

ABRAROV, Z., aspirant

Unified automotive transportation organization is an important
condition for the improvement of motor-vehicle utilization.
Avt. transp. 42 no.11:31-32 N '64. (MIRA 17:12)

1. Institut ekonomiki AN Uzbekskoy SSR.

APATENKO, A.K.,; ABRASHENKOV, V.N.(Moskva)

Universal microprojector for microscopy. Arkh. pat. 18 no.1:118-120
'56. (MLRA 9:6)

1. Iz Tsentral'noy patologoanatomicheskoy laboratorii (nach-prof.
A.V. Smol'yannikov)
(MICROSCOPE, apparatus and instruments,
universal light-microprojector (Rus))

ABRASHEV, G.

BULGARIA/Chemical Technology, Chemical Products and Their Application, Part 3. - Treatment of Natural Gases and Mineral Oil, Motor and Rocket Fuel, Lubricants.

H-23

Abs Jour: Referat. Zhurnal Khimiya, No 10, 1958, 33824.

Author : G. Pan'kov, G. Abrashev.

Inst : Not given

Title : Study of one-stage Evaporation of Tyulenovo Mineral Oil.

Orig Pub: Teshka promishlennost, 1957, 6, No 7, 29-31.

Abstract: Laboratory experiments of one-stage evaporation of Tyulenovo mineral oil were carried out at an installation and in accordance with methods accepted in SSSR. The results of 15 distillations at various temperatures and residual pressures of 6 to 10 mm of merc.

Card : 1/2

27

ABRASHEV, G.

TECHNOLOGY

Periodicals: MINKO BELLO. Vol. 13, No.5 Sept./Oct. 1958

ABRASHEV, G. Let us use the petroleum from Tiulenovo more efficiently. p. 64.

Monthly List of East European Accession (EMAL) IC Vol. 8, No. 4, April 1959,
Unclass.

ABRASHEV, G.: PANKOV, G.

"Production of oil for electric transformers from Tiulenovo petroleum"

Khimia i industriia. Sofia, Bulgaria. Vol. 30, no. 3, 1958

Monthly list of East European Accessions (EEAI), LC, Vol. 8, No. 6, Jun 59, Unclas

COUNTRY : BULGARIA
CATEGORY : Chemical Technology. Chemical Products and Their Applications. Chemical Processing of Natural*
ABS. JOUR. : RZhKhim., No 17, 1959, No. 62256
AUTHOR : Pankov, G.; Abrashev, G.
INSTITUTE : -
TITLE : Production of Transformer Oil from the Tulane Crude Oil (Refinery Experiments).
ORIG. PUB. : Khimiya i industriya (Bulg.), 1958, 30, No 4, 102-111
ABSTRACT : Operating conditions were developed (plant scale) for the production of transformer oil (T.O.) from the Tulane crude oil (Bulgaria). The yield of TO, basis crude, comprised 7%. In its physico-chemical and technological properties.. TO, stabilized with 0.02% paraoxydiobenzylamine, fully meets the requirements of the BDS - 1457 - 53 standard as well as the GOST - 982 - 56 standard.
-- Ya. Satunovskiy.

*Gases and Petroleum. Motor and Rocket Fuels. Lubricants.

Card: 1/1

ABRASHEV, G.; PANKOV, G.

Investigation of oil fractions of Tiuelnovo petroleum for production of transformer oil p. 251

Sofia. Nauchnoizsledovatel'ski institut za tekhnoloznki izsledvania na gorivata. GODICHNIK. Sofia, Bulgaria. Vol. 4, 1959

Monthly List of East European Accessions (EEAI), IC, Vol. 8, No. 12, December 1959
Uncl.

ABRASHEV, G.; TSCNEV, M.; ZAKHARIEV, Iv.; TOSHKOV, D.; DIMITROV, D.;
KHRISTOZOV, G.

Operational testing of diesel oil under testing conditions in
the Zetor-25 tractor diesel engine. Khim i industriia 35 no.5:
181-183 '63.

ABRASHEV, G., inzh.

Experiments in processing the zinc-containing materials at
the rolling mill of the Plovdiv Nonferrous-Metal Combine.

Min delo 18 no.4: 28-31 Ap'63

1. N-k na beltstsekha v KTaM, Plovdiv.

ACC NR: AR6014583

SOURCE CODE: UR/0081/65/000/021/P013/P013

AUTHORS: Abrashov, G.; Tsonev, M.

TITLE: Preparation of motor oils from Dolnodubniskaya petroleum (NRB). 2nd report. Selective refining of the oil distillation fractions

SOURCE: Ref. zh. Khimiya, Abs. 21P113

REF SOURCE: Godishnik N.-i. in-t koksokhim. i neftoprerab., v. 2, 1964, 169-180

TOPIC TAGS: petroleum refining, phenol, furfural, fluid viscosity measurement, lubricating oil

ABSTRACT: Comparison of the selective refining of Dolnodubniskaya petroleum distillation oil fractions using furfural (I) and phenol was performed under laboratory conditions. It was established that employment of I in a ratio of 1:1 or 1:1.75 to the crude material yielded high quality motor oils with viscosity index > 85 from oils of viscosity $\sqrt{100}$ 7 and 10 centistokes. Increase of the ratio of I to the raw material results in super-refining of the product and also enhances the undesirable properties of the oils. Deparaffinization with acetone-benzene-toluene mixture at -28C and refining with 5% fuller's earth yields 68 and 62% of the final product from oils of viscosity $\sqrt{100}$ 7 and 10 centistokes, respectively. From a summary. Trans-

lation of abstract

SUB CODE: 11,07

Card 1/1

ABRASHEV, Georgi M., shloser

A device for the air pistol grinding. Transp delo 6 no.4:46 '54.

