APPROVED FOR RELEASE: Thursday, September 26, 2002 CIA-RDP86-00513R001446530009-9

ture gradient in the vicinity of the p-n junction. By this means the effect of the junction is eliminated. Since absolute values of temperature gradient of the thermal EMF need not be known, the accuracy of measurement is greatly increased. Experimental results are in good agreement with computed results. Orig. art. has: 2 figures and 1 table.

ASSOCIATION: Fiziko-tekhnicheskiy institut im. A. F. Ioffe Akademii nauk SSSR (Physico-technical Institute, Academy of Sciences SSSR)

SUBMITTED: 00 ENCL: 01

SUB CODE: EC NO REF SOV: 001 OTHER: 002

APPROVED FOR RELEASE: Thursday, September 26, 2002 CIA-RDP86-00513R001446530009-9

L 05609-67 EWT(m)/EWP(t)/ETI IJP(c) JD/JG ACC NR: AP6024491

ACC NR: AP6024491 SOURCE CODE: UR/0181/66/008/007/2218/2221

AUTHOR: Badalov, M. F.; Rzayev, M. A. 64 B

ORG: Institute of Physics, AN AzSSR, Baku (Institut fiziki AN AzSSR)

TITLE: Phenomenon of secondary tunneling in GaSb

SOURCE: Fizika tverdogo tela, v. 8, no. 7, 1966, 2218-2221

TOPIC TAGS: gallium compound, antimonide, volt ampere characteristic, tunnel diode, pn junction, temperature dependence, semiconductor research

ABSTRACT: The authors investigated the volt-ampere characteristics of tunnel junctions produced with p-GaSb as the basis, at different temperatures, for the purpose of explaining the nature of the secondary peaks on the volt-ampere characteristic. Inverted diodes were produced from single-crystal p-GaSb doped with zinc. The p-n junctions were produced by fusing an alloy of 98% Sn plus 2% Te in vacuum. The volt-ampere characteristics were plotted at the different temperatures using direct current and a null method. The secondary peaks were observed in the voltage range 0.28 - 0.32 v at room temperature and are attributed to the presence of deep levels in the semiconductor, caused by uncontrolled impurities and defects and allowing the carriers to tunnel through the p-n junction. The observed temperature dependence of the position of the secondary peaks is attributed to the temperature dependence of the injection current, and not to a possible influence of the residual resistance of the diode. The author thanks G. B. Abdullayev for interest in the work and valuable remarks. Orig. art. has: 3 figures and 2 formulas.

SUB CODE: 20/ SUBM DATE: 21Dec65/ ORIG REF: 001/ OTH REF: 005

Card 1/1 egh

RZAYEV, M.A.

Prospects for finding oil and gas in the Miocene sediments of the western Apsheron Peninsula. Azerb. neft. khoz. 40 no.5:5-9 My '61. (MIRA 16:12)

L 12855-63 EWT(1)/EWG(k)/BDS/EEC(b)-2 AFFTC/ASD/ESD-3 Pz-4
AT/IJP(C)
ACCESSION NR: AP3003719 S/0109/63/008/007/1187/1192

AUTHOR: Galavanov, V. V.; Nasledov, D. N.; Rzayev, M. A. 65 64

TITLE: Volt-ampere characteristics of alloyed p-n junctions in InSb

SOURCE: Radiotekhnika i elektronika, v. 8, no. 7, 1963, 1187-1192

TOPIC TAGS: diode, volt-ampere characteristics, p-n junction, diode alloy, InSb diode, Shockley theory

ABSTRACT: The effect of temperature variation (78 to 150K) on the volt-ampere characteristics of an alloy type p-n junction in InSb was investigated. The junctions were prepared on n-type InSb crystals with a donor impurity concentration from 3×10^{14} to $3 \times 10^{10}/cm^3$ by alloying either with In or In with cadmium impurities. The area of the p-n junction was between 2×10^{-2} to $4 \times 10^{-2}/cm^2$. The volt-ampere characteristics obtained by direct current for the specimen before and after etching in the SR-4 etching bath at 78K show that reverse current decreases by 1.5 orders of magnitude after etching, while forward current does not change at voltages over 0.13 v. Rectification is absent below 0.12 v for the specimen which is not etched. This is explained by a small shunting resistance (180 ohm) in the specimen surface layer, which does not depend on the voltage

applied, and is 10,000 ohms for the etched specimen. It was concluded that this resistance determines the inverse p-n junction characteristics. The study of volt-ampere characteristics at various temperatures shows that both reverse and forward currents increase with increasing temperature. The β-coefficient in the expression for the straight part of the volt-ampere characteristics which appears in the Shockley theory varies between 1 and 2. The value of the cutoff voltage as well as its temperature dependence characteristic coincides with the contact potential difference. The β-coefficient and other data obtained in these experiments agree qualitatively with the Shockley and Sah-Noyce-Shockley theories. Orig. art. has: 6 figures, 1 table, and 5 formulas.

ASSOCIATION: Fiziko-tekhnicheskiy institut im. A. F. Ioffe AN SSSR (Physicotechnical Institute, AN SSSR)

SUBMITTED: 12Jun62 DATE ACQ: 02Aug63 ENCL: 00

SUB CODE: PH NO REF SOV: 000 OTHER: 010

L 18388-63 EWP(q)/EWT(m)/BDS AFFTC JD
ACCESSION NR: AP3003732 S/0109/63/008/007/1280/1281

58
57

AUTHOR: Galavanov, V. V.; Lebedev, A. A.; Rzayev, M. A.

TITLE: Capacitance of alloy p-n junction in InSb

27—27

SOURCE: Radiotekhnika i elektronika, v. 8, no. 7, 1963, 1280-1281

TOPIC TAGS: capacitance, InSb junction

ABSTRACT: Results are reported of an experimental determination of capacitance of a p-n junction obtained by alloying In into n-InSb. Single crystals of InSb with donor-impurity concentrations of 3×10^{14}, 2×10^{15}, and 2×10^{16} cm^{-3} were used as a source material. The p-n junction area was 0.02 cm^2. Thirty samples were measured at the liquid-nitrogen temperature, at 50-1,000 kc. The capacitance was found to depend on the frequency and smoothness of the junction surface. "In conclusion, we consider it our pleasant duty to thank D. N. Nasledov for his interest in this work." Orig. art. has: 2 figures and 1 formula.

Card 1/2

L 18388-63
ACCESSION NR: AP3003732

ASSOCIATION: Fiziko-tekhnicheskiy institut im. A. F. Ioffe AN SSSR (Physicotechnical Institute, AN SSSR)

SUBMITTED: 19Oct62 DATE ACQ: 02Aug63 ENCL: 00

SUB CODE: GE NO REF SOV: 000 OTHER: 006

Card 2/2

GALAVANOV, V.V.; NASLEDOV, D.N.; RZAYEV, M.A.

Voltampere characteristics of alloyed p-n junctions in InSb.
Radiotekh. i elektron. 8 no.7:1187-1192 Jl '63. (MIRA 16:8)

1. Fiziko-tekhnicheskiy institut im. A.F.Ioffe AN SSSR.
(Semiconductors)

GALAVANOV, V.V.; LEBEDEV, A.A.; RZAYEV, M.A.

Capacitance of fused p-n junction in InSb. Radiotekh. i elektron. 8 no.7:1280-1281 Jl '63. (MIRA 16:8)

1. Fiziko-tekhnicheskiy institut im. A.F.Ioffe AN SSSR.
(Transistors)

RZAYEV, M.A.; SALAYEV, S.G.; ZEYNALOV, M.M.

Miocene geology of the western Apsheron Peninsula. Trudy AzNII DN no.10:31-45 '60. (MIRA 14:4)
(Apsheron Peninsula--Geology)

GUSEYNOV, G.A.; SAFAROV, N.I.; GAIBOV, T.D.; RZAYEV, N.A.; KASIMOV, G.I.; MOVSUMOV, S.M.

