

LARIONOVA, L.P.

TATARSKAYA, R.I.; FAYN, F.S.; LARIONOVA, L.P.

Distribution and properties of thiaminase in various animal forms.  
Biokhimiia, Moskva 16 no.4:305-313 July-Aug 51. (GIML 21:1)

1. Institute of Biochemistry imeni Bakh, Academy of Sciences USSR,  
Moscow.

ACCESSION NR: AP4025001

S/0070/64/009/002/0297/0300

AUTHORS: Kapustin, A. P.; Larionova, L. S.

TITLE: The behavior of anisotropic liquids in an electrical field

SOURCE: Kristallografiya, v. 9, no. 2, 1964, 297-300

TOPIC TAGS: anisotropy, anisotropic liquid, electrical field, mesophase, paraazoxyphenetole, polarizing microscope, domain structure, light transmission

ABSTRACT: For a mesophase the author used paraazoxyphenetole, because its liquid-crystalline phase occupies a broad temperature field (280) and it is relatively easy to prepare. The material was placed on the glass plates of a condenser separated by a layer of mica 0.2 mm thick. The surfaces on which the paraazoxyphenetole was placed were made conductive and served as electrodes. The entire system was placed on the stage of a polarizing microscope for optical observation. Studies were made in electrical fields both normal and parallel to the glass surface. The preparation was found to change noticeably when the electrical field was applied. In a parallel field the domain structure was altered at 1000 v/cm,

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ACCESSION NR: AP4025001

streams beginning to form; the fibers near the electrodes orienting themselves along the lines of the field. At higher fields (up to 4000 v/cm), dark twisting lines appeared, extending from electrode to electrode. The intensity of transmitted light decreased appreciably with increase in field strength, more appreciably in the lower fields than the higher. The coloration of individual parts (domains) of the mesophase changed appreciably with change in field strength and change in temperature. Newton rings were observed. From optical observations it was concluded that at low fields (100-200 v) the preparation occurs in small drops with rippled surfaces. In greater fields, strong movement takes place and the amount of transmitted light is reduced as much as 40%. Orig. art. has: 7 figures.

ASSOCIATION: Institut kristallografii AN SSSR (Institute of Crystallography AN SSSR)

SUBMITTED: 18Jul63

DATE ACQ: 16Apr64

ENCL: 00

SUB CODE: PH

NO REF SOV: 002

OTHER: 000

Card 2/2

LARIONOVA, L. V.

Comparative study of the chemical structure of antigens of typhoid-paratyphoid microorganisms cultured by different methods. E. A. Petrosyan and L. V. Larionova. *Nauch. Trudy Moskov. Nauch.-Issledovatel. Inst. Vasilisa i Syrovatki* 8, 360-91 (1958); *Referat. Zhur. Khim., Biol. Khim.* 1957, Austr. No. 17742. — Typhoid and paratyphoid bacteria were cultured in liquid medium with aeration and on agar slants. The antigens of both were nearly identical in their chem. compn. as was the yield of polysaccharide fractions by acid hydrolysis. All fractions of either acid or alk. hydrolysis possessed no immunogenic properties. B. S. Levine

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USSR/Microbiology - Microorganisms Pathogenic to Humans and Animals.

F-5

Abs Jour : Ref Zhur - Bich., No 5, 1958, 19923

reaction of culture No 16. The antigen immunogenicity of both series ranged within similar limits. In fractionation of one or the other antigens with acetone a number of preparations of different chemical composition and differing serological activity were obtained. At that time one of the antigen fractions from Flexner bacilli was found to be more immunogenic than the initial preparations in a number of cases. On the other hand, the antigen fractions of the typhoid microorganisms were almost always less active.

Card 2/2

5.4110

68115

5(2)

SOV/78-5-1-27/45

## AUTHORS:

Nisel'son, L. A., Larionova, L. Ye.

## TITLE:

On the Interaction of Zirconium Tetrachloride With Phosphorus  
Pentachloride ✓

## PERIODICAL:

Zhurnal neorganicheskoy khimii, 1960, Vol 5, Nr 1,  
pp 172-174 (USSR)

## ABSTRACT:

The authors carried out a thermal analysis of the system  $ZrCl_4 - PCl_5$  and determined the relative volatility of the products of reaction of  $ZrCl_4$  and  $HfCl_4$  with  $PCl_5$ . The liquidus temperatures were determined according to V. F. Alekseyev. The temperatures were measured on a PP potentiometer by means of two thermocouples connected in series. The thermograms were recorded by a Kurnakov pyrometer. Results are shown in a table and in figure 1. The congruently melting compound  $ZrCl_4 \cdot PCl_5$  (melting point:  $365^\circ$ ) is formed. Figure 2 illustrates the dependence of the logarithm of molar concentration of the compounds  $ZrCl_4$  and  $ZrCl_4 \cdot PCl_5$  upon the reciprocal value of the liquidus temperature. The strong curvature is indicative of

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68115

SOV/78-5-1-27/45

## On the Interaction of Zirconium Tetrachloride With Phosphorus Pentachloride

association of the two components, which is in accordance with the formation of  $2\text{ZrCl}_4 \cdot \text{PCl}_5$  observed at low temperatures. The almost equal composition of the azeotropic and the eutectic point corresponds to the composition of the thermally instable compound  $2\text{ZrCl}_4 \cdot \text{PCl}_5$ . The product resulting from reaction of  $\text{PCl}_5$  and commercial  $\text{ZrCl}_4$ , which contained 1% of  $\text{HfCl}_4$ , was rectified in inert atmosphere. The separation could not be carried out as completely as in the experiments with  $\text{POCl}_3$  described in reference 5. If the rectification is carried out without inert atmosphere, lyophobic flakes of zirconium phosphates develop under the action of atmospheric oxygen which clog the rectifying column. The relative volatility of the azeotropic rectification products of  $\text{ZrCl}_4$  and  $\text{HfCl}_4$  with  $\text{PCl}_5$  was determined to 1.15 and 1.14. There are 2 figures, 1 table, and 7 references, 4 of which are Soviet.

SUBMITTED:  
Card 2/2

September 17, 1958

07777

S/078/60/005/009/028/040/XX  
B017/B058

11.4100  
AUTHORS: Ivanov-Emin, B. N., Nisel'son, L. A., Larionova, L. Ye.  
TITLE: Study of the Behavior of Some Fluoro Gallates of Alkali Metals in Aqueous Solutions  
PERIODICAL: Zhurnal neorganicheskoy khimii, 1960, Vol. 5, No. 9, pp. 1993-1995

TEXT: The fluoro gallates of potassium, rubidium and cesium were studied in aqueous phase by means of electrical conductivity measurements. The molecular electrical conductivities found for the compounds  $[GaF_3 \cdot 3H_2O]$ ,  $K_2[GaF_5 \cdot H_2O]$ ,  $Rb[GaF_4 \cdot 2H_2O]$  and  $Cs[GaF_4 \cdot 2H_2O]$  are given in Fig. 1 and Table 1. The determination was made at  $20^\circ C$ . It follows from the studies of the conductivity of fluoro gallates of potassium rubidium and cesium that the complex anion decomposes in aqueous solution according to the reaction scheme:  $K_2[GaF_5 \cdot H_2O] \rightarrow 2 KF + GaF_3 + H_2O$  and  $Cs[GaF_4 \cdot 2H_2O] \rightarrow CsF + GaF_3 + H_2O$ , K

Card 1/2



85599

Study of the Behaviour of Some Fluoro  
Gallates of Alkali Metals in Aqueous Solutions S/078/60/005/009/028/040/XX  
B017/B058

respectively. When diluting the gallium fluoride solutions, hydration and dissociation of the hydrated gallium fluoride molecule sets in according to the reaction scheme:  $[\text{GaF}_3 \cdot 3\text{H}_2\text{O}] + \text{H}_2\text{O} \rightarrow [\text{GaF}_2 \cdot 4\text{H}_2\text{O}]^+ + \text{F}^-$ . The dissociation rises slowly with increasing dilution and the molecular conductivity attains the valence of a two-ion electrolyte only at a dilution of  $V \approx 700 - 1000$  l/mole. The authors mention I. V. Tananayev and N. V. Bausova. There are 1 figure, 2 tables, and 5 references: 4 Soviet and 1 British.

SUBMITTED: June 6, 1959

Card 2/2

NISEL'SON, L.A.; IVANOV-EMIN, B.M.; LARIONOVA, L.Ye.

Crystals-liquid phase equilibria in binary systems formed by  $ZrCl_4$ ,  
 $HfCl_4$ ,  $SnCl_2$ , and  $BiCl_3$ . Zhur. neorg. khim. 6 no.1:186-191 '61. 4'  
(Zirconium chloride) (Hafnium chloride)  
(Phase rule and equilibrium) (MIRA 1/4:2)

IVANOV-EMIN, B.N.; NISEL'SON, L.A.; RABCVIK, Ya, I.; LARIONOVA, L.Ye.

Complex compounds of gallium halides with o-phenanthroline. Zhur.  
neorg.khim. 6 no.5:1142-1146 My '61. (MIRA 14:4)

(Gallium compounds) (Phenanthroline)

IVANOV-EMIN, B.N.; NISEL'SON, L.A.; LARIONOVA, L.Ye.

