

.SIDOROVA, I.I.

Method for the primary selection of antibiotics produced by mold
fungi. Antibiotiki 7 no.8:679-685 Ag '62. (MIRA 15:9)

1. Institut po izyskaniy novykh antibiotikov AMN SSSR.
(ANTIBIOTICS) (FUNGI)

SIDOROVA, I.I.

Mycoparasitism of fungi from the genus *Trichothecium* Link.
Vest. Mosk. un. Ser. 6: Biol., pochv. 19 no.4:48-56 J1-Ag '64.
(MIRA 17:12)

1. Kafedra nizshikh rasteniy Moskovskogo universiteta.

SIDOROVA, I.I.; GORLENKO, M.V.; NALEPINA, L.N.

Systematics of the genera *Trichothecium* Link and *Arthrobotrya* Corda.
Bot.zhur. 49 no.11:1592-1599 N '64. (MIRA 18:1)

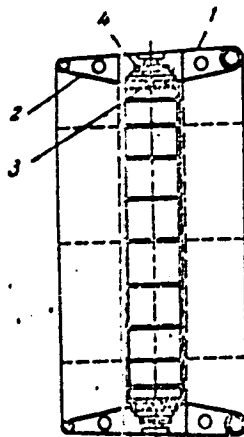
1. Moskovskiy gosudarstvennyy universitet.

SIDOROVA, I.S. [Sydorova, I.S.]

Gynecological massage and its use in patients with fixed
uterine displacements in general compound fangotherapy at
the Yevpatorium health resort. Pediat. akush. ginek. no.3:
61-62 '63 (MIRA 17:1)

1. Sanatoriy "Udarnik" (glavnyy vrach, A.N. Step, nauchnyy
sotrudnik - prof. V.G. Dik [Dik, V.H.] g. Yevpatoriya.

ACC NR: AP7000371



1—external surface of the nozzle; 2—internal surface of the nozzle; 3—internal surface of the nozzle in the region of the screw disc; 4—shock absorbers

SUB CODE: 13/ SUBM DATE: 18Oct65

Card 2/2

YEMEN, V.B.; ZHARVA, E.K.

Differences in the mutation variation of two pea varieties. Izv.
SO AN SSSR no.4 Ser. biol.-med. nauk no.1:74-82 '64.

(MIRA 17:11)

I. Institut tsitologii i genetiki Sibirskogo otdeleniya AN SSSR,
Novosibirsk.

SIDOROVA, K.K.; KALININA, N.P.; UZHINTSEVA, L.P.

Characteristics of mutational changes in pea varieties and
forms. Genetika no.2:136-142 Ag '65. (MIRA 18:10)

1. Institute of Cytology and Genetics, Academy of Sciences
of the U.S.S.R., Siberian Department, Novosibirsk.

BERKOVICH, M.; KHARCHEVNIKOVA, S.; SHUBINA, L.; SIDOROVA, L.;
VOZNESENSKAYA, N.

Using mineral pigments in making building materials. Stroi. mat.
4 no. 4:33 Ap '58. (MIRA 11:5)
(Pigments) (Building materials)

ANDRONOV, Ivan Koz'mich; OKUNEV, Aleksandr Kuz'mich; SIDOROVA, L.A..
red.; SMIRNOVA, M.I., tekhn.red.

[Basic course of trigonometry, based on practical problems;
textbook for teachers] Osnovnoi kurs trigonometrii, razvivaemyi
na tselesoobraznykh zadachakh; posobie dlia uchitelei. Moskva,
Gos.uchebno-pedagog.izd-vo M-va prosv.RSFSR, 1960. 365 p.
(MIRA 13:6)

(Trigonometry--Study and teaching)

Р. И. В., Степанов Александрович; И. И. В., И. И. В., ред.

[book of extracurricular readings on mathematics for
the higher grades (8 to 9)] Kniga dlia vneklassnogo soderzhaniiia
po matematike v starsnikh klassakh (VIII-IX). Izd. 2., dop.
Moskva, Uchpedgiz, 1963. 434 p. (MIRA 17.9)

KARNITSKIY, Pavel Nikolayevich; SIDOROVA, L.A., red.; MAKAROVA,
N.F., tekhn. red.

[Problems about the universe in mathematics in secondary
schools] Voprosy o vselennoi v matematicheskikh zadachakh
srednei shkoly; posobie dlia uchitelei. Izd.2., dop. Mo-
skva, Uchpedgiz, 1963. 90 p. (MIRA 17:2)

KLINIS, Izrail' Mikhaylovich; SIDOROVA, L.A., red.

[Collection of applied problems in inequality theory; a text-
book for teachers] Sbornik prikladnykh zadach na neravenstva;
posobie dlia uchitelei. Izd. 2., dop. Moskva, Prosveshchenie,
1964. 142 p. (EIRA 17:7)

BARNYALSKIY, Izrail' Acol'fovich; ASKINUZE, V.G., nauchn. red.;
SIDOROVA, L.A., red.

[Elements of mathematical analysis in a school mathematics
course; a textbook for teachers] Elementy matematicheskogo
analiza v shkol'nom kurse matematiki; posobie dlia uchite-
lei. Moskva, Prosveshchenie, 1964. 140 p.

(MIRA 18:4)

IGRATYEV, V.I.; IGRTYEV, N.I.; SHOK, A.YA.; SIDOROVA, L.A.,
red.

[Problems in arithmetic; textbook for elementary school
teachers] Sbornik zadach po arifmetike; posobie dlia
uchitelei nachal'noi shkoly. Izd.4., ispr. Moskva, Pro-
sveshchenie, 1965. 277 p. (MIRA 18:7)

SIDOROVA, L.D.

Treatment of pulmonary suppurative processes by endobronchial
administration of penicillin. Ter. ark., Moskva 25 no.6:36-40
Nov-Dec 1953. (GML 25:5)

1. Of the Hospital Therapeutic Clinic (Acting Head -- Decent
M.I. Khurgin), Novosibirsk Medical Institute.

1. I. I.

1. I. I.: "The permeability of the capillaries in patients with
diabetes mellitus." Novosibirsk State Medical Inst. Novosi-
birsk, 1956. (Dissertation for the Degree of Candidate in Medical
Sciences).

Source: Kalinina State Inst No. 28 1956 Moscow

~~SECRET~~ F.F. SIDOROVA, L. G.

AUTHORS: Krentsel', B. A., Topchiyev, A. V., 62-58-4-18/32
Sidorova, L. G.

TITLE: Synthesis of Crystalline Polypropylene by Means
of Polymerisation of Technical Propylene With Triiso-
butylaluminum and Titanium Tetrachloride (Polucheniye
kristallicheskogo polipropilena polimerizatsiyey tekhnicheskogo propilena s triizobutilaluminiumen i chetyrekhkhloristym titanom)

PERIODICAL: Izvestiya Akademii Nauk SSSR, Otdeleniye Khimicheskikh
Nauk, 1958, Nr 4, pp. 500-501 (USSR)

ABSTRACT: In periodicals numerous reports have been published
of late, concerning a new high-polymeric material:
stereo-regular polypropylene. The latter was produced
by the polymerisation of propylene in the presence of
the complex organometallic catalyst $Al(C_2H_5)_3 + TiCl_4$.

It was of interest to use instead of the greatly pyrophoric triethylaluminum especially high-molecular and less inflammable aluminum alkyls. In the present paper the authors describe the carried out polymeri-

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Synthesis of Crystalline Polypropylene by Means of 62-58-4-18/32
Polymerisation of Technical Propylene With Triisobutylalu-
minum and Titanium Tetrachloride

sation of propylene in so high crystalline polypro-
pylene in the presence of a complex organometallic
catalyst, $(Al(iC_4H_9)_3)_3TiCl_4$ which is much less
inflammable than $Al(C_2H_5)_3 + TiCl_4$.

There are 3 figures.

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

SUBMITTED: October 20, 1957

AVAILABLE: Library of Congress

1. Propylene--Polymerization 2. Organometallic
catalyst $(Al(iC_4H_9)_3)_3TiCl_4$ --applications

Card 2/2

AUTHORS: Topchiyev, A. V., Krentsel', B. A., SOV/62-58-9-21/26
~~Sidorova, L. G.~~

TITLE: Letters to the Editor (Pis'ma redaktoru)

PERIODICAL: Izvestiya Akademii nauk SSSR. Otdeleniye khimicheskikh nauk,
1958, Nr 9, pp 1133 - 1133 (USSR)

ABSTRACT: Of late in publications several references were made
in publications in regard to the mechanism of the
stereospecific polymerization of the α -olefins. In
regard to these references the authors of this letter
wish to report some experimental data gathered in in-
vestigations on the polymerization reaction of propylene
in the presence of the catalytic system $TiCl_4$ and $Al(i-C_4H_9)_3$.

Studies on the change in molecular weight of the poly-
propylene formed in the reaction show that already 15
seconds after the reaction begins a product of high
molecular weight has formed. The duration of the reaction
does not change the molecular weight of the polymer formed.
The structural chain keeps adding polymeric units in a
chain reaction during the polymerization, as indeed the

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Letters to the Editor

SOV/62-55-9-21/26

results of several experiments carried out by the authors showed that the propylene polymerization is a chain reaction. At the present the authors are concerned with further investigations on the mechanism and the function of the catalytic metallo-organic complex in the propylene polymerization and in the polymerization of other α -olefins.

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

SUBMITTED: May 29, 1958

Card 2/2

SIDOROVA, I. G., Cand Chem Sci (diss) -- "Investigation of the polymerization reaction of propylene with the catalytic system $\text{Al}(\text{iso-C}_4\text{H}_9)_3 / \text{TiCl}_4$ ".
Moscow, 1959. 14 pp (Acad Sci USSR, Inst of Petroleum-Chem Synthesis), 150 copies (KI, No 9, 1960, 122)

5 (2,3)

AUTHORS:

Topchiyev, A. V., Academician,
Krentsel', B. A., Sidorova, L. G.

SOV/20-128-4-27/65

TITLE:

Some Rules of Polymerization of Propylene With the $TiCl_4 + AlR_3$
Catalytic System

PERIODICAL:

Doklady Akademii nauk SSSR, 1959, Vol 128, Nr 4, pp 732 - 735
(USSR)

ABSTRACT:

Different opinions were expressed in publications on the rules and mechanism of stereospecific polymerization of α -olefines. Many problems in this respect have, however, remained unclear. Therefore, some observations made by the authors in dealing with the subject mentioned in the title are interesting. ($AlR_3 = Al(Iso-C_4H_9)_3$). The experimental system had been described before (Ref 5). It can be assumed that an exchange reaction takes place between $TiCl_4$ and the metallic alkyl forming organotitanium compounds (Ref 6). The latter decompose due to their instability, and form free radicals. The polymerization of styrene, for instance (Ref 7), can be initiated in this way. The organotitanium compound acts as a catalyst while the metal-

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Some Rules of Polymerization of Propylene With the $\text{TiCl}_4 + \text{AlR}_3$ Catalytic System SOV/20-128-4-27/65

lic alkyl is, so to speak, a "supplier" of the alkyl radical. The propylene polymerization is a chain reaction. Already 17 seconds after its start, a polymer with a high molecular weight is formed (Fig 1) which remains unchanged for a long time (up to 1.5 hours). Thus, the molecule attains a maximum size, and does not grow any more. The catalytic activity of the complex catalysts of the Tsigler type decreases with time (Fig 2). This is possibly due to the fact that the amount of resulting organotitanium compounds is reduced with an increasing alkylation of titanium chlorides. Accordingly, the absorption rate of propylene also decreases. If, however, TiCl_4 is first poured into the reactor, and then aluminum alkyl evenly added at a low rate, e.g. within 3 hours, the activity of the catalyst is maintained for a long time, and the polymer yield is considerably increased. An explanation of these phenomena is attempted with reference to the assumption made by C. D. Nenitzescu (Ref 4). The polymerization process initiated by Tsigler catalysts is highly sensitive to admixtures of various types in the monomer, particularly to oxygen (Fig 3).