Effectiveness of the use of specific gamma-globulins in burn sickness; preliminary report. Probl. gemat. i perel. krovi 9 no.4:42-43 Ap '64. (MIRA 17:11)

1. Azerbaydzhanskiy nauchno-issledovatel'skiy institut gematologii i perel'vaniya krovi (dir. - dotsent G.A. Guseynov), Baku.

COUNTRY : USSR
CATEGORY : Cultivated Plants. Cereals. M

ABS. JOUR. : RZhBiol., No. 23, 1958, No. 104617

AUTHOR : Rzayev, N. D.
INST. : Institute of Agriculture, AS Azerbaydzhan SSR
TITLE : The Influence of Microelements on the Resistance to Cold and on the Occurrence of Lodging in Different Wheat Varieties.
ORIG. PUB. : Tr. 5-y Nauchn. konferentsii aspirantov AN AzerbSSR. Baku, AN AzerbSSR, 1957, 8-15
ABSTRACT : Experiments at the Institute of Agriculture, Academy of Sciences, Azerbaydzhan SSR. The influence of B, Mn, Cu and Zn with and without the background of nitrogen and phosphorus fertilizers was studied. Microelements, especially Mn and Cu, considerably increase the resistance to cold in wheat, improve the water cycle in the plants, and appreciably check the lodging of wheat. With the application of Cu, no lodging at all was observed. Microelements, especially Cu and Mn, appreciably increase the absolute weight and the character of the grain.

Card: 1/1

MEKHTIYEV, S.D.; RZAYEV, M.I.; ABDULLAYEVA, L.R.; BRZHEZITSKAYA, L.M.

Isomerization of halo-substituted alkanes under the action of aluminum chloride. Azerb.khim.zhur. no.5:85-89 '62. (MIRA 16:5)
(Paraffins) (Isomerization) (Aluminum chloride)

RZAYEV, M.M., kand.biolog. nauk

Some methodical problems in the practical selection of cotton. Agrobiologiia no. 3:399-403 My-Je '64. (MIRA 17:7)

1. Azerbaydzhanskiy nauchno-issledovatel'skiy institut khlopkovodstva, Kirovabad.

APPROVED FOR RELEASE: Thursday, September 26, 2002 CIA-RDP86-00513R001446530009-9"

RZAYEV, N.A.

The effect of irritation of interoceptors on the residual nitrogen and polypeptide nitrogen of the blood. A. I. Karaev, R. I. Safarov, and N. A. Rzaev. *Doklady Akad. Nauk Azerbaidzhan. S.S.R.* 12, 129–32(1956)(in Russian).—Irritation of the receptor centers of the rectum of dogs results in intensification of protein metabolism, shown by increase of nonprotein N and polypeptide N in the blood.
G. M. Kosolapoff

Med 3

USSR / Human and Animal Physiology. Blood. Blood Transfusions and Blood Substitutes. T

Abs Jour: Ref Zhur-Biol., No 22, 1958, 101800.

Author : Rzayev, N. A.
Inst : Azerbajdzhan Scientific Research Institute of Blood Transfusion.

Title : The Influence of Isohemotransfusion on the Nitrous Components of the Arterial and Venous Blood.

Orig Pub: Sb. nauchn. tr. Azerb. n.-i. in-ta perelivaniya krovi, 1957, vyp. 3, 125-133.

Abstract: On 13 dogs anematized through bleeding, the changes of dry residue and water, total protein and residual N, polypeptide and amino N were studied in the arterial and venous blood of the hind extremity after isohemotransfusion (I). The activity of proteolytic ferments (PF) was determined in venous

USSR / Human and Animal Physiology. Blood. Blood Transfusions and Blood Substitutes. T

Abs Jour: Ref Zhur-Biol., No 22, 1958, 101800.

Abstract: blood. In a majority of cases, 1 hour after I, an increase of water in the serum, most strongly pronounced in venous blood, was observed. After 24 hours these indices decreased. The amount of total and protein N decreased after 1 hour in most cases, more significantly in the arterial than in venous blood. 24 hours later, the amounts of total and protein N were restored, with a significant decrease of arteriovenous difference. The residual N decreased insignificantly in most cases after 1 hour and, after 24 hours, exceeded the initial amount. The amount of amino and polypeptide N increased insignificantly and temporarily. The activity of PF increased 1 hour after I and, after 24 hours, returned to the initial level. Apparen-

RZAYEV, N. A.

RZAYEV, N. A., Cand Biol Sci -- (diss) "Condition of the albumin metabolism in bleeding and blood transfusion." Baku, 1958. 16 pp. (Min Higher Ed USSR, Azerbaydzh State Univ im S. M. Kirov), 100 copies. (KL, 9-58, 116)

RZAYEV, N.A., kandidat biologicheskikh nauk

Change in the distribution of amino nitrogen between plasma and the formed elements of arterial and venous blood in isohemotransfusion. Azerb.med.zhur. no.11:14-19 N '59. (MIRA 13:4)

1. Zav. biokhimicheskoy laboratoriyey Azerbaydzhanskogo nauchno-issledovatel'skogo instituta perelivaniya krovi (direktor - dotsent G.A. Guseynov).
(NITROGEN) (BLOOD--TRANSFUSION)

RAZAYEV, N.A.; GAIBOV, T.D.; GUSEYNOV, G.A. (Baku)

Changes in the amino acid content of the blood of patients after blood transfusion. Pat. fiziol. i eksp. terap. 4 no. 5:16-19 S-O '60. (MIRA 13:12)

1. Iz Azerbaydzhanskogo nauchno-issledovatel'skogo instituta gematologii i perelivaniya krovi.
(BLOOD—TRANSFUSION) (AMINO ACIDS)

RZAYEV, N.A.; GAIBOV, T.D.; GUSEYNOV, G.A.

Some data on the assimilation by the body of protein hydrolysate products. Probl.gemat.i perel.krovi no.11:41-47 '61. (MIRA 15:1)

1. Iz biokhimicheskoy laboratorii (zav. N.A. Rzayev) Azerbaydzhanskogo nauchno-issledovatel'skogo instituta gematologii i perelivaniya krovi (dir. - dotsent G.A. Guseynov).
(PROTEIN METABOLISM)

GUSEYNOV, G.A.; KASIMOV, G.I.; RZAYEV, N.A.; AKHUNDOVA, A.M.; TERMKRTYCHEVA, O.Kh.; FROLOVA, K.G.

Use of plastic bags for the storage and transfusion of preserved blood. Probl. gemat. i perel. Krovi 8 no.9:18-19 S '63. (MIRA 17:9)

1. Iz Azerbaydzhanskogo nauchno-issledovatel'skogo instituta gematologii i perelivaniya krovi (dir. - dotsent G.A.Guseynov).

ABUTALYBOV, M.G.; ALIYEV, D.A.; RZAYEV, N.D.

Effect of trace elements on the carbohydrate and protein metabolism of plants. Uch.zap.AGU no.8:41-51 '56. (MLRA 10:4)
(Plants, Effect of minerals on) (Carbohydrate metabolism) (Protein metabolism)

RZAYEV, N.D.

Effect of some trace elements on the winter hardiness of wheat in Azerbaija (in Azerbaijani with summary in Russian]. Dokl AN Azerb.SSR 13 no.7:775-779 '57. (MLRA 10:7)
(Azerbaijan--Wheat) (Plants--Frost resistance)
(Trace elements)

USSR/Cultivated Plants - Grains.

Abs Jour : Ref Zhur - Biol., No 9, 1958, 39185

Author : Rzayev, N.D.

Inst : AS AzerSSR

Title : The Influence of Some Trace Elements on Winter Resistance of Wheat Under Conditions Prevailing in Azerbadzhan.

Orig Pub : M'ruseler. Dokl. AN Azerb. SSR, 195, 13, No 7, 775-779

Abstract : The influence of trace elements on the decrease of water content in plant tissues, on the increase in cell fluid concentration and on frost resistance of plants was established in the Karabakh zonal experiment station. The quantity of plants which failed diminished by 33.4% under the influence of Cu. Under the influence of Mn it decreased by 26.7%. B caused a decrease of 20.0% and

Card 1/2

KEAIN, N.D.