Properties of solutions of alkali metal gallates. Zhur.neorg.khim.  
7 no.3:522-526 Mr '62. (MIRA 15:3)  
(Gallic hydroxide)

LARIONOVA, M.; MOLCHANOV, M.; RABINOVICH, G.; RUSIN, Z.; SAVICHEV, P.;  
SEREBRYANYI, M.

"Financial and credit dictionary". Vol. 1. Reviewed by M.  
Larionova and others. Fin. SSSR 23 no.9:88-92 S '62.

(MIRA 15:9)

(Finance--Dictionaries)

LARIONOVA, M. A.

Unsaturated cyclic hydrocarbons and their derivatives.  
 XIX. Synthesis of 1,2,3-tribromocyclohexane and its reaction with quinoline. N. A. Domin and M. A. Larionova (State Univ., Leningrad). *Zhur. Obshch. Khim.* 26, 1398-1400 (1950); cf. *C.A.* 48, 13444b; 50, 7733a. — Refluxing 21 g. 3-bromo-5,5-dimethylhydantoin in  $\text{CCl}_4$  20 min., followed by addn. of 61.5 g. cyclohexane gave 60% 3-bromo-1-cyclohexene (I), bp 57.5-58°, d<sub>4</sub> 1.3398, n<sub>D</sub> 1.5271 (with  $\text{KMnO}_4$  this gave glutaric acid). This (4.8 g.) heated with 11.6 g. quinoline to 140-50°, then to 170-80° gave 1 g. 1,3-cyclohexadiene, b. 70-80°, d<sub>4</sub> 0.8110, n<sub>D</sub> 1.4748. I (16.1 g.) in  $\text{CCl}_4$  was treated with 5.1 ml.  $\text{Br}_2$  with ice cooling yielding 20 g. 1,2,3-tribromocyclohexane, b. 135.5-7°, d<sub>4</sub> 2.1352, n<sub>D</sub> 1.5939. This (17 g.) and 12.4 g. quinoline at 150°, finally at 180°, gave 2.3 g.  $\text{C}_8\text{H}_7$ ; treatment of the tribromide with aq.  $\text{KOH}$  gave mixed monobromides. The formation of  $\text{C}_8\text{H}_7$  in the reaction with quinoline is believed to occur through bromocyclohexadiene, which undergoes an allylic rearrangement to 5-bromo-1,3-cyclohexadiene, which then loses  $\text{HBr}$ .

G. M. Kosolapoff

LARIONOVA, M. A.; KLEBANSKIY, A. L.; BARTASHEV, V. A.

Synthesis of some 3,3,3-trifluoropropyl derivatives of  
phosphorus. Zhur. ob. khim. 33 no.1:265-266 '63.  
(MIRA 16:1)

1. Vsesoyuznyy nauchno-issledovatel'skiy institut sinteti-  
cheskogo kauchuka imeni S. V. Lebedeva.

(Phosphorus organic compounds)

ZHEVTYAK, P.N., dots.; LARIONOVA, E.A., kand. ekon. nauk; LAYKOV, A.M., prepodavatel'; YASTREBOV, N.A., dots.; SHASHKOVSKIY, A.V., st. prepodavatel'; KONDRAT'YEVA, A., red.; FILIPOVA, E., red.

[Finance of enterprises and branches of the national economy]  
Finansy predpriyatii i otraslei narodnogo khoziaistva. Moskva, Finansy, 1964. 430 p. (MIRA 17:11)

1. Kafedra finansov Leningradskogo finansovo-ekonomicheskogo instituta (for Zhevtyak, Larionova, Laykov, Yastrebov, Shashkovskiy).



SEMENSKAYA, Ye.M.; ABAKELIYA, TS.I.; KIGURADZE, E.Sh.; LARIONOVA, N.G.

Producing experimental leukemia in rats and mice by means of 9,10-dimethyl-1,2-benzanthracene. Soob.AN Gruz.SSR 24 no.5:601-606 My '60.  
(MIRA 13:8)

1. Institut eksperimental'noy i klinicheskoy khirurgii i gematologii  
AN GruzSSR, Tbilisi. Predstavleno akademikom K.D.Eristavi.  
(BENZANTHRACENE) (LEUKEMIA)

LARIONOVA, N.G.

Comparative evaluation of the osmotic resistance of leucocytes.  
Soob.AN Gruz.SSR 26 no.1:99-102 Ja '61. (MIRA 14:3)

1. AN Gruzinskoy SSR, Institut eksperimental'noy i klinicheskoy  
khirurgii i gematologii, Tbilisi. Predstavleno akademikom K.D.  
Eristavi.

(LEUCOCYTES)

LARIONOVA, N.G.

Osmotic resistance of the leucocytes in spontaneous and  
transplantable leukemias in mice. Soob. AN Gruz. SSR 28  
no.6:739-743 Je '62. (MIRA 15:7)

1. AN Gruzinskoy SSR, Institut eksperimental'noy i klinicheskoy  
khirurgii i gematologii, Tbilisi. Predstavleno akademikom  
K.D.Eristavi.

(LEUKEMIA) (LEUCOCYTES) (OSMOSIS)

LARIONOVA, N.G.

Change in the osmotic resistance of leucocytes and phagocytosis  
caused by the use of sympathicotropic and parasympathicotropic  
substances. Trudy Inst,eksp.i klin.khir.i gemat. AN Gruz.SSR  
10:225-230 '62. (MIRA 16:2)  
(LEUCOCYTES) (PHAGOCYTOSIS) (AUTONOMIC DRUGS)

DZHIBLADZE, N.V.; LARIONOVA, N.G.; BURDZHANADZE, O.I.

Changes in the composition of peripheral blood and bone marrow  
following resection of the lungs. Trudy Inst. eksp. i klin.  
khir. i gemat. AN Gruz. SSR 11:71-73 '63. (MIRA 17:8)

SEMENSKAYA, Ye.M.; ABAKELIYA, TS.I.; LARIONOVA, N.G.; KIGURATSE, E.Sh.

Producing an experimental leukemia model in mice. Trudy Inst.  
eksp. i klin. khir. i gemat. AN Gruz. SSR 11:151-154 '63.  
(MIRA 17:8)

LARIONOVA, N.G.; MEKHUZLA, T.A.

Osmotic resistivity of leucocytes in systemic blood diseases.  
Soob. AN Gruz. SSR 32 no.3:709-714 D '63.

(MIRA 19:11)

SEMENSKAYA, Ye.M.; ABAKELIYA, TS. I.; LARIONOVA, N.G.; TSOMAYA, I.S.

Effect of some vitamins on the development and course of  
experimental leucosis in mice. Soob. AN Gruz. SSR 33 no. 2:  
461-468 F '64. (MIRA 17:9)



NIKOLAYEV, A.F.; TERESHCHENKO, M.N.; LARIONOVA, N.G.

Emulsion copolymerization of styrene and N-vinylphthalimide  
in a redox medium. Zhur. prikl. khim. 38 no.10:2287-2292  
O '65. (MIRA 18:12)

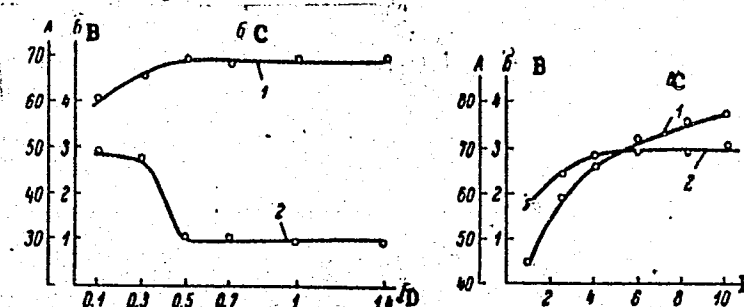
1. Leningradskiy tekhnologicheskij institut imeni Lensoвета.  
Submitted April 11, 1964.

L 10995-66 EWT(m)/EWP(j)/T/EWA(c)/ETC(m) RPL WH/RM  
 ACC NR: AP5025659 SOURCE CODE: UR/0080/65/038/010/2287/2292  
 44 55 44 55 44 55  
 AUTHOR: Nikolayev, A. F.; Tereshchenko, M. N.; Larionova, N. G.  
 44 55  
 ORG: Leningrad Technological Institute im. Lensovet (Leningradskiy tekhnologicheskiy institut)  
 44 55  
 TITLE: Emulsion type of copolymerization of styrene with N-vinylphthalamide in a redox medium  
 1.14.5 1  
 SOURCE: Zhurnal prikladnoy khimii, v. 38, no. 10, 1965, 2287-2292  
 TOPIC TAGS: copolymerization, styrene polymerization, organic synthesis, viscosity, EMULSION, POLYMERIZATION, COPOLYMER, THERMAL STABILITY, STYRENE, EMULSION, FLUID VISCOSITY, SOLID MECHANICAL PROPERTY  
 ABSTRACT: Copolymerization of styrene with N-vinylphthalamide containing 33 mol percent of the second component results in a thermally stable copolymer with good mechanical properties. The first stage of the investigation was aimed at determining the effect of the nature of the emulsifier on the copolymerization reaction. It was found that with the same concentration of emulsifier, the rate of copolymerization reaction is the greatest in the presence of the Sulfonol and is lowest in the presence of sodium oleate. When the concentration of Sulfonol is changed from 0 to 3% the yield of copolymer increases. The relationship of yield and the intrinsic viscosity of the copolymer on concentration of the emulsifier initiator and the duration of the reaction is shown in fig. 1. Sodium hydrosulfite, sodium sulfite, silver ni-  
 UDC: 547.538.141+670.7  
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L 10995-66

ACC NR: AP5025659

Fig. 1. Yield and intrinsic viscosity of the copolymer as a function of the concentration of emulsifier (a), initiator (b) and duration of reaction (c). A--yield of copolymer (%), B--intrinsic velocity,  $[\eta]$ , C--concentration of emulsifier (%), D--concentration of initiator (%), E--time (hrs), 1--yield of copolymer, 2--intrinsic viscosity.



trate and triethanolamine were used as initiators. From these initiators, copolymers with high intrinsic viscosity are produced only in the presence of sodium sulfite. Investigations of the effect of the water: oil ratio on the copolymerization

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L 10995-66

ACC NR: AP5025659

of styrene with N-vinylphthalamide show that the change in this ratio from 1 to 10 leads to a slight lowering of the intrinsic viscosity. The increase of temperature from 30 to 60°C increases the yield of the copolymer but at the same time lowers molecular weight significantly. This shows that the rate of termination of the chain is increased at higher temperatures. The investigated characteristics of the emulsion-type copolymerization of styrene with N-vinylphthalamide enabled the production of copolymers containing 25-30 mol % of N-vinylphthalamide and had good thermal and mechanical properties. Orig. art. has: 3 tables, 2 figures.

