

L 51844-65 EWT(m)/EWG(m)/EWP(t)/EWP(b) IJP(c) RDW/JD/JG

ACCESSION NR: AP5011809

UR/0080/65/038/004/0717/0720
546.23+546.65

AUTHOR: Markovskiy, L. Ya.; Soboleva, M. S.; Sapozhnikov, Yu. P.

TITLE: Preparation of rare earth selenides by reduction of selenites

SOURCE: Zhurnal prikladnoy khimii, v. 38, no. 4, 1965, 717-720

TOPIC TAGS: rare earth compound, selenide, lanthanum compound, cerium compound, praseodymium compound, gadolinium compound, neodymium compound, reduction method

ABSTRACT: Selenites of lanthanum, cerium, praseodymium, neodymium, samarium, and gadolinium were reduced with a mixture of hydrogen and hydrogen selenide at 600°C, forming selenides of the general formula M_2Se_3 . Hydrogen selenide was used to minimize the formation of oxyselenides, which were present in the reaction products when hydrogen alone was used. X-ray phase analysis of all products showed various selenide phases in the case of each rare metal. The powder figures for lanthanum and samarium polyselenides had the same system of lines and nearly the same intensities, but differed in interplanar distances. Such distances for the powder patterns of polyselenides of cerium and the other rare earth elements occupy an inter-

Card 1/2

L 51844-65

ACCESSION NR: AP5011809

2

mediate position between the polyselenides of lanthanum and samarium. The patterns for sesquiselenides are very similar to those of the corresponding polyselenides. A comparison of the experimental interplanar distances with those in the literature shows contradictions. The proposed method is suitable for the preparation of high-purity rare earth selenides which can be used as semiconductors and luminescent materials. "In conclusion, the authors express their gratitude to Yu. D. Kondrashev for assistance in taking the powder patterns and for a number of valuable suggestions." Orig. art. has: 1 figure, 2 tables.

ASSOCIATION: Gosudarstvennyy institut prikladnoy khimii (State Institute of Applied Chemistry)

SUBMITTED: 21May63

ENCL: 00

SUB CODE: IC

NO REF SOV: 004

OTHER: 006

Card 2/2

25(6)

SOV/91-59-5-19/27

AUTHOR: Sapozhnikov, Yu.M., Engineer

TITLE: On Thermal Efficiency of Steam-Power Installations of ST Type (O teplovoy ekonomichnosti parosilovykh ustanovok tipa ST)

PERIODICAL: Energetik, 1959, Nr 5, pp 32-33 (USSR)

ABSTRACT: In small enterprises not connected with outside thermal and electric networks, the thermofication aggregates of ST type work in accordance with electric chart and their efficiency directly depends upon parameters of used steam and the graphs of steam loads. The author examines how to find the most economical consumption of steam by means of a thermal balance equation

$$D_{CT}^{MMH} = \frac{d_{CT} N_{CT} (i_{NE} - t_{n.s.}^{CT}) - d_{CK} N_{CK} (i_{NE} - t_{n.B.}^{CK})}{i_{n.B.}^{CK} - t_{n.B.}^{CK}} \text{ kg/h}$$

Card 1/2

wherein d_{CT}^{MMH} is the utilized heat of used steam;

SOV/91-59-5-19/27

On Thermal Efficiency of Steam-Power Installations of ST Type

d_{st} and d_{sk} are specific expenditures of steam for ST and SK in kg/e.l.s./hour; N_{st} and N_{sk} are powers of ST and SK in horsepower; $t_{n.g.}^{st}$, $t_{n.g.}^{sk}$ are temperatures of feed water of the boiler and locomobiles ST and SK in $^{\circ}C$; i_{HE} is the content of heat in overheated steam of both locomobiles in large calories per kg; i_H^K is the content of heat of saturated steam from the boiler, in large calories per kg. The Lyudimovskiy lokomobil'nyy zavod (Lyudinovo Locomobile Plant) is mentioned in the text.

Card 2/2

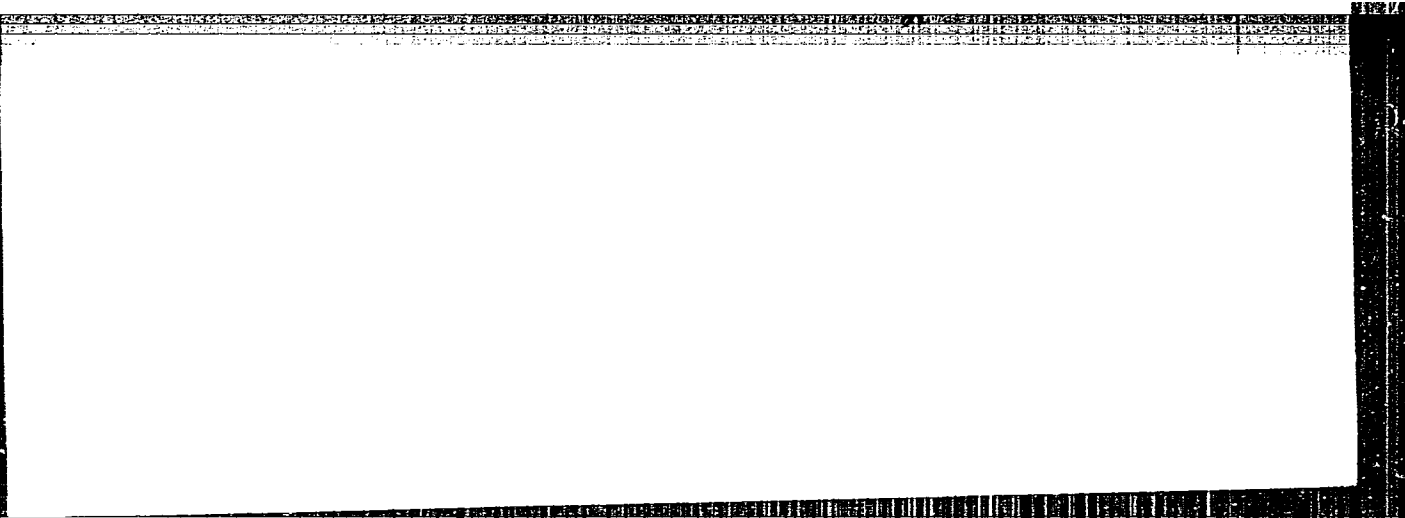
SAPOZHNIKOV, Yu.M., inzh.

Deaeration of feed water in industrial boilers. **Energetik 8**
no. 10:8-9 0 '60. (MIRA 14:1)
(Boilers) (Feed-water purification)

(SAPOZHENKOV, Yu.F.)

Effect of the greater gerbil (*Rhombomys opimus*) on vegetation
in the black saksaul groves of eastern Kara Kum. Biol. MOIP.
Otd. biol 65 no. 3: 20-27 My-Je '60. (MIRA 13:7)
(KARA KUM--GERBILS) (DESERT ECOLOGY)

"APPROVED FOR RELEASE: 07/13/2001 CIA-RDP86-00513R001447130014-6



APPROVED FOR RELEASE: 07/13/2001 CIA-RDP86-00513R001447130014-6"

SAPOZHNIKOV, Y. P.

Y.P.
Enthalpy of formation for compounds of zinc with acid
body: S. A. Shchukarev, M. F. Muzova, and Yu. P. Sapozhnikov. *J. Gen. Chem. U.S.S.R.* 26, 821-3 (1950)
(English translation).—See C.A. 50, 11780g. B. M. E.

AM

456

85622

5.2200 2209, 1273, 1643

S/078/60/005/012/003/016
B017/B064

AUTHORS: Markovskiy, L. Yu., Sapozhnikov, Yu. P.

TITLE: Some Properties of Lead Selenite ✓

PERIODICAL: Zhurnal neorganicheskoy khimii, 1960, Vol. 5, No. 12,
pp. 2655-2661

TEXT: Lead selenites were prepared by the following methods:

- a) Reaction of lead nitrate or lead acetate with potassium selenite in the stoichiometric ratio,
- b) reaction of lead acetate with a solution of selenious acid,
- c) reaction of lead nitrate with an excess of selenious acid,
- d) reaction of lead carbonate with selenious acid.

Acid lead selenite $Pb(HSeO_3)_2$ was formed by the methods b), c), and d).

Lead biselenite $PbSe_2O_5$ was prepared by heating $Pb(HSeO_3)_2$ to $130^\circ C$. The

best method of synthesizing lead selenite is that of precipitating from a solution of lead acetate with selenious acid or potassium selenite.

After the synthesis, the following compounds were separated: $PbSeO_3$,

Card 1/3

85622

Some Properties of Lead Selenite

S/078/60/005/012/003/016
B017/B064

$Pb(HSeO_3)_2$, and $PbSe_2O_5$. Moreover, the double salt $PbSeO_3 \cdot Pb(NO_3)_2$ was separated, and its occurrence confirmed by chemical and X-ray phase analyses. The lattice parameters of the compounds are given. Microphotographs were taken of the individual forms of lead selenites. The thermal stability of lead selenites was studied. The differential-thermal curves were determined with an EПП-09 (EPP-09) recording electronic potentiometer, and with an ФПК-54 (FPK-54) Kurnakov pyrometer. The thermograms of $PbSeO_3$ show two endothermic effects: the melting point lies at $675 \pm 10^\circ C$, and SeO_2 forms at $790-830^\circ C$. At $410^\circ C$, a strong endothermic effect appears on the thermograms of the double salt, indicating the decomposition of this compound. When further heated, the reaction product melts, and at $690-700^\circ C$ SeO_2 vapors form in a considerable amount. An endothermic effect appears at $110-120^\circ C$ on the $Pb(HSeO_3)_2$ thermogram, corresponding to the dehydration of this compound. On further heating of the dehydrated product, SeO_2 vapor is generated at $380^\circ C$. There are 6 figures, 3 tables, and 17 references: 9 Soviet.

