

AUTHORS: Davydova, V. P., Voronkov, M. G.      SOV/79-28-7-35/64

TITLE: Investigation in the Field of Alkoxy-Silanes (Issledovaniya v oblasti alkoksilsilanov) XI. The Reaction of Dialkyl-Diacetoxy-Silanes with Glycerin and Pentaerythrite (XI. Reaktsiya dialkildiatsetoksisilanov s glitserinom i pentaeritritom)

PERIODICAL: Zhurnal obshchey khimii, 1958, Vol. 28, Nr 7, pp.1879-1882 (USSR)

ABSTRACT: Earlier (Ref 2) the authors showed that the dialkyl-diacetoxy-silanes react with glycols under the formation of cyclic dialkyl-silanediolethers or their dimers (scheme 1). They were interested in extending this reaction to the polyvalent alcohols, especially to glycerin and pentaerythrite. It appeared that the above mentioned silanes easily enter reaction with pentaerythrite under the formation of the hitherto unknown spiro-cyclic ethers of the dialkyl-silanedioles according to scheme 2. This way they obtained, for instance, by the conversion of pentaerythrite with dimethyldiacetoxy-silane the crystallized 3,3,9,9-tetramethyl-2,4,8,10-tetraoxa-3,9-disilaspiro (5,5) undecane (Formula I). The reaction of

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Investigation in the Field of Alkoxy-Silanes. XI. The Reaction of Dialkyl-  
Diacetoxy-Silanes With Glycerin and Pentaerythrite

SOV/79-28-7-33/64

dialkyl-diacetoxy-silanes with glycerin proved to be more complicated. In using diethyl-diacetoxy-silane with glycerin the compound with the formula  $C_{18}H_{40}O_6Si_2$  (II) was obtained, for which the structural formulæ (IIa) and (IIb) are equally probable. However, in the reaction of dimethyl-diacetoxy-silane with glycerin the authors in all cases obtained an easily polymerizing product of the empiric formula  $C_{17}H_{18}O_5Si$  with two hydroxyl groups and an acetoxy group combined with the carbon. According to the experimental data obtained this compound corresponds with regard to its structure to the formula (III), which fact is explained by the last scheme. There are 5 references, 5 of which are Soviet.

ASSOCIATION: Institut khimii silikatov Akademii nauk SSSR (Institute of Silicate Chemistry, AS USSR)

SUBMITTED: June 6, 1957  
Card 2/3

SOV/79-26-7-33/64  
Investigation in the Field of Alkoxy-Silanes. XI. The Reaction of Dialkyl-  
Diacetoxy-Silanes With Glycerin and Pentaerythrite

1. Silicanes--Chemical reactions
2. Dithioglycerol--Chemical reactions
3. Pentaerythritol tetranitrate--Chemical reactions

Card 3/3

AUTHORS: Voronkov, M. G., Davydova, V. P., <sup>00072-10-8-10/00</sup> Lazarev, I. I.

TITLE: Investigations in the Field of Alkoxy Silanes (Izucheniye v oblasti alkoksisilanov) XII. Hexa-Tert.-Butoxycyclo Tri-siloxane (XII. Geksa-tret.-butoksitsiklotrisiloksan)

PERIODICAL: Zhurnal obshchey khimii, 1958, Vol. 38, Nr 3, pp. 2128-2131 (USSR)

ABSTRACT: Polydialkoxy-cyclosiloxanes  $[(RO)_2SiO]_n$  have hitherto been synthesized according to the hydrolysis reaction (ref. 1-4),  $n(RO)_2SiX_2 + nH_2O \rightarrow [(RO)_2SiO]_n + 2nHX$ , where  $R = C_2H_5, C_4H_9$ ;

$X = Cl, OC_2H_5, NH_2$ ;  $n = 3-8$ .

The authors observed a very interesting case of formation of a previously unknown hexa-tert.-butoxy-cyclotrisiloxane by the way of an intermolecular condensation of the tri-tert.-butoxy-acetoxysilane in a tert.-butyl alcohol medium in the presence of tert.-sodium butylate according to scheme 2. Such a reaction under formation of a siloxane compound at

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Investigations in the Field of Alkoxy Silanes.  
XII. Hexa-Tert.-Butoxycyclo Trisiloxane

807/79-18-3-10/66

the expense of the alkoxy- and acyloxy silane condensation (Scheme 3) has hitherto been known to an only small extent in the organosilicon chemistry. The main product of the above mentioned reaction is the completely resistant cyclic trisiloxane and not, as expected, the tetrasiloxane which circumstance is assumed to be caused by the influence of the tert.-butoxy groups. Hexaethoxy-cyclotrisiloxane is, in contrast to octaethoxy-cyclotetrasiloxane, obtained only with difficulty and is very unstable. The infrared absorption spectrum of the hexa-tert.-butoxy-cyclotrisiloxane was investigated. Its interpretation permits to draw several conclusions on the structure of the cycle. This is shown by the figure. There are 1 figure and 22 references, 9 of which are Soviet.

ASSOCIATION: Institut khimii silikatov Akademii nauk SSSR  
(Institute of the Chemistry of Silicates, AS USSR)

SUBMITTED: July 11, 1957

Card 2/3

Investigations in the Field of Alkoxy Silanes.  
XII. Hexa-Tert.-Butoxycyclo Trisiloxane

SOV/79-28-8-29/66

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5(3)

SOV/80-32-5-31/52

AUTHORS: Vorozkov, M.G., Davydova, V.P., Grishanina, N.P.

TITLE: The Hydrophobization of Paper by Alkylacetoxysilanes and -Siloxanes. Communication V.

PERIODICAL: Zhurnal prikladnoy khimii, 1959, Vol 32, Nr 5, pp 1106-1112 (USSR)

ABSTRACT: Acetoxysilanes cited in Tables 1 and 2 were used for the hydrophobization of paper. The water-resistance of the paper increases, if it is kept longer in 2.5 - 10%-solutions of methyltriacetoxysilane. The optimum are 2.5 - 5% solutions and 10 min. For ethylacetoxysilane the concentration must be above 5% and the time more than 10 min. Phenyl- and n-butyl-triacetoxysilane are more effective than methyltriacetoxysilane. The effect of tetraacetoxysilane disappears with the time due to the esterification of the hydroxyl groups, which form orthosilicic cellulose esters. A mixture of 20% of methylalkoxydiacetoxysilane and 80% of methyltriacetoxysilane increases the hydrophobic properties and improves the quality of the treated material. The hydrophobization by the preparations A-12 and A-16 increases the water-resistance of filter paper from 2 to 100-110 cm, of wrapping paper from 15 to 108-119 cm and of kraft paper from 132 to 190-220 cm.

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SOV/80-32-5-31/52

The Hydrophobization of Paper by Alkylacetoxysilanes and -Siloxanes. Communication V.

In all experiments the treated paper was heated finally for 3 hours to 105-110°C. To reduce this long time the ethyl ether of the orthotitanic acid was used as a catalyst. It reduced the time to 10-30 min at 105-110°C and to 2 min at 150°C. For hydrophobization 2-5% solutions of the preparations A-12 and A-16 are recommended. There are: 6 tables, 2 graphs and 7 Soviet references.

ASSOCIATION: Institut khimii silikatov AN SSSR (Institute of the Chemistry of Silicates of the AS USSR)

SUBMITTED: November 27, 1957

Card 2/2



5(3)

SOV/20-125-3-24/63

AUTHORS:

Voronkov, M. G., Davydova, V. P.

TITLE:

Photochemical Chlorination of Organochlorosilanes by Sulphuryl Chloride (Fotokhimicheskoye khlorigovaniye organokhlorsilanov khlorigistym sul'furilom)

PERIODICAL:

Doklady Akademii nauk SSSR, 1959, Vol 125, Nr 3, pp 553-556 (USSR)

ABSTRACT:

The chlorination mentioned in the title which is not carried out photochemically is used to a great extent in the organic synthesis (Ref 1). It is catalyzed by organic peroxides or halides of several elements. Against this the photochemical reaction of organic compounds with  $SO_2Cl_2$  is used only as its sulfochlorination reaction (Ref 2). The use of  $SO_2Cl_2$  for the introduction of chlorine atoms into the alkyl- or aralkyl radicals connected with a Si-atom which is described in many papers is limited in the case of the chlorination of silicon organic compounds. Under normal conditions the methyl- (Refs 4, 7,9) or phenyl groups (Ref 4) connected with the Si-atom are not chlorinated by  $SO_2Cl_2$  in the presence of benzoyl peroxide.

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SOV/20-125-3-24/63

Photochemical Chlorination of Organochlorosilanes by Sulphuryl Chloride

Though the chlorination of methyl derivatives in the medium of a high-boiling solvent (Refs 7,11,12) is successful, only a small yield is obtained by it. The authors observed that an ultraviolet irradiation catalyzes the last mentioned reaction to a much greater extent than organic peroxides. Thus the use of  $\text{SO}_2\text{Cl}_2$  for the chlorination under comparatively mild conditions is made possible even in the case of compounds which can be chlorinated only with difficulty, like methyl trichlorosilane and methyl dichlorosilane. Ethyl trichlorosilane and the higher alkylchlorosilanes react as easily with  $\text{SO}_2\text{Cl}_2$  at ultraviolet irradiation. An additional communication on this topic follows. An intensive irradiation of a boiling mixture of methyl trichlorosilane and  $\text{SO}_2\text{Cl}_2$  leads to the formation of mono-, di-, and trichloro-derivatives (Table 1). This procedure is recommended especially for the production of  $\text{CHCl}_2\text{SiCl}_3$ . In the presence of  $\text{FeCl}_3$ , neither a photochemical nor a dark chlorination takes place. Quinoline, on the other hand, is a catalyst

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SOV/20-125-3-24/63

## Photochemical Chlorination of Organochlorosilanes by Sulphuryl Chloride

of this reaction.  $\text{FeCl}_3$  is a good catalyst (it is an inhibitor in the case of  $\text{CH}_3\text{SiCl}_3$ ) for the photochemical chlorination of phenyl trichlorosilane, i.e. in the dark (Table 3), though with lower velocity than that of the photochemical reaction. Dimethyl dichlorosilane reacts with  $\text{SO}_2\text{Cl}_2$  considerably more quickly than methyl trichlorosilane (Table 2). Mono- as well as dichloro-derivatives may be obtained with a yield of 45-50% according to the ratio of the initial reagents. Phenyl trichlorosilane is slowly chlorinated photochemically by  $\text{SO}_2\text{Cl}_2$ . The yield of chlorine phenyl trichlorosilane is not high (approximately 15%). In all cases hexachlorobenzene is the main product. Therefore the  $\text{Si-C}_6\text{H}_5$  bond is ruptured and the chlorobenzene (or perhaps benzene) which is split off is chlorinated. Quinoline is an inhibitor (2 mole-%) of the photochemical chlorination of phenyl chlorosilane by  $\text{SO}_2\text{Cl}_2$ . The boiling of benzene with  $\text{SO}_2\text{Cl}_2$  in the dark does not lead to an interaction in the presence or absence of benzoyl peroxide. There are 4 tables and 22 ref-

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SOV/20-125-3-24/63

Photochemical Chlorination of Organochlorosilanes by Sulphuryl Chloride

erences, 7 of which are Soviet.

ASSOCIATION:    Institut khimii silikatov Akademii nauk SSSR (Institute of  
Silicate Chemistry of the Academy of Sciences, USSR)

PRESENTED:      November 5, 1958, by A. V. Topchiyev, Academician

SUBMITTED:      October 29, 1958

Card 4/4

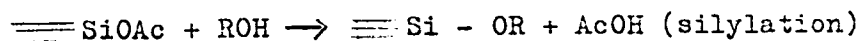
S/661/61/000/006/029/081  
D205/D302

AUTHORS: Davydova, V. P., Voronkov, M. G. and Dolgov, B. N.

TITLE: Cyclic esters of dialkylsilane diols and orthosilicic acid

SOURCE: Khimiya i prakticheskoye primeneniye kremneorganicheskikh soyedineniy; trudy konferentsii. no. 6: Doklady, diskussii, resheniye. II Vses. konfer. po khimii i prakt. prim. kremneorg. soyed., Len., 1958. Leningrad, Izd-vo AN SSSR, 1961, 134-135

TEXT: It is assumed that, depending on the temperature, the reactions between acyloxysilanes and alcohols proceed by different mechanisms. At lower temperatures:



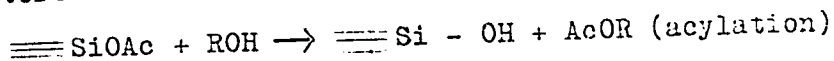
This is changed at higher temperatures to:

Card 1/2



S/661/61/000/006/029/031  
D205/D302

Cyclic esters of ...



The interaction product of dimethyl diacetoxysilane with glycerin,  $(\text{CH}_3)_2\text{Si}(\text{OH})\text{OCH}_2\text{CHOHCH}_2\text{OCOCH}_3$ , polymerizes on standing and splits off acetic acid. The gelatinous polymer is thermally depolymerized on distillation, changing into a liquid. The latter is changed back to a gel on cooling. This polymer is soluble in water. All the cyclic ethers of dimethyl silane diol with glycols or glycerine are reversibly polymerizable. They are obtained in good yields and do not decompose on distillation. These substances possess a strong odor resembling that of menthol. R. Kh. Freydlina (INEOS AN SSSR, Moscow) took part in the discussion which followed.

ASSOCIATION: Institut khimii silikatov, AN SSSR, Leningrad (Institute of Silicate Chemistry of the AS USSR, Leningrad)

Card 2/2

CHERNINA, N.P., doktor med.nauk; DAVYDOVA, V.P., kand.biol.nauk;  
KORYUKIN, V.I., inzh.

Load distribution on the foot in standing and walking. (Electro-  
dynamographic studies). Ortop., travm. i protez. no.7:40-45 '61.  
(MIRA 14:8)

1. Iz Tsentral'nogo nauchno-issledovatel'skogo instituta prote-  
zirovaniya i protezostroyeniya Ministerstva sotsial'nogo obespe-  
cheniya RSFSR (dir. - zasluž. deyatel' nauki prof. B.P. Popov).  
(FOOT)                      (POSTURE)                      (WALKING)

DAVIDOVA, Viktoriya Pavlovna; VORONKOV, Mikhail Grigor'yevich,  
doktor Khim. nauk; FIASTRO, V.D., red.izd-va; AKEF'YEVA,  
G.P., tekhn. red.

["Polyphosphazenes"; polymer and monomer phosphonitrile  
compounds] Polifosfazery; polimernye i monomernye fosfo-  
nitril'nye soedineniia. Moskva, Izd-vo Akad. nauk, 1962.  
86 p. (MIRA 15:11)  
(Phosphonitrile chloride)



PHASE I BOOK EXPLOITATION

SOV/6267

Davydova, Viktoriya Pavlovna, and Mikhail Grigor'yevich Voronkov

Polifosfazeny; polimernyye i monomernyye fosfonitril'nyye soyedineniya  
(Polyphosphazenes; Polymeric and Monomeric Phosphonitrile Compounds)  
Moskva, Izd-vo AN SSSR, 1962. 86 p. 2600 copies printed.

Sponsoring Agency: Akademiya nauk SSSR. Institut khimii silikatov.

Resp. Ed.: M. G. Voronkov, Doctor of Chemical Sciences; Ed. of Publishing  
House: V. D. Piastro; Tech. Ed.: G. P. Aref'yeva.

PURPOSE: This book is intended for scientists, engineers, aspirants, teachers,  
and students in advanced courses at schools of higher education working in  
the field of monomeric and high-molecular compounds.

Card 1/4

Polyphosphazenes (Cont.)

SOV/6267

COVERAGE: This book is reportedly the first effort to review and systematize the existing literature on polyphosphazenes. It is based on journal articles and patents published up to 1961. It is expected that materials prepared from phosphonitrile polymers will be better than materials from the polyorganosiloxanes presently used. The chapter on nomenclature was written by M. G. Voronkov, and the other chapters were prepared by V. P. Davydova. There are 23 Soviet and 218 non-Soviet references.

TABLE OF CONTENTS:

Preface	3
Introduction	4
Nomenclature	6
Phosphonitrile Chlorides and Bromides	8

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PHASE I BOOK EXPLOITATION

SOV/6267

Davydova, Viktoriya Pavlovna, and Mikhail Grigor'yevich Voronkov

Polifosfazeny; polimernyye i monomernyye fosfonitril'nyye soyedineniya  
(Polyphosphazenes; Polymeric and Monomeric Phosphonitrile Compounds)  
Moskva, Izd-vo AN SSSR, 1962. 86 p. 2600 copies printed.

Sponsoring Agency: Akademiya nauk SSSR. Institut khimii silikatov.

Resp. Ed.: M. G. Voronkov, Doctor of Chemical Sciences; Ed. of Publishing  
House: V. D. Piastro; Tech. Ed.: G. P. Aref'yeva.

PURPOSE: This book is intended for scientists, engineers, aspirants, teachers,  
and students in advanced courses at schools of higher education working in  
the field of monomeric and high-molecular compounds.

Card 1/4

Polyphosphazenes (Cont.)

SOV/6267

COVERAGE: This book is reportedly the first effort to review and systematize the existing literature on polyphosphazenes. It is based on journal articles and patents published up to 1961. It is expected that materials prepared from phosphonitrile polymers will be better than materials from the polyorganosiloxanes presently used. The chapter on nomenclature was written by M. G. Voronkov, and the other chapters were prepared by V. P. Davydova. There are 23 Soviet and 218 non-Soviet references.