SUB CODE: 07/

SUBM DATE: 11Apr64/

ORIG REF: 010/

OTH REF: 004

SC  
Card 3/3

ACCESSION NR: AP4042083

~~S/0079/64/034/006/1780/1782~~

AUTHOR: Yuzhelevskiy, Yu. A.; Kogan, E. V.; Klebanskiy, A. L.; Larionova, O. N.

TITLE: 3,3,3 Trifluoropropylmethylcyclosilaxanes isomers

SOURCE: Zhurnal obshchey khimii, vol. 34, no. 6, 1964, 1780-1782

TOPIC TAGS: trimer, pentamer, stereoisomer, hydrolisate

ABSTRACT: The authors established that a trimer, obtained during the catalytic destruction of the hydrolisate 3,3,3-trifluoropropylmethylcyclosilaxane, is a mixture of two stereoisomers. During the catalytic destruction process, in a Claisen flask at 200° (4 mm), a distillate was obtained which was a cyclic 3,3,3-trifluoropropylmethylcyclosilaxanes mixture. The authors concluded that further investigation is necessary to clarify the structure of the compound.

ASSOCIATION: none

SUBMITTED: 04Feb64

ENCL: 00

SUB CODE: GC

NO REF SOV: 001

OTHER: 003

Cord 1/1

YUZHELEVSKIY, Yu.A.; KOGAN, E.V.; KLEBANSKIY, A.L.; LARIONOVA, O.N.

Rearrangement of 3,3,3-trifluoropropylmethylsiloxanes in  
acetone under the effect of basic catalysts. Zhur. ob. khim.  
34 no.8:2810 Ag '64. (MIRA 17:9)

1. Vsesoyuznyy nauchno-issledovatel'skiy institut sinteticheskogo  
kauchuka imeni S.V. Lebedeva.

LARIONOVA, O.R.

LARIONOVA, O.R.; FEYSEL'SON, I.B.

Using mineral hydrogen sulfide solution for edge water drive.

Neft. khoz. 35 no.8:46-50 Ag '57.

(MIRA 10:11)

(Oil field flooding) (Hydrogen sulfide)

LARIONOVA, P. N.

LARIONOVA, P. N. -- "The Effect of the Products of Protein Decomposition on the Germination of Seeds and the Action of Enzymes." Vol. 17, no. 52, Moscow State Pedagogical Institute V. I. Lenin (Dissertation for the Degree of Candidate in Biological Sciences).

SO: Vechernaya Moskva January-December 1952



CA LARIONOVA, T.A.

14

Effect of trinitrotoluene on biochemical utilization of oxygen and oxidizability of water. T. A. Larionova (Irkutsk Med. Inst.). *Gigiena i Sanit.* 1951, No. 8, 20-2.--Trinitrotoluene (25-80 mg./l.) represses the rate of natural (biochem.) O consumption by sewage water by 5-30%, apparently by retarding the activity of the bacterial population. Expts. with *Daphnia* colonies showed considerable toxicity of the chemical. G. M. Kosolapoff

LARIONOVA, T.A., dotsent (Irkutsk); VLASOVA, T.P., vrach (Bodaybo)

Medical service for the workers of Bodaybo; on the 50th  
anniversary of the Lena events. Sov.zdrav. 21 no.12:6-9 '62.  
(MIRA 15:12)  
(BODAYBO--LABOR AND LABORING CLASSES--MEDICAL CARE)

LARIONOVA, T. I.

LARIONOVA, T. I. = "Carbohydrate-phosphorus and oxidation metabolism in the liver and skeletal muscles under normal conditions and in experimental thyrotoxicosis." Moscow Order of Lenin and Order of Labor Red Banner U ineni N. V. Leninsky. Soil Biology Faculty. Moscow, 1956. (Dissertations for the Degree of Candidate in Biological sciences).

SO: Knizhnyy Lektoris No. 22, 1956

EXCERPTA MEDICA Sec.2 Vol.10/8 Phy.Biochem. Aug 57  
LARIKOV, T.I.

3309. LARIONOVA T.I. Dept. of Animal Biochem., State's Univ., Moscow.  
\*Carbohydrate-phosphate metabolism in liver and skeletal muscle in normal and experimentally thyrotoxic animals (Russian text) VOP.MED.KHIMII. 1956, 2/5 (378-389) Illus. 9  
In experimental thyrotoxicosis in the kidney tissue of rats both the aerobic and anaerobic fixation of inorganic P decreased, with simultaneous increase in respiration. As a result, the phosphorylation coefficient in the experiment was twice as low as in the control. In the tissue of the skeletal muscle (leg) of the experimental rats, the production of the labile P was disturbed to a significant degree due to inhibition (by 50%) of the phospho-creatine reaction. In the glycogen samples, on incubation of intestinal tissue of rats receiving thyroldin for prolonged periods of time (5 weeks and more), accumulation of large quantities of fructose-diphosphate was obtained, some 2-3 times more than in controls. The accumulation of fructose-diphosphate in the tissues of experimental animals may be regarded as a result of its increased production, and not as a result of arrest of its further metabolism, because there were no disturbances in the production of lactic acid from glycogen.

LARIONOVA, T.I.

20-1-36/54

AUTHOR YEUREINOVA, T.N., and LARIONOVA, T.I.  
 TITLE Protein-Carbohydrate Coacervates and Catalase  
 (Belkovo - uglevodnyye koatservaty i katalaza. Russian)  
 PERIODICAL Doklady Akademii Nauk SSSR, 1957, Vol 115, Nr 1, pp 133-136 (U.S.S.R.)  
 ABSTRACT The present work is a continuation of the studies of the influence of ferments in coacervate systems. In the present studies coacervates were produced of gum arabic and gelatine, protamin and gum arabic as well as protamin and gelatine. Their use made it possible to study the activity of catalase at from 4,2 - 9 pH. Liver catalase and a bacterial catalase (of Micrococcus lysodeikticus) served as ferments. The influence of catalase was determined in the following systems: I. in coacervate. II. in coacervative drops. III. in balanced liquid. IV. in buffer solution. Bacterial catalase: The ferment proved to be practically inactive at 4,27 pH. When pH was raised to from 6,3 - 6,4 the ferment could be reactivated only partly. The ferment, without preliminary influence of an aciduous medium, has a high activity at from 6,0 - 6,3 pH. The indices of the determination in the coacervate with 6,0 pH are mentioned in tables 1 - 3 . 1.) The activity on the ferment is practically the same both in the coacervate as a whole and in the fractions corresponding to its drops. In balanced liquid its activity is of minor character. 2.) The ferment is active in a

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20-1-36/54

Protein-Carbohydrate Coacervates and Catalase

very high dilution. In the case of the use of higher ferment concentrations the whole  $H_2O_2$  decomposes in the solution as well as in the coacervate: a substratum is lacking. At the same time the increase of the super-oxide quantity is undesired because of the destruction of coacervate drops. 4.) The greatest activity of catalase is to be found in coacervates at  $43^{\circ}$  in the buffer solution, however, at  $37^{\circ}$ . Protamin reduces the activity of catalase. Liver catalase. Experimental results are mentioned in table 6. At 4,27 pH the whole ferment was practically concentrated in the coacervate drop. At 6,0 pH catalase can be found mainly in balanced liquid. The results of the present work lead to the assumption of a possible vacuole rôle in the cells. In vacuoles there are less colloides than in the surrounding plasma. It is, therefore, possible that the formation of vacuoles as well as a local liquefaction of plasma in cells as well as in one-cell animals promotes the acceleration of fermentative processes more in this respect than is the case in a viscous plasma. (7 tables and 6 Slavic references).

Card 2/3

20-1-36/54

Protein-Carbohydrate Coacervates and Catalase

ASSOCIATION	Moscow State University imeni M. V. Lomonosov (Moskovskiy gosudarstvennyy universitet im. M.V. Lomonosova)
PRESENTED BY	OPARIN, A.I., Academician, April 4, 1957
SUBMITTED	19.3.1957
AVAILABLE	Library of Congress

Card 3/3

YEVREINOVA, T.N.; POGOSOVA, A.V.; CHUKANOVA, T.I.; LARIONOVA, T.I.

