L 3212-66 EWT(1)/EWA(j)/EWA(b)-2 JK

ACCESSION NR: AP5009230 S/0020/65/161/001/0224/0227

AUTHOR: Fedorov, V. D.; Ionicheva, G. A.

TITLE: Phospholipids of photosynthesizing Chlorum thiosulfatum green sulfur bacteria

SOURCE: AN SSSR. Doklady, v. 161, no. 1, 1965, 224-227

TOPIC TAGS: Chlorum thiosulfatum, bacteria, photosynthesis, phospholipid, culture method, diurnal fluctuation, light brightness

ABSTRACT: Phospholipid composition of green sulfur bacteria and lipid changes under conditions of light and darkness were investigated. Pure cultures of Chlorobium thiosulfatophilum green sulfur bacteria were incubated on a Larsen medium at 30° under anaerobic conditions with alternating periods of light and darkness. After 2-3 days all the cultures were mixed together in a sterile flask, one third of the mixture was taken for analysis (I light sample), and the remaining two thirds were poured into jars and exposed to darkness for 48 hrs. Then half the mixture was taken for analysis (darkness sample) and the remaining half was exposed to light for 48 hrs and analyzed (II light sample). Following precipitation and filtering of

Card 1/2

L 3212-66

ACCESSION NR: AP5009230

2

bacteria, biomass volume was measured. Lipids were extracted from cells destroyed by dodecyl sulfate which proved to be the most effective agent. Chemical methods, paper chromatography, and spectrophotometry were used to determine phospholipid composition and changes. Inositolphosphatide, sphingomyelin, serinphosphatide, leucethin, and phosphatide acid were found in the phospholipid fractions of the green sulfur bacteria. No marked differences were found in samples exposed to different light conditions. This shows that phospholipids cannot be considered as mobile reserves of organic substances expended during dark reactions of endogenous substrate decomposition. The authors suggest that the phospholipids are not a readily available reserve dependent on diurnal fluctuations, but are mobilized only with prolonged incubation of photosynthesizing organisms in darkness or under other unfavorable conditions. Orig. art. has: 2 tables and 1 figure.

ASSOCIATION: None.

SUBMITTED: 08Jun64 ENCL: 00 SUB CODE: LS

NR REF SOV: 001 OTHER: 008

Card 2/2

GAL'TSOVA, R.D.; NOVICHKOVA, A.T.; IONICHEVA, G.A.

Sterol composition of yeast organisms. Prikl. biokhim. i mikrobiol. 1 no.3:294-298 My-Je '65. (MIRA 18:7)

1. Institut mikrobiologii AN SSSR.

RUMANIA / Cultivated Plants. Commercial. Oil Bearing. M-5
Sugar Bearing

Abs Jour: Ref Zhur-Biol., No 6, 1958, 25150

Author : Olteanu, Fl., Mihailescu, G., Ionicioiu, C.
Inst : Agronomic S.R.I.; Inst. of Biochemistry
Title : The Effect of Growth Stimulants on the Sunflower and Corn Crop Increase

Orig Pub: Comun. Acad. RPR, 1957, 7, No 1, 107-112 (Rum., res. Russ., Fr.)

Abstract: Test made at the Agronomic Scientific Research Institute in 1954-1955 together with the Institute of Biochemistry show that seeds of sunflower and corn which have been treated with hydroquinone, KBr, I in Lugol's solution, $KMnO_4$, NH_4NO_3 and other substances have a considerably higher yield. The best results were obtained by treating sunflower

Card 1/2

RUMANIA / Cultivated Plants. Commercial. Oil-Bearing. M-5
Sugar-Bearing.

Abs Jour: Ref Zhur-Biol., No 6, 1958, 25150

Abstract: seeds in a 20% sol. of hydroquinone. The longest soaking time showed the best results. -- A. M. Smirnov

Card 2/2

IONIDI, P. N., BEDENASHVILI, G. G. and GOGILASHVILI, I. F.

"A survey of malignant catarrhal fever and listerilosis in cattle."

Veterinariya, Vol. 37, No. 8, 1960, p. 26

Ionidi - Vet. Dr. - Tsalka Rayon, Georgian SSR

IONIDI, Perikl Petrovich, doktor filos. nauk, prof.; GARKAVENKO, F.I., red.; TROFIMOV, A.V., tekhn. red.

[Philosophical significance of D.I. Mendeleev's periodic law] Filosofskoe znachenie periodicheskogo zakona D.I. Mendeleeva. Moskva, Izd-vo "Znanie," 1958. 47 p. (MIRA 11:7)
(Periodic law)

IONIDI, Perikl Petrovich; SHOSTAKOVSKIY, M.F., doktor khimicheskikh nauk, otv.red.; BASKAKOV, V.G., doktor filosof.nauk, otv.red.; KOMPANIYETS, A.I., red.izd-va; BRUZGUL', V.V., tekhn.red.

[D.I.Mendeleev's world outlook] Mirovozzrenie D.I.Mendeleeva. Moskva, Izd-vo Akad.nauk SSSR, 1959. 374 p. (MIRA 13:1)
(Mendeleev, Dmitrii Ivanovich, 1834-1907)

IONIKH Z.I., inzhener.

Problems of highway engineering in the Great Soviet Encyclopedia.
Avt.dor. 19 no.1:31-32 Ja '56. (MLRA 9:5)
(Roads)

IONIN, A.

BUDANOV, V.; IONIN, A.

Submarine photography. Sov.foto 17 no.2:49-51 F '57. (MLRA 10:7)
(Photography, Submarine)

IONIN, A. A.

Gorelki Szhiganiia Gaza (Gas Burners), 106 p., Moscow, 1951.

IONIN, A.A., kandidat tekhnicheskikh nauk.

Optimal distance between the nozzle and mixing chamber of ejectors. Trudy Stroi.inst. Mosgorispolkoma no.4:84-91 '53. (MLRA 8:3)
(Jets)

IONIN, A. A. (ENGR)

IONIN, A. A. (ENGR) -- GAS JETS FOR INDUSTRIAL HEATING BOILERS," SUB 27 MAY 52, CONSTRUCTION INST OF THE MOSCOW SOVIET OF WORKERS DEPUTIES (DISSERTATION FOR THE DEGREE OF CANDIDATE IN TECHNICAL SCIENCES)

SO: VECHERNAYA MOSKVA, JANUARY-DECEMBER 1952

IONIN, A.A.

Hydraulics of low-pressure gas systems. Gaz. prom. no.2:23-27 F '58.
(Gas distribution) (MIRA 11:2)

IONIN, A.A.

Hydraulic conditions in the operation of low-pressure gas systems.
Gaz. prom. no.3:29-35 Mr '58. (MIRA 11:3)
(Gas distribution)

TONIN, A.I.

Design of atmospheric gas burners. Vod. i san. tekh. no.9:25-29 S '61. (MIRA 14:11)

(Gas burners)

IONIN, A.A.

Designing medium-pressure injection burners. Gaz. prom. 7 no.2: 19-26 '62. (MIRA 17:6)

IONIN, A.A.

Optimal radius of action for the gas regulator points of city gas networks. Gaz. prom. 7 no.11:30-34 N '62. (MIRA 17:9)

IONIN, Aleksandr Aleksandrovich, kand. tekhn. nauk; NOVIKOVA, M.M., ved. red.; VORONOVA, V.V., tekhn. red.

[Fundamentals for the design of jet gas burners] Osnovy rascheta ezhektsionnykh gazovykh gorelok. Moskva, Gostoptekhizdat, 1963. 151 p. (MIRA 16:10)
(Gas burners)

IONIN, A.A.; AKOPYAN, V.M.

Determining rated flow rates for low-pressure gas pipelines.
Gaz. prom. 9 no.7:16-21 '64. (MIRA 17:8)

IONIN, Aleksandr Aleksandrovich, kand. tekhn. nauk; SMIRNOV, A.S., doktor tekhn. nauk, prof., nauchn. red.

