

5 (4)

AUTHORS:

Bering, B. P., Serpinskiy, V. V.

SOV/62-59-7-6/38

TITLE:

Adsorption of Gas Mixtures (Adsorbtsiya smesi gazov).  
Communication 5. Adsorption Balance in the System Water - Ethyl  
Chloride - Activated Carbon (Soobshcheniye 5. Adsorbtsionnoye  
ravnovesiye v sisteme voda - khloristy etil - aktivnyy ugol')

PERIODICAL:

Izvestiya Akademii nauk SSSR. Otdeleniye khimicheskikh nauk,  
1959, Nr 7, pp 1186-1195 (USSR)

ABSTRACT:

In this paper the experimental data on the adsorption of the  
gases mentioned in the title on activated carbon of two different  
types are compared (the type I on which the investigations were  
carried out already in a previous paper and the type II had a  
different porosity) and conclusions are drawn on the  
characteristic of the adsorption balance. For the investigations  
the adsorption isotherm of water and ethyl chloride and of the  
mixture of both was recorded volumo-gravimetrically at 75°  
in a new apparatus (Ref 1). The obtained data of the individual  
substances are given in tables 1 and 2 and in figures 1 and 2.  
The sections of the thermodynamic surfaces were determined from  
the data obtained and the adsorption balance from the constancy  
of different thermodynamic parameters. All sections of carbon II

Card 1/3

Adsorption of Gas Mixtures. Communication 5. Adsorption SOV/62-59-7-6/38  
Balance in the System Water - Ethyl Chloride - Activated Carbon

obtained were analogous to the corresponding one of carbon I. From the great number of the isotherms obtained those were regarded in which the adsorption of one component is constant. In figure 3 the adsorption isotherms of water are described accordingly. The curves are represented according to the formula  $c = c_0 (1 - ka_2)$  (1) (where  $a_2$  is the value of the adsorption of ethyl chloride;  $c_0$  is a parameter for the individual water isotherm at constant value  $a_0$ ). The set of curves of the adsorption isotherms for ethyl chloride at constant  $a_1$  is represented in figure 2. The following investigation is carried out by means of the latter set of curves according to the conception of the potential adsorption theory of Dubinin (Refs 2, 4, 6). The parameters  $W_0$  ( $W$ ) and  $B$  of the equation (4) of Dubinin, Zaverina and Radushkevich (Ref 4) were determined (Table 4) characterizing the adsorbent and represented in dependence of  $\alpha$  (Fig 6). Investigations revealed that the adsorption of the ethyl chloride at constant  $a_1$  may be represented

Card 2/3

Adsorption of Gas Mixtures. Communication 5.

SOV/62-59-7-6/38

Adsorption Balance in the System Water - Ethyl Chloride - Activated Carbon

by the mentioned equation. The density of the water being adsorbed in the micropores is considerably higher than the density otherwise at the same temperatures. The transition to the sorption in the field of the capillary condensation is characterized by a decrease of the density of the water. The fusion of the two mentioned equations (for  $a_1 = \text{const}$  and for  $a_2 = \text{const}$ ) describes the adsorption of the mixture of both components on the activated carbon by means of the parameter of the individual adsorption isotherms of both substances if also the empiric parameter on the adsorption of the water  $a_1 \ll 2 \text{ mM/g}$  is given. Finally the authors thank M. M. Dubinin for his interest in this paper and for valuable discussions held together. There are 6 figures, 5 tables, and 6 Soviet references.

ASSOCIATION: Institut fizicheskoy khimii Akademii nauk SSSR (Institute of Physical Chemistry of the Academy of Sciences, USSR)

SUBMITTED: November 21, 1957  
Card 3/3

AUTHORS: Bering, B. P., Dubinin, M. M., Academician, S/020/60/131/04/041/073  
Zhukovskaya, Ye. G., Serpinskiy, V. V. BO04/B125

TITLE: Molecular Sieves as Adsorbents<sup>1</sup> of the First Structural Type

PERIODICAL: Doklady Akademii nauk SSSR, 1960, Vol 131, Nr 4, pp 865 - 867 (USSR)

TEXT: The authors divide the porous adsorbents into structural types according to the size of their pores. Second structural type: silica gel with large pores and active coal with large pores. First structural type: silica gel with fine pores, active coal with fine pores, and zeolite. They tested whether zeolite belongs to the first structural type by means of the potential theory of adsorption developed in their institute. They present the equation of the adsorption isotherm (1), which establishes a linear relation between the logarithm of the adsorption  $a$  and the square of the logarithm of the relative pressure  $h = p/p_g$ . The isotherms of nitrogen and benzene in fine-pored silica gels (Ref 4) may be determined in a wide temperature range by determining the constants  $W$  and  $B$  of the equation (1) and the affinity  $\beta$  of the molecular volume  $v$  and the partial pressure  $p_g$  of the saturated vapor. For the molecular sieve "Linde 5A" the experiments were carried out with nitrogen at  $-195^\circ$ . Figure 1 shows the results of

Card 1/2

Molecular Sieves as Adsorbents of the First Structural Type S/020/60/131/04/041/073  
B004/B125

the experiments. The curves of the adsorption of nitrogen and argon on chabazite according to reference 6 were added for comparison. The validity of the equation (1) was tested on the basis of the determined constants by calculation of the adsorption isotherms for chloromethyl on chabazite at 0, 50, and 100°. Figure 2 shows the result. The experimental data of R. M. Barrer and D. W. Brook (Ref 9) is entered for comparison. At 50° there is good agreement between the data calculated by the authors and the experimental data from reference 9. At 100° the experimental data is somewhat lower, at 0° somewhat higher; but the deviation is at most only 5%. The authors arrive at the conclusion that the equation (1) is applicable to the study of the adsorption on zeolite and that the molecular sieves may be considered adsorbents of the first structural type. There are 2 figures and 11 references, 7 of which are Soviet.

ASSOCIATION: Institut fizicheskoy khimii Akademii nauk SSSR (Institute of Physical Chemistry of the Academy of Sciences, USSR)

SUBMITTED: December 30, 1959

Card 2/2

BERING, B.P.; SERPINSKIY, V.V.

Properties of surface solutions and surface heterogeneity. Izv.AN  
SSSR Otd.khim.nauk no.3:406-414 Mr '61. (MIRA 14:4)

1. Institut fizicheskoy khimii Akademii nauk SSSR.  
(Adsorption)

BERING, B.P.; LIKHACHEVA, O.A.; SERPINSKIY, V.V.

Adsorption of mixtures of ethylene with carbon dioxide on carbon black. Izv.AN SSSR Otd.khim.nauk no.4:551-559 Ap '61.

(MIRA 14:4)

1. Institut fizicheskoy khimii AN SSSR.

(Ethylene)

(Carbon dioxide)

(Adsorption)

BERING, B.P.; SERPINSKIY, V.V.

Adsorption of gas mixtures. Report No.6: Adsorption equilibrium  
in the system water - n.heptane - silica gel. Izv.AN SSSR.Otd.khim.-  
nauk no.11:1947-1954 N '61. (MIRA 14:11)

1. Institut fizicheskoy khimii AN SSSR.  
(Heptane) (Silica) (Adsorption)



S/076/61/035/001/021/022  
B004/B060

AUTHORS: Bering, B. P. and Serpinskiy, V. V.

TITLE: Academician Mikhail Mikhaylovich Dubinin (on the occasion of his 60th birthday)

PERIODICAL: Zhurnal fizicheskoy khimii, v. 35, no. 1, 1961, 225-227

TEXT: This is an article on the scientific activity of M. M. Dubinin, written on the occasion of his 60th birthday on January 1, 1961. He began his scientific activity in 1920 as a student of Nikolay Aleksandrovich Shilov, and investigated problems of theoretical analysis and practical application of sorption effects on porous bodies. On this field he published more than 250 papers. On the basis of the classical theory of the adsorption potential, he worked out a method of solving scientific and practical problems in this field, which makes it possible to calculate the most important parameters of sorption equilibrium (degree of adsorption, differential heats, adsorption entropy, etc.) for any vapors within a wide range of temperatures and pressures, including the critical and trans-critical ranges. The method is sufficiently accurate for most practical

Card 1/2

Academician Mikhail Mikhaylovich Dubinin ...