1. Mekhanicheska rabotilnitsa pri obekt 889.

ABRASHEV, G.P.; RADEV, R.I.; TSENKOV, TS.G.; DIMOV, N.D.; ZAKHARIYEV, I.TS.;
PENCHEV, S.P.; TSONEV, M.D.; SHAVEL'SKIY, G.A.

Crude oil of the Dolni Dubnik field. Khim i tekhn. topl. i masel 8
no.11:24-30 N '63. (MIRA 16:12)

BOZHEKIN, D.S.; ABRAHAMOV, K.K.; KONSTANTINOVA, A.P.; TORITSYN, B.A.

Dependence of the electrical conductivity of diamonds on temperature.
Dokl. Akad. Nauk SSSR, Ser. Geofiz. no.2:138-141 '65. (MIRA 13:5)

L. Yakutskiy filial Sibirskogo otdeleniya AN SSSR, Yakutsk.

KRAVCHENKO, S.M.; VLASOVA, Ye.V.; KAZAKOVA, M.Ye.; ILYUKHIN, V.V.;
ABRASHEV, K.K.

Inmelito, a new barium silicate. Dokl. AN SSSR 141 no.5:1198-1199
D '61. (MIRA 14:12)

1. Institut mineralogii, geokhimii i kristalloghimii redkikh
elementov AN SSSR. Predstavleno akademikom N.V. Belovym.
(Yakutia--Barium silicates)
(Minerals)

ABRASHEV, K.K.; BELOV, N.V., akademik

Crystalline structure of barillite ($\text{BaBe}_2\text{Si}_2\text{O}_7$). Dokl. AN SSSR 144
no.3:636-638 My '62. (MIRA 15:5)
(Minerals) (Crystallography)

DORFMAN, M.D.; ABRASHEV, K.K.

Supergene sodium phosphate in nepheline syenites of the Khibiny
Mountains. Trudy Min. muz. no.14:226-230 '63. (MIRA 16:10)

(Khibiny Mountains--Sodium phosphate)
(Khibiny Mountains--Nepheline syenite)

ABRASHEV, K.K.

Dimensional leucophane group. Trudy Min. muz. no.14:200 '63.
(Leucophanite) (MIRA 16:10)

ROZHKOV, I.S.; ABRASHEV, K.K.

New method and some results of the study of diamond-bearing
kimberlite ores. Geol. i geofiz. no.2:146-150 '64.

(MIRA 18:4)

1. Yakutskiy filial Sibirskogo otdeleniya AN SSSR, Yakutsk.

ROZHKOV, I.S.; ABRASHEV, K.K.; KONSTANTINOVA, A.F.

Some characteristics of the heat conductivity of diamonds from
the "Mir" and "Aykhal" deposits. Geol. i geofiz. no. 3:135-138
'64. (U.S.S.R.)

1. Yakutskiy filial Sibirskogo otdeleniya AN SSSR, g. Yakutsk.

ABRASHEV, K.K.; ILYUKHIN, V.V.; BELOV, N.V.

Crystalline structure of barilite $\text{Br}^{\text{e}}_2\text{Si}_2\text{O}_7$. Use of difference syntheses for the exposure of light atoms in the presence of sufficiently heavy atoms. Kristallografiia 9 no.6:816-827 N-D '64. (MIRA 18:2)

1. Institut kristallografi AN SSSR.

VASILEVA, R.; ABRASHEVA, P.

Experimental studies on a possibility of determining E-605 in exhumed cadavers and chemical and legal determination of poisoning. Nauch. tr. vissh. med. inst. Sofia 39 no.1:189-202 '60.

1. Predstavena ot prof. M. Markov, zav. Katedrata po cudebna meditsina.

(PARATHION toxicol) (IDENTIFICATION MEDICOLEGAL)

VASILEVA, R.; ABRASHEVA, P.

Medico-legal studies on E-605 poisoning in our area (according to data of the department). Nauch. tr. vissh. med. inst. Sofia 39 no.1:203-219 '60.

1. Predstavana ot prof. M. Markov, zav. Katedrata po cudebna meditsina.

(PARATHION toxicol)

NEDZVETSKIY, G.V., kand.tekhn.nauk; ABRASHIN, A.V., inzh.

Condenser charge welding of heat exchangers. Svar. proizv. no.10:
36-37 0 '63. (MIRA 16:11)

1. Bryanskiy institut transportnogo mashinostroyeniya.

BABICHKOV, A.M., prof., doktor tekhn.nauk; ABRASHIN, I.I., inzh.

Generalization of practices in the use of electronic calculating
machines for traction calculations. Zhel.dor.transp. 42 no.11:43-46
N '60. (MIRA 13:11)

(Electronic calculating machines)
(Railroad engineering)

BABICHKOV, Abram Mikhaylovich, prof.; YEGORCHENKO, Valentin Filippovich.
Prinimali uchastiye: NOVIKOV, A.P., dots.; ABRASHIN, I.I., inzh.;
BABICHKOV, V.A., dots.; KOROSTYLEV, A.I., inzh., retsenzent;
MOROZOV, M.A., inzh., retsenzent; SOBAKIN, V.V., inzh.red.; BOBROVA, Ye.N.,
tekh.red.

[Train traction and the use of specialized electronic computers
for traction calculations] Tiaga poezdov i primeneniye spetsializirovannykh elektronnykh vychislitel'nykh mashin dlia tiagovykh raschetov. Ind.4., dop. i prerer. Moskva, Transzheldorizdat, 1962.