[Gas supply] Gazosnabzhenie. Moskva, Stroiizdat, 1965. 446 p. (MIRA 18:10)

IONIN, A.S.

IONIN, A.S.

New data on vertical movements of seashores. Trudy Inst.okean. no.13:40-51 '55. (MLRA 8:11)
(Coast changes)

IONIN, A. S.

15-57-1-216

Translation from: Referativnyy zhurnal, Geologiya, 1957, Nr 1, p 30 (USSR)

AUTHORS: Budanov, V. I., Ionin, A. S.

TITLE: Contemporary Vertical Movements of the Western Shores of Bering Sea (Sovremennyye vertikal'nyye dvizheniya zapadnykh beregov Beringova morya)

PERIODICAL: Tr. Okeanogr. komis. AN SSSR, 1956, Nr 1, pp 65-72

ABSTRACT: The western shore of the Bering Sea may be divided into a number of parts according to the character of their contemporary vertical movements. Along the southwestern and western shore of the Anadir Bay, the southern part of the Koryak shore and the western part of eastern Kamchatka an uplifting may be observed at this time. In the portion of the shore from Ushakov cove northward to the Dezhnev cove then

Card 1/3

Contemporary Vertical Movements (Cont.)

southward and along the shore of the Olyutorskiy Cape a slow relative subsidence is taking place. The regions of uplift and subsidence are separated by a zone of relative stability. The following factors bear witness to the contemporary uplift: 1) increase in the absolute height of shore ridges as their distance from the shore increases, that is, as they pass from the younger to the older ones; 2) signs of drying off in those parts of the lagoon bottoms which lie behind natural dams (the dry portions are lifted above the water level in the lagoons to a height of 0.3 m to 0.5 m and show no signs of being submerged; 3) presence of submarine abrasional terraces in the bedrocks of the submarine shore slopes; 4) diminishing of abrasional steps; 5) cutting of river outlets into the contemporary terrace. The signs of present subsidence are: 1) diminution of the absolute height of ancient shore ridges as their distance from the contemporary shore line increases; 2) character of the submerged off-shore slope: presence of very wide abrasional terraces in the bedrock, stretching out to a considerable depth and showing no distinct

Contemporary Vertical Movements (Cont.)

curvature in their profile; 3) wide distribution of active abrasional steps; 4) presence of perched outlets which were formed because the time of incision lagged behind the time of the shore recession, due to the intensification of the process. For signs of the stable state of the shore we take: 1) approximately equal height of the ancient shore ridges and the contemporary storm ridges; 2) wide distribution of well developed submerged abrasional terraces formed in the bedrock and in the Quaternary strata. The article includes a schematic map of the western shore of the Bering Sea, showing the character of vertical movements in various locations and the profiles of the leveled contemporary marine accumulations.

G. V. K.

Card 3/3

IONIN, A. S.

14-1-380

Translation from: Referativnyy Zhurnal, Geografiya, 1957, Nr 1, p. 35 (USSR)

AUTHOR: Ionin, A. S.

TITLE: Evolution of Bay Shores (K voprosu ob evolyutsii bukhtovykh beregov)

PERIODICAL: Tr. Okeanogr. komis. AN SSSR; 1956, Nr 1, pp. 82-89

ABSTRACT: The evolution of bay shores formed as a result of an ocean invasion of glacial troughs, or an ingression of the ocean after th sinking of moraine relief, is considered. The effect of different geological formations on the evolution of the shore line and the primary character of the submerged terrain are pointed out. Evolution of fjord-like shores is described at some length.

ASSOCIATION: Oceanography Commission, Academy of Sciences, USSR (Okeanogr. komis. AN SSSR)

Card 1/1

IONIN, A.S.; KAPLIN, P.A.

Formative characteristics of seashore terraces. Izv.AN SSSR. Ser.geog. no.5:9-21 S-O '56. (MLRA 9:11)

1. Institut okeanologii Akademii nauk SSSR.
(Seashore)

IONIN, A. S., BUDANOV V. I., VLADIMIROV, A. T., KAPLIN, P. A. and MEDVEDEV, V. S.

"Present Day Vertical Movement of Far Eastern Seacoasts of the USSR,"

paper presented at the 9th Pacific Science Congress, Bangkok, Thailand 18-29 Nov 57.

Trans. in Mining Gazette, v. 2, No. 11, 1957 (Bangkok)

Ionin, A. S.

20-6-31/42

AUTHORS: Budanov, V. I., Vladimirov, A. T., Ionin, A. S., Kaplin, P. A., Medvedev, V. S.

TITLE: Recent Vertical Motion of the Shores of the Far East Seas (Sovremennyye vertikal'nyye dvizheniya beregov dal'nevostochnykh morey).

PERIODICAL: Doklady AN SSSR, 1957, Vol. 116, Nr 6, pp. 1005-1008 (USSR).

ABSTRACT: In literature there often appear data about the kind of the recent and not long ago motions of the shores in the Far East and Northeast of the USSR. Frequently, the data about the velocity and direction of these shiftings contradict each other, coarsely. Such an estimation apparently has its cause in a) different conceptions of the mechanism of formation of the shore-relief-forms; b) imperfection of the method of investigation and c) an indistinct limitation of the characteristics of not long ago and vertical notions. These latter are defined here. The authors used a uniform theory of method which is in use in the Laboratory for Bottom of Sea- and Shore Relief (of the institute, see below: "association"). Thus, comparable results were rendered possible. Here the theory of method is described shortly. The shores of the Far East Seas are divided according to the kind of their recent

Card 1/3

Recent Vertical Motion of the Shores of the Far East Seas.

vertical motions into a number of sections; some are sinking, other are rising; finally there are relative steady sections. The clearest symptoms of the sinking were stated: in the Eastern and Northern part of the Chukot Peninsula ("Chukotskiy poluostrov"), on the Northeastern shore of the Korayken Highland ("Korayskoye nagor'ye") in some sections of the Eastern- and Western shore of Kamchatka, in the surroundings of the town Okhotsk, and at the Northeastern shore of Sakhalin. The raising-zones are: Western shore of the Anadyr Bay, individual sections of the Northeastern- and Eastern Kamchatka, farther the shore of Southern Sakhalin and the Sea Province. The characteristics for the above-mentioned classification are given. In connection with post-glacial transgression all shores of the Far East Seas have an ingression appearance. But that does not mean a recent shore-sinking, because at the raising shores the eustatic raisung of the level was not compensated by tectonic motions. Therefore the observed raising is not relative, but absolute. Low sinking or stability of individual shore sections are to be estimated relatively. They form an algebraic term of a sum of the eustatic raising of the world ocean during the late glacial period and tectonic motions of the continent. No sections with high velocities

Recent Vertical Motion of the Shores of the Far East Seas.

of motion have been observed. By the differences of the height of the old shore quays the authors conclude that the velocity of the relative sinking of the Western-Kamchatka shore exceed that one of the Eastern part of the Chukot-Peninsula by the 3 - to 4 -fold. The definition of absolute velocities just is impossible because of the deficiency of proofs.
There are 3 figures, and 12 Slavic references.

ASSOCIATION: Institute for Oceanology AN USSR (Institut okeanologii Akademii nauk SSSR).

PRESENTED: June 12, 1957, by A. A. Grigor'yev, Academician.

SUBMITTED: June 11, 1957.

AVAILABLE: Library of Congress.

IONIN, A. S.

Some Peculiarties in the Dynamics and Morphology of the Bering Sea Coast. The article reports on a number of reconnaissance jobs undertaken by a group of scientists on the trawler "Geolog". The main morphogenic types of coastal slopes are discussed. Three photographs and a map are included. The author offers a classification of shore types and surveys the main types of deposition.

Oceanographic Research in NW Part of Pacific Ocean, Moscow, Izd-vo-An SSSR, 1958, 148pp.

