

KOVIKOVA, E.Z.

X-ray therapy in hemolytic osteoarthritis; preliminary communication. Probl.gemat.i perel.krovi 4 no.12:31-34 D '59.

(MIRA 13:4)

1. Iz Tsentral'nogo ordena Lenina instituta gematologii i perelivaniya krovi (direktor - deystvitel'nyy chlen ANN SSSR prof. A.A. Bagdasarov) Ministerstva zdravookhraneniya SSSR.

(HEMOPHILIA compl.)

(JOINTS dis.)

NOVIKOVA, E.A., kand.med.nauk (Moskva, ul. Stepani, d.8, kv.15)

Osteoarticular changes in hemophilia. Vest. rent. i rad. 35
no. 2:13-20 Mr-Apr '60. (MIRA 14:2)

1. Iz Tsentral'nogo ordena Lenina instituta gematologii i
perelivaniya krovi Ministerstva zdravookhraneniya SSSR (direktor -
deystvitel'nyy chlen AMN SSSR prof. A.A. Bagdasarov).
(HEMOPHILIA) (BONES) (JOINTS)

FATSIORA, M.D.; KOVIKOVA, E.Z.

Varicose dilatation of the esophageal veins in the syndrome of portal hypertension. *Khirurgiia* 36 no.9:98-113 8 '60.

(MRA 13:11)

1. Is Tsentral'nogo ordena Lenina instituta gematologii i perelivaniya krovi (dir. - deystvitel'nyy chlen AMN SSSR prof. A.A. Bagdasarov) Ministerstva zdravookhraneniya SSSR.
(ESOPHAGUS—BLOOD SUPPLY) (HYPERTENSION) (VARIX)

NOVIKOVA, Ye. I.

Case of osteosclerosis in chronic renal insufficiency. *Klin.*
med. 38 no.1:131-134 Ja '60. (MIRA 13:10)
(RICKETS) (OSTEOSCLEROSIS)

SOBOLEVA, S.S.; NOVIKOVA, E.Z., kand.med.nauk (Moskva)

Hypernephroma simulating erythremia. Klin.med. 38 no.3:131-134
Mr'60. (MIRA 16:7)

1. Iz Tsentral'nogo ordena Lenina instituta gematologii i pere-
livaniya krovi Ministerstva zdravookhraneniya SSSR (dir.-deystvi-
tel'nyy chlen AMN SSSR prof. A.A.Bagdasarov).
(ERYTHREMIA) (KIDNEYS—CANCER)

KRAYEVSKIY, N. A.; NEMENOVA, N. M., doktor med. nauk; KHOKHLOVA, M. P.,
kand. med. nauk; NOVIKOVA, E. Z., kand. med. nauk (Moskva)

Interrelation of osseous and hematopoietic tissues in some diseases
of the blood system. Arkh. pat. no.6:3-10 '61.

(MIRA 14:12)

1. Iz Tsentral'nogo ordena Lenina instituta gematologii i perelivaniya
krovi (dir. - deystvitel'nyy chlen AMN SSSR prof. A. A. Bagdasarov)
2. Deystvitel'nyy chlen AMN SSSR (for Krayevskiy).

(BONE) (HEMATOPOIETIC SYSTEM—DISEASES)

NOVIKOVA, E.Z., kand.med.nauk (Moskva, ul.Stopani, d.8, kv.15)

Role of X-ray investigations in the differential diagnosis of
splenomegaly of various origins. Vest. rent. i rad. 36 no.4:
31-39 J1-Ag '61. (MLRA 15:2)

1. Iz Tsentral'nogo ordena Lenina instituta gematologii i perelivaniya
krovi (dir. - deystvitel'nyy chlen AMN SSSR prof. A.A. Bagdasarov).
(DIAGNOSIS, DIFFERENTIAL) (SPLEEN_HYPERTROPHY AND DILATATION)
(X RAYS)

NOVIKOVA, E.Z., kand.med.nauk

Myositis ossificans in hemophilia. Khirurgia 37 no.3:90-92
Mr '61. (MIRA 14:3)

1. Iz rentgenovskogo otdeleniya (sav. I.E. Gurevich) Tsentral'no-
nogo ordena Lenina instituta gematologii i perelivaniya krovi
(dir. - deystvitel'nyy chlen AMN SSSR prof. A.A. Bagdasarov)
Ministerstva zdravookhraneniya SSSR.
(MUSCLES---DISEASES) (HEMOPHILIA)

NOVIKOVA, E.Z.

Variants of osteomyelodysplasia (osteomyelosclerosis). Probl.
gemat.i perel.krovi no.2:21-27 '62. (MIRA 15:1)

1. Iz gematologicheskoy kliniki (zav. - prof. M.S. Dul'tsin)
rentgenovskogo otdeleniya (zav. - doktor med.nauk I.B. Gurevich)
i patologoanatomicheskogo otdeleniya (zav. - prof. N.M. Nemenova)
TSentral'nogo ordena Lenina instituta gematologii i perelivaniya
króvi (dir. - dotsent A.Ye. Kiselev) Ministerstva zdravookhraneniya
SSSR.

(LEUCOPENIA)

(OSTEOMYELITIS)

PATSIORA, M. D.; NOVIKOVA, E. Z.; BEZMENOVA, E. V.; LEMENEV, V. L. 5

"Splanoptography"

to be presented at the Radiology Congress, Karlovy
Vary, Czechoslovakia, 10-14 June 63

NOVIKOVA, E.Z., kand. med. nauk; GARIN, N.D., doktor med. nauk

X-ray therapy of hemophilic osteoarthroses. Khirurgia 39
no.5:87-92 My '63. (MIRA 17:1)

1. Iz rentgenovskogo otdeleniya (zav. - doktor med. nauk
I.B. Gurevich) i khirurgicheskoy kliniki (zav. - prof.
D.M. Grozdov) Tsentral'nogo ordena Lenina instituta gemato-
logii i perelivaniya krovi Ministerstva zdravookhraneniya
SSSR.

NOVIKOVA, E.Z., doktor med. nauk

Interrelation of osteomyelodysplasia with other diseases accompanied by systemic sclerosis of the skeleton and the differential diagnosis of these diseases. Vost. rent. i rad. 39 no.4:7-14 JI-Ag '64. (MIRA 18:7)

I. Tsentral'nyy ordena Lenina institut gematologii i perelivaniya krovi, Moskva.

NOVIKOVA, Faina Andreyevna; VOLKOV, M.Ya., red.; DEMENT'YEV, V.A., red. izd-
va; MURASHOVA, V.A., tekhn. red.

[Financial groups of the U.S.A. and methods of their domination]
Finansovye gruppy SShA i metody ikh gospodstva. Moskva, Gos. izd-
vo "Vysshaya shkola," 1961. 111 p. (MIRA 14:8)
(United States--Big business)

KUTSOVOL, M.S.; SIDOROV, K.V.; NOVIKOVA, F.S., inzh.

Fiftieth anniversary of the "Moskabel'" factory. Vest. elektroprom.
33 no.3:4-9 Mr '62. (MIRA 15:3)

1. Direktor zavoda "Moskabel'" (for Kutsovol). 2. Glavnyy inzh.
zavoda "Moskabel'" (for Sidorov).
(Electric equipment industry)

NABIYEV, M.N., akademik; IBRAGIMOVA, U.I.; IL'YASOV, A.I.; RUBO, V.M.;
NOVIKOVA, F.V.; GLAGOLEV, Ye.D.; GLAGOLEVA, A.F.; EYDEL'MAN, A.S.,
red.

[Liquid mixed fertilizers produced by treating phosphates with
nitric acid] Zhidkie slozhnye duobreniia na osnove azotnokislotoi
pererabotki fosfatov. Tashkent, Izd-vo "Nauka" UzSSR, 1965.
402 p. (MIRA 18:8)

1. AN UzbekSSR (for Nabiyeu). 2. Institut khimii AN UzbekSSR
(for Ibragimova). 3. Chirchiskiy elektrokhimicheskiy kombinat
(for Il'yasov).

X

NOVIKOVA, G., Cand Phys-Math Sci -- (diss) "Alpha-disintegration of
certain uneven nuclei." Mos, 1958. 10 pp (Acad Sci USSR) (KL, 16-
58, 116)

- 7 -

NOVIKOVA, Galya, yunnat; DENISOV, Borya, yunnat

At a pond. IUn. nat. no.11:28 N '61.

(MIRA 14:11)

1. Orudnevskaya shkola, Dmitrovskiy rayon, Moskovskaya oblast'.
(Ducks)

NOVIKOVA, G.A.; PETROVA, E.A.; USHAKOVA, V.I.; FEOFILOVA, Ye.P.

