presence of large amounts of nickel

SOURCE: Vsesoyuznaya konferentsiya rabotnikov metallurgicheskoy i khimicheskoy promyshlennosti i sotrudnikov vuzov. Rostov-on-Don, 1962. Peredovyye metody khimicheskoy tekhnologii i kontrolya proizvodstva (Progressive methods of chemical engineering and production control); trudy konferentsii. Rostov-on-Don, Izd-vo Rostovskogo univ., 1964, 136-140

TOPIC TAGS: molybdenum, tungsten, nickel, polarographic analysis

ABSTRACT: It was found that when molybdenum is polarographed in 0.5 N nitric acid, a catalytic molybdenum wave with a half-wave potential of -0.169 V appears which permits the determination of this metal in the presence of large amounts of nickel and iron. It is shown that the electrochemical reaction of tungsten in 5.7 N

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L 12308-66

ACC NR: AT6005600

hydrochloric acid and in a mixture of 1.4 N hydrochloric acid and 10 N lithium chloride in the presence of nickel is catalytic in character. The two methods of determining tungsten complement each other under certain conditions. At a nickel content of not over 50% of the tungsten content, a mixture of LiCl and HCl can be used. When the ratio of nickel to tungsten is not greater than 1.2:1, tungsten should be polarographed in 5.7 N HCl. Amounts of nickel greater than these should be separated electrolytically. This method can be successfully used when the nickel content is ten times that of tungsten, but not greater.

SUB CODE: 07/ SUBM DATE: 24Mar64/ ORIG REF: 004/ OTH REF: 002

Card 2/2

DATSKO, V.G.; GONCHAROVA, I.A.; PROTSENKO, G.P.

Study of organic matter in the Volga and Don Rivers and the Sea of Azov. Gidrokhim. mat. 31:108-112 '61. (MIRA 14:3)

1. Gidrokhimicheskiy institut Akademii nauk SSSR, g. Novocherkassk.
(Volga River--Organic matter)(Don River--Organic matter)
(Azov, Sea of--Organic matter)

PROTSENKO, G.P.; KOVALENKO, P.N.

Electrolytic separation of molybdenum and nickel. Ukr.khim.zhur. 28 no.4:522-525 '62. (MIRA 15:8)

1. Rostovskiy-na-Donu gosudarstvennyy universitet.
(Molybdenum--Analysis) (Nickel--Analysis)
(Electrochemical analysis)

PROTSENKO, G.P., gornyy inzhener.

Testing the TsIOT-54 dust collecting machine in the Krivoy Rog Basin. Gor.zhur. no.6:69-70 Je '57. (MLRA 10:6)

1.Trest Dzerzhinskruda.
(Krivoy Rog--Mine dusts)
(Dust collectors--Testing)

PROTSENKO, I.A.; MUZYLEV, G.A., redaktor; KHVAN, V.I., redaktor; RYKOV, N.A., redaktor.

[Gravitation methods of coal preparation] Gravitatsionnye metody obogashcheniia uglia. Moskva, Ugletekhizdat, 1954. 186 p. (Coal preparation) (MLRA 7:8)

PROTSENKO, L.D.; NEGIYEVICH, L.A.

Mono-, di-, and trichloroacetylethylenetriamides of phosphoric acid. Ukr. khim. zhur. 30 no.12:1328-1329 '64
(MIRA 18:2)

1. Ukrainskiy nauchno-issledovatel'skiy sanitarno-khimicheskiy institut.

PROTSENKO, Ivan Akimovich; RYKOV, N.A., redaktor; KOROVENKOVA, Z.A., tekhnicheskiy redaktor.

[Coal dust removal and dehydration of concentrates] Obespylivanie uglia i obezvozhivanie produktov obogashcheniia. Moskva, Ugletekhizdat, 1955. 132 p. (MLRA 9:1)
(Coal preparation)

PROTSENKO, Ivan Akimovich,; ARTYUSHIN, S.P., otv. red.; GARBER, T.N., red. izd-va,; KOROVENKOVA, Z.A., tekhn. red.

[Principles of coal preparation] Osnovy obogashcheniia uglia. Moskva, Ugletekhizdat, 1958. 131 p. (MIRA 11:11)
(Coal preparation)

MEDVEDOVSKAYA, B.I., inzh.; SHASTINA, Ye.A., inzh.; GORDON, Ye.Yu., inzh.; PROTSENKO, I.Ye., inzh.; LITVINOV, V.P., inzh.; SHISHKINA, E.I., inzh.; POPOVA, N.E., otv.red.; SALITAN, L.S., red.; KARABILOVA, S.F., tekhn.red.

[Handbook for the certification of multiplexing channels in domestic cable and overhead line communication systems] Rukovodstvo po pasportizatsii kanalov otechestvennykh sistem uplotneniia vozdushnykh i kabel'nykh linii sviazi. Moskva, Gos.izd-vo lit-ry po voprosam sviazi i radio, 1960. 261 p. (MIRA 13:9)

1. Russia (1923- U.S.S.R.) Glavnoye upravleniye mezhdugorodnoy telefonno-telegrafnoy svyazi.
(Telecommunication)

1. PROTSENKO, K.

2. USSR (600)

4. Plant Lice

7. Place for taking preventive measures against the melon aphis, Khlopkovodstvo No. 10, 1952.

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

L 22987-65
ACCESSION NR: AP5002317 S/0141/64/007/005/0865/0871

AUTHOR: Medvedev, Yu. A.; Protsenko, K. D.; Stepanov, B. M.

TITLE: Probability distribution of the time position of the signal threshold point at a detector output in the presence of noise

SOURCE: IVUZ. Radiofizika, v. 7, no. 5, 1964, 865-871

TOPIC TAGS: probability distribution, threshold signal, detector output, signal to noise ratio

ABSTRACT: A system is considered, consisting of a zero-lag detector and a narrow-band filter with a spectral characteristic that is symmetrical about the center frequency. The sinusoidal input signal is modulated by a slowly-varying smooth function. The authors analyze the output produced by this signal in conjunction with Gaussian noise at the input. Non-stationary processes in the detector itself are neglected. The fluctuations are assumed to be small, and the distribution function is investigated to estimate the mean square deviation of the time position of the threshold point at the detector output, defined as the

Card 1/2

L 22987-65
ACCESSION NR: AP5002317

time when the envelope of the voltage passes through a fixed level. This problem is similar to one considered earlier by V. I. Tikhonov (Vestnik MGU v. 5, 31, 1956) as applied to an electronic relay. It is shown that the probability of a given value of the time constant is decreasing with increasing signal/noise ratio. "The authors thank Yu. S. Sayasov for useful remarks." Orig. art. has: 2 figures and 19 formulas.

ASSOCIATION: None

SUBMITTED: 21Oct63 ENCL: 00 SUB CODE: EC

NR REF SOV: 003 OTHER: 002

Card 2/2

PROTSENKO, K. I.

USSR/Chemical Technology - Chemical Products and Their Applications -- Pesticides. I-7

Abs Jour : Ref Zhur - Khimiya, No 3, 1957, 8845

Author : Protsenko, K.I.
Inst : All-Union Sciences Research Institute for Cotton Growing
Title : Improving the Effectiveness of Chemical Methods Used in the Fight Against the Cotton Plant Aphids.

Orig Pub : Itogi rabot Vses. n.-i. in-ta khlopkovodstva, 1954, (1956), No 4, 37-39.

Abstract : The harvest losses caused by the melon patch aphid (MPA) during tests carried out in 1952 on strongly infested (over 100 aphids per shrub) cotton fields represented 51.5%. A single preventive treatment of the weeds surrounding the cotton fields with a 2% mineral

Card 1/2

BABICHEV, F.S.; PROTSENKO, L.D.

Interaction of methylene bases in the thiazole series with dibasic acid anhydrides. Ukr.khim.zhur.17 no.5:755-760 '51. (MLRA 9:9)

1.Kiyevskiy gosudarstvennyy universitet.
(Thiazole) (Anhydrides)

PROTSENKO, L.D.

Protsenko, L.D.--"Investigation of the Chemical Nature of Pigments of Some New Carotin-Bearers." Cand Chem Sci, Joint Sci Council, Inst of Organic Chemistry and Inst of General and Inorganic Chemistry, Acad Sci USSR, 20 Jan 54. (PRAVDA UKRAINY, 9 Jan 54)

Source: SUM 168, 22 July 1954

PROTSENKO, L. D.

USSR/Chemistry - Chromatography

Card : 1/1 Pub. 116 - 11/20

Authors : Savinov, B. G. and Protsenko, L. D.

Title : Chromatographic investigation of carotene dyes of squash, mountain ash and thistle.

Periodical : Ukr. khim. zhur. 20, Ed. 4, 399 - 407, 1954

Abstract : The content and chemical nature of carotene dyes, found in certain chlorophyll-free organs of plants, were investigated by the chromatographic method. The results are presented in tables. Eighteen references: 5-Swiss, 7-German, 3-USSR, 2-Ukrainian and 1-English (1930-1953).

Institution : Acad. of Sc. Ukr-SSR, Institute of Organic Chemistry

Submitted : February 20, 1954

"Phosphoric Acid Aryldiethylenetriamides. 1," by K. A. Kornev and L. D. Protsenko, Ukrainian Scientific Research Sanitary-Chemical Institute, Ukrainskiy Khimicheskiy Zhurnal, Vol 22, No 6, 1956, pp 782-783

Phosphoric acid triethylenetriamide (TEF) was found to be active in the treatment of leukemia, lymphogranulomatosis, and cancer of the lungs. It has a general alkylating action and is capable of inhibiting the growth of malignant tumors to a significant degree. It therefore seemed interesting to the authors to further investigate derivatives of TEF. Six new phosphoric acid aryldiethylenetriamides of the type $ArNHPO\left(N\begin{smallmatrix}CH_2\\|\\CH_2\end{smallmatrix}\right)_2$ were prepared having the following aryl groups: phenyl, p-tolyl, p-chlorophenyl, 2,4-dichlorophenyl, 2,4,6-trichlorophenyl, and p-nitrophenyl.

PEYSAKHOVICH, I.M., prof.; SOLOGUB, P.Ya., kand.med.nauk; PROTSENKO, L.D., kand.khim.nauk (Kiyev)

Action of N-benzoyl-N',N',N"-diethylene phosphoric triamide in inhibiting tumor growth. Vrach.delo no.1:1249-1254 D '58. (MIRA 12:3)

1. Ukrainskiy nauchno-issledovatel'skiy sanitarno-khimicheskiy institut.

(CYTOTOXIC DRUGS)
(PHOSPHORIC TRIAMIDE)

PROTSENKO, L.D.; KORNEV, K.A.

Acyldiethylene of phosphoric triamide. Ukr.khim.zhur. 24 no.5: 636-638 '58. (MIRA 12:1)

1. Ukrainskiy nauchno-issledovatel'skiy sanitarno-khimicheskiy institut.
(Phosphoric triamide)

PROTSANKO, A. D.

Khimiya i Primeneniye Fosfororganicheskikh Soyedineniy (Chemistry and Application of Organophosphorus Compounds) A. Ye. Arbuzov, Ed. publ. by Kazan' Affil, Acad. Sci. USSR, Moscow, 1962 634 p.

Collection of complete papers presented at the 1959 Kazan Conference on Chemistry of Organophosphorus Compounds.

PEYSAKHOVICH, I.M.; TELENGATOR, Ya.M.; PROTSENKO, L.D. (Kiyev)

Antiblastomatic effect of 1,4-dioxyphenyl-O,O-bis-diethylenediamide of phosphoric acid. Arkh.pat. 21 no.6:67-72 '59. (MIRA 12:12)

1. Iz Ukrainskogo nauchno-issledovatel'skogo sanitarno-khimicheskogo instituta.

(CYTOTOXIC DRUGS, eff.
1,4-bis(O-diasiridinylphospho)-benzene, antiblastomatic eff. in rats & chickens (Rus))
(NEOPLASMS, exper.
eff. of 1,4-bis(O-diaziridinylphospho)-benzene in rats & chickens (Rus)

PROTSENKO, L.D.; KORNEV, K.A.

Diethylenediamides of alkyl - and arylurethanphosphoric acids.
Ukr. khim. zhur. 27 no.2:243-244 '61. (MIRA 14:3)
(Urethanphosphoric acid)

PROTSENKO, L.D.; KORNEV, K.A.; BOGODIST, Yu.I.

Synthesis of some fluorinated acyl- and aryldiethylenetriamides of phosphoric acid. Ukr.khim.zhur. 27 no.3:357-359 '61. (MIRA 14:11)

1. Ukrainskiy nauchno-issledovatel'skiy sanitarno-khimicheskiy institut.

(Phosphoric acid)
(Polyamides)

PROTSENKO, L.D.; DERKACH, G.I.; KIRSANOV, A.V.

Bistriethylenetriamidophosphazo derivatives of dibasic acids and diethylenediamides of bis-N-diethylenediamidophosphinylimino-carboxylic acids. Zhur.ob.khim. 31 no.10:3433-3436 O '61. (MIRA 14:10)

1. Institut organicheskoy khimii AN Ukrainskoy SSR i Ukrainskiy nauchno-issledovatel'skiy sanitarno-khimicheskiy institut.
(Acids, Organic) (Phosphazo compounds)

PROTSENKO, L. D.; KORNEV, K. A.

Tetraethylenamides of diphosphoric esters of some diatomic phenols. Ukr. khim. zhur. 28 no.6:719-720 '62.
(MIRA 15:10)

1. Ukrainskiy nauchno-issledovatel'skiy sanitarno-khimicheskiy institut.

(Amides) (Pyrophosphoric acid) (Phenols)

DERKACH, G.I.; PROTSENKO, L.D.; ZHURAVLEVA, L.P.; KIRSANOV, A.V.

N-diethylenediamidophosphinyl-N'-ethylene-N"-arylguanidines.
Zhur.ob.khim. 32 no.9:2992-2994 S '62. (MIRA 15:9)

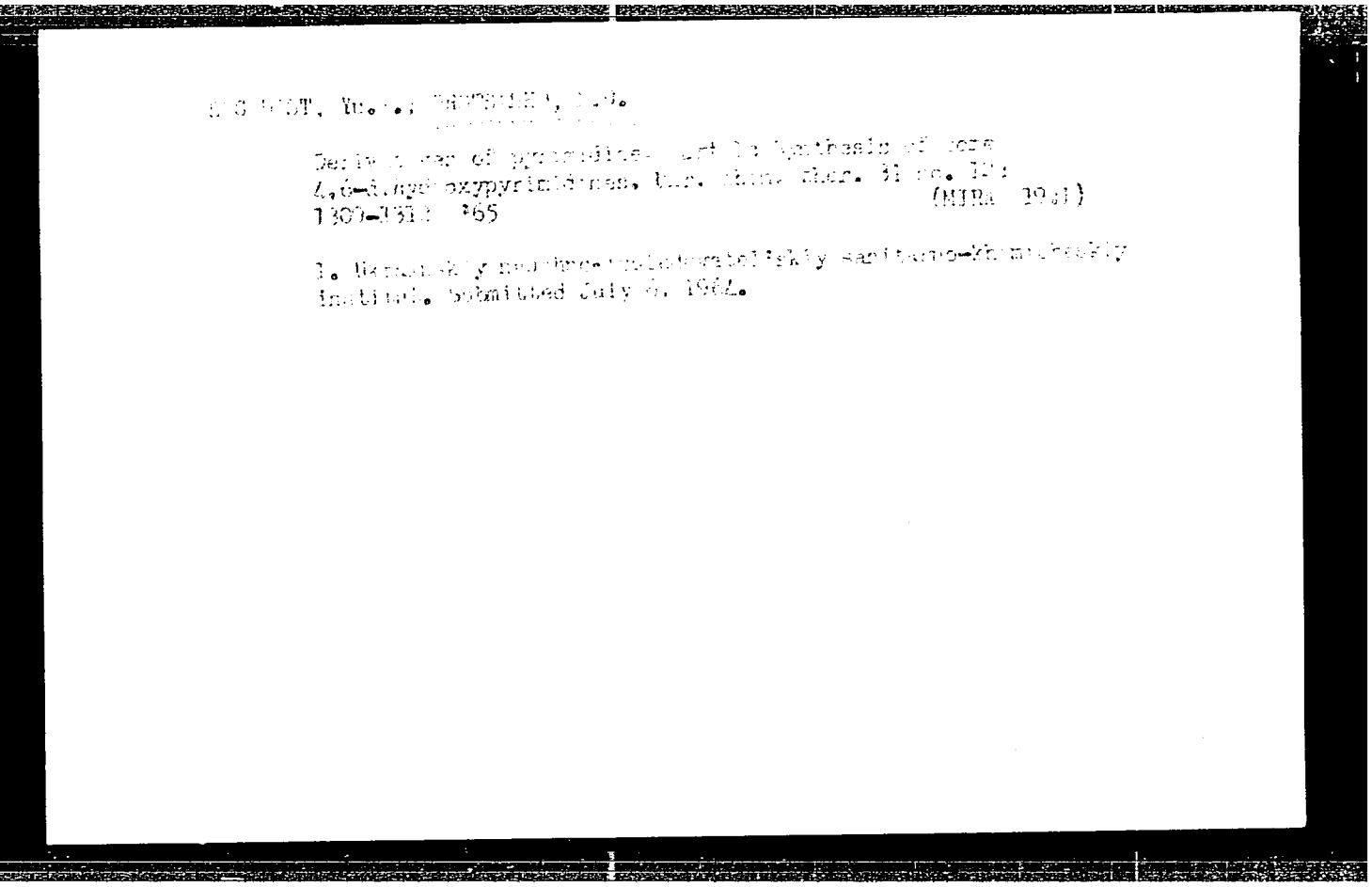
1. Institut organicheskoy khimii AN UkrSSR.
(Guanidine) (Phosphorylation)

PROTSENKO, L.D.; BOGODIST, Yu.I.

Amino- and ethyleneimine derivatives of 5-fluoropyrimidine.
Zhur.ob.khim. 33 no.2:537-542 F '63. (MIRA 16:2)
(Pyrimidine)

PROTSENKO, L.D.; SKUL'SKAYA, N.Ya.

Reaction of arylethylenephosphoramides and aroxyethylenethiophosphoramides with chlorine and hydrogen chloride. Zhur. ob. khim. 35 no.4:715-717 Ap '65. (MIRA 18:5)



L 21856-66 EWP(j)/EWT(m) RM

ACC NR: AP6012654 SOURCE CODE: UR/0079/65/035/002/0368/0370

AUTHOR: Protsenko, L. D.

ORG: none

TITLE: Bromide-containing acyldiethylenetriamides of phosphoric acid

SOURCE: Zhurnal obshchey khimii, v. 35, no. 2, 1965, 368-370

TOPIC TAGS: phosphoric acid, amide, bromide, chemical decomposition

ABSTRACT: The preparation of acyldiethylenetriamides of phosphoric acid containing 1, 2, or 3 bromine atoms was studies. Bromine-containing acyldiethylene triamides of phosphoric acid are formed by reaction of dichlorides of bromine-containing acylamido phosphoric acids with ethylenimine in the presence of triethylamine:

$$RCONHPOCl_2 + 2HNC_2H_4 \xrightarrow{2N(C_2H_5)_3} RCONHPO(NC_2H_4)_2$$

It was found that bromine-containing acyldiethylenetriamides of phosphoric acid are crystalline compounds, which decompose above 200° with slow heating, without melting. The compounds stored for 1-2 months at room temperatures gradually polymerize, which necessitates their storage at temperatures below +5°. In the study, six dichlorides of bromine-containing benzoylamidophosphoric acids previously not described in the literature were obtained. Orig. art. has: 2 tables. [JPRS]

SUB CODE: 07 / SUBM DATE: 20Jan64 / ORIG REF: 001 / OTH REF: 001

Card 1/1 nst UDC: 546.185: 547.415.3

L 25599-66 EWT(m) RM

ACC NR: AP6016686 SOURCE CODE: UR/0079/65/035/009/1564/1566

AUTHOR: Protsenko, L. D.; Negiyevich, L. A.

ORG: none

TITLE: Iodine-containing acyldiethylenetriamides of phosphoric acid

SOURCE: Zhurnal obshchey khimii, v. 35, no. 9, 1965, 1564-1566

TOPIC TAGS: phosphoric acid, amide, iodinated organic compound, organic imine compound, organic synthetic process, phosphorus chloride, formic acid, organic azo compound, chlorinated organic compound

ABSTRACT: Mono-, di-, and tri-iodo-acetyldiethylamine triamides of phosphoric acid were synthesized by the action of ethyleneimine in the presence of triethylamine on dichlorides of the corresponding iodobenzoylamidophosphoric acids. The initial dichlorides of iodobenzoylamidophosphoric acids were synthesized from the corresponding acid amides and phosphorus pentachloride or by the action of water or formic acid on trichlorophosphazoacyls. In addition, previously undescribed amides of 3,4-diiodobenzoic, 3,5-diiodobenzoic, 2,4,5- and 3,4,5-triiodobenzoic acids were prepared by the action of ammonia on the acid chlorides for the synthesis of the initial acid dichlorides. The iodine-containing acetyldiethylenetriamides of phosphoric acid are cream-colored or light pink crystalline compounds, which decompose above 200° without melting when heated slowly or melt within a range of 1-2° when heated at a rate of 10-12° per minute. The new compounds will be used to study the influence of the position of the iodine atoms and their number in the benzene ring on the physiological activity. Orig. art. has: 3 tables. [JPRS]

SUB CODE: 07 / SUBM DATE: 02Oct64 / ORIG REF: 001 / OTH REF: 001

UDC: 546.185:547.539.4

Card 1/1

ACC NR: AP6029836 (A) SOURCE CODE: UR/0073/66/032/008/0867/0871

AUTHOR: Protsenko, L. D.; Bogodist, Yu. I.

ORG: Scientific Research Institute of Toxicology and Pharmacology (Nauchno-issledovatel'skiy institut toksikologii i farmakologii)

TITLE: Derivatives of pyrimidine

SOURCE: Ukrainskiy khimicheskiy zhurnal, v. 32, no. 8, 1966, 867-871

TOPIC TAGS: organic imine compound, pyrimidine, fluorinated organic compound

ABSTRACT: The paper continues studies of the synthesis of othyleneimino derivatives of pyrimidine. Fifteen new 4,6- and 2,6-diethyleneiminopyrimidines, shown in Table 1, were synthesized. It was found that in the reaction of tetrachloropyrimidine, 5-bromo-2,4,6-trichloropyrimidine and tetrabromopyrimidine with ethyleneimine, the halogen atoms in the 4 and 6 positions of the pyrimidine ring are replaced. 5-Fluoro-4,6-dichloro-2-methylsulfonylpyrimidine reacts with ethyleneimine with substitution of the two chlorine atoms and substitution of the methylsulfonyl group and one chlorine atom. Orig. art. has: 1 table.

UDC: 547.853.7

Card 1/2

ACC NR: AP6029836

Compound No.	X	R	R_1	Yield, %	M.P., °C	Formula	Solubility: Water	Alcohol	Benzene	Acetone
I	Cl	NCH_2CH_2	Cl	87	125—126 (with dec.)	$C_9H_9Cl_2N_5$	—	—	+	+
II	Br	NCH_2CH_2	Cl	88	126—128 (with dec.)	$C_9H_9BrClN_5$	—	—	+	+
III	Br	NCH_2CH_2	Br	97	135—150 (with dec.)	$C_9H_9Br_2N_5$	—	—	+	—
IV	NO_2	NCH_2CH_2	Cl	66	130—135 (with dec.)	$C_9H_9ClN_6O_2$	—	—	+	+
V	NO_2	NCH_2CH_2	SCH_3	87	138—139 (with dec.)	$C_{10}H_{11}N_5O_2S$	—	—	—	—
VI	Cl	Cl	NCH_2CH_2	82	129—130 (with dec.)	$C_9H_9Cl_2N_5$	—	+	+	+
VII	F	Cl	NCH_2CH_2	32	128	$C_9H_9ClFN_5$	—	+	+	+
VIII	F	NCH_2CH_2	SO_2CH_3	31	151—152	$C_{10}H_{11}FN_5O_2S$	—	—	—	+
IX	Cl	NCH_2CH_2	OCH_3	75	138—140	$C_{10}H_{11}ClN_5O$	—	+	+	+
X	Br	NCH_2CH_2	OCH_3	83	135,5—136,5	$C_{10}H_{11}BrN_5O$	—	+	+	+
XI	Cl	OCH_3	NCH_2CH_2	65	111—113	$C_{10}H_{11}ClN_5O$	—	+	+	+
XII	Br	OCH_3	NCH_2CH_2	60	115,5—116,5	$C_{10}H_{11}BrN_5O$	—	+	+	+
XIII	F	NCH_2CH_2	SCH_3	78	107,5—108,5	$C_{10}H_{11}FN_5S$	—	+	+	+
XIV	H	NCH_2CH_2	H	22	72,0—72,5	$C_9H_{10}N_5$	+	+	+	+
XV	CH_3	H	NCH_2CH_2	30	107,5—108	$C_9H_{12}N_5$	+	+	+	+

SUB CODE: 07/ SUBM DATE: 13Nov64/ ORIG REF: 003/ OTH REF: 003

Card 2/2

PROTSENKO, L.D.; NEGIYEVICH, L.A.

Iodine containing acyldimethylene triamides of phosphoric acid.
Zhur. ob. khim. 35 no.9:1564-1566 S '65. (MIRA 18:10)

L 17952-65 EWT(m)/EPF(c)/EWP(j) Pc-4/Pr-4 RPL RM
ACCESSION NR: AP5002563 S/0079/64/034/007/2233/2234

AUTHOR: Protsenko, L. D.; Skul'skaya, N. Ya.

TITLE: O-aryl-N,N,N',N' - diethylenediamides of thiophosphoric acid

SOURCE: Zhurnal obshchey khimii, v. 34, no. 7, 1964, 2233-2234

TOPIC TAGS: phosphoric acid, organic synthetic process, chloride, phenol

Abstract: A series of six O-aryl-N,N,N',N' -diethylenediamides of thiophosphoric acid and chlorides of O-arylthiophosphoric acids were synthesized (Ar = p-$CH_3C_6H_4$, o-$CH_3C_6H_4$, p-ClC_6H_4, p-IC_6H_4, p-BrC_6H_4, and p-$NO_2C_6H_4$). The O-aryl-N,N,N',N' -diethylenediamides of thiophosphoric acid were colorless crystalline compounds or viscous light yellow oils. The initial chlorides of the corresponding O-arylthiophosphoric acids were produced by the action of phosphorus thiochloride on phenols in pyridine. Orig. art. has 2 tables.

ASSOCIATION: none

SUBMITTED: 17Jun63 ENCL: 00 SUB CODE: OC, GC

NO REF SOV: 000 OTHER: 002 JPRS

Card 1/1

PROTSENKO, L.D.; SKUL'SKAYA, N.Ya.

Aryl diethylene triamides of thiophosphoric acid. Zhur.ob.khim. 33 no.7:2284-2287 Jl '63. (MIRA 16:8)
(Phosphoroamidothioic acid)

FEDOROV, Yu.V.; UZLYUK, M.V.; PROTSENKO, L.K.

Anticorrosive properties of tar waters. Koks i khim. no.7:43-45 '65. (MIRA 18:8)

1. Dneprodzerzhinskiy metallurgicheskiy zavod-vtuz.

AUTHORS: Sokurskiy, Yu. N., Protsenko, L. N. 89-4-5-5/26

TITLE: Deformation Systems of α-Zirconium (Sistemy deformatsii α-tsirkoniya)

PERIODICALS: Atomnaya Energiya, 1958, Vol. 4, Nr 5, pp. 443 - 447 (USSR)

ABSTRACT: The deformation systems of α-zirconic iodide were investigated in large-grained (average diameter 0.5 - 1.5 mm), semi-crystalline (5 x 5 x 7 mm) samples that had been deformed by annealing. The orientation of the grains was determined by a Laue diagram. This was taken by a special reflex camera with the light ray having particularly small dimensions. The indices of the deformation systems were determined by means of the double-plate method or of the method of geometrical localization of the poles.
It was stated that α-zirconium is deformed by slip in the plane $(10\bar{1}0)$ in direction $[\bar{1}2\bar{1}0]$ and in the plane $(10\bar{1}1)$. A series of twinning-systems was determined in α-zirconium:
a) $K_1(10\bar{1}2)$, $\eta_1[\bar{1}011]$, $K_2(10\bar{1}\bar{2})$, $\eta_2[10\bar{1}\bar{1}]$, $s = 0{,}173$

Card 1/2

b) $K_1(11\bar{2}1)$, $\eta_1[1126]$, $K_2(0001)$, $\eta_2[11\bar{2}0]$, s = 0,629

c) $K_1(11\bar{2}2)$, $\eta_1[11\bar{2}3]$,

d) $K_1(11\bar{2}3)$, $\eta_1[\bar{1}\bar{1}22]$ observed in one case only.

There are 5 figures, 1 table and 6 references, none of which are Soviet.

SUBMITTED: December 14, 1957

AVAILABLE: Library of Congress

1. Alpha-zirconic iodide—Deformation

Country : USSR
Category : Plant Diseases. Diseases of Cultivated Plants. 0

Abs Jour : RZhBiol., No 6, 1959, No 25207

Author : Protsenko, L. V.
Inst : Ukrainian Scientific-Research Institute of Vegetable Cultivation and Potatoes.
Title : Determination of Resistance to Canker of Potato Varieties with the Aid of the Precipitation Reaction.
Orig Pub : Nauch. tr. Ukr. n.-i. in-t ovoshchevodstva i kartofelya, 1957, 4, 233-238

Abstract : While verifying the method of A. N. Mamontova, published in the report of the Immunity Laboratory of the All-Union Institute for the Protection of Plants in 1949 on 21 potato varieties, the author came to the conclusion that this method may be recommended only as a sub-

Card : 1/2

Country : USSR
Category : Plant Diseases. Diseases of Cultivated Plants. 0

Abs Jour : RZhBiol., No 6, 1959, No 25207

Author :
Inst :
Title :

Orig Pub :

Abstract : sidiary one, because it does not furnish an adequately accurate determination of the resistance of potato varieties to canker. A technique for obtaining antigen and the conduction of the precipitation reaction is described. The results of determination of the resistance of potato varieties by the precipitation reaction agree with the data of field experimentation only up to 55 percent. -- I. A. Veselovskiy

Card : 2/2.

PROTSENKO, N.

Runoff

Retention of thaw water. Kolkh. proizv., 12, No. 2, 1952.

9. Monthly List of Russian Accessions, Library of Congress, June 1952. Unclassified.

PROTSENKO, N.

PROTSENKO, N. "Forprofitable enterprise work", Po leninskomu puti, 1948, No. 12, p. 15-17.

SO: U-3042, 11 March 53, (Letopis 'Zhurnal 'nykh Statey, No.7 1949).

MARKOV, A.; KALGANOV, V.; PROTSENKO, N.; STRONGIN, V.L., red.; SOKOLOVA, N.I., tekhn.red.

[Storage of fruits and vegetables in natural waters] Khranenie plodov i ovoshchei v vodoemakh. Moskva, Gos. izd-vo torgovoi lit-ry, 1957. 39 p. (MIRA 11:4)
(Vegetables--Storage) (Fruit--Storage)

Protsenko, N

N. PROTSENKO

"DRY METHOD OF REGENERATION OF IRRADIATED URANIUM BY GASEOUS FLUORINE"

by V. Prusakov, N. Simonov, N. Protsenko

Report presented at 2nd UN Atoms-for-Peace Conference, Geneva, 9-13 Sept 1958

PROTSENKO, N.A. [Protsenko, M.A.]

Phosphorylation [illegible] in the subcellular fractions of the heart muscle in adrenaline myocarditis. Ukr. biokhim. zhur. 37 no.4:505-513 '65. (MIRA 18:9)

1. Institut biokhimii AN UkrSSR, Kiyev.

PROTSENKO, N.A.

Experience in the underwater storage of processed fruits and vegetables. Kons. i ov. prom. 13 no.8:37-39 Ag '58. (MIRA 11:9)

1. Voronezhskiy plodoovoshchnoy kombinat Oblpotrebsoyuza.
(Fruit--Storage) (Vegetables--Storage)

USSR / Cultivated Plants. Plants for Technical Use. M
Oil Plants. Sugar Plants.

Abs Jour : Ref Zhur - Biologiya, No 6, 1959, No. 24982

Author : Protsenko, N. G.
Inst : Kirgizian University, Faculty of Biology
Title : Effect of the Seeds' Reproduction Locality on the Variability of the Gambo Hemp's Morphological and Biological Symptoms

Orig Pub : Uch. zap. Biol. fak. Kirg. un-ta, 1957, vyp 8, 13-21

Abstract : During 1954-1956, sowing experiments were conducted on the territory of the basting state farm "Vasil'evskoye". Ten different variety specimens from the VIR [All-Union Plant Cultivation Institute] collection were used. Results of the investigations indicated

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USSR / Cultivated Plants. Plants for Technical Use. M
Oil Plants. Sugar Plants.

Abs Jour : Ref Zhur - Biologiya, No 6, 1959, No. 24982

that here the reaction of different varieties on external environmental conditions is not the same: in the medium-matured and late-matured variety specimens at reproduction early maturity increased, the size of the stalk grew larger, as well as the harvest and the absolute weight of seeds; the early maturing forms of the gambo hemp developed a still taller stalk, accumulated a great quantity of boles and increased the vegetative period. -- B. L. Klyachko-Gurvich

Card 2/2

COUNTRY : USSR
CATEGORY : Cultivated Plants. Industrial. Oleiferous. M
Sugar.
ABS. JOUR. : RZhBiol., No. 3, 1959, No. 11047

AUTHOR : Protsenko, N. G.
INST. : Department of Biology, Kirgiz University.
TITLE : Peanut Cultivation in Chuyskaya Valley.

ORIG. PUB. : Uch. zap. Biol. fak. Kirg. un-t, 1957, vyp. 3, 65-70

ABSTRACT : At the present time peanut is grown in Kirgiz SSR in a small amount only in Oshskaya Oblast'. For the purpose of determining the possibilities of enlarging the peanut sowings, there were carried out in the Republic during 1955-1956, in the kolkhoz "Vasil'yevskoye", small-plot field experiments with three varieties adapted regionally in the Middle-Asiatic republics: Tashkentskiy 32, Tashkentskiy 112 and Peruvian 46-2. Experiments have shown that the soil and climatic conditions are quite suitable for the cultivation of the mid-season and even late-ma-

CARD: 1/2

CATEGORY :

ABS. JOUR. : RZhBiol., No. 1959, No. 11048

AUTHOR :
INST. :
TITLE :

ORIG. PUB. :

ABSTRACT : its quality. Experiments have shown that in the case of a sowing with the seeding material of less than full value (less than 100% germination), a less sharp drop in the yield (in comparison with the sowing with the seeds the germinating ability of which equals 100%) occurs if in the determination of the sowing rate, there is taken into consideration, in addition to their absolute weight, not the germinating ability of the seeds but the vigor of the emergence of their sprouts. — O. P. Plyusnina

CARD: 2/2

PROTSENKO, N.G.

Effect of root pruning time on the opening of cotton bolls.
Uch. zap. Biol.-pochv. fak. Kir. un. no.7:49-54 '58.
(MIRA 15:10)

(Kirghizistan—Cotton growing) (Pruning)
(Roots (Botany))

PROTSENKO, N.G.

Effect of harvesting time on the germination of ambary hemp seeds. Uch. zap. Biol.-pochv. fak. Kir. un. no.7:39-47 '58. (MIRA 15:10)

(Kirghizistan--Ambary hemp) (Germination)

USSR/Cultivated Plants. Technical Plants. Oil and Sugar Bearing Plants.

Author : Ter-Avanesyan, D. V., Protsenko, M. G.
Inst : Turkmen and Central Asian Experiment Stations of the All-Union Institute of Plant Cultivation. Kirgizian Experiment Station of the All-Union Scientific Research Institute of Cotton.
Title : Geographical Variability of the World Cotton Collection Specimens and Their Hybrids.

Orig Pub : Tr. po prikl. botan., genet. i seleksii, 1957, 30, No 3, 154-177

Abstract : In 1949 and 1951, at the Turkmen and Central Asian Experiment Stations of the All-Union Institute of Plant Cultivation, and also at the Kirgizian Experiment Station of the All-

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USSR/Cultivated Plants. Technical Plants. Oil and Sugar Bearing Plants. II

Abs Jour : Ref Zhur-Biol., No 15, 1958, 68256

Union Scientific Research Institute of Cotton, a study was made of 35 cotton specimens from the All-Union Institute of Plant Cultivation collection, with vegetation periods of various length, as well as of a series of their hybrids. The plants were studied under conditions of sharply emphasized soil and climatic differences. Thus it was possible to clarify the influence of various environmental factors on the development and the variation of characteristics and properties of cotton. The best indices in yield and fiber quality were obtained at the Central Asian Experiment Station from 1306 and 915 quick-maturing varieties, and from

Card : 2/3

USSR/Cultivated Plants. Technical Plants. Oil and Sugar Bearing Plants. M

Abs Jour : Ref Zhur-Biol., No 15, 1958, 68256

108-F, 18819, 2034, and 8517 median-maturing varieties. At the Kirgizian Experiment Station, the best economic indices were obtained from the 1306 and 915 quick-maturing varieties, and from 108-F and 18819 median-maturing varieties. At the Turkmen Experiment Station, the most productive varieties were 108-F, 18819, 2032, and C-450-555 g. Other varieties were not productive. -- A. M. Smirnov

Card : 3/3

TER-AVANESYAN, D.V., prof., doktor biol. nauk; PROTSENKO, N.G., kand. sel'skokhozyaystvennykh nauk

Geographical variability in specimens of the world collection of cotton plants and their hybrids. Trudy po prikl. bot., gen. i sel. 30 no. 3:154-177 '57. (MIRA 11:7)
(Cotton--Varieties)
(Botany--Ecology)

L 60446-65 EWT(d)/EED-2/EWP(1) Pq-4/Pg-4/Pk-4 IJP(c) BB/GG/GS

ACCESSION NR: AT5017384 UR/0000/64/000/000/0056/0059

AUTHOR: Drymalyk, Ya. P. (Kiev); Nikulin, V. N. (Kiev); Protsenko, N. M. (Kiev); Skurikhin, V. I. (Kiev)

TITLE: The RTsU-ML-1 and RTsU-ML-2 magnetic tape digital parameter recorders

SOURCE: Konferentsiya po avtomaticheskomu kontrolyu i metodam elektricheskikh izmereniy, 3d, Novosibirsk, 1961. Avtomaticheskiy kontrol' i metody elektricheskikh izmereniy; trudy konferentsii, t. 2: Tsifrovyye izmeritel'nyye pribory. Elektricheskiye izmereniya neelektricheskikh velichin. Ustroystva avtomaticheskogo kontrolya i upravleniya v promyshlennosti (Automatic control and electrical measuring techniques; transactions of the conference, v. 2: Digital measuring instruments. Electrical measurements of nonelectrical quantities. Devices for automatic control and regulation in industry). Novosibirsk, Redizdat Sib. otd. AN SSSR, 1964, 56-59

TOPIC TAGS: magnetic tape recorder, binary tape recorder, digital parameter recorder, computer input

ABSTRACT: After listing 10 existing Soviet and Western systems for the collection and processing of information (D.W. Halfhill, Nucleonics, v. 16, 1958; P.J. Webeer, Magnetic Tape Recorders, 1959, no. 3; E.G. Wildanger, IRE Trans. PGIE-11, 1959; V.M. Glushkov, A.I. Nikitin, Avtomatika i priborostroyeniye, Kiev, 1960, no. 2),

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ACCESSION NR: AT5017384

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the authors briefly describe the design and technical characteristics of the RTsU-ML-1 and RTsU-ML-2 recorders developed at the Vychislitel'nyy tsentr AN Ukr SSR (Computer Center, AN Ukr SSR) and intended for the direct input of digital material into the "Ural-1" computer. The RTsU-ML-1 works with a binary code, can question up to 16 sensing devices, the output sensor voltages are within 0-25 V, the sampling frequency reduced to a single sensor is 320 c/sec, the sampling frequency from each sensor during a complete cycle and the maximum displacement rate of the tape is 20 c/s, the error of the device is approximately ±0.5%, the maximum length of the tape is 250 m, and the registration time is 12-60 min. It contains 150 standard semiconductor elements, 325 P-13 and P-15 transistors, 450 D9D diodes, and 20 vacuum tubes. The analogous RTsU-ML-2 device can use the magnetic tape computer accumulator permitting a high density (10 binary signs per millimeter of tape) and a high rate of registration (about 20 thousand 8-digit binary numbers per second). Its accuracy will be on the order of +0.5+1.0%. Orig. art. has: 1 figure and 1 table.

ASSOCIATION: none

SUBMITTED: 11Nov64 ENCL: 00 SUB CODE: DP

NO REF SOV: 002 OTHER: 003

Card 2/2 dm

YASIYEVICH, V., kand.arkhitektury; PROTSENKO, O., arkhitektor, prepodavatel'; PORSIN, Yu., kand.tekhn.nauk, dotsent; KAMYSHNYY, N., doktor tekhn. nauk, prof.; LEVIN, I., kand.tekhn.nauk, dotsent; FRIDKIN, B., student; SEKACHEV, Yu., student; MILEVSKIY, V., student; VMIRNOV, A., student; KORNEYEVA, S., studentka; VYGODSKIY, B., student; MOSHKOV, V., student

What kind of program for the course in "Industrial Design?" Opinion of teachers and students. Tekh.est. no.5:20-21 My '65. (MIRA 18:6)

1. Kafedra nachertatel'noy geometrii i kafedra grafiki Lesotekhnicheskoy akademii imeni Kirova (for Porsin). 2. Moskovskoye vysshoye tekhnicheskoye uchilishche imeni Baumana (for Kamyshnyy, Korneyeva, Vygodskiy, Moshkov). 3. Moskovskiy avtomekhanicheskiy institut (for Levin, Smirnov). 4. Leningradskiy institut aviapriborostroyeniya (for Fridkin, Sekachev, Milevskiy).

PROTSENKO, O., prepodavatel'

Somatography helps the industrial designer in the planning and design of operator's stations. Tekh. est. 2 no.9:14-15 S '65. (MIRA 18:11)

1. Chelyabinskiy politekhnicheskiy institut.

BUCHIN, P.I.; ZININ-BERMES, N.N.; PROTSENKO, O.A.; PLOTNIKOVA, Ye.K.; TOCHILKINA, A.M.

Characteristics of salmonellas isolated in the territory of the Kuznetsk Basin. Zhur. mikrobiol., epid. i immun. 40 no.6:121-122 Je '63. (MIRA 17:6)

1. Iz Kemerovskogo meditsinskogo instituta Kemerovskoy oblastnoy sanitarno-epidemiologicheskoy stantsii i Kemerovskoy infektsionnoy bol'nitsy.

BUCHIN, P.I.; ZININ-BERMES, N.N.; PROTSENKO, O.A.; KOMAROVA, M.A.

Data on the dysenterial and typhoid-paratyphoid bacteria carrier states in the bodies of white rats during peroral infection in an experiment. Zhur. mikrobiol. epid. i immun. 32 no.6:136-137 Je '61. (MIRA 15:5)

1. Iz Kemerovskogo meditsinskogo instituta.
(SHIGELLA) (SALMONELLA)

PROTSENKO, O. A., CAND MED SCI, "EXPERIMENTAL STUDY OF THE ACTION OF STREPTOMYCIN, LEVOMYCETIN, AND THEIR COMBINATIONS UPON DYSENTERY BACTERIA." SARATOV, 1960. (MIN OF HEALTH USSR, ALL-UNION SCI RES INST "MIKROB"). (KL,2-61, 219).

KURNOSOVA, N.A.; BONDARENKO, V.A.; RAKHMAN, E.Z.; YAVRUMOV, V.A.; KIRYUSHINA, L.A.; MANOLOVA, E.P.; ESSEL', A.Ye.; TARASOVA, M.A.; PIROGOVA, A.I.; PIROGOV, I.Ya.; AKOPYAN, R.A.; BABUNASHVILI, N.P.; PROTSENKO, O.A.; PUNSKAYA, I.G.; BURMISTROVA, O.G.; POGOREL'SKAYA, S.A.; D'YACHENKO, T.F.; TOPURIYA, I.I.; MATABELI, G.V.; GIGITASHVILI, M.S.; VACHNADZE, T.G.; MAZURIN, N.D.; NABIYEV, E.G.; BLOKHOV, V.P.

Abstracts. Zhur. mikrobiol., epid. i immun. 41 no.4:142-147 Ap '64. (MIRA 18:4)

1. Moskovskiy institut epidemiologii i mikrobiologii (for Kurnosova). 2. Faleshtskaya rayonnaya bol'nitsa Moldavskoy SSR i Vinnitskiy meditsinskiy institut imeni Pirogova (for Bondarenko). 3. Stavropol'skiy institut vaktsin i syvorotok (for Rakhman). 4. Kaluzhskiy oblastnoy otdel zdravookhraneniya (for Yavrumov, Kiryushina). 5. Donetskiy meditsinskiy institut (for Manolova). 6. Tbilisskaya rayonnaya imeni 26 komissaro sanitarno-epidemiologicheskaya stantsiya (for Akopyan, Babunashvili). 7. Kemerovskiy meditsinskiy institut (for Protsenko). 8. Turkmenskiy meditsinskiy institut (for Punskaya, Burmistrova). 9. Gor'kovskiy institut epidemiologii i mikrobiologii i Gor'kovskaya rayonnaya sanitarno-epidemiologicheskaya stantsiya (for Pogorel'skaya, D'yachenko). 10. Institut meditsinskoy parazitologii i tropicheskoy meditsiny imeni Virsaladze Ministerstva zdravookhraneniya Gruzinskoy SSR (for Topuriya, Matabeli, Gigitashvili, Vachnadze). 11. Kazanskiy institut usovershenstvovaniya vrachey (for Nabiyev).

COUNTRY : USSR
CATEGORY :

ABS. JOUR. : RZhBiol., No. 3 1959, No. 10077

AUTHOR : Protsenko, O. A.
INST. : Saratov Medical Institute
TITLE : Experimental Study of the Combined Effect of Streptomycin and Levomycetin /Levorotary Chloramphenicol/ on Dysentery Bacteria

ORIG. PUB. : Sb. nauchn. rabot. Saratovsk. med. in-t. Saratov, 1957, 84-92

ABSTRACT : The sensitivity of 35 strains of dysentery bacteria of the Flexner and Sonne varieties to streptomycin (I) ranged from 2 to 7 units per cubic centimeter and to levomycetin (II), from 0.25 to 500 γ per cubic centimeter, whereby the strains isolated from patients before treatment proved to be more resistant to II (50-500 γ per cubic centimeter) compared with the laboratory strains (0.25-5 γ per cubic centimeter). The bactericidal effect of I is manifested depending on the concentration during the first few hours of the

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COUNTRY :
CATEGORY :

ABS. JOUR. : RZhBiol., No. 1959, No. 10077

AUTHOR :
INST. :
TITLE :

ORIG. PUB. :

ABSTRACT : contact of I with the bacteria. In a corresponding dose II begins to manifest its bactericidal effect only after 8 hours of contact. With the combination of I and II a synergistic effect is observed if both preparations are used in doses which are not lower than the subbacteriostatic. With the combination of high concentrations of I with very low concentrations of II, which exert no effect, an antagonistic effect of the antibiotics is observed. Under the influence of constantly acting and increasing concentrations of I and

Card: 2/4

COUNTRY :
CATEGORY :

ABS. JOUR. : RZhBiol., No. 1959, No. 10077

AUTHOR :
INST. :
TITLE :

ORIG. PUB. :

ABSTRACT : II resistant strains of dysenetery bacteria were obtained which differed from the original strains in a number of morphologic, biochemical and cultural properties. In the presence of II no strains resistant to I appeared. In experiments on mice the combination of I and II produces only a total effect. Treatment with I, II and their combinations does not lead to an elimination of the dysentery microbes from the internal organs of mice. After the use of therapeutic doses in vivo no dysentery cultures are obtained which are

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COUNTRY :
CATEGORY :

ABS. JOUR. : RZhBiol., No. 1959, No. 10077

AUTHOR :
INST. :
TITLE :

ORIG. PUB. :

ABSTRACT : resistant to I or II. -- N. S. Revzner

Card: 4/4

LUTSKOVA, M. T.; PROTSENKO, O. L.

Use of thermophilic ferments in the making of ripened cream butter on a continuous production line. Khar. prom. no.1: 27-30 Ja-Mr '63. (MIRA 16:4)

1. Ukrainskiy nauchno-issledovatel'skiy institut myasomolochnoy promyshlennosti.

(Butter) (Fermentation)

PROTSENKO, O. L.

Magnetic detector for preventing the penetration of metal shavings into the dried milk. Khar. prom. no.1:49 Ja-Mr '63. (MIRA 16:4)

1. Ukrainskiy nauchno-issledovatel'skiy institut myasomolochnoy promyshlennosti.
(Metal detectors) (Milk, Dried)

L 52291-65 EWT(d)/EWT(m)/EWP(w)/EWA(d)/EWP(v)/EPR/EWP(k)/EWA(h) Pf-4/Pg-4/Peb
IJP(c) WW/EM
ACCESSION NR: AP5011587 UR/0198/65/001/003/0027/0034

AUTHOR: Protsenko, O. P. (Kiev)

TITLE: On the stability of a cylindrical shell with initial deflection, under action of aperiodic axial compression

SOURCE: Prikladnaya mekhanika, v. 1, no. 3, 1965, 27-34

TOPIC TAGS: cylindrical shell, stability criterion, compressive force, stress distribution, partial differential equation, deformation rate, nonlinear mechanics, Lagrange equation

ABSTRACT: The behavior of a flexible elastic cylindrical shell under a dynamically applied, axially compressive load was studied analytically, assuming that the rate of the applied load is variable. A special consideration was given to the effect of an increased load application rate and the amplitude of the initial deflection on the magnitude of the critical dynamic load and the type of stability loss. The initial deflection is defined by

$$W_0(x, y) = \varphi_0 \sin \alpha x \sin \beta y + \psi_0 \sin^2 \alpha x \sin^2 \beta y + f_0$$

with boundary conditions $W = 0$; $M_x = 0$ at $x = 0, l$ (see Fig. 1 on the Enclosure

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ACCESSION NR: AP5011587

for coordinate nomenclature). The corresponding governing differential equation is given by

$$\frac{1}{E}\nabla^2\nabla^2\Phi = \left[\left(\frac{\partial^2 W_1}{\partial x\partial y}\right)^2 - \left(\frac{\partial^2 W_0}{\partial x\partial y}\right)^2\right] - \left(\frac{\partial^2 W_1}{\partial x^2}\frac{\partial^2 W_1}{\partial y^2} - \frac{\partial^2 W_0}{\partial x^2}\frac{\partial^2 W_0}{\partial y^2}\right) - \frac{1}{R}\left(\frac{\partial^2 W_1}{\partial x^2} - \frac{\partial^2 W_0}{\partial x^2}\right).$$

It is shown the differential equation of motion of the shell under the dynamically applied load satisfies the Lagrange equation of the second kind. Numerical calculations are made for a set of shell sizes and the results are shown graphically with curves of total deflection W versus time. These results show that, at the start of the motion, oscillations take place around an initial equilibrium position. A further increase in the load causes a large increase in deflection. After the load reaches a maximum, the shell starts to oscillate around a new equilibrium position. Furthermore, it is found that the presence of an initial deflection reduces the critical time and, consequently, the magnitude of the critical dynamic load. Also, the critical dynamic load is significantly larger for a load applied at a variable rate than for the case of a constant rate. Finally, the magnitude of the critical dynamic load is shown to depend on the relative shell dimensions. Orig. art. has: 12 equations, 5 figures, and 3 tables.

L 52291-65

ACCESSION NR: AP5011587

ASSOCIATION: Institut mekhaniki AN UkrSSR (Institute of Mechanics, AN UkrSSR)

SUBMITTED: 10Jul64 ENCL: 01 SUB CODE: AS

NO REF SOV: 008 OTHER: 000

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L 52291-65

ACCESSION NR: AP5011587

ENCLOSURE: 01

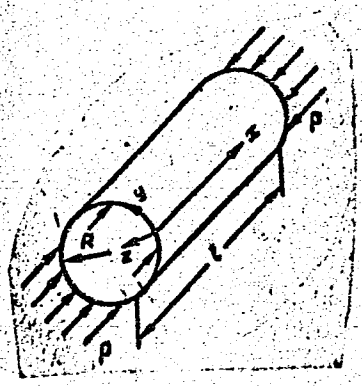

Fig. 1.

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L 01946-67 EWP(k)/EWT(d)/EWT(m)/EWP(w)/EWP(v) IJP(c) EM/WW

ACC NR: AR6021882 (N) SOURCE CODE: UR/0124/66/000/003/V015/V015

AUTHOR: Protsenko, O. P.; Shpakova, S. G. 27 B

TITLE: The stability of a cylindrical shell with an initial bend under dynamic loading 24

SOURCE: Ref. zh. Mekhanika, Abs. 3V103

REF SOURCE: Sb. Dinamika sistem tverdykh i zhidkikh tel. Kiyev, 1965, 107-114

TOPIC TAGS: cylindric shell structure, cylindric shell, cylindric shell stability, dynamic loading, bending stress, compression force, axial compression

ABSTRACT: A comparison was made between two methods of calculating the effect of an initial bend on the stability of a closed cylindrical shell subjected to aperiodic axial compression forces. The first method, which is commonly used for studying the stability of a cylindrical shell, is based on the assumption that the bending of the shell consists of an initial bend and an elastic bending resulting from the application of a load. In the second method, changes in the curvature of the initial bend in the shell is taken into consideration so that

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ACC NR: AR6021882 O

the cylindrical surface is transformed into a quasicylindrical surface of a variable dual curvature. Bending of such a shell is understood to mean only elastic bending. A numerical study showed that according to the second method, which considers the effect of the initial bend, the bend increases more sharply and the magnitude of bending is significantly higher during the loss of stability. The average value of the critical dynamic load obtained by the second method is 10% higher than the corresponding magnitude found by the first method. [Translation of abstract.] [FM]

SUB CODE: 20/

Card 2/2 gd

S/198/61/007/003/001/013
D264/D303

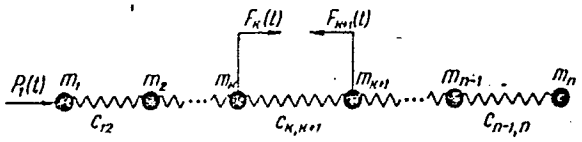
10 6300

AUTHORS: Kil'chevs'kyy, K.O., Konstantynov, A.Kh., and Protsenko, O.P. (Kyyiv)

TITLE: On the theory of longitudinal vibrations of a system of material points connected by springs

PERIODICAL: Prykladna mekhanika, v. 7, no. 3, 1961, 233 - 238

TEXT: The article considers a material system under the action of non-periodic forces, consisting of masses m_i ($i = 1, 2, \ldots n$) joined by springs whose constants are $c_{i,i+1}$ ($i = 1, 2, \ldots n-1$).



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From an investigation of the longitudinal vibrations of such a system in order to find the frequency a high-order determinant is obtained. The article proposes a method of solving the resulting equations. The authors consider the action of a non-periodic force P_1 (t) applied to the mass m_1. The system is considered in two parts: The system of masses whose indices are $< k$, k+1, and those whose indices are $\geqslant$ k+1, k+2. The action of the spring between m_k and m_{k+1} is replaced by elastic forces which must be determined. The generalized co-ordinates are the displacements of the masses of the system. Considering the motion for each system separately, the equations of motion for the system m_j (j = 1, 2, ... k) are given and solved. From the known coordinates of the center of inertia of the system, and by substitution the equation of motion may be written

$$mx_c = \sum_{i=1}^{k} m_i x_i = \sum_{s=1}^{k-1} C_s \cos \omega_s t \sum_{i=1}^{k} m_i \Delta_i(\omega_s^2) + \ldots \qquad (11)$$

$$+\sum_{s=1}^{k-1} D_s \sin\omega_s t \sum_{l=1}^{k} m_l \Delta_l(\omega_s^2) + (A + Bt)\, m, \qquad (11)$$

where $m = \sum_{l=1}^{k} m_l$. It is supposed that at a given instant of time the first and last mass of the system experience unit impulses. Then the initial expressions are

$$x_{j0}^{(2)} = 0 \quad (j = 1, 2, \ldots, k); \quad \dot{x}_{j0}^{(2)} = 0 \quad (j = 2, 3, \ldots, k-1); \qquad (12)$$

$$\dot{x}_{10}^{(2)} = \frac{1}{m_1}; \quad \dot{x}_{k0}^{(2)} = \frac{1}{m_k}. \qquad (12)$$

When the system experiences forces $P_1(t)$ and $F_k(t)$, the displacement of the points of the system amy be written

$$x_j^{(2)} = \sum_{i=1}^{k-1} \frac{\Delta_j(\omega_i^2)}{\omega_i \sum_{a=1}^{k} m_a \Delta_a^2(\omega_i^2)} \left[\Delta_1(\omega_i^2) \int_0^t P_1(t_1) \sin \omega_i (t - t_1)\, dt_1 + \right.$$

$$\left. + \Delta_k(\omega_i^2) \int_0^t F_k(t_1) \sin \omega_i (t - t_1)\, dt_1 \right] + \frac{1}{m_1} \int_0^t P_1(t_1)(t - t_1)\, dt_1 + \qquad (13.)$$

$$+ \frac{1}{m_k} \int_0^t F_k(t_1)(t - t_1)\, dt_1. \qquad (13)$$

The general solution is of the form $x_j = x_j^{(1)} + x_j^{(2)}$ ($j = 1, 2, \ldots k$). The equation of frequency of the original system has one zero solution. Using the proposed method, as many zero solutions

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are obtained as the number of parts, into which the system is divided, [Abstractor's note: In the above case two]. There is no inconsistency here, since there is still one non-zero solution which has not been evaluated and which enters the analytical expression of the elastic force $F_k(t)$. Insofar as $F_k(t)$ is a continuous function possessing all derivatives, it may be written as a Taylor series for each interval. By this method the unknown function is obtained in the following form:

$$F_k\left(\frac{p-j}{p}t\right) = \Phi_{k,k+1}\left(\frac{p-j}{p}t\right) + \\ + c_{k,k+1}\sum_{i=0}^{p-j-1}\left\{\sum_{\sigma=k+1}^{n-1}\frac{\Delta^2_{k+1}(\omega_\sigma^2)}{\omega_\sigma^2\sum_{a=k+1}^{n} m_a\Delta_a^2(\omega_\sigma^2)}\left[F_k\left(\frac{i}{p}t\right)\left(\cos\frac{p-j-i}{p}\omega_\sigma t - \right.\right.\right. \qquad (21)$$
$$\left.\left.\left. - \cos\frac{p-j-i-1}{p}\omega_\sigma t\right) + F_k'\left(\frac{i}{p}t\right)\left(\frac{1}{\omega_\sigma}\sin\frac{p-j-i}{p}\omega_\sigma t - \right.\right.\right.$$

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$$-\frac{1}{\omega_\sigma}\sin\frac{p-j-i-1}{p}\omega_\sigma t+\frac{p-j-i-1}{p}t\cos\frac{p-j-i-1}{p}\omega_\sigma t-$$
$$-\frac{p-j-i}{p}t\cos\frac{p-j-i}{p}\omega_\sigma t\Bigg)\Bigg]+\ldots$$
$$+\sum_{\sigma=1}^{k-1}\frac{\Delta_k^2(\omega_\sigma^2)}{\omega_\sigma^2\sum_{a=1}^{k}m_a\Delta_a^2(\omega_\sigma^2)}\Bigg[F_k\left(\frac{i}{p}t\right)\left(\cos\frac{p-j-i}{p}\omega_\sigma t-\right. \qquad (21)$$
$$-\cos\frac{p-j-i-1}{p}\omega_\sigma t\Bigg)+F_k'\left(\frac{i}{p}t\right)\left(\frac{1}{\omega_\sigma}\sin\frac{p-j-i}{p}\omega_\sigma t-\right.$$
$$-\frac{1}{\omega_\sigma}\sin\frac{p-j-i-1}{p}\omega_\sigma t+\frac{p-j-i-1}{p}t\cos\frac{p-j-i-1}{p}\omega_\sigma t-$$
$$-\frac{p-j-i}{p}t\cos\frac{p-j-i}{p}\omega_\sigma t\Bigg)\Bigg]+\left(\frac{1}{m_{k+1}}+\right.$$

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$$+\frac{1}{m_k}\left)\left[\frac{(2i-2p+1)t^2}{2p^2}F_k\left(\frac{i}{p}t\right)+\right.$$

$$\left.+\frac{3p(2i+1)-2(3i^2+3i+1)}{6p^3}t^3F_k'\left(\frac{i}{p}t\right)\right]\Bigg\}; \qquad (21)$$

where $F_k(0) = \Phi_{k,k+1}(0)$. The author states that this method is sufficiently effective for investigating transient processes which last for a short time interval. In this case the appearance of secular terms in the solution does not cause any difficulty. These terms may be avoided if the formulae of mechanical quadratures are used to solve the integral equation. If the system consists of a large quantity of masses, it can be broken down into several systems so that the problem becomes one of solving a system of integral equations. There are 1 figure and 2 Soviet-bloc references.

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ASSOCIATION: Instytut mekhaniky AN URSR (Institute of Mechanics, AS UkrSSR)

SUBMITTED: June 15, 1960

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ACCESSION NR: AP4023364 S/0198/64/010/002/0143/0148

AUTHOR: Protsenko, O. P. (Kiev)

TITLE: The effect of an initial bend on the frequencies of free vibrations of a cylindrical shell

SOURCE: Pry*kladna mekhanika, v. 10, no. 2, 1964, 143-148

TOPIC TAGS: initial bend effect, cylindrical shell, free radial vibration frequency

ABSTRACT: The author considers free radial vibrations of a flexible closed cylindrical shell with an initial bend. He takes into account the effect of this bend on the shell's curvature when the circumferential length of the cross-section is invariable. The initial bend is considered to be commensurable with the thickness of the shell; the form of the expression determining this bend coincides with one of the members of the series which represents the deflection. After adopting certain hypotheses which concern the initial bend, the author concludes from his calculations that the bend increases the

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ACCESSION NR: AP4023364

frequencies of free radial vibrations; in this connection, the frequencies of the fundamental tone correspond to the largest number of transverse waves. Orig. art. has: 15 equations.

ASSOCIATION: Insty*tut Mekhaniky*, AN UkrRSR (Institute of Mechanics, AN UkrRSR)

SUBMITTED: 17Jul63 DATE ACQ: 15Apr64 ENCL: 00

SUB CODE: PH NO REF SOV: 003 OTHER: 000

Card 2/2

PROTSENKO, O.P.

[Respiration and fermentation; lectures delivered at Kiev University] Dykhannia ta brodinnia; lektsii, prochytani v Kyivs'komu derzhuniversyteti. Kyiv, Vyd-vo Kyivs'koho derzh.univ., 1956. 68 p. (MIRA 14:2)
(Plants--Respiration)

PROTSENKO, O.F. (Kiyev)

Stability of a [illegible] under the action of [illegible].
Prikl. mekh. 1 no.3:27-3[illegible] '65.

(MIRA 18:9)

1. Institut mekhaniki [illegible].

KIL'CHEVSKIY, N.A. [Kil'chevs'kyi, M.O.] (Kiyev); KONSTANTINOV, A. Kh. [Konstantynov, A. Kh.] (Kiyev); PROTSENKO, O.P. (Kiyev)

Theory of longitudinal vibrations of a system of material points connected with springs. Prykl.mekh. 7 no.3:233-238 '61. (MIRA 14:6)

1. Institut mekhaniki AN USSR.
(Vibration)

L 10059-63 EWT(1)/EWP(q)/EWT(m)/BDS/EEC(b)-2/ES(s)-2--AFFTC/ASD/ESD-3/SSD--Pt-4--GG/IJP(C)/JD

ACCESSION NR: AR3000364 S/0058/63/000/004/E054/E054

72

SOURCE: RZh. Fizika, Abs. 4E369

AUTHOR: Protsenko, P. I.; Khodakov A. A.; Mirskaya Ye. Z.; Venerovskaya, L. N.

TITLE: Physico-chemical parameters of nitrates and nitrates of alkali and alkali-earth metals with ferroelectric properties.

27

CITED SOURCE: Sb. Segnetoelektriki. Rostov-na-Donu, Rostovsk. un-t, 1961, 21-26

TOPIC TAGS: Ferroelectrics, nitrates and nitrites, alkali metals, alkali-earth metals

TRANSLATION: Thermographic, dielectric, and dilatometric investigations were made of a series of crystals of nitrites and nitrates of alkali and alkali-earth metals grown from a solution or from a melt. The coefficient of linear expansion of Na N O sub 2 at room temperature is on the order of 0.0001 - 0.00001 per degree Centigrade. It increases noticeably on approaching the Curie temperature,

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and decreases sharply near it. Upon heating above the Curie temperature, the domain structure of Na N O sub 3 disappears and is not restored after the specimen is cooled to room temperature. Single crystals of the nitrate of K, Rb and Tl have each two or three phase transitions in the temperature interval from room empera ure to the melting temperature. In crystals of Rb N O sub 3, Cs N O sub 3, Tl N O sub 3, Ba (N O sub 2) sub 2, (Tl, Ba) N O sub 2, Li N O sub 3 and a few other nitrates, no ferroelectric properties were observed. The increase of Epsilon in some crystals is connected with the growth in their conductivity. A. Fotchenkov

DATE ACQ: 14May63 ENCL: 00 SUB CODE: PH

cs/ja

Card 2/2

FROTSENKO, P.; LITVINENKO, I., inzh.

Arched buildings of rectilinear factory-made elements. Sel'. stroi. 15 no.7:14-15 Jl '61. (MIRA 14:8)

1. Glavnyy tekhnolog Novosibirskogo zavoda zhelezobetonnykh konstruktsiy i gipsovykh izdeliy.
(Novosibirsk Province--Farm buildings)
(Precast concrete construction)

PROTSENKO, P. I.

Protsenko, P. I. - "The interaction of nitrates and nitrites of certain alkali and alkali-earth metals in fusion", (Report), Soobshch. o nauch. rabotakh chlenov Vsesoyuz. khim. o-va im. Mendeleyeva, 1949, Issue 1, p. 9-10.

SO: U-4630, 16 Sept. 53, (Letopis 'Zhurnal 'nykh Statey, No. 23, 1949).