262 p. (MIRA 15:6)

(Electronic calculating machines) (Locomotives)

ABRASHIN, S.M., mashinist-instruktor

These breakdowns could have been prevented. Elek. i topl. tiaga
2 no.9:29-30 S '58. (MIRA 11:10)

1. Depo Barabinsk, Omskaya doroga.
(Electric locomotives)

ABRASHIN, S.M., mashinist elektrovoza.

Some practical recommendations. Elek. i tepl. tiaga 4 r.o. 9:39-
40 S '60. (MIRA 13:12)

(Electric locomotives)

ABRASHIN, S.M., mashinist

Practical advice for the operator of the recuperative VL22^m
electric locomotive. Elek.i tepl.tiaga 6 no.2:34-35 F '62.
(MIRA 15:2)

1. Depo Tuapse Severo-Kavkazskoy dorogi.
(Electric locomotives)

CHERKESOV, L.V.; ABRASHINA, N.N.

Unsteady waves due to periodic pressures in a liquid of finite depth. Dokl. AN BSSR 7 no.9:591-593 S '63. (MIRA 17:1)

1. Institut matematiki AN BSSR. Predstavleno akademikom AN BSSR V.I. Krylovym.

ABRASHINA, N.N.

Development of waves on the surface of a stream under the action of periodic pressures in a liquid of finite depth. Dokl. AN BSSR 8 no.8:519-522 Ag '64. (MIRA 17:11)

1. Ins titut matematiki i vychislitel'noy tekhniki AN BSSR. Predstavleno akademikom AN BSSR V.I. Krylovym.

ABRASHINA, O.G. [Abrashyna, O.H.], nauchnyy sotrudnik

Rugose mosaic of potatoes and its control in Crimean and Kherson Provinces. Visnyk sil'hosp.nauky 4 no.8:55-57 Ag '61.

(MIRA 14:7)

1. Ukrains'kiy naukovo-doslidniy institut zroshuvanogo zemlerobstva.
(Crimea—Potato mosaic virus)
(Kherson Province—Potato mosaic virus)

ABRASHKEVICH, Vsevolod Markovich; NAGIRNYAK, F.I., red.;
SKOROBOGACHEVA, A.P., red.izd-va; MATLYUK, R.M., tekhn.red.

[Practice in increasing the efficiency of ore dressing]
Praktika povysheniia effektivnosti obogashcheniia rud.
Sverdlovsk, Metallurgizdat, 1959. 21 p. (MIRA 17:2)

ABRASHNEV, M.M.

"Development of the general biology problems in Russia" by
S.R. Mikulinskii. Reviewed by M.M.Abrashnev. Priroda 51
no.2:123-124 F '62. (MIRA 15:2)

1. Gor'kovskiy meditsinskiy institut im. S.M.Kirova.
(MIKULINSKII, S.R.)
(BIOLOGY)

ABRASHNEV, M.M.

I.N. Diad'kovskii. Selected works. Reviewed by M.M. Abrashnev.
Sov.zdrav. 19 no.1:87-90 '60. (MIRA 13:4)
(DIAD'KOVSKII, JUSTIN EVDOKIMOVICH, 1784-1841)

ABRASHNEV, M.M., kand. filosof. nauk (Gor'kiy)

Valuable work on the history of natural science in Russia.
Priroda 51 [i.e. 52] no.5:121-122 '63. (MIRA 16:6)

(Science)

СЕРГЕЕВ, А.С.

Work processes as a therapeutic factor in sanatorium treatment.

Sber. nauch. rab. vrach. san.-kur. uchr. profsoyuzov no.1:209-

214 '64.

(MIRA 18:10)

1. Zamestitel' glavnoy vracha po meditsinskoy chasti sanatoriya
"Rossiya", Odessa.

AMISHOVA, Ye. P.

"Non-generalized vulvovaginitis in girls."

Vestnik venerologii i dermatologii (Bulletin of Venerology Dermatology),
no 1, January-February 1984, (Moscow), 2 pages.

ZHDANOV, G.B., glavnyy red.; IVANENKO, I.P., zam.glavnogo red.;
SYROVATSKIY, S.I., otv.red.toma; KHUENOV, B.A., zam.red.toma;
GERASIMOVA, N.M., red.; NIKISHOV, A.I., red.; KISEPIN, V.I.,
red.; DORMAN, L.I., red.; TULINOV, V.F., red.; MOROV, V.M.;
VAVILOV, Yu.N., red.; ABRASIMOV, A.T., red.; FRADIN, M.I.,
red.izd-va; BRUZGUL', V.V., tekhn.red.

[Radiation belts of the earth. Primary cosmic radiation and its
properties and origin] Radiatsionnyi poias Zemli. Pervichnoe
kosmicheskoe izluchenie, ego svoiatva i proiskhozhdenie. Moskva,
Izd-vo Akad.nauk SSSR, 1960. 258 p. (Trudy Mezhdunarodnoi
konferentsii po kosmicheskim lucham, no.3)

(MIRA 14:2)

1. International Conference of Cosmic Radiation.
(Cosmic rays)

ABRASIMOV, A.T.; BAZILEVSKAYA, G.A.; SOLOV'YEVA, V.I.; KHRISTIANSEN, G.B.