Formation of diacetyl and acetoin by lactic acid streptococci.
Trudy Inst. mikrobiol. no. 6:87-92 '59. (MIRA 13:10)

1. Kafedra mikrobiologii Moskovskogo gosudarstvennogo universiteta.
(BUTANONE) (BUTANEDIONE) (LACTIC ACID BACTERIA)

KONDRAT'YEVA, Ye.N.; NOVIKOVA, G.A.; KUZNETSOVA, V.M.

Antimicrobial properties of carbamide resin and its use of some
micro-organisms. Nauch. dokl. vys. shkoly; biol. nauki no. 2:
166-170 '64. (MIFA 17:5)

1. Rekomendovana kafedroy mikrobiologii Moskovskogo gosudarstven-
nogo universiteta im. M.V.Lomonosova.

SHAPOSHNIKOVA, V.N.; NOVIKOVA, G.A.; ISAYEVA, V.S.

Development of *Proteus vulgaris* on synthetic media. Vest. Mosk.
un. Ser. 6: Biol., pochv. 20 no.6:29-32 N-D '65.

(MIRA 19:1)

1. Kafedra mikrobiologii Moskovskogo gosudarstvennogo universiteta.
Submitted December 17, 1964.

1160 J. K. ODA, G. O.

5(1) PHASE I RYK EXPLOITATION 001/2087

Yaroslav), Technological Institute
Chernye Zapiski, tom II (Scientific Notes, Vol. 2)
Yaroslav), vol. 10, 1950, p. 100. 200. 200. 200.

Editorial Staff: A.I. Solov'ev, Candidate of Historical Sciences; Decret
M.M. Mazurek, Candidate of Chemical Sciences; Professor M.I. Pavlov,
Doctor of Technical Sciences;

Assoc. Prof. Professor Yu.D. Maschakov, Doctor of Chemical Sciences
Secretary-Editor: B.F. Stepanovskiy, Candidate of Chemical Sciences

REMARKS: This book is primarily intended for industrial chemists and tech-
nologists interested in the kinetics of chemical reactions and their ap-
plied physical problems.

CONTENTS: The contents articles of this collection deal mainly with in-
dustrial processes for the preparation of gaseous compounds, problems of
heat physics and general techniques related to these processes, and with
industrial chemical equipment. No personalities are mentioned. References
are given after each article.

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NOVIKOVA, G.G.

Replacing Clark's medium with condensation water from rosolic acid medium in differentiating between B. coli commune and B.coli aerogenes. Lab.delo 4 no.5:39-40 S-0 '58 (MIRA 11:11)

1. Iz Gorodskoy sanitarno-epidemiologicheskoy stantsii g. Drogobych.

(AEROBACTER AEROGENES)

(ESCHERICHIA COLI)

(BACTERIOLOGY—CULTURES AND CULTURE MEDIA)

SUKHANOVA, M.V.; NOVIKOVA, G.G.

Increasing the sedimentation stability of enamel paints containing barium and iron oxide reds by means of the addition of surface-active agents. Lakokras. mat. 1 ikh prim. no. 4:26-28 '63.
(MIRA 16:10)

BLYUMBERG, I.B.; IVANOVA, V.G.; NOVATSKAYA, T.A.; NOVIKOVA, G.G.

Study of the processing of cinematographic films by jets. Zhur.
V KHO 5 no.4:473-474 '60. (MIRA 13:12)

L. Leningradskiy institut kinoinzhenerov.
(Motion-picture photography--Films)

BURDIN, Viktor Fedorovich; RUDAKOV, Viktor Vasil'yevich; NOVIKOVA,
Galina Ivanovna; LYUSTIBERG, V.F., inzh., ved. red.;
SOSNOVSKIY, A.A., inzh., red.; SOROKINA, T.M., tekhn. red.

[Device for measuring step-wise changes in capacitance]Izme-
ritel' skachkoobraznykh izmenenii emkosti. Chetyrekhkanal'-
nyi kommutator k elektronnyim ostsillografam. [By]V.V.Rudakov
i G.I.Novikova. Moskva, Filial Vses. in-ta nauchn. i tekhn.
informatsii, 1958. 15 p. (Peredovoi nauchno-tekhnicheskii i
proizvodstvennyi opyt. Tema 36. No.P-58-78/13) (MIRA 16:3)

(Electric capacitance--Measurement)

(Cathode ray oscillograph) (Commutation (Electricity))

VASSERMAN, P.I.; CHEBOTAREVSKIY, V.V.; Prinimali uchastiye: FEOKTISTOVA,
A.A.; NOVIKOVA, G.I.; BRATYSHEV, V.L.

Determination of the insulative characteristics of lacquer-
paint coatings based on their ohmic resistance. Lakokras.mat.
i ikh prim. no.2:35-44 '61. (MIRA 14:4)
(Protective coatings)

ZAVALISHIN, D.A.; NOVIKOVA, G.E.

An inverter using transistors for frequency control of the speed
of asynchronous electric motors. Sbor.rab.po vsp.elektromekh.
no.7:78-85 '62. (MIRA 16:1)
(Electric motors, Induction) (Automatic control)

ZAVALISHIN, D.A.; NOVIKOVA, G.I., inzh.; CHZHEN BIN-GAN [Cheng Ping-kang],
kand.tekhn.nauk

Transistorized frequency converters for regulating the angular
velocity of asynchronous motors. Elektrichestvo no.11:37-44
N '62. (MIRA 15:11)

1. Institut elektromekhaniki AN SSSR. 2. Chlen-korrespondent
AN SSSR (for Zavalishin).

(Electric motors, Induction) (Frequency changers)

GRUZOV, Vladimir Leonidovich; NOVIKOVA, Galina Ivanovna; KOVCHIN,
S.A., red.

[Transistorized frequency converters for automated a.c.
drives] Poluprovodnikovye preobrazovateli chastoty dlia
avtomatizirovannykh elektroprivodov peremennogo toka.
Leningrad, 1964. 24 p. (MIRA 18:3)

NOVIKOVA, G. I.

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✓ 4077 AEC-tr-2435 (Pt. 1) (p.167-82)

~~α-SPECTRA OF HEAVY ELEMENTS. L. L. Goldin, G. I.~~

~~Novikova, and E. P. Tretyakov. p.167-82 of CONFERENCE~~

~~OF THE ACADEMY OF SCIENCES OF THE USSR ON THE~~

~~PEACEFUL USES OF ATOMIC ENERGY, JULY 1-5, 1955.~~

~~SESSION OF THE DIVISION OF PHYSICAL AND MATHE-~~

~~MATICAL SCIENCES. (Translation). 16p.~~

~~This paper was originally abstracted from the Russian~~

~~Journal appeared in Nuclear Science Abstracts as NSA 9-7905.~~

Nov

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APPROVED FOR RELEASE: 08/23/2000

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NOVIKOVA, G.I.

SUBJECT USSR / PHYSICS CARD 1 / 2 PA - 1771
 AUTHOR KONDRAT'EV, L.N., NOVIKOVA, G.I., SOBOLEV, JU.P., GOL'DIN, L.L.
 TITLE The α -Decay of Pu²⁴⁰.
 PERIODICAL Žurn. eksp. i teor. fis, 31, fasc. 5, 771-774 (1956)
 Issued: 1 / 1957

The authors investigated the spectrum of two plutonium sources within the energy range of from 4.800-5.050 MeV by means of the α -spectrometer of the Academy of Science in the USSR. The results obtained by the experiments which took 2 weeks each, are illustrated in form of a diagram. A line A₁, which is known from literature, and which is due to the α -decay of Pu²⁴⁰ on to the level 4+ of the daughter nucleus, is clearly marked. The authors were able to give precise definitions of the parameters obtained for this level. Besides this line A₁, also the lines A₂, A₃, A₄ and A₅ are visible in the spectrum of the source A (12% Pu²³⁹, 88% Pu²⁴⁰, < 0,2% Pu²⁴¹, < 0,2% Pu²⁴²). In the spectrum of the source B (80% Pu²³⁹, 17% Pu²⁴⁰, 3% Pu²⁴¹, 0,5% Pu²⁴²), apart from the line A₁ also the lines B₄ and B₅ are visible. The last two lines are apparently due to the admixture of Pu²⁴¹ and Pu²⁴² in the source B, but the line B₅ originates from the superposition of the first satellites. A table contains the energies and relative intensities of the α -particles of Pu²⁴¹ and Pu²⁴². The line A₅ apparently belongs neither to Pu²⁴¹ nor to Pu²⁴².