Effect of trace elements on the susceptibility of wheat to lodging and its relation to oxidation-reduction processes. Uch.zap.AGU.Biol.ser. no.2:57-66 '59. (MIRA 13:6)

(TRACE ELEMENTS) (WHEAT)

APPROVED FOR RELEASE: Thursday, September 26, 2002 CIA-RDP86-00513R001446530009-9"

RZAYEV, N.M, Cand Med Sci--(diss) "The use of mesaton in surgery." Baku, 1958. 18 pp (Azerbaydzhan State Med Inst im N. Narimanov), 150 copies (KL,31-58, 108)

EFENDIYEV, F.A.; RZAYEV, N.M.; MUSTAFAYEV, R.A.

Resuscitation of the organism after clinical death caused by air embolism. Dokl. AN Azerb. SSR 17 no.12:1185-1188 '61. (MIRA 15:2)

1. Institut eksperimental'noy i klinicheskoy meditsiny AN AzSSR.
(RESUSCITATION) (EMBOLISM)

RZAYEV, N. M., kand. med. nauk

Mezaton in the treatment of acute hemodynamic disorders. Khirurgiia no.4:82-85 '62. (MIRA 15:6)

1. Iz kafedry fakul'tetskoy khirurgii (zav. - chlen-korrespondent AN Azerbaydzhanskoy SSR prof. F. A. Efendiyev) pediatricheskogo i sanitarno-gigiyenicheskogo fakul'tetov Azerbaydzhanskogo meditsinskogo instituta imeni Narimanova.

(ETHANOL) (BLOOD—CIRCULATION, DISORDERS OF)

APPROVED FOR RELEASE: Thursday, September 26, 2002 CIA-RDP86-00513R001446530009-9"

EFENDIYEV, F.A., RZAYEV, N.M.

Treatment of pulmonary infarction with heparin. Trudy Inst. klin. i eksper. kard. AN Gruz. SSR 8:395-400 '63. (MIRA 17:7)

1. Otdeleniye grudnoy khirurgii fakul'tetskoy khirurgicheskoy kliniki pediatricheskogo i sanitarno-gigiyenicheskogo fakul'tetov Azerbaydzhanskogo meditsinskogo instituta imeni N.Narimanova, Baku.

EFENDIYEV, F.A., red.; ABDULAYEV, D.M., red.; MAMEDOV, Z.M., red.; GUSEYNOV, D.Yu., red.; GASANOV, Kh.A., red.; RZAYEV, N.M., red.; KERIMOV, G.M., red.; ABDULLAYEV, M.M., red.

[Problems of cardiovascular and endocrine pathology] Voprosy serdechno-sosudistoi i endokrinnoi patologii. Baku, Izd-vo AN Azerbaidzh.SSR, 1964. 195 p. (MIRA 17:12)

1. Azerbaidzhanskiy institut eksperimental'noy i klinicheskoy meditsiny.

RUAYEV, N.M.

Diagnosis and treatment of embolism and thrombosis of the pulmonary artery. Azerb. med. zhur. 42 no.3:25-35 Mr '65. (MIRA 18:6)

1. Iz Azerbaydzhanskogo instituta eksperimental'noy i klinicheskoy meditsiny AMN SSSR (direktor - chlen-korrespondent AN Azerb. SSR, prof. F.A. Efendiyev [deceased]).

RZAYEV, Niyazi.

Method for converting the lunar calendar to solar [in Azerbaijani with summary in Russian]. Dokl. AN Azerb. SSR 14 no.4:339-341 '58. (MIRA 11:5)
(Time--Conversion tables)

APPROVED FOR RELEASE: Thursday, September 26, 2002 CIA-RDP86-00513R001446530009-9"

RZAYEV, Niyzi

New experimental plan of a club for 200 persons. Dokl.AN Azerb. SSR 17 no.4:355-358 '61. (MIRA 14:6)
(Clubhouses)

APPROVED FOR RELEASE: Thursday, September 26, 2002 CIA-RDP86-00513R001446530009-9"

RZAYEV, P.B.; ROYTER, V.A.; KORNEYCHUK, G.P.

Kinetics of sulfuric acid catalysis on barium-aluminum-vanadium catalysts. Ukr. khim. zhur. 26 no.2:161-167 '60. (MIRA 13:9)

1. Institut fizicheskoy khimii im. L.V. Pisarzhevskogo AN USSR.
(Sulfur dioxide) (Catalysts)

APPROVED FOR RELEASE: Thursday, September 26, 2002 CIA-RDP86-00513R001446530009-9"

RZAYEV, U.

Nonlinear mixed problem for a linear problem. Uch.zap.AGU. Fiz.-mat.i khim.ser. no.1:63-69 '59. (MIRA 13:6)
(Differential equations)

T

USSR/Human and Animal Physiology (Normal and Pathological). Blood. Transfusions and Blood Substitutes.

Abs Jour: RefZhur-Biol., No 17, 1958, 79433.

Author : Efendiyev, F.A.; Goncharskaya, T.Ya.; Rzayev, N.M.
Inst :
Title : Clinical Observations on Transfusions of Dry Plasma Dissolved in Antishock Liquid (According to a Perscription of the AzIPK [Azerbaydzhan Institute of Blood Transfusion]).

Orig Pub: Sb. nauchn. tr. Azerb. n.-i. in-ta perelivaniya krovi, 1957, vyp. 3, 11-17.

Abstract: The antishock disintoxicated liquid of the AzIPK is a colloid solution which contains isogenetic plasma $MgSO_4$ (0.4%), mesatone [sic] (0.004%), and ascorbic acid. High effectiveness and sin-

Card : 1/2

RZAYEV, N.M.

Mesaton, a new sympathomimetic amine, and its use in surgery. Azerb.med.zhur. no.1:96-100 Ja '58 (MIRA 11:12)

1. Iz kliniki fakul'tetskoy khirurgii (zav. klinikoy - zaslyzhenny deyatel' nauki, prof. F.A. Efendiyev) pediatricheskogo i sanitarno-gigiyenicheskogo fakul'tetov Azerbaydzhanskogo gosudarstvennogo meditsinskogo instituta imeni N.Narimanova (direktor - zaslyzenny deyatel' nauki prof. B.A. Eyvazov).
(VASOMOTOR DRUGS)
(ETHANOL)

SOV/76-32-11-10/32

5(4), 5(1)

AUTHORS: Royter, V. A., Korneychuk, G. P., Stukanovskaya, N. A., Rzayev, P. B.

TITLE: The Effect of the Transport Phenomena on the Kinetics of the Oxidation of Sulfur Dioxide Gases on the Barium-Aluminum-Vanadate Catalyst (Vliyaniye yavleniy perenosa na kinetiku okisleniya sernistogo gaza na bariyevo-alyumo-vanadiyevom katalizatore) I. Investigations According to the Diaphragm Method (I. Issledovaniye metodom diafragm)

PERIODICAL: Zhurnal fizicheskoy khimii, 1958, Vol 32, Nr 11, pp 2525-2531 (USSR)

ABSTRACT: The kinetics mentioned in the title has already been investigated by some authors (Refs 1,2,3). In the present case the diaphragm method is employed and the equation by G. K. Boreskov (Ref 3) is modified for the conditions of this method (Ref 4). The operation mechanism of this method has already been described (Refs 4-6). A schematic representation of the test plant (Fig 1) as well as a diagram of the vessel for sample taking of the gases (Fig 3) are given. A reactor apparatus of quartz (Ref 10) was used. The diaphragms (from a

The Effect of the Transport Phenomena on the Kinetics of the Oxidation of Sulfur Dioxide Gases on the Barium-Aluminum-Vanadate Catalyst. I. Investigations According to the Diaphragm Method

barium-aluminum-vanadate contact mass) were 0.64 cm thick, had a diameter of 1.78 cm and a weight of 1.499 g. The experimental data were obtained for three initial concentrations of the SO_2 gas in air (2.43; 4.78; 6.42%) at temperatures of 430-530°C (Table 2). The activation energy of the oxidation process of SO_2 on barium-aluminum-vanadate catalysts amounts to from 36 to 39 kcal/mol, and thus is considerably higher than the value (23 kcal/mol) given by G. K. Boreskov. This is regarded as a proof of the assumption of the important effect of the transport factor also in the case of fine-grained catalysts. There are 8 figures, 2 tables, and 12 references, 11 of which are Soviet.

ASSOCIATION: Akademiya nauk Ukrainskoy SSR, Institut fizicheskoy khimii im. L. V. Pisarzhevskogo, Kiyev (Academy of Sciences, Ukrainskaya SSR, Institute of Physico-Chemistry imeni L. V. Pisarzhevskiy, Kiyev)

STUKANOVSKAYA, N.A.; GOLODETS, G.I.; RZAYEV, P.B.

Analytical separation of a mixture of substances obtained in the catalytic oxidation of naphthalene. Ukr. khim. zhur. 29 no.8:827-828 '63. (MIRA 16:11)

1. Institut fizicheskoy khimii im. Pisarzhevskogo AN UkrSSR.

RZAYEV, P. B. Cand Chem Sci -- "On the kinetics of oxidation of sulfurous anhydride on barium-and-alumovanadium catalyzers." Baku, 1960. (Azerbaydzhan State Univ im S. M. Kirov) (KL, 1-61, 183)

ROYTER, V.A.; KORNEYCHUK, G.P.; STUKANOVSKAYA, N.A.; RZAYEV, P.B.

Effect of transfer phenomenon on the kinetics of sulfur dioxide oxidation on a barium aluminovanodate catalyst. Part 1: Diaphragm method of analysis. Zhur.fiz.khim. 32 no.11:2525-2531 N '58. (MIRA 12:1)

1. Akademiya nauk Ukrainskoy SSR, Institut fizicheskoy khimii imeni L.V. Pisarzhevskogo, Kiyev.
(Oxidation) (Sulfur dioxide) (Catalysis)

KOR[illegible], ROYTER, V. A., STUKANOVSKAYA, N. A., [illegible]ZAYEV, P. B., ZHIGAYLO, Ya. V.

, "Study of the Effect of the Conditions of Catalysis on the Sulfur Content in the Barium-Aluminum-Vanadium Sulfate Catalyst."

Problemy Kinetiki i Kataliza, v. 9, Isotopes in Catalysis, Moscow, Izd-vo AN SSSR, 1957, 443p.

Most of the papers in this collection were presented at the Conf. on Isotopes in Catalysis which took place in Moscow, Mar 31-Apr 5, 1956.

KORNEYCHUK, G.P.; ROYTER, V.A.; STRUKANOVSKAYA, N.A.; RZAYEV, P.B.; ZHIGAYLO, Yu.V.

Influence of the conditions of catalysis on the sulfur content in barium-aluminum-vanadium sulfate catalyst. Probl. kin. i kat. 9: 329-336 '57. (MIRA 11:3)

(Catalysts) (Sulfur--Isotopes)

RZAYEV, P.F.

Calculation of heat losses from a solar hothouse through the transparent enclosure. Geliotekhnika no.6:32-36 '65.
(MIRA 19:1)

1. Laboratoriya po ispol'zovaniyu energii vetra i Solntsa AN AzSSR.

TERNOV, I.M.; RZAYEV, R.A.

Characteristics of the relativistic positron radiation in a magnetic field. Vest. Mosk. un. Ser. 3: Fiz., astron. 20 no.6: 87-89 N-D '65. (MIRA 19:1)

1. Kafedra teoreticheskoy fiziki Moskovskogo universiteta.
Submitted April 20, 1965.

RZAYEV, R.A.

Angular intensity distribution of synchrotron radiation. Izv. AN Azerb. SSR. Ser. fiz.-tekh. i mat. nauk. no.2:55-61 '65. (MIRA 18:8)

L 38509-66 EWT(1) IJP(c) AT

ACC NR: AP6013463 SOURCE CODE: UR/0139/66/000/002/0111/0118

AUTHOR: Ternov, I. M.; Bagrov, V. G.; Rzayev, R. A.

ORG: Moscow State University im. M. V. Lomonosov (Moskovskiy gosudarstvennyy universitet)

TITLE: Scattering of electrons by a short-range force center in a constant and homogeneous magnetic field

SOURCE: IVUZ. Fizika, no. 2, 1966, 111-118

TOPIC TAGS: electron scattering, potential scattering, electron spin, wave function, constant magnetic field, homogeneous magnetic field

ABSTRACT: The purpose of the investigation was to examine the spin flip of an electron moving in a magnetic field and scattered by short-range centers such as a Yukawa potential. The authors write out the wave function of such an electron with account taken of the fact that this wave function must also satisfy the equation of the eigenvalues of one of the electron-spin polarization operators. The resultant equation is used to obtain the change in the electron spin orientation in the Born approximation. An expression is obtained for the total scattering probability, summed and integrated over all the quantities except the eigenvalues of the spin operators. Only the scattering probability of transversely polarized electrons is of practical interest, since the probability of longitudinal electrons does not differ from that of free electrons. Particular attention is therefore paid to the behavior of the spin projection on the direction of the magnetic field. Approximate expressions are ob-

Card 1/2

ACC NR: AP6013463

tained for this probability in several limiting cases. The results show that there is no preferred directivity in the spin flip process. Orig. art. has: 46 formulas.

SUB CODE: 20/ SUBM DATE: 22Jul64/ ORIG REF: 005/

Card 2/2 mlp

TERNOV, I.M.; BAGROV, V.G.; RZAYEV, R.A.

Effect of synchrotron electron emission on the orientation of their spin. Vest. Mosk. un. Ser. 3: Fiz., astron. 19 no.4: 62-70 Jl-Ag '64. (MIRA 17:10)

1. Kafedra teoreticheskoy fiziki Moskovskogo universiteta.

ACCESSION NR: AP4043800 S/0188/64/000/004/0062/0070

AUTHOR: Ternov, I. M., Bagrov, V. G., Rzayev, R. A.

TITLE: Influence of synchrotron radiation of electrons on their spin orientation

SOURCE: Moscow. Universitet. Vestnik. Seriya 3. Fizika, astronomiya, no. 4, 1964, 62-70

TOPIC TAGS: electron, magnetic field, synchrotron radiation, electron spin, electron spin polarization, electron spin orientation

ABSTRACT: The influence of an electromagnetic field on the movement of a polarized beam of electrons generally leads to a change in both the momentum vector of the particles and their spin orientation. In the case of a magnetic field which is uniform in space and constant in time this change occurs in such a way that the state of polarization of the electron spin, determined relative to the direction of motion of the electron and relative to the direction of the external magnetic field, does not change with time. During motion in a magnetic field an electron becomes a source of extremely strong electromagnetic radiation which can lead to a change in the orientation of electron spin. In this article the author considers the problem of the behavior of electron spin during synchrotron radiation. Two states of polarization are investigated: relative to the direction of

Card 1/5

motion (longitudinal) and relative to the direction of the magnetic field (for practical purposes transverse). Expressions are derived for the wave functions, followed by an analysis of the probability of spontaneous transitions. In his exposition of the formulas characterizing spectral distribution, the author cites

$$\omega = \frac{\sqrt{3}}{4\pi}\frac{e^2}{\hbar c}\frac{c}{R}\frac{1}{\sqrt{\varepsilon_0}}\int_0^\infty \frac{dy}{(1+\xi y)^3}F, \qquad (1)$$

where F is dependent on the state of polarization of the electron spin. The state of longitudinal polarization is

$$\vec{F} = [2(1+\xi y)+\xi^2 y^2]\int_0^\infty K_{1/3}(x)\,dx, \qquad (2)$$

$$\vec{F} = \xi^2 y^2\left(2K_{1/3}(y) - \int_y^\infty K_{1/3}(x)\,dx\right). \qquad (3)$$

where arrows indicate transitions corresponding to spin flipping ($\rightleftarrows$) and without change in spin orientation ($\rightarrow$). These formulas show that transition probability is generally independent of the initial state of polarization. In the case $E \leqslant E1/2$ (that is, when $\xi \ll 1$),

spin flipping is expressed in terms proportional to the square of the Planck constant $\hbar^2$. The state of polarization along a magnetic field is

(4)

$$F^{\uparrow\uparrow} = 2(1+\xi y)\int_y^\infty (K_{\gamma_1}(x))\,dx + \xi^2 y^2 K_{\gamma_1}(y) - \zeta(2+\xi y)\,\xi y K_{\gamma_1}(y),$$

(5)

$$F^{\downarrow\uparrow} = \xi^2 y^2 (K_{\gamma_1}(y) + \zeta K_{\gamma_1}(y)).$$

where the arrows indicate retention of polarization ($\uparrow\uparrow$) and change of polarization ($\downarrow\uparrow$) (spin flipping). The results differ appreciably from the preceding case: dependence on initial spin state enters into both expressions. Limiting the problem to the region of energies $E \ll E\ 1/2$, when it can be assumed that $\zeta \ll 1$, the authors find the integral value for transition probability. It is shown that the integral transition probability without spin flipping is identical for both longitudinal polarization and polarization along the field

(6)

$$\omega^{\downarrow\uparrow} = \omega^{\rightrightarrows} = \frac{5\sqrt{3}}{6}\,\frac{e^2}{\hbar c}\,\frac{c}{R}\,\frac{E}{m_0 c^2}.$$

The probability of transitions with spin flipping in the case of longitudinal polarization is not dependent on initial spin orientation

$$w^{\rightarrow} = \frac{5\sqrt{3}}{36\cdot 9}\frac{e^2}{\hbar c}\frac{c}{R}\frac{E}{m_0c^2}\xi^2. \qquad (7)$$

A different situation prevails for states of polarization of electron spin relative to magnetic field direction.

$$w^{\uparrow\downarrow} = \frac{5\sqrt{3}}{36}\frac{e^2}{\hbar c}\frac{c}{R}\frac{E}{m_0c^2}\xi^2\left(1 \mp \zeta\frac{8\sqrt{3}}{15}\right). \qquad (8)$$

Thus, as a result of radiation it is possible for there to be predominant orientation of electron spin against the field $\zeta = -1$. This effect also will occur for electrons which are nonpolarized at the initial time. "The authors thank Professor A. A. Sokolov for discussion of the results." Orig. art. has: 47 formulas.

ASSOCIATION: Kafedra teoreticheskoy fiziki Moskovskogo Universiteta. (Department of Theoretical Physics, Moscow University)

ACCESSION NR: AP4043800

SUBMITTED: 15Oct63

ENCL: 00

SUB CODE: NP

NO REF SOV: 007

OTHER: 004

Card 5/5

APPROVED FOR RELEASE: Thursday, September 26, 2002 CIA-RDP86-00513R001446530009-9

L 22481-65 EWT(1) IJP(c)/ASD(a)-5/AFWL/SSD/AS(mp)-2/AFETR/RAEM(j)/ESD(gs)/
ACCESSION NR: AP5002259 ESD(t) S/0139/64/000/006/0111/0121

AUTHOR: Ternov, I. M.; Bagrov, V. G.; Rzayev, R. A.; Klimenko, Yu. I.

TITLE: Motion of polarized electrons possessing a vacuum magnetic moment

SOURCE: IVUZ. Fizika, no. 6, 1964, 111-121

TOPIC TAGS: electron motion, electron polarization, magnetic moment, polarization, spin, Dirac equation

ABSTRACT: The motion of the electron with oriented spin in a constant and homogeneous magnetic field is considered by introducing as polarization operators the four-dimensional polarization vector and the polarization tensor, in accord with the deductions of an earlier paper by some of the authors (Ternov, Bagrov, and Rzayev, ZhETF v. 46, 374, 1964). The wave function of the electron moving in the magnetic field is determined and the variation of the spin of the moving electron is studied. The effect of the vacuum magnetic moment of the electron on the longitudinal and transverse orientations of the spin is analyzed. An exact solution of the Dirac equation with account of the vacuum moment is used to calculate the

Card 1/2

APPROVED FOR RELEASE: Thursday, September 26, 2002 CIA-RDP86-00513R001446530009-9

L 22481-65
ACCESSION NR: AP5002259

3

probability of the change in the spin orientation of a radiating electron. It is shown that account of the interaction between the electrons and the vacuum leads to an additional although small electron polarization, and that the longitudinal polarization of the electrons is not conserved. "The authors thank Professor A. A. Sokolov and B. A. Lysov for a discussion of the results." Orig. art. has: 55 formulas.

ASSOCIATION: Moskovskiy gosuniversitet imeni M. V. Lomonosova (Moscow State University)

SUBMITTED: 02Jul64 ENCL: 00 SUB CODE: NP, EM

NR REF SOV: 006 OTHER: 001

Card 2/2

TERNOV, I.M.; BAGROV, V.G.; RZAYEV, R.A.; KLIMENKO, Yu.I.

Motion of a polarized electron having a vacuum magnetic moment. Izv. vys. ucheb. zav.; fiz. 7 no.6:111-121 '64. (MIRA 18:2)

1. Moskovskiy gosudarstvennyy universitet imeni M.V. Lomonosova.

TERNOV, I.M.; BAGROV, V.G.; RZAYEV, R.A.

Radiation from fast electrons with oriented spin in a magnetic field. Zhur. eksper. i teor. fiz. 46 no.1:374-382 Ja'64. (MIRA 17:2)

1. Moskovskiy gosudarstvennyy universitet.

S/0139/63/000/005/0127/0139

ACCESSION NR: AP4002278

AUTHORS: Ternov, I. M.; Bagrov, V. G.; Rzayev, R. A.

TITLE: Polarization properties of emission of spin oriented fast electrons in a magnetic field

SOURCE: IVUZ. Fizika, no. 5, 1963, 127-139

TOPIC TAGS: relativistic electron emission, extreme ultrarelativistic region, linear emission, circular emission, spin oriented fast electron, fast electron polarization, fast electron emission, polarization property

ABSTRACT: The polarization properties of relativistic electron emission in a homogeneous magnetic field including electron and photon spin correlation have been investigated. The relativistic motion of the electron is obtained by solving the Dirac equation

$$i\hbar\frac{\partial\psi}{\partial t}=\{c(\alpha P)+\rho_3 mc^2\}\psi,$$

Card 1/2

where

$$(\sigma P)\psi = \sigma\left(-i\hbar\nabla + \frac{e}{c}A\right)\psi = \hbar k\zeta\psi$$

Expressions are obtained describing linear and angular polarization emissions valid for electron energies $E \ll E_{1/2}$, as well as for $E \gg E_{1/2}$ thus including in the analysis extreme ultrarelativistic region. "The author is grateful to Professor A. A. Sokolov and to his colleague B. K. Kerimov." Orig. art. has: 80 equations.

ASSOCIATION: Moskovskiy gosuniversitet imeni, M. V. Lomonosova (Moscow State University)

SUBMITTED: 14Jul62 DATE ACQ: 02Dec63 ENCL: 00

SUB CODE: PH NO REF SOV: 012 OTHER: 000

ACCESSION NR: AP4012565 S/0056/64/046/001/0374/0382

AUTHORS: Ternov, I. M.; Bagrov, V. G.; Rzayev, R. A.

TITLE: Radiation of fast electrons with oriented spins in a magnetic field

SOURCE: Zhurnal eksper. i teoret. fiz., v. 46, no. 1, 1964, 374-382

TOPIC TAGS: electron radiation, fast electron radiation, relativistic electron radiation, electron with oriented spin, electron in magnetic field, electron polarized radiation, electron radiation polarization, electron spontaneous emission, spin dependence of polarization

ABSTRACT: In view of the high degree of polarization of the radiation of fast electrons moving in a magnetic field, the authors investigate the radiation properties of relativistic electrons in a magnetic field, using quantum theory methods and allowing for the

Card 1/2

ACCESSION NR: AP4012565

polarization of the electron spin. Wave functions are derived for an electron moving in a homogeneous and constant magnetic field. The spontaneous emission and the intensity of the polarized radiation are evaluated for polarization along the direction of motion and polarization along the magnetic field vector. In the former case the change in electron spin polarization is independent on the direction of the spin at the initial instant of time. In the latter case the radiation component does depend on the initial spin orientation, and the dependence is included in terms proportional to the first power of Planck's constant. "The authors are grateful to Prof. A. A. Sokolov and Yu. M. Loskutov for participating in a discussion of the results." Orig. art. has: 60 formulas.

ASSOCIATION: Moskovskiy gosudarstvenny*y universitet (Moscow State University)

SUBMITTED: 04Jul63 DATE ACQ: 26Feb64 ENCL: 00

SUB CODE: PH NO REF SOV: 008 OTHER: 003

Card 2/2

TERNOV, I.M.; BAGROV, V.G.; RZAYEV, R.A.

Polarization properties of fast electron emission with oriented spin in a magnetic field. Izv. vys. ucheb. zav.; fiz. no.5:127-139 '63. (MIRA 16:12)

1. Moskovskiy gosudarstvennyy universitet imeni Lomonosova. 2. Sotrudnik Instituta fiziki AN Azerbaydzhanskoy SSR (for Rzayev).

KURBANALIYEV, I.G.; RZAYEV, S.D.

Rare case of the formation of a pathological anastomosis between the gallbladder and the pylorus of the stomach. Azerb. med. zhur. no.6:43-45 Je '62. (MIRA 17:8)

41338-66 EWT(1) WW

ACC NR: AR6017337 SOURCE CODE: UR/0044/66/000/001/B076/B076 37 6

AUTHOR: Rzayev, U. T.

TITLE: A boundary value problem in stationary thermal conduction

SOURCE: Ref. zh. Matematika, Abs. 1B350

REF SOURCE: Uch. zap. Azerb. un-t. Ser. fiz.-matem. n., no. 4, 1964, 17-18

TOPIC TAGS: boundary value problem, transcendental function, thermal conduction

ABSTRACT: The author indicates a possibility of solving the equation

$$(\lambda+\beta u)\frac{d^2u}{dx^2}+\beta\left(\frac{du}{dx}\right)^2+\beta\frac{du}{dx}\frac{d^2u}{dx^2}=0$$

with conditions: $u(0)=p_1,\ u(l)=p_2$ (λ, β, p_1, p_2—const) by reduction with two successive quadratures to a transcendental equation. A. Uspenskiy. [Translation of abstract] [KP]

SUB CODE: 12/

Card 1/1 116 UDC: 517.9:536.2

RZAYEV, Z.A.

In Krasnokamsk. Neftianik 1 no.9:34-35 S '56. (MLRA 9:11)

1. Instruktor kul'turno-massovogo otdela TSentral'nogo komiteta profsoyuza rabochikh neftyanoy promyshlennosti.
(Krasnokamsk--Petroleum workers)

L 44585-66 EWT(m)/EWP(j)/T IJP(c) WW/RM

ACC NR: AP6015668 (A) SOURCE CODE: UR/0413/66/000/009/0075/0075

31

B

INVENTOR: Zubov, P. I.; Kochkin, D. A.; Rzayev, Z. M.; Sukhareva, L. A.

ORG: none

TITLE: Method of obtaining copolymers. Class 39, No. 181289

SOURCE: Izobreteniya, promyshlennyye obraztsy, tovarnyye znaki, no. 9, 1966, 75

TOPIC TAGS: copolymer, styrene, ether, maleic anhydride, copolymerization, esterification, dehydration

ABSTRACT: An Author Certificate has been issued for a method of obtaining copolymers by esterification of styromal or maleic anhydride, with subsequent copolymerization of the ether obtained with styrene and esterification reagents. To obtain copolymers possessing bactericidal activity, tin or organolead hydroxyl-containing compounds or byproducts of their dehydration are used as esterifying reagents. [Translation] [NT]

SUB CODE: 11/ SUBM DATE: 15May64/

Card 1/1 UDC: 678.746.22-134.434.2:667.613:620.193.81

ACC NR: AP6013477 SOURCE CODE: UR/0374/66/000/002/0292/0295

AUTHOR: Zubov, P. I.; Sukhareva, L. A.; Grozinskaya, Z. P.; Krylova, L. N.; Kochkin, D. A.; Rzayev, Z. M.

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

TITLE: Study of the physicomechanical properties of styromal-base coatings

SOURCE: Mekhanika polimerov, no. 2, 1966, 292-295

TOPIC TAGS: polymer structure, protective coating, solid physical property, solid mechanical property, adhesion

ABSTRACT: A two-component system obtained by copolymerizing styrene with maleic anhydride in the proportion of 1:1 at 60°C without catalyst or solvent was studied. The mechanism of forming was investigated by studying the internal stresses, the structure of the coatings, and the strength and adhesion characteristics. Kinetic data on internal stresses showed that the forming process is practically complete after one hour of curing and that the limiting value of these stresses is independent of the conditions under which the coatings were formed. The effect of forming temperature on the structure was studied by IR spectroscopy. Coatings formed from acetone solutions were

UDC: 678:539.4019

APPROVED FOR RELEASE: Thursday, September 26, 2002 CIA-RDP86-00513R001446530009-9"

ACC NR: AP6013477

found to have a weak adhesion to glass (6-7 kg/cm^2), but those formed from solutions of styromal in dimethylformamide had a higher adhesion (25 kg/cm^2). The elasticity of the coatings increased upon addition of triethylene glycol diester of methacrylic acid (TGM). An increase in the latter gradually lowered the physicomechanical characteristics of the coatings. Coatings most stable to the action of high temperatures were those obtained from solutions in dimethylformamide containing up to 20% TGM. Orig. art. has: 6 figures, 1 table.

SUB CODE: 07,11/ SUBM DATE: 21Jun65/ ORIG REF: 005/ OTH REF: 000

Card 2/2

SADYKHZADE, S.I.; SHIKHMAMEDBEKOVA, A.Z.; YUL'CHEVSKAYA, S.D.; SALAKHOVA, S.Kh.; RZAYEVA, A.S.

Condensation of vinylacetylene with α -chloroethers. Azerb. khim. zhur. no.2:37-44 '63. (MIRA 16:8)

APPROVED FOR RELEASE: Thursday, September 26, 2002 CIA-RDP86-00513R001446530009-9

L 34194-65 EWT(m)/EPF(c)/EWP(j)/T Pc-4/Pr-4 RM

ACCESSION NR: AP5007524 S/0316/64/000/006/0039/0042

AUTHOR: Sadykhzade, S. I.; Rzayeva, A. S.

TITLE: Synthesis and polymerization properties of the vinyl esters of alkyl- and alkoxy-substituted derivatives of phenoxyacetic acid

SOURCE: Azerbaydzhanskiy khimicheskiy zhurnal, no. 6, 1964, 39-42

TOPIC TAGS: phenoxyacetic acid, vinyl alkylphenoxyacetate, vinyl alkoxyphenoxyacetate, polyester synthesis, vinyl ester polymerization

ABSTRACT: The article is devoted to the synthesis of vinyl esters of alkyl- and alkoxy-substituted derivatives of phenoxyacetic acid and their polymerization properties in relation to the nature and position of the substituent in the aromatic ring. It was shown that in the presence of mercury salts, these derivatives are readily vinylated by vinyl acetate to form the corresponding vinyl esters:

$$RC_6H_4OCH_2COOH + CH_2{=}CHOCOCH_3 \longrightarrow RC_6H_4OCH_2COOCH{=}CH_2 + CH_3COOH,$$

where R=H; o=, m=; n=CH_3; o=, m=; n=CH_3O.

Card 1/2

APPROVED FOR RELEASE: Thursday, September 26, 2002 CIA-RDP86-00513R001446530009-9

L 34194-65

ACCESSION NR: AP5007524

It was found that the yields of the polymeric products of the vinyl esters obtained can be arranged in the following decreasing order in relation to the nature and position of the substituent:

$$o\text{-}CH_3 > m\text{-}CH_3 > p\text{-}CH_3 > o\text{-}CH_3O > m\text{-}CH_3O > p\text{-}CH_3O$$

The physicochemical constants of the vinyl esters obtained are tabulated, and the procedure used in the synthesis is described. Orig. art. has: 3 tables and 1 formula.

ASSOCIATION: None

SUBMITTED: 00 ENCL: 00 SUB CODE: OC

NO REF SOV: 002 OTHER: 007

Card 2/2

RASULOV, A.M.; RZAYEVA, F.A.

Rupture of rubber under a constant load. Uch. zap. AGU. Ser. fiz.-mat. i khim. nauk no.2:25-33 '61. (MIRA 16:7)

ISMAILOV, R.G.; ALIYEV, S.M.; MAMEDALIYEV, G.M.; RZAYEVA, F.D.; SARKISOV, V.M.

Initiated polymerization of alkenyl aromatic monomers of the 120 - 200° C fraction of the tar from the pyrolysis of gases and oxidative pyrolysis of benzene. Khim. i tekh. topl. i masel 10 no.3:4-10 Mr '65. (MIRA 18:11)

1. Institut neftekhimicheskikh protsessov AN AzerSSR.

MAMEDALIYEV, Yu.G.; MAMEDALIYEV, G.M.; ALIYEV, S.M.; RZAYEVA, F.D.

Xylene production by converting products of catalytic cracking in the presence of toluene over synthetic aluminosilicates. Dokl. AN Azerb.SSR 16 no.9:841-846 '60. (MIRA 13:12)

1. INKHP.

(Xylene) (Toluene)

L 12307-63 EWP(j)/EPF(c)/EWT(m)/BDS ASD Pc-4 RM/WW

S/081/63/000/005/064/075 66

AUTHOR: Mamedaliyev, Yu. G., Mamedaliyev, G. M., Aliyev, S. M., Rzayeva, F. D. and Markhevka, V. M.

TITLE: Production of synthetic tars and aromatic hydrocarbons by complex treatment of liquid pyrolysis products

PERIODICAL: Referativnyy zhurnal, Khimiya, no. 5, 1963, 587, abstract 5T24, (Azerb. kimja zh. Azerb, khima, zh. 1962, no. 1, 3 - 15)

TEXT: The polymerization of unsaturated compounds of the 110 - 190° C fraction of pyrolysis tar of gases in the presence of various initiators, (IN) (hydroperoxide of di-isopropylbenzenes and others) was investigated. The influence of various factors (temp., concentration of IN and duration of experiment) on the polymerization process was studied. It was shown that at 80° C concentration of IN 1.5 - 4 % and duration of 25 - 70 hours the yield of white powder-like polymer was 25 - 35 % of the weight of the starting materials. Its intrinsic viscosity in benzene is 0.1 - 0.15; mol. weight 10000 - 20000, softening temp. (by the ring and ball method) is 145 - 150° C, spec. gr. 1.05 - 1.1. A test on synthesized tars was conducted and it was

Card 1/2

APPROVED FOR RELEASE: Thursday, September 26, 2002 CIA-RDP86-00513R001446530009-9"

established that compositions made with them possess a variety of valuable physical and mechanical properties. Catalytic reforming of the non-polymerizing part of a polymerizing mixture with benzentoluene fractions of tar of pyrolysis of gases was studied and it was shown that the preliminary obtaining of synthetic resins does not exert a negative influence on the output of the lower molecular weight aromatic hydrocarbons. The characteristics of the starting materials and the obtained products are given. A complex scheme is proposed for treatment of light oil from pyrolysis of hydrocarbon gases, which enables production of synthetic tars, benzene, toluene, xylene and others. T. Danilova).

[Abstractor's note: Complete translation]

APPROVED FOR RELEASE: Thursday, September 26, 2002 CIA-RDP86-00513R001446530009-9

L 32810-65 EPF(c)/EPR/EWP(j)/EWT(m)/T Pc-4/Pr-4/Ps-4 RM/WW

ACCESSION NR: AP5006657 S/0065/65/000/003/0004/0010

AUTHOR: Ismailov, R.G.; Aliyev, S.M.; Mamedaliyev, G.M.; Rzayeva, F.D.; Sarkisov, V.M.

TITLE: Initiated polymerization of alkenyl aromatic monomers of the 120-200°C fraction of a resin obtained by gas pyrolysis and by oxidative pyrolysis of gasoline

SOURCE: Khimiya i tekhnologiya topliv i masel, no. 3, 1965, 4-10

TOPIC TAGS: initiated polymerization, polymerization, polymerization initiator, pyrolysis, gas pyrolysis, gasoline pyrolysis, oxidative pyrolysis, resin

ABSTRACT: A study was made of the initiated polymerization of alkenyl aromatic monomers of the 120-200°C fraction of a gas pyrolysis resin and of a resin obtained by oxidative pyrolysis of gasoline, using various initiators and their binary mixtures. It was shown that with temperatures of 80-120°C, initiator concentrations of 0.1-2%, and 40- to 70-hr polymerization periods, the conversion of alkenyl aromatic monomers of the stated fraction varies between 50 and 75%. Polymers thus obtained are characterized by a molecular weight of 20,000 to 34,000 and a melting point of 130-150°C, which corresponds to the softening point observed in the

Card 1/2

APPROVED FOR RELEASE: Thursday, September 26, 2002 CIA-RDP86-00513R001446530009-9

L 32810-65
ACCESSION NR: AP5006657

"ring and ball" method, i.e., 150-170°C. It was established that the use of binary mixtures of initiators (tert-butyl peroxide and isopropylbenzene hydroperoxide, etc.) as well as their gradual addition to the system, accelerates the polymerization process and aids a good conversion (95%) of the alkenyl aromatic monomers. The authors describe the laboratory and pilot plant equipment and its operation. Orig. art. has: 6 diagrams and 2 tables.

ASSOCIATION: INKhP AN Azerb. SSR

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

NO REF SOV: 007 OTHER: 000

Card 2/2

SOV/81-59-7-24796

Translation from: Referativnyy zhurnal. Khimiya, 1959, Nr 7, p 462 (USSR)

AUTHORS: Mamedaliyev, G.M., Rzayeva, F.D.

TITLE: On the Nature of Unsaturated Hydrocarbons in the Products of Thermal Decomposition of Petroleum

PERIODICAL: V sb.: Sostav i svoystva neftey i benzino-kerosinovykh fraktsiy. Moscow, AS USSR, 1957, pp 369 - 401

ABSTRACT: Methods of selective hydrogenation (SH) and hydrostabilization (HS) were used to investigate the chemical structure-group composition of unsaturated hydrocarbons (UH) of light oil of pyrolysis (LO) and the products of thermal cracking (PC), i.e., press-distillate and kerosene. SH was carried out by passing the product and H_2 through a Ni-catalyst layer at temperatures of 130 - 285°C and atmospheric pressure; HS was carried out by passing the product through a layer of synthetic alumosilicate catalyst at temperatures of 200 - 350°C and a pressure of 3 - 5 atm. As a result of HS complete hydrogenation of UH took place at the expense of the reaction of redistribution of H.

Card 1/2

SOV/81-59-7-24796

On the Nature of Unsaturated Hydrocarbons, the Products of Thermal Decomposition of Petroleum

The unsaturated ones of LO were mainly monoolefines of the cyclic and aromatic series, from which 75 - 80% were compounds of the styrene series. UH of the crude benzene fraction (b. p. 75 - 100°C) of LO were mainly a mixture of 5- and 6-membered cyclenes with one or two double bonds. Unsaturated hydrocarbons of PC mainly had a cyclic structure.

A. Ravikovich

Card 2/2

MAMADALIYEV, G.M.; SULEYMANOV, G.N.; AKOPDZHANOVA, A.A.; RZAYEVA, F.D.

Study of the nature of unsaturated hydrocarbons of a crude benzene fraction of light oil obtained in pyrolysis. Izv.AN Azerb.SSR no.1: 25-37 Ja '56. (MLRA 9:7)
(Petroleum products) (Hydrocarbons)

RZAYEVA, L.M.; BEYBUTOV, R.

Apple seed chalcid Torymus druparum (Bch.) (Hymenoptera, Chalcidoidea) in the Kuba-Khachmas zone of the Azerbaijani S.S.R. Izv. AN Azerb. SSSR. Ser. biol. i med. nauk no. 6: 63-65 '63. (MIRA 17:5)

APPROVED FOR RELEASE: Thursday, September 26, 2002 CIA-RDP86-00513R001446530009-9"

RZAIBVA, [illegible] --"Quality of the Wool Produced by Crossing Merino and Karabakh sheep in the Azerbaijan SSR." *(Dissertations for Degree in Science and Engineering Defended at USSR Higher Educational Institutions) Acad Sci AzerBaijan SSR, Inst of Zoology, Baku, 1955

SO: Knizhnaya Letopis', No. 25, 18 Jun 55

* For Degree of Candidate in Agricultural Sciences

APPROVED FOR RELEASE: Thursday, September 26, 2002 CIA-RDP86-00513R001446530009-9"

RZAYEVA

"The Wool Quality of Merino-Karabakh Breeds in Azerbaydzhan SSR." Cand Agr Sci, Inst of Zoology, Acad Sci Azerbaydzhan SSR, Baku, 1955. (KL, No 18, Apr 55)

SO: Sum. No. 704, 2 Nov 55 - Survey of Scientific and Technical Dissertations Defended at USSR Higher Educational Institutions (16).

RZAYEVA, L.M.

Chalcids (Hymenoptera Chalcidoidea) in northeastern Azerbaijan. Izv.AN Azerb.SSR.Ser.biol.i med.nauk no.4:53-57 '62. (MIRA 15:12)

(KUBA DISTRICT--CHALCID FLIES)
(KHACHMAS DISTRICT--CHALCID FLIES)

MELIKOV, F.A.; RZAYEVA, L.M.

Wool quality of Merino Karabakh crosses in the Azerbaijan S.S.R.
Trudy Inst. zool. AN Azerb. SSR 22:103-125 '62. (MIRA 15:11)
(Azerbaijan--Wool)

TRYAPITSYN, V.A.; RZAYEVA, L.M.

Zeteticontus planiscutellum Merc., a new species of Encyrtidae (Hymenoptera, Chalcidoidea) in the U.S.S.R. Izv.AN Azerb.SSR. Ser.biol.i med.nauk. no.5:35-38 '62. (MIRA15:9)
(KUBA DISTRICT--ENCYRTIDAE)

RZ

RZAYEVA, L.M.

Variation of the fineness of wool in medium-wool fat-tailed hybrid sheep (Merinos Karabakh) during different seasons of the year [in Azerbaijani with summary in Russian]. Dokl. AN Azerb. SSR 13 no.9:1021-1024 '57. (MIRA 10:9)

1. Institut zoologii.
(Azerbaijan--Wool)

S/081/61/000/023/014/061
B117/B147

AUTHORS: Mambetov, A. A., Rzayeva, N. A.

TITLE: Permanganatometric method for determining columbium, with the use of 8-hydroxyquinoline as precipitating agent

PERIODICAL: Referativnyy zhurnal. Khimiya, no. 23, 1961, 120 - 121, abstract 23D61 (Tr. Azerb. s.-kh. in-ta, v. 11, 1960, 75-86)

TEXT: Conditions for the precipitation of columbium in the form of hydroxyquinolate from solutions of the tartaric acid complex were established. The solutions were prepared from carbonate or pyrosulfate melts, as well as from a sulfuric acid columbium pentoxide solution. The reproducibility and duration of oxidation of hydroxyquinoline (I) with permanganate in sulfuric acid medium were examined, and the equivalent of (I) in this reaction was determined. Optimum conditions for the dissolution of columbium hydroxyquinolate in H_2SO_4 and for the titration of this solution with 0.02 N $KMnO_4$ solution were established. The permanganatometric method was found to be most convenient and most accurate for the determination of small amounts of Cb (5 - 50 mg) in a small volume of

S/081/62/000/012/035/063
B166/B101

AUTHORS: Mambetov, A. A., Rzayeva, N. A., Kel'ner, Ye. S.

TITLE: Study of the solubility of calcined finely disperse niobium pentoxide in sulfuric acid as a function of its concentration and temperature

PERIODICAL: Referativnyy zhurnal. Khimiya, no. 12, 1962, 376, abstract 12K14 (Uch. zap. Kirovabadsk. ped. in-t, no. 8, 1961, 91-99)

TEXT: In an investigation of the process of dissolution of Nb_2O_5 in solutions of H_2SO_4 with a concentration of 50.5-93.55 at temperatures of 30-310°C it was established that at 30-120°C the given Nb_2O_5 preparation does not interact with H_2SO_4 solutions, but an insignificant quantity of it is entrained by the H_2SO_4 solution or peptized. Commencing from a temperature of 120-240°C, the dissolution of the given preparation in H_2SO_4 solutions is accompanied by chemical interaction of the Nb_2O_5 with

Study of the solubility of ...

the H_2SO_4 forming niobium sulfate. There is almost no change in the solubility of niobium sulfate with change in temperature, which promotes constancy of Nb_2O_5 concentration in the liquid phase both in hot and in cold solutions. On the basis of these investigations the decomposition of niobium-containing ores is carried out at 150-180°C with an 80-85% solution of H_2SO_4 by heating for 4 hours. 10 references. [Abstracter's note: Complete translation.]

GASAN-DZHALALOV, G.A.; RZAYEVA, N.A.

Results of the treatment of brucellosis with intracutaneous injection of vaccine. Klin. med., Moskva 30 no.2:33-38 Feb 1952. (CLML 22:1)

1. Candidate Medical Sciences for Gazan-Dzhalalov. 2. Of the Second Therapeutic Division (Head -- Prof. G. M. Baysheva-Zeynalova), Azerbaydzhan Scientific-Research Clinical Institute (Director -- Honored Worker in Science Prof. I. M. Orudzhev).

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ORUDZHOV, I.M.; ALIYEV, T.A.; KULIYEVA, Sh.K.; RZAYEVA, N.D.

Errors in the diagnosis of endocrine diseases. Azerb.med.zhur. no.1:30-35 Ja '60. (MIRA 13:5)
(ENDOCRINE GLANDS--DISEASES--DIAGNOSIS)

DADASHEV, F.G.; RZAYEVA, R.D.

Geochemical characteristics of casinghead gas in the Surakhany oil field. Izv. AN Azerb. SSR Ser. geol.-geog, nauk i nefti no.1:11-20 '63. (MIRA 16:6)

(Apsheron Peninsula—Gas, Natural—Geology)

RZAYEVA, R.D.

Estimate of the results of investigating rocks by the fluorescence bituminological method. Dokl.AN Azerb.SSR 17 no.9:803-807 '61. (MIRA 15:3)

1. Institut geologii AN AzSSR. Predstavleno akademikom AN AzSSR A.D.Sultanovym.
(Rocks--Analysis) (Azerbaijan--Bitumen--Geology)

SHIKHIYEV, I.A.; VATANKHA, A.A.; RZAYEVA, S.A.; GUSEYNZADE, B.M.

Synthesis and transformations of oxygen-containing organic and organosilicon compounds. Azerb. khim. zhur. no.5:27-30 '64.
(MIRA 18:3)

AMBARTSUMOV, P.A.; RZAYEVA, S.B.; PODLISKER, Ye.B.; Prinimali uchastiye: BUYNITSKAYA, V.L.; AKOPOVA, Ye.N.; VLADIMIRSKAYA, G.I.; MAMEDOVA, S.P.

Using chromatographic methods for controlling the production of bivinyl from butane. Sbor. nauch.-tekh. inform. Azerb. inst. nauch.-tekh. inform. Ser. Nefteper. i khim. prom. no.2:30-34 '62. (MIRA 18:9)

1. Institut neftekhimicheskikh protsessov AN AzerSSR (for Buynitskaya, Akopova, Vladimirskaya, Mamedova).