Extensive air showers involving ultrahigh energies. Zhur. eksp.
i teor. fiz. 38 no.1:100-107 Jan '60. (MIRA 14:9)

1. Institut yadernoy fiziki Moskovskogo gosudarstvennogo universi-
teta i Fizicheskiy institut im. P.N.Lebedeva AN SSSR.
(Cosmic rays)

ABRATOVA, T.D.

Epidemiological peculiarities of dysentery. Zmur.mikrobiol.epid.1 immun.
no.7:23 J1 '53. (MLRA 6:9)
(Dysentery)

YUR' YEV, Yu.K.; ABRATSKIY, A.V.

Sulfamides, containing a pyrrolidine ring. Vest.Moak.un. 8 no.2:83-87 F
'53. (MLRA 6:5)

1. Laboratoriya organicheskoy khimii im. akad. N.D. Zelinskogo.
(Sulfamides) (Pyrrolidine)

ALEKSANDROV, I.V.; ABRAUDUSHKIN, Yu.S.

3-Aminophenol derivatives. Part 1: N-Arylsulfonyl and N-benzoyl derivatives of 3-aminophenol and its homologues. Zhur.ob.khim. 30 no.10:3407-3412 0 '61. (MIRA 14:4)

1. Nauchno-issledovatel'skiy institut organicheskikh poluproduktov i krasiteley.

(Phenol)

ABRAYTENE, L. L. Cand Med Sci -- (diss) "Treatment of Trachoma with
Norsulfazol and Means for Liquidating this Disease in the
Latvian SSR," Minsk, 1960, 24 pp, 250 copies, Minsk State Medical
Institute) (KL, 46/60, 127)

ACC NR: AP7003594

SOURCE CODE: UR/0236/66/000/003/0141/0149

AUTHOR: Abraitis, R. I.—Abraitis, R.; Mayauskas, I. S.—Majauskas, J.

ORG: Institute of Power Engineering and Electrical Engineering, Academy of Sciences, Lithuanian SSR (Institut energetiki i elektrotechniki Akademii nauk Litovskoy SSR)

TITLE: Gas erosion of zirconium dioxide-base refractories

SOURCE: AN LitSSR. Trudy. Seriya B. Fiziko-matematicheskiye, khimicheskiye, geologicheskiye i tekhnicheskiye nauki, no. 3, 1966, 141-149

TOPIC TAGS: zirconium dioxide, refractory, ~~refractory-gas~~ erosion, ZIRCONIUM COMPOUND, GAS CORROSION

ABSTRACT: A method of investigating the erosion resistance of high-temperature oxides possessing high sensitivity to thermal shock has been developed and the erosion rate of zirconium dioxide-base refractories, depending on the duration of test, temperature of specimen walls and velocity of the high-temperature stream, has been investigated. It was determined that in the first 2—3 hr of testing at 2320K at a stream velocity of about 500 m/sec, an intensive adjustment of the surface in direct contact with the high temperature gas stream takes place. During that time, the rate of erosion decreases 3—4 times and gradually reaches a constant value and when the test is continued for 6hr, it remains constant. The rate of erosion increases when the temperature of the specimen walls is increased from 2000 to 2630K. The weight losses of the material increased significantly with an increase in the high-temperature stream

Card 1/2

UDC: none

ACC NR: AP7003594

velocity from 370 to 730 m/sec. It was noticed that the rate of erosion depends to a great extent on the material composition. Orig. art. has: 5 figures and 2 tables.

SUB CODE: 11 / SUBM DATE: 26Feb66/ ORIG REF: 006

Card 2/2

ABRAYTIS, P.I. (Abaytis, P.I.); NYKADOM, V.I. (Nykadom, V.I.)

Study of the surface relief of metals subjected to friction
with a loose abrasive. Izv. Akad. Nauk SSSR, Ser. P. no. 1:201-
216 1964 (1964:17:7)

L. Institut central de Recherches et de Developpement.

ABRAZEVICH, I. V.

Death following galvanocautery of tonsils. Vest. otorinolar.
Moskva 13 no.4:79 July-Aug 1951. (GML 21:1)

1. Leningrad.

ABRAZHANOVA, E.A.

4

CZECH

Preparation of nitriles of dibasic carboxylic acids directly from their chlorides. Y. V. Kirsanov and E. A. Abrazhanova (I. V. Stalin Met. Inst., Dnepropetrovsk, USSR). *Soviet Zhurnal Khim.* 2, 845-8 (1954). — The following method of prepn. of nitriles is based on the reaction of $ArSO_2N:PCl_2$ with $RCOCl$, which yields RCN , $POCl_3$ and $ArSO_2Cl$. A mixt. of 10.15 g. phthalic acid and 29.25 g. $PhSO_2N:PCl_2$ (I) in a flask with 2 thermometers, 1 of which is in the mixt., the other slightly below the opening of an outlet tube leading to a chilled receiver, is gradually heated (HCl evolution at 60-70°) to 220-30° with distr. of the $POCl_3$ over 1 hr., the cooled solid residue added in portions to 50 ml. 20% NH_4OH , chilled with ice, stirred 2 hrs., the ppt. sepd., washed, triturated with 7 g. KOH in 20 ml. H_2O , filtered, and the filtrate acidified with HCl , yielding $PhSO_2NH_2$, while the insol. portion is crude *o*- $C_6H_4(CN)_2$ (81.2%), m. 137.5-9° (from H_2O). Similarly *m*- $C_6H_4(CO_2H)_2$ gave 89% *m*- $C_6H_4(CN)_2$, m. 159-61° (from H_2O). Trimesic acid heated with $SOCl_2$ 12 hrs. did not react but 3 hrs. at 120-30° with PCl_5 gave *tris*-*o*-*trifluoromethyl*- $C_6H_2(CN)_3$ (II), b.p. 175-6°, m. 37-9°. This (1.3 g.) added to 20 ml. cold NH_4OH and left overnight, gave 68% *tris*-amide, m. 389-6°, which can be crystallized from much H_2O . Trimesic