This collection of articles reports the results of obeervations made in the Pacific by the INstitute of Oceanology of the Academy of Sciences, USSR. In 1949, the Institute launcehd a systematic five-year program of scientific exploration of certain hydrographic peculiarities of the Soviet Pacific Area. The Operations were carried out as a "Complex Oceanographic Expedition," using the Motorboat Vityaz' as its base. The Expedition worked in collaboration with the Hydrographic Institue of the Soviet Navy (VMS), the Pacific Institute of Piscatology and Oceanography, and some 40 other institutes of the Academy of Sciences. Between 1949 and 1954, 18 trips were made, covering about 130,000 miles. Among the subjects of direct concern were: Meteorology, hydrology, geeanography, hydrochemistry, sedimentation, geography of the littoral, geology and contours, of the sea bottom, fauna, plankton, microbiology, and gravimetry. Twenty-eight authors contributed to the collection which consists of 27 articles. There are: 6 gables, 8 23 diagraps, 3 illustrations (Photographs of the littoral(), 4 maps. There are no references.

IONIN, A.S.

Special features in the dynamics and morphology of the Bering Sea shores. Trudy Okean. kom. 3:55-65 '58. (MIRA 11:8)
(Bering Sea--Seashore)

IONIN, A.S.; DOLOTOV, Yu.S.

Characteristics of dynamics and morphology of raising coasts; illustrated by the example of Novaya Zemlya. Trudy Inst. okean. 28:71-84 '58. (MIRA 11:5)

(Novaya Zemlya--Coast changes)

IONIN, A.S.

Studying the dynamics and morphology of the Soviet shores of the Chukchi and Bering Seas. Trudy Okean.kom. 4:205-214 '59.
(MIRA 13:4)

1. Institut Okeanologii AN SSSR
(Chukchi Sea--Coast changes) (Bering Sea--Coast changes)

DOBROVOL'SKIY, A.D.; IONIN, A.S.; UDINTSEV, G.B.

History of investigations in the Bering Sea. Trudy Inst. okean. 29:5-16 '59. (MIRA 12:12)
(Bering Sea--Oceanographic research)

POPOV, B.A.; IONIN, A.S.; KAPLIN, P.A.

Concerning R.IA.Knaps's critical notes on analytical investigation of the formation of marine terraces. Biul. Okean. kom. no.5:79-86 '60. (MIRA 13:10)

1. Institut okeanologii AN SSSR.
(Seashore) (Knaps, R.IA.)

KAPLIN, P.A.; IONIN, A.S.

Methods for geological and geomorphological underwater exploration. Izv. AN SSSR. Ser. geol. 25 no.11:105-112 N '60. (MIRA 13:11)

1. Institut okeanologii AN SSSR, Moskva.
(Submarine geology)

BELOUSOV, Vladimir Vladimirovich; IONIN, A.S., red.; GEORGIYEVA, G.I., tekhn. red.

[Structural geology] Strukturnaia geologiia. Moskva, Izd-vo Mosk. univ., 1961. 206 p. (MIRA 14:7)

(Geology, Structural)

IONIN, A.S.; SHCHERBAKOV, F.A.

Stratification of littoral deposits in the eastern part of the Black Sea. Okeanologiia 1 no.5:866-871 '61. (MIRA 15:3)

1. Institut okeanologii AN SSSR.
(Black Sea--Sediments (Geology))

IONIN, A.S.

Degrading accumulative shore forms of the Bering Sea. Trudy Okean. kom. 8:85-97 '61. (MIRA 14:5)

1. Institut okeanologii AN SSSR.
(Bering Sea--Coast changes)

IONIN, A.S.

Study of the shore dynamics and morphology of Komandorskiye Islands. Trudy Okean.kom. 8:206-210 '61. (MIRA 14:5)

1. Institut okeanologii AN SSSR.
(Komandorskiye Islands---Coast changes)

S/519/61/000/009/001/001
H000/H000

AUTHORS: Kaplin, P. A., and A. S. Ionin

TITLE: Some coastal relief features of the Kurile-Kamchatka region in relation to tsunami problems

SOURCE: Akademiya nauk SSSR. Soviet po seismologii. Byulleten'. Problemy tsunami, no. 9, 1961, 74-88

TEXT: The Kurile-Kamchatka area, which lies parallel to a line of epicenters known to cause tsunamis, is schematized and regionalized on the basis of available literature according to its susceptibility to tsunamis. The severity of a tsunami in a given coastal area depends not only on intensity of the quake causing the tsunami, parameters of the initial wave, and distance from the expicenter, but also on submarine and surface coastal relief characteristics and configuration of the shoreline. Tsunami wave height at the coast depends specifically on 1) exposure of coast line, 2) surface features and bottom relief of embayments (fiords, craters, etc.), 3) pre-

Card 1/3

sence or absence of the broad shoaly terraces which border the coast in many places, 4) submarine canyons, 5) height, curvature and structure of coastal slopes and cliffs, 6) aggradation landforms, and 7) submerged offshore bars in front of river mouths. A full-page map is given showing five zones of varying susceptibility to tsunamis in the Kurile-Kamchatka region: 1) zones entirely safe from flooding, possessing volcanic (with steep sides facing the water), abraded (with bench not less than 20 m high), denuded, and abrasion-denuded formations, and coasts with enclosed and crater-type bays; 2) zones of slight flooding, possessing fiords and ria bays, low or terraced abraded shores and shores with obliterated cliffs [otmershimi klifami] hemmed in by offshore bars 3) zones of severe flooding, possessing recent marine alluvial plains, marine aggraded terraces, and major aggradation landforms; and 4) regions of sharp tsunami wave magnification and 5) diminution, owing to relief features of the bottom and configuration of the coastline. Low coastlines, consisting of alluvial and marine alluvial plains, and large aggradation landforms, whether located in embayments or along the open

S/519/61/000/009/001/001
H000/H000

coast, suffer the heaviest destruction from tsunamis. Shoal water offshore increases the destructive effect still further. The destructive effect on abrasion-denuded coastline is directly related to the distance the shallow abrasion terrace extends out into the water and to the presence or absence of low abraded or aggraded terraces bordering the coastal shelf. A shallow abraded terrace extending a sufficient distance offshore will dissipate tsunami waves so that they will not reach the brow of the low terrace. Volcanic coastlines and abrasion-denuded coastlines having a high coastal terrace are almost entirely safe from danger of tsunami destruction, while the shores of crater bays and narrow-mouth bays of the Avachinskaya bay type are not subject to the effects of tsunamis. There are three figures, including the map. There are 2 English-language references, which read as follows: Imamura, A., "Theoretical and applied seismology", Maruzen, Tokyo, 1937; Shepard, F. P., G. A. Macdonald, and D. C. Cox, "The tsunami of April 1, 1946", Bull. of the Scripps Univ. of Calif. Press, v. 5, no. 6, 1950.

Card 3/3

IONIN, A.S.; KAPLIN, P.A.; MEDVEDEV, V.S.

Classification of global coast types (as applied to maps of the physicogeographical atlas of the world). Trudy Okean.kom. 12: 94-108 '61. (MIRA 15:1)

1. Institut okeanologii AN SSSR.
(Coasts)

IONIN, A.S.; KAPLIN, P.A.; MEDVEDEV, V.S.

Some results of regional investigations of seashores in the Soviet Union. Trudy Inst. okean. 48:3-33 '61. (MIRA 15:1)
(Coasts)

VOLKOV, P.A.; IONIN, A.S.

Magnitude of nonerosive wave velocities for gravel. Okeanologiia 2 no.3:410-418 '62. (MIRA 15:7)

1. Institut okeanologii AN SSSR. (Waves) (Gravel)

ZENKOVICH, V.P.; IONIN, A.S.

Movement of pebble material in the shore area. Okeanologiia 2 no.5:864-873 '62. (MIRA 15:11)

1. Institut okeanologii AN SSSR.
(Pebbles)

IONIN, A.S.