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Some Rules of Polymerization of Propylene With the
 $TiCl_4 + AlR_3$ Catalytic System

SOV/20-128-4-27/65

By very large oxygen quantities, the catalyst is fully poisoned. Various possible explanations are given for this fact (Ref 8). Figure 4 shows the temperature effect on the molecular weight of the polymer at an optimum oxygen content in propylene. At a temperature increase from 30 to 80°, the yield decreases linearly as expected. The stereospecific polymerization processes can apparently be realized by any known initiation mechanism. The process can be imagined according to the ion- or radical mechanism. The stereospecificity in the respective class of catalysts is only determined by the degree of orderliness of the catalytic surface. The authors think that a radical mechanism is not impossible in polymerization with Tsigler catalysts (for the first time in Ref 4). The said catalyst has, however, not a high stereospecificity in the reactions of propylene polymerization. There are 4 figures and 11 references, 2 of which are Soviet.

SUBMITTED: April 22, 1959
Card 3/3

S/191/61/000/002/001/012
B118/B203

AUTHORS: Topchiyev, A. V., Krentsel', B. A., Sidorova, L. G.

TITLE: Polymerization of propylene with the catalytic system $\text{Al}(\text{iso-C}_4\text{H}_9)_3 + \text{TiCl}_4$

PERIODICAL: Plasticheskiye massy, no. 2, 1961, 3 - 8

TEXT: For some modes of application of polypropylene (films, tubes) a high content of isotactic structure (produced by the catalytic complex containing TiCl_3) is not required; the quality of the stereoblock polymer obtained with the catalytic system $\text{AlR}_3 + \text{TiCl}_4$ is sufficient. This circumstance induced the authors to study the polymerization of propylene with the system $\text{Al}(\text{iso-C}_4\text{H}_9)_3 + \text{TiCl}_4$. They proceeded from the industrial propylene-propane fraction of the gas formed in petroleum pyrolysis which contained practically no oxygen after thorough purification (Ref.1). Triisobutyl aluminum was distilled in vacuo, and used as a 20-30 % solu- ✓

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S/191/61/000/002/001/012
B118/B203 ✓

Polymerization of propylene ...

tion in purified benzene fraction boiling between 90 and 110°C. Commercial titanium tetrachloride was "chemically pure". The components were stored in a vessel filled with pure nitrogen. The propylene polymerization was performed in inert, carefully purified, anhydrous n-heptane as solvent. It proceeded successfully with the complex catalyst $\text{Al}(\text{iso-C}_4\text{H}_9)_3 + \text{TiCl}_4$ which is less inflammable and better accessible than the hitherto used $\text{Al}(\text{C}_2\text{H}_5)_3 + \text{TiCl}_4$. The molar ratio K between the components of the catalyst affects the yield and the molecular weight of polypropylene. The maximum yield of polymer was obtained at $K = 1.5$: 2 moles of triisobutyl aluminum/ TiCl_4 . The highest-molecular polypropylene was formed at $K = 3$. The catalytic activity of the complex catalyst decreases with time due to a change in its composition, irrespective of whether it is in operation or stored in an inert medium. If, however, the propylene polymerization is performed by bringing about a gradual formation of the catalyst complex with a steady addition of small doses of $\text{Al}(\text{i-C}_4\text{H}_9)_3$, then the high activity of the catalyst is preserved long-

Card 2/3

KRENTSEL, B.A., SIDOROVA, L.G., TOPICHEV, A.V., (Deceased)

Principles of conversational polymerisation of unsaturated hydrocarbons.

Report submitted for the International Symposium of Macromolecular Chemistry,
Paris, 1-6 July 63

KRENTSEL', B.A.; SIDOROVA, L.G.; SHISHKINA, M.V.; KUSAKOV, M.M.; KORENEVSKAYA,
F.V.; SHCHEKIN, V.V.

Conversion polymerization of α -olefins. Neftekhimiia 2 no.5:
705-708 S-0 '62. (MIRA 16:1)

1. Institut neftekhimicheskogo sinteza AN SSSR.
(Olefins) (Polymerization)

KRENTSEL', Boris Abramovich, doktor khim. nauk; SIDOROVA,
Lyudmila Grigor'yevna, kand. tekhn. nauk

[Polypropylene] Polipropilen. Kiev, Tekhnika, 1964. 89 p.
(MIRA 18:1)

L 35064-65 EWT(m)/EWP(t)/EWP(b) IJP(c) JD/JG

S/0286/65/000/006/0019/0019

ACCESSION NR: AP5008518

AUTHOR: Vulikh, A. I.; Arkhipov, S. M.; Sidorova, L. G.

15
B

TITLE: A method for producing bromides and iodides of rubidium and cesium,
Class 12, No. 169081

27 27 27

SOURCE: Byulleten' izobreteniy i izobretenskikh znakov, no. 6, 1965, 19

TOPIC TAGS: reducing agent, cesium inorganic compound, rubidium compound, bromide, iodide

ABSTRACT: This Author's Certificate introduces a method for producing bromides and iodides of rubidium and cesium by interaction of the higher hydroxides of the bicarbonates or carbonates of these metals with bromine or iodine in the presence of reducing agents which produce only gaseous products during oxidation. The use of hydrazine hydrate as the reducing agent improves the purity of the product.

ASSOCIATION: none

SUBMITTED: 11May64

NO REF SOV: 000

Card 1/1

ENCL: 00

SUB CODE: GC, IC

OTHER:000

38299 SIDOROVA, L. I. AND SIDOROV, S. N.

Mizhet li primenyat'sya sul'-Fat-anabazin kak protivouksusnoye sredstvo? Zdravookhraneniye Kazakhstana, 1949, No 6, s. 22-24

USSR/Pharmacology and Toxicology - Toxicology

V

Abs Jour : Ref Zhur - Biol., No 2, 1959, 9355

Author : Sidorova, L.I.

Inst : Alma-Ata Medical Institute, Bureau of Main Medicolegal
Expert Examination and Chair of Forensic Medicine

Title : Clinical Picture in Arsenic Poisoning

Orig Pub : Sb. tr. Byuro Gl. sudebno-med. ekspertizy i Kafedry
sudebn. med. Alma-Atinsk. med. in-ta, 1957, vyp. I, 46-
47

Abstract : No abstract.

Card 1/1

1015

- 32 -
E N D

USSR/Pharmacology and Toxicology - Toxicology

V

Abs Jour : Ref Zhur - Biol., No 2, 1959, 9353

Regeneration of the glandular epithelium in the affected places comes about mainly by amitotic and, in the preserved mucosa, by mitotic, cell division. Indifferent epithelium of the stomach is chiefly differentiated into delomorphous cells, Localization of the lesions and "rebuilding" of the glandular epithelium are apparently connected with excretion of the poison. -- S.T. Skorodolov

Card 2/2

ABATUROV, P.V.; GROZNOV, S.R.; GANETSKIY, I.D.; KOZYREVA, Ye.A.;
NOVITSKAYA, L.A.; ODINTSOV, A.I.; PROTOPOPOV, S.I.; SIDOROV,
V.A.; SIDOROVA, L.I.; TROFIMOVA, V.I.; TRUSHINA, I.V.; SHTEYMAN,
R.A.; DUNTSOVA, K.G., red.; KAZENOVA, A.R., red.; MARSHAK, M.S.,
prof., red.; MOLCHANOVA, O.P., prof., red.; SALOMATINA, K.Z.,
red.; KAGANOVA, A.A., red.; MEDRISH, D.M., tekhn. red.

[Dietetic cookery in eating establishments]Dieticheskoe pitanie v
stolovykh; sbornik retseptur i tekhnologiya prigotovleniya blud.
Moskva, Gos.izd-vo tserg.lit-ry, 1962. 262 p. (MIRA 16:1)

1. Russia (1917- R.S.F.S.R.)Ministerstvo torgovli.
(~~COOKERY FOR THE STON~~)

KAGANER, M. G.; VELIKANOVA, M. G.; SIDOROVA, L. I.

"Heat-transfer investigation in multilayer vacuum insulation."

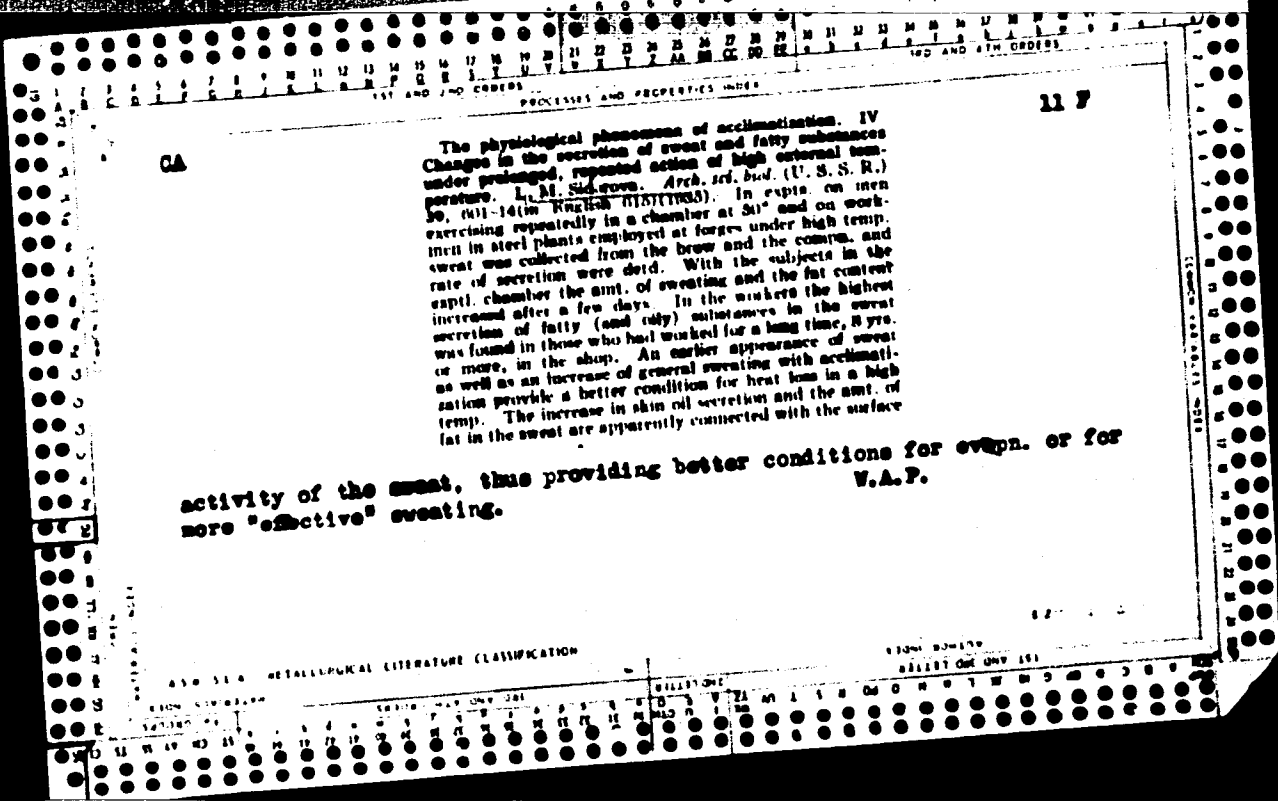
report submitted for 2nd All-Union Conf on Heat & Mass Transfer, Minsk, 4-12
May 1964