Jan

В. В. Косыгин

acid (1.05 g.) and 2.4 g. $\text{SO}_2\text{N}_2\text{H}_2$ with 10 ml. pyridine heated on a steam bath 3 hrs., evapd. *in vacuo*, treated with 10 ml. H_2O , rapidly heated to boiling, and chl'd., gave 77.7% transamide. II (2.0 g.) and 8.75 g. I heated as described for phthalic acid, above, to 210-20° used HCl and POCl_3 , evolution stopped, treated with cooling with 20 ml. 20% NH_4OH 3 hrs., filtered, and the ppt. washed with H_2O and extd. with 4 g. KOH in 15 ml. H_2O gave 1.4 g. crude, or 0.6 g. pure (88%) *transamide*, $\text{C}_8\text{H}_8\text{N}_2$, m. 210-12° (from H_2O); the mother liquor gave 0.2 g. unknown substance, m. 143-5°. Heating 3.69 g. $(\text{CH}_2)_2\text{COCl}_2$ and 11.7 g. I as above 1 hr. to 130-10°, treating the residue with 50 ml. 20% NH_4OH (cooling) 2-3 hrs., extg. the pot. and the filtrate with CHCl_3 , washing the ext. with 5% NaOH, drying and distg. gave 50.0% *trans-nitrile*, b.p. 180-5°, m. 110-1°. Solubility 5.1 g. CH_2Cl_2 , $(\text{CH}_2)_2\text{COCl}_2$ and 17.5 g. C_6H_6 . Fraction 30 min., as above, to 113-40°, then distd. *in vacuo* at pot. temp. 120-60°, yielded a distillate of mixed nitrile and PhSO_2Cl ; this treated with cold NH_4OH as above gave 49.6% glutaric-ditrile, b.p. 144°. Similarly were obtained 15% $(\text{CH}_2)_2\text{CN}$ and 23.2% CH_2CN .

2/2

G. M. Kosygin

ABRAZHANOVA Ye.A.

USSR.

Hydrolysis and acidolysis of trialkylphosphorodithioates
 ArSO₂NHPOCl₂ by H₂O vapor in addition to
 ArSO₂NHPOCl₂ as the 1st stage. A 10% solution of the tri-
 chlorides with HCO₂H yields in turn all the 1st stage inter-
 mediates ArSO₂NHPOCl, ArSO₂NHPO, ArSO₂NHPO(OH), other org.
 while their chemistries are not
 known. The 1st stage is
 described in the literature
 (Mol. Zh., 1958, 1, 100-101).
 The 2nd stage is described in
 Mol. Zh., 1958, 1, 100-101.
 The 3rd stage is described in
 Mol. Zh., 1958, 1, 100-101.
 The 4th stage is described in
 Mol. Zh., 1958, 1, 100-101.
 The 5th stage is described in
 Mol. Zh., 1958, 1, 100-101.
 The 6th stage is described in
 Mol. Zh., 1958, 1, 100-101.
 The 7th stage is described in
 Mol. Zh., 1958, 1, 100-101.
 The 8th stage is described in
 Mol. Zh., 1958, 1, 100-101.
 The 9th stage is described in
 Mol. Zh., 1958, 1, 100-101.
 The 10th stage is described in
 Mol. Zh., 1958, 1, 100-101.

...with
 ...about 10%
 ...in a few hrs.
 ...70-75%
 ...148-150
 ...These acids are
 ...ArSO₂NHPOCl₂
 ...Mol. Zh., 1958, 1, 100-101.
 ...Mol. Zh., 1958, 1, 100-101.
 ...Mol. Zh., 1958, 1, 100-101.
 ...Mol. Zh., 1958, 1, 100-101.
 ...Mol. Zh., 1958, 1, 100-101.
 ...Mol. Zh., 1958, 1, 100-101.
 ...Mol. Zh., 1958, 1, 100-101.
 ...Mol. Zh., 1958, 1, 100-101.
 ...Mol. Zh., 1958, 1, 100-101.
 ...Mol. Zh., 1958, 1, 100-101.

ARRAZHANOVA, Y. A.

USSR.

Analysis of trichlorophosphazene: A. V. Kuznetsov and B. A. Arrazhanova (U. S. S. R. Acad. Sci. Div. Chem. Sci., Div. Inorg. Chem., Moscow, U. S. S. R.) *Dokl. Akad. Nauk SSSR* 1964, 19, 3652. — Into a soln. of 0.03 ml. As_2O_3 in 50 ml. dry CCl_4 at 0–3° was passed dry NH_3 for 5 hrs., after which the closed flask was allowed to stand at room temp. 10–12 hrs., the mixt. filtered and the ppt. washed with CCl_4 , then with hot Me_2CO . The residue extd. with 50 ml. hot $EtOH$ gave on cooling the est. a ppt. of $As_2O_3 \cdot P(NH_2)_3$, purified by crystn. from hot $EtOH$ (the *o*-ethyl deriv. the crude product was extd. with 50 ml. hot Me_2CO , and the soln. allowed to stand 24 hrs. when the product is deposited). The following $As_2O_3 \cdot P(NH_2)_3$ were prepd. (47 shown): *Ph*, 49.8%, m. 137–9°; *o*- MeC_6H_4 , 41.4%, m. 123–5°; *p*- MeC_6H_4 , 48.3%, m. 129–2°; *l*- C_6H_5 , 34%, m. 142–3°. These are sol. in hot $EtOH$, Me_2CO , H_2O , sparingly in dioxane, $EtOAc$; their aq. solns. are neutral to litmus. To 0.4 g. *o*- $MeC_6H_4As_2O_3 \cdot P(NH_2)_3$ in 10 ml. H_2O was added 4 ml. $N AgNO_3$ yielding a ppt. of *o*- $MeC_6H_4As_2O_3 \cdot N_3P(NH_2)_3$, a colorless sparingly sol. salt. Adding 0.5 g. $As_2O_3 \cdot P(NH_2)_3$ to stand in 15 ml. H_2O 24 hrs. followed by evapor. in vacuo at room temp. gave a solid residue of $P_2As_2O_7 \cdot P(NH_2)_3(OH)$. An aq. soln.