ZENKOVICH, Vsevolod P., IONIN, A. S.,

"Determination of the angle between the shoreline and the wave's ray which provides the maximum speed of pebble shifting"

Report to be submitted for the 13th General Assembly, Intl. Union of Geodesy and Geophysics (IUGG), Berkeley Calif., 19-31 Aug 63

IONIN, A.S.; KAPLIN, P.A.; MEDVEDEV, V.S.

Submarine geomorphological studies in the U.S.S.R. Vest. Mosk. un. Ser. 5: Geog. 18 no.3:17-23 My-Je '63. (MIRA 16:6)

1. Institut okeanologii AN SSSR. (Submarine topography)

ZENKOVICH, V.P.; IONIN, A.S.

Migration of pebbles along the shore. Priroda 52 no.4:94-97 '63. (MIRA 16:4)

1. Institut okeanologii AN SSSR, Moskva.
(Pebbles) (Seashore)

IONIN, A.S.; KAPLIN, P.A.; MEDVEDEV, V.S.

O.K. Leont'ev's book "Fundamentals of seashore geomorphology." (MIRA 16:11)
Okeanologiia 3 no.5:946-948 '63.

BUDANOV, Valentin Illarionovich; IONIN, A.S., otv. red.

[Methods for the study of coastal sea zones by exploratory expeditions] Metodika ekspeditsionnykh issledovanii beregovoi zony moria. Moskva, Izd-vo "Nauka," 1964. 223 p. (MIRA 17:6)

AKSENOV, A.A.; IONIN, A.S.; SHCHERBAKOV, F.A.

New data on the structure of strata of recent coastal deposits. Okeanologiia 4 no.5:842-849 '64. (MIRA 18:1)

1. Institut okeanologii AN SSSR.

ACC NR: AT7001796 (N) SOURCE CODE: UR/0000/66/000/000/0194/0206

AUTHOR: Ionin, A. S.

ORG: none

TITLE: Development of some coastal accumulated formation types

SOURCE: AN SSSR. Okeanograficheskaya komissiya. Issledovaniya gidrodinamicheskikh i morfodinamicheskikh protsessov beregovoy zony morya (Studies of hydrodynamic and morphodynamic processes of the shoreline). Moscow, Izd-vo Nauka, 1966, 194-206

TOPIC TAGS: oceanography, ocean dynamics

ABSTRACT: The developmental histories of two coastal accumulated formations in the Bering Sea are traced, demonstrating the polygenetic nature of their origin. A diagram illustrating the successive stages of one of these formations is given in Figure 2.

Card 1/3

ACC NR: AT7001796

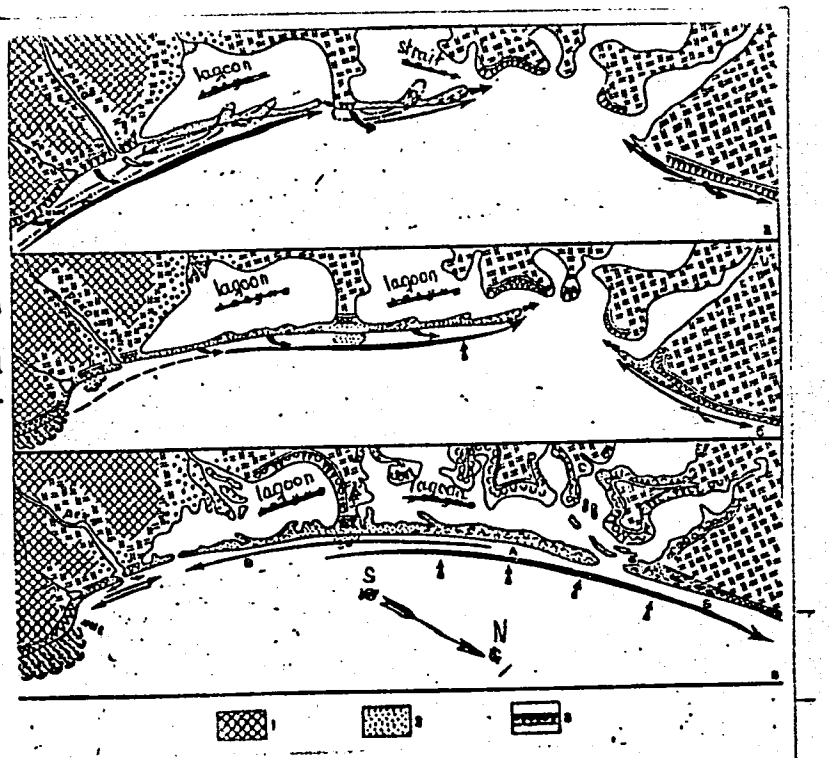


Figure 2. Morphodynamic diagrams of lagoon barrier beach development

a, b, c — successive stages; 1- mountains of glacial origin (200 to 2,000 m) with alpine forms of relief; 2- deltas and accumulated plains of alluvial origin; 3- coastal ledges formed by abrasion and solifluction.

Card 2/3

ACC NR: AT7001796

Orig. art. has: 3 figures.

SUB CODE: 08/ SUBM DATE: 17Apr66/ ORIG REF: 014

Card 3/3

IONIN, B.I

AUTHORS: Efros, L. S. and Ionin, B. I. 79-2-28/58

TITLE: Study of Imidazole Derivatives. Part 16. About the Basicity of Isomeric 4- and 6-Amine-3-Methylbenzimidazoles (Issledovaniye v oblasti proizvodnykh imidazola. XVI. Ob osnovnosti izomernykh 4- i 6-amino-3-metilbenzimidazolov)

PERIODICAL: Zhurnal Obshchey Khimii, 1957, vol 27, No 2, pp. 406-411 (U.S.S.R.)

ABSTRACT: Experiments were conducted to determine the effect of the amino group in positions 4 and 6 respectively on the basicity of isomeric benzimidazoles. A comparison of the basicity constants of derivatives of 4-amino-3-methylbenzimidazole with the constants of analogous derivatives of 6-amino-3-methylbenzimidazole showed that in this series of the amino group in position 4, in contrast to the amino group in position 6, has almost no effect on the basicity of the compounds investigated. A study of secondary hydrolysis constants of isomeric 4- and 6-amino-3-methylbenzimidazoles showed that also in the case of derivatives having no methyl groups in position 3, the basicity of the amino group in position 4, is considerably smaller than the basicity of the amino group in position

Card 1/2

Study of Imidazole Derivatives. Part 16. 79-2-28/58

6. The absence of the effect of the amino group in position 4, on the basicity is explained by the disruption in the conjugation between the indicated amino group and the nitrogen atom of the benzimidazole hetero ring.

1 table, 3 graphs. There are 7 references of which 2 are Slavic

ASSOCIATION: Leningrad Technological Institute imeni Lensovet

PRESENTED BY:

SUBMITTED: March 1, 1956

AVAILABLE: Library of Congress

Card 2/2

IoNIN B.I.

S/020/60/132/01/38/064
B011/B126

AUTHORS: Zanin, F. I., Voronkov, M. G., Shepeleva, Ye. S., Ionin, B. I.

