

NEPLOKH, Ya, M.

Changes in consciousness in minor focal arteriosclerotic softenings of the brain. Sbor. trud. Len. nauchn. ob-va nevr. i psikh. na. 6: 151-154 '59. (MIRA 13:12)

1. Iz Psikhiatricheskoy bol'nitsy imeni Skvortsova-Stepanova (glavnyy vrach N.D. Bulkin) i kafedry psikhiatrii Leningradskogo pediatricheskogo instituta (zav. - prof. S.S. Mukhin).  
(CONSCIOUSNESS) (BRAIN-SOFTENING)

NEPLOKH, Ya.M.

Toxicotraumatic neuritis of the sciatic nerves related to treatment with aminazine. Zhur. nerv. i psikh. 60 no. 2:238-241 '60.

(MIRA 14:4)

1. Psikhonevrologicheskaya bol'nitsa imeni Skvortsova-Stepanova (glavnyy vrach N.D. Bulkin) i kafedra psikhiatrii (zav. - prof. S.S. Mnukhin) Leningradskogo pediatricheskogo instituta.  
(CHLORPROMAZINE) (SCIATIC NERVE DISEASES)

NEPLOKH, Ya.M.

Causes of fatal outcome in epilepsy. *Ann. N.Y. Acad. Sci.* 1383-1387 '65. (MIRA 18:5)

1. Psikhonevrolgicheskaya bol'nitsa No.3 im. Skvartsova-Stepanova (glavnyy vrach N.D. Dolbin), Leningrad.

NEPLOKH, Ya.M. (Leningrad)

Nuclear hematomas in hypertensive cerebral hemorrhages. Arkh.  
pat. 26 no.2:68-73 '64. (MIRA 17:8)

1. Psikhonevrologicheskaya bol'nitsa imeni Skvortsova-Stepanova  
(glavnyy vrach N.D. Bulkin), Leningrad.

NEPLOKH, Ya.M.

Osteomuscular hypoplasia and pes excavatus as residual symptoms  
of brain lesions. Vop. psikh. nevr. no.10:139-146 '64.

(MIRA 18:12)

1. Psikhonevrologicheskaya bol'nitsa imeni Skvortsova-Stepanova  
(glavnyy vrach - N.D.Bulkin).

ZARFEMBA, Ye.M.; CHVAMANIYA, A.Ye.; KUVARDINA, N.M.; BELKIN, M.L.; MALYKHINA, A.F.;  
NEPLOTNIK, I.F.; CHUCHENKO, R.I.; MATUSTYAK, Ye.I.

Comparative evaluation of various methods of gastric lavage with  
"Yessentuki" No.4 mineral water in chronic gastritis. Sbor. nauch.  
rab. vrach. san.-kur. uchr. profsciuzov no.1:79-83 '64.

(MIRA 18:10)

I. Yessentukakiy sanatoriy imeni I.P.Pavlova (glavnyy vrach A.Ye.  
Chvamaniya, nauchnyy rukovoditel' kand.med.nauk I.I.Konovalov).

NEPLOTEIK, Ya.F.

Physiological capillary permeability in newborn infants. *Pediatria*,  
Moskva no.6:8-13 Nov-Dec 1953. (CML 25:5)

1. Candidate Medical Sciences. 2. Of the Institute of Obstetrics and  
Gynecology (Director — L. G. Stepanov), Ministry of Public Health USSR.

NEPLOTHIK, Ya.F., kandidat meditsinskikh nauk

Capillary permeability in intracranial birth injuries and asphyxia  
in the newborn. *Pediatrics* 39 no.3:70-74 Ky-Je '56. (MLRA 9:9)

1. Iz Insituta akusherstva i ginekologii (dir. L.G.Stepanov)  
Ministerstva zdravookhraneniya SSSR.

(CAPILLARY PERMEABILITY, in various dis.

intracranial birth inj. & asphyxiaeotorum)

(DELIVERY, compl.

birth inj., intracranial, capillary permeability in)

(BRAIN, wounds and inj.

at birth, capillary permeability in)

(ASPHYXIA NEONATORUM, physiol.

capillarypermeability in)



SEREBRYANYI, S.B.; YURGANOVA, L.G.; NEPLYUYEV, V.M.

Synthesis of esters of N( $\alpha$ )-arylsulfonylamino acids. Part 1.  
Ukr.khim.zhur. 27 no.3:365-369 '61. (MIRA 14:11)

1. Institut organicheskoy khimii AN USSR.  
(Arginine)

BABICHEV, F.S.; NEPLYUYEV, V.M.

Benzothiazolylalkylcarboxylic acids and their derivatives.  
Part 4: 2-Benzothiazolylalkylcarbinols. Zhur.ob.khim. 32  
no.3:857-859 Mr '62. (MIRA 15:3)

1. Kiyevskiy gosudarstvennyy universitet imeni T.G.Shevchenko.  
(Benzothiazole) (Methanol)

BABICHEV, F.S.; NEPLYUYEV, V.M.

Benzothiazolylcarboxylic acids and their derivatives. Part 5:  
2,3-Polymethylenebenzothiazole salts. Zhur.ob.khim. 32 no.3:  
860-864 Nr '62. (MIRA 15:3)

1. Kiyevskiy gosudarstvennyy universitet imeni T.G.Shevchenko.  
(Benzothiazole)

SEREBRYANYI, S.B.; KOZLOV, E.A.; NEPLYUYEV, V.M.

Terminal groups of polyhedral protein formed on infecting  
the mulberry silkworm with nuclear polyhedrosis virus.  
(Bartelnavirus bombycis). Ukr. khim. zhur. 29 no.2:177-180  
'63. (MIRA 16:6)

1. Institut organicheskoy khimii AN UkrSSR,  
(Proteins) (Virus research)

NEPLUYEV, V.M.; SOGULYAYEVA, V.M.; SEREBRYANYI, S.B.

4-Dimethylamino-3,5-dinitrophenyl isothiocyanate as a reagent  
for determining the terminal sequence in proteins. Part 1:

4-Dimethylamino-3,5-dinitrothiohydantoins of amino acids.  
Ukr. khim. zhur. 29 no.2:181-184 '63. (MIRA 16:6)

1. Institut organicheskoy khimii AN UkrSSR.  
(Amino acids) (Hydantoin)

NEPLYUYEV, V.M.; CHERNUKHINA, L.A.; SEREBRYANYI, S.B.

Chromatographic separation of the 4-dimethylamino-3,5-dinitro-phenylthiohydantoins of amino acids on paper. Biokhimiia 29  
No. 1:51-52 Ja-F '64. (MIRA 18:12)

1. Institut organicheskoy khimii AN UkrSSR, Kiyev. Submitted  
March 16, 1963.

DZYUBENKO, G.M.; LAVRENKO, V.A.; NEPOCHATOV, A.N.

Apparatus for studying the kinetics of catalytic reaction of recombination of gas atoms on solid surfaces. Zhur.fiz.khim. 39 no.10:2622-2624 0 '65.

(MIRA 18:12)

1. Institut problem materialovedeniya AN UkrSSR.

NEPOCHATYKH, A. P. Cand Med Sci -- (diss) "Problems of labor hygiene in the production of synthetic fatty acids and fatty alcohols." Kursk, 1957. 13 pp (Inst of Hygiene and Labor and Occupational Diseases, Acad Med Sci USSR), 200 copies (KL, 45-57, 99)



24(7)

SOV/48-22-11-52/33

AUTHOR:

Nepochatykh, P.F.

TITLE:

On Particular Features of the Luminescence of Difuryl Polyenes (Ob osobennostyakh svecheniya difurilpoliyenov)

PERIODICAL:

Izvestiya Akademii nauk SSSR. Seriya fizicheskaya, 1958, Vol.22, Nr 11, pp. 1417 - 1419 (USSR)

ABSTRACT:

Three polyenes are the object of this work, which contain CO- or COCO-groups in the chain: 1,6-difuryl-hexadiene-1,5-dione-3,4; difuryl-1,10-decatetraene-1,3,7,9-dione-5,6; difuryl-1,9-decatetraene-1,3,7,9-dione-5,6. They are crystalline substances, which are insoluble in water, soluble, however, in alcohols, in hexane and acetone. The information presented in this paper leads to the following conclusions: If the chain of single and of conjugate double bonds is extended the limit polarization will be reduced. The CO-group exerts a considerable influence upon the limit polarization. The durations of the excited state which proceeds from measurements by a fluorometer and from such which utilize polarization do not agree. This may be explained by the fact that the fluorescing molecule departs from its spherical shape.