ANALYSIS

obtained as above after 24 hrs. at room temp., then treated with $N AgNO_3$ gave the following Ag salts: $(H_2N)_2P(O)(NH_2)O_2$, *o*-tolyl analog, *p*-tolyl analog; these are insol. in H_2O . Refining 2.34 g. $PhSO_2N:P(NH_2)_2$ in 10 ml. H_2O 20 min. gave on cooling a ppt. of $PhSO_2NH_2$ which can be obtained from the aq. soln. by evapn. and extra. with CaH_2 . The CaH_2 -insol. material was $(H_2N)_2P(O)(ONH_2)$, m. $106-0^\circ$ (from $BaOH$); this ppted with $AgNO_3$ gave the characteristic $(H_2N)_2P(O)OAg$. To 0.44 g. $PhSO_2N:P(NH_2)_2$ in 10 ml. H_2O was added 1.9 ml. $N NaOH$ (NH_3 loss begins) and the soln. after 15 hrs. gave a ppt. of $PhSO_2NH_2$ (total yield of 8.15% obtained by extra. of evapd. soln. with CaH_2), while the aq. soln. gave $(H_2N)_2P(O)(OH)$ identified as the Ag salt; similar hydrolysis occurs in dil. NH_4OH at room temp. When 0.01 mole $ArSO_2N:P(O)Cl_2$ is added gradually to 10 ml. concd. NH_4OH and the soln. is acidified with concd. HCl to Congo red with cooling, there is obtained a ppt. of $ArSO_2NHPO_2NH_2(OH)$; the following were isolated (Ar shown): *Ph*, 71.9%, m. $156-0^\circ$; *o*-*MeC_6H_4*, 71.0%, m. $168-9^\circ$; *p*-*MeC_6H_4*, 67.9%, m. $148-9^\circ$; *i*-*ClC_6H_4*, 69.9%, m. $167-9^\circ$; these can be crystal. from $EtOH$; on boiling in aq. soln. they hydrolyze to $ArSO_2NH_2$ and derivs. of H_3PO_4 . They are sparingly sol. in org. solvents except hot $EtOH$ or $EtOAc$. Passage of dry NH_3 into solns. of $ArSO_2NHPO_2Cl_2$ in inert solvents gave only $ArSO_2NHPO_2(NH_2)OH$ (after aq. treatment). It is possible that $ArSO_2NHPO_2(NH_2)OH$ are tautomers of $ArSO_2NH(P(O)(OH)_2)$ and $ArSO_2N:P(NH_2)(OH)_2$; similar tautomerism is possible between $ArSO_2N:P(NH_2)_2$ and $ArSO_2NH(P(O)(OH)_2)$ (NH_2), although these are not titratable to phenolphthalein with $NaOH$. The monoamides, however, titrate to phenolphthalein with 2 eqs. of $NaOH$. G. M. Kos...

2/2

ABRAZHANOVA, YE. A.

Arslaminolysis of trichloroarsosulfonamide

(NHP)₂Cl, m. 143-4°; 1-C₆H₅SO₂NHPO(NHP)₂Cl, m. 172-3°. Treated with aq. NaOH or NH₄OH these chlorides form sol. Na or NH₄ salts of ArSO₂NHPO(NHP)₂, which on acidification with HCl to Congo red yield the free amides; the hydrolysis of the chlorides is accomplished in several hrs. at room temp. by M. S. G. (U.S.S.R.)

A. Ye. A.

U S S R .

Amidation of carboxylic acids by amides of phosphoric acid. A. V. Kiranov and E. A. Abrashanova. *J. Gen. Chem. U.S.S.R.* 24, 114 (1951) (English translation). *Chem. Abstr.* 49: 3047f. H. I. H.

ABRAZHANOVA E. A.

USSR/Chemistry - Amidation

Card 1/1 Pub. 151 - 20/36

Authors : Kirsanov, A. V., and Abrazhanova, E. A.

Title : Amidation of carboxylic acids with amides of phosphoric acid

Periodical : Zhur. ob. khim. 24/1, 120-122, Jan 1954

Abstract : The reaction of p-nitrobenzoic acid with trianilide, tri-p-toluidide and dianilide of phosphoric acid, and with trianilide, dianilide, triamide and monoamide of phenylsulfonicimido phosphoric acid, was investigated. Only trianilide, among the above mentioned phosphoric acid amides, was found to be a phenyl-amidation agent. It was also established that trianilide of phosphoric acid can be successfully applied for direct phenylamidation of carboxylic acids of the fatty and aromatic series. Two USSR references (1949-1953).