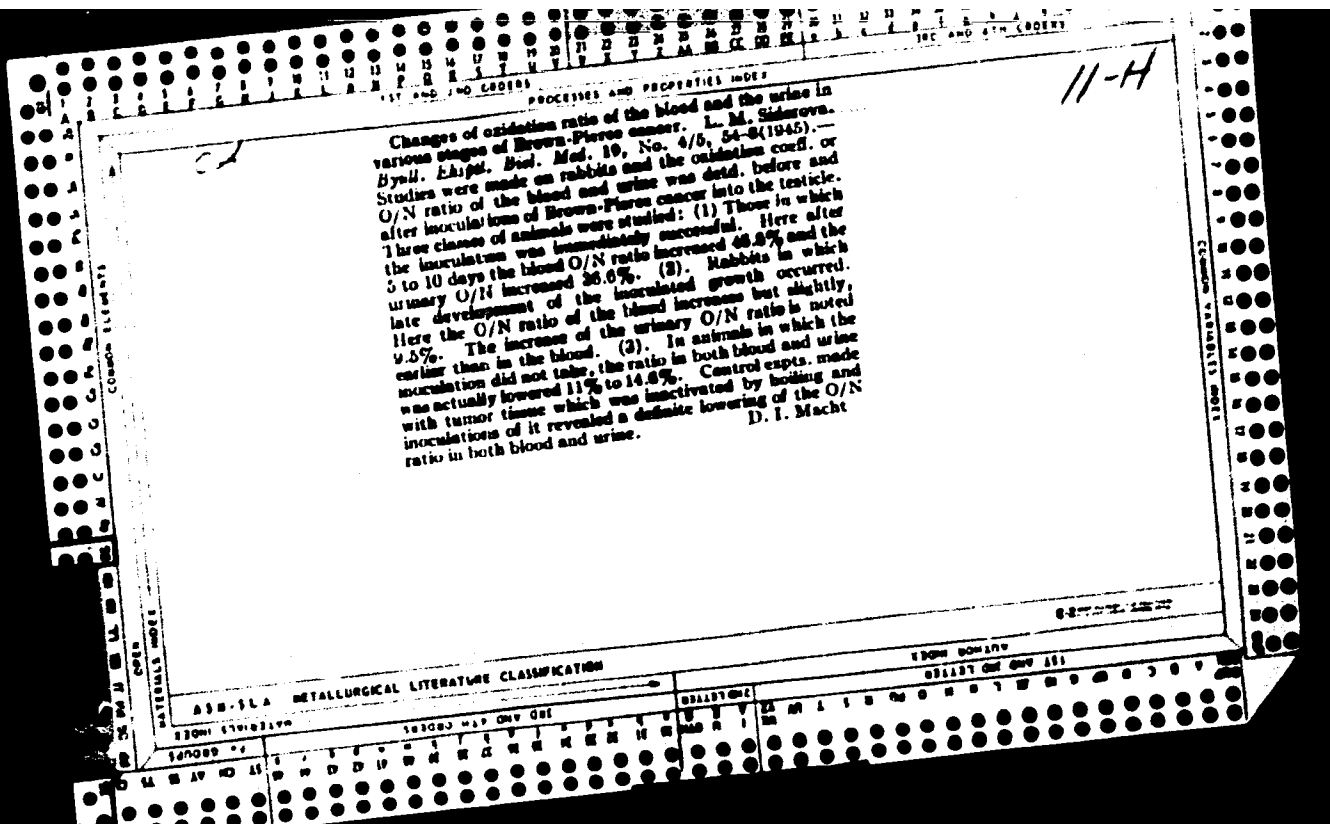
All-Union Sci Res Inst of Oxygen Engineering.

GREBEN', L.K., akademik; BAYDUGANOVA, Ye.P., nauchnyy sotr.; SAVCHENKO, P.Ye., kand. biol. nauk; GREBEN', Ye.K., kand. sel'khoz. nauk; KRYLOVA, L.F., nauchn. sotr.; SIDOROVA, L.M., nauchn. sotr.; SOROKINA, V.I., nauchn. sotr.; BAGMET, M.I.; LAZORENKO, Ye.L.; KHOKHLYUK, A.G.; PASHKEVICH, M.K.; BRYZHNIK, K.A.; LUZHKOVA, M.A., kand. sel'khoz. nauk; BALASHOV, N.T., kand. sel'khoz. nauk; ZHELIKHOVSKIY, V.I., redaktor; POTOTSKAYA, L.A., tekhn. red.

[Ukrainian White Steppe swine] Ukrainskaia stepnaia belaja poroda svinei. Pod obshchei red. L.K.Grebenia. Kiev, Gos-sel'khozizdat USSR, 1962. 252 p. (MIRA 16:5)

1. Ukrainskiy nauchno-issledovatel'skiy institut zivotnovodstva stepnykh rayonov im. M.F.Ivanova "Askaniya-Nova."
 2. AN Ukr.SSR i Vsesoyuznaya akademiya sel'skokhozyaystvennykh nauk im. V.I.Lenina (for L.K.Greben').
 3. Ukrainskiy nauchno-issledovatel'skiy institut zivotnovodstva stepnykh rayonov im. M.F.Ivanova "Askaniya-Nova" (for Bayduganova).
 4. Melitopol'skaya gosudarstvennaya plemennaya stantsiya (for Bagmet, Lazorenko, Khokhlyuk).
 5. Spetsialist sovkhoza "Komsomolets" , Stavropol'skiy kray (for Bryzhnik).
- (Ukraine--Swine breeding)





SIDOROVA, L. M. Cand. Biolog. Sci.

Dissertation: "The Oxidation Coefficients of Blood and Urine in Cases of Malignant Tumors." First Moscow Order of Lenin Medical Inst, 16 Jun 47.

SO: Vechernyaya Moskva, Jun, 1947 (Project #17836)

SIDOROVA, L.M.

SIDOROVA, L.M.

Alkaline phosphatase in blood-forming elements in cancer. Trudy
(MIRA 10:8)
AMN SSSR 21 no.4:103-106 '52.

1. Iz klinicheskoy laboratorii (zav. N.N.Shiller) Tsentral'nogo
onkologicheskogo instituta im. P.A.Gertsena (dir. -chlen-korr.
AMN SSSR prof. A.I.Savitskiy)

(NEOPLASMS, blood in,
alkaline phosphatase)

(PHOSPHATASES,
alkaline, in blood in cancer)

Sidorova, L.M.
SIDOROVA, L.M.; TREGUBOVA, Kh.L.

Effect of 9,10-dimethyl-1,2-benzanthracene on the skin in rabbits.
Trudy AMN SSSR 21 no.4:150-156 '52. (MLRA 10:8)

1. Iz Tsentral'nogo onkologicheskogo instituta im. P.A.Gertsena
Ministerstva zdravookhraneniya RSFSR (dir. - chlen-korrespondent
AMN SSSR prof. A.I.Savitskiy)

(SKIN, neoplasms,
exper. 9,10-dimethyl-1,2-benzanthracene tumors)

(BENZANTHRACENE, effects,
9,10-dimethyl-1,2-benzanthracene causing skin tumors
in rabbits)

(CARCINOGENS, effects,
9,10-dimethyl-1,2-benzanthracene causing tumors of skin
in rabbits)

SIDOROVA, L.M., starshiy nauchnyy sotrudnik (Moskva, G-117, 2-y Neopalimovskiy, d.4, kv.2)

Effect of oxygen therapy on blood gas content in pulmonary cancer
[with summary in English, p.159] Vest.khir. 77 no.7:82-86 J1 '56.
(MIRA 9:10)

1. Iz klinicheskoy laboratorii (zav. - kandidat meditsinskih nauk
N.N.Shiller) Gosudarstvennogo onkologicheskogo instituta im. P.A.
Gertsena (dir. - doktor med. nauk A.N.Novikov, nauchn. rukov. -
prof.A.I.Savitskiy)

(LUNG NEOPLASMS, surg.

preop. & postop. oxygen ther.)

(OXYGEN, ther. use

preop. & postop., in surg. of lung cancer)

SIDOROVA, L.M.

Use of Khakim's diagnostic serum reaction in cancer; preliminary
report. Lab.delo 7 no.9:26-30 S '61. (MIRA 14:10)

1. Kliniko-diagnosticheskaya laboratoriya (zav. N.N.Shiller-Volkova)
Nauchno-issledovatel'skogo onkologicheskogo instituta imeni Gertseva,
Moskva.

(CANCER--DIAGNOSIS)

(SERUM DIAGNOSIS)

SIDOROVA, L.M.

Influence of a high environmental temperature on simultaneous complex conditioned reflexes in dogs. Zhur. vys. nerv. deiat. 11 no.4:697-702 J1-Ag '61. (MIRA 15:2)

1. Chair of Normal Physiology, Medical Institute, Stalino.
(CONDITIONED RESPONSE) (HEAT--PHYSIOLOGICAL EFFECT)

ACCESSION NR: AP4014137

S/0247/64/014/001/0056/0060

AUTHOR: Sidorova, L. M.

