

SERGEYEV, V.

More about the quality control of pastry goods. Obshchestv.  
pit. no.7:29 J1 '61. (MIRA 14:8)

1. Direktor Tsentral'noy laboratorii Lennarpita, g. Leningrad.  
(Pastry)

SERGEYEV, V., polkovnik, kand.filosofskikh nauk

Formation of communist social relations. Komm. Vooruzh. Sil 2  
no.4:43-48.F '62. (MIRA 15:2)  
(Communist Party of the Soviet Union--Party work)

SERGEYEV, V.

Development of foreign trade in socialist countries. Vop.ikon.  
no.7:139-147 JI '62. (MIRA 15:7)  
(Communist countries--Commerce)

SKACHKOV, Semen Andreyevich; SERGEYEV, V.; SHEVYAKOV, G.; INOZEMTSEV,  
N.N., red.; KORIONOV, V.G., red.; KHARLAPOV, M.A., red.;  
KOLONIYTSSEV, V., red.; KONOVALOVA, L., tekhn. red.

[Aid and cooperation in the name of peace; Soviet economic co-  
operation with the countries of Asia, Africa, and Latin  
America] Pomoshch' i sotrudnichestvo vo imia mira; ekonomichne-  
skoe sotrudnichestvo SSSR so stranami Azii, Afriki i Latin-  
skoi Ameriki. Moskva, Gospolitizdat, 1962. 54 p.

(MIRA 15:11)

(Economic assistance)

GONCHARENKO, V., tekhnicheskiy inspektor; SOLOV'YEV, L.; LEKONT, G.;  
SEROVA, I.; GOLUB', T.; MEDVEDEV, L.; PEKISHEV, V.; ANISIMOV, P.;  
ASTASHEVA, V.; DOSHCHATOV, V.; SERGEYEV, V.; YUOZAPAVICHYUS, L.  
[Juozapavicius, L.]; MISHURIS, M.; VORONTSOV, N.; BOCHKAREV, G.

Readers' conference by correspondence. Okhr. truda i sots.  
strakh. 5 no.5:31-32 My '62. (MIRA 1:5:5)

1. Tekhnicheskiye inspektora Omskogo oblastnogo soveta profsoyuzov (for Solov'yev, Lekont, Serova, Golub', Medvedev).
  2. Tekhnicheskiy inspektor respublikanskogo soveta profsoyuzov, Turkmenskaya SSR (for Pekishev).
  3. Zaveduyushchiy otdelom sotsial'nogo strakhovaniya Tyumenskogo oblastnogo soveta professional'nykh soyuzov (for Doshchatov).
  5. Zaveduyushchiy yuridicheskoy konsul'tatsiyey Arkhangel'skogo soveta professional'nykh soyuzov (for Sergeyev).
  6. Zaveduyushchiy otdelom okhrany truda Litovskogo respublikanskogo soveta professional'nykh soyuzov (for Yuozapavichyus).
  7. Zaveduyushchiy yuridicheskoy konsul'tatsiyey Luganskogo oblastnogo soveta professional'nykh soyuzov (for Mishuris).
  8. Zaveduyushchiy otdelom sotsial'nogo strakhovaniya Smolenskogo oblastnogo soveta professional'nykh soyuzov (for Vorontsov).
  9. Predsedatel' komissii okhrany truda Barnaul'skogo motornogo zavoda (for Bochkarev).
- (Industrial hygiene--Periodicals)

SERGEYEV, V.

Dismissal of employees for a systematic failure to fulfill their  
work duties. Okhr.truda i sots.strakh. 5 no.10:44 0 '62.  
(MIRA 15:11)

1. Zaveduyushchiy yuridicheskoy konsul'tatsiyey Arkhangel'skogo  
oblastnogo soveta professional'nykh soyuzov.  
(Employees, Dismissal of)

SERGEYEV, V. (Moskva)

Paying bonuses to the engineers and technicians of industrial enterprises. Sots.trud 7 no.7:61-64 JI '62. (MIA 15:8)  
(Technicians in industry) (Bonus system) (Costs, Industrial)

SERGEYEV, V.

The country could have flourished... Sov. profsoiuzy 18 no.18:43-  
44 S '62. (MIRA 15:9)

1. Zamestitel' zaveduyushchego mezhdunarodnyã otdeom  
Vsesoyuznogo tsentral'nogo soveta professional'nykh soyuzov.  
(Bolivia--Social conditions)



FEDOROV, A.A.; SERGEYEV, V.

"Some methods of analysis used in ferroalloy plants" by M.V.Babaev.  
Reviewed by A.A.Fedorov and V.Sergeev. Zav.lab. 28 no.11:1403-  
1404 '62. (MIRA 15:11)

1. Nachal'nik Tsentral'noy khimicheskoy laboratorii Zaporozhskogo  
zavoda ferrosplavov (for Sergeyev).  
(Iron alloys) (Metallurgical analysis) (Babaev, M.V.)

SERGEYEV, V., polkovnik, kand.filosofskikh nauk

Party ideology in military science. Komm. Vooruzh. Sil 3 no.1:  
20-27 Ja '63. (MIRA 16:1)

(Military art and science)  
(Russia--Armed forces--Political activity)

SERGEYEV, V., kand.ekonom.nauk

Definition of the world market category. Vnesh.torg. 43  
no.4:17-24 '63. (MIRA 16:4)  
(Commerce)

LIKHACHEV, M., inzh.; SERGEYEV, V., inzh.

Miniature receivers. Radio no.5:49 My '65.

(MIRA 18:5)

SERGEYEV, Vl.

"Aerial" fisherman. Grazhd. av. 19 no.11:21 N '62.  
(MIRA 16:1)

(Aeronautics in fishing)

SERGEYEV, V.; SMIRNOVA, K.; MOLODYAKOVA, A.

Fluorescence method for determining meat freshness. Obshchestv.  
pit. no.6:24-25 Je '63. (MIRA 16:12)

1. Tsentral'naya sanitarno-pishchevaya laboratoriya Lenannarpita,  
Leningrad.

SERGEYEV, V.A.

Role of the bacterial factor in the etiology of pulmonary diseases  
in sheep. Trudy VIEV 22:185-188 '59. (MIRA 13:10)  
(Sheep--Diseases and pests) (Pneumonia)

KOGAN, A. M.; SERGEYEV, V. A.; SHLEYFMAN, R. B.; GUREVICH, L. B.

Capron for molding. Mashinostroitel' no.10:31-32 0 '62.  
(MIRA 15:10)

(Nylon)



SEEGEYEV, V.A.

Organize the manufacture of standard checking devices. Izv.tekh.  
no.11:54 N '60. (MIRA 13:11)  
(Measuring instruments--Testing)

1. SERGEYEV, V. A.
2. SSSR (600)
4. Microorganisms, Pathogenic
7. Filterable forms of the causative organism of pasteurellosis in farm animals (short communication).  
Trudy Vses. inst. sksp. vet. 19 No. 1, 1952

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

USSR/Microbiology - Medical and Veterinary  
Microbiology

F-5

Abs Jour : Ref Zhur-Biologiya, No 1, 1957, 647

Author : V. A. Sergeev

Inst :

Title : Effect of Bile on the Virulent Properties  
of Microbes

Orig Pub : Sb. nauch. rabot stud. Mosk. vet. akad.,  
1955, vyp. 2, 130-132

Abstract : The first Tsenkovskiy vaccine against  
anthrax, and its changeability under  
the action of bile of an ox were investi-  
gated. In large concentrations bile  
has a bacteriostatic effect on Bacillus  
anthracis. In small concentrations a  
dissociation into R-and S forms has been

Card 1/2

SERGEYEV, V. A. Cand Vet Sci -- (diss) "Study of ~~the~~ filtrable forms of brucellae (strain No 19)," Mos, 1957. 11 pp (All-Union Inst of Experimental Vet Medicine VASKHNIL [All-Union Acad Agr Sci im Lenin]), 140 copies (KL, 43-57, 90)

SPRINT (V)

USSR/Virology - Human and Animal Viruses.

E-2

Abs Jour : Ref Zhur - Biol., No 8, 1958, 33556

Author : Ratner, L.S., Sergeev, V..A.

Inst : -

Title : A Biological Diagnostic Method for Types of Foot-and-Mouth Disease Viruses by Sera of Convalescents.  
(Biologicheskiy metod diagnostiki tipov virusa yashchura po syvorotkam rekonvalestsentov.)

Orig Pub : Veterinariya, 1957, No 2, 73-76.

Abstract : Each serum of the convalescent animal, diluted  $\frac{1}{2}$ , was administered to 7-8 day old mice. In 18-24 hours the inoculated mice were divided into 3 groups of 3 mice each and were infected respectively by three types of foot-and-mouth disease virus, adapted to suckling mice. The presence of antibodies in the sera and their type was judged by the survival of mice by comparison with

Card 1/2

3

USSR/Virology - Human and Animal Viruses.

E.

Abs Jour : Ref Zhur - Biol., No 19, 1958, 85802

Author : Sergeyev, V.A.

Inst :

Title : The Cultivation of Viruses in Tissue Cultures.  
A Review of the Foreign Literature.

Orig Pub : Veterinariya, 1958, No 4, 83-88

Abstract : No abstract.

Card 1/1

- 7 -

SERGEYEV, V.A.

Antibodies in animals vaccinated against foot-and-hoof disease.  
Dokl.Akad.sel'khoz. 23 no.11:38-41 '58. (MIRA 11:12)

1. Vsesoyuznyy institut eksperimental'noy veterinarii.  
Predstavlena akademikom S.N.Muromtsevyam.  
(Foot-and-hoof disease) (Antigens and antibodies)

SEREBYEV, V.A.

Cultivation of viruses in tissue cultures; a survey of foreign literature. Veterinaria 35 no.4:83-88 Ap '58. (MIRA 11:3)  
(Viruses) (Bacteriology--Cultures and culture media)



SERGEYEV, V.A., kand. veterinarnykh nauk; YASHENKINA, M.I.

Multiplication dynamics of the foot-and mouth disease virus in single-layer cultures and suspensions of calf kidney tissue treated with trypsin. Dokl. Akad. sel'khoz. 24 no.4:16-18 '59.  
(MIRA 12:6)

1. Vsesoyuznyy nauchno-issledovatel'skiy institut eksperimental'noy veterinarii. Predstavlena akademikom S.N. Muromtsevyam.  
(Foot-and-mouth disease)

SERGEYEV, V.A.

Study of immunizing and interference properties of the virus of  
foot-and-mouth disease grown in a calf kidney tissue culture.  
Vop. virus 5 no.4:479-484 Je-Ag '60. (MIRA 14:1)  
(FOOT AND MOUTH DISEASE)

SERGEYEV, V. A. and FEDOROVA, T. L. (All-Union Institute of Veterinary Virology and Microbiology of the Ministry of Agriculture USSR).

"Comparative evaluation of the titration methods used for the foot and mouth virus"

Veterinariya, vol. 39, no. 8, August 1962, p. 67

NIKITIN, Ye.Ye.; VLADIMIROV, A.G.; SERGEYEV, V.A.

Resistance of the foot-and-mouth disease and influenza viruses  
to desiccation by the pulverization method. Vop.virus. 7  
no.6:719-723 N-D '62. (MIRA 16:4)

1. Vsesoyuznyy nauchno-issledovatel'skiy institut veterinarnoy  
virusologii i mikrobiologii.  
(FOOT-AND-MOUTH DISEASE) (INFLUENZA) (VACCINES)

SERGEYEV V.A., FEDOROVA, T.O.

Comparative evaluation of methods for the titration of the  
virus of foot-and-mouth disease. Veterinarika 39 no.8:  
67-69 Ag '62. (MIRA 17:12)

1. Vsesoyuznyy institut veterinarnoy virusologii i mikrobiologii  
Ministerstva sel'skogo khozyaystva SSSR.

SERGEYEV, V.A.

Establishment of two lines of transplantable kidney and heart cells from cattle. TSitologiya no.1:104-107 Ja-F'63.

(MIRA 16:6)

1. Vsesoyuznyy nauchno-issledovatel'skiy institut veterinarnoy virusologii i mikrobiologii Ministerstva sel'skogo khozyaystva SSSR, Moskva.

(TISSUE CULTURE)

(TRANSPLANTATION OF ORGANS, TISSUES, ETC.)

METERLKIN, O.A.; SORVACHEV, Ye.V.; SERGEYEV, V.A.; REZVYAKOVA, L.G.

Cultivation of hog cholera virus in a tissue culture of swine and rabbit. Veterinariia 40 no.2:74-78 F '63. (MIRA 17:2)

1. Vsesoyuznyy nauchno-issledovatel'skiy institut veterinarnoy virusologii i mikrobiologii.

OSIDZE, N.S.; [REDACTED], V.I.; [REDACTED], F.V.

Adaptation of subinoculated cell lines to the nutrient  
solution with a lactalbumin hydrolysate. Veterinaria  
10:10-13 3 '64. (MIRA 18:13)

1. Vsesoyuznyy nauchno-issledovatel'skiy institut  
veterinarnoy virusologii i mikrobiologii.



TRUBITSYN, B.I.; LAVROVA, T.S.; SERGEYEV, V.A.

Effect of the method for cultivating the virus of foot-and-mouth disease on the formation of negative colonies in tissue cultures. Veterinariia 41 no.11:11-15 N '64.

(MIRA 18:11)

1. Vsesoyuznyy nauchno-issledovatel'skiy institut veterinarnoy virusologii i mikrobiologii.

TEPEROVA, B.I.; SERGEYEV, V.R.; K. M. F. ...

Comparative study of the immunobiological properties of the  
virus of Foot-and-mouth disease. Veterinariia 49 n. 2: 17-  
21, 1968. (NH 6803)

L. Vsesoyuznyy nauchno-issledovatel'skiy institut veterinarnoy  
virusologii i mikrobiologii.

L 31311-66

ACC NR: 100(20)

(2,1)

SOURCE CODE: UR/0346/66/000/001/0013/0020

AUTHOR: Iarova, N. A.; Iaroyev, V. A.; Trubitsyn, B. I.; Khizhinskaya, V. P.ORG: All-Union Scientific Research Institute of Veterinary Virology and Microbiology  
(Vsesoyuzny nauchno-issledovatel'skiy institut veterinarnoy virusologii i  
mikrobiologii)TITLE: Reproduction of foot-and-mouth disease virus in a tissue culture of pig  
embryo kidney

SOURCE: Veterinariya, no. 1, 1966, 18-20

TOPIC TERM: foot and mouth disease, virus, virology, vaccine

ABSTRACT: The effect of certain conditions on reproduction of the foot-and-mouth disease virus (Type O) in a culture of pig embryo kidney cells was studied. The strain used was obtained from cattle and adapted in 7-8 passages to the pig embryo kidney culture. It was found that reproduction of the virus in the culture did not depend on previous adsorption of the virus in the culture did not depend on previous adsorption of the virus to the cells. In cultivating the foot-and-mouth disease virus in this culture in one-liter flasks it is good to inoculate the culture simultaneously with a change of the medium (pH 7.6), introducing the virus in a dose of  $10^{-2}$ - $10^3$  TC<sub>50</sub>/ml. The infected cultures are incubated at 37° C for 18-20 hours. Cultivation of foot-and-mouth disease virus in this way was found promising for producing vaccine. Orig. art. has: 3 tables. [JPRS]

SUB CODE: 06 / SUBM DATE: none / ORIG REF: 003 / OTH REF: 006

Card 1/1

UDC: 619.616.988.43-093.35

0915

05-98

ACC NR: AP6021576 (11) SOURCE CODE: UI/0402/66/000/003/0375/0375

AUTHOR: Sergeev, V. A.; Lavrova, T. S.

ORG: All-Union Institute of Veterinary Virology and Microbiology, Ministry of Health, SSSR, (Vsesoyuznyy institut veterinarnoy virusologii i mikrobiologii. Ministerstva sel'skogo khozyaystva SSSR)

TITLE: Growth cycle and heterogeneity of virus particles

SOURCE: Voprosy virusologii, no. 3, 1966, 375

TOPIC TAGS: animal disease, foot and mouth disease, virology, virus, veterinary medicine

ABSTRACT:

Growth of type 0 strain Op foot-and-mouth virus in pig kidney tissue culture is characterized by a latent phase lasting about 2 hr, followed by a maximum quantity of virus appearing within 4 hours in the cultured cells and within 8 hours in the culture fluid. The virus population is heterogeneous as determined by standard tests.

[W.A. 50; CBE No. 10]

SUB CODE: 06/ SUBM DATE: none/

Card 1/1

SERGEYEV, V. A., Cand Chem Sci - (diss) "Concerning the Synthesis of Polymers from Aliphatic Diazo-Compounds." Mos [Pub House of Acad Sci USSR], 1957. 7 pp. (Acad Sci USSR, Inst of Elementoorganic Compounds), 110 copies. (KL, 7-58, 108)

SERGEYEV, V. A., and TRUCHAL, V. V.

"Mechanism of decomposition of a few aliphatic diazo compounds, and their use for the formation of polymers, " a paper presented at the 9th Congress on the Chemistry and Physics of High Polymers, 28 Jan-2 Feb 57, Moscow, Organic Chemistry Research Inst.

B-3,604,395

*SERGEYEV, V.A.*

62-12-16/20

AUTHORS: Korshak, V.V., Sergeyev, V.A.

TITLE: On the Additional Components of Diazomethane with Unsaturated Compounds (O produktakh prisoedineniya diazometana k nepredel'nyh soedineniyam).

PERIODICAL: Izvestiya AN SSSR Otdeleniya Khimicheskikh Nauk, 1957, No. 12, pp. 1495-1497 (USSR)

ABSTRACT: The reaction of diazomethane with olefines leads to the formation of various pyrazolines 1,2. As a result of the reaction after the addition of diazomethane to stiroil methylacrylate, diacrylate of ethylene glucol pyrazoline was obtained. It was found that with the setting in of interaction between the diazomethane and stiroil, 5-phenylpyrazoline is formed. Furthermore, products of the linkage between diazomethane and the glucol esters of acrylic- and metacrylic acids were obtained. Finally, the kinetics of the decay of the glucol esters of pyrazoline-3-carboxylic acid and 5-methylpyrazoline-5-carboxylic acid was investigated. There are 2 figures, 2 tables, and 5 references, 2 of which are Slavic.

Card 1/2

On the Additional Components of Diazomethane with  
Unsaturated Compounds

62-12-16/20

ASSOCIATION: Institute for Elemental-organic Compounds of USSR (Institut  
elementoorganicheskikh soedineniy Akademii nauk SSSR).

SUBMITTED: May 28, 1957

AVAILABLE: Library of Congress

Card 2/2

1. Diazomethane-Olefines-Reactions
2. Diazomethane-Components



SERGEYEV V.A.  
 AUTHOR KORSHAK V.V., Corresponding Member, AN USSR 20-2-31/62  
SERGEYEV V.A.  
 TITLE Formation of Polymeric Hydrocarbons at the Decomposition of Aliphatic  
 Diazocompounds.  
 (Ob obrazovanii polimernykh uglevodorodov pri raspade alifatiches-  
 kikh diazsoyedineniy - Russian)  
 PERIODICAL Doklady Akad.Nauk SSSR, 1957, Vol 115, Nr 2, pp 308-311 (U.S.S.R.)  
 ABSTRACT This decomposition leading to the formation of polyhydrocarbons was  
 studied by a number of investigators in the presence of various ca-  
 talysts. The authors studied a comparative investigation of the decom-  
 position reactions of diazomethane, diazoethane, diazotoluol and dia-  
 zophenylmethane as well as of their mixtures in the presence of cop-  
 per metal and boron compounds (trimethylborate and boron fluoride).  
 The decomposition of diazomethane by trimethylborate is characteri-  
 zed by an induction period. A further difference between the influ-  
 ence of these catalysts is that trimethylborate leads to a faster  
 decomposition and a quantitative yield of polymethylene  $(CH_2)_x$ .  
 With copper a 10-15% yield of polymers is obtained; ethylene is pre-  
 sent in the escaping nitrogen. Besides that various nitrogenous pro-  
 ducts develop. It may well be stated that this process is an ionic  
 process. It has some common features with the polymerization process  
 of olefinic hydrocarbons under the influence of ion catalysts. Dia-  
 zoethane decomposes also with copper and forms corresponding polym-  
 eric hydrocarbons. Diazotoluol in the presence of fluorboronethyra-

Card 1/3

Formation of Polymeric Hydrocarbons by Decomposition of 2C-2-31/62  
Aliphatic Diazocompounds.

rene, and of polymethylene which was produced in the presence of fluorboronethyrate. The formation of a non-branched regular polystyrene under the conditions of the authors cannot be explained by the orientating influence of the crystalline surface of the catalyst (as Matta and others think). The conception apparently is more correct that the cause for the regular position of substituents in the molecule of this polystyrene lies in the controlling action of side groups during the formation of the polymer. This self-regulation depends above all on the spatial influence of the groups which on the whole is analogous to that observed in the polymerization of vinyl type monomers. The authors propose for this influence the name "stereochemical factors". They give further explanations for it. (4 illustrations, 3 Slavic references).

ASSOCIATION Institut elemento-organicheskikh sovedineniy Akademii nauk SSSR

PREPARED BY

SUBMITTED

15.3.1957

AVAILABLE

Library of Congress.

Card 3/3

5(4)

AUTHORS:

Tsetlin, B. L., Sergeyev, V. A.,  
Rafikov, S. R., Korshak, V. V., Corresponding Member AS USSR,  
Glazunova, P. Ya., Bubis, L. D.

SOV/20-126--33/62

TITLE:

The After-effect in the Irradiation of Methylmethacrylate in  
the Presence of Oxygen (Effekt posledeystviya pri obluchenii  
metilmetakrilata v prisutstvii kisloroda)

PERIODICAL:

Doklady Akademii nauk SSSR, 1959, Vol 126, Nr 1, pp 123-125  
(USSR)

ABSTRACT:

It is a known fact that oxygen inhibits the radical polymeriza-  
tion of many vinyl monomers. This is the case also with  
radiation polymerization (Ref 1). However, the irradiated  
monomer is able to polymerize later, as soon as the supply  
of oxygen is interrupted (Ref 2). This manner of utilizing  
ionization energy is of practical interest. The authors  
investigated the basic rules of this process. The monomer  
was irradiated with fast electrons (900 kev) in an accel-  
erator of the second Institute mentioned under Association.  
Figure 1 shows the kinetic polymerization curve in dependence  
on the radiation dose R. The initial velocity  $V_0$  of polymer-  
ization is, as figure 2 shows, proportional to  $R^{1/2}$ .

Card 1/3

The After-effect in the Irradiation of Methylmethacrylate in the Presence of Oxygen

SOV/20-126-1-33/62

Figure 3 shows the influence exercised by temperature upon  $V_0$ . Polymerization was introduced by evacuation. The activation energy was calculated as amounting to 11.2 kcal/mol. It is thus considerably lower than the activation energy in the polymerization of methyl methacrylate with benzoyl peroxide, which amounts to 19.7 kcal/mol. The high activity of the peroxide groups formed by irradiation facilitates polymerization at low temperatures. Figure 4 shows the development of polymerization by irradiation, and, as a comparison, the effect of 0.01 % benzoyl peroxide. Apart from the low reaction temperature, irradiation offers the further advantage that, after irradiation, polymerization may be begun at any desired point of time. There are 4 figures and 9 references, 5 of which are Soviet.

Card 2/3

The After-effect in the Irradiation of Methyl-  
methacrylate in the Presence of Oxygen

SOV/20-126-1-33/62

ASSOCIATION: Institut elementoorganicheskikh sovedineniy Akademii nauk  
SSSR (Institute of Elemental-organic Compounds of the Academy  
of Sciences, USSR). Institut fizicheskoy khimii Akademii  
nauk SSSR (Institute of Physical Chemistry of the Academy of  
Sciences, USSR)

SUBMITTED: February 25, 1959

Card 3/3

KORSHAK, V.V.; GOLOVA, O.P.; SERGEYEV, V.A.; MERLIS, N.M.; SHNEYER, R.Ya.

Polyethers of levoglucosan. Part 1: Polymerization of levoglucosan  
and its ethers. Vysokom.sped. 3 no.3:477-485 Mr '61. (MIRA 14:6)

1. Institut elementoorganicheskikh soedineniy AN SSSR.  
(Glucopyranose) (Polymerization)

KORSHAK, V.V.; SERGEYEV, V.A.; KLEYZER, N.B.

Polyesters of levoglucosan. Part 2: Alkyd resins based on levoglucosan and dicarboxylic acids. *Vysokom.soed.* 3 no.8:1191-1196  
Ag '61. (MIRA 14:9)

1. Institut elementoorganicheskikh soyedineniy AN SSSR.  
(Alkyd resins) (Levoglucosan) (Acids, Organic)

S/062/62/000/008/011/016  
B117/B180

AUTHORS: Korshak, V. V., Kudryavtsev, R. V., Sergeyev, V. A., and  
Itsikson, L. B.

TITLE: Investigation of hydrolytic polymerization mechanism of  
 $\epsilon$ -caprolactam in the presence of water containing a heavy  
oxygen isotope

PERIODICAL: Akademiya nauk SSSR. Izvestiya. Otdeleniye khimicheskikh  
nauk, no. 8, 1962, 1468-1470

TEXT: In this investigation the water contained 6%  $O^{18}$ .  $\epsilon$ -caprolactam  
and the labeled water, in a 1:1.5 ratio, were heated for 6 hrs at  $200^{\circ}C$ .  
The molecular weight of the resulting poly- $\epsilon$ -caproamide was relatively  
low, and its  $O^{18}$  content the same as with an exchange reaction. From this ✓  
it is concluded that the monomer links on to the end groups of the  
growing polymer chain during the reaction. When the polymer was heated  
for 3 hrs at  $250^{\circ}C$  in argon, the viscosity of the solution was found to  
be higher than that of the initial polymer, (from  $[\eta] = 0.38$  to  $[\eta] = 1.76$ ),

Card 1/2



Investigation of hydrolytic ...

S/062/62/000/008/011/016  
B117/B180

as also the molecular weight. In the final stage of the reaction, if all the water can be removed, polycondensation of the macromolecule will occur due to the reaction between amino and carboxyl end-groups. The course of the hydrolytic polymerization of  $\epsilon$ -caprolactam described above confirms earlier predictions (V. V. Korshak and T. M. Frunze, Izv. AN SSSR. Otd. khim. n. 1955, 376). There is 1 table.

ASSOCIATION: Institut elementoorganicheskikh soyedineniy Akademii nauk SSSR (Institute of Elemental Organic Compounds of the Academy of Sciences USSR).

SUBMITTED: January 31, 1962

Card 2/2

PESIN, V.G.; KHALETSKIY, A.M.; SERGEYEV, V.A.

2,1,3-Thio- and selenodiazoles. Part 13: Nitration of 4- and 5-aminobenz-2,1,3-thiodiazoles. Zhur. ob. khim. 32 no.1:181-186 Ja '62. (MIRA 15:2)

1. Leningradskiy khimiko-farmatsevticheskiy institut.  
(Thiadiazole) (Nitration)

ACCESSION NR: AT4033981

S/0000/63/000/000/0024/0028

AUTHOR: Korshak, V. V.; Kogan, A. M.; Sergeev, V. A.; Shleyfman, R. B.; Gurevich, L. B.; Andion, G. B.

TITLE: The rapid low-temperature alkaline polymerization of Epsilon-caprolactam

SOURCE: Geterotsepnny\*ye vy\*sokomolekulyarny\*ye soyedineniya (Heterochain macromolecular compounds); sbornik statey. Moscow, Izd-vo "Nauka," 1963, 24-28

TOPIC TAGS: polymerization, caprolite, capron, low temperature polymerization, alkaline polymerization, caprolactam

ABSTRACT: Influenced by the recent work of Wichterle on a method for the production of high-quality poly- $\epsilon$ -caproamide (Capron), the authors studied the peculiarities of rapid low-temperature polymerization and the properties of the polymeric products with the aim of producing pure and admitted compositions suitable as raw material for large pieces. The polymerization of  $\epsilon$ -caprolactam was carried out with equimolar ratios of the sodium salt of caprolactam and N-acetylcaprolactam as a catalytic system. Samples measuring 55 x 6 x 4mm were used in tests for static

Card 1/3

L 12721-63 EPP(c)/EWP(j)/EWT(m)/BDS AFPTC/ASD Pr-4/Pc-4 RM/WW  
ACCESSION NR: AP3002292 S/0062/63/000/006/1100/1105

67  
66

AUTHOR: Korshak, V. V.; Sergeyev, V. A.; Pokrikyan, V. G.

TITLE: Polymerization of styrene previously irradiated in the presence of atmospheric oxygen

SOURCE: AN SSSR. Izv. Otdeleniye khimicheskikh nauk, no. 6, 1963, 1100-1105

TOPIC TAGS: polymerization, styrene, irradiation, atmospheric oxygen, peroxide, polymer, molecular weight

ABSTRACT: Styrene was irradiated with x-rays while air was bubbled through. The treated monomer was then polymerized. The effect of radiation dosage and temperature on peroxide content of monomer and of the same variables and time on the rate of formation and molecular weight of the polymer was studied. During the polymerization, the molecular weight of the product increases continuously reaching higher values than in polymerizations using benzoyl peroxide as initiator. This is attributed to the breakdown of polyperoxide sequences derived from the polyperoxide initiator produced by irradiation in the presence of oxygen and incorporated in the main polystyrene chain. Orig. art. has: 5 tables and 7 figures.

Association: Inst. of Organoelemental Compounds, Academy of Sciences SSSR

Card 1/2/

I. 12723-63  
ACCESSION NR: AP3002293

EPR/EPF(c)/EWP(j)/EWT(m)/BDS ASD Ps-4/Pr-4/Pc-4 RM/WW  
S/0062/63/000/006/1106/1109

72

AUTHOR: Pokrikyan, V. G.; Sergeyev, V. A.; Korshak, V. V.

TITLE: Preparation of block copolymer of polystyrene and methyl methacrylate

SOURCE: AN SSSR. Izv. Otdeleniye khimicheskikh nauk, no. 6, 1963, 1106-1109

TOPIC TAGS: block copolymer, polystyrene, methyl methacrylate, polymeric peroxides

ABSTRACT: Polystyrenes, obtained by polymerization of styrene previously irradiated in the air and containing fragments of polymeric peroxides, were used for the synthesis of block copolymers. The formation of a block copolymer containing 76% of polystyrene and 24% polymethyl methacrylate by heating a 20% solution of polystyrene in methyl methacrylate for 5 hours at 95 degrees was confirmed by fractionation and turbidimetric analysis. Polystyrene obtained with benzoyl peroxide did not give any copolymer. Orig. art. has: 2 figures and 6 tables.

ASSOCIATION: Institut elementoorganicheskikh soyedineniy, Akademii nauk SSSR (Institute of Organoelemental Compounds, Academy of Sciences SSSR)

Card 1/2/

KORSHAK, V.V.; SERGEYEV, V.A.; SURNA, Ya.A.; PERNIKIS, R.Ya.

Polyethers of levoglucosan. Part 3: Polymers of trimethyllevoglucosan.  
Vysokom.soed. 5 no.11:1593-1596 N '63. (MIRA 17:1)

1. Institut elementoorganicheskikh soyedineniy AN SSSR i Institut  
lesokhozyaystvennykh problem i khimii drevesiny AN Latvyskoy SSR.

ACCESSION NR: AP3012237

S/0190/63/005/011/1597/1602

AUTHORS: Korshak, V. V.; Sergeev, V. A.; Shit'ikov, V. K.; Burenko, P. Sh.

TITLE: Isomeric polymerization of aliphatic diazo compounds

SOURCE: Vy\*sokomolekulyarny\*ye soyedineniya, v. 5, no. 11, 1597-1602, 63

TOPIC TAGS: polymerization, polymerization mechanism, isomeric polymerization, isomer polymerization, isomerizational polymerization, diazo compound, aliphatic diazo compound, absorption spectrum, infrared absorption spectrum, infrared spectroscopy, infrared spectrum, polymer, copolymer, polybenzylidene, methane.4-methylphenyldiazo-, methane.4-methylbenzenediazo-, heat resistant polymer, thermally stable polymer, methane.phenyldiazo-, benzenediazomethane, thermomechanical property, compressive strength, compression curve, thermomechanical compression curve, methane.diazo-, polyethylidene

ABSTRACT: The aim of the present investigation consisted in elucidating the structure of polymers and copolymers obtained via cleavage of certain diazo compounds by means of boron fluoride ethyl ether and tributylboron catalysts. The issuing materials included diazo-methane, phenyldiazomethane and 4-methylphenyl-

Card 1/3

ACCESSION NR: AP3012237

diazomethane (4MPD), which were prepared by standard procedures, as was the phenyldiazomethane-diazomethane (PD) copolymer. The obtained polymers and copolymers were subjected to infrared spectroscopy and proton resonance spectroscopy from solutions in carbon tetrachloride. The spectrum of the PD copolymer showed an increased intensity of the absorption bands in the 2930 and 2855  $\text{cm}^{-1}$  region, as compared with those of polybenzylidene, which correspond to the 2926 and 2853  $\text{cm}^{-1}$  valency oscillation frequencies of methylene groups. A similar intensification of bands corresponding to the methylene groups was observed in the spectrum of the 4MPD polymer, besides showing the characteristic absorption bands for the methyl group. A peak corresponding to methylene groups appeared also on the proton resonance spectrum. The authors assume that the formation of methylene groups is due to partial isomerization of the benzylidene group during the polymerization process, the methylene and phenylene groups appearing in the main chain. Thermal stability studies within a 50-300C range revealed the 4MPD polymer to be the most resistant, almost equaling polybenzylidene, while the PD copolymer's compression modulus was most affected by temperature, which was attributed to a higher content in methylene groups. Thanks are given to G. A. Sidorov for the taking of infrared spectra, and to E. I. Fedin and A. P. Petrovskiy for the proton resonance spectra. Orig. art. has: 1 formula and 3 charts.

Card 2/3



ACCESSION NR: AP3012237

ASSOCIATION: Institut elementoorganicheskikh soedineniy AN SSSR (Institute of Elementoorganic Compounds, AN SSSR)

SUBMITTED: 15Feb62

DATE ACQ: 22Nov63

ENCL: 00

SUB CODE: CH, MA

NS~~REF~~ SOV: 003

OTHER: 019

Card 3/3

PESIN, V. G.; KHALETSKIY, A. M.; SERGEYEV, V. A.

Chemistry of 2,1,3-thiodiazole. Part 16: Chlorination,  
bromination and thiocyanation of 5-aminobenzo-2,1,3-  
thiodiazole. Zhur. ob. khim. 33 no.1:230-233 '63.  
(MIRA 16:1)

1. Leningradskiy khimiko-farmatsevticheskiy institut.

(Thiadiazole)

PESIN, V.G.; KHALETSKIY, A.M.; SERGEYEV, V.A.

Chemistry of 2,1,3-benzothiadiazole. Part 17: Halogenation  
of 2,1,3-benzothiadiazole and its halo derivatives. Zhur.ob.khim.  
33 no.3:949-952 Mr '63. (MIRA 16:3)

1. Leningradskiy khimiko-farmatsevticheskiy institut.  
(Benzothiadiazole) (Halogenation)

PESIN, V.G.; KHALETSKIY, A.M.; SERGEYEV, V.A.

2,1,3-Thiodiazole. Part 22: Nitration of derivatives of  
benzo-2,1,3-thiodiazole. Zhur.ob.khim. 33 no.6:1759-1766 Je  
'63. (MIRA 16:7)

1. Leningradskiy khimiko-farmatsevticheskiy institut.  
(Benzothiadiazole) (Nitration)

KORSHAK, V.V.; SERGEYEV, V.A.; SHLEYFMAN, R.B.

"Kaproлит." Priroda 52 no.10:93-100 '63.

(MIRA 16:12)

1. Institut elementoorganicheskikh soyedineniy AN SSSR, Moskva.
2. Chlen-korrespondent AN SSSR (for Korshak).

PESIN, V.G.; KHALETSKIY, A.M.; SERGEYEV, V.A.

2,1,3-Thiadiazoles and selenadiazoles. Part 25: Direct amination of  
2,1,3-benzothiadiazole derivatives. Zhur.ob.khim. 34 no.1:261-272  
Ja '64. (MIRA 17:3)

1. Leningradskiy khimiko-farmatsevticheskiy institut.

PESIN, V. G.; SERGEYEV, V. A.; KHALETSKIY, A. M.

2,1,3-Thia- and selenadiazoles. Part 30: Nitration of mono-  
and dimethyl derivatives of benzo-2,1,3-thiadiazole. Zhur.  
ob. Khim. 34 no.6:1986-1992 Je '64. (MIRA 17:7)

1. Leningradskiy khimiko-farmatsevticheskiy Institut.

RUSSIA, G.I.; SIBIRSKAYA, G.A.; ANATOLSKAYA, A.M.

2,1,3-Thia- and selenadiazole. Part 31: Halogenation of 2,1,3-benzotriadiazole and its halo-, mono-, and dimethyl derivatives. Zhur. ob. khim. 34 no.9:3028-3034 S '64.

(MIRA 17:11)

L. Leningradskiy khimiko-farmatsevticheskiy institut.



ACCESSION NR: AP5011028

UR/0079/64/034/011/3753/3756

AUTHOR: Pesin, V. G.; Sergeev, V. A.; Khaletskiy, A. M. 1  
BTITLE: Investigations in the field of 2, 1, 3-thia- and -selenadiazole. XXXII.  
Behavior of benz-2, 1, 3-thiadiazole, and its derivatives toward chromic acid

SOURCE: Zhurnal obshchey khimii, v. 34, no. 11, 1964, 3753-3756

TOPIC TAGS: chromic acid, organic nitrogen compound, organic azo compound, organic sulfur compound

Abstract: Under the action of chromic anhydride in sulfuric acid on benz-2,1,3-thiadiazole, its 4- and 5-methyl- and 5,6-dimethyl derivatives, 2,1,3-thiadiazole-4,5-dicarboxylic acid was formed in satisfactory yield. In the case of 5-bromobenz-2,1,3-thiadiazole, in addition to the latter, 4,5-dibromobenz-2,1,3-thiadiazole was formed. 5-Chloro-, 4,7-dichloro-, 4,7-dibromo-, 4-nitro-, and 5-nitrobenz-2,1,3-thiadiazoles manifested high stability toward this oxidizing agent. In the reaction of 2,1,3-thiadiazole-4,5-dicarboxylic acids with organic bases (aniline, isomeric toluidines, pyridine, p-anisidine, p-phenetidine, and piperazine, the corresponding acid salts were produced; with beta-phenyl-isopropylamine, dimethylaminoethylamine, and piperidine, neutral salts were formed. Orig. art. has 7 formulas and 3 tables.

Card 1/2

ACCESSION NR: AP5011028

ASSOCIATION: Leningradskiy khimiko-farmatsevticheskiy ihstitut (Leningrad  
Chemicopharmaceutical Institute)

SUBMITTED: 26Jun63

ENCL: 00

SUB CODE: OC, GC

NO REF SOV: 010

OTHER: 015

JPBS

Card 2/2

L 65132-65 EWT(m)/EWP(j) RM

ACCESSION NR: AP5021598

UR/0286/65/000/013/0070/0070

AUTHORS: Korshak, V. V.; Sergeev, V. A.; Shitikov, V. K.; Burlutskiy, V. F.;  
Belyakova, I. Kh.; Zheltakova, S. G.

TITLE: A method for obtaining phenolaldehyde resins. Class 39, No. 172489

SOURCE: Byulleten' izobreteniy i tovarnykh znakov, no. 13, 1965, 70

TOPIC TAGS: resin, phenolaldehyde, formaldehyde

ABSTRACT: This Author Certificate presents a method for obtaining phenolaldehyde resins by condensing phenol or formaldehyde in the presence of a solvent. The condensation is conducted in the presence of methylol derivatives of phenolphthaleine, using dimethyl formamide as the solvent.

ASSOCIATION: none

SUBMITTED: 13Jul62

ENGL: 00

SUB CODE: 00

NO REF SOV: 000

OTHER: 000

Card 1/1

L 41251-65 EWT(m)/T/EWA(m)-2

S/0048/65/029/001/0105/0112

ACCESSION NR: AP5004531

AUTHOR: Sergeyev, V.A.

19

14  
11  
B

TITLE: Contribution to the theory of deuteron scattering by alpha particles Report, 14th Annual Conference on Nuclear Physics held in Tbilisi 14-22 Feb 1964

SOURCE: AN SSSR. Izvestiya. Seriya fizicheskaya, v.29, no.1, 1965, 105-112

TOPIC TAGS: alpha particle, deuteron scattering, phase analysis, mathematical physics

ABSTRACT: The p-wave scattering phases for deuterons on  $\alpha$ -particles were calculated for deuteron energies up to 4.6 MeV by a variational method with distortion of the deuteron wave function taken into account. The interaction between a nucleon and the  $\alpha$ -particle was described by a Gaussian potential, and calculations were performed both with the parameter values employed by S.Sack, L.C.Biedenharn and G. Breit (Phys.Rev.93,321,1954) and with those of E.van der Spuy (Nucl.Phys.1,381, 1956). The nucleon-nucleon interaction was represented by a 50.89 MeV deep Gaussian well with radius 1.82 fermi. Calculations were also performed with a stepped rectangular potential well. The calculations were performed by the variational me-

Card 1/2

L 41251-65

ACCESSION NR: AP5004531

2

thod of W.Kohn (Phys.Rev.74,1763,1948) and also by that of S.I.Rubinow (Phys.Rev. 98,183,1955). Both methods gave nearly the same results. The effect of deuteron distortion was to increase the effective interaction and the scattering phases. The p-wave scattering phases were positive, increased with increasing deuteron energy, and showed considerable dependence on the total angular momentum quantum number. This is not in good agreement with the phase analysis of the experimental data performed by A.Galonsky and M.T.McEllistrem (Phys.Rev.98,590,1955) which showed the p-wave phase to be negative for deuteron energies between 3 and 4.6 MeV. The experimental phase, however, is positive at energies near 1 MeV, in agreement with the present calculations. Calculations with the rectangular potential well of J.L. Gammel, B.J.Hill and R.M.Thaler (Phys.Rev.119,267,1960) lead to negative phases over the full range of energies considered here, and this potential is accordingly regarded as unsatisfactory. In order to obtain better understanding it would be desirable to calculate other properties of the  $n + p + \alpha$  system and to improve the phase analysis of  $d-\alpha$  scattering. "In conclusion, the author expresses his deep gratitude to M.V.Kazarnovskiy for valuable discussions and to Z.P.Mukhinova for performing the extensive calculations." Orig.art.has: 20 formulas and 2 figures.

PHYSICS INSTITUTE, AN SSSR -

SUBMITTED: 0-JAN 65

Card 2/3

L 54629-65 EWT(m)/EPF(c)/EPR/EWP(j)/T Pc-4/Pr-4/Ps-4 RPL WW/RM  
 UR/0286/65/000/007/0102/0102  
 ACCESSION NR: AP5010915

AUTHOR: Korshak, V. V.; Kogan, A. M.; Frunze, I. M.; Sergeyev, V. A.; <sup>32/6</sup>  
Karashev, V. V.; Shleyfman, R. B.; Danilevskaya, L. B.

TITLE: A method of obtaining styrene-ε-caprolactam copolymers.  
 Class 39, No. 169782 ✓

SOURCE: Byulleten' izobreteniy i tovarnykh znakov, no. 7, 1965, 102

TOPIC TAGS: copolymer, styrene caprolactam copolymer, polymerization catalyst, caprolactam

ABSTRACT: This method of forming copolymers of ε-caprolactam and styrene by copolymerization of the corresponding monomers in the presence of N-acryloylcaprolactams is characterized by the use of ε-caprolactam as solvent, and the use of anionic catalysts or a mixture of anionic and free radical catalysts. The two types of catalysts are added either simultaneously or sequentially. This procedure enhances formation of graft copolymers with desirable properties. A mixture of the sodium derivative of caprolactam and N-acylamide co-catalyst, containing unsaturated substituents, can be used as the anionic catalyst. [VS]

Card 1/2

L 54629-65

ACCESSION NR: AP5010915

0

ASSOCIATION: none

SUBMITTED: 07Mar64

ENCL: 00

SUB CODE: OC, GC

NO REF SOV: 000

OTHER: 000

ATD PRESS: 3231

Card

*RR*  
2/2

L 01007-66 EPP(m)/EPP(c)/EPP(j)/T RM/AM

ACCESSION NR: AP5019564

UR/0191/65/000/008/0009/0011

678.632'32'21

AUTHOR: <sup>44,55</sup> Doroshenko, Yu. Ye.; <sup>44,55</sup> Korshak, V. V.; <sup>44,55</sup> Sergeyev, V. A.

30

29

B

TITLE: <sup>44,55</sup> Phenolformaldehyde polymers. <sup>44,55</sup> The effect of the structure of bis-phenol on the properties of polymers

SOURCE: <sup>44,55</sup> Plasticheskiye massy, no. 8, 1965, 9-11

TOPIC TAGS: polymer, polymerization, phenolformaldehyde, thermosetting material

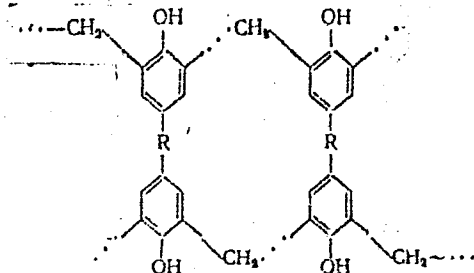
ABSTRACT: The physical and mechanical properties of polymers were investigated as a function of the length of cross linkage. Polymers were synthesized from 1,6-bis-(*n*-hydroxyphenyl)-hexane, 1,8-bis-(*n*-hydroxyphenyl)-octane and 1,10-bis-(*n*-hydroxyphenyl)-decane by condensation with formaldehyde in *n*-propanol in the presence of ammonia. The distance between polymer chains can be changed by changing the length of R in the following structure

Card 1/2



D. 01007-66

ACCESSION NR: AP5019564



The obtained resols were softened at 130°C and pressed at 180°C into 4 mm thick specimens. These latter were tested for impact and flexure strength. When the number of methylene groups in the space lattice of thermosetting phenolformaldehyde polymers is increased, not only are the mechanical properties improved but the polymers become more thermally stable. It was found that thermal treatment above 400°C causes significant loss in weight. At 500°C the yield of the secondary polymer (coke) decreases with an increase in the polymethylene chain. Orig. art. has: 2 tables and 2 figures.

ASSOCIATION: none

SUBMITTED: 00

NO REF SOV: 002

Card 2/2

ENCL: 00

OTHER: 001

SUB CODE: OC, NT

L 9690-66 EWT(m)/EWP(j)/T/ETC(m) WW/RM

ACC NR: AP5028485

SOURCE CODE: UR/0286/65/000/020/0065/0065

INVENTOR: Korshak, V. V.<sup>44,55</sup>; Sergeev, V. A.<sup>44,55</sup>; Shitikov, V. K.<sup>44,55</sup>

41  
B

ORG: none

TITLE: Preparative method for phosphorus-containing polyesters. Class 39, No. 175651<sup>15</sup>

SOURCE: Byulleten' izobreteniy i tovarnykh znakov, no. 20, 1965, 65

TOPIC TAGS: polyester plastic<sup>44,55</sup>, heat resistant plastic, fire resistant material, phosphorus

ABSTRACT: An Author Certificate has been issued for a preparative method for heat-resistant phosphorus-containing polyesters. The method involves condensation of phosphorus acid chlorides or esters with phenolphthalein. [SM]

SUB CODE: 11/ SUBM DATE: 07Dec65/ ATD PRESS: 4157

cc

Cord 1/1

UDC: 678.673:678.85

I 9689-66 EWT(m)/EWP(i)/T RM SOURCE CODE: UR/0286/65/000/022/0062/0062  
ACC NR: AP6000995

INVENTOR: Korshak, V. V.; <sup>44,55</sup>Sergeyev, V. A.; <sup>44,55</sup>Shitikov, V. K. <sup>44,55</sup>

ORG: none

TITLE: Preparative method for thermosetting organometallic polymers. Class 39,  
No. 176422<sup>15</sup>

SOURCE: Byulleten' izobreteniy i tovarnykh znakov, no. 22, 1965; 62

TOPIC TAGS: thermosetting material, organometallic compound, polymer

ABSTRACT: An Author Certificate has been issued for a preparative method for ther-  
mosetting organometallic polymers involving condensation of furfural with zirconium  
acetylacetonate. The method provides for heating of the reactants over an inorganic  
alkali catalyst. [BO]

SUB CODE: 07, 11/ SUBM DATE: 19Feb63/ ATD PRESS: 4157

OC  
Card 1/1

UDC: 678.029.5:669.296.547.724.1

A L 11607-66 EWT(m)/EWP(J)/T RM

ACC NR: AP6001863

SOURCE CODE: UR/0190/65/007/012/2067/2072

AUTHORS: Mukhamed Abdel'moneym El' Azmirli; Korshak, V. V.; Sergeyev, V. A.

ORG: Moscow Chemical-Technological Institute im. D. I. Mendeleev (Moskovskiy khimiko-tekhnologicheskii institut); Institute for Heteroorganic Compounds, AN SSSR (Institut elementoorganicheskikh soyedineniy AN SSSR)

TITLE: On the autocatalytic nature of the anionic polymerization process of  $\epsilon$ -caprolactam with alkali salts

SOURCE: Vysokomolekulyarnyye soyedineniya, v. 7, no. 12, 1965, 2067-2072

TOPIC TAGS: polymer, polymerization, catalytic polymerization, polymerization catalyst, heat of polymerization, polymerization kinetics, enin, alkali

ABSTRACT: The catalytic anionic polymerization of  $\epsilon$ -caprolactam (KL) in the presence of the sodium salt of KL or N,N'-isophthaloyl-bis- $\epsilon$ -caprolactam was studied to extend the currently available information on the properties of poly- $\epsilon$ -caprolactam. The change in temperature during polymerization, the yield of polymer, and the specific viscosity of the reaction mixture as a function of the initial temperature of reaction were determined. Experimental results are shown in tables and graphs (see Fig. 1), and a polymerization mechanism is proposed. It was found that the polymers obtained during the anionic polymerization of  $\epsilon$ -caprolactam

Card 1/2

UDC: 66.095.26+678.675

L 11607-66

ACC NR: AP6001863

0

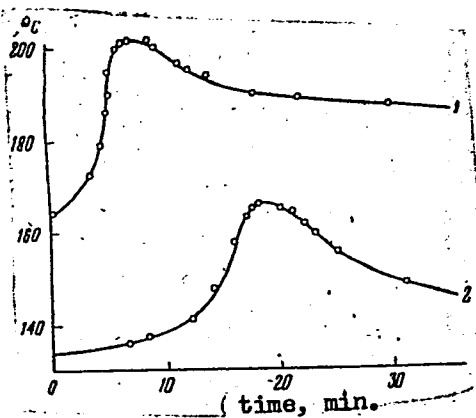


Fig. 1. Change in the temperature of the reaction mixture during polymerization. Initial temperatures: 1 - 164°C; 2 - 134°C.

catalyze the polymerization of  $\epsilon$ -caprolactam, so that the polymerization is autocatalytic. Orig. art. has: 2 tables, 4 graphs, and 8 equations.

SUB CODE: 0711/ SUBM DATE: 07Jan65/ ORIG REF: 008/ OTH REF: 006

Card <sup>de</sup> 2/2

DOROSHENKO, Yu.Ye.; SERGEYEV, V.A.

Synthesis of  $\alpha, \omega$ -bis(p-hydroxyphenyl) alkanes. Zhur. org.  
khim. 1 no.9:1602-1604 S '65. (MIRA 18:12)

1. Moskovskiy khimiko-tehnologicheskii institut imeni D.I.  
Mendeleyeva i Institut elementoorganicheskikh soyedineniy  
AN SSSR. Submitted July 11, 1964.

L 20801-66 EWP(j)/EWT(m)/ETC(m)-6/T IJP(c) RM/WW

ACC NR: AP6005951

SOURCE CODE: UR/0191/66/000/002/0033/0035

AUTHORS: Korshak, V. V.; Sergeev, V. A.; Kozlov, L. V.; Komarova, L. I. 37  
13

ORG: none

TITLE: Thermal and thermooxidative destruction of phenolformaldehyde oligomers of novolac type

SOURCE: Plasticheskiye massy, no. 2, 1966, 33-35

TOPIC TAGS: phenolformaldehyde, oligomer, thermal decomposition, oxidation

ABSTRACT: Chemical processes occurring in novolac phenolformaldehyde oligomers upon heating at 150--900C have been investigated by elementary analysis, titration for OH groups, and ESR and IR spectral analysis. Oligomers were prepared according to the method described by K. A. Andrianov and D. A. Kardashev (Prakticheskiye raboty po iskusstvennym smolam i plastmassam, ONTI, 1936, str. 198), washed repeatedly with distilled water, and dried at 150C/1--2 mm for 15 hours. The product, containing 2% of free phenol, was subjected to thermal and thermooxidative treatment for 3--4 hours. It was established that the primary act in thermooxidative destruction was oxidation of methyl groups. Cross-linking during thermal

Card 1/2

UDC: 678.632'32'21.01:536.45 2

L 20301-05

ACC NR: AP6005951

treatment of the novolac oligomers mainly occurs due to formation of aromatic etheral bonds. This process is facilitated by conversion of polymeric hydrogen bonds to dimeric ones. Orig. art. has: 2 tables and 2 figures.

SUB CODE: 11/ SUBM DATE: none/ ORIG REF: 007/ OTH REF: 008

Card 2/2



L 31922-66 EWT(m)/EWP(j)/T IJP(c) WW/JWD/RM

ACC NR: AF6007972 (A)

SOURCE CODE: UR/0191/66/000/003/0057/0059

AUTHOR: Sergeyev, V. A.; Korshak, V. V.; Kozlov, L. V.

ORG: none

TITLE: Thermal destruction of thermoactive resins containing nitrogen

SOURCE: Plasticheskiye massy, no. 3, 1966, 57-59

TOPIC TAGS: resin, nitrogen compound, thermal decomposition

ABSTRACT: Thermal destruction of the thermoreactive resins obtained by a polycondensation of aniline, p-aminophenol, m-phenylenediamine, 2,6-diaminopyridine, fuchsin, melamine, dicyandiamide, or urea with formaldehyde was studied at 330 and 900C. At 330C, the highest amount of NH<sub>3</sub> was evolved from the dicyandiamidephenol (4:6), dicyandiamide, and 2,6-diaminopyridine resins. No NH<sub>3</sub> was evolved from melamine and aniline resins. At 900C, the lowest loss of weight was observed in fuchsin, p-aminophenol, and m-phenylenediamine, and the highest in urea resins. Heating the resins at 900C, a 19-65% yield of solid product was obtained. The resins of p-aminophenol and m-phenylenediamine produced 2-2 1/2 times more solid than the aniline resin. Apparently, the anilineformaldehyde resin is less cross-linked and, subsequently, thermally less stable. Even though m-phenylenediamine and p-aminophenol resins have the same structure and the same number of cross-links, their thermal behavior was not alike.

Card 1/2

UDC: 678.652.019.35

mt  
Card 2/2

ZAIKIN, D.A.; SERGEYEV, V.A.

Nucleon interaction with  $H^3$  and  $He^3$  at low energies. Izv. AN SSSR.  
Ser.fiz. 30 no.1:148-155 Ja '66. (MIRA 19:1)

I. Fizicheskii institut im. P.N.Lebedeva AN SSSR.

ACC NR: AP7008882

SOURCE CODE: UR/0367/66/004/004/0712/0719

AUTHOR: Barit, I. Ya.; Sergeev, V. A.--Sergeev, V. A.

ORG: Institute of Physics im. P. N. Lebedev, AN SSSR (Fizicheskiy institut AN SSSR)

TITLE: Charge-invariant analysis of nucleon scattering experiments on  $A = 3$  nuclei

SOURCE: Yadernaya fizika, v. 4, no. 4, 1966, 712-719

TOPIC TAGS: scattering cross section, nucleon, S matrix

SUB CODE: 20

ABSTRACT: The charge-invariant phase shift analysis of a number of experiments on the direct and charge exchange scattering of 0 - 1.7 MeV (c. m.  $\epsilon$ ) nucleons on  $A = 3$  nuclei has been performed. Spin-orbital interaction and the contribution of  $l \geq 2$  waves were neglected. The S-matrix elements for  $l = 0$ ,  $I = 0$  and  $l$  were determined, describing the experimental scattering cross sections at  $\theta_{\text{cms}} = 90^\circ$  with an accuracy  $\sim 10\%$ . The analysis confirms the existence of a virtual level in  $\text{He}^4$  with  $J^\pi = 0^+, T = 0$ , below the (p, n)-reaction threshold and indicates the importance of taking the spin-orbital interaction into account for energies  $> 1.1$  MeV. Orig. art. has: 1 figure, 11 formulas and 2 tables. [Based on authors' Eng. abst.] [JPRS: 39,658]

Card 1/1

UDC: none

SERGEYEV, V. A.

"Results of Investigations into the Influence of Filtration of Sea-Water Across the Kapabogazsk Sand Bars Upon the Level of the Bay," Scientific Bulletin of Leningrad State University, No 3, 1946 (22-23).  
(Meteorologiya i Gidrologiya, No 6 Nov/Dec 1947)

SC: U-3218, 3 Apr 1953

SERGEYEV, V. A.

Sep/Oct 48

USSR/Hydrology - Caspian Sea  
Earthquakes

"Reason for the Present-Day drop in the Level of The Caspian Sea," S. Yu. Belinkov

"Meteorol i Gidrol" No 5, pp 104-108

Critically discusses argument advanced by Prof B. L. Lichkov and Docent V. A. Sergeyev in article in "Vestnik Leningradskogo Universiteta," No 2, 1948, that result of movements of earth's crust in the Caspian depression is a subsidence of the sea bottom which affects volume of basin enough to drop sea level.

Sibmitted 16 Jul 48

166T42

SERGEYEV, V.A., dotsent.

Use of cyclic observations of the level of underground waters in  
some water balance calculations. Nauch. biul. Len. un. no.22:31-34  
'49. (MLRA 10:4)

1. Geologo-pochvennyy fakul'tet.  
(Water, Under'ground)

SERGEYEV, V.A.

Stratigraphy and tectonics of the western coastal region of Kara-Bogaz-Gol (Gulf). Trudy Len.ob-va est. 68 no.2:7-25 '51.(MLRA 9:3)  
(Kara-Bogaz-Gol (Gulf) region--Geology)

SERGEYEV, V. A.

Translation from: Referativnyy zhurnal, Geografiya, 1957, Nr 7,  
p 33 (USSR) 14-57-7-14471

AUTHOR: Sergeyev, V. A.

TITLE: Structural Peculiarities of Eastern Kopet-Dag  
(Nekotoryye osobennosti struktury Vostochnogo Kopet-Daga)

PERIODICAL: Vestn. Leningr. un-ta, 1956, Nr 24, pp 14-23

ABSTRACT: Local faults are absent in Eastern Kopet-Dag. Its structure was formed by recent movements. Uplifting of Kopet-Dag apparently began in the Miocene period. It is possible that even today differential subsidences are taking place in different regions, particularly in the **piedmont section of Karakum**. These subsidences are parallel to other movements in Eastern Kopet-Dag. It is probable that this process caused the Tedzhen and Murgab Rivers to shift to the

Card 1/2



SERGEYEV, V.A.

Possible relation of interior drainage basins and depressions of  
the Mangyshlak steppe region to the Caspian Sea level. Uch.zap.  
Len.un. no.209:58-72 '56. (MLBA 9:8)  
(Mangyshlak Peninsula--Physical geography)

СЕРГЕЕВ, В.А.

SERGEEV, V.A.

Geology of the eastern shores of the Kara-Bogaz-Gol (Kulan-Gurlan  
area). Trudy Len. ob-va est. 69 no.2:98-106 '57. (MIRA 11:2)  
(Kulan-Gurlan, Cape--Geology)

SERGEYEV, V.A.

The concept "ground waters" in hydrogeology [with summary in  
English]. Vest.LGU 13 no.18:44-53 '58. (MIRA 12:1)  
(Water, Underground)

ZUYEV, A.V.; SERGEYEV, V.A.

Relationship between the water discharge of springs and  
fractures in water-bearing rocks. Vest.LGU 14 no.18:  
43-49 '59. (MIRA 12:8)  
(Rocks---Permeability) (Springs)

SERGEYEV, V.A.

Estimate of the water balance of underground waters based on level  
fluctuations. Vest.LGU 16 no.12:61-69 '61. (MIRA 14:6)  
(Water, Underground)

S/213/62/002/001/001/002  
1068/1242

AUTHORS: Tsyplyukhin, V. F. and Sergeev, V. A.  
TITLE: Instrumental investigation of the damping of waves with depth  
PERIODICAL: Okeanologiya, v. 2, no. 1, 1962, 134-138

TEXT: The article describes investigations on the tenth voyage of the ship Lomonosov. Surface waves were measured by an electrical contact meter built by one of the authors. Damping of the waves with depth was measured by a system of membrane transducers with compensating air chambers. Vertical displacement of the gage was measured by a ГМ-16 (GM-16) wave recorder. All readings were recorded simultaneously on the chart of the high-speed potentiometer ЭПП-09 (EPP-09). An error of 6% was found in the previous value of wave height and an error of 15-20% in the previous value of the dynamic coefficient  $\eta$ . The measurements showed that  $\eta$  is a quadratic function of the period of surface waves,  $T$

$$\eta = \frac{Z_0}{h} = \frac{1}{4\pi^2} \frac{\gamma S}{M} T^2$$

where  $Z_0$  — amplitude of forced oscillations of the gage,  $h$  — height of wave,  $S$  — surface area of the gage above the water,  $M$  — mass of the gage and its system. There are 4 figures.

ASSOCIATION: Morskoy gidrofizicheskiy institut USSR (Hydro-Physical Sea Institute, UkrSSR)

SUBMITTED: November 9, 1961

Card 1/1

TSYPLUKHIN, V.F.; SAMARIN, V.G.; SERGEYEV, V.A.

Gradient measurements of pressure variations in the surface  
layer of the sea from a ship by the use of a wave measuring  
pole. Okeanologiya 1 no.3:522-530 (MIRA 16:9)

1. Morskoy gidrofizicheskiy institut AN SSSR.

SERGFYEV, V.A.; TSYPLUKHIN, V.F.

Amplitude-periodic wave analyzer. Trudy Mor.gidrofiz.inst.  
AN URSR 28:54-58 '63. (MIRA 17:3)



SERGEYEV, V.A.

Sergei Sergeevich Kuznetsov as organizer of the Department of  
Hydrogeology at Leningrad University. Trudy Geol. muz. AN SSSR  
no.14:7-9 '63. (MIRA 17:11)

ANSBERG, Ye.A., assistant; BOROVITSKIY, V.P., dots.; BUTS, Sh.F., dots.; Prinsipali uchastiya: SERGEYEV, V.A., dots.; SAMARINA, V.S., st. nauchn. sotr.; SKORYNINA, N.P., red.

[Practice in general hydrogeology] Praktikum po obshchei gidrogeologii. Leningrad, Izd-vo Leningr. univ., 1965. 231 p. (MIRA 18:4)

1. Kafedra gidrogeologii Leningradskogo gosudarstvennogo universiteta im. A.A.Zhdanova (for Buts, Ansberg, Sergeyev).
2. Institut Zemnoy kory, Leningrad (for Samarina).
3. Gornyy institut, Leningrad (for Borovitskiy).

ACC NR: A1000016 (A,N) SOURCE CODE: UR/0413/66/000/023/0130/0130

INVENTOR: Ivanov, V. V.; Sheheglov, G. M.; Spasskiy, K. N.; Karakhan'yan, V. K.; Prudovskiy, B. M.; Semenov, M. I.; Sergeyeu, V. A.; Smirnov, I. N.; Britvin, L. N.; Shtel'makh, A. A.

ORG: None

TITLE: An impeller. Class 59, No. 189315 [announced by the All-Union Scientific Research Institute of Hydraulic Machine Building (Vsesoyuznyy nauchno-issledovatel'skiy institut gidromashinostroyeniya)]

SOURCE: Izobreteniya, promyshlennyye obraztsy, tovarnyye znaki, no. 23, 1966, 130

TOPIC TAGS: centrifugal pump, blade profile, *metal blade, pump component*

ABSTRACT: This Author's Certificate introduces: 1. An impeller for an open centrifugal pump. Pump efficiency is improved and the rigidity of the impeller blades is increased by making the blades in the cylindrical section with a channel shape. The walls of the blade channel are recurved toward the front at a sharp angle to the walls of the pump housing. 2. A modification of this impeller in which the blade channel formed in the cylindrical section has a flat bottom. 3. A modification of this impeller with U-shaped grooves in the flat bottom of the channel on the working side of the blade. These grooves are adjacent to the end surfaces of the blades.

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UDC: 621.671.1-253.5

ACC NR: AP7002616

4. A modification of this impeller equipped with a flat annular rim connected to each blade at the middle of its end sections. 5. A modification of this impeller equipped with flat ribs which connect the middle of the end section on the back side of each blade to the central section of the working side of the following blade.

SUB CODE: 13/ SUBM DATE: 13Jul65

Card 2/2