TITLE: The Interaction Between Dialkyl-phosphorous Acids and Quinones

PERIODICAL: Doklady Akademii nauk SSSR, 1960, Vol. 132, No. 1, pp. 145-148

TEXT: The organophosphorus compounds are highly active as additions to lubricating oils (Refs. 1-3). Some derivatives of dithiophosphorous, phosphoric, and phosphorous acids belong to them. The authors have taken the trouble to obtain organophosphorus compounds which are, amongst other things, also anti-oxidants, which hinder the oxidation of hydrocarbons by atmospheric oxygen. Thus, the authors tried to add acid esters of the phosphorous acid to the quinones. The reaction of dialkyl-phosphorous acids or phosphites with p-benzoquinone can take place in two ways and lead to: a) esters of dihyd[illegible]enylphosphoric acids (I) and (II), or b) compounds in which phosphorus is bonded with oxygen (III) and (IV) (Ref. 11). The authors have established that dialkyl-p-oxyphenylphosphates are formed on the reaction of dialkylphosphorous acids with p-benzoquinone. As a result, the phosphorous group adds to the oxygen atom of the benzoquinone (see scheme). This addition is accompanied by a conversion of the

Card 1/3

quinoid structure into a benzoid structure. The reaction between dialkylphosphorous acids and α-naphthoquinone is similar. Table 1 shows the melting temperatures and the results of analyses of the compounds produced. They are crystalline substances, soluble in aqueous alkali solutions. They give the characteristic color reaction for phenylhydroxyl with ferric chloride, but no reaction for the carbonyl group. The hydrolysis of the substances obtained with HCl (1:1), and the saponification with alcoholic alkalis at 40-50° gives a yield of 80%. All compounds produced contain only one hydroxyl group. On the basis of the ultraviolet absorption spectra the authors have stated that esters of p-oxyphenyl-phosphorous acid are concerned. As can be seen from table 2, the absorption maximum of the products is shifted towards short waves, and agrees with the maximum of dimethyl-p-methoxyphenylphosphate. Thus, the results given above show that the said substances are really dialkyl-p-oxyphenylphosphates (see scheme). The following were also quoted: V. S. Abramov, A. N. Pudovik, Yu. P. Kitayev, and G. Kametayeva. There are 2 tables and 18 references, 10 of which are Soviet.

ASSOCIATION: Institut neftekhimicheskogo sinteza Akademii nauk SSSR (Institute of Petroleum-chemical Synthesis of the Academy of Sciences, USSR)

Card 2/3

S/080/60/033/010/029/029
D216/D306

AUTHORS: Zavlin, P.M., and Ionin, B.I.

TITLE: Preparing trialkylphosphates

PERIODICAL: Zhurnal prikladnoy khimii, v. 33, no. 10, 1960, 2376 - 2378

TEXT: The authors' investigation of the reaction of fatty oxyamines with phosphorus trichloride and other chloranhydrides of phosphoric acid has shown that in the simultaneous presence of an amine group and an oxy-group the ester of phosphoric acid is formed by the general scheme:

$$>P(=O)-Cl + HO(CH_2)_nNH_2 \rightarrow >P(=O)-O(CH_2)_nNH_2 \cdot HCl.$$

From this it can be predicted that phosphorus trichloride will react with alcohols in the presence of primary amines forming the corresponding esters of phosphoric acid by the reaction:

Card 1/4

Preparing trialkylphosphates

$$PCl_3 + 3ROH + 3R_1NH_2 \rightarrow P(OR)_3 + 3R_1NH_2 \cdot HCl.$$

Subsequent work has shown that this is so and the present work deals with the use of aniline as the primary amine. The table shows the trialkylphosphates prepared and gives some of their data which corresponds well to the pusblished data. Trimethylphosphate was prepared from 96 gm. (3 moles) of methanol, 279 gms. (3 moles) of aniline and 700 mls. of absolute ether; to this mixture (in a 3 necked flask fitted with a stirrer, reflux condenser and dropping funnel), at 15-20°C, a solution containing 137 gm. (1 mol) PCl_3 in 150 mls. of absolute ether was slowly added with continuous stirring. The reaction was complete in 1-1.5 hours. The resultant liquor was freed of aniline hydrochloride and the solvent was distilled off; the yield was 72 gms. Triethylphosphate was prepared using a similar set up and the following reagents: 69 gm. (1.5 moles) of ethyl alcohol, 139 gms. (1.5 mole) of aniline, and 500 mls. of benzene; to this mixture at 18-20°C 68.5 gms. of PCl_3 of benzene were

Preparing trialkylphosphates

added. The reaction was complete in 1-1.5 hours. Tripropylphosphate tri isopropylphosphate and tributylphosphate were prepared in an analogous manner to triethylphosphate. There are 1 table and 10 references: 7 Soviet-bloc and 3 non-Soviet-bloc. The reference to the English-language publication reads as follows: A.A. Toord-Moore, J.H. Williams, J. Chem. Soc., 1469, 1947.

SUBMITTED: March 9, 1960

Card 3/4

S/080/60/033/010/029/029
D216/D306

Preparing trialkylphosphates

Table.

Legend: 1 - Compound; 2 - B. Pt. °C; 3 - n_D^{22}; 4 - yield, gms - %.

① Соединение	② Температура кипения (в °С)	③ n_D^{22}	④ Выход в г	в %
$(CH_3O_3)P$	111—112	1.4140	72	58
$(C_2H_5O)_3P$	158—159	1.4118	62	75
$(C_3H_7O)_3P$	83 (10 мм)	1.4278	81	78
(изо-$C_3H_7O)_3P$	82—83 (32 мм)	1.4240	82.5	79.5
$(C_4H_9O)_3P$	107—113 (4—5 мм)	1.4317	96	77

Card 4/4

IONIN, B.I.; PETROV, A.A.

Arbuzov rearrangement with acetylenic halides having a halogen atom at the triple bond. Zhur.ob.khim. 32 no.7:2387-2388 Jl '62. (MIRA 15:7)

1. Leningradskiy tekhnologicheskiy institut imeni Lensoveta.
(Rearrangements (Chemistry)) (Phosphorous acid) (Acetylene)

VORONKOV, M.G., IONIN, B.I.

The reaction of dialkylphosphorus acids with quinones.

Khimiya i Primeneniye Fosfororganicheskikh Soyedineniy (Chemistry and application of organophosphorus compounds) A. YE. ARBUZOV, Ed. Publ. by Kazan Affil. Acad. Sci. USSR, Moscow 1962, 632 pp.

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

IONIN, B.I.; PETROV, A.A.

Prototropic isomerization of esters of alkenylphosphinic acids.
Zhur.ob.khim. 33 no.2:432-437 F '63. (MIRA 16:2)

1. Leningradskiy tekhnologicheskiy institut imeni Lensoveta.
(Phosphinic acid) (Isomerization)

IONIN, B.I.; LEBEDEV, V.B.; PETROV, A.A.

Phosphinic acid esters with diacetylene radicals. Dokl. AN SSSR 142 no.6:1354-1356 O '63. (MIRA 16:11)

1. Leningradskiy tekhnologicheskiy institut im. Lensoveta. Predstavleno akademikom B.A. Arbuzovym.

L 17962-65 EWT(m)/EPF(c)/EWP(j) Pc-4/Pr-4 ASD(a)-5/SSD/AFWL/ESD(t)/RPL
WW/JFW/RM

ACCESSION NR: AP5002621 S/0079/64/034/008/2630/2632

AUTHOR: Ionin, B. I.; Mingaleva, K. S.; Petrov, A. A.

TITLE: Dipole moment of phosphinic acid esters with unsaturated radicals

SOURCE: Zhurnal obshchey khimii, v. 34, no. 8, 1964, 2630-2632

TOPIC TAGS: ester, phosphinic acid, chemical bonding, organic phosphorus compound, saturated hydrocarbon, unsaturated hydrocarbon, dipole moment

Abstract: The dipole moment of eight diethyl esters of phosphinic acids with saturated, ethylene, and acetylene radicals: diethyl esters of methyl- acetylenyl- and phenylacetylenylphosphinic acids and their ethylene and

with saturated, ethylene, and acetylene

acetylethyl- and phenylacetylenylphosphinic acids and their ethylene and unsaturated analogs, as well as ethyldiacetylenyphosphinic ester, were measured. An assumption of weak conjugation of the diethylphosphone group with multiple bonds was confirmed. It was shown that the diethylphosphone group is somewhat more conjugated with a triple bonds than with a double bond. The dipole moment was found to be directed in all cases toward the diethylphosphone group. Orig. art. has 2 tables.