S/076/61/035/001/021/022  
B004/B060

purposes. Dubinin worked out a classification of adsorbents on the basis of their structure. His great experience in chemical technology enabled him to make practical use of his research work for the improvement of commercial sorption processes. Mention is made of his many papers on theoretical and practical problems of gas defense and of the manufacture and commercial use of molecular sieves (synthetic zeolites). Special lectures and laboratories on sorption processes were organized under Dubinin's supervision. In 1943, he was appointed Member of the Academy of Sciences USSR. Since 1948 he has been Academician-Secretary of Otdeleniye khimicheskikh nauk Akademii nauk SSSR (Department of Chemical Sciences, Academy of Sciences USSR) and a member of the Presidium of the Academy. In 1946 he was elected President of Vsesoyuznoye khimicheskoye obshchestvo im. D. I. Mendeleyeva (All-Union Chemical Society imeni D. I. Mendeleev). In addition, Dubinin is a deputy to the Verkhovnyy Sovet RSFSR (Supreme Council of the RSFSR), and was twice awarded the Stalin Prize and also the Order of the USSR. There is 1 figure.

Card 2/2

BERING, B.P.; DUBININ, M.M., akademik; SERPINSKIY, V.V.

Adsorption isosters in the potential theory. Dokl.AN SSSR 138  
no.6:1373-1376 Je '61. (MIRA 14:6)

1. Institut fizicheskoy khimii AN SSSR.  
(Adsorption) (Potential, Theory of)

BERING, B.P.

PHASE I BOOK EXPLOITATION

SOV/6246

Soveshchaniye po tseolitam. 1st, Leningrad, 1961.

Sinteticheskiye tseolity; polucheniye, issledovaniye i primeneniye  
(Synthetic Zeolites: Production, Investigation, and Use). Mos-  
cow, Izd-vo AN SSSR, 1962. 286 p. (Series: Its: Doklady)  
Errata slip inserted. 2500 copies printed.

Sponsoring Agency: Akademiya nauk SSSR. Otdeleniye khimicheskikh  
nauk. Komisiya po tseolitam.

Resp. Eds.: M. M. Dubinin, Academician and V. V. Serpinskiy, Doctor  
of Chemical Sciences; Ed.: Ye. G. Zhukovskaya; Tech. Ed.: S. P.  
Golub'.

PURPOSE: This book is intended for scientists and engineers engaged  
in the production of synthetic zeolites (molecular sieves), and  
for chemists in general.

Card 1/12

Synthetic Zeolites: (Cont.)

SOV/6246

**COVERAGE:** The book is a collection of reports presented at the First Conference on Zeolites, held in Leningrad 16 through 19 March 1961 at the Leningrad Technological Institute imeni Lensovet, and is purportedly the first monograph on this subject. The reports are grouped into 3 subject areas: 1) theoretical problems of adsorption on various types of zeolites and methods for their investigation, 2) the production of zeolites, and 3) application of zeolites. No personalities are mentioned. References follow individual articles.

**TABLE OF CONTENTS:**

Foreword	3
Dubinina, M. M. Introduction	5

Card 2/22

3

Synthetic Zeolites: (Cont.)

SOV/6246

THEORETICAL PROBLEMS OF ADSORPTION ON ZEOLITES.  
METHODS OF INVESTIGATION

- Dubinin, M. M., Z. A. Zhukova, and N. V. Kel'tsev. Appli-  
cability of the Potential Theory to the Adsorption of  
Gases and Vapors by Synthetic Zeolites 7
- Bering, B. P., V. V. Serpinskiy. Adsorption Isoosteres for  
Synthetic Zeolites Within the Framework of the Potential  
Theory 18
- Timofeyev, D. P., O. N. Kabanova, I. T. Yerashko, and A. S.  
Ponomarev. The Role of the Secondary Porosity of Zeolites  
in the Kinetics of Water-Vapor Sorption 24
- Misin, M. S., B. V. Adrianova, and M. N. Adrianov. Investi-  
gation of the Adsorption and Kinetic Properties of Granu-  
lar Zeolites With the Aid of Thoron 31

Card 3/12  
3

BERING, B.P.; SERPINSKIY, V.V.

Thermodynamic criterion for the applicability of the potential  
theory of adsorption. Dokl. AN SSSR 148 no.6:1331-1334 F  
'63. (MIRA 16:3)

1. Institut fizicheskoy khimii AN SSSR.  
(Adsorption) (Thermodynamics)

BERING, B.P.; SERPINSKIY, V.V.; SURINOVA, S.I.

Preliminary computation of adsorption equilibrium parameters  
for the system adsorbent - binary mixture of vapors. Dokl.  
AN SSSR 153 no.1:129-132 N '63. (MIRA 17:1)

1. Institut fizicheskoy khimii AN SSSR. Predstavleno akademi-  
kom M.M. Dubininym.



BERING, B.P.; SERPINSKIY, V.V.; SURINOVA, S.I.

Adsorption of vapor mixtures on zeolites. Izv. AN SSSR Ser.  
khim no.7:1309-1311 J1 '64. (MIRA 17:8)

1. Institut fizicheskoy khimii AN SSSR.

BERING, B.P.; SERPINSKIY, V.V.; SURINOVA, S.I.

Adsorption of vapor mixtures and the structure of adsorbents. Dokl.  
AN SSSR 154 no.6:1417-1420 F 64. (MIRA 17:2)

1. Institut fizicheskoy khimii AN SSSR. Predstavleno akademikom M.M.  
Dubininym.

I 20352-66 EWT(m)/EWP(j)/I RM

ACC NR: AP6012079

SOURCE CODE: UR/0052/65/000/005/0769/0776

AUTHOR: Bering, B. P.; Serpinskiy, V. V.; Surinova, S. I. 29  
E

ORG: Institute of Physical Chemistry, AN SSSR (Institut fizicheskoy khimii AN SSSR)

TITLE: Adsorption of a mixture of gases. Communication 7. Joint adsorption of a binary mixture of vapors on activated charcoal

SOURCE: AN SSSR. Izvestiya. Seriya khimicheskaya, no. 5, 1965, 769-776

TOPIC TAGS: adsorption, diethyl ether, chloroform, gas adsorption

ABSTRACT: A method was developed for calculating the parameters of adsorption equilibrium of a binary mixture of vapors on an adsorbent within the framework of the theory of volume filling of micropores (potential theory of adsorption). The adsorption isotherms on activated charcoal were measured for diethyl ether at 50, 60, and 71°, ethyl chloride at 50 and 71°, chloroform at 60°, and for mixtures of ethyl chloride with diethyl ether at 50 and 60° and diethyl ether with chloroform at 60°. A generalization of the Dubinin-Radushkevich equation for the adsorption of an individual substance on adsorbents of the first structural type was proposed for the cumulative adsorption of the components of a binary system of vapors. This equation was found to be a good approximation of the experimental data. The generalization of the Dubinin-Radushkevich equation, in conjunction with the Lewis empirical equation, can be used for an approximate calculation of the adsorption of each component of the mixture according to the set partial equilibrium pressures of the components, if the phase diagram of

Card 1/2

UDC: 541.183+661.183.2

L. 20352-66

ACC NR: AP6012079

volume solutions of these substances is known. The differential heats of adsorption of the components from the mixture were calculated for the ethyl chloride-diethyl ether system. Orig. art. has: 7 figures, 1 table, and 11 formulas. [JPRS]

SUB CODE: 07 / SUBM DATE: 10May63 / ORIG REF: 008 / OTH REF: 003

Card 2/2

vmb

MUMINOV, S.Z.; BERING, B.P.; SERPINSKIY, V.V.

Capillary condensation thermodynamics. Izv. AN SSSR. Ser. khim.  
no.1:43-55 '66. (MIRA 19:1)

1. Institut fizicheskoy khimii AN SSSR. Submitted July 3, 1965.

REFINDER, FELCS.

"Technická kontrola v konzervářském průmyslu. Číslo 1. Praha, Státní nakl. technické literatury. Technical control in the canning and preserving industry. 1st ed. footnotes, forms, graphs, index."

p.163 (1957, Praha, Czechoslovakia)

Monthly Index of East European Accession (MIEA) 10, Vol. 7, No. 6, 1958

BERINGER, Milos, ina.

Improvement of organoleptic methods for evaluation of the quality of food products, in particular canned food. Prum potravin 15 no.11:590-591 N '64.

1. Association of Distillation Plants and Canneries, Prague.

BERINGER, Milos, inz.