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On Particular Features of the Luminescence of  
Difuryl Polyenes

SOV/48-22-11-32/33

The fluorescence of the solutions in question is extinguished by aniline (Fig 2). Other extinguishing agents, as  $KaJ$ ,  $NaJ$ , and  $NaBr$  have no effect. In a non-polar solvent, as in hexane, the fluorescence yield is very small. If ethyl alcohol is added, the luminous intensity is increased to a certain maximum value (Fig 3). If the solution is heated, the luminescence is quenched. The author expresses his gratitude to V.L. Levshin for constant interest, to M.D. Galanin for his assistance with the measurements, and to B.A. Arbuzov for making available test substances. There are 3 figures, 1 table, and 3 references, which are Soviet.

ASSOCIATION: Kazanskiy gos. pedagogicheskiy i uchitel'skiy institut  
(Kazan' State Pedagogical and Teachers' Institute)

Card 2/2

NEPOCHATYKH, V.I.; ROGOVIN, Z.A.

Investigating the possibility of obtaining fibers from stable  
derivatives of cellulose derivatives. *Khim.volokn.* no.1:10-14, '61.  
(MIRA 14:2)

1. Moskovskiy tekstil'nyy institut.  
(Viscose) (Textile fibers, Synthetic)

NEPOCHATYKH, V.I.; ROGOVIN, Z.A.; Primal uchastiye ROTENBERG, R.

Development of the method for the production of thiourethane cellulose  
"hektaks" fibers and investigating their properties. Khim. volok. no.1:  
64-68 '62. (MIRA 18:4)

1. Moskovskiy tekstil'nyy institut.

L 45460-66 EWT(m)/EWP(j)/T RM

ACC NR: AP6022725

(A)

SOURCE CODE: UR/0183/66/000/002/0049/0051

AUTHOR: Nepochatykh, V. I.; Rogovin, Z. A.; Finger, G. G.; Mogilevskiy, Ye. M.

48

ORG: [Nepochatykh, Rogovin] MTI; [Finger, Mogilevskiy] VNIIV

44

TITLE: Production of copper xanthate fiber

B

SOURCE: Khimicheskiye volokna, no. 2, 1966, 49-51

TOPIC TAGS: synthetic fiber, xanthic acid, bactericide, wood chemical product, copper compound, organic sulfur compound, *cellulose plastic, synthetic fiber, copper compound*

ABSTRACT: The authors used available data on the change occurring in the stability of cellulose xanthate in accordance with the nature of the cations contained in the salts to investigate the possibilities of manufacturing a fiber made of cellulose copper xanthate in order to study the basic properties of this fiber and to determine the fields in which practical use could be made of it. While production of the fiber is possible using a single bath, the use of the process proved to be undesirable because the copper sulfate in the precipitating bath entered an exchange reaction not only with the sodium xanthate, but with the sulfur compounds in the viscose as well. Copper consumption was increased and the fiber obtained was dirty. Use of two baths was resorted to and was found to be quite simple and caused no complications in the technological process. The first bath contained sodium sulfate and sodium bicarbonate or sulfate of ammonia, and was used to coagulate the viscose. After washing in a  $Na_2SO_4$  solution the

Card 1/2

UDC: 677.467

Card 2/2

SUB CODE: 11, 07, 06 / SUBM DATE: 25 Apr 65/ ORIG REF: 005 / OTH REF: 003

OSTROVSKIY, Yu.M. [Ostrov's'kyi, IU.M.]; NEPOCHELOVICH, N.S. [Nepochelovych, N.S.]

Activity of tissue transaminases in colvulsions produced by thiamine.  
Ukr. biokhim. zhur. 35 no.5:728-731 '63. (MIRA 17:5)

1. Department of Biochemistry of Grodno Medical Institute.

OSTROVSKIY, Yu.M.; LUKASHIK, N.K.; RAZUMOVICH, A.N.; BALAKLEYEVSKIY, A.I.;  
DOSTA, G.A.; TREBUKHINA, R.V.; LARIN, R.S.; KARPUT', S.N.;  
KOMAROVA, B.P.; NEPOCHELOVICH, N.S.; DVORYANINOVICH, L.W.;  
MOYSEYENOK, A.G.; MANDRIK, K.A.; GALITSKIY, E.A.; MATYSIK, M.S.;  
PODOBED, V.G.; MAKARINA-KIBAK, L.Ya.

Differentiation of specific and nonspecific metabolic shifts  
in an acute avitaminosis B<sub>1</sub> caused by oxythiamine. Vop.pit.  
24 no.4:41-48 JL-Ag '65. (MIRA 18:12)

1. Kafedra biokhimi (zav. - dotsent Yu.M.Ostrovskiy)  
meditsinskogo instituta, Grodno. Submitted July 23, 1964.

SLADKOV, V.; NEPOGODIN, G., inzh.

Exterior finishing of large-panel buildings. Zhil. stroi. no.5:  
23-24 '64 (MIRA 17:7)

1. Starshiy prepodavatel' Kazanskogo inzhenerno-stroitel'nogo  
instituta (for Sladkov). 2. Glavnyy inzhener Kazanskogo zavoda zhe-  
lezobetonnykh izdeliy No.3, Kazan' (for Nepogodin).



FAYBICH, M.M.; MEPOGODIN, N.F.; KORNEYEV, A.A.

Immunogenic characteristics of some fractions of the pathogen  
of plague. Biol. eksp. biol. i med. 55 no.1:77-80 Ja'63.  
(MIRA 16:7)

1. Predstavlena deystvitel'nym chlenom AMN SSSR N.N.Zhukovym-  
Verezhnikovym.

(PASTEURELLA) (NUCLEIC ACIDS) (IMMUNITY)

L 13048-66 EWT(m)/T DJ

ACC NR: AP5027590

SOURCE CODE: UR/0065/65/000/011/0050/0052

AUTHOR: Vorozhikhina, V.I.; Nepogod'yev, A. V.; Ryazanov, L. S.

ORG: Kolomna Diesel Locomotive Plant (Kolomenskiy teplovozostroitel'nyy zavod)

TITLE: Adsorption processes involved in the consumption of additives

SOURCE: Khimiya i tekhnologiya topliv i masel, no. 11, 1965, 50-52

TOPIC TAGS: lubricant additive, adsorption, desorption

ABSTRACT: To study the nature of change in the concentration of additives in motor oil during the first 50 -- 100 hr of its use, the authors carried out experiments on a YaAz-204 engine using DS-14 oil with 2% of Monto-613 additive and 0.13% of Santolube-493 additive. It was found that in addition to chemical reactions of the additive with the fuel combustion products and the oil oxidation products, the additive is involved in adsorption and desorption processes. A sharp decrease in the concentration of the active lubricant which occurs during the first few hours of its

hr of the tests the adsorption processes distort the true curve representing the

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UDC: 541.18:665.59

L 13048-66

ACC NR: AP5027590

consumption of the additive in the neutralization of the fuel combustion and oil oxidation products, the relationships established for the consumption of additives during short-term tests cannot be extrapolated to longer periods of service of the of the oil. Orig. art. has: 4 figures.

SUB CODE: 07/ SUEM DATE: none/ ORIG REF: 003/ OTH REF: 001

Card 2/2

SOSEDOV, N.; BATAKOVA, V.; FREYMAN, I.; MEN'SHOVA, L.; MARKIN, A.; NIKOLONOV,  
A.; LEVCHENKO, Ye.; SKOPINSKIY, V.; ARKHIPOVA, Ye.

Disinfection of grain with methyl bromide in the ship's hold. Mag.-  
elev. prom. 26 no.10:12-14 0'60. (NIRA 13:10)  
(Grain--Disinfection) (Methylene)

NEPOKLONOV, A. A.

Min Higher Education USSR. Moscow Veterinary Academy.

NEPOKLONOV, A. A. - "The motor, secretory, and evacuatory functions of the small intestine of cattle." Min Higher Education USSR. Moscow Veterinary Academy. Moscow, 1956.

(Dissertation for the Degree of Candidate in Biological Sciences.)

SO: Knizhnaya Letopis' No. 13, 1956

8/006/60/000/06/07/025  
B007/B005

AUTHOR: Nepoklonov, B. V.