Card 2/3

85622

Some Properties of Lead Selenite

S/078/60/005/012/003/016
B017/B064

ASSOCIATION: Gosudarstvennyy institut prikladnoy khimii (State Institute of Applied Chemistry)

SUBMITTED: August 11, 1953

Card 3/3

MARKOVSKIY, L.Ya.; SAPOZHNIKOV, Yu.P.

Different forms and some properties of neutral zinc selenite. Zhur.
strukt. khim. 1 no.3:346-352 S-O '69. (MIRA 14:1)

1. Gosudarstvennyy institut prikladnoy khimii.
(Zinc selenite)

MARKOVSKIY, L.Ya.; SAPOZHNIKOV, Yu.P.

Some properties of lead selenite. Zhur. neorg. khim. 5
no. 12:2655-2661 D '60. (MIRA 13:12)

1. Gosudarstvennyy institut prikladnoy khimii.
(Lead selenite)

20020

24.3500 1160 1155 1138

S/081/61/000/002/006/023
A005/A105

Translation from: Referativnyy zhurnal, Khimiya, 1961, No. 2, p. 320, # 2K101

AUTHORS: Markovskiy, L.Ya., Sapozhnikov, Yu.P.

TITLE: The Development of Cathode Phosphors on the Basis of Certain Metal Oxides

PERIODICAL: "Sb.tr.Gos. in-ta prikl. khimii", 1960, No. 43, pp. 92 - 100

TEXT: The expediency of the application of mineralizers to the synthesis of the luminescence composition $MgO:Cr:LiCl$ is shown. It is found out that the composition $MgO:Cr:LiCl$ has relatively low emission intensity in the visible spectrum range and is of importance only as an i.r.-emitter. The luminescence composition $Al_2O_3:Cr$ has high emission intensity in the visible spectrum range (λ_{max} 690 m μ) and does not yield to the luminescence composition $Zn_3(PO_4)_2:Mn$ with respect to the magnitude of the relative emission brightness. It is shown that it is possible to obtain new luminescence compositions with a wide emission band, a large part of which lies in the red spectrum region by mixing oxides of Zn and Mg. There are 13 references. X

R.A.

Translator's note: This is the full translation of the original Russian abstract.

Card 1/1

MARKOVSKIY, L.Ya.; SAPOZHNIKOV, Yu.P.

Composition and some properties of selenic acid cadmium
salts. Zhur. neorg. khim. 6 no.7:1592-1598 J1 '61.
(MIRA 14:7)

1. Gosudarstvennyy institut prikladnoy khimii.
(Cadmium selenate)

29532
S/078/61/006/011/010/013
B101/B147

54500

AUTHORS:

Sapozhnikov, Yu. P., Kondrashev, Yu. D., Markovskiy, L. Ya.,
Omel'chenko, Yu. A.

TITLE:

Study of phase composition and luminescence properties of
the system ZnO - MgO, activated by chromium

PERIODICAL:

Zhurnal neorganicheskoy khimii, v. 6, no. 11, 1961, 2550-2557

TEXT: On the basis of a paper by A. L. Smith (see below) who studied
the luminescence of nonactivated MgO and ZnO mixtures, the authors
examined the system MgO - ZnO activated with 0.5 % of Cr (added as
ammonium bichromate). The mineralizer added was 3 % LiCl. Samples were
produced at 1100 and 1300°C. Powder patterns were taken by a YPC-50-V
(URS-50-I) apparatus. Two limited solid solutions were found: Zn(Mg)O
and Mg(Zn)O with the structure of the initial components. The unit cell
volume of the solid solution Mg(Zn)O increases continuously. The
incorporation of Mg ions into the hexagonal structure of ZnO causes a
slight increase of parameter a and a considerable decrease of parameter c;
thus, the unit cell volume is reduced. The upper limits of existence of

Card 1/3

Chromium is an

29532

S/078/61/006/011/010/013
B101/B147

Study of phase composition and...

activator of ZnO and of solid Zn(Mg)O solutions. A paper by G. S. Zhdanov, V. A. Pospelov (Dokl. AN SSSR, 93, 97 (1953)) is mentioned. There are 4 figures, 2 tables, and 10 references: 4 Soviet and 6 non-Soviet. The two most recent references to English-language publications read as follows: A. L. Smith, J. Electrochem. Soc., 55, 155 (1952); W. A. Runciman. US Patent no. 2736712, February 28, 1956.

ASSOCIATION: Gosudarstvennyy institut prikladnoy khimii (State Institute of Applied Chemistry)

SUBMITTED: September 30, 1960

X

Card 3/3

SAPOZHNIKOV, Yu.P.; MARKOVSKIY, L.Ya.

Reduction of zinc selenite by hydrogen. Zhur.neorg.khim. 9
no.4:849-855 Ap '64. (MIRA 17:4)

1. Gosudarstvennyy institut prikladnoy khimii.

ACCESSION NR: AP4029185

S/0078/64/009/004/0856/0866

AUTHOR: Markovskiy, L. Ya.; Sapozhnikov, Yu. P.; Boyev, E. I.

TITLE: Bismuth Selenites

SOURCE: Zhurnal neorganicheskoy khimii, v. 9, no. 4, 1964, 856-866

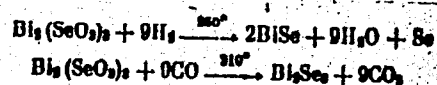
TOPIC TAGS: bismuth selenite, synthesis, composition, thermal stability, Bi sub 2 (SeO sub 3) sub 3, bismuth selenite, bismuth selenite monohydrate, Bi sub 2 (SeO sub 3) sub 3.H sub 2 O, Bi sub 2(SeO sub 3) sub 3.H sub 2SeO sub 3, Bi sub 2 (SeO sub 3) sub 3.SeO sub 2, Bi sub 2 O sub 3.SeO sub 2, Bi(NO sub 3)SeO sub 3, Bi sub 2(SO sub 4) (SeO sub 3) sub 2, Bi(CH sub 3COO)SeO sub 3, thermogram, bismuth selenide, BiSe, Bi sub 2Se sub 3, selenious acid, crystal microphotograph, x ray analysis

ABSTRACT: The conditions for synthesizing bismuth selenites, their phase composition and thermal stability were investigated. Reactions between H_2SeO_3 and bismuth nitrate, sulfate, acetate, chloride, suspensions of bismuth oxides, hydroxide, basic carbonate and citrate were run. The existence of the neutral selenite $Bi_2(SeO_3)_3$, its monohydrate $Bi_2(SeO_3)_3 \cdot H_2O$ and its crystalline acid salt

Card 1/8

ACCESSION NR: AP4029185

$\text{Bi}_2(\text{SeO}_3)_3 \cdot \text{H}_2\text{SeO}_3$ was confirmed. $\text{Bi}_2(\text{SeO}_3)_3$ is best prepared by reaction of selenious acid with bismuth nitrate or citrate. Two new selenites $\text{Bi}_2(\text{SeO}_3)_3 \cdot \text{SeO}_3$ and $\text{Bi}_2\text{O}_3 \cdot \text{SeO}_2$ were identified, as well as selenite double salts with nitric, sulfuric and acetic acids: $\text{Bi}(\text{NO}_3)\text{SeO}_3$, $\text{Bi}_2(\text{SO}_4)(\text{SeO}_3)_2$, $\text{Bi}(\text{CH}_3\text{COO})\text{SeO}_3$. Microphotographs of these various selenites are shown. X-ray data is given. The thermal stability of these selenites was investigated (thermograms are shown in figs. 1-6) and explanations are given for the various endothermic and exothermic effects observed. The bismuth selenides BiSe and Bi_2Se_3 are formed on heating the neutral or acid bismuth selenites in hydrogen or carbon monoxide:



Orig. art. has: 8 figures, 4 tables and 2 equations.

Card 2/8

ACCESSION NR: AP4029185

ASSOCIATION: Gosudarstvennyy institut prikladnoy khimii (State Institute of Applied Chemistry)

SUBMITTED: 13Aug62

DATE ACQ: 29Apr64

ENCL: 05

SUB CODE: GC

NO REF SOV: 008

OTHER: 010

Card 3/8

ACCESSION NR: AP4029185

ENCLOSURE: 01

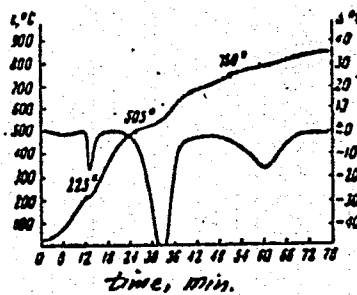
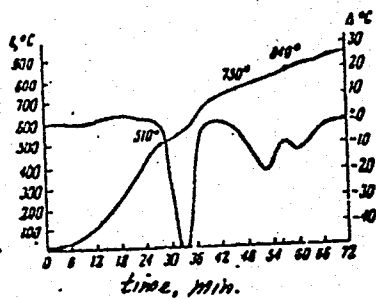


Fig. 1. Heat curve for the neutral bismuth selenite $Bi_2(SeO_3)_3$ I and $Bi_2(SeO_3)_3$ II.

