NAMETKIN, N.S.; CHERNYSHEVA, T.I.; PRITULA, N.A.; OPPENGEYM, V.D.; NECHITAYLO, N.A.

Synthesis of silicon organic compounds with phenylene carbonic and phenylene siloxane groups and their thermal analysis. Neftekhimia 4 no.4:650-657 Jl-Ag '64 (MIRA 17:10)

1. Institut neftekhimicheskogo sinteza im. A.V. Topchiyeva AN SSSR.

NAMETKIN, N.S.; VDOVIN, V.M.; GRINBERG, P.L.

Telomerization of silicacyclobutanes. Izv. AN SSSR. Ser. khim. no.6:1133-1134 Je '64. (MIRA 17:11)

1. Institut neftekhimicheskogo sinteza im. V.A. Topchiyeva AN SSSR.

KHAIANSKII, [illegible]; [illegible]

Leukemia

Acute leukemia. Arkhiv pat. 14, No. 4, 1952.

Monthly List of Russian Accessions, Library of Congress, December 1952. Unclassified.

NAMESTEK, Ladislav

Assessment of the health hazard of mines with reference to the pathogenesis of coniosis in miners. Prac. lek. 16 no.3: 107-111 Mr'64

1. Vedeckovyzkumny uhelny ustav, Ostrava-Radvanice; reditel: inz. E. Bartos.

ROSMANITH, Jindrich; BUBIK, Karel; NAMESTEK, Ladislav

Degree of carbonification as a cause of difference in the biological agressiveness of black coal dust? Prac. lek. 16 no.3:117-120 Mr'64

1. Oddeleni chorob z povolani Krajske nemocnice z poliklinikou v Ostrave (vedouci: MUDr. J.Rosmanith) a Vedeckovyzkumny uhelny ustav v Ostrave (reditel: inz. E.Bartos).

NAMESTEK, Vladimir, inz.

Central test rooms for trunk circuits. Cs spoje 9 no. 2:9-10 Ap '64.

1. Research Institute of Telecommunication.

NAMESTNIKOVA, A. F.

Dissertation: "Investigation of the Technology of Drying of Green Peas in Convection Dryers." Cand Tech Sci, Moscow Technological Institute of the Food Industry, Moscow, 1953. (Referativnyy Zhurnal-Khimiya, No 10, Moscow, May 54)

SO: SUM 318, 23 Dec 1954

NAMESTNIKOV, A.F., kandidat tekhnicheskikh nauk; ADAMOVSKIY, I.I., inzhener, retsenzent; OSIPOV, A.M., inzhener, retsenzent; SEMENOVA, N.L., redaktor; GOTLIB, E.M., tekhnicheskiy redaktor.

[Home preservation of fruits and vegetables] Konservirovanie plodov i ovoshchei v domashnikh usloviiakh. Moskva, Pishchepromizdat, 1954. 166 p. [Microfilm] (MLRA 8:2)
(Canning and preserving)

NAMESTNIKOV, A.F., kandidat tekhnicheskikh nauk.

Improving the production of canned foods. Trudy VNIIKP no.3: 4-17 '54. (MLRA 9:8)

(Canning and preserving)

NAMESTNIKOV, A. F.

USSR/Miscellaneous - Food Processing

Card 1/1

Author : Namestnikov, A. F., Can. in Tech. Sciences

Title : Food enterprises of Rumania

Periodical : Nauka i Zhizn' 21/4, 41-42, April 1954

Abstract : The author states that food conditions have improved in Rumania since the industries have been nationalized, and that new factories, slaughterhouses, canneries, refrigerating establishments, etc. were constructed. The meat and fish supply has increased by 40-60 percent. A description of a food research laboratory is given along with descriptions of various institutes connected with the production of food.

Institution : ....

Submitted : ....

NAMESTNIKOV, A.F., kandidat tekhnicheskikh nauk; SABUROV, N.V., doktor tekhnicheskikh nauk professor, retsenzent; IZOTOV, A.K., inzhener, retsenzent; VASIL'YEVA, G.N., redaktor; GOTLIB, E.M., tekhnicheskiy redaktor.

[Technology of canning fruits and vegetables] Tekhnologiia konservirovaniia plodov i ovoshchei. Moskva, Pishchepromizdat, 1955. 127 p.
(Canning and preserving) (MLRA 9:4)

NAMESTNIKOV, A.F., kandidat tekhnicheskikh nauk.;RABINER, N.Ya., kandidat tekhnicheskikh nauk.;SKOPCHENKO, G.A., starshiy nauchnyy sotrudnik.; KHARIN, Yu. S., mladshiy nauchnyy sotrudnik.;KOZOSHINSKAYA, V.T., mladshiy nauchnyy sotrudnik.

New varieties of canned vegetable appetizers. Ref. nauch. rab. VNIIKOP no.3:3-6 '55. (MLRA 9:11)
(Vegetables)

VOLKOV, Ye.N.; STEPCHKOV, K.A.; NAMESTINIKOV, A.F.

Sodium glutamate and its use in canned foods and food concentrates. Kons. i ov. prom. 12 no.4:4-5 Ap '57. (MLRA 10:6)

1. Vsesoyuznyy nauchno-issledovatel'skiy institut konservnoy i ovoshchesushil'noy promyshlennosti.
(Glutamic acid) (Food, Canned)

NAMESTNIKOV, A.F.

Improving equipment and methods of producing canned vegetable apperizers; materials of the conference held in Krasnodar in 1957. Kons.i ov.prom. 12 no.6:25-27 Je '57. (MLRA 10:7)

1. Vsesoyuznyy nauchno-issledovatel'skiy institut konservnoy i ovoshchesushil'noy promyshlennosti.

(Vegetables--Preservation)

NAMESTNIKOV, A.F.; SAMSONOVA, A.N.

Improve the technology of canning and preserving of fruits and vegetables. Kons. i ov. prom. 12 no.7:4-6 Jl '57. (MIRA 12:4)

1. Vsesoyuznyy nauchno-issledovatel'skiy institut konservnoy i ovoshchesushil'noy promyshlennosti.
(Canning and preserving—Congresses)

NAMESTNIKOV, A.F.

Types of canned fruits and vegetables manufactured in the U.S.S.R. and in people's democracies. ons. i ov.prom. 12 no.7:12-15 Jl '57.
(MIRA 12:4)

1. Vsesoyuznyy nauchno-issledovatel'skiy institut konservnoy i ovoshchesushil'noy promyshlennosti.
(Food, Canned)

NAMESTNIKOV, A.F.

Two cookbooks ("Culinary art and the Hungarian kitchen" by Elek Magyar; "Culinary art and the Rumanian kitchen" by Sand Marin). Reviewed by A.F. Namestnikov. Kons. i ov. prom. 13 no.3:43-44 Mr '58.
(Cookery (Hungarian)) (Cookery (Rumanian)) (MIRA 11:4)

SAMSONOVA, Anna Nikolayevna; ROGACHEV, V.I., kand.tekhn.nauk, retsenzent;
NAMESTNIKOV, A.F., kand.tekhn.nauk, spetsred.; RESH, G.S., red.;
GOTLIB, E.M., tekhn.red.

[Manufacture of fruit and berry juices] Proizvodstvo plodovo-iagodnykh sokov. Moskva, Pishchepromizdat, 1959. 82 p.
(MIRA 12:12)

(Fruit juices)

NAMESTNIKOV, Aleksandr Fedorovich, kand. tekhn. nauk; BELOUSOV,D.P., inzh.; VOLKOV,Ye.N., kand.tekhn.nauk; LIPOVSKIY,M.S., inzh.; SAVZDARG,V.E., red.; BALLOD,A.I., tekhn.red.

[Collective-farm cannery] Kolkhoznyi konservnyi zavod. Moskva, Gos.izd vo sel'khoz.lit-ry, 1959. 275 p. (MIRA 14:5)

1. Nauchno-issledovatel'skiy institut konservnoi i ovoshchesushil'noy promyshlennosti, Moskva, Novoslobodskaya, 7 (for Namestnikov); 2. Gipropishcheprom, Butyrskiy val. 68 (for Belousov)

(Canning industry--Equipment and supplies)

NAMESTNIKOV, Aleksandr Fedorovich, kand.tekhn.nauk; KOSSOVA, O.N., red.; GOTLIB, E.M., tekhn.red.

[Home canning and preserving of fruits and vegetables] Konservirovanie plodov i ovoshchei v domashnikh usloviiakh. Izd.3., ispr. i dop. Moskva, Pishchepromizdat, 1959. 213 p. (MIRA 12:9)

(Canning and preserving)

SHELAPUTIN, V.I.; NAMESTNIKOV, A.F.