Problems of nonalcoholic beverages. Prum potravim 16 no.2:57-59  
F '65.

1. Sdruzeni lihovaru a konservaren, Branch Projects, Prague.  
Submitted October 23, 1964.



1. FRENKEL', G. L; BERINGER, Yu. V.; VOL'FE, A. S.
2. USSR (600)
4. Shock
7. Concepts of "shock and "collapse." Novosti med., No. 24, 1951.

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

LAVROV, V.V.; ARKHANGEL'SKAYA-LEVINA, M.S.; FEDOROV, D.N.; IOSSET, G.Ya.;  
SOSNYAKOV, N.G.; BERINGER, Yu.V.; KOZACHINSKIY, R.M.; YELETSKAYA,  
O.I.; GOSHKINA, A.I.; ~~MIRBASHEVSKAYA~~, A.V.; ZYKOV, A.A.; LEBEDEV,  
M.F.; BERGUNOVA, K.S.; RYTSK, Z.A.; FRENKINA, D.Z.; TSIVIN, S.S.

In memory of A.M.Zabludovskii. Khirurgiia no.12:74-75 D '53.

(MLRA 7:1)

(Zabludovskii, Anton Martynovich, 1880-1953)

BERINGER, Yuriy Vladimirovich; ZYKOV, Anatoliy Anatol'yevich

[Concise practical manual on anesthesia] *Kratkoe prakticheskoe rukovodstvo po obezbolivaniu.* Leningrad, Medgiz, 1958. 227 p.

(ANESTHESIA)

(MIRA 12:4)

ERRINGER, Yu.V., dots. (Leningrad, Malaya Sadovaya ul., d.3, kv.44)

Helminth occlusion of the common bile duct combined with gangrenous  
cholecystitis [with summary in English]. Vest. khir. 80 no.2:99-101  
F. '58. (MIRA-11:3)

1. Is kafedry obshchey khirurgii (sav.-prof. A.N.Filatov) 1-go  
Leningradskogo meditsinskogo instituta im. I.P.Pavlova.

(CHOLECYSTITIS, compl.

necrosis with helminth occlusion of common bile duct (Rus)

(BILE DUCT, COMMON, stenosis

caused by helminth infect., with gangrenous  
cholecystitis (Rus)

(HELMINTH INFECTION, compl.

causing common bile duct stenosis, with gangrenous  
cholecystitis (Rus)

BERINGER, Yu.V.

Blood ointment for treating skin maceration in intestinal, pancreatic,  
and biliary fistulas. Akt.vop.perel.krovi no.7:191-193 '59.

(MIRA 13:1)

1. Kafedra obshchey khirurgii I Leningradskogo meditsinskogo instituta  
im. Pavlova (zav. kafedroy - chlen-korrespondent AMN prof. A.N. Filatov)  
i laboratoriya sukhikh preparatov Leningradskogo instituta perelivaniya  
krovi (zav. laboratoriyey - prof. L.G. Bogomolova).

(BLOOD AS FOOD OR MEDICINE)

(FISTULA)

BERINGER, Yu. S. (Leningrad, Malaya Sadovaya ul., d. 3, kv. 44); ZYKOV, A.A.

Morphological changes in skin preserved by different methods  
[with summary in English]. Vest.khir. 82 no.2:83-86 F '59.

(MIRA 12:2)

1. Iz kliniki obshchey khirurgii (zav. - prof. A.N. Pilatov) 1-go  
Leningradskogo meditsinskogo instituta imeni I.P. Pavlova i gisto-  
logicheskoy laboratorii (zav. - st. nauchn. sotr. V.P. Teodorovich)

Leningradskogo instituta perelivaniya krovi.

(SKIN TRANSPLANTATION

homotranspl., eff of various preservents (Rus))

FILATOV, Antonin Nikolayevich, prof., zasl. deyatel' nauki RSFSR; BERINGER, Yu.V.; GOLOVIN, G.V.; MEDVEDEV, P.M.; MIKHAYLOV, S.S., red.; SHEV-  
CHENKO, F.Ya., tekhn. red.

[Transplantation and replacement of tissues and organs] Peresadki i zameshchenia tkanei i organov. Leningrad, Gos. izd-vo med. lit-ry Medgiz, Leningr. otd-nie, 1960. 323 p. (MIRA 14:7)

1. Chlen-korrespondent Akademii meditsinskikh nauk SSSR (for Filatov)  
(TRANSPLANTATION OF ORGANS, TISSUES, ETC.)

FILATOV, A.N., prof.; BERINGER, Yu.V., doktor med.nauk (Leningrad)

Errors and hazards in operations on thrombosed veins. Khirurgia  
36 no.9:3-7 S '60. (MIRA 13:11)

(THROMBOSIS)



BERINGER, Yu.V.

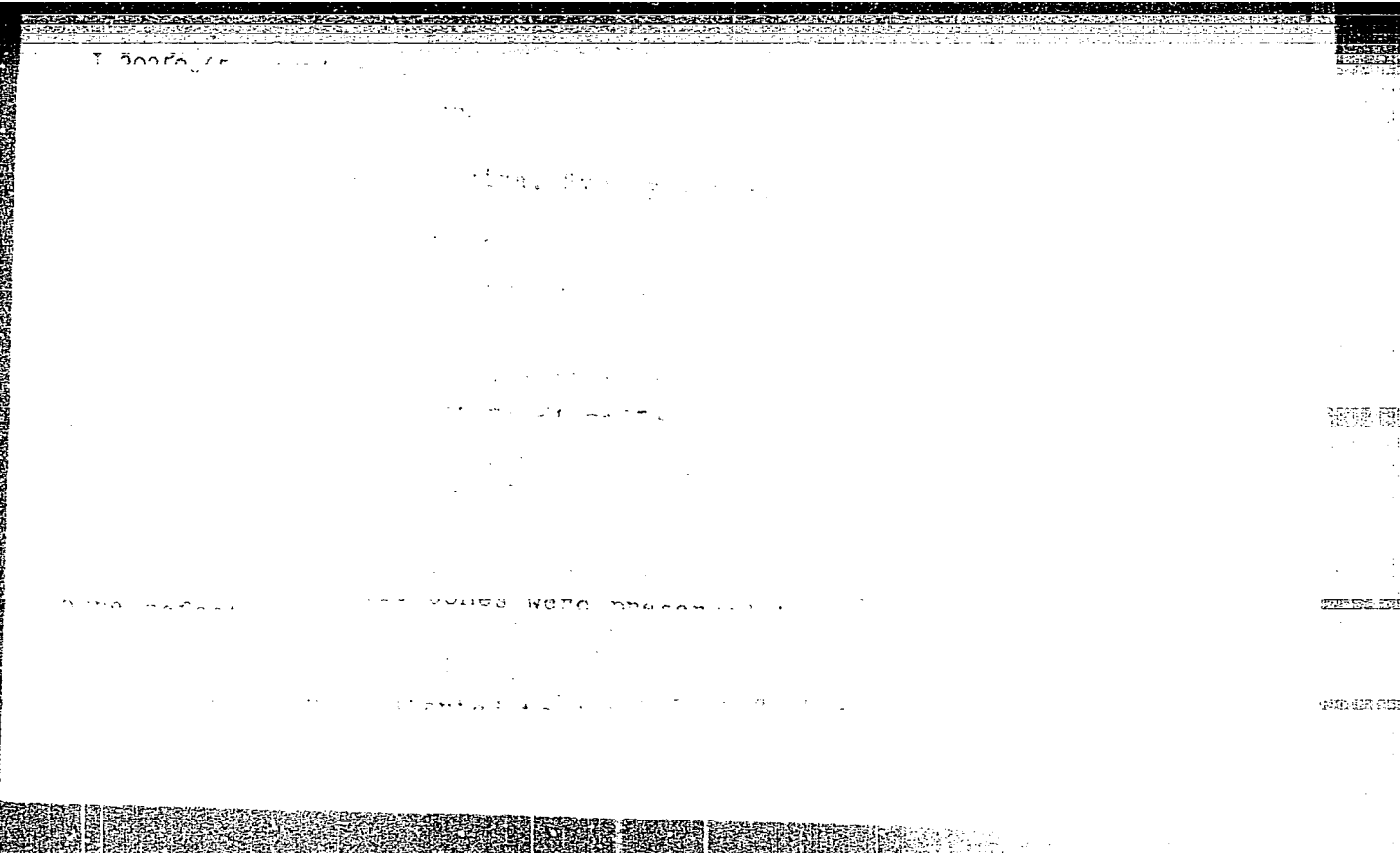
Anorectal thromboses and their treatment. Khirurgiia 36 no.9:  
51-56 S '60. (MIRA 13:11)

1. Iz kafedry obshchey khirurgii (zav. - chlen-korrespondent  
AMN SSSR prof. A.N. Filatov) I Leningradskogo meditsinskogo  
instituta imeni I.P. Pavlova.  
(HEMORRHOIDS)

BERINGER, Yu.V., doktor med.nauk; ZYKOV, A.A., kand.med.nauk

Use of preserved intestine in the treatment of burns and trophic  
ulcers. Vest.khir. no.4:70-74 '61. (MIRA 14:4)

1. Iz kliniki obshchey khirurgii (zav. - prof. A.N. Filatov)  
1-go Leningradskogo meditsinskogo instituta im. I.P. Pavlova.  
(INTESTINES—TRANSPLANTATION) (BURNS AND SCALDS)  
(VARIX)



I. 20259-65

BERINGER, Yu. V. prof.

