BABIKOV, M. A.

Modern High-Voltage Equipment (Sovremennyye electricheskiye apparaty vysokogo napryazheniya), Gosenergoizdat, 271 pp, 1951.

Book W-22517, 29 Apr 52

BABIKOV, M.A.

PHASE X TREASURE ISLAND BIBLIOGRAPHICAL REPORT AID 611 - X

BOOK Call No.: TK145.B25
Author: BABIKOV, M. A., Doc. of Tech. Sci.
Full Title: ELECTRICAL APPARATUS. First Part: THEORETICAL PRINCIPLES
Transliterated Title: Elektricheskiye apparaty. Chast' pervaya: Osnovy teorii
PUBLISHING DATA
Originating Agency: None
Publishing House: State Power Engineering Publishing House
Date: 1951 No. pp.: 420 No. of copies: 10,000
Editorial Staff
Contributors and appraisers: Academician V. S. Kulebakin, Prof. O. B. Bron, and members of the Chair of Electrical Apparatus of the Moscow Institute of Power Engineering im. Molotov: B. K. Bul', R. A. Baryshnikova, M. G. Borodina, P. A. Varlashkin, I. I. Pekker, P. V. Sakharov, and A. A. Chunikhin.
Editor: Ye. L. L'vov, Kand. of Tech. Sci.
PURPOSE AND EVALUATION: The book is written as a textbook for the course in electrical apparatus of electrical and mechanical faculties of institutions of higher education. It was approved as such by the Ministry of Higher Education of the USSR. It may also

be of great use for engineers and technicians dealing with the design and manufacture of electrical apparatus. It is a comprehensive textbook, and very probably has no corresponding equivalent in the English language. The book published in England by William Wilson: The Calculation and Design of Electrical Apparatus, Chapman and Hall Ltd., London, 3rd ed., 1941, (240 pp.), can be considered as closest to it but it is not by far as complete as the book by Babikov. Another book in this line was written in the USA by Frank Amos Eastom: Electric Power Apparatus, University of Colorado, 3rd ed., 1954 (261 pp.). However, it deals neither with the theory nor the design of electrical apparatus. Although there are many books on the calculation and design of electrical machinery and transformers, there is probably none that attempts to give the principles upon which the complete design of switchgear, automatic control gear, relay and other protective equipment, instruments and similar apparatus is based. It is true that the various isolated problems and individual portions of the subject are included in general electrical engineering textbooks and books on general design or certain types of electrical power apparatus. The value of Babikov's book, however, consists in the fact that it is a very complete

Elektricheskiye apparaty. Chast' pervaya: Osnovy teorii AID 611 - X

treatise about all the major problems, theoretical and structural, concerning electric power apparatus. The book was translated in 1954 into German in East Germany under the title: Wichtige Bauteile Elektrischer Apparate, thus, as the Foreword to the German edition says, filling an important gap in German technical literature.

TEXT DATA

Coverage: This book is the first part of a general course"Electrical Apparatus" which was taught for several years by the author at the electromechanical faculty of the Moscow Power Engineering Institute im. V. M. Molotov. The first part introduces the basic theory of the various fields common for the majority of electrical power apparatus, independently of their size, the kind of their current, size of nominal voltage, purpose, etc. These problems include a discussion of magnetic circuits, nonlinear resistances, thermoelectricity, electrodynamics, heating processes, electric arc and arc quenching devices, electric contacts, and, finally, problems of movement and of damping of the movable parts of electrical apparatus. The second part of this work will be devoted to the structure and design of the basic types of electrical power apparatus. The book is well illustrated, contains several numerical

Elektricheskiye apparaty. Chast' pervaya: Osnovy teorii AID 611 - X

tables with general physical and specific electrical, and mechanical and chemical data. It includes several theoretical calculations of the various processes and of the elements of electrical apparatus.

Table of Contents

Elektricheskiye apparaty. Chast' pervaya: Osnovy teorii — AID 611 - X

Elektricheskiye apparaty. Chast' pervaya: Osnovy teorii — AID 611 - X

Elektricheskiye apparaty. Chast' pervaya: Osnovy teorii — AID 611 - X

Elektricheskiye apparaty. Chast' pervaya: Osnovy teorii AID 611 - X

No. of References: 79, all Russian. (1, 1906; 26, 1931-1939; 52, 1940-1951).

Facilities: In addition to the names of contributors and appraisers, the author brings in several names of Russian and Soviet scientists who contributed to the development of electrical power apparatus. These include among the recent ones: Academician A. A. Chernyshev, Prof. A. A. Smurov, A. Ya. Buylov, V. K. Arkad'yev, V. I. Kovalenkov, N. Ye. Lysov, B. I. Filippovich, A. M. Senkevich, F. A. Stupel'. Among the institutions and factories are enumerated the several polytechnical and power-engineering institutes and factories: VEK and "Dinamo" in Moscow, Siemens in Leningrad, and Vol'ta in Revel' which though representing foreign capital, employed Russian engineers. Now several Soviet factories of electrical apparatus have their own laboratories in which new types of apparatus are developed. An important role in this field is also played by the great users of apparatus, like the Ministry of Electric Power Stations, Mosenergo, Donenergo, Lenenergo, and the central scientific and research laboratories of the various ministries.

10/10

DUBIKOV, M.A.

1. MESHKOV, V. V.: IVANOV, A. P.: KIRILLIN, V. A.: GLAZUNOV, A. A.: PANTYUSHIN, V. S.: ZOLOTAREV, T. L.: BABIKOV, M. A.: FABRIKANT, V. A.: ZHDANOV, G. M.: PEREKALIN, M.A.: KOMAR, V. G.: TALITSKIY, A. V.

2. USSR (600)

4. Kaganov, i. l. 1902-

7. Professor I. L. Kaganov; fifieth birthday anniversary. Elektrivhestvo, No.11, 1952.

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

BABIKOV, M. A.

AID P - 1233

Subject : USSR/Electricity

Card 1/1 Pub. 27 - 28/34

Author : Babikov, M. A. and six more co-signers

Title : Professor S. M. Bragin: his 60th birthday and 35 years of scientific and educational activity. (Current Events)

Periodical : Elektrichestvo, 12, 82-83, D 1954

Abstract : A short biographical sketch and a list of his activities and publications are presented. One photograph.

Institution : None

Submitted : No date

BABIKOV, Maksim Alekseyevich, professor, redaktor; KOMAROV, Nikita Semënovich; SERGEYEV, Aleksandr Sergeyevich; DOLGINOV, A.I., redaktor; VORONIN, K.P., tekhnicheskiy redaktor.

[High tension engineering] Tekhnika vysokikh napriazhenii Pod red. M.A.Batikova, Izd. 2-e, perer. Moskva, Gos. energet. izd-vo 1955. 287 p. (MLRA 8:12)
(Electric power distribution--High tension)

Babikov, M. A.

LARIONOV,A.N.; BABIKOV,M.A.; VANEYEV,A.I.; ZHITKOV,A.A.; KOPYLOV,V.P.; TRET'YAKOV,M.F.; GAITHEYEV,F.F.

