The purification of ...

S/275/63/000/001/017/035
D413/D308

ing irregularities in the distribution of impurities along the length of the crystal, and for studying the process of diffusion of impurities. Various types of defects in the crystals are considered. 7 references. [Abstracter's note: Complete translation.]

Card 2/2

AKERMAN, Karol; BRAFMAN, Marek; KRUSZEWSKA, Olga; KRUSZEWSKI, Klemens

Isotopeic research on the effectiveness of various methods of purifying trichlorosilane and silicon tetrachloride when applied to semiconductor purity silicon and silica. Przegl elektroniki 4 no. 5/6: 299-310 My-Je '63.

1. Zaklad Stosowania Izotopow w Chemii i Technologii Chemicznej, Instytut Badan Jsdrowych, Polska Akademia Nauk, Warszawa.

AKERMAN, Karol; BRAFMAN, Marek; FIK, Henryk; KITALA, Jan; NOWAK, Maciej; POCZYNAJLO, Andrzej

Isotopic studies on the separation course of impurities during the zinc redistillation process. Archiw hutn 8 no. 2: 103-118 '63.

1. Instytut Badan Jadrowych Polskiej Akademii Nauk, Zaklad XVI, Warszawa (for Akerman, Brafman, Nowak).
2. Biuro Projektow, Zjednoczenie Gorniczo-Hutnicze Metali Biezelaznych, Gliwice, (for Fik)
3. Zaklady Cynkowe Silesia, Huta Welnowiec (for Kitala).

AKERMAN, Karol

POLAND

AKERMAN, Karol

Nuclear Research Institute (Instytut Badan Jadrowych)

Wroclaw, Przeglad elektroniki, No 9, Sept 63, pp 529-31.

"Synthesis of Specific Sorbents for Germanium Concentrates Production from Industrial Zinc Electrolytes".

AKERMAN, Karol; BRAFMAN, Marek; SZTERK, Lucjan; KRUSZEWSKA, Olga

Studies on the structural surface defects of silicon single crystals from chemical etching and radioactive tracer decoration. Przegl elektroniki 5 no.7:337-345, 346 Jl '64.

1. Department no.16, Institute of Nuclear Research, Polish Academy of Sciences.

AKERMAN, K.; HOFFMANN, P.M.; ZABLOTNY, W.

Application of isotopic techniques to the studies of unitary chemical processes. Nukleonika 9 no.7/8:637-645 '64

1. Institute of Nuclear Research, Warszawa-Swierk.

L 11139-65 EPR/EWP(t)/EWP(k) [illegible]

[illegible] Gorbunova, K. M., Kraikman, N. [illegible]

[illegible] electronic studies on the [illegible] structures in various chemical

[illegible]

[illegible] application

[illegible] of [illegible] studies of some

Ga, Cu, In and [illegible] during the electrolytic refining of uranium to a purity of 99.999%; the determination of optimum conditions of zone-refining of aluminum and determination of the purity of the final product; the revealing of dislocation pits on the surface of silicon single crystals; the purification of $SiHCl_3$ and $SiCl_4$ used in production of semiconductor-grade silicon and silicon dioxide; and the recovery of germanium from zinc electrolytes and rhenium from molybdenum concentrates. Orig. art. has: 8 figures and 3 tables.

Card 1/2

L 11439-65
ACCESSION NR: AP4045670

ASSOCIATION: Institute of Nuclear Research, Warsaw

SUBMITTED: 00 ENCL: 00 SUB CODE: NM

NO REF SOV: 000 OTHER: 025

Card 2/2

ZABLOTNA, R.; AKERMAN, K.; SZUCHNIK, A.

Direct preparation of tri-,di-, and monomethylgermanium mono-, di-, and triiodides, respectively, and their use for obtaining unsymmetrical tetraaklyl germanes. Bul chim PAN 12 no.10:695-699 '64.

1. Department of Using Radioisotopes in Chemistry and Chemical Technology of the Institute of Nuclear Research, Warsaw. Submitted August 3, 1964.

POLAND

AKERMAN, Karol; BRAFMAN, Marek; KRUSZEWSKA, Olga; SZTEREK, Lucjan

Nuclear Research Institute (Instytut Badan Jadrowych)

Warsaw, Przeglad elektroniki, No 8, August 1966, pp 376-86

"Revelation of dislocation structural defects in metal and semiconductor single crystals."

(U)

AKERMAN, Karol; NARUSZAK, Edward

Recuperation of rare earth elements from grinding waste.
Przem chem 39 no.7:442-443 Jl '60.

1. Katedra Zespolowa Chemii Fizycznej i Technologii Chemicznej, Uniwersytet im. Curie-Sklodowskiej, Lublin

AKERMAN, Radoslav, dr.; GARDILCIC, Ante, dr.; MATANIC, Vladimir, dr.; PEROVIC, Slavko, dr.

Has Crede's prophylaxis of eye gonorrhea in newborn infant become outmoded? A proposal for discussion. Med. glasn. 9 no.7-8:287-289 July-Aug 55.

1. Opca bolnica u Zadru.
(OPHTHALMIA NEONATORUM, prov. & control
silver nitrate, value (Ser))

AKERMAN, Radoslav, Dr.

The treatment of threatening abortion with sympathomimetics.
Lijec. vjes. 77 no.5-7:308-315 May-July 55.

1. Iz Ginekolosko-porodiljskog odjela Opce bolnice u Zadru.
(SYMPATHOMIMETICS, ther. use,
threatened abortion (Ser))
(ABORTION,
threatened, ther., sympathomimetics (Ser))

AKERMAN, R., Dr.; JELIC, R., dr.; KRAGIC, L., dr.

Modern aspects of sterility. Lijec. vjes. 77 no.10-12: 485-497 Oct-Dec 55.

1. Iz Ginekolosko-porodajnog i Rentgenoloskog odjela Opce bolnice u Zadru.

(STERILITY, etiol. & ther. (Ser))

AKERMAN, Radoslav, Zadar

Effect of constitutional and exogenic factors on sexual processes of female organism. Med. glasn. 10 no.3:98-103 March 56.

1. Ginekolosko-prodoajno odjeljenje Opce bolnice u Zadru (sef. prim. dr. R. Akerman).

(BODY CONSTITUTION,
eff. on menstruation, amenorrhea & female climacteric (Ser))
(MENSTRUATION, physiol.
eff. of body constitution & environment on (Ser))
(AMENORRHEA, physiol.
same)
(CLIMACTERIC, FEMALE, physiol.
same)
(ENVIRONMENT,
eff. on menstruation, amenorrhea & female climacteric (Ser))

AKERMAN, Radoslav, Dr.

Psychological aspects of practical gynecology. Lijec. vjes. 78 no.11-12:506-512 Nov-Dec 56.

1. Iz Ginekolosko-porodajnog odjela Opce bolnice u Zadru.
(GYNECOLOGY,
psychol. aspects (Ser))
(PSYCHOLOGY,
in gyn. (Ser))

SMRKINIC,B.,dr.; AKERMAN,R.,dr.; PEROVIC,S.,dr.

Our experiences with ophthalmological examination of newborn infants. Med. glasn. 13 no.7:379-381 Jl '59.

1. Ocni, Ginekolosko-porodajni i Djecji odjel Opce bolnice u Zadru.
(EYE DISEASES in inf. & child)
(INFANT NEWBORN dis.)

AKERMAN, Radoslav, prim. dr

Contribution to the problem of pain control and spasmolysis in obstetrics and gynecology. Med.glasn. 14 no.7/8:397-400 Jl-Ag '60.

1. Ginekolosko i porodiljsko odeljenje Opste bolnice u Zadru (Sef: prim. dr R.Akerman)

(SCOPOLAMINE ther)
(GYNECOLOGY analg & anesth)
(AMINOPYRINE ther)
(ANESTHESIA OBSTETRICAL)

AKHABABIAN, Nushan

Structure of the nucleen. Fiz mat spisanie BAN 6 no. 2:91-97 '63.

AKHABABYAN, N.; BETEV, B.; KAVLAKOV, Sht.; POPOVA, L.

Diurnal intensity variation of the hard component of cosmic rays for 1960-1963 as observed with narrow-angled crossed telescopes. Geomag. i aer. 5 no.2:230-233 Mr-Ap '65. (MIRA 18:7)

1. Fizicheskiy institut Bolgarskoy Akademii nauk, Sofiya.

AKHABADZE, A.F.

Include factory callisthenics in the regimen of each worker. Zdrav. Ros. Feder. 4 no. 4:27-30 Ap '60. (MIRA 13:10)

1. Starshiy inspektor otdela meditsinskoy pomoshchi gorodskomu naseleniya i rabochim promyshlennykh predpriyatiy Ministerstva zdravookhraneniya RSFSR.
(CALLISTHENICS)

GAVRILOV, N.I.; GRIGOR'YEVA, E.N.; KONDYURIN, L.I.; AKHABADZE, A.F.; YELISEYEVA, T.N.; BOGATYREV, I.D., red.; PETROVA, N.K., tekhn. red.

[Work experience of medical and sanitary units]Opyt raboty mediko-sanitarnykh chastei. Moskva, Medgiz, 1962. 121 p. (MIRA 15:11)

(MEDICINE, INDUSTRIAL)

AKHABADZE, A. F.

Organization of cosmetic care in the R.S.F.S.R. Zdrav. Ros. Feder. 6 no.6:30-32 Je '62. (MIRA 15:7)

1. Direktor Instituta vrachebnoy kosmetiki Ministerstva zdravookhraneniya RSFSR.

(BEAUTY CULTURE)

AKHABADZE, Antonina Fedorovna; GUSAROVA, Aleksandra Sergeyevna, kand. med. nauk; KRIKUN, Lyudmila Aleksandrovna, kand. med. nauk; SOROKO, Ya.I., red.

[Medicine as the guardian of beauty] Meditsina na strazhe krasoty. Moskva, Izd-vo Znanie," 1964. 46 p. (Novoe v zhizni, nauke, tekhnike. VIII Seriia: Biologiia i meditsina, no.13) (MIRA 17:8)

1. Direktor Instituta vrachebnoy kosmetiki (for Akhabadze).

AKHABADZE, I.F.; ENIN, P.K., redaktor

[Jacov's ladder] Siniukha lazurnaia. Moskva, Medgiz, 1955. 15 p.
(JACOB'S LADDER) (MLRA 9:11)

28-119-5-55/59

AUTHORS: Polezhayev, L. V., Akhabadze, L. V., Zakharova, N. A., Mant'yeva, V. L.

TITLE: On the Regeneration of the Myocardium in Mammals (O regeneratsii miokarda u mlekopitayushchikh)

PERIODICAL: Doklady Akademii Nauk SSSR, 1958, Vol. 119, Nr 5, pp. 1039 - 1042 (USSR)

ABSTRACT: It is known from experiments with mammals (References 2, 16-18) and pathological-anatomical data on man (References 1,4) that the cardiac muscle does not regenerate after an injury or infarct, but that it forms a scar. Only newborn cats can regenerate myocardium (Reference 11). The authors tried to bring about the regeneration of myocardium in grown mammals. For this purpose they chose the method of the chemical organospecific traumatization. It is based on the influence exerted by own tissue proteins and their decomposition products, further of nucleoproteins upon the injured organ. Previous experiments (References 8,1o,12) yielded positive

Card 1/4

On the Regeneration of the Myocardium in Mammals

results. Experimental-morphological, biochemical, physiological(electrocardiography = ECG) and histological methods were employed in combination. The experiments were performed with 8o old rats. Under an urethane narcosis and artificial respiration the heart was exposed and the tissue on the front wall of the left ventricle not far from the apex of heart was bloodlessly coagulated by means of an electro-diathermic apparatus. A white infarct-like center of injury, 4-5mm in size and deep, formed. The wound of operation was then sewn up in layers. For 14-2o days the animals (except the control animals) received subcutaneous injections of biopreparations: of hydrolysates and extracts from rat hearts. The method of production of these preparations is described. The test animals were killed between the 1-st to 16o-th day after the operation, the hearts were fixed with Gelli-liquid and the paraffin sections dyed. Conclusions: 1) The described center of necrosis is resorbed in the course of time and replaced by small centers of non-differentiated muscles which later decompose and dis-

appear. The muscles of the marginal zone are neither destroyed nor dedifferentiated nor regenerated. No microcells are formed. 2) When the hydrolysate is given the necrotic center is resorbed 2 1/2 times faster. In its place muscles are newly formed which have no connection with the old muscles of the marginal zone. Microcells are formed in a large amount. The extract stimulates the regeneration less than the hydrolysate. 3) After the injury of the heart the ECG passes an acute, a subacute and a scar stage. The hydrolysate shortens the acute stage and brings about an earlier beginning of the scar stage. In 50% of cases the ECG returns to the norm on the 11-th day after the operation which morphologically corresponds to the restoration of the myocardium. There are 3 figures and 19 references, 12 of which are Soviet.

ASSOCIATION: Institut morfologii zhivotnykh im. A. N. Severtsova Akademii nauk SSSR (Institute for Animal Morphology imeni A. N. Severtsov, AS USSR)

On the Regeneration of the Myocardium in Mammals 28-119-5-55/59

PRESENTED: January 14, 1958, by K. I. Skryabin, Member, Academy of Sciences, USSR

SUBMITTED: January 14, 1958

Card 4/4

20-119-6-55/56

AUTHOR: Akhabadze, L. V.

TITLE: Histological Changes During the Healing of a Damaged Myocardium in Rats (Gistologicheskiye izmeneniya pri zazhivlenii povrezhdennogo miokarda u krys)

PERIODICAL: Doklady Akademii nauk SSSR, 1958, Vol. 119, Nr 6, pp. 1251-1254 (USSR)

ABSTRACT: In a joint work (Ref 9) the author proved that the regeneration of the artificially damaged myocardium can be considerably stimulated by means of hydrolysates and extracts, which is impossible without such a treatment. In the present work the endeavor is made to follow the histological changes during the healing process of such an artificial, infarct-like damage. According to various experiments the conclusion was drawn that the myocardium of grown-up men and animals cannot regenerate. The damage caused in the myocardium is remedied by means of connective tissues. Only in newly born cats can the capacity of regeneration be observed. The details of the experiment and of the material already described

Card 1/3

Histological Changes During the Healing of a Damaged Myocardium in Rats

in Ref 9 are repeated. Numerous details from the aforementioned paper are mentioned: On the strength of his observations the author arrives at the following conclusions:
1) After electro-thermo-coagulation of the myocardium of rats an infarct-like tissue center of the type of a coagulation necrosis forms. Its development passes through various stages: a) Resorption and formation of a regenerating immature connective tissue; b) Development of the latter and formation of small muscle centers and c) Disintegration of newly formed muscles and cicatrization of the damaging center.
2) The muscles of the marginal zone are neither differentiated nor regenerated; in the central zone centers of new formation of muscle fibers form isolatedly and independent of the margins of the old muscles. 3) The newly formed muscles are not capable of differentiating normally; they disintegrate and are replaced by the cicatricial tissue. Consequently, some conditions of growth and development of the newly formed muscles are lacking. There are 4 figures and 11 references, 5 of which are Soviet.

2o-119-6-55/56

Histological Changes During the Healing of a Damaged Myocardium in Rats

ASSOCIATION: Institut morfologii zhivotnykh im. A. N. Severtsova Akademii nauk SSSR
(Institute of Animal Morphology imeni A. N. Severtsov, AS USSR)

PRESENTED: January 23, 1958, by N. N. Anichkov, Member, Academy of Sciences, USSR

SUBMITTED: January 11, 1958

Card 3/3

POLEZHAYEV, L.V.; AKHABADZE, L.V.; ZAKHAROVA, N.A.; MANT'YEVA, V.L.

Stimulating the regeneration of the mammalian cardiac muscle [with summary in English]. Izv. AN SSSR Ser.biol. 24 no.1:16-33 Ja-F '59. (MIRA 12:2)

1. Institute of Animal Morphology, Academy of Sciences of the U.S.S.R., Moscow.
(HEART--MUSCLE) (REGENERATION (BIOLOGY))

17(1) SOV/20-128-2-47/59

AUTHOR: Akhabadze, L. V.

TITLE: Distribution of Desoxyribonucleic Acid in Healing Injured Myocardium in Rats

PERIODICAL: Doklady Akademii nauk SSSR, 1959, Vol 128, Nr 2, pp 391 - 394 (USSR)

ABSTRACT: In continuation of the preceding paper (Ref 2) the author deals with the distribution of desoxyribonucleic acid (DNA) mentioned in the title. The processes of growth, multiplication of cells, and regeneration are always accompanied by an increase of DNA in the tissues. The DNA total content is an important index of the processes of growth on fibroblasts (Refs 6,10), leucocytes (Ref 10), and of the tissues of various organs (Ref 3). 22 grown-up male rats were used for the experiments. Their myocardium was damaged in the area of the left chamber of the heart by electro-diathermic coagulation (method of reference 2). The animals were killed 1 - 45 days after the operation. The author exactly describes the individual stages of the regeneration of animals killed at these periods and shows individual stages of this process (Figs 1-3).

Distribution of Desoxyribonucleic Acid in Healing Injured Myocardium in Rats

The 3 morphological stages found in the preceding paper of the author (Ref 2) were observed also in this case: 1) stage of the lysis of the necrotic tissue and formation of a young connective tissue in the focus of lesion 2) stage of the new formation of muscle units within the granulation and 3) decomposition stage of the newly formed muscles and stage of scar-formation. Each of these stages is characterized by qualitative changes of the DNA content and -distribution. 1) In the center proper of the injured zone DNA was not found at all since here no cells are preserved. 2) The DNA distribution differs in nuclei in the center and at the periphery of the focus of lesion even if the nuclei are of the same type. The nuclei of the central part are small and have a denser chromatine which takes a dark violet color by fuchsine sulphurous acid (Fig 3v). The author tries to explain a)the differences in the color intensity at the above-mentioned places of the focus of lesion and b) the weakly violet color in the intercellular space (after addition of fuchsine sulphurous acid). For a) he assumes a concentration of chromatine due to the reduction of the nuclei and for b) a nuclear substance liberated

APPROVED FOR RELEASE: 06/05/2000 CIA-RDP86-00513R000100610003-0"

Distribution of Desoxyribonucleic Acid in Healing Injured Myocardium in Rats

from destroyed nuclei (Refs 12,13). There are 3 figures and 17 references, 10 of which are Soviet.

ASSOCIATION: Institut morfologii zhivotnykh im. A. N. Severtsova Akademii nauk SSSR (Institute of Animal Morphology imeni A. N. Severstov of the Academy of Sciences, USSR)

PRESENTED: March 9, 1959, by N. N. Anichkov, Academician

SUBMITTED: February 6, 1959

AKHABADZE, L.V.

Distribution of ribonucleic acid during the healing of wounds in the myocardium of the rat. Dokl.AN SSSR 132 no.5:1210-1212 Je '60. (MIRA 13:6)

1. Institut morfologii zhivotnykh im. A.N. Severtsova Akademii nauk SSSR. Predstavleno akademikom N.N. Anichkovym.
(HEART--WOUNDS AND INJURIES) (NUCLEIC ACIDS)

POLEZHAYEV, L.V.; AKHABADZE, L.V.; ZAKHAROVA, N.A.; YAVICH, M.P.

Effect of pyrogenal and myocardial hydrolyzate on the regeneration of the heart muscle. Dokl.AN SSSR 138 no.3:714-717 My '61.
(MIRA 14:5)

1. Institut morfologii zhivotnykh im. A.N.Severtsova AN SSSR. Predstavleno akademikom A.N.Bakulevym.

(Heart--Muscle) (Regeneration (Biology))
(Pharmacology) (Tissue extracts)

S/020/62/143/005/017/018
B144/B138

AUTHOR: Akhabadze, L. V.

TITLE: Distribution of ribonucleic acid during stimulation of myocardial regeneration and inhibition of cicatrization

PERIODICAL: Akademiya nauk SSSR. Doklady, v. 143, no. 5, 1962, 1198-1201

TEXT: On the basis of their previous investigations (DAN, 132, no. 5 (1960); Izv. Akad. nauk, seriya biol., no. 1 (1959)), the authors studied the RNA distribution in the operated cardiac muscle of white rats after administration of a spleen preparation as inhibitor either alone (group I) or combined with a myocardial hydrolyzate (group II) as stimulator. Sections were prepared 1 - 324 days after the operation. The RNA content was determined by the methyl green-pyronine method. Histological changes are described in detail. In I the inflammatory reaction was markedly inhibited. The lysis of the coagulated muscle fibers was completed after 7 days (controls 13 days). The texture of the newly formed connective tissue is less dense. This promotes the formation of bridges by the fibers regenerating from the muscle stumps at the wound

Card 1/2

POLEZHAYEV, L.V.; AKHABADZE, L.V.; MUZLAYEVA, N.A.; YAVICH, M.P.

Regeneration of a rat's myocardium as an effect of ribonucleic acid and pyrogenal treatment. Dokl.AN SSSR 145 no.5:1180-1183 '62. (MIRA 15:8)

1. Institut morfologii zhivotnykh im. A.N.Severtsova AN SSSR. Predstavlena akademikom A.N.Bakulevym.
(PYROGENAL) (NUCLEIC ACIDS) (HEART—MUSCLE)
(REGENERATION (BIOLOGY))

AKHABADZE, L.V.

Variation in the basophily of an injured myocardium in animals treated with ribonucleic acid and pyrogenal. Dokl. AN SSSR 146 no.4:913-915 O '62. (MIRA 15:11)

1. Institut morfologii zhivotnykh im. A.N. Severtsova AN SSSR. Predstavleno akademikom N.N. Anichkovym.

(Nucleic acids) (Fever therapy)
(Regeneration (Biology))

POLEZHAYEV, L.V. (Moskva V-333, 2-y Akademicheskiy pr., d.4, kv.4); AKHABADZE, L.V.; MUZLAYEVA, N.A.; YAVICH, M.P.

Stimulation of the regeneration of the myocardium in inhibited cicatrization. Grud. khir. 5 no. 2:47-54 Mr-Ap '63. (MIRA 17:2)

1. Iz laboratorii eksperimental'noy morfologii zhivotnykh (zav.-prof. L.V.Polezhayev) Instituta morfologii zhivotnykh imeni A.N. Severtsova (direktor - chlen-korrespondent AN SSSR G.K.Khrushchov).

POLEZHAYEV, L.V.; AKHABADZE, L.V.; MUZLAYEVA, N.A.; YAVICH, M.P.

Stimulation of myocardium regeneration in rabbits and dogs. Dokl. AN SSSR 153 no.6:1450-1453 D '63. (MIRA 17:1)

1. Institut morfologii zhivotnykh im. A.N. Severtsova AN SSSR. Predstavleno akademikom A.N. Bakulevym.

AKHABADZE, L.V.

Change in the nucleic acid content in the heart muscle after the stimulation of its regeneration and inhibition of cicatrix formation. Dokl. AN SSSR 154 no.4:978-981 F '64.
(MIRA 17:3)

1. Institut morfologii zhivotnykh im. A.N. Severtsova AN SSSR. Predstavleno akademikom A.A. Anichkovym.

AKHABADZE, L.V.

Distribution of glycogen in the cardiac muscle after stimulation of its regeneration and inhibition of the development of a scar. Dokl. AN SSSR 154 no.5:1218-1221 F'64. (MIRA 17:2)

1. Institut morfologii zhivotnykh im. A.N. Severtsova AN SSSR. Predstavleno akademikom N.N. Anichkovym.

POLEZHAYEV, Lev Vladimirovich, prof.; AKHABADZE, Lyubov' Viktorovna; MUZLAYEVA, Nina Andreyevna; YAVICH, Marina Pinkhusovna; KOSOBUTSKAYA, I.P., red.

[Stimulation of the regeneration of the heart muscle] Stimuliatsiia regeneratsii myshtsy serdtsa. Moskva, Nauka, 1965. 395 p. (MIRA 18:11)

1. Akademiya nauk SSSR. Institut morfologii zhivotnykh.

AKHACHINSKIY, V.

Symposium on the Thermodynamics of Nuclear Materials. Atom. energ. 15 no.4:346-351 O '63. (MIRA 16:10)

SOV/120-58-5-24/32

AUTHORS: Akhachinskiy, V. V. and Mashirev, V. P.

TITLE: Automatic Maintaining of the Equality of the Temperatures of Two Media (Avtomaticheskoye podderzhaniye ravenstva temperatur dvukh sred)

PERIODICAL: Pribory i tekhnike eksperimenta, 1958, Nr 5, pp 94-96 (USSR)

ABSTRACT: The device is shown in the diagram on p 96. The transducer of the temperature difference is in the form of two resistance thermometers T_1 and T_2 which are connected into a resistance bridge. A symmetrical transformer (type EST-1) supplies the bridge with the mains frequency at 3 V. The resistance of the thermometers is 450 Ω. The operation of the device is as follows. The output voltage of the bridge is amplified by a 3-stage amplifier which has a gain of 8×10^5, and is then rectified by a detector and applied to the grid of a tube which forms the part of a phase shifting circuit. The parameters of the phase shifting circuit are chosen in such a way that, in the absence of the

Automatic Maintaining of the Equality of the Temperatures of Two Media

detector voltage the input tube of the phase shifter is closed. The phase shifter is followed by a thyratron, type TG8/3000; when the phase shifter tube is closed, the voltage at the grid of the thyratron is in anti-phase with the anode voltage and the thyratron does not conduct. As the detector voltage increases (positively), the phase of the voltage at the output of the phase shifter changes continuously up to about 180° and the current through the thyratron increases from 0 to its maximum value. Since the thyratron is connected in series with the heater of the temperature control device, the current through the heater depends on the voltage appearing at the input of the amplifier. Therefore, a temperature difference results in an increase of the heater current which in turn leads to a reduction in the temperature difference. The equipment is adjusted so that when the temperatures are equal, the current through the thyratron is zero; on the other hand, the current becomes a maximum when the temperature difference is 0.005°. The equipment can be used for the temperature control in thermostats. For this purpose

Automatic Maintaining of the Equality of the Temperatures of Two Media

it is possible to simplify it by using thermistors as the resistance thermometers. The paper contains 1 figure and 4 references; 3 of the references are English and 1 is Soviet.

SUBMITTED: November 22, 1957.

21.1330
26.2230

S/089/60/009/006/011/011
B102/B212

AUTHORS: Akhachinskiy, V. V., Kovtin, L. M.

TITLE: Heat of formation of $PuBe_{13}$

PERIODICAL: Atomnaya energiya, v. 9, no. 6, 1960, 504-505

TEXT: There are no data available in publications on the formation heats of intermetallic compounds of plutonium. The authors have determined it for $PuBe_{13}$ and report on it in this paper. It was determined by measuring the solution heat of $PuBe_{13}$ and its components in 19% hydrochloric acid in a microcalorimeter having an isothermal jacket (cf. Fig.). The calorimeter can consisted of two containers, an inner one made of tantalum and an outer one made of copper; between these two containers, the heater made of manganin wire (80 ohms) was located together with a paraffin layer. A copper resistance thermometer was mounted outside the calorimeter, which was connected via a bridge circuit to a mirror galvanometer (sensitivity 0.00003° per mm on the scale). The water equivalent of the calorimeter was 35 cal/deg and the cooling constant

Card 1/5

Heat of formation of $PuBe_{13}$

$3 \cdot 10^{-4}$ sec^{-1}. The water temperature in the casing was kept at 25°C ± 0.001°. All measurements were done as carefully and accurately as possible. The correction for the heat exchange has been calculated and taken into account. The hydrogen released in the reaction has been measured (and all necessary corrections were made), which made it possible to determine the chemical composition and phase composition of each dissolved weighed sample of the alloy by using the known Pu-Be phase diagram. The phase composition was calculated from the equation $x+y=1$, $138.80\,x + 908.26\,y = v$, where x and y represent the amount of Pu and $PuBe_{13}$, respectively, per gram of alloy; the numerical factors denote the amounts of hydrogen which were released by dissolution of 1 g Pu and 1 g $PuBe_{13}$; v denotes the amount of hydrogen (in cm^3) which was released by dissolution of 1 g alloy. The Be and Pu used had a purity of 99.15% with less than 0.2% impurities. $PuBe_{13}$ was obtained by fusing metallic Pu and Be powder in a high-frequency furnace (in a BeO container and Ar atmosphere). The lattice constant of the product obtained was determined to be a = 10.259 ± 0.001 kX, and its microhardness was

Heat of formation of $PuBe_{13}$.

1045 kg/mm^2. The phase analysis furnished compositions between 92.17% by weight of $PuBe_{13}$ + 7.83% by weight of Pu and 89.78% by weight of $PuBe_{13}$ + 10.22% by weight of Pu. The solution heat of $PuBe_{13}$ was calculated separately for each weighed sample, taking the phase composition into account. The following results have been obtained:

Dissolved substance	number of tests	H_2 released per g, cm^3	solution heat ΔH, kcal/mole
Cu	6	2477.8 ± 0.67	89.38 ± 0.06
Be	4	138.8 ± 0.13	141.02 ± 0.19
alloy	5	from 830 to 848	1267.2 ± 2.3

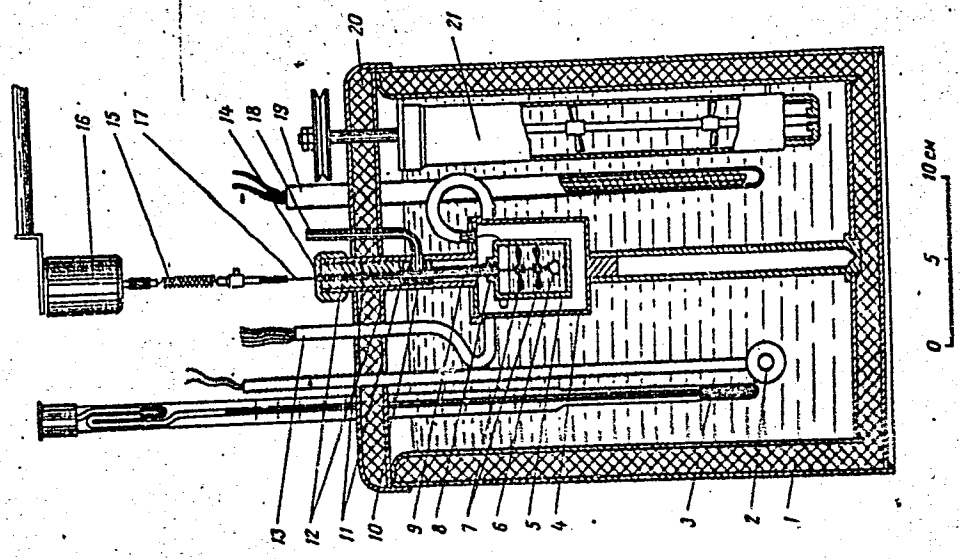
From these data, the formation heat of $PuBe_{13}$ has been determined by employing Hess' law, and the following result has been obtained: $\Delta H^\circ_{298} = 35.7 \pm 3.4$ kcal/mole. The authors thank Ye. S. Smotritskaya, A. N. Yelistratova, and M. I. Ivanov for help and suggestions. There are 1 figure, 1 table, and 4 references: 2 Soviet-bloc and 2 non-Soviet-bloc.

SUBMITTED: July 5, 1960

Card 3/5

22451
S/089/60/009/006/011/011
B102/B212

Heat of formation of $PuBe_{13}$



Card 4/5

Heat of formation of $PuBe_{13}$

Legend to the figure: 1) Casing of the calorimeter; 2) thermistor; 3) Beckmann thermometer; 4) housing; 5) calorimeter can; 6) flask with the substance to be investigated; 7) impellers; 8) calorimeter cover; 9) ebonite sleeve pipe; 10) tube; 11) felt interlayer; 12) copper sleeve; 13) outlet tube; 14) cover nut; 15) spring; 16) Warren drive; 17) stirrer axis; 18) tube connecting the calorimeter with a gas burette; 19) casing heater; 20) casing cover; 21) mixer.

Card 5/5

AKHACHINSKIY, V. V.

AKHACHINSKIY, V.V., KOPYTIN, L.M., IVANOV, M.I., AND PODOLSKAYA, N.S.

"Heats of formation of intermetallic compounds of Pu with Al and Fe, U with Fe."

Report submitted to the IAEA Symposium on the Thermodynamics of Nuclear Materials.
Vienna, Austria 21-26 May 1962

AKHADI, G.G.

Some changes in nitrogen metabolism in treating infectious polyarthritis at Naftalan. Azerb.med.zhur. no.4:96-99 Ap '58 (MIRA 11:7)

1. Iz Azerbaydzhanskogo nauchno-issledovatel'skogo instituta kurortologii i fizicheskikh metodov lechniya im. S.M. Kirova (nauchnyye rukovoditeli - prof. Sh.M. Gasanov i dots. A.Z.Babayev).
(NITROGEN METABOLISM)
(ARTHRITIS)
(NAFTALAN--MINERAL WATERS)

AKHADI, G. G. Cand Med Sci -- (diss) "Effect of naphthalan petroleum upon the nitrous metabolism in infectious-polyarthritis patients." Baku, 1959. 37 pp (Azerbaydzhan State Med Inst im M. Narimanov), 220 copies (KL, 46-59, 139)

AKHADI, G.G.

Influence of naphthalan therapy on the functional capacity of the joints and biochemical changes in chronic infectious polyarthritis. Azerb.med.zhur. no.1:7-13 Ja '60. (MIRA 13:5)

1. Iz instituta kurortologii i fizicheskikh metodov lecheniya imeni S.M. Kirova.
(NAPHTHALAN--PETROLEUM--THERAPEUTIC USE) (ARTHRITIS)

AKHADOV, Ya. Yu.

PHASE I BOOK EXPLOITATION SOV/5469

Soveshchaniye po kriticheskim yavleniam i flyuktuatsiyam v rastvorakh. Moscow, 1960.

Kriticheskiye yavleniya i flyuktuatsii v rastvorakh; trudy soveshchaniya, yanvar' 1960 g. (Critical Phenomena and Fluctuations in Solutions; Transactions of the Conference, January 1960) Moscow, Izd-vo AN SSSR, 1960. 190 p. 2,500 copies printed.

Sponsoring Agencies: Akademiya nauk SSSR. Otdeleniye khimicheskikh nauk. Moskovskiy gosudarstvennyy universitet im. M. V. Lomonosova. Khimicheskiy fakul'tet.

Responsible Ed.: M. I. Shakhparonov, Doctor of Chemical Sciences, Professor; Ed. of Publishing House: E. S. Dragunov; Tech. Ed.: S. G. Tikhomirova.

PURPOSE : This collection of articles is intended for scientific personnel concerned with chemistry, physics, and heat power engineering.

Card 1/9

Critical Phenomena and Fluctuations SOV/5469

COVERAGE: The book contains 24 of the 26 reports read at the Conference on Critical Phenomena and Fluctuations in Solutions organized by the Chemical Division of Moscow State University, January 26-28, 1960. The reports contain results of investigations carried out in recent years by Soviet physicists, chemists, and heat power engineers. The Organizing Committee of the Conference was composed of Professor Kh. I. Amirkhanov, A. Z. Golik, I. R. Krichevskiy (Chairman), V. K. Semenchenko, A. V. Storonkin, I. Z. Fisher, and M. I. Shakhparonov (Deputy Chairman). References accompany individual articles.

TABLE OF CONTENTS:

Critical Phenomena and Fluctuations SOV/5469

Critical Phenomena and Fluctuations SOV/5469

Critical Phenomena and Fluctuations SOV/5469

AVAILABLE: Library of Congress (QD545.S73)

Card 9/9

JP/dfk/jw
10-28-61

S/058/62/000/012/031/048
A160/A101

AUTHORS: Akhadov, Ya. Yu., Shakhparonov, M. I., Kasimov, R. M.

TITLE: Investigations of the molecular structure of individual liquids and of their solutions by radiophysical methods

PERIODICAL: Referativnyy zhurnal, Fizika, no. 12, 1962, 16, abstract 12D112 (In collection: "Primeneniye ul'traakust. k issled. veshchestva". M., no. 15, 1961, 29 - 39)

TEXT: Investigations were carried out of the permeability and losses of the following solutions: acetone-benzene, acetone-carbon tetrachloride, acetone--nitrobenzene, nitrobenzene-hexane, acetone-methyl alcohol, and acetone-water within a wide concentration and temperature range and on radio-wave lengths of 8.15 mm and 3.21 cm. An analysis of the results indicates that the molecules in the mentioned first four solutions did not tend to association. It appears that there are deviations from a chaotic distribution of polar-molecule orientations in the acetone-nitrobenzene solutions. In the acetone-methyl alcohol and acetone--water solutions it seems that there are associated complexes of water and methyl

Card 1/2

S/058/62/000/012/031/048
A160/A101

Investigations of the molecular structure of...

alcohol molecules. It may be assumed that when adding small amounts of acetone to water, the associated groups of water molecules increase.

[Abstracter's note: Complete translation]

Card 2/2

KASIMOV, R.M.; SHAKHPARONOV, M.I.; AKHADOV, Ya.Yu.

Influence of fluctuations on the dielectric properties of solutions in ultrahigh frequency electromagnetic fields. Zhur. strukt. khim. 2 no. 1:13-19 Ja-F '61. (MIRA 14:2)

. Moskovskiy gosudarstvennyy universitet im. M.V. Lomonosova.
(Dielectric constants) (Electromagnetic waves)

KASIMOV, R.M.; AKHADOV, Ya.Yu.; SHAKHPARONOV, M.I.

Dielectric properties of acetone - carbon tetrachloride solutions in superhigh-frequency electromagnetic fields and fluctuations in concentration. Dokl. AN Azerb. SSR 17 no. 3:207-211 '61. (MIRA 14:5)

1. Institut neftekhimicheskikh protsessov AN AzerbSSR.
(Acetone—Electric properties)
(Carbon tetrachloride—Electric properties)

KASIMOV, R.M.; AKHADOV, Ya.Yu.; SHAKHPARONOV, M.I.

Dielectric properties and molecular structure of acetone solutions of nitrobenzene, methyl alcohol, and water. Dokl. AN Azerb. SSR 17 no.8:687-690 '61. (MIRA 14:10)

1. Institut neftekhimicheskikh protsessov AN AzerbSSR. Predstavleno akademikom AN Azerbaydzhanskoy SSR M.F. Nagiyevym.
(Dielectrics)
(Systems(Chemistry))

40370
S/185/62/007/008/004/008
D234/D308

5.4120

AUTHORS: Shakhparonov, M.I., Kasimov, R.M., and Akhadov, Ya.Yu.

TITLE: Dielectric properties and molecular structure of concentrated liquid solutions

PERIODICAL: Ukrayins'kyy fizychnyy zhurnal, v. 7, no. 8, 1962, 874 - 882

TEXT: The authors give some of the results of a study of relaxation of the dielectric polarization of the following solutions: acetone-benzene, acetone-CCl_4, nitrobenzene-hexane, acetone-nitrobenzene, acetone-methyl alcohol and acetone-water. Dielectric constant and losses of these solutions were measured at 3.21 cm and 8.15 mm wavelengths by Poley's waveguide method. The experimental values were used for calculating the macroscopic relaxation times. Enthalpy and entropy of the activation of molecular reorientation in an external electric field were also determined. It is concluded that the solutions of nitrobenzene in hexane and of acetone in benzene and CCl_4 have random distribution of molecular orientation.

Card 1/2

S/185/62/007/008/004/008
D234/D308

Dielectric properties and ...

The process of relaxation of polarization in acetone-nitrobenzene solutions can be approximately represented as a superposition of two independent processes. There are associated complexes of molecules of the solvents in solutions of acetone in water and methyl alcohol. There are 7 figures and 1 table.

ASSOCIATION: Moskovskiy universitet (Moscow University)

Card 2/2

SHAKHPARONOV, Mikhail Ivanovich. Prinimali uchastiye: KASIMOV, R.M.; AKHADOV, Ya.Yu.; VAKALOV, I.A.; BERIDZE, D.K.; GUROV, K.P., kand. fiz.-matem. nauk, red.; YERMAKOV, M.S., tekhn. red.

[Methods of studying the thermal motion of molecules and the structure of liquids] Metody issledovaniia teplovogo dvizheniia molekul i stroeniia zhidkostei. Moskva, Izd-vo Mosk. univ. 1963. 280 p. (MIRA 16:11)
(Dielectric constants) (Molecular structure)

AKHADOV, Ya.Yu.; SHAKHPARONOV, M.I.; KASIMOV, R.M.

Use of radio physics methods in studying the moclecular structure of individual liquids and their solutions. Prim. ul'traakust. k issl. veshch. no.15:29-39 '61. (MIRA 16:8)

(Solution (Chemistry)) (Liquids) (Molecular theory)

KASIMOV, R.M.; AKHADOV, Ya.Yu.; SHAKHPARONOV, M.I.

Dielectric properties of acetone-nitrobenzene solutions in the superhigh-frequency range. Vest. Mosk. un. Ser. 2: Khim. 18 no.5:22-25 S-O '63. (MIRA 16:11)

1. Kafedra fizicheskoy khimii Moskovskogo universiteta.

SHAKHPARONOV, M.I.; AKHADOV, Ya.Ya.

Dielectric properties and molecular structure of water-acetone solutions. Zhur. strukt. khim. 6 no.1:21-26 Ja-F '65. (MIRA 18:12)

1. Moskovskiy gosudarstvennyy universitet imeni M.V.Lomonosova. Submitted October 2, 1963.

AKHADOVA, M.A.

16(1) PHASE I BOOK EXPLOITATION SOV/2660

Vsesoyuznyy matematicheskiy s"yezd. 3rd, Moscow, 1956

Trudy, t. 4: Kratkiye soderzhaniya sektsionnykh dokladov. Doklady inostrannykh uchenykh (Transactions of the 3rd All-Union Mathematical Conference in Moscow. vol. 4: Summary of Sectional Reports. Reports of Foreign Scientists) Moscow, Izd-vo AN SSSR, 1956. 247 p. 2,200 copies printed.

Sponsoring Agency: Akademiya nauk SSSR. Matematicheskiy institut.

Tech. Ed.: G.M. Shevchenko; Ed'torial Board: A.A. Abramov, V.G. Boltyanskiy, A.K. Vasil'yev, A.V. Medvedev, A.D. Myshkis, S.M. Nikol'skiy (Resp. Ed.), A.G. Postnikov, Yu. V. Prokhorov, L.A. Ryabushko, P. L. Ul'yanov, V.A. Uspenskiy, M.G. Chetayev, O. Ye. Shilov, and A.I. Shirshov.

PURPOSE: This book is intended for mathematicians and physicists.

COVERAGE: The book is Volume IV of the Transactions of the Third All-Union Mathematical Conference, held in June and July 1956. The book is divided into two main parts. The first part contains summaries of the papers presented by Soviet scientists at the Conference that were not included in the first two volumes. The second part contains the text of reports submitted to the editor by non-Soviet scientists. In those cases when the non-Soviet scientist did not submit a copy of his paper to the editor, the title of the paper is cited and, if the paper was printed in a previous volume, reference is made to the appropriate volume. The papers, both Soviet and non-Soviet, cover various topics in number theory, algebra, differential and integral equations, function theory, functional analysis, probability theory, topology, mathematical problems of mechanics and physics, computational mathematics, mathematical logic and the foundations of mathematics, and the history of mathematics.

Card 2/ 3

AKHAIMOV, B. A.

AKHAIMOV, B.A.; KOZLOV, A.G., redaktor;

[Efficient smelting methods for small induction furnaces] Ratsional'nye metody vedeniia plavok v malykh induktsionnykh pechakh. Sverdlovsk, Gos. nauchno-tekhn. izd-vo mashinostroit. i sudostroit. lit-ry [Uralo-Sibirskoe otd-nie] 1953. 23 p. (MLRA 7:8)

1. Uralo-Sibirskoye otdeleniye Mashgiza.
(Smelting furnaces)

AKHALADZE, G.I., kand.med.nauk.

Three cases of tuberculous bursitis of the ischial tuberosity. Probl.tub. 36 no.4:112 '58 (MIRA 11:7)

1. Iz gospital'noy khirurgicheskoy kliniki pediatricheskogo i sanitarno-gigiyenicheskogo fakul'tetov Tbilisskogo meditsinskogo instituta (zav. kafedroy - prof. M.K. Chachava) i onkologicheskoy kliniki Tbilisskogo instituta usovershenstvovaniya vrachey (zav. - kafedroy - prof. K.F. Vepkhvadze).
(BURSITIS, etiol. & pathogen.
tuberc. causing bursitis of ischial tuberosity (Rus))
(TUBERCULOSIS, OSTEOARTICULAR, case reports,
bursitis of ischial tuberosity (Rus))

AKHALADZE, G.L.; ZUMBADZE, G.L.

Certain surgical forms of crucellosis. Khirurgiia, Moskva no.12:55-59 Dec 1953. (CIML 25:5)

1. Candidate Medical Sciences for Akhaladze. 2. Of Kazbegsk Rayon Hospital (Head -- G. L. Zumbadze).

AKHALADZE, G.L.

AKHALADZE, G.L., kandidat meditsinskikh nauk (Tbilisi, Mtskhetskaya ul. d.46)

Echinococcosis of the gluteal region. Vest.khir.74 no.7:79 O-N '54. (MLRA 8:10)

1. Iz kazbegskoy rayonnoy bol'nitsy (zav.-N.N.Tavberidze)
(ECHINOCOCCOSIS, gluteal region)
(BUTTOCS, diseases, echinococcosis)

COUNTRY :USSR T
CATEGORY :Human and Animal Physiology, Blood

ABS. JOUR. : RZhBiol., No. 5 1959, No. 21926

AUTHOR :Akhaladze, G.
INST. :The Blood Transfusion Institute of the Georgian SSR
TITLE :The Leukopenia of Operative Shock and its Pathogenesis.

ORIG. PUB. :Sb. tr. N.-i. in-t perelivaniya krovi, GruzSSR, 1957, 5, 197--200.

ABSTRACT : Leukopenia is characteristic of shock of any etiology. In the case of operative shock, it parallels the fall in arterial pressure and entails a diminution in the level of neutrophils. The absence of leukopenia makes the diagnosis of shock doubtful. The intensity and duration of the leukopenia depends on the severity of the shock. Leukopenia is especially important in a differential diagnosis including shock and internal bleeding. The leukopenia of shock is said to be "overdistributive". At different stages in shock micro-

Card: 1/2

T-29

AKHALADZE, G.L.; SIMONIYA, Z.A.

Case of Treitz's hernia. Khirurgiia 35 no.3:104 Mr '59.
(MIRA 12:8)

1. Iz gospital'noy khirurgicheskoy kliniki (zav. - prof. M.Kh.Chachava) sanitarno-pediatricheskogo fakul'teta Tbilisskogo meditsinskogo instituta.
(HERNIA)

AKHALADZE, TS.L.

Biology of Livornian hawk moth (Deilephila lineata var.livornica Esp.). Soob.AN Gruz.SSR 25 no.5:599-603 N '60. (MIRA 14:1)

1. Akademiya sel'skokhozyaystvennykh nauk GruzSSR, Institut sadovodstva, vinogradarstva i vinodeliya. Predstavlèno chlenom-korrespondentom Akademii L.P. Kalandadze.
(Hawk moths)

AKHALADZE, Ts. L.

Cand Biol Sci - (diss) "Results of the study of the Livornskiy sphinx (Deilephila lineata var. livornica Esp) and testing of measures of combating it." Tbilisi, Pub. Georgian Agri Inst, 1961. 24 pp; (Ministry of Agriculture Georgian SSR, Geor Order of Labor Red Banner Agricultural Inst); 180 copies; free; (KL, 10-61 sup, 210)

38169
S/058/62/000/004/071/160
A058/A101

9,2160

AUTHOR: Akhaladze, V. P.

TITLE: Quartz-holders and quartz excitation

PERIODICAL: Referativnyy zhurnal, Fizika, no. 46, 1962, 36, abstract 4G302 (V sb. "Primeneniye ul'traakust. k issled. veshchestva". v. 13, Moscow, 1961, 333-341)

TEXT: The author gives a general description of quartz-holders, which enables one to realize unilateral operating conditions for quartz plates. He suggests that thin quartz plates be used as wide-band ultrasonic emitters operating under forced-oscillation conditions at frequencies of several megacycles.

Ye. Romanenko

[Abstracter's note: Complete translation]

Card 1/1

39620
S/194/62/000/004/055/105
D295/D308

9,2180

AUTHOR: Akhaladze, V. P.

TITLE: Quartz holders and the excitation of quartzes

PERIODICAL: Referativnyy zhurnal, Avtomatika i radioelektronika, no. 4, 1962, abstract 4-5-31n (V sb. Primeneniye ul'traakust. k issled. veshchestva. no. 13, M., 1961, 333-341)

TEXT: It has been observed by means of a shadow method that many quartz radiators have an inhomogeneous sound field. The homogeneity of such a field is determined by many factors, and in particular by the quartz holder. Among the various quartz holders tested, the best has proved a quartz holder with an air-cushion. In addition, versions of a quartz radiator working over a wide frequency range are described. It has been established that by using a single quartz a considerably wide range can be covered continuously. Measurements of ultrasonic absorption by means of exciting one and the same quartz (f = 12.5 Mc/s) over the frequency range 5 - 15 Mc/s

Card 1/2

40332

S/194/62/000/006/117/232
D256/D308

24.1800

AUTHORS: Akhaladze, V.P., and Kudryavtsev, B.B.

TITLE: Measurements of absorption of ultrasound in solutions in the presence of an external electric field

PERIODICAL: Referativnyy zhurnal. Avtomatika i radioelektronika, no. 6, 1962, abstract 6-5-35 y (V. sb. primeneniye ul'traakust. k issled. veshchestva, no. 12, M., 1960, 177-187)

TEXT: The investigation concerns the possible effect of electric fields, parallel and perpendicular to the direction of the sound, upon the propagation of the sound in solutions of polar liquids in non-polar solvents. The velocity and the absorption of ultrasound was measured using optical method of light diffraction on the ultrasonic waves. The experimental system is described and a bloc diagram of the el. circuits is presented. The measurements were carried out for binary mixtures benzene - nitro-benzene and n-heptane - nitrotoluene at frequencies 8 to 19 Mc/s and at a temp. of 21°C. The el. field was produced using two electrodes submerged in-

Card 1/2

AKHALADZE, V.P.

Quartzholders and the excitation of quartzes. Prim. ul'tra-akust. k issl. veshch. no.13:333-341 '61. (MIRA 16:6)

(Quartz—Acoustic properties)

S/058/62/000/012/028/048
A160/A101

AUTHORS: Akhaladze, V. P., Semin, V. I.

TITLE: An installation for supersonic measurings in the liquid in the temperature and frequency range on one quartz plate

PERIODICAL: Referativnyy zhurnal, Fizika, no. 12, 1962, 76, abstract 12G686 (In collection: "Primeneniye ul'traakust. k issled. veshchestva". M., no. 16, 1962, 177 - 182)

TEXT: A formerly-indicated possibility is used for measuring the coefficient of absorption and velocity of ultrasound in liquids in the frequency and temperature range without replacing the quartz plates. An optical installation provided with larger-size windows in the thermostating chamber was used for determining the absorption coefficient. Presented is its diagram and the design of its windows, permitting to eliminate the moisture condensate with the help of a good heat insulation, and enabling one to observe the sonic field in the chamber along its whole length. The drawing shows the quartz holder of a simplified design, used at temperatures which slightly differ from the surrounding ones, and

Card 1/2

An installation for supersonic measurings in...

also the quartz holder used at high and low temperatures and adapted for direct emission into the liquid. According to the data on the measuring of the ultrasound velocity, carried out in benzene with the help of the first quartz (with a natural frequency of 11.3 Mc) in a frequency range of 1 - 16 Mc and a temperature range of 6.5 - 75°C, a curve was plotted which shows the relation between the velocity of ultrasound and the temperature. The magnitude of the velocity remained unchanged.

I. Nikolayeva

[Abstracter's note: Complete translation]

Card 2/2

45435
S/058/63/000/001/104/120
A062/A101

21.1800

AUTHORS: Akhaladze, V. P., Kudryavtsev, B. B.

TITLE: Influence of electrostatic fields on ultrasonic propagation in high polymer solutions

PERIODICAL: Referativnyy zhurnal, Fizika, no. 1, 1963, 68, abstract 1Zh407 (In collection: "Primeneniye ul'traakust. k issled. veshchestva". no. 15, Moscow, 1961, 117 - 127)

TEXT: Results are reported of a study on the influence of an electrostatic field on the propagation of ultra-sound at frequencies 5 - 15 Mc/s in solutions of polar polymers in non-polar liquids. Measurements were carried out in solutions of benzol-polymethyl-methacrylate, toluol-polymethyl-methacrylate and benzol-polystyrol at room temperature for different concentrations. To find out the influence of an electrostatic field on the ultra-sound absorption, use was made of a specially elaborated photoelectric method in which the absolute value of the ultra-sound absorption in the absence of an electric field was determined by Bazhulin's method, and the relative value by a photometric

Card 1/2

method. The accuracy of the method is estimated as ~0.1%. In all the measurements there was found no influence of the electrostatic field on the absorption and speed of ultra-sound. A large additional absorption of ultra-sound is noted in the investigated solutions despite the absence of relaxation phenomena. If the polymer molecules are represented in the form of loose small clouds, then it may be assumed that the additional absorption is brought about by friction in the relative motion of the polymer molecules in the solution.

E. Denisov

[Abstracter's note: Complete translation]

AKHALADZE, V.P.; SEMIN, V.I.

Apparatus for ultrasonic measurement in liquids in a wide range of frequencies and temperatures using a single quartz plate. Prim.ul'traakust.k issl.veshch. no.16:177-182 '62.
(MIRA 16:4)

(Ultrasonic waves--Measurement) (Liquids--Acoustic properties)

KUDRYAVTSEV, B.B.; AKHALADZE, V.P.; KORCHAGINA, I.I.

Effect of the double layer potential on the rate of wave propagation along the interface of two liquids. Zhur. fiz. khim. 38 no.9:2309-2311 S '64. (MIRA 17:12)

AKHALAYA, M.G.

Late revivification of an excised extremity. Sbor. trud. Med. nauch. ob-vo Abkh. 2:17-24 '59. (MIRA 14:10)

1. Iz fakul'tetskoy khirurgicheskoy kliniki 2-go Moskovskogo meditsinskogo instituta imeni I.V.Stalina (director - prof. N.A. Bogoras) i eksperimental'noy laboratorii po peresadke organov Respublikanskoy bol'nitsy imeni A.A.Ostroumova Ministerstva zdravookhraneniya Abkhazskoy ASSR. Nauchnyy rukovoditel' - akademik AN GruzSSR K.D. Eristavi.

(TRANSPLANTATION) (EXTREMITIES--SURGERY)

AKHALAYA, M.G.

Local intraosseous and intravenous novocaine anesthesia supplemented with curarelike substances in the treatment of fractures of the long tabular bones. Sbor. trud. Med. nauch. ob-vo Abkh. 2:25-27 '59.
(MIRA 14:10)

1. Iz otdeleniya travmatologii i vosstanovitel'noy khirurgii Respublikanskoy bol'nitsy imeni A.A.Ostroumova Minzdrava Abkhazskoy ASSR (zav. otdeleniyem M.G.Akhalaya, glavnyy vrach G.N.Nadareyshvili).
(LOCAL ANESTHESIA) (FRACTURES)
(NOVOCAINE) (CURARELIKE SUBSTANCES)