SUBJECT USSR / PHYSICS CARD 1 / 2 PA - 1246
AUTHOR GOL'DIN, L.L., PEKER, L.K., NOVIKOVA, G.I.
TITLE The Alpha Decay
PERIODICAL Usp. fis. nauk, 59, 459-541 (1956)
Publ. 7 / 1956 reviewed 9 / 1956

This survey is arranged as follows: Experimental technics, α - γ - correlations (quite recently α -rays are examined by the determination of the angular correlations between δ -particles and γ -rays); the classical theory of α -decay; α -decay on the ground level of the daughter nucleus (the individual properties of nuclei depend more on the number of protons than on the number of neutrons, apparently because in heavy nuclei there are far more neutrons than protons. On the occasion of α -decay the properties of the mother nucleus and not of the daughter nucleus probably play the essential part); the deviation of nuclei from the spherical shape and the rotation structure of the excited levels; the rotation levels and the fine structure of α -rays; the intensity of the lines in α -spectra, simplified and not simplified transitions; the intensity of α -transitions on rotation levels.

Summary: The present theory of α -decay is not satisfactory. Essentially, nothing has been done except computing the transparence of barriers for a spherical nucleus. This is, however, quite insufficient because the α -active nuclei are by no means spherical. Nothing whatever is as yet known about the probability of the creation of α -particles. Undeniable progress was made by the discovery that a considerable part of the lower excited levels has rotational character. Nevertheless, many points still remain unexplained (par-

NOVIKOVA, G. I., GOL'DIN, L. L., KONDRAT'YEV, L. N., TRETYAKOV,

(Acad. Sci. USSR)

"Rotational Bands with $K = \frac{1}{2}$ and Low Excited Levels of Uranium-235,"

paper submitted at the A-U Conf. on Nuclear Reactions in Medium and Low Energy Physics, Moscow, 19-27 Nov 57.

Novikova, G. I.

AUTHORS: Kondrat'yev, L.N., Novikova, G.I., Dedov, V.B., Gol'din, L.L. ^{48-7-1/21}

TITLE: α -Decay of Pu^{238} (α -Raspad Pu^{238})

PERIODICAL: Izvestiya Akad. Nauk SSSR, Ser. Fiz., 1957, Vol. 21, Nr 7, pp. 907 - 908 (USSR)

ABSTRACT: The knowledge of the α -decay intensities on the successive levels which belong to a rotation level permits to draw important conclusions on the formation of the daughter nuclei. The most accurate values of the α -decay intensities can be determined by direct measurement of the α -transitions by means of an α -spectrometer or by an ionization chamber. The determination of the intensities by other methods sometimes leads to great errors. The low intensity of the transitions to the levels $4^+, 6^+$ and so on make it necessary to choose comparatively short-lived substances for the investigation by means of an α -spectrometer. In this work the highest excited states of rotation of U^{234} which show themselves in the α -decay of Pu^{238} were investigated, where the investigation was carried out by means of a magnetic α -spectrometer of the Academy of Science of the USSR. Pu^{238} was obtained as a product of the α -decay of Cm^{242} which had

Card 1/2

NOVIKOVA, G. I.

AUTHOR
TITLENOVIKOVA, G.I., KONDRAT'YEV, L.N., SOBOLEV, Yu.P., GOL'DIN, L.L. 6-5-11/55
The Alpha-Decay of Pu²³⁹.
(Alfa-raspad Pu²³⁹. - Russian)

PERIODICAL

Zhurnal Eksperim. i Teoret. Fiziki 1957, Vol 32, Nr 5, pp 1018-1021 (USSR)

ABSTRACT

First all the paper under review makes reference to some relevant previously published papers and thus outlines the present stage in the investigations with respect to the above problem. The authors investigated the α -spectrum of Pu²³⁹ by means of a magnetic α -spectrometer in the energy interval from 4,850 to 5,120 MeV. The first diagram in the paper under review represents the α -spectrum in the energy interval 5,025 - 5,120 MeV. One can see quite distinctly a line that corresponds to the level of 84 keV. A second diagram shows the part of the spectrum situated in the energy interval 4,850-5,080 MeV. With certainty one can see here an α -line corresponding to the level with the excitation energy of 151 keV. The intensity of this transition amounts to (0.013 0.005) %. The excitation energy of the level with I = 9/2 belonging to the rotational band with K = 1/2 amounts to 153 keV and thus coincides with the energy of the level discovered by the authors of the paper under review. Thus the energies of

CARD 1/3

The Alpha-Decay of Pu²³⁹.

56-5-11/55

of Pu²³⁹ and the lowest level of the rotational bands have the same parity. The transitions to the levels with the energy 13.2 and 52 keV take place with $l = 2$, and the transitions to the levels with the energy 84 and 151 keV with $l = 4$. In concluding, the authors of the paper under review also discuss the γ -transition between the levels with the spin $1/2$ and $7/2$.
(3 reproductions)

ASSOCIATION: -
PRESENTED BY: -
SUBMITTED: 13.2. 1957
AVAILABLE: Library of Congress.

CARD 3/3

21(0)

SOV/30-59-4-33/51

AUTHOR:

Novikova, G. I., Candidate of Physical and Mathematical Sciences

TITLE:

Investigations of Nuclear Spectroscopy (Issledovaniya po yadernoy spektroskopii)

PERIODICAL:

Vestnik Akademii nauk SSSR, 1959, Nr 4, pp 116-118 (USSR)

ABSTRACT:

The 11th Annual Conference on Nuclear Spectroscopy was held in Khar'kov between January 26th and February 2nd; more than 100 reports were delivered. The reports dealt with various nuclear models, the problem of β -decay and the non-conservation of parity, the resonance scattering of γ -rays as well as with the application of the methods of the theory of superfluidity for the purpose of investigating the properties of the atomic nucleus. S. A. Sliv and L. K. Peker reported on successes achieved in connection with the generalized model of the nucleus. A. S. Davydov recommended a new method of investigating the properties and structure of the nucleus. The problem of non-conservation of parity in the case of strong interaction was explained by Ya. A. Smorodinskiy. A. B. Migdal, S. T. Belyayev, and V. G. Solov'yev spoke about the application of the method

Card 1/2

21(0),24(5)

AUTHORS:

Gol'din, L. L., Novikova, G. I.,
Ter-Martirosyan, K. A.

SOV/56-36-2-25/63

TITLE:

On the Shape of α -Active Nuclei (O forme α -aktivnykh yader)

PERIODICAL:

Zhurnal eksperimental'noy i teoreticheskoy fiziki, 1959,
Vol 36, Nr 2, pp 512-516 (USSR)

ABSTRACT:

Theoretical papers (Refs 1-5) have recently been published, in which the intensity of α -decay on levels in one and the same rotational band were calculated. Intensity was found to be dependent to a considerable extent on the shape of the nucleus. Utilizing this sensitivity, the authors investigate the shape of various heavy nuclei with the aid of the intensity of α -decay on successive levels of the main rotational band of the daughter nucleus. Proceeding from the results obtained by a previous paper (Ref 5), the deviation from the spherical shape is calculated according to

$$R(\theta) = r_0 \left[1 + \alpha_2 P_2(\cos\theta) + \alpha_4 P_4(\cos\theta) \right].$$

The coefficients α_2 and α_4 of the development according to Legendre polynomials P_2 and P_4 are calculated, as also

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On the Shape of α -Active Nuclei

SOV/56-36-2-25/63

$u^2 = (a^2 - b^2)/a^2 \approx 2 \Delta R/R$ (a = the large, b = the small semiaxis of the nucleus), and further also the quadrupole moment Q_0 and the 2^4 -pole moment Q_4 . The numerical results obtained for four even and three odd nuclei are shown in a table, and the 7 diagrams of figure 1 show the influence exercised by the shape of the nucleus on α -decay probability in the case of transitions to excited levels of the main rotational bands. Numerical results are in good agreement and show that the contribution made by the term $\propto P_4(\cos\theta)$ to the nuclear shape is considerable.

Nucleus	u^2	a_2	a_4	Q_0 [barn]	Q_4 [barn]
U 235*	0.34	0.161	-0.058	13.7	-3.6
Np 237*	0.34	0.160	-0.056	14.5	-3.6
Th 229	0.39	0.177	-0.030	14.7	+2.0
Pu 238	0.31	0.138	-0.052	12.3	-3.9
U 236	0.28	0.119	-0.026	10.9	-0.7
U 234	0.33	0.148	-0.041	11.7	-0.9
Th 228	0.39	0.173	-0.025	14.1	-3.0

Card 2/3

On the Shape of α -Active Nuclei

SOV/56-36-2-25/63

(The original table contains numerous further data concerning these 7 nuclei, as e.g. the ratios of the decay probabilities for various states).

The authors finally thank G. M. Adel'son-Vel'skiy and A. P. Birzgal for mathematical computations. There are 2 figures, 1 table, and 6 references, 3 of which are Soviet.

SUBMITTED: July 9, 1958

Card 3/3

TRET'YAKOV, Ye.F.; ANIKINA, M.P.; GOL'DIN, L.L.; NOVIKOVA, G.I.;
PIROGOVA, N.I.

Spectrum of internal conversion electrons accompanying α -decay
of U^{233} and the energy level diagram of Th^{229} . Zhur.eksp.1
teor.fiz. 37 no.4:917-927 0 '59. (MIRA 13:5)
(Uranium--Isotopes) (Thorium--Isotopes) (Electrons)

NOVIKOVA, G.I.; VOIKOVA, Ye.A.; GOL'DIN, L.L.; ZIV, D.M.; TRIT'YAKOV,
Ye.F.

Radioactive decay of Ac^{277} and excited levels of Fr^{223} and
 Th^{227} . Zhur.eksp.i teor.fiz. 37 no.4:928-937 0 '59.
(Actinium--Isotopes) (Thorium--Isotopes) (MIRA 13:5)
(Francium--Isotopes)

GOL'DIN, L.L.; NOVIKOVA, G.I.; PIROGOVA, N.I.; TRET'YAKOV, Ye.F.

Alpha-decay of Th^{229} . Interaction of nuclear levels. Zhur.
eksp. i teor. fiz. 37 no.4:1155-1157 0 '59.

(MIRA 13:5)

(Thorium--Decay)

24.6800

hh28h
S/048/62/026/012/003/016
B117/B186

AUTHORS: Tret'yakov, Ye. F., Kondrat'yev, L. N., Grishuk, G. I.,
Novikova, G. I., and Gol'din, L. L.

TITLE: A double, air-core β -spectrometer having a toroidal field

PERIODICAL: Akademiya nauk SSSR.. Izvestiya. Seriya fizicheskaya,
v. 26, no. 12, 1962, 1470-1474

TEXT: A β -spectrometer for investigating modes of decay using a coincidence method is described. Its principle parts are two toroidal coils, each weighing 400 kg, placed one above the other and divided into 4 sections connected in parallel for cooling purposes. For each coil the distance between source and detector is 800 mm. Each coil consists of 600 insulated turns made of 0.7 mm stamped copper, which are assembled in 60 packages. They are symmetrical with respect to the median plane of the coil, connected in series, reinforced and cooled in the middle by 2 mm sheet brass provided with a water-cooled pipe. The dimensions and the resolution of the apparatus are determined by the distance f between the source (detector) and the median plane of the coil, and by the coefficient K
Card 1/3

A double, air-core β -spectrometer ...

S/048/62/026/012/003/016
B117/B186

from the equation $p(\text{oe cm}) = 0.2 \kappa ni (A)$, where p is the momentum of electrons to be focused, i the current intensity, and n the number of turns. $f = 400$, $\kappa = 0.8$ were chosen as being optimum values. The coils are contained in an evacuated case carrying counter-turns on the outside to compensate parasitic fields which are set up when current flows through the coil. A vacuum lock in the middle of the case permits installation of sources between the two coils when they are operating independently. Next to the lock there are Wilson seals for the rods connected with exchangeable diaphragms. Adjustable scintillation counters with stilbene crystals, mounted perpendicular to the axis of the apparatus on separate flanges, serve as detectors. The coils are supplied from two current stabilizers controlled by d-c tube amplifiers. The power supply system makes it possible to maintain a stabilized current of 3 - 70 a for continuous operation at 80 v, or 160 v with the two coils connected in series. Each of the earth's magnetic field components is compensated to 1/50 by 3 threefold coils, connected in series, which are fed by a stabiliser made up of transistors. Debugging the apparatus is very simple; it comes down to checking that the components are accurately made and correctly assembled. With a 4-mm source and a 5-mm diaphragm, one section of the coil has a resolution of 0.45%. With an open diaphragm the

Card 2/3

TRET'YAKOV, Ye. F.; KONDRAT'YEV, L. N.; GRISHUK, G. I.; NOVIKOVA, G. I.;
GOL'DIN, L. L.

Double iron-free β -spectrometer with a toroidal field. Izv.
AN SSSR. Ser. fiz. 16 no.12:1470-1474 D '62.
(MIRA 16:1)

1. Institut teoreticheskoy i eksperimental'noy fiziki AN SSSR.

(Beta-ray spectrometer)

SEN'KO, P.K., red.; NOVIKOVA, G.M., red.

[Transactions of the Soviet Antarctic Expedition, 1955-]
Trudy Sovetskoi antarkticheskoi ekspeditsii, 1955-. Le-
ningrad, Morskoi transport. Vol.35. 1963. 378 p.
(MIRA 18:6)

1. Sovetskaya antarkticheskaya ekspeditsiya, 1955-.

NOVIKOVA, G. N. —

"Treatment of Dysentery by Preparations From Local Raw
Material -- Bistalbin and Bistalform." Cand Med Sci, Molotov
State Medical Inst, Molotov, 1953. (RZhBiol, No 2, Sep 54)

Survey of Scientific and Technical Dissertations Defended at
USSR Higher Educational Institutions (10)

SO: Sum. No. 481, 5 May 55

KALYUZHNIY, M.Ya.; PETRUSHKO, G.M.; NOVIKOVA, G.P.

Flocculation of *Candida utilis* and *Candida tropicalis* yeasts
and its relation to flotation. *Mikrobiologiya* 34 no.5:918-
924 S-0 '65. (MIRA 18:10)

1. Vsesoyuznyy nauchno-issledovatel'skiy institut gidroliznoy
i sul'fitno-spirovoy promyshlennosti, Leningrad.

S/908/62/000/000/002/008
B163/B180

AUTHORS: Gryaznov, A. I., Novikova, G. V., Shorin, K. N.

TITLE: Power supply system for the electromagnet of the 680 Mev accelerator

SOURCE: Uskoritel' elektronov na 680 Mev; sbornik statey. Ed. by Z. D. Andreyenko. Moscow, Gosatomizdat, 1962. 24-30

TEXT: The power system used for the 180 Mev proton synchrotron was completely modernized for operation with electrons, especially with respect to the weak magnetic field characteristics at the beginning of the acceleration cycle. A suitably adapted demagnetization device was introduced, the voltage across the magnet windings in the first period of the acceleration cycle was stabilized, and a negative field created before the working cycle. This reduced the residual field in the gap from 50 to 2 oe. The working pulse was supplied from a controllable ignitron rectifier fed from a synchronous generator calculated for an average power of 3000 kw. The generator voltage is controlled by a regulator. Mounted on the same shaft are a 1400 kw asynchronous motor,

Card 1/2

Power supply system for the ...

S/908/62/000/000/002/008
B163/B180

a 4 ton flywheel for smoothing out power fluctuations, and a synchronous generator for supplying the control circuits. The field windings of the synchronous generators are fed from two autonomous generators comounted with another, 135 kw asynchronous motor and a sub-exciter. Four phase shifters regulate the pulses controlling the ignitron rectifier. A block-diagram of the power system, and circuit diagrams of the ignitron rectifier, demagnetizing arrangement, negative magnetic field system, and initial voltage stabilization are given. There are 5 figures.

Card 2/2

GRYAZNOV, A.I.; METAL'NIKOV, Yu.N.; MOLCHANOV, S.S.; NOVIKOVA, G.V.;
PETUKHOV, V.A.; PISAREV, V.Ye.; PYSHKIN, B.N.; PANTYUSHKOVA, Ye.V.;
SEDOV, M.G.; SHORIN, K.N.; YAKIMENKO, M.N.

The 680 Mev. synchrotron of the Physical Institute of the Academy
of Sciences of the U.S.S.R. Atom. energ. 13 no.3:228-234 S '62.
(MIRA 15:9)

(Synchrotron)

TEMKINA, A.A.; NOVIKOVA, G.V.

Determination of the content of acetic butylamine in a
caprolactam melt. Khim.volok. no.1:74 '63. (MIRA 16:2)

1. Barnaul'skiy zavod.
(Butylamine) (Azepinone)

L 59224-65 EMT(m)/EPF(c)/EWP(j)/T Pc-h/Pr-h RM

ACCESSION NR: AP5016879

UR/0374/65/000/003/0015/0020
678:539.32

34
B

AUTHOR: Marey, A. I. (Leningrad); Sidorovich, Ye. A. (Leningrad); Novikova, G. Ya. (Leningrad)

TITLE: Influence of the crystalline phase in rubberlike polymers on their elasticity

SOURCE: Mekhanika polimerov, no. 3, 1965, 15-20

TOPIC TAGS: divinyl rubber, isoprene rubber, natural rubber, rubber elasticity

ABSTRACT: The article deals with the influence of crystallization of divinyl¹⁵ (SKD) and isoprene rubbers (NK, SKI-3, SKI) of regular structure on their elasticity in the transition temperature region. The elastic properties of the polymers were determined with a KS pendulum elastometer over a wide temperature range, and the data obtained were used to calculate the rebound elasticity and the dynamic elastic modulus. Crystallization was studied dilatometrically. Plots of the temperature dependence of the rebound elasticity

of such polymers. Orig. art. has: 1 figure and 1 table.