TITLE: Experience Made With the Application of Phototheodolite<sup>12E</sup>  
Surveys for the Compilation Survey of Aerial Photographs 20

PERIODICAL: Geodeziya i kartografiya, 1960, No. 6, pp. 27 - 32

TEXT: The author reports on the experience made by the Sredne-Aziatskoye aerogeodezicheskoye predpriyatiye (Soviet Central Asia Aerogeodetical Enterprise) which has used phototheodolite survey for the compilation survey of aerial photographs since 1955. As a rule, such a method is used for the conjunction of aerial photographs in making maps of 1 : 25,000 for high-mountain areas. The coordinates and altitudes of fixed points are determined both by the method of stereophotogrammetric and photogrammetric terrestrial survey. The formulas used for computing accuracy in determining the coordinates and altitudes are written down, and Table 1 shows the root mean square deviations computed by these formulas. Conclusions are drawn on the basis of these values. The method used in phototheodolite survey by the above enterprise mentions is described. The

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Experience Made With the Application of  
Phototheodolite Surveys for the Compilation  
Survey of Aerial Photographs

S/006/60/000/06/07/025  
B007/B005

author enumerates the preliminary operations, mentions the circumstances to be considered in setting up the working project, and describes the field work to be carried out. He describes a method of determining the base length, which makes it unnecessary to use range-finder fixtures. The evaluation of the data obtained is described. Table 2 shows the data used to estimate the accuracy of determining base lengths. The accuracy of determining altitudes in terrestrial stereophotogrammetric surveys was estimated by the divergence of geodetic and photogrammetric altitudes of 288 triangulation points. Table 3 was compiled on the basis of these data. By means of these data it was possible to derive an empirical formula for choosing the length of photo bases. Finally, it is pointed out that for a full utilization of all possibilities of phototheodolite surveys for the compilation survey of aerial photographs it is necessary to combine terrestrial stereophotogrammetric with terrestrial photogrammetric survey. There are 1 figure, 3 tables, and 1 Soviet reference.

✓B

Card 2/2

BONDAREV, G.I.; ZINOV'YEV, Ye.Sh.; NEPOKLONOV, Yu.A.; YENDOVITSKAYA, I.S.

Supply of vitamins C, B<sub>1</sub>, B<sub>2</sub> and PP for fish processing  
workers on fishing craft in the North Atlantic. Vop. pit.  
22 no.5:58-60 S-O '63. (MIRA 17:1)

1. Iz otdela gigiyeny pitaniya (sav. - kand. med. nauk  
G.I. Bondarev) Tsentral'noy nauchno-issledovatel'skoy  
laboratorii gigiyeny vodnogo transporta, Moskva.



BONDAREV, G.I.; ZINOV'YEV, Ye.Sh.; NEFOKLONOV, Yu.A.; YENDOVITSKAYA, I.S.

Energy expenditure of fishery workers on trawlers fishing in  
the Barents Sea and North Atlantic. Vop. pit. 21 no.6:40-43  
N-D '62. (MIRA 17:5)

1. Iz Tsentral'noy nauchno-issledovatel'skoy laboratorii  
gigiyeny vodnogo transporta, Moskva.

NEPOKOYCHITSKIY, A.G. [Nepokoichitskii, A.H.]; YANKOVSKIY, A.A.  
[Yankovskii, K.A.]

Combustion of a proportioned quantity of matter in spectrum analysis  
using the photoelectric method. Vestsi AN BSSR. Ser. fiz.-tekh.  
nav. no.3:124-127 '63. (MIRA 16:10)

NT 10 20 1136610 I

ZHEBROVSKIY, T. .; NEPOKOYCHITSKAYA, I. .; YUKHNEVICH, M.

Results of combined treatment of pulmonary tuberculosis with para-aminosalicylic acid and streptomycin. Probl. tuberk., Moskva no.1: 52-55 Jan-Feb 52. (CML 21:5)

1. Of the Clinic of Pulmonary Tuberculosis of Gdansk Medical Academy (Head of Clinic--Prof. M. Telyatytskiy) and of the Student Sanatorium in Zakopane (Director--M. Yasinskiy), Poland.

NOVOSEL'TSEV, V.S.; NEPOKOYCHITSKIY, A.G.

Some new aspects of the behavior of semiconductors in polar liquids.  
Uch.zap.Ped.inst.Gerts.no.233-239 '61.

(MIRA 16:5)

1. Mogilevskiy gosudarstvennyy pedagogicheskiy institut.  
(Semiconductors—Electric properties) (Liquids)

NOVOSEL'TSEV, V.S.; NEPOKOYCHITSKIY, A.G.

Some electric properties of cadmium chloride. Uch.zap.Ped.inst.  
Gerts.no.207:241-242 '61.

(MIRA 16:5)

1. Mogilevskiy gosudarstvennyy pedagogicheskiy institut.  
(Cadmium chloride—Electric properties)

ACCESSION NR: AP4042725

S/0250/PA/008/008/0372/0375

AUTHOR: Nepokoychitskiy, A. G., Yankovskiy, A. A.

TITLE: A method of quantitative emission spectral analysis according to the maximal spectral line intensity in the process of substance burn-up

SOURCE: AN BSSR. Doklady\*, v. 8, no. 6, 1964, 372-275

TOPIC TAGS: quantitative analysis, spectral analysis, emission spectrum, spectroscopy, spectral line intensity, combustion spectrum, metal determination

ABSTRACT: The authors show that the change in intensity of a spectral line in the process of complete burn-up of a measured quantity of a substance under the action of an electrical charge can be described by the empirical equation

$$i = i_0 (1 - e^{-\alpha t})^{\beta} \quad (1)$$

where  $i$  is the intensity of the line,  $i_0$  is the intensity of the line at the onset of an instantaneous increase in intensity,  $\alpha$  and  $\beta$  are constants characterizing the rates of substance burn-up and spectral line intensity growth, depending on the analytical

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ACCESSION NR: AP4042725

procedure, and  $t$  is time; they also show that the intensity of the line reaches a maximum expressed by the equation

$$i_{max} = i_0 \frac{\beta}{a + \beta} \left( \frac{a}{a + \beta} \right)^{1/\beta} \quad (2)$$

following which it subsides, and that both the integral and maximum intensities may be used for measuring the concentration of the element being determined quantitatively by emission spectral analysis. Calibrating curves for the quantitative determination of Cr, Ba, Zn, Mn, Ag and Pb in solutions and Mn, Cr, Zn and Ni in alloys, plotted in a coordinate system of  $\lg i_{max}$  versus  $\lg C$ , are presented in the article. Orig. art. has: 2 figures and 4 formulas.

ASSOCIATION: Institut fiziki AN BSSR (Physics Institute, AN BSSR)

SUBMITTED: 12Feb64

ENCL: 00

SUB CODE: IC, GP

NO REF SOV: 002

OTHER: 000

Card 2/2

NEPOKOYCHITSKIY, A.G.; YANKOVSKIY, A.A.

Relationship between the burning out of a measured quantity  
of a substance and calcination in spectrum analysis. Dokl. AN  
BSSR 7 no.12:814-816 D '63. (MIRA 17:8)

1. Institut fiziki AN BSSR. Predstavleno akademikom AN BSSR  
B.I. Stepanovym.



NEPOKOYCHITSKIY, A.G.; YANKOVSKIY, A.A.

Method of quantitative emission spectrum analysis based on the maximum intensity of spectral lines in the process of burnup of a substance. Dokl. AN BSSR 8 no.6:372-375 Je '64. (MIRA 17:10)

1. Institut fiziki AN BSSR. Predstavleno akademikom AN BSSR M.A. Yel'yashevichem.

NEPOKOYCHITSKIY, A.G.; YANKOVSKIY, A.A.

Mechanism underlying the flow of matter in light sources for  
spectrum analysis. Zhur. prikl. spekt. 2 no.3:201-206 Mr '65.  
(MIRA 18:6)

NGFOKOYCHITSKIY, V.S.

Effect of natural factors on the planning and construction of residential  
blocks in Noril'sk. Stroi. v raion. Vest.Sib.i Krain.Sev. no.2:3-27 '62.  
(MIRA 18:7)

E 32909-66

ACC NR: AT6023835

SOURCE CODE: UR/2925/64/000/010/0102/0111

AUTHOR: Nepokoychitskiy, V. S. 19  
241

ORG: Scientific-Research Building Institute, Krasnoyarsk (Nauchno-issledovatel'skiy institut po stroitel'stvu)

TITLE: Features of city planning in Noril'sk

SOURCE: AN SSSR. Komissiya po problemam severa. Problemy severa, no. 10, 1964, 102-111

TOPIC TAGS: Arctic climate, general construction, government economic planning, structural engineering

ABSTRACT: Noril'sk, a city of 115,000, has special planning problems because, located near the 70th parallel, it has permafrost, severe cold, strong winds, sparse vegetation, and polar days and nights. Frozen construction sites are capable of holding multistory buildings; but if the permafrost melts the ground loses almost all of its loadcarrying capacity. Winter in Noril'sk lasts 8 months with temperatures dropping to  $-51^{\circ}$ ; mean annual temperature is close to  $-8^{\circ}$ . Mean annual wind speed is 6 to 7 m/sec, reaching hurricane maxima of over 40 m/sec. Weather severity is scaled in conditional points computed by adding the temperature to twice the wind speed, 45 points being the limit of human activity outdoors. Snow storms coinciding with severe cold, rapid variations in atmospheric pressures, and the oppressive polar twilight has had effects on human psychology and physical well-being.