TITLE: Effect of prolonged high temperature on simultaneous complex conditioned reflexes in dogs

SOURCE: Zhurnal vyssh. nerv. deyatel'., v. 14, no. 1, 1964, 56-60

TOPIC TAGS: conditioned reflex, simultaneous complex conditioned reflex, complex conditioned reflex component, prolonged high temperature 45°C, high temperature effect, motor defensive conditioned reflex, conditioned reflex inhibition, transmarginal inhibition

ABSTRACT: In a group of experiments on 4 dogs, the effects of prolonged high temperature were investigated alternately with the effects of normal temperature. The high temperature experiments were conducted at 2 wk intervals and normal temperature experiments were conducted at 1 wk intervals. The dogs were placed in a combination heat-conditioned reflex chamber for 2 hrs at 45°C. The complex stimulus consisted of two components - bell and light - and was applied for 10 sec, then reinforced by an unconditioned stimulus, and

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ACCESSION NR: AP4014137

after 4 min was applied again. Each of the 2 components was also applied separately. The complex stimulus or the components were applied to the animals after 30 min in the chamber the first time, and after 80-90 min the second time. Temperature of the animals was measured before and after heat exposure. Motor defensive conditioned reflex excitation was measured by the total height that extremities of the animal were raised. Findings show that motor defensive conditioned reflexes are inhibited by prolonged high temperature. The inhibition is more marked in the complex conditioned reflexes which indicates an increase in transmarginal inhibition. The inhibiting effect of one component on the effect of the other component is sharply weakened with prolonged high temperature. This may be attributed to weakened negative induction on the part of the center which reacts to the stronger component of the complex. Orig. art. has: 4 tables.

ASSOCIATION: Kafedra normal'noy fiziologii donetskogo meditsinskogo instituta (Department of Normal Physiology of the Donets Medical Institute)

SUBMITTED: 18Apr63

DATE ACQ: 13Mar64

ENCL: 00

SUB CODE: AM

NO REF SOV: 009

OTHER: 002

Card 2/2

SIDOROVA, L.N.

Development of ascarid eggs in stored vegetables. Sov.zdrav.Kir. no.2:
42-43 Mr-Ap '58. (MIRA 12:12)

1. Iz parazitologicheskoy laboratorii (zav. - kand.biol.nauk I.A.
Gontar') Kirgizskogo instituta epidemiologii, mikrobiologii i gigiyeny.
(ASCARIDS AND ASCARIASIS)

SIDOROVA, L.N. (Leningrad).

Correlation of cholesterol and phospholipids in the blood of subjects with coronary atherosclerosis and myocardial infarct. (MIRA 11:9)
Klin.med. 36 no.8:63-66 Ag '58

1. Iz fakul'tetskoy terapevticheskoy kliniki (zav. kafedroy - prof. T.S. Istamanova) Leningradskogo meditsinskogo instituta imeni I.P. Pavlova.

(CORONARY DISEASE, blood in cholesterol & phospholipids, correlation in arteriosclerosis (Rus))

(MYOCARDIAL INFARCT, blood in cholesterol & phospholipids, correlation (Rus))

(CHOLESTEROL, in blood in coronary arteriosclerosis & myocardial infarct, correlation with phospholipids (Rus))

(PHOSPHOLIPIDS, in blood in coronary arteriosclerosis & myocardial infarct, correlation with cholesterol (Rus))

KALYUZHNYI, I.T.; SIDOROVA, L.N.; BURMIN, L.; AKTAYEV, S.; TEPLITS,
V.V.; ZUYEV, V.N.; POKROVSKAYA, T.I.; KOZHOMKULOV, T.A.;
LAVROVA, N.N., prof., red.; ZUBOK, Ya.Z., tekhn. red.

[Read this, this is useful] Prochitai, eto polezno. Frunze,
1962. 10 nos. [Botkin's disease] Bolezn' Botkina. 19 p.
[Communicable (infectious) diseases in children] Detskie
zaraznye (infektsionnye) bolezni. 18 p. [Helminths and the
harm they cause to human health] Gel'minty i ikh vred dlia
zdorov'ia cheloveka. 26 p. [Work hygiene of the beet grower]
Gigiena truda svklovoda. 12 p. [Hygienic regimen of the
schoolchild] Gigienicheskii rezhim shkol'nika. 24 p. [Fungus
diseases of the skin] Gribkovye zabolevaniia kozhi. 24 p.
[Prevention and treatment of cardiac and vascular diseases]
Preduprezhdenie i lechenie boleznei serdtsa i sosudov. 19 p.
[Prevention and treatment of rickets] Rakhit, ego predu-
prezhdenie i lechenie. 8 p. [Old age and longevity] Starost'
i dolgoletie. 14 p. [Vitamins and their significance for
human health] Vitaminy i ikh znachenie dlia zdorov'ia chelo-
veka. 22 p. (MIRA 17:3)

SLUTSKIY, S.S., kand.ekonom.nauk; PILIPCHUK, A.I., nauchnyy sotrudnik;
ANTONOV, M.F., kand.tekhn.nauk; MALYARCHUK, G.S., kand.tekhn.
nauk. Prinimali uchastiye: MEL'NIKOV, A.A., inzh.; ARSEN'YEVA,
A.I., inzh.; TEREKHOVA, Z.S., tekhnik; SIDOROVA, L.N., tekhnik;
ISSERLIS, I.I., tekhnik; KRAVCHENKO, A.I., inzh. POSENIKOV,
S.A., inzh., red.; ZHULIN, V.K., otv. za vypusk; POKHLEBKINA,
M.I., tekhn.red.

[Efficient distribution of and organization of work at cargo
transfer points] Ratsional'noe razmeshchenie i organizatsiia
raboty punktov perevalki. Pod obshchii red. S.S.Slutskogo.
Moskva, 1960. 127 p. (MIRA 14:2)

1. Moscow. Tsentral'nyy nauchno-issledovatel'skiy institut
ekonomiki i ekspluatatsii vodnogo transporta. 2. Tsentral'nyy
nauchno-issledovatel'skiy institut ekonomiki i ekspluatatsii
vodnogo transporta (for Slutskiy, Pilipchuk, Terekhova, Sidorova,
Isserlis). 3. Institut kompleksnykh transportnykh problem AN SSSR
(for Antonov, Malyarchuk, Kravchenko).
(Cargo handling)

KRUTIKOV, K.T., inzh.; GARINOV, K.A., kand. tekhn. nauk; ITTENBERG, I.A.,
kand. tekhn. nauk; prinalni uchastiye: VAKHTUROV, A.N., starshiy
nauchnyy sotrudnik; VOLKOV, M.V., starshiy nauchnyy sotrudnik;
KURTSMAN, L.B., starshiy nauchnyy sotrudnik; BOGATYREVA, M.I.,
mladshiy nauchnyy sotrudnik; ZABOLOTNEVA, G.K., mladshiy nauch-
nyy sotrudnik; NOVIKOVA, V.V., mladshiy nauchnyy sotrudnik;
ALEKSEYEVA, T.I., mladshiy nauchnyy sotrudnik; PETROVA, I.A.,
mladshiy nauchnyy sotrudnik; SEDEL'NIKOVA, A.F., mladshiy
nauchnyy sotrudnik; KATKOVA, T.I., inzh.; ZELENKOV, P.A., inzh.;
SIDOROVA, L.N., starshiy laborant; KALASHNIKOVA, V.M., starshiy
laborant; VOYEVODINA, A.Ye., starshiy tekhnik; USPENSKAYA, M.B.,
starshiy tekhnik; YEPIFANOV, V.K., starshiy tekhnik

[Organization of the shipping of transit cargoes on the Volga-
Baltic Sea Waterway.] Organizatsiia perevozok tranzitnykh gruzov
po Volgo-Baltiiskomu vodnomu puti. Moskva, Transport, 1965.
109 p. (Moscow. Sentral'nyi nauchno-issledovatel'skii institut
ekonomiki i ekspluatatsii vodnogo transporta. Trudy, no.40).

SEREBRYAKOV, L.P.; VOLODCHENKO, K.G.; MINASHKIN, M.A. Prinsipialni uchastiye: TITOV, N.A.; PROSELKOV, N.L.; MINAYEV, I.Z.; NIKOLAYEV, S.V.; SAMOYLOVA, V.F.; SIDOROVA, L.P.; FOMIN, V.F., red. vypuska; BOBRYSEEV, A.T., red. vypuska; CHAPOVSKIY, Ye.G., red. vypuska; POSPELOVA, A.M., red. izd-va; GUROVA, O.A., tekhn. red.

[Collection of unified district estimates for geological prospecting] Sbornik edinykh poraionnykh edinichnykh ras-tsenok na geologorazvedochnye raboty. Moskva, Gos. nauchno-tekhn. izd-vo lit-ry po geol. i okhrane neдр. No.2. [Hydrogeology and geological engineering] Gidrogeologicheskie i inzhenerno-geologicheskie raboty. 1960. 91 p. (MIRA 14:12)

1. Russia (1923- U.S.S.R.) Ministerstvo geologii i okhrany neдр. 2. Ministerstvo geologii i okhrany neдр SSSR (for Titov, Nikolayev).

(Prospecting)

SIDOROVA, L. P.

p. 4

PHASE I BOOK EXPLOITATION

790

Akademiya nauk SSSR. Otdeleniye khimicheskikh nauk

Deystviye ioniziruyushchikh izlucheniya na neorganicheskiye i organicheskiye sistemy (Effect of Ionizing Radiation on Inorganic and Organic Systems)
Moscow. Izd-vo AN SSSR, 1958. 416 p. 7,000 copies printed.

Resp. Ed.: Pshezhetskiy, S. Ya.; Ed. of Publishing House: Bugayenko, L.T.;
Tech. Ed.; Prusakova, T. A.

PURPOSE: This publication is for scientists working in the field of radiochemistry.

COVERAGE: This collection of articles represents contributions of Soviet scientists in the field of radiochemistry. The papers are concerned with the effect of ionizing radiation on organic and inorganic substances in solutions and in the solid phase. These papers were completed in the years 1951 - 1956 at the Institute of Physical Chemistry, AS USSR, the Institute of Physics and Chemistry imeni L. Ya. Karpov, the Moscow State University, and other scientific institutions. Most of these works are a continuation of those published in "Sbornik rabot po radiatsionnoy khimii" published in 1955. Ts. I. Zalkind and Yu. M. Malinskiy cooperated in the editing of this symposium.

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Effect of Ionizing Radiation (Cont.)

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TABLE OF CONTENTS:

PART 1. REACTIONS IN AQUEOUS SOLUTIONS
AND RADIATION AND ELECTRO-CHEMICAL PROCESSES

Preface

Duzhenkov, V.I., Dolin, P.I. Effect of X-ray Irradiation on Aqueous
Alkali Solutions Saturated With Oxygen

7

The kinetics of accumulation of molecular products formed in the radiolysis of water are studied in this paper. These products are: hydrogen peroxide and hydrogen. The absorption of oxygen in high-purity alkali solutions saturated with oxygen was also taken into consideration. It was determined that the initial yield of hydrogen depends on the concentration of the irradiated KOH solution only for concentrations up to 0.6 - 0.7 N KOH. The same relation was found for H_2O_2 . The material balance of the molecular products showed a strong deviation towards excessive absorption of oxygen. This fact was explained as the formation of higher peroxides, probably HO_2 or the complex $H_2O_2 \cdot HO_2$.

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Effect of Ionizing Radiation (Cont.)

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There are 4 figures and 8 references, of which 6 are Soviet and 2 English.