Card 1/2

L 59221-65

ACCESSION NR: AP5016879

ASSOCIATION: None

SUBMITTED: 26Dec64

ENCL: 00

SUB CODE: MT

NO REF SOV: 005

OTHER: 002

ACCESSION NR: AP4043968

8/0138/64/000/008/0001/0005

AUTHOR: Novikova, G. Ye., Trapeznikova, O. N.

TITLE: Refractometric investigations on the crystallization and melting of the crystalline phase of chloroprene rubber

SOURCE: Kautchuk i rezina, no. 8, 1964, 1-5

TOPIC TAGS: rubber, chloroprene rubber, rubber crystallization, rubber melting, refractometry, refractive index, polychloroprene, synthetic rubber

ABSTRACT: The effect of the temperature of crystallization (T_{cr}) on the melting temperature (T_{melt}) and the range of $\Delta T = T_{cr} - T_{melt}$ for polychloroprene rubber was determined by a simple and convenient refractometric method. The range of melting temperatures was found to depend linearly on the temperature of crystallization. The temperature dependence of the refractive index of polychloroprene samples, crystallized at different temperatures, as well as of amorphous polymers over a temperature range of -35 to 70C was also measured, using IRF-22 and RLU refractometers of the Abbe type. A schematic view and description of the apparatus for cooling the refractometer are given. Tabulated data show that optimum crystallization is obtained at -10C, which agrees with

Card 1/2

ACCESSION NR: AP4043968

the data of dilatometric measurements. With increasing T_{cp} , the melting temperature of the crystalline phase increases slightly, but the melting range decreases. The experimental data show that the degree of crystallization of polychloroprene samples can be determined refractometrically. Orig. art. has: 6 figures, 1 table and 2 formulas.

ASSOCIATION: Vsesoyuznyy nauchno-issledovatel'skiy institut sinteticheskogo kauchuka im. S. V. Lebedeva (All-Union Scientific Research Institute for Synthetic Rubber)

SUBMITTED: 00

ENCL: 00

SUB CODE: MT

NO REF SOV: 004

OTHER: 001

Card 2/2

L 13815-65 ENT(m)/EWP(j) Pc-4 RM

ACCESSION NR: AP4047668

S/0138/64/000/010/0007/0012

AUTHOR: Marey, A. I., Novikova, G. Ye., Kuznetsov, N. P. ✓

TITLE: Crystallization of stereoregular butadiene rubbers B

SOURCE: Kauchuk i rezina,, no. 10, 1964, 7-12

TOPIC TAGS: butadiene rubber, stereoregular synthetic rubber, dilatometry, rubber crystallization, rubber microstructure

ABSTRACT: The crystallization of stereoregular butadiene rubber was investigated at different temperatures and the effect of some structural factors such as molecular weight, degree of steric purity of the rubber microstructure and the degree of polymerization on the crystallization process was studied. The microstructural investigations were effected by infrared spectroscopy and the molecular wt. was

was found that for all batches of SKD rubber the rate of crystallization increased

Card 1/3

L 13815-65
ACCESSION NR: AP4047668

with decreasing temperature from -10 to -56-57C, but decreases with a further decrease in temperature. This maximum does not depend on the method of preparation nor on structural molecular factors. The kinetic parameters are calculated by Avrami's equations. They describe the process of crystallization with sufficient accuracy except in the initial and final stages, and can be used for the evaluation of the kinetics of crystallization of different polymers. The tabulated data on the relationship between intrinsic viscosity and crystallization show that with

of polymerization. Orig. art. has: 3 figures, 3 tables and 2 formulae.

Card 2/3

L 13815-65
ACCESSION NR: AP4047668

ASSOCIATION: Vsesoyuznyy nauchno-issledovatel'skiy institut sinteticheskogo
kauchuka im. S. V. Lebedeva (All-Union Scientific Research Institute for
Synthetic Rubber)

SUBMITTED: 00

ENCL: 00

SUB CODE: 00

NO REF SOV: 002

OTHER: 010

Card 3/3

L 17563-65 EWT(m)/EWP(j) Pc-4 RM
ACCESSION NR: F4049782

S/0138/64/000/011/0013/0018

AUTHOR: Gorenko, B. M.; Maroy, A. I.; Dukhina, M. F.; Novikova, G. Ye.;
Pomirichaya, B. A.

TITLE: Effect of carbon-black filler on rubber crystallization

SOURCE: Kauchuk i rezina, ^{23 -}no. 11, 1964, 13-18

TOPIC TAGS: rubber crystallization, natural rubber, synthetic rubber, carbon black
filler, polysulfide crosslink, monosulfide crosslink, rubber elasticity

ABSTRACT: The literature on the effect of fillers is sparse and contradictory and applies only to natural rubber. This work is an attempt to expand the knowledge to both natural and synthetic rubbers. Two methods of investigation were used - a study of the crystallization of rubbers in the free state by the dilatometric method, and a study of deformed rubbers from the point of view of recoverability. A comparison was made of the kinetic curves obtained by the dilatometric methods those obtained from the change in recoverability. The kinetics of crystallization of natural rubber were studied at -25C, those of synthetic rubber SKI-3 at -25C and of rubber SKD at -38, -45, and -56C. Data on crystallization of deformed rubber were processed with the aid of the formula $\lg \tau_{1/2} = \lg \tau_{1/2}^0 - B \sigma$,

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L 17563-65

ACCESSION NR: AP4049782

where $\lg \tau_{1/2}$ is the log of the half-period of crystallization, $\lg \tau_{1/2}^0$ is the segment cut off by the straight line on the axis and corresponds to the half time of crystallization of the sample in the absence of crystallization; and B is a magnitude showing the effect of stress on crystallization and determined as the tangent of the angle of the slope of the characteristic straight line to the axis τ . For unstressed rubbers, the ability to crystallize increases with an increase in the carbon-black content. The same was observed for rubbers crystallizing under conditions of deformation (compression). The influence of filling depends on the type of transverse links. For natural rubber and SKI-3 with a predominant content of polysulfide links, there is a noticeable change in the parameters $\lg \tau_{1/2}^0$ and B. For rubbers with a predominant content of monosulfide links, filling changes these parameters very little. In the case of SKD, filling affects crystallization analogously. Orig. art. has 5 figures, 1 table and 1 formula.

ASSOCIATION: Nauchno-issledovatel'skiy institut rezinovoy promy*shlennosti (Scientific Research Institute for the Rubber Industry); Vsesoyuzny'y nauchno-issledovatel'skiy institut sinteticheskogo kauchuka im. S. V. Lebedeva (All-Union Scientific Research Institute for

I 62997-65 EWT(1)/EWT(m)/EWP(j)/T/EBC(b)-2 IJF(c) GG/RM

ACCESSION NR: AP5016514

ER/0100/65/007/006/1117/1121
078.01:53*678.66

APR 28: Apukhtina, N. P.; Marey, A. I.; Novikova, G. Ye.; Muller, B. Ye.

TITLE: Crystallization of urethane elastomers

SOURCE: Vysokomolekulyarnyye soyedineniya, v. 7, no. 6, 1965, 1117-1121, and bottom half of insert facing p. 1043

TOPIC TAGS: crystallization, organic chemistry, elastomer, synthesis, rubber, urethane, polymer, resin

ABSTRACT: To minimize the crystallizability of the urethane resins, the effect of molecular weight of polyesters, (the concentration of cross-linkages and the conditions of synthesis have been studied. Urethane elastomers selected for this study were obtained from reaction of highly oriented polyesters with 1,4-stillbenzodisocyanate. The dilatometric method of A. I. Marey, N. P. Kuznetsov, and G. Ye. Novikova (4-ya Nauchno-tekhnicheskaya konferentsiya po voprosam khimii i tekhnologii kauchuka i reziny (tezisy dokladov), Yaroslavl', 1962, 13) has been employed for this study. The crystallizability of the polymers was defined by

means of 3 parameters determined graphically from the curve of the relative

Card 1/2

L 62997-65

ACCESSION NR: AP5016514

3

volume change during the crystallization process: maximum rate, half-life, and depth of crystallization. It has been established that by decreasing the length of the polyester segment of the chain, by increasing the degree of cross-linking, and by disturbing the orientation in the polymer by using one-step synthesis, it is possible to lower considerably the resins' crystallizability. Orig. art. has: 3 graphs and 4 tables.

