

SKAVRONSKAYA, A.G.; BORISOVA, N.B.; GOL'DINA, L.R.

Effect of levomycetin on the intensity of protein and nucleic acid synthesis in Escherichia coli B. Zhur. mikrobiol. epid. i immun. 40 no.5:138-143 My '63

1. Iz Instituta epidemiologii i mikrobiologii imeni Gamalei AMN SSSR.

SKAVRONSKAYA, A.G.; FRADKIN, G.Ye.; BORISOVA, N.B.; ZAMCHUK, L.A.

Effect of gamma irradiation on the auxotrophic mutants of Escherichia coli under the conditions of changing synthetic activity. Radiobiologiya 3 no. 6:858-865 '63. (MIRA 17:7)

1. Institut epidemiologii i mikrobiologii imeni akademika N.F.Gamalei, Moskva.

BORISOVA, N.B.; GLADKIY, M.F.; MINENKOVA, V., red.

[Winter rape for feed] Oziroyi raps na korm. Moskva,  
Kolos, 1965. 58 p. (MIRA 18:8)

BORISOVA, N.B.

Winter rap as a promising crop. Zemledelie 26 no.12:67-69 D '64.  
(MIRA 18:4)

1. Dedinovskaya opytnaya stantsiya po peymennomu lugovodstvu  
Vsesoyuznogo nauchno-issledovatel'skogo instituta kormov.

YAKOVLEV, G.P., BORISOVA, N.B.

$\Delta E$ - and  $\Delta G$ - effects in strong magnetic fields. Fiz. met. i metalloved.  
16 no.6:943-944 D '63. (MIRA 17:2)

1. Ural'skiy gosudarstvennyy universitet imeni A.M.Gor'kogo.

EWT(m)/BDS/ES(b)--AFFTC/ASD--RM/K

L 10778-63

ACCESSION NR: AP3003936

S/0205/63/003/004/0582/0586

59  
58

AUTHOR: Skavronskaya, A. G.; Fradkin, G. Ye.; Borisova, N. B.; Zamchuk, L. A.; Gol'dina, L. P.

TITLE: Influence of the intensity of synthesis of nucleic acids and albumin on the lethal and mutagenic effects of gamma radiation 19

SOURCE: Radiobiologiya, v. 3, no. 4, 1963, 582-586

TOPIC TAGS: gamma radiation, nucleic acid, albumin, mutagenesis, synthetic process intensity, radiation, DNA, RNA

ABSTRACT: The influence of the intensity of synthesis of nucleic acids and albumin on the lethal and mutagenic effects of gamma radiation was examined by reproducing the process of mutability and varying the intensity of the synthetic processes. In this way the role of individual cell components in determining and changing the hereditary traits of microorganisms was examined. Experiments were conducted with *E. coli* B cultures in a glucose salt "minimal" medium, using a Co<sup>60</sup> gamma-ray source. Levomycetin was used to vary the intensity of the synthetic processes in the cell. It was found that the lethal and mutagenic

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L 10778-63

ACCESSION NR: AP3003936

effects of radiation increase under the action of gamma rays against a background of an almost complete block of albumin synthesis and of retarded nucleic acid synthesis. Irradiation of the culture under conditions of retarded albumin synthesis and negligibly stimulated DNA and RNA synthesis leads to some lessening of these effects. The presence of a correlative relationship between the intensity of DNA and RNA synthesis, on the one hand, and mutagenic and lethal action of gamma irradiation, on the other, confirms the genetic role of nucleic acids and attests to the dynamic character of the functioning of the cellular genetic structures. Orig. art. has: 1 figure and 2 tables.

ASSOCIATION: Institut epidemiologii i mikrobiologii im. akad. N. F. Gamaleya AMN SSSR, Moscow (Institute of Epidemiology and Microbiology, AMN SSSR)

SUBMITTED: 17Jul62

DATE ACQ: 15Aug63

ENCL: 00

SUB CODE: AM

NO REF SOV: 001

OTHER: 005

Card

*med/W*  
2/2

BOLEDOVA, N. F. --

"Changes in the Cardiovascular System During Bronchial  
Pneumonia in Young Children." Cand Med Sci, Second Moscow State  
Medical Inst, Moscow, 1953. (R.M.Siol, No 2, Sep 54)

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

SO: Sum. No. 481, 5 May 55



BORISOVA, N.F. (Moskva)

Changes in the cardiovascular system in severe bronchopneumonia  
in infants. Fel'd. i akush. 21 no.3:25-26 Mr '56. (MIRA 9:7)  
(PNEUMONIA) (CARDIOVASCULAR SYSTEM--DISEASES)  
(INFANTS--DISEASES)

BORISOVA, N.F.

Spontaneous gangrene of the leg in a 3-week-old child as the  
result of birth injury. *Pediatrics* 36 no.6:91 Je '58 (MIRA 11:6)

1. Iz kliniki detskikh bolezney II Moskovskogo meditsinskogo instituta  
na baze Detskoy klinicheskoy bol'nitsy No.1.  
(INFANTS (NEWBORN)--DISEASES)  
(GANGRENE)

BORISOVA, N.F. (Moskva)

Clinical aspects of the encephalic form of poliomyelitis. Zhur. nerv.  
i psikh. 59 no.7:785-789 '59. (MIRA 12:11)

1. Klinika nervnykh bolezney detskogo vozrasta (zav. - prof. D.S.  
Futer) II Moskovskogo gosudarstvennogo meditsinskogo instituta  
(dir. - dotsent M.G. Sirotkina) na baze Detskoy klinicheskoy bol'-  
nitsy (glavnyy vrach Ye.V. Prokhorovich).  
(POLIOMYELITIS, in inf. & child,  
encephalic form (Rus))

STEPANOVA, M.N.; BORISOVA, N.F., kand.med.nauk

Acute diffuse suppurative peritonitis as a complication of  
chronic nephrosonephritis in children. *Pediatriia* 38 no.12:  
17-20 '60. (MIRA 14:2)

1. Iz 2-y khirurgicheskoy kliniki (zav. - prof. Ya.G. Dubrov)  
i pediatricheskoy kliniki (zav. - prof. M.I. Olevskiy) Moskov-  
skogo oblastnogo nauchno-issledovatel'skogo klinicheskogo insti-  
tuta imeni M.F. Vladimirovskogo (dir. - kand.med.nauk P.M. Leonenko).  
(KIDNEYS—DISEASES) (PERITONITIS)

ZHUKOVA, Ye.K.; BORISOVA, N.F.

Encephalitic syndrome in acute poliomyelitis. Zhur.nevr.i psikh.  
60 no.7:782-788 '60. (MIRA 14:1)

1. Klinika nervnykh bolezney detskogo vozrasta (zav. - prof. D.S. Futer) II Moskovskogo meditsinskogo instituta imeni N.I.Pirogova i patologoanatomicheskoye otdeleniye Detskoy gorodskoy klinicheskoy bol'nitsy No.1 (glavnyy vrach Ye.V. Prokhorovich).  
(POLIOMYELITIS) (ENCEPHALITIS)

OSTAPISHIN, V.V.; BORISOVA, N.G.

High-quality seeds guarantee good crop yields. Zemledelie 8  
no.2:60-62 F '60. (MIRA 13:5)

1. Glavnyy agronom Kaluzhskogo oblastnogo upravleniya sel'skogo  
khoz'yaystva (for Ostapishin). 2. Zaveduyushchaya oblastnoy  
kontrol'no-semennoy laboratoriyey (for Borisova).  
(Field crops)

BORISOVA, N. I.

Defended his Dissertation for Candidate Agricultural Sciences in the Soil  
Institute, Academy of Sciences, USSR, Moscow, 1953

Dissertation: "Use of the Radioactive Isotope of Phosphorus  $p^{32}$  in Agrochemical  
Investigations"

SO: Referativnyy Zhurnal Khimiya, No. 1, Oct. 1953 (W/29955, 26 Apr 54)

BORISOVA, M.I.

M. Phyrp  
③

Chemical Abstracts  
Vol. 48 No. 5  
Mar. 10, 1954  
Soils and Fertilizers

Use of phosphorus<sup>32</sup> isotope for evaluation of transfer of phosphates from the soil and from the fertilizer to the plant in layer and uniform distribution. M. I. Borisova and O. A. Zaslavaya (V. V. Dokuchaev Soil Inst., Acad. Sci. U.S.S.R., Moscow). *Izvest. Akad. Nauk S.S.S.R., Ser. Biol.* 1953, No. 6, 111-16.—Expts. with P<sup>32</sup>-labeled Ca phosphate fertilizer on oat cultures show that the fertilizer is better utilized when applied locally than when distributed uniformly over the field. A smaller amt. of the soil phosphate is less utilized with local fertilizer than with uniform distribution.  
G. M. Kosolapoff

9

6-16-54  
RMZ



BORISOVA, N. I.

Entry into plants of phosphorus from granulated and non-granulated phosphates applied simultaneously. N. I. Borisova (*Izv. Akad. Nauk, Ser. Biol.*, 1954, No. 1, 110—112).—In pot tests with oats on a podsollic loam absorption of fertiliser P (labelled with  $^{32}\text{P}$ ) was greater from granular superphosphate than from aq.  $\text{Ca}(\text{H}_2\text{PO}_4)_2$  or from a mixture of the two. In a similar test with a serozem soil absorption from aq.  $\text{Ca}(\text{H}_2\text{PO}_4)_2$  was much greater than from either of the other sources. Soils & FERT. (A. G. P.)

BORISOVA, N. I.