Card 1/2

L 17962-65

ACCESSION NR: AP5002621

ASSOCIATION: Leningradskiy tekhnologicheskiy institut im. Lensoveta (Leningrad Technological Institute)

SUBMITTED: 27Jun63	ENCL: 00	SUB CODE: OC, EM
NO REF SOV: 011	OTHER: 004	JPRS

Card 2/2

MASHLYAKOVSKIY, L.N.; IONIN, B.I.

Unsaturated phosphinic acids and their derivatives. Part 1: Synthesis of phosphinic acid chlorides with diene and acetylene radicals. Zhur. ob. khim. 35 no.9:1577-1584 S '65.

(MIRA 18:10)

1. Leningradskiy tekhnologicheskiy institut imeni Lensoveta.

L 25687-66 EWT(m)/EWP(j) RM

ACC NR: AP6016710 SOURCE CODE: UR/0079/65/035/012/2255/2255

AUTHOR: Ionin, B. I.; Petrov, A. A.

ORG: Leningrad Technological Institute im. Lensovet (Leningradskiy tekhnologicheskiy institut)

TITLE: Ester of acetylenephosphinic acid with the diethylamino group at the triple bond

SOURCE: Zhurnal obshchey khimii, v. 35, no. 12, 1965, 2255

TOPIC TAGS: ester, phosphinic acid, chlorinated organic compound, amine, organic phosphorus compound, carboxylic acid

ABSTRACT: To synthesize compounds with the dialkylamino group at a triple bond, monochloroacetylenes containing electron-acceptor groups can be used. Thus, when triethylamine is treated with the diethyl ester of chloroacetylenephosphinic acid (I) the unstable quarternary salt (II) is immediately formed, which after boiling 10 minutes in benzene decomposes to form the diethyl ester of diethylaminoacetylenephosphinic acid (III). When compound (III) is heated with a slight excess of water on a water bath, hydration occurs to form the previously undescribed diethylamide of diethylphosphonacetic acid (IV).

Card 1/2 UDC: 547.333.3+547.314.2+547.341

ACC NR: AP6016710

$$Cl\text{-}C\equiv C\text{-}PO(OC_2H_5)_2 + (C_2H_5)_3N \longrightarrow [(C_2H_5)_3N\text{-}C\equiv C\text{-}PO(OC_2H_5)_2]^+Cl^-$$
(I) (II)

$$\longrightarrow (C_2H_5)_2N\text{-}C\equiv C\text{-}PO(OC_2H_5)_2 \xrightarrow{H_2O} (C_2H_5)_2N\text{-}\underset{\underset{O}{\|}}{C}\text{-}CH_2\text{-}PO(OC_2H_5)_2$$
(III) (IV)

Attempts to conduct the analogous reaction with trimethylamine failed. [JPRS]

SUB CODE: 07 / SUBM DATE: 05Jun65 / ORIG REF: 002 / OTH REF: 001

Card 2/2

L 25589-66 EWT(m)/EWP(j) RM

ACC NR: AP6016690 SOURCE CODE: UR/0079/65/035/009/1577/1584

AUTHOR: Mashlyakovskiy, L. N.; Ionin, B. I.

ORG: Leningrad Technological Institute im. Lensovet (Leningradskiy tekhnologicheskiy institut)

TITLE: Unsaturated phosphinic acids with their derivatives. I. Synthesis of chlorides of phosphinic acids with dienic and acetylenic radicals

SOURCE: Zhurnal obshchey khimii, v. 35, no. 9, 1965, 1577-1584

TOPIC TAGS: phosphinic acid, organic synthetic process, tertiary amine, proton resonance, phosphorus chloride, ester, chloride, IR spectrum

ABSTRACT: Chlorides of phosphinic acids with dienic radicals were synthesized by dehydrochlorination of chlorides of the corresponding chloroalkenephosphinic acids with triethylamine. The corresponding chloroalkenephosphinic acids were produced from the diene hydrocarbons and PCl_5. The chloride of 2-methylbutadiene-1,3-thiophosphinic-1 acid was produced analogously to the oxygen compounds by treating the chloride of 2-methyl-4-chlorobutene-2-thiophosphinic-1 acid with triethylamine. Chlorides of phosphinic acids with acetylenic and enyne radicals were produced by reaction of esters of the corresponding phosphinic acids with PCl_5. The new compounds include the dimethyl ester of butene-3-yne-1-phosphinic-1 acid, produced for one of the syntheses by an Arbuzov rearrangement of trimethyl phosphite with bromo-

Card 1/2 UDC: 547.341+546.185

L 25589-66

ACC NR: AP6016690

4

vinylacetylene. The infrared spectra and proton magnetic resonance spectra of the unsaturated acid chlorides are cited. The authors thank A. A. Petrov and I. S. Okhrimenko for their interest in this work. The authors also thank I. G. Savich for taking the infrared spectra and V. B. Lebedev and K. V. Parshina for taking the proton magnetic resonance spectra. Orig. art. has: 3 figures and 1 table. [JPRS]

SUB CODE: 07 / SUBM DATE: 20May64 / ORIG REF: 013 / OTH REF: 002

Card 2/2 FV

L 27759-66 EWT(m)/EWP(j) RM

ACC NR: AP6018510 SOURCE CODE: UR/0079/65/035/011/2046/2050

50
49
B

AUTHOR: Orlov, Yu. F.; Ionin, B. I.; Shvedov, V. P.

ORG: Leningrad Technological Institute im. Lensovet (Leningradskiy tekhnologicheskiy institut)

TITLE: Extraction properties of phosphinic acid esters

SOURCE: Zhurnal obshchey khimii, v. 35, no. 11, 1965, 2046-2050

TOPIC TAGS: phosphinic acid, alkyl radical, IR spectrum, electron density, organic phosphorus compound, cerium compound

ABSTRACT: The extraction of trivalent cerium nitrate by esters of phosphinic acids with alkyl radicals, radicals with multiple bonds and functional groups was investigated. The butyl esters of propylphosphinic, 3-oxobutylphosphinic, allylphosphinic, methylacetylphosphinic, and 1,2-di(carbethoxy)ethylphosphinic acids, as well as the diisoamyl ester of methylphosphinic acid were studied as extraction reagents. The extraction ability of phosphonates was found to be determined chiefly by the inductive effect of the substituents. The presence of acceptor groups in the radical greatly reduces the extraction constant. Of the compounds investigated, the maximum extraction ability was possessed by the diisoamyl ester of methylphosphinic acid, which the authors explain by a

Card 1/2

UDC: 542.61:547.26'118:546.655

ACC NR: AF6018510

hyperconjugation effect between the methyl and phosphoryl groups, leading to an increase in the electron density on the oxygen in the case of this ester. No strict correlation was detected between the extraction constants and frequencies of the P=O groups in the infrared spectra of the compounds, indicating that such physical data as infrared spectra or dipole moments should be used in evaluating the extraction abilities of organophosphorus compounds only for series of similar compounds. No appreciable interaction of the carbonyl, carbethoxyl, and unsaturated groups with cerium nitrate was detected. The authors thank K. S. Mingaleva for measuring the dipole moments. Orig. art. has: 2 figures, 1 table and 2 formulas. [JPRS]

SUB CODE: 07,20 / SUBM DATE: 03Jul64 / ORIG REF: 010 / OTH REF: 002

Card 2/2

L 27765-66 EWT(m)/EWP(j) RM/WW

ACC NR: AP6018496 SOURCE CODE: UR/0079/65/035/011/1917/1921

28
27
B

AUTHOR: Ionin, B. I.; Petrov, A. A.