Bibliographic manual on refrigeration. Kons. i ov. prom. 14 no.5:46 My '59. (MIRA 12:6)
(Food industry) (Refrigeration and refrigerating machinery)

NAMESTNIKOV, A.F.; SMIRNOVA, T.K.

Manufacture of new types of canned baby food. Kons. i ov. prom. 14 no.6:10-11 Je '59. (MIRA 12:8)

1.TSentral'nyy nauchno-issledovatel'skiy institut konservnoy i ovoshchesushil'noy promyshlennosti (for Namestnikov). 2.Moskovskiy ordena Lenina pishchevoy kombinat im. A.I. Mikoyana (for Smirnova).
(Food, Canned) (Infants--Nutrition)

APT, F.S.; KOSTROVA, Ye.I.; MATROZOVA, R.G.;NEKHOTENOVA, T.I.; ROGACHEVA,
A.I.; NOSKOVA, G.L., kand. biol. nauk, retsenzent; SYCHEVA, M.Ye.,
mikrobiolog, retsenzent; NAMESTNIKOV, A.F., kand. tekhn. nauk,
spets. red.; MURASHEVA, O.I., red.; SOKOLOVA, L.A., tekhn. red.

[Microbiological control in the canned food, concentrated food and dried vegetables industry] Mikrobiologicheskii kontrol' konservnogo, pishchekontsentratnogo i ovoshchesushil'nogo proizvodstva. Moskva, Pishchepromizdat, 1961. 114 p. (MIRA 14:11)
(FOOD—MICROBIOLOGY)

NAMESTNIKOV, Aleksandr Fedorovich; IZOTOV, A.K., inzh., tekhnolog, retsenzent; FUKS, V.K., red.; SATAROVA, A.M., tekhn. red.

[Preserved fruits and vegetables; innovation in assortment and technology] Plodoovoshchnye konservy; novoe v assortimente i tekhnologii. Moskva, Pishchepromizdat, 1961. 141 p. (MIRA 15:6)

(Canning and preserving)

MOLCHANOVA, O.P., prof.; LOBANOV, D.I., prof.; MARSHAK, M.S., prof.; GANETSKIY, I.D.; BEREZIN, N.I., laureat Stalinskoy premii; KONNIKOV, A.G., laureat Stalinskoy premii; LIFSHITS, M.O.; METLITSKIY, L.V., doktor sel'skokhoz.nauk; NAMESTNIKOV, A.F., kand.tekhn.nauk. Prinimali uchastiye: ANAN'YEV, A.A.; GROZNOV, S.R.: YEFIMOV, V.P.; KIKNADZE, N.S.; NIKASHIN, F.P.; PIROGOV, N.M.; SKRIPKIN, G.M.; TSYPLENKOV, N.P. SIVOLAP, I.K., red.; SKURIKHIN, M.A., red.; BETSOFEN, Ya.I., red.; DAMASKINA, G.B., red.; PRITYKINA, L.A., red.; KISINA, Ye.I., tekhn.red.

[Book on tasty and healthy food] Kniga o vkusnoi i zdorovoi pishche. Moskva, Pishchepromizdat, 1961. 423 p. (MIRA 15:2)

1. Chlen-korrespondent AMN SSSR (for Molchanova).
(Cookery)

KOCHETOVA, L.T.; MOLCHANOVA, O.P., prof., retsenzent; NAMESTNIKOV, A.F., kand.tekhn.nauk; FUKS, V.K., red.; SATAROVA, A.M., tekhn. red.

[Production of canned food for children]Proizvodstvo konservov dlia detskogo pitaniia. Moskva, Pishchepromizdat, 1962. 104 p. (MIRA 16:2)

(Canning industry)

NAMESTNIKOV, A.F.

From pages of foreign journals. Kons. i ov.prom. 18 no.3:38-39 Mr '63. (MIRA 16:3)

(Bibliography--Food--Preservation)

NAMESTNIKOV, A.F.

Use of antioxidants in the freezing of food products (from "Frosted Food Field," 34, no.5, 1962). Kons. i ov.prom. 18 no.4:37-38 Ap '63.
(MIRA 16:3)

(United States--Food, Frozen)

NAMESTNIKOV, A.F.

In the canning plants and Institut of the Fermentation Industry of the Polish People's Republic. Kons.i ov.prom. 18 no.5:34-38 My '63. (MIRA 16:4)

1. TSentral'nyy nauchno-issledovatel'skiy institut konservnoy i ovoshchesushil'noy promyshlennosti.
(Poland—Canning industry)

NAMESTNIKOV, A.F.

From pages of foreign journals. Kons. i ov. prom. 18 no.8:43-45 Ag '63. (MIRA 16:8)

(Canning and preserving)

VOL'PER, Izrail' Naumovich; NAMESTNIKOV, A.F., kand. tekhn. nauk, retsenzent; TIKHONOVA, T.V., red.

[Chemistry in the food industry] Khimiia v pishchevoi promyshlennosti. Moskva, Pishchevaia promyshlennost', 1965. 87 p. (MIRA 18:8)

NAMESTNIKOV, Aleksandr Fedorovich, kand. tekhn. nauk; TIKHONOVA, T.V., red.

[Home canning and preserving of fruits and vegetables] Konservirovanie plodov i ovoshchei v domashnikh usloviiakh. 4., ispr. i dop. izd. Moskva, Pishchevaia promyshlennost', 1965. 230 p. (MIRA 18:5)

GRABOVSKIY, V.A., dots.; NAMESTNIKOV, I.V., inzh.; YAROTSKIY, B.E.

Rapid washing of sulfate pulp in diffusers. Bum. prom. 33 no.4: 16-18 Ap '58. (MIRA 11:4)

1. Leningradskiy tekhnologicheskiy institut (for Grabovskiy, Namestnikov). 2. Svetogorskiy tsellyulozno-bumazhnyy kombinat (for Yarotskiy).

(Woodpulp) (Diffusers)

NAMESTNIKOV, I. V., Cand of Tech Sci — (diss) "Intensification of the Process of Washing Sulfate Cellulose in Diffusers," Leningrad, 1959, 15 pp (Leningrad Forestry Engineering ~~[illegible]~~ Academy im S. M. Kirov) (KL, 5-60, 126)

GRABOVSKIY, V.A., dots.; NAMESTNIKOV, I.V., inzh.

Effect of certain factors on the washing of sulfate pulp in diffuser tanks. Bum.prom. 34 no.6:2-4 Je '59.
(MIRA 12:10)

1. Leningradskiy tekhnologicheskiy institut tsellyulozno-bumazhnoy promyshlennosti.
(Woodpulp)

MAKSIMOV, Vladimir Fedorovich; NAMESTNIKOV, Igor' Vasil'yevich; SOKOLOVA, Ol'ga Ivanovna; POPILOV, L.Ya., red.; KHOT'KOVA, Ye.S., red. izd-va; BACHURINA, A.M., tekhn. red.

[Methods of inspecting working conditions in the enterprises of the woodpulp, paper, and woodworking industries]Metody kontrolia uslovii truda na predpriiatiiakh tselliulozno-bumazhnoi i derevoobrabatyvaiushchei promyshlennosti. Moskva, Goslesbumizdat, 1962. 214 p. (MIRA 15:10)
(Woodworking industries—Hygienic aspects)

GRABOVSKIY, V.A., kand.tekhn.nauk; NAMESTNIKOV, I.V., kand.tekhn.nauk

Effect of pressure differences in the diffuser on the washing of sulfate pulp. Trudy LTITSBP no.8:105-108 '61. (MIRA 16:9)
(Woodpulp)

TOPCHIYEV, A.V., akademik; NAMETKIN, N.S., kandidat tekhnicheskikh nauk.

Practical use of silicon organic compounds. Trudy MNI no.11:196-203 '51. (MIRA 10:3)

(Silicon organic compounds)

C.A. V-48
Jan 10, 1954
Synthetic Resins
and plastics

Organo-polysiloxane fluids. A. V. Topchiev, N. S. Leznov, and N. S. Nametkin. *Uspekhi Khim.* 20, 714-33 (1951).—Review with 19 references, dealing with structures and prepn. of the silicones. G. M. Kosolapoff

10-11-54

10

CA

Direct synthesis of phenylbromosilanes. A. V. Topchiev, N. S. Nametkin, and N. M. Zhmykhova (I. M. Gubkin Petrol. Inst., Moscow). *Doklady Akad. Nauk S.S.S.R.* **78**, 497-500(1951); cf. Rochow, *C.A.* **39**, 3788. PhBr vapor passed over 60 g. Si and 15 g. reduced powd. Cu reacted very slowly below 400°; at 400-500°, 18-51% Si derivs. form, with the best results at 410-20° when 270 g. PhBr is passed over the reactant over a period of 20-4 hrs. Distn. gave 33% *$PhSiBr_3$*, 28% *Ph_2SiBr_2*, and 10.3% residue in the expt. at 400-10°. At 480-500° the resultant products consist of 44.7% $PhSiBr_3$, 10% Ph_2SiBr_2, and 11.8% residue. Some 14-17% $SiBr_4$ is formed. Pure *$PhSiBr_3$*, b. 130-1°; *Ph_2SiBr_2*, b_2 190-4°. Distn. of the combined residues gave *Ph_3SiBr*, b_1 200-20°, m. 114-18°; higher-boiling products were incompletely identified, but a substance, b_1 250-300° and contg. 49% Br, was isolated. All bromosilanes fume in the air and are easily hydrolyzed by H_2O.