Gvozdev, B.A., Shubin, V.N. Effect of Accelerated Electrons on Potassium Permanganate Solutions

12

The reduction of aqueous KMnO_4 solutions by accelerated electrons in the concentration range of 10^{-5} to $3 \cdot 10^{-1}$ M is discussed in this paper. The yield of the reaction $\text{Mn(VII)} \longrightarrow \text{Mn(IV)}$ is determined from the relation between the amount of reduced permanganate and the amount of energy absorbed by the solution. The authors explain the effect of the acidity of the solution (in the range $\text{pH} = 0.4$ to 12) on the rate of reduction. The maximum yield was observed for $\text{pH} = 2.05$. It was determined that the yield of reaction does not depend on the dosage rate in the range from $\sim 10^{17}$ to $\sim 10^{20}$ eV/ml.sec for electron energies from 0.1 to 0.7 Mev. There are 8 figures, 3 tables, and 7 references, of which 4 are Soviet, 2 English, and 1 Polish.

Card 3/31

AUTHORS: Sidorova, L. P., Zimin, A. V.,
Proskurnin, M. A. SOV/78-3-12-30/36

TITLE: The Effect of γ -Radiation From Co^{60} on Aqueous Solutions
of Tin and Titanium (Deystviye γ -izlucheniya Co^{60} na vodnyye
rastvory soley olova i titana)

PERIODICAL: Zhurnal neorganicheskoy khimii, 1958, Vol 3, Nr 12,
pp 2793-2797 (USSR)

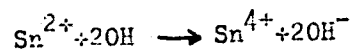
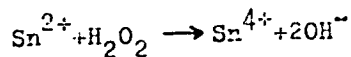
ABSTRACT: The radiolysis of aqueous solutions of Sn^{2+} , Ti^{3+} , Ti^{4+} and
suspensions of $\text{Sn}(\text{OH})_2$ and $\text{Ti}(\text{OH})_3$ was investigated. Co^{60} was
used as the source of the gamma radiation. The relationship
between the generation of hydrogen and the variation in the
 Sn^{2+} -ion concentration upon the amount of energy absorbed was
investigated. It was found that a change in the sulfuric acid
concentration from 1-4 N did not influence the yield of hydrogen.
The addition of Fe^{2+} (10^{-3} and 10^{-2} mole) did not interfere with
the yield of hydrogen. In the radiolysis of aqueous solutions
of Sn^{2+} mainly water and Sn^{2+} -ions arise, and these latter are

Card 1/3

The Effect of γ -Radiation From Co^{60} on
Aqueous Solutions of Tin and Titanium

SOV/78-3-12-30/36

further oxidized to Sn^{4+} according to the following reactions:



In the irradiation of the suspension of $\text{Sn}(\text{OH})_2$ in weakly alkaline solution the reduction to metallic tin proceeds more quickly and intensively than it does in weakly acidic solution. In irradiating Ti^{3+} solution it was found that in the region of concentration of 1-4 N HCl and H_2SO_4 no significant change in the hydrogen generation occurs. With an increase in the Ti^{4+} concentration the yield of molecular hydrogen decreases as a result of the interaction of the Ti^{4+} -ions with atomic hydrogen according to the equation:



In irradiating 10^{-2} molar Ti^{4+} solutions in 4N HCl hydrogen and

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The Effect of γ -Radiation From Co^{60} on
Aqueous Solutions of Tin and Titanium

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oxygen form with the following yields:

$$G_{\text{H}_2} \sim 0.2 \text{ moles/100eV} \quad \text{and} \quad G_{\text{O}_2} \sim 0.05 \text{ moles/100eV}$$

No metallic titanium forms as a result of irradiating a suspension of $\text{Ti}(\text{OH})_3$.

It was found that in 10^{-2} and 0.1m solutions of Ti^{3+} in hydrochloric acid solution the radiolysis of the water amounts to 5.0 mole/100eV and in sulfuric acid solution to 4.2 mole/100eV. There are 6 figures, 1 table, and 16 references, 8 of which are Soviet

SUBMITTED: February 1, 1958

Card 3/3

29128

S/020/62/144/003/022/030
B119/B101

5.4600

AUTHORS: Zimin, A. V., Verina, A. D., Sidoreva, L. P., and
Gubanova, A. V.TITLE: Radiochemical synthesis of organosilicon and
organofluorosilicon compoundsPERIODICAL: Akademiya nauk SSSR. Doklady, v. 144, no. 3, 1962,
576-578

TEXT: Compounds of the type C_nH_{2n} , $C_nH_{2n-m}F_m$, C_6H_6 and C_6H_5Cl on the one hand, $HSiCl_3$, H_2SiCl_2 , CH_3SiHCl_2 and $C_2H_5SiCl_2H$ on the other, were made to react mutually under the action of γ -rays (Co^{60}) at $+20^\circ C$ and $+70^\circ C$. The resulting reaction products were fractionated by multiple condensation. The individual components were subjected to elementary analysis. Molecular weight, density, refractive index, and molar refraction were determined. A number of known compounds and the new compounds $(C_3HF_6)SiCl_3$ ($d^{20} =$

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S/020/62/144/003/022/030-
B119/3101

Radiochemical synthesis of ...

$d^{20} = 1.5170$, $n_D^{20} = 1.3610$, $MR = 39.06$, b. p. $84^\circ\text{C}/756.5$ mm Hg); $(\text{C}_3\text{HF}_6)_2\text{SiCl}_2$
 $(d^{20} = 1.7202$, $n_D^{20} = 1.3413$, $MR = 49.39$, b. p. $160^\circ\text{C})$; $(\text{C}_3\text{HF}_6)\text{CH}_3\text{SiCl}_2$
 $(d^{20} = 1.4610$, $n_D^{20} = 1.3338$, $MR = 39.61$, b. p. $94^\circ\text{C}/749$ mm Hg);
 $(\text{C}_3\text{HF}_6)\text{C}_2\text{H}_5\text{SiCl}_2$ ($d^{20} = 1.4342$, $n_D^{20} = 1.3710$, $MR = 44.107$, b. p. $110-112^\circ\text{C}/$
 752 mm Hg), and $\text{C}_2\text{HF}_4\text{ClSiCl}_2$ ($d^{20} = 1.5138$, $n_D^{20} = 1.3645$, $MR = 34.718$)

were found. This synthetic method can be applied where the polymerization rate of olefins is lower than their reaction rate with chloro silanes. The radiation chemical yield (G) and the quantitative yield in reaction products depend on the molar quantitative ratio of the initial substances (optimum: 1 olefin molecule per H atom of chloro silane). The change of reaction temperature does not affect the radiation chemical yield of perfluoro (alkyl-dialkyl) chloro silanes (G = 80 - 100 molecules/100 ev) and aryl chloro silanes (G = 6 - 10 molecules/100 ev). With (alkyl-dialkyl) chloro silanes, G increases from 8-10 molecules/100 ev at 20°C to 160-210 molecules/100 ev at 70°C . There is 1 table. The most important English-language reference is: A. K. El-Abbady, . . .

Card 2.3

Radiochemical synthesis of...

S/020/62/144/003/022/030
B119/B101

L. C. Anderson, J. Am. Chem. Soc. 80, 1737 (1958).

ASSOCIATION: Fiziko-khimicheskiy institut im. L. Ya. Karpova
(Physicochemical Institute imeni L. Ya. Karpov)

PRESENTED: January 17, 1962, by V. A. Kargin, Academician

SUBMITTED: January 12, 1962

Card 3/3

ZIMIN, A.V.; VERINA, A.D.; SIDOROVA, L.P.; GUBANOVA, A.V.

Radiation-induced chemical synthesis of organosilicon and
silicon fluoroorganic compounds. Dokl.AN SSSR 144 no.3:576-
578 My '62. (MIRA 15:5)

1. Fiziko-khimicheskiy institut im. L.Ya.Karpova. Predstavleno
akademikom V.A.Karginym.
(Silicon organic compounds) (Radiochemistry)

L 19461-65 EWT(m)/EWP(t)/EWP(b) IJP(c) JD

ACCESSION NR: AP4044671

S/0120/64/000/004/0084/0086

AUTHOR: Wang, Ts'ien-wa; Sidorov, A. I.; Sidorova, L. P.; Simonova, L. I.

TITLE: Method of producing silicon spectrometric detectors with a broad region of the sensitive layer

27, 27

SOURCE: Priboiy* i tekhnika eksperimenta, no. 4, 1964, 84-86

TOPIC TAGS: spectrometric detector, silicon spectrometric detector

ABSTRACT: The development of detectors from Si compensated with Li and having practically no dead layer is reported. The detectors are based on a "new phenomenon" observed by the authors in the course of their experiments with drifting Li ions in Si. At a temperature of 125C and lower and at a voltage over 200 v, the entire high-resistance region had electron-type conductivity. This fact facilitates bringing the space-charge layer to the surface; after removing a thin p-region, a surface-barrier junction can be created by spraying gold. The

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L 19461-65

ACCESSION NR: AP4044671

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resulting material has a very high resistivity. A theoretical explanation of the phenomenon is offered. "The authors wish to thank B. M. Golovin, B. P. Osipenko and I. V. Sizov for their interest in the work, and also to thank other workers of the Semiconductor Group of the Nuclear-Reaction Laboratory." Orig. art. has: 4 figures and 7 formulas.

ASSOCIATION: Ob"yedinenny*y institut yaderny*kh issledovaniy (Joint Nuclear Research Institute)

SUBMITTED: 25Jul63

ENCL: 00

SUB CODE: EC, NP

NO REF SOV: 003

OTHER: 006

Card 2/2

SHEROVA, L.V.

Winter flow of the glacial rivers of Transcaucasia. Trudy
Tbilniskoi nauchno-issledovatel'skoi gidrometeorologicheskoi
akademii (1963) (MIRA 11:8)

L. Zakavkazskiy nauchno-issledovatel'skiy gidrometeorologicheskii
institut.

SIDOROVA, L.V.

Applicability of statistical generalization charts for the calculation of the annual distribution of flow of mountain rivers. Sbor. rab. po gidrol. no.4:72-79 '64.

(MIRA 19:1)

1. Zakavkazskiy nauchno-issledovatel'skiy gidrometeorologicheskii institut.

CHANTLADZE, Z.I.; SIDOROVA, L.V.

Annual change in the mineralization of water of the rivers
of Georgia. Sbor. rab. po gidrol. no.4:134-140 '64.

(MIRA 19:1)

1. Zakavkazskiy nauchno-issledovatel'skiy gidrometeorologi-
cheskiy institut.

SIDE . . .

... characteristics of the regime of the year-to-year streamflow
of the southern slopes of the central Caucasus. Tsidy TbilNIGMI
(MIRA 18:10)
... 1964.

SIDOROVA, M.

Formation and plann'ng of public consumption funds on collective farms. Vop. ekon. no.10:91-96 0 '61. (MIRA 14:10)
(Collective farms)

SHAUROV, N.I., polkovnik; SIDOROVA, M.A., starshiy nauchnyy sotrudnik;
POPOV, V.A., redaktor; BOGOROLOVA, M.F., redaktor; ZUDAKIN, I.M.,
tekhnicheskiiy redaktor

[Aeronautics and aviation in Russia to 1907; a collection of
documents and papers] Vosdukhoplavaniye i aviatsiya v Rossii do 1907 g.;
sbornik dokumentov i materialov. Pod red. V.A.Popova. Moskva, Gos.
izd-vo obor. promyshl., 1956. 951 p. (MLRA 10:2)

1. Russia (1923- U.S.S.R.) Tsentral'nyy gosudarstvennyy voyenno-
istoricheskiiy arkhiv. Glavnoye arkhivnoye upravleniye.
(Aeronautics--History)

VENZHER, V.G., doktor ekon.nauk, nauchnyy sotrudnik; KOZLOV, M.I., kand.
ekon.nauk, nauchnyy sotrudnik; SEMENOV, S.I., kand.sel'skokhoz.
nauk, nauchnyy sotrudnik; SIDOROVA, M.I., kand.ekon.nauk, nauchnyy
sotrudnik; BANNIKOV, N.A., red.; GUREVICH, M.M., tekhn.red.;
ZUBRILINA, Z.P., tekhn.red.

[Production expenditures and the cost of products on collective
farms] Izderzhki proizvodstva i sebestoimost' produktsii v kol-
khozakh. Moskva, (os.izd-vo sel'khoz.lit-ry, 1960. 256 p.
(MIRA 13:5)

1. Akademiya nauk SSSR. Institut ekonomiki. 2. Institut ekonom
Akademii nauk SSSR. (for Venzher, Kozlov, Semenov, Sidorova).
(Collective farms--Costs)

LAPTEV, I.D., starshiy nauchnyy sotr.; BUYANOV, P.S., starshiy nauchnyy sotr.; KASSIROV, L.N., starshiy nauchnyy sotr.; TERYAYEVA, A.P., starshiy nauchnyy sotr.; SUVOROVA, L.I., starshiy nauchnyy sotr.; SIDOROVA, M.I., starshiy nauchnyy sotr.; SEMIN, S.I., starshiy nauchnyy sotr.; Prinsipali uchastiye: ARKHIPOV, A.I., mladshiy nauchnyy sotr.; VAZYULYA, P.F., mladshiy nauchnyy sotr.; KARLYUK, I.Ya., mladshiy nauchnyy sotr.; KARDIAUKHOVA, Ye.I., mladshiy nauchnyy sotr.; KRYLOVA, T.N., mladshiy nauchnyy sotr.; ROMANOVSKAYA, L.S., mladshiy nauchnyy sotr.; CHISTOV, G.N., mladshiy nauchnyy sotr.; POTAPOV, Kh.Ye., red.; GERASHILOVA, Ye.S., tekhn. red.

[Communal funds of collective farms and the distribution of collective farm income] Obshchestvennye fondy kolkhozov i raspredelenie kolkhoznykh dokhodov. Moskva, Izd-vo ekon. lit-ry, 1961. 386 p. (MIRA 15:3)

1. Akademiya nauk SSSR. Institut ekonomiki. 2. Sektor ekonomiki sel'skogo khozyaystva Instituta ekonomiki Akademii nauk SSSR (for Laptev, Buyanov, Kassirov, Teryayeva, Suvorova, Sidorova, Semin).
(Collective farms--Income distribution)

LAPTEV, I.D.; TERYAYEVA, A.F.; SAPIL'NIKOV, N.G.; CHENTSOV, R.Ye.
[deceased]; SEPP, Ya.P.; SUVOROVA, L.I.; ZASLAVSKAYA, T.I.;
GREKOVA, A.I.; TONKOVICH, V.S.; IBRAGIMOV, A.I.; KOTSYUBA,
T.Ya.; KURYLEV, V.M.; KOVALEVSKIY, G.T.; KALNYNSH, A.A.
[Kalnins, A.]; SIDOROVA, N.I.; MALISHAUSKAS, V.I.
[Malisauskas, V.]; PASECHNIK, P.P.; BUGAREVICH, V.S.;
KARNAUKHOVA, Ye.I.; ABEF'YEV, T.I.; KAZAKOV, I.G.;
GUMOVSKIY, I.A.; SEMIN, S.I., red.; LINKUMA, N.I., red.;
TSITKO, I.A., red.; VOLKOVA, V.V., tekhn. red.

[Material incentives for developing the collective farm produc-
tion] Material'noe stimulirovanie razvitiia kolkhoznogo pro-
izvodstva. Moskva, Izd-vo AN SSSR, 1963. 326 p. (MIRA 16:12)

1. Akademiya nauk SSSR. Institut ekonomiki. 2. Institut eko-
nomiki AN SSSR (for Laptev, Teryayeva, Suvorova, Zaslavskaya,
Sidorova, Karnaukhova). 3. Sredneaziatskiy gosudarstvennyy uni-
versitet (for Sapil'nikov). 4. Komi filial AN SSSR (for Chentsov).
5. Institut ekonomiki AN Estonskoy SSR (for Sepp). 6. Bashkirskiy
filial AN SSSR (for Grekova). 7. Institut ekonomiki AN Belo-
russkoy SSR (for Tonkovich, Kovalevskiy). 8. Institut ekonomiki
AN Uzbekskoy SSR (for Ibragimov)

(Continued on next card)

LAFTEV, I.D.--- (continued). Card 2.

9. Institut ekonomiki AN Ukr.SSR (for Kotsyuba, Pasechnik).
10. Belorusskiy institut ekonomiki i organizatsii sel'sko-khozyaystvennogo proizvodstva (for Bugarevich).
11. Vsesoyuznyy institut sakharnoy svekly (for Aref'yev).
12. Institut ekonomiki AN Kirgizskoy SSR (for Kazakov).
13. Rabotnik Tsentral'nogo Komiteta Kommunisticheskoy partii Moldavskoy SSR (for Gumnovskiy).
14. Kuybyshevskiy planovyy institut (for Kurylev).
(Collective farms--Income distribution)

68229

5(2) 5.2300
AUTHORS:

Ambrozhiy, M. N.,
Luchnikova, Ye. F., Sidorova, M. I.

S/078/60/005/02/020/045
B004/B016

TITLE:

The Thermal Decomposition of Carbonates of Rare Earths¹⁷ of the Cerium¹⁸ Subgroup

PERIODICAL:

Zhurnal neorganicheskoy khimii, 1960, Vol 5, Nr 2, PP 366-371
(USSR)

ABSTRACT:

The authors investigated the thermal behavior of the carbonates of La, Ce, Pr, Nd, and Sm. The analyses of these substances are given in table 1. L. S. Shrayber took the thermograms (Figs 1-5) by means of the Kurnakov pyrometer. Table 2 presents the data of thermal dissociation of the carbonates, and table 3 the temperatures, at which the decomposition is completed. The decomposition proceeds according to the following scheme:
a) Discharge of the crystal water, b) formation of intermediates, except for $Sm_2(CO_3)_3$, c) formation of the oxide.

Card 1/2

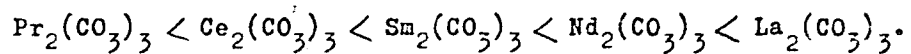
As far as the thermal stability is concerned, the compounds investigated may be arranged in the following order:

The Thermal Decomposition of Carbonates of
Rare Earths of the Cerium Subgroup

68229

S/078/60/005/02/020/045

B004/B016



There are 5 figures, 3 tables, and 11 references, 7 of which
are Soviet.

ASSOCIATION: Saratovskiy gosudarstvennyy universitet im. N. G. Cherny-
shevskogo (Saratov State University imeni N. G. Chernyshevskiy)

SUBMITTED: September 26, 1958

Card 2/2

DYKHANOV, M.N.; SIDOROVA, M.I.

Synthesis of 2,4-dichlorobenzoic acid. Med.prom. 10 no.4:11-14
O-D '56. (MLRA 10:2)

1. Tsentral'naya laboratoriya Moskovskogo khimiko-farmatsevticheskogo
savoda "Akrikhin".
(BENZOID ACID)

СИДОРОВА, Л.С., СУТЯГОВ, Ye.I.

influence of concentration polarization upon the electrochemical
activity of membranes. Vest. AGU 19 no.22:87-87 '64
(MIRA 18:1)

FRIDRIKHSBERG, D.A.; SIDOROVA, M.P.

Relationship between the phenomenon of induced polarization and
the electrokinetic properties of capillary systems. Vest.LGU 16
no.4:57-69 '61. (MIRA 14:3)

(Polarization (Electricity))
(Capillarity)

KAUFMAN, B., kand. tekhn. nauk; LINETSKIY, Ya., inzh.; GUTINA, M., inzh.; SIDOROVA,
No. inzh.

Insulating materials for layered exterior elements of buildings.
Zhil. stroi. no. 1:10-12 '63. (MIRA 16:2)
(Insulating materials)

LAZAREVICH, S.K., kand.tekhn.nauk; REKITAR, Ya.A., starshiy nauchnyy sotrudnik, kand.ekonomicheskikh nauk; BOBYLEVA, N.M., inzh.; SIDOROVA, N.A., ekonomist

Comparative economic efficiency of various wall materials used in large-panel construction. Stroi. mat. 7 no.9:6-9 S '61.

(MIRA 14:11)

1. Rukovoditel' sektora ekonomiki proyektnykh resheniy Nauchno-issledovatel'skogo instituta ekonomiki stroitel'stva Akademii stroitel'stva i arkhitektury SSSR (for Lazarevich). 2. Nauchno-issledovatel'skiy institut ekonomiki stroitel'stva (for Rekitar).

(Building materials) (Walls)

SIDOROVA, N.B., uchitel'nitsa

Forest festival in a school. Biol. v shkole no.5:62 S-0 '61.
(MIRA 24-9)

1. Srednyaya shkola No.173, Leningrad.
(Natural resources)

PA 163T46

SIDOROVA, N. D.

USSR/Medicine - Meningitis
Streptomycin
Jan/Feb 50

"Treatment of Tubercular Meningitis in Children
With Streptomycin," N. D. Sidorova, Asst, Chair
of Children's Diseases, Khar'kov Med Inst

"Yop Ped i Okhran Mater i Det" No 1, pp 39-42

Discusses results in 58 cases of course of treat-
ment involving suboccipital and later endolumbar
injection of streptomycin. Treatment produced
changes in course of disease for most part in di-
rection of progressive improvement. Found early
treatment sharply decreases mortality rate,

163T46

USSR/Medicine - Meningitis
(Contd.)
Jan/Feb 50

before 10th day of disease 36 %, and thereafter
86 %. Found treatment considerably less effec-
tive on very young children. Chief, Chair of
Children's Diseases: Prof Ye. Ye. Granat.

163T46

PROCESSES AND PROPERTIES

a3

BC

Condensation of alcohols with aromatic compounds in presence of aluminum chloride. VI. Alkylation of halogen-substituted aromatic hydrocarbons with alcohols. I. P. TUREVYANIK, IX. Condensation of 2-methylcyclohexanone, menthol, and bornol with benzene and toluene. I. P. TUREVYANIK and N. G. SEMENOVA. *J. Gen. Chem. Russ.*, 1939, 8, 1612-1615, 1619-1620. VI. Alcohols and PCl_5 heated at 100° with AlCl_3 yield $\text{p-C}_6\text{H}_4\text{R-Cl}$ ($\text{R} = \text{Et}^n$, $\text{tert-C}_4\text{H}_9$, Pr^n , Bu^n , isop), b.p. 212-216°. $\text{o-C}_6\text{H}_4\text{MeCl}$ similarly yields

2-chloro-*tert*-butyltoluene, b.p. 225-230/720 mm., and 1- $\text{C}_6\text{H}_4\text{Cl}$ gives 1-chloro-*isopropyl*, b.p. 310-312°, and *tert*-amyl-naphthalene, b.p. 305-310°.

IX. Cyclic alcohols and aromatic hydrocarbons are condensed in presence of AlCl_3 at 100° . 2-Methylcyclohexanone and C_6H_6 give methylcyclohexylbenzene, b.p. 142-145/36 mm., and a mixture of *m*- and *p*-di(methylcyclohexyl)benzene; with PhMe a mixture, b.p. 182-184/32 mm., of *m*- and *p*-methylcyclohexylbenzene was obtained. Menthol gives methylcyclohexane with C_6H_6 and a mixture, b.p. 183-185/30 mm., of *m*- and *p*-methylcyclohexane with PhMe . Bornol reacts similarly to menthol. R. T.

METALLURGICAL LITERATURE CLASSIFICATION

Condensation of alcohols with aromatic hydrocarbons in the presence of aluminum chloride. Condensation of cycloheptanol with benzene and toluene. N. G. Sidkova and I. P. Tskervanik. *J. Gen. Chem.* (U. S. S. R.) 10, 2073 (1940). A yield of 46-50% of cycloheptylbenzene (I) and cycloheptyltoluene (II) was obtained on condensation of cycloheptanol (III) with benzene (IV) and toluene (V). III was prepd by the reduction of cycloheptanone by the method of Mowettig and Burger (C. A. 24, 6767); 10 g of III, 12 g. AlCl₃ and 100 ml. IV yielded 7 g. I, b.p. 132.5°, d₄²⁰ 0.9410, n_D²⁰ 1.5217, M_R 261.2, calcd 261.43. Oxidizing I with 15% HNO₃ in sealed tubes at 140-50° yielded H₂O₂, m. 119°. *p*-Cycloheptylnitrobenzene (VI) was obtained on nitrating I with a nitration mix. VI, b.p. 233-10°. Oxidizing VI with 15% HNO₃ in sealed tubes gave *p*-O₂NC₇H₁₃CO₂H, m. 230°. The *p*-amino deriv. (VII) of I was obtained on reduction of VI with Sn and HCl, and was purified by steam distn. The benzene of VII (from alc.) m. 173°; acetate (from 50% alc.) m. 130.7°. The acetamin and benzamide derivatives of phenylcyclohexylmethane (VIII) and 1-methyl-2-phenylcyclohexane (IX), which were specially prepd., differed from the derivs. of I. Synthesis of VIII. Phenylcyclohexylcarbinol (X) was obtained by Grignard's reaction from 10 g. Mg, 0.8 g. bromocyclohexane, 43 g. BrH in 100 ml. of abs. ether. The yield was 31.5 g. (45.5%), b.p. 140-42°. Ph cyclohexyl ketone (XI) was formed by the oxidation of X. To 31.5 g. of the heated X was added dropwise 18.5 g. Na₂Cr₂O₇ in 45 ml. of H₂O and 43 ml. H₂SO₄. The reaction product was extracted with ether. After the ether was evaporated, thin needles of XI, m. 54°, were obtained. The yield was 31 g. (91%). Phenylcyclohexylmethane (XII) was obtained by the reduction of XI by the Clemmensen method. The yield was 32%, XII, b.p. 137°, d₄²⁰ 0.9430, n_D²⁰ 1.5255, M_R 261.48, calcd 261.43. The (nitrophenyl)cyclohexylmethane, b.p. 181-02°. The corresponding amine was obtained on reduction with Sn and HCl. The *N*-H₂ deriv. (from dil. alc.) m. 101-2°. The *N*-Ac deriv. (from dil. alc.) m. 170-1.

Synthesis of IX. 3-Methyl-2-phenylcyclohexane (XIII) was obtained by Grignard's reaction from 1 g. Mg, 20 g. bromobenzene and 18 g. of 2-methylcyclohexanone in 30 ml. of abs. ether. The yield was 12 g. (42%), b.p. 112-15°. 1-Methyl-2-phenylcyclohexane (XIV) was obtained on heating 12 g. of XIII with 12.5 ml. H₂ (d. 1.7) and 0.75 g. of red P in a sealed tube, for 6 hrs., at 160-200°. XIV, b.p. 91-2°, d₄²⁰ 0.9360, n_D²⁰ 1.5100, M_R 261.75, calcd 261.43. The nitro and the corresponding amino compds. were obtained from XIV by the usual method. The *N*-H₂ deriv., m. 169-1°. The *N*-Ac deriv. was a liquid, b.p. 195-200°. It was obtained on treating 5 g. of III with 50 ml. of V and 6 g. of AlCl₃. The yield was 1 g. of II (a mixt. of *m*- and *p*-isomers), b.p. 110-12°, d₄²⁰ 0.9450, n_D²⁰ 1.5245, M_R 261.81, calcd 261.65. It oxidized with dil. HNO₃ yielded a mixt. of *tert*- and *isophthalic* acids, which were identified by their di-Me esters. The conclusion is drawn that the conversion of the 7-membered ring to a 6-membered ring on condensation of III with IV and V proceeds only to a small extent.

James J. Lichten

USSR/Chemistry - Alkylation
Chemistry - Benzene

Feb 49

"Alkylation of Benzene in the Presence of $\text{HSO}_4\text{AlCl}_2$,"
N. G. Sidorova, Ye. A. Vdortsova, Lab Org Chem, Cen
Asia State U, 5 pp

"Zhur Obsuch Khim" Vol XIX, No 2

Studied alkylation of benzene by olefins, halogen
derivatives, and alcohols in presence of $\text{HSO}_4\text{AlCl}_2$.
Showed that condensation proceeds well with olefins
(yield of alkylation products 78 - 86% of theoretical)
and halogen derivatives (yield of 60 - 83% of
theoretical). Reaction with alcohols is poor: primary

46/49115

USSR/Chemistry - Alkylation (Contd)

Feb 49

alcohols do not yield to alkylation, secondary ones
yield poorly (5% yield), while tertiary produce up
to 50% of the yield of alkylbenzenes. Para-isomers
form during alkylation in presence of $\text{HSO}_4\text{AlCl}_2$.
 $\text{HSO}_4\text{AlCl}_2$ causes partial isomerization of radicals.
Submitted 29 Oct 47.

46/49115

SILCROVA, N. G.

USSR/Chemistry - Alkylation

May 51

"Cyclodalkylation of Aromatic Compounds. IV. Condensation of 1-Methylcyclohexanol-1 With Benzene, Toluene, and Phenol," N. G. Sidorova, Lab of Org Chem, Cen Asia State U

"Zhur Obshch Khim" Vol XXI, No 5, pp 869-874

Condensation of 1-methylcyclohexanol-1 with C_6H_6 and $C_6H_5CH_3$ in presence of $AlCl_3$ yielded 1-methyl-1-phenylcyclohexane (I), with C_6H_5OH in presence of H_2PO_4 yielded 61% p-(1-methylcyclohexyl)-phenol (II) and 18% 1-methylcyclohexyl ester of phenol (III)

182136

USSR/Chemistry - Alkylation (Contd)

May 51

fully isomerizes into II on distn). Products characterized by prepn of derivs. Identity of II with product of diazotization of p-(1-methylcyclohexyl)aniline shown.

182136

SIDOROVA, N. G.

SIDOROVA
SIDOROVA, N.G.



Chemical Abst.
Vol. 48 No. 5
Mar. 10, 1954
Organic Chemistry

Alkylation of aromatic compounds in the presence of
phosphoric acid via polyalkylation of phenol. N. G.
Sidorova. *J. Gen. Chem. U.S.S.R.* 22, 1018-18 (1953).
(Engl. translation).—See *C.A.* 47, 8034e. H. L. H.

8-31-54
H

SIDOROVA, N. G.; GREBENYUK, A. D.

Hexane

Cycloakylation of aromatic compounds. Part 5. Synthesis of trans-1-methyl-4-phenylcyclohexane. Zhur. ob. khim. 22 no. 9, 1952

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

USSR

Alkylation of aromatic hydrocarbons with halo derivatives in the presence of metallic aluminum. N. G. Sidorova, I. P. Trubervanik, and Z. Kh. Abidova. *Doklady Akad. Nauk USSR*, S.S.S.R. 1953, No. 5, 33-7; *Referat. Zhur., Khim.* 1954, No. 10235.—Condensation of a no. of chloro- and bromoalkyls with C_6H_6 and PhMe in the presence of metallic Al gave 47-81% monoalkylated products. The reaction required 0.01 g.-atom Al as freshly prepd. filings per mole of halo compd. Alkylation was partly accompanied by isomerization of primary into secondary alkyls. The reaction apparently proceeds through the formation of Al org. intermediates such as RA_2Cl and R_2AlCl . C_6H_5 23, Al 0.3, and BuBr (part of it added initially and the balance dropwise after the start of the reaction) 30 g. heated for 2 hrs. at 70° gave 51% BuPh (I), b_m 170-1°, n_D^{20} 1.4920, d_4^{20} 0.8631, and 20% C_6H_4 Bu, b. 178-240°. BuCl 24, C_6H_5 60, and Al 0.3 g. heated 30 min. at 70-80° produced 81.2% I. Nitration of I produced 54% *p*-nitro-*sec*-butylbenzene, b. 132-4°, n_D^{20} 1.5320, d_4^{20} 1.0661; this with Sn and HCl produced *p*-*sec*-butylaniline b_m 244-5°, n_D^{20} 1.6300, d_4^{20} 0.9770; *p*-*sec*-butylacetanilide, m. 125-6°; and *p*-*sec*-butylbenzamide, m. 181° (from alc.). BuBr 30, PhMe 30, and Al 0.3 g. heated for 2 hrs. at 70° gave 04.3% BuC₆H₄Me (II), b_m 190-3°, n_D^{20} 1.4920, d_4^{20} 0.8592. BuCl 12, PhMe 15, and Al 0.15 g. heated for 1.5 hrs. at 70-80° gave 62.5% II, b. 190-200°. AmCl 11.5, C_6H_5 60, and Al 0.1 g. heated for 2 hrs. at 70-80° gave a mixt. of 66% amylbenzenes, b_m 190-3°, n_D^{20} 1.4930, d_4^{20} 0.8628. n -C₆H₁₁Cl 27, C_6H_5 23, and Al 0.3 g. produced 47% *sec*-octylbenzene, b. 242-5°, n_D^{20} 1.4850, d_4^{20} 0.8601. PhCH₂Cl 25, C_6H_5 150, and Al 0.1 g. heated to 70° and the reaction continued for 50 min. at 15° produced Ph₂CH₂, b_m 250-60°, m. 20°. A cooled soln. of EtCl in 75 g. of C_6H_6 added over a period of 2 hrs. at 40° to 0.3 g. of Al produced 73.7% PhEt, b_m 134-6°, n_D^{20} 1.4950, d_4^{20} 0.8620, and a mixt. of 14% C_6H_5 Et, b. 180-90°, after a repeated distn. b_m 180-5°, n_D^{20} 1.5020, d_4^{20} 0.8630. M. Hosh

SIDOROVA, N.G.; DUBNIKOVA, Ye.A.