ORG: Leningrad Technological Institute im. Lensovet (Leningradskiy tekhnologicheskiy institut)

TITLE: Arbuzov rearrangement with the participation of fluor-, chloro-, bromo-, and iodacetylenes

SOURCE: Zhurnal obshchey khimii, v. 35, no. 11, 1965, 1917-1921

TOPIC TAGS: halogenated organic compound, fluorinated hydrocarbon, acetylene ester, organic synthetic process

ABSTRACT: The Arbuzov rearrangement of triethyl phosphite with haloacetylenes containing various halogens and different substituents at the triple bond was studied. Chloro, bromo, and iodoalkylacetylenes that do not contain a conjugated system of multiple bonds (methylhaloacetylenes, ethylchloroacetylene, and isopropyl- and butylbromoacetylenes) do not enter into the reaction. Haloacetylenes do take part in this reaction and are arranged in the activity series F > Cl > Br > I. Replacement of the hydrogen at the triple bond of the haloacetylene by electronegative atoms or groups leads to an increase in the mobility of the halogen: dichloroacetylene reacts with triethyl phosphite readily in cold ether solution to produce primarily the ester of chloroacetylenylphosphinic

Card 1/2 UDC: 547.314.0/547.26'18

L 27765-66

ACC NR: AP6018496

acid. The ester also undergoes an Arbuzov rearrangement, forming bis(diethylphosphone)acetylene. The ester also reacts with ethyl magnesium bromide to yield the diethyl ester of ethylacetylenylphosphinic acid and with ammonia to give diethylphosphonoacetonitrile. These reactions indicate broad potentialities for the synthesis of previously inaccessible esters of alkylacetylenylphosphinic acids and other compounds. Experiments with phenylhaloacetylenes (phenylchloro and phenylbromoacetylenes react readily with triethyl phosphite; phenyliodoacetylene does not react) indicate that the presence of an excess positive charge on the alpha-carbon atom is necessary for a successful Arbuzov rearrangement with the participation of haloacetylenes. Orig. art. has: 2 figures and 1 formula. [JPRS]

SUB CODE: 07/ SUBM DATE: 30Nov64/ ORIG REF: 006 / OTH REF: 007

Card 2/2

L 40807-66 EWT(m)/EWP(v)/T/EWP(j) IJP(c) RM/WW

ACC NR: AP6025622 SOURCE CODE: UR/0413/66/000/013/0077/0077

AUTHORS: Mashlyakovskiy, L. N.; Ionin, B. I.; Okhrimenko, I. S.; Petrov, A. A.

ORG: none

TITLE: Preparative method for phosphorus-containing polyesters. Class 39, No. 183385 [announced by Leningrad Technological Institute imeni Lensovet (Leningradskiy tekhnologicheskiy institut)]

SOURCE: Izobreteniya, promyshlennyye obraztsy, tovarnyye znaki, no. 13, 1966, 77

TOPIC TAGS: phosphorus, polyester, polycondensation, phosphonic acid, glycol

ABSTRACT: This Author Certificate presents a method for preparing phosphorus-containing polyesters by polycondensation of alkylphosphonic chlorides with aliphatic or aromatic glycols. To broaden the assortment of phosphorus-containing polymers having high fire resistance and good adhesion to metals, chlorides with 1,3-diene groups at the phosphorus atom, e.g., (2-methyl-1,3-butadienyl)-phosphonic chloride, are used as the alkylphosphonic chlorides. [04]

SUB CODE: 07/ SUBM DATE: 22Apr65 / ATD PRESS: 5159

UDC: 678.674
678.85

Card 1/1 mlp

ACC NR: AP6028905 SOURCE CODE: UR/0079/66/036/008/1505/1506

AUTHOR: Ignat'yev, V. M.; Petrov, A. A.; Ionin, B. I.

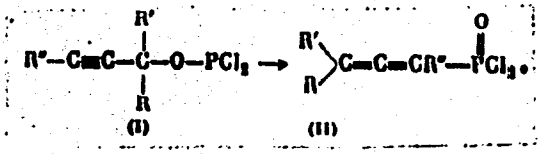
ORG: Leningrad Technological Institute im. Lensovet (Leningradskiy tekhnologicheskiy institut)

TITLE: Acetylene-allene isomerization of propargyl dichlorophosphites

SOURCE: Zhurnal obshchey khimii, v. 36, no. 8, 1966, 1505-1506

TOPIC TAGS: dichloride, propargyl compound, acetylene, allene, isomerization, organic phosphorus compound

ABSTRACT: Alkylpropargyl dichlorophosphites are readily isomerized to form the corresponding dialkylpropadienephosphonyl dichlorides:



As an example of this type of isomerization, preparation is reported of

 UDC: 547.241

ACC NR: AP6028905

3-methyl-1,2-butadienyephosphonyl dichloride, bp 79°C, d_4^{20} 1.2553, n_D^{20} 1.5140. [W.A. 50]

SUB CODE: 07/ SUBM DATE: 14Mar66/ ORIG REF: 007/ OTH REF: 001

Card 2/2

MOISEYEV, A.A., doktor tekhn. nauk, nauchnyy red.; IONIN, D.G., inzh., retsenzent; ZAVEL'SKAYA, V.M., red. izd-va; KOHOVENKO, Yu.N., tekhn. red.

[Handbook on the technology of ship repairing] Spravochnik po tekhnologii sudomontazhnykh rabot. Pod red. A.A.Moiseeva. Leningrad, Gos.soiuznoe izd-vo sudostroit.promyshl., 1961. 728 p. (MIRA 15:1)

(Ships—Maintenance and repair)

IONIOV, I.; TSOLOV, R.; MATEV, M.

Cholecystitis at the Internal Propedeutic Clinic in Sofia. Suvrem. med., Sofia 8 no.6:65-66 1957.

1. Iz Propedevtichnata vutreshna klinika pri VMI; Sofiia.
(CHOLECYSTITIS, statistics,
hosp. statist. (Bul))

IONIN, M. V. PA 11T43

USSR/Acidity May 1947
Instruments, Measuring

"pH-Meter," M. V. Ionin, 2 pp

"Zavod Lab" Vol XIII, No 5

Two schematic diagrams and a photograph of the exterior of the apparatus. Brief discussions of the amplifier, gauge, electrode couple, and a list of the uses of the meter.

11T43

IONIN, M.V.; NIKITINA, V.G.

Rate of hydrolysis of ferrous chloride in a water vapor - air medium. Zhur. prikl. khim. 33 no.12:2651-2657 D '60. (MIRA 14:1)

1. Kafedra obshchey khimii Gor'kovskogo politekhnicheskogo instituta imeni A.A.Zhdanova.

(Iron chloride)

S/081/62/000/019/004/053
B144/B160

AUTHOR: Ionin, M. V.

TITLE: Conversion of the electrochemical into the thermodynamic scale

PERIODICAL: Referativnyy zhurnal. Khimiya, no. 19, 1962, 40, abstract 19B258 (Tr. po khimii i khim. tekhnol. [Gor'kiy], no. 3, 1961, 427 - 429)

TEXT: The isobaric potential $\Delta Z_o'$ = 105.77 kcal/g-ion and the enthalpy $\Delta H_o'$ = 103.35 kcal/g-ion of hydrogen ions in solution were determined by the thermodynamic scale. Using the equations $\Delta Z_o' = \Delta Z_o + 105.77\ n$ and $\Delta H_o' = \Delta H_o + 103.35\ n$, where n is the number of elementary ionic charges, ΔZ_o and ΔH_o are the isobaric potential and the enthalpy, respectively, of the ion in solution, measured by the hydrogen scale, the $\Delta Z_o'$ and $\Delta H_o'$ values can be calculated for any ion. The hydration heats ΔH_h (calculated) determined for a number of ions were in good agreement with ΔH_h (experiment).

Card 1/2

S/081/62/000/019/004/053
B144/B160

Conversion of the ...

[Abstracter's note: Complete translation.]

Card 2/2

IONIN, M.V.; KOZHAKOVA, A.A.; NIKITINA, V.G.