8001-RML

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(5)

Radiochemical study of the products of spallation of silver by high-energy particles. B. V. Kurchatov, V. N. Mekhedov, N. I. Borisova, M. Ya. Kuznetsov, L. N. Kurchatova, and G. I. Shchegolev. *Sessiya Akad. Nauk S.S.S.R. po Alikomu Ispol'zovaniyu Atomnoi Energii*, July 1-5, 1955, *Zusammenfassung*. *Khim. Nauk* (Moscow) 178-202 (English summary, 202-4).—The compn. and yield are given for the spallation products of Ag bombarded with 550-m.e.v.  $\alpha$ -particles, 230-m.e.v. deuterons, and 480-m.e.v. protons. About 70 spallation products were observed. The product yields rapidly decreased with at. no., passing through a min. in the region of at. no. approx. equal to 25-8. The total cross section was found to be  $0.43 \times 10^{-24}$  sq. cm., which corresponded to 0.32 of the geometrical cross section. When Ag was irradiated by 480-m.e.v. protons, the cross section for the formation of the light nuclei  $C^{11}$ ,  $Na^{23}$ , and  $P^{31}$  was approx.  $3 \times 10^{-27}$  sq. cm. The formation of light nuclei was believed to be the result of processes in which asym. fission from an excited level predominated. The following hitherto unknown isotopes were detected:  $Ca^{42}$ ,  $Ca^{44}$ ,  $Ag^{211}$ ,  $Mo^{98}$ ,  $Sr^{87}$ ,  $Sr^{89}$ , and  $Rb^{87}$ . J. R. L.

RML

BORISOV, Iv.; BORISOVA, N. Iv.

On some petrographic, chemical, and physicomachanical properties  
of marbles in Bulgaria. Godishnik biol 54 no.2:159-222 '59/'60  
[publ. '61].

BORISOVA, N. I.

807/56-15-1-7/59

Kurchatov, B. V., Michayev, V. K.,  
 Chistyakov, L. V., Kuznetsova, M. Ia., Borisova, N. I.,  
 Solov'yev, V. G.

Secondary Nuclear Reactions in Bismuth and Lead During  
 Bombardment by Protons of High Energy (Vyskochnyye yadernyye  
 reaktsii na vyzvute i svintse pri bombardirovke protunami  
 vysokikh energiy)

Zhurnal eksperimental'noy i teoreticheskoy fiziki, 1956,  
 Vol 13, Pt 1, pp 56 - 63 (USSR)

In the present paper experiments are described which had  
 already been carried out in 1951 - 1952, the results  
 and evaluations of which, however, published only  
 now. Bi(2-83) and Pb(2-82) was bombarded with protons  
 of energies of from 160 to 480 MeV, and astatine isotope  
 (8-85) were obtained the production of which was inves-  
 tigated by a radiochemical method. With the exception  
 of At(211), which was also obtained from lead.  
 $Pb^{208}(11, \text{km})\text{At}^{211}$  - it was possible to obtain all  
 astatine isotopes from bismuth.  $\sigma(\text{At}^{211}) = 6 \cdot 10^{-29} \text{cm}^2$

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$d(\text{At}^{210}) = 2 \cdot 10^{-29} \text{cm}^2$ . The At-isotopes found are nearly all  
 inactive.  $\text{At}^{205}(\text{a}, \text{K})\text{T} = 7 \text{ min}$ ,  $\text{At}^{207}(\text{a}, \text{K})\text{T} = 25 \text{ min}$ ;  
 $\text{At}^{205}(\text{a}, \text{K})\text{T} = 25 \text{ min}$ ,  $\text{At}^{206}(\text{a}, \text{K})\text{T} = 2.5 \text{ hr}$ ,  $\text{At}^{207}(\text{a}, \text{K})\text{T} = 90 \text{ hr}$ ;  
 $\text{At}^{210}(\text{a}, \text{K})\text{T} = 6.5 \text{ hr}$ ,  $\text{At}^{209}(\text{a}, \text{K})\text{T} = 5.5 \text{ hr}$ ;  
 $\text{At}^{210}(\text{a}, \text{K})\text{T} = 8.5 \text{ hr}$  (For the activity of  $Pb^{210} \text{ T} = 140 \text{ d}$ );  
 $\text{At}^{211}(\text{a}, \text{K})\text{T} = 7.5 \text{ hr}$ . The production cross section  
 of  $\text{At}^{211}$  in lead was  $\sim 10^{-3} \text{cm}^2$ . The authors endeavored  
 to explain the phenomena observed by assuming them to be  
 the result of a secondary reaction of the capture of  
 fission products ( $\alpha$ -particles or  $\beta$ -nuclei). The production  
 of light astatine isotopes might be explained by the  
 capture of high-energy protons with a following emission  
 of  $\pi^+$ -mesons and several neutrons. The cross section  
 for the production of  $\alpha$ -particles with  $E > 20 \text{ MeV}$  from  
 bismuth irradiated with 480 MeV protons is determined as  
 from the astatine yield amounting to (5 to 6)  $\cdot 10^{-10} \cdot 10^{-25}$   
 (Perfilov and Ostrovskiy (Ref 1)) obtained (1.5  $\cdot 10^{-10} \cdot 10^{-25}$   
 cm<sup>2</sup>.) In conclusion: Professors B.K. Pontekorvo and I.I.

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Proceedings of the Academy of Sciences of the USSR  
 Pomeranchuk are thanked for their advice and discussions.  
 There are 2 figures, 4 tables, and 12 references, 2 of  
 which are Soviet.

SUBMITTED: February 20, 1956

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BORISOVA, N. I., P. M. CHULKOV, B. V. KURCHATOV, V. I. NOVGORODTSEVA, V. A. PCHELIN,  
and V.M. SHUBKO

"Research on the Content of Radioactive Strontium in the Atmosphere, Soil, Food  
Products, and Human Bones."

Soviet Scientists Concerning the Dangers of Nuclear-Weapon Tests, p. 62,  
Publishing House of the Main Administration for the Use of Atomic Power  
Council of Ministers USSR, Moscow 1959.

21(7)  
AUTHORS:

SOV/56-37-2-6/56  
Borisova, N. I., Kuznetsova, M. Ya., Kurchatova, L. N.,  
Mekhedov, V. N., Chistyakov, L. V.

TITLE:

Recoil Nuclei in the Disintegration of Silver by Fast Protons

PERIODICAL:

Zhurnal eksperimental'noy i teoreticheskoy fiziki, 1959,  
Vol 37, Nr 2(8), pp 366-373 (USSR)

ABSTRACT:

In the present paper several experiments carried out in the years 1951/52 were at first discussed, which aimed at the direct determination of the ranges and angular distributions of the recoil nuclei of some disintegration products of silver (cf. Ref 7). Figure 1 shows the special containers used for the investigation of angular and energy distribution. The targets used were silver foils ( $0.5 \text{ mg/cm}^2$ , impurities: Mg, Si, Fe, Al, Pb  $< 10^{-3}\%$ , Au  $< 10^{-3}\%$ ) which were irradiated by protons (particle current  $\sim 0.1 \mu\text{a}$ ). The following was investigated: Ag<sup>103</sup> + Ag<sup>104</sup>( $\beta^+$ ,K), T = 70 min; Ag<sup>106</sup>(K), T = 3 d; Zr<sup>89</sup>( $\beta^+$ ,K), T = 80 h; Nb<sup>90</sup>( $\beta^+$ ,K), T = 16 h; Rb<sup>81</sup> + Rb<sup>82</sup>( $\beta^+$ ,K), T = 6 h, and

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SOV/56-37-2-6/56

## Recoil Nuclei in the Disintegration of Silver by Fast Protons

$\text{Se}^{73}(\beta^+, \text{K})$ ,  $T = 6.7 \text{ h}$ . The angular distribution of the products was investigated with the exception of selenium for the three directions: forward, backward, and at  $90^\circ$  to the proton beam (forward:  $5 \leq \theta \leq 58^\circ$ , backward:  $122 \leq \theta \leq 175^\circ$ ); the results obtained are shown in table 1. The result of the investigation of the angular distribution of the observed activities is shown by table 2; figure 2 shows the variation of the ratio of activities, stopped in the first and in the second film with  $\theta$ . (Weak exponential increase with growing  $\theta$ .) In the following, investigations of the energy distribution of the reaction products are described. The same isotopes and also  $\text{Se}^{73}$  for the angle  $90 \pm 40^\circ$  were investigated. The directly measured number of nuclei of each element in % for various ranges is shown by figure 3. The errors in range-values may be explained by the thickness of the polystyrene film. With an increase of the range, the number of recoil nuclei decreases in the case of all elements; with a decreasing  $Z$  the range increases. In figure 4 the range - energy curve is given for polystyrene and silver; the polystyrene curve is considerably higher and has a steeper

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SOV/56-37-2-6/56

Recoil Nuclei in the Disintegration of Silver by Fast Protons

slope than the silver curve. Figure 5 finally shows the energy distribution of the recoil nuclei at  $90 \pm 40^\circ$ . Finally, there follows a discussion of the results with respect to a qualitative explanation of the distribution laws found. The results seem to confirm the mechanism of the Se, Rb, Zr, and Nb formation by evaporation of  $\alpha$ -particles, protons and neutrons. In this connection table 3 is of great value, which gives the measured and calculated energies and particle numbers ( $\bar{E}(n,p)$ ,  $\bar{E}(n,p,\alpha)$ ;  $\alpha:p:n$ , etc.) for these isotopes. The authors finally thank B. V. Kurchatov and Professor B. T. Geylikman for their help and valuable remarks. There are 5 figures, 3 tables, and 21 references, 8 of which are Soviet.

ASSOCIATION: Ob"yedinennyy institut yadernykh issledovaniy (Joint Institute of Nuclear Research)

SUBMITTED: March 4, 1959

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S/824/62/000/000/002/004  
B183/B102

AUTHORS: Borisova, N. I., Kurchatov, B. V., Novgorodtseva, V. I.,  
Pchelin, V. A., Chistyakov, L. V., Shubko, V. M.