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1571

L 32909-66

ACC NR: AT6023835

Local evergreens are extremely slow-growing and trees die after transplanting; birch and willow withstand transplanting but grow slowly and show leaves only between June and September and their decorative value is thus quite low. Although more than 500,000 m<sup>2</sup> of modern living space has been completed, more than three times the existing living space is required to provide 15 m<sup>2</sup> per person. Also involved is the removal of numerous temporary building and barracks that have sprouted around the industrial plants. Living space being provided is in the form of efficiency apartments and residential-type hotels. Together with large 5-story apartments, consideration is also being given to high-rise types. Among the problems facing city planning, the most important is permanence of the permafrost foundation; protection from wind and drifting snow and beautification problems are secondary. Underground utility lines laid improperly can break down and adjacent structures can become damaged. Above-ground lines also engender problems; heat-conducting pipes laid on trestles break up courtyard areas, interfere with movement, and are unsightly. The best solution found was to build utility tunnels with lines in the upper part and a passageway below for inspection purposes. To keep heat away from the permafrost around building foundations, these tunnels are laid under the centerlines of the streets.

For these and similar reasons interconnected buildings are built around central courts. The court areas are thus protected from winds and utility interconnections are simplified. In one block, divided into courts by an interconnected maze of buildings, wind speed was decreased by 60%.

According to the general plan of 1961, the basic construction unit is a microdistrict that almost completely closes off the internal areas and courts from winds and drifting snow. Microdistrict No 1, typical of two

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L 32909-66

ACC NR: AT6023835

others discussed, covers about 24 hectares. In the center is a sports field flanked by schools, apartments, and service buildings. Windward outer walls of the district are solid and have a minimum number of entrances. Foundation integrity is maintained by spacing the buildings farther apart than required by proven standards. Orig. art. has three typical plan layouts of micro-districts suitable for arctic cities. Orig. art. has: 3 figures. [JPRS]

SUB CODE: 05, 13, 04 / SUBM DATE: none

Card

3/3

*LB*

L 39698-66 EWP(j)/EWT(m)/T IJP(c) RM/DJ/GD-2/GS

ACC NR: AT6008944

(A)

SOURCE CODE: UR/0000/65/000/000/0049/0056

AUTHORS: Kragel'skiy, I. V.; Nepomnyashchiy, Ye. F.

ORG: none

TITLE: The theory of wear of highly elastic materials

SOURCE: Moscow. Institut mashinovedeniya. Plastmassy v podshipnikakh skol'zheniya; issledovaniya, opyt primeneniya (Plastics in friction bearings; research and experiment in application). Moscow, Izd-vo Nauka, 1965, 49-56

TOPIC TAGS: material testing, friction, elastic material, wearability, destructive testing, resin

ABSTRACT: The process of wear of highly elastic resin materials is studied in conditions of friction along a hard, rough surface. Three basic types of wear can occur, depending on the properties of the material, the properties of the counterbody, and other friction conditions. Of particular interest is the appearance of zones of tension in the material in the vicinity of the zone of slip (see Fig. 1). The authors conducted model tests on contact fatigue, in which a spherical indenter slips along a resin surface. After a known number of cycles, the indenter was removed and the resin surface inspected. Fatigue curves were then plotted and compared with curves of ordinary fatigue. This comparison shows that the curves are parallel. Based on this result, it was concluded that the applied contact stress  $\sigma$  is proportional to the

Card 1/2

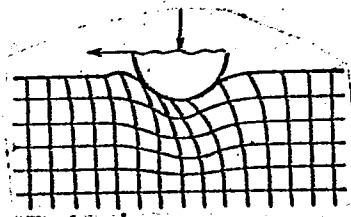
16  
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L 39698-66

ACC NR. AT6008944

Fig. 1. Diagram of the interaction of a moving rigid spherical indenter with an elastic half space.



unit force of friction, that is, the force of friction  $F$  in contact with the area of actual rubbing  $A_r$

$$\langle \sigma \rangle = k \frac{F}{A_r}$$

where  $k$  is a coefficient of proportionality. This equation is used in constructing quantitative relationships for fatigue wearing of highly elastic materials. Wearing intensity is given by

$$i_n = i_n \frac{A_r}{A_n}$$

where  $i_n$  is the unit wearing intensity and  $A_n$  is the normal contact area. The unit intensity is, in turn, related to deformation, geometry, the number of cycles until failure, and to other material parameters. Photographs of surface wearing and plots of test results are shown. Orig. art. has: 7 figures and 6 equations. //

SUB CODE: 11, 20/ SUBM DATE: 31Jul65/ ORIG REF: 009

Card 2/2 *gd*



~~NEPOKOYCHISKIY, Ye. O.~~

Operation of the gynecological examining clinic. Zdrav. Belor.  
5 no.6:56-57 Je '59. (MIRA 12:9)

1. Glavnyy vrach Rossonskogo rayona.  
(GENERATIVE ORGANS, FEMALE--DISEASES)

NEPOKRITYI, I.

With rest and treatment. From.koop.no.1:33 Ja '56. (MLRA 9:6)

1.Zamestitel' predsedatelya pravleniya Vsekopromstrakhsoveta.  
(Health resorts, watering places, etc.)

NEPOKRITYY, I.F.

From a department to a university of health. Zdrav. Ros. Feder. 4  
no.7:24-26 Je '60. (MIRA 13:9)

1. Glavnyy vrach Podol'skogo doma sanitarnogo prosveshchaniya.  
(MOSCOW PROVINCE—HEALTH EDUCATION)

НЕПОКРИТИЙ, Я. Ф.

35288

S/716/61/018/000/019/019  
3207/0301

24,2200 (1147, 1164, 1482)

AUTHOR: Непокрытый, Я. Ф.

TITLE: Results of an observation of the stability of permanent magnets

SOURCE: Akademiya nauk Ukrayins'koyi RSR. Instytut elektrotekhniki. Sbornik trudov, v. 18, 1961. Voprosy magnitnykh izmereniy, 125-127

TEXT: Loss of magnetic flux by permanent magnets after three years' storage was investigated. The magnets were made of АНЗ and АНКОЗ (АНЗ and АНКОЗ) Fe-Ni-Al alloys, prepared as specified in ГОСТ 4402-48 (ГОСТ 4402-48). The magnets had various shapes: Horse-shoe, bar, plate, hook and hollow cylinder with narrowing internal diameter. Some magnets were subjected to artificial ageing in an alternating field of gradually decreasing amplitude; others had no special treatment. All were stored without yokes for three years at room temperature. The АНЗ and artificially aged (14% reduction

Card 1/2

S/716/61/018/000/019/019  
D207/D301

Results of an observation ...

of flux after ageing treatment) magnets, showed a flux loss of 1% after 3 years, compared with the 2.7 - 8.3% loss for AN3 magnets which were not aged artificially. The magnets made of  $\text{AlNiCo}_3$  and artificially aged (7% reduction of flux after the ageing treatment) lost only 0.25% of their flux after three years, compared with up to 4.2% loss for  $\text{AlNiCo}_3$  magnets which were not aged artificially. Two AN3 magnets which were not artificially aged and were stored for three years with their like poles in contact showed a 30% loss of flux. The results indicate that the Fe-Ni-Al magnets are quite stable and, if artificially aged, they can be used in measuring instruments. There are 1 figure and 1 table. K

Card 2/2

*NEPOKRYTYI, Ya. F.*S/716/61/018/000/010/019  
5201/5301AUTHORS: Pevralkova, N. Ye., Neokrytyy, Ya. F. and Ol'khovskiy, B. P.

TITLE: Testing of complex-shaped magnets

SOURCE: Akademiya nauk Ukrayins'koyi RSR. Instytut elektrotekhniki. Sbornik trudov, v. 18, 1961. Voprosy magnitnykh izmereniy, 84-89

TEXT: The authors studied hysteresis curves of permanent magnets shaped like a horseshoe or a hollow cylinder. For the former, it was found that reliable results (within 3%) can be obtained by measurements in the neutral plane (middle of the magnet) or the outer convex side of the horseshoe; elsewhere in the neutral plane the measured magnetic properties were affected by the magnet poles. For the cylindrical magnet an allowance has to be made for the flux in air inside the magnet if the ratio  $S_2/S_1$  is greater than 0.5; here  $S_1$  and  $S_2$  are the total and the internal (air-filled) cross-  
Card 1/2

Testing of complex-shaped ...

8/718/61/018/000/018/018  
D207/D381

sectional areas, respectively. There are 4 figures and 2 tables.



Card 2/2

NEPOKUPNOY, G. I.  
USSR/Medicine - Dysentery

FD-2320

Card 1/1      Pub 148 - 21/36

Author        : Nepokupnoy, G. I.