Hydrolysis rate of ferrous chloride in a water vapor medium.
Zhur.prikl.khim. 35 no.4:900-902 Ap '62. (MIRA 15:4)

1. Kafedra obshchey khimii Gor'kovskogo politekhnicheskogo instituta.
(Iron chlorides) (Hydrolysis)

IONIN, M.V.

Determination of the enthalpy of gaseous ions from electrochemical and thermochemical constants. Zhur.fiz.khim. 36 no.10:2215-2216 O '62. (MIRA 17:4)

1. Gor'kovskiy politekhnicheskiy institut.

IONIN, M.V.

Determination of the energies of hydration of ions in solution from electrochemical, thermal, and spectroscopic constants. Zhur.fiz.khim. 37 no.7:1575-1576 Jl '63. (MIRA 17:2)

1. Gor'kovskiy politekhnicheskiy institut.

TONIN, M.V.

Determination of the isobaric potentials of some salts of metals of the second group of periodic table. Zhur.fiz.khim. 38 no.11: 2684-2685 N '64. (MIRA 18:2)

1. Cor'kovskiy politekhnicheskiy institut.

IONIN, N.V.; KURINA, N.V.

Distribution coefficient of electrolytes as a function of solvation and of the activity coefficients of its ions. Trudy Kom.anal.khim. 14:87-98 '63. (MIRA 16:11)

TARASENKO, Mitrofan Ivanovich; IONIN, Sergey Mikhaylovich; VOLKOV, V.A., red.; NAVROTSKIY, O.G., tekhn. red.

[Some laws, principles, and rules of general chemistry; manual for students of the correspondence departments of pharmaceutical institutes and faculties] Nekotorye zakony, printsipy i pravila obshchei khimii; posobie dlia studentov zaochnykh otdelenii farmatsevticheskikh institutov i fakul'tetov. Moskva, Pervyi MOLMI im. I.M.Sechenova, 1960. 69 p. (MIRA 14:7)

(Chemistry, Physical and theoretical)

TARASENKO, Mitrofan Ivanovich; MOROKHOVETS, Andrey Yevgen'yevich; IONIN, Sergey Mikhaylovich; MITSELOVSKIY, Eduard Sergeyevich; BULENKOV, Trifiliy Illarionovich; PERKOVSKAYA, G.Ye., red.; GOROKHOVA, S.S., tekhn. red.

[Laboratory work in inorganic chemistry]Praktikum po neorganicheskoi khimii. Moskva, Vysshaia shkola, 1962. 219 p. (MIRA 15:10)

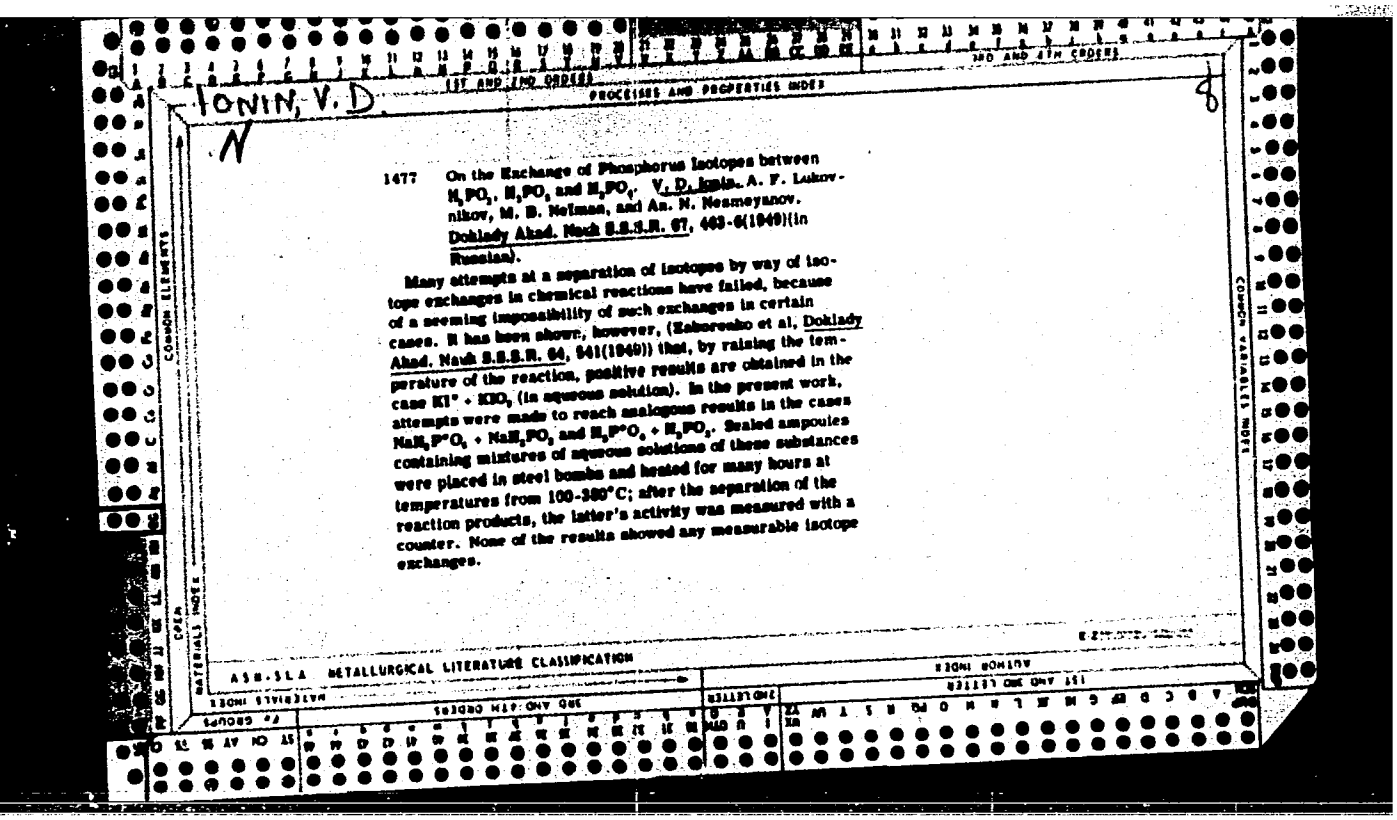
(Chemistry, Inorganic—Laboratory manuals)

IONIN, S.N.

Experimental thin-walled panel apartment houses at the "Rostovs-hakhtstroi" Combine. Trudy NPI 102:45-52 '59. (MIRA 13:7)
(Apartment houses) (Concrete slabs)

DUROV, I.S.; KRASULIN, N.N.; IONIN, S.N.

Experimental study of panels for apartment houses. Trudy NPI 147: 11-16 '63. (MIRA 17:3)



IONIN, V. D.

N

1477 On the Exchange of Phosphorus Isotopes between H_3PO_3, H_3PO_2 and H_3PO_4. V. D. Ionin, A. F. Lukovnikov, M. B. Neiman, and An. N. Nesmeyanov. Doklady Akad. Nauk S.S.S.R. 67, 463-6(1949)(in Russian).

Many attempts at a separation of isotopes by way of isotope exchanges in chemical reactions have failed, because of a seeming impossibility of such exchanges in certain cases. It has been shown, however, (Zaborenko et al, Doklady Akad. Nauk S.S.S.R. 64, 541(1949)) that, by raising the temperature of the reaction, positive results are obtained in the case $KI^* + KIO_3$ (in aqueous solution). In the present work, attempts were made to reach analogous results in the cases $NaH_2P^*O_2 + NaH_2PO_2$ and $H_3P^*O_4 + H_3PO_4$. Sealed ampoules containing mixtures of aqueous solutions of these substances were placed in steel bombs and heated for many hours at temperatures from 100-380°C; after the separation of the reaction products, the latter's activity was measured with a counter. None of the results showed any measurable isotope exchanges.

ASM-SLA METALLURGICAL LITERATURE CLASSIFICATION