Preservation of bone homografts in a liquid medium. Vest.  
Khir. 94 no.1:75-82 Ja '65. (MIRA 18:7)

1. Iz laboratorii konservirovaniya i peresadki tkaney i organov  
Leningradskogo nauchno-issledovatel'skogo instituta travmatologii i  
ortopedii (nauchnyy rukovoditel' instituta - prof. V.G.Vaynshteyn).

BERINKEY, L.

The taxonomic examination of the otoliths of the Cyprinidae of Hungary. In English  
p.455.  
(Magyar Nemzeti Muzeum Termzettudományi Muzeum Evkonyve, Vol. 7, 1956,  
Budapest, Hungary)

SO: Monthly List of East European Accessions (EEAL) LC. Vol. 6, no. 9, Sept. 1957. Uncl.

BERINKEY, L.

The osteology of Lucioperca lucioperca and Lucioperca volgensis. In English  
p. 313.

Orszagos Magyar Termeszetudomanyi Museum. MAGYAR NEMSETO MUZEUM TERMESZETT-  
UDOMANYI MUZEUM EV KONYVE. ANNALES HISTORICO-NATURALES MUSEI NATIONALIS  
HUNGARICI. Budapest, Hungary. vol. 9, 1958

UNCL.

Monthly List of East European Accession (EEAI) LC, Vol. 9, no. 2, Feb. 1960

BERINSKAYA, A. N. (Dr Med Sci)

Third Chair Therapy, Central Institute of Advanced Training for Physicians;  
Member, Therapeutic Clinic, Moscow City Sci Res Inst of First Aid imeni Sklifosovskiy

"Nidus Myocardia Disturbances During Infections Simulating Coronary Deficiency and Infarct  
in Myocardia"

SOURCE: Terap. Arkhiv., 20, No 2, 1948.



*BERINSKAYA, A. N.*

31042. BERINSKAYA A. N. AND VAKHURKINA, A. M.

*swelling tumor cavity heart*      *cardiac*      *internal*      *2015*  
Opukholi polostey serdtsa. V sb: Voprosy ostroy vnutrenney kliniki.  
M., 1949, s. 105-21

BERINSKAYA, A. N.

Berinskaya, A. N. "Secondary skin injuries in tularemia," Vracheb. delo, 1949, No. 3,  
paragraphs 245-48.

SO: U-3736, 21 May 53, (Letopis 'Zhurnal 'nykh Statey, No. 18, 1949).

BERINSKAYA, Anna Naumovna; KALININA, N.V.; MEYERZON, T.I.

[Outcome and prognosis of myocardial infarct] Iskhody i prognoz  
infarkta miokarda. Moskva, Medgiz, 1958. 270 p. (MIRA 13:4)  
(HEART--INFARCTION)

BERINSKIY, I., inzh.

New methods for laying ceramic-block walls. Sel'.stroi. 15  
no.9:24-27 S '60. (MIRA 13:9)  
(Lvov Province--Building blocks)

ACCESSION NR: AP4039230

Y/0010/64/000/003/0162/0171

AUTHOR: Berisa, Toma (Lieutenant Colonel in technical branch, Graduate engineer);  
Abduli, Ramiz (Major in technical branch, Graduate engineer)

TITLE: The role of the gyroscope in the control and guidance system of a projectile

SOURCE: Vojnotehnicki glasnik, no. 3, 1964, 162-171

TOPIC TAGS: gyroscope theory, gyroscope control, gyroscope guidance, missile control, missile guidance, pneumatic missile control system, direction gyroscope, speed gyroscope

ABSTRACT: The article is an introduction to the use of gyroscopes in rocket control and guidance, from the most basic features of the gyroscope phenomenon to a sketch and block diagram of the pneumatic control and guidance system of the American IB2 experimental missile, and an explanation of the system's various parts and their functions. Orig. art. has: 13 figures.

ASSOCIATION: none

SUBMITTED: 00

DATE ACQ: 12Jun64

ENCL: 00

Card 1/2

BERINSON, H.

"Materiałoznawstwo techniki próżniowej" (Material knowledge of the vacuum technique), by H. Berinson. Reported in New Books (Nowe Książki), No. 13, July 1, 1955

BERINYA, Dz. Zh.

Cand Agr Sci - (diss) "Forms and dynamics of manganese in soils of the Latvian SSR." Riga, 1961. 31 pp; with diagrams; (Ministry of Agriculture Latvian SSR); 400 copies; price not given; (KL, 10-61 sup, 221)

CERNEA, P., dr.; BERINZON, H., dr.; NEAGSU, Antoaneta, dr.

Oculopalpebral dyssynergia. Neurologia (Bucur) 10 no.2:143-148  
Mr-Ap'65.

1. Lucrare efectuata in Spitalul Clinic al Ministerului Trans-  
porturilor si Telecomunicatiilor, Iasi.



PERICSEA, Octavian  
SURNAME, Given Names

Country: Rumania

Academic Degrees: -Dr.-

Affiliation: Adjunct Minister of Health and Social Welfare (Adjunct al  
Ministrului Sanatatii si Prevederilor Sociale).

Source: Bucharest, Stiinta si Tehnica, Vol XIII, No 11, Nov 1961, pp 10-11.

Data: "Everything for the Happy Life of Man; For the Health of Man."

070 981643

*BERIOSINA, M.P.*

AUTHOR: YAKIMOV, P.A., Dr. chem. sc., BULATOV, P.K., M.D., PA - 2852  
BERIOSINA, M.P., Dr. biol. sc.

TITLE: The Preparation "Bin Chaga". (Preparat Bin-Chaga, Russian)  
PERIODICAL: Vestnik Akademii Nauk SSSR, 1957, Vol 27, Nr 4, pp 88-91 (U.S.S.R.)  
Received: 6 / 1957 Reviewed: 7 / 1957

ABSTRACT: The black birch fungus "chaga", which occurs particularly frequently in Siberia, has since long attracted the interest of scientists. Positive results were obtained by botanical laboratories and institutes for antibiotica after a long period of intense research work: In 1951 work was begun on a large scale. Technically, working up the fungus substance presents no difficulties, but hitherto it has not been possible to breed it artificially. The fungus belongs to the sterile kind of spore-bearing *inonotus obliquus*.

The new preparation, which is called "Bin-Chaga", was administered to 457 patients between 1951 and 1955 (sarcoma, carcinoma, malignant growths of various kinds). Results: With the majority of patients treated with "Bin-Chaga" growths did not increase, while in the case of a smaller number of patients they continued to shrink; in the case of the latter patients results were absolutely positive.

As a next stage, patients suffering from cancer (internal growths), and also in this case astonishing success was achieved.

Card 1/2

The Preparation "Bin Chaga".

PA - 2852

In 1956 the preparation was admitted for sale to the general public after it had been thoroughly tested. The process of preparation is described on the basis of drawings.

ASSOCIATION: Not given  
PRESENTED BY:  
SUBMITTED:  
AVAILABLE: Library of Congress

Card 2/2

L 1105-66 EWT(m)/EWP(i)/EWP(j)/EWP(t)/EWP(b) RM/D

ACCESSION NR: AP5023656

UR/0119/65/000/008/0020/0021  
621.793:678.7

AUTHOR: <sup>44,55</sup> Berishvili, A. I. (Engineer); <sup>44,55</sup> Topchiashvili, M. I. (Engineer)

TITLE: <sup>6</sup> Metallization of polypropylene <sup>19,44,55</sup> parts for instruments

31  
B

SOURCE: Priborostroyeniye, no. 8, 1965, 20-21

TOPIC TAGS: polypropylene plastic, metal coating <sup>16</sup> <sub>44,55</sub>

ABSTRACT: The following method has been developed for the metallization of parts manufactured from polypropylene of any shape or size but with a radius of over 3 mm. The part is sandblasted, cleaned with compressed air, and placed in a glass or metallic container. Zinc wire 1.5 mm in diameter is melted in an acetylene-oxygen flame or an electric arc and spread on the part surface with compressed air. The part is then placed in cold water and dried. Depending on the requirements, coatings 0.1 to 0.8 mm thick can be prepared. Parts metallized by this method are suitable for service at temperatures of up to 100C. Orig. art. has: 1 table. [B0]

ASSOCIATION: none

Card 1/2

L 1105-66

ACCESSION NR: AP5023656

SUBMITTED: 00

ENCL: 00

SUB CODE: MT, MM <sup>0</sup>

NO REF SOV: 000

OTHER: 000

ATD PRESS: 4097

Card 212 *DP*

1. BERISHVILI, F. G.
2. USSR (600)
4. Tea
7. Changes in vegetative and chemical characteristics in the process of growth and development of the tea plant, Soob. AN SSR, 12, No. 10, 1951.
9. Monthly List of Russian Accessions, Library of Congress, April, 1953, Uncl.

BERISHVILI, G.A., inzh.

Influence of borehole stemming on the effectiveness  
of blasting in the Chiatursk manganese deposits. (MIRA 18:11)  
Vzryv. delo no.57/14:330-338 '65.

1. Institut gornogo dela imeni TSulukidze AN Gruzinskoy  
SSR.

BERISHVILI, G.A., gornyy inzh.; GABIDZASHVILI, V.D., gornyy inzh.

Experience in using short-delay blasting in the Lenin mine of  
Tkibulugol' trust. Ugol' 36 no.9:20-21 S '61. (MIRA 14:9)

1. Institut gornogo dela im. G.A.TSulukidze AN Gruzinskoy SSR.  
(Georgia--Coal mines and mining) (Blasting)



BFRISHVILI, G.A.

Effect of certain factors on the net rate of percussive-rotary drilling. Vzryv. delo no.46/3:34-52 '61. (MIRA 15:1)  
(Boring)

BERISHVILI, G.A. Primali uchastiye: GABIDZASHVILI, V.D., inzh.;  
KACHARAYA, G.G., inzh.; KASHAKHASHVILI, G.N., inzh.; PIRTSKAHALAVA,  
D.T., inzh.; TEZADZE, A.I., inzh.

Results of experiments in studying the effective use of short-  
delay blasting. Trudy Inst.gor.dela AN Gruz.SSR 2:215-227 '60.  
(MIRA 14:10)

1. Institut gornogo dela AN Gruzinskoy SSR (for Gabidzashvili,  
Kacharava, Kashakashvili, Pirtskhalava, Tevzadze).  
(Blasting)

BERISHVILI, G.A., gornyy inzh.; GABIDZASHVILI, V.D., gornyy inzh.

First Republic Conference on Boring and Blasting held in  
Tiflis. Ger. zhur. no.10:73 0 '63. (MIRA 16:11)

1. Institut gornogo dela AN Gruzinskoy SSR.

BERISHVILI, G.A., inzh.; GABIDZASHVILI, V.D., inzh.

Effect of the number of delay stages on the efficiency of charges  
explosion in case of wedge crosscutting. Shakht.stroi. 6 no.11:16-  
18 N '62. (MIRA 15:12)

1. Institut gornogo dela AN Gruzinskoy SSR.  
(Blasting)

BERISHVILI, G. A.; SINDZHIKASHVILI, A. N.; MIKHEL'SON, R. V.

Efficiency of using short delay blasting in the coal mines of  
Georgia. Ugol' 37 no.10:48-50 O '62. (MIRA 15:10)

1. Institut gornogo dela AN Gruzinskoy SSR.

(Georgia--Blasting)

BERISHVILI, G.A.

Using various forms of wedge cuts in Georgian mines. Vzryv.  
delo no.55/12:275-291 '64. (MIRA 17:10)

1. Institut gornogo dela im. G.A. TSulukidze AN GruzSSR.

BERISHVILI, G.P.

772. Чегвадзе Давид М. Александрович. Диссертация по специальности "Математика" в Институте математики АН СССР в Иерусалиме. 1941. 38 с. [2] ил. Тб., Груз. ССР, 1954, № 1, 10. Заг. 1954, 25.1.

773. Чедашвили Гурген Александрович. Взаимодействие у растений с лесными вредителями. 1954. 90 с. Заг. 1955, 25.1.

774. Чрдашвилия Арчил Георгиевич. Историческое развитие сводки полиархидных насекомых.

775. Чубабадзе Илья Соломонович. Об основных энергетических соотношениях в аргентине. 1941. 90 с. Заг. 1941, 30.6.

776. Шалаур Рестоу Сиеванович. Обatomой и мочевой жидкостях больных Б-О в Грузии. 1954. 78 с. Заг. 1955, 15.6.

**შეფუთვითი გეოგრაფია**

777. ჯანაშვილი ვახტანგ დავითის ძე. გეოგრაფიული მდებარეობის როლი საქართველოს სსრ-ის სოფლის მეურნეობის განვითარებაში (1923-1945 წწ.). 1951. 98, 111, 113, 115, 117 ს. ფ. 100, ც. 2, 1956; ფ. 6, 1957; ფ. 100, ც. 2, 1956; ფ. 6, 1957; ფ. 100, ც. 2, 1956; ფ. 6, 1957; ფ. 100, ც. 2, 1956; ფ. 6, 1957.

778. ჯანაშვილი ვახტანგ დავითის ძე. გეოგრაფიული მდებარეობის როლი საქართველოს სსრ-ის სოფლის მეურნეობის განვითარებაში (1923-1945 წწ.). 1951. 98, 111, 113, 115, 117 ს. ფ. 100, ც. 2, 1956; ფ. 6, 1957; ფ. 100, ც. 2, 1956; ფ. 6, 1957; ფ. 100, ც. 2, 1956; ფ. 6, 1957.

779. ჯანაშვილი ვახტანგ დავითის ძე. გეოგრაფიული მდებარეობის როლი საქართველოს სსრ-ის სოფლის მეურნეობის განვითარებაში (1923-1945 წწ.). 1951. 98, 111, 113, 115, 117 ს. ფ. 100, ც. 2, 1956; ფ. 6, 1957; ფ. 100, ც. 2, 1956; ფ. 6, 1957; ფ. 100, ც. 2, 1956; ფ. 6, 1957.

780. ჯანაშვილი ვახტანგ დავითის ძე. გეოგრაფიული მდებარეობის როლი საქართველოს სსრ-ის სოფლის მეურნეობის განვითარებაში (1923-1945 წწ.). 1951. 98, 111, 113, 115, 117 ს. ფ. 100, ც. 2, 1956; ფ. 6, 1957; ფ. 100, ც. 2, 1956; ფ. 6, 1957; ფ. 100, ც. 2, 1956; ფ. 6, 1957.

781. ჯანაშვილი ვახტანგ დავითის ძე. გეოგრაფიული მდებარეობის როლი საქართველოს სსრ-ის სოფლის მეურნეობის განვითარებაში (1923-1945 წწ.). 1951. 98, 111, 113, 115, 117 ს. ფ. 100, ც. 2, 1956; ფ. 6, 1957; ფ. 100, ც. 2, 1956; ფ. 6, 1957; ფ. 100, ც. 2, 1956; ფ. 6, 1957.

782. ჯანაშვილი ვახტანგ დავითის ძე. გეოგრაფიული მდებარეობის როლი საქართველოს სსრ-ის სოფლის მეურნეობის განვითარებაში (1923-1945 წწ.). 1951. 98, 111, 113, 115, 117 ს. ფ. 100, ც. 2, 1956; ფ. 6, 1957; ფ. 100, ც. 2, 1956; ფ. 6, 1957; ფ. 100, ც. 2, 1956; ფ. 6, 1957.

783. ჯანაშვილი ვახტანგ დავითის ძე. გეოგრაფიული მდებარეობის როლი საქართველოს სსრ-ის სოფლის მეურნეობის განვითარებაში (1923-1945 წწ.). 1951. 98, 111, 113, 115, 117 ს. ფ. 100, ც. 2, 1956; ფ. 6, 1957; ფ. 100, ც. 2, 1956; ფ. 6, 1957; ფ. 100, ც. 2, 1956; ფ. 6, 1957.

784. ჯანაშვილი ვახტანგ დავითის ძე. გეოგრაფიული მდებარეობის როლი საქართველოს სსრ-ის სოფლის მეურნეობის განვითარებაში (1923-1945 წწ.). 1951. 98, 111, 113, 115, 117 ს. ფ. 100, ც. 2, 1956; ფ. 6, 1957; ფ. 100, ც. 2, 1956; ფ. 6, 1957; ფ. 100, ც. 2, 1956; ფ. 6, 1957.

785. ჯანაშვილი ვახტანგ დავითის ძე. გეოგრაფიული მდებარეობის როლი საქართველოს სსრ-ის სოფლის მეურნეობის განვითარებაში (1923-1945 წწ.). 1951. 98, 111, 113, 115, 117 ს. ფ. 100, ც. 2, 1956; ფ. 6, 1957; ფ. 100, ც. 2, 1956; ფ. 6, 1957; ფ. 100, ც. 2, 1956; ფ. 6, 1957.

197  
 Dissertation for degree of  
 Candidate Physical-Mathematical Sciences

სსრკ-ის მეცნიერებათა აკადემიის  
 თბილისის სახელმწიფო უნივერსიტეტი

HRRISHVILI, G.P.

Study of the frequency of geomagnetic storms [in German with summary  
in Russian]. Trudy Inst.geofiz.AN Gruz 13:21-43 '54. (MIRA 9:9)  
(Storms) (Magnetism, Terrestrial)



69826

SOV/169-59-2-2039

Translation from: Referativnyy zhurnal, Geofizika, 1959, Nr 2, p 153 (USSR)

3.9100

AUTHOR:

Berishvili, G.P.

TITLE:

On the Study of the Fundamental Characteristics of Geomagnetic Storms  
With Sudden Origin

PERIODICAL:

Tr. In-ta geofiz. AS GruzSSR, 1957, Vol 16, pp 39 - 51

ABSTRACT:

A statistical investigation of the sudden origins (SC) of magnetical storms is carried out based on the analysis of observations of the magnetic observatory in Karsani - Dusheti during 1933 - 1945. The SC are subdivided into four types (SC - the sudden increase in H; SC\* - a small negative pulse precedes the sudden increase in H; inversed SC - the sudden decrease in H; inversed SC\* - a positive pulse precedes the decrease in H). The diurnal, yearly, and secular courses of the SC and SC\* are discussed. The results obtained are compared with the data from other observatories. A brief theoretical discussion of the character of the SC is given, which made it possible to explain the increase in the probability of the SC with in-

Card 1/2

69826

SOV/169-59-2-2039

On the Study of the Fundamental Characteristics of Geomagnetic Storms With Sudden  
Origin

creasing intensity of the storm, on the basis of the fundamental equations of the  
Chapman-Ferraro theory. Lists of the SC for 1933 - 1945 are given with the indication  
of the SC-type, the time point of its beginning, and the amplitude of H.

N.B.

Card 2/2

NODIA, M.Z.; BERISHVILI, G.P.; MATSABERIDZE, V.S.

Some results of investigating microterritorial and micro-temporal secular variations of the earth's magnetic field in eastern Georgia. Trudy Inst.geofiz.AN Gruz.SSR 17:73-79 '58. (MIRA 13:4)

(Georgia--Magnetism, Terrestrial)

BERISHVILI, G.P.; KHVEDELIDZE, N.S.

Fluxmetric observations on variations in the geomagnetic field at  
Dasheti. Trudy Inst. geofiz. AN Gruz. SSR 18:23-27 '60.

(Magnetism, Terrestrial--Observations)

(MIRA 13:10)

BERISHVILI, G. P.; KHVEDELIDZE, N. S.; GOGATISHVILI, Ya. M.

Study of the microstructure of baylike disturbances. Trudy  
Inst. geofiz. AN Gruz. SSR 20:13-18 '62.

(MIRA 16:1)

(Magnetic storms)

NODIA, M. Z.; BERISHVILI, G. P.; KATSIASHVILI, N. A.

Some results of studying the pulsations of a geomagnetic  
field. Trudy Inst. geofiz. AN Gruz. SSR 20:19-25 '62.  
(MIRA 16:1)

(Magnetism, Terrestrial)

BERISHVILI, G.P.

Probability of the recurrence of geomagnetic storms. Soob. AN Gruz.  
SSR 30 no.4:431-436 Ap '63. (MIRA 17:9)

1. Institut geofiziki AN GruzSSR, Tbilisi. Predstavleno akademikom  
Ye.K. Kharadze.

ACC NR: AR6032142

SOURCE CODE: UR/0169/66/000/006/A037/A037

AUTHOR: Nodia, M. Z.; Berishvili, G. P.; Katsiashvili, N. A.

TITLE: Perturbed variations of the geomagnetic field according to magnetograms of observatories at Tbilisi-Korsani-Dushati from 1900 to 1956

SOURCE: Ref. zh. Geofizika, Abs. 6A236

REF SOURCE: Sb. Nekotoryye vopr. issled. elektromagnitn. polya Zemli. No. 1(23). Tbilisi, Metsniyereba, 1965, 5-13

TOPIC TAGS: ~~geomagnetic~~ magnetic disturbance, solar cycle, geomagnetic field, magnetogram

ABSTRACT: A catalog of magnetic disturbances compiled by the Tbilisi Observatory is described. The Tbilisi Observatory was located from 1900 to 1904 at Tbilisi, from 1908 to 1934 at Karsani, and from 1936 to 1956 at Dushati. This catalog contains data on 2587 storms, of which 640 are intense or very intense and 804 are moderate. The rest of the storms were small bay-type disturbances, sudden pulses, and short-period oscillations. The results of statistical investigations of storms, small disturbances, their distribution by solar cycles and seasons, and their diurnal variations are given.

SUB CODE: 08/ SUBM DATE: none

Card 1/1

UDC: 525.241



L0834-66

ACCESSION NR: AP5020035

UR/0348/65/000/008/0017/0018  
632.958.31

AUTHOR: Berishvili, I. (Senior research associate); Akhvlediani, Ye. (Aspirant) <sup>4</sup> <sub>B</sub>

TITLE: Bacterial rodenticides

SOURCE: Zashchita rasteniy ot vreditel'ey i bolezney, no. 8, 1965, 17-18

TOPIC TAGS: bacterial rodenticide, field mouse eradication

ABSTRACT: In 1964, the bacterial method was used in Eastern Georgia (SSSR) on a massive scale against field mice. The grain bacterial preparation was prepared from the Prokhorov (No. 5170) and Isachenko bacterial strains and wheat, oat, and barley grain. A description of the procedure and ingredients employed in the preparation of the rodenticides is given. The maximum titer of the bacterial preparations was 7100 million bacteria, the minimum was 2100 million. Laboratory virulence tests showed that as a rule, field, house, and white mice died after 6 to 8 days. In the field, the preparation was spread in the proportion of 1.8 kg per hectare. One month after the treatment, the number of field mice dropped an average of 99.1%. The preparation was also tested on stock and poultry farms; no adverse effects whatsoever were observed in the animals or poultry. The development and spread of the epizootic on a single farm was also investigated. It

Card 1/2

L00834-66

ACCESSION NR: AP5020035

is concluded that the bacterial preparation used in Georgia was highly effective: the number of mice was drastically reduced and continued to remain at low levels for 8 months.

ASSOCIATION: GruzIZR

SUBMITTED: 00

ENCL: 00 SUB CODE: LS, GO

NO REF SOV: 000

OTHER: 000

Card

2/2

BERISHVILI, I.M.

The vole *Microtus socialis* Pall. and current methods of combating it [in Georgian with summary in Russian]. Trudy Inst. zashch.rast. AN Gruz. SSR 9:29-41 '53. (MIRA 8:2)  
(Georgia--Field mice)

BERISHVILI, I.M., kand.sel'skokhoz.nauk; AKHVLEDIANI, Ye.N., aspirantka;  
PODARYASHCHIY, A.S., agronom; POLITOV, A.K., entomolog (Groznyy);  
SELIN, I.V., starshiy nauchnyy sotrudnik; BUGROVA, T.I.; POPOVA,  
K.N.; KOVALEV, N.V., kand.sel'skokhoz.nauk; NASIROV, A.

Brief information. Zashch. rast. ot vred. i bol. 8 no.11:56-58  
N '63. (MIRA 17:3)

1. Gruzinskiy institut zashchity rasteniy (for Berishvili, Akhvlediani).
2. Opytnoye khozyaystvo "Boyevik", g. Novozybkov, Bryanskoy obl. (for Podaryashchiy).
3. Smolenskaya oblastnaya sel'skokhozyaystvennaya opytnaya stantsiya (for Selin).
4. Punkt sluzhby ucheta i prognozov, g.Kurgan-Tyube, Tadzhikskoy SSR (for Bugrova, Popova).
5. Maykopskaya opytnaya stantsiya Vsesoyuznogo nauchno-issledovatel'skogo instituta rasteniyevodstva (for Kovalev).
6. Uzbekskiy institut zashchity rasteniy, Tashkent (for Nasirov).

BERISHVILI, Iosif Stepanovich

[New efficient materials and progressive structures in the construction industry] [Novye effektivnye materialy i progressivnye konstruksii v stroitel'stve. Tbilisi, Izd-vo "Sabchota Sakartvelo"] 1964. 141 p. [In Georgian]  
(MIRA 17:4)

BERISHVILI, T.A.

PAS inhalation therapy of respiratory tuberculosis in the sanatorium  
LIBANI; preliminary communication. Probl. tub. no.4:69-70 J1-Ag '54.  
(MIRA 7:11)

1. Iz sanatoriya imeni Lenina v Gul'ripshe (glavnyy vrach  
TSitsabadze)

(TUBERCULOSIS, PULMONARY, therapy.

PAS, inhalation)

(PARAAMINOSALICYLIC ACID, therapeutic use,  
tuberc., respiratory, inhalation)

(INHALATION THERAPY, in various diseases,  
PAS in tuberc. of resp. organs)

YUGOSLAVIA

Docent Dr Berislav BERIC [Affiliation not given.]

"Role and Opportunity of the General Practitioner in Early Diagnosis of Genital and Mammary Carcinoma in Women."

Belgrade, Narodno Zdravlje, Vol 19, No 5, 1963; pp 162-168.

Abstract : A general review of various statistical data regarding genital and mammary carcinoma in women in various parts and the country as a whole in Yugoslavia 1950-1962. Among the primary ways available to decrease the rapidly increasing mortality from such tumors is training the GP to carry out routinely in all his patients a summary examination of breasts and take vaginal cytologic smear. Six tables, 15 Western and 11 Yugoslav (1 unpublished) references.

1/1





ACC NR: AT7004430

SOURCE CODE: UR/2531/66/000/184/0022/0030

AUTHOR: Beritashvili, B. Sh.; Brounshteyn, A. M.; Kazakova, K. V.

ORG: None

TITLE: Dependence of the integral function of transmission through the atmosphere on the temperature of black radiation

SOURCE: Leningrad. Glavnaya geofizicheskaya observatoriya. Trudy, no. 184, 1966. Aktinometriya, atmosfernaya optika i ozonometriya (Actinometry, atmospheric optics and ozonometry), 22-30

TOPIC TAGS: atmospheric radiation, atmospheric temperature, atmospheric water, black body radiation, radiation effect, radiation intensity, radiation physics, integral function

ABSTRACT: The dependence of the integral function of transmission of longwave radiation on the temperature of black radiation is reviewed. The method used to investigate the relationship between the integral function of transmission and radiator temperature was based on that described in A. M. Brounshteyn's "Experimental Investigation of the Integral Function of Transmission," *Gidrometeoizdat*, Leningrad, 1963, and utilized a telescopic radiometer, a vacuum radiation thermo-element with two separate receiving areas as the receiver, a heated black radiator and a black cavity cooled to the temperature of liquid nitrogen, serving as the

Card 1/2

UDC: none

ACC NR: AT7004430

"radiation screen." The requirement for non-selectivity in the receiver is noted, as is the requirement for accuracy in maintaining the sequence with which the elements are contained in the measurement system: black source - layer of atmosphere being investigated - non-selective radiation receiver, in which the only selective element is the atmosphere. Any random, selective element making its appearance in the sequence will distort the results. Measurements were made in Voyeykovo, near Leningrad, in the summers of 1962 and 1963, with radiators set up 59.7 meters from the telescopic radiometer. The results are plotted and preliminary data for the special case when the amount of water deposited is almost 0.05 cm are presented. Linear changes in the integral function of transmission, the magnitudes of which equal 27% per 100° of change in radiation temperature, are obtained for the 10° to 80°C range. The connection between the results obtained and recently published data on the transmission function, obtained by the two radiators method, is discussed. Work on refining the data is in progress and will be published in the form of correction factors for data already published. Senior Technicians E. S. Kokko and V. S. Oguryeyev participated in taking the measurements and processing the data, and the authors wish to express their appreciation to them. Orig. art. has: 10 formulas and 3 figures.

[29]

SUB CODE: 04/SUBM DATE: None/ORIG REF: 008/OTH REF: 009

Card 2/2

ACC NR: AP7006055

SOURCE CODE: UR/0362/66/002/009/0997/0999

AUTHOR: Beritashvili, B. Sh; Dovgalyuk, Yu. A.

ORG: Main Geophysical Observatory (Glavnaya geofizicheskaya observatoriya)

TITLE: Influence of the heat of phase changes on the rate of diffusion processes in drop clouds

SOURCE: AN SSSR. Izvestiya. Fizika atmosfery i okeana, v. 2, no. 9, 1966, 997-999

TOPIC TAGS: atmospheric diffusion, atmospheric cloud, atmospheric density

ABSTRACT: The condensation growth of individual drops in clouds has been investigated in many studies, but in deriving the computation formulas it has been assumed that in the term containing the correction for curvature, the temperature of a droplet is equal to the temperature of the surrounding medium. The purpose of this paper is to derive a refined expression for the rate of condensation growth of a drop, obtaining in explicit form the dependence of the course of this process on the change of its temperature, caused by the release of the latent heat of condensation, and determination of the total condensation increment of the mass of the population of cloud droplets described by the formula of the Khragian-Mazin distribution. Neglecting the thermal and diffuse interaction of cloud particles, due to their smallness in comparison with the distances between them, for the total increment of the mass of droplets in poly-

Card 1/2

UDC: 551.574.1

09270858

ACC NR: AP7006055

disperse clouds it is possible to write

$$\frac{dW}{dt} = n \int_0^{\infty} \eta(r) \frac{dm}{dt} dr,$$

where  $W$  is the mass of droplets in 1 g of cloud air;  $n$  is the total quantity of droplets in 1 g of cloud air;  $\eta(r)$  is the relative quantity of droplets with the radius  $r$  present in 1 g of cloud air. Using the Khrgian-Mazin function as the cloud droplet size distribution function

$$\eta(r) = \frac{1}{n\rho'} ar^2 e^{-br}, \quad a = 1.45W/\rho'\bar{r}^6, \quad b = 3/\bar{r}$$

where  $\rho'$  is air density,  $\bar{r}$  is the mean arithmetical radius of the droplets, and taking into account that for condensation nuclei in most cases  $M' \leq 10^{-13}$  g and  $\omega M'/r^3 \ll 1$  with  $r \geq 1$   $\mu$  m, the first of these expressions can be integrated and used for determining the actual condensation growth of the mass of the population of cloud droplets under the condition that the process occurs in the already forming drop-size spectrum and the number of the drops remains constant in the considered volume of cloud air. Orig. art. has: 1 figure and 9 formulas. [JPRS]

SUB CODE: 04

Card 2/2

BERITASHVILI, I.S.

Central inhibition according to I.M. Sechenov's experiments  
and concepts and its current interpretation. Trudy Inst. fiziol.  
AN Grus. SSR. 14:3-21 '65. (MIRA 18:10)

BERITASHVILI, I.S.; AYVAZASHVILI, I.M.; ORDZHONIKIDZE, TS.A.

Characteristics and origin of delayed reactions in dogs. Trudy  
Inst. fiziol. AN Gruz. SSR. 14:23-38 '65. (MJRA 18:10)

BERITASHVILI, I. S.

See: BERITOV, I. S.

In 1949 Beritashvili was Russianized

BERITASHVILI T. P.

Dezinfektsiya i dezinitsiruyushchiye sredstva (Disinfection and Disinfectants).  
Tbilisi, Gomizdat Georgian SSR 1960, 59 pages. In the Georgian language.

U-4258



BERITIC, D; DJURIC, D.

Poisoning of 4 workers by exhaust gases in a tank. Arh. hig. rada 5  
no.2:258-264 1954.

1. Institut za higijenu rada, Zagreb.  
(CARBON MONOXIDE, pois.  
occup.)  
(OCCUPATIONAL DISEASES  
carbon monoxide pois.)

BERITIC, T.

DOGAN, S. ; BERITIC, T. "Occupational manganese poisoning from the clinical viewpoint and from the viewpoint of industrial hygiene." p. 139.  
(Arhiv Za Higijenu Rada, Vol. 4, no. 2, 1953. Zagred.)

SO: Monthly List of East European Accessions, Vol. 3, No. 6, Library of Congress,  
Feb. 1954, Unc.

BERITIC, T.

Acute poisoning with fumes from boiling trichlorethylene. Arh.  
hig.rada 6 no.3-4:398-402 1954.

1. Odjel za higijenu rada Instituta za medicinska istrasivanja  
Jugoslavenske akademije, Zagreb.

(TRICHLORETHYLENE, pois.

fumes, in optical lens indust.(Ser))

(POISONING,

trichlorethylene fumes in optical lens indust.(Ser))

BERITIC, T.; VALIC, F.

Methemoglobinemias caused by toxic effects of nitrates. Arh. hig rada 6 no.6:303-310 1955.

1. Institut za medinska istrazivanja Jugoslavenske akademije znanosti i umjetnosti, Zagreb. Institute of Industrial Hygiene, Zagreb.

(METHEMOGLOBINEMIA, etiol. & pathogen.

nitrite pois. in meat preserv. indust. (Ser))

(NITRITES,

pois.. causing methemoglobinemia in meat preserv. indust. (Ser))

(POISONING,

nitrites, causing methemoglobinemia in meat preserv. indust. (Ser))

(OCCUPATIONAL DISEASES,

methemoglobinemia caused by nitrite pois. in meat preserv. indust. (Ser))

B=ARTIC, I

BERITIC, Tihomil, Dr.; FLEISCHACKER, Miroslav, dr.

Diagnosis of lead poisoning. Lijec. vjes. 77 no.8-9:  
367-378 Aug-Sept 55.

1. Iz Instituta za medicinska istrazivanja Jugoslavenske  
akademije znanosti i umjetnosti u Zagrebu.  
(LEAD POISONING, diagnosis,)

BERITIC, T.; MOHACEK, I.

Acute occupational poisoning with nitric fumes. Arh. hig. rada  
7 no.1:31-40 1956.

1. Institut za medicinska istrazivanja Jugoslavenske akad.  
znanosti i umjetnosti, Zagreb, i Interna klinika Medicinskog  
fakulteta, Zagreb.

(NITRATES, poisoning,

lung edema caused by nitric acid fumes in indust. (Ser))

(LUNGS DISEASES, etiology and pathogenesis

edema caused by nitric acid fumes in indust. (Ser))

(EDEMA,

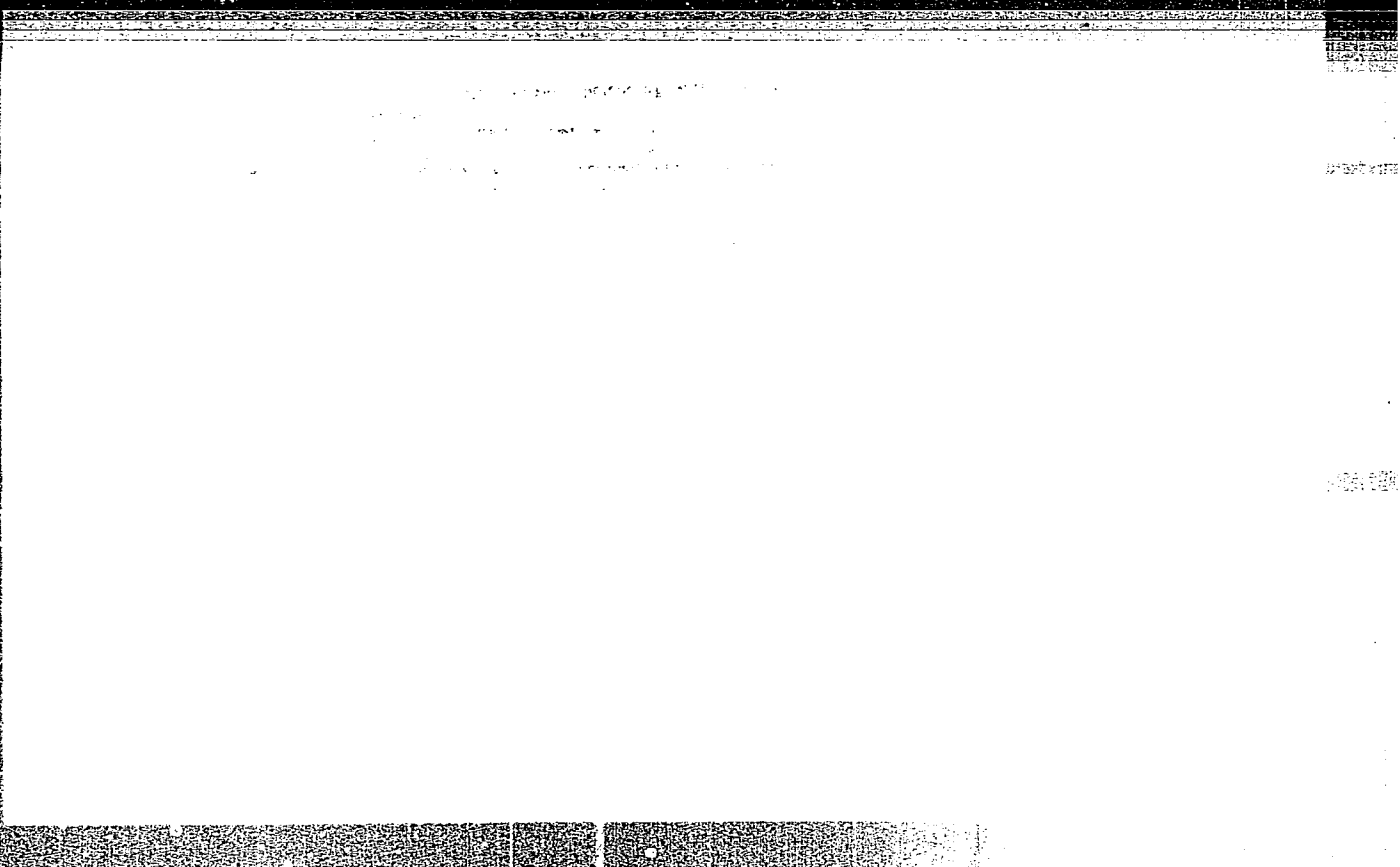
lungs, caused by nitric acid fumes in indust. (Ser))

BERITIC, Tihomil; DJURIC, Dusan

Lead poisoning caused by pottery glazing. Higijena, Beogr.  
8 no.1:12-24 1956.

1. Institute of Medical Research, Zagreb.  
(LEAD POISONING, etiol. & pathogen.  
lead-glazing of pottery (Ser))





BERITIC, T.

Lead poisoning and the role of endemic nephropathy. Lijec. vjes.  
81 no. 7-8:523-525 '59.  
(NEPHRITIS etiol.)  
(LEAD POISONING)

BERITIC, T.

Blood groups and diseases. Liječ. vjes. 81 no.11:874-876 '59.  
(BLOOD GROUPS)

SARIC,Marko,dr.; KOSOKOVIC,Smiljka,dr.; ZORICA,Mladen,dr.; BKRITIC,Tihomil,dr.

Occupational lead poisoning in workers employed in the construction of the "Liberty Bridge". Lijec. vjes. 81 no.11:803-809 '59.

1. Iz Instituta za medicinska istrazivanja JAZU i Interne klinike Medicinskog fakulteta Sveucilista u Zagrebu.

(LEAD POISONING)