ASSOCIATION: Vsesoyuznyy nauchno-issledovatel'skiy institut sinteticheskogo kautchuka (All-Union Scientific Research Institute of Synthetic Rubber)

DATE: 10Aug64

ENCL: 00

SUB CODE: MT, GC

NO REF SOV: 003

OTHER: 000

Card 4/2

NOVIKOVA, G.Ye.; TRAPEZNIKOVA, O.N.

New type of crystal structure in gutta-percha. *Fiz.tver.tela*.
1 no.12:1789-1790 D '59. (MIRA 13:5)

1. Fizicheskiy institut Leningradskogo gosudarstvennogo
universiteta.
(Gutta-percha)

TRAPEZNIKOVA, O.N.; NOVIKOVA, G.Ye.; MINAKOVA, S.V.

Light scattering in crystalline polymers. Part 2: Investigating the temperature dependence of the refraction indices of both the crystalline and the amorphous phase of polychloroprene and determining the extent of crystallization. Opt. i spektr. li no.3:353-358 S '61. (MIRA 14:9)

(Light-Scattering) (Chloroprene-Optical properties)

NOVIKOVA, G.Ye.

Formation and melting of gutta-percha crystals as observed under
a microscope. Vest. LGU. 18 no.16:69-76 '63. (MIRA 16:11)

SOV/78-3-9-22/38

AUTHORS: Savitskiy, Ye. M., Terekhova, V. F., Novikova, I. A.

TITLE: The Phase Diagram of the Alloys of the System Magnesium-Neodymium (Diagramma sostoyaniya splavov sistemy magniy-neodim)

PERIODICAL: Zhurnal neorganicheskoy khimii, 1958, Vol 3, Nr 9, pp 2138-2142 (USSR)

ABSTRACT: The thermal analysis, the microstructure, and the determination of the microhardness were used for the construction of the phase diagram of the system magnesium-neodymium. The hardening method was used for the determination of the solubility of neodymium in magnesium in solid state. Chemical compounds of neodymium and magnesium exist in the solid solutions of neodymium in magnesium within the range of 40 - 60 percents by weight neodymium. Considerable structural changes of the alloys occur with an increase of the neodymium content up to 1%. If neodymium is added to magnesium, the hardness is increased and the mechanical properties of the alloys are improved. The strength and plasticity of the alloys in the system neodymium-magnesium in the region of the solid solution on the basis of magnesium are increased with rising neodymium content. At 150

Card 1/2

SOV/78-3-9-22/38

The Phase Diagram of the Alloys of the System Magnesium-Neodymium

and 250°C the alloys of magnesium with neodymium are considerably more solid than pure magnesium. The microstructure of the alloys changes to a great extent in alloys with 10% neodymium, they reach the maximum dispersion at 25% neodymium. There are 4 figures, 2 tables, and 7 references, 4 of which are Soviet.

ASSOCIATION: Institut metallurgii im. A. A. Baykova Akademii nauk SSSR
(Institute of Metallurgy imeni A. A. Baykov, AS USSR)

SUBMITTED: January 21, 1958

Card 2/2

L 22657-66 EWT(m)/EWP(j)/T RM

ACC NR: AP6006194

SOURCE CODE: UR/0377/65/000/004/0027/0030

52
53
B

AUTHOR: Vil'kova, S. N.; Novikova, I. A.; Alavutdinov, D.

ORG: Physicotechnical Institute, AN UzSSR, (Fizikotekhnicheskly institut AN UzSSR)

TITLE: The use of foamed polyurethans for manufacturing solar energy collectors

SOURCE: Celliotekhnika, no. 4, 1965, 27-30

TOPIC TAGS: solar energy, solar energy collector, polyurethane, foamed polyurethane, foamed plastic, plastic mirror, epoxy resin, aluminum filled epoxy resin, energy conversion, solar energy conversion, polyethylene terephthalate

ABSTRACT: A method for making solar energy collectors from rigid foamed polyurethans lined with mirror-like plastic films is described. Polyurethans used for this purpose were prepared from branched polyesters of dicarboxylic acids and triols or the combination of the latter with diols; the polyesters were combined with aromatic diisocyanates. Foamed polyisocyanates were obtained by combining a polyester resin prepared from glycerol (1.3 moles), sebacic acid (0.5 moles) and adipic acid (0.3 moles) with toluylene diisocyanate in a 10:7 ratio at room temperature; water was used to enhance foaming; the foam was stabilized with OP-7 or OP-10 emulsifier (0.3-0.5%). The foamed plastic obtained had good mechanical properties. Two types of solar energy collector were built: one-piece paraboloid collectors with a diameter of 280 or 410 mm, and facet collectors mounted from hexagonal facets with sides 55 mm long each.

Card 1/2

2

I. 22657-66

ACC NR: AP6006194

The one-piece collectors were made as follows: metal-coated poly(ethylene terephthalate) film fixed between a disk and a ring was inflated to the required curvature, thus forming a paraboloid mirror; the mirror was coated with a thin layer of liquid epoxy resin which cured on the inflated film. After that foam was applied on the mirror obtained; polymerization of the foam lasted about 12 hours at room temperature. The weight of the foamed collector of 410 mm diameter was 201 g, while the similar collector made from filled epoxy resin weighed 930—1000 g; the temperature of the heat receiver in the focus of the collector was 880C; convexity h was 5 cm, and focal length was 21 cm. The facets for the facet collector were prepared by pouring foam into molds. The facets were lined with an epoxy resin mirror, obtained by applying liquid epoxy resin on the aluminum powdered glass. After curing, the film was stripped by heating the mirror on the glass substrate to 160—190C for 2—3 hr. An experimental model assembled from 19 facets with a total surface of 1444 cm² had a focal length of 0.5 cm. The reflection coefficient of the facet was 0.9; the focus point had an area of 150 cm²; the temperature of the heat receiver in the focus point was initially 250C, but decreased to 115C after 60 days of exposure because of the damage to the mirror surface caused by dirt, dust, and cleaning. The problem of protecting the mirror surface has not yet been solved. The polyurethan substrate retained its high mechanical properties after 60 days of exposure; the color of the foamed plastic changed from light yellow to dark yellow. The expedience of the use of foamed polyurethan for a solar energy collector for the Central Asian climatic conditions was demonstrated. The technology of preparing thin epoxy resin mirror has been developed. Orig. art. has: 2 figures and 2 tables. [BN]

SUB CODE: 10, 11/ SUBM DATE: 06 Aug 65/ ORIG REF: 002/ ATD PRESS: 4216

Card 2/2 A.W.

10

L 24857-66 EWT(m)/EWP(v)/EWP(j)/T WW/RM

ACC NR: AP6009441

(A)

SOURCE CODE: UR/0377/65/000/003/0041/0018

AUTHORS: Umarov, G. Ya. (Candidate of physico-mathematical sciences); Vil'kova, S. N.; Ayzenshtat, Ye. L.; Novikova, L. A.; Sutyagina, V. M.

ORG: Physicotechnical Institute, AN UzSSR (Fiziko-tehnicheskiy institut AN UzSSR)

61
2

TITLE: Producing aluminum mirrors on asbestos cement by the conversion method

SOURCE: Geliotekhnika, no. 3, 1965, 41-48

TOPIC TAGS: solar energy conversion, metal plating, asbestos product, aluminum, epoxy plastic, resin, light reflection coefficient/ ED-5 resin

ABSTRACT: The use of low-cost asbestos cement as the body of solar concentrators is described. Epoxy resin ED-5 is used to create a smooth surface on one side of the cement for metallization. This resin shows a small shrinkage as compared with other materials. The resin (15--20 g) with 8% hardener was applied to a 12 x 6-cm plate of asbestos cement and was pressed with a steel beam weighing 3 kg. It was shown that an optically accurate mirror surface can be created by the conversion method (see Fig. 1). A study of the mirror layer showed that its adhesion

Card 1/2

L 24857-66

ACC NR: AP6009441

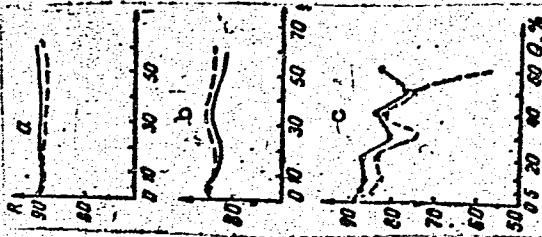


Fig. 1. Reflection factor before and after (dotted and continuous curves) conversion versus amount of falcence flour (a), graphite (b), and sawdust (c) added to resin.

exceeded by a factor of 5--6 the adhesion of a mirror surface produced by vaporization in a vacuum. Causes of fogging of the reflecting surface with time are explained, and methods of their elimination are shown. Orig. art. has: 5 photographs, 1 graph, and 1 table.