Institution : The I. V. Stalin, Order of Red Banner Metallurgical Institute, Faculty of Organic Chemistry, Dnepropetrovsk

Submitted : June 20, 1953

Seventh Ukrainian Republic Conference on Organic Chemistry (Abstracts) in Donetsk, Donetsk State University, Vol. 2, 1961, Kiev, 1961, p. 107. The regular reports, conferences on organic chemistry, dedicated to the 100th anniversary of the faculty of Chemistry, were held in Kiev, 1961, under the leadership of A. M. Butlerov, was held in Kiev, 1961, 7-13 October 1961.

1. N. Ye. Gerasimova, L. V. Kuznetsova and L. I. Shcherbakova (DNI, Kharkov) presented the research of a number of rearrangements of the diethyl glutamate aldehyde in connection with the absorption spectra of the obtained products.

The section of synthesis works, at its three sessions, heard about very diverse reactions and compounds. Alkylation and acylation of aromatic compounds were the subject of the reports by Ye. P. Babits (Branch of the IOO, Donetsk), S. V. Lavrenko (KPI - Kiev Pedagogical Institute, Kiev) and S. I. Burdakov (KPI - Desyatinovskiy Chemical-Technological Institute, Desyatinovskiy) and their associates. O. M. Dorofeyko and his associates (Branch of IOO, Donetsk) reported on the acylation of aromatic hydrocarbons in the presence of perchloric acid; S. I. Burdakov and his associates, on the acylation and alkylation of alcohols and aldehydes. A. Ye. Krayev and Ye. A. Abramova (KPI, Desyatinovskiy) reported on the products of the reaction between N-methylaminoalkylaldehydes with the oximes of aldehydes and ketones. A. V. Lopyrevskiy, N. I. Gerasimchuk and E. O. Tashchuk (DNU - Chernomorsk State University, Chernomorsk) synthesized alpha-substituted styrenes and piperidines by condensation with alpha-substituted styrenes and piperidines by condensation with diamines in the presence of stannic chloride. L. P. Ivanenko (Branch of KPII - Scientific Research Station Institute of Chemistry, Y. Ya. Pochinok (KPI - Kiev State University, Kiev), Ye. S. Kozum (KPI, Kiev) and associates investigated the reactions of thiazolotriazoles and observed microcrystalline structures. S. S.

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Alamy hamova F M

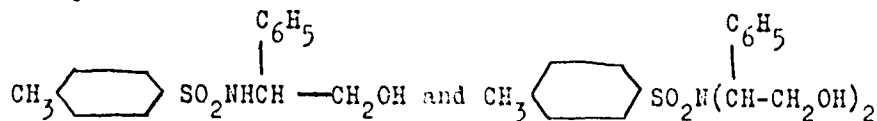
LP

AUTHORS: Kretov, A. Ye., Abrazhanova, Ye. A. SOV/79-28-10-30/60

TITLE: On the Reaction of Aryl Sulfamides With Propylene Oxide
(O reaktsii arilsul'famidov s okis'yu propilena)

PERIODICAL: Zhurnal obshchey khimii, 1958, Vol 28, Nr 10,
pp 2779 - 2782 (USSR)

ABSTRACT: Ethylene oxide found widespread use as raw material for many products used as solvents (Ref 1), plastifiers, varnishes (Refs 2,3), in ammunition and medical preparation industries. The reactions of propylene oxide with aryl sulfamides are investigated. Jonson (Dzhonson)(Ref 5) already carried out the reaction of styrene oxide with p-toluene sulfamides, and separated two products:



The propenyl oxide was reacted by the authors with benzene-, p-chlorobenzene- and p-toluene sulfamide. Based on the general scheme it could be assumed that the reaction

Card 1/3

On the Reaction of Aryl Sulfamides With Propylene Oxide SOV/79-28-10-30/60

takes place in two steps so that the mono or di-substituted aryl sulfamides were to be expected (Reaction Scheme (7) and (2)). In the reaction under high pressure and with caustic soda as catalyst in which the authors proceeded from benzene sulfamide the N- β -hydroxy isopropyl benzene sulfamide (I) was obtained as main product. When using p-toluene- and p-chloro benzene sulfamide the reaction takes place according to the schemes (1) and (2) under the formation of substituted amides. The sirupy N- β -hydroxy isopropyl-aryl sulfamides (Formulae (A)) were purified in form of their crystalline sodium derivatives (with some molecules crystal water). The N- β, β' -dihydroxy diisopropyl-aryl sulfamides (B) are of crystalline nature. The halogenation and acylation of the hydroxyl groups was carried out to prove the structure of the products obtained. Eight aryl sulfamide derivatives not described in publications were synthesized and characterized. There are 6 references, 1 of which is Soviet.

Card 2/3

On the Reaction of Aryl Sulfamides With Propylene Oxide SOV/79-28-10-30/60

ASSOCIATION: Dnepropetrovskiy khimiko-tekhnologicheskii institut
(Dnepropetrovsk Chemotechnological Institute)

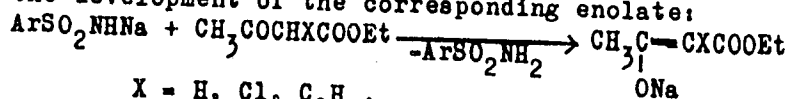
SUBMITTED: August 2, 1957

Card 3/3

S/079/60/030/04/42/080
B001/B002AUTHORS: Kretov, A. Ye., Abrazhanova, Ye. A.TITLE: Acylation of Arene Sulfamides With Esters of Acetoacetic Acid
and Its Substituted Compounds