Cycloalkylation of aromatic compounds. Part 6. Condensation of 1-methyl-
cyclopentanol and 1-chlor-1-methylcyclopentane with benzene. Zhur.ob.khim.
23 no.8:1399-1401 Ag '53. (MLRA 6:8)

1. Sredneaziatskiy Gosudarstvennyy universitet.
(Condensation products (Chemistry)) (Aromatic compounds)
(CA 47 no.22:12268 '53)

SIDOROVA, N. G.

USSR/Chemistry - Alkylation

Sep 53

"Cycloalkylation of Aromatic Compounds. VII. Condensation of Cyclohexanol with Chlorobenzene," N.G. Sidorova and I.S. Lapovok, Lab of Org Chem, Central Asiatic State Univ

Zhur Obshch Khim, Vol 23, No 9, pp 1509-1512

It has been shown that the alkylation of aromatic hydrocarbons by cyclic alcohols, in the presence of $AlCl_3$, gives good yields of monoalkylated products. This method was tested on halogenated benzenes, especially chlorobenzene (I). The condensation of

268r29

I with cyclohexanol (II) in the presence of $AlCl_3$ was studied, and the conditions which give yields of cyclohexyl chlorobenzene up to 85% of the theoretical were determined. It was shown that condensation conducted under heat results in n-cyclohexyl chlorobenzene, whereas at 0°-20°, a mixture of o-cyclohexyl chlorobenzene and p-cyclohexyl chlorobenzene is obtained, with the latter predominating. The condensation of I with II in the presence of phosphoric acid (III) could not be achieved. III acts as a dehydrating and polymerizing agent.

268r29

Sidorova, N.G.

USSR/Chemistry - Alkylation

Card 1/1 Pub. 151 - 17/36

Authors : Sidorova, N. G.; Tsukervanik, I. P.; and Pak, E.

Title : Alkylation of aromatic hydrocarbons with olefines in the presence of metallic Al and halogen derivatives

Periodical : Zhur. ob. khim. 24/1, 94-96, Jan 1954

Abstract : The possibility of alkylation of aromatic hydrocarbons (benzene) with olefines (ethylene, propylene, isobutylene, isoamylenes and cyclohexene) in the presence of metallic aluminum and additions of halogen derivatives, is explained. The amount of Al used for the alkylation was found to be of no great importance since only a small part of it enters into reaction. Room temperature was found to be the most favorable condition for the reaction with low-molecular olefines; high temperature was required for olefines with higher molecular weight. The results obtained from such alkylation are listed. Five references: 3-USSR and 2-German (1895-1953). Tables.

Institution : Central Asiatic State University, Laboratory of Organic Chemistry

Submitted : July 1, 1953

Sidorova, N. G.

USSR/Chemistry - Condensation

Card 1/1 Pub. 151 - 13/38

Authors : Sidorova, N. G.

Title : Cycloalkylation of aromatic compounds. Part 8.- Condensation of 2-methylcyclohexanol and 3-methylcyclopentanol with benzene

Periodical : Zhur. ob. khim. 24/2, 255-259, Feb 1954

Abstract : The condensation of 2-methylcyclohexanol and 3-methylcyclopentanol, with benzene in the presence of $AlCl_3$, was investigated at different conditions. The two reaction tendencies observed in the case of 2-methylcyclohexanol are explained. The products obtained during smooth and rigid reaction conditions are listed. It was observed that the condensation of 3-methylcyclopentanol with benzene is not accompanied by any noticeable isomerization of the alcohol radical. The stereoisomeric product obtained in the latter case is described. Ten references: 5-USSR; 2-USA and 3-German (1924-1953).

Institution: Central Asiatic State University, Laboratory of Organic Chemistry

Submitted : July 1, 1953

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

Abst Journal: Referat Zhur - Khimiya, No 19, 1956, 61468

Author: Sidorova, N. G., Feyershteyn, N. M., Kochetkova, E. A.

Institution: None

Title: Cycloalkylation of Aromatic Compounds. IX. Reaction of 1-phenyl-1-cyclohexanol with Benzene

Original

Periodical: Zh. obshch. khimii, 1956, 26, No 1, 191-197

Abstract: On condensation of 1-phenylcyclohexanol (I) with C_6H_6 in presence of $AlCl_3$ takes place primarily reduction of I to phenylcyclohexane (II). Condensation products consist of 1,3-(III) and 1,4-(IV) di-phenylcyclohexanes (14-22%). Addition to $AlCl_3$ of: water, HCl, Cu_2Cl_2 and $SnCl_4$ has no effect on course of reaction. With $FeCl_3$ is obtained III and phenylcyclohexane (V); with $AlBr_3$ yield of III and IV 26-45% that of II 30-37%. Reduction of I to II by action of $AlCl_3$ takes place also in absence of C_6H_6 in iso-octane (80°, 11 hours), yield 25%. From 0.025 mol I, 0.037 mol $AlCl_3$ in 100 ml

Card 1/2

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

Abst Journal: Referat Zhur - Khimiya, No 19, 1956, 61468

Abstract: ~~On~~ gradual heating to 80° in 3 hours is obtained II, yield 40%, and mixture of III and IV (22%). Dehydrogenation of IV with Se ($340-380^{\circ}$, 2 hours) yields p-terphenyl, while III gives m-terphenyl. 0.05 mol I and 0.05 mol $AlBr_3$ in 100 ml C_6H_6 are left standing for ~12 hours, heated for 7 hours gradually increasing temperature to 80° , produces II, yield 17.5% and mixture of I and IV, yield 36.9%. On increasing amount of $AlBr_3$ to 1.5 equivalents yield of II is 30%, yield of mixture III and IV, 45%. 0.05 mol V in 10 ml C_6H_5 are slowly added to mixture of 0.025 mol $AlCl_3$ in 10 ml C_6H_6 , let stand for 24 hours, heated 4 hours to 80° , produces 13.6% yield of mixture III and IV. Communication VIII, see Referat Zhur - Khimiya, 1954, 34125.

Card 2/2

Sidorova, N. G.

✓ Cycloalkylation of aromatic compounds. IX. Reaction
 of 1-phenylcyclohexanol with benzene. N. G. Sidorova,
 N. M. Pefershtein, and E. A. Kochelkova. *Zhur. Obshch. Khim.*
 26, 191-7; *J. Gen. Chem. U.S.S.R.* 26, 201-6 (1956)
 (Eng. translation); cf. *C.A.* 49, 8152i. Addn. of 6.7 g.
 AlCl₃ to 8.8 g. 1-phenylcyclohexanol (I), and 200 ml. C₆H₆,
 followed by 4 days at room temp. and 30 hrs. at 40-50°,
 finally refluxing until HCl evolution ceased, gave 00%
 phenylcyclohexane and 14.4% isomeric diphenylcyclohex-
 anes; if the reaction mixt. was directly refluxed 3 hrs. the
 yields were 37% and 16%, resp. Under the latter tech-
 nique, 4.4 g. I, 6 g. AlCl₃, and 100 ml. C₆H₆ gave 40% and
 22% yields of the above products, resp. The diphenylated
 product yielded some *p*-diphenylcyclohexane, m. 108°, and
 the *n*-isomer, which was identified after dehydrogenation to
m-terphenyl. Dry HCl was passed for 2 hrs. into 3.35 g.
 AlCl₃ and 50 ml. C₆H₆, after which the dark soln. was treated
 dropwise with 4.4 g. I in 30 ml. C₆H₆, and the mixt. refluxed
 4 hrs. on a steam bath, yielding 35% and 20%, resp., of the
 above products. If the mixt. of I, AlCl₃, and C₆H₆ is treated
 with a few drops of H₂O, then refluxed, the yields are 42% and
 18.5%. Addn. of small amts. of CuCl or SnCl₄ gave similar
 results; FeCl₃ gave 18.6% phenylcyclohexane and some
 diphenylated product. However, heating 8.8 g. I, 8.1 g.
 FeCl₃, and 75 ml. C₆H₆, 4 hrs. at 75° gave 40% phenylcyclo-
 hexane only. I (8.8 g.), 13.5 g. AlBr₃, and 100 ml. C₆H₆,
 kept overnight, then heated 7 hrs. to 80° gave 17.5% phenyl-
 cyclohexane and 30.9% 1,4-diphenylcyclohexane mixed with
 some 1,3-isomer; the use of 1.5 equivs. of AlBr₃ gave
 3% and 45%, resp. To 3.35 g. AlCl₃ and 10 ml. C₆H₆, was
 slowly added 8 g. phenylcyclohexane in 10 ml. C₆H₆, and,
 after 24 hrs., the mixt. heated 4 hrs. at 80°, yielding 56%
 starting hydrocarbon and 13.6% mixed diphenylcyclohex-
 anes. Heating 4.4 g. I in isooctane with 3.35 g. AlCl₃ 11

4

1/2

SIDOROVA, N.G., FEIERSHTEIN, N.M., ...

hrs. at 80° gave 25% phenylcyclohexane and other unidentif-
 ied products. X. Condensation of 1,4-cyclohexanediol
 and 4-chlorocyclohexanol with benzene. N. G. Sidorova
 and Yu. V. Valibekov. *Zhur. Obshchei Khim.* 26, 516-20
 (1956).—To 5.8 g. 1,4-cyclohexanediol suspended in 60 ml.
 C₆H₆ was added 20% AlCl₃ and the mixt. heated 4 hrs. at
 70°; after aq. treatment with HCl there was obtained 10%
 mixt. (I) of 1,3- and 1,4-diphenylcyclohexanes, bp 150-200°
 (dehydrogenation to *m*- and *p*-terphenyl). Similar reaction
 of 4-chlorocyclohexanol gave some phenylcyclohexane (con-
 taminated with phenylcyclohexene) and I. Pure 1,4-cyclo-
 hexanediol m. 168-9°. The use of AlBr₃ gave 43.5% phenyl-
 cyclohexane and 25.5% I. 1,4-Isomer of I stirred in C₆H₆
 with AlCl₃ gave phenylcyclohexane and I. Thus the reac-
 tion results in alkylation with formation of I and in forma-
 tion of phenylcyclohexane contaminated with olefin. The
 yields are moderately affected by reactant proportions.

G. M. Kosolapoff

2/2

PM

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0

SIDOROVA, N.O.; VALIBEKOV, Yu.V.

Cycloalkylation of aromatic compounds. Part 10. Condensation of
1,4-cyclohexanediol and 4-chlorocyclohexanol with benzene. Zhur.
ob.khim. 26 no.2:515-520 F '56. (MLBA 9:8)

1. Sredneaziatskiy gosudarstvennyy universitet.
(Cyclohexanediol)(Cyclohexanol) (Benzene)