TITLE: The radiochemical study of Am<sup>241</sup> fission by neutrons of  
various energies

SOURCE: Fizika deleniya atomnykh yader. Ed. by N. A. Perfilov and  
V. P. Eysmont. Moscow, Gosatomizdat, 1962, 48 - 53

TEXT: Even-odd nuclei can be fissioned at different resonance energies according to which of the two possible spin states is present. This effect was observed in the neutron-induced fission of Am<sup>241</sup>. Because of the relatively low fission cross section of Am<sup>241</sup> the study was made with a filtered beam of rays, despite certain disadvantages of this as compared with monochromatic neutron beams. The irradiation was done in the MPT (IRT) reactor under a neutron flux of  $5 \cdot 10^{12}$  neutrons/cm<sup>2</sup>·sec lasting one hour without and several hours with the filter. The filters were of aluminum-alloyed gadolinium, cadmium, rhodium, and erbium oxides. The

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The radiochemical study of...

S/824/62/000/000/002/004  
B183/3102

$\text{Am}^{241}$  was extracted from plutonium, thoroughly purified and then electro-deposited upon platinum disks to give a thickness 0.13 - 0.5  $\text{mg}/\text{cm}^2$ . The fission products emitted from this layer on irradiation were collected on filter paper and subjected to radiochemical analysis. The counting was made on a methane flow counter with an approximate  $4\pi$ -geometry. The yield of the different products, as referred to the yield in  $\text{Mo}^{99}$ , increases with increasing neutron energy when the yield of  $\text{Ba}^{140}$  is neglected. Comparative calculations showed that within experimental limits of error thermal neutrons and neutrons of the first resonance cause the same mass yields in the fission of  $\text{Am}^{241}$ . The effect is too weak to allow of estimates in the regions of the second and third resonances. There are 1 figure and 2 tables.

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BORISOV, Iv.; BORISOVA, H. Iv.

Comparative microphysiographic, histochemical and physicochemical characteristics of some main types of granuloids in Bulgaria. Godishnik biol 57 no. 1:111-157 '62-'63 [publ. '64]

BORISOVA, N.I.; MAZEL', Yu.Ya.; RACHINSKIY, V.V., doktor khim.  
nauk

[Use of the method of labeled atoms in soil chemistry]  
Primenenie metoda mechenykh atomov v agrokhimii. Mo-  
skva, Sel'khoz. akad., 1963. 47 p. (Praktikum po pri-  
meneniiu izotopov i izluchanii v sel'skom khoziaistve,  
no.9) (MIRA 12:9)

L 1873-66 EWT(m) DIAAP  
ACCESSION NR: AT5022307

UR/3136/65/000/833/0001/0012

AUTHOR: Borisova, N. I.; Novgorodtseva, V. I.; Pchelín, V. A.; Shigin, V. A.

TITLE: Symmetric fission threshold of Np super 237

SOURCE: Moscow. Institut atomnoy energii. Doklady, IAE-833, 1965. Porog simmetrichnogo deleniya Np237, 1-12

TOPIC TAGS: nuclear fission, neptunium, fission cross section, fission product, neutron bombardment

ABSTRACT: The variation of the symmetric fission cross section of <sup>237</sup>Np was studied as a function of the excitation energy. Particular attention was concentrated on the behavior of the cross section in the vicinity of the asymmetric fission threshold. The target used was <sup>237</sup>Np, and the fission was induced by monoenergetic neutrons produced by the reactions T(p,n)He<sup>3</sup> and D(d,n)He<sup>3</sup>. The experiments were carried out on an electrostatic accelerator. The results indicate that the thresholds of symmetric and asymmetric fission coincide. A detailed comparison of the fission cross section curves shows that the barriers of symmetric and asymmetric fission are the same in height as well as shape. The results agree with the hypothesis that during the initial stage the process of

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ACCESSION NR: AT5022307

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symmetric fission coincides with that of asymmetric fission, and differences in the yields of symmetric and asymmetric fission and in the variation of their cross sections at high neutron energies are due to the influence of the shells of the fragments, which manifests itself in the last stages of fission. "The authors thank B. M. Gokhberg and B. V. Kurchatov for his steady interest and for reviewing the results, and L. V. Chistyakov for valuable technical advice." Orig. art. has: 1 figure and 1 table.

ASSOCIATION: none

SUBMITTED: 00

ENCL: 00

SUB CODE: NP

NO REF SOV: 008

OTHER: 009

dy  
Card 2/2

15 0/1

L 2737-66 EWT(m)/EPF(n)-2/EWP(t)/EWP(b)/EWA(h) IJR(c) JD/WW/JG  
ACCESSION NR: AP5024335 UR/0367/65/002/002/0243/0247

AUTHOR: Borisova, N. I.; Novgorodtseva, V. I.; Pchelin, V. A.; Shigin, V. A. 33  
30

TITLE: The symmetric fission threshold for  $Np^{237}$  B

SOURCE: Yadernaya fizika, v. 2, no. 2, 1965, 243-247

TOPIC TAGS: neptunium, radioisotope, nuclear fission, fission cross section, fission threshold

ABSTRACT: The cross section for symmetric fission is measured as a function of excitation energy. Particular attention is given to the behavior of this cross section close to the threshold of asymmetric fission.  $Np^{237}$  was used as the target. Fission was produced by neutrons. The low degree of anisotropy in the angular distribution of  $Np^{237}$  fission fragments, and the weak relationship between this anisotropy and neutron energy indicate that contributions to the fission cross section from various states at the fission barrier do not change considerably when the neutron energy is varied. This made it possible to eliminate the influence of independent-particle effects on the fission fragment yield. An electrostatic accelerator was used. The  $T(p, n) He^3$  and  $D(d, n) He^3$  reactions served as sources of monochromatic neutrons. Symmetric and asymmetric fissions were identified by the

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radiochemical method. Yields were determined for Mo<sup>99</sup>, Ag<sup>111</sup>, Cd<sup>115</sup> and Ba<sup>140</sup>. The methods for preparing the sample for irradiation and determining the yields of these isotopes are described. The exposure time was 25-50 hours at a neutron intensity of  $2 \cdot 10^8$  neutrons/sec·cm<sup>2</sup>. The results are graphed and tabulated. It is found that the thresholds of symmetric and asymmetric fission coincide. This indicates that the process of symmetric fission coincides at first with the process of asymmetric fission and that the differences in the yields of symmetric and asymmetric fission and in the behavior of their cross sections at high neutron energies are due to the effect of fragment shells which appear in the last stages of the fission process. "The authors consider it their pleasant duty to thank B. M. Gokhberg and B. V. Kurchatov for constant interest in the work and discussion of the results, and also L. V. Chistyakov for valuable consultation on methods." Orig. art. has: 1 figure, 1 table.

ASSOCIATION: none

SUBMITTED: 20Mar65

ENCL: 00

SUB CODE: NP

NO REF SOV: 005

OTHER: 012

*mlr*  
Card 2/2



BORISOVA, N.M.

TEPLOV, B.M.; BORISOVA, N.M.

Sensitivity to discrimination and sensorial memory. Vop. psikhol. 3  
no. 1:61-77 Ja-F '57 (MIRA 10:3)

1. Institut psikhologii Akademii pedagogicheskikh nauk RSFSR, Moskva.  
(Memory) (Perception)

DISTIER, G.I.; GERASIMOV, Yu.M.; BORISOVA, N.M.

Direct method for studying the electric microrelief of crystalline surfaces. Dokl. AN SSSR 165 no.2:329-331 N '65.

(MIRA 18:11)

1. Institut kristallografii AN SSSR. Submitted March 18, 1965.

ACC NR: AP6025387

SOURCE CODE: UR/0243/66/000/007/0016/0019

AUTHOR: Borisova, N. N.; Limanov, V. Ye.; Starkov, A. V.; Skvortsova, Ye. K.; Putyatina, T. I.

ORG: Central Disinfectant Research Institute, Moscow (Tsentral'nyy nauchno-issledovatel'skiy dezinfektsionnyy institut)

TITLE: Synthesis and antibacterial properties of some quaternary ammonium compounds. Report 1.

SOURCE: Meditsinskaya promyshlennost' SSSR, no. 7, 1966, 16-19

TOPIC TAGS: organic chemistry, organic synthesis, biochemistry, antibiotic, quaternary ammonium compound, antibiotic effect, AMMONIUM COMPOUND

ABSTRACT: The antibacterial properties of the quaternary ammonium compounds listed in the table were tested on *E. coli* and *Staph. aureus*. In the compounds studied, replacement of a cetyl radical by the more available mixed cetyl-octadecyl radical does not decrease the antibacterial properties of the compounds (see the table). The substitution of a saturated long chain radical by an unsaturated one increased the antibacterial properties of the compound. Antibacterial activity of the preparations increased as the basicity of the incorporated tertiary amines increased. The nature

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UDC: 615.711.41-012+615.711.41-017.78

ACC NR: AP6025387

of the anion affects the antimicrobial properties of the preparations. Cetyl (-octadecyl)-pyridine bisulfate (no. 5) had not appreciably affected bacterial growth after 45 min, when a 0.5% concentration was used. However, when bromide was substituted for bisulfate, growth inhibition was noted after 5 minutes (no. 6), and when chloride was substituted, a 0.025% solution inhibited bacterial growth within five minutes (nos. 7 and 8). The role of unsaturated atoms in the long-chain radical of the quaternary nitrogen compound has been studied little. In this study, compounds no. 8 and 16, which contain a long chain largely unsaturated radical (iodine no. 40), are more physiologically active than compounds no. 7 and 15 with a saturated radical. Systematic studies of the relationship of basicity of anions to antibiotic properties revealed that antibacterial activity increases with increasing basicity. For example, a 0.05% solution of compound no. 6 inhibits microbial growth; a 0.1% solution of no. 9 and a 0.025% solution of no. 10 and no. 11 produce the same result (see the table). However, a 1:1 mixture of no. 13 and no. 14 produce the same results as no. 14 alone when tested on *Staph. aureus*. On the other hand, the introduction of an electronegative n-chlorobenzene group for the methyl group of compound no. 12 results in lowered antimicrobial effect. Similar results hold for cyclic

Card 2/3

ACC NR: AP6025387

amines when a more basic group is substituted. Compare compounds  
no. 17 and 18. [WA-50; CBE No. 11]

SUB CODE: 06/ SUBM DATE: 22Sep65/ ORIG REF: 002/ OTH REF: 002

Card 3/3

KRYLOV, A.V.; OVCHAROV, K.Ye.; TARAKANOVA, G.A.; BORISOVA, N.N.