Title         : A many-sided method of inspecting food workers to detect persons who have chronic dysentery

Periodical    : Zhur. mikro. epid. i immun. No 2, 58-59, Feb 1955

Abstract     : Recommends that in addition to other methods of inspection rectoscopic examination of food workers be carried out to detect persons with chronic dysentery.

Submitted    : August 30, 1954



НЕПОКУПНЫЙ, I.

Cyclical schedule for track maintenance. Zhel.dor.transp. 36  
no.3:43-44 Nr '55. (MIRA 12:5)

1. Nachal'nik Pamyutinskoy distantcii puti Yuzhnoy dorogi.  
(Railroads--Track)

НЕПОКУПНЫЙ, I.M. (Panyutino).

We do not agree with Comrade Kuznetsov. Put' i put. khoz. no.5:  
21-22 My '57. (MLRA 10:6)

1. Nachal'nik Panyutinskoy distantcii.  
(Railroads—Balls)

НЕПОКУПНИЙ, Ivan Mikhaylovich

In place of railway guard cabins--track maintenance villages.  
Put' i put.khoz. no.11:48 N '57. (MIRA 10:11)

1. Nachal'nik Panyutinskoy distantzii Yuzhnoy dorogi.  
(Railroads--Maintenance and repair)

НЕПОКУПНЫЙ, I.M.

Straightening out track laid on crushed-stone ballast. Put' i put.  
khoz. no.4:3-4 Ap '58. (MIRA 11:4)

1. Nachal'nik Panyutinskoy distantsii puti Yuzhnoy dorogi, stantsiya  
Panyutino.  
(Railroads--Track) (Ballast (Railroads))

НЕПОКУПНЫ, I.M.

Storeroom on wheels. Put' i put.khoz. 4 no.1:45 Ja '60.  
(MIRA 13:5)

1. Nachal'nik distantcii, stantsiya Lozovaya, Yuzhnoy dorogi.  
(Railroads--Equipment and supplies)

NEPOKUPNYY, I.M.; SIMANCHUK, V.K.

Connecting instruments to a high voltage line. Put' i put. khoz.  
5 no. 1:33 Ja '61. (MIRA 14:5)

1. Nachal'nik Lozovskoy distantzii (for Nepokupnyy). 2. Zamestitel'  
nachal'nika uchastka energosnabzheniya, st. Lozovaya, Yuzhnoy dorogi  
(for Simanchuk).

(Railroads--Electric equipment)

NEPOKUPNYY, I.M.

Group of communist labor. Put' i put. khoz. 5 no.3-5 M<sup>r</sup> '61.  
(MIRA 14:3)

1. Nachal'nik Lozovskoy distantii, st.Lofovaya, Yuzhnoy dorogi.  
(Railroads--Employees)

NEPOKUPNYY, I.M.

Skillful workers of the Lezevya district. Put'i put.khoz.  
5 no.5:30-31 My '61.

(MIRA 14:6)

1. Nachal'nik Lezevskoy distantzii Yuzhnoy deregi.  
(Lezevaya--Railroads--Technological innovations)



NEPOLUPNY, L.M.

Production innovator. Pat' 1 pat.khoz. 6 no.5:19 '62.

(MIRA 15:4)

1. Nachal'nik Lozovskoy distantzii Yuzhnoy dorogi.  
(Railroads--Employee) (Efficiency, Industrial)

NEPOKUPNYY, I.M.

Two shifts use the same mechanisms. Put' i put.khoz. 6 no.12:3  
'62. (MIRA 16:1)

1. Nachal'nik Lozovskoy distantzii puti Yuzhnoy dorogi.  
(Railroads--Equipment and supplies)

ANGELEYKO, V.I.; ZOLOTUKHIN, G.I.; NEPOKUFNYY, I.M.; BASILOV, V.V.,  
inzh., retsenezent; PROVODINA, M.H., inzh., red.; VOROB'YEVA,  
L.V., tekhn. red.

[Collective of creative labor; experience of the railroad  
workers of the Lozovaya Division of the Southern Railroad]  
Kollektiv tvorcheskogo truda; opyt puteitsev Lozovskoi distan-  
tsii Iuzhnoi dorogi. Moskva, Transzheldorizdat, 1963. 41 p.  
(MIRA 16:12)

(Railroads—Maintenance and repair)

NEPOMILUYEV, V. F.

FEDOROV, M.V.; NEPOMILUYEV, V.F.

Basic forms of rhizospheric bacteria of timothy (*Phleum pratense*) and the change in the number of their cells in the rhizosphere depending upon the developmental stage and age of the plant. *Mikrobiologiya* 23 no.2:166-171 Nr-Apr '54. (MIRA 7:4)

1. Moskovskaya sel'skokhozyaystvaya akademiya im. K.A. Timiryazeva. (Timothy grass) (Bacteria)

NEPOMILUYEV, V. F.  
USSR/Biology

FD 293

Card 1/1

Author : Fedorov, M. V. and Nepomiluyev, V. F.

Title : The occurrence and nitrogen-fixing activity of Azotobacter in the rhizosphere of perennial plants

Periodical : Mikrobiologiya, 23, 275-282, May/June 1954

Abstract : The occurrence and nitrogen-fixing activity of Azotobacter in the rhizospheres of clover, timothy and perennial grasses is discussed in detail. A correlation between the maturity and state, i.e. fast-growing stage, flowering stage, etc., of the plants and the above-mentioned characteristics of the Azotobacter is shown. The results of the investigations are presented on 8 charts. Six Soviet references.

Institution : Moscow Agricultural Academy imeni K. A. Timiryazev

Submitted : September 15, 1953

✓ Fundamental forms of the rhizosphere bacteria of clover and their content in the rhizosphere according to the phases of development and the age of the plant. M. V. Federov and V. F. Nepomilnev (*Mikrobiologiya*, 1954, 23, 431—437).—The flora of the rhizosphere consists mainly of non-sporing bacteria and includes some species specific to clover. The greatest no. of the predominant species occur during budding and flowering; the no. of bacteria per g. of plant root diminishes sharply during spring and autumn growth. The principal species of rhizosphere bacteria were, *Pseud. fluorescens*, *Chromobact. dentrificans*, *Mycobact. globiformis*, and *Pseud. radiobacter*. The flora was similar during the second and third years' growth of clover and was not affected by fertiliser treatment.  
Soils & FERT. (A. G. P.)

①

USSR/Soil Science. Soil Biology

J-2

Abs Jour : Ref Zhur - Biol., No 10, 1958, No 43803

Author : Poddubnyy N.N., Nepomiluyev V.F.

Inst : Not Given

Title : The Biochemical Processes Occurring in Solonetz and Soloth  
Soils in the Presence of Excessive Moisture

Orig Pub : Dokl. Mosk. s.-kh. akad. in. K.A. Timiryazeva, 1957, vyp.  
29, 202-207

Abstract : Research made in Kokchetavskaya and Saratovskaya Oblasts has shown that excessive moisture in solonetz and soloth soils reduces the quantity of aerobic saprophytic microorganisms, the nitrifying and aerobic cellulose-decomposing bacteria, while increasing the amount of anaerobic microorganisms. Under anaerobic conditions the microbiological processes lead to the formation of ferrous compounds. The intensity of these processes depends on the composition of organic substances, as well as on the quantity of diverse species of microorganisms.  
F.N. Sofiyeva

Card : 1/1

1  
PODDUBNYY, N.N., kand.sel'skokhozyaystvennykh nauk; NEPOMILUYEV, V.F.,  
kand.biologicheskikh nauk

Properties of solodized soils and their biochemical processes  
under excessively wet conditions. Izv. TSIhA no.3:98-108 '60.  
(MIRA 14:4)

(Solonetz soils) (Soloth soils) (Soil micro-organisms)



~~NEPOMILUYEV, V.F.,~~ kand. biol. nauk; GRMOHIN, I.P., kand. sel'skokhozyayst-  
vennykh nauk.

Effect of different tillage methods of dynamics of microbiological  
processes in turf-Podsolic soils [with summary in English]. Izv.  
TSKhA no.2:137-144 '58. (MIRA 11:6)  
(Soil micro-organisms) (Tillage)

KAURICHEV, I.S.; NEPOMILOVYEV, V.F.; PODDUBNYI, N.N.

Characteristics of oxidation-reduction processes in Solonetz and  
Soloth soils [with summary in English]. Pochvovedenie no.4:9-15  
Ap '59. (MIRA 12:7)

1. Sel'skokhozyaystvennaya akademiya im. K.A. Timiryazeva.  
(Solonetz soils) (Soloth soils) (Oxidation-reduction reaction)

NEPOMILUYEV, V.F.; GRECHIN, I.P.