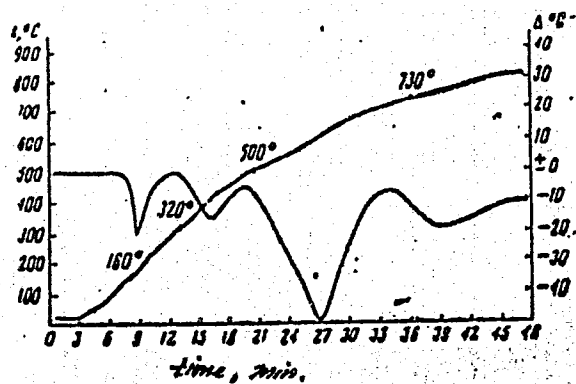
Fig. 2. Heat curve for the neutral bismuth selenium oxide $Bi_2(SeO_3)_3 \cdot H_2O$

Card 4/8

ACCESSION NR: AP4029185

ENCLOSURE: 02

Fig. 3. Heat curve for the acid selenium oxide $\text{Bi}_2(\text{SeO}_3)_3 \cdot \text{H}_2\text{SeO}_3$.

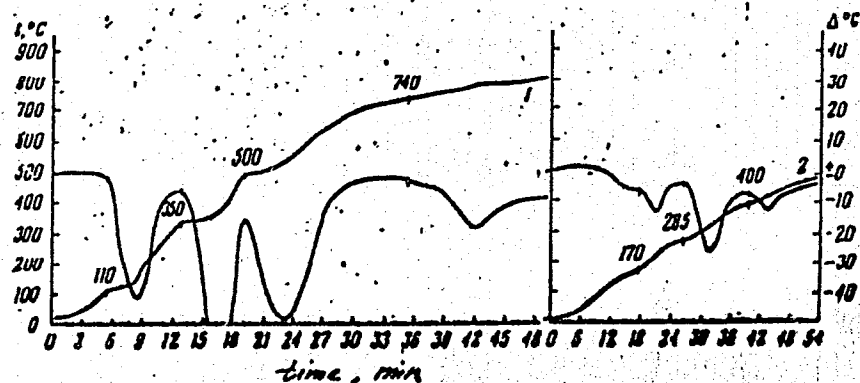


Card 5/8

ACCESSION NR: AP4029185

ENCLOSURE: 03

Fig. 4. Heat curves for the $\text{Bi}(\text{NO}_3)_3\text{SeO}_3$ double salt (1) and bismuth nitrate (2)

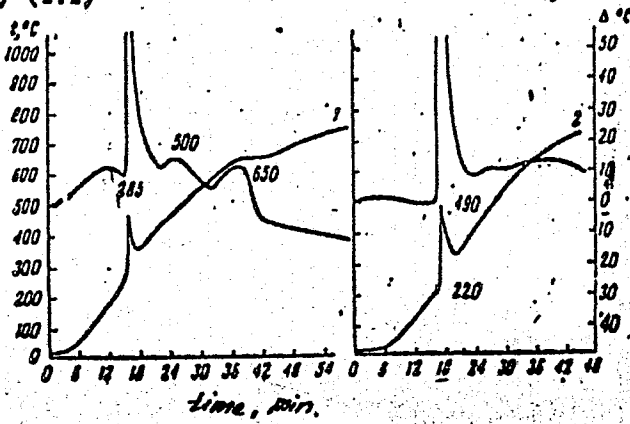


Card 6/8

ACCESSION NR: AP4029185

ENCLOSURE: 04

Fig. 5. Heat curves for the bismuth selenite-acetate double salt $\text{Bi}(\text{CH}_3\text{COO})\text{SeO}_3$ (1) and mixtures of bismuth acetate and bismuth selenite (2) (1:1)

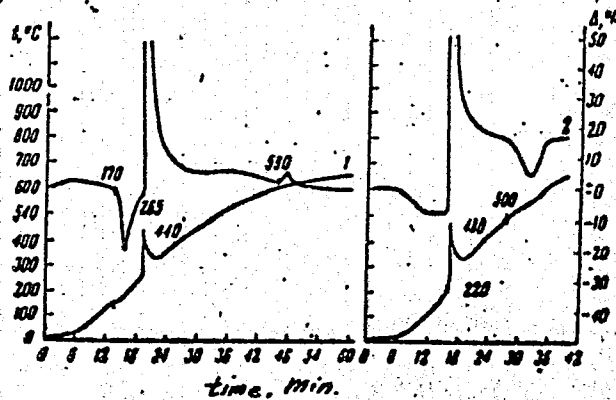


Card 7/8

ACCESSION NR: AP4029185

ENCLOSURE: 05

Fig. 6. Heat curves for the bismuth selenite-citrate double salt (1) and mixtures of bismuth citrate with bismuth selenite (2) (1:1)



Card 8/8

SAPOZHNIKOV, Yu.P.; MARKOVSKIY, L.Ya.

Studying the phase composition and thermal stability of acid zinc selenites. [Trudy] GIFKH no.51:20-29 '64.

Reduction of mercury selenite with hydrogen. *ibid.*:30-33

(MIRA 18:5)

L 10539-65 EWT(m)/EWP(b) ESD(gs) RDM/ID

S/3110/64/000/051/0034/0039

ACCESSION NR: AT4044995

AUTHOR: Sapozhnikov, Yu. P.

5

TITLE: The crystal hydrates of neutral cadmium selenite and their thermal decomposition

SOURCE: Leningrad. Gosudarstvennyy institut prikladnoy khimii. Trudy*, no. 51, 1964. Khimiya i tekhnologiya lyuminoforov (Chemistry and technology of luminophors), 34-39

TOPIC TAGS: luminophor, cadmium selenide, cadmium selenite, neutral cadmium selenite, crystal hydrate, cadmium selenite reduction

ABSTRACT: Since the usual method of preparing CdSe luminophors involves the high-temperature reduction of cadmium selenite by hydrogen, it appeared important to study the thermal stability of the various phases of cadmium selenite and its hydrates. In the present paper, the crystal hydrates were obtained by reacting a solution of cadmium sulfate with a stoichiometric amount of sodium or potassium selenite after the preliminary addition of 1/10 the stoichiometric amount of selenious acid. After 10-15 days, colorless

Card 1/2

L 10539-65

ACCESSION NR: AT4044995

obtained, which are stable at room temperature. The lattice parameters and chemical composition of these crystals and of α -CdSeO₃ are tabulated. Heating of these crystals at 100-110C for one hour also did not change their phase or chemical composition. At higher temperatures, however, endothermic dehydration took place, with $3\text{CdSeO}_3 \cdot 2\text{H}_2\text{O}$ changing into β -CdSeO₃ at 160C.

cadmium selenite may be used for the preparation of
2 tables and 1 chemical equation.

ASSOCIATION: Gosudarstvennyy Institut prikladnoy khimii, Leningrad (State Institute
of Applied Chemistry)

SUBMITTED: 00

ENCL: 00

SUB CODE: IC

NO REF SOV: 004

OTHER: 003

Card 2/2

МАШИНСКИЙ, А.И.; СЕВЕРЯКОВА, М.И.; СЕВЕРЯКОВ, Ю.П.

Production of rare-earth selenides by the reduction of selenites.
Zhur. prikl. khim. 38 no.4:717-720 Ap '65. (MIRA 18:6)

1. Gosudarstvennyy institut prikladnoy khimii.

SAPOZHNIKOV, YU. S.

34237. O Zakrytykh Vkhodnykh pulevykh otverstiyakh. Kriminalistika i Nauch.-Sudeb. Ekspertiza. SB. Zh. Kiyev, 1949, c. 191-94

SO: Knizhnaya Letopis' NO. 6, 1955

SAPozhnikov, Yu. S.

34236. K opredeleniyu prizhiznennosti povrezhdeniy Na obgorevshikh Trupakh.
Kriminalistika i nauch.-Sudeb. Ekspertiza SB: Z. Kiyev, 1949, c. 195-205.

SO: Knizhnaya Letopis' No. 6, 1955

GRISHCHENKO, O.A., dots., otv. red.; GAMBURG, A.M., red.;
DIDKOVSKAYA, S.P., red.; LISICHENKO, V.K., red.;
SAROZHNIKOV, Yu.S., red.; KONTSEVICH, I.A., red.;
NARINSKAYA, A.L., tekhn. red.

[Studies of the forensic medical experts of the Ukraine]
Trudy sudebnomeditsinskikh ekspertov Ukrainy. Kiev, Gos-
medizdat USSR, 1962. 293 p. (MIRA 16:7)

1. Glavnyy sudebnomeditsinskiy ekspert Ministerstva zdravo-
okhraneniya Ukr.SSR (for Grishchenko).
(UKRAINE—MEDICAL JURISPRUDENCE)

SAPOZHNIKOV, Z. A.

BENDERSKIY, I.I., inzhener; SAPOZHNIKOV, Z.A., inzhener.

Number of guys on derrick cranes. Elek.sta. 25 no.7:53 J1 '54.
(Cranes, derricks, etc.) (MLRA 7:8)

SAPOZHNIKOV, Z.A., inzh.

Using a mobile track-laying crane for the assembly of heat-generating equipment. Energ. stroi. no.26:33-37 '61. (MIRA 15:7)

1. Trest "Yuzhteploenergomontazh."
(Cranes, derricks, etc.) (Boilers)

SAPOZHNIKOVA, A. F.

PROCESSES AND PROPERTIES INDEX

10

CO
 The abnormal elimination of halogens from some tri- and tetra-substituted halogen compounds. A. A. Petrov and A. F. Sapozhnikova: *J. Gen. Chem.* (U. S. S. R.) 7, 476 (1937).—In compds. of the type RCH_2CX_2R or RCH_2XCX_2R , when the halogens represented by X are more neg. than the I or Br (e. g., Cl), they cause an electron shift toward themselves, which permits the I or Br to sep. as a pos. ion. Therefore, when these compds. are treated with alc. KOH, a reductive splitting off of the I or Br occurs, with formation of hypohalite and an olefin, instead of the normal sepn. of hydrohalide. 2-Butene (I) adds Br_2 to form 2,3-dibromobutane which loses HBr with KOH to yield 2-bromo-2-butene (II). This brominates to 2,2,3-tribromobutane which with KOH goes entirely to 2,3-dibromo-2-butene (III). With Br_2 this forms 2,2,3,3-tetrabromobutane, which gives III again with alkali. Similarly, I and Cl_2 form 2,3-dichlorobutane. KOH converts this to 2-chloro-2-butene

(IV), and IV with Br_2 gives 2-chloro-2,3-dibromobutane (V), b. 182.5–6° (decompn.), br 66–6.5°, d_4^{20} 1.9196, d_4^{25} 1.8975, n_D^{20} 1.5339. KOH converts V into 2-chloro-3-bromo-2-butene (VI), b. 128–9.5°, d_4^{20} 1.8202, d_4^{25} 1.4998, n_D^{20} 1.4080. VI and I_2 give 2-chloro-2,3,3-tribromobutane (VII), m. 223–4°. With KOH this yields VI again. A small amt. of the normal product, 2-chloro-3-bromo-1,3-butadiene, is probably present, since a resinous film seps. on the walls after standing. IV and ICl give 2,2-dichloro-3-iodobutane (VIII), br. 69.5°, d_4^{20} 1.8902, d_4^{25} 1.8580, n_D^{20} 1.5505. VIII and KOH form IV and, if not enough KOH is used, CHI₃. This shows the presence of KIO. II and ICl give a mixt. of the isomers $MeCHIClBrMe$ and $MeCHClIBrMe$ which cannot be sepd. KOH gives IV from the 1st and VI from the 2nd. The product of the union of II and IBr is a mixt. of $MeCHICBr_2Me$ and $MeCHBrCBr_2Me$ (IX). With KOH these form II and III. From the relative amts. of the reaction products, it appears that not less than 50% of the mixt. is IX. H. M. Leicester

ASB-51A METALLURGICAL LITERATURE CLASSIFICATION

10

PROCESSES AND PROPERTIES INDEX

JA POZHNIKOVA, A-F

Condensation of acrylonitrile with piperylene and isoprene. A. A. Petrov and A. E. Sazonova (Aviation Institute of Chemistry, Moscow, U.S.S.R.) *Izv. Akad. Nauk SSSR* 1942-9 (1948) (in Russian). — $CH_2=CHCN$ (5 g.) and 5.4 g. isoprene in 15 ml. MePh, in the presence of 0.05 g. hydroquinone, heated in sealed tubes 18 hrs. at 135° gave 92% mixed *cis*- and *5-methyl-3-cyclohexene-1-carbonitrile*, b_p 94-5°, d_4^{20} 0.9366, n_D^{20} 1.4738, which on hydrolysis by aq. alc. NaOH gave 85% mixed acids, sep'd. into 5.5 g. *4-methyl-3-cyclohexene-1-carboxylic acid*, m. 99° (from H_2O), and 1.3 g. oily acid, probably the *5-Me isomer*, b_p 182-4°, d_4^{20} 1.0545, n_D^{20} 1.4832. Reduction of 5 g. nitrile mixt. in 35 ml. EtOH by 5 g. Na gave the corresponding *amine mixt.* (73.6%), b_p 81.5-1°, b. 186-7°, d_4^{20} 0.8944, n_D^{20} 1.4830; *picrate*, m. 169-70°. Heating 5.6 g. $CH_2=CHCN$ and 6.8 g. piperylene (contg. about 50% *trans form*) in 20 ml. MePh (with hydroquinone) in sealed tubes 6 hrs. at 135° gave 46% *2-methyl-3-cyanocyclohexene*, b_p 89.5-90°, d_4^{20} 0.9307, n_D^{20} 1.4700 (further heating 12 hrs. at 180° gives an addnl. 0.3 g.), indicating that the *cis form* does not react. The nitrile is probably a mixt. of *cis-trans isomers*; 9 g. nitrile and 15 g. NaOH in 20 ml. EtOH and 10 ml. H_2O refluxed 12 hrs., followed by removal of the EtOH, gave 3.2 g. *amide*, m. 159-60°, while acidification of the filtrate gave 4.6 g. *acid*, b_p 137.5-8°, d_4^{20} 1.0391, n_D^{20} 1.4740, which is a mixt. of *cis-trans isomers*; on standing, a small amt. of the *trans form*, m. 63° (from H_2O), seps. Hydrolysis of 3 g. *amide* with 5 g. NaOH in dil. alc. 48 hrs. at reflux gave 1.9 g. *trans acid*, b_p 137.5-8°, m. 34-40° (crude), m. 63° (from H_2O). Heating 1.5 g. nitrile (obtained from *cis*-piperylene at 180° condensation temp.) 3 hrs. with aq. alc. NaOH gave 0.4 g. *amide*, m. 158.5-9.5°, and 1 g. *cis acid*, b_p 137.5-8.0°, n_D^{20} 1.4720. Reduction of the nitrile (4 g.) by 4 g. Na in 35 ml. EtOH gave 80% *2-methyl-3-tetrahydroprizylamine*, b_p 76.5-7°, d_4^{20} 0.9088, n_D^{20} 1.4828; *picrate* m. 101.5° (from EtOH). G. M. Kosolapoff

G. M. Kosolapoff

METALLURGICAL LITERATURE CLASSIFICATION

SAPPOZHNIKOVA, A. F.

USSR/Chemistry - Ethyl Alcohol, Decomposition of
Chemistry - Distillation

Apr 48

"Problem of the Nature of the Amylene-Piperylene Fraction of the Condensate Formed as a Result of the Catalytic Decomposition of Ethyl Alcohols," A. A. Petrov, A. F. Sapozhnikova, Chem Lab, Leningrad Inst of Aviation Instr Bldg, 5 $\frac{1}{2}$ pp

"Zhur Obsheh Khim" Vol XVIII (LXXX), No 4

Shows that the piperylene in the amyleno piperylene fraction of the condensate obtained by the decomposition of the ethyl alcohol by S. V. Lebedev's method does not fully react with acronitrite and consists of a mixture of cis- and trans-forms, latter, predominating. Establishes presence of isoprene in initial fractions. Submitted 4 Mar 1947.

PA 8/49T37

MARKHININ, Ye.K.; SAPOZHNIKOVA, A.M.

Zirconium content in igneous rocks of Kamchatka and
the Kurile Islands. Geokhimiia no.9:838-839 '62.
(MIRA 15:11)

1. Kamchatskaya geologo-geofizicheskaya observatoriya.
(Kamchatka--Zirconium)
(Kurile Islands--Zirconium)

MARKHININ, Ye.K.; SAPOZHNIKOVA, A.M.

Content of Ni,Co,Cr,V and Cu in igneous rocks of Kamchatka and
Kurile Islands. Geokhimiia no.4:372-376 '62. (MIRA 16:7)

1. Laboratory of Volcanology, Academy of Sciences, U.S.S.R., Moscow.
(Kamchatka--Nonferrous metals)
(Kurile Islands--Nonferrous metals)

L 22420-66 EWT(1)/EWA(d)/T-2 IJP(c) AT

ACC NR: AP6013615

SOURCE CODE: UR/0105/65/000/011/0022/0025

AUTHOR: Kartsev, V. P. (Moscow); Sapozhnikova, A. N. (Moscow); Sychev, V. V. (Moscow)

ORG: none

TITLE: Optimization of superconducting magnetic systems of MHD generators

SOURCE: Elektrichestvo, no. 11, 1965, 22-25

TOPIC TAGS: MHD generator, electronic computer, digital computer, superconductivity

ABSTRACT: Superconducting magnetic systems for MHD generators (with or without ferromagnetic cores) should offer significant advantages as compared with the usual systems because 1) they are much smaller in weight and size; 2) they use much less electric power for self-consumption; 3) the size of the entire MHD generator may be reduced by increasing the field strength within the generator channel; and 4) there is an automatic damping of the current reaction within the generator plasma and the generator emf is independent of the load, due to the properties of the superconductive circuit which maintains the current constant. The design of superconductive magnetic systems has distinctive peculiarities (the existence of a critical current beyond which the conductor stops being superconductive; the superconductor

Card 1/2

UDC: 621.3.045.2:537.312.62

L 22420-66

ACC NR: AP6013615

critical current varies in a sharply nonlinear manner with the magnetic field strength; very high cost of superconductor material). Consequently, the author investigates the methods for the determination of rational geometric dimensions of a superconducting magnetic system without a permanent core. Following the formulation of the pertinent theoretical relationships the actual optimization calculation was carried out on the electronic digital computer "Ural-1". Orig. art. has: 5 figures and 8 formulas. [JPRS]

SUB CODE: 09, 20 / SUEM DATE: 20May65 / ORIG REF: 003 / OTH REF: 002

Card 2/2 *aw*

AVDUS, Pavel Borisovich; SAPOZHNIKOVA, Aleksandra Semenovna;
D'YACHENKO, V.M., red.; GOLUBKOVA, L.A., tekhn. red.

[Determining the quality of grain, flour, and groats] Opre-
delenie kachestva zerna, muki i krupy. Moskva, Zagotizdat,
1961. 245 p. (MIRA 15:4)
(Grain--Grading) (Flour--Grading)

L 9842-63

EPR/EWP(j)/EPF(o)/EWT(m)/BDS--AFFTC/ASD--Ps-l/PC-l/Pr-l--RM/

WW/MAY

ACCESSION NR: AP3003523

S/0291/63/000/003/0037/0042

AUTHOR: Sapozhnikova, E. A.; Sultanov, A. S.

TITLE: Preparation of tetrahydropyryl ethers of poly(vinyl alcohol)

SOURCE: Uzbekskiy khimicheskiy zhurnal, no. 3, 1963, 37-42

TOPIC TAGS: adhesives, synthesis, dihydropyran, poly(vinyl alcohol), poly(vinyl alcohol) tetrahydropyryl ethers, alkylation

ABSTRACT: In view of the possibility of producing adhesives based on tetrahydropyryl ethers of poly(vinyl alcohol), the reaction of dihydropyran with aqueous poly(vinyl alcohol) (PVA) solutions in the presence of catalysts has been studied under various conditions. The reaction yielded a water-insoluble rubberlike polymer in which the presence of tetrahydrofuryl groups was established by IR and chemical analysis. According to United States Patent 2,448,260, the product is soluble in the common organic solvents. However, full alkylation of PVA was not realized; the products contained one tetrahydropyryl group for every 3 to 9 PVA groups. The highest polymer yield, 160% (on dry PVA), was obtained.

Card 1/2

L 9842-63
ACCESSION NR: AP3003523

under the following conditions: concentration of aqueous PVA solution, 6%; ratio of dihydropyran to PVA, 2:1; catalyst, 2.4% anhydrous HCl (on dry PVA); temperature, 50C; reaction time, 12 min. Orig. art. has: 1 figure, 4 formulas, and 3 tables.

ASSOCIATION: Institut khimii polimerov AN UzSSR (Institute of Polymer Chemistry AN UzSSR)

SUBMITTED: 31May62 DATE ACQ: 23Jul63 ENCL: 00
SUB CODE: 00 NO REF SOV: 001 OTHER: 010

ja/nh

Card 2/2

SAPOZHNIKOVA, E.A.; SOKOL'SKIY, D.V.; SULTANOV, A.S.

Recyclodehydration of tetrahydrofurfuryl alcohol to dihydropyran.
Khim. i fiz.-khim. prirod. i sint. polim. no.1:155-166 '62
(MIRA 18:1)

SAPOZHNIKOVA, E.A.; PUTIYEV, Yu.P.; SULTANOV, A.S.

Polymerization of dihydropyran. Khim. i fiz.-khim. prirod. i sint.
kolim. no.1:167-171 '62 (MIRA 18:1)

SAPZHNIKOVA, E.A.; SULTANOV, A.S.

Preparation of tetrahydroxypyrylium ethers of polyvinyl alcohol.
Uzb.khim.zhur. 7 no.3:37-42 '63. (MIRA 16:9)

1. Institut khimii polimerov AN UzSSR.
(Vinyl alcohol polymers)
(Pyrylium compounds)

SAPOZHNIKOVA, F.D.

Photoperiodic response in the mite *Typhlodromus* (*Amblyseius*) *similis*
(C.L. Koch) (Acarina, Phytoseiidae). Zool. zhur. 43 no.8:1140-1144
'64. (MIRA 17:11)

1. Vsesoyuznyy institut zashchity rasteniy, Leningrad.

POKIDOVA, N.V.; FURER, N.M.; SAPOZHNIKOVA, G.A.; YERMOL'YEVA, Z.V., prof.

Purification of interferon by chromatography on sephadex
KM. Antibiotiki 10 no.8:713-717 Ag '65. (MIRA 18:9)

1. Laboratoriya novykh antibiotikov i biologicheskii aktivnykh
veshchestv, Kafedra mikrobiologii (zav.- deystvitel'nyy chlen
AMN SSSR prof. A.V. Yermol'yeva) Tsentral'nogo instituta us-
vershenstvovaniya vrachey, Moskva.

BEKHTEREVA, M.N.; MEDVEDEVA, G.A.; POGLAZOVA, M.N.; SAPOZHNIKOVA, G.A.;
FEOFILOVA, Ye.P.

Rapid method of detecting bacterial infection in culture fluid
during the production of streptomycin. Prikl. biokhim. i
mikrobiol. 1 no. 6:726-730 N-D '65. (MIRA 18:12)

1. Institut mikrobiologii AN SSSR. Submitted Dec. 24, 1964.

BARCH, I.Z., inzh.; KUTOV, E.N., inzh. Prinsipialni uchastiye: KADOCHNIKOVA, G.N., mladshiy nauchnyy sotr.; SAPOZHNIKOVA, G.F., starshiy laborant; BLOKHA, L.A., starshiy laborant; KONYUSHEVSKIY, Ye.I., red.; DONSKOY, Ya.Ye., red.; SHEVCHENKO, M.G., tekh. red.

[Construction cranes] Stroitel'nye krany; spravochnoe posobie. Pod red. E.I. Konyushevskogo. Khar'kov, Khar'kovskoe knizhnoe izd-vo, 1961. 409 p. (MIRA 15:1)

1. Kharkov. Yuzhnyy nauchno-issledovatel'skiy institut promyshlennogo stroitel'stva. 2. Chlen-korrespondent Akademii stroitel'stva i arkhitektury USSR (for Konyushevskiy). (Cranes, derricks, etc.)

SAPOZHENIKOVA, G.M.

Osteoma of the mastoid region. Zhur. ush., nos. i gorl. bol. 21 no.3:
56-57 My-Je '61. (MIRA 14:6)

1. Iz kliniki bolezney ukha, gorla i nosa (zav. - zasluzhenny
deyatel' nauki prof. Ya.A.Shvartsberg) Kiyevskogo Ordena Trudovogo
Krasnogo Znameni meditsinskogo instituta imeni akademika
A.A.Bogomol'tsa i otdeleniya bolezney ukha, gorla i nosa
gorodskoy klinicheskoy bol'nitsy imeni Oktyabr'skoy revolyutsii.
(EAR-TUMORS)

~~SAPOZHNIKOVA, G.M.~~

Removal of a metallic foreign body (a bolt) from the esophagus
using Tikhomirov's spatula. Zhur. ush., nos. i gorl. bol. 21
no.5:72 9-0.'61. (MIHA 15:1)

1. In kliniki bolezney ukha, gorla i nosa (zav. - zasl. deyatel'
nauki prof. Ya.A.Shvartsbert) Kiyevskogo ordena Trudovogo Krasnogo
Znemeni meditsinskogo instituta imeni akademika A.A.Bogomol'tsa i
otdeleniya bolezney ukha, gorla i nosa Gorodskoy klinicheskoy bol'nitsy
imeni Oktyabr'skoy revolyutsii (glavnyy vrach - D.D.Sergiyenko),
(ESOPHAGUS FOREIGN BODIES) (SPATULA)

SMIRNOV, Aleksey Vladimirovich, kand. tekhn.nauk; KRAVTSOV, G.Ya.,
red.; SAPOZHNIKOVA, I.V., red.

[Lake sapropels, their extraction and use in agriculture]
Ozernye sapropeli, ikh dobycha i ispol'zovanie v sel'skom
khoziaistve. Moskva, Kolos, 1965. 157 p. (MIRA 18:7)

SAPOZHNIKOVA, I.Ya.; SHCHIRINA, M.G.

Problem of work training and employment of the mentally ill ("Social psychiatry" by Maxwell Jones. Reviewed by I.IA. Sapozhnikova, M.G. Shchirina). Zhur.nevr.i psikh. 60 no.5:636-638 '60. (MIRA 13:9)
(MENTALLY ILL—REHABILITATION) (JONES, MAXWELL)

Sapozhnikova, L.S.

ADAMOVICH, V.N., SAPOZHNIKOVA, L.S., KOVALEVA, S.I.

"Clinical and experimental studies on tuberculosis." Probl.tub.
36 no.3:111-114 '58 (MIRA 11:5)
(TUBERCULOSIS)

SAPOZHNIKOVA, L. V.; YEGORSHINA, L. A.; EBERTS, V. L.; SHEROVEROVA, L. P.

"Change With Age of the Immunological Reactivity in Children Suffering From Dysentery," Trudy 2-y Pavlovskoy Konferentsii Tomskogo Meditsinskogo Instituta, Tomsk, 1952, pp 215-217.

KRAYEVSKIY, N.A., prof.; SAPOZHNIKOVA, M.A.

Work of the Moscow Society of Pathoanatomists. Arkh. pat. 24
no.11:85-93 '62. (MIRA 18:12)

1. Predsedatel' Moskovskogo obshchestva patologoanatomov;
deystvitel'nyy chlen AMN SSSR (for Krayevskiy). 2. Sekretar'
Moskovskogo obshchestva patologoanatomov (for Sapozhnikova).