Distribution of  $S^{35}$ -labeled vitamin  $B_1$  in different parts of  
the tomato plant. Fiziol.rast. 6 no.3:296-302 My-Je '59.  
My-Je '59. (MIRA 12:8)

I. K.A. Timiryazev Institute of Plant Physiology, the U.S.S.R.  
Academy of Sciences, Moscow.  
(Tomatoes) (Thiamine) (Plants, Effect of 2,4-D on)

IMAYEV, M.G.; BORISOVA, N.N.

Synthesis of some esters of diaminothiomethylphosphinic acid. Zhur.ob.khim. 32 no.10:3360-3362 0 '62. (MIRA 15:11)

1. Ufimskiy neftyanoy institut.  
(Phosphinic acid)

USSR.

Continuous distillation of gas-producer wood tar. D. Tishchenko, N. Sliishchenkova, and N. Borsova. *Zhur. Priklad. Khim.* 21, 516-21(1948).—Tar leaving the scrubbing system contains up to 40% emulsified water very slowly sep. by standing. Difficulty in sepn. is due to (1) small difference between sp. gr. of tar and emulsified acid water, (2) viscosity of tar phase of emulsion, (3) small diam. of drops of emulsified water. App. is described which yields oil and pitch directly from the wet tar. Exptl. evidence is presented indicating wld hydrolysis of high-mol. compds. of tar during distn. which increases yield of oil.  
V. N. Bednarski

Cent. Sci. Res. Inst. Wood Chemistry



BORISOVA, N. P.

USSR/Chemistry - Hydrocarbons  
Chemistry - Catalysis

Feb 49

"Irreversible Catalysis and Catalytic Dehydrogenation of Hydrocarbons on Activated Carbon, G. A. Radakov, N. P. Borisova, O. A. Yemel'yanova, I. G. Yeroshevskiy, N. F. Komshilov, A. N. Makarova, E. M. Marlis, Z. S. Khomenko, *Gen Sci Res Inst of Wood-Pulp Chem*, 18 $\frac{1}{2}$  pp

"Zhur Priklad Khim" Vol XXII, No 2

Investigation carried out on pure terpenes and a naphthene hydrocarbon, n-methane, showed that activated carbon brings about irreversible catalysis and dehydrogenation of hydrocarbons. This confirmed conclusions made long ago by Russian scientists working on pyrolysis of petroleum. Describes reactions in detail. Submitted 13 Mar 48.

PA 48/49T19

PETROV, A.A.; BORISOVA, N.P.

Studying the demulsifying action of oxiethylated alkyl phenols.  
Khim.i tekhn.topl.i masel 4 no.2:66-71 F '59. (MIRA 12:2)

1. Giprovoostokneft'.

(Phenols)

(Emulsions)

BJP-

5.3100

24107  
S/192/61/002/003/001/001  
D257/D305

**AUTHORS:** Borisova, N.P. and Vol'kenshteyn, M.V.  
**TITLE:** Van der Waals forces between hydrocarbon molecules  
**PERIODICAL:** Zhurnal strukturnoy khimii, v. 2, no. 3, 1961, 346-349

**TEXT:** This article deals with the van der Waals "interaction energy" or so-called van der Waals "potential energy" between molecules of methane. The results found in the literature for potential energy between two non-bonded hydrogen atoms - H...H were represented in Fig. 1. where potentials energies - "U" in Kcal/mol were plotted against the corresponding inter-nuclear distances - "r" in Å. [Abstractor's note: In this article two non-bonded hydrogen atoms are represented as follows: H...H, and analogously two non-bonded carbon atoms - C...C, two hydrogen molecules - H<sub>2</sub>...H<sub>2</sub>, two methane molecules - CH<sub>4</sub>...CH<sub>4</sub> etc.] Curve 2 in Fig. 1 is the experimental curve found from potential energy between two hydrogen molecules. Curve 1, Curve 3 and Curve 4 in Fig. 1 represent the potential

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Van der Waals...

energy between  $H_2-H_2$  i.e. the potential energy between non-bonded hydrogen atoms which have a bond with an atom of H (i.e. between H - H...H - H) calculated by various equations derived independently. The potential for  $-C-H...H-C-$  represented by curve 5 in the range  $2.2 < r < 3.0 \text{ \AA}$  is negative, i.e. it represents the forces of attraction while the potential for H-H...H-H represented by curves 1, 3 and 4 in the above mentioned range of "r" is positive, i.e. it represents forces of repulsion. It can be assumed that C bonded with H causes the deformation of the electronic shell of hydrogen atom, leading to the decrease of repulsive forces between hydrocarbon molecules. The carbon atom in a methane molecule is not completely shielded by the four hydrogen atoms and, therefore, the calculation of potential energy between methane molecules does not reduce to the calculation of the potential energy between non-bonded hydrogen atoms; the potential energy between two carbon atoms C...C as well as the potential energy between hydrogen atom of one molecule and carbon atom of the other molecule H...C should be considered. The potential energy

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Van der Waals...

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between two non-bonded carbon atoms was found by A.I. Kitaygorodskiy:

$$U_{C-C}(r, \text{\AA}) = 37 \cdot 10^3 e^{-3.6r} - \frac{330}{r^6} \quad (4)$$

The potential energy for C...C plotted against internuclear

distances "r" is represented in Fig. 3, [Abstractor's note: no more explanation referring to the potential for C...C could be found in this article]. Eq. (7) for the potential energy between C...H is then given:

$$U_{C...H}(r, \text{\AA}) = 36 \cdot 10^3 \exp(-4.6 r) - 80 r^{-6} \quad (7)$$

[Abstractor's note:

No further explanation referring to the potential for C...H could be found in this article.] When calculating the potential energy between methane molecules, their relative spatial orientations of one molecule in respect to the other should be taken into consideration. One methane molecule can have different spatial orientations in respect to the other. Total potential between methane molecules is the sum of three potential energies namely: the potential between non-bonded hydrogen atoms H...H, the potential between non-bonded carbon atoms - C...C and the potential

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Van der Waals...

<sup>24107</sup>  
S/192/61/002/003/001/001  
D257/D305

X

between non-bonded carbon and hydrogen atoms - C...H. As the potential energy depends on the distance between atoms, each of the three above mentioned potential energies are different for the different relative spatial orientations of methane molecules. The potential energy H...H is pronounced mostly in the "a" relative orientations of molecules, the potential energy C...C is pronounced mostly in the "c" orientations of molecules and the potential energy C...H is pronounced mostly in the "B" orientations of molecules. Eq. (3) used for calculating potential energy between non-bonded hydrogen atoms was derived for the calculation of potential energy between hydrogen molecules. The assumption that it can be applicable for hydrocarbons is, therefore, wrong.

$$U(r, \text{Å}) = 12 \cdot 10^2 \exp(-2,85 r) - \frac{160}{r^6} \quad (3)$$

Eq. (3) was derived assuming that the potential energy

between hydrogen molecules is equal to the sum of 1/4 the potential for two hydrogen atoms in the single state and 3/4 the potential for two hydrogen atoms in triplet form:

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24107

S/192/61/002/003/001/001

D257/D305

Van der Waals...

$$U_{H...H} = \frac{1}{4} U_1 \xi + \frac{3}{4} U_3 \xi \quad (2)$$

[Abstractor's note: Eq. (3) was not derived and no more explanation referring to it could be found in this article]. Taking into account the equations for calculating potential energy between methane molecules, the potential energy between non-bonded hydrogen atoms in methane molecule  $H_3C - CH_3$  was calculated to be equal  $-0.2$  Kcal/mol which represents attraction and was found to be practically independent of the rotational angle of the  $CH_3$ -group around the C - C bond. There are 5 figures and 14 references: 1 Soviet-bloc and 13 non-Soviet-bloc. The references to the most recent English language references read as follows: C.A. Coulson, D. Stocker, Mol. Phys. 2, 397 (1959), K. Howlett, J. Chem. Soc., 4353 (1957), L. Pauling, Proc. Nat. Acad. Sci. USA, 44, 211 (1958), G. Harris, F. Harris, J. Chem. Phys., 31, 1450 (1959).

ASSOCIATION: Institut vysokomolekulyarnykh soyedinyeny AN SSSR  
Leningrad (Institute of High Molecular Compounds, AS  
USSR, Leningrad)

SUBMITTED: July 4, 1960  
Card 5/6

(For Figs. 1, and 3 see next card)

BORISOVA, N.P.; VOL'KENSITEYN, M.V.

Internal rotation in propane and n-butane. Zhur.struktkhim.  
2 no.4:469-475 J1-Ag '61. (MIRA 14:9)

1. Institut vysokomolekulyarnykh soyedineniy AN SSSR,  
Leningrad.

(Propane)

(Butane)

(Molecular rotation)



L 6875-65 EWT(m)/EPF(c)/T Pr-4 BW/DJ

ACCESSION NR: AR4041676

S/0081/64/000/007/PO16/PO16

SOURCE: Ref. zh. Khimiya, Abs. 7P116

46

AUTHOR: Borisova, N. P.

TITLE: Use of surface-active materials to prepare oil for processing in the Sredne-Volzhskoye Sovnarkhoz

CITED SOURCE: Tr. Gos. in-t po proyektir. i issled. rabotam nefteob. prom-sti Giprovtokneft', vy'p. 6, 1963, 35-46

TOPIC TAGS: surface active material, demulsifier, oil processing, oil

TRANSLATION: On the basis of tests on dehydrating and desalting installations at the Sredne-Volzhskoye Sovnarkhoz in demulsifiers, non-ionic surface-active materials based on oxyethylized phenols OP-10, OP-7, KAUF-14 and UFE and anion-active compounds (wetting agent NB, secondary sodium alkylsulfate), and also sulphoammonium salts, it was established that activity of non-ionic reagents is significantly higher than anion-active. As compared to NChK, which has at present wide use in

Card 1/2

L 6875-65

ACCESSION NR: AR4041676

dehydrating and desalting installations, oxyethylized phenol has 15 - 60 times greater effectiveness, and sodium alkylsulfate and wetting agent NB are 4 - 5 times and sulfoammonium salts only 1.5 - 2.5 times more effective. Effectiveness of desalting oil with the help of oxyethylized phenols increases with increase of expenditure of reagent, increase of expenditure of washing water, increase of pressure drop on emulsifying valve, and it decreases if the same quantity of reagent is distributed between several points of its introduction into the installation. Expenditures on reagent during application of oxyethylized phenols for dehydration oils is 4 - 10 greater, and for desalting is 3 - 4 times less than expenditure during use of NCHK. Conducted tests showed that use of oxyethylized phenols to prepare oil is expedient both in a technological and an economic sense.

SUB CODE: GC, FP

ENCL: 00

Card 2/2

B/190/63/005/002/021/024  
B101/B102

AUTHORS: Borisova, N. P., Birshteyn, T. M.  
 TITLE: Conformations of isotactic polymers  
 PERIODICAL: Vysokomolekulyarnyye soyedineniya, v. 5, no. 2, 1963,  
 279-286

TEXT: A quantitative evaluation was made of the interactions in crystalline and in dissolved isotactic polypropylene, in poly-4-methyl-pentene-1, poly-3-methyl-butene-1, and in polyacetaldehyde, in order to determine the role of torsional vibrations and rotation isomerism in the statistical coiling of the chain. For crystalline polypropylene, the energy of the monomer links was calculated with a change of the angle of internal rotation between  $-30^\circ < \psi_1 < 20^\circ$ ,  $80^\circ < \psi_2 < 140^\circ$  (Fig. 1). The rotation of the branch about the  $C_2 - R_1$  bond was likewise considered. For each conformation, the rotation angle  $\psi_1$  was sought that corresponded to a minimum of the total energy of the system. This was calculated from  $U(\psi_1, \psi_2, \psi_1) = 1.5 (3 - \cos 3\psi_1 - \cos 3\psi_2 - \cos 3\psi_1) + \sum_{i,k} U_{i,k}(r_{i,k})$ .  
 Card. 1/4

Conformations of isotactic ...

S/190/63/005/002/021/024  
B101/B102

where the first member describes the orientation effect of the bonds and the second member the steric interactions of the atoms. The data of L. Bartell (J. Chem. Phys., 32, 827, 1960) and T. Hill (J. Chem. Phys., 16, 399, 938, 1948) were considered for the interactions of non-bound C---C and H---H atoms. The calculation yielded a potential well with flat bottom and an energy of 2.5 kcal/mole with tetrahedral valency angles and of 1.6 kcal/mole with  $114^\circ$  valency angles. Thus the links are able to vibrate in a  $20^\circ$  interval of the angles  $\psi_1$  and  $\psi_2$ . The transition from one conformation to the other is easy. In statistically coiled chains, the conformations  $(0^\circ, 120^\circ)(0^\circ, 120^\circ)$ ;  $(-120^\circ, 0^\circ)(-120^\circ, 0^\circ)$  and  $(-120^\circ, 0^\circ)(0^\circ, 120^\circ)$  are possible; whereas the conformation  $(0^\circ, 120^\circ)(-120^\circ, 0^\circ)$  is sterically unfavorable owing to the  $H_2$ --- $H_6$  and  $H_{R_1}$ --- $H_{R_3}$  interaction. In solution, the polypropylene molecules form right and left-handed helices somewhat distorted by twisting vibrations and containing  $\sim 15$  monomeric units. The mean energy of the junction between the helices is 1.5 kcal/mole. For the monomer link of polyacetaldehyde  $H(-CHCH_2-O)_nH$  the energy was calculated for different

Card 2/4

Conformations of isotactic ...

S/190/63/005/002/021/G24  
B101/B102

conformations and it was found that the conformation  $-30^\circ$ ,  $100^\circ$  is energetically favorable. The bottom of the potential well (2.6 kcal/mole) is less flat than for polypropylene. For poly-4-methyl pentene-1 the conformation  $-15^\circ$ ,  $110^\circ$  and for poly-3-methyl-butene-1 the conformation  $-25^\circ$ ,  $100^\circ$  proved favorable. Conclusion: The crystalline conformations are determined by intramolecular interactions, the consistency between the angles of internal rotation of the main chain and those of the branches being very important. There are 6 figures and 1 table. ✓

ASSOCIATION:

Institut vysokomolekulyarnykh soyedineniy AN SSSR  
(Institute of High-molecular Compounds AS USSR);  
Leningradskiy gosudarstvennyy universitet im. A. A.  
Zhdanova (Leningrad State University imeni A. A.  
Zhdanov)

SUBMITTED:

September 11, 1961

Card 3/4

BORISOVA, N.P.; BOKACHEVA, L.P.

Determination of the structure of polymers by the MO LKAO method.  
Vest. LGU. 18 no.16:120-126 '63. (MIRA 16:11)

BORISOVA, N.P.

Calculation of the internal rotation energy of polyethylene.  
Vysokom. soed. 6 no.1:135-136 Ja'64. (MIRA 17:5)

1. Nauchno-issledovatel'skiy khimicheskikh institut Leningradskogo gosudarstvennogo universiteta.

BORISOVA, N.P.; BIRSHTEYN, T.M.

Conformation of syndiotactic polymers. Vysokom. soed. 6 no.7:  
1234-1237 JI '64 (MIRA 18:2)

1. Leningradskiy gosudarstvennyy universitet i Institut vysokomolekularnykh soyedineniy AN S SSR.



BORISOVA, N. S.

FRASE I BOOK EXPLANATION 608/5305

Moscow. Institut stali  
Relaksatsionnyye yavleniya v metalloch i splavakh; trudy Mezhdunarodnogo  
seminara po (Relaxation Phenomena in Metals and Alloys). Transactions of the  
Inter-Institute Conference) Moscow, Metallurgizdat, 1950. 326 p.  
Sponsoring Agency: Ministerstvo vysshego i srednego spetsial'nogo obrazovaniya  
USSR and Moskovskiy Institut stali imeni I.V. Shallina.

Ed. (title page): B.M. Timbal'shteyn; Ed. of Publishing House: Ye.I. Lavit; Tech.  
Ed.: A.I. Karasov.  
PURPOSE: This collection of articles is intended for personnel in scientific insti-  
tutions and schools of higher education and for physical metallurgists and  
physicists specializing in metals. It may also be useful to students of these  
fields.

COVERAGE: The collection contains results of experimental and theoretical inves-  
tigations carried out by schools of higher education and scientific research  
institutions in the field of the relaxation phenomena in metals and alloys.  
Several articles are devoted to the investigation-by the internal-friction  
method-of the decomposition of supersaturated solid solutions. Also analyzed  
are the defects of the crystalline lattice, plastic deformation, high-tempera-  
ture behavior of alloys, and creep. Problems of the relation between internal  
friction and temper brittleness, the use of this method of internal friction in  
the investigation of powder-stallings products, and the mechanism of impact  
fatigue are discussed. The collection contains articles on the damping charac-  
teristics of materials, elastic aftereffect and the new slow-detection method.  
No personalities are mentioned. References follow most articles. There are 366  
references. 152 Soviet and 174 non-Soviet.

Tsobhallo, S.O. (Leningradskiy politekhnicheskiy institut (Leningrad Poly-  
technic Institute)). Elastic Aftereffect of the Alloys Used for Springs 154

Zastov, E.S. (Institut metallorodnaya i fiziki metallov IZMICHIM [Institute  
of Science of Metals and Physics of Metals of the IZMICHIM]). On the Theory of  
Elastic Aftereffect in Homogeneous Bodies 169

Garber, R.I., and T.F. Megin'valova (Fiziko-khimicheskiy institut AN UZSSR  
(Physicochemical Institute of the Academy of Sciences USSR)). Internal  
Friction and Plastic Deformation in Overstressed Microzones of Rigid Bodies 178

Guda, A.Y., and V.A. Pavlov (Institute of Physics of Metals of the Academy of  
Sciences USSR). Internal Friction in Deformed  $\alpha$ -Solid Solutions of Aluminum  
With Magnesium 189

Lebedev, R.S., and V.S. Postnikov (Kuznetsov Pedagogical Institute). Effect  
of Plastic Deformation on Internal Friction of Ferrous Alloys 199

Tsobhallo, S.O. (Leningrad Polytechnic Institute). Study of Defects in  
Metal Products and Samples by the Method of Measuring the Damping of Vibrations 222

Pavlov, V.A. (Institute of Physics of Metals of the Academy of Sciences USSR).  
Analysis of the Defects in Crystal Lattice by Using the Internal Friction 227

Detsko, O.I., and V.A. Pavlov (Institute of Physics of Metals of the Academy  
of Sciences USSR). Dependence of the Internal Friction in Pure Nickel on the  
Temperature 234

Borisova, N.S., and V.M. Reznitskiy (Institute of Science of Metals and Physics of  
Metals IZMICHIM). Study of the Effect of the Intergranular Structure of Austenite  
on the Internal Friction and Creep 231

Sasoylora, A.Ya., and V.S. Postnikov (Kuznetsov Pedagogical Institute). Recovery  
of the Internal Friction in Aluminum, Silver, and Platinum After the Removal of  
the Loading 251

Postnikov, V.S. (Kuznetsov Pedagogical Institute). Internal Friction of  
Plastically Deformed Metals and Alloys at Elevated Temperatures 264

Bernshorn, M.L., and Ye.S. Pikhomirova (Moscow Steel Institute). Effect of  
Surfactants on the Internal Friction of Commercial-Grade Iron 279

Makalozhik, P.A. (Kiyevskiy gosudarstvennyy universitet (Kiyev State University)).  
Analysis of the Maximum Internal Friction on Grain Boundaries in the Aluminum-  
Copper-Silver Alloy 289

DANILOV, B.P., inzh.; BORODITSKAYA, R.M., inzh.; ZHUDOV, V.F., inzh.;  
BORISOVA, N.S., inzh.; MYASNYANKINA, T.V., inzh.; KIL'DEYeva, V.Ye.,  
inzh.

Shrinkage of air-entrained concrete without autoclave treatment.  
Stroi.mat. 8 no.1:38-40 Ja '62. (MIRA 15:5)  
(Air-entrained concrete)

BARINOV, A.A.; BORODITSKAYA, R.M.; BORISOVA, N.S.; DANILOV, B.P.;  
MYASNANKINA, T.V.; TOKAREV, G.I.

Single-layer slab made of nonautoclaved air-entrained fly-ash concrete.  
Stroi. mat. 9 no.2:22-23 F '63. (MIRA 2:2)

1. Donetskii nauchno-issledovatel'skiy institut nadshakhtnogo stroitel'stva Akademii stroitel'stva i arkhitektury UkrSSR (for Barinov, Boroditskaya, Borisova, Danilov). 2. Nachal'nik otdela novykh stroitel'nykh materialov Donetskhilstroya (for Myasnyankina). 3. Nachal'nik Donetskogo domostroitel'nogo kombinata No.1 (for Tokarev).  
(Concrete slabs) (Air-entrained concrete)

NEYAGLOV, A.V.; MOLOCHNIKOV, I.M.; MEYERCHENKO, M.P.; BORISOVA, N.S.

Technical and economic indices for the separation of butane-  
butylene, propane-propylene, and ethane-ethylene fractions on  
a gas-fractionating unit. Trudy BashNII NF no.7:155-163 '64.  
(MIRA 17:9)

KOSTSOVA, A.G.; BORISOVA, N.T.

Alkanesulfonic acids. Part 18: Chlorination of alkanesulfonotoluidides. Zhur.ob.khim. 28 no.9:2420-2423 S '58.  
(MIRA 11:11)

1. Voronezhskiy gosudarstvennyy universitet.  
(Chlorination) (Toluenesulfonic acid)

KEDROV, L.V.; KACHKO, I.L.; KOZLOVA, Z.V.; KUBASHKINA, T.S.;  
SIMONOV, I.G.; LUPEKIN, L.A.; BORISOVA, N.V.; FETISOVA,  
N.A.; VAYSBERG, I.Ye.; SUCHKOV, V.G.; KHEMNIKOV, N.S.;  
FILATOV, M.F., red.; ZHIYEVSKAYA, L.G., red.

[Flexible footwear] Gibkaia obuv'. Moskva, 1962. 38 p.  
(MIRA 17:8)

1. Tsentral'nyy institut nauchno-tehnicheskoy informatsii  
legkoy promyshlennosti.

TUMERMAN, L.A.; BORISOVA, O.F.; RUBIN, A.B.

Relation between the photosynthetic activity and the luminescence  
of chlorophyll. Biofizika 6 no.6:645-649 '61. (MLRA 15:1)

1. Institut radiatsionnoy i fiziko-khimicheskoy biologii AN SSSR,  
Moskva.

(CHLOROPHYLL)      (PHOTOSYNTHESIS)

BORISOVA, O.F.; KISELEV, L.L.; TUMERMAN, L.A.

Determining the degree of spiralization of transport RNA from the fluorescent properties of their complexes with acridine dyes. Dokl. AN SSSR 152 no.4:1001-1004 0 '63. (MIRA 16:11)

1. Institut radiatsionnoy i fiziko-khimicheskoy biologii AN SSSR. Predstavleno akademikom V.A. Engel'gardtom.



ZAV IL'GEL'SKIY, G.B.; BORISOVA, O.F.; MINCHENKOVA, L.Ye.; MINYAT, E.Ye.

Interaction of acridine orange with UV-irradiated DNA. Biokhimiia  
29 no.3:508-517 My-Je '64. (MIRA 18:4)

1. Institut radiatsionnoy i fiziko-khimicheskoy biologii AN SSSR, Moskva.

BORISOVA, O.F.; KISELEV, L.L.; SUROVAYA, A.I.; TUMERMAN, L.A.; FROLOVA,  
L. Yu.

Macromolecular structure of transfer ribonucleic acids in a  
solution. Dokl. AN SSSR 159 no.5:1154-1157 D '64 (MIRA 18:1)

1. Institut radiatsionnoy i fiziko-khimicheskoy biologii AN  
SSSR. Predstavleno akademikom V.A. Engel'gardtom.

BORISOVA, O.F.; TUMERMAN, L.A.

Use of acridine orange fluorescence for studying the secondary structure of nucleic acids. Biofizika 10 no.1:32-36 '65. (MIRA 18:5)

1. Institut radiatsionnoy i fiziko-khimicheskoy biologii AN SSSR, Moskva.

KISELEV, L.L.; FROLOVA, L.Yu.; BORISOVA, O.F.; KUKHANOVA, M.K.

Secondary structure of transfer RNA determined from data of its formaldehyde reaction and ribonuclease hydrolysis. *Biokhimiya* 29 no. 1:116-125 Ja-F '64. (MIRA 18:12)

1. Institut radiatsionnoy i fiziko-khimicheskoy biologii AN SSSR, Moskva. Submitted May 23, 1963.

SHATILOV, A.M.; BORISOVA, O.G.

Improvement of ore dressing processes at the Lud'evskaia plant.  
Bul. TSIIN tsvet. met. no.9:10-13 '58. (MIRA 11:6)  
(Ore dressing)

9(2)

SOV/112-59-1-1742

Translation from: Referativnyy zhurnal. Elektrotehnika, 1959, Nr 1, p 246 (USSR)

AUTHOR: Borisova, O. I., and Litvinenko, M. N.

TITLE: Miniature Oscillograph

PERIODICAL: Radiotekhn. proiz-vo, 1957, Nr 12, pp 36-37

ABSTRACT: A portable (140 x 150 x 225-mm) oscillograph intended for repairing and aligning radio equipment and using a 7LO55 picture tube is described.

The sweep frequency is 5-cps - 15 kc, voltage span is 5-50 v, and vertical-amplifier passband goes up to 3 mc. The instrument is AC supplied at 220 v, 50 cps. The oscillograph is designed with 4 peanut-size tubes. Both continuous and slave sweeps are provided, as well as the possibility of synchronizing the sweep oscillator from the internal or an external source or from a 50-cps line. The rectifier is designed with semiconductor diodes. The principal diagram of the instrument is given.

S.A.B.

Card 1/1

FLORIANOVICH, N.M.; BORISOVA, O.I.; GUNDAROV, V.P.

The SEL-2, new model of the automatic erythrocyte counting apparatus. Nov. med. tekhn. no.2:20-24 '62.

(MIRA 17:11)

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Some data on the effectiveness of tissue therapy in aniline. *Fiziol. zhur.* [Ukr] 4 no.6:843-845 N-D '58. (MIRA 12:3)

1. Odesskaya nauchno-issledovatel'skaya sanitarno-khimicheskaya laboratoriya. (ANILINE--TOXICOLOGY) (TISSUE EXTRACTS)



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Designing a sewage-purification plant in Moscow. Gor.khoz.Mosk.  
36 no.1:41-44 Ja '62. (MIRA 16:1)  
(Moscow--Sewage--Purification)

BORISOV-REBRIN, M., inzh.

Important problems in the development of the rock products in-  
dustry. Stroi. mat. 10 no. 7: 14-16 JI '61 (MIRA 1881)

BORISOVA, R.P.

Beacon of advanced practices. Med. sestra 22 no.3:57-59  
Mr'63. (MIRA 16:6)  
(KALININ PROVINCE—NURSES AND NURSING)

BORISOVA, S.

24136 BORISOVA, S. Michurinets bakhtadze. (K prisuzhdeniyu Stalinskoy premii za vyvedeniye luchshikh sortov Gruzinskogo chaya). Ogonok, 1949, No. 31, S. 24, S portr.

SO: Letopis, No. 32, 1949.

BORISOVA, S.A.

Role of the kidneys in osmoregulation of the body. Biul. eksp. biol. i  
med. 58 no.10:18-20 0 '64. (MIRA 18:12)

1. Kafedra normal'noy fiziologii (zav. - dotsent Ya.D.Finkinshteyn)  
Novosibirskogo meditsinskogo instituta. Submitted April 3, 1964.

KOVAL', V.G.; SKIRSTYMONSKIY, A.I.; BORISOVA, S.K.; RUBCHENKO, M.H.;  
LITVAK, I.M.; GRIVTSEVA, E.A.; SLESAREVA, O.I.

Changes in the composition of nitrogen substances in molasses  
dependent on the duration of sugar manufacture. Report No. 1.  
Trudy UkrNIISP no.9:14-20 '64.

(MIRA 17:10)

1. Ukrainskiy nauchn -issledovatel'skiy institut spirtovoy i  
likero-vodochnoy promyshlennosti (for Koval', Skirstymonskiy,  
Borisova, Rubchenko). 2. Kiyevskiy tekhnologicheskii institut  
pishchevoy promyshlennosti im. Mikoyana (for Litvak, Grivtseva,  
Slesareva).

BORISOVA, S.Yu. [Borysova, S.IU.]

Asymptotic representation of the solution to a boundary value problem for an integrodifferential equation containing a small parameter with derivatives of higher order. Dop. AN URSSR no.2:139-143 '65. (MIRA 18:2)

1. Institut matematiki AN UkrSSR.



PETRENKO, I.G.; Prinsipala uchastiye BORISOVA, S.N., laborant

- Isotopic molecules of methane and its derivatives. Trudy IGI 16:  
14-23 '61. (MIRA 16:7)

(Methane) (Isotopes)

S/049/60/000/01/025/027

E201/E191

AUTHORS: Borisova, S.V., and Burman, E.A.TITLE: Kinematics of Local Winds in the Alazani ValleyPERIODICAL: Izvestiya Akademii nauk SSSR, Seriya geofizicheskaya,  
1960, No 1, pp 169-173

TEXT: The paper is based on field investigations carried out by the El'bruss Expedition of the Institute of Applied Geophysics, Ac. Sc. USSR and the Geophysical Institute of the Georgian SSR in May and June 1956 and supplied to the authors by Professor G.K. Sulakvelidze. The valley of the Alazani river is one of the most important regions of vine growing in Georgia, and it is subject to frequent thunder- and hailstorms which cause considerable damage. The experimental material on winds in the valley was obtained by observations in the Telavi region where the valley is 15 km wide. Pilot balloon investigations were made at three points: 1) Bardisubani on the slopes of the Tsivi-Gomborskiy range; 2) Gulguly at the centre of the valley; and 3) Shakriani at the southern slopes of the Caucasus (Fig 1). The circulation along the valley, i.e. along the river course, does not differ greatly from the usual types observed under similar conditions. ✓

Card 1/2

S/049/60/000/01/025/027  
E201/E191

**Kinematics of Local Winds in the Alazani Valley**

Transverse circulation, at right-angles to the length of the valley, is unique. The present paper discusses this transverse circulation in some detail and illustrates it in Figs 1 and 3 which show respectively the "normal" and "anomalous" transverse circulation in the valley. In these two figures the white arrows show the wind directions during the day, and the shaded arrows show the winds at night. The observed transverse circulation is of the breeze type due to the temperature contrast between the two sides of the valley being greater than the contrasts between the valley slopes and the atmosphere. Such anomalous contrasts are due to differences in the slope and orientation of the sides of the valley and the consequent differences in insolation (Fig 2). Acknowledgements are made to Professor G.K. Sulakvelidze for his help and advice. There are 3 figures, 1 table and 2 Soviet references.

ASSOCIATION: Odesskiy gidrometeorologicheskii institut  
(Odessa Hydrometeorological Institute)

SUBMITTED: November 11, 1958

Card 2/2

L 47115-66 EWT(i) GW

ACC NR: AR6019878

SOURCE CODE: UR/0169/66/000/002/B038/B039

AUTHOR: Borisova, S. V.

28  
B

TITLE: Strength of mountain winds and valley breezes in the deep valleys of the Pamirs and Tien Shan

SOURCE: Ref. zh. Geofizika, Abs. 2B260

REF SOURCE: Meteorol., klimatol. i gidrol. Mezhved. nauchn. sb., vyp. 1, 1965, 23-26

TOPIC TAGS: meteorologic observation, valley breeze, mountain wind, wind

ABSTRACT: On the basis of data for 5—6 yr, variations in strength of mountain winds and valley breezes during the six warm months of the year are discussed. The mean monthly altitudes of the wind shift were determined by averaging the values of current strength for individual days with a mountain-valley circulation (10 to 20 cases per month). In the majority of cases the altitude of wind shift

Card 1/2

UDC: 551.553.12

L 47115-66

ACC NR: AR6019878

0

was determined by interpolation, and the turning of the breeze was recorded only when current direction varied from one level to another by more than 90°. Determination of the strength of a valley breeze is more complex, as the antivalley current is either absent or is determined solely by a weakening of breeze velocity without a change in direction. As a result of the investigation, it was found that the altitude of turning of mountain breezes in all valleys follows a fairly clear pattern, with maximum values in transition seasons and minimum values in the summer. For mountain breezes, the shift-altitude fluctuation amplitude from maximum values in May and minimum values in August may exceed 1300 m depending on the width of the valley. L. Volokitina. [Translation of abstract]

[DW]

SUB CODE: 04/

hs

Card 2/2

1 45798-48  
ACCESSION NR: AP5011495

EW(d) Pg-4 IJR(c)

UR/0041/65/017/002/0019/0028

AUTHOR: Borisova, S. Yu. (Kiev)

12  
3

TITLE: Asymptotic representation of the solution of the Cauchy problem for an integro-differential equation with a small parameter with higher derivatives in the case of a nonregular kernel

SOURCE: Ukrainskiy matematicheskiy zhurnal, v. 17, no. 2, 1965, 19-28

TOPIC TAGS: differential equation, boundary value problem, small parameter, integral equation

ABSTRACT: The author considers the Cauchy problem for

$$(L_\epsilon + K)u(x) = h(x) \tag{1}$$

where

$$L_\epsilon u(x) \equiv \sum_{m=0}^l \epsilon^m a_{2m+1} u^{(2m+1)}(x) + \sum_{r=0}^k a_r u^{(r)}(x), \tag{2}$$

$$a_l = \text{const}, \quad a_{2+1} \neq 0, \quad a_k \neq 0,$$

$$Ku(x) \equiv \int_0^\infty K(x,s)u(s)ds, \tag{3}$$

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L 48298-65

ACCESSION NR: AP5011495

where  $h(x)$  is infinitely differentiable on the interval  $[0; \infty)$  with initial conditions

$$u(0) = u'(0) = \dots = u^{(k-1)}(0) = 0. \quad (4)$$

She assumes that there exist functions  $\varphi_j(\varepsilon)$  ( $j=0, 1, \dots, p, p < \infty$ ) with

$\lim_{\varepsilon \rightarrow 0} \frac{\varphi_{j+1}(\varepsilon)}{\varphi_j(\varepsilon)} = 0$ , such that in some neighborhood of  $s = 0$

$$\varepsilon K(x, \varepsilon s) = \sum_{l=0}^p \varphi_l(\varepsilon) K_l(x, s), \quad (5)$$

where  $K_j(x, s)$  are sufficiently smooth functions. If the kernel  $K(x, s)$  is regular,

$$K_j(x, s) = \frac{s^j}{j!} \left. \frac{\partial^j K(x, t)}{\partial t^j} \right|_{t=0}, \quad (6)$$

$$\varphi_j(\varepsilon) = \varepsilon^{j+1}.$$

For  $\varepsilon \rightarrow 0$  the Cauchy problem of (1), (4) degenerates into the Cauchy problem for an integro-differential equation of  $k$ -th order

$$A(L_k + K)u(x) = h(x), \quad (7)$$

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L 48298-88  
 ACCESSION NR: AP5011495

where

$$L_0 u(x) = \sum_{r=0}^n a_r \frac{d^r u(x)}{dx^r} \quad (8)$$

$$u(0) = u'(0) = \dots = u^{(n-1)}(0) = 0.$$

The author gives an algorithm for obtaining an asymptotic representation of the solution of (1), (4) when this degenerates regularly into problem (7), (8) where  $K(x,s)$  can be represented by (5). She obtains a system of integro-differential equations for regular terms of the asymptotics and for functions of the boundary layer type. If (1), (4) regularly degenerates into (7), (8), the latter being solvable for all  $h(x)$  and  $K(x,s) = 0$  for  $s \geq A$ , then for  $\epsilon$  sufficiently small she gives a unique solution of (1), (4) with remainder term of known order. The following examples are considered: 1. Cauchy problem for

$$\epsilon y' + y + \int_0^1 \frac{y(s)}{\sqrt{s}} ds = 1 \quad (9)$$

with  $y(0) = 0$ ; 2. Cauchy problem for

$$\epsilon y' + y + \int_0^1 \ln s y(s) ds = 1 \quad (10)$$

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L 48298-65

ACCESSION NR: AP50 11495

with  $y(0) = y'(0) = 0$ . Orig. stt. has: 29 formulas. 0

ASSOCIATION: none

SUBMITTED: 11Dec63

ENCL: 00

SUB CODE: MA

NO REF SOV: 005

OTHER: 000

Card 4/4

ACC NR: AP6032411

SOURCE CODE: UR/0021/66/000/009/1099/1103

AUTHOR: Borysova, S. Yu.--Borisova, S. Yu.

ORG.: Institute of Mathematics, AN UkrSSR (Instytut matematyky AN URSR)

TITLE Solution of a differential equation with small parameter when there are higher derivatives on the discontinuous right side

SOURCE: AN UkrRSR. Dopovidi, no. 9, 1966, 1099-1103

TOPIC TAGS: Cauchy problem, differential equation solution

ABSTRACT: This paper gives an asymptotic representation of the solution to a Cauchy problem for a differential equation with a small parameter when there are higher derivatives in the case where the right side of the equation has discontinuities of the first kind. Let

$$L_{\varepsilon}u(x) = f(x)$$

be a differential equation with constant coefficients and small parameter  $\varepsilon(\varepsilon > 0)$  with derivatives of higher order where

$$L_{\varepsilon}u = \sum_{r=0}^k \varepsilon^r a_{k+r} u^{(k+r)} + \sum_{l=1}^m a_l u^{(l)}$$

Card 1/3

ACC NR: AP6032411

$a_k = \text{const}$ ,  $a_{k+1} \neq 0$ ,  $a \neq 0$ , and function  $h(x)$  or its derivatives have discontinuities of the first kind at points  $x_1, x_2, \dots, x_m$ , while  $h(x)$  is a function in  $[x_{i-1}, x_i]$  differentiated a sufficient number of times. The paper examines the solution of equation (1) which satisfies the initial zero conditions

$$\bar{u}(0) = u'(0) = \dots = u^{(k-1)}(0) = 0.$$

The solution of expressions (1) and (2) may be written

$$u_\varepsilon(x) = \int_0^x G_\varepsilon(x-\xi) h(\xi) d\xi,$$

where  $G(x-\xi)$  is the Green function of differential operator  $L$  with initial conditions (2). The paper states and proves the theorems (1): the solution of problem (1), (2) with right side  $h(x)$  which has discontinuities of the first kind at points  $x_1, x_2, \dots, x_m$  may be given in the form

$$u_\varepsilon(x) = u_0(x) + \varepsilon^k \sum_{j=0}^m v_j \left( \frac{x-x_j}{\varepsilon} \right) + z_\varepsilon(x),$$

where the first term on the rightside is the solution of the degenerated problem, the second term without the summation sign represents functions of the type of boundary layer  $k$  at point  $x = x_j$  ( $j = 0, 1, \dots, m$ ;  $x_0 = 0$ ), and the third term is a function

Card 2/3

ACC NR: AP6032411

which tends toward zero when  $\epsilon \rightarrow 0$ ; (2): under certain degenerative conditions problem (1, (2)) may be expressed as

$$z_\epsilon(x) = \sum_{l=0}^N \epsilon^l u_l(x) + \epsilon^k \sum_{l=0}^{N-k} \epsilon^l \sum_{j=0}^m v_{jl} \left( \frac{x-x_j}{\epsilon} \right) + z_{N,\epsilon}(x),$$

where  $u_l(x)$  represents regular functions,  $v_{jl}(x-x_j/\epsilon)$  represents functions of the zero order boundary layer type at point  $x = x_j$  ( $j = 0, 1, \dots, m; x_0 = 0$ ), and  $z_{N,\epsilon}(x)$  is the remainder. The paper was presented by Yu. O. Mytropol'skiy, Academician of AN UkrSSR. Orig. art. has: 29 formulas.

SUB CODE: 12/ SUBM DATE: 09Oct65/ ORIG REF: 003

Card 3/3

*BORISOVA, T.*

Country : USSR

M

Category: Cultivated Plants. Grains.

Abs Jour: RZhBiol., No 11, 1958, No 48877

Author : Suleymanova, I.G.; Borisoba, T.

Inst : Kazan Affiliate Academy of Sciences USSR

Title : The Effect of Soaking the Seeds Prior to Sowing on  
the Development of the Culture.

Orig Pub: Tr. Kazansk. fil. AN SSSR, Ser. biol. n., 1956  
(1957), vyp. 4, 109-115

Abstract: The experiments were conducted at the Biological  
Station of the Kazan' University. The pre-sowing  
treatment with the solutions of different substances  
promotes an increase in the growth of the leaves,  
especially of the 5, 8th and 9th tiers, vigor of

Card : 1/2

Country : USSR

M

Category: Cultivated Plants. Grains.

Abs Jour: RZhBiol., No 11, 1958, No 48876

grain was obtained by growing 2 plants to a pocket.  
The heavier sowing produced a high yield of green  
stuff.

Card : 2/2

M-32

STEMPORZHETSKAYA, Ye.G.; BORISOVA, T.A.; KARON, I.I., red.;  
KUZ'MINA, N.S., tekhn. red.

[Instructive and methodical manual on disinfection] Sbornik in-  
struktivno-metodicheskikh materialov po dezinfektsionnomu delu.  
Moskva, Medgiz, 1962. 430 p. (MIRA 16:1)

1. Russia (1923- U.S.S.R.) Ministerstvo zdravookhraneniya.  
(DISINFECTION AND DISINFECTANTS) (PUBLIC HEALTH LAWS)

ZAYETS, T.L.; BORISOVA, T.A.

Changes in protein and nucleic acid metabolism in the organism  
of animals subjected to burns. Dokl. AN SSSR 150 no.3:677-679  
My '63. (MIRA 16:6)

1. Institut khirurgii im. A.V. Vishnevskogo AMN SSSR.  
Predstavleno akademikom A.N. Bakulevym.  
(Protein metabolism)  
(Nucleic acid metabolism)  
(Burns and scalds)



L 4090-66 EWI(m)/KPF(c)/EMP(j) RM SOURCE CODE: UR/0286/65/000/017/0067/0067

ACC NR: AP5026777

INVENTOR: Zimin, E. V.; Reykh, V. N.; Borisova, T. A.; Yurina, N. G.

ORG: none

TITLE: Vulcanization of carboxylated rubbers. Class 39, No. 174353 [announced by All-Union Scientific Research Institute of Synthetic Rubber im. Academician S. V. Lebedev (Vsesoyuznyy nauchno-issledovatel'skiy institut sinteticheskogo kauchuka)]

SOURCE: Byulleten' izobreteniy i tovarnykh znakov, no. 17, 1965, 67

TOPIC TAGS: synthetic rubber, carboxylated rubber, vulcanization, calcium aluminate

ABSTRACT: An Author Certificate has been issued for a method for vulcanizing carboxylated rubbers with metal compounds. To reduce the tendency of rubber mixtures to premature vulcanization, calcium aluminates, alone or in combination with other vulcanizing agents (peroxides, sulfur), are used as the metal compounds. [B0]

SUB CODE: MT, GC/ SUBM DATE: 12May64/ ORIG REF: 000/ OTH REF: 000/ ATD PRESS:

BVK  
Card 1/1

UDC: 678.744.33-139  
678.028.293

ACC NR: AP7005114

SOURCE CODE: UR/0219/65/060/012/0051/0054

AUTHOR: Zayets, T. L.; Borisova, T. A.ORG: Biochemical Laboratory (Head: Professor S. S. Konikova), Institute of Surgery im. A. V. Vishnevskiy (Director: Active Member of the AMN SSSR, Professor A. A. Vishnevskiy), AMN SSSR, Moscow (Biokhimicheskaya laboratoriya Instituta khirurgii AMN SSSR)TITLE: Measurements of protein metabolism in the presence of experimental burns against the background of the action of chlorpromazine √SOURCE: Byulleten' eksperimental'noy biologii i meditsiny, v. 60, no. 12, 1965, 51-54

TOPIC TAGS: protein, biologic metabolism, injury, chlorpromazine, rabbit, nucleic acid, methionine, radioisotope

ABSTRACT: In view of the relative stability of protein metabolism in the presence of chlorpromazine in the healthy organism, it was of interest to investigate whether chlorpromazine block of the reticular formation will affect the protein metabolism of the organism with burns. Accordingly, male rabbits weighing 2.5-3 kg were exposed to burns by immersing their hind legs into boiling water for 20 sec. Chlorpromazine was injected into these rabbits (7 mg/kg body weight) as well as into healthy controls, twice a day for 5 days. Subsequent investigation of the autolytic activity of the tissues, the level of nucleic acids in the tissues, and the rate of incorporation of  $S^{35}$ -methionine into tissue proteins revealed that, in the animals

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UDC: 617-001.17-008.939.6-092.9/:612.8

ACC NR: AP7005114

with burn disease, chlorpromazine appreciably reduces the burn-caused increase in the level of autolytic processes in the liver, muscles and walls of the small intestine. In healthy controls injected with chlorpromazine, on the other hand, this chemical does not influence the degree of autolysis. In both healthy and burned animals the rate of  $S^{35}$ -methionine incorporation, and the level of nucleic acids are not influenced by chlorpromazine. The fact that chlorpromazine reduces the degree of autolysis in animals with burns is not in itself proof of the advisability of administering this chemical to animals with burns, since there exist numerous contradictory findings on the clinical effectiveness of this drug. This paper was presented by Acting Member AMN SSSR, A. A. Vishnevskiy. Orig. art. has: 1 table. [JPRS: 34,588]

SUB CODE: 06,19 / SUBM DATE: 14Apr64 / ORIG REF: 018 / OTH REF: 004

Card 2/2

BORISOVA, T.G.; ZOLOTNITSKIY, E.Ya.

Phage lysis of culture of *Str. subtropicus* in the production of albomycin. Antibiotiki 1 no.6:21-25 N-D '56. (MLRA 10:3)

1. Moskovskiy khimiko-farmatsevticheskiy zavod imeni L.Ya.Karpova.

(ANTIBIOTICS, preparation of albomycin, lysis of *Streptomyces subtropicus* by bacteriophage during prod. (Rus))

(BACTERIOPHAGE, lysis of *Streptomyces subtropicus* during prod. of albomycin (Rus))

(STREPTOMYCES, *subtropicus*, lysis by bacteriophage during prod. of albomycin (Rus))