Introducing of amino acids into coacervates. Nauch. dokl.  
vys. shkoly; biol. nauki no.1:159-164 '62. (MIRA 15:3)

1. Rekomendovana kafedroy biokhimii rasteniy Moskovskogo  
gosudarstvennogo universiteta im. M.V. Lomonosova.

(COACERVATES)

(AMINO ACIDS)



OPARIN, A.I., akademik; YEFREINOVA, T.N.; LARIONOVA, T.I.; DAVYDOVA, I.M.

Synthesis and decomposition of starch in coacervate drops.  
Dokl. AN SSSR 143 no.4:980-983 Ap '62. (MIRA 15:3)  
(Starch) (Coacervates)

LARIONOVA, T.I.; KUDLAY, D.G.; TASHPULATOV, R.Yu.

Comparative study of phosphatase activity in *Escherichia coli* of pathogenic and nonpathogenic serological types. Zhur. mikrobiol., epid. i immun. 41 no.1:59-63 Ja '64. (MIRA 18:2)

1. Institut epidemiologii i mikrobiologii imeni Gamalei AMN SSSR, Moskva.

LARIONOVA, T.I.; PETROVSKAYA, V.G.; BORUNOVA, S.F.

Comparative study of the phosphatase activity of typhoid fever  
bacteria of various virulence. *Bull. eksp. biol. i med.* 57 no.4:  
78-80 Ap 1964. (MIRA 18:3)

1. Otdel obshchey meditsinskoy mikrobiologii (zav. - deystvitel'nyy  
chlen AMN SSSR V.D. Timakov) Instituta epidemiologii i mikrobiologii  
imeni Gamalei (dir. - prof. P.A. Vershilova), Moskva. Submitted  
June 15, 1963.

L 63385-65 ENT(1)/ENA(j)/ENA(b)-2 JK

ACCESSION NR: AP5020102

UR/0016/65/000/008/0145/0146

576.851.49.095.3

AUTHOR: Larionova, T. I.; Kudlay, D. G.; Petrovskaya, V. G.

TITLE: Oxidative metabolism in salmonellas differing in virulence

SOURCE: Zhurnal mikrobiologii, epidemiologii i immunobiologii, no. 8, 1965, 145-146

TOPIC TAGS: oxidative metabolism, salmonella, microbiology, antigen

ABSTRACT: No differences were noted in the respiratory rate of salmonella strains genetically related but with different antigen structure and virulence in the presence of Krebs cycle substrates or in the precursors of these strains. Genetically unrelated strains (Nos. 70, 1, and 112) with markedly different virulence consumed O<sub>2</sub> intensely in the presence of pyruvic, succinic, oxalic, fumaric, lactic, glutamic, malic, and acetic acids. They did so less actively in the presence of citric acid. They consumed extremely little O<sub>2</sub> in the presence of α-ketoglutaric acid. O<sub>2</sub> consumption by the most virulent strain, No. 70, decreased in the presence of glucose (approximately 30% less than that of the avirulent strain No. 1126). The

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L 63385-65

ACCESSION NO: AP5020102

2  
respiratory rate in the presence of glucose and sensitivity to cyanide in genetically related variants of the causative agents of typhoid and mouse typhoid with different virulence were virtually the same at the same growth phase of the population, regardless of the antigen structure or rate of multiplication of the cultures.

ASSOCIATION: Institut epidemiologii i mikrobiologii im. N. F. Gamalei AMN SSSR  
(Institute of Epidemiology and Microbiology, AMN SSSR)

SUBMITTED: 07May64

ENCL: 00

SUB CODE: LS

NO REF SOV: 000

OTHER: 000

lm  
Card 2/2

LARIONOVA, T.I.; KUDLAY, D.G.; PETROVSKAYA, V.G.

Oxidative metabolism in salmonella of various virulence. Zhur.  
mikrobiol., epid. i immun. 42 no.8:145-146 Ag '65. (MIRA 18:9)

1. Institut epidemiologii i mikrobiologii imeni Gamalei AMN SSSR.

L 46329-66 EWT(m)/ENP(t)/ETI IJP(c) JD

ACC NR: AP6019766

SOURCE CODE: UR/0370/66/000/003/0084/0089

AUTHOR: Konovalov, E. Ye. (Obninsk); Peyzulayev, Sh. I. (Obninsk); Larionova, I. Ye. (Obninsk); Kondrat'yeva, L. I. (Obninsk); Pinchuk, G. P. (Obninsk)

ORG: none

TITLE: Determination of equilibrium distribution coefficients of impurities in bismuth

SOURCE: AN SSSR. Izvestiya. Metally, no. 3, 1966, 84-89

TOPIC TAGS: bismuth, metal zone melting, distribution coefficient, metal crystallization

ABSTRACT: In order to calculate the process of zone melting with optimum parameters, it is necessary to have the values of equilibrium coefficients of distribution of the impurities ( $k_0$ ). These coefficients can be calculated by the method of Burton, Prim, and Slichter (J. Chem. Phys. 21, 1987, 1953) if the effective distribution coefficients  $k$  are known from experiments conducted at different crystallization rates ( $f$ ) but under the same conditions of stirring of the melt. Using this method, the authors determined the values of  $k_0$  for the impurities  $Ag$ ,  $^{210}Pb$ ,  $^{63}Cu$ ,  $^{201}Tl$ ,  $^{109}Cd$ , and  $Ni$  in bismuth. The values of  $k$  were determined by two independent methods, one involving zone melting processes and the other a normal directed crystallization. The two methods produced very similar results. This permitted the recommendation of their mean values as the most reliable values of the equilibrium coefficients of

Card 1/2

UDC: 669.764

L 46329-66

ACC NR: AP6019766

distribution for the above-mentioned impurities in bismuth. Orig. art. has: 4 figures, 4 tables, and 4 formulas.

SUB CODE: 11/ SUBM DATE: 23Feb65/ ORIG REF: 004/ OTH REF: 002

Card 2/2 fv



LARIONOVA, T.S.; RAPOPORT, K.V.

Study of the qualities of sodium sulfate and potash as additions for concrete hardeners. Sbor. nauch. trud. NII po stroi.  
ASIA no.4:98-107 '63, (MIRA 17:8)

LARIONOVA, T.V.; PETROVA, E.B.; PODMOSTKOVA, V.A.; YAKIMOV, P.A.

Effect of molybdenum and boron in an enriched medium on the  
biosynthesis of streptomycin. Trudy Len.khim.-farm.inst.  
no.15:121-126 '62. (MIRA 15:11)

(STREPTOMYCIN)  
(BACTERIOLOGY--CULTURES AND CULTURE MEDIA)

LARIONOVA, V.D.; KHLYSTOV, V.A.

Dynamics of syringomyelitic arthropathy. Zhur. nevr.i psikh. 60  
no.10:1291-1292 '60. (MIRA 14:1)

1. Yaroslavskaya gorodskaya klinicheskaya bol'nitsa imeni N.V.  
Solov'yeva (glavnyy vrach P.M. Meshavkina).  
(SYRINGOMYELIA) (BONES—DISEASES)  
(JOINTS—DISEASES pathol.)

ACC NR: AP6034111 (A, N) SOURCE CODE: UR/0358/66/035/005/0532/0537

AUTHOR: Kamennov, N. A.; Alekseyev, A. N.; Starkov, A. V.; Volkova, A. P.; ~~Larionova, V. D.~~ *Scientific*

ORG: Central Disinfection<sup>Scientific</sup> Research Institute, Ministry of Health, Moscow (Tsentral'nyy nauchno-issledovatel'skiy dezinfektsionnyy institut Ministerstva zdavookhraneniya)

TITLE: Properties of ovicidal drugs

SOURCE: Meditsinskaya parazitologiya i parazitarnyye bolezni, v. 35, no. 5, 1966, 532-537

TOPIC TAGS: ovicidal drug, drug effect, para isobutyl phenyl ester, toxicity, phenyl compound, disinfectant, pesticide

ABSTRACT: Ortho- and paracresylacrylates and phenylacetate were the most effective ovicidal drugs of the 13 fatty acid phenyl esters studied. Orthocresylacrylate was most effective against loose eggs laid in hair when applied in a 2% solution in a 2% aqueous sulfanole solution. Their toxicity is not more than DDT and they are effective only against eggs and not against imagoes. Orig. art. has: 6 tables and 1 figure. [W.A. 50]

SUB CODE: 06/ SUBM DATE: 16Nov64

UDC: 615.777/.779+616.5-002.957.5 (Pediouli-  
dae)-085.77

Card 1/1

ACC NR: AP6034111 (A, N) SOURCE CODE: UR/0358/66/035/005/0532/0537

AUTHOR: Kamennov, N. A.; Alekseyev, A. N.; Starkov, A. V.; Volkova, /  
A. P.; Larionova, V. D.

ORG: Central Disinfection<sup>Scientific</sup> Research Institute, Ministry of Health,  
Moscow (Tsentral'nyy nauchno-issledovatel'skiy dezinfektsionnyy insti-  
tut Ministerstva zdravookhraneniya)

TITLE: Properties of ovicidal drugs

SOURCE: Meditsinskaya parazitologiya i parazitarnyye bolezni, v. 35,  
no. 5, 1966, 532-537

TOPIC TAGS: ovicidal drug, drug effect, para isobutyl phenyl ester,  
~~toxicity, phenyl compound, disinfectant, pesticide~~

ABSTRACT: Ortho- and paracresylacrylates and phenylacetate were the  
most effective ovicidal drugs of the 13 fatty acid phenyl esters  
studied. Orthocresylacrylate was most effective against loose eggs  
laid in hair when applied in a 2% solution in a 2% aqueous sulfanole  
solution. Their toxicity is not more than DDT and they are effective  
only against eggs and not against imagos. Orig. art. has: 6 tables  
and 1 figure. [W.A. 50]

SUB CODE: 06/ SUBM DATE: 16Nov64

UDC: 615.777/.779+616.5-002.957.5 (Pediculi-  
dae)-085.77

Card 1/1

ACC NR: AP6024436

SOURCE CODE: UR/0016/66/000/007/0024/0029

AUTHOR: Vashkov, V. I.; Dremova, V. P.; Starkov, A. V.; Volkova, A. P.;  
Sindorova, M. V.; Katunina, V. I.; Lari nova, V. D.; Yerina, K. M.

ORG: Central Disinfection Institute, Moscow (Tsentral'nyy dezinfektsionnyy institut)

TITLE: Insecticidal properties of the various forms of DDVP and perspectives of  
their application for disinfection

SOURCE: Zhurnal mikrobiologii, epidemiologii, i immunobiologii, no. 7, 1966, 24-29

TOPIC TAGS: insecticide, aerosol, DDVP, insect ~~pest~~

ABSTRACT: Preparations of DDVP (0,0-dimethyl 0-2,2-dichlorovinyl phosphate) can be  
used for the immediate extermination of flies and domestic insects (bugs,  
cockroaches, fleas); in the form of 0.5-0.3% aqueous solutions. A  
minimal amount, assuring 100% destruction of flies, fleas, and bugs on  
finished surfaces (glass, wood) is 0.05-0.5 g, for cockroaches 1-2 g,  
per 1 m<sup>2</sup> (see Tables 1 and 2). Residual action at 18-20° lasts no  
longer than 5-7 days. To exterminate fly larvae in their substrate,  
a 0.2%-0.5% aqueous solution can be used at a standard flow rate of  
the pressure fluid (1-2 liters of solution for materials up to 30 cm  
thick. Bait for flies and cockroaches can be prepared from aqueous

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UDC: 616.981.452-092.9-097.3

ACC NR: AP6024436

solutions of DDVP. However, the short period (2 days) of residual action of such bait limits prospects for use in practice. DDVP dusts can be used to exterminate a number of domestic parasites. However, in view of the brief period of residual action, further study of the prospects for use in extermination practice is necessary. DDVP is toxic to animals when taken internally. (LD<sub>50</sub> of various samples of preparation is 100—200 mg/kg for mice.) Inhalation of a 0.5% aqueous solution during single or repeated spraying, does not induce any toxic effect in various animals. In preparing aqueous solutions and other forms of DDVP, precautionary measures must be observed, in view of the possibility of entry of the concentrated preparation into the mouth and skin. DDVP in aerosol or vapor form is especially promising.

[WA-50; CBE No. 11]

SUB CODE: 06/ SUBM DATE: 22Feb65/ ORIG REF: 002/ OTH REF: 002/

Card 2/2

SOURCE CODE: UR/0016/66/000/007/0024/0029  
4

LARIONOV, A.D.; LARIONOVA, V.F.

Results of the use of some laboratory methods in the diagnosis  
of rheumatic fever. Uch. zap. Stavr. gos. med. inst. 12:  
345-346 '63. (MIRA 17:9)

1. Kafedra fakul'tetskoy terapii (zav. dotsent N.A. Aushev)  
Stavropol'skogo gosudarstvennogo meditsinskogo instituta  
i klinicheskaya laboratoriya Stavropol'skoy krayevoy bol'nitsy  
(glavnyy vrach Yu.P. Zotov).



LARIONOVA, V. G.

Photoformation of charged  $\pi$  mesons in hydrogen and  
deuterium. M. I. Adamovich, G. V. Kur'ukhova, V. G.  
Larionova, and S. P. Khramov. *Bull. Acad. Sci. D 9-551*  
19, 548 (1965) (Engl. translation).—See C.A. 50, 7618.  
B. M. H.

4

*[Handwritten initials]*

LARIONOVA, V. G.

4821

PHOTOFORMATION OF CHARGED  $\pi$  MESONS FROM  
HYDROGEN AND DEUTERIUM: M. I. Adamovich, G. V.  
Kuz'micheva, V. G. Larionova, and S. P. Kharlamov.  
Izvest. Akad. Nauk S.S.S.R. Ser. Fiz. 19, 606(1955) Sept.

Oct. (In Russian)

Experimental studies indicated a considerable electrical  
dipolar absorption of  $\gamma$  quanta at the threshold of  $\pi^+$ -meson  
photo formation from hydrogen. In the case of  $\pi^-$ -meson  
photo formation in deuterium, an interaction spin was ob-  
served causing a shift in the spin of the nucleon system.  
The probability limit of the spin shift of the nucleon system  
near the threshold of  $\pi^-$ -meson formation was 40%. (U.V.J.)

*new*

*PML*

*1- PML*

LARIONOVA, V. G.

USSR/ Physics -  $\pi$ -mesons

Card 1/1 Pub. 22 - 16/53

Authors : Adamovich, M. I.; Kuzmichova, G. V.; Larionova, V. G.; and Kharlamov, S. P.

Title : Photo-formation of negative  $\pi$ -mesons on deuterium

Periodical : Dok. AN SSSR 102/4, 715-718, Jun 1, 1955

Abstract : The reaction  $\gamma + d \rightarrow p + p + \pi^-$  was studied by the method of photo-emulsions. The photo-emulsions were filled with water and exposed to a beam of photons. Five USA references (1952-1954). Table; diagrams.

Institution : The Acad. of Sc., USSR, P. N. Lebedev Physical Institute

Presented by: Academician I. Ye. Tamm., February 1, 1955

LARIONOVA, V.G., KHARLAMOV, S.P., RUZHITCHOVA, G.V., ADAMOVICH, M.I.,  
VERSLER, V.I.

Photoproduction of negative  $\pi$ -mesons on deuterium  
(11/60)

CERN-Symposium on High Energy Accelerators and Pion  
Physics.

Geneva 11-23 June 56  
In. Branch #5

LARIONOVA, V.G., ADAMOVICH, M.I., VEKSLER, V.I., KUZMICHEVA, G.V., KHARLAMOV, S.P.

"Photoproduction of <sup>+</sup>egative  $\pi$  Mesons on Deuterium," paper  
presented at CERN Symposium, 1956, appearing in Nuclear Instruments,  
No. 1, pp. 21-30, 1957

AUTHORS: Adamovich, M. I., Kuz'micheva, G. V., SOV/56-35-1-3/59  
 Larionova, V. G., Kharlamov, S. P.

TITLE: The Photoproduction of  $\pi^-$ -Mesons on Deuterium Near  
 the Threshold (Fotorozhdeniye  $\pi^-$ -mezonov na deyterii  
 vblizi poroga)

PERIODICAL: Zhurnal eksperimental'noy i teoreticheskoy fiziki, 1958,  
 Vol 35, Nr 1, pp 27 - 38 (USSR)

ABSTRACT: In several earlier papers (Refs 1-4) the ratio of  
 the cross sections of the processes  $\gamma+d \rightarrow p+p+\pi^-$  and  
 $\gamma+d \rightarrow n+n+\pi^+$  has already been investigated ; Watson  
 (Watson) (Ref 4) showed that  $\sigma^-/\sigma^+$  for deuterium  
 corresponds to that for free nucleons. The authors  
 of the present paper investigated the reaction  $\gamma+d \rightarrow p+p+\pi^-$   
 on the 265 MeV synchrotron of the FIAN (Fizicheskii  
 institut Akademii nauk SSSR - Physics Institute AS USSR)  
 with NIKFI-R photoemulsion plates which were enriched with  
 deuterium (as  $D_2O$ ). (Plates:  $3.2 \cdot 10^{22}$  deuterium nuclei  
 per  $cm^3$ ). The maximum energy of the  $\gamma$ -quanta amounted to  
 250 and 200 eV for a magnetic field with  $H=7000$  Oe in

Card 1/3

The Photoproduction of  $\pi^-$ -Mesons on Deuterium Near  
the Threshold

SOV/56-35-1-3/59

the evaluation of the plates the microscope MBI -2 was used, for the determination of coordinates in the case of multiple scattering MBI -8. For the dependence of the cross section of meson production on photon energy ( $5 < E < 30$  MeV,  $p < 0,7$ ) experimental results are compiled in a table, where they are compared with theoretical results. Measuring results:  $2,98 \pm 0,50$  (1,125),  $5,90 \pm 70$  (1,175),  $5,91 \pm 0,91$  (1,225),  $3,66 \pm 0,52$  (1,30); (the values in brackets denote the photon energy [ $\mu\text{e}^2$ ], the  $\sigma$  are given in units of  $10^{29}\text{cm}^2$ ). In chapter 4, a number of other experimental results is compared with the predictions of impulse approximation. It is shown that the square of the matrix element of the photoproduction of  $\pi$ -mesons by neutrons near the meson threshold is a constant and equal to

$|\overline{K}_n|^2 = (0,785 \pm 0,072) \cdot 10^{-27}\text{cm}^2$ . For  $\sigma^-/\sigma^+ = |K_n|^2/|K_p|^2$   $1,34 \pm 0,14$  is obtained. In conclusion the authors thank Professor V.I.Veksler and A.M.Baldin for their valuable advice and assistance. There are 8 figures, 1 table, and

Card 2/3

The Photoproduction of  $\pi^-$ -Mesons on Deuterium Near  
the Threshold

SOV/56-35-1-3/59

9 references, 3 of which are Soviet.

ASSOCIATION: Fizicheskiy institut im.P.N.Lebedeva Akademii nauk SSSR  
(Physics Institute imeni P.N.Lebedev, AS USSR)

SUBMITTED: February 10, 1958

Card 3/3



LARIONOVA, V. G.

24(1)

AUTHORS:

Kharlov, S. P., Adamovich, M. I., Larionova, V. G.

TITLE:

On the Amount of the Ratio  $\sigma'/\sigma$  Near the Threshold of Meson Photoproduction (O velichine otnosheniya  $\sigma'/\sigma$  blizl poroga fotoproduktsii mezonov)

PERIODICAL:

Zhurnal eksperimental'noy i teoreticheskoy fiziki, 1959, Vol 36, Nr 5, pp 945 - 947 (USSR)

ABSTRACT:

The amount of the yield ratio of negative and positive photo-mesons from deuterium  $\sigma'/\sigma$  may deviate considerably from the value  $\sigma'/\sigma$  for pion-photoproduction on free nucleons. This fact has already been investigated in reference 1. A table contains the pion yield ratios for 165 and 310 Mev from deuterium at angles of 60 and 75° to the direction of photon radiation. The abstracts of the Coulomb (Kulon) interaction ( $\pi^+\pi^+$ ) and ( $\pi^+\pi^-$ ) and a correction which take into account that  $\pi^+$ - and  $\pi^-$ -mesons of one and the same energy can be formed by photons from different energy intervals. The  $\sigma'/\sigma$ -values are smaller than the corresponding yield conditions, the difference becomes smaller with in-

Card 1/3

creasing energy. The corrections are then discussed. Figure 1 shows the experimentally found  $\pi^+$ -distribution according to mesons in the reaction  $\gamma d \rightarrow \pi^+\pi^+\pi^+$  for photons between 155 and 165 Mev (cf. Ref 1). Figure 2 shows the dependence pion yield ( $6.7 - 11.7$  Mev) at an angle of 60° to the photon direction, on the energy of  $\gamma$ -quanta. The  $\pi^+$ -curve is lower and has a lower maximum than the  $\pi^-$ -curve, which is also shifted somewhat in the direction of higher energies. The curves are normalized according to

$$\left[ \frac{d^2}{d\Omega dE} \left( \frac{N}{N_0} \right) \right]_{\pi^+/\pi^-} = 2.10 \pm 0.17 \exp (\text{Ref 5}).$$
 For a photon energy of  $\sim 160$  Mev and a Coulomb correction equal to  $1.065 \pm 0.11$  results for  $\sigma'/\sigma$ . If in the Carlson-Lee experiment the upper boundary of the spectrum is established not at 165 but at 167 Mev, the

$\pi^+/N_0$  agrees with  $\sigma'/\sigma = 1.42 \pm 0.12$ . This shows the important influence exercised by this boundary. This is particularly

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Meson Photoproduction

started in the photoproduction of charged mesons on beryllium

$(\gamma Be_9 \rightarrow \pi^+\pi^+\pi^+)$ , which has an energy threshold that is by 17.9 Mev lower than that of  $\pi^+$ -production. This explains the anomalous behavior of the quantities  $\pi^+/N_0$  if the upper boundary of the spectrum is decreased, as also in the case of an increase of the energy of the flying-off angle of the recorded meson. There are 2 figures, 1 table, and 5 references, 2 of which are Soviet.

ASSOCIATION: Fizicheskii institut im. P. M. Lebedeva Akademi nauk SSSR (Physics Institute Imeni P. M. Lebedev of the Academy of Sciences, USSR)

SUBMITTED: November 26, 1959

Card 3/3

S/056/61/041/006/023/054  
B102/B138

AUTHORS: Adamovich, M. I., Gorzhevskaya, E. G., Larionova, V. G.,  
Panova, N. M., Popova, V. M., Kharlamov, S. P., Yagudina, F.R.

TITLE: The energy dependence of the photoproduction cross section of  
 $\pi^+$  mesons on hydrogen near the threshold

PERIODICAL: Zhurnal eksperimental'noy i teoreticheskoy fiziki, v. 41,  
no. 6(12), 1961, 1811-1817

TEXT: The paper gives results of  $\pi^+$  photoproduction cross section measurements made in the photon energy range from 167 to 212 Mev at an angle  $\theta = \arccos(k - 0.93)/kq$ , i. e. the angle in the c. m. s. at the contribution of the non-physical region to the dispersion integral vanishes.  $k$  denotes the photon momentum, 0.93 is its threshold,  $q$  and  $\omega$  are momentum and total energy of the pion,  $\theta$  the angle of emission of the meson;  $\hbar = c = \mu = 1$ . The energy range was chosen so as to satisfy the relation  $k\omega - kq \cos \theta = 0.93$ ; it holds exactly for 195-Mev photons, for 167 and 212 Mev it is 0.88 and 0.99, which are both close to the threshold value. The photon ray from the synchrotron of the FIAN with a maximum

Card 1/04

The energy dependence of the ...

S/056/61/041/006/023/054  
B102/B138

energy of 250 Mev was collimated and directed on to the hydrogen target, a brass cylinder of 17 $\mu$  wall thickness, placed in a vacuum chamber. The detector was a stack of 50 layers of NIKFI BK-400 (NIKFI BK-400) emulsion plates. It was placed between two 2cm-thick emulsion blocks and fixed so that the mesons struck its end. The emulsions were evaluated as usual, by MBH-1 (MBI-1) microscopes. All  $\pi$ - $\mu$  decay events were selected. An area of 340 cm<sup>2</sup> yielded 3322  $\pi$ - $\mu$  decays and 64  $\pi^-$  decays. The differential photoproduction cross sections were plotted after applying corrections for energy loss, scattering meson decay and background (Fig. 3). The results are in good agreement with dispersion theory, where the imaginary part of the resonance amplitude is determined empirically. The experimental results were treated by the method of least squares to find the threshold value of the matrix element of  $\pi^+$  photoproduction  $\chi^{-1} d\sigma/d\Omega$  and its dependence on  $q^2$ ;

$\chi = (q/k)(1+1/M)^{-2}$ , M - nucleon mass. For  $0.17 \leq q^2 \leq 0.74$

$$\frac{1}{\chi} \frac{d\sigma}{d\Omega} \left[ 10^{-20} \frac{\text{cm}^2}{\text{cm}^2 \text{cm}^2} \right] = (1.90 \pm 0.15) - (0.34 \pm 0.22) q^2, \quad (5)$$

$$\frac{1}{\chi} \frac{d\sigma}{d\Omega} \left[ 10^{-20} \frac{\text{cm}^2}{\text{cm}^2 \text{cm}^2} \right] = (2.39 \pm 0.21) - (2.87 \pm 0.93) q^2 + (2.80 \pm 1.0) q^4, \quad (6)$$

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S/056/61/041/006/023/054  
B102/B138

The energy dependence of the ...

was found. The threshold value was determined from power expansions of the squares of the matrix elements,  $a_0 = (1.90 \pm 0.15) \cdot 10^{-29} \text{ cm}^2/\text{steradian}$ , which is in good agreement with the theoretical value,  $a_0 = 2.04 \cdot 10^{-29} \text{ cm}^2/\text{sterad}$ . Experimentally,  $\sigma^-/\sigma^+ = 1.34 \pm 0.11$  was found. Using the theoretical  $a_0$  value, the calculated value is  $\sigma^-/\sigma^+ = 1.28$ . The pion photoproduction cross section as a function of the photoproduction amplitudes is given by

$$d\sigma/d\Omega = (q/k) \{ |F_1|^2 + |F_2|^2 - 2\text{Re } F_1^* F_2 \cos \theta + \frac{1}{2} \sin^2 \theta (|F_3|^2 + |F_4|^2 + 2\text{Re } F_3^* F_4 + 2\text{Re } F_1^* F_4 + 2\text{Re } F_2^* F_4 \cos \theta) \} \quad (9)$$

with

$$\begin{aligned} F_1 &= \sqrt{2} F_{10} - \sqrt{2} F_{11} \cos \theta, & F_2 &= \sqrt{2} F_{20}, \\ F_3 &= \sqrt{2} F_{30} + \sqrt{2} F_{31} / (1 - \beta \cos \theta), & F_4 &= \sqrt{2} F_{41} / (1 - \beta \cos \theta); \end{aligned}$$

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The energy dependence of the ...

S/056/61/041/006/023/054  
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$\beta$  denotes pion velocity. From experimental data for 15 and 165° in the c. m. s. the amplitudes were calculated for 185-Mev photons:

$$\begin{aligned} [(F_{10})_1 &= (1.81 \pm 0.034) \cdot 10^{-2}, & (F_{11} + F_{20})_1 &= -(0.105 \pm 0.034) \cdot 10^{-2}, \\ (F_{10})_2 &= -(1.81 \pm 0.034) \cdot 10^{-2}, & (F_{11} + F_{20})_2 &= (0.105 \pm 0.034) \cdot 10^{-2}. \end{aligned}$$

The authors thank Professor P. A. Cherenkov for help, A. M. Baldin and A. I. Lebedev for discussions and A. A. Svetlov, Engineer, for assistance. There are 5 figures, 2 tables, and 15 references: 3 Soviet and 12 non-Soviet. The four most recent references to English-language publications read as follows: J. Hamilton, W. S. Woolcock. Phys. Rev. 118, 291, 1960; N. P. Samios. Phys. Rev. Lett., 4, 470, 1960; M. Derrick et al. Phys. Rev. Lett., 5, 230, 1960; A. F. Dunaitsev et al. Proc. 1960 Ann. Intern. conf. on high energy physics at Rochester, Publ. Univ. Rochester 1961, p. 181.

ASSOCIATION: Fizicheskiy institut im. P. N. Lebedeva Akademii nauk SSSR  
(Physics Institute imeni P. N. Lebedev of the Academy of Sciences, USSR)

SUBMITTED: July 31, 1961

Card 4/84

ADAMOVICH, M.I.; GORZHEVSKAYA, E.G.; LARIONOVA, V.G.; PANOVA, N.M.; POPOVA, V.M.; KHARLAMOV, S.P.; YAGUDINA, F.R.

Energy dependence of the cross section for the photoproduction of  $\pi^+$ -mesons on hydrogen near the threshold. Zhur. eksp. i teor. fiz. 41 no.6:1811-1817 D '61. (MIRA 15:1)

1. Fizicheskiy institut imeni P.N.Lebedeva AN SSSR.  
(Photonuclear reactions) (Mesons) (Hydrogen)

*LARIONOVA, V. G.*

ADAMOVICH, M. I.; GORLINSKAYA, E. G.; KHANLAMOV, S. P.; LARIONOVA, V. G.;  
YAGUDINA, F. R.

"Photoproduction of Positive Pions from Hydrogen near Threshold"

report presented at the 11th Intl. Conference on High Energy Physics,  
Geneva, 4-11 July 1962

ADAMOVICH, M.I.; LARIONOVA, V.G.; KHARLAMOV, S.P.

Photoproduction of negative pions on deuterium near the  
threshold. Trudy Fiz. Inst. 19:37-65 '63. (MIRA 16:8)

(Mesons) (Nuclear reactions)



L 16678-65 ENT(m)/T/EWA(m)-2 SSD/AFWL

ACCESSION NR: AP4045625

S/0020/64/158/002/0309/0312  $\beta$

AUTHOR: Adamovich, M. I. ; Larionova, V. G. ; Lebedev, A. I. ; Kharlamov, S. P. ; Yagudina, F. R.

TITLE: Analysis of photogeneration of positive pions<sup>19</sup> at photon energies of 175 to 230 Mev

SOURCE: AN SSSR. Doklady\*, v. 158, no. 2, 1964, 309-312

TOPIC TAGS: photogeneration, positive pion,  $\gamma$ - $\pi$ - $\rho$  interaction, nuclear reaction

ABSTRACT: The comparison of experimental data on photogeneration of positive pions in hydrogen near the threshold, with the theoretical estimation is important for the evaluation of various effects instrumental in the process, particularly the effect of resonance  $\pi$ - $\pi$  interaction ( $\rho$  meson). The authors conducted such a comparison in a wide range of angles and energies. The experiment was made with the 260 Mev synchrotron of the Physical Institute of AN SSSR using piles of nuclear photoemulsions for detection. The  $\pi$ - $\mu$ -decays were recorded, and also the ends of the  $\rho$ -meson and of pions traces. The differential cross section for

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ACCESSION NR: AP4045625

the photogeneration of  $\pi^+$  was measured for 9 angles at photon energies from 175 to 230 Mev, in 5 Mev steps. The agreement with the theoretical estimation depends on the chosen constant of the  $\gamma$ - $\pi$ - $\rho$  interaction. The authors are grateful to Prof. P. A. Cherenkov for his interest, and to R. Uvarova for numerical calculations. Orig. art. has: 3 figures, 1 table

ASSOCIATION: Fizicheskiy institut im. P. N. Lebedeva Akademii nauk SSSR  
(Institute of Physics, Academy of Sciences, SSSR)

SUBMITTED: 01Mar64

ENCL: 00

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NO REF SOV: 001

OTHER: 007

Cord 2/2

L 4384-66 EWT(m) DIAAP

ACC NR. AP5020265

UR/0357/65/002/001/0135/0143

AUTHOR: Adamovich, M. I.; Larionova, V. G.; Lebedev, A. I.; Kharlamov, S. P.;  
Yagudina, F. R.TITLE: Determination of the isotopic spin components of the  $\gamma + N \rightarrow N + \pi$  amplitude  
at threshold

SOURCE: Yadernaya fizika, v. 2, no. 1, 1965, 135-143

TOPIC TAGS: gamma scattering, scattering cross section, differential cross section,  
proton scattering, photonuclear reaction

ABSTRACT: The differential cross sections for the process  $\gamma + p \rightarrow n + \pi^+$  for laboratory-system pion angles 16, 24, 36, 56, 64, and 76° have been measured in the photon energy region 165-230 MeV. The experiments were performed with the FIAN (Physics Institute of the Academy of Sciences) 265-Mev electron synchrotron, using a liquid-hydrogen target. The pion detector was a stack of NIKFI BK-600 nuclear pellicles. The bremsstrahlung flux was measured with a quantum meter. The positive-pion photoproduction amplitude in the S state was obtained for zero pion momentum by extrapolating the empirical dependence of the cross section on the pion momentum to the threshold. Data on the process  $\gamma + n \rightarrow p + \pi^-$  were analyzed in the same manner and the corresponding negative-pion photoproduction amplitude obtained. These amplitudes, together with the similar amplitude  $\kappa$  for neutral-pion photoproduction, are used to

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ACC NR: AP5020265

find the isoscalar and isoscalar parts of the photoproduction amplitudes, which are compared with the theoretical predictions. The agreement is not particularly good, mostly because of the low accuracy with which the S-wave photoproduction amplitudes are known. "The authors thank Professor P. A. Cherenkov and A. M. Baldin for their interest and for a discussion of this work." Orig. art. has: 5 figures, 8 formulas, and 4 tables.

ASSOCIATION: Fizicheskii institut im. P. N. Lebedeva Akademii nauk SSSR (Physics Institute, Academy of Sciences, SSSR)

SUBMITTED: 17Jan65

ENCL: 00

SUB CODE: NP

NR REF SOV: 002

OTHER:013

Card

2/2

L 12007-66 EWT(m)/T/EWA(m)-2

ACC NR: AF6001779

SOURCE CODE: UR/0386/65/002/010/0490/0494

AUTHOR: <sup>44,55</sup>Adamovich, M. I.; <sup>44,55</sup>Larionova, V. G.; <sup>44,55</sup>Lebedev, A. I.; <sup>44,55</sup>Kharlamov, S. P.; <sup>47</sup>Yagudina, F. B.

ORG: <sup>44,55</sup>Physics Institute im. P. N. <sup>47,53</sup>Lebedev, Academy of Sciences SSSR (Fizicheskii <sup>B</sup>institut Akademii nauk SSSR)

TITLE: Determination of the  $\gamma\pi\rho$  interaction constant <sup>19,44,55</sup>

SOURCE: Zhurnal eksperimental'noy i teoreticheskoy fiziki. Pis'ma v redaktsiyu. Prilozheniye, v. 2, no. 10, 1965, 490-494

TOPIC TAGS: Gamma interaction, meson interaction, photon scattering, dispersion equation

ABSTRACT: The authors attempt an indirect determination of the  $\gamma\pi\rho$  interaction constant  $A$ , from data on single photoproduction of pions from nucleons. The contribution of the  $\rho$  meson to the photoproduction amplitudes is separated by comparing the experimental data with theoretical calculations based on rigorous dispersion relations, since such an analysis is sensitive to the accuracy with which the dispersion integrals are calculated. The authors' main purpose in this paper is (i) to find for the photoproduction processes a differential characteristic for which the theoretical uncertainties are minimal or nil, and (ii) analyze the cor-

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ACC NR: AF6001779

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responding experimental data for the purpose of determining the constant  $\Lambda$ . To avoid the uncertainties connected with the imaginary parts of the photoproduction amplitudes, they confine themselves to a consideration of the near-threshold region of photon energies. The contribution of the subtraction constant is neglected. By making use of published data and their own results (Dokl. AN SSSR v. 158, 309, 1964) on the differential cross sections of the process  $\gamma + p \rightarrow n + \pi^+$ , the authors conclude that more accurate values of the differential cross sections of the processes  $\gamma + p \rightarrow n + \pi^+$  and  $\gamma + n \rightarrow p + \pi^-$  in the near-threshold region of energy can yield more definite information on the constant  $\Lambda$ . To obtain data on the latter process it is necessary to study further the processes  $\gamma + d \rightarrow p + p + \pi^-$  and  $\pi^- + p \rightarrow n + \gamma$ . Authors are grateful to Corresponding Member AN SSSR P. A. Cherenkov and Professor A. M. Baldin for useful discussions and interest. Orig. art. has 2 figures and 6 formulas. 4/55

SUB CODE: 20/ SUBM DATE: 05Oct65/ ORIG REF: 003/ OTH REF: 002

Card 2/2

YUKHVID, M.Ye.; GATOVSKIY, M.B.; LARIONOVA, V.M.