V.N.Akimov, Elektrichestvo no.10:86 0'55. (MLRA 8:12)
(Akimov, Valentin Nikolaevich, 1903-1955)

BABIKOV,M.A., professor, doktor tekhnicheskikh nauk

Producing electrical apparatus for small-unit distributing installations of 3-10 kv power stations and substations. Trudy MEI no.15:5-20 '55. (MLRA 8:11)
(Electric power distribution) (Electric substations)

BABIKOV,M.A., professor, doktor tekhnicheskikh nauk; CHUNIKHIN,A.A., dotsent, kandidat tekhnicheskikh nauk

New arc-extinguishing apparatus for increasing the breaking capacity of the VM-22 6kv circuit breaker. Trudy MEI no.15:21-54 '55. (MLRA 8:11)

1. Kafedra elektricheskikh apparatov Moskovskogo ordena Lenina energeticheskogo instituta imeni V.M.Molotova
(Electric circuit breakers)

BABIKOV, Maksim Alekseyevich, doktor tekhnicheskikh nauk; SLIVINSKAYA, A.G., redaktor; FRIDKIN, A.M., tekhnicheskiy redaktor

[Electric apparatus] Elektricheskie apparaty. Moskva, Gos. energ. izd-vo. Pt. 2.. [Low-voltage apparatus] Apparaty nizkogo napriazheniia. 1956. 376 p. (MLRA 10:1)
(Electric apparatus and appliances)

Babikov, M.A.

Category : USSR/Electronics - Gas Discharge and Gas-discharge Instruments H-7

Abs Jour : Ref Zhur - Fizika, No 2, 1957, No 4332

Author : Babikov, M.A.
Title : Fundamental Premises of the Modern Theory of Electric Arc.

Orig Pub : Tr. Mosk. energ. in-ta, 1956, vyp. 16, 5-15

Abstract : A brief survey is made of the history of research on electric arcs. Two basic models used in the calculation of electric arcs are considered. In both models the initial premise is based on the equation of the energy balance of the arc channel. The differential equation is derived for the electric arc in the dynamic state. This equation is solved for the case: a) when the burning of the ac arc is stable when the current passes through zero; b) when the electric arc is in the extinction process. The calculated relationships agree with the experimental values, and this serves as a condirmation of the correctness of the initial premises of the energy theory of the arc.

Card : 1/1

ALEKSANDROV, A.G., dots; ARONOVICH, I.S., inzh.; BABIKOV, M.A., doktor tekhn.nauk; BATUSOV, S.V., kand.tekhn.nauk; BEL'KIND, L.D., doktor tekhn.nauk; VENIKOV, V.A., doktor tekhn.nauk; VESELOVSKIY, O.N., kand.tekhn.nauk; GOLOVAN, A.T., doktor tekhn.nauk; GOLUBTSOVA, V.A., doktor tekhn.nauk; GREYNER, L.K., inzh.; GRUDINSKIY, P.G., prof.; GUSEV, S.A., inzh.; DMOKHOVSKAYA, L.F., kand.tekhn.nauk; DROZDOV, N.G., doktor tekhn.nauk; IVANOV, A.P., doktor tekhn.nauk [deceased]; KAGANOV, I.L., doktor tekhn.nauk; KERBER, L.L., inzh.; KOCHENOVA, A.I., kand.tekhn.nauk.; LARIONOV, A.N.; MINOV, D.K., doktor tekhn.nauk; NETUSHIL, A.V., doktor tekhn.nauk; NIKULIN, N.V., kand.tekhn.nauk; NILENDER, R.A., prof.; PANTYUSHIN, V.S., prof.; PASYNKOV, V.V., doktor tekhn.nauk; PETROV, G.N., doktor tekhn.nauk; POLIVANOV, K.M., doktor tekhn.nauk; PRIVEZENTSEV, V.A., doktor tekhn.nauk; RADUNSKIY, L.D., inzh.; RENNE, V.T., doktor tekhn.nauk; SVENCHANSKIY, A.D., doktor tekhn.nauk; SOLOV'YEV, I.I., doktor tekhn.nauk; STUPEL' F.A. kand.tekhn.nauk; TALITSKIY, A.V., prof.; TEMNIKOV, F.Ye., kand.tekhn. nauk; FEDOROV, L.I., inzh.; FEDOSEYEV, A.M., doktor tekhn.nauk; KHOLYAVSKIY, G.B., inzh.; CHECHET, Yu.S., doktor tekhn.nauk; SHNEY-BERG, Ya.A., kand.tekhn.nauk; SHUMILOVSKIY, N.N., doktor tekhn.nauk; ANTIK, I.B., red.; MEDVEDEV, L.Ya., tekhn.red.

[The history of power engineering in the U.S.S.R. in three volumes] Istoriia energeticheskoi tekhniki SSSR v trekh tomakh. Moskva, Gos. energ. izd-vo.

(Continued on next card)

ALEKSANDROV, A.G.--(continued) Card 2.

Vol.2. [Electric engineering] Elektrotekhnika. Avtorskii kollektiv toma: Aleksandrov i dr. 1957. 727 p. (MIRA 11:2)

1. Moscow. Moskovskiy energeticheskiy institut. 2. Chlen-korrespondent AN SSSR (for Larionov)
(Electric engineering)

8(0)

AUTHORS: Arkhipov, V. N., Babikov, M. A., Morozov, D. P., Petrov, G. N., Chechet, Yu. S., Chilikin, M. G. SOV/105-59-7-27/30

TITLE: Corresponding Member of the AS USSR A. N. Larionov (Chlen-korr. AN SSSR A. N. Larionov)On His 70th Birthday (K 70-letiyu so dnya rozhdeniya)

PERIODICAL: Elektrichestvo, 1959, Nr 7, p 91 (USSR)

ABSTRACT: Corresponding Member of the AS USSR, Doctor of Technical Sciences, Professor Andrey Nikolayevich Larionov, was born on July 16, 1889. He began his pedagogical and scientific activities in 1919 after leaving the MVTU as Engineer-electrotechnician. In 1930 he was appointed to the Chair for "Special Electric Machines" at the MVTU, was confirmed as Professor in 1933, and took the degree of Doctor of Technical Sciences in 1937. 1925 - 1932 the power engineering plants of Azneft', Grozneft', and Donbass were investigated under his supervision, and on the basis of the data obtained, they were reorganized. 1920 - 1936 he was occupied with solving problems connected with the putting into operation and operating of turbo- and hydraulic generators. In 1930 high-voltage direct current units were produced according to his plans and under his super-

Card 1/3

vision for the transmitting plants of sea vessels. He is one of the creators of the electrical equipment of the aircraft "Maksim Gor'kiy". 1933 - 1934 he was a Member of the Arbitration Court of Berlin. In 1935 he was appointed to the Chair for "Electrical Equipment of Industrial Plants", and since 1941 he has been in charge of the Chair for the "Electrical Equipment for Aircraft, Automobiles, and Tractors" at the Moskovskiy energeticheskiy institut (Moscow Institute of Power Engineering). He worked at this Institute already in 1921, first as scientific collaborator and later as scientific Director. In 1953 he was appointed Corresponding Member of the AS USSR. Thanks to his work, hysteresis motors were for the first time designed and produced in the USSR. He took out numerous patents and published a number of works. He is the inventor of the "Wiring Scheme for the Rectification of Alternating Current", which is known all over the world. As a side-line he supervises a group at the laboratory of the institut avtomatiki i telemekhaniki AN SSSR (Institute of Automation and Telemechanics of the Academy of Sciences of the USSR), he is

Corresponding Member of the AS USSR A. N. Larionov. SOV/105-59-7-27/30
On His 70th Birthday

Consultant of a number of research institutes, OKB, and plants, as well as Chairman of the Committee for Permanent Magnets of the AS USSR. He is holder of the Order of Lenin. There is 1 figure.

Card 3/3

SIROTINSKIY, L.I.; POLIVANOV, K.M.; NETUSHIL, A.V.; BABIKOV, M.A.; SYROMYATNIKOV, I.A.; DROZDOV, I.G.; FEDOSEYEV, A.M.; CHILIKIN, M.G.; BESSONOV, L.A.; BUTKEVICH, G.V.; ZHEKULIN, L.A.; NEYMAN, L.R.; GORTINSKIY, S.M.; SMIRNOV, A.D.; MANIKONYANTS, L.G.; PETROV, I.P.

Vsevolod IUr'evich Lomonosov; obituary. Elektrichestvo no.12:88 D '62. (MIRA 15:12)

(Lomonosov, Vsevolod IUr'evich, 1899-1962)

BABIKOV, Maksim Alekseyevich; MIKHAYLOV, V.V.[deceased], red.; LARIONOV, G.Ye., tekhn. red.

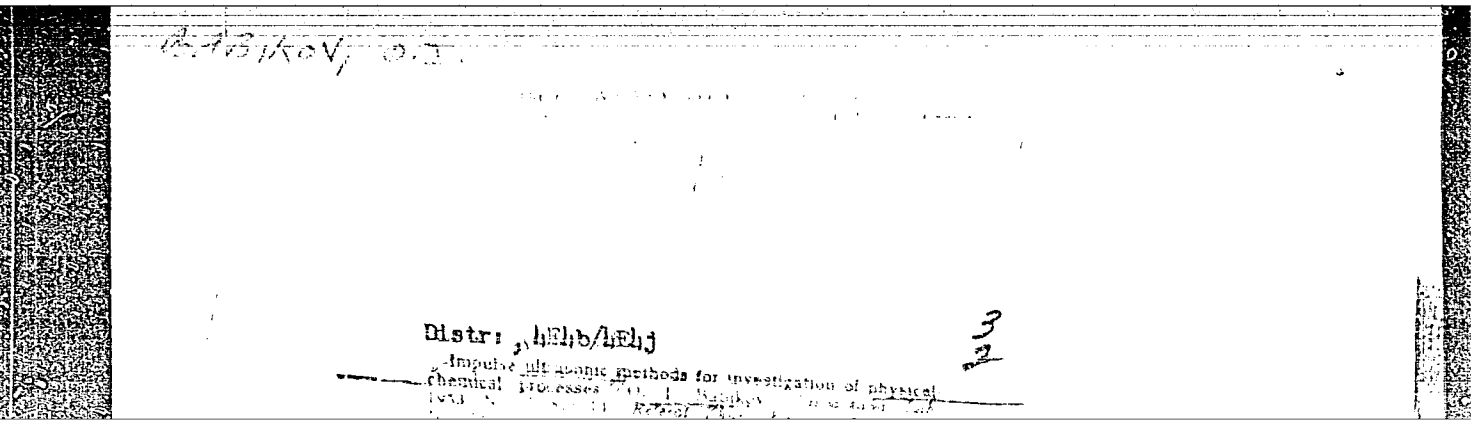
[Electrical apparatus] Elektricheskie apparaty. Moskva, Gosenergoizdat. Pt.3. [Electrical apparatus of high-voltage power systems] Elektricheskie apparaty elektroenergeticheskikh sistem vysokogo napriazheniia. 1963. 735 p. (MIRA 16:10)
(Electric transformers) (Electric switchgear)
(Electric insulators and insulation)

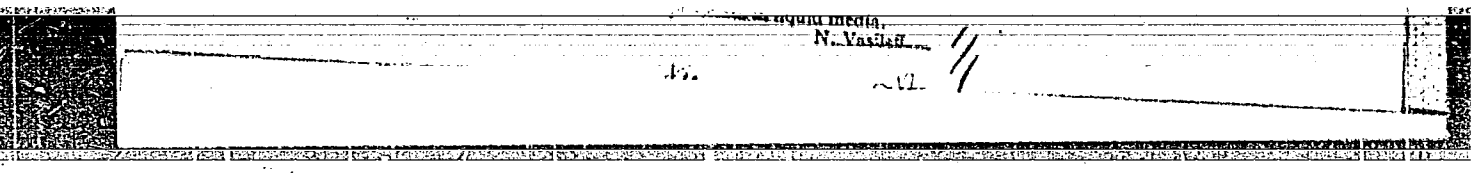
BABIKOV, Maksim Alekseyevich, prof.; KOMAROV, Nikita Semenovich; SERGEYEV, Aleksandr Sergeyevich; KUKHARKIN, Ye.P., dots., retsenzent; KOGEN-DALIN, V.V., dots., kand. tekhn.nauk, red.; LARIONOV, G.Ye., tekhn. red.

[High-voltage engineering] Tekhnika vysokikh napriazhenii. Izd.3., perer. Moskva, Gosenergoizdat, 1963. 670 p. (MIRA 17:2)

RABIKOV, M.G., instruktor peredovykh metodov truda

Following Valentina Gaganova's example. Transp.stroi. 10 no.7:8 Jl '60. (MIRA 13:7)
(Murzakhanov, Zakii)





BABIKOV, O.I., kandidat tekhnicheskikh nauk (Leningrad)

Ultrasonic waves in technology. Nauka i zhizn' 24 no.3: 17-20 Mr '57. (MLRA 10:5)
(Ultrasonic waves--Industrial applications)

24(1); 25(6,1) PHASE I BOOK EXPLOITATION SOV/1767

Babikov, Oleg Ivanovich, Candidate of Technical Sciences

Puti ispol'zovaniya ul'trazvuka (Ways of Using Ultrasonic Waves) Moscow, Izd-vo AN SSSR, 1958. 47 p. (Series: Energeticheskaya promyshlennost') 1,500 copies printed.

Sponsoring Agencies: USSR. Sovet Ministrov. Gosudarstvennyy nauchno-tekhnicheskiy komitet and Akademiya nauk SSSR. Institut nauchnoy i tekhnicheskoy informatsii.

No contributors mentioned.

PURPOSE: This booklet is intended for technical personnel dealing with industrial application of ultrasonics.

COVERAGE: The booklet presents a classification of ultrasonic equipment used in industry and describes methods and equipment used for detection of flaws, machining of hard and brittle materials, ultrasonic leaning, and soldering of aluminum. Ultrasonic methods of physical and chemical control and analysis, and

Card 1/3

application of ultrasonics in metallurgy are also discussed. The booklet contains several illustrations of ultrasonic equipment. No personalities are mentioned. There are 96 references, of which 53 are Soviet, 34 English, 8 German, and 1 French.

TABLE OF CONTENTS:

AVAILABLE: Library of Congress (QC244.B19)

Card 3/3

GO/ad
6-18-59

PHASE I BOOK EXPLOITATION 960

Babikov, Oleg Ivanovich

Ul'trazvuk i yego primeneniye v promyshlennosti (Ultrasonics and Its Application In Industry) Moscow, Fizmatgiz, 1958. 260 p. (Series: Fiziko-matematicheskaya biblioteka inzhenera) 15,000 copies printed.

Ed.: Dudnik, R.L.; Tech. Ed.: Adhlamov, S.N.

PURPOSE: This book is intended for scientists, engineers, and technicians dealing with industrial applications of ultrasonics.

COVERAGE: The book deals with industrial applications of ultrasonic methods of inspection. Special emphasis is placed on the pulse method and application of ultrasonics in physical and chemical investigations of metals. Several types of flaw detectors are described, and the fundamentals of ultrasonic wave theory are presented. No personalities are mentioned. There are 202 references, 148 of which are Soviet, 40 English, 11 German, and 3 French.

Card 1/5

TABLE OF CONTENTS:

AVAILABLE: Library of Congress

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12-11-58

Card 5/5

PHASE I BOOK EXPLOITATION SOV/3391

Novoye v elektricheskoy i ul'trazvukovoy obrabotke materialov (New Developments in Electrical and Ultrasonic Machining of Materials) [Leningrad], Lenizdat, 1959. 261 p. 5,000 copies printed.

Ed. (title page): L.Ya. Popilov; Ed. (inside book): S.I. Borshchevskaya; Tech. Ed.: P.S. Smirnov.

PURPOSE: This book is intended for technical personnel and production workers.

COVERAGE: This is a collection of 20 articles presented at the Third All-Union Conference of the Scientific and Technical Society of the Machine Industry on Electrical and Ultrasonic Machining of Metals, held in Leningrad. The articles deal with the latest achievements in the field of electrical and ultrasonic machining of metals. New methods of machining presently being developed are described. References follow several of the articles.

AVAILABLE: Library of Congress (TJ 1191 .P 63)

VK/pw/jb
6-12-60

Card 2/4

BABIKOV, O.I.

"The Development of Methods and Techniques of Ultrasonic Inspection."

report presented at the All-Union Scientific-Engineering Conference on the Application of Ultrasonics in Industry, Moscow, 22-26 November 1960.

S/081/62/000/001/065/067
B119/B101

AUTHORS: Fikhtengol'ts, V. S., Babikov, O. I., Peyzner, A. B., Poddubnyy, I. Ya., Zolotareva, R. V.

TITLE: Ultrasonic method for determining the conversion degree during polymerization in emulsion

PERIODICAL: Referativnyy zhurnal. Khimiya, no. 1, 1962, 535, abstract 1P230 (Vestn. tekhn. i ekon. inform. N.-i. in-t tekhn.-ekon. issled. Gos. kom-ta Sov. Min. SSSR po khimii, no. 10, 1960, 28)

TEXT: There is a linear relationship between the propagation velocity of ultrasonics and the content of dry residue (polymer) in chloroprene and butadiene styrene latexes containing no monomer. The polymer composition (butadiene/styrene ratio) affects the change of ultrasonic velocity with increasing concentration. The dependence of ultrasonic velocity on the conversion degree of latex is not linear: at first the velocity changes slowly, then it increases rapidly, and drops again toward the end of the process owing to the presence of monomer. A decrease of the monomer

Card 1/2

Ultrasonic method for ...

content in the latex increases the propagation velocity of ultrasonics to a much higher extent than a change of the polymer content. The value differences of ultrasonic velocity are sufficient for controlling polymerization, especially toward the end of the process. [Abstracter's note: Complete translation.]

Card 2/2

BABIKOV, O.I., kand. tekhn. nauk; ANUFRIYENKO, A.Ye., red.; FOMICHEV, A.G., red.izd-va; BOL'SHAKOV, V.A., tekhn. red.

[Ultrasonic control of physico-chemical processes] Ul'trazvukovoi kontrol' fiziko-khimicheskikh protsessov. Leningrad, 1962. 22 p. (Leningradskii dom nauchno-tekhnicheskoi propagandy. Obmen peredovym opytom. Seriia: Elektricheskie metody obrabotki metallov, no.5) (MIRA 15:8)
(Ultrasonic waves--Industrial applications)

"Ultrasonic method of physico-chemical control."

report presented at the Intl Symp on Ultrasonics Application, Bratislava, CSSR, 6-12 Sep 62.

BABIKOV, O.I., kand.tekhn.nauk; POL'-MARI, G.S.

The UZIS-7 device for ultrasonic testing of liquid media. Biul.tekh.-ekon.inform.Gos.nauch.-issl.inst.nauch. i tekh.inform. no.7:46-48 '62. (MIRA 15:7)

(Ultrasonic testing)

ACC NR: AR6034974 SOURCE CODE: UR/0272/66/000/008/0059/0059

AUTHOR: Babikov, O. I.

TITLE: Ultrasonic analyzers

SOURCE: Ref. zh. Metrologiya i izmeritel'naya tekhnika, Abs. 8.32.471

REF SOURCE: Tr. Vses. n.-i. in-ta tokov vysokoy chastoty, vyp, 6, 1965, 210-216

TOPIC TAGS: ultrasonic absorption, ultrasonic wave propagation, ultrasonic sensor, ultrasound, ultrasonic analyzer

ABSTRACT: The physical principles of using ultrasound for purposes of control assume the existence of a single-valued relationship between the physical and chemical parameters essential in production (concentration, density, molecular weight, temperature) and the rates of ultrasonic propagation and absorption. The dependence of the propagation rate on the physicochemical parameters of the medium on temperature, concentration, and the structure of organic compounds is reviewed. The block-diagrams of the equipment and the characteristics of the

Card 1/2 UDC: 543.2:534-8

ACC NR: AR6034974

UZAS-7 and UZKII-SB ultrasonic devices are given. The specific features of designing ultrasonic sensors are described. The article has 8 illustrations and a bibliography of 7 titles. P. Agaletskiy. [Translation of abstract] [DW]

SUB CODE: 20/

Card 2/2

S/887/61/000/000/006/069
E073/E155

AUTHORS: Babikov, O.I., Korepin, Ye.A., Mikhalev, B.Ye., and ~~Belyayev, Yu.V.~~

TITLE: Piezoelectric ultrasonic radiator.
(A.c. no. 117326, cl. 42s (no.598828 of April 28, 1958)).

SOURCE: Sbornik izobreteniy; ul'trazvuk i yego primeneniye. Kom. po delam izobr. i otkrytiy. Moscow, Tsentr. byuro tekhn. inform., 1961, 14-15

TEXT: A cylindrical piezoelectric ultrasonic radiator is proposed for effective cleaning of the internal surfaces of components (for instance internal surfaces of tubes) in cleaning baths. This consists of a radially polarised piezo-element designed as a hermetically sealed hollow cylinder. This design of radiator ensures that only the outer surface emits ultrasonics. The radiator (Fig.10) consists of a cylindrical, hollow piezo-element, the body 2, the lid 3 and the components which supply the piezo-element. Sealing gaskets ensure hermetic sealing of the internal cavity of the radiator. Deformation of the insulating and sealing gaskets is prevented by flat springs. The silver

Card 1/2

Piezoelectric ultrasonic radiator

S/887/61/000/000/006/069
E073/E155

coating of the radiator is protected by a layer of vinyflex. The proposed radiator is economical and convenient in use. It has been acknowledged useful by the Akusticheskiy institut AN SSSR (Acoustics Institute, AS USSR).
There is 1 figure.

[Abstractor's note: Complete translation.]

Fig.10.
1 - piezoelectric projector; 2 - body; 3 - lid;
4 - cable; 5 - spring contact; 6 - contact plate;
7 - flat springs.

Card 2/2

ZHAVORONKOV, N.M.; BABIKOV, S.I.; ORLOV, V.Yu., kand.khimicheskikh nauk; SAKODYNSKIY, K.I., kand.khimicheskikh nauk; SEVRYUGOVA, N.N.; SOKOL'SKIY, V.A.; CHERNYKH, G.N.

Production and uses of stable isotopes. Khim.nauka i prom. 4 no.4:487-498 '59. (MIRA 13:8)
(Isotope separation)
(Isotopes--Industrial applications)

BA:IKOV, S. S.

Nel'kan-Alanskii trakt. /Nelkan-Ayan highway/. (Severnaia Aziia, 1925, no. 4, p. 43-52). DLC: H8.S4 Slav.

SO: Soviet Transportation and Communications, A Bibliography, Library of Congress, Reference Department, Washington, 1952, Unclassified.

VADKOVSKIY, N.D.; LEBEDEVA, V.P.; AL'TANI, B.S.; GILEVICH, F.N.; BABIKOV, V.A.; SAVOSH, I.A.; DOKTOROVICH, M.Kh., starshiy inzh.; KRISTAL'NAYA, Ye.F., starshiy inzh.; MALINA, K.N., starshiy tekhnik; NEFEDOVA, V.I., tekhnik; LEBEDEVA, V.P., otv.red.; NOVIKOVA, Ye.S., red.; KARABILOVA, S.F., tekhn.red.

[Standard plan for stations of 600 and 1200 watt wire broadcasting centers] Tipovoi proekt stantsii radiotranslitsionnykh uzlov moshchnost'iu 600 i 1200 vt. Moskva, Gos.izd-vo lit-ry po voprosam sviazi i radio, 1960. 103 p. (MIRA 13:11)

1. Moscow. Gosudarstvennyy institut po izyskaniyam i proyektirovaniyu sooruzheniy svyazi.
(Radio stations) (Wire broadcasting)

BABIKOV, V. V.

"The Theory of Bremsstrahlung for Non-Relativistic Radiation." (Work - 1954); pp. 226-237.

"The Physics of Plasmas; Problems of Controlled Thermonuclear Reactions." Vol. II. 1958, published by Inst. Atomic Energy, Acad. Sci. USSR. resp. ed. M. A. Leontovich, editorial work V. I. Kogan.

Available in Library.

BABIKOV, V V

21(7) PHASE I BOOK EXPLOITATION SOV/1243

Akademiya nauk SSSR. Institut atomnoy energii

Fizika plazmy i problema upravlyayemykh termoyadernykh reaktsiy, t. III. (Plasma Physics and the Problem of Controlled Thermonuclear Reactions, v. 3) [Moscow] Izd-vo AN SSSR, 1958. 362 p. 3,000 copies printed.

Resp. Ed.: Leontovich, M.A., Academician.

PURPOSE: This collection contains previously unpublished work of members of the Institut atomnoy energii (Institute of Atomic Energy) of the Academy of Sciences of the USSR. It is intended for scientists interested in this field.

COVERAGE: This book is the third of four volumes of previously unpublished work of the members of the Institute of Atomic Energy during the period 1951-58. The exploitation cards on the other volumes in this series have been released under the numbers 1241, 1242, and 1244.

Card 1/6

TABLE OF CONTENTS:

AVAILABLE: Library of Congress (QC794.A38)

IS/ksv
3-6-59

Card 6/6

BABIKOV, V.V.

Cross section of the formation of a compound nucleus in the interaction of atomic nuclei. Zhur. eksp. i teor. fiz. 38 no.1:274-276 Jan '60. (MIRA 14:9)

1. Ob"yedinennyy institut yadernykh issledovaniy.
(Nuclei, Atomic)

BABIKOV, V.V.

[Resonance model of NN-interactions and its application to the nucleus] Rezonanskaia model' NN -vzaimodeistvii i ee prilozhenie k iadru. Dubna, Ob"edenennyi in-t iadernykh issledovanii, 1962. 12 p. (MIRA 16:10)
(Nuclear models)

BABIKOV, V.V.; SARANTSEVA, V.R., tekhn. red.

[Gamma radiation from a compound nucleus having a large angular momentum] O γ-izluchenii sostavnogo iadra s bol'shim momentom vrashcheniia. Dubna, Ob"edinennyi in-t iadernykh issl., 1962. 7 p. (MIRA 15:3)
(Gamma rays) (Angular momentum (Nuclear physics))

S/056/62/042/005/016/050
B104/B102

24.6600

AUTHOR: Babikov, V. V.

TITLE: The compound nucleus formation time and the γ-emission in nuclear interaction

PERIODICAL: Zhurnal eksperimental'noy i teoreticheskoy fiziki, v. 42, no. 5, 1962, 1244-1246

TEXT: It is shown that the formation time of a compound nucleus can be determined by studying the electromagnetic emission in nuclear interactions. Because of the high quantum numbers, the compound system can be regarded as a classical system rotating at the angular velocity $\omega = l\hbar/I$ (I = moment of inertia). This system consists of two incompletely fused subsystems, with electric quadrupole and dipole moments occurring. The direction characteristics

$$dW_{\text{д}}(\omega_0, \vartheta) = (e_{\text{д}}^2 R_0^2 \omega_0^4/8\pi c^3)(1 + \tfrac{1}{2}\sin^2\vartheta)\,d\Omega,$$

$$dW_{\text{кв}}(2\omega_0, \vartheta) = (e_{\text{кв}}^2 R_0^4 \omega_0^6/2\pi c^5)(1 - \tfrac{3}{8}\sin^4\vartheta)\,d\Omega.$$

Card 1/2

for the emission referring to the vector of the turning moment are derived for the quadrupole and dipole emission due to rotation. ϑ is the angle between the radiation direction and the particle incidence. An increase in the turning moment leads to a fusion of the two subsystems, and thus to an increase of the dipole moment. This involves a relative red shift of the spectrum emitted at an angle $\vartheta = 90^{\circ}$ as compared with that emitted at 0°. At the same time, the spectrum emitted at 0° undergoes a blue shift owing to the rising angular velocity. This shift has been observed on γ-emission in reactions between heavy ions. From this shift, the time for formation of a compound nucleus is estimated to be 10^{-14}-10^{-15} sec. There are 2 figures and 2 tables.

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

SUBMITTED: November 14, 1961

S/056/62/042/006/036/047
B104/B112

AUTHOR: Babikov, V. V.

TITLE: Gamma emission from a compound nucleus with a large angular momentum

PERIODICAL: Zhurnal eksperimental'noy i teoreticheskoy fiziki, v. 42, no. 6, 1962, 1647-1650

TEXT: Using the general theory of interaction between an electromagnetic field and nuclei, the energy spectrum of γ-emission is calculated on the assumption that a compound nucleus with a large angular momentum is in statistical equilibrium before and after the emission of a γ-quantum. It is shown that the drop of the nucleon temperature as a result of rotation with a given total energy leads to a softening of the γ-emission. A strong anisotropy in the angular distribution of the emission is assumed.

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

SUBMITTED: January 24, 1962

Card 1/1

BABIKOV, V.V.

Time of formation of a compound nucleus and γ-radiation from interacting nuclei. Zhur. eksp. i teor. fiz. 42 no.5:1244-1248 My. '62. (MIRA 15:9)

1. Ob"yedinennyy institut yadernykh issledovaniy.
(Nuclei, Atomic) (Gamma rays)

BABIKOV, V.V.

Gamma-radiation from a compound nucleus with large angular momentum. Zhur. eksp. i teor. fiz. 42 no.6:1647-1650 Je '62. (MIRA 15:9)

1. Ob"yedinennyy institut yadernykh issledovaniy.
(Gamma rays)
(Nuclear reactions)

BABIKOV, V.V.; VYALOV, G.N.; INDREASE, G.

[Calculation of the electric system of extraction of an ion beam from a classical cyclotron] K raschetu elektricheskoi sistemy vyvoda ionnogo puchka v klassicheskom tsiklotrone. Dubna, Ob"edinennyi in-t iadernykh issledovanii, 1963. 14 p. (MIRA 17:1)

BAHIKOV, V.V.

Resonance Model of NN Interactions and Its applications to Nucleus

Progress of Theoretical Physics, Vol. 29, No.5, May 1963,
Kyoto, Japan.

ZHDANOV, Yu.A.; MINKIN, V.I., kand. tekhn. nauk, otv. red.; BABIKOV, V.V., red.

[Inversion method in organic chemistry] Obrashchenie metoda v organicheskoi khimii. Rostov-na-Donu, Rostovskii univ., 1963. 62 p. (MIRA 17:7)

BABIKOV, V.V.

Method for calculating cross sections in an optical model.
IAd. fiz. 1 no.6:984-986 Je '65. (MIRA 18:6)

1. Ob"yedinennyy institut yadernykh issledovaniy.

BABIKOV, V.V.

Heavy mesons and the nucleon nucleon potential. IAd. fiz. 2 no.2:326-331 Ag '65. (MIRA 18:8)

1. Ob"yedinennyy institut yadernykh issledovaniy.

L 2749-66 EWT(m)/T/EWA(m)-2
ACCESSION NR: AP5024348 UR/0367/65/002/002/0326/0331

AUTHOR: Babikov, V. V. 44,55

TITLE: Heavy mesons and nucleon-nucleon potential 19,44,55

SOURCE: Yadernaya fizika, v. 2, no. 2, 1965, 326-331

TOPIC TAGS: particle physics, nucleon interaction, meson, baryon, heavy particle

ABSTRACT: Local velocity-dependent nucleon-nucleon potentials are derived for interchange of pseudovector ($J^P = 1^+$), tensor ($J^P = 2^+$) and pseudotensor ($J^P = 2^-$) heavy mesons. Recoil effects are precisely accounted for. These potentials, which are derived for a neutral meson with zero strangeness may be applied not only to the nucleon-nucleon system, but to any system of two baryons with a spin of $\frac{1}{2}$, e. g. ΛN, $\Sigma\Xi$, etc. Generally speaking, the coupling constants will differ for different combinations of baryons. Weingerg's method using Feynman diagrams for particles with any spin may be used for deriving the NN-potentials which correspond to interchange of mesons with a spin of $J>2$. Orig. art. has: 17 formulas.

Card 1/2

L 2749-66

ACCESSION NR: AP5024348

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

SUBMITTED: 17Mar65 ENCL: 00 SUB CODE: NP

NO REF SOV: 002 OTHER: 006

Card 2/2

TEPINKICHIYEV, V.K., prof., otv. red.; MAKTYNOV, V.I., dots., red.; CHIKOVA, N.N., st. inzh., red.; MOLCHANOV, V.N., st. inzh., red.; SMALCHINEV, V.A., ispol. obyazan. dots., red.; BABIKOV, V.V., red.

[Use of ultrasonic waves in agricultural machinery manufacture] Primenenie ul'trazvuka v sel'skokhozialstvennom mashinostroenii. Rostov-na-Donu, Izd-vo Rostovskogo univ., 1964. 157 p. (MIRA 18:3)

1. Rostov-on-Don. Institut sel'skokhozyaystvennogo mashinostroyeniya.

BABIKOV, Yu.

Visiting rural operators of steam-power electric plants. Tekh.molod. 21 no.11:18-19 N '53. (MLRA 6:11)

1. Kolkhoz imeni K.E.Voroshilova Bronnitskogo rayona Moskovskoy Oblasti. (Rural electrification)

BABIKOV, Yu. (Donetskaya oblast')

Worth of spoiled mood. Izobr.i rats no.10:28-29 O '62.
(MIRA 15:9)
1. Spetsial'nyy korrespondent zhurnala "Izobretatel' i Ratsionalizator".
(Donets Basin--Coal mines and mining)

BABIKOV, Yu.A.

Prospects for using natural gas in place of coke in iron production in Central Asia. Gaz. delo. no.1:47-48 '63. (MIRA 16:8)

1. Institut ispol'zovaniya topliva NA UzSSR.
(Soviet Central Asia—Iron--Metallurgy)

BABIKOV, Yu.A.

Intensification of heat exchange in a gas-fired gupola. Lit. proizv. no.3:42-43 Mr '65. (MIRA 18:6)

RASSKAZOV, D.S., kand. tekhn. nauk; BABIKOV, Yu.M., inzh.; BELINSKAYA, N.T., inzh.; LYAPUNOV, O.I., inzh.

Change in the thermophysical properties of monoisopropylbiphenyl subject to reactor irradiation. Teploenergetika 12 no.8:83-84 Ag '65. (MIRA 18:9)

1. Moskovskiy energeticheskiy institut.

ACCESSION NR: AP4037641 S/0096/64/000/006/0056/0058

AUTHOR: Vukalovich, M. P. (Doctor of technical sciences, Professor); Rasskazov, D. S. (Candidate of technical sciences); Popov, V. N. (Candidate of technical sciences); Babikov, Yu. M. (Engineer)

TITLE: Thermophysical properties of monoisopropyldiphenyl

SOURCE: Teploenergetika, no. 6, 1964, 56-58

TOPIC TAGS: monoisopropyldiphenyl, Hagen Poiseuille equation, Vargaftik equation.

ABSTRACT: The authors present the results of an experimental investigation of the density, thermal conductivity, heat capacity, and viscosity of monoisopropyldiphenyl. The density was determined by the pyncometric method at room temperature and by the piezometric method for a constant volume at t = 50-350C. From the experimental results the authors determined that the temperature dependence of the density is

$$\rho = 984.3 - 0.473t - 0.811 \cdot 10^{-3}t^2, \text{ kg/m}^3 \qquad (1)$$

Calculation and experiment agreed within 0.3%. Thermal conductivity was deter-

Card 1/3

mined at t = 30-230C. The experimental data are well described by the Vargaftik equation ("Teplofizicheskiye svoystva veshchestv," Gosenergoizdat, 1956.)

$$\lambda = B\rho^{4/3} \quad (2)$$

Calculation accuracy was within experimental error. Viscosity was computed according to the Hagen-Poiseuille equation

$$V = \frac{\pi \Delta p r^4 \tau}{8 L \eta} \quad (3)$$

and was measured at t = 20-350C. Heat capacity was determined according to a formula obtained from the thermal balance of two calorimeters, and was measured at t = 38-212C. Experimental data are described by the following equation

$$c_p = 1.620 + 34.8 \cdot 10^{-4} t \quad (5)$$

ACCESSION NR: AP4037641

Discrepancy between calculation and experiment did not exceed 1.3%. All the above values agree within experimental error with those obtained by N. B. Vargaftik et al. ("Neft' i gaz" no. 7, 1963). Orig. art. has: 1 figure, 5 formulas, and 2 tables.

ASSOCIATION: Moskovskiy energeticheskiy institut (Moscow Power Institute)

SUBMITTED: 00 DATE ACQ: 22Jun64 ENCL: 00

SUB CODE: OC, TD NO REF SOV: 013 OTHER: 001

Card 3/3

L 8933-65 EWT(m)/EPF(c)/EPR/EWP(j)/T Pc-4/Pr-4/Ps-4 RPL/ASD(d) WW/DJ/RM

ACCESSION NR: AP4044561 S/0096/64/000/009/0071/0073

AUTHOR: Rasukazov, D. S.(Candidate of technicalsciences); Babikov, Yu. M. (Engineer); Khamann, K. (Engineer)

TITLE: The effect of thermal decomposition on the thermophysical properties of monoisopropyldiphenyl

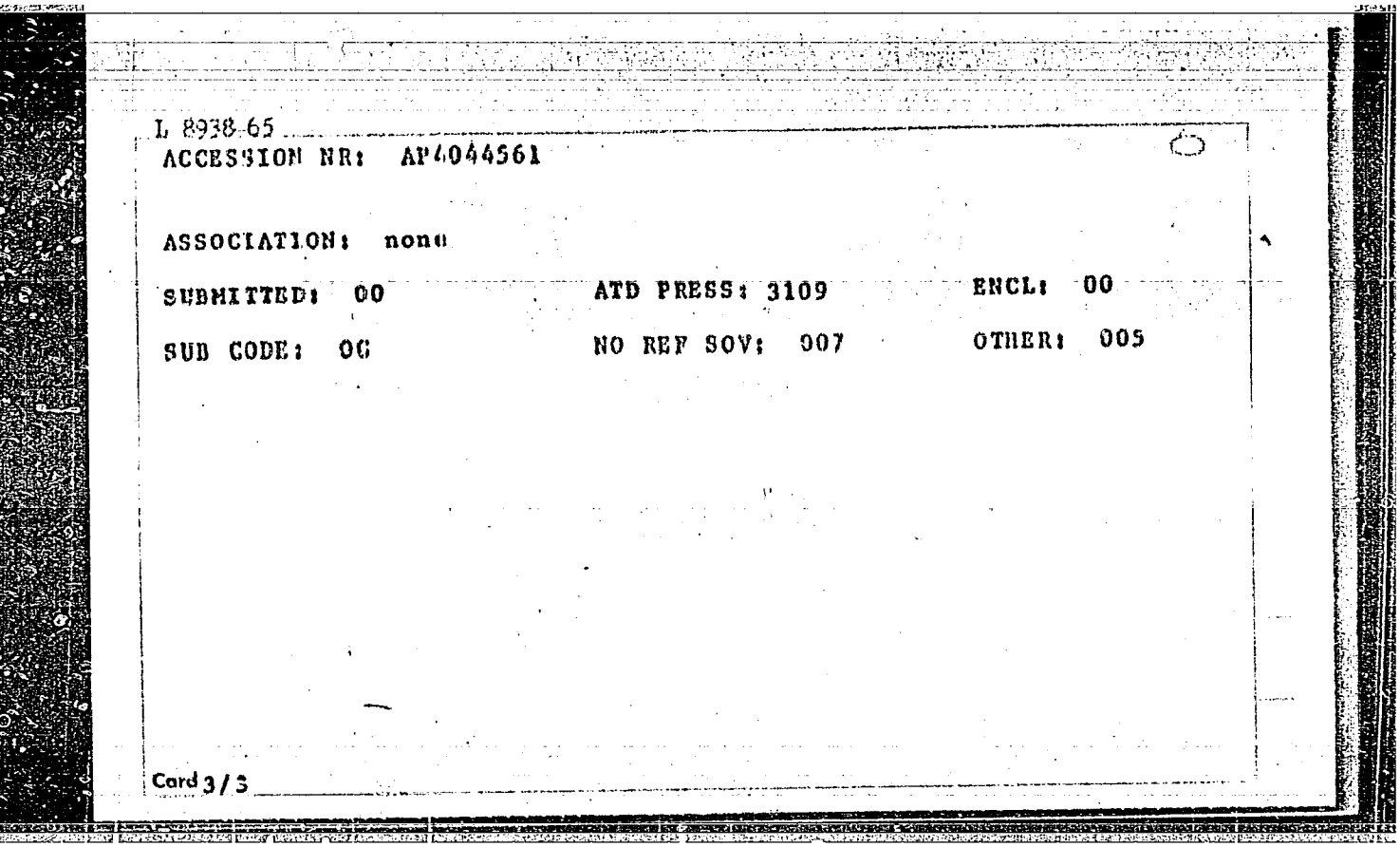
SOURCE: Teploenergetika, no. 9, 1964, 71-73

TOPIC TAGS: liquid heat transfer agent, monoisopropyldiphenyl, thermal decomposition, decomposition products

ABSTRACT: The thermal decomposition of the liquid organic heat transfer agent monoisopropyldiphenyl (I) was studied at 370—400C and 20 bars to determine the effect of the high-boiling decomposition products (II) of I (less volatile products than I and consisting mainly of polyphenyls) on the viscosity (n) and density (ρ) of partially decomposed I. Results showed that the main product formed by the thermal decomposition of I is II with an average molecular weight of 273±4. The concentration of II increased with time and

Card 1/3

temperature; in particular, a marked increase in the concentration of II was observed in experiments with I in the presence of air; in this case the concentration of II increased from 6.5% on heating for 100 hr at 400C to 26% on heating for 156 hr at 400C. The relative viscosity of I is directly proportional to the concentration of II and inversely proportional to the temperature. The following equation relating these parameters is given: $\eta_\pi/\eta_0 = (1 + \pi/100)$, where η_π is the viscosity of the partially decomposed I, η_0 is the viscosity of pure I, and π is the concentration (in %) of II. The dependence between density, temperature, and the concentration of II in partially decomposed I is expressed by the following equation: $\rho_\pi = \rho_0 + 1.7\pi$, where ρ_π is the density of the partially decomposed I, and ρ_0 is the density of pure I. These equations are valid over a temperature range of 100--350C and π=0--3-%. The equations may be used to determine the content of II from the concentration dependence of the viscosity. The data on ρ may be used to monitor the thermal decomposition of I and to determine the periods between regenerations. Orig. art. has: 2 tables and 2 figures.



L 8938-65
ACCESSION NR: AP4044561

ASSOCIATION: none

SUBMITTED: 00	ATD PRESS: 3109	ENCL: 00
SUB CODE: OC	NO REF SOV: 007	OTHER: 005

Card 3/3

APPROVED FOR RELEASE: 06/06/2000 CIA-RDP86-00513R000102830003-4"

L 63204-65 EPA(s)-2/EWT(m)/EPF(c)/EPF(n)-2/EWG(m)/EWP(j) WW/GG/RM

ACCESSION NR: AP5018875 UR/0096/65/000/008/0083/0084
662.987.543.8

AUTHORS: Rasskazov, D. S. (Candidate of technical sciences); Babikov, Yu. M. (Engineer); Belinskaya, N. T. (Engineer); Lyapunov, O. I. (Engineer)

TITLE: Change in thermophysical properties of monoisopropyldiphenyl under the influence of reactor radiation

SOURCE: Teploenergetika, no. 8, 1965, 83-84

TOPIC TAGS: thermophysical property, viscosity, polymer, irradiation exposure

ABSTRACT: The changes in viscosity and density of monoisopropyldiphenyl (M) under radiation were investigated in a temperature range of 20-280C and 0-10% polymer concentration. The irradiation process was carried out in the circulation loop of a commercial reactor in the 200-250C temperature range. The results show that for a given concentration the relative viscosity of (M) remains constant in a wide temperature range but increases if the concentration is raised. Up to 100C, this result agrees well with previous investigations. Two empirical expressions are proposed to correlate the data for a range in π (% mass concentration in solution) from 0 to 50%. These equations are: $\eta_n/\eta_{прив} = (1 + 0{,}035\pi)$, $\eta_{прив} = \frac{65.6}{(t+60)^{1.71}}$,

Card 1/2

L 63204-65

ACCESSION NR: AP5010875

where η is given in Newtons-sec/m^2 and $\rho_{ж} = \rho_{расч} + 1{,}5n,$

$\rho'_{расч} = 934 - 0{,}473t - 0{,}811 \cdot 10^{-3}t^2.$

Orig. art. has: 2 formulas, 2 figures, and 1 table.

ASSOCIATION: Moskovskiy energeticheskiy institut (Moscow Heat Power Institute)

SUBMITTED: 00 ENCL: 00 SUB CODE: MT, GC

NO REF SOV: 006 OTHER: 005

Card 2/2

BABIKOV, Yu.P.

New nutrient medium for cultivating parasitic hyphomycetes. Zdrav. Turk. 6 no.2:23-26 Mr-Ap '62. (MIRA 15:11)

1. Iz kafedry biologii (zav. - G.A.Pravikov) Turkmenskogo gosudarstvennogo meditsinskogo instituta.
(FUNGI IMPERFECTI)

BASKAKOV, P., podpolkovnik meditsinskoy sluzhby; BABIKOVA, A.

Treatment of some dermatoses with a paste of the ASD fraction 3 preparation. Voen.-med. zhur. no.8:79 Ag '61. (MIRA 15:2)
(SKIN--DISEASES) (TISSUE EXTRACTS)

BASKAKOV, P. (Lt. Colonel of the Medical Service) and BABIKOVA, A. (Lt. Colonel of the Medical Service)

"The treatment of certain dermatoses with ASD /Dorogov's antiseptic stimulator/ paste."

Voyenne - Meditsinskiy Zhurnal, No 8, August 1961

[redacted], A. D., [redacted], Z. P., [redacted], N. G., [redacted], V. A.

"Hygienic Characteristics of Capital Residential Construction in the City of Stalinsk during the Post-War Period."

report submitted at the 13th All-Union Congress of Hygienists, Epidemiologists and Infectionists, 1959.

CHTETSOVA, V.M.; BABIKOVA, N.I.; KLIMOVA, L.I.

Immunobiological reactivity of infants during severe recurrent pneumonia. Vop. okh. mat. i det. 6 no.7:27-31 Jl '61. (MIRA 14:8)

1. Iz pediatricheskogo otdeleniya (rukovoditel' - dotsent R.Ye. Leyenson) Sverdlovskogo nauchno-issledovatel'skogo instituta okhrany materinstva i mladenchestva (dir. - kandidat med. nauk R.A.Malysheva; nauchnyy rukovoditel' - doktor med.nauk V.M.Lotis).
(PNEUMONIA)

CHTETSOVA, V.M.; BABIKOVA, N.I.; KLIMOVA, L.I.

Some indices of natural immunity in healthy infants. Vop. okh. mat. i det. 7 no.1:60-63 Ja '62. (MIRA 15:3)

1. Iz Sverdlovskogo nauchno-issledovatel'skogo instituta okhrany materinstva i mladenchestva (dir. - kand.med.nauk R.A. Malysheva; nauchnyy rukovoditel' - doktor med.nauk V.M. Lotis; rukovoditel' raboty - dotsent R.Ye. Leyenson). (IMMUNITY)

BABIKOVA, Natal'ya Ivanovna; DIDENKO, Valentina Sergeyevna; ZAMKOVSKIY, Dmitriy Yakovlevich; TISHENINOVA, Nina Mikhaylovna; ISHKOVA, A.K., red.; GROMOV, A.S., tekhn. red.

[Work organization in a workshop for the sewing of custom-made clothes] Organizatsiia truda v atel'e individual'nogo poshiva odezhdy. Moskva, Gostorgizdat, 1962. 229 p. (MIRA 15:6)
(Clothing industry--Job descriptions)

VORONINA, N.M.; PUSHKAREVA, Z.V.; RADINA, L.B.; BABIKOVA, N.V.

Synthesis and study of some acridine compounds and their N-oxides. Part 1. Zhur.ob.khim. 30 no.10:3476-3480 O '61. (MIRA 14:4)

1. Sverdlovskiy nauchno-issledovatel'skiy institut po profilaktike poliomiyelita.

(Acridine)

21(8); 18(3,6) PHASE I BOOK EXPLOITATION SOV/2649

Babikova, Yu. F.

Izucheniye podvizhnosti atomov v tverdykh rastvorakh metodom radioktivnykh indikatorov, avtoreferat dissertatsii na soiskaniye uchenoy stepeni kandidata fiziko-matematicheskikh nauk (Using Radioactive Indicators in the Study of the Mobility of Atoms in Solid Solutions; Author's Abstract of a Dissertation For the Degree of Candidate of the Physical and Mathematical Sciences) Moscow, 1957. 15 p. 100 copies printed.

Sponsoring Agency: Moskovskiy inzhenerno-fizicheskiy institut.

Faculty Advisor: P.L. Gruzin, Doctor of Physical and Mathematical Sciences, Professor.

PROFESSOR: This booklet is intended for metallurgists and students of university courses in metallurgy.

COVERAGE: The booklet contains the author's abstract of his doctoral dissertation

Card 1/3

on the use of C^{14} to study alloy properties and alloying processes and the physical nature of their occurrence in order to facilitate the the development and application of fire-resistant alloys and steels and of new alloys with special physical and mechanical properties for scientific and technical purposes. The following results are listed: 1) a new method which employs C^{14} to determine the transference numbers of carbon in steels was worked out and experimentally proven; 2) in determining the transference number in gram atoms of carbon for pure ferrite and nickel at different temperatures, the existance of carbon atoms as cations in ferrite and nickel was established, the discharge of carbon cations being, in round figures, 4 for ferrite and 2 for nickel; 3) the first data concerning the influence of alloying elements on the electrodispersion of carbon in ferrite and nickel was obtained; 4) data on the temperature dependency of transference numbers for iron, nickel, and a series of iron-and nickel-base alloys was compiled; 5) specific electrical resistances in the temperature range 450-800° and the dependency of electrical resistance upon temperature and concentration was determined for all alloys studied; and 6) a new variant of the method for studying carbon diffusion in metals and alloys based on the use of artificial radioactive C^{14} was developed. There are 12 references: 10 Soviet, 1 English, and 1 German. No personalities are mentioned.

Card 2/3

Using Radioactive Indicators in the Study (Cont.) SOV/2645

TABLE OF CONTENTS:

(No Table of Contents is given. The abstract is divided into the following sections:)

AVAILABLE: Library of Congress (QC 185.B2)

Card 3/3

TM/gmp
12-1-59