

ACCESSION NR: AP4036564

S/0139/64/000/002/0098/0104

AUTHORS: Shalimova, K. V.; Morozova, N. K.

TITLE: On the nature of absorption in zinc sulfide

SOURCE: IVUZ. Fizika, no. 2, 1964, 98-104

TOPIC TAGS: optical absorption, polycrystalline structure, stoichiometric composition, spectrograph ISP 28, hexagonal specimen, crystal structure, film substrate, excitation level, zinc sulfide, Hitachi spectrophotometer

ABSTRACT: Optical absorption in thin polycrystalline ZnS layers was studied as a function of its stoichiometric composition. Measurements were taken on thin films by using an Hitachi spectrophotometer at room temperatures and with a spectrograph ISP-28 at 77K. Three absorption regions were observed with specimens containing excess zinc atoms (at 220, 240-260, and 300-340 m μ). The hexagonal specimens exhibited six bands with maxima at 3085, 3120, 3164, 3190, 3210, and 3224 Å at 77K. Films with cubical crystal structure showed three bands with maxima at 3214, 3273, and 3290 Å. Raising the surplus zinc atom concentration above its stoichiometric value sharply increased absorption in the 240-260 and 300-340 m μ regions, while

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decreasing this concentration reduced the absorption in the corresponding bands. Optical absorption was also increased by raising the heating temperature of the film substrate. It is shown that ZnS absorption in the 240-260 and 300-340 m μ regions is determined by electron transitions in excess zinc atoms from $4s^2 1S_0$ ground level to the excitation levels of $4s4p^1 P_1$ and $4s4p^3 P_{0,1,2}$ respectively. In the hexagonal crystal specimens these excitation levels are thought to be caused by $j + 1$ splitting of the energy levels (j - internal quantum number). Orig. art. has: 3 figures.

ASSOCIATION: Moskovskiy energeticheskiy institut (Moscow Institute of Power Engineering)

SUBMITTED: 19Jul63 DATE AQ: 05Jun64 ENCL: 00

SUB CODE: GP, GC NO REF SOV: 011 OTHER: 007

Card 2/2

ACCESSION NR: AP4036565

S/0139/64/000/002/0104/0109

AUTHORS: Shalimova, K. V.; Morozova, N. K.

TITLE: Temperature dependence of absorption spectra of zinc sulfide polycrystalline films

SOURCE: IVUZ. Fizika, no. 2, 1964, 104-109

TOPIC TAGS: absorption spectra, fused quartz, ultraviolet light, spectrograph, cubic lattice, wavelength, temperature displacement coefficient, single crystal, spectrograph ISP 28, ultraviolet lamp GSVD 120

ABSTRACT: The absorption spectra of ZnS were studied (with an ISP-28 type spectrometer) as a function of temperature from 77K to room temperature. The specimens were prepared by vacuum deposition on fused quartz in argon and hydrogen sulfide atmospheres. A GSVD-120 lamp served as a source of ultraviolet light. The cubic lattice specimens showed three absorption bands at 77K (3210, 3273, and 3290 Å). Of these, only two are visible at room temperature (wavelengths of 3280 and 3360 Å). The 3273 Å band showed a temperature displacement coefficient equal to 4.5×10^{-4} ev/degree, and the 3210 Å band of 3.3×10^{-4} ev/degree. The cubical

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lattice specimens with hexagonal traces showed absorption bands of 3120, 3190, 3217, 3273, and 3290 Å at 77°K. These shifted toward greater wavelengths when the temperature was raised to 293K. A table is presented for comparing the temperature displacement coefficients of single crystal, powder, and polycrystalline film specimens of α and β -ZnS. The shift in absorption bands is attributed to transition of electrons on various active levels with different degrees of forbiddenness. Orig. art. has: 4 figures and 1 table.

ASSOCIATION: Moskovskiy energeticheskiy institut (Moscow Institute of Power Engineering)

SUBMITTED: 19Jul63

DATE ACQ: 05Jun64

ENCL: 00

SUB CODE: GC, GP

NO REF SOV: 009

OTHER: 004

Card 2/2

SHALIMOVA, K.V.; MOROZOVA, N.K.

Effect of excess zinc on the crystalline structure of ZnS.
Kristallografiia 9 no.4:559-560 J1-Ag '64.

(MIRA 17:11)

1. Moskovskiy energeticheskiy institut.

SHALINOVA, K.V.; MOROLOVA, N.K.

Diffuse reflection spectra of zinc sulfide powders of various
crystalline modifications. Opt. i spektr. 16 no. 4: 59-62
Ap '64. (MIRA 17:5)

L 12432-65 EWT(m)/EWP(t)/EWP(b) IJF(c)/ESD/SSD/AS(mp)-2/ESD(gs)/ESD(t) JD

ACCESSION NR: AP4047340

S/0139/64/000/005/0008/0011

AUTHORS: Shalimova, K. V.; Andrushko, A. F.; Khirin, V. N.; Moro-
zova, N. K.

TITLE: Optical properties of powders of cadmium sulfide of hexa-
gonal modification at 77.3K

27 27 B

SOURCE: IVUZ. Fizika, no. 5, 1964, 8--11

TOPIC TAGS: cadmium sulfide, luminescence spectrum, luminescence
analysis, polycrystal, reflection band, optical absorption

ABSTRACT: Inasmuch as earlier research on the fine structure in the
absorption, reflection, emission and excitation of luminescence of
hexagonal-modification cadmium sulfide was limited to single-crystal
samples and thin films deposited on heated substrates, the authors
have undertaken to determine the dependence of the optical proper-
ties of the hexagonal modification of cadmium sulfide on the condi-

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L 12432-65

ACCESSION NR: AP4047340

tions under which it is obtained. α -CdS powders with fine crystalline structure, obtained by different means at different temperatures and with different reagents, were used in the investigations. All the spectra were obtained in unpolarized light at liquid-nitrogen temperature. The reflection spectra were obtained with the ISP-51 spectrograph with UF-84 camera, while the radiation and excitation spectra were investigated with the same spectrograph but with an FEP-1 photoelectric attachment. The tests were made in the 4600--5400 Å range. The powders have five reflection bands at liquid-nitrogen temperature, and the luminescence excitation spectra display six maxima. A comparison of these spectra indicates that each maximum of reflection corresponds to a maximum of excitation. The emission of cadmium-sulfide powders lies in the blue and green regions of the spectrum. The blue band has two maxima with positions that vary from sample to sample, while the green band has four maxima at 5146, 5223, 5295, and 5390 Å. The differences in the spectra depend on the preparation. The results indicate that the opti-

Card 2/3

ACCESSION NR: AP4047340

cal absorption in the cadmium sulfide is due to impurities and is connected with the violation of the stoichiometry of the crystals. Orig. art. has: 3 figures.

ASSOCIATION: Moskovskiy energeticheskiy institut (Moscow Power Engineering Institut)

SUBMITTED: 28Apr63

ENCL: 00

SUB CODE: OP, K

NR REF SOV: 009

OTHER: 003

Card 3/3

L 13079-45 EWT(m)/EWP(t)/EWP(b) LJP(c)/AEDC(a)/AS(mp)-2/ESD(c)/ESD(gs)
JD

ACCESSION NR: AP4047358

S/0139/64/000/0C5/0119/0124

AUTHORS: Shalimova, K. V.; Andrushko, A. F.; Khirin, V. N.; Morozova, N. K. β

TITLE: Optical properties of powders of the cubic modification of cadmium sulfide and their changes in the $\beta \rightarrow \alpha$ phase transition

SOURCE: IVUZ. Fizika, no. 5, 1964, 119-124

TOPIC TAGS: Cadmium sulfide, cubic crystal, powder, phase transition, light absorption, light emission

ABSTRACT: In order to obtain additional information on the mechanism of absorption and emission of light in CdS, the authors investigated the spectra of diffuse reflection, emission, and excitation of luminescence of CdS powders of cubic modification, and also investigated the spectra of β -CdS powders annealed at high temperatures in air and in a helium atmosphere. All the spectra were investigated in unpo-

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L 13079-65

ACCESSION NR: AP4047358

larized light at liquid-nitrogen temperature. The reflection spectra were obtained with an ISP-51 spectrograph with UF-84 camera. The excitation and emission spectra were investigated with the same spectrograph and a photoelectric attachment. The cadmium sulfide powder was precipitated from solutions and heat treated at temperatures from 100 to 1200C. One band is observed in β CdS in reflection and in emission at 77K. After heating the β -CdS above 540C, this band at 5060--5070 Å gradually attenuates and vanishes, and is replaced by the reflection peaks characteristic of the hexagonal modification crystals. The emission and reflection spectra show a similar behavior. Orig. art. has: 3 figures.