SAPOZHNIKOVA, M.A. (Moskva)

Osteomalacia in a man with Fanconi's syndrome [with summary in English].
Arkh. pat. 20 no.4:81-86 '58. (MIRA 11:5)

1. Iz patologoanatomicheskogo otdeleniya (zav.-prof. A.V. Smol'yannikov)
Nauchno-issledovatel'skogo instituta imeni N.V. Sklifosovskogo (dir.-
zasluzhennyy vrach USSR M.M. Tarasov)

(METABOLIC DISEASES, case reports

Fanconi's rachitic synd. with osteomalacia, postmortem
pathol. (Rus)

(OSTEOMALACIA,

in Fanconi's rachitic synd., postmortem pathol. (Rus)

SAPZHNIKOVA, M.A.

Cancer of the esophagus developing after burns caused by caustic soda. Vop. onk. 9 no.11:91-95 '63. (MIRA 18:2)

1. Iz patologoanatomicheskogo otdeleniya (zav.- doktor med. nauk N.K. Permyakov) Nauchno-issledovatel'skogo instituta skoroy pomoshchi imeni Sklifosovskogo (glavnyy khirurg instituta-chlen-korrespondent AMN B.A. Petrov, dir.- zasluzhennyy vrach UkrSSR M.M. Tarasov). Adres avtora: Moskva, I-10, B. Kolkhoznaya ploshchad', 3, Nauchno-issledovatel'skiy institut skoroy pomoshchi imeni Sklifosovskogo.

KRAYEVSKIY, N.A., prof.; SAPozhnikova, M.A.

Work of the Moscow Society of Pathoanatomists from September through December 1962. Arkh. pat. 25 no.10:71-76 '63.

(MIRA 17:7)

1. Predsedatel' Moskovskogo obshchestva patologoanatomov (for Krayevskiy). 2. Sekretar' Moskovskogo obshchestva patologoanatomov (for Sapozhnikova).

KRAYEVSKIY, N.A., prof.; SAPOZHNIKOVA, M.A.

Proceedings of the Moscow Society of Pathologists for the First
half of 1964. Arkh. pat. 27 no.5:87-94 '65.

(MIRA 18:5)

1. Predsedatel' Moskovskogo obshchestva patologoanatomov (for
Krayevskiy). 2. Sekretar' Moskovskogo obshchestva patologo-
anatomov (for Sapozhnikova).

DAVYDOVA, S.Ya.; Prinimala uchastiye: SAPOZHNIKOVA, M.B.

Metabolism of ureidosuccinic acid in animal tissues in vivo and in vitro experiments. Biokhimiia 24 no.5:866-871 S-0 '59.

(MIRA 13:2)

1. Laboratoriya biokhimii Instituta eksperimental'noy i klinicheskoy onkologii Akademii meditsinskikh nauk SSSR, Moskva.
(ASPARTIC ACID rel.cpd.s.)

DAVYDOVA, S.Ya.; SAPOZHNIKOVA, M.B.

Effect of sarcolysin and dopan on the biosynthesis of pyrimidines of nucleic acid in transplanted tumors and tissues of the recipient organism. Biul. eksp. biol. i med. 49 no.3:89-93 Mr '60.

(MIRA 14:5)

1. Iz laboratorii biokhimi (zav. - doktor biologicheskikh nauk A.A.Tustanovskiy) Instituta eksperimental'noy i klinicheskoy onkologii (dir. - chlen-korrespondent AMN SSSR N.N.Blokhin) AMN SSSR, Moskva.

Predstavlena deystvitel'nym chlenom AMN SSSR V.N.Chernigovskim.

(URACIL)

(ALANINE)

(PYRIMIDINE)

(NUCLEIC ACIDS)

(TUMORS)

DAVYDOVA, S. Ya.; DROZDOVA, G.A., Primala uchastiye: SAPOZHNIKOVA, M.B.

Activation of amino acids in the cytoplasm of cells in some normal tissues and in transplanted tumors. Vop. med. khim. 8 no.5:463-468
S - 0'62 (MIRA 17:4)

1. Laboratoriya biokhimii Instituta eksperimental'noy i klinicheskoy onkologii AMN SSSR, Moskva.

KUZ'MINA, N.; SAPOZHNIKOVA, N.

Soviet exhibitions in Africa. Vnesh. torg. 43 no.10: 36-39 '63.
(MIRA 16:11)

SAPOZHNIKOVA, M.N.

Novocaine in the treatment of epidermophytosis. Vest.ven. i derm.
no.3:53 My-Je '55. (MLRA 8:10)

1. Iz kliniki kozhnykh i venericheskikh bolezney Krymskogo meditsinskogo instituta imeni I.V.Stalina
(NOVOCAINE) (RINGWORM)

USSR/Human and Animal Morphology - The Vascular System.

S

Abs Jour : Ref Zhur Biol., No 5, 1959, 21509
Author : Sapozhnikova, N.N.
Inst : Omsk Medical Institute
Title : The Problem of the Interrelationships Between the
Short Saphenous Vein and the Fascia of the Leg
Orig Pub : Tr. Omskogo med. in-ta, 1957, No 23, 68-72
Abstract : No abstract.

Card 1/1

1ST AND 2TH ORDERS

1ST AND 2TH ORDERS
PROCESSES AND PROPERTIES INDEX

V

Effect of neutral salts on the speed of hydrolysis of ethyl acetate in the presence of strong acids and the theory of the same. N. V. Sapozhnikova and Z. A. Pecherina. *J. Phys. Chem.* (U. S. S. R.) 8, 116-25(1934).—The effects of NaCl, KCl, MgCl₂ and NaCl + KCl in 0.1 N HCl and Na₂SO₄, MgSO₄, K₂SO₄, KCl + K₂SO₄, and NaCl + Na₂SO₄ in 0.1-0.5 M H₂SO₄ were studied. The rise of reaction velocity continues for each addn. of chloride. With sulfates in acid soln. there is a decreasing velocity with each addn. of sulfate but after a concn. of about 1 M is reached, further addn. is almost without effect. Conclusions: The change of rate of hydrolysis of ethyl acetate with that of the activity of EtOAc in the presence of sulfates. The change of rate of hydrolysis with increasing H₂SO₄ concn. is analogous to the fall of activity of the acid with concn., but the agreement is poorer than with the addn. of sulfates. Salts such as KCl, NaCl and MgCl₂ do not give a lowering of the speed with a small concn., whence it follows that a law cannot be derived for the change of speed with change of activity of the acid or for the same change of activity of the ester. Qualitatively it is known but quantitatively it has not been measured that in the case of amphoteric esters by alkalies, sulfates exert a pos. effect while chlorides slow down the reaction. These results are similar to those for the effect of the same ions on cane-sugar hydrolysis. Eight tables and ten graphs summarize the data for concns. of acid varying from 0 to 4 N and of salts from 0 to 5 N.

F. H. Rathmann

ASAC-31A METALLURGICAL LITERATURE CLASSIFICATION

11011 004170
011117 004 111

1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31 32 33 34 35 36 37 38 39 40 41 42 43 44 45 46 47 48 49 50 51 52 53 54 55 56 57 58 59 60 61 62 63 64 65 66 67 68 69 70 71 72 73 74 75 76 77 78 79 80 81 82 83 84 85 86 87 88 89 90 91 92 93 94 95 96 97 98 99 100

LIST AND INDEX PROCESSES AND PROPERTIES INDEX

10

anomalous anomaly in the system water-ethyl acetate-
 N. V. Sapozhnikova and Z. G. Linstikaya. *J. Phys. Chem.* (U. S. S. R.) 8, 943-52 (1936).—Data are given for the increase in the b. p. of EtOAc-water aqns. caused by various salts. The values of $\alpha = \Delta T / m$, ionic radius are: NaCl 1.18, Na₂SO₄·10H₂O 1.30, MgCl₂·6H₂O 2.67, MgSO₄·7H₂O 2.42 and BaCl₂·2H₂O 3.9 A. The data are found in the main to support the Debye-Hückel theory. (C. A. 19, 1234). F. H. Rathmann

COMMON VARIABLES INDEX

ASS. S.L.A. METALLURGICAL LITERATURE CLASSIFICATION

1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31 32 33 34 35 36 37 38 39 40 41 42 43 44 45 46 47 48 49 50 51 52 53 54 55 56 57 58 59 60 61 62 63 64 65 66 67 68 69 70 71 72 73 74 75 76 77 78 79 80 81 82 83 84 85 86 87 88 89 90 91 92 93 94 95 96 97 98 99 100

1ST AND 2ND ORDERS PROCESSES AND PROPERTIES INDEX

ca

Kinetics of reactions of various ion types in solutions. N. V. Sushchinskaya. *J. Phys. Chem.* (U. S. S. R.) 13, 174-88 (1959). - Et and Na monochloroacetates were subjected to various reactions at 15° and 25°. The energies of activation were: $\text{CH}_3\text{COOCCl}_2 + \text{Na}_2\text{S}_2\text{O}_8 = \text{EtO}_2 + \text{NaCl}$, 16.14 Cal.; $\text{CH}_3\text{COONa} + \text{Na}_2\text{S}_2\text{O}_8 = \text{NaO}_2\text{CCH}_2\text{S}_2\text{O}_8 + \text{Na}^+ + \text{NaCl}$, 16.50 Cal.; $\text{CH}_3\text{COOCCl}_2 + \text{NaOH} = \text{CH}_3\text{COONa} + \text{NaCl}$, 7.04-7.28 Cal.; $\text{CH}_3\text{COCCl}_2 + \text{NaOH} = \text{CH}_3\text{COONa} + \text{NaCl}$, 11.03-11.62 Cal. For the reaction of the chloroacetate by HCl and H₂SO₄, the rate constant for concn. above 0.5 N for both acids; the ratio of the catalytic effect of the 2 acids is practically const. for different concns. For di-Et succinate, the E values for the 1st and 2nd stages of sapon. are 11.65 and 9.78 Cal., in agreement with the Moseley-Hughes equation. For the reactions $\text{CH}_3\text{XCOO}^- + \text{NH}_3 = \text{CH}_3\text{NH}_3\text{COO}^-$, E = 26.26 Cal. for X = Cl, and 22.37 for X = I. F. H. Rathmann

COMMON ELEMENTS

COMMON VARIANTS INDEX

ASS-SLA METALLURGICAL LITERATURE CLASSIFICATION

1959 INDEX

1958 INDEX

1957 INDEX

1956 INDEX

1955 INDEX

1954 INDEX

1953 INDEX

1952 INDEX

1951 INDEX

1950 INDEX

1949 INDEX

1948 INDEX

1947 INDEX

1946 INDEX

1945 INDEX

1944 INDEX

1943 INDEX

1942 INDEX

1941 INDEX

1940 INDEX

1939 INDEX

1938 INDEX

1937 INDEX

1936 INDEX

1935 INDEX

1934 INDEX

1933 INDEX

1932 INDEX

1931 INDEX

1930 INDEX

1929 INDEX

1928 INDEX

1927 INDEX

1926 INDEX

1925 INDEX

1924 INDEX

1923 INDEX

1922 INDEX

1921 INDEX

1920 INDEX

1919 INDEX

1918 INDEX

1917 INDEX

1916 INDEX

1915 INDEX

1914 INDEX

1913 INDEX

1912 INDEX

1911 INDEX

1910 INDEX

1909 INDEX

1908 INDEX

1907 INDEX

1906 INDEX

1905 INDEX

1904 INDEX

1903 INDEX

1902 INDEX

1901 INDEX

1900 INDEX

SAPozhNIKOVA, N. V.

"The Kinetics of the Reactions of Diff. Ion Types in Solution--I."; Zhur Fiz. Khim. 13, No. 2, 1939; Ural Industrial Institute, Chair of Physical & Colloidal Chemistry, Sverdlovsk; Recd. 21 May 1938.

Report U-1613, 3 Jan. 1952.

PROCEDURES AND PROPERTIES INDEX

17

CA

Solubility of several sulfanilamide compounds in water and in water-alcohol mixtures. N. V. Reposhnikova and I. Ya. Pankovskii. *J. Applied Chem. (U.S.S.R.)* 17, 427-34(1944)(English summary).—The solubilities in water of sulfanilamide, sulfaguanidine, sulfapyridine, sulfamethylthiazole, sulfathiazole, sulfamethylthiazine and their Ac derivs. were detd. at 20-30°. *N*-heterocyclic derivs. have poor water soly. Heats of soln. range from 1000 to 10,000 cal./mol. All compds., except diacetyl-sulfanilamide have max. soly. in EtOH-water mixts. of 67-76% EtOH. Solubilities in water up to 10M are given in graphical form. G. M. Kosolapoff

ASB-51A METALLURGICAL LITERATURE CLASSIFICATION

FROM SWISSLIV

FROM BOWLING

FROM LETTERS

FROM LETTERS

PA 11/49132

SAPOZHNIKOVA, N. V.

USSR/Chemistry - Organic Compounds, Aug 48
Aromatic

Chemistry - Hydrolysis

"Kinetics of the Hydrolysis of Sulfochloride Groups in Some Aromatic Compounds," Z. G. Lnetskaya, N. V. Sapozhnikova, *Chim. of Phys. and Colloid Chem.*, *Ural Inst. Inst. S. M. Kirov*, 47 pp

"Zhur Priklad. Khimii" Vol XXI, No 8

Treats subject under: (1) hydrolysis kinetics of benzoylsulfochloride, acetylsulfonyl chloride (II), and formylsulfonyl chloride during heterogeneous course of the process; (2) hydrolysis kinetics of

11/49132

USSR/Chemistry - Organic Compounds, Aug 48
Aromatic (Contd.)

sulfochloride group in an acetone-water medium, in I, and II, and in chloranhydrides of sulfo acids of naphthalene and its acetylamino substitution products (3) Influence of acetylamino group and position of a sulfochloride group on hydrolysis speed of the latter; (4) effect of composition of solvent on hydrolysis kinetics of a sulfochloride group. Submitted 16 Feb 48.

11/49132

SAPOLANIKOVA, N.V.

Chem Ab. v48
1-25-54
general + Physical
Chemistry

Application of the methods of chemical kinetics to chemistry of organic compounds in the work of N. A. Menshutkin. N. V. Sapozhnikova. *Uspekhi Khim.* 22, 1018-29 (1953). A historical discussion with 41 references. G. M. K.

Chem 4
②

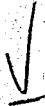
S/153/60/003/003/019/036/XX
B016/B058

AUTHORS: Dariyenko, N. I., Sapozhnikova, N. V.

TITLE: Kinetics of the Nucleophilic Substitution of Halogens in Halogen-substituted Acetates and the Influence of Halogen Accumulation at the Place of Substitution on the Mobility of the Halogen

PERIODICAL: Izvestiya vysshikh uchebnykh zavedeniy. Khimiya i khimicheskaya tekhnologiya, 1960, Vol. 3, No. 3, pp. 461 - 465

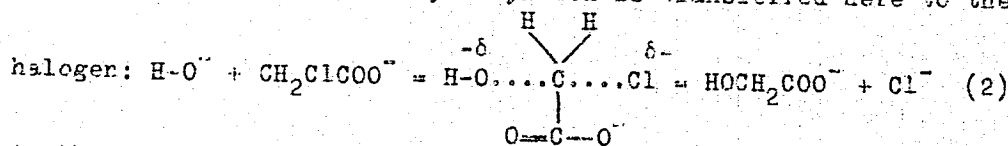
TEXT: It was the aim of the authors to characterize the influence of the halogen accumulating at the substitution place in a completely quantitative way. They give a similar characteristic of the influence of the halogen nature on its mobility in the reactions of nucleophilic substitution during the interaction of the halogen acetates with hydroxyl ion and ammonia. Since the corresponding data by other scientists for the reaction: $\text{CH}_2\text{HalCOO}^- + \text{OH}^- = \text{CH}_2(\text{OH})\text{COO}^- + \text{Hal}^-$ (1) differ



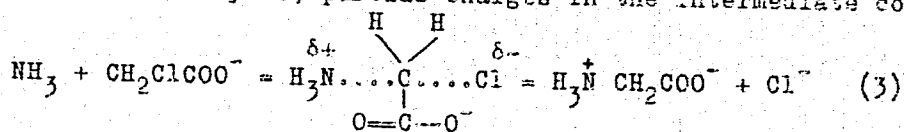
Card 1/4

Kinetics of the Nucleophilic Substitution of Halogens in Halogen-substituted Acetates and the Influence of Halogen Accumulation at the Place of Substitution on the Mobility of the Halogen S/153/60/003/003/019/036/XX B016/BC5B

widely, the authors determined for this reaction the rate constants for several temperature values between 60 and 98°C. On the basis of the same halogen acetates, the reaction was studied with another nuclear reagens, i.e. aqueous ammonia, between 25 and 60°C. The number of charges remains unchanged in phase (1) which determines the reaction rate, but a new distribution of the charges in the intermediate complex occurs. One charge of the hydroxyl-ion is transferred here to the



At the ammonolysis, partial charges in the intermediate complex:



Card 2/4

Kinetics of the Nucleophilic Substitution of Halogens in Halogen-substituted Acetates and the Influence of Halogen Accumulation at the Place of Substitution on the Mobility of the Halogen S/153/60/003/003/019/036/XX
B016/B058

develop in the phase which determines the reaction rate. On the basis of these data, the authors characterize the kinetics of nuclear substitution of the halogens in mono-substituted acetates in dependence on the nature of the halogen concerned, in the following way: 1) In the reactions with the hydroxyl-ion and ammonia, greatly differing with regard to their mechanism, iodine is much less mobile than bromide (Table 1). 2) The authors proved that the ammonolysis reaction is steadily slowed down by the accumulation of chlorine in the chlorine acetates, since the activation energy increases (Table 3). 3) The "periodicity" by P. Petrenko-Kritchenko (Refs. 5,6) concerning the influence of halogen accumulation in chlorine acetates on the mobility of this halogen in the reaction with alkali, was confirmed (Table 4). The authors presume that the increased reactivity of chlorine in trichloroacetate is connected with the change of the reaction mechanism. They did not succeed yet in studying the nature of this reaction (its products, phases) more closely. The authors drew the above conclusion from the analogy with the data by J. Hine (Ref.7) on the increased reactivity

Card 3/4

Kinetics of the Nucleophilic Substitution of Halogens in Halogen-substituted Acetates and the Influence of Halogen Accumulation at the Place of Substitution on the Mobility of the Halogen

S/153/60/003/003/019/036/XX
B016/B058

of the chloroform in the reaction with alkali. They mention the paper by M. B. Neyman, V. B. Miller, and Yu. M. Shapovalov (Ref.8). There are 4 tables and 11 references: 5 Soviet, 2 US, 1 British, and 3 German.

ASSOCIATION: Ural'skiy politekhnicheskiy institut im. S. M. Kirova; Kafedra fizicheskoy i kolloidnoy khimii (Ural Polytechnic Institute imeni S. M. Kirov; Chair of Physical and Colloid Chemistry)

SUBMITTED: October 24, 1958

Card 4/4

SAPOZHNIKOVA, N.V., dotsent, kand. khim. nauk

Some factors determining the rate of chemical reactions in solutions and the compensational effect; based on experimental data of a group of physicochemists of the Department of Physical and Colloid Chemistry. Sbor. nauch. trud. Ural. politekh. inst. no.122:73-82 '61. (MIRA 17:12)

SAPOZHNIKOVA, N.V.; LINETSKAYA, Z.G.; DARIYENKO, N.I.

Compensation effect in the action of internal and external factors on the constants of Arrhenius's equation and the constants of Frenkel-Eyring's fluidity equation. Zhur. fiz. khim. 36 no.4: 917-919 Ap '62. (MIRA 15:6)

1. Ural'skiy politekhnicheskiy institut imeni Kirova, Sverdlovsk. (Chemical reactions) (Chemical equations)

SAPOZHNIKOVA, N.V.; MOKRUSHIN, S.G., nauchn. red.

[Kinetics of chemical reactions in solutions; a manual]
Kinetika khimicheskikh reaktsii v rastvorakh; uchebnoe
posobie. Sverdlovsk, Ural'skii politekhn. in-t im. S.M.
Kirova. 1963. 133 p. (MIRA 17:7)

ACC NR: AP7008113

SOURCE CODE: UR/0020/67/172/004/0837/0840

AUTHOR: Andreyev, S. N.; Sapozhnikova, O. V.

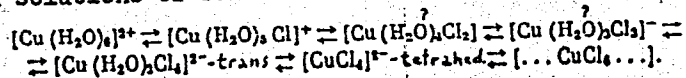
ORG: Leningrad Institute of Textile and Light Industry im. S. M. Kirov (Leningradskiy institut tekstil'noy i legkoy promyshlennosti)

TITLE: Coordination equilibria in the system $\text{Cu}^{2+} \cdot \text{aq} - \text{HCl} - \text{H}_2\text{O}$

SOURCE: AN SSSR. Doklady, v. 172, no. 4, 1967, 837-840

TOPIC TAGS: copper compound, absorption spectrum, coordination chemistry, chemical equilibrium

ABSTRACT: Electronic absorption spectra of the crystals Cs_2CuCl_4 , $[(\text{CH}_3)_4\text{N}]_2\text{CuCl}_4$ and $[(\text{C}_2\text{H}_5)_4\text{N}]_2\text{CuCl}_4$, which differ in the size of the cations located outside the coordination sphere, were studied. The spectra showed that a decrease in the radius of the cation outside the sphere causes a shift of the absorption bands of $[\text{CuCl}_4]^{2-}$ ions into the high-frequency range, the form of the spectral absorption curves remaining the same. This leads to the assumption that the electronic absorption spectrum of the system $\text{Cu}^{2+} \cdot \text{aq} - \text{HCl} - \text{H}_2\text{O}$ at $C_{\text{HCl}} = 5-12 \text{ M}$ is due to the formation of tetrahedral complexes $[\text{CuCl}_4]^{2-}$ in the solution. A change in HCl concentration from 10^{-4} to 20 M in solutions of salts of divalent copper involves the following processes:



Card 1/2

UDC: 535.34:541.49:546.562

ACC NR: AP7008113

The reactions of stepwise substitution of Cl^- ions for water in the inner sphere of hydrated Cu^{2+} cations take place in solutions where HCl is dissociated almost completely. The direction of these processes is determined by the concentration of Cl^- ions. The coordination equilibria $[\text{Cu}(\text{H}_2\text{O})_2\text{Cl}_4]^{2-} \rightleftharpoons [\text{CuCl}_4]^{2-}$ -tetrahedral and $[\text{CuCl}_4]^{2-}$ -tetrahedral $\rightleftharpoons [\text{CuCl}_2]_n$ can be observed only at a high concentration of undissociated HCl molecules. It is postulated that in the former process the HCl molecules act as dehydrating agents, and in the latter, they solvate the chloride anions. The paper was presented by Academician Chernyayev, I. I., 13 April 1966. Orig. art. has: 3 figures.

SUB CODE: 07/ SUEM DATE: 12Apr66/ ORIG REF: 001/ OTH REF: 011

2/2
212

ZAITS, L.P.; SAPOZHNIKOVA, O.V.

Tuberculosis as a cause of disability among Sverdlovsk workers in 1956-1960. Probl.tub. no.7:7-11 '62. (MIRA 15:12)

1. Iz Sverdlovskogo nauchno-issledovatel'skogo instituta tuberkuleza (dir. - prof. I.A.Shakleia) i Gorodskoy vrachebno-trudovoy ekspertnoy komissii po tuberkulezu Sverdlovsk (predsedatel' O.V.Sapozhnikova).
(TUBERCULOSIS) (SVERDLOVSK—DISABILITY EVALUATION)

ANDREYEV, S.N.; SAPOZHNIKOVA, O.V.

Near hydrate surroundings of Cu^{2+} ions in diluted aqueous solutions
of Cu (II) salts. Dokl. AN SSSR 156 no. 4:855-857 Je '64.
(MIRA 17:6)

1. Leningradskiy tekstil'nyy institut im. S.M.Kirova. Predstavleno
akademikom I.I.Chernyayevym.

LILICH, L.S.; SAPOZHNIKOVA, O.V.

System $\text{CuCl}_2 - \text{HCl} - \text{H}_2\text{O}$ at 25° . Zhur. neorg. khim. 9 no.9:
2219-2221 8 '64. (MIRA 17:11)

ANDREYEV, S.N.; SAPOZHNIKOVA, O.V.

Composition and structure of Cu (II) chlorides. Zhur.neorg.khim.
10 no.11:2538-2543 N. 165. (MIRA 18:12)

1. Leningradskiy institut tekstil'noy i legkoy promyshlennosti
imeni S.M.Kirova. Submitted May 9, 1964.

САДЪЕ НАИ КОВА, О. В.

U S S R .

Determination of small quantities of ketones colorimetrically in the ultraviolet region of the spectrum. S. A. Shchukarev, S. N. Andreev, and O. V. Sapozhnikova. *J. Anal. Chem. U.S.S.R.* 9, 213-19 (1964) (Engl. translation). *Sci. C.A.* 49, 128108. H. L. H.

SAPozhnikova, O. V.

USSR/Chemistry - Spectral analysis

Card 1/1 : Pub. 145 - 2/14

Authors : Shchukarev, S. A.; Andreyev, S. N.; and Sapozhnikova, O. V.

Title : Determination of small ketone amounts by colorimentering in the ultraviolet zone of the spectrum

Periodical : Zhur. anal. khim. 9/4, 193-195, Jul-Aug 1954

Abstract : The applicability of the colorimentering method for quantitative analysis of various aliphatic ketones was investigated. The objects used in this investigation were the following aqueous ketone solutions: acetone, methylethylketone, pentanone-2, hexanone-2, heptanone-2 and octanone-2. The relative accuracy of the analysis attained by this method was 0 - 15%. It was established that the colorimentering of acetone solutions in the presence of formaldehyde is possible also at a acetone-formaldehyde concentration ration of 1 : 100. Nine references: 2-English; 2-German and 5-USSR (1901-1953). Tables; graphs.

Institution : The A. A. Zhdanov State University, Leningrad

Submitted : December 9, 1953

SAPOZHNIKOVA, P. F.

BAZUNOV, G.I.; PALLEY, S.S.; SAPOZHNIKOVA, P.F.

Automatic control of the galvanizing process. Suggestion by G.I.
Bazunov, S.S. Pallei, P.F. Sapozhnikov. Prom. energ. 13 no.3:17-
18 Mr '58. (MIRA 11:2)

(Galvanizing) (Automatic control)

SAPOZHENIKOVA, P.G.

Microclimate of the classroom and its significance for the condition of students. *Pediatrics* 39 no.1:45-49 Ja-F '56. (MLBA 10:1)

1. Iz otdela giginy Nauchno-issledovatel'skogo pediatricheskogo instituta RSFSR.

(CLIMATE,
microclimate of class-rooms, determ of eff. on students)
(VENTILATION
class-rooms, eff. of microclimate on students)

ZAKHAROVA, A.I.; SAPOZHNIKOVA, R.A.

Intramolecular rearrangements in the acetylene series. VII. Reaction of an acetylenic chloride, 2,3,3-trimethyl-3-chloro-4-hexyne, with organomagnesium compounds. Zhur. Obshchey Khim. 22,1804-10 '57.
(CA 47 no.14:6857 '53) (MLRA 5:11)

1. Leningrad State Univ.

ROYZEN, I.S.; POZAMANTIR, A.G.; MEDVEDEVA, V.S.; BYTENSKIY, V.Ya.; STEPANOVA,
N.A.; SAPOZHKOVA, R.A.

Investigating the danger of the explosion of acetylating mixtures.
Bezop. truda v prom. 8 no.10:45-47 0 '64. (MIRA 17:11)

SAPOZHNIKOVA, R.G., kandidat meditsinskikh nauk.

Significance of fresh air for children's health. Med.vestn no.2:17-20
P '54. (MIRA 7:1)

(Air) (Children--Care and hygiene)

SAPOZHNIKOVA, R.G.

Certain problems of the hygiene of clothing for newborn infants.
Gig.i san.no.4:32-36 Ap '54. (MLRA 7:4)

1. Iz otdela gigiyeny Nauchno-issledovatel'skogo pediatricheskogo
instituta Ministerstva zdravookhraneniya RSFSR,
(Infants--Clothing)