Characteristic features of microbiological processes in turf-  
Podzolic soils depending on cultivation practices. Trudy Inst.  
mikrobiol. no:7:87-95 '60. (MIRA 14:4)

1. Moskovskaya sel'skokhozyaystvennaya akademiya imeni K.A.  
Timiryazeva.

(SOIL MICRO-ORGANISMS)

(TILLAGE)

NEPOMILUYEV, V.F., kand.biologicheskikh nauk.; SHISHOV, L.L., kand.  
sel'skokhozyaystvennykh nauk.

Microflora of turf-~~g~~rey soils and its change during agricultural use  
of soils [with summary in English]. Izv. TSKHA no.1:87-104 '62.  
(MIRA 15:6)

(Volga Valley--Soil micro-organisms)

NEPOMILUYEV, V.F.; SHISHOV, L.L.

Distribution and nitrogen fixating capability of Azotobacter in turf-gley soils. Nauch. dokl. vys. shkoly; biol. nauki no.2:191-196 '62.  
(MIRA 15:5)

1. Rekomendovana kafedroy pochvovedeniya Moskovskoy sel'skokhozyaystvennoy akademii im. K.A.Timiryazeva.

(AZOTOBACTER)

NEPOMIDUYEV, V.F., dotsent, kand. biologicheskikh nauk; KUZYAKINA, T.I.

Effect of tilling peat on the microflora and microbiological  
processes. Izv. TSKHA no. 1:71-81 '65 (MIRA 19:1)

1. Kafedra pochvovedeniya Moskovskoy sel'skokhozyaystvennoy  
ordena Lenina akademii imeni Timiryazeva.

MEPOMNIN, V.Ya.; kand.istor.nauk; YERSHOV, V.V., otv.red.[deceased];  
ENOPOV, B.I., red.izd-va; GOR'KOVSKAYA, Z.P., tekhn.red.

[Outline history of the building of socialism in Uzbekistan,  
1917-1937] Ocherki istorii stotsialisticheskogo stroitel'stva  
v Uzbekistane, 1917-1937 gg. Tashkent, Izd-vo Akad.nauk  
Uzbekskoi SSR, 1957. 216 p. (MIRA 13:9)  
(Uzbekistan--Economic conditions)

NEPOMNIN, V.Ya., kand.istor.nauk; ZHITOV, K.Ye., doktor istor.nauk,  
otv.red.; RAYEVSKIY, L.A., red.; SALAIKHUTDINOVA, A., tekhn.red.

[Historical experience in the building of socialism in Uzbekistan, 1917-1937] Istoricheski opyt stroitel'stva sotsializma v Uzbekistane, 1917-1937. Otvet.red.K.E.Zhitov. Tashkent, Gos.izd-vo Uzbekskoi SSR, 1960. 381 p. (MIRA 13:9)  
(Uzbekistan--Economic conditions)



5 (3)

AUTHORS:

Mironov, V. F., Nepomnina, V. V.

SOV/62-59-7-12/38

TITLE:

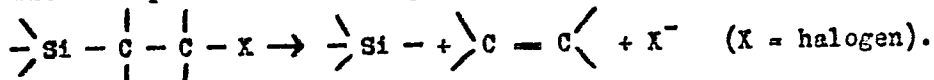
The Influence of the Chlorosilyl Groups on the Mobility of the Chlorine Atom in  $\beta$ -Chloralkylsilanes During Their Dehydrochlorination by Quinoline (Vliyanie khlorosilil'nykh grupp na podvizhnost' atoma khloro v  $\beta$ -khloralkil'silanakh pri degidrokhlorirovaniikhinolinom)

PERIODICAL:

Izvestiya Akademii nauk SSSR. Otdeleniye khimicheskikh nauk, 1959, Nr 7, pp 1231 - 1237 (USSR)

ABSTRACT:

In the present paper a  $\beta$ -decomposition product is obtained by the dehydrochlorination of  $\text{CH}_3\text{Cl}_2\text{SiCH}_2\text{CH}_2\text{Cl}$  with quinoline which is produced according to the following reaction scheme:



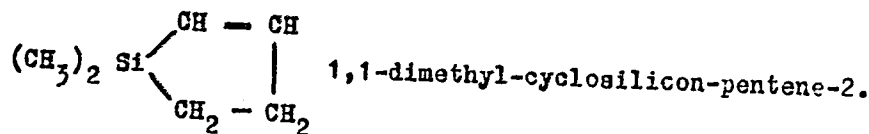
The reaction was more intensively investigated in a series of compounds of the type  $\text{Cl}_n\text{R}_{3-n}\text{SiCH}_2\text{CH}_2\text{Cl}$ . HCl is splitted off.

It was observed that the formation of a  $\beta$ -product  $\text{Cl}_n\text{R}_{3-n}\text{SiCH}=\text{CH}_2$  proceeds the more easily the greater n is. From the fur-

Card 1/3

The Influence of the Chlorosilyl Groups on the Mobility of the Chlorine Atom in  $\beta$ -Chloroalkylsilanes During Their Dehydrochlorination by Quinoline SOV/62-59-7-12/38

ther investigation of the mobility of the  $\beta$ -chlorine atom it follows that this atom is more mobile in the chlorine compounds  $\text{Cl}_3\text{SiCH}^{\text{Cl}}\text{CH}_2\text{SiCl}_3$  and in  $\alpha,\alpha$ -,  $\alpha,\beta$ -, and  $\beta,\beta$ -dichloroethyl-trichlorosilane than in the  $\beta$ -monochloroalkyl-trichlorosilanes. Moreover, the following substance was obtained from the investigations:



The different reactions and synthesis methods are described in detail in the experimental part. There are 18 references, 9 of which are Soviet.

The Influence of the Chlorosilyl Groups on the Mobility of the Chlorine Atom in  $\beta$ -Chloralkylsilanes During Their Dehydrochlorination by Quinoline

SOV/62-59-7-12/38

ASSOCIATION: Institut organicheskoy khimii im. N. D. Zelinskogo Akademii nauk SSSR (Institute of Organic Chemistry imeni N. D. Zelinskiy of the Academy of Sciences, USSR)

SUBMITTED: November 23, 1957

Card 3/3

82693

S/062/60/000/008/007/012  
B004/B054

5.3700

AUTHORS: Mironov, V. F. and Nepouanina, V. V.

TITLE: Synthesis of Alkenyl Silanes by Addition of Methyl-dichloro Silane to Diene- and Acetylene Compounds

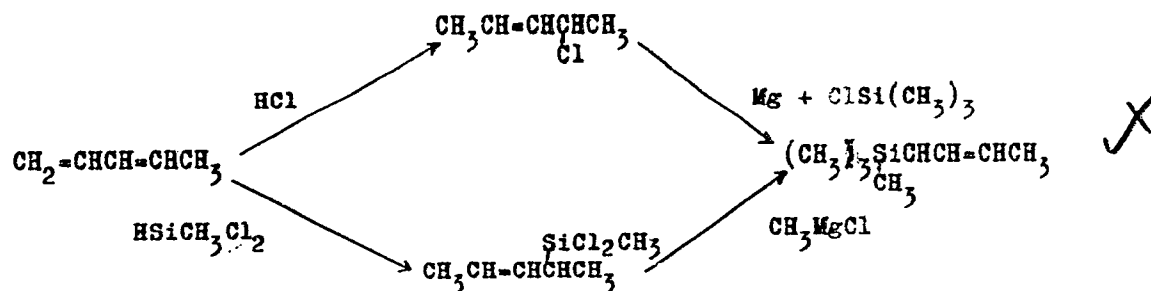
PERIODICAL: Izvestiya Akademii nauk SSSR. Otdeleniye khimicheskikh nauk, 1960, No. 8, pp. 1419-1423

TEXT: Other investigators (Refs. 1, 3) arrived at the conclusion that tri-chlorosilane and methyl- or ethyl-dichloro silane are added to butadiene in 1,4-position only. The authors found that this also applies to the addition of methyl-dichloro silane to piperylene. The structure of the reaction product could be established by the identity of the Raman spectrum of the compound obtained in the following two ways:

Card 1/4

Synthesis of Alkenyl Silanes by Addition  
of Methyl-dichloro Silane to Diene- and Acetylene  
Compounds

82693  
S/062/60/000/008/007/012  
B004/B054



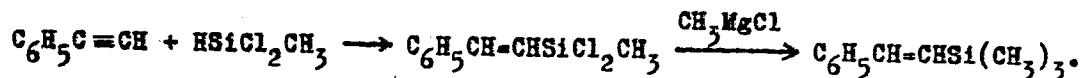
Instead of platinum on carbon, the authors used J. L. Speier's (Ref. 9) catalyst for their syntheses, and thus could work under mild conditions at atmospheric pressure. With addition of methyl-dichloro silane to diallyl, an isomer with a different position of the double bond is formed besides the  $\epsilon$ -hexenyl-methyl-dichloro silane expected, which was established by means of the Raman spectrum after methylation of the compounds. Further, the authors performed the following syntheses: addition of methyl-dichloro silane to phenyl acetylene:

Card 2/4

82693

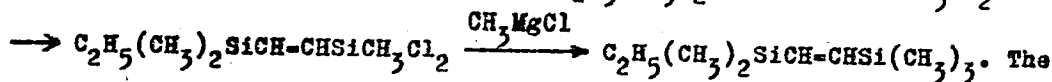
Synthesis of Alkenyl Silanes by Addition  
of Methyl-dichloro Silane to Diene- and Acetylene  
Compounds

S/062/60/000/008/007/012  
B004/B054



The  $\beta$ -(trimethylsilyl)-styrene thus obtained differs in its Raman spectrum from the  $\alpha$ -isomer produced formerly (Ref. 17). Besides, the  $\beta$ -isomer was also produced by means of organomagnesium reaction (Ref. 18); here  $C_6H_5C=CSi(CH_3)_3$  was formed as a by-product. The addition of methyl-di-

chloro silane to hexine occurs with the formation of the  $\alpha$ -isomer which was identified by the Raman spectrum:  $C_4H_9C\equiv CH + HSiCl_2CH_3 \rightarrow C_4H_9CH-CHSiCl_2CH_3 \rightarrow C_4H_9CH-CHSi(CH_3)_3$ . Further, the reaction was carried out with ethyl-dimethyl-ethynyl silane:  $C_2H_5(CH_3)_2SiC\equiv CH + HSiCH_3Cl_2$



The physical data and the Raman spectrum confirmed the structure of this compound as a 1,2-disubstituted ethylene (Ref. 2). The addition of

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Synthesis of Alkenyl Silanes by Addition  
of Methyl-dichloro Silane to Diene- and Acetylene  
Compounds

S/062/60/000/008/007/012  
B004/B054

methyl-dichloro silane to isopropoxy acetylene is also mentioned. The silyl group is always added to the  $C\equiv C$  bond. The authors thank L. Leytes for taking and analyzing the Raman spectra. There are 23 references: 15 Soviet, 10 US, and 1 British.

ASSOCIATION: Institut organicheskoy khimii im. N. D. Zelinskogo  
Akademii nauk SSSR  
(Institute of Organic Chemistry imeni N. D. Zelinskiy of  
the Academy of Sciences, USSR)

SUBMITTED: February 27, 1959

Card 4/4

5.3700

2209, 1273, 1236

87166

S/062/60/000/012/005/020  
B013/B055

AUTHORS: Mironov, V. F. and Nepomnina, V. V.

TITLE: Synthesis of Unsaturated Organosilicon Compounds by Dehydrochlorination of ( $\gamma$ -Chloro-alkyl) Silane Chlorides (The expression "silane chloride" is used by the author to denote that all available hydrogen atoms bound to silicon are replaced by chlorine)

PERIODICAL: Izvestiya Akademii nauk SSSR. Otdeleniye khimicheskikh nauk, 1960, No. 12, pp. 2140-2146

TEXT: In this publication the authors studied the possibilities of preparing ( $\gamma$ -chloro-alkyl) silanes using 0.1 N  $H_2PtCl_6 \cdot 6H_2O$  in isopropyl alcohol (Ref. 7). It was found that under the conditions described - apart from methyl dichloro silane - methyl diethyl silane, methyl ethyl chloro silane, ethyl dichloro silane and trichloro silane also add readily to allyl- and methallyl chloride. This method has the advantages of simple procedure, high yields and the possibility of adding new hydrosilanes (expression used to denote silanes in which the silicon contains at least one unsubstituted hydrogen

Card 1/3



87166

Synthesis of Unsaturated Organosilicon Compounds S/062/60/000/012/005/020  
by Dehydrochlorination of ( $\gamma$ -Chloro-alkyl) B013/B055  
Silane Chlorides

atom) to halo olefins. This could not be effected by the former methods. The authors also added  $\text{CH}_3\text{Cl}_2\text{SiH}$  to  $\text{CH}_2=\text{C}(\text{CH}_2\text{Cl})_2$  obtaining the ( $\gamma$ -halo-alkyl) silane chlorides listed in Table 1. The authors studied various methods of dehydrochlorination of ( $\gamma$ -chloro-alkyl) silane chlorides to obtain alkenyl silane chlorides. It was found that 5-10% piperidine relative to ( $\gamma$ -chloro-alkyl) silane chloride is sufficient to attain maximum yields of alkenyl silane chlorides. The ( $\gamma$ -chloro-alkyl) silane chlorides given in Table 2 were dehydrochlorinated in this manner. This method is without doubt the simplest and most convenient way of synthesizing allyl methyl dichloro silanes, methallyl methyl dichloro silanes and other alkenyl dichloro silanes. The following rules were observed: ( $\gamma$ -chloro-isobutyl) silane chlorides (with the exception of  $\text{Cl}_3\text{SiCH}_2\text{CH}(\text{CH}_3)\text{CH}_2\text{Cl}$ ) on dehydrochlorination with piperidine always yielded a mixture of isocrotyl- and methallyl silane chlorides. The ratio of these two alkenyl silane chlorides varied in the experiments, indicating the occurrence of isomerization of methallyl silanes to isocrotyl silanes during distillation. Dehydrochlorination of ( $\gamma$ -chloro-propyl) silane chloride, however, leads exclusively to allyl silane chlorides. HCl is

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Synthesis of Unsaturated Organosilicon Compounds S/062/60/000/012/005/020  
by Dehydrochlorination of ( $\gamma$ -Chloro-alkyl) B013/B055  
Silane Chlorides

evidently most easily split off from compounds of the ( $\gamma$ -chloro-alkyl)-di-chloro-silane type. ( $\beta$ -chloro-ethyl) trichloro silane and ( $\beta$ -chloro-ethyl) dichloro silane split off HCl much less readily under the action of piperidine. ( $\gamma$ -chloro-alkyl) silane chlorides behave similarly. The reverse dependence was observed under the action of quinoline, however. There are 3 tables and 13 references: 11 Soviet and 2 US.

ASSOCIATION: Institut organicheskoy khimii im. N. D. Zelinskogo Akademii nauk SSSR  
(Institute of Organic Chemistry imeni N. D. Zelinskiy of the Academy of Sciences USSR)

SUBMITTED: June 3, 1959

Card 3/3

MIRONOV, V.F.; NEPOMYNA, V.V.

Effect of the character of the silyl group on the rate of dehydrochlorination of some  $\alpha$ - and  $\beta$ -chloroalkylchlorosilanes by piperidine. Izv.AN SSSR.Otd.khim.nauk no.5:920-921 My '61. (MIRA 14:5)

1. Institut organicheskoy khimii im. N.D.Zelinskogo.  
(Silyl group) (Silane) (Piperidine)

S/661/61/000/006/023/081  
D205/D302

AUTHORS: Mironov, V. F. and Nepomnina, V. V.

TITLE: The rearrangement of  $\alpha$ - $\beta$ -dichloro-iso-propyl trichlorosilane on dehydrohalogenation with aluminum chloride

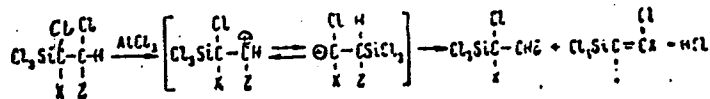
SOURCE: Khimiya i prakticheskoye primeneniye kremneorganicheskikh soyedineniy; trudy konferentsii, no. 6, Doklady, diskussii resheniye. II Vses. Konfer. po khimii i prakt. prim. kremneorg. soyed. Len. 1958. Leningrad. Izd-vo AN SSSR, 1961, 112-116

TEXT:  $\alpha$ - $\beta$ -dichloro-iso-propyl trichlorosilane was dehydrohalogenated by  $AlCl_3$ , giving a product which was identified as  $\beta$ -chloropropenyl trichlorosilane. This is an additional proof for the proposed mechanism

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S/661/61/000/006/023/081  
D205/D302

The rearrangement of ...



I. A. Shikhiyev (Baku), R. Kn. Freydlina (INEOS AN SSSR, Moscow), P. S. Rościszewski (Institute of Synthetic Resins, Warsaw) and A. L. Klebanskiy (VNIISK, Leningrad) took part in the discussion. The opinion expressed by the investigators, who took part in the discussion, was that the proposed mechanism is not sufficiently clear for the time being and further, more substantial proof is needed. There are 2 Soviet-bloc references.

ASSOCIATION: Institut organicheskoy khimii Akademii nauk SSSR, Moskva (Institute of Organic Chemistry, Academy of Sciences, Moscow) ✓

Card 2/2

MIRONOV, V.F.; NEPOMNINA, V.V.