ASSOCIATION: Moskovskiy energeticheskiy institut (Moscow Power Engineering Institute)

SUBMITTED: 28Apr63

ENCL: 00

SUB CODE: OP, 88

NR REF SOV: 010

OTHER: 003

Card 2/2

ACCESSION NR: AP4035477

S/0051/64/016/005/0866/0868

AUTHOR: Shalimova, K.V.; Morozova, N.K.

TITLE: Effect of preparation procedure on the optical absorption and reflection of polycrystalline zinc sulfide layers

SOURCE: Optika i spektroskopiya, v.16, no.5, 1964, 866-868

TOPIC TAGS: zinc compound, phosphor, absorption spectrum, reflection spectrum, thin film

ABSTRACT: It was shown in an earlier paper by the authors (Kristallografiya, 8, 461, 1963) that the crystal structure of zinc sulfide films prepared by evaporation depends to a considerable degree on the deposition procedure. It would be reasonable to expect the absorption and reflections spectra of such films to vary as well. The purpose of the present study was to confirm this. As before, the films were prepared by evaporation-sublimation in vacuum, argon or hydrogen sulfide on fused quartz and glass backings heated to different temperatures from 200 to 800°C. The spectra were recorded at 77°K by means of an ISP-28 spectrograph. It was found that the predominant factor where the optical properties of the zinc sulfide films are concerned is

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ACCESSION NR: AP4035477

the substrate temperature. The atmosphere appears to have little effect. The absorption and reflection spectra of films deposited on substrates heated to different temperatures are reproduced in figures. Coatings deposited on substrates heated to 200-250°C are characterized by a highly defective cubic structure and exhibit no absorption in the 300 to 340 μ m region. With increase of the substrate temperature the cubic structure becomes more perfect and absorption bands appear at 316 and 325 μ m. Additional bands appear in the spectra of films deposited on substrates heated to 450°C and the x-ray diffraction patterns show evidence of traces of the hexagonal modification (the new bands are associated with this modification). The amount of hexagonal ZnS increases with increase of the substrate temperature; at the same time the "hexagonal" bands increase in intensity, while the "cubic" bands fade. The reflection spectra show a consistent variation. Films with a purely hexagonal structure can be obtained on glass substrates. In general the polycrystalline film spectra correspond to the single crystal and powder spectra of the two modifications of ZnS. Thus, both cubic and hexagonal ZnS have three characteristic bands (different for each modification), which means that both crystal forms have three groups of levels with different probabilities for electron transitions between them. Orig. art. has: 2 figures.

Card 2/3

L 11937-66 EWT(l)/EWT(m)/T/EWP(t)/EWP(b)/EWA(c) IJP(c) JD

ACC NR: RP6001648 SOURCE CODE: UR/0051/65/019/006/0939/0942

AUTHOR: Shalimova, K.V.; Morozova, N.K.

15
44
B

ORG: none

TITLE: ^{21, 44, 55} Narrow-line spectra of ZnS monocrystals with packing errors

SOURCE: Optika i spektroskopiya, v. 19, no. 6, 1965, 939-942

TOPIC TAGS: zinc sulfide, crystal growth, single crystal

ABSTRACT: It is established in this paper that in the spectra of ²⁷ zinc sulfide ²⁷ monocrystals with packing flaws in the 300 - 330 millimicron region at 77° K there may simultaneously appear bands characteristic of α - and β -ZnS, and also a number of lines which occupy an intermediate position between them. The presence of two phases is also indicated by X-ray analysis. A detailed study of the crystal structure and optical properties of crystals of this type was made by means of the Laue method with stationary and rotating samples and the photographic method for analysis of the absorption and reflection spectra. The authors found that the spectral complexity alluded to is the result of a layer-by-layer alternation of cubic and hexagonal structures, and also of the deformation of individual layers within these crystals attributable to growth defects. The type of packing present in falsely imposed layers can be determined on the basis of an analysis of the optical spectra of the crystals. A

Card 1/2

UDC: 535.34:548.0

L 11937-66

ACC NR: AP6001648

brief description is given of the structure types possible in the case of ZnS monocrystals. It is noted that great care should be taken in the study of the absorption and reflection spectral structures of these crystals, making this analysis only in conjunction with detailed X-ray observations. Authors make use of this opportunity to express their gratitude to Ye. V. Kolontsova for her assistance in this work. Orig. art. has: 4 figures.

SUB CODE: 20 / SUBM DATE: 31Aug64 / ORIG REF: 004

Card

2/2 pu

MOROZOVA, N.K.; MOROZOV, V.P.

Reduction to a cellular-diagonal form of the matrices of operators commutable with a group of symmetry operators. Dokl. AN SSSR 161 no.4:817-820 Ap '65. (MIRA 18:5)

1. Dnepropetrovskiy khimiko-tekhnologicheskly institut im. F.E Dzerzhinskogo. Submitted October 31, 1964.

L 01825-07 EWT(m)/EWP(t)/ETI LJP(c) JD

ACC NR: AP6026972

SOURCE CODE: UR/0051/66/021/002/0192/0196

AUTHOR: Morozova, N. K.; Shalimova, K. V.

ORG: none

54
B

TITLE: Nature of the absorption of zinc sulfide ✓

SOURCE: Optika i spektroskopiya, v. 21, no. 2, 1966, 192-196

TOPIC TAGS: zinc sulfide, absorption spectrum, spectral fine structure, impurity band

ABSTRACT: The object of the work was to study the narrow-line absorption spectrum (at 300-340 mμ) of polycrystalline ZnS films during a gradual decrease of the concentration of zinc in excess of the stoichiometric composition. This decrease was achieved by heating the samples in sulfur vapor. The optical absorption of ZnS single crystals heated in sulfur vapor was also studied. The narrow-line spectra of both polycrystalline and single-crystal ZnS were found to be highly sensitive to changes in the stoichiometric composition. The fact that the fine structure bands of ZnS in the 300-330 mμ range disappear on heating in sulfur vapor indicates that the excess zinc in the sulfide lattice is responsible for their presence in the spectra. The strong absorption at 300-330 mμ is measured against the background of the fundamental absorption of this compound, due to indirect interband transitions. ✓ As in the case of other semiconducting crystals, for example highly doped silicon, the probability of these transitions increases with the concentration of the zinc impurity in the ZnS lattice.

Card 1/2

UDC: 535.34:549.321

L 04825-67

ACC NR: AP6026972

Orig. art. has: 4 figures

SUB CODE: 20/ SUBM DATE: 24Mar65/ ORIG REF: 010/ OTH REF: 002

Card 2/2 *gd*

L 31313-65 EWT(m)/EWP(1) Pc-4 RM

ACCESSION NR: AR5003888

S/0081/64/000/018/S074/S074

SOURCE: Ref. zh. Khimiya, Abs. 188417

AUTHOR: Kochetkov, V. N.; Morozova, N. V.; Ponomereva, V. A.

19
B

TITLE: Inorganic stabilizers for PK-4 polyamide film

CITED SOURCE: Vest. tekhn. i ekon. issled. N.-1. in-t. tekhn.-ekon. issled. Gos. kom-ta khim. i nef. prom-sti pri Gosplane SSSR, vyp. 7, 1963, 31-32

TOPIC TAGS: halide, polyamide, thermal stability

TRANSLATION: The possibility of stabilizing PK-4 polyamide film by injecting small amounts of halides of Na, K, Mn, Fe, Co, Ni, Zn, Cd, Ba, Hg and Bi was studied. They were introduced into the polyamide melt to the extent of 0.1-1.0% (by weight). The most effective were KI, NaI, NaBr, KBr and Cu₂Br₂. These salts increase the thermal and photostability of films significantly, increasing their length of service by a factor of 3-4. B. Galler.

SUB CODE: OG, GC

ENCL: 00

Card 1/1

MNDZHONYAN, O.L.; MROZOVA, N.M.

Amino ethers. Report No.3: Some dialkylamino ethyl ethers of
p-alkoxybenzhydrol. Izv.AN Arm.SSR.Khim.nauki 15 no.6:553-
562 '62. (MIRA 16:2)

1. Institut tonkoy organicheskoy khimii AN Armyanskoy SSR.
(Amines) (Benzhydrol)

5(2)

AUTHORS: Ol'shanova, K. M., Muravova, N. M. 317, 241

TITLE: Chromatographic Method of Determining Copper and Nickel
(Khromatograficheskiy metod opredeleniya medi i nikel'nykh)

PERIODICAL: Izvestiya vysshikh uchebnykh zavedeniy. Khimicheskaya i tekhnicheskaya tekhnologiya, 1977, No 2, pp 63 - 65 (USSR),

ABSTRACT: The problem of the precipitation chromatography has hitherto not been paid the attention it deserves, although it may successfully be used for analytical purposes. The separation of elements with a precipitation-chromatographic column is based on the different values of the solubility product of the precipitations. A certain dependence between the width of the forming zone and the concentration of the investigated solution may be found. The task of the present paper is the working out of determination methods for the metals mentioned in the title. For this purpose the authors investigated characteristically colored copper compounds that are difficult to solve with ditio-oxamic acid as well as nickel compounds

Card 1/4

Chromatographic Method of Determining Copper and Nickel 5.7.1959-02-1959

with dimethyl glyoxime. The column for the precipitation-chromatogram is formed by a mixture of a carrier (a highly disperse substance) and a precipitator (substances that form precipitates with the ions to be investigated, which are difficult to solve). Amorphous aluminum oxide type "ch", K-1, F-1, series 20, 1959, activated charcoal, glass and rice powder, etc., river sand, etc. are used as carriers. Later only amorphous aluminum oxide was used. Different weight ratios of the carrier and the precipitator were tried. The experiment is carried out with aluminum oxide with a precipitator made from 0.1% of the carrier. Aluminum oxide has an extreme capacity, which in this case is highly influenced by the amount and the length of the nose of the precipitation-chromatogram. If the precipitator is present in a larger quantity (more than 1%) the precipitation is almost completely suppressed. The results were improved by the addition of a precipitator in the form of the radiometric indicator Cu^{64} . The

Card 2/4

Chromatographic Method of Determining Copper and Manganese in Soil

experiment, and that the selected conditions for the
 method are suitable for the determination of copper and
 manganese in soil. The results of the analysis of the
 grain size (number of particles per unit volume) are
 to the grain size of the soil. For example, if the
 if the grains are bigger. The length of the grain
 also changes according to the grain size. Calibration
 curves, if they are plotted in the form of
 curves, are suitable for the determination of
 with various types of soil. For example, it
 does not depend on the volume of the soil. It
 depends on the concentration of the soil. It
 on different types of Al₂O₃ was tested. All
 could not be used for the determination of
 different types of soil. It is possible
 some of the results of the present study are
 obtained for some of the soil. It is possible
 high of the concentration of the soil. It
 to the results of the present study. It is
 e. v. s. figures 1, 2). The concentration of the
 results were similar to the results of the present study.

Ca. 1/4

Chromatographic Methods of Determining... (Soviet Union)

shows that the precipitation-... method secures a more rapid determination of... totals in relation with minimum consumption of... reagents. To be used figures and tables.

ASSOCIATION: Moscow City Technical University Institute for Meat and Dairy Industry (Moscow Technical Institute for Meat and Dairy Industry) Kaf. ... Institutskoy khimii (Chair of Analytical Chemistry)

SUBMITTED: September 14, 1957

201 4, 4

MOROZOVA, N.M.; BARKAN, S.M.

Lowering acidity of milk with anionites. Izv.vys.ucheb.zav.;
pishch.tekh. no.5:64-67 '58. (MIRA 11:12)

1. Moskovskiy tekhnologicheskii institut myasnoy i molochnoy
promyshlennosti, kafedra analiticheskoy khimii, kafedra tekhnolo-
logii moloka.
(Milk--Composition) (Anions)

AUTHOR: Korozova, N.M., Technician

TITLE: Portable Gas Analyzer for Determining the Quality of Hydrogen. (Perenosnyy gazoanalizator dlya opredeleniya kachestva volododa)

PERIODICAL: Energetik, 1953, ⁶ No 8, pp 22 (USSR)

ABSTRACT: A portable gas analyzer for determining the quality of the hydrogen in the cooling system of a generator is described. With this apparatus, the quality of the hydrogen may be tested on the spot, whereas with the old system samples had to be taken by pipette and sent to the laboratory for testing. Due to leaks in the pipette and temperature differences, errors could occur in. There is 1 diagram.

1. Hydrogen--Test methods 2. Gas analyzers--Applications

Card 1/1

MOROZOVA, N. M.

5(2), (3) PHASE I BOOK EXPLOITATION 30V/255A

Академия наук ССР. Отделение химический наук. Комиссия по хроматографии

Исследования в области ионообменной, распределительной и осадочной хроматографии (Studies in the Field of Ion Exchange, Distribution and Precipitation Chromatography) Moscow, Izd-vo AN SSSR, 1959. 150 p. Errata slip inserted. 3,500 copies printed.

Ed. of Publishing House: M. G. Yegorov, Tech. Ed. I. M. Guseva; Editorial Board: E. V. Chibrikov, Corresponding Member, USSR Academy of Sciences (Resp. Ed.); P. M. Shchegolev, Professor; K. M. Ol'shanova, Professor; E. M. Saldadze, Docent, and M. M. Tunitakiy, Professor.

FUNDS: This book is intended for chemists and chemical engineers.

COVERAGE: The book discusses studies in ion-exchange, distribution, and precipitation chromatography. Various problems of the theory of chromatography and its application are also considered. This is the 4th collection of articles published by the Committee on Chromatography. The first collection was published in 1952 under the title "Исследования в области хроматографии" (Studies in the Field of Chromatography); the second was published in 1955 under the title "Хроматография и смежные вопросы" (Chromatography: Theory and Practice of the Ion-Exchange Materials); and the third was published in 1957 under the title "Исследования в области ионообменной хроматографии" (Studies in the Field of Ion-Exchange Chromatography). No personalities are mentioned. References are given after most of the articles.

Davidov, A. F. and G. M. Litvin. Study of the Sorption Value and the Exchange Energy of Cations on Mofatite With Relation to Temperature 21

Rashnitskiy, I. I. Theory of the Stationary Front of Dynamic Sorption 24

Saldadze, E. M., and Ye. E. Fedotova. Effect of the Ionite Structure on the Ion Exchange Process 39

Saldadze, E. M., and Ye. A. Suvayina. Kinetics of Cation Exchange Processes on Carboxylic Cationites 48

Surf, L. M., and P. M. Shchegolev. Purification of Salts With the Aid of an Ion-Exchange Counterflow Installation 55

Podgornaya, O. P., E. M. Tunitakiy, and Ye. E. Chumakova. Study of the Kinetics of Complex Cation Exchange on Sulfonated Resins 63

Chernomura, Ye. F., A. D. Pashkov, S. M. Barabanov, and M. M. Tunitakiy. Change in the Selectivity of Strongly Acidic Monofunctional Cationites in Relation to the Concentration of Sulfo Groups and Interchain Bonds in Cationites 70

Podgornaya, O. P., Ye. E. Chumakova, and M. M. Tunitakiy. Study of the Diffusion of Ions Through a Cationite Membrane 76

Shchegolev, P. M. Organic Reagents Used in Adsorption and Distribution Chromatography, Their Classification, and Trends of Investigation 80

Mitselgizkiy, E. M., and P. M. Shchegolev. Some New Phenomena Which Accompany the Process of Electromigration of Organic Substances 90

Polynskiy, M. G. Study of Thermal Desulfonation of Sulfo-phenolformaldehyde Resin EW-1 95

Kozlov, V. D., and E. M. Ol'shanova. Precipitation Chromatography 105

Kozlov, V. D., and E. M. Ol'shanova. Secondary Phenomena in Precipitation Chromatography 113

Ol'shanova, E. M., and E. M. Muzasya. Determination of Calcium by the Precipitation Chromatography Method With the Indicator Murexide 124

Ol'shanova, E. M., and Z. A. Koloskova. Ion-exchange Paper Chromatography in Qualitative Analysis 128

Orlov, Y. V., M. V. Chromatographic Method of Qualitative Analysis for Pur Dye-stuffs 134

Saldadze, E. M., K. M. Ol'shanova, and L. I. Ivanova. Sorption of Mineral Acids and of Their Salts on Cationites 138

Gorbacheva, M. A., and E. M. Saldadze. Absorption of Complex Zink Anions on Anionites With Different Basicity 143

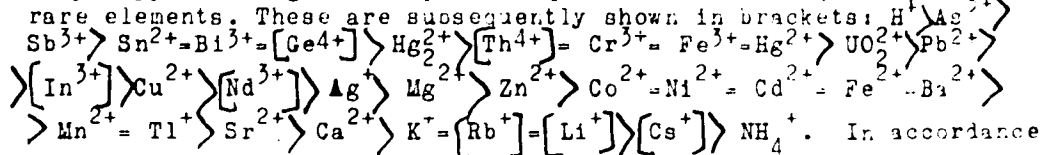
AUTHORS: Ol'shanova, K. M., Morozova, N. M. SOV/153-2-4-6/32

TITLE: Fractional Discovery of Several Rare Elements By Means of the Chromatographic Method

PERIODICAL: Izvestiya vysshikh uchebnykh zavedeniy. Khimiya i khimicheskaya tekhnologiya, 1959, Vol 2, Nr 4, pp 498 - 502 (USSR)

ABSTRACT: The authors attempted to investigate the method mentioned in the title on chromatographing aluminum oxide. Since the elements investigated may be combined with various elements in natural mixtures, chromatograms of the solutions of mixtures of various cations were investigated. The solutions were composed in accordance with the presupposition in such a way that a complex cation mixture could be separated according to various degrees of sorption. Therefore, the mixtures were composed of adjacent elements in the sorption sequence. The authors succeeded in considerably supplementing the sorption sequence of cations (Ref 1, by rare elements. These are subsequently shown in brackets: H⁺, As³⁺,

Card 1/3



Fractional Discovery of Several Rare Elements By Means of SCV 151-2-1-612
the Chromatographic Method

with the sorption sequence fixed by several elements, chromatograms of rare elements were obtained in combination with other cations. In addition, the analysis in connection with the discovery of the following metals and ions is described: Cerium: in the presence of bismuth and copper ; of tin (IV); of mercury (I) and bismuth; of tin (IV), bismuth, mercury (I and II), and iron; of bismuth, antimony (III), and arsenic (III). Discovery of indium ions: in the presence of cobalt; of zinc; of mercury (I and II) , and lead; of iron (III). Discovery of ions UO_2^{2+} in the presence of cerium; of mercury (I and II), and iron²⁺ (III); of copper. Discovery of thallium ions: in the presence of : copper; of mercury (I and II); of indium; of cerium; of cobalt, nickel, cerium, and lead; of uranyl and zirconyl. Discovery of zirconyl ions: in the presence of mercury (II); of zinc; of copper; of iron (III); of cobalt; of uranyl ions. Discovery of thorium ions: in the presence of lead; of cobalt; of uranyl ions; of iron (III). Discovery of neodymium ions: in the presence of mercury (II); of lead; of copper, silver, and cobalt; of nickel; of iron (III); of cadmium. There is a * Soviet reference.

Card 2/3

Fractional Discovery of Several Rare Elements By Means of SOV/151-2-1-6/58
the Chromatographic Method

ASSOCIATION: Moskovskiy tekhnologicheskii institut myasnoy i molochnoy promysh-
lennosti, Kafedra analiticheskoy khimii (Moscow Technological
Institute of Meat- and Milk Industry, Chair of Analytical Chemi-
stry)

SUBMITTED: March 28, 1958

Card 3/3

MOROZOVA, N. M. Cand Chem Sci -- "Organic substances in sedimentary carbonate-grapy^h and its use in analysis of various objects of the food industry." Mos, 1960. (Mos Order of Lenin Chemicotechnological Inst ~~Am~~ D. I. Mendeleev) (KL, 1-61, 182)

MOROZOVA, N.M.; OL'SHANOVA, K.M.

Application of ion exchange processes in the dairy industry.
Izv.vys.ucheb.zav.;pishch.tekh.no.5:63-67 '69. (MIRA 13:12)

1. Moskovskiy tekhnologicheskiy institut myasnoy i molochnoy
promyshlennosti. Kafedra analiticheskoy khimii.
(Dairy industry) (Ion exchange)

MOROZOVA, N.M.; OL'SHANOVA, K.M.

Chromatographic method of analyzing heavy metals in dairy products. *Izv.vys.ucheb.zav.; pishch.tekh.* 1:130-135 '61.

(MIRA 14:3)

1. Moskovskiy tekhnologicheskoy institut myasnoy i molochnoy promyshlennosti, Kafedra analiticheskoy khimii.
(Dairy products--Analysis and examination)
(Metals--Analysis)

OL'SHANOVA, K.M.; KOPYLOVA, V.D.; MOROZOVA, N.M.

Determination of the concentration of inorganic ions from the zone length or volume in precipitation chromatograms. Izv.vys. ucheb.zav.; khim.i khim.tekh. 4 no.6:923-927 '61. (MIRA 15:3)

1. Moskovskiy tekhnologicheskii institut myasnoy i molochnoy promyshlennosti, kafedra neorganicheskoy i analiticheskoy khimii.
(Chromatographic analysis)

OL'SHANOVA, Ye., prof.; MOROZOVA, N.^M; MUROMTSEVA, G.

Chromatographic method for determining the tin content of canned meat.
Mias.ind.SSSR 32 no.2:47-48 '61. (MIRA 14:7)
(Meat, Canned--Preservation) (Chromatographic analysis)

KOPYLOVA, V.D.; MOROZOVA, N.M.; OL'SHANOVA, K.M.

Organic reagents as indicators in precipitation chromatograms.

Izv.vys.ucheb.zav.; khim.i khim.tekh. 5 no.1:22-25 '62.

(MIRA 15:4)

1. Moskovskiy tekhnologicheskiy institut myasnoy i molochnoy
promyshlennosti, kafedra neorganicheskoy i analiticheskoy khimii.
(Chromatographic analysis) (Chemical tests and reagents)

OL'SHANOVA, Kaleriya Maksimovna; KOPYLOVA, Valentina Dmitriyevna;
MOROZOVA, Nadezhda Mikhailovna; CHMUTOV, K.V., otv. red.;
VLASOV, L.G., red.; MAKCCONOVA, I.A., tekhn. red.

[Precipitation chromatography] Osadochnaia khromatografiia.
Moskva, Izd-vo Akad.nauk SSSR, 1963. 103 p. (MIRA 16:2)

1. Chlen-korrespondent Akademii nauk SSSR (for Chmutov).
(Chromatographic analysis)

S/032/63/029/001/003/022
B101/B106

AUTHORS: Ol'shanova, K. M., Morozova, N. M., and Kopylova, V. D.

TITLE: Determination of microamounts of inorganic ions

PERIODICAL: Zavodskaya laboratoriya, v. 29, no. 1, 1963, 24 - 26

TEXT: The limiting concentration at which an inorganic ion ceases to give a chromatographic color reaction is determined. Next, the solution under investigation is diluted until the element concerned gives no reaction. The concentration of the element in the sample is calculated from the required degree of dilution and the known limiting concentration. A glass column 10-13 cm long and of 4-5 mm diameter filled with Al_2O_3 is used. The following elements, developers for the chromatogram, and limiting concentrations (mg-equ/liter) are given: Cu(II), rubeanic acid, $4.7 \cdot 10^{-2}$; Ni, rubeanic acid, $7.3 \cdot 10^{-3}$; Ni, dimethyl glyoxime, $1.1 \cdot 10^{-3}$; Fe(III), potassium ferrocyanide, $3.8 \cdot 10^{-3}$; Ag, potassium chromate, $9.2 \cdot 10^{-2}$; Hg(II), potassium chromate, $7.6 \cdot 10^{-2}$; Zn, ammonium tetrathiocyano mercurate in the
Card 1/2

Determination of microamounts of ... ; S/032/63/029/001/003/027
B101/B186

the presence of cobalt ion, 0.26; Pb, sodium rhodizonate, $2.5 \cdot 10^{-3}$; Pb, potassium chromate, 1.0; Sn, potassium xanthogenate, 0.23; Co, α -nitroso- β -naphthol, $4.7 \cdot 10^{-4}$; Cl^- , $\text{Hg}(\text{NO}_3)_2$, $5 \cdot 10^{-2}$. The method is recommended for industrial analyses. There is 1 table.

ASSOCIATION: Moskovskiy tekhnologicheskii institut myasnoy i molochnoy promyshlennosti (Moscow Technological Institute of the Meat and Milk Industry)

Card 2/2

OL'SHANOVA, Kaleriya Maksimovna; POTAPOVA, Mariya Aleksandrovna;
KOPYLOVA, Valentina Dmitriyevna; MOROZOVA, Nadezhda
Mikhaylovna; DEBABOV, V.G., red.

[Manual on ion-exchange, partition, and precipitation
chromatography] Rukovodstvo po ionoobmennoi, raspredeli-
tel'noi i osadochnoi khromatografii. Moskva, Khimiia,
1965. 199 p. (MIRA 18:7)

L 24115-66 EWT(1)/EWP(m)/EWA(d)/ETC(m)-6/EWA(1) LJP(c) WW

ACC NR: AP6011518

SOURCE CODE: UR/0382/66/000/001/0109/0115

AUTHOR: Kushnir, V. S.; Morozova, N. M.; Fichakhchi, L. D.

73
B

ORG: none

TITLE: The effect of busbars on the current interaction of conducting fluid flow with the traveling wave magnetic field

SOURCE: Magnitnaya gidrodinamika, no. 1, 1966, 109-115

TOPIC TAGS: electroconductive fluid, electromagnetic field, magnetic effect, traveling wave, wave function, traveling wave interaction, electric inductance

ABSTRACT: An analysis has been made of the effect of electroconducting busbars on the current interaction of conducting fluid flow with the traveling wave magnetic field created by a long line of concentrated inductances and capacitances. An expression for the amplification coefficient as a function of the ratio of busbar thickness and duct width to the wavelength was obtained. The inclusion of busbars increases the amplification coefficient. Orig. art. has: 4 figures and 22 formulas. [Based on authors' abstract] [NT]

SUB CODE: 20/ SUMM DATE/21Sep65/ ORIG REF: 002/

2

Card 1/1 *llw*

UDC: 538.4

ACC NR: AP6029329

(A)

SOURCE CODE: UR/0426/66/019/006/0441/0446

AUTHOR: Yndzhoyan, O. L.; Morozova, N. M.; Samvelyan, V. M.

ORG: Institute of Fine Organic Chemistry, AN ArmSSR (Institut tonkoy organicheskoy khimii AN ArmSSR)

TITLE: Studies in the field of amino derivatives. Part 14: Some N-(β-chloroethyl)-N-benzyl-N-p-alkoxybenzylamines

SOURCE: Arayanskiy khimicheskii zhurnal, v. 19, no. 6, 1966, 441-446

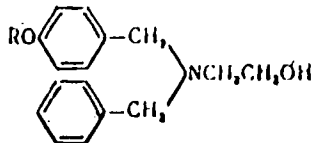
TOPIC TAGS: amino salt, secondary amino, organic synthetic process

ABSTRACT: Alkoxy derivatives of dibenamine

 $(C_6H_5CH_2)_2NCH_2CH_2Cl$

HCl

were synthesized. Their general structure was



Card 1/3

UDC: 541.69+547.233

ACC NR: AP6029329

The physical properties of the alkoxybenzylamines obtained are shown in Table 1, and the properties of their hydrochlorides in Table 2. All the hydrochlorides manifested a more or less pronounced adrenolytic activity. They also had a pronounced ganglion-blocking and "H" cholinolytic effect. Orig. art. has: 3 tables.

Table 1

R	Yield, %	Boiling point °C/mm	Molecular formula	d ₄ ²⁰	n _D ²⁰	MR _D	
						calculated	found
CH ₃	57,7	205-7/3	C ₁₁ H ₁₃ NO ₂	1,0942	1,5630	80,61	80,54
C ₂ H ₅	62,0	178-80/1	C ₁₂ H ₁₅ NO ₂	1,0758	1,5550	85,23	85,13
C ₃ H ₇	67,5	202-3/1	C ₁₃ H ₁₇ NO ₂	1,0648	1,5520	89,85	89,83
iso-C ₃ H ₇	33,3	192-5/1	C ₁₃ H ₁₇ NO ₂	1,0667	1,5500	89,88	89,81
C ₄ H ₉	53,3	219-21/1	C ₁₄ H ₁₉ NO ₂	1,0534	1,5456	94,47	94,13
iso-C ₄ H ₉	48,6	196-8/0,5	C ₁₄ H ₁₉ NO ₂	1,0510	1,5456	94,47	94,35
C ₅ H ₁₁	63,0	238-9/2	C ₁₅ H ₂₁ NO ₂	1,0398	1,5415	99,06	99,08
iso-C ₅ H ₁₁	71,3	225-30/2	C ₁₅ H ₂₁ NO ₂	1,0386	1,5400	99,06	99,06

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ACC NR: AP6029329

Table 2

R	Yield, %	Boiling point °C/mm	Molecular formula	Melting point, °C
CH ₃	96,1	190—192/4	C ₁₁ H ₂₀ CINO	183
C ₂ H ₅	92,3	186—188/1	C ₁₈ H ₃₂ CINO	124—126
C ₃ H ₇	81,8	186—187/2	C ₁₀ H ₂₄ CINO	108—114
iso-C ₃ H ₇	94,5	170—175/2	C ₁₀ H ₂₄ CINO	130—133
C ₄ H ₉	57,4	207—208/3	C ₂₀ H ₃₈ CINO	108—110
iso-C ₄ H ₉	71,6	203—205/3	C ₂₀ H ₃₈ CINO	137—139
C ₅ H ₁₁	87,3	238—239/3	C ₂₁ H ₃₈ CINO	114—115
iso-C ₅ H ₁₁	71,3	210—213/3	C ₂₁ H ₃₈ CINO	118—119

SUB CODE: 07/ SUBM DATE: 01Mar65/ ORIG REF: 001/ OTH REF: 008

Card 3/3

MOROZOVA, N.N.

Theory of numbers at Moscow University in the 19th century.
Uch. zap. MGPI 98:3-46 '60. (MIRA 15:1)
(Numbers, Theory of)

MOROZOVA, H.P., kand.med.nauk, referent; TRESHCHINSKIY, A.I., referent;
GORODINSKIY, D.M., dotzent, referent

Minutes of meetings of the Kiev and Kiev Province Surgical Societies.
Nov.khir.arkh. no.6:128-134 N-D '59. (MIRA 13:4)
(KIEV PROVINCE--SURGICAL SOCIETIES)

VEREMEYENKO, K. N.; ZVER'KOVA, M. P.; MOROZOVA, N. P.

Use of crystalline trypsin in the treatment of thrombophlebitis.
Nov. khir. arkh. no.3:20-22 '62. (MIRA 15:4)

(PHLEBITIS) (TRYPSIN)

ACC NR: AT6036654

SOURCE CODE: UR/0000/66/000/000/0280/0282

AUTHOR: Mirolubov, G. P.; Frolov, N. I.; Morozova, N. P.

ORG: none

TITLE: Some characteristics of the effect of landing impact accelerations on the organism (Paper presented at the Conference on Problems of Space Medicine held in Moscow from 24-27 May 1966)

SOURCE: Konferentsiya po problemam kosmicheskoy meditsiny, 1966. Problemy kosmicheskoy meditsiny. (Problems of space medicine); materialy konferentsii, Moscow, 1966, 280-282

TOPIC TAGS: space physiology, impact acceleration, biologic acceleration effect, injury

ABSTRACT: In experiments conducted on 250 white rats and 20 dogs, selective injuries have been observed in parenchymatous and hollow organs. From the type of injuries sustained by hollow structures, it was concluded that the destructive force was directed from inside the organ. Ruptures of the vena cava and intestine were accompanied by hemorrhages in gastric mucosa, injury to the endocardium, and rupture of the interatrial septum. Injuries to parenchymatous organs were external in nature and surface hemorrhaging on the liver, subcapsulated fissures, and surface ruptures were noted.

Tolerance of landing accelerations depends to a considerable degree

Card 1/3

ACC NR: AT603554

on the superimposition of additional accelerations which develop during vibration of a falling platform and its supporting chair during impact. Formerly, these effects of supplementary accelerations were extremely injurious. Animals are killed at landing rates of 6 m/sec. After elimination of supplementary accelerations, they can withstand an impact of 14 m/sec without injury.

Changes in arterial pressure, pulse, respiration rate, and EKG disorders occurring during landing impact accelerations are frequently observed when internal organs are injured. In isolated cases, injury to internal organs is observed in the absence of any cardiovascular or respiratory disorder. The range of accelerations which disrupt cardiovascular and respiratory function and cause injury to internal organs is more clearly demonstrated during transverse accelerations. Apparently, this range depends on the body surface sustaining the impact and the receptor zones involved and on the compensatory capacities of the organism. Expanding the methods for studying these phenomena will permit a more accurate determination of the range of accelerations which cause functional disorders only.

The effects of repeated impact accelerations which do not cause injury

Card 2/3

ACC NR: AT6036654

are marked by a deterioration in tolerance reflected in cardiovascular and respiratory disorders (apnea, extrasystole, etc.). Injury to internal organs also occurs during repeated exposure to these accelerations. The summary effect of impact accelerations depends on the intensity of exposure as well as on the extent of the disruption in systems regulating the function of the organism and the antagonism of a number of complex compensatory mechanisms. When intervals between exposures are increased and the acceleration magnitude is decreased, a summary effect does not occur. This is probably due to the complete recovery of regulatory mechanisms during the interval between exposures. A study of the complex mechanisms of regulation and the compensatory reactions of the organism, as well as determining the time necessary for recovery after exposure to repeated accelerations will permit a far more accurate assessment of the problem of establishing permissible human limits. [W.A. No. 22; ATD Report 66-116]

SUB CODE: 06 / SUBM DATE: 00May66

Card 3/3

MOROZOVA, N.P.

Investigating the effect of errors in making electrodes on
the quality of electronic images in cathode systems. Opt.-mekh.
prom. [25] no.3:40-43 Mr '58. (MIRA 11:9)
(Electron optics)

BIANKI, V. L.; MORGEOVA, N. I.

Effect of sectioning the corpus callosum on the differentiation of geometrical shapes and sizes of visual stimuli in rats. Zhurn. vya. nerv. deiat. L. no. 5:826-828. S.O. '64.

1. Chair of Physiology of Higher Nervous Activity, Leningrad University.

MOROZOVA, N. P.

Development of the second year sugarbeets under varying duration of
day light. Dokl. AN SSSR 83, no. 2, March 1952.
Monthly List of Russian Accessions, Library of Congress, August, 1952.

OPARIN, A.I., akademik; SINYAGIN, I.I.; MOROZOVA, N.P.

Certain characteristics in the development of the sugar beet in its third year of life. Dokl. AN SSSR 91 no.3:671-673 J1 '53. (MLBA 6:7)

1. Vsesoyuznyy nauchno-issledovatel'skiy institut sveklovichnogo polevodstva (for Sinyagin and Morozova). 2. Akademiya nauk SSSR (for Oparin). (Beets and beet sugar)

MOROZOVA, N. P.

USSR/Biology - Plant physiology

Card 1/1 Pub. 22 - 37/40

Authors : Sinyagin, I. I., and Morozova, N. P.

Title : Metabolism in blossoming and non-blossoming biennial plants

Periodical : Dok. AN SSSR 99/2, 321-324, Nov 11, 1954

Abstract : The changes occurring in the metabolism of plants during phase development under the effect of external media are discussed. These changes were revealed by comparing the photosynthesis, breathing, transpiration and other life activities of biennial plants. The results obtained for blossoming and non-blossoming biennial plants are tabulated. Eleven USSR references (1932-1952). Tables.

Institution : All-Union Scientific Research Institute of Sugar Beet Growing

Presented by: Academician A. L. Kursanov, September 16, 1954

RUBIN, B.A.; METLITSKIY, L.V.; SAL'KOVA, Ye.G.; MUKHIN, Ye.N.; KORABLEVA,
N.P.; MOROZOVA, N.P.

Use of ionizing radiations to control dormancy in potato
tubers during storage. Biokhim.pl. 1 ovoshch. no.5:5-101
'59. (MIRA 13:1)

1. Institut biokhimii imeni A.N.Bakha Akademii nauk SSSR.
(Plants, Effect of gamma rays on)
(Potatoes--Storage)

HRUSOVA, N.P., SALKOVA, YE.G., KONDITORSKI, N.V., KOSYKOVA, Y.I.,
KOSYKOVA, N.P., (USSR)

"Influence of γ -Irradiation on Nuclear and Carbohydrate
Metabolism in Storage Grains of Plants."

Report presented at the 5th Int'l. Biometrics Congress, Moscow,
15-16 Aug 1961.

RUBIN, B.A.; METLITSKIY, L.V.; SAL'KOVA, Ye.G.; MUKHIN, Ye.N.; KORABLEVA, N.P.;
MOROZOVA, N.P.

Using ionizing radiations to control the dormancy of potatoes during
storage. Report No.2. Biokhim.pl.i ovoshch no.6:5-57 '61.

(MIRA 14:6)

1. Institut biokhimii imeni A.N.Bakha AN SSSR.
(Plants, Effect of gamma rays on) (Potatoes--Storage)

S/275/63/000/002/022/032
D405/D301

AUTHORS: Kotlyarevskaya, K.B., Morozova, N.P. and Mayyer, E.A.

TITLE: Comparative estimate of ultrasonic-intensity measurements by radiometric-calorimetric method

PERIODICAL: Referativnyy zhurnal, Elektronika i ee primeneniye, no. 2, 1963, 21, abstract 2V128 (Primeneniye ul'trakoust. k issled. veshchestva, no. 16, M., 1962, 169-175 (Collection))

TEXT: The radiation of a quartz transducer for various supply voltages was estimated by means of a radiometer and a calorimeter. It was found that both methods yield intensity values which differ by 20-25% from the calculated values, and that they differ among themselves by 5%. In order to remove standing waves in the container, a plastic-foam or metal hood was mounted on the quartz radiator, which altered considerably the radiometer readings. The optimum conditions for radiometric measurements were determined.
[Abstracter's note: Complete translation]

Card 1/1

3-015

S/O2C/62/143/001/C30/C3C
B144/B1C1

27.11.80

AUTHORS: Metlitskiy, L. V., Korableva, N. P., and Morozova, N. P.

TITLE: Effect of gamma radiation on nucleic acid metabolism in storage organs of plants

PERIODICAL: Akademiya nauk SSSR. Doklady, v. 143, no. 1, 1968, 225-227

TEXT: It was observed that gamma-radiosensitivity differs widely in onion bulbs (allium cera), potato tubers (P), and garlic bulbs (G) and decreases in the given order. Nucleic acid metabolism as the decisive factor of plant growth was investigated in meristematic (M) and storage (St) tissues. These were analyzed two days after irradiation and then every 30 days; conservation temperature 5°C. As shown previously, M are most strongly affected by disturbances of nucleic acid metabolism in irradiated P. In the present tests, guanylic, adenylic, cytidylic, and uridylic acids were reduced by 50% on irradiation of P with 10 kr. Surprisingly, nucleic acids were found to decrease even in nonirradiated M of G on longer conservation. The hypothesis of possible depolymerization and washing-out of the low-polymer fragments of nucleic acids, when these tissues are

Card 1/2

X

Effect of gamma radiation on ...

S/020/62/143/001/030/030
B144/B101

prepared for analysis, was proved by studying UV absorption. The extent of the polymerism of the nucleotides thus obtained and their nature has still to be elucidated. Thus, the inhibitive effect of gamma-irradiation on plant growth is due to different disturbances of nucleic acid metabolism, particularly RNA and DNA synthesis in *M*, dependent on the plant species. The different radiosensitivity of the plants studied is probably due to varying degrees of polymerism and contents of nucleic acids. The high radioresistance of *G* may also be caused by some protective agent. There are 3 figures, 2 tables, and 3 references: 1 Soviet and 2 non-Soviet. The two references to English-language publications read as follows: A. Thomas, H. Sherratt, *Biochem. J.*, 62, no. 6 (1956); M. Ogur, J. Rosen, *Arch. Biochem.*, 25, 262 (1950).

ASSOCIATION: Institut biokhimii im. A. N. Bakha Akademii nauk SSSR
(Institute of Biochemistry imeni A. N. Bakh of the Academy of Sciences USSR)

PRESENTED: October 16, 1961, by A. I. Oparin, Academician

SUBMITTED: October 10, 1961

Card 2/2

METLITSKIY, L.V., MUKHIN, Ye.N., MOROZOVA, N.I.

Biochemical nature of the reactions to wounds and their use in increasing the resistance of potatoes to microorganisms. Dokl. AN SSSR 150 no.6:1382-1384. Ja '63. (MIRA 16:8)

1. Institut Biokhimi im. A.N.Bokha AN SSSR. Predstavleno akademikom A.I. Oparinym.

(POTATOES--DISEASES AND PESTS)
(PLANTS--DISEASE AND PEST RESISTANCE)

KOCHEPKOV, V.N.; SIDOROV, V.A., inzh.; MOROKOVA, N.V.

Investigating the effect of stabilizers on the aging, physico-mechanical and lightproof properties of polyester films.
Nauch.-issl. trudy VNIIPK no.14:92-110 '64.

(MIR) p. 12.

L 23071-65 EWT(m)/EWP(j) Pc-4 RM

ACCESSION NR: AR4048487

S/0081/64/000/013/S053/S053

SOURCE: Ref. zh. Khimiya, Abs. 138335

AUTHOR: Kochetkov, V. N.; Sidorov, V. A.; Morozova, N. V.

TITLE: A study of the effect of stabilizing additives on the aging, physicom-
ical and optical properties of a polyamide film

CITED SOURCE: Nauchno-issled. tr. Vses. n.-i. in-t plenochn. materialov i 'iskusstv.
kozhi, sb. 14, 1963, 92-110

TOPIC TAGS: polyamide film, polyamide light permeability, polyamide heat resist-
ance, polymer film stability, stabilizing additive

TRANSLATION: The authors studied the effect of the addition of stabilizing ad-
ditives (CuSO₄, CaHPO₄, TiO₂, β-naphtol, phenol, diphenylguanidine, resorcinol,
maleic anhydride, phenol-formaldehyde resin, etc.) on the physicom-
optical properties of polyamide film. They found that the most effective stabil-
izers are KI, β-naphtol and phenol-formaldehyde resin; the greatest heat re-
sistance was produced by the addition of stabilizers in amounts of 0.25-1%.

Card 1/2

L 23071-65

ACCESSION NR: AR4048487

Addition of stabilizers decreased the light permeability of polyamide film only insignificantly; addition of KI and β -naphthol decreased the rate of thermo-oxidative degradation by 50-66%. Addition of stabilizers did not cause any difficulties in the manufacture of polyamide film. Yu. Lipatov

ASSOCIATION: None

SUB-CODE: MT

ENCL: 00

Card 2/2

BERLINER, Mark Aleksandrovich, dots.; BOLTOVSKAYA, Mona
Yur'yevna, assistent [deceased]; MOROZOVA, Nina
Vladimirovna, assistent; KOMAROVA, M.V., red.

[Principles of industrial electronics and automatic
control] Osnovy promyshlennoi elektroniki i avtomatiki.
[n.p.] Vysshaya shkola, 1964. 86 p. (MIRA 17:11)

1. Kafedra "Promyshlennaya elektronika i avtomatika"
Moskovskogo avtomobil'no-dorozhnogo instituta im. Molotova.

MOROZOVA, N.V.

Problem of early diagnosis of oneiric catatonia. Vop.klin., patog.
i lech. shiz. no.1:102-104 '64. (MIRA 18:5)

1. Otdel psikhozov pozdnego vozrasta (zav. - prof. S.G.Zhislin)
Gosudarstvennogo nauchno-issledovatel'skogo instituta psikhiatrii
Ministerstva zdravookhraneniya RSFSR i Moskovskaya gorodskaya
klinicheskaya bol'nitsa No.4 imeni Gannushkina (glavnyy vrach -
V.N.Pybalka).

SIDOROV, V.A.; MOROZOVA, N.V.; TROSMAN, G.M.; ZAYTSEVA, N.P.; ALEKSANDROV, K.N.

Using stabilized polyamide films in agriculture. *Biul. tekhn.-ekon.
inform. Gos. nauch.-issl. nauch. i tekhn. inform.* 17 no.9:67-69
S '64 (MIRA 18:1)

KUCHETKOV, V.N.; ROGOV, V.M.; MOROZOVA, N.V.; PONOMAREVA, V.A.

Studies in the field of the stabilization of polyamide films.
Plast. massy no.3:12-14 '65. (MIRA 12:6)

МОРЗОВА, А. В.
AUTHORS: Rogovin, Z. A., Davydov, A. N., Tsarfin, Ya. A. 64-1-4/19
Morozova, N. V. Yerokhina, V. G.

TITLE: Rapid Method for the Acetylation of Cellulose in a Homogeneous Medium
(Bystryy metod atsetilirovaniya tsellyulozy v gomogennoy srede)

PERIODICAL: Khimicheskaya Promyshlennost', 1958, Nr 1, pp. 17-20 (USSR).

ABSTRACT: The cellulose acetylations which have hitherto been carried out in plants took from 8 - 12 hours. Therefore it was necessary to find a method of shorter duration. In the present paper a rapid method is suggested which refers among other things to some proposals of Thomas (reference 3) as being superfluous, so e. g. a pretreatment of cellulose with concentrated urea solution. The usual activation with glacial acetic acid at 60°C for 30 minutes is sufficient. Investigations of the influence of the acetylation temperature showed that a temperature of 70°C is not to be surpassed and that with a quantity of 0,3 percentages by weight of sulfuric acid as catalyst at 80°C the triacetylcellulose can be obtained within from 20 - 30 minutes. In order to obtain

Card 1/3

Rapid Method for the Acetylation of Cellulose
in a Homogeneous Medium

04-1-4/19

triacetylcellulose with sufficiently high molecular weight special attention must be paid to the composition of the mixture to be acetylated. Experimental results show that the decomposition of the obtained acetylcellulose is proportional to the added quantity of acetic acid, on the other hand, however, the procedure becomes too expensive in the case of an increase in addition of acetic anhydride, except the product is isolated in an arid medium so that no hydrolysis of the anhydride can occur. On the strength of various investigations a mixture of 50 - 60% of acetic anhydride and of 50 - 40% of acetic acid was found to be the optimum condition. In investigations of the catalyst quantity and its character it was found that the quantity must be reduced at increased temperature (from 1 - 1.5% to 0.3% in the case of sulfuric acid), aniline sulfate (0.6 percentages by weight) is assumed to be a better catalyst than the ammonium sulfate suggested by Thomas. The investigations are carried on in order to test them in the industrial scale and to obtain a further reduction of the acetic anhydride quantity.

Card 2/3

There are 3 tables, and 3 references, 2 of which are Slavic.

Rapid Method for the Acetylation of Cellulose
in a Homogeneous Medium

64-1-4/19

ASSOCIATION: Laboratory of the NIIPP at the Chemical Plant, Vladimir
(Laboratoriya NIIPP na Vladimirsom khimicheskom zavode)

AVAILABLE: Library of Congress.

1. Cellulose-Acetylation

Card 3/3

YEROKHINA, V.G.; MOROZOVA, N.V.; ROGOVIN, Z.A.

Development of a method for determining the reactivity of cellulose in the process of acetylation. *Plast.massy* no.8:65-66 '60.
(MIRA 13:10)

(Cellulose)

(Acetylation)

L 18880-63

EWP(j)/EWT(m)/BDS AFFTC/ASD. Pg-4 RM/MAY

ACCESSION NR: AP3006533

8/0191/63/000/009/0015/0017 61

AUTHORS: Kochetkov, V. N.; Ponomareva, V. A.; Morozova, N. V.

TITLE: Polyamide film stabilization analysis. Stabilizing effect of hydrohalogen acid salts

SOURCE: Plasticheskiye massy*, no. 9, 1963, 15-17

TOPIC TAGS: polyamide-film stability, hydrohalogen acid salt, KJ, CuBr, NaB 8.5 2, KB Sub 2, film thermostability, Hg, Zn, Bi, Mn, Co, Fe, Ca, Cd, mercury, zinc, bismuth, manganese, copper, iron, calcium, cadmium

ABSTRACT: Laboratory and industrial conditions of stabilization of polyamide film with salts of hydrohalogen acids were investigated. The introduction of small quantities of hydrohalogen acid salts increases considerably the stability of polyamide film to heat effect and to atmospheric conditions. The most effective stabilizers were found to be KJ, CuBr, NaB₂ and KB₂. The highest thermostability of the film is obtained when the additions are in quantities of 0.5 to 1.0%. The salts of Mn, Zn, B₂, Hg, Bi, Co, Fe, Ca and Cd are not

Card 1/2

L 18880-63

ACCESSION NR: AP3006533

sufficiently effective as dispersant and therefore are not suitable additives. Orig. art. has: 2 tables and 5 figures.

ASSOCIATION: none

SUBMITTED: 00

DATE ACQ: 30Sep63

ENCL: 00

SUB CODE: CH

NO REF SOV: 010

OTHER: 003

Card 2/2

L 41647-65 EWT(m)/EPP(s)/EPR/EWP(j)/T Pc-4/Pr-4/PS-4/Pt-7 WW/RM
ACCESSION NR: AP5006556 5/0191/65/000/003/0012/0014

AUTHOR: Kochetkov, V. N.; Rogov, V. M.; Morozova, N. V.; Ponomareva, V. A. 36
B

TITLE: Stabilization of polyamide films 15

SOURCE: Plasticheskiye massy, no. 3, 1965, 12-14

TOPIC TAGS: polyamide, stabilization, polymer film

ABSTRACT: Stabilization of polyamide film by the addition of salts of sodium, potassium and copper is investigated. One of the parameters studied is the relative elongation of the film as a function of the amount of salt introduced. These relationships are shown in Fig. 1 of the Enclosure. It was shown that the greatest thermal stability is obtained with copper salts in the amount of 0.25% of the weight of the polymer. It was also found that the most effective salts are iodides and bromides of sodium, potassium and copper. The results of stability tests with respect to thermal oxidation are shown in Fig. 2 of the Enclosure. It was found that the stabilizers quite strongly adsorbed so that there is no danger of them being washed out. The dielectric constants of unstabilized film differ very little from film stabilized with NaI, NaBr, KI and KBr. Orig. prt. has: 5 figures and 2 tables.

Card 1/1

L 41647-65
ACCESSION NR: AP5006556

0

ASSOCIATION: none

SUBMITTED: 00

ENCL: 02

SUB CODE: GC, MT

NO REF SOV: 003

OTHER: 000

Card 2/4

KOROZOVA, O. D.

~~Cementing rubber to metal. E. K. Zhuravskaya, O. D. Korozova, A. A. Kostikov, I. B. Shatro, and E. A. Zhuravskaya. U.S.S.R. 136,004, June 23, 1957. For cementing rubber to metal a dichloroethane soln. of p,p'-tricyanato-triphenylmethane (triccuate) is used. The cementing is carried out under compression at 60-80° for 4-8 hrs. Nonflat metal surfaces are first treated thermally at 120° for 60 min., and then cementing is done as above.~~

~~M. Horst~~

RM

004

GILYAROV, N.P., kand.tekhn.nauk; MOROZOVA, O.F., inzh.

Resistances in the lower boundary of a self-simulating area during
work with air models. Trudy LIT no.7:17-22 '60. (MIRA 15:2)
(Aerodynamic models) (Hydrodynamics)

YEMISHINA, P.Ye.; MOROZOVA, O.G. (Andizhan)

Study of vitamin B₁₂ metabolism under the climatic conditions
of Central Asia. Klin.med. 38 no.8:119-120 Ag '60.

(MIRA 13:11)

1. Iz kafedry patologicheskoy fiziologii (zav. - dotsent R.P.
Fulатов) Andizhanskogo meditsinskogo instituta (dir. - zasluhen-
nyy vrach Uzbekskoy SSR U.A. Alimov).

(CYANOCOBALAMINE)

(SOVIET CENTRAL ASIA--MAN--INFLUENCE OF CLIMATE)

MOROZOVA, O.G., assistant

Content of vitamin B₁₂ in the blood serum of healthy persons and
syrue patients. Med. Zhur. Uzb. no.5849-51 My'63 (MIRA 17:4)

1. Iz kafedry fakul'tetskoy terapii (ispolnyayishchiy obyazan-
nosti zaveduyushchego - dotsent G.M.Kleyner) Andizhanskogo medi-
tsinskogo instituta.

MOROZOVA, O. I.

Morozova, O. I. "The effect of taking away the aerial mass of seed plants upon the condition of their subterranean organs," So-obshch. Tadzh. filiala Akad. nauk SSSR, Issue 2, 1946, p. 41-44

SO: U-3566, 15 March 53, (Letor's Journal High State, No. 1, 1949).

MOROZOVA, O. I.

Morozova, O. I. - "Structure of the root system of desert sedge," Soobshch.
Takzh. filiala Akad. nauk SSSR, Issue 11, 1949, p. 28-30

So: U-3566, 15 March 53, (Letopis 'Zhurnal 'nykh Statey, No. 13, 1949)

MOROZOVA, O. I.

Morozova, O. I. "Seasonal variations in the fodder reserves of annual-grass pastures in Tadzhikistan", Soobshch. Tadzh. filiala Akad. nauk SSSR, Issue 14, 1949, p. 3033.

SO: U-4630, 16 Sept. 53, (Letopis 'Zhurnal 'nykh Stat y, No. 23, 1949).

24134 КОМОЗОВА, С. И. Izucheniye sezonnykh yavlenny u rastitel'nosti pastbishch.
Soobshch. Tadzh. filiala Akad. nauk SSSR, VYP. 15, 1949, S. 3-42
Bibliogr: 5 nazv.

SC: Letopis, No. 32, 1949.

1. MOROZOVA, O. I.
2. USSR (600)
4. Tajikistan--Weeds
7. Biological basis of measures for combatting certain pastureland weeds of the Sub-Alpine belt, Soob. TFAN SSSR, No. 23, 1950.

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

1. O. I. MCRCZCVA
2. USSR (600)
4. Botany - Tajikistan
7. Utilization of high altitude pasture lands of Tajikistan for karakul sheep.
Zoob. TFAN SSSR no. 27. 1950.

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

1. MOROZOVA, O. I.
2. USSR (600)
4. Pastures - Tajikistan
7. Change in the vegetation of pasturelands of the Tajikistan lowlands resulting from not using them for pasturing. Soob. TFAN SSSR, no. 30, 1951.

9. Monthly List of Russian Accessions, Library of Congress, March 1953. Unclassified.

1. MOROZOVA, O. I.
2. USSR (600)
4. Poisonous Plants
7. Control of *Ceratocephalus falcatus*, a poison plant of desert sheep pastures.
Kar. i zver. 5 no. 5, 1952.

9. Monthly List of Russian Accessions, Library of Congress, January 1953. Unclassified.

KOROZOVA, O.I.

Evolutionary role of grazing in the formation of species of *Angiospermae*. Bot. Zhur. 37, No.2, 158-172 '52. (MLRA 5:5)
(Biol.A 28 no.2:2662 '54)

M2P 52 1/A

COUNTRY : USSR L
CATEGORY : Meadow Cultivation.

ABST. JOUR. : RZhBiol., No. 3, 1959, No. 10823

AUTHOR : Morozova, O. I., Sin'kovskiy, L. P., Agalina, V. G.
INST. : Academy of Sciences, Tadzhik SSR
TITLE : The Summer High-Mountain Pastures of the Southern Slope
of Gissar Ridge and Their Utilization in Caracul Raising.

CIT. PUB. : Tr. AN TadzhSSR, 1957, 67, 5-69.

ABSTRACT : A characteristic is given of the sovkhos "Kabadian" pastures and of the region of Anzob Pass, and a description of their vegetation cover. The chemical composition and the nutrition value of the high-mountain pasture plants and also the extent of their being eaten by the Caracul sheep were investigated. There was made a calculation of the forage reserves of the high-mountain pastures and their change after the summer grazing period. Recommendations are given on raising the forage production of the

CARD: 1/2

PUSHKIN, P.S.; Morozova, O.N.; Polyakova, L.N.

Raw materials balance in assembly-line operations of the Synthetic
Rubber Sele Combine in Ivanovo. Kozh.-obuv. prom. no.5:13-15 My
'59. (MIRA 12:6)

(Ivanovo--Shoe industry)

PUSHKIN, P.S., kand.tekhn.nauk; MOROZOVA, O.N., inzh.; POLYAKOVA, L.N.,
inzh.

Analyzing the indices of the continuity of the movement of
labor products and of the use of equipment in rubber sole
manufacture. Nauch.-issl.trudy VNIIPK no.12:114-126 '60.

(MIRA 16:2)

(Rubber industry)

(Assembly-line methods)

AUTHOR: Morozova, O. P.

SOV/30-59-2-40/60

TITLE: 40th Anniversary of the Polish Communist Party (40-letiyе
Kommunisticheskoy partii Pol'shi)

PERIODICAL: Vestnik Akademii nauk SSSR, 1959, Nr 2, pp 95-96 (USSR)

ABSTRACT: On this occasion an extended session of the uchenyy sovet
Instituta slavyanovedeniya Akademii nauk SSSR (Scientific
Council of the Institute of Slavic Philology of the Academy of
Sciences, USSR) was held on December 16, 1958. I. A. Khrenov,
Vice-Director of the Institute reported on the formation of the
Polish Communist Party. Doctor A. Ya. Manusevich spoke about
the Polish Communist groups in Russia fighting for the victory
and strengthening of the Soviet Union in the years 1917 to 1919,
mentioning Polish revolutionaries such as F. Dzerzhinski ,
I. Unshlikht, B. Veselovski . Professor G. Zatorski , Head of
the Chair of Modern History of the

Military-Political
Academy imeni Dzerzhinskiy in Warsaw), and the participant in
the Polish revolutionary movement, Member of the SDKP and L
since 1906, B. Milevskaya also took the floor. The session was
attended also by the Secretary of the Embassy of the People's

Card 1/2

40th Anniversary of the Polish Communist Party

SOV; 30-59-2-40/60

Republic of Poland, A. Krzeniewski as well as by the Polish
historians N. Gasierowska and V. Hajdus.

Card 2/2

MOROZOVA, O.

Judicial consultations in enterprises. Sov. profsoiuzy 19
no.11:18 Je '63. (MIRA 16:8)

1. Sekretar' Moskovskogo gorodskogo soveta professional'nykh
soyuzov.
(Moscow--Labor laws and legislation) (Trade unions)

KOZLOV, V.N.; MOROZOVA, O.V.

Chemical composition of wood of certain species growing in the
Far East. Zhur. prikl. khim. 29 no.12:1884-1886 D '56.

1. Laboratoriya lesokhimi Dal'nevostochnogo filiala Akademii nauk
SSSR. (MLBA 10:6)

(Wood--Chemistry)

(Soviet Far East--Trees)

KOROZOVA, O.V.; BAYULA, A.G.; VINOKUROVA, Ye.A.; KOZLOV, V.N.

Frothing agents from wates of gum-turpentine production. Gidroliz.
i lesokhim. prom. 10 no.8:10-12 '57. (MIRA 10:12)

1. Dal'nevostochnyy i Ural'skiy filialy AN SSSR.
(Flotation) (Turpentine industry)