G. M. Kosolapoff

10

CA

Action of phenylmagnesium bromide on tetraethoxysilane. A. V. Topchiev and N. S. Nametkin. *Doklady Akad. Nauk S.S.S.R.* 80, 807-8(1951).—Slow addn. of mixed PhBr, $(EtO)_4Si$, and Et_2O at 30-5° to Mg, followed by distn. of the Et_2O and heating the residue with MePh 3-6 hrs. at 100° gave the following results: With a 1:1:1 mol. ratio of reagents 35-40% $PhSi(OEt)_3$, b. 234°, was obtained, along with 8-10% $Ph_2Si(OEt)_2$, b. 203°. Higher products were not found. At a 2:2:1 reagent ratio were formed 18-20% $PhSi(OEt)_3$, 40-2% $Ph_2Si(OEt)_2$, and 5-6% Ph_3SiOEt, m. 65°, b_4 207°. At a 3:3:1 ratio, 30-2% $Ph_2Si(OEt)_2$ and 28-30% Ph_3SiOEt were formed. Finally at a 4:4:1 ratio, 60-3% Ph_3SiOEt was formed. The formation of Ph_4Si succeeded only when $(EtO)_4Si$ was slowly added to prepd. PhMgBr with a reagent ratio [PhBr:Mg:$(EtO)_4Si$] of 4:4:1, and the mixt. was heated 6 hrs. at 100°; 63-5% Ph_3SiOEt and 3-5% Ph_4Si, m. 234°, b_4 228°, were formed. Ph_2 always formed, its amt. increasing with the duration of expt. and with increase of the PhBr concn. O. M. K.

USSR/Chemistry - Organosilicon Compounds 21 Feb 52

"The Synthesis of Organosilicon Compounds From Methylene Chloride and Silicon Dioxide," A. V. Topchiyev, N. S. Nametkin, V. N. Zetkin

"Dok Ak Nauk SSSR" Vol LXXXII, No 6, pp 927-929

The reaction of methylene chloride with silicon dioxide under various conditions was studied. Preliminary expts indicated that below 300° the reaction does not run well. The optimum temp range is between 320 and 350°. The yield of organosilica compds decreases significantly at 400° in the 1st 10 hours of operation. In the following 10 hrs, the yield of $SiCl_4$ does not exceed 18-19%. At 300° the yield of organosilicon compds is increased when the rate of entry of methylene chloride is increased, but at higher temps, there is little difference. However, when the methylene chloride supply rate is increased, the yield of gaseous products is increased. Hexachlordisilanemethane, bp 165° at 760 mm and 64° at 10 mm, one of the liquid products, fumes slightly in air.

214T23

214T23

NAMETKIN, N. S.

NAMETKIN, N. S.

USSR/Chemistry - Organosilicon Compounds 21 Mar 52

"Preparation of Hexalkoxy Derivatives of Disilanemethane," Acad A.V. Topchiyev, N.S. Nametkin, V.I. Zetkin

"Dok Ak Nauk SSSR" Vol 83, No 3, pp 423 - 425

Hexachlordisilanemethane was prepd from silicon and methylene chloride. This was used as the starting material for the synthesis of hexapropoxy, hexaisopropoxy, hexabutoxy, and hexaisopentoxy disilanemethanes from the corresponding abs alcs. The reactions were carried out in a stream of nitrogen.

227T7

USSR/Chemistry - Organosilicon Compounds 11 Apr 52

"Chemical Properties of Triphenylethoxysilane (Triphenylsilanol [I], Triphenylsilanolate of Na [II], Triphenylchlorosilane [III], and Hexaphenylsiloxane [IV], N. S. Nametkin, Acad A. V. Topchiyev, F. F. Machus

"Dok ak Nauk SSSR" Vol LXXXIII, No 5, pp 705-707

Obtained I by reacting triphenylethoxysilane with HI; prepd II by the action of Na metal on an etheral soln of I; obtained III by treating triphenylethoxysilane with acetyl chloride or with PCl_5, also by treating I with PCl_5; prepd IV by heating

218T7

USSR/Chemistry - Organosilicon Compounds 11 Apr 52
(Contd)

triphenylethoxysilane in glacial acetic acid in the presence of sulfuric acid, phosphoric acid, or HI. Describes properties of the compds obtained as well as of triphenylethoxysilane, which was originally prepd by the authors (cf. "Dok Ak Nauk SSSR" Vol LXXX, No 6, 1951).

218T7

IN, N. S.

NAMETKIN, N. S.

USSR/Chemistry - Organosilicon Compounds 21 May 52

"Hexalcoxyderivatives of Disilanemethane," N. S. Nametkin, Acad A. V. Topchiyev, V. I. Zetkin

"Dok Ak Nauk SSSR" Vol LXXXIV, No 3, pp 513, 514

Hexalcoxyderivatives of disilanemethane were obtained through the reaction of hexachlorodisilanemethane with the primary normal hexyl, heptyl, octyl and nonyl alcs. Hexachlorodisilanemethane had been derived through the reaction of methylene chloride with silicon. All hexalcoxyderivs of disilanemethane are oily liquids.

225T4

(BA-All Ap '53:184)

NAMETKIN, N. S.

USSR/Chemistry - Organosilicon Compounds 11 Jun 52

"Preparation of Hexalkoxy Derivatives of Disilanethane," A. V. Topchiyev, N. S. Nametkin, V. I. Zetkin

"Dok Ak Nauk SSSR" Vol LXXXIV, No 5, pp 979, 980

Hexahexoxy-, hexaheptoxy-, hexaoctoxy-, and hexanonoxydisilanethanes were prepd from the appropriate primary normal alc and hexachlordisilanethane.

223T16

1. NAMETKIN, N. S., Acad.: TOPCHIYEV, A. V., Acad., ZETKIN, V. I.

2. USSR (600)

4. Silane Derivatives

7. Certain aromatic and hydro-aromatic derivatives of hexoxydisilanethane,
Dokl. AN SSSR, 86 No. 1, 1952.

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

NAMETKIN, N. S.

PA

USSR/Chemistry - Organosilicon Compounds

21 Sep 52

"Hexamethyl and Hexaethyl Derivatives of Disilanmethane and Disilanethane," Acad A. V. Topchiyev, N. S. Nametkin, and A. A. Shcherbakova

DAN SSSR, Vol 86, No 3, pp 559-560

Hexamethyl and hexaethyl derivs of disilanmethane and disilanethane were prepd by treating hexachlorodisilanmethane and hexachlorodisilanethane with Grignard reagents or Li-organic compds. The following were prepd: hexamethyldisilanmethane, hexaethyldisilanmethane, hexamethyldisilanethane, and hexaethyldisilanethane.

247T9

NAMETKIN, N. S.

PA 245T6

USSR/Chemistry - Organosilicon Compounds 11 Oct 52

"The Preparation of Organosilicon Compounds From Unsaturated Hydrocarbons," Acad A. V. Topchiev, N. S. Nametkin, and O. P. Solovova

"Dok Ak Nauk SSSR" Vol 86, No 5, pp 965-968

Refer to literature of recent years which indicates that aromatic hydrocarbons, in their reaction with trichlorosilicane or its homologs (in the presence or the absence of the catalysts, BF_3 or BCl_3), yield aromatic halogenosilanes.

Add that they synthesized certain hydrogen-containing halogensilanes and disilanes by the direct reaction of alkyl bromides, methylene chloride, and dichloroethane with silicon. State that they became interested in preparing new organosilicon compounds by addition of the hydrogen compounds of silicon to unsaturated hydrocarbons. Since tribromosilane is obtained as a secondary product of the direct synthesis of alkylbromosilanes (in insignificant amounts), could also prepare it directly from hydrogen bromide and silicon. The yield of hydrogen compounds from hydrogen bromide and silicon does not exceed a few percent; the main product obtained is silicon tetrabromide. Authors state that the rate of flow of HBr has a decisive effect on obtaining good yields of tribromosilane. A weak current of HBr leads mostly to a formation of silicon tetrabromide, whereas an increase in the rate of flow of HBr to increased yields of hydrogen compounds. The authors also found that hydrogen-containing disilanes, analogously to hydrogen containing silanes, when added to unsaturated hydrocarbons, form the corresponding alkyl-halogenodisilanes.