Thread-cutting chasers for cutting high-strength steel parts.  
Stan. 1 instr. 35 no.10:29-30 0 '64. (MERA 17:12)

GLADKOV, B.A.; YUKHVID, M.Ye.; LARIONOVA, V.M.

Effect of structural components of a lathe and cutting conditions  
on the precision of shape and roughness of machined surface  
in fine turning. Stan.i instr. 34 no.4:7-11 Ap '63. (MIRA 16:3)  
(Lathes) (Turning)



GNEZDILOVA, Ye.I.; DMITRENKO, I.I.; LARIONOVA, V.S.; NAVROTSKAYA, V.S.

Characteristics of the temperature regime during dry periods in  
the steppe of the Black Sea region. Trudy OGI no.21:21-26 '60.  
(MIRA 14:10)

(Black Sea region--Droughts)

LARIONOVA, YE. I.

Category : USSR/Optics - Physical optics

K-5

Abs Jour : Ref Zhur - Fizika, No 1, 1957, No 2375

Author : Kats, M.S., Kolobayev, Ye.N., Larionova, Ye.I.

Title : Temperature Glow of Luminophor<sup>S</sup>

Orig Pub : Uch. zap., Saratovsk. un-ta, 1954, 40, 131-133

Abstract : The thermal-glow curves of the phosphor  $1\text{ZnS} + 0.0001\text{Ag} + 0.0251\text{LiCl}$ , excited with a 365-millimicron line at the temperature of liquid  $\text{O}_2$ , displayed peaks at 110°K and 183 D, i.e., approximately at the location of the thermal-glow peaks of the ZnS-Cu phosphors. The third peak for ZnS-Cu, approximately near 290 K is missing from the ZnS-Ag curve. The first peak glows also at the liquid oxygen temperature. Increasing the amount of flux (LiCl) to 50% of the amount of ZnS causes the second peak to disappear, and causes the shallowest localization levels to predominate in the phosphor.

Card : 1/1

SAKHAROV, M.I., doktor meditsinskikh nauk; SHCHERBATSKAYA, V.A., dotsent;  
LARIONOVA, Ye.M.; GORLOVA, M.A.

Influence of glyccol on the survival of erythrocytes in preserved blood and in an erythrocytic suspension as (revealed by experimental and clinical material). Probl. gemat. i perel. krovi 5 no.3:43-52 Mr '60. (MIRA 14:5)

1. Iz kafedry biologicheskoy khimii i meditsinskoy radiologii Sverdlovskogo gosudarstvennogo meditsinskogo instituta i Sverdlovskoy stantsii perelivaniya krovi.

(GLYCINE)

(ERYTHROCYTES)

(BLOOD--COLLECTION AND PRESERVATION)

LEDENTSOV, Yu.K.; LARIONOVA, Ye.M.

Change in the content of some amino acids in the blood and urine under the influence of low temperature and ionizing radiations. Biul. eksp. biol. i med. 56 no.8:60-64 Ag '63.  
(MIRA 17:7)

1. Iz kafedry biokhimii (zav. - dotsent A.M. Genkin) Sverdlovskogo meditsinskogo instituta. Predstavlena deystvitel'nym chlenom AMN SSSR A.V. Lebedinskim.

LARIONOVA, E. N.

24831. LARIONOVA, E. N. <sup>✓</sup>Devonskie i Siluriy Skie Otlozuyeniya Krasnokamsko-Polaznenskoy Antiklinali. Izvestiya Akad. Nauk SSSR, Seriya Geol., 1949, 4, S. 136-46  
Bibliogr: 5 Nazv.

SO: Letopis' No. 33, 1949

LARIONOVA, Ye.N.; SAFONOVA, T.P.

Coal deposits at Sovetsk in the Vyatka Uval. Izv. AN SSSR. Ser. geol.  
20 no.6:29-41 N-D '55. (MLRA 9:2)  
(Vyatka Uval--Coal geology)

LARIONOVA, Ye.N.

Characteristics of the Devonian on the Vyatka River, near ~~Sovetsk~~.  
Dokl. AN SSSR 109 no.1:176-179 J1-Ag '56. (MIRA 9:10)

1. Tsentral'naya nauchno-issledovatel'skaya laboratoriya ob'yedineniya  
Molotovneft', gorod Molotov.  
(Vyatka Valley--Geology, Stratigraphic)

LARIONOVA, Ye.N.; TIKHOMIROVA, V.N.

Heavy sediments in Perm Province and the Udmurt A.S.S.R. Trudy  
VNIGHI no.13:29-36 '59. (MIRA 13:1)  
(Perm Province--Geology, Stratigraphic)  
(Udmurt A.S.S.R.--Geology, Stratigraphic)



LARIONOVA, Ye.N.

New data on the geology of the upper Kama trough. Geol. nefti i  
gaza 4 no.2:15-19 F '60. (MIRA 13:10)

1. TSentral'naya nauchno-issledovatel'skaya laboratoriya Upravleniya  
neftyanoy promyshlennosti Permskogo sovnarkhoza.  
(Kama Valley--Geology)

APRODOVA, A.A.; LARIONOVA, Ye.N.

Glazov key well. Trudy VNIGNI no.26:65-112 '60. (MIRA 14:1)  
(Russian Platform--Petroleum geology)

KURANOVA, P.Z.; LARIONOVA, Ye.S.; PLOTNIKOV, P.M.; PUMPYANSKIY, A.Ya.;  
SOBETS, L.P.; SOBOLEV, A.T.; IL'INSKIY, N.A., spetsred.;  
SHCHERBAKOVA, G.V., red.; YAROV, E.M., tekhn.red.

[Mechanized assembly-line production of sweet rusk; experience  
of the Leningrad Port Mechanical Bakery] Mekhanizirovannoe  
potochnoe proizvodstvo sдобnykh sukharey; opyt Leningradskogo  
Portovogo khlebozavoda. Moskva, Pishchepromizdat, 1956. 31 p.  
(MIRA 11:12)

1. Moscow. Vsesoyuznyy nauchno-issledovatel'skiy institut  
khlebopekarnoy promyshlennosti.  
(Leningrad--Bakers and bakeries--Equipment and supplies)

LARIONOVA, Ye.V., inzhener.

Cost of hauls is an important index of the utilization of new types  
of traction. Zhel.dor.transp. 39 no.9:31-36 S '57. (MIRA 10:10)  
(Railroads--Cost of operation)

LARIONOVA, Ye.V.

Methods of calculating transportation costs for trains with different  
traction power. Trudy MIIT no.119:101-128 '59. (MIRA 12:11)  
(Railroads--Costs) (Locomotives)

LARIONOVA, Ye.V., kand.ekonom.nauk

Transportation costs and advantages of the new equipment and techniques. Zhel.-dor.transp. 43 no.9:26-30 S '61.

(MIRA 14:8)

(Railroads—Cost of operation)

LARIONOVA, Ye.V., kand.ekonom.nauk

The role of profits in the strengthening of business accounting in  
railroad divisions. Zhel.dor.transp. 44 no.12:54-58 D '62.

(MIRA 15:12)

(Railroads—Finance)

LARIONOVA, Yekaterina Vasil'yevna, kand. ekon. nauk; NEDOPEKIN, G.K.,  
retsenzent; BUYANOVA, M.S., retsenzent; KRISHTAL', L.I., red.;  
VOROTNIKOVA, L.F., tekhn. red.

[Calculating the cost of railroad transportation according to the  
types of traction] Raschet sebestoimosti perevozok po vidam tiagi  
na zheleznykh dorogakh. Moskva, Transzheldorizdat, 1963. 85 p.  
(MIRA 16:3)

(Railroads--Cost of operation)



LARIONOVA, Ye.V., kand. ekonom. nauk

Planning the utilization indices of the capital assets of railroads.  
Zhel. Gor. transp. 46 no.9:42-45 S '64.

LARIONOVA, Ye.V., kand. ekonom. nauk

Planning the utilization indices of the capital assets of railroads.  
Zhel.dor.transp. 46 no.9:42-45 S '62. (MIRA 17:10)

1. LARIONOVA, Ye. Ya.
2. USSR (600)
4. Vitamins
7. Utilization of cod-liver meal. Latv. PSR Zin. Akad. Vestis No. 7, 1951.
9. Monthly List of Russian Accessions, Library of Congress, April 1953, Uncl.

S/079/63/033/001/021/023  
D204/D307

AUTHORS: Ponomarev, A. I., Klebanskiy, A. L., Larionova, Yu. A.  
and Bogdanova, V. V.

TITLE: The preparation of p-cyanophenylmethyldiethoxysilane

PERIODICAL: Zhurnal obshchey khimii, v. 33, no. 1, 1963, 316

TEXT: p-Bromophenylmethyldiethoxysilane (I) was obtained by reacting methylchlorodiethoxysilane with  $p\text{-BrC}_6\text{H}_4\text{MgBr}$ . The Br in I was then replaced with a nitrile group to give p-cyanophenylmethyldiethoxysilane (b.p. 111 - 112°C/3 mm Hg,  $n_D^{20} = 1.5032$ ,  $d_4^{20} = 1.2058$ ,  $M_R = 57.69$ ), in 45 - 50% yield. [Abstracter's note: Essentially complete translation.]

SUBMITTED: August 8, 1962

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