LISOVSKAYA, M.D., kand.med.nauk; ALEKSEYEVA, V.G.; MUKHINA, L.D.

Adie syndrome. Vest. derm. i ven. 38 no.9:71-73 S '64.
(MIRA 18:4)

1. Leningradskaya dermatologicheskaya bol'nitsa (glavnyy vrach
S.I.Brodskiy).

L 35909-66   EWT(d)/F55-2

ACC NR: AP6010790   SOURCE CODE: UR/0106/66/000/002/0056/0066

AUTHOR: Aleksayeva, V. G.

ORG: none

TITLE: Phase distortion in transmission systems and "image" characteristics of signals

SOURCE: Elektrosvyaz', no. 2, 1966, 56-66

TOPIC TAGS: transmission system, signal transmission, phase distortion

ABSTRACT: It has been repeatedly pointed out that a symmetrical pulse loses its symmetry when phase distortion occurs. This article attempts to explore the causes of disruption of "image" characteristics of signals; each function $F'(t)$ and $F''(t)$ is an "image" of the other if $F'(t) = F''(-t)$ and $F'(-t) = F''(t)$. The system response to the application (cessation) of a unit step voltage is called turn-on (turn-off) function. Equations are set up and investigated which describe a system with ideal phase characteristic, a l-f system with phase distortion, and a band-pass system with phase distortion. Experimental data on a multiplexing single-repeater channel published elsewhere is compared with some data estimated from

Card 1/2   UDC: 621.391.833.2

L 35909-66

ACC NR: AP6010790

the theory developed in this article. These conclusions are offered re transients accompanying the application and cessation of symmetrical pulses: (1) At the output of an ideal-phase-frequency-characteristic 1-f system, the turn-on and turn-off functions have "image" characteristics: the pulses preserve their symmetry: (2) At the output of a phase-distorting system, the above functions lose their "image" characteristics; pulses become asymmetrical: (3) At the output of a band-pass filter having an ideal phase frequency characteristic, the turn-on and turn-off function envelopes are "images," but are connected by nonlinear relations: the pulses are symmetrical; (4) At the output of a band-pass system having arbitrary phase distortion, the envelopes are not "images" and are connected by nonlinear relations; the pulses are asymmetrical; (5) A two-band transmission of signals over a system having even curves of amplitude and phase distortions is an exception to the general rule of determining phase distortion by the disruption of symmetrical properties. Orig. art. has: 7 figures and 30 formulas.

SUB CODE: 09 / SUBM DATE: 25May65 / ORIG REF: 004 / OTH REF: 002

Card 2/2

ACC NR: AP6033587   SOURCE CODE: UR/0181/66/008/010/3138/3140

AUTHOR: Alekseyeva, V. G.; Landsberg, Ye. G.

ORG: Institute of Radio Engineering and Electronic AN SSSR, Moscow (Institut radiotekhniki i elektroniki AN SSSR)

TITLE: Certain electric and photoelectric properties of the compound SbSI

SOURCE: Fizika tverdogo tela, v. 8, no. 10, 1966, 3138-3140

TOPIC TAGS: antimony compound, photoelectric property, semiconductor single crystal, ferroelectricity, resistivity, activation energy, Hall effect, electron mobility, absorption band

ABSTRACT: The authors have investigated the electric and photoelectric properties of single crystals of SbSI in the ferroelectric region. Small amounts of LiI were introduced into some of the single crystals. The temperature dependence of the resistivity was measured in the 15 - 40C range. The resistivity decreased exponentially with increasing temperature, with an activation energy close to that obtained by J. Sasaki (Japan J. Appl. Phys. v. 4, 228, 1965 and earlier). The carrier mobility could be determined from the Hall effect only for lithium-doped crystals and amounted to 50 - 100 $cm^2/v-sec$. The sign of the Hall emf corresponded to n-type conductivity. The photoconductivity of lithium doped crystals, measured after prolonged storage in

Card 1/2

ACC NR: AP6033587

darkness, was 10 - 20 times larger than that of the pure samples. Both samples showed smearing of the long-wave edge of the absorption band and a rapid decrease in the photocurrent in the short-wave side corresponding to the intrinsic absorption. The low short-wave sensitivity is attributed to surface recombination. The decrease in photoconductivity has a complicated character. Measurements of the thermally stimu- lated conductivity disclosed the presence of adhesion centers, but they were unstable and disappeared under the influence of light or heating. The experimental results are interpreted from the point of view that both doped and undoped samples contained two types of defects, stable and unstable, and the latter are strongly affected by illumi- nation. The authors thank S. G. Kalashnikov for a discussion of the results. Orig. art. has: 2 figures.

SUB CODE: 20/ SUBM DATE: 12Mar66/ ORIG REF: 001/ OTH REF: 004

Card 2/2

ACC NR: AR6035207   SOURCE CODE: UR/0274/66/000/008/A011/A011

AUTHOR: Alekseyeva, V. G.

TITLE: The effect of nonuniformity in the amplitude spectrum of a signal and the transmission coefficient of the signal compression circuit on the shape of the output signal

SOURCE: Ref. zh. Radiotekhnika i elektrosvyaz', Abs. 8A71

REF SOURCE: Tr. Leningr. in-t aviats. priborostr., vyp. 45, 1965, 38-48

TOPIC TAGS: spectrum, radio signal, frequency modulation, filter, amplitude, signal amplitude, output signal

ABSTRACT: The effect of a deviation from the constant value of the product of the spectral density of an excitation signal with a linear frequency modulation on the transmission coefficient of a filter with a rectangular frequency characteristic and a quadratic phase dispersion was investigated. It is shown that it leads primarily to an increase in the minimum spacings separating two adjacent iterative signals. [Translation of abstract]
SUB CODE: 17/   [NT]

Card 1/1   UDC: 621.391.14

KORYAKIN, I.S.; ALEKSEYEVA, V.G.; GOVOROVA, M.S.; VORONINA, T.V.;
DAUTBAYEV, F.A.; DEMIDOVA, S.I.; KAZANTSEVA, G.V.; MOROZ, V.M.;
MUKHINA, N.S.; PIPIN'YAN, P.O.; SHTIFANOVA, A.K.

Trace elements in drinking water sources of Kazakhstan and their
relations to the problem of some noninfectious diseases. Vest. AMN
SSSR 19 no.7:90-95 '64.   (MIRA 18:3)

1. Alma-Atinskiy meditsinskiy institut.

ALEKSEYEVA, V.I., starshiy inzh.

Track patrol. Put' i put.khos. 5 no.10:25 0 '61.   (MIRA 14:10)

1. Poronayskaya distantsiya Yushno-Sakhalinskoy dorogi.
              (Railroads—Track)

SVERDLOV, Yu.D.; ALEKSEYEVA, V.I.

Suprasegmental inhibition of intercalary spinal neurons in cats with local tetanus. Dokl. AN SSSR 143 no.5:1200-1202 Ap '62.
(MIRA 15:9)

1. Vtoroy Moskovskiy meditsinskiy institut im. N.I.Pirogova.
Submitted October 27, 1961.

ALEKSEYEVA, V.I., kand.med.nauk

Chalcosis of the eye and its treatment by negative ionization.
Vest.oft. no.4:13-18 '62.   (MIRA 15:11)

1. Gosudarstvennyy nauchno-issledovatel'skiy institut glaznykh
bolezney imeni Gel'mgol'tsa.
          (EYE—DISEASES AND DEFECTS) (COPPER IN THE BODY)
                         (ELECTROPHORESIS)

ALEKSEYKVA, Vera Ivanovna; VAYNSHTEYN, Ye.S., red.

[Chalicosis of the eye] Khal'koz glaza. Moskva, Medi-
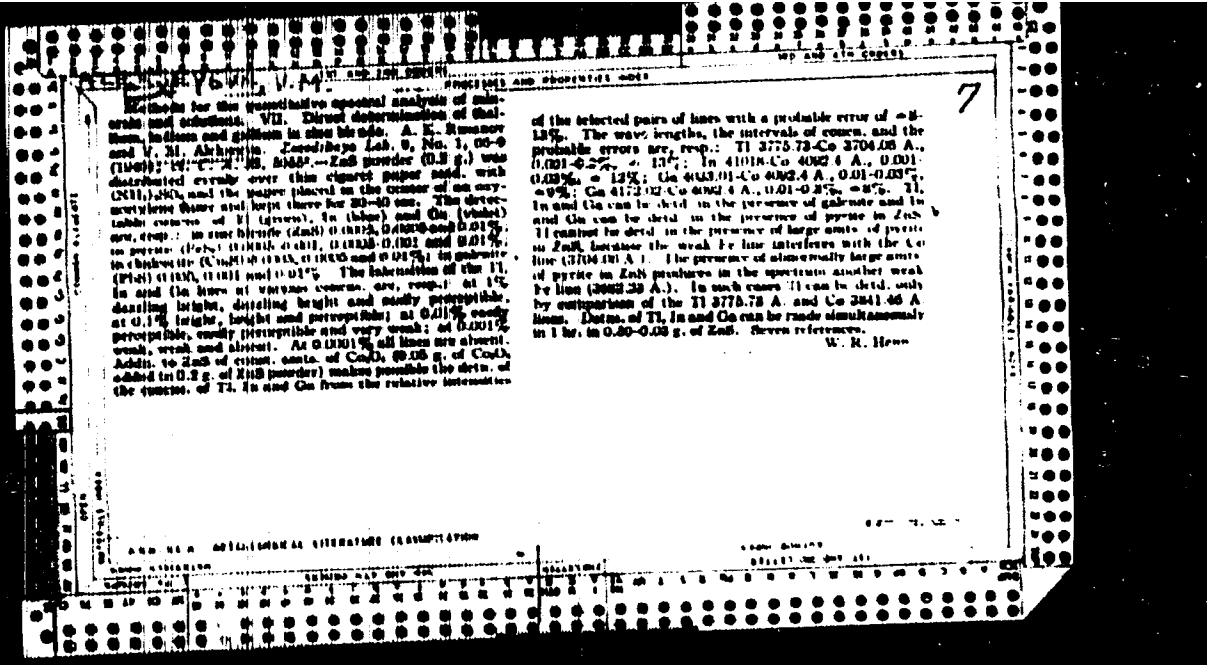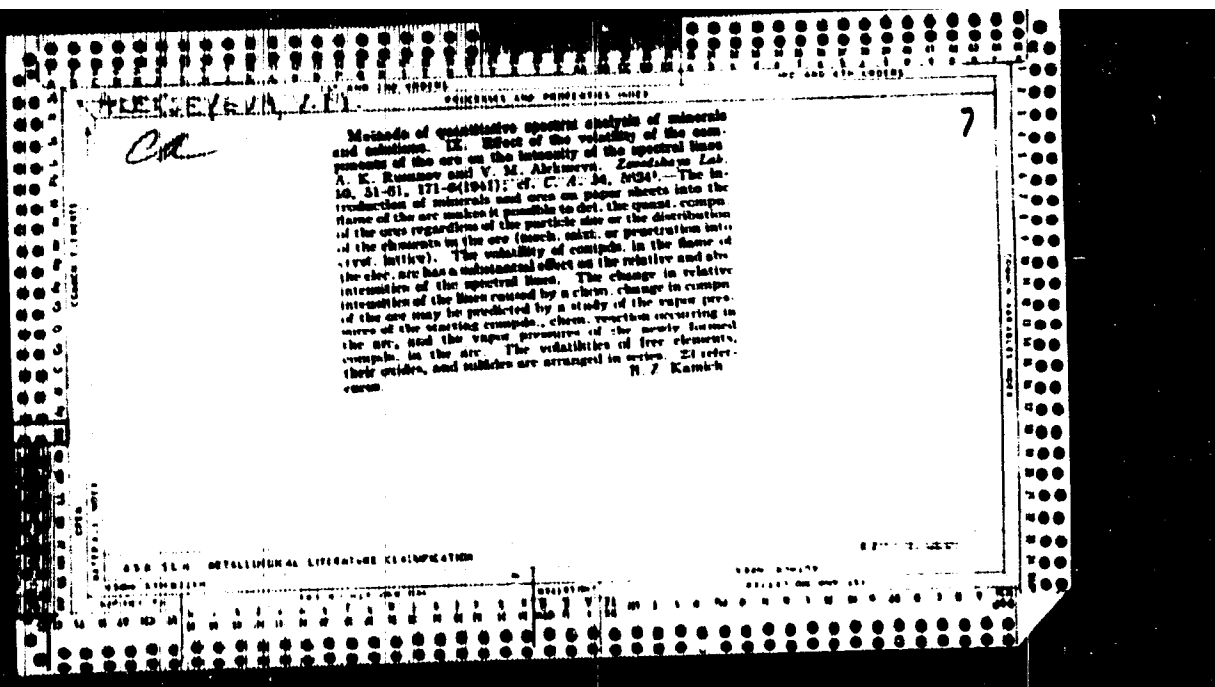tsina, 1965. 113 p.   (MIRA 18:5)
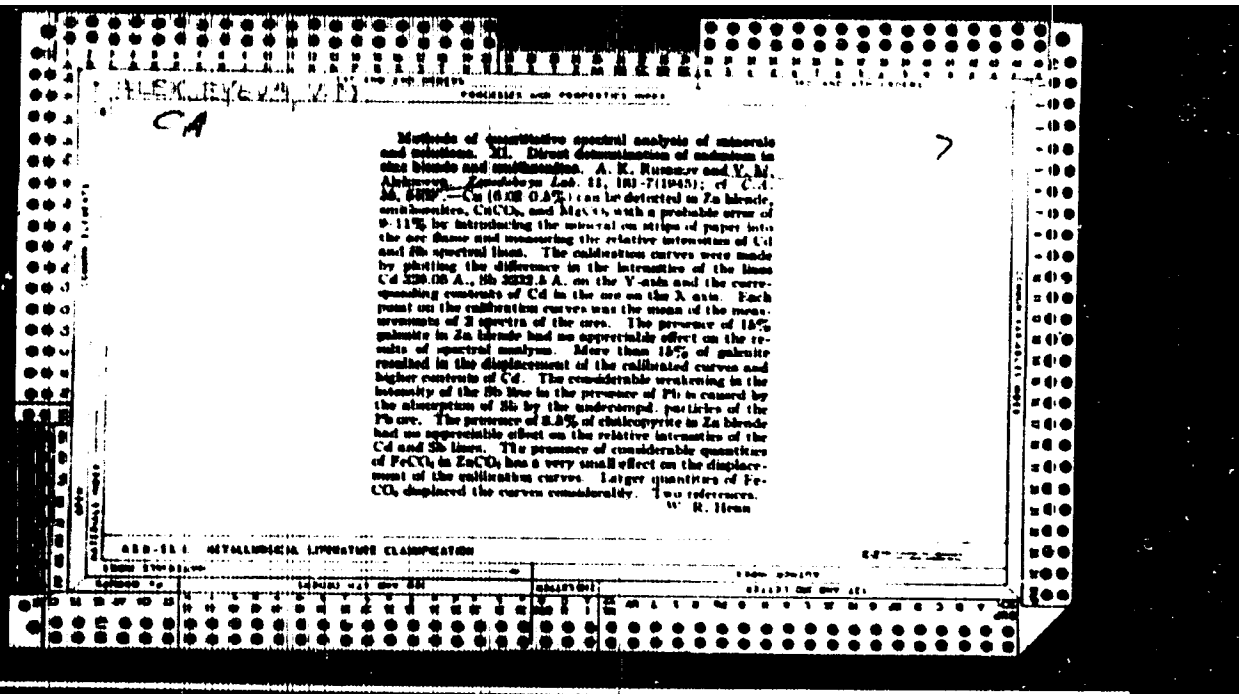
ALEKSEYEVA, V. M.

Quantitative spectrum analysis of solutions. IV. Determination of cadmium and zinc. A. K. Rusanov and V. M. Alekseyeva (Zavod. Lab., 1939, 7, 963—967).—Cd and Zn are determined in solutions, by comparison of the intensity of the lines Cd 4799·91– Mn 4823·50 A., Zn 4722·16–Mn 4783·43 A., Zn 4810·53– Mn 4823·50 A. The error is ±4·5% for solutions containing 0·03—1% of Cd, and ±2·7% for solutions containing 0·01—1% of Zn.   R. T.

ALEKSEYEVA, V.M.

Spectral analysis of solutions and minerals. A. K. Rusanov and V. M. Alekseeva. Zavodskaya Lab. 8, 993 (1939). — The intensities of the lines Na 5890.0 and 5895.9 A.—Cr 4267.98 A. and Li 6103.5v A. Moderate A. were measured to det. Na and Li. With a 2-ml sample the Na can be detd. down to a concn. of 0.001% and Li to 0.001%. These elements can be detd. in the presence of other alk. metals with a probable error of ±4.5% for Li within the concn. range of 0.001-0.2% and ±4.5% for Na for the concn. range of 0.001-0.1%.   D. Z. K.

ASM SLA METALLURGICAL LITERATURE CLASSIFICATION

7

Methods of quantitative spectral analysis of minerals and minions. IX. Effect of the volatility of the components of the ore on the intensity of the spectral lines. A. K. Russanov and V. M. Akrimova. *Zavodskaya Lab.* 10, 51-61, 171-6(1941); cf. *C. A.* 34, 5036.—The introduction of minerals and ores on paper sheets into the flame of the arc makes it possible to det. the quant. compn. of the ores regardless of the particle size or the distribution of the elements in the ore (touch, mist. or penetration into the latter). The volatility of compds. in the flame of the arc has a substantial effect on the relative and absolute intensities of the spectral lines. The change in relative intensities of the lines caused by a chem. change in compn. of the ore may be predicted by a study of the vapor pressures of the starting compds., chem. reactions occurring in the arc, and the vapor pressures of the newly formed compds. in the arc. The volatilities of free elements, their oxides, and sulfides are arranged in series. 21 references.   N. 7 Kamich

CA

Methods of quantitative spectral analysis of minerals and solutions. XI. Direct determination of cadmium in zinc blende and multimetallic. A. K. Rusanov and V. M. Alekseeva. Zavodskaya Lab. 11, 180-7 (1945); cf. C.A. M. 3107.—Cd (0.02–0.5%) can be detected in Zn blende, smithsonite, $CdCO_3$, and MgS with a probable error of 9–11% by introducing the mineral on strips of paper into the arc flame and measuring the relative intensities of Cd and Zn spectral lines. The calibration curves were made by plotting the difference in the intensities of the lines Cd 3280.08 A., Sb 3232.5 A. on the Y-axis and the corresponding contents of Cd in the ore on the X axis. Each point on the calibration curves was the mean of the measurements of 3 spectra of the ores. The presence of 16% galenite in Zn blende had no appreciable effect on the results of spectral analysis. More than 16% of galenite resulted in the displacement of the calibrated curves and higher contents of Cd. The considerable weakening in the intensity of the Sb line in the presence of Pb is caused by the absorption of Sb by the undeveloped particles of the Pb ore. The presence of 8.0% of chalcopyrite in Zn blende had no appreciable effect on the relative intensities of the Cd and Sb lines. The presence of considerable quantities of $FeCO_3$ in $ZnCO_3$ has a very small effect on the displacement of the calibration curves. Larger quantities of $FeCO_3$ displaced the curves considerably. Two references.
W. R. Honn

ASM-16.1   METALLURGICAL LITERATURE CLASSIFICATION

USSR/Chemistry - Spectral analysis

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

Authors   :   Rusanov, A. K., and Alekseyeva, V. M.

Title   :   Horizontal DC-arc as a source of excitation of the spectrum of ores and minerals

Periodical   :   Zhur. anal. khim. 9/4, 183-192, Jul-Aug 1954

Abstract   :   The applicability and advantage of a horizontal carbon-arc, placed between two charged puncture-electrodes and used as a source of excitation of ore and mineral spectra, are described. The general law governing the geometrical distribution of intensities of arc and spark lines of elements in a horizontal DC-arc, which depends very little upon the properties of the elements and volatility of the compounds, was established.

Institution   :   All-Union Scientific Research Institute of Mineral Raw Materials, Moscow

Submitted   :   April 8, 1954

Card 2/2   :   Pub. 145- 3/14

Abstract   :   The distribution of line intensities in an arc flame, based on measured temperature distribution and relative atom concentration in the arc, is explained. Eight references: 7-USSR and 1-German (1951-1952). Graphs; drawings.

SOV/ ...

AUTHORS: ...., V. M., ..., A. K.

TITLE: Sp...... Determination of Scandium in Or..

ABSTRACT: Sp...ro......te determination of scandium in silica ores
was studi.d. The following apparatus and materials were
used: Horizontal graphite ... . (... Fig. 1); auto-
collim.ting spectrograph, KS-.. with glass optics; and
buffer powde. consisting of ..... parts (by weight) of
carbon and S-CO., into water ..% of scandium oxid. is
introduc.d. A samp... of the .... ore (....5 g) is
.i..d with the buffe. powder (..... g); .... (3-.) of
.. ...p and .... v .. ...j..t.d.

C...d 1/.   Fig. .. Graph.. ...-
...... and t.. p....

Spectral Determination of Scandium in Ores

Calibration graphs (see Fig.) were used.

Fig. . Dependence of relation I and in the intensities on the
( ) S in I.
Scand .

Spectral Determination of Scandium In Ores   77744
SOV/75-15-1-6/29
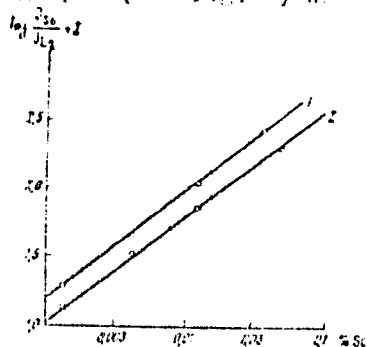
Fig. 3. Dependence of difference in darkening of lines of Sc, 2552.36 and Sr, 2423.6, on the concentration of Sc in the ore.
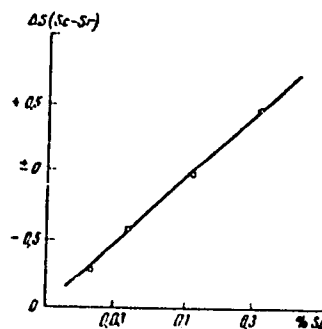
There are 2 tables; 3 figures; and 10 references, 2 U.K., 1 German, 7 Soviet. The 2 U.K. references are: Ahrens, L. H., Spectrochem. Analysis, Cambridge (1950); Kvalheim, A., Strock. W., Spectrochem. Acta, 1, 221 (1939).

Card 4/5

Spectral Determination of Scandium in Ores   77744
SOV/75-15-1-6/29

Using the proposed method, 0.001-0.1% Sc can be determined in silicate ores with an accuracy of ±10% (see Table 2). Composition of the ores has practically no effect on the results, except for the presence of Ce (1%), which interferes, since the analytical Sc line overlaps the Ce line (4246.4). The analyzed sample should not contain La (over 1%) since it is used as internal standard in this case.

Table 2. (1) Composition of sample; (2) scandium; (3) taken, %; (4) found, %; (5) relative error of a single determination; (6) quartz; (7) quartz /50%/ and feldspar /50%/; (8) the same; (9) quartz /50%/ and Al₂O₃ /50%/; (10) quartz /50%/ and CaCO₃ /50%/; (11) quartz /50%/ and MgO /50%/; (12) quartz /50%/ and Fe₂O₃ /50%/.

Card 3/5

(1)	(2)		(5)
	(3)	(4)	
(6)	0,0185	0,0180	—2,7
(7)	0,0185	0,0180	—2,7
(8)	0,041	0,042	+2,4
(9)	0,041	0,040	—2,4
(10)	0,0060	0,0060	±0
(9)	0,041	0,045	+9,8
(11)	0,0185	0,0190	+2,7
(9)	0,041	0,044	+7,3
(12)	0,0185	0,0190	+2,7
(1)	0,041	0,036	—12,2

Spectral Determination of Scandium in Ores   77744
                                        SOV/75-15-1-6/29

ASSOCIATION: All-Union Institute of Mineral Raw Materials, Moscow
                (Vsesoyuznyy institut mineral'nogo syr'ya, Moskva)

SUBMITTED: October 29, 1958

Card 5/5

IVANOV-MIROSLAVTSEV, Petr Ivanovich; SIDOROV, P.A., red.; ALEKSEYEVA, V.M., red.; PETROV, G.P., tekhn. red.

[New branches of the Chuvashian industry] Novye otrosli promyshlennosti Chuvashii. Cheboksary, Chuvashskoe gos. izd-vo, 1960.   39 p.
(MIRA 14:7)

(Chuvashia—Industries)

RUSANOV, A.K.; ALEKSEYEVA, V.M.; KHITROV, V.G.; MATIS, T.I., red.izd-va;
    BYKOVA, V.V., tekhn.red.

[Quantitative spectral determination of rare and scattered
elements in ores and minerals] Kolichestvennye spektral'noe
opredelenie redkikh i rasseiannykh elementov v rudakh i mine-
ralakh. Moskva, Gos.nauchno-tekhn.izd-vo lit-ry po geologii
i okhrane nedr, 1960. 194 p.   (MIRA 13:11)
            (Metals, Rare and minor)

ALEKSEYEVA, V.M.; NIKONOVA, Ye.A.; MYAGKOV, V.A.

Effect of different surface active agents on the dearation of
viscose and defoaming of a spinning bath. Khim.volok. no.3:30-33
'61.   (MIRA 14:6)

1. Vsesoyuznyy nauchno-issledovatel'skiy institut steklyanogo
volokna.
                        (Surface active agents)
                            (Viscose)

S/075/62/017/007/001/006
B119/B186

AUTHORS: Rumanov, A. K., Alekseyeva, V. M., Il'yasova, N. V., and
            Khitrov, V. G.

TITLE: Spectrographic quantitative determination of small concentra-
            tions of rare earths in rocks and minerals

PERIODICAL: Zhurnal analiticheskoy khimii, v. 17, no. 7, 1962, 809 – 819

TEXT: A direct simultaneous determination of rare earths in ores was made
using a ДФС-13 (DFS-13) diffraction spectrograph having a dispersion of
4 – 2 Å/mm. The spectrum was excited by evaporating the powder sample,
mixed with buffer mixture, in a carbon arc discharge. Otherwise, the
procedure followed the traditional spectrographic method. The standard
experimental error of the method is 15%. The sensitivity of determination
is 0.001% for Yb, 0.003% for Tu and Y, 0.005% for La, 0.01% for Nd, 0.03%
for Pr, Gd, Dy, and Lu, 0.04% for Ce, 0.05% for Sm, Eu, Tb, Ho, and Er.
The sensitivity can be increased to the 30 – 100 times by a simple chemical
enrichment of the samples with rare earths. In the original paper the
analytic spectrum lines of the rare earths and of the disturbing elements

Card 1/2

Spectrographic quantitative determination...   S/075/62/017/007/001/006
                                                B119/B186

were tabulated on 5 pages. There are 3 figures and 4 tables. The most
important English-language reference is: J. A. Norris, C. E. Repper,
Analyt. Chem. 24, 1399 (1952).

ASSOCIATION: Vsesoyuznyy nauchno-issledovatel'skiy institut mineral'nogo
              syr'ya, Moskva (All-Union Scientific Research Institute of
              Mineral Raw Materials, Moscow)

SUBMITTED: December 30, 1961

Card 2/2

PIKHMAN, V.D.; ALEKSEYEVA, V.M.; PAKSHVER, A.B.

Effect of heat treatment on the properties of polyvinyl chloride
fibers. Khim. volok. no.2:12-15 '65.
(MIRA 18:6)

1. VNIISV.

ALEKSEYEVA, V. M.

20191 ALEKSEYEVA, V. M. Frakticheskiye zanyatiya po fiziologii .
Estestvoznaniye v shkole, 1949, No. 3, s. 85-90

SO: LETOPIS ZHURNAL STATEY, Vol. 27, Moskva, 1949.

ALEKSEYEVA, V.N.

Protective role of fatty matter in radiation injury of cells [with summary in English]. Biofizika 3 no.1:101-107 '58.   (MIRA 11:2)

1. Institut biologicheskoy fiziki AN SSSR, Moskva.
    (RADIATION—PHYSIOLOGICAL EFFECT) (FAT)   (YEAST)

ALEKSEYEVA, V.M., dots.

Preparation of bone marrow extract and its influence on the body in radiation sickness. Akt.vop.perel.krovi no.6:84-89 '58.
(MIRA 13:1)

1. Radiobiologicheskaya laboratoriya Leningradskogo instituta pereli-vaniya krovi (zav. laboratoriyey - starshiy nauchnyy sotrudnik G.M. Murav'yev).
(TISSUE EXTRACTS)   (RADIATION SICKNESS)

ALEKSEYEVA, V.M.

On so-called lipophanerosis observable in irradiated cells. Zhur.
ob. biol. 22 no.2:146-149 Mr-Ap '61.   (MIRA 14:5)

1. Institut biofisiki AN SSSR.
        (FAT)   (YEAST)   (RADIATION—PHYSIOLOGICAL EFFECT)

MEYSEL', M.N.; MEDVEDEVA, G.A.; ALEKSEYEVA, V.M.

Detection of live, injured and dead micro-organisms. Mikrobiologiia
30 no.5:855-62 S-O '61.   (MIRA 14:12)

1. Institut mikrobiologii AN SSSR i Institut biofiziki AN SSSR.
                    (MICRO-ORGANISMS)

ALEKSEYEVA, V. M.

Dissertation defended at the Institute of Microbiology for the academic
degree of Candidate of Biological Sciences: *1962*

"Fatty and Lipoid Cellular Substances, Their Condition and Significance
Upon Radiation Exposure."

Vestnik Akad Nauk No. 4, 1963, pp. 119-145

34757

S/020/62/142/003/025/027
B144/B101

27. 1220

AUTHORS: Alekseyeva, V. M., and Meysel', M. N., Corresponding Member
            AS USSR

TITLE: Importance of intracellular fat reserves for cell reactivation
            after radiation injuries

PERIODICAL: Akademiya nauk SSSR.   Doklady, v. 142, no. 3, 1962, 699-701

TEXT: Cell reactivation after ultraviolet and ionizing irradiations is
dependent on 1) character of radiation injuries, 2) state of cell activity,
and 3) cell structure and function. This paper is a detailed study of the
third factor, particularly of the regulating effect of intracellular fat
reserves. The variation of nutrient media by additions of saccharose
and glycocoll to obtain yeast cells rich in fats and lipoids and the
subsequent effect on oxidation processes and radioresistance in irradiated
cells have been described previously (Biofizika, 3, no. 1, 101 (1958)).
In the present tests, the total content of fats and lipoids determined
in 48 hr cultures of Endomyces magnusii (EM) by extraction with sulfuric
ether was 11.5% (dry weight) on a suitable nutrient medium as compared
Card (1/3)

Importance of intracellular fat...

S/020/62/142/003/025/027
B144/B101

to 2.2% on unsuitable media. Cells were correspondingly termed as rich and poor in fat. 2% suspensions of both types were irradiated in a РУП-м (RUP1-M) x-ray apparatus (210 kw, 15 ma, 3760 r/min, without filter). EM were irradiated with 150 and 250 kr and Saccharomyces vini with 100 kr. Cells and controls were subcultured in Petri dishes with agarized beer wort immediately after irradiation and kept 6 - 9 days at 28°C as 0.2 - 0.02% suspensions in sterile tap water with daily subculturing in wort agar dishes. Reactivation was judged from the percentage of colonies (colonies in nonirradiated controls = 100%). It has been found that EM cells rich in fat have much higher reactivation levels and radioresistances (Fig. 1). The state of the fat inclusions was studied in luminescent light in cells treated with aqueous solution of Nile blue. The intracellular fat proved to be utilized in the process of cell reactivation. The present studies confirm increased reactivation in cells rich in fats and prove that their reactivation level is much higher, particularly in the first 24 hr. There are 2 figures and 8 references: 6 Soviet and 2 non-Soviet. The reference to the English-language publication reads as follows: W. A. Pratt, W. S. Moos, M. Eden, J. Nat. Cancer Inst., 15, 4, 1039 (1955).

Card 2/3
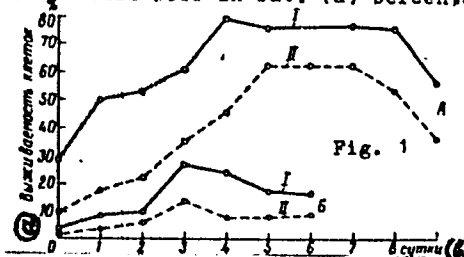
Importance of intracellular fat...   S/020/62/142/003/025/027
                                            B144/B101

ASSOCIATION: Institut mikrobiologii Akademii nauk SSSR (Institute of
               Microbiology of the Academy of Sciences USSR). Institut
               biologicheskoy fiziki Akademii nauk SSSR (Institute of
               Biophysics of the Academy of Sciences USSR)

SUBMITTED: October 3, 1961

Fig. 1. Reactivation of EM cells after irradiation with 150 kr (A) and
250 kr (5).
Legend: (I) cells rich in fat; (II) cells poor in fat; (a) percentage of
cell survivals; (b) days.

Fig. 1

Card 3/3

ALEKSEYEVA, V. M.
"Fat and Lipid Components of Cells, Their Condition and Significance
During Radiation."

Irradiation of animal and yeast cells produces changes in the luminescence of lipids
and increases the quantity of peroxides and fatty acids. The absence of fatty and
lipid reserves exerts a regulating influence on the intensity of oxidative processes
in the cell and increases its radiation stability by 30%

candidate dissertation listed in Meditsinskaya radiologiya, no. 7, 1964. The
article did not state specifically what degree was awarded. The annotated
titles deal with studies on radiation physiology, radiation biochemistry,
combined trauma and the influence of radiation on regenerative processes,
radiation microbiology and immunology, and radiation pharmacology.

ILIUKHIN, L. Ye. (Moskva, Leningradskiy prospekt, 75-a, kv.56);
PEREL'MAN, M.I.; ALEKSEYEVA, V.M.; GARGOLOYA., V.O.; GOROKHOVA,
Ye.M.; IOFFE, F.M.; LEVITIN, F.I.

Significance of compound treatment in the effectiveness of
surgical interventions in pulmonary tuberculosis. Vest. khir.
92 no.4:28-32 Ap '64   (MIRA 18:1)

1. Iz kafedry tuberkuleza TSentral'nogo instituta usovershen-
stvovaniya vrachey (rektor - M.D. Kovrigina) bol'nitsy Mi-
nisterstva putey soobshcheniya (glavnyy vrach - A.A.Potsube-
yenko) i klinicheskoy bol'nitsy "Zakhar'ino" (glavnyy vrach
V.P.Petrik).

KAMENIR, L.N.; ALEKSEYEVA, V.M.; IVKOV, V.G.

Automatic calculation of luminescent micro-objects. Mikrobiologiia
34 no.1:171-175 Ja-F '65.   (MIRA 18:7)

1. Institut biologicheskoy fiziki AN SSSR.

LITINSKAYA, L. L.; ... KENYEVA, V.M.; ORLOVSKIY, G.N.

Study of the morphology of microorganisms by using automatic
analyzer for microobjects. Biofizika 10 no.3:463-469 '65.
                                                    (MIRA 18:11)
1. Institut biologicheskoy fiziki AN SSSR, Moskva. Submitted
Jan. 24, 1963.

ALEKSEYEVA, V.M.; KAMINIR, L.B.

Fluorometric method of determining the amount of lipids
in yeast cells. TSitologiia 7 no.6:776-779 N-D '65.
(MIRA 19:1)

1. Laboratoriya biofiziki zhivykh struktur Instituta biologicheskoy
fiziki AN SSSR, Moskva. Submitted September 26, 1964.

ACC NR: AP6028191   (A)   SOURCE CODE: UR/0032/66/032/006/0696/0700

AUTHOR: Rusanov, A. K.; Alekseyeva, V. M.; Il'yasova, N. V.

ORG: All-Union Scientific Research Institute for Mineral Raw Materials (Vsesoyuznyy nauchno-issledovatel'skiy institut mineral'nogo syr'ya)

TITLE: Elimination of the mutual effect of tantalum and niobium in the spectrum analysis of mineral ores

SOURCE: Zavodskaya laboratoriya, v. 32, no. 6, 1966, 696-700

TOPIC TAGS: spectrum analysis, tantalum, niobium cobalt compound

ABSTRACT: The article proposes a spectral method for simultaneous determination of niobium and tantalum, which eliminates the mutual effect of these two elements. The method is based on the addition of cobalt chloride to the samples being analyzed. In the interval 0.001-0.1%, the reproducibility (variation coefficient) of a single determination of tantalum and niobium is 11%. It was found that the effect of niobium on the intensity of the tantalum lines can be eliminated by the creation of conditions under which tantalum will appear in the arc cloud independently of the appearance of niobium. This is achieved by the addition to the samples of reagents (metal chlorides or fluorides) which lead to the formation of new compounds. The experimental results given in the article were obtained by additions of anhydrous cobalt chloride. It

Card 1/2   UDC: 543.42

ACC NR: AP5028191

follows from the data that both tantalum and niobium can be determined by this method in spite of the presence of up to 2% niobium in silicate ores. It was found that considerable changes in concentration of tungsten, zirconium, and thorium in the samples do not affect the intensity of the niobium lines. Orig. art. has: 6 figures and 2 tables.

SUB CODE: 07, 11/ SUBM DATE: none/ ORIG REF: 004

Card 2/2

ALEKSEYEVA, V.P.; P'YANKOVA, M.D.; SULTANBEK, R.Kh.

Albumin-urea-formaldehyde glue for particle borads. Der.prom. 10
no.5:20 My '61.
            (Glue)   (Hardboard)
                                              (MIRA 14:5)

ALEKSEYEVA, V.P.

80485

S/020/60/132/02/32/067
B011/B002

5.3830

AUTHORS: Korshak, V. V., Corresponding Member AS USSR, Sosin, S. L.,
               Aleksayeva, V. P.

TITLE: The Production of New Types of Linear Polymers by Means of the
               Reaction of Polyrecombination

PERIODICAL: Doklady Akademii nauk SSSR, 1960, Vol. 132, No. 2, pp. 360-363

TEXT: The authors treated diphenylmethane, some of its derivatives, methyl
ester of phenyl acetic acid, and benzyl benzoate with tertiary butylperoxide
(1.2 and more moles per 1 mole of the initial substances) at 200°, according to
the methods described in Ref. 2. Thus they obtained polymers containing no
noticeable amounts of tridimensional structures. In such cases hitherto it was
only possible to obtain dimers (Refs. 3, 10). Now a linear polymer was obtained
from diphenylmethane which the authors consider to be a polydiphenylmethylene (I)
and which hitherto has not been known (see Scheme). It is a yellowish powder
soluble in benzene, with a melting point of 205-220°. Its molecular weight
varies between 10000 and 900000, according to the molar ratio between peroxide
and hydrocarbon. Against all expectations, this polymer shows no inclination

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The Production of New Types of Linear Polymers by Means   80485   S/020/60/132/02/32/067
of the Reaction of Polyrecombination   B011/B002

to decompose into free radicals in the presence of diphenylpicrylhydrazine. It
is also largely stable towards HNO_3 and chromium mixtures. It is very probable
that the stability of the polymer is due to the fact that the first product of
the polyrecombination reaction, namely the dimer tetraphenylethane, is a
completely stable compound (Ref. 5). The structure of polydiphenyl methylene (I)
was also confirmed by IR-spectra. On the basis of their results, the authors
concluded the following: tertiary butylperoxide decomposes in such a way that
1 mole of peroxide develops only 1 mole of active radicals instead of 2. Hence
the maximum of the molecular weight: 2 moles of peroxide consumption per 1 mole
of hydrocarbon. Half of the liberated radicals which developed originally, are
used for side reactions. From the above-mentioned compounds and others given
in table 1 the authors in the same way produced linear polymers with a high
molecular weight, soluble in benzene. If durene, ditolylmethane, p,p'-di-iso-
propyl diphenyl, benzylacetate or other compounds are introduced into the
reaction instead of diphenylmethane, large amounts of indissoluble polymers
develop besides linear polymers. Their structure apparently is cross-linked by
methyl groups. Polyrecombination allows the production of linear polymers with
aromatic cycles not only in their side-, but also in their main chains. Finally
the authors state that polyrecombination will only produce linear polymers of a

Card 2/3

The Production of New Types of Linear Polymers by   80485
Means of the Reaction of Polyrecombination   S/020/60/132/02/32/067
                                                    B011/B002

high molecular weight, if the compounds used do not contain groups which may
act as branch points of the polymer chain. There are 2 figures, 1 table, and
14 references, 7 of which are Soviet.

ASSOCIATION: Institut elementoorganicheskikh soyedineniy Akademii nauk SSSR
             (Institute of Elemental Organic Compounds of the Academy of Sciences,
             USSR)

SUBMITTED: February 3, 1960

Card 3/3

VILENSKAYA, R.M.; FRENKEL', S.Ya., red.; ALEKSEYEVA, V.P., bibliogr.red.;
KUZ'MIN, A.A., vedushchiy red.; SIL'CHENKOVA, V.V., tekhn.red.

[Bibliographic index of works of scientific personnel of the
Institute of High Molecular Weight Compounds of the Academy of
Sciences of the U.S.S.R., 1949-1959] Bibliograficheskii ukazatel'
rabot nauchnykh sotrudnikov Instituta vysokomolekuliarnykh soedinenii
AN SSSR, 1949-1959 gg. Sost.R.M.Vilenskaia. Pod red. S.IA. Frenkelia.
Leningrad, 1961. 103 p.   (MIRA 14:2)

1. Akademiya nauk SSSR. Institut vysokomolekulyarnykh soyedineniy.
        (Bibliography--Macromolecular compounds)

27570
15.8150   1371   2209   2405   1526   S/120/61/003/009/005/016
                                           3110/B101

AUTHORS: Korshak, V. V., Sosin, S. L., Alekseyeva, V. P.

TITLE: Synthesis of new types of linear polymers

PERIODICAL: Vysokomolekulyarnyye soyedineniya, v. 3, no. 9, 1961,
              1332-1340

TEXT: The first two authors showed in previous papers (Ref. 1: Dokl.
AN SSSR., 121, 299, 1958; Ref. 2: Vysokomolek. soyed., 1, 958, 1959) that
when treating peroxides (PO) of compounds such as p-diisopropyl benzene
(DIPB), diisopropyl ferrocene, p-dichloro benzene, etc., linear polymers
are formed, and, particularly in the case of DIPB, non-fusible and
insoluble polymers with cross-linked trimer structure. Polyrecombination
of diphenyl methane (DPM), phenyl acetic acid methyl ester, benzyl
benzoate, etc., was studied in the present work. When treating these
compounds with tert-butyl peroxide (TBPO) (molar ratio of TBPO to initial
compound ≥ 1-3) at 200°C, linear polymers were obtained. Diphenyl methane
(DPM) gave a linear polymer, an amorphous, yellowish powder which
dissolved in benzene (melting point = 200-220°C) with a molecular weight

Card 1/7

27570
S/190/61/003/009/005/016
P110/9101

Synthesis of new types ...

(M) of 10,000-900,000, depending on the molar ratio.

$[\eta] = 2.18 \cdot 10^{-5} M^{0.328}$. The following reactions take place:

$(CH_3)_3COCC(CH_3)_3 \longrightarrow 2(CH_3)_3CO^{\cdot}(R^{\cdot})$; $(CH_3)_3CO^{\cdot} \longrightarrow (CH_3)_2CO + CH_3^{\cdot}(R^{\cdot})$. The

radicals react with the hydrocarbons:

$(C_6H_5)_2CH_2 + R^{\cdot} \rightarrow RH + (C_6H_5)_2\dot{C}H$; $2(C_6H_5)_2\dot{C}H \rightarrow HC(C_6H_5)_2CH(C_6H_5)_2 \rightarrow$

$\dot{C}(C_6H_5)_2 \rightarrow H[C(C_6H_5)_2]_2 H \rightarrow HC(C_6H_5)_2[C(C_6H_5)_2]_n \rightarrow C(C_6H_5)_2 H$ (1).
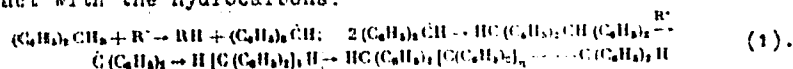
The resultant polydiphenyl methylene (PDM) (1) does not decompose to free
radicals in the presence of diphenyl picryl hydrazine, and is stable to
oxidants (HNO₃), since the structure of tetraphenyl ethane (TE) which is
probably formed initially does not permit the formation of stable radicals.
Rearrangements might take place according to

(II)

Card 2/7

27570

, Synthesis of new types ...

S/190/61/003/009/005/016
B110/B101

change in viscosity. In A, TPE is formed (melting point 209-211°C, i.e., higher than the reaction temperature), and viscosity considerably increases. In B, however, it decreases since the low-molecular polymers melt already at 180-190°C. The reaction of TPE which is first accelerated is then retarded by the formation of high-molecular polymers (melting point 200°C). The viscosity will be reduced toward the end of the reaction by adding a DPM-PO mixture to DPM; the yield increases. Peroxide admixture of > 2 moles/mole of DPM graphically results in a steep ascent of the molecular weight which asymptotically approaches the ordinate. Assuming that the chain grows by doubling (dimer, tetramer, octamer), the following holds: $N_R = 2 - 2/n$, where N_R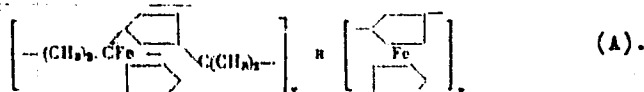 = number of free radicals/moles; n = polymerization coefficient. 1 mole of free radicals is formed on decomposition of TBPO. Maximum M is thus obtained for a PO consumption of 2 moles/mole of hydrocarbon. 0.68 mole tert-butoxyl radicals result from 1 mole PO (in the form of tert-butyl alcohol). 1.32 mole of radicals decomposes to give 1.32 mole acetone and 0.66 mole methane, as follows:

(A) $(CH_3)_3 CO \cdot \xrightarrow{140°C} (CH_3)_2 CO + CH_3^\cdot$, and (B) $(CH_3)_3 CO \cdot \xrightarrow{190-200°C} (CH_3)_2 CO$ + $CH_3 -O-C-(CH_3)_3$. According to Yu. A. Aleksandrova, Huan Yü-li, A. P.

Card 4/ 7

27570

Synthesis of new types ...

S/190/61/003/009/005/016
B110/B101

change in viscosity. In A, TPE is formed (melting point 209-211°C, i.e., higher than the reaction temperature), and viscosity considerably increases. In B, however, it decreases since the low-molecular polymers melt already at 180-190°C. The reaction of TPE which is first accelerated is then retarded by the formation of high-molecular polymers (melting point 200°C). The viscosity will be reduced toward the end of the reaction by adding a DPM-PO mixture to DPM; the yield increases. Peroxide admixture of > 2 moles/mole of DPM graphically results in a steep ascent of the molecular weight which asymptotically approaches the ordinate. Assuming that the chain grows by doubling (dimer, tetramer, octamer), the following holds: $N_R = 2 - 2/n$, where N_R = number of free radicals/moles; n = polymerization coefficient. 1 mole of free radicals is formed on decomposition of TBPO. Maximum M is thus obtained for a PO consumption of 2 moles/mole of hydrocarbon. 0.66 mole tert-butoxyl radicals result from 1 mole PO (in the form of tert-butyl alcohol). 1.32 mole of radicals decompose to give 1.32 mole acetone and 0.66 mole methane, as follows:

(A) $(CH_3)_3CO \cdot \xrightarrow{140°C} (CH_3)_2CO + CH_3 \cdot$, and (B) $(CH_3)_3CO \cdot \xrightarrow{190-200°C} (CH_3)_2CO + CH_3-O-C-(CH_3)_3$. According to Yu. A. Aleksandrova, Huan Yü-li, A. P.

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8/190/61/003/009/005/016
B110/B101

Synthesis of new types ...

Pravednikov, S. S. Medvedev (Dokl. AN SSSR, 123, 1029, 1958), no methyl
radicals are formed in (B) which takes place at higher temperatures.
Isobutylene oxide results on initiation of the peroxide decomposition. The
authors separated the fraction (51-53°C): isobutyl-methyl ether and
isobutylene oxide. In the same way, they obtained polymers which dissolved
in benzene. When using ditolyl methane instead of DPM, a polymer
insoluble in benzene and p-cresol (melting point 180-240°C) with cross-
linked structure is obtained in addition to linear polymers (melting
point = 150-180°C, molecular weight = 2500). The elemental-organic
polymers obtained from diisopropyl ferrocene, ferrocene, and triphenyl-tri-
N-isopropyl borazol (TPNI) by means of polyrecombination showed IR
absorption maxima at 820, 1000, and 1100 cm^{-1}, and, accordingly, structure

$$\left[-(CH_2)_3 \cdot CFe = \diagdown C(CH_3)_2-\right]_x \quad R \quad \left[-\diagdown Fe\diagup \right]_x \qquad (A).$$

M = 1000-7000, they are dark-red powders soluble in benzene (softening
point ~300°C). The electron paramagnetic resonance signal (line width

Card 5/7

Synthesis of new types ...

27570
S/190/61/003/009/005/016
B110/B101

120 oe, 20°C) confirmed the existence of unpaired electrons (concentration 10^{21}/g polymer). Treatment of TPNI with TBPO yielded only a soluble, low-molecular polymer. Polyrecombination gives also polymers with aromatic rings in side and principal chains. A soluble copolymer was obtained by treating a mixture of DPM (0.1 mole) and DIPB (0.1 mole) with 0.25 mole TBPO; DIPB alone gave a nearly insoluble polymer. 2,5-dichloro-p-xylene gives a chlorinated analog of poly-p-xylene soluble in benzene. Cl in ortho-position to the CH_3 groups blocks them and prevents their participation in the formation of linear chains. Polyrecombination thus results in carbon chain polymers with aromatic rings in the principal chain, whose production is difficult. Gas chromatography of DPM was made on the X-2 (Kh-2) apparatus. There are 4 figures, 1 table, and 18 refer-ences: 6 Soviet and 12 non-Soviet. The three most recent references to English-language publications read as follows: Ref. 7: G. A. Russel, J. Amer. Chem. Soc., 78, 1047, 1956; Ref. 9: J. H. Brook, Trans. Faraday Soc., 53, 327, 1957; Ref. 10: K. M. Johnston, G. H. Williams, Chem. and Chem. Ins. 1958, No. 11, 328.

ASSOCIATION: Institut elementoorganicheskikh soyedineniy AN SSSR
               (Institute of Elemental Organic Compounds AS USSR)
Card 6/7

ACCESSION NR: AP3000691   S/0190/63/005/005/0663/0669

AUTHOR: Korshak, V. V.; Sosin, S. L.; Alekseyeva, V. P.; Morozova, Ye. M.

TITLE: Investigation of the structure of a polymer prepared by the polyrecom-
bination of hexyl trifluoroacetate

SOURCE: Vysokomolekulyarny*e soyedineniya, v. 5, 1963, 663-669

TOPIC TAGS: polyrecombination polymer, hexyl trifluoroacetate, electron
paramagnetic resonance

ABSTRACT: The structure and properties of a polymer prepared by the polyrecombination
of hexyl trifluoroacetate have been studied at the Institute of Organoelemental
Compounds, AN SSSR by IR and EPR spectroscopy and by the method of thermo-
gravimetric analysis. The polymer was prepared by a previously described method (V. V. Korshak, S. L. Sosin,
V. P. Chirkov, Doklady* Akad. Nauk SSSR; Termoreaktivny*e polimery*, Goskhimizdat, 1960,
p. 9) and characteristic properties were studied and analyzed. Study of the
thermogravimetric curves indicate that the polymer exhibits elastic properties
at 220 to 530C. As the peroxide/monomer ratio is varied from 2.15 to 3.05/1, the
polymer yield varies from 7.0 to 11.4% of the reacted monomer, the mol. wt. from
1020 to 12,000, and the softening point from 198 to 580C. The EPR spectrum of
Card 1/3

polymer showed a carbon (C=C=O) and carbon signal, indicating the presence ... the IR signal by both the solid polymer and ... not delocalized within the polymer ... its ... is due to the presence of con... ... the IR spectrum. The IR spectrum also indi... the fluorine is found in the ester group. These spectroscopic data and elemental analysis of the polymer suggest that it has the following structure:

$$\text{---CH}_2\text{---CH}_2\text{---CH}_2\text{---CH}_2\text{---CH---} \quad \begin{array}{c} CF_3 \\ | \\ C=O \\ | \\ O \end{array}$$
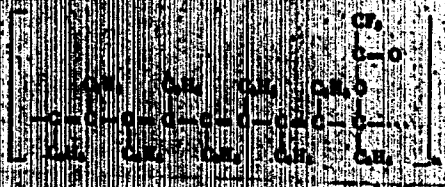
Where every 7th or 9th C atom has a trifluoroacetate substituent. This structure is probably formed by the splitting off of most of the trifluoroacetate groups.

Card 2/3

ACCESSION NR: AP3000591

In the polycondensation, chars are unstable and undergo further decomposition.
Orig. art. has: 2 figures, 4 formulas, and 1 table.

ASSOCIATION: Institut elementoorganicheskikh soyedineniy AN SSSR (Institute
of Organoelement Compounds, AN SSSR)

SUBMITTED: 09Oct61   DATE ACQ: 17Jun63   ENCL: 00

SUB CODE: CH, MA   NO REF SOV: 007   OTHER: 006

Card 3/3

SOSIN, S.L.; KORSHAK, V.V.; ALEKSEYEVA, V.P.

Polymers and copolymers of derivatives of ferrocene obtained by
the polyrecombination method. Dokl. AN SSSR 149 no.2:327-329
Mr '63.   (MIRA 16:3)

1. Institut elementoorganicheskikh soyedineniy AN SSSR.
2. Chlen-korrespondent AN SSSR (for Korshak).
                        (Ferrocene) (Polymerization)

SOSIN, S.L.; KORSHAK, V.V.; ALEKSEYEVA, V.I.

Possibility of preparing high-molecular weight compounds from diphenylgermane under conditions of polyrecombination reaction. Vysokom.soed. 6 no. 5:827-831 My '64. (MIRA 17:6)

1. Institut elementoorganicheskikh soyedineniy AN SSSR.

ACCESSION NR: AP4032577   S/0190/64/006/004/0745/0750

AUTHORS: Sosin, S. L.; Korshak, V. V.; Alekseyeva, V. P.

TITLE: A study of the possibility of synthesizing high molecular compounds from diphenylsilane under conditions of the polyrecombination reaction

SOURCE: Vy*sokomolek. soyedin., v. 6, no. 4, 1964, 745-750
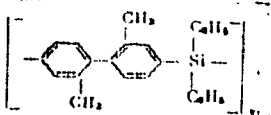
TOPIC TAGS: organosilicon compound, diphenylsilane, triphenylsilane, tetraphenyl-silane, phenylsilane polyrecombination, phenylsilane heterochain polymer, tetraphenylsilane polymer, diphenylsilane disproportionation, UR 10 spectroscope, Trub Tauber spectrometer

ABSTRACT: The polyrecombination of diphenylsilane was conducted in the presence of tert.butyl peroxide in a special apparatus at 170 and 200C. The reaction products were treated with benzene, and the soluble polymer was precipitated with methanol. The obtained compounds were fractionated, analyzed chemically, and examined by infrared spectroscopy on a UR-10 apparatus and on a nuclear magnetic resonance Trub Tauber spectrometer. The main polymer isolated by the authors

Card 1/3

ACCESSION NR: AP4032577

is ascribed the formula

Its formation may have proceeded through the intermediate product tetraphenyl-
silane, which has been isolated from the reaction products together with
triphenylsilane and hydrosilicon. Since at a 1:0.1 molar ratio of the issuing
diphenylsilane and peroxide only 4% of diphenylsilane could be recovered, it is
assumed that a disproportionation reaction takes place in which some of the
products become involved in the building of the polymer chain. This assumption
is supported by the fact that increased concentrations of the peroxide result in
a higher yield of tetraphenylsilane. Heating of the obtained polydiphenylsilane
of molecular weight 1530 to 9000 in a quartz tube yielded a polymer with a molecu-
lar weight of 810. The benzene-insoluble fraction of the diphenylsilane poly-
recombination reaction products yielded a polymer of 190 500 molecular weight.
Orig. art. has: 5 formulas and 1 chart.

Card 2/3

ACCESSION NR: AP4032577

ASSOCIATION: Institut elementoorganicheskikh soyedineniy AN SSSR (Institute of Organoelemental Compounds, AN SSSR)

SUBMITTED: 01Jun63   DATE ACQ: 11May64   ENCL: 00

SUB CODE: CH   NO REF SOV: 005   OTHER: 009

Card 3/3

ACCESSION NR: AP4037279   S/0190/64/006/005/0827/0831

AUTHORS: Sosin, S. L.; Korshak, V. V.; Alekseyeva, V. P.

TITLE: A study of the possibility of obtaining high molecular compounds from
diphenylgermanium under conditions of the polyrecombination reaction

SOURCE: Vy*sokomolekulyarny*ye soyedineniya, v. 6, no. 5, 1964, 827-831

TOPIC TAGS: diphenylgermanium polyrecombination, diphenylgermanium high molecular
compound, diphenylgermanium disproportionation reaction, diphenylgermanium dispro-
portionation product, tetraphenylgermanium, diphenylgermanium, germanium hydride

ABSTRACT: The polyrecombination of diphenylgermanium was conducted at 200C (in the
presence of tert-butyl peroxide) by a technique described by the authors in an
earlier publication (Vy*sokomolek. soyed. 3, 1332, 1961). The reaction product was
treated with benzene, and the soluble fraction was precipitated with methanol. It
was found that the disproportionation of diphenylgermanium produced 50% of a polymer

$$\left[-\overset{\displaystyle C_6H_5}{\underset{\displaystyle C_6H_5CH_2}{Ge}}-CH_2- \right]$$
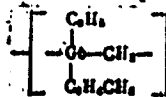
Card 1/2

ACCESSION NR: AP4037279

(with a maximum molecular weight of 1840) and also tetraphenylgermanium, triphenyl-germanium, and germanium hydride, the presence of which was confirmed by infrared spectroscopy. The thermal disproportionation of diphenylgermanium also took place without tert.butyl peroxide at 200C and at 140C. A copolymer of diphenylgermanium with diphenylmethane in equimolar ratio was synthesized in the presence of tert.-butyl peroxide, yielding an amorphous brown product with a molecular weight of 4800. Orig. art. has: 4 formulas.

ASSOCIATION: Institut elementoorganicheskikh soyedineniy AN SSSR (Institute of Organoelemental Compounds, AN SSSR)

SUBMITTED: 01Jun63   DATE ACQ: 09Jun64   ENCL: 00

SUB CODE: MT   NO REF SOV: 004   •   OTHER: 008

Card 2/2

SOSIN, S.L.; KORSHAK, V.V.; ALEKSEYEVA, V.P.

Possibility of synthesizing macromolecular compounds from
diphenylsilane under conditions of the polyrecombination
reaction. Vysokom. soed. 6 no.4:745-750 Ap '64.
(MIRA 17:6)

1. Institut elementoorganicheskikh soyedineniy AN SSSR.

VILENSKAYA, Raisa Markovna; FRENKEL', S.Ya., doktor fiz.-mat.
nauk, red.; ALEKSEYEVA, V.F., red.; KUTASOVA, E.I., red.

[High-molecular compounds; bibliographic index o. Soviet
and foreign books, 1930-1963] Vysokomolekuliarnye soedine-
niia; bibliograficheskii ukazatel' otechestvennykh i zaru-
bezhnykh knig 1930-1963. Leningrad, 1965. 368 p.
                                        (MIRA 18:10)

1. Akademija nauk SSSR. Biblioteka.

ALEKSEYEVA, V. S.

Nervos - Surgery

Surgical therapy of peripheral paralyse of the facial nerve (anastomosis of facial
and accessory nerves), Vop. neirokhir, 16, No. 3, 1952.

Monthly List of Russian Accessions.   Library of Congress October 1952   UNCLASSIFIED.

ALEKSEYEVA, V.S.

Clinical aspects and surgical therapy of neurinoma of the Gasserian ganglion. Vop. neirokhir. 18 no.5:17-22 S-O '54.   (MLRA 7:11)

1. Iz Instituta neyrokhirurgii imeni N.N.Burdenko Akademii meditsinskikh nauk SSSR.
     (NERVES, TRICEMINAL,
        gasserian ganglion, neurilemmoma, surg.)
     (NEURILEMMOMA,
        gasserian ganglion, surg.)

ALEKSEYEVA, V.S., kand.med.nauk (Moskva)

Medulloblastmas of the posterior cranial fossa in adults. Vop.
neirokhir. 23 no.6:30-33 N-D '59.   (MIRA 13:4)

1. Nauchno-issledovatel'skiy ordena Trudovogo Krasnogo Znameni
institut neyrokhirurgii imeni akademika N.N. Burdenko AMN SSSR.
            (MEDULLOBLASTOMA)
            (SKULL   neoplasms)

ALEKSEYEVA, V.S., kand.med.nauk

Topography of intracerebral tumors of the parietal lobe. Probl.
sovr.neirokhir. 3:99-112 '59.
(BRAIN—CANCER)   (MIRA 16:6)

ALEKSEYEVA, V.S., kand.med.nauk

Clinical aspects and surgical treatment of nodular bones of
sarcomas of the cerebellum. Probl.sovr.neirokhir. 4:230-234
'62.

(CEREBELLUM—TUMORS)

(MIRA 16:2)

5(3)   SOV/79-29-9-41/76
AUTHORS: Lutskiy, A. Ye., Alekseyeva, V. T.

TITLE: Intramolecular Hydrogen Bond and Absorption Spectra in the
             Ultraviolet. VI. Absorption Spectra of Nitro-aniline

PERIODICAL: Zhurnal obshchey khimii, 1959, Vol 29, Nr 9,
             pp 2992 - 2998 (USSR)

ABSTRACT: The absorption spectra of o-, m- and p- nitro-anilines
             were frequently investigated by spectrum analysis (Refs 1-9).
             The characteristic features of their spectra are explained
             by the formation of quinoid structures (Ref 1), by the vary-
             ing stability of the intramolecular bonds of the isomers
             (without explaining their nature) (Ref 2), and by the differ-
             ence in their energy levels between which electron transitions
             take place (Refs 7,8,10). On the basis of the physical and
             chemical properties of these compounds (Refs 11-14) the intra-
             molecular hydrogen bond is assumed to be only present in the
             ortho-isomer.

Card 1/3

Intramolecular Hydrogen Bond and Absorption Spectra   SOV/79-29-9-41/76
in the Ultraviolet. VI. Absorption Spectra of Nitro-aniline
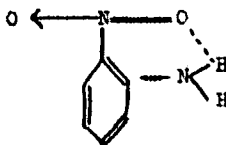
The relation between the individual absorption bands and
certain kinds of electron transition is bound to be reflected
by the kind of its variation when another solvent is used.
For this reason the authors determined the spectra of nitro-
benzene, aniline, and o-, m-, p-nitro-aniline in six differ-
ent solvents which had hitherto not been used for such in-
vestigations, i.e. benzene, chloroform, diethyl ether, n-bu-
tanol and sulphuric acid (98% and 9.8%). Figures 1-6 show
the results of investigation. They reveal that the character-
istics of the nitro-aniline spectra are similar to those
observed in all disubstituted benzenes with active groups,

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Intramolecular Hydrogen Bond and Absorption Spectra   SOV/79-29-9-41/76
in the Ultraviolet. VI. Absorption Spectra of Nitro-aniline

observed in all disubstituted benzenes with active groups,
i.e. with a nucleophilic and electrophilic group. The long-
wave band of nitro-anilines is an $N \rightarrow V$-band of electron
transitions in which the electrons of both functional groups
take part. In o-nitro-aniline the intramolecular hydrogen
bond is characterized by a distinct shift and broadening of
the band (A) toward the long-wave range. The table shows the
data characteristic of the absorption spectra of nitro-ani-
lines. There are 6 figures, 1 table, and 26 references, 8
of which are Soviet.

ASSOCIATION: Khar'kovskiy politekhnicheskiy institut (Khar'kov Polytech-
nic Institute)

SUBMITTED: July 27, 1958

Card 3/3

5(5)   SOV/79-29-9-42/76
AUTHORS: Lutskiy, A. Ye., Alekseyeva, V. T.

TITLE: Absorption Spectra of Disubstituted Benzenes With Functional
              Groups Acting in the Same Way. I. Nitro-acetophenone

PERIODICAL: Zhurnal obshchey khimii, 1959, Vol 29, Nr 9,
              pp 2998 - 3005 (USSR)

ABSTRACT: To clarify the nature of the electron transitions which
              correspond to the various ultraviolet absorption bands of
              the aromatic compounds, it is necessary to investigate the
              characteristics of absorption in the case of disubstituted
              benzenes containing functional groups acting in the same way.
              The spectra of the compounds of this kind (nitro-acetophenone,
              nitro-benzaldehyde, dinitro-benzene, etc) have been investi-
              gated several times (Refs 1-8), as a rule, however, only in
              hexane or ethanol without consideration of all isomers. Know-
              ledge of the character of the variation in the absorption bands
              in polar, hydroxyl-containing, and acid solvents is necessary
              (Refs 9-11) for a determination of the nature of the electron
              transitions. The spectra of the compounds of this kind were
Card 1/3   investigated in the following seven solutions: in apolar ones

Absorption Spectra of Disubstituted Benzenes With   SOV/79-29-9-42/76
Functional Groups Acting in the Same Way. I. Nitro-acetophenone

(hexane, benzene, dioxane), in a polar solution (ether), a
hydroxyl-containing one (n-butanol) as well as in 98 and 9.8%
sulphuric acid. The results of measurement of the spectra of
nitro-benzene and its o-, m-, and p-acetyl derivatives in the
aforementioned solvents are given. The absorption curves of
nitro-acetophenones are similar with respect to the number,
and position of the absorption bands as well as to the varia-
tion caused by the nature of the solvent; this similarity re-
fers also to the absorption curves of the monosubstituted
compounds (mainly nitro-benzene). The characteristic features
of the spectra of the kinds of compounds under investigation are
due to the hindered transition of the charge in molecule exci-
tation under the participation of the electrons of both substi-
tuents. The presence of a steric effect of the groups is only
confirmed by o-nitro-acetophenone. The bands corresponding to
the p ——➤ π transitions do not undergo a hypsochromic shift
in hydrogen-containing solvents and acids in groups with
π- and some p-electron pairs. There are 11 figures, 1 table,
and 21 references, 4 of which are Soviet.

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Absorption Spectra of Disubstituted Benzenes With   SOV/79-29-9-42/76
Functional Groups Acting in the Same Way. I. Nitro-acetophenone

ASSOCIATION: Khar'kovskiy politekhnicheskiy institut (Khar'kov Polytechnic
            Institute)

SUBMITTED: July 27, 1958

Card 3/3

LUTSKIY, A.Ye.; ALEKSEYEVA, V.T.

Absorption spectra of disubstituted benzene derivatives having
functional groups of the same directing influence. Part 3:
Nitrobenzoic acids and ethylnitrobenzoates. Zhur.ob.khim. 30
no.8:2737-2742 Ag '60.
                   (Benzoic acid--Spectra)   (MIRA 13:8)

LUTSKIY, A.Ye.; ALEKSEYEVA, V.T.; KONDRATENKO, B.P.

Dipole moments of disubstituted benzenes having electron-
acceptor functional groups. Zhur.fiz.khim. 35 no.8:1706-
1709 Ag '61.   (MIRA 14:8)

1. Khar'kovskiy politekhnicheskiy institut imeni V.I.
Lenina.
                (Benzene—Dipole moments)

PHASE I BOOK EXPLOITATION   SOV/4769

Ostroushko, Yu. I., P. I. Buchikhin, V. V. Alekseyeva, T. F. Naboyshchikova,
     G. A. Kovda, S. A. Shelkova, R. N. Alekseyeva, and M. A. Makovetskaya

Litiy, yego khimiya i tekhnologiya (Lithium, its Chemistry, and Technology)
     Moscow, Atomizdat, 1960. 198 p. Errata slip inserted. 5,000 copies
     printed.

Ed.: Ye. I. Panasenkova; Tech. Ed.: Ye. I. Mazel'.

PURPOSE: This book is intended for scientific workers, metallurgical engineers,
     and chemists working in the chemistry and technology of rare and sparsely dis-
     tributed elements. Engineers and mechanics in charge of lithium production,
     and students in schools of higher education and in tekhnikums may find the
     book useful.

COVERAGE: The book deals with the geochemistry and mineralogy of lithium, the
     chemistry of lithium and its compounds, analytical chemistry of lithium,
     d   of lithium ores, methods of processing lithium ores, and the metal-

Ca...   . .

Lithium, its Chemistry, and Technology (Cont.)   SOV/4769

lurgy of lithium. It is based on Soviet and other technical literature
published from 1918 through 1958. No personalities are mentioned.
References accompany each chapter.

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meditsinskogo instituta imeni I.M.Sechenova
        (ANEMIA, PERNICIOUS, physiology,
            intestine, small, motor funct. (Rus))
    (INTESTINE, SMALL, invarious diseases,
        anemia, pernicious, motor funct. (Rus))

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5773. Zameniteli shirlaevo-surichnoco grunta v mashinostroenii. M. 1954. 14s. s ill
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[Electrical machinery] Elektricheskie mashiny. Izd... Moskva, Energiia. P... 1969. (MIRA 21:11)

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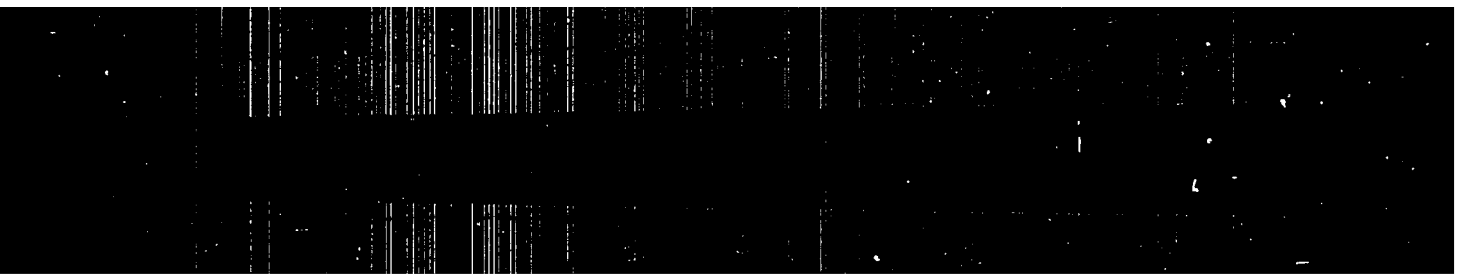
DOMBROVSKAIA, N.S., doktor khimicheskikh nauk; ALEKSEYEVA, Ye.A., inzh.

Increasing the wear resistance of metals by chemical heat treatment. Trudy NIIKHIMMASH no.27:142-149 '59. (MIRA 14:8)
(Case hardening)

5(2,4)

AUTHORS: Dombrovskaya, N. S., Alekseyeva, Ye. A.   SOV/20-127-5-24/58

TITLE: A Mutual 7-Component System of 16 Salts of Li, Na, Rb, Tl || Br, Cl, NO_3, SO_4 in Melts

ABSTRACT: From the practical point of view the investigation of multi-
             component systems is of high importance for the investigation of
             natural and technological processes. A complete investigation of
             such systems is very complicated. Methods of a simpler solution
             of these problems were shown already in the thirties by N. S.
             Kurnakov and his collaborators (Refs 1-4). The composition of
             the mentioned systems is represented geometrically by n-dimen-
             sional polytopes. The system mentioned in the title which was
             investigated by the authors contains the following systems of
             components:
             16 systems of 1-components of the type AX
             48 binary systems of the type AX — BX
             32 ternary systems of the type A || X, Y, Z
             36 ternary mutual systems of the type A, B || X, Y
              8 quaternary systems of the type A || X, Y, Z, T

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A Mutual 7-Component System of 16 Salts of
Li, Na, Rb, Tl || Br, Cl, NO_3,SO_4 in Melts

SOV/2C-127-5-24/58

48 quaternary mutual systems of the type A, B || X, Y, Z
12 quintary mutual systems of 8 salts A, B || X, Y, Z, T
16 quintary mutual systems of 9 salts A, B, C || X, Y, Z
8 hexadic mutual systems of 12 salts A, B, C || X, Y, Z, T

D e t e r m i n a t i o n   of the   s i n g u l a r   s t a r .
Such an (equilibrium) star is determined by the stable diagonals
of the ternary mutual systems, by the stable diagonal triangles
of the quaternary mutual systems, by the stable diagonal
tetrahedra of the quintary mutual systems etc. (Refs 2-4). It is
practical to use the table of indices of the polytope peaks which
were used for the geometrical representation of the compositions
of multi-component systems: the peak indices of multi-component
systems are determined by the number of stable diagonals passing
through the polytope peak concerned. Table 1 shows the peak
indices of the mutual systems from 6, 8, 9, and 12 salts.
The   m u t u a l   s y s t e m   (as mentioned in the title) is a
6-dimensional polytope (Ref 4). Table 2 shows the peak indices
Card 2/3   for this polytope. The singular star contains the most stable

A Mutual 7-Component System of 16 Salts of
Li, Na, Rb, Tl || Br, Cl, NO_3, SO_4 in Melts

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"base" tetrahedron 9-5-5-9 Li_2SO_4-NaCl - $RbNO_3$ - TlBr
(first mentioned by V. P. Radishchev). It is placed in the center
of a cube and 6 pentatopes have it in common in the centers of
the cube-facets; 12 base pentatopes are placed in the center of
quadratic cycles; 30 hexatopes are in the middle of the edges;
20 heptatopes are at the peaks of the squares and of the 2
prolongations. Figure 1 shows the singular star of the system
mentioned in the title. It has a double symmetry with a center
of symmetry. The mentioned system may be attributed to the class
of the reversible-mutual systems. There are 1 figure, 2 tables,
and 8 Soviet references.

PRESENTED: April 4, 1959, by I. I. Chernyayev, Academician

SUBLITTED: March 30, 1959

Card 3/3

ALEXEITSEVA, YE. I. and N. G. DOKBROVTSEVA, (Doctor of Technical Sciences)

Development of Methods for the Thermochemical Treatment of Metal Surfaces for the Purpose of Increasing Their Wear Resistance.

Povsheniye iznosostoykosti i sroka sluzhby mashin. t. 2 (Increasing the Wear Resistance and Extending the Service Life of Machines. v. 2) Kiyev, Izd-vo AN UkrSSR, 1960. 290 p. 3,000 copies printed. (Series: Its: Trudy, t. 2)

Sponsoring Agency: Vsesoyuznoye nauchno-tekhnicheskoye obshchestvo mashinostroitel'noy promyshlennosti. Tsentral'noye i Kiyevskoye oblastnoye pravleniya. Institut mekhaniki AN UkrSSR.

Editorial Boards: Resp. Ed.: B. D. Grozin; Deputy Resp. Ed.: D. A. Drayger; A.I. Braun, I. V. Tigmeran, I. V. Kragel'skiy; Scientific Secretary: N. L. Barabach; Ed. of v. 2: ya. A. Samokhvalov; Tech. Ed.: N.I. Radhlina.

COVERAGE: The collection contains papers presented at the Third Scientific Technical Conference held in Kiyev in September 1957 on problems of increasing the wear resistance and extending the service life of machines. The conference was sponsored by the Institut stroitel'noy mekhaniki AN UkrSSR (Institute of Structural Mechanics of the Academy of Sciences Ukrainian SSR), and by the Kiyevskaya oblastnaya organizatsiya nauchno-tekhnicheskogo obshchestva mashinostroitel'noy promyshlennosti (Kiyev Regional Organization of the Scientific Technical Society of the Machine-Building Industry).