SUB CODE: 10, 20/ SUBM DATE: 23Apr65/ ORIO REF: 002

2/2 dda

MITEREV, G.A., prof.; LOGINOVA, R.A., kand.med.nauk, dotsent;
NOVIKOVA, I.M., kand.med.nauk, assistent

Sanitary and hygienic characteristics of terramycin production.
Gig. i san. 26 no.9:85-88 S '61. (MIRA 15:3)

1. Iz kafedry gigiyeny I Moskovskogo ordena Lenina meditsinskogo
instituta imeni I.M. Sechenova.
(TERRAMYCIN)

MITREV, G.A.; LOGINOVA, R.A.; NOVIKOVA, I.M.; MABOKOV, Yu.S.;
SANSONOVA, M.N.

Hygienic conditions in pharmacies. Apt.delo 12 no.3:48-54
Hy-Je '62. (MIRA 16:1)

1. I Moskovskiy ordena Lenina meditsinskiy institut imeni I.M.
Sechenova.

(PHARMACY—HYGIENIC ASPECTS)

NOVIKOVA, I. S.

Lakes

Influence of the trough form in determining the character of the lake. Vop.
geog. 26, 1951.

9. Monthly List of Russian Accessions, Library of Congress, April 1952. ~~1953~~, Uncl.

KOCHETKOVA, G.V.; NOVIKOVA, I.S.

Determining the antibacterial activity of gramicidin by agar diffusion. Antibiotiki 5 no.2:120-122 Mr-Ap '60. (MIRA 14:5)

1. Institut po izyskaniyu novykh antibiotikov AMN SSSR.
(GRAMICIDIN)

KOCHETKOVA, G.V.; NOVIKOVA, I.S.

Supporting the active stage of organisms producing gramicidin C.
Antibiotiki 6 no.2:163-164 F '61. (MIRA 14:5)

1. Institut po izyskaniyu novykh antibiotikov AMN SSSR.
(ANTIBIOTICS) (BACILLUS BREVIS)

NOVIKOVA, I.S.

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S/560/61/000/011/007/012
E027/E635

AUTHORS: Zhukov-Verezhnikov, N.N., Mayskiy, I.N.,
Yazdovskiy, V.I., Pekhov, A.P., Gyurdzhian, A.A.
Nefed'yeva, N.P., Kapichnikov, M.M., Pedoplelov, I.I.,
Rybakov, N.I., Klemparskaya, N.N., Klimov, V.Yu.,
Novikov, S.N., Novikova, I.S., Petrov, R.V.,
Sushko, N.G., ~~Ugryumov, Ye.P.~~ Fedorova, G.I.,
Zakharov, A.F., Vinogradova, I.N., Chamova, K.G.
and Buyko, Ye.A.

TITLE: The results of the first microbiological and
cytological experiments in Space in Earth satellites

SOURCE: Akademiya nauk SSSR. Iskusstvennyye sputniki Zemli.
no. 11. Moscow, 1961. Rezul'taty nauchnykh
issledovaniy, provedennykh vo vremya poletov vtorogo
i tret'yego kosmicheskikh korabley-sputnikov, 44 - 67

TEXT: The authors report the results of their investigations
of biological objects which had been exposed to space conditions
in satellite vehicles. The first part of the work was devoted
to a study of the survival of cells of differing levels of
organization under the influence of radiation and other
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E027/E635

The results of the ---

unfavourable factors, in comparison with control materials which remained in the laboratory over the same period. In experiments with bacteria 2ml. samples of suspensions of Escherichia coli, Aerobacter aerogenes, Staphylococcus aureus and Clostridium butyricum containing 500 million organisms or spores per ml. were sealed in ampoules, and exposed to a space flight of unstated duration; the number of viable individuals after the exposure did not differ significantly from the values for the control samples. A similar experiment was carried out with the T2 phage of E. coli and the 1321 phage of A. aerogenes, which were sent in the second satellite; again, no significant reduction in the titre of the phage preparations could be detected after return from space. Similar results were obtained with preparations of phage sent into space in the fourth and fifth satellites. Two bottles and six tubes of HeLa cells, some of which were saturated with oxygen, were exposed to space flight

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The results of the . . .

conditions, after it had first been shown that vibration and acceleration did not detach the cells from the glass. The cultures without oxygen appeared normal on return, whereas in those exposed to oxygen most of the cells had degenerated. Subculture showed that 90% of the cells, whether detached from or remaining on the glass, were dead; however, two tubes gave good growth, and the cells which grew up showed no abnormalities of morphology. No antigenic differences could be detected in the cells in anaphylaxis and desensitization experiments in guinea-pigs. In subsequent space flights fibroblast and human amnion cell cultures were studied, with similar results. Pieces of human and rabbit skin were also used. On August 12th 1960 two pieces of skin 2.5 x 3.5 cm. in size and 0.5 mm. thick were taken from a human donor, placed in Hanks solution and sent into space in the second satellite. On recovery they were regrafted on the original site in the donor and became firmly attached after seven days.

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The results of the ---

Similar results were obtained with two other donors. An apparatus was devised for making a subculture in space, in order to study the ability of bacteria to multiply under space conditions. In experiments with *Glostridium butylicum* no deviations from the controls were observed. The second part of the work was devoted to a study of possible genetic effects brought about by exposure to space conditions, mainly by looking for the production of auxotrophic mutants and lysogeny in bacteria. The former were detected by inoculation on a layer of minimal medium which was then covered with an overlay of the same medium in order to fix the colonies. When the latter had grown up their position was noted and an overlay of complete medium was then put on, and the colonies which then grew up as a result of the diffusion of essential nutrients were selected as auxotrophic mutants. No such mutants could be found in suspensions of *Escherichia coli* recovered from the second satellite. The experiments on the induction of lysogenic bacteria were carried out on a strain of *E. coli* lysogenized by a λ phage which had been exposed to cosmic

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The results of the ---

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radiation in the fifth satellite. Free phage particles were removed by adding phage antiserum; after the end of the latent period the action of the antiserum was cut short by diluting 1:100, streptomycin was added to inhibit the host organisms, and the mixture was plated out on the indicator strain in order to count the phage particles produced. The results obtained, considered in comparison with control experiments, provided no evidence of induction by cosmic radiation during a space flight of ninety minutes. No difference was observed in the plaque morphology. No changes could be detected in the chemical and physical properties of calf thymus deoxyribonucleic acid recovered after a space flight. The results as a whole indicate that no damage was suffered by isolated cells during a brief exposure to space conditions. There are 6 figures and 10 tables. f

SUBMITTED: May 23, 1961

Card 5/5

ZHUKOV-VEREZHNIKOV, N.N.; MYSKIY, I.N.; YAZDOVSKIY, V.I.; PEKHOV, A.P.;
RYBAKOV, N.I.; KLEMPARSKAYA, N.N.; GYURDZHIAN, A.A.; TRIBULEV,
G.P.; NEFED'YEVA, N.P.; KAPICHNIKOV, M.M.; PODOPLELOV, I.I.;
ANTIPOV, V.V.; NOVIKOVA, I.S.; KOP'YEV, V.Ya.

Problems of space microbiology and cytology. Probl.kosm.biol.
1:118-136 '62. (MIRA 15:12)
(SPACE MICROBIOLOGY) (CYTOLOGY)

SOV/118-58-6-3/25

AUTHORS: Pechkovskaya, K.A., Shedid-Khuzemi, N.A., Orlovskiy P.N.,
Livshits, F.B., Novikova I.S. and Bryushkova, I.I.

TITLE: Chemical and Physico-Chemical Methods of Evaluating the
Properties of Carbon Black (Khimicheskiye i fiziko-
khimicheskiye metody otsenki kachestva sazh)
Part II: The Fundamental 'Structure' of Carbon Black
(Soobshcheniye II: pervichnaya 'struktura' sazh)

PERIODICAL: Kauchuk i Rezina, 1958, Nr 6, pp 8 - 13 (USSR)

ABSTRACT: The colorimetric method for evaluating the dispersity of
carbon black was discussed in Part I (Ref 1). This article
describes investigations on the 'structure' of carbon
black. After defining the terminology of 'carbon black
particles', crystallite, and the primary and secondary
aggregate, methods for the quantitative evaluation of the
fundamental 'structure' of carbon black are discussed.
None of these methods was entirely satisfactory. Com-
parative evaluation of the fundamental 'structure' can be
achieved by defining the oil number and the 'structure'
index. The form factor can serve as an added character-
istic. The partial breakdown of the fundamental 'structure'

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SOV/038-58-6-3/25

Chemical and Physico-Chemical Methods of Evaluating the Properties of Carbon Black

of jet carbon black leads to a decrease in the oil number without causing appreciable changes in the unit surface. The fundamental 'structure' inhibits granulation of the carbon black. The secondary 'structure' makes granulation easier. The degree of the development of the fundamental 'structure' indicates a change in the technological properties of the raw material mixtures; mixtures containing carbon black with large primary particles are usually more viscous, can be sprayed more quickly and give a thinner deposit than mixtures containing carbon black of normal structure. Jet carbon black (with partly disintegrated fundamental 'structure') imparts to vulcanisates, based on SKB, a lowered modulus, a lower degree of electroconductivity and increased bonding strength to cords (Fig 3). The degree of dispersity and data on the 'structure' of various Soviet carbon blacks are listed in

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SOV/1383-58-6-3/25
Chemical and Physico-Chemical Methods of Evaluating the Properties
of Carbon Black

Table 2, and Table 4 gives the physico-chemical and
technological properties of American furnace carbon black.
There are 5 tables, 3 figures and 13 references
(7 English, 2 German and 4 Soviet)

ASSOCIATION: Nauchnoissledovatel'skiy institut shinnoy
promyshlennosti (Research Institute for the Tire Industry)

1. Carbon black--Physical properties 2. Carbon black--Chemical pro-
perties 3. Colorimetric analysis--Applications

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S/081/61/000/023/054/061
B106/B101

AUTHORS: Pechkovskaya, K. A., Livshits, F. B., Orlovskiy, P. N.,
Novikova, I. S.

TITLE: Comparative study of the physicochemical and technical
properties of test samples of disperse furnace blacks of the
HAF type

PERIODICAL: Referativnyy zhurnal. Khimiya, no. 23, 1961, 560, abstract
23P347. (Tr. N.-i. in-ta shin. prom-sti, sb. 5, 1960, 68-80)

TEXT: The results of a comparative study of the properties of test
samples of disperse furnace blacks (DB) of the HAF type from liquid raw
material and import fillblack O are presented. The increased adsorption
surface of the DB blacks and their higher oxygen content can retard the
vulcanization process and sometimes diminish strength of vulcanizates.
As to dispersity, the DB blacks, produced under semi-industrial conditions
from liquid raw material, are not inferior to the best blacks of type HAF.
The most important physicochemical and chemical properties of the DB
blacks are given along with the electrical conductivity, internal friction,

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Comparative study of the...

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B106/B101

and physicommechanical properties of [KC-30 AM(SKS-30AM) rubber containing DB blacks. The latter tend to form secondary structures, which entails incomplete dispersion of the black in the compound and, consequently, leads to a decrease in abrasion resistance and strength of the rubber. The properties of vulcanizates containing DB blacks can be improved by modifying the formula for the rubber compound used to examine the above-mentioned blacks. [Abstracter's note: Complete translation.]



Card 2/2

S/138/61/000/011/005/007
A051/A126

AUTHORS: Lezhnev, N. N., Terent'yev, A. P., Novikova, I. S., Kobzeva, T. A.

TITLE: The chemical nature of the surface of carbon black

PERIODICAL: Kauchuk i rezina, no. 11, 1961, 21 - 27

TEXT: The authors have developed a new method for the quantitative determination of certain oxygen functional groups present in carbon black, and have tested the validity of methods previously used. A rapid and accurate method for the determination of active hydrogen in carbon blacks, using an ether solution of the Grignard reagent, was also developed, in addition to a method for the alkalimetric titration of the acidic groups of the carbon blacks with caustic soda and sodium carbonate. By assuming that the caustic soda reacts with all the acidic groups and the sodium carbonate only with the carboxylic ones, the phenol and carboxylic groups in the carbon blacks were determined. The general nitrogen in the carbon black was determined by the Kjeldahl method. The latter is a variation of the method introduced by A. P. Terent'yev and B. M. Luskiniy. Combustion can be carried out in 4 hours, and chromic acid is used as the oxidation catalyst. Conclusions are drawn on the nature of the oxygen bound with certain carbon blacks



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S/138/61/000/011/005/007
A051/A126

The chemical nature of the surface of carbon black

from the developed methods and by comparing the obtained results with data of other non-Soviet authors, and data of carbon black investigation using the paramagnetic electron resonance method. However, a large portion of the oxygen in the channel black has not been identified. The most complete identification of oxygen was made for that bound with experimental carbon black of the XAΦ (KhAF) type. Data of the channel black analysis, both of the initial and of that containing chemically adsorbed neozone Д (D), Φ 2HA (F2NA) and also captax MBT (MBT) led to the assumption that these substances react with oxygen-containing radicals of carbon black at the position of the weakest-bound hydrogen atom (RN-H and RS-H). It is pointed out that carbon black chemically interacts with various ingredients of rubber and probably with raw rubber or polymer radicals. Thus, the following are thought to be chemically active: 1) various oxygen-containing groups, 2) sulfur-containing compounds - in the case of carbon blacks, produced on the basis of petroleum and coal, 3) free radicals on the surface - non-coupled electrons of atoms of carbon and oxygen and possibly atoms of sulfur and nitrogen, bound by chemical bonds with carbon atoms of the carbon black crystalline lattice. The sulfur-containing groups are thought to have the structure $>C = S$ and $\rightarrow C - SH$. The active hydrogen is thought to be in the groups $-C \begin{smallmatrix} O \\ \diagdown \\ -O \end{smallmatrix} - H$ and $\rightarrow C - O - H$. Re-

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S/138/61/000/011/005/007
A051/A126

The chemical nature of the surface of carbon black

sults obtained clarified the mechanism of interaction between the carbon black and accelerators of vulcanization and anti-oxident of the secondary aromatic amine type. A satisfactory correlation is derived in a comparison of the theory of polymerization and hydrocarbon oxidation with two cases investigated by the authors: Channel black processed with MBT; channel black processed with F2NA. There are 2 tables, 1 figure and 14 references: 6 Soviet-bloc and 8 non-Soviet-bloc. The references to the 3 most recent English-language publications read as follows: H. V. Drushel, J. V. Hallum, J. Phys. Chem., 62, no. 1, 110 (1958); G. Kraus, R. L. Collins, Rubb. World, 139, 219 (1958); M. Beroza, Analyt. Chem., 25, 177 (1958).

ASSOCIATION: Nauchno-issledovatel'skiy institut shinnoy promyshlennosti (Scientific Research Institute of the Tire Industry)

Card 3/3

ZARIF'YANTS, Yu.A.; KISELEV, V.F.; LEZHNEV, N.N.; NOVIKOVA, I.S.; FEDOROV,
G.G.

Synthesis and functional analysis of oxygen complexes on a sur-
face of freshly cleft graphite. Dokl. AN SSSR 143 no.6:1358-
1361 Ap '62. (MIRA 15:4)

1. Moskovskiy gosudarstvennyy universitet im. M.V.Lomonosova i
Nauchno-issledovatel'skiy institut shinnoy promyshlennosti.
Predstavleno akademikom M.M.Dubininyam.
(Graphite) (Surface chemistry) (Oxygen compounds)

LEZHNEV, M.N.; TEREENT'YEV, A.P.; NOVIKOVA, I.S.; KOBZEVA, T.A.

Using the bromination method for the testing of carbon black. Kauch.
i rez. 24. no.9:16-20 '65. (MIRA 18:10)

1. Nauchno-issledovatel'skiy institut shinnoy promyshlennosti i
Moskovskiy gosudarstvennyy universitet imeni M.V.Lomonosova.

TERENT'YEV, A.P.; NOVIKOVA, I.S.

Sodium borohydride in organic analysis. Report 2: Analysis
of sugars. Zhur. anal. khim. 20 no. 11:1226-1227 '65
(MIRA 19:1)

1. Moskovskiy gosudarstvennyy universitet imeni M.V. Lomo-
nosova. Submitted December 8, 1964.

LEZHNEV, N.N.; KOZYREV, B.M.; GARIF'YANOV, N.S.; RYZHMANOV, Yu.M.;
NOVIKOVA, I.S.

Probable mechan'ism underlying the reaction of carbon black with
phenyl-2-naphthylamine and mercaptobenzothiazole (captax). Dokl.
AN SSSR 159 no.5:1127-1130 D '64 (MIRA 18:1)

1. Nauchno-issledovatel'skiy institut shinnoy promyshlennosti
i Kazanskiy fiziko-tekhnicheskiy institut AN SSSR. Predstavleno
akademikom M.M. Dubininym.

TERENT'YEV, A.P.; NOVIKOVA, I.S.

Sodium borohydride in organic analysis. Report 1: Determination
of carbonyl group in organic materials. Zhur. anal. khim. 20
no.7:836-841 '65. (MIRA 18:9)

1. Lomonosov Moscow State University.

KOLOMIYTSOVA, T.S.; NOVIKOVA, I.V.

Photoelectric method of recording interference bands in white light.
Opt. i spektr. 8 no.3:363-370 Mr '60. (MIRA 14:5)
(Interferometry)