TABLE OF CONTENTS:

Preface	3
Introduction	4
Nomenclature	6
Phosphonitrile Chlorides and Bromides	8

Card 2/4

L 23526-65 EWT(m)/EPP(c)/EAP(j) Pc-1/Pr-1 RM  
ACCESSION NR: AP4046377 S/0020/64/158/003/0648/0651

AUTHOR: Lazarev, A. N.; Tenisheva, T. F.; Davy\*dova, V. P.

TITLE: The mutual effect of Si-O<sup>-</sup> and Si-O(Si) type bonds

SOURCE: AN SSSR. Doklady\*, v. 158, no. 3, 1964, 648-651

TOPIC TAGS: terminal Si O bond, bridge Si O bond, IR spectra, tetramethyldisiloxanediolate

ABSTRACT: The mutual effect of terminal and bridge Si-O bonds in  $XO(CH_3)_2 SiOSi(CH_3)_2 OX$  type compounds ( $X = H, Li, Na, K$ ) was studied. The IR spectra were obtained and the shifts in the frequencies of the absorption maxima were interpreted. The shifts were most noticeable when going from  $X = H$  to  $X = Li, Na, K$ . Although the calculated data did not give the absolute parameters of the molecules, it showed that as the dynamic coefficient of the Si-O(H, K) bond increased the coefficient of the Si-O(Si) bond decreased by approximately the same value (6-9%) and the SiOSi angle decreased by 8-10 degrees. These

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L 23526-65  
ACCESSION NR: AP4046377

values directly characterized the redistribution of the  $d\pi - p\pi$  interaction in the  $Si-O^-$  and  $Si-O(Si)$  bonds. The intensification of the  $(p \rightarrow d)\pi$  interaction in the  $Si-O^-$  bond, caused by the increased electron density on the O atom, lowered the effective positive charge of the Si d- orbit, decreasing the order of the  $Si-O(Si)$  bond. Similar but smaller shifts in the  $SiOSi$  frequencies occurred when  $X = Li, Na$ . On the other hand the increase in the  $SiO^-$  frequency was significantly larger, probably due to the smaller atom mass of Li and Na in comparison to K. The sharp splitting of the  $\nu_{as}SiOSi$  when  $X = Li$  was explained by intramolecular effects attributed to the strong resonance interaction of the  $O^-(CH_3)_2CiOSi(CH_3)_2O^-$  group due to the  $O \dots Li \dots O$  bridges. Orig. art. has: 1 table, 3 figures and 1 equation.

ASSOCIATION: Institut khimii silikatov im. I. V. Grebenshchikova Akademii nauk SSSR (Institute of Silicate Chemistry, Academy of Sciences, SSSR)

SUBMITTED: 20Apr64  
NR REF SOV: 003

ENCL: 00  
OTHER: 004

SUB CODE: OC, GC

Card 2/2

L 00930-66 ENT(m)/EPF(c)/ENP(j) RH

ACCESSION NR: AP5022089

UR/0138/65/000/008/0006/0008  
678.84:678.01:536:495:54-44

AUTHOR: Davydova, V. P.<sup>44</sup>; Lebedeva, Z. S.<sup>44</sup>; Karlin, A. V.<sup>44</sup>

27  
25  
B

TITLE: Thermal stability of siloxane rubbers obtained with acid or alkaline catalysts

15,44

SOURCE: Kauchuk i rezina, no. 8, 1965, 6-8

TOPIC TAGS: organosilicon compound, siloxane, rubber, thermal stability, catalytic polymerization, synthetic rubber, siloxane rubber, acid catalyst, alkaline catalyst, catalyst removal, thermal stability improvement, silicone rubber

ABSTRACT: The presence of residual alkaline or acid catalysts used for the polymerization of organocyclosiloxanes impairs the thermal stability of the siloxane rubbers obtained. The results of a study on the effect of such catalysts and methods for their removal from the final products are given in the paper. Samples of vinyl group-containing dimethylsiloxane rubbers SKTV and SKTV-1 were used which differed in the content of methylvinylsiloxane repeat units (from 0.1 to 0.5 mol%). The following catalysts were used: potassium polydimethylsiloxanediolate, alkaline; tetramethylammonium polydimethylsiloxanediolate, alkaline, thermally decomposable; aluminum

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L 00930-66

ACCESSION NR: AP5022089

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sulfate in polysiloxane paste, acid. The following treatments were applied for removal of the catalyst from the final product after polymerization: washing with water, neutralization either with ferric hydroxide (GOST 4150-48) or U-333 white filler, heating under vacuum, or reprecipitation. It was found that the thermal stability of polysiloxane rubbers freed from the catalyst by water wash is considerably impaired under thermo-oxidative conditions. The other treatments mentioned above produce better results. It was also found that the above siloxane rubbers, obtained by polymerization with alkaline catalyst, are as good as the acid catalyst rubbers with respect to thermal stability both under vacuum and in air. A comparison of the thermal stabilities of unwashed and washed samples which were subsequently neutralized with U-333 white filler indicated that their thermal stabilities were nearly the same. It was assumed that the residual alkaline catalyst is blocked by white filler and does not affect the thermal stability of the rubber. The thermal stability of the samples was determined by weight loss. Orig. art. has: 3 figures and 1 table.

[BN]

ASSOCIATION: Vsesoyuznyy nauchno-issledovatel'skiy institut sinteticheskogo kauchuka im. S. V. Lebedeva (All-Union Scientific Research Institute of Synthetic Rubber)

15,44  
Card 2/3



L 00930-66

ACCESSION NR: AP5022089

SUBMITTED: 00

ENCL: 00

SUB CODE: MT, TD

NO REF SOV: 001

OTHER: 005

ATD PRESS: 4177

Card 3/3

PRAVIKOVA, N.A.; DAVIDOVA, V.P.; KIRICHENKO, V.A.; YAKUSHINA, T.A.

Application of the turbidimetric titration method for determining  
the molecular weight distribution in siloxane polymers. Kauch. i  
rez. 24 no.10:19-22 '65. (MIRA 13:10)

1. Fiziko-khimicheskiy institut imeni L.Ya.Karpova, Moskva, i  
Vsesoyuznyy nauchno-issledovatel'skiy institut sinteticheskogo  
kauchuka imeni S.V.Lebedeva.

L 23531-66 EWP(j)/EWT(m)/1 RM

ACC NR: AF6007853 (A)

SOURCE CODE: UR/0138/66/000/002/0002/0005

AUTHOR: Davydova, V. P.; Lebedeva, Z. S.; Oplachko, V. G. 25  
BORG: All-Union Scientific Research Institute for Synthetic Rubber in S.V. Lebedev  
(Vsesoyuznyy nauchno-issledovatel'skiy institut sinteticheskogo kauchuka)TITLE: Production of organosiloxane elasticity gauges of given molecular weight by  
anionic polymerization of organocyclosiloxanes 1

SOURCE: Kauchuk i rezina, no. 2, 1966, 2-5

TOPIC TAGS: organosilicon compound, organic synthetic process

ABSTRACT: The curves of dependence of  $1/\bar{p}$  (average degree of polymerization) on  $[X]$  (concentration of agent regulating the molecular weight) showed that linear polymethylsiloxanes Si4 (decamethyltetrasiloxane), Si5 (dodecamethylpentasiloxane) and Si6 (tetradecamethylhexasiloxane), i.e., those having  $\geq 4$  atoms of silicon in the main chain of molecules, were the best regulators of molecular weight during polymerization of octamethylcyclotetrasiloxanes with potassium polydimethylsiloxane-diolate as the catalyst. The least effective was Si2 because 6 methyl groups around the bond  $-\text{Si}-\text{O}-\text{Si}-$  created spatial obstructions during the reaction with active centers at the ends of macromolecules. The Si3 occupied an intermediary position between Si2 and Si4. The mixtures of linear polymethylsiloxanes can be used also as

Card 1/2

UDC: 678.84:541.24.0022 2

L-23531-66

ACC NR: AF6007853

regulators of molecular weight. Their optimal amounts were determined experimentally. The lower molecular weight mixtures FM and FKE (Si3 with n=2: 30-33%, Si4 with n=3: 23-26%, Si5 with n=4: 17-20%, Si6 with n=5: ~6%, and linear polymethylsiloxanes with n=6:8: ~14%) had an effectiveness in between that of Si3 and Si4. PMS-10, a polymethylsiloxane liquid with an average molecular weight of ~940, had an effectiveness that was nearly similar to that of Si4. Evidently, the increase of the molecular chain at  $n > 4$  did not influence the effectiveness of the linear polymethylsiloxanes. The results of the experiments suggested that during anionic polymerization of organo-cyclosiloxanes any polysiloxane liquid having closed ends of the chain and  $\geq 4$  atoms of Si in the molecules could be used as regulator of molecular weight of siloxane elasticity gauges. Orig. art. has: 2 fig. and 2 tables.

SUB CODE: 07/ SUBM DATE: 10Feb65/ ORIG REF: 004/ OTH REF: 003

Card

2/2-10

CHERNINA, N.P., doktor med. nauk (Moskva, G-69, ul. Pisemskogo d. 12, kv.33);  
DAVYDOVA, V.P., kand. biol. nauk

Nature of changes in the pressure on the sole of the foot in relation  
to the height of the heel of the shoe. Ortop., travm. i protez. 25  
no.2:20-25 F '64. (MIRA 18:1)

DRUZHININA, Ye.N., kand. tekhn. nauk, dotsent; DAVYDOVA, V.V., inzh.

New technology of heat treatment of die-casting mold parts with the use of gas cyaniding process. Izv.vys.ucheb.zav.;mashinostr. no.5:155-161 '64. (MIRA 18:1)

1. Moskovskoye vyssheye tekhnicheskoye uchilishche imeni N.E.Baumana.

KURASOVA, G.P., kand.tekhn.nauk; FREYDINA, Z.V., inzh.; DAVIDOVA, V.Ye.,  
inzh.

Using high-strength claydite bitumen in constructing over-  
passes for motor-vehicle and electric-car traffic. Avt.dor,  
25 no.8:13-15 Ag '62. (MIRA 16:2)

1. Proyektnyy institut "Mosinshproyekt" (for Freydina).  
(Viaducts)

ATAULIN, V.V.; VLASOVA, R.M.; DAVYDOVA, Ye.A.; DANILENKO, I.S.; DZIOV, V.A.;  
DUBROVIN, A.P.; YEFANOVA, L.V.; KARPENKO, L.V.; KLEPIKOV, L.N.;  
KOTRELEV, S.V.; LUK'YANOV, N.I.; MEL'NIKOV, N.V., prof., obshchiy  
red.; MKRTYCHAN, A.A.; NEMTINOV, A.M.; POGOSYANTS, V.K.; SEMIZ,  
M.D.; SKOBLO, G.I.; SLOBODCHIKOV, P.I.; SMIRNOV, V.M.; SUSHCHENKO,  
A.A.; SOKOLOVSKIY, M.M.; TRET'YAKOV, K.M.; FISH, Ye.A.; TSOY, A.G.;  
TSYPKIN, V.S.; CHEKHOVSKOY, P.A.; CHIZHIKOV, V.I.; ZHUKOV, V.V.,  
red.izd-va; KOROVENKOVA, Z.L., tekhn.red.; PROZOROVSKAYA, V.L.,  
tekhn.red.

[Prospects for the open-pit mining of coal in the U.S.S.R.; studies  
and analysis of mining and geological conditions and technical and  
economic indices for open-pit mining of coal deposits] Perspektivy  
otkrytoi dobychi uglia v SSSR; issledovanie i analiz gornogeologi-  
cheskikh uslovii i tekhniko-ekonomicheskikh pokazatelei otkrytoi  
razrabotki ugol'nykh mestorozhdenii. Pod obshchei red. N.V.Mel'-  
nikova. Moskva, Ugletekhizdat, 1958. 553 p. (MIRA 11:12)

1. Vsesoyuznyy tsentral'nyy gosudarstvennyy proyektnyy institut  
"Tsentrogiproshakht." 2. Chlen-korrespondent AN SSSR (for Mel'-  
nikov).

(Coal mines and mining)



SOKOLOVSKIY, A.L., gornyy inzhener; DAVYDOVA, Ye.A., gornyy inzh.

Greater attention to the expansion of open-cut mines in the Kuznetsk  
Basin. Ugol' 33 no.10:17-20 0 '58. (MIRA 11:11)  
(Kuznetsk Basin--Strip mining)

SOKOLOVSKIY, M.M., inzh.;SUSHCHENKO, A.A., inzh.;DAVYDOVA, Ye.A., inzh.

"Potentialities of mining machinery and the economic efficiency of systems without transportation in Kuznetsk Basin open-pit mining of steeply dipping coal seams" by V. V. Lugovskoi. Reviewed by M. M. Sokolovskii, A.A. Sushchenko, E. A. Davydova. Ugol' 34 no.11: 54-55 N '59 (MIRA 13:3)  
(Kuznetsk Basin--Strip mining) (Excavating machinery)  
(Lugovskoi, V.V.)

SEVER'YANOV, N.N., kand. tekhn. nauk, red.; BERLIN, A.Ye.,  
retsenzent; VOYTSEKHOVSKIY, G.A., retsenzent;  
DAVYDOVA, Ye.A., retsenzent; ZIL'BERSHTEYN, Ya.Yu.,  
retsenzent; KIRICHINSKIY, N.R., retsenzent; KLEPIKOV,  
L.N., retsenzent; KUBYNIN, A.Ye., retsenzent; LEBEDEV,  
V.V., retsenzent; MOROZOV, V.P., retsenzent; MOSKVIN,  
V.B., retsenzent; MUSARSKIY, I.S., retsenzent; PODERNI,  
Yu.S., retsenzent; SALIKOV, I.A., retsenzent; SUSCHENKO,  
A.A., retsenzent; TRET'YAKOV, K.M., retsenzent; UL'YANOV,  
V.P., retsenzent; TSVIRKO, P.P., retsenzent; TSOY, A.G.,  
retsenzent; CHEL'TSOV, M.I., retsenzent; SHISHCHITS, G.N.,  
retsenzent; DIDKOVSKIY, D.Z., otv. red.

[Handbook on the prospecting, planning, and construction  
of strip mines] Spravochnik po izyskaniyam, proektirovaniu  
i stroitel'stvu kar'erov. Moskva, Nedra, 1964. 2 v.  
(MIRA 18:2)

SHABANOV, B.I.; TURGHANINOV, A.A.; MAGNITSKIY, A.A., starshiy nauchnyy sotrudnik; MIROSHNICHENKO, T.K.; DAVYDOVA, Ye.D.; MUKHINA, A.G., prepodavatel'

Communis' labor paves the way to a bright future. Tekst prom. 24 no.2:1-10 F '64. (MIRA 17:3)

1. Nachal'nik Upravleniya tekstil'noy promyshlennosti Soveta narodnogo khozyaystva Moskovskogo gorodskogo ekonomicheskogo rayona (for Shabanov). 2. Rukovoditel' laboratorii ekonomiki i organizatsii truda TSentral'nogo nauchno-issledovatel'skogo instituta sherstyanoy promyshlennosti (TsNIIShersti) (for Turchaninov). 3. TSentral'nyy nauchno-issledovatel'skiy institut khlopchatobumazhnoy promyshlennosti (TsNIKhBI) (for Magnitskiy). 4. Nachal'nik pryadil'nogo tsekha kommunisticheskogo truda kombinata "Trekhgornaya manufaktura" imeni Dzerzhinskogo (for Miroshnichenko). 5. Rukovoditel' brigady kommunisticheskogo truda Moskovskoy kamvol'noy ~~fabriki~~ fabriki imeni Kalinina (for Davydova). 6. Moskovskiy finansovyy institut (for Mukhina).

PROCESSING AND PROPERTIES INDEX

24

CA

**Effect of moisture and sunlight on the explosive properties of TNT.** E. G. Davydova. *Gornyi Zhur.* 122, No. 5, 24-5 (1948).—The briance (detd. by the Heas crushes method) of TNT contg. up to 11% of moisture did not vary from that of dry TNT (being 14 mm.). Above 11% moisture, the briance was erratic and varied greatly (3-14 mm.) for the same moisture content. At 14% moisture and higher, the detonation was incomplete. Large charges were somewhat less affected by moisture, but at 14% moisture and higher the detonation was incomplete even in large charges. Crushed TNT was exposed to the sun where the temp. reached 65°. After 5-7 days, the upper layers of TNT became brown and somewhat fused. After 1 month it turned into a black fused mass hard to crush in a mortar. After 2-months exposure the pll of the TNT dropped from 6.16 to 4.17, and the briance decreased from 13.5 to 10.4 mm.

M. Hosh

A S H - S L A METALLURGICAL LITERATURE CLASSIFICATION

E S T T A B L E

S O U R C E										R E F E R E N C E									
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20

I. 27111-66

ACC NR: AP6017475

SOURCE CODE: UR/0020/65/162/006/1437/1439

AUTHOR: Davydova, Ye. K.ORG: Institute of Higher Nervous Activity and Neurophysiology, AN SSSR  
(Institut vysshey nervnoy deyatelnosti i neyrofizologii AN SSSR)TITLE: Change in excitability in the cortical representation of a signal stimulus following the formation of a conditioned food reflex.

SOURCE: AN SSSR. Doklady, v. 162, no. 6, 1965, 1437-1439

TOPIC TAGS: conditioned reflex, dog, cerebral cortex, biologic secretion, electrophysiology

ABSTRACT: Experiments were performed on two dogs with chronically implanted electrodes to detect changes in the excitability of the cortical point directly stimulated as a "signal stimulus" in the course of forming motor and conditioned secretory food reflexes. Background experiments revealed a considerable spread of values of the motor reaction. The square mean statistically characterizing this spread was 0.12 in one dog and 0.028 in the other. The spread of the thresholds during the period when the reflexes were being formed was smaller than in the background experiments. The square mean in the first dog was 0.06; it increased in the other dog to 0.08 during the first few experimental days and then dropped to 0.015. The decrease in spread of the thresholds of the "natural" reaction (i.e., the reaction caused by the stimulus prior to formation of the conditioned reflex) was an indication that the threshold of the motor reaction had stabilized at the

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L 27111-66

ACC NR: AP6017475

point of the signal stimulus while the conditioned reflexes were being formed. Then during the formation of the conditioned reflex there was a significant, chronic elevation of the threshold of the "natural" as compared with the background experiments and a tendency for the "natural" reaction to increase in the course of the experiment.

During the formation of the conditioned food reflex, there was a sharp dissociation between its motor and secretory components. Whereas the conditioned motor reflex was formed after 20-30 combinations of electric stimulation of the motor cortex with the supplying of food, the secretory reflex was extremely difficult to form, even though 200 combinations were applied.

Thus, as the conditioned food reflex was formed in response to direct stimulation of the cortex with the stimulated point acquiring signal properties, its capacity to elicit its "natural" reaction weakened while its capacity to create an effect characteristic of the unconditioned stimulus intensified. This paper was presented by Academician L. S. Shtern on 2 September 1964. The orig. art. has: 1 figure. [JPRS]

SUB CODE: 06 / SUBM DATE: 17Aug64 / ORIG REF: 007

Card 2/2

DAVYDOVA, Ye.M., Cand of Agric Sci -- (diss) "Length of time required to raise sheets of old established sod in the northern regions of non-  
fertile land of Tatar ASSR," Kazan', 1957, 16 pp (Stalingrad Agricultural  
Institute), 100 copies (KL, 35-57,108)



COUNTRY : USSR N-1  
CATEGORY :  
ABST. JOUR. : REBiol., No. 19, 1958, No. 86949  
AUTHOR : Davydova, Ye. M.  
INST. :  
TITLE : Concerning the Time of Lifting and Use of  
the Stratum of Perennial Grasses in the  
Non-Chernozem Zone of Tatarsiya.  
ORIG. PUB. : S. Kh. Povolzh'ya, 1957, No 5, 28-31  
ABSTRACT : No abstract.

CARD: 1/1

3

DANILOVA, T.A.; DAVIDOVA Ye.N.

Effect of cobalt on plants. Dokl.AN SSSR 137 no.6:1470-1473 Ap  
'61. (MIRA 14:4)

1. Vsesoyuznyy nauchno-issledovatel'skiy institut udobreniy i  
agropochvovedeniya. Predstavleno akademikom A.L.Kursanovym.  
(Plants, Effect of cobalt on)

L 24834-66 EWT(1)/EWA(h) GM

ACC NR: AT6007203

SOURCE CODE: UR/2619/65/000/036/0119/0131

37  
BT1

AUTHOR: Dedova, Ye. V.

ORG: Institute of Physics of the Earth, Academy of Sciences, SSSR (Institut fiziki Zemli Akademii nauk SSSR)

TITLE: Types of permanent soil deformation by earthquakes

SOURCE: AN SSSR. Institut fiziki Zemli. Trudy, no. 36 (203), 1965. Seysmicheskoye mikrorayonirovaniye; voprosy inzhenernoy seysmologii (Seismic microdistricting; problems of engineering seismology), no. 10, 119-131

TOPIC TAGS: earthquake, soil mechanics, seismology

ABSTRACT: The author discusses various types of permanent soil deformation which take place during earthquakes as a function of the nature of the terrain, soil composition and the degree to which the soil is saturated with water. The basic forms of permanent seismic deformation are divided into three categories: 1. seismotectonic; 2. seismodenudation; 3. mixed seismotectonic-denudation type. The second category is subdivided into deformation with and without the effect of gravitational

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L 24834-66

ACC NR: AT6007203

processes. A table is given showing the nature of deformations in each of these basic genetic groups with regard to terrain, soil composition and moisture content. Data are given on the susceptibility of various types of soil to permanent deformations. It is shown that the degree of deformation and the geometric dimensions of deformations (width of cracks etc.) are definitely related to the intensity of earthquakes. Orig. art. has: 5 figures, 4 tables, 9 formulas.

SUB CODE: 08/ SUBM DATE: 00/ ORIG REF: 013/ OTH REF: 002

Card 2/2 *dbz*

PETRZHUK, G.G.; DAVYDOVA, Ye.Ya.; LEZNEVA, L.V.

Pigment dyeing of textile fabrics. Tekst.prom. 21 no.3:44-45  
Mr '61. (MIRA 14:3)  
(Textile fabrics) (Dyes and dyeing)

DAVYDOVA, Yu.A.

Conference on the light regime, photosynthesis and productivity  
of forests. Fiziol.rast. 12 no.6:1108-1109 N-D '65.  
(MIRA 18:12)

ROGACHEVSKAYA, Lyudmila Solomonovna; DAVYDOVA, Yu.F., red.;  
NAZAROVA, A.S., tekhn. red.

[Neighbors should not lag behind; the origin and development of the Gaganova movement in the U.S.S.R.] Riadom ne dolzhno byt' otstalushchikh; o vozniknovenii i razvitii gaganovskogo dvizhenia v SSSR. Moskva, Izd-vo "Znanie," 1964. 31 p. (Novoe v zhizni, nauke, tekhnike. I Seria: Istorii, no.2) (MIRA 17:1)

LOMOV, Nikolay Andreyevich, general-polkovnik, prof.; DAVYDOVA, Yu.F.,  
red.; ATROSHCHENKO, L.Ye., tekhn.red.

[Soviet military doctrine] Sovetskaia voennaia doktrina.  
Moskva, Izd-vo "Znanie," 1963. 20 p. (Novoe v zhizni, nauke,  
tekhnike. I Seria: Istorii, no. 11) (MIRA 16:6)  
(Military policy)



DZHUNUSOV, Maskhud Sadykovich, prof.; DAVIDOVA, Yu.F., red.; RAKITIN,  
I.T., tekhn. red.

[Non capitalistic path of development]O nekapitalisticheskoy  
puti razvitiia. Moskva, Izd-vo "Znanie," 1963. 31 p.  
(MIRA 16:3)

(Underdeveloped areas)

(Soviet Central Asia--Economic conditions)

RYABCHUN, Petr Il'ich; DAVYDOVA, Yu.F., red.; RAKITIN, I.T., tekhn.  
red.

[Great international problem; the building of communism is a  
great international problem of the Soviet people] Velikaia  
internatsional'naiia zadacha. Postroenie kommunizma - velikaia  
internatsional'naiia zadacha sovetskogo naroda. Moskva, Izd-  
vo "Znanie," 1963. 46 p. (Novoe v zhizni, nauke, tekhnika.  
I Seria: Istorii, no.6) (MIRA 16:4)  
(Communism) (Russia--Economic policy)

ISKENDEROV, Akhmed Akhmedovich; KISELEV, Vladimir Ivanovich;  
ROZALIYEV, Yuriy Nikolayevich; DAVYDOVA, Yu.F., red.;  
ATROSHCHENKO, L.Ye., tekhn. red.

[Labor movement in Asia and Africa] Rabochee dvizhenie v  
Azii i Afrike. Moskva, Izd-vo "Znanie," 1963. 32 p. (No-  
voe v zhizni, nauke, tekhnike. 1 Seria: Istorii, no.18)  
(MIRA 16:11)

(Asia--Labor and laboring classes)  
(Africa--Labor and laboring classes)

ZAYTSEV, Vladimir Semenovich; TIMOFEYEVSKIY, Aleksandr Antonovich;  
NOVIKOV, Petr Grigor'yevich; DAVYDOVA, Yu.P., red.;  
KUDRYAVTSEVA, O.V., tekhn. red.

[The second phase; the CPSU in the struggle for the building of socialism] Na vtorom etape; KPSS v bor'be za postroenie sotsializma. Moskva, Izd-vo "Znanie," 1963. 72 p. (Novoe v zhizni, nauke, tekhnike. I Seriya, no.15-16) (MIRA 16:11)  
(Communist Party of the Soviet Union)  
(Russia--Economic conditions)

SIDOROV, Ivan Firsovich; DVOSKIN, Beniamin Yakovlevich; DAVYDOVA,  
Yu.F., red.; RAKITIN, I.T., tekhn. red.

[Settled virgin lands] Obzhitaia tselina. Moskva, Izd-  
vo "Znanie," 1964. 32 p. (Novoe v zhizni, nauke, tekhnike. I Seria: Istorii, no.4) (MIRA 17:2)

SHTYL'KO, Anatoliy Aleksandrovich; DAVYDOVA, Yu.F., red.

[School of communism; trade unions in the building of  
communism] Shkola kommunizma; profsoiuzy v stroitel'stve  
kommunizma. Moskva, Izd-vo "Znanie," 1964. 47 p.  
(MIRA 17:5)

PARFENOV, Vasilii Aleksandrovich; DAVYDOVA, Yu.F., red.;  
ATROSHCHENKO, L.Ye., tekhn. red.

[Four "big chemistry"] Za bol'shuiu khimiiu. Moskva, Izd-  
vo "Znanie," 1964. 47 p. (Novoe v zhizni, nauke, tekhnike.  
I Seria: Istoriiia, no.6) (MIRA 17:3)

DAVIDOVA, YU. S.

"Effect of Certain Antioxidants on Fish Oils." Sub 31 Jan 47, Moscow  
Higher Technical Education Institution of the Fish Industry imeni A. I. Mikoyan  
(MOSRYBVTUZ)

Dissertations presented for degrees in science and engineering in Moscow  
in 1947

SO: Sum No. 457, 18 Apr 55

Also: Vechernyaya Moskva, Jan, 1947, (Project #17836)



DAVYDOVA, Yu.S., kand.tekhn.nauk; LAGUNOV, L.L., kand.tekhn.nauk;  
MAKSIMOV, S.I., inzh.-teknolog.

Obtaining a vitamin A concentrate by molecular distillation.  
Trudy VNIRO 35:272-282 '58. (MIRA 11:11)

1. Laboratoriya novoy tekhnologii Vsesoyuznogo nauchno-issledovatel'-  
skogo instituta morskogo rybnogo khozyaystva i okeanografii i Vita-  
minnyy tsekh Moaryhkombinata. (Distillation, Molecular)  
(Vitamins--A)

FEREPLETCHIK, R.R., kand.tekhn.nauk; DAVIDOVA, Yu.S., kand.tekhn.nauk;  
NOVIKOVA, Ye.I., ~~nauchnyy~~ nauchnyy sotrudnik

Polyunsaturated fatty acids constituents of cod-liver oil.  
Trudy VNIRO 45:80-88 '62. (MIRA 16:5)  
(Cod-liver oil) (Acids, Fatty)

MROCHKOV, K.A., kand.tekhn.nauk; DAVYDOVA, Yu.S., kand.tekhn.nauk;  
MIZIKIN, S.N., inzh.

Investigating cold oil extraction from whale bones. Trudy VNIRO  
45:106-115 '62. (MIRA 16:5)  
(Extraction (Chemistry))      (Whale products)

DAVYDOVA, Yu.S., ~~kad~~.tekh.nauk

Azeotropic method of feed fish meal production. Trudy VNIRO 45:  
139-142 '62. (MIRA 16:5)

(Fish meal)

MASLYANSKIY, G.N.; BURSIAK, I.R.; MEL'NIKOVA, N.P.; PODOL'SKIY, M.A.;  
FEDOROV, A.P.; Prinsipali uchastiya: NOVOZHILOVA, T.S.; DAVYDOVA,  
Z.A.; VOLNUKHINA, N.K.

Long service life of a platinum catalyst. Khim.i tekhnopl.i  
masel 7 no.2:5-7 F '62. (MIRA 15:1)

1. Krasnodarskiy filial Vsesoyuznogo nefte-gazovogo nauchno-  
issledovatel'skogo instituta i Vsesoyuznyy nauchno-issledovatel'skiy  
institut neftekhimicheskikh protsessov.  
(Platinum)                      (Cracking process)

BURSIYAN, N.R.; KOGAN, S.B.; ~~DAVYDOVA, Z.A.~~

Effect of sodium on the properties of a platinum-alumina catalyst.  
Kin. i kat. 6 no.4:744-746 JL-Ag '65. (MIRA 18:9)

1. Vsesoyuznyy nauchno-issledovatel'skiy institut neftekhimicheskikh  
protseessov.

BURSIAN, N.R.; KOGAN, S.B.; DAVYDOVA, Z.A.

Aromatization of hexanes at atmospheric pressure over a sodium promoted alumina-platinum catalyst. Kin.i kat. 4 no.5:783-786  
S-0 '63. (MIRA 16:12)

1. Vsesoyuznyy nauchno-issledovatel'skiy institut po pererabotke nefti i polucheniyu iskusstvennogo zhidkogo topliva, Leningrad.

BURSIAN, N.R.; KOGAN, S.B.; DAVYDOVA, Z.A.

Variations in the aromatization capacity of an aluminoplatinum catalyst as dependent on its platinum and sodium content. Kin. i kat. 6 no. 6:1046-1051 M-D '65 (MIRA 19:1)

1. Vsesoyuznyy nauchno-issledovatel'skiy institut neftekhimicheskikh protsessov "Vhineftekhim". Submitted November 28, 1964.



BALANDINA, V.A.; DAVYDOVA, Z.F.

Determination of acenaphthylene in a mixture with acenaphthene.  
Plast.massy no.3:65-66 '62. (MIRA 15:4)  
(Acenaphthlene) (Acenaphthene)

ZVEGINTSEVA, G.B.; GINZBURG, B.G.; KORCHILOVA, Ye.Ya.; DAVILOVA, Z.I.;  
DAVANKOV, A.B.; ZUBAKOVA, L.P.

Recovery of phenol from sulfate liquor wastes of a phenol  
sulfonation plant by means of pyridine-containing anion  
exchangers. Zhur. prikl. khim. 38 no.5:1102-1105 My '65.  
(MIRA 18:11)

DAVIDOVA, Z.M.; SOKOLOVA, Ye.V., kand. nauk.

Effect of mineral feeding and the stage of oviposition on the mineralization of tibia in caged layers. Dokl. TSKhA no.27:335-339 '57.  
(MIRA 11:4)

1. Zootekhnicheskaya opytnaya stantsiya Moskovskoy ordena Lenina sel'skokhozyaystvennoy akademii im. K.A. Timiryazeva i Vsesoyuznyy nauchno-issledovatel'skiy institut ptitsepromyshlennosti.  
(Poultry) (Tibia)

DAVYDOVA, Z.M., laborant

~~Characteristics of mineralization in the tubular bones of~~  
chickens during the laying season. Izv.TSKhA no.4:179-186  
'59. (MIRA 12:11)

(Bones) (Poultry--Anatomy)

DAVYDOVA, Z. M., Cand Biol Sci -- (diss) "Changes in the mineralization and structure of tubular bones in the hen in relation with egg-laying and various conditions of poultry-raising." Moscow, 1960. 20 pp; with illustrations; (Moscow Order of Lenin Agricultural Academy im K. A. Timiryazev); 120 copies; price not given; (KL, 19-60, 131)

DAVYDOWA, Z.M.

Changes in the mineralization of the skeleton of hens during the  
period of egg laying. Biul. MOIP. Otd. biol. 66 no.4:152 JI-Ag  
'61.

(BONES)

(POULTRY--PHYSIOLOGY)

(MIRA 14:7)  
(EGGS--PRODUCTION)

PAVLENKO, L.I.; DAVYDOVA, Z.M.

Quantitative spectral determination of small amounts of germanium, indium, and thallium in silicate rocks. Zhur.anal.khim. 17 no.2: 199-201 Mr-Ap '62. (MIRA 15:4)

1. V.I.Vernadsky Institute of Geochemistry and Analytical Chemistry, U.S.S.R., Academy of Sciences, Moscow.  
(Germanium--Analysis) (Indium--Analysis) (Thallium--Analysis)

MAKOLKIN, I.A.; DAVYDOVA, Zh.V.

Some chemical equilibria in the gas cyanidation of metals.  
Zhur.prikl.khim. 35 no.7:1487-1496 J1 '62. (MIRA 15:8)

1. Moskovskiy institut narodnogo khozyaystva imeni G.V.Flekhanova.  
(Cyanide process) (Chemical equilibrium)



DAVYDOVA-VELICHKO, I.V.

Discovery of *Paramphistomum ichikawai* Fukui, 1922, in cattle in  
the U.S.S.R. Trudy VIGIS 11:207-209 '64. (MIRA 18:12)

DAVIDOVICH, B., arkhitektor; CHOGLEY, Yu., inzh.

Underground piping in microdistricts of Kemerovo. Zhil. strel.  
no. 11:20-22 '64 (MIRA 18:2)

U S S R

1957. MANIFESTATIONS OF SUPPORTING PRESSURE IN THE MASS (OF COAL AND ROCK) DURING WORKING OF BEAMS SUBJECT TO SUDDEN ERUPTIONS. Matveev, B.V., Davydovich, I.L. and Shaitanov, S.H. (Ugol (Coal), Dec. 1954, 9-17). AN ILLUSTRATED DESCRIPTION IS GIVEN OF THE INSTRUMENTS USED AND RESULTS OBTAINED IN AN INVESTIGATION BY THE ALL UNION SURVEY INSTITUTE IN 1952-1953 IN CENTRAL DOBASSA, WHERE SCAMS DIP AT 50-70°. THE INSTRUMENTS INCLUDED A DISTANT-READING DEVICE FOR MEASURING RELATIVE TENSILE STRENGTH OF COAL AND ROCK, TENSIMETERS AND A DEVICE FOR MEASURING PRESSURE IN COALS BY BLOWING COMPRESSED AIR INTO PORES AND THE THERMAL EFFECTS OF DESORPTION AND PERCOLATION OF METHANE BY DISTANT-READING ELECTRIC THERMOMETERS. (L).

DAVIDOVICH, I. L.

Davydovich, I. L. — "Overmining and Undermining of Coal Strata as a Means of Protecting them from Sudden Blowouts of Coal and Gas." Min Higher Education USSR, Leningrad Order of Lenin and Order of Labor Red Banner Minint Inst, Leningrad, 1955 (Dissertation for Degree of Candidate of Technical Sciences).

SO: Knizhnaya Letopis', No. 23, Moscow, June, 1955, pp. 87-104.

KUZNETSOV, S.T., kand.tekhn.nauk; DAVIDOVICH, I.L., kand.tekhn.nauk;  
KOROTKOV, M.V., kand.tekhn.nauk; KOLBENKOV, S.P., kand.tekhn.nauk

"Efficient development and rock-hole mining methods," V.P.  
Prokof'ev, K.P. Zaika. Reviewed by S.T. Kuznetsov and others.  
Ugol' 36 no.11:60-61 N '61. (MIRA 14:11)

1. Vsesoyuznyy nauchno-issledovatel'skiy marksheyderskiy institut.  
(Coal mines and mining)  
(Prokof'ev, V.P.)      (Zaika, K.P.)

DAVYDOVICH, I.L., kand. tekhn. nauk

Building major mine workings at great depths. Ugol' 39  
no.3:7-13 My'64. (MIRA 17:5)

1. Vsesoyuznyy nauchno-issledovatel'skiy marksheyderskiy  
institut.

DAVYDOVICH, S. S.

DAVYDOVICH, S. S. "On Infection of Timothy with Epichloe Typhina,"  
Selektsiia i Semenovodstvo, vol. 18, no. 10, 1951, pp. 77-78. 61.9 Se5

SO: SIRA - SI - 90-53, 15 Dec. 1953

DAVYDOVICH, S.S.

[Jerusalem artichoke] Zemlianaia grusha. Moskva, Gos. izd-vo  
selkhoz. lit-ry, 1957. 91 p. (MIRA 11:1)  
(Jerusalem artichoke)



"APPROVED FOR RELEASE: 06/12/2000      CIA-RDP86-00513R000309910003-6

DAVYDOVICH, S. Ya., Lt. Col. MED. Serv., GREKOV, P.M., Maj. Med. Serv.,  
DAVYDOVICH, S. Ya., Capt. Med. Serv. TISHCHENKO, A.I., Sr. Lt. Med. Serv.

"Prevention and Treatment of Acute Catarrh of Upper Respiratory Tracts,"  
Voyenno-Meditsinskiy Zhurnal, No. 8, August 1957.

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SHESTAKOV, V.V., podpolkovnik meditsinskoy sluzhby; GREKOV, P.M., mayor  
meditsinskoy sluzhby; DAVIDOVICH, S.Ya., kandidat meditsinskoy sluzhby;  
TISHCHENKO, A.I., starsnly leytenant meditsinskoy sluzhby

Prevention and treatment of acute catarrh of the upper respiratory  
tract. Voen.-med.zhur. no.8:79-81 Ag '57. (MIRA 10:12)  
(RESPIRATORY ORGANS--DISEASES)

DAVYDOVICH, Ye. P.

AGROSKIN, S.I., zasluzhennyy vrach RSFSR; DAVYDOVICH, Ye.P.

Tuberculosis of the upper respiratory tract in children [with  
summary in English]. *Pediatrics* 36 no.1:43-48 Ja '58. (MIRA 11:2)

1. Iz IORotdeleniya (zav. - dotsent F.F.Malomuzh) Detskoy bol'nitsy  
imeni F.M.Dzerzhinskogo (glavnyy vrach A.N.Kudryasheva)  
(RESPIRATORY ORGANS--TUBERCULOSIS)  
(CHILDREN--DISEASES)

3

✓ Comparative evaluation of properties of zinc oxide obtained by different methods. B. I. Davydovskaya and N. K. Mel'nikova. *Byull. Obshch. Svyaznykh Tekhnichesk. Prom.* 1953, No. 4, 12-17; *Referat. Zhur., Khim.* 1953, No. 9800.—The properties of zinc oxide (pigment) were studied with samples obtained by a thermal method (reduction of a raw material contg. Zn with subsequent oxidation of Zn vapors) and with samples obtained by a method of pptn. and calcination (from zinc hydroxide obtained by interaction of  $ZnSO_4$  vapors and ammonia, from the basic carbonate obtained by the action of a soda soln., and from basic carbonate pptd. from an ammonia complex). According to the basic pigment properties (color, covering power, intensity), each form of zinc oxide proved to differ very little from the others, excluding samples obtained by means of an ammonia-zinc complex. These samples differed in their low pigment properties; brilliant, oily color, photochem. pigment activity, lowest degree of dispersion, and in connection with the latter, the greatest atm. stability. Industrial samples of zinc oxide had insufficient atm. stability; however, it could be increased considerably by addnl. calcination of zinc oxide at  $900^\circ$ . After a study of zinc oxide structure with the aid of an electron microscope, it was shown that samples obtained by a thermal method consist of needle-like crystals, and samples obtained by pptn. and calcination consist of particles with a spherical shape.

Marjorie Kestner

①

*[Handwritten signature]*

DAVYDOVSKAYA, B.L.

Borodina, M.L., T.A. Velikoslavinskaya, and B.L. Davydovskaya. Advantages of the Use of High-Content Ilmenite Titanium Slags Instead of Ilmenite for the Production of Titanium Dioxide by the Sulfuric Acid Method, p. 73. Titan i yego splavy. vyp. II: Metallurgiya titana (Titanium and Its Alloys. No. 2: Metallurgy of Titanium) Moscow, Izd-vo AN SSSR, 1959. 179 p.

This collection of papers deals with sources of titanium; production of titanium dioxide, metallic titanium, and titanium sheet; slag composition; determination of titanium content in slags; and other related matters. The sources of titanium discussed are the complex sillimanite ores of the Kyakhtinskoye Deposit (Buryatskaya ASSR) and certain aluminum ores of Eastern Siberia. One paper explains the advantages of using ilmenite titanium slags for the production of titanium dioxide by the sulfuric acid method. Production of metallic titanium by thermal reduction processes (hydrogen, magnesium, and carbon reduction) is the subject of several papers, while other papers are concerned with the electrolytic production of titanium. Other subjects dealt with are interaction of titanium with water vapor and with hydrogen and the determination of titanium in slags.

BORODINA, M.L.; VELIKOSLAVINSKAYA, T.A.; DAVIDOVSKAYA, B.L.

Advantage of using high titanium content ilmenite slags instead  
of ilmenite for the production of titanium dioxide by the sul-  
furic acid method. Titan i ego splavy no.2:73-77 '59.  
(MIRA 13:6)

(Titanium oxides) (Slag)

KOLOS~~KOV~~. S.P.; KOMAROV, A.F.; SAVVINA, A.P.; SERGEYEVA, N.M.; MOSKVICHEVA E.P.;  
Prinimali uchastiye: DAVIDOVSKAYA, N.G.; NIKITINA, R.Ya.; FILLER, Ya.Ya.

Yeast generator with self-aeration. Ferm.i spirt.prom. 31 no.1:26-  
28 '65. (MIRA 18:5)

1. Vsesoyuznyy nauchno-issledovatel'skiy institut fermentnoy i  
spirtovoy promyshlennosti (for all except Davydovskaya, Nikitina,  
Filler). 2. Glavnyy inzh. Rakvereskogo spirtozavoda (for Filler).

DAVYDOVSKAYA, N.I.

(Novosibirsk)

Changes in the pulmonary vessels in Fallot's tetralogy based on  
biopsy and autopsy materials. Arkh. pat. 25 no. 4:44-49 '63  
(MIRA 17:4)

1. Iz laboratorii patomorfologii (zav. - dotsent Yu.G. TSellarius,  
rukovoditel' temy - prof. I.K. Yesipova) Instituta eksperimental'-  
noy biologii i meditsiny (dir. - prof. Ye.N. Meshalkin) Sibirskogo  
otdeleniya AN SSSR.



BASITOVA, S.M.; DAVYDOVSKAYA, R.M.; BEKHTIE, G.A.

Determining the vapor tension of molybdenum and rhenium chlorides.  
Izv. Otd. est.nauk AN Tadsh. SSR no.23:35-39 '57.      (MIRA 11:8)

1. Institut khimii AN Tadshikskoy SSR.  
    (Molybdenum chlorides) (Rhenium chlorides)

BEKHTLE, G.A.; DAVYDOVSKAYA, R.M.; RODIONOVA, R.A.

Chlorination of cassiterite in the presence of oxygen-removing  
agents, (reductive chlorination), Trudy AN Tadz. SSR 84:57-63  
'59. (MIRA 13:3)

(Cassiterite) (Chlorination)

BEKHTELE, G.A.; DAVYDOVSKAYA, R.M.; RODIONOVA, R.A.

Hydrochlorination of cassiterite in the presence of iron. Trudy  
AN Tadzh. SSR 84:65-72 '59. (MIRA 13:3)  
(Cassiterite) (Hydrochloric acid)

BEKHTE, G.A.; DAVYDOVSKAYA, R.M.; RODIONOVA, R.A.

Stannous chloride as a catalyst in the hydrochlorination of certain  
metals. Trudy AN Tadzh. SSR 84:73-77 '59.      (MIRA 13:3)  
(Tin chloride) (Hydrochloric acid) (Metals)

BEKHTLE, G.A.; DAVYDOVSKAYA, R.M.; RODIONOVA, E.A.

Hydrochlorination of cassiterite in the presence of iron, cast iron,  
and copper. Trudy AN Tadzh. SSR 84:79-104 '59. (MIRA 13:3)  
(Cassiterite) (Hydrochloric acid)

137-58-4-6828

Translation from: Referativnyy zhurnal, Metallurgiya, 1958, Nr 4, p 73 (USSR)

AUTHORS: Novoselov, S.S., Davydovskaya, Ye.A.

TITLE: Experimental Development of Caustic Refining of Lead and Hydrometallurgical Treatment of Liquid Smelts (Opyt osvoyeniya shchelochnogo rafinirovaniya svintsa i gidrometallurgicheskoy pererabotki zhidkikh plavov)

PERIODICAL: Sb. nauchn. tr. Gos. n.-i. in-t tsvetn. met., 1957, Nr 13, pp 177-191

ABSTRACT: A process of refining (R) crude Pb from Sb and As by caustic melts with added  $\text{NaNO}_3$  has been developed and elaborated on a commercial scale. The R is conducted in an apparatus consisting of a reaction vessel containing the smelt, a pump to deliver the Pb into the upper portion of the reactor (onto the smelt), and a bin with feed for delivery of  $\text{NaNO}_3$  into the reaction vessel, all atop the Pb pot. Agitation of the smelt proved unnecessary. The optimum composition of the smelt is 75% NaOH; 25% NaCl. Replacement of NaCl by 8-10%  $\text{Na}_2\text{CO}_3$  is permissible. When regenerated NaOH containing up to 3%  $\text{NaNO}_3$  is used, addition of NaCl is not required. It is recommended that the temperature of

Card 1/2

137-58-4-6828

Experimental Development of Caustic (cont.)

the Pb be held at 400-420°C. In the R process, the smelt is saturated with up to 24-28% Sb+As. The NaNO<sub>3</sub> consumption is 0.6 kg/kg Sb and 1 kg/kg As. The R ends when the content of Sb and Pb is reduced to appx. 0.03%, whereupon the smelt containing 4-5% lead beads is subjected to granulation in a by-pass solution (BS). The precipitating beads of Pb are returned to the pot after washing by the BS. The BS is filtered to separate out the Sb-As pitch, steamed in 2 stages, and a regenerated caustic was obtained (% composition: 75-88.3 NaOH; 4.4-9.5 Na<sub>2</sub>CO<sub>3</sub>; 3.6-3.1 NaCl; 2.1-4.5 Sb; 0.4-1.1 As), with addition of by-pass salt (% composition: 55-63 NaCl; 11.16 NaOH; 11.18 Na<sub>2</sub>CO<sub>3</sub>) it was returned to the reactor. The Sb-As pitch was repulped in water at 80-90° to dissolve the As which, after filtration of the solution, was precipitated in the form of Ca arsenate, whereupon the solution was sent to granulation of the smelt. The Sb-pitch precipitate contained, after washing: 45-47% Sb; 0.2-0.3% As; 0.4-0.8% Pb.

Ye. Z.

1. Lead--Refining
2. Liquid melts--Processes

Card 2/2

ДАВЫДОВСКАЯ, YE A.

AZOS, S.; ARIF'YEV, A.; ARTAMONOV, I.; BABINA, I.; BERNGOVSKIY, V.; BLOZHKO, V.;  
BRAVERMAN, A.; BYKHOVSKIY, Yu.; VINOGRADOVA, M.; GALANKINA, Ye.;  
GIL'DENGERSH, F.; GLOBA, T.; GREYVER, N.; GORDON, G.; GUL'DIN, I.;  
GULYAYEVA, Ye.; GUSHCHINA, I.; DAVYDOVSKAYA, Ye.; DAMSKAYA, G.;  
DERKACHEV, D.; YEVDOKIMOVA, A.; YMCUNOV, V.; ZABELYSHINSKIY, I.;  
ZAYDENBERG, B.; AZMOSHNIKOV, I.; ITKINA, S.; KARCHEVSKIY, V.;  
KLUSHIN, D.; KUVINOV, Ye.; KUZNETSOVA, G.; KURSHAKOV, I.;  
LAKERNIK, M.; LBYZNEVICH, G.; LISOVSKIY, D.; LOSKUTOV, F.;  
MALEVSKIY, Yu.; MASLYANITSKIY, I.; MAYANTS, A.; MILLER, L.;  
MITROFANOV, S.; MIKHAYLOV, A.; MYAKINENKOV, I.; NIKITINA, I.;  
NOVIN, R.; OGNEV, D.; OL'KHOV, N.; OSIPOVA, T.; OSTRONOV, M.;  
PAKHOVA, G.; PFTKER, S.; PLAKSIN, I.; PLEHNEVA, N.; POPOV, V.;  
PRESS, Yu.; PROKOF'YEVA, Ye.; PUGHKOV, S.; REZKOVA, F.; RUMYANTSEV, M.;  
SAKHAROV, I.; SOBOL', S.; SPIVAKOV, Ya.; STRIGIN, I.; SPERIDONOVA, V.;  
TIMKO, Ya.; TITOV, S.; TROITSKIY, A.; TOLOKONNIKOV, K.; TROFIMOVA, A.;  
FEDOROV, V.; CHIZHIKOV, D.; SHEYN, Ya.; YUKHTANOV, D.

Roman Lazarevich Veller; an obituary. TSvet. met. 31 no. 5:78-79  
My '58. (MIRA 11:6)

(Veller, Roman Lazarevich, 1897-1958)



DAVIDOVSKAYA, Ye.A.; ZAGORUL'KO, L.V.; FILIMONOV, M.I.

Hydrometallurgical treatment of oxidized and mixed ores from  
the Dzhenkazgan deposit. Sbor. nauch. trud. Gintsveteata  
no.23:269-282 '65. (MIRA 18:12)

BRUDZ', V.G.; VAYNSHTEYN, Yu.I.; DAVYDOVSKAYA, Yu.A.; DRAPKINA, D.A.;  
MARKOVICH, I.S.

Polarographic method of analysis of solutions obtained in the  
production of glyoxal. Zav.lab. 27 no.9:1087-1090 '61.(MIRA 14:9)

1. Vsesoyuznyy nauchno-issledovatel'skiy institut khimicheskikh  
reaktivov.

(Glyoxal)                      (Polarography)

DAVYDOVSKAYA, Yu.A.; VAYNSHTEYN, Yu.I.; BILIK, I.M.; SEREBRYANNYY, A.M.

Conductometric analysis of boron fluoride in reaction mixtures  
in the synthesis of diphenylolpropane. Trudy IREA no.25:232-239  
'63. (MIRA 18:6)

DAVYDOVSKIY, A.

Aid for the industrial designer. Technological efficiency and industrial design. Tekh. est. no.3:8-15 Mr '65. (MIRA 18:6)

1. Nachal'nik otdela tekhnologichnosti Gosudarstvennogo eksperimental'nogo proyektno-tekhnologicheskogo instituta.