(CA 47 no.20: 10471 '53)

(3) 245T6

NAMETKIN, N.S.

A.V. Topchiyev, G.M. Panchenkov, N.S. Nametkin, A.A. Gundyrev and Ku Ch'ang-li, "Temperature Dependence of the Viscosity and Density of Certain Silicon-Organic Compounds.

Report presented at the Second All-Union Conference on the Chemistry and Practical Application of Silicon-Organic Compounds held in Leningrad from 25-27 September 1958.
Zhurnal prikladnoy khimii, 1959, pp 238-240 (USSR)

NAMETKIN, N.S.; TOPCHIYEV, A.V.; CHERNYSHEVA, T.I.; DURGAR'YAN, S.G.

Synthesis and properties of silicohydrocarbons of the disilanopropane series. Trudy MNI no.23:22-30 '58. (MIRA 12:1)
(Silicon organic compounds)

NAMETKIN, N. S. PA 234T29

USSR/Chemistry - Organosilicon Compounds 21 Oct 52

"Some Aromatic and Hydroaromatic Derivatives of Hexahydroxydisilanmethane," Acad A. V. Topchiyev, N. S. Nametkin, V. I. Zetkin

"Dok Ak Nauk SSSR" Vol 86, No 6, pp 1133, 1134

Hexaphenylmethoxydisilanmethane, hexaphenoxydisilanmethane, hexacyclohexyloxydisilanmethane, hexacresoxydisilanmethane were prepd from hexachlorodisilanmethane and benzyl alc, phenol, cyclohexanol, and m-cresol, respect.

234T29

(CA 47 no.22: 12281 '53)

NAMETKIN, N.S.

CA., V-48
Jan 10, 1954
Organic Chem.

Some aromatic and hydroaromatic derivatives of hexaalkoxydisilanoethane. N. S. Nametkin, A. V. Topchiev, and V. I. Zetkin. *Doklady Akad. Nauk S.S.S.R.* 87, 59-60 (1952).—Addn. of 40 g. $Cl_3SiCH_2CH_2SiCl_3$ to 145 g. $PhCH_2OH$ gave an unstated yield of $[(PhCH_2O)_3SiCH_2]_2$, $b_{1.4}$ 335-6°, d_{25} 1.5522, n_D^{20} 1.5679. Similarly cyclohexanol gave $[(C_6H_{11}O)_3SiCH_2]_2$, $b_{2.2}$ 299-302°, d_{20} 1.0292, n_D^{20} 1.4863. PhOH at 50° gave $[(PhO)_3SiCH_2]_2$, $b_{1.1}$ 310-13°, m. 96° (from CH_2Cl_2), while m-MeC_6H_4OH gave $[(m\text{-}MeC_6H_4O)_3SiCH_2]_2$, b_1 316-18°, m. 78-9° (from petr. ether). The refractive indexes of the latter 2 substances by immersion method were N_p 1.6065 and N_g 1.674 (at 594 mμ) and N_p 1.592 and N_g 1.701 (at 400 mμ) resp. G. M. K.

4
Chem
③

NF
7-28-54

NAMETKIN, N. S.

PA 245T8

USSR/Chemistry - Silicon-organic Compounds 11 Nov 52

"Triphenylsilanol Acetate and Triphenylchlorosilane," N. S. Nametkin, Acad A. V. Topchiyev, F. F. Machus

"Dok Ak Nauk SSSR" Vol 87, No 2, pp 233-236

Triphenylsilaneol acetate and triphenylchlorosilane were obtained by treating triphenylsilanol with a ratio of 1:1 and an excess of acetyl chloride respectively. The melting point of triphenylsilanol acetate was established at 97° and that of trichlorosilane also at 97°.

245T8

(CA 47 no. 22: 12281 '53)

NAMETKIN, N. S.

PA 245T12

USSR/Chemistry - Organosilicon Compounds 21 Nov 52

"Hexalkoxy Derivatives of Disilanethane," Acad A. V. Topchiyev, N. S. Nametkin, and V. I. Zetkin

"Dok Ak Nauk SSSR" Vol 87, No 3, pp 431, 432

The preparation and physical and chemical properties of the following are described: hexapropoxy disilanethane, hexaisopropoxy disilanethane, hexabutoxy disilanethane, hexaisobutoxy disilanethane, and hexaisopentoxy disilanethane.

(CA 47 no. 22: 12223 '53)

245T12

NAMETKIN, N.S.

③

C.A. V-48
Jan/10, 1954
Organic Chemistry

Some hexaalkoxy derivatives of disilanomethane and disilanoethane. N. S. Nametkin, A. V. Topchiev, and V. I. Zetkin. *Doklady Akad. Nauk S.S.S.R.* 87, 601-3 (1952); cf. *C.A.* 47, 12223*f*.—Addn. of 95 g. $CH_2(SiCl_3)_2$ over 35 min. to 150 g. abs. MeOH gave an unstated yield of $CH_2[Si(OMe)_3]_2$, b_5 92-3°, d_{20} 1.0873, n^{20}_D 1.4071. Similarly were obtained: *EtO analog*, $b_{1.5}$ 114-15°, d_{20} 0.9741, n^{20}_D 1.4098; *Me_2CHCH_2O analog*, $b_{1.5}$ 180-2°, d_{20} 0.9110, n^{20}_D 1.4240; $[CH_2Si(OMe)_3]_2$, b_5 103-4°, d_{20} 1.0087, n^{20}_D 1.4001; $[CH_2Si(OEt)_3]_2$, $b_{1.5}$ 122-3°, d_{20} 0.9660, n^{20}_D 1.4120.

G. M. Kosolapoff

AF
1-28-54

[illegible]

NAMETKIN, N.S.

USSR/Organic Chemistry - Synthetic Organic Chemistry, E-2

Abst Journal: Referat Zhur - Khimiya, No 19, 1956, 61589

Author: Nametkin, N. S., Topchiyev, A. V., Solovova, O. P.

Institution: None

Title: Alkylation with Hydrocarbons of Various Compounds of Silicon

Original Periodical: Voprosy geologii, dobychi i pererabotki nefti (Tr. Mosk. neft. in-ta, No 13), Moscow-Leningrad, 1953, 158-164

Abstract: A review. Bibliography, 22 titles.

Card 1/1

NAMETKIN, N. S.

Chem Abs V48
1-25-54
Organic Chemistry

Direct synthesis of alkyl- and arylhalosilanes. A. V. Topchiev and N. S. Nametkin. *Zhur. Obshchei Khim.* 23, 76-83(1953); cf. *C.A.* 46, 1963*f*.—The reaction of Si with organic halogen derivs. was studied in a tube furnace in Mo glass tubes each charged with 60 g. Si and 15 g. reduced Cu. Before passage of RX the air in the tubes was displaced with CO_2. MeBr reacts too sluggishly at 250-300° and best yields are obtained at 330-40°. Usually the reaction gives best yields after 10-12 hrs. operation of the tube, possibly owing to better porosity of the mass of Si and Cu. Under best conditions passage of 1250 g. MeBr over 42 hrs. through the tube gave 618 g. organo-Si derivs. The products include some HBr, Me_3SiBr, b. 79.0°, Me_2SiBr_2 (principal product), b. 112-12.5°, $MeSiBr_3$, b. 133-3.5°, and a small amt. of $SiBr_4$, b. 151°. The bromo derivs. act corrosively on glass. The reaction of Si-Cu with PhBr proceeds only very slowly below 400°; best results are obtained at 410-20° when 56.5% organo-Si derivs. are obtained. Relatively slow feed of PhBr is desirable (276 g. per 20 hrs. gave 60.5% yield, 700 g. per 56 hrs. gave 56.5% yield). The rate of reaction is max. at 10-12 hrs. after which it declines. The reaction products consist of $SiBr_4$ (isolated only in crude state owing to closeness of b.p. to PhBr), $PhSiBr_3$, b_{12} 130-1°, Ph_2SiBr_2, b_{11} 190-4°, f.p. −70°, and Ph_3SiBr, b_3 200-20°, m. 114-18° (the latter formed in very low yield). All the Br derivs. are easily hydrolyzed by H_2O.

G. M. Kosolapoff

6/8/54

NAMETKIN N. S.

NAHETKIN, N S.

NAMETKIN, N.S.

Synthesis of hexa-alkyl derivatives of cyclotrimethylenetrisilane. N. S. Nametkin, A. V. Topchiev, and V. I. Zetkin. *Doklady Akad. Nauk S.S.S.R.* 93, 1045-7(1953).—From the reaction of CH_2Cl_2 with Si-Cu (cf. *C.A.* 48, 1267(*i*) was isolated a fraction, b_{14} 137-40°, which on chilling gave *1,1,3,3,5,5-hexachlorocyclotrimethylenetrisilane*, b_{10} 133-4°, m. 85°. This treated with RMgX gave: 73.8% corresponding *hexa-Me deriv.*, b_{15} 96-7°; 60% *hexa-Et analog*, b_1 136-8°; 59.8% *hexa-Pr analog*, b_1 165-6°; and 65.5% *hexa-Bu analog*, b_1 203-4°. The reactions with RMgX were completed by distn. of the solvent Et_2O and heating the residues 2-3 hrs. at 110-80° (depending on the size of R group). G. M. Kosolapoff

NAMETKIN, N.S.

USSR/Chemistry

Card : 1/1

Authors : Nametkin, N. S. Topchiev, A. V. Academ., and Machus, F. F.

Title : Synthesis and properties of hexlkyl derivatives of disilanemethane and disilanmethane

Periodical : Dokl. AN SSSR, 96, Ed. 5, 1003 - 1005, June 1954

Abstract : Report describes the synthesis and physico-chemical properties of hexapropyl- and hexabutyl derivatives of disilanemethane and disilaneethane. The experimental part is described in detail. The solidification point of the investigated silicon-hydrocarbons was found to be lower than in the structutal hydrocarbon analogues. (Silicon hydrocarbons have a higher boiling point and index of refraction and sharply increased specific weights in comparison with normal hydrocarbons.) Four references.

Institution : ....

Submitted : April 13, 1954

NAMETKIN, N. S.

USSR/ Chemistry

Card : 1/1

Authors : Topchief, A. V., Academician, Nametkin, N. S. and Povarov, L. S.

Title : Si-containing analogue of 2,2,4-trimethylpentane and some of its derivatives

Periodical : Dokl. AN SSSR, 97, Ed. 1, 99 - 102, July 1954

Abstract : The derivation and certain physico-chemical properties of pentamethyldisilanemethane, which is an analogue of 2,2,4-trimethylpentane, and some of its derivatives (pentamethylethoxydisilanemethane, pentamethyloxydisilanemethane, dimer of pentamethyloxydisilanemethane), are described. The physico-chemical properties of a linear tetramer obtained, with a siloxane carbon chain and described in literature as a Si-organic analogue, are tabulated. Eight references: 5 USSR, 3 USA. Tables.

Institution : ....

Submitted : April 13, 1954

NAMETKIN, N. S.

USSR/ Chemistry - Synthesis

Card 1/1 Pub. 22 - 17/40

Authors : Nametkin, N.S.; Topchiev, A.V., Academician.; and Povarov, L.S.

Title : Synthesis of compounds with siloxane-carbon chain from methylene chloride-silicon reaction products

Periodical : Dok. AN SSSR 99/3, 403-406, Nov 21, 1954

Abstract : The synthesis of linear and cyclic tetramers, with ethyl radicals in the Si-atoms, is described. Pentachlorodisilanemethane and hexachlorodisilanemethane were the basic products from which the linear and cyclic tetramers were derived. The hydrogen displacement (S-H bond) in the pentaethyldisilanemethane by the ethoxy- and hydroxy-groups occurs under more stable conditions than in pentamethyldidilanemethane. A method for the derivation of silicon-organic compounds, with siloxane-carbon chain and different organic radicals, is briefly described. The physico-chemical properties of the synthesised tetramers are tabulated. Four references: 3-USA and 1-USSR (1947-1954). Table.

Institution: Academy of Sciences USSR, Petroleum Institute

Submitted: September 21, 1954

NAMETKIN, N. D

USSR/Chemistry - Physical chemistry

Card 1/1 Pub. 22 - 17/45

Authors : Topchiev, A. V., Academician; Nametkin, N. S.; and Zetkin, V. I.

Title : Comparative physico-chemical characteristic of silicon hydrocarbons and siloxanes

Periodical : Dok. AN SSSR 99/4, 551-553, Dec 1, 1954

Abstract : The physico-chemical properties of hitherto unknown silicon hydrocarbons - hexalkyl derivatives of disilanemethane and disilanethane - which represent two homologous series $R_3SiCH_2SiR_3$ and $R_3SiCH_2CH_2SiR_3$, were investigated. Viscosity, boiling point, specific weight, and index of refraction of the silicon hydrocarbons were determined and presented in table. Five USSR references (1951-1954). Table; graphs.

Institution : Academy of Sciences USSR, Petroleum Institute

Submitted : September 21, 1954

A

USSR/Chemistry - Organic chemistry

Card 1/1 Pub. 22 - 26/51

Authors : Nametkin, N. S.; Topchiyev, A. V., Academician; and Kartasheva, L. I.

Title : Reactions of propyl bromide and butyl bromide with silicon

Periodical : Dok. AN SSSR 101/5, 885-887, Apr 11, 1955

Abstract : The reaction of C_3H_7Br and C_4H_9Br with Si was investigated at temperatures of 260-340°. The basic reaction products were found to be tetrabromosilane and tribromosilane which form according to certain described schemes. It was established that some reaction products having a 170° boiling point contained basically alkyltribromosilane and hexabromodisilane. The chemical properties of the reaction products were identical to those mentioned in literature and their analyses coincided with estimated values. Six USSR references (1951-1953). Tables.

Institution : Acad. of Sc., USSR, Petroleum Inst.

Submitted : December 14, 1954

NAMETKIN, N. S

USSR/ Chemistry - Organic chemistry

Card 1/1 Pub. 22 - 25/46

Authors : Topchiyev, A. V., Academician; Nametkin, N. S.; and Zetkin, V. I.

Title : Synthesis of hexaalkoxy derivatives of cyclotrimethylenetrisilane

Periodical : Dok. AN SSSR 103/1, 95-96, Jul 1, 1955

Abstract : The chemical properties of hexaalkoxy derivatives of cyclotrimethylenetrisilane are described. These compounds were obtained during the reaction of 1, 1, 3, 3, 5, 5-hexachlorocyclotrimethylenetrisilane with ethyl, propyl and n-primary butyl alcohols. It was established that the reaction leading to the formation of hexaalkoxy derivatives of cyclotrimethylenetrisilane is followed by the formation of certain condensation products the amount of which decreases with the increase in molecular weight of the alcohol. The effect of water formed during the reaction on the hydrolysis and condensation of the reaction product is explained. One USSR reference (1953).

Institution : Acad. of Sc., USSR, Inst. of Petroleum

Submitted : April 18, 1955

NAMETKIN,N.S.; TOPCHIYEV,A.V., akademik; POVAROV,L.S.

Synthesis of linear tetramers with a siloxane-carbon chain by means of propyl and butyl radicals. Dokl. AN SSSR 103 no.3:435-437 Jl'55.
(MLRA 8:11)

1. Institut nefti Akademii nauk SSSR.
(Siloxanes)

Name: NAMETKIN, Nikolay Sergeyevich

Dissertation: Research in the field of organic silicon compounds

@ Moscow
RSFSR

Degree: Doc Chem Sci

Affiliation: Moscow Or~~der of Labor Red Banner~~ Petroleum Inst imeni ~~Gor'kiy~~ I. M. Gubkin

Defense Date, Place: 22 Mar 56, Council of Petroleum, Acad Sci USSR

Certification Date: 26 May 56

Source: BMVO 4/57

ZHIGACH, K.F., professor, otvetstvennyy redaktor; MURAV'YEV, I.M., professor, redaktor; TIKHOMIROV, A.A., kandidat ekonomicheskikh nauk, redaktor; YEGOROV, V.I., kandidat ekonomicheskikh nauk, redaktor; CHARYGIN, M.M., professor, redaktor; DUNAYEV, F.F., professor, redaktor; NAMETKIN, N.S., dotsent, redaktor; BIRYUKOV, V.I., dotsent, redaktor; YEGOROV, A.F., dotsent, redaktor; CHARNYY, I.A., professor, redaktor; CHERNOZHUKOV, P.I., professor, redaktor; KUZMAK, Ye.M., professor, redaktor; DOKHNOV, V.N., professor, redaktor; PANCHENKOV, G.M., professor, redaktor; ALMAZOV, N.A., dotsent, redaktor; TAGIYEV, E.I., redaktor; GUREVICH, redaktor; ZHIGACH, K.F., redaktor; DAYEV, G.A., vedushchiy redaktor; GENNAD'YEVA, I.M., tekhnicheskiy redaktor

[The tenth scientific and technical conference, 1955] Desiataia nauchno-tekhnicheskaia konferentsiia, 1955 g. Leningrad, Gos. nauchno-tekhn. izd-vo neftianoi i gorno-toplivnoi lit-ry, Leningradskoe otd-nie, 1956. 167 p. (MIRA 9:7)

1. Moscow. Moskovskiy neftyanoy institut. Nauchnoye studencheskoye obshchestvo
(Petroleum engineering) (Petroleum geology)

Nametkin, N.S.

USSR/Organic Chemistry. Synthetic Organic Chemistry. E-2

Abs Jour: Ref Zhur-Khimiya, No 6, 1957, 19255.

Author : Topchiyev A. V., Nametkin N. S., Povarov L. S.
Inst :
Title : Synthesis of Silicon Organic Compounds of the Type Bis (tetraalkyldisilanemethane) Cyclodioxide.

Orig Pub: Dokl. AN SSSR, 1956, 109, No 2, 332-335.

Abstract: The symmetrical structure of tetrachlordisilanemethane (I), formed at the reaction of CH_2Cl_2 with Si by obtaining from it $[(CH_3)_2 - SiR]_2CH_2$ (II) (R=OH) and bis-(tetramethyldisilicomethane)-cyclodioxide (III) is proven. To CH MgI (from 2.8 mole CH_3J in 500 cc ether) is added 0.33 mole I in 150 cc ether, heated to boiling 4 hours, yield $(HSiR_2)CH_2$(IV) (R=CH3) 82.5%, b.p. 103°/752 mm. By the interaction of 10 g. IV (R= CH_3) with C_2H_5ONa (from 2.3 g. Na and 50 cc C_2H_5OH) is obtained II (R=$O(C_2H_5)_2$(V), yield

Card : 1/3

E-2

USSR/Organic Chemistry. Synthetic Organic Chemistry.

Abs Jour: Ref Zhur-Khimiya, No 6, 1957, 19255

51.2%, b.p. 82-83°/21 mm. A mixture 8.5g. V and 40 cc
water left standing 5 days, extracted with petroleum ether
II (R=OH), yield 71%, m.p. 85-87°. [16 g. IV (R=CH_3)
and 100 cc 5% solution NaOH in CH_3OH boiled 15 min. and
after dilution with 150 cc water is obtained 12.5 g. III
b.p. 208-209°, m.p. 30° (from petr.ether). Analogously
from C_2H_5MgBr (from 1.6 mole C_2H_5Br)and 0.18 mole I in
100cc ether is obtained IV (R=C_2H_5) (VI), yield 75.6%,
b.p. 55°/3mm. By boiling 4 hours of a mixture 26.5 g.
VI and 120 cc 10% alcoholic sol. NaOHafter the addition
of 100 cc petroleum ether and 200 cc water is obtained
$[(C_2H_5)_2SiOH]_2CH_2$ (VII), yield 84%, b.p. 126-128°/5mm,
m.p. 17-18°. By boiling 6 hours 22g. VII with 50 cc
40% HBr is obtained bis-(tetraethyldisilanemethane)-
cyclodioxide, yield 74%, b.p. 154-155°/3 mm. A mixture
of 2 moles C_4H_9Br, 0.3 mole pentachlordisilane-methane,

Card : 2/3

E-2

USSR/organic Chemistry. Synthetic Organic Chemistry.

Abs Jour: Ref Zhur-Khimiya, No 6, 1957, 19255.

Abstract: 48.6 g. Mg and 700 cc ether is boiled 16 hours, yield hydroxytetrabutyldisilanemethane (VIII) 35.8%, b.p. 158-159°/4 mm. Dy boiling 6 hours of a mixture 23 g. VIII with 75 cc of a 10% alcoholic sol. NaOH after the usual treatment is obtained $[(C_4H_9)_2SiOH]CH_2$ (IX), yield 32.9% b.p. 185-189°/5 mm. Bis-(tetrabutyldisilanemethane)-cyclodioxide is synthesized from IX by boiling with 40% HBr, yield 63.5% b.p. 214-216°/1mm.

Card : 3/3

NAMETKIN, N S

NAMETKIN, N.S.

NAMETKIN, N.S.

NAMETKIN, N.S.

20-1-29/54

AUTHOR NAMETKIN, N.S., TOPCHIYEV, A. V., Academician CHAN-LI Gu and LEONOVA N.A.,

TITLE The Production and Properties of Mono-, Di- and Tri-p-Tolylalkylsilanes. (Sintez i svoystva mono-, di-i tri-p-tolilalkilsilanov -Russian)

PERIODICAL Doklady Akad. Nauk SSSR, 1957, Vol 115, Nr 1, pp 107 - 109 (U.S.S.R.)

ABSTRACT

In recent years a great number of papers has been published in which the production methods and properties of silicon-hydrocarbons of various structure were described. The derivatives of these substances which contain functional groups in the organic radical have hitherto hardly been studied at all. They may be of theoretical as well as of practical interest. The authors thought of interest to produce silicon hydrocarbons with p-totyl radicals and to study the production methods on their basis of compounds with functional groups in the organic radical. In the present paper mono-, di-and tri-p-tolylalkyl derivatives of silicon are described the properties of which are given in tables 1 and 2. p-tolyl-chloro(ethoxy)silanes. p-tolyltrichloro silane and di-p-tolyldichlorosilane were produced from tetrachlorosilicon and p-tolylmagnesiumbromide. Their properties agree with published data. p-tolyltriethoxy- and di-, as well as tri-, p-tolyldiethoxysilane were obtained from tetraethoxysilane and p-tolylmagnesiumbromide. p-tolyl-propyl-ethoxysilane was isolated from the reaction products of the synthesis of di-tolyl-di-propylsilane. P-tolyl-di-isobutyl-ethoxy-silane was obtained from the interaction of isobutyllithium with p-tolyl-triethoxysilane.

Card 1/2

NAMETKIN, N.S.

AUTHOR TOPCHIYEV, A.V., Member of the Academy, 20-2-36/62
NAMETKIN, N.S. and CHERNYSHEVA, T.I.

TITLE Synthesis of some alkylhaloidsilanes and silicon hydrocarbons.
(Sintez nekotorykh alkilgaloidsilanov i kremniyuglevodorov. Russian)

PERIODICAL Doklady Akademii Nauk SSSR 1957 Vol 115, Nr 2, pp 326-329

ABSTRACT The present report is a continuation of the authors' papers on the formation reaction of organosilicon compounds from unsaturated hydrocarbons and silicon compounds containing a Si--H bond. Addition reactions of trichlorosilane and tribromosilane to isoamylene, nonene-1 and decene-1 were especially studied. The former two were performed in analogous conditions. In the presence of benzoylperoxide trichloro- and tribromosilane add to nonene-1 and decene- with high yields (60-70%), to isomylene they add with small yields (5-8%). The low yields might have been due to the reaction temperature in connection with the low boiling temperature of isomylene. In order to exclude the influence of temperature, the authors carried out an attempt of addition of trichlorosilane on isomylene under pressure, at 100°C, in the presence of benzoylperoxide. The yield of iso-

CARD 1/3

Nametkin, N. S.

20-2-24/50

AUTHORS: Topchiyev, A. V., Academician [illegible],
Nametkin, N. S., and Machus, F. F.

TITLE: Some Silicon Hydrocarbons of the Disilane-Methane and Disilane-Ethane Series (Nekotoryye kremniyuglevodorody ryada disilanmetana i disilanetana).

PERIODICAL: Doklady AN SSSR, 1957, Vol. 116, Nr 2, pp. 248-250 (USSR)

ABSTRACT: In a number of earlier reports the authors described silicon hydrocarbons of the disilane-methane and the disilane-ethane series. They were obtained by interaction of organomagnesium compounds with hexachloro-, pentachloro- and tetrachloro-derivatives of disilane-methane and with hexachlorodisilane-ethane. The possibility of a reaction of addition of pentachloro- and tetrachloro-disilane-methane to unsaturated hydrocarbons was also proved, which leads to the formation of alkyl- and dialkyl-chloro-derivatives of disilane-methane. The present report describes silicon hydrocarbons of the disilane-methane series with various organic radicals which were obtained in interactions of organolithium compounds with alkyl- and dialkyl-chloro derivatives of disilane-methane, earlier described by the authors, as well

Card 1/2

NAMETKIN, N.S.; TOPCHIYEV, A.V., akademik; POVAROV, L.S.

Formation of compounds with silthiano-carbon links. Dokl. AN SSSR 117 no.2:245-248 N '57. (MIRA 11:3)
(Silicon organic compounds) (Sulfur organic compounds)

SOV/62-58-8-6/22

AUTHORS: Topchiyev, A. V., Nametkin, N. S., Kartasheva, L. I.

TITLE: Reaction of Ethyl Bromide With Silicon (Reaktsiya bromistogo etila s kremniyem)

PERIODICAL: Izvestiya Akademii nauk SSSR, Otdeleniye khimicheskikh nauk, 1958, Nr 8, pp. 949-953 (USSR)

ABSTRACT: This paper was written for the purpose of investigating the possible production of alkyl bromosilanes with various organic radicals. The investigation of this reaction of ethyl bromide with silicon in the presence of reduced copper within the temperature intervals of from 260-380°C is described. Ethyl tribromosilane was found as basic product of the reaction; its yield increases considerably if the temperatures of the reaction rise. The formation of diethyl dibromosilane and especially of triethyl bromosilane in connection with a partial pyrolysis of ethyl bromide took place to a much lower degree. It was found that in the reaction products also silicon compounds are contained (with the binding Si - H = tribromosilane and ethyl dibromosilane). Thereare 2 figures, 7 tables, and 5 references, which are Soviet.

Card 1/2

SOV/62-58-8-6/22

Reaction of Ethyl Bromide With Silicon

ASSOCIATION: Institut nefti Akademii nauk SSSR (Institute of Petroleum, AS USSR)

SUBMITTED: January 14, 1957

Card 2/2

NAMETKIN, N.S.

20-3-28/59

AUTHORS: Topchiyev, A. V., Academician
Nametkin, N. S., Chernysheva, T. I.

TITLE: The Addition of Dialkyl(phenyl)Silanes to Ethylene Hydrocarbons (O prisoyedinenii dialkil[fenil] silanov k etilenovym uglevodorodam).

PERIODICAL: Doklady AN SSSR, 1958, Vol. 118, Nr 3, pp. 517-519 (USSR).

ABSTRACT: First the authors give a short survey on papers concerning the said reaction (references 1-8). In the present work they investigated the addition reactions of diethyl-silane, dibutyl-silane, methyl-phenyl-silane and diphenyl silane to octene-1, nonnene-1 and decene-1. They were carried out in sealed ampoules in the presence of platinized carbon. The addition of diethyl-silane and dibutyl-silane to octene-1 and nonene-1(ratio 1:2) only took place with a Si-H bond. On the same conditions and the same ratio diphenyl-silane was added to decene-1 and formed diphenyl-decyl-silane with a yield of 61% + diphenyl-didecyl-silane with a yield of 10%. Dibutyl-silane is added to nonene-1 with formation of 6% dibutyl-dinonyl-silane only when their ratio is equal to 1:4, diphenyl-silane is added to decene-1 also in the presence of

Card 1/2

The Addition of Dialkyl(phenyl)Silanes to Ethylene Hydrocarbons. 20-3-28/59

benzoylperoxide, while this is not the case with diethyl-silane and octene-1. From table 1 can be seen that diethyl-silane and dibutyl-silane are added to olefines with half the yields as is the conclusion can be drawn that the Si-H bond in dihydric-silanes, containing phenyl-radicals, is more active than the same bond in dihydric-silanes with alkyl radicals. From dibutyl-nonyl silane and diphenyl decyl silane dibutyl-dinonyl-silane and diphenyl-nonyl-decyl-silane were produced by interaction with nonene-1. An experimental part with the usual data follows. There are 8 references, 5 of which are Slavic.

SUBMITTED: March 25, 1957

AVAILABLE: Library of Congress

Card 2/2

20-118-4-29/61

AUTHORS: Topchiyev, A. V., Member of the Academy, Nametkin, N. S., Gu Chan-Li, Leonova, N. A.

TITLE: Production and Properties of Phenyl-, 3,4-Xylyl- and 4-Isopropylphenylalkylsilanes (Sintez i svoystva fenil-, 3,4-ksilil- i 4-izopropilfenilalkilsilanov)

PERIODICAL: Doklady Akademii Nauk SSSR, 1958, Vol. 118, Nr 4, pp. 731-734(USSR)

ABSTRACT: More and more attention has been paid in the last years to the synthesis and the study of the physical, chemical and technical properties of silicon-hydrocarbons of different structure. Aryl-alkyl-silanes in which the aryl- and alkyl radicals are bound to the silicon atom are especially interesting. In a previous report of the authors (ref. 1) the mono-,di-, and tri-p-tolyl-alkyl-silanes are described. In the present paper the properties and the production of the phenyl- alkyl-silanes, 3,4-xylyl-alkyl-silanes, and of the 4-isopropyl-phenyl-alkyl-silanes are discussed. The latter are not yet described, of the 3,4-xylyl-alkyl-silanes only one, the 3,4-xylyl-trimethyl-silane (ref. 2) is known. The phenyl-alkyl-silanes were synthetized in order to compare their physical and chemical properties to those of other aryl-alkyl-silanes.

Card 1/2

Production and Properties of Phenyl-, 3,4-Xylyl- and 4-Isopropylphenylalkylsilanes

20-118-4-29/61

Several of them were produced for the first time. They were all obtained from magnesium- and lithium-organic compounds. 3,4-xylyl-alkyl-silanes (table 1) were produced by interaction between the 3,4-xylyl-lithium and corresponding alkyl-haloid (ethoxy)silanes. 3,4-xylyl-lithium was obtained from 4-bromo-o-xylene which had been produced by bromization of o-xylene. 4-bromoisopropylbenzene was produced in an analogous way. Di-4-isopropyl-phenyl-dimethyl-silane and di-4-isopropyl-phenyl-diethyl-silane were produced from it over lithium-organic compounds. 19 produced substances are given with the usual data in a kind of experimental part. Their physical and chemical properties are given in table 1. There are 1 table and 7 references, 2 of which are Soviet.

SUBMITTED: October 4, 1957

AVAILABLE: Library of Congress

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AUTHORS: Gundyrev, A.A., Nametkin, N.S., SOV/20-121-6-22/45
Topchiyev, A.V., Member, Academy of Sciences, USSR

TITLE: Dipole Moments of the Hexalkyl Derivatives of Disiloxane (Dipol'nyye momenty geksalkilproizvodnykh disiloksana)

PERIODICAL: Doklady Akademii nauk SSSR, 1958, Vol 121, Nr 6, pp 1031 - 1033 (USSR)

ABSTRACT: In the present paper the values of the dipole moments of the 4 derivatives referred to in the title: a) hexa-methyl-disiloxane b) hexa-ethyl-disiloxane c) hexa-propyl-disiloxane and d) hexa-butyl-disiloxane are quoted. They were produced by hydrolysis of the corresponding tri-alkyl-haloid-(ethoxy)-silanes (Ref 1). Only the dipole moment for a) was known (Refs 2,3). The others have been determined here for the first time. Results and references are given in table 1. A comparison of these results shows a very high precision of the used apparatus. This equipment worked according to the pulsation method. Its stabilization consisted of piezoquartz with a frequency of $7{,}95 \cdot 10^5$ cycles. The dipole moments were computed by the formula:

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$$\mu = 0{,}012813 \cdot 10^{-18}\sqrt{P_{or}T} \quad (1)$$

according to the method by Hederstrand (Gederstrand, Ref 7). μ means the dipole moment, P_{or} an orientational polarization, and T the absolute temperature. The orientational polarization is associated with the general polarization of the dissolved compound P_{∞} and with the deformation polarization $P_{D\infty}$ (supposed being identical with the molar refraction) by the ratio

$$P_{or} = P_{\infty} - P_{D\infty} \quad (2)$$

Table 2 shows the constants of the pure solvent for the determination of P_{∞} and $P_{D\infty}$. Table 3 contains the determination of dielectric permeability (ε), density (d), and refractive index (n_D) of the substances in question, dissolved in n-hexane, for various concentrations of the dissolved compounds. They are expressed in mol-portions (molarity) (C_2) (molyarnyye doli Pl.). From the data of table 2 and 3, the constants for the determination of the dipole moments according to the Hederstrand method are calculated (Table 4). This evaluation of the dipole moments proves the Si-O-bond being a distinctly polar one. This is due

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Dipole Moments of the Hexalkyl Derivatives of Disiloxane

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to the significant difference of the electronegativity of Si and O. There are 4 tables and 7 references.

SUBMITTED: May 13, 1958

Card 3/3

NAMETKIN, N.S.; TOPCHIYEV, A.V.; DURGAR'YAN, S.G.; TOLCHINSKIY, I.M.

Copolymerization of dimethyl- and methylphenyldiallylsilane with propylene on the complex catalyst $(C_2H_5)_3Al+ TiCl_4$. Vysokom. soed. 1 no.11:1739-1744 N '59. (MIRA 13:5)

1. Institut neftekhimicheskogo sinteza AN SSSR.
(Silane) (Propene)

SOV/79-29-9-3/76

5(3)

AUTHORS: Nametkin, N. S., Topchiyev, A. V., Ku Ch'ang-li, Pritula, N. A.

TITLE: On the Possibility of Synthesizing Some Organosilicon Compounds With Alkyl Benzyl Radicals on the Basis of Chloromethylated Alkyl Benzenes

PERIODICAL: Zhurnal obshchey khimii, 1959, Vol 29, Nr 9, pp 2820 - 2826 (USSR)

ABSTRACT: The chloromethylation of aromatic hydrocarbons had been hitherto effected in aqueous and acetic medium with different catalysts, like $ZnCl_2$, $AlCl_3$, $SnCl_4$, phosphoric and sulphuric acid (Refs 1-4). In the reaction, formaldehyde may be used both in the form of its polymer and in the solved state. Chloromethyl ether is also suggested for use. The authors chloromethylated toluene, ethyl- and isopropyl benzene according to the scheme:

$$RC_6H_5+HCHO+HCl \longrightarrow RC_6H_4CH_2Cl+H_2O, \quad (R=CH_3,\ C_2H_5,\ \text{iso-}C_3H_7).$$

This reaction occurred in the following usual way: hydrogen-

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chloride was flown through the mixture of alkyl benzene, 35% formalin and $ZnCl_2$ under stirring for 1½ h at room temperature and thereupon during 10 h at 70-80°. Properties and yields of chloromethylated alkyl benzenes are shown in table 1. On the basis of chloromethylated alkyl benzenes the authors obtained organomagnesium compounds, which, on reacting with alkyl halogen silanes, yielded organosilicon compounds with alkyl benzyl radicals at the silicon atom (Scheme 2). On the reaction of magnesium chloromethyl toluene and magnesium chloromethyl ethyl benzene with diethyl dichloro silane and subsequent decomposition of the reaction mass with water, alkyl benzyl diethyl silanols were formed, aside from silicon hydrocarbons, in yields of 42% in both cases (Scheme 3). Methyl benzyl diethyl silanol condenses, on standing, to 1,3-di-(methyl benzyl)-1,1,3,3-tetraethyl disiloxane (Scheme 4) (Table 2). To clarify the question, whether and in which ratio o- or p-alkyl benzenes are formed with chloromethylation (Refs 2,4,5 as well as paper by I. N. Nazarov

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On the Possibility of Synthesizing Some Organosilicon SOV/79-29-9-3/76
Compounds With Alkyl Benzyl Radicals on the Basis of Chloromethylated
Alkyl Benzenes

and A. V. Semenovskiy, Ref 5), the authors effected the oxidation with chromic anhydride, and determined the yield of terephthalic acid (Table 3). When chloromethylating toluene, ethyl- and isopropyl benzene, the formation of para- and ortho-isomers was likewise determined by way of oxidation (Table 4). The content of para-isomers was shown to increase with growing alkyl radical in alkyl benzyl diethyl silanes. There are 4 tables and 8 references, 2 of which are Soviet.

SUBMITTED: June 27, 1958

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5(3) SOV/20-126-4-29/62

AUTHORS: Nametkin, N. S., Topchiyev, A. V., Academician,
Chernysheva, T. I., Kartasheva, L. I.

TITLE: Investigation of the Reaction of Addition of Trialkoxysilanes to Olefines (Izucheniye reaktsii prisoyedineniya trialkoksisilanov k olefinam)

PERIODICAL: Doklady Akademii nauk SSSR, 1959, Vol 126, Nr 4, pp 794-797 (USSR)

ABSTRACT: Up to now there are no data in publications on the possibility of the reaction mentioned in the title. On the contrary, the opinion was held (Ref 1) that it does not take place, for instance in the case of octene-1 (initiation of the reaction with acetyl peroxide and exposure to ultraviolet rays). Only in the patent of G. Wagner (Ref 2) such a possibility is pointed out. The authors succeeded in proving the reaction mentioned in the title. This was done by means of the examples of the reciprocal action of tri-ethoxysilane, tri-isopropoxysilane, tributoxysilane, tri(secund.-butoxy)silane and tri(tert.-butoxy)silane with nonene-1 and decene-1 in the presence of platinum-hydrochloric acid and platinized coal. The pysicochemical properties of the original trialkoxysilane are shown

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Investigation of the Reaction of Addition of Trialkoxysilanes to Olefines

in table 1. The output amounted to 30-40%, except for tri(tert.-butoxy)silane. For the latter it was only 12%, due to the spatial restrictions. Table 2 shows the properties of the products. Decyl-tributoxysilane and nonyl-triisopropoxysilane were also produced by means of the reciprocal action of nonyl-trichlorosilane and decyl-trichlorosilane with the corresponding alcohols. The identity of the substances produced in these two ways, is shown in table 3. This identity was also proved by means of the relative intensity and by means of the number of lines in the Raman spectra. The statement that in this case the addition takes place against Markovnikov's rule, is based on the comparison of the mentioned properties, or of the spectra. There are 3 tables and 3 references, 1 of which is Soviet.

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

SUBMITTED: April 3, 1959

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5 (3)

AUTHORS: Nametkin, N. S.; Topchiyev, A. V., Academician; Chernysheva, T. I.

SOV/20-126-5-24/69

TITLE: On the Addition of Tribenzyl Silane to Olefins (O prisoyedinenii tribenzilsilana k olefinam)

PERIODICAL: Doklady Akademii nauk SSSR, 1959, Vol 126, Nr 5, pp 1001 - 1003 (USSR)

ABSTRACT: In the course of the last few years an ever increasing attention has been called to the addition of the hydride-silanes to unsaturated hydrocarbons. The extensive utilization of this reaction has become possible owing to the introduction of new catalysts (Refs 1-3). This report is a continuation of the authors' investigation of the formation of monomeric organo-silicon compounds (Refs 4-10). In this case the addition of the tribenzyl silane has been effected to the following substances: pentene-1, hexene-1, octene-1, nonene-1 and decene-1. The catalyst used was platinum hydrochloric acid. With ratios of olefins: tribenzyl silane of 1:3 and 1:4 at 100-120° within 2-3 hours tribenzyl alkyl silanes have been obtained with yields of 50-60%. The products are viscous liquids with a high boiling point. Their specific weight is lowered in proportion to the

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On the Addition of Tribenzyl Silane to Olefins SOV/20-126-5-24/69

increase of the alkyl-radical. This weight is more than unity with the tribenzyl pentyl silane and the tribenzyl hexyl silane. Table 1 reveals the properties of the substances produced. In order to clarify the succession of the additions mentioned in the title several tribenzyl-alkyl-silanes have been produced according to the reaction $RSiCl_3 + C_6H_5CH_2Li \rightarrow RSi(CH_2C_6H_5)_3$. The agreement between the physico-chemical properties of the two series justifies the authors in asserting that under the conditions selected the addition takes place contrary to the Markovnikov law. (see scheme). There are 1 table and 11 references, 7 of which are Soviet.

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

SUBMITTED: April 3, 1959

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SOV/20-129-6-35/69

AUTHORS: Gundyrev, A. A., Nametkin, N. S., Panchenkov, G. M., Topchiyev, A. V., Academician

TITLE: The Dielectric Constants and the Dipole Moments of Some Organosilicon Compounds

PERIODICAL: Doklady Akademii nauk SSSR, 1959, Vol 129, Nr 6, pp 1325-1327 (USSR)

ABSTRACT: The authors determined the dielectric constants of 15 organosilicon compounds at a frequency of $7.95 \cdot 10^5$ cps: hexaalkyl derivatives of disilane methane, disilane ethane, disiloxane and linear polyethyl siloxanes. The values determined at 25±0.05° are given in table 1. (Abstracter's note: This table has erroneously been printed under the heading "dipole moments" instead of "dielectric constants"). Within the series of hexaalkyl derivatives of disilane methane and disilane ethane the dielectric constant in each series increases from the hexamethyl- to the hexabutylene derivatives, the greatest change occurring in transition from the hexamethyl- to the hexaethyl derivative. The dielectric constants of the hexaalkyl derivatives of disiloxane vary anomalously with an increase in the molecular weight of the compounds. From the densities mentioned in table 2, refraction indices and dielectric constants of the compounds with different concentrations dissolved in n-hexane, the dipole

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