PERIODICAL: Zhurnal obshchey khimii, 1960, Vol. 30, No. 4, pp. 1243 - 1245

TEXT: In addition to the papers of Refs. 1,2, the authors investigated the reactions of alkali salts of arene sulfamides on the one hand, with esters of acetoacetic acid and its substituted compounds on the other. The initial substances were benzene-, p-chloro, p-toluene sulfamide and the esters of acetoacetic acid, and of chloro-, ethyl-, dichloro-, and diethylacetoacetic acid. Under the participation of a mobile hydrogen of the methylene group of the ester in the reaction, the latter proved to take place under the development of the corresponding enolate:

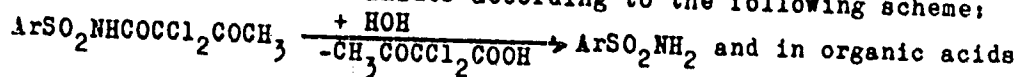
X = H, Cl, C₂H₅.

Card 1/2

Acylation of Arene Sulfamides With Esters of Acetic Acid and Its Substituted Compounds S/079/60/030/04/42/080
B001/B002

If no mobile hydrogen is present, the ester group enters into reaction:

$$\text{ArSO}_2\text{NHNa} + \text{CH}_3\text{COCl}_2\text{COEt} \xrightarrow{-\text{EtONa}} \text{ArSO}_2\text{NHCOCCH}_2\text{COCH}_3$$
 The reaction took place in boiling, non-aqueous methanol. Due to the hydrolysis taking place readily, it was not possible to separate the final product in the pure state. The hydrolysis takes place in neutral and alkaline media, under the formation of arene sulfamides according to the following scheme:



according to a different scheme. Thus the following compounds were synthesized: N-dichloroacetylbenzene sulfamide, N-dichloroacetyl-p-toluene sulfamide, N-dichloroacetyl-p-chlorobenzene sulfamide. These are colorless, crystalline products which are soluble in hot water and benzene, and which may be titrated with phenolphthalein in an alcoholic solution at a low temperature. There are 2 references, 1 of which is Soviet.

ASSOCIATION: Dnepropetrovskiy khimiko-tehnologicheskii institut
 (Dnepropetrovsk Institute of Chemical Technology)

SUBMITTED: April 20, 1959

Card 2/2

KRETOV, A.Ye.; ABRAZHANOVA, Ye.A.; ZLOTCHENKO, S.I.

Production of hemichloronitroso hydrocarbons. Zhur.ob.khim. 31
no.12:4043-4044 D '61. (MIRA 15:2)

(Hydrocarbons)

(Nitroso compounds)

KRETOV, A.Ye.; ABRAZHANOVA, Ye.A.; ZLOTCHENKO, S.I.; KUKHAR', V.P.

Arene sulfamido ketones. Zhur.ob.khim. 33 no.7:2355-2357 J1
'63. (MIRA 16:8)

(Acetophenone) (Sulfamide)

FRUTOV, A.Ye. [deceased]; ABRAZHANOVA, Ye.A.; KUKHAR', V.P.

Oximes of alkoxy- and aroxy-cyclohexanones. Zhur. org. khim. 1 no.6:
1021-1022 J6 '65. (MIRA 18:7)

СЕРГЕЕВ, В. С., ПРАХОВ, М. А. П.

Synthesis and transformation of chalcogenes. Zhurn. Khim. Fiz. 1981, 54, 220-226. Sp. 1981.

2. Belorusskiy gosudarstvennyy universitet. 1981.

ABRAZHEY A.M.
NOVIKOV, B.; LEVITSKAYA, G.; ABRAZHEY, A.M.

Reaction of the hypophyseal-thyroid complex to the action of temperature in the embryonic and postembryonic stage of development of certain warm-blooded animals. Trudy Inst. zool. AN URSR 10:105-123 '53. (MLRA 7:10)
(Pituitary body) (Thyroid gland) (Temperature--Physiological Effect)

USSR/Farm Animals. Domestic Birds

Q-5

Abs Jour : Ref Zhur - Biol., No 11, 1958, No 50093

Author : Novikov, B.G., Moshkov E.O., Abrazhey A.M.

Inst : Academy of Sciences UkrSSR

Title : Growth and Development of Ducks at the Presence of Various Light Conditions.

Orig Pub : Dopovidi AN URSR, 1957, No 1, 98-100

Abstract : Test ducks of the peking breed raised at the sovkhos imeni Chkalov in the Stalin Oblast' were kept for the duration of one year starting with the 20th day of their lives under the following conditions: for the 1st series of tests the birds were subjected to 16 hours of uninterrupted illumination; and for the 2nd series they were subjected to a two-phase daylight illumination, namely, from 10 a.m. to 6 p.m. and from 10 p.m. to 6 a.m. In both series of tests no differences were detected in terms of the ducks' growth tempi and final body measurements, or in terms of their weight, and condition

Card : 1/2

ABREIMOV, I. V.

Abreimov, I. V. and Prikhot'ko, A. F. The interferometer for work at low temperatures.
Pages 550 - 553.

Inst. of Physics of Acad. of Sci.
Ukr. SSR and Inst. of Organic
Chemistry
Acad. of Sci. USSR.

SO: Bulletin of the Academy of Sciences, Izvestia, (USSR) Vol. 14, No. 4.
(1950) Series on Physics.

ABREYMOV, P.G.

STRONGIN, G.M.; PISAREV, K.Ye.; ABREYMOV, P.G.; GRISHIN, N.T.; SHISHKINA, A.I.

Zinc phosphide. Patