DERIM-OGLU, G.N., inzh.; PISAREV, A.L., kand.tekhn.nauk

Series of output-type a.c. magnetic amplifiers for contactless control systems. Vest. elektroprom. 34 no.1:26-31 Ja '63. (MIRA 16:1)

(Magnetic amplifiers)

DERIF, A.

Fluid relays. IUn.tekh. 3 no.9:45 S '58. (MIRA 11:10)
(Electric relays)

DERING, A.

The low-frequency selective amplifier.

P. III. (LACZNOSC) (Poznan, Poland) No. 1, 1956

SO: Monthly Index of East European Accession (EEAI) LC Vol. 7, No. 5, 1958

L 34453-66

ACC NR: AP6026191 SOURCE CODE: PO/0022/65/000/001/0013/0016

AUTHOR: Dering, Adam (Master engineer) 31 B

ORG: none

TITLE: Matched filters

SOURCE: Przeglad elektrotechniczny, no. 1, 1965, 13-16

TOPIC TAGS: electric filter, pulse signal

ABSTRACT: The article defines a matched filter as a linear filter which maximizes the ratio of peak signal power to mean noise power. This aspect is analyzed mathematically. In addition, several important characteristics of such a filter are discussed, i.e. its frequency spectrum, its impulse transfer function (response to the DIRAC delta) and others. This type of filter is viewed as the optimum system for detecting pulse signals against background noise, its performance is compared to that of the inversion filter. It is also viewed in terms of "encoding" and "decoding". It is pointed out in conclusion that the matched filter can serve as a model or standard for the performance of other filters but that it itself can be realized only in approximation. Orig. art. has: 2 figures and 24 formulas. [JPRS]

SUB CODE: 09 / SUBM DATE: none / OTH REF: 003

Card 1/1 90

UDC: 621.396.6

0976 1720

DERING, A.B., glav. red.; TUROV, M.G., zam. glav. red.; BERZON, E.M., red.; BUCHKIN, N.A., red.; KOZLOV, V.K., red.; NAYMARK, I.I., red.; NIKOLAYEV, K.N., red.; SUSHCHEV, N.N., red.; TERESHCHENKO, Ye.I., red.; YUNMEYSTER, A.B., red.; PUL'KINA, Ye.A., otv. za vyp.

[Reports on the technical level of the manufacture of reinforced concrete products] Sbornik dokladov ob urovne tekhniki proizvodstva zhelezobetonnykh izdelii; informatsionnyi material. Leningrad, Otdel tekhn. informatsii. No.3. 1959. 81 p. (MIRA 16:11)

1. Leningrad. Vsesoyuznyy nauchno-issledovatel'skiy institut po mashinam dlya promyshlennosti stroitel'nykh materialov.
(Reinforced concrete products)

KVATETS, Ye.V.; BELENKO, L.D.; GERASIMOV, A.I.; GOROVENKO, L.I.; DERING, A.I.; DRAKE, L.V.

Treatment of pulmonary tuberculosis with phthivazide inhalations. Vrach.delo no.11:141-142 N '62. (MIRA 16:2)

1. Oblastnoy protivotuberkuleznyy dispanser g. Nikolayeva, pervaya bol'nitsa g. Nikolayeva, tuberkuleznoye otdeleniye i detskiy tuberkuleznyy sanatoriya No.1 g. Nikolayeva.
(TUBERCULOSIS) (PHTHIVAZIDE)

1383. ROENTGEN DIAGNOSIS OF AFFECTIONS OF THE LACRIMAL PASSAGES (Russian text) - Dering A.S. - MEDGIZ (Moskva) 1956 (60 pages)

In the general part anatomy and physiology, clinical examination methods and roentgenography of the lacrimal passages are outlined. Bismuth nitrate is recommended as a contrast medium which will give a sufficiently good shadow, which is stable in vaseline paste, and which is practically non-irritant to the lacrimal ducts. To prepare the emulsion the finest bismuth nitrate powder is thoroughly stirred with vaseline until a consistency of a thick cream is obtained. It is best to prepare it immediately before use. Roentgenography is done immediately after introduction of the paste. To obtain a frontal view the patient lies down in a chin-nose position. A lateral view is taken only to make the roentgenologic picture more exact. In the special part of the book various roentgenologically demonstrable changes in all parts of the lacrimal passages are discussed. Roentgenologic changes are related to clinical manifestations of the pathological process. The book is illustrated with 73 roentgenograms. References 42. (S)

DERING, B. Ye

"Arterial Blood Supply of the Kidney in the Direct and Indirect Circulation of a Rabbit. Experimental and Morphological Research on Rabbits." Cand Med Sci, L'vov State Medical Inst, Chair of Anatomy, L'vov, 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

DERING, B. Ye.

USSR / Human and Animal Morphology, (Normal and Pathological). S
Cardiovascular System.

Abs Jour : Ref Zhur - Biol., No 21, 1958, No 97106

Author : Dering, B.Ye.

Inst : Lvov Oblast Scientific Society of Anatomists, Histologists and Embryologists

Title : Arteries of Lymph Nodes of the Pelvic Extremity and Their Participation in Collateral Blood Circulation (Anatomo-Experimental Investigation).

Orig Pub : Sb. nauchn. rabor L'vovsk. obl. nauch. o-vo anatomov, gistol. i embriol., 1958, vyp. 1, 52-56

Abstract : It was shown in 20 rabbits at the ages of 6 months-2 years, that lymph nodes (LN) of the hind extremity are supplied by 1-3 arteries of the nearest trunks; besides, the supplying arteries, approaching the LN, anastamose between themselves. In experiments with exclusion of the external iliac artery, it was determined that in the development of collateral circulation, the branches which supply LN

Card 1/2

SOV/124-58-3-2834D

Translation from: Referativnyy zhurnal, Mekhanika, 1958, Nr 3, p 41 (USSR)

AUTHOR: Dering, I. S.

TITLE: A Study of Ash-precipitating Devices Operating With the Introduction of a Water Spray Into a Gas Stream (Issledovaniye zolo-ulavlivayushchikh apparatov, rabotayushchikh v usloviyakh vvedeniya v potok gazov raspylennoy vody)

ABSTRACT: Bibliographic entry on the author's dissertation for the degree of Doctor of Technical Sciences, presented to the Odessk. politekhn. in-t (Odessa Polytechnic Institute), 1957.

ASSOCIATION: Odessk. politekhn. in-t (Odessa Polytechnic Institute).

Card 1/1

NIKOLINA, V.Ya.; Prinimali uchastiye: KNYSH, L.I.; DERING, N.A.

Preparation of highly dispersed silicon dioxide. Khim.prom. no.1: 48-52 Ja '62. (MIRA 15:1)

1. Nauchno-issledovatel'skiy institut osnovnoy khimii.
(Silicon oxide)

NIKOLINA, V.Ya.; KNYSH, L.I.; DERING, N.A.

Preparation of highly dispersed silicon dioxide by vapor-phase hydrolysis. [Trudy] NIOKHIM 15:64-75 '63.
(MIRA 18:2)

DERING, S. A. Cand. Med. Sci.

"Optico-Ciliary Resection and Its Influence on Intra-Ocular Pressure," Vest. Oftalmol., No.1, 1949

Optical Diseases Clinic, Bashkir Med. Inst.

DERING, Sergey Arsen'yevich; BELOSTOTSKIY, Ye.M., redaktor; BEL'CHIKOVA, Yu.S., tekhnicheskiy redaktor

[X-ray diagnosis of diseases of the lacrymal ducts] Rentgenodiagnostika zabolevanii slezootvodiashchikh putei. Moskva, Gos. izd-vo med. lit-ry, 1956. 58 p. (MLRA 10:3)
(LACRYMAL ORGANS--DISEASES) (DIAGNOSIS, RADIOSCOPIC)

DERING, S.A., kand.med.nauk

Case of retrobulbar axial neuritis following the intra-arterial administration of penicillin. Oft.zhur. 14 no.4:245-248 '59. (MIRA 12:10)

1. Iz N-skogo Voyenno-Morskogo gospitalya.
(OPTIC NERVE--DISEASES) (PENICILLIN--TOXICOLOGY)
(INJECTIONS, INTRA-ARTERIAL)

DERING, S.A., kand.med.nauk; SHEKHAYEV,O.V., vrach (g.Nikolayev)

Stable spasm of accommodation in diseases of the central nervous system. Oft.zhur. 15 no.7:426-431 '60. (MIRA 13:11)
(NERVOUS SYSTEM--DISEASES)
(EYE--ACCOMMODATION AND REFRACTION)

DERINGAS, L.N.

Some organizational suggestions to improve the work of forensic medicine experts. Sud.-med. ekspert. 8 no.1:50-51 Ja-Mr '65. (MIRA 18:5)

1. Shaulyaskiy mezhrayonnyy sudebnomeditsinskiy ekspert.

SURNAME, Given Name

DERIOGEA, V.

Country: Rumania

Academic Degrees:

Affiliation: Zootechnical Research Institute (Institutul de Cercetari Zootehnice).

Source: Bucharest, Problema Zootehnice si Veterinare, Vol XI, No 9, Sep 1961, pp 24-32.

Data: "Evaluation of Reproductions According to the Weight and the Line of Descendants in the Case of the 'Tigaia' Breed."

Authors:

STEFANESCU, C., -Dr.-
DERIOGEA, V.
HARSIAN, A., -Engineer.-

GPO 981643

DERIN-OGLU, G.N., inzh.; PISAREV, A.A., kand.tekhn.nauk

Magnetic amplifiers with a.c. output for noncontact control systems. Vest.elektroprom. 33 no.6:47-51 Je '62. (MIRA 15:7)
(Magnetic amplifiers) (Automatic control)

DERIPASKA, M.V.

Combination die of simple design. Kuz.-shtam.proizv. 4 no.12: 45-46 D '62. (MIRA 16:1)
(Dies (Metalworking))

SILKA, A.N.; DERIPASKO, N.N.

Constant level regulator of a dephenolization system. Koks i khim. no.2:39 '62. (MIRA 15:3)

1. Makeyevskiy koksokhimicheskiy zavod.
(Separators (Machinery))

DERIPASKO, P.G.; KOVALEV, G.V., veterinarnyy vrach; GRIGOR'YEV, N.Kh.

Reducing echinococcus in sheep. Veterinariia 42 no.9:45-46 S '65. (MIRA 18:11)

1. Nachal'nik veterinarnogo otdela Nauchno-issledovatel'skoy veterinarnoy stantsii Checheno-Ingushskoy ASSR (for Deripasko). 2. Veterinarnyy otdel Nauchno-issledovatel'skoy veterinarnoy stantsii Checheno-Ingushskoy ASSR (for Kovalev). 3. Zaveduyushchiy otdelom parazitologii Nauchno-issledovatel'skoy veterinarnoy stantsii Checheno-Ingushskoy ASSR (for Grigor'yev).

RADKEVICH, P.Ye., prof.; DERIPASKO, P.G.; DMITRIYEVSKIY, L.M.; DAVYDOV, G.D.; SAAKYAN, V.S.; FINK, Ye.G.; ATOYAN, P.G., vetvrach.

Poisoning of cattle by corn silage contaminated by pathogenic fungi. Veterinariia 35 no.4:79-81 Ap '58. (MIRA 11:3)

1. Vsesoyuznyy institut eksperimental'noy veterinarii (for Radkevich). 2. Nachal'nik vetotdela (for Deripasko). 3. Starshiy vetvrach vetotdela Groznenskogo oblsel'khozupravleniya (for Dmitriyevskiy). 4. Direktor oblvetbaklaboratorii (for Davydov). 5. Zaveduyushchiy khimicheskim otdelom (for Saakyan). 6. Glavnyy vetvrach Groznenskogo rayona (for Fink). 7. Kolkhoz imeni 1-go Maya (for Atoyan).
(Cattle--Diseases and pests)

DEMIDOV, N.V., kand.veterinarnykh nauk; DERIPASKO, P.G., veterinarnyy vrach; KOVALEV, G.V., veterinarnyy vrach

Application of difluorotetrachloroethane in cattle fascioliasis. Trudy VIGIS 6:216-220 '59. (MIRA 15:5)

1. Groznenskoye oblastnoye upravleniye sel'skogo khozyaystva.
(Liver flukes) (Parasites--Cattle)
(Anthelmintics)

DERIPASKO, P.G.

Epizootiology of leptospirosis in cattle. Veterinariia 41 no.8:27-28 Ag '64. (MIRA 18:4)

1. Nachal'nik veterinarnogo otdela Ministerstva proizvodstva i zagotovok sel'skokhozyaystvennykh produktov Checheno-Ingushskoy ASSR.

1. DERISHCHEV, M. G.

2. USSR (600)

4. Peanuts

7. Ciliation of gynophore and pod of the peanut. Bot. zhur., 37 no. 6, 1952.

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

USSR / Cultivated Plants. Commercial, Oleaceous, Sugar Bearing. M-4

Abs Jour : Ref Zhur - Biologiya, No 2, 1959, No. 6347

Author : Derishchev, M. G.
Inst : ~~All-Union~~ Scient. Res. Inst. of Oleaceous and Essential Oil Crops
Title : Selection and Seed Cultivation of Sunflowers in the Altay Kray

Orig Pub : V sb.: Kratkiy otchet o nauchno-izsled. rabote Vses. n.-i., in-ta maslichn. i efiro-maslichn. kul'tur za 1956 g. Krasnodar, "Sov. Kuban'", 1957, 31-35

Abstract : The selection experiments with sunflowers started in 1956 in the arid zone of the Altay Kray (Kulundinskaya Steppe). The 8392 variety of VNIIMK (All-Union Scient. Res. Inst. Oleac.

Card 1/2

USSR / Cultivated Plants. Commercial, Oleaceous, Sugar Bearing. M-4

Abs Jour : Ref Zhur - Biologiya, No 2, 1959, No. 6347

Crops) which took the first place because of its yield of seeds (7.2 cwt/ha) and oil (2.47 cwt/ha), showed itself as a good prospect for the steppe part of Altay in the competitive variety tests in 1956. Many numbers with a shorter vegetation period than the 8883 variety were found in the nursery dedicated to the evaluation of the descendants of the 8883 variety. Among them, No 291 which has a vegetation period, shorter by 12 days than the 8883 variety, surpassed the latter by 25% in yield. -- O. P. Plyusnina

Card 2/2

DERIV, S.

ROMANIA / Pharmacology, Toxicology, Analeptics U-3

Abs Jour : Referat Zh.-Biol., No 1, 1958, No 3388

Author : Deriv, S., Tanasescu, Gh., Costescu G., Ionescu G., Tanase I., Dimitriv M., Manescu M., Carp, N., Neascu, C., Grigorescu-Simionescu G., Ionescu C., Nitulescu, F., Sibiceanu Gh, Voicitu, Al.

Inst : Not given.

Title : A Study of Sulfur-Containing Amino Acids (Methionine, Cysteine, Cystine), Cyclic and Heterocyclic Amino Acids (Tyrosine, Tryptophan, and Histidine), Nucleic Acids (RNA and DNA), Proteases (Trypsin, Cathepsin, Dipeptidase and Carboxypeptidase) and of Nucleases (Ribo-and Desoxy-ribonuclease) in the Cerebral Cortex of Rats Under the Influence of Luminal and Benzedrine.

Orig Pub : Bul. Stiint. acad. RPR, Sec. Mod., 1955, 7, No 4, 1193-1208.

Abstract : A study was made of protein and nucleic acid metabolism in

Card : 1/2

ROMANIA / Pharmacology, Toxicology, Analeptics U-3

Abs Jour : Referat Zh.-Biol., No 1, 1958, No 3388

Abstract : the cerebral cortex of rats during a state of luminal-induced depression and of benzedrine-induced excitement. It was shown that under the influence of benzedrine there was a decrease in the amounts of cysteine and cathepsin; there was no change in the tyrosine and tryptophan content. When luminal was administered, the amount of cathepsin was increased and that of tyrosine and tryptophan remained unchanged. No alterations in the activity of desoxy-and of ribo-nuclease were noted during excitement. During a state of inhibition, an increase in the activity of both nucleases was observed, whereas there was no change in the amount of RNA and DNA. The authors conjecture that during sleep anabolic processes predominate over catabolic processes.

Card : 2/2

DENIY, I. G.

Piece of equipment for climbing trees. Les. khoz. 5, no 6, 1952.

Deriy, I. G.

AUTHOR: Deriy, I.G., (Belaya Tserkov', Ukrainian SSR) 26-12-25-49

TITLE: The "Aleksandriya" Dendrological Park at Belaya Tserkov' (Belotserkovskiy dendrologicheskiy park "Aleksandriya")

PERIODICAL: Priroda, 1957, No 12, pp 96-97 (USSR)

ABSTRACT: The author gives a detailed description of the "Aleksandriya" park, now in the possession of the AN of the Ukrainian SSR. It was laid out in the XVIII century and covers an area of 201.48 ha. The park contains 420 varieties of trees and bushes, among them century old oaks and valuable exotic trees, such as a tulip tree, a black pine, ash trees, weeping oaks and others. Over 150 different kinds of fruit trees and berry bushes grow in a separate garden. On the slopes of the Paliyeva mountain, in the park's south-western corner, many varieties of herbs can be found which are characteristic of the steppe vegetation, along with hundreds of other plants and grasses all over the park.

AVAILABLE: Library of Congress

Card 1/1

DERIY, I.G.

Trees in the "Aleksandriya" Arboretum of the Botanical Garden of the Academy of Sciences of the Ukrainian S.S.R. Trudy Bot. sada AN URSR 5:110-132 '58. (MIRA 12:2)
(Kiev--Arboretums)

DERIY, I.G.

The Aleksandriya Arboretum. Biul. Glav. bot. sada no.30:10-15 '58. (MIRA 11:6)

1. Dendropark "Aleksandriya" g. Belaya TSerkov'.
(Belaya TSerkov'--Arboretums)

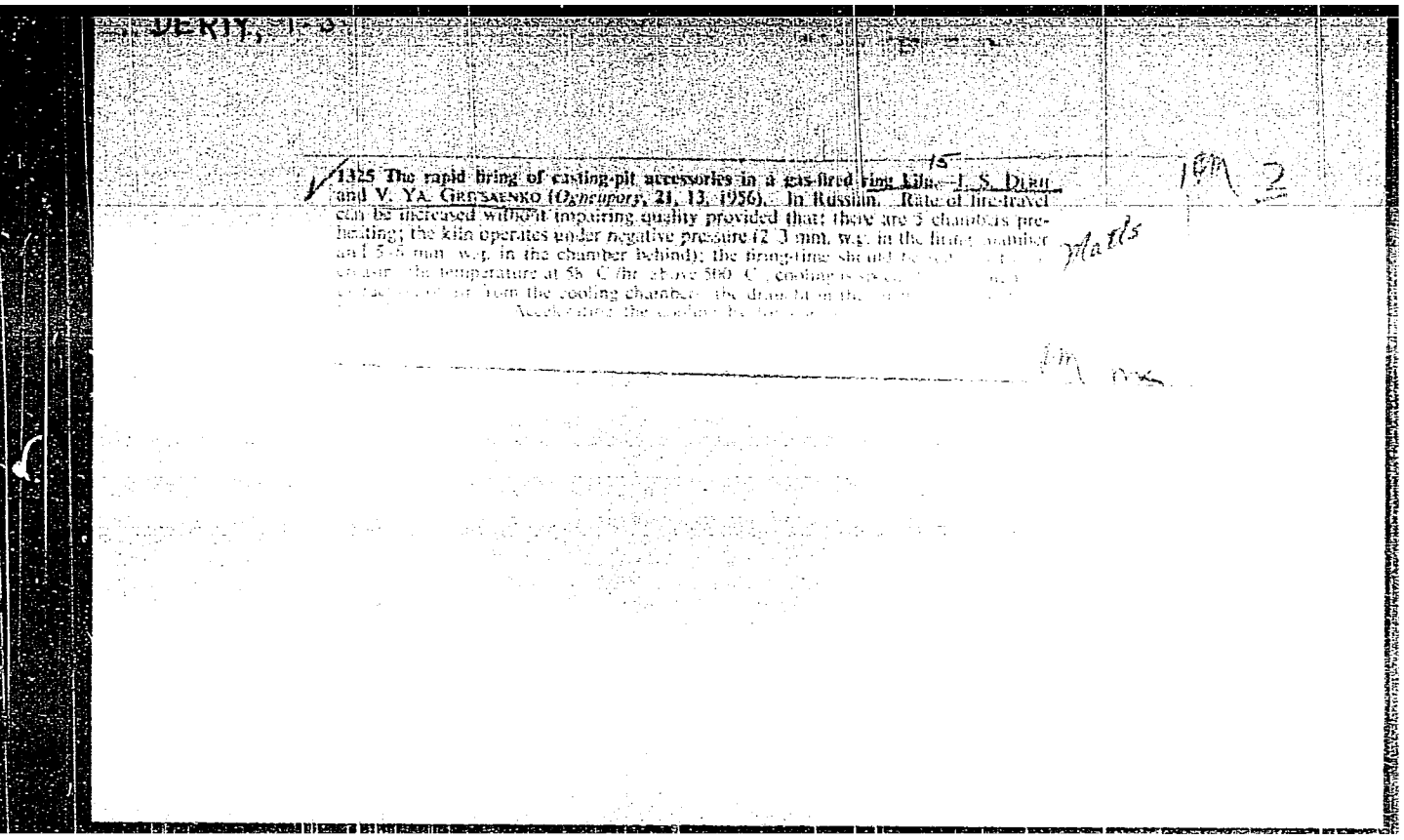
DERIY, I. G.

Cand Biol Sci - (diss) "Trees and shrubs of the Belotserkov dendrological park "Alexandria" and their utilization for landscaping the Ukrainian SSR." Kiev, 1961. 26 pp; (Dnepropetrovsk State Univ imeni 300th Reunion of the Ukraine with Russia, Chair of Geobotany and Higher Plants); 200 copies; free; list of author's works at end of text (12 entries); (KL, 5-61 sup, 183)

DERIY, I.G.

Introduction of Securinega suffruticosa (Pall.) Rehd. in the Ukraine. Biul. Glav. bot. sada no.53:10-17 '64.
(MIRA 17:6)

1. Dnepropetrovskiy gosudarstvennyy universitet.



1325 The rapid firing of casting-pit accessories in a gas-fired ring kiln. I. S. Diau and V. Ya. Grigsaenko (*Ogneupory*, 21, 13, 1956). In Russian. Rate of fire-travel can be increased without impairing quality provided that: there are 3 chambers pre-heating; the kiln operates under negative pressure (2–3 mm. w.g. in the first chamber and 1.5–5 mm. w.g. in the chamber behind); the firing-time should be [illegible] the temperature at 55° C/hr. above 580° C., cooling is [illegible] from the cooling chamber the draught in the [illegible]

DERYEV, N.K.

USSR.

1570. **A new photo-elastic method of determining the modulus of elasticity of glass.**—N. K. DERYEV (*Glass & Ceramics*, Moscow, 11, No. 11, 5, 1954). The direct determination of the elasticity modulus of glass is difficult for a number of reasons, e.g. the necessity of precise measurements of very small deformations. The author therefore recommends a photo-elastic method in which small specimens are used. Small rectangular glass test-pieces are bent in a special apparatus under the polarizing microscope. The bending of the specimen is measured by an ocular micrometer (×65). Stresses arising in the specimen are measured by photo-elastic methods (×15). The accuracy of the method is ±10%. (1 table.)

DERIYEVA, G.M.

Experience in the treatment of glaucoma patients with D'Arsonval currents under ambulatory conditions. Vest.oft.,74 no.1:23-24 '61. (MIRA 14:3)

(GLAUCOMA) (DIATHERMY)

DERIZEMLYA, V.; MURSALIMOV, A.

Problems in the improvement of planning, financing, and calculating operational costs of grain receiving enterprises. Muk.-elev. prom. 29 no.8:4-5 Ag '63.
(MIRA 17:1)

1. Planovo-ekonomicheskoye upravleniye Kazakhskogo ob"yedineniya khleboproduktov.

DERIZHAN, A.; SAEV, St.; VELICHKOVA, D.

Experiences with hypothermia in surgery of congenital cardiac defects. Khirurgiia, Sofia 11 no.5-6:449-452 1958.

1. Iz Khirurgichnata klinika pri ISUL.
(CARDIOVASCULAR DEFECTS, CONGENITAL, surgery,
hypothermia (Bul))
(HYPOTHERMIA,
in cardiovasc. defects, congen. surg. (Bul))

DERJANETZ, J.

1095. Effect of steroid hormones upon pulmonary neuro-dystrophy induced by vagotomy. A. Tigyi, K. Lissák, and J. Derjanetz. *Acta physiol. Acad. Sci. hung.*, 1954, 6, 33--40.--The effect of deriv. of lutoid, folliculoid, testoid, glyco- and mineralo-corticoid hormones were studied on the degree of lung infiltration and survival time following bilateral cervical vagotomy in rats. The quotient wt. of lungs (mg.) over body wt. (g.) was the measure of lung infiltration. Mineralo-corticoid (DOCA) slightly inhibits infiltration and considerably prolongs survival time. Lutoids inhibit development of lung infiltration without an effect on survival time. Folliculine and testosterone slightly, cortisone more so, increase infiltration and have no effect on survival time. It is suggested that there is a parallelism between inhibitory effect of lung infiltration and anaesthetic activity of the lutoids. A. B. L. BERNÁK.

(2)

Inst. Physiol. of Med. Univ. - Pecs

DERKACH, A.

Relays. Tekh.mol. 22 no.5:32-33,40,3 of cover.My '54. (MLRA 7:6)

1. Student Novocherkasskogo politekhnicheskogo instituta.
(Electric relays)

VAVILOV, L.; USHAKOV, L.; DERKACH, A.; AKOL'ZIN, L.; YUTSOV, L., agronom; YEVMENENKO, L.

Successes of chemicalization. Zashch. rast. ot vred. i bol. 10 no.1:4-8 '65. (MIRA 18:3)

1. Nachal'nik Primorskoy stantsii zashchity rasteniy, Vladivostok (for Vavilov). 2. Nachal'nik Brestskoy stantsii zashchity rasteniy (for Ushakov). 3. Glavnyy agronom Brestskoy stantsii zashchity rasteniy (for Derkach). 4. Nachal'nik Pskovskoy stantsii zashchity rasteniy (for Akol'zin). 5. Mogilevskiy otryad po zashchite rasteniy (for Yutsov). 6. Nachal'nik Gomel'skoy stantsii zashchity rasteniy (for Yevmenenko).

DERKACH, A.A., Cand Tech Sci —(diss) "Method of selection of optimum ~~most profitable~~ technical parameters of [illegible] electric supply [illegible] to agricultural ~~regions~~ regions." Kiev, 1959. 16 pp with ~~schemes~~ diagrams; 1 sheet of ~~schema~~ diagrams (Min of Agr UkSSR. Ukrainian Acad of Agr Sci), 150 copies (KL, 30-59, 120)

DERKACH, A.A., inzh. (Kiyev); SIN'KOV, V.M., kand.tekhn.nauk, dotsent (Kiyev)

Effect of economic factors on the parameters of networks of districts with distributed loads. Elektrichestvo no.5:15-22 My '60. (MIRA 13:9)
(Electric power distribution)

DERKACH, A. D.

USSR/ Engineering - Glass furnaces

Card 1/1 Pub. 104 - 10/12

Authors : Derkach, A.D.

Title : Multi-duct muffle furnace of continuous action

Periodical : Stek. i ker. 5, 29-30, May 1954

Abstract : A description is presented of a multi-duct muffle furnace employed at the Ceramic Product Factory in Tashkent, for baking tiles. Drawings depicting the above mentioned furnace are presented, together with technical specifications.

Institution: .....

Submitted: .....

DERKACH, A. D.

14-57-6-12695

Translation from: Referativnyy zhurnal, Geografiya, 1957, Nr 6, p 130 (USSR)

AUTHORS: Fasulatin, K. K., Derkach, A. D.

TITLE: Composition and Distribution of Coccinellinae in Trans-Carpathian Region (Nekotoryye dannyye o sostave i kharaktere raspredeleniya koktsinellid Zakarpat'ya)

PERIODICAL: Nauch. zap. Uzhgorodsk. un-ta, 1956, Vol 16, pp 147-166

ABSTRACT: The authors discuss Coccinellinae found in the trans-Carpathian Region (two species from the subgroup Subcoccinellinae and 61 species from the subgroup Coccinellinae). The article describes their distribution throughout the area, which is related to the distribution of fauna and flora upon which they feed. The authors distinguish the types which are peculiar to plains, deciduous and conifer forests, meadows, fields orchards, and gardens.

Card 1/1

L. D.

COUNTRY : USSR.
CATEGORY : Zoological Parasitology. Acarids and Insects 3
as Disease Vectors. Insects.
ABS. JOUR. : RZhBiol., No. 14,1958, No. 62686.

AUTHORS : Ivanov, K. A.; Derkach, A. P.
INST. : Astrakhan Anti-Plague Station.
TITLE : Distribution and Dynamics of the Numbers of Rodents' Fleas in One of the Localities of the Silt Subzone in the Northwestern Region of*
ORIG. PUB. : Sb. tr. Astrakhansk. protivochumn. st., 1955, vyp. 1, 289-301.
ABSTRACT : In a typical section for the silt subzone in the northwestern region of the Caspian Sea dwell rodents of 13 species; the most numerous are the "emuranchik," crested and midday gerbils and the domestic mouse. 3234 fleas were collected. 11 flea species were noted on the little beasts, 6 in the burrows' entrances and 4 in the nests of the "emuranchik." On the average for 3 years (1951-1953), the highest abundance indices of the fleas (I) were observed in March-April; the lowest (0.3),

CARD: 1/3

COUNTRY :
CATEGORY :

ABS. JOUR. : RZhBiol., No. 14, 1958, No. 62686.

AUTHOR :
INST. :
TITLE :

ORIG. PUB. :

ABSTRACT : in July. On the midday gerbits, I kept at a low level (0.14-0.4). On the "emuranchiks," I were the higheat (3.5) in the period of mass awakening (March) and gradually diminished until the state of hibernation (0.3 in October-November). In the burrows' entrances, I were highest in March (3.0), then diminished towards summer and again increased towards autumn. It was noted that the fleas' exchange proceeds

CARD: 2/3

COUNTRY :
CATEGORY :

ABS. JOUR. : RZhBiol., No. 14, 1958, No. 62586.

AUTHOR :
INST. :
TITLE :

ORIG. PUB. :

ABSTRACT : preeminently according to the design - suslik - "yemuranchik" - gerbils - domestic mouse, forming, as it were, a chain from the steppe to the synantropic rodents.--R. B. Kosminskiy

CARD: 3/3

DERKACH, A.S., inzh.; SHTERN, V.I., inzh.

Characteristics of the performance of automatic electronic compensators in electrolysis shops. Priborostroenie no.6:26-27 Je '65. (MIRA 18:7)

DERKACH,B.; DERKACH,V.

Self-braking winch. Mast. ugl. 3 no.12:19-20 D '54.
(MIRA 8:6)

1. Glavnyy mekhanik shakhty no.4 kombinata Molotovugol' (for Derkach B.) 2. Nachal'nik mekhanicheskogo tsekha (for Derkach,V.)
(Mine hoisting)

DEMKACH, B.A.

Anniversary of N.K. Gudzii, active member of the Academy of Sciences of the Ukrainian S.S.R. Visnyk AN URSR 28 no.6:48-51 Je '57.
(Gudzii, Nikolai Kallinikovich, 1887-) (MLRA 10:8)

DERKACH, B. N.

USSR/Pharmacology. Pharmacognosy. Toxicology - Chemotherapeutic Preparations. T-9

Abs Jour : Referat Zhur - Biologiya, No 16, 1957, 71877

Author : Derkach, B.N.
Inst :
Title : The Study of the Antitoxic Properties of Antibiotics on the Detoxification and Desintoxification of Antibiotics in Relation to the Botulism Toxin.

Orig Pub : Tr. Kharkovsk. N.I. In-ta Vaksin i Syvorotok, 1956, 23, 25-33

Abstract : The effect of Biomycin (I), sanazine (II) and levomycetine (III) on botulism intoxication was investigated. To 1-2 DL_m (in 0.1 ml of physiological solution) of botulism toxin I was added in 0.1-0.8 mg doses, II in 0.1-0.4 mg, III 0.4-0.8 mg and put into the incubator for 1-6 hrs. at 37 C, and then injected intravenously into mice. It was found that I, II and III have a detoxifying effect

Card 1/2 - 80 -

USSR/Pharmacology. Pharmacognosy. Toxicology - Chemotherapeutic Preparations. T-9

Abs Jour : Referat Zhur - Biologiya, No 16, 1957, 71877

on the botulinic toxin; I was the most effective. The combined use of II and III, and also of II and I, or III and I heightens the desintoxifying effect on the botulism intoxication.

Card 2/2

DERKACH, Dem'yan Ivanovich; VANCHUK, L., red.; STEPANOVA, N., tekhn. red.

[Analysis of the economic operations of an industrial enterprise; in charts with explanations] Analiz khoziaistvennoi deiatel'nosti promyshlennogo predpriiatiia (v skhemakh s poiasneniiami). Minsk, Gos.izd-vo BSSR. Red. nauchno-tekhn.lit-ry, 1961. 298 p. (MIRA 15:5)

(Accounting) (Industrial management)

DERKACH, D.Ya.

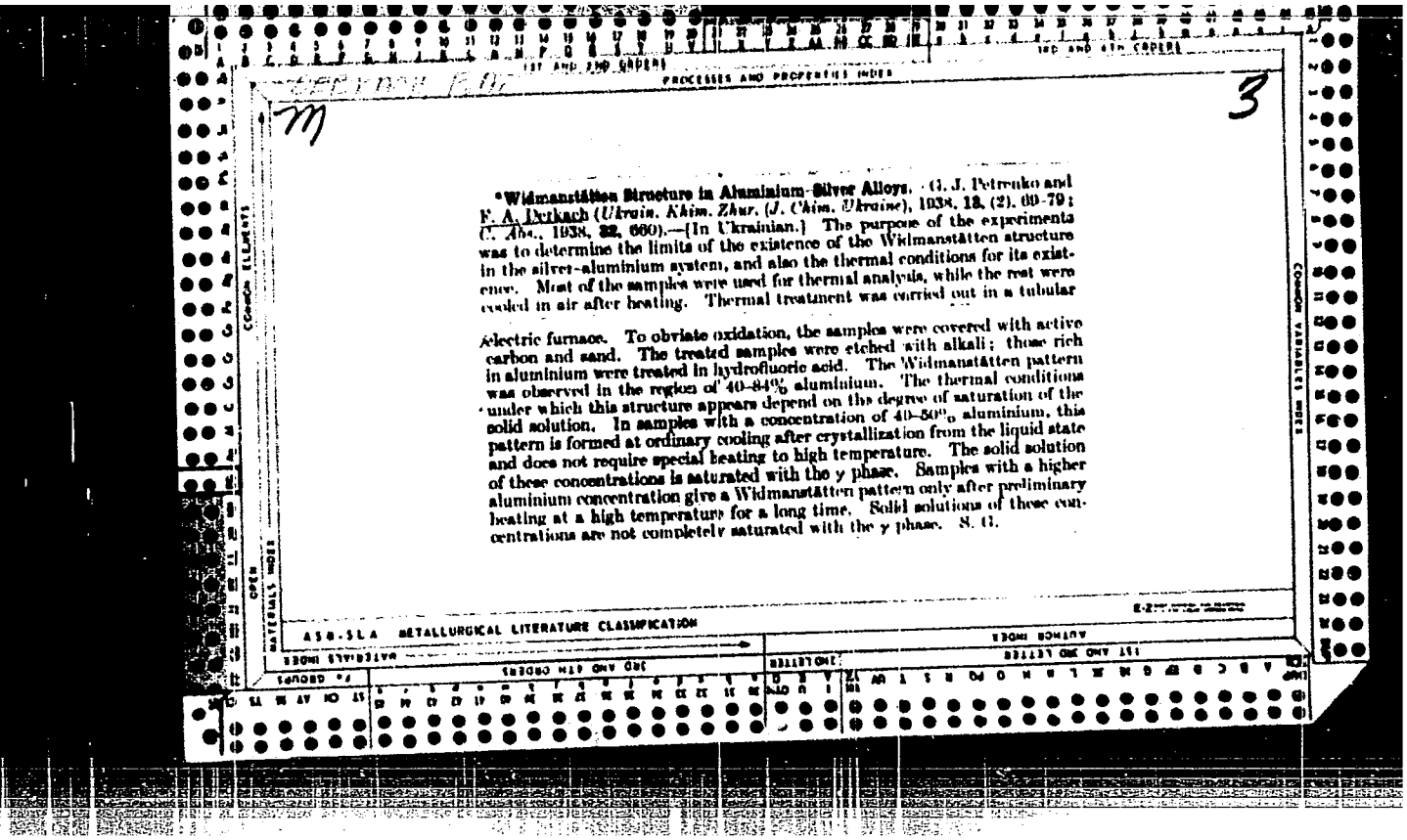
Mechanization of the packaging of plastic goods. Plast.massy no.2:71-72 '61. (MIRA 14:2)
(Plastics—Packaging)

DERKACH, F.A.

DERKACH, F.A.; OVCHINNIKOVA, A.I., student; DERKACH, E.A., student.

Corrosion resistance of cadmium-zinc alloys. Nauk.zap.L'viv.un. 21:110-120 '52. (MLRA 10:7)

1. Kafedra neorganichnoi khimii.
(Cadmium--Zinc alloys--Corrosion)



PROCESSES AND PROPERTIES INDEX

3

Widmanstätten Structure in Aluminium-Silver Alloys. G. J. Petrenko and F. A. Berkach (*Ukrain. Khim. Zhur.* (*J. Chim. Ukraine*), 1938, **13**, (2), 69–79; *C. Abs.*, 1938, **32**, 660).—[In Ukrainian.] The purpose of the experiments was to determine the limits of the existence of the Widmanstätten structure in the silver-aluminium system, and also the thermal conditions for its existence. Most of the samples were used for thermal analysis, while the rest were cooled in air after heating. Thermal treatment was carried out in a tubular electric furnace. To obviate oxidation, the samples were covered with active carbon and sand. The treated samples were etched with alkali; those rich in aluminium were treated in hydrofluoric acid. The Widmanstätten pattern was observed in the region of 40–84% aluminium. The thermal conditions under which this structure appears depend on the degree of saturation of the solid solution. In samples with a concentration of 40–50% aluminium, this pattern is formed at ordinary cooling after crystallization from the liquid state and does not require special heating to high temperature. The solid solution of these concentrations is saturated with the γ phase. Samples with a higher aluminium concentration give a Widmanstätten pattern only after preliminary heating at a high temperature for a long time. Solid solutions of these concentrations are not completely saturated with the γ phase. S. G.

ASM-SLA METALLURGICAL LITERATURE CLASSIFICATION

DERKACH, F.A.

Brilliant Russian scientist and patriot, Dmitrii Ivanovich Mendeleev. Nauk. zap. L'viv. un. 13:27-34 '49. (MIRA 12:10)

1.Kafedra obshchey neorganicheskoy khimii L'vovskogo gosudarstvennogo universiteta imeni I. Franko.
(Mendeleev, Dmitrii Ivanovich, 1834-1907)

DERKACH, F.A.

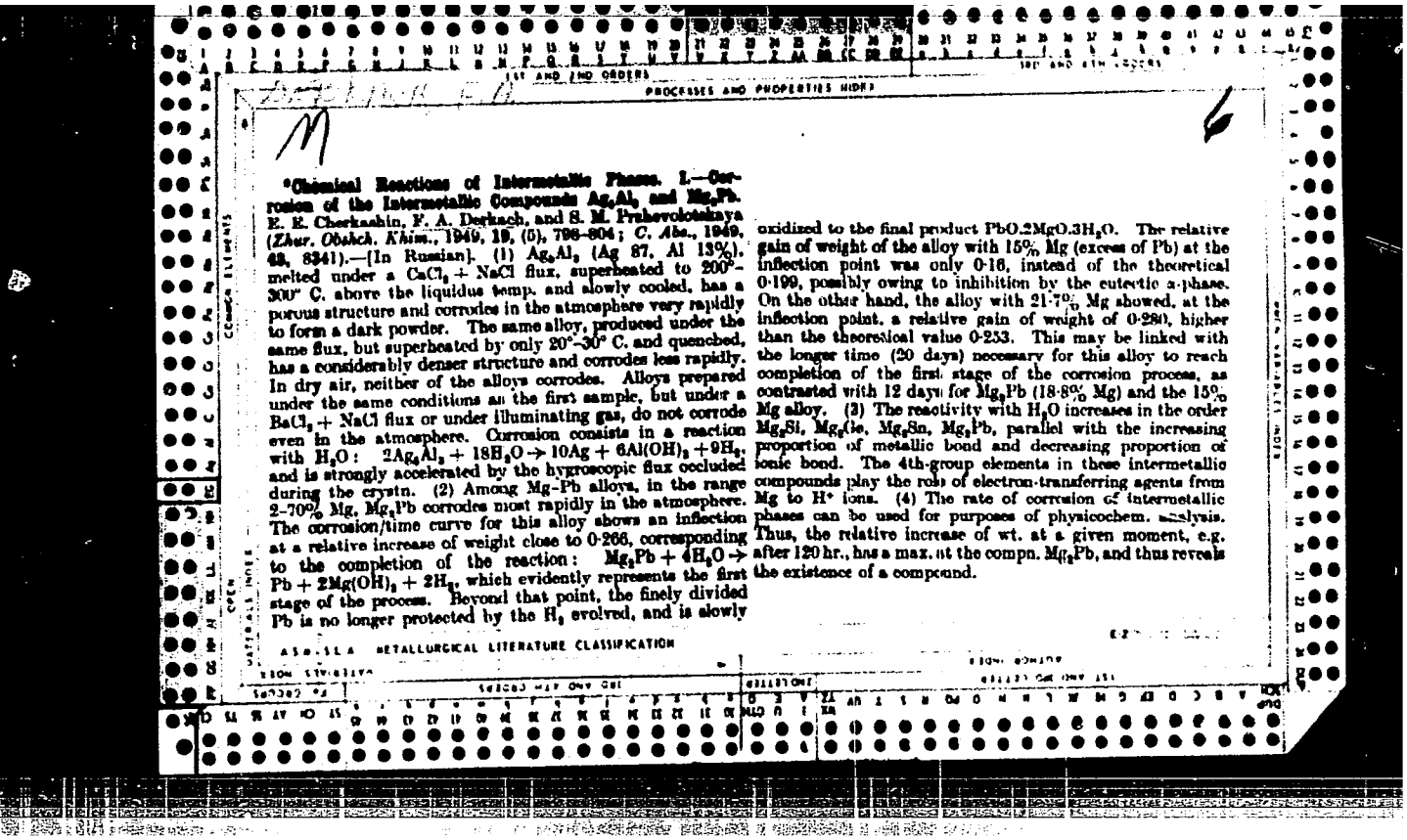
Corrosion of zinc-tin alloys in hydrochloric acid with hydrogen depolarization. Nauk. zap. L'viv. un. 13:91-102 '49.
(MIRA 12:10)

1.Kafedra neorganicheskoy khimii L'vovskogo gosudarstvennogo universiteta imeni I. Franko.
(Zinc-tin alloys--Corrosion)

DERKACH, F.A.; PREVARSKIY, A.P. [Prevars'kyi, A.P.], student IV kursa

The chemistry laboratory of M.V. Lomonosov. Nauk. zap. L'viv. un. 13:137-145 '49. (MIRA 12:10)

1.Kafedra neorganicheskoy khimii L'vovskogo gosudarstvennogo universiteta imeni I. Franko.
(Lomonosov, Mikhail Vasilevich, 1711-1765)



*Chemical Reactions of Intermetallic Phases. I.—Corrosion of the Intermetallic Compounds Ag_3Al_2 and Mg_3Pb. E. E. Cherkashin, F. A. Derkach, and S. M. Prshevolotskaya (*Zhur. Obshch. Khim.*, 1949, 19, (5), 796–804; *C. Abs.*, 1949, 43, 8341).—[In Russian]. (1) Ag_3Al_2 (Ag 87, Al 13%), melted under a $CaCl_2$ + NaCl flux, superheated to 200°–300° C. above the liquidus temp. and slowly cooled, has a porous structure and corrodes in the atmosphere very rapidly to form a dark powder. The same alloy, produced under the same flux, but superheated by only 20°–30° C. and quenched, has a considerably denser structure and corrodes less rapidly. In dry air, neither of the alloys corrodes. Alloys prepared under the same conditions as the first sample, but under a $BaCl_2$ + NaCl flux or under illuminating gas, do not corrode even in the atmosphere. Corrosion consists in a reaction with H_2O: $2Ag_3Al_2 + 18H_2O \rightarrow 10Ag + 6Al(OH)_3 + 9H_2$, and is strongly accelerated by the hygroscopic flux occluded during the crystn. (2) Among Mg–Pb alloys, in the range 2–70% Mg, Mg_3Pb corrodes most rapidly in the atmosphere. The corrosion/time curve for this alloy shows an inflection at a relative increase of weight close to 0·266, corresponding to the completion of the reaction: $Mg_3Pb + 4H_2O \rightarrow Pb + 2Mg(OH)_2 + 2H_2$, which evidently represents the first stage of the process. Beyond that point, the finely divided Pb is no longer protected by the H_2 evolved, and is slowly oxidized to the final product $PbO.2MgO.3H_2O$. The relative gain of weight of the alloy with 15% Mg (excess of Pb) at the inflection point was only 0·16, instead of the theoretical 0·199, possibly owing to inhibition by the eutectic α-phase. On the other hand, the alloy with 21·7% Mg showed, at the inflection point, a relative gain of weight of 0·280, higher than the theoretical value 0·253. This may be linked with the longer time (20 days) necessary for this alloy to reach completion of the first stage of the corrosion process, as contrasted with 12 days for Mg_3Pb (18·8% Mg) and the 15% Mg alloy. (3) The reactivity with H_2O increases in the order Mg_2Si, $Mg_3(le$, Mg_2Sn, Mg_3Pb, parallel with the increasing proportion of metallic bond and decreasing proportion of ionic bond. The 4th-group elements in these intermetallic compounds play the rôle of electron-transferring agents from Mg to H^+ ions. (4) The rate of corrosion of intermetallic phases can be used for purposes of physicochem. analysis. Thus, the relative increase of wt. at a given moment, e.g. after 120 hr., has a max. at the compn. Mg_3Pb, and thus reveals the existence of a compound.

DERKACH, F.A.

Corrosion of alloys of the cadmium-bismuth system in hydrochloric acid. Nauk.zap.L'viv.un. 21:89-97 '52. (MIRA 10:7)

1. Kafedra neorganichnoy khimii.
(Bismuth--Cadmium alloys--Corrosion)

DERKACH, F.A.; OVCHINNIKOVA, A.I., student; DERKACH, E.A., student.

Corrosion resistance of cadmium-zinc alloys. Nauk.zap.L'viv.un. 21:110-120 '52. (MLRA 10:7)

1. Kafedra neorganichnoi khimii.
(Cadmium--Zinc alloys--Corrosion)

DERKACH, F.A.; KONOVALENKO, M.A., studentka.

Corrosion of lead-zinc alloys in an alkaline medium. Nauk.zap. L'viv.un. 21:121-124 '52. (MLRA 10:7)

1. Kafedra neorganichnoi khimii.
(Lead--Zinc alloys--Corrosion)

DERKACH, F.A.

USSR/Physical Chemistry - Thermodynamics. Thermochemistry. Equilibrium. Physicochemical Analysis. Phase Transitions, B-8

Abst Journal: Referat Zhur - Khimiya, No 1, 1957, 366

Author: Derkach, F. A., Kolisnichenko, U. M., and Kul'bik, O. G.

Institution: Lvov University

Title: On the Question of the Existence of a Limit for the Chemical Stability of Alloys of the Mg-Cd System

Original Periodical: Nauk. zap. L'vivs'k. un-tu, 1955, Vol 34, 72-78 (published in Ukrainian with a summary in Russian)

Abstract: The dependence of the chemical activity of Mg-Cd alloys on the composition has been investigated over the concentration range from pure Mg to 60 atom percent Cd in solutions of 0.1 N H_2SO_4 and in an acetic buffer of the composition 0.25 N CH_3COOH + 0.25 N CH_3COONa. The volume of hydrogen liberated was measured at 10° in the H_2SO_4 solution and at 25° in the buffer. It is shown that the chemical activity of the alloys gradually increases from pure Mg to a concentration of

USSR/Physical Chemistry - Thermodynamics. Thermochemistry. Equilibrium. Physico-chemical Analysis. Phase Transitions, B-8

Abst Journal: Referat Zhur - Khimiya, No 1, 1957, 366

Abstract: 5-10 atom percent Cd, after which it decreases fairly rapidly and becomes insignificant in the region of high Cd content. Under the conditions investigated pure Cd does not dissolve. Notwithstanding the results of previous investigations (V. V. Skorchelletti and A. I. Shultin, Khimicheskoye razrusheniye metallov, ONTI, 1934), not one of the theoretically possible stability limits could be established.

Card 2/2

DERKACH, F.A.; GOLOVATYY, R.M.[Holovatyi, R.M.], dots., otv. red.; KVITKO, I.S., red.; SARANYUK, T.V., tekhn. red.

[Laboratory work in inorganic chemistry] Praktykum z neorganichnoi khimii. L'viv, Vyd-vo L'vivs'koho univ., 1962. 447 p. (MIRA 16:5)
(Chemistry, Inorganic--Laboratory manuals)

KIRSANOV, A.V.; DERKACH, G.I.

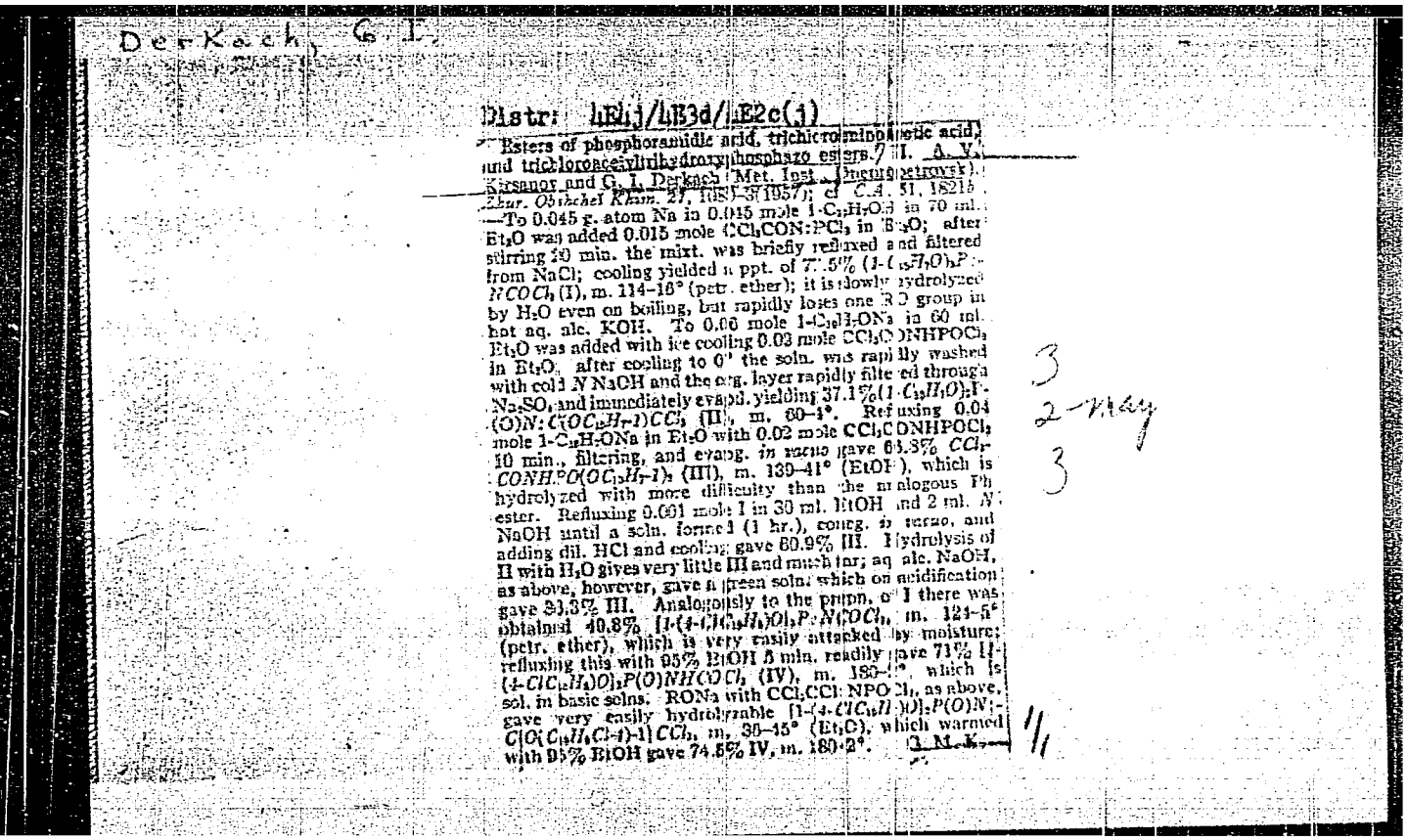
Trichlorophosphazotrichloroacetyl and N-phosphoryl chloride of trichloroiminoacetyl. Zhur.ob.khim. 26 no.7:2009-2014 Jl '56. (MLRA 9:10)

1. Dnepropetrovskiy metallurgicheskiy institut.
(Acetyl chloride) (Phosphorus compounds)

KURSANOV, A.V.; DERKACH, G.I.

Esters of *N*-phosphoric acid, trichloroiminoacetic acid, and trioxyphosphazotrichloroacetyl ester. Zhur.ob.khim. 26 no.9: 2631-2638 S '56. (MLRA 9:11)

1. Dnepropetrovskiy metallurgicheskiy institut.
(Esters)



DerKach, G. I.

Distr: 4E4j/4B3d/4E2c(j)

Esters of phosphoramidic acid, trichloroiminophosphetic acid, and trichloroacetylhydroxyphosphazo esters. V. I. A. V. Kirsanov and G. I. Derkach (Met. Inst., Dnepropetrovsk). Zhur. Obshchei Khim. 27, 1681-5(1957); cf. C.A. 51, 18218. To 0.045 g. atom Na in 0.015 mole 1-C_4H_7OH in 70 ml. Et_2O was added 0.015 mole $CCl_3CON:PCl_3$ in Et_2O; after stirring 10 min. the mixt. was briefly refluxed and filtered from NaCl; cooling yielded a ppt. of 77.5% $(1\text{-}C_4H_7O)_2P(O)NHCOCCl_3$ (I), m. 114–16° (petr. ether); it is slowly hydrolyzed by H_2O even on boiling, but rapidly loses one BuO group in hot aq. alc. KOH. To 0.06 mole 1-C_4H_9ONa in 60 ml. Et_2O was added with ice cooling 0.03 mole $CCl_3CONHPOCl_2$ in Et_2O; after cooling to 0° the soln. was rapidly washed with cold N NaOH and the org. layer rapidly filtered through Na_2SO_4 and immediately evapd. yielding 37.1% $(1\text{-}C_4H_7O)_2P(O)N:C(OC_4H_7\text{-}1)CCl_3$ (II), m. 60–1°. Refluxing 0.04 mole 1-C_4H_9ONa in Et_2O with 0.02 mole $CCl_3CONHPOCl_2$ 10 min., filtering, and evapg. *in vacuo* gave 66.8% $CCl_3CONH.P(OC_4H_7\text{-}1)_2$ (III), m. 139–41° (EtOH), which is hydrolyzed with more difficulty than the analogous Ph ester. Refluxing 0.001 mole I in 30 ml. EtOH and 2 ml. N NaOH until a soln. formed (1 hr.), concg. *in vacuo*, and adding dil. HCl and cooling gave 60.9% III. Hydrolysis of II with H_2O gives very little III and much tar; aq. alc. NaOH, as above, however, gave a green soln. which on acidification gave 34.3% III. Analogously to the prepn. of I there was obtained 40.8% $[1\text{-}(4\text{-}ClC_6H_4O)]_2P(O)NHCOCCl_3$, m. 124–5° (petr. ether), which is very easily attacked by moisture; refluxing this with 95% EtOH 5 min. readily gave 71% $[1\text{-}(4\text{-}ClC_6H_4O)]_2P(O)NHCOCCl_3$ (IV), m. 180–5°, which is sol. in basic solns. RONa with $CCl_3CCl:NPOCl_2$, as above, gave very easily hydrolyzable $[1\text{-}(4\text{-}ClC_6H_4O)]_2P(O)N:C[OC_6H_3Cl\text{-}4)\text{-}1]CCl_3$, m. 30–45° ($Et_2O$), which warmed with 95% EtOH gave 74.5% IV, m. 180–2°. O. M. K.

3
2-Kay
3

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79-12-16/43

AUTHORS: Kirsanov, A. V., Derkach, G. I.

TITLE: Trichlorphosphazoaciles, Trichloroisophosphazoaciles and Their Derivatives (Trikhlorfosfazoatsily, trikhlorizofosfazoatsily i ikh proizvodnyye).

PERIODICAL: Zhurnal Obshchey Khimii 1957, Vol. 27, Nr 12, pp. 3248-3254 (USSR)

ABSTRACT: As it has been shown before trichlorophosphazoaciles of the RCON = PCl_3 type are obtained by the action of pentachloride on the amides of the carboxylic acids, which on the occasion of partial hydrolisis form dichloroanhydrides of the acil-amidophosphoric acids. Up to now only a trichloroisophosphazo-acile was known i. e. trichloroisophosphazotrichloracetyl and some corresponding triaroxyisophosphazoaciles. It is of inter-est whether also from other carboxylic acids trichloroiso-phosphazoaciles and triaroxyisophosphazoaciles occur or whether the trichloroisophosphazoaciles occur only in the case of trichloroacetic acid and its analogs. Trichlorophosphazo-aciles were produced for the diphenylchloracetic acid, tri-phenylacetic acid and p - nitrobenzoic acid and their thermal stability was investigated. It was demonstrated that

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Trichlorphosphazoaciles, Trichloroisophosphazoaciles and Their Derivatives. 79-12-16/43

trichloroisophosphazoaciles occur not only for trichloracetic acid and its analogs but also for diphenylchloracetic acid and p - nitrobenzoic acid. Trichloroisophosphazotriphenylacetyl could not be obtained, since dichloroanhydride of the triphenylacetylamidophosphoric acid when thermated has no durability. The authors obtained the di- and tri -α - naphtoxyderivatives from the corresponding synthesized trichlorophosphazo- and trichloroisophosphazo compounds. The synthesized Tri -α- naphtoxyisophosphazo - p - nitrobenzoyl is the first derivative of trichloroisophosphazoaciles obtained from crystals.
There are 6 references, 4 of which are Slavic.

ASSOCIATION: Dnepropetrovsk Metallurgical Institute (Dnepropetrovskiy metallurgicheskiy institut).

SUBMITTED: October 16, 1956

AVAILABLE: Library of Congress

Card 2/2

1. Trichlorophosphazoaciles - Chemical analysis
2. Trichloroisophosphazoaciles - Chemical analysis

DYMKACH, G.I., Cand Chem Sci--(diss) "Inophosphorus compounds and their derivatives." Kiev, 1958. 13 pp (Acad Sci UkrSSR. Inst of Organic Chemistry), 120 copies (KL, 22-58, 102)

79-28-4-52/60

AUTHORS: Shevchenko, V. I., Derkach, G. I.

TITLE: Dimethyl Esters From Aryl Sulfon-N-Methyl-Amidophosphoric Acids (Dimetilovyye efiry arilsul'fon-N-metilamidofosfornykh kislot)

PERIODICAL: Zhurnal Obshchey Khimii, 1958, Vol.28, Nr 4, pp.1085-1087(USSR)

ABSTRACT: In recent times a great number of diesters of aryl sulfonamidophosphoric acids were produced (Ref 1). It is, however, probably not proved that they have amido-like structure (formula I). However, it is not excluded either that the compounds of type (I) are in equilibrium with a phosphorazo form (formula II).

$$ArSO_2NH\text{-}PO(OR)_2 \rightleftarrows ArSO_2N{=}P(OR)_2(OH)$$

(I) (II)

The structure of these diesters can hardly be explained by chemical methods. Also for the explanation by physical methods compounds of structures (I) and (II) as samples are necessary in any case. A great number of compounds of structure

Card 1/4

Dimethyl Esters From Aryl Sulfon-N-Methyl-Amidophosphoric Acids

(II are known (Refs 1, 2), while compounds of the structure (I) are unknown. Therefore, it was of interest to alkylate the silver and sodium salts of the diesters of aryl sulfonamidophosphoric acids. It could be expected in this case that either phosphorazo compounds or esters of the N-alkylated aryl sulfonamidophosphoric acids would form because some cases were known in which alkylation of silver and sodium salts took place in one case with nitrogen and in the other with oxygen.

The authors investigated methylation of silver and sodium salts of aryl sulfonamidophosphoric acid and dimethyl esters. Methylation of sodium salts was unsuccessful. The sodium salts remained unchanged after long heating with methyl iodide on a boiling water bath, while they were converted into ill-smelling compounds with dimethyl sulfate. On the other hand, silver salts easily react with methyl iodide under formation of dimethyl esters of the aryl-sulfon-N-methylamidophosphoric acids:

$$ArSO_2NAg\text{-}PO(OCH_3)_2+CH_3J \longrightarrow AgJ+ArSO_2N(CH_3)\text{-}PO(OCH_3)_2 \quad (III)$$

Dimethyl Esters From Aryl Sulfon-N-Methyl-Amidophosphoric Acids

By this method compounds of the formula III were produced for Ar= o-toluyl, α-naphthyl and β-naphthyl. These compounds react neutrally and are insoluble in alkalies. If boilt for a long time in aqueous alcoholic hydrochloric acid the compounds of formula III are hydrolized under formation of the corresponding N-methyl-aryl-sulfonamides which proves their structure.

$$ArSO_2N(CH_3)\text{-}PO(OCH_3)_2 + H_2O \xrightarrow{H^+} ArSO_2NHCH_3$$

The N-methyl derivatives easily solve in methyl iodide, acetone, benzene, and boiling alcohol while they are difficultly soluble in petroleum ether, and insoluble in water. The compounds of formula III with Ar = α- and β-naphthyl are crystallized compounds with melting points at 91° and 82°, respectively. The melting points of the isomeric trimethyl esters are at 84 - 85° and 93 - 94°, respectively (Ref 1). The compound (III) with Ar = o-toluyl could not be obtained in pure form. The reaction product formed a thick, oily liquid which cannot be distilled without decomposition. The mentioned reactions as well as the crystalline form and

Dimethyl Esters From Aryl Sulfon-N-Methyl-Amidophosphoric Acids

solubility of the formed compounds are described in detail in an experimental part. There are 5 references, 4 of which are Soviet.

ASSOCIATION: Dnepropetrovskiy metallurgicheskiy institut (Dnepropetrovsk Metallurgical Institute)

SUBMITTED: March 18, 1957

79-28-5-21/69

AUTHORS: Kirsanov, A. V., Derkach, G. I., Makitra, R. G.

TITLE: Triaroxyphosphazoacyl (Triaroksifosfazoatsily)

PERIODICAL: Zhurnal Obshchey Khimii, 1958, Vol. 28, Nr 5, pp. 1227-1232 (USSR)

ABSTRACT: The similarity of triaroxyphosphazoacyls (I) and triaroxyphosphazosulfone-compounds (II) shows up in a number of common chemical properties so that their reactions of formations are in common:

$$RSO_2N = PCl_3 + 3NaOR' \rightarrow 3NaCl + RSO_2N = P(OR')_3$$

$$RCON = PCl_3 + 3NaOR' \rightarrow 3NaCl + RCON = P(OR')_3$$

Between them, however, also specific chemical differences with regard to heating and hydrolysis. The compounds (I) split off rather easily (depending on the radical) from the corresponding triesters of phosphoric acid and produce nitriles according to the scheme $RCON = P(OR')_3 \rightarrow OP(OR')_3$ +RCN (III). The compounds (II) are very much stable against

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heating so that until now there has been no case of splitting according to scheme (III). They saponify easily with alkali liquors under the formation of salts of the diesters of the corresponding alkyl- or aryl--sulfonamidophosphoric acids, but they do not saponify with water in neutral solutions. Therefore the synthesis and the separation of the products (II) do not meet with any difficulties because of the easy saponifiability. All compounds (I) saponify on boiling practically quantitatively to the diesters of the acylamidophosphoric acids for which reason the synthesis, separation and purification of the triaroxyphosphazoacyls takes place so difficulty; for the same reason in the experiments care must be taken that they do not come into contact with atmospheric humidity. This difference can apparently be explained by the fact that in the saponification of the compounds (I) in alkali solutions the carbon- and oxygen atoms of the carboxyl-group take part in the hydrolysis and increase the positive charge of the phosphorus atom according to the given scheme 1. In the saponification of the compounds (II) mainly only the nitrogen- and phospho-

rus atoms take part in the hydrolysis (see scheme 2). There are 2 tables and 7 references, 6 of which are Soviet.

ASSOCIATION: Institut organicheskoy khimii AN Ukrainskoy SSR (Institute for Organic Chemistry, AS Ukrainian SSR)

SUBMITTED: February 22, 1957

SOV/79-28-7-36/64

AUTHORS: Kirsanov, A. V., Derkach, G. I.

TITLE: Trichlorisophosphazoacyls of the Aromatic Series (Trikhlorizofosfazoatsily aromaticheskogo ryada)

PERIODICAL: Zhurnal obshchey khimii, 1958, Vol. 28, Nr 7, pp. 1887-1892 (USSR)

ABSTRACT: Recently trichlorophosphazoacyls were obtained according to the reactions (1), (2) and (3). It was of importance to the authors to find out whether the reaction (3)

$RCONHPOCl_2 + PCl_5 \longrightarrow POCl_3 + RCCl{=}{=}{=}NPOCl_2$ was of general character or whether it holds only for carboxylic acids with a clearly electronegative character. It turned out that this reaction (3) is of general character for acids of the aromatic series. The authors obtained trichlorophosphazoacyls of the type RCCl NPOCl$_2$ in almost quantitative yields, in which R is of the electronegative character just mentioned (Table 1). This reaction takes place considerably more slowly and at higher temperature than (1), and it reminded the authors of the reaction of phosphorus-pentachloride with the N,N-dialkyl-

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Trichlorisophosphazoacyls of the Aromatic Series SOV/79-28-7-36/64

amides of carboxylic acids (Ref 5). The trichloroisophosphazoacyls of the aromatic series are liquid and low melting crystalline products and cleave-off $POCl_3$ on heating under the formation of nitriles according to the scheme:

$RCOCl{=}{=}{=}NPOCl_2 \longrightarrow POCl_3 + RCN$ (4). They are stable in the absence of humidity and can be well stored in closed containers at room temperature. Some trichlorophosphazoacyls and dichloranhydrides of acylamidophosphoric acids as well as the corresponding acylamidophosphoric acids, which were synthesized by the authors and had been unknown before, served as initial products. There are 2 tables and 7 references, 6 of which are Soviet.

ASSOCIATION: Institut organicheskoy khimii Akademii nauk Ukrainskoy SSR (Institute of Organic Chemistry, AS UkrSSR)

SUBMITTED: May 10, 1957

1. Cyclic compounds--Synthesis 2. Cyclic compounds--Properties
3. Acids--Chemical reactions

Card 2/2

AUTHORS: Kirsanov, A. V., Derkach, G. I. SOV/79-28-8-51/66

TITLE: Triaroxyisophosphoazoacyls of the Aromatic Series (Triaroksiizofosfazoatsily aromaticheskogo ryada)

PERIODICAL: Zhurnal obshchey khimii, 1958, Vol. 28, Nr 8, pp. 2247 - 2252 (USSR)

ABSTRACT: Until now only five triaroxyisophosphoazoacyls of the type $RC(OR')=NPO(OR')_2$ have been synthesized according to the reaction $RCCl=NPOCl_2+3NaOR' \rightarrow 3NaCl+RC(OR')=NPO(OR')_2$. Reaction I, with the notation R and R'). Only one of these compounds is crystalline. On the basis of the few facts known the reaction (I) may be considered a general reaction, or a conception of the general properties of the triaroxyisophosphcazo compounds may be formed. In the previous paper the authorsworked out a general method for synthesizing the trichloroisophosphoazoacyls of the aromatic series (Ref 3), which offered the possibility to determine the limits within which the reaction might be used in regard to the triaroxyisophosphoazoacyls. It was found that this reaction can be used in all cases for the aromatic series. 22 triaroxyisophospho-

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azoacyls and 1-trimethoxyisophosphoazoacyl were obtained in good yield (see the experimental section and table 1). The properties of these compounds differed sharply from those of their isomeric triaroxyphosphoazoacyls (Ref 4), as did those of the triaroxyisophosphoazoacyls from the properties of the trichloroacetic acid series (Refs 1,2). The triaroxyisophosphoazoacyls of the aromatic series are crystals of low melting point and which can be distilled in a high vacuum without decomposition. With heating under atmospheric pressure or at reduced vacuum they carbonize gradually, and the formation of triarylphosphates does not occur (this is a difference from the isomeric triaroxyphosphoazoacyls). This shows that the reaction

$ArC(OR)=NHPO(OR)_2 \xrightarrow{heat} OP(OR)_3$ does not occur. The triaroxyisophosphoazoacyls of the aromatic series do not hydrolyse in boiling water and they saponify easily and quantitatively only by boiling aqueous alkali alcohol solutions according to diagram (II)(see table 2). There are 2 tables and 7 references, which are Soviet.

Card 2/3

Triaroxyisophosphoazoacyls of the Aromatic Series SOV/79-28-8-51/66

ASSOCIATION: Institut organicheskoy khimii Akademii nauk USSR (Institute of Organic Chemistry AS UkrSSR)

SUBMITTED: June 5, 1957

Card 3/3

SOV/79-29-1-51/74

AUTHOR: Derkach, G. I.

TITLE: C-Chloro-P, P-Dimethoxy- and C-Chloro-P, P-Diaroxy Isophosphazo Acyls (C-khlor-P,P-dimetoksi- i C-khlor-P,P-diaroksiizofosfazoatsily)

PERIODICAL: Zhurnal obshchey khimii, 1959, Vol 29, Nr 1, pp 241 - 245 (USSR)

ABSTRACT: Recently (Ref 1) the authors and collaborators obtained trichloro isophosphazo acyls according to the scheme $RCONHPOCl_2+PCl_5 \rightarrow HCl+POCl_3+RCCl = NPOCl_2$, in connection with the reaction of phosphorus pentachloride with dichloric acid anhydrides of aryl amido phosphoric acids. It was only natural to extend this reaction also to the diesters of acyl amido phosphoric acids and thus to obtain C-chloro-P,P-dialkoxy- and C-chloro-P,P-diaroxy isophosphazo acyls (I) according to the scheme $RCONHPO(OR')_2+PCl_5 \rightarrow HCl+PCCl_3+RCCl = NPO(OR')_2$. The compounds (I) are according to their chemical nature chloric acid anhydrides of diesters of N-phosphoric acids of imino acids and are therefore bound to

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have on the one hand the properties of chloric acid anhydrides of imino carboxylic acids and on the other hand those of amido phosphoric acids. The synthesis of the compound (I) is of interest as it has hitherto been unknown and because it is used as a basis for a new type of phosphoric acid derivatives. The second reaction proceeds much easier than the first. In the case of mixing together e.g. PCl_5 and dimethyl ester of acyl amido phosphoric acid the reaction takes place very vehemently already at room temperature under separation of 80-90% of hydrogen chloride and 90% of the theoretical quantity of phosphorus oxychloride. The reaction can also proceed without a solvent (benzene, chloro benzene). The separation of phosphorus oxychloride entails great losses in the compound (I). C-chloro-P,P-dimethoxy isophosphazo acyls are thick, oily liquids or low-melting crystalline products so that in contrast to C-chloro-P,P-diaroxy isophosphazo acyls they cannot easily be separated in form of crystals. All of them are reactive compounds and rather stable in the absence of moisture. In the case of

C-Chloro-P,P-Dimethoxy- and C-Chloro-P,P-Diaroxy Isophosphazo Acyls

SOV/79-29-1-51/74

thermal separation they form in almost quantitative yields acid nitriles and chloric acid anhydrides of the corresponding phosphates according to the scheme $RCCl = NPO(OR')_2 \rightarrow RCN + ClPO(OR')_2$. There are 1 table and 4 references, 2 of which are Soviet.

ASSOCIATION: Institut organicheskoy khimii Akademii nauk Ukrainskoy SSR (Institute of Organic Chemistry of the Academy of Science, Ukr SSR)

SUBMITTED: September 18, 1957

Card 3/3

SOV/79-29-2-52/71

AUTHORS: Kirsanov, A. V., Derkach, G. I.

TITLE: C-Aroxy-P,P-dimethoxyisophosphazoacyls and Mixed Triaroxyisophosphazoacyls (C-Aroksi-P,P-dimetoksiizofosfazoatsily i smeshannyye triaroksiizofosfazoatsily)

PERIODICAL: Zhurnal obshchey khimii, 1959, Vol 29, Nr 2, pp 600-605 (USSR)

ABSTRACT: In the preceding paper (Ref 1) the authors synthesized C-chloro-P,P-dimethoxyisophosphazoacyls and C-chloro-P,P-diaroxyisophosphazoacyls (I) according to the scheme

$$RCONHPO(OR')_2 + PCl_5 \longrightarrow POCl_3 + HCl + RCCl{=}NPO(OR')_2. \quad (I)$$

The problem was whether the C-aroxy-P,P-dimethoxyisophosphazoacyls and the mixed triaroxyisophosphazoacyls of the type (II), which have hitherto been unknown, may be obtained by aroxylation of these compounds (I) according to the scheme

$$RCCl{=}NPO(OR')_2 + R''ONa \longrightarrow NaCl + RC(OR''){=}NPO(OR')_2. \quad (II)$$

Other syntheses are connected with great difficulties. Synthesis (II) takes place without difficulties. In mixing equivalent amounts of

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C-Aroxy-P,P-dimethoxyisophosphazoacyls and Mixed Triaroxyisophosphazoacyls

n-chlorophenolate and C-chloro-P,P-dimethoxyisophosphazoacyls in benzene solution the synthesis takes place under a strong development of heat within 5-10 minutes, in the case of other derivatives only within 2-3 hours. All mixed triaroxyisophosphazoacyls are obtained in crystalline form after the distillation of the solvent. The C-aroxy-P,P-dimethoxyisophosphazoacyls form first as oils, which soon adopt a crystalline shape. Compounds (II) do not hydrolyze with water if they are boiled, they hydrolyze difficultly in boiling alkali lye and easily in aqueous alcoholic solutions of alkali (Scheme 3). Some of the initial compounds were synthesized anew according to scheme 1 described above. The mixed triaroxyisophosphazoacyls are no insecticides. In this respect C-n-nitrophenoxy-P,P-dimethoxyisophosphazobenzoyl is very active.- There are 3 Soviet references.

ASSOCIATION: Institut organicheskoy khimii Akademii nauk Ukrainskoy SSR (Institute of Organic Chemistry of the Academy of Sciences, UkrSSR)

SUBMITTED: December 16, 1957

AUTHORS: Derkach, G. I., Kirsanov, A. V. SOV/79-29-6-9/72

TITLE: C-Phosphinyl-P,P-Diaroxy-Isophosphazo-Aroyls (C-Fosfinil-P,P-diaroksiizofosfazoaroily)

PERIODICAL: Zhurnal obshchey khimii, 1959, Vol 29, Nr 6, pp 1815-1818 (USSR)

ABSTRACT: The C-chloro-P,P-diaroxy-isophosphazo-acyls of the $ArCCl{=}NPO(OAr')_2$ type yield under the influence of water the diaryl esters of the acyl-amido-phosphoric acids (Ref 1), under the influence of sodium alcoholates and sodium arylates the corresponding esters (Ref 2). They react readily with ammomia and amines and are as acylating agents analogs of the acid chlorides of the carboxylic acids. It was of interest to find out whether this analogy also holds for the reaction of A. Ye. Arbuzov, i.e. whether the above-mentioned acyls also react with the esters of the phosphorous acid like the acid chlorides of the carboxylic acids. This was confirmed by the experiments. These acyls react already at -15° under considerable heat evolution according to Arbuzov and yield the corresponding C-phosphinyl-P,P-diaroxy-isophosphazo-aroyls

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according to the scheme:

$$ArCCl{=}NPO(OAr')_2 + P(OAlk)RR' \longrightarrow AlkCl + ArC{=}NPO(OAr')_2 \quad (I)$$
$$\qquad\qquad\qquad\qquad\qquad\qquad\qquad\qquad\qquad\qquad\quad OPRR'$$

Among the 9 compounds synthesized (I) only two have a crystalline nature, the remaining ones are dense liquids or vitreous products. Analytical data, appearance, solubility, and melting points of these compounds are given in the table. By shaking with 90 % alcohol they hydrolyze quantitatively within 4-6 hours yielding the diesters of the acyl-amido-phosphoric acids and the corresponding acid esters of the phosphorous acid, phosphinic acid or also of the free diphenyl-phosphinic acid, according to scheme 2. On the hydrolysis of the compounds (IV) and (VIII) (Table) it was possible to separate nearly quantitatively the diphenyl-phosphinic acid. There are 1 table, and 5 references, 3 of which are Soviet.

ASSOCIATION: Institut organicheskoy khimii Akademii nauk Ukrainskoy SSR (Institute of Organic Chemistry of the Academy of Sciences, Ukrainskaya SSR)

SUBMITTED: May 27, 1958

ACC NR: AP6027089 SOURCE CODE: UR/0079/65/035/010/1881/1882

AUTHOR: Derkach, G. I.; Slyusarenko, Ye. I.; Libman, B. Ya.; Liptuga, N. I.

ORG: Institute of Organic Chemistry, AN UkrSSR (Institut organicheskoy khimii AN UkrSSR)

TITLE: Siisocyanates and diisothiocyanates of alkylphosphonic acids

SOURCE: Zhurnal obshchey khimii, v. 35, no. 10, 1965, 1881-1882

TOPIC TAGS: cyanate, phosphonic acid, thermal decomposition, chemical decomposition, phosphoric acid, thermal decomposition, chemical decomposition, phosphoric acid, thiocyanate, potassium compound, reaction rate, urea

ABSTRACT: It was shown earlier that the thermal decomposition of esters of diaryloxy(dialkoxy)chlorophosphazocargoylic acids and diesters of urethanephosphoric acids yields diesters of isocyanatophosphoric acid:

$$\left.\begin{matrix} AlkOCONHPO(OR)_2 \\ AlkOCON{=}P(OR)_2Cl \end{matrix}\right\} \longrightarrow (RO)_2PONCO$$

Under similar conditions, dicarbethoxy diamides of alkylphosphonic acids form diisocyanates of alkylphosphonic acids:

$$RPO(NHCOOAlk)_2 \longrightarrow RPO(NCO)_2 + AlkOH$$

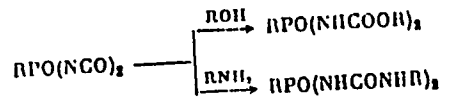
Diisothiocyanates of alkylphosphonic acids are obtained in good yields by the reaction of alkylphosphonic acid dichlorides with potassium thiocyanate:

$$RPOCl_2 \xrightarrow{KNCS} RPO(NCS)_2$$

UDC: 547.241

ACC NR: AP6027089

Diicocyanates and diisothiocyanates of alkylphosphonic acids react vigorously with alcohols, phenols, and amines to form the corresponding phosphorylated urethanes and ureas:



Orig. art. has: 1 table. [JPRS: 36,328]

SUB CODE: 07 / SUBM DATE: 06May65 / ORIG REF: 003

L 34127-66 EWT(1)/EWT(m)/EWP(j) RO/RM

ACC NR: AP6025540 SOURCE CODE: UR/0079/66/036/001/0162/0163

AUTHOR: Ivanova, Zh. M.; Liptuga, N. I.; Stukalo, Ye. A.; Derkach, G. I. 32 B

ORG: Institute of Organic chemistry, AN UkrSSR (Institut organicheskoy khimii AN UkrSSR)

TITLE: Isothiocyanates of alkyl esters of methylphosphonic acid and their derivatives

SOURCE: Zhurnal obshchey khimii, v. 36, no. 1, 1966, 162-163

TOPIC TAGS: ester, phosphate, phosphorylation, chlorination reaction rate, chemical synthesis

ABSTRACT: Chlorides of alkyl esters of methylphosphonic acid, like dialkyl chlorophosphates, react with potassium thiocyanate to form isothiocyanates of alkyl esters of methylphosphonic acids. These isothiocyanates may be chlorinated to yield dichlorides of monoalkylmonomethylphosphonylimidocarbonic acid. Both series of reaction products react vigorously with alcohols, phenols, ammonia and amines to form the corresponding phosphorylated derivatives of thioureas and iminocarboxylic acid. Four isothiocyanates and two dichlorides were synthesized and characterized. Orig. art. has: 1 table. [JPRS: 35,998]

SUB CODE: 07 / SUBM DATE: 12Jul65 / ORIG REF: 002

Card 1/1

DERKACH, G.I.; LEPESA, A.M.; KIRSANOV, A.V.

Alkyl esters of N-dialkoxy- and N-diaroxyphosphinyliminocarboxylic acids. Zhur.ob.khim. 31 no.10:3424-3433 O '61. (MIRA 14:10)

1. Institut organicheskoy khimii AN Ukrainskoy SSR.
(Esters) (Acids, Organic)

DERKACH, G.I.; SHOKOL, V.A.; KIRSANOV, A.V.

Diesters of acylamidophosphoric acids. Zhur.ob.khim. 30 no.10: 3393-3397 O '61. (MIRA 14:4)

1. Institut organicheskoy khimii Akademii nauk Ukrainskoy SSR.
(Phosphoramidic acid)