Rearrangement proceeding during the dehydrochlorination of  
1, 2-bis(trichlorosilyl) dichloroethanes by aluminum chloride.  
Izv. AN SSSR. Otd. khim. nauk no. 10: 1795-1799 0 '61. (MIRA 14:10)

1. Institut organicheskoy khimii im. N.D. Zelinskogo AN SSSR.  
(Silane) (Hydrochloric acid)

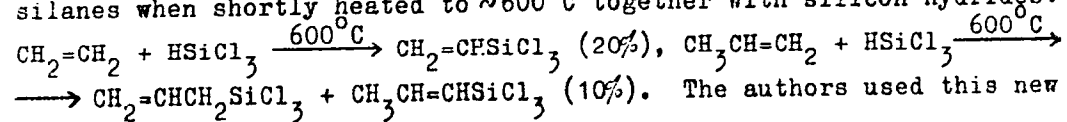
5.3700

25275  
S/062/61/000/010/012/018  
B106/B101AUTHORS: Mironov, V. F., and Nepomnina, V. V.

TITLE: Synthesis of alkenyl silanes by high-temperature condensation of unsaturated compounds with silicon hydrides

PERIODICAL: Akademiya nauk SSSR. Izvestiya. Otdeleniye khimicheskikh nauk, no. 10, 1961, 1886 - 1888

TEXT: It was shown in previous papers (Ref. 1: V. F. Mironov, Author's Certificate 126883 (1959); Byul. izobr., No 6, 19 (1960); Chem. Abstrs 54, 19485 (1960); Ref. 2: V. F. Mironov, Collect. Czechoslov. Chem. Commun. 25, 2167 (1960); Ref. 3: V. F. Mironov, A. D. Petrov, V. V. Pisarenko, Dokl. AN SSSR 124, 102 (1959)) that ethylene and propylene are converted into the corresponding alkenyl silanes when shortly heated to  $\sim 600^{\circ}\text{C}$  together with silicon hydrides:



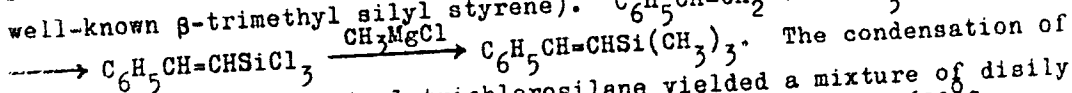
Card 1/4

28275 S/062/61/000/010/012/018  
B106/B101

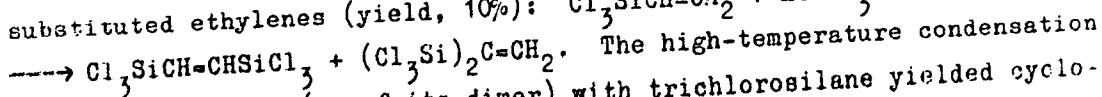
Synthesis of alkenyl silanes...

reaction to study the high-temperature condensation of trichlorosilane with styrene, cyclopentadiene, and vinyl trichlorosilane. Condensation of styrene with trichlorosilane gives  $\beta$ -trichloro silyl styrene (yield, 15%; boiling point, 90-93°C (2 mm Hg);  $n_D^{20}$  1.5540;  $d_4^{20}$  1.2718; MR 59.87),

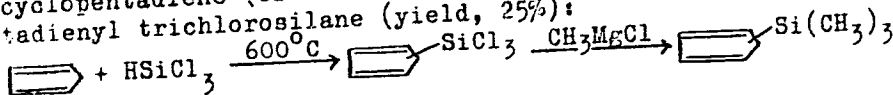
the structure of which was proved by methylation (perfect agreement of properties and Raman spectra of the resulting substance with those of the well-known  $\beta$ -trimethyl silyl styrene).  $C_6H_5CH=CH_2 + HSiCl_3 \xrightarrow{600^\circ C}$



trichlorosilane with vinyl trichlorosilane yielded a mixture of disilyl-substituted ethylenes (yield, 10%):  $Cl_3SiCH=CH_2 + HSiCl_3 \xrightarrow{600^\circ C}$



of cyclopentadiene (or of its dimer) with trichlorosilane yielded cyclopentadienyl trichlorosilane (yield, 25%):



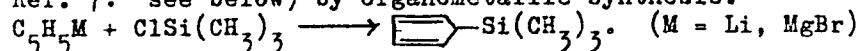


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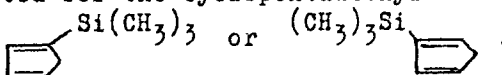
S/062/61/000/010/012/018  
B106/B101

Synthesis of alkenyl silanes...

The properties of the resulting cyclopentadienyl trimethyl silane (boiling point, 138-140°C;  $n_D^{20}$  1.4610;  $d_4^{20}$  0.8834; MR 45.54) do not agree with the properties of the compound obtained previously (Ref. 6: A. D. Petrov, G. I. Nikishin, Izv. AN SSSR. Otd. khim. n. 1952, 1128; Ref. 7: see below) by organometallic synthesis.




Whereas the latter cyclopentadienyl trimethyl silane, to which the above structure was ascribed without proof, reacts vigorously with maleic anhydride in ethereal solution, forming an adduct with the melting point 102°C, the cyclopentadienyl trimethyl silane synthesized by the authors does not react with maleic anhydride under these conditions. The Raman and infrared spectra of the two compounds also differ considerably. Hence, the following structures are suggested for the cyclopentadienyl trimethyl silane synthesized by the authors:



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Synthesis of alkenyl silanes...

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B106/B101

Also structures of the type  Si(CH<sub>3</sub>)<sub>3</sub> cannot be excluded for the

time being. The authors thank L. A. Leytes for taking and analyzing the Raman spectra. There are 9 references: 8 Soviet and 1 non-Soviet. The reference to the English-language publication reads as follows: Ref. 7: K. C. Frisch, J. Amer. Chem. Soc. 75, 6050 (1953).

ASSOCIATION: Institut organicheskoy khimii im. N. D. Zelinskogo Akademii nauk SSSR (Institute of Organic Chemistry imeni N. D. Zelinskiy of the Academy of Sciences USSR)

SUBMITTED: April 3, 1961

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Card 4/4

25800

S/080/61/034/002/022/025  
A057/A129

15.8100

AUTHORS: Chernyshev, Ye.A., Mironov, V.F., Nepoznina, V.V.,  
Lizgunov, S.A.

TITLE: Reaction of silicon hydrides with ethyl- and isopropyl-  
benzene and preparation of trichlorosilyl-substituted styrenes

PERIODICAL: Zhurnal Prikladnoy Khimii, v 34, no 2, 1961, 458-460

TEXT: Arylochlorosilanes were synthesized by reactions of trichloro-  
silane and methylchlorosilane with ethylphenyl- and isopropylphenyl-  
benzenes in liquid phase under pressure using  $H_2SO_4$  as catalyst. Methyl-  
dichlorosilane was more active than trichlorosilane. Trichlorosilyl-sub-  
stituted styrene and  $\alpha$ -methylstyrene was obtained by chlorination of  
ethylphenyl- and isopropylphenyltrichlorosilanes to monochlorides, and  
pyrolysis of the latter. Nowadays three syntheses of arylochlorosilanes  
are frequently studied. The most developed is the method studied in the

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S/080/61/034/002/022/025  
A057/A129

Reaction of silicon hydrides ...

present investigation, i.e., the reaction between silicon hydride and benzene (or homologs) in liquid phase under pressure at 200°-400°C with catalysts ( $\text{BCl}_3$ ,  $\text{H}_3\text{BO}_3$ ,  $\text{AlCl}_3$ , etc.). In the second method instead of benzene (or homologs) an arylhalide is used (Ref 7: A. Barry et al., Ind. Eng. Chem., 51, 91 (1959)) and twice as much silicon hydride is necessary than in the first method. In the third variant silicon hydride and arylhalide react in gaseous phase at atmospheric pressure in flowing systems at 500°-700°C (Ref 8: Ye.A. Chernyshev et al., DAN SSSR, 127, 808 (1959), Ref 9: ibid. 132, 1099 (1960), Ref 10: A.D. Petrov et al., ibid. 126, 1009 (1959), Ref 11: V.A. Ponomarenko et al., ibid. 130, 333 (1960)). The present experiments were carried out to compare the yields of the arylchlorosilanes and to check results of other investigators. The reaction occurred in a rotating steel autoclave (1 l), ratio of components was 1 : 1 with 0.1 weight % of catalyst and contact time of 5 hrs at varying temperatures from 230°-380°C. The results (Fig.) indicate the higher activity of methyldichlorosilane in comparison to trichlorosilane. This is in agreement with observations in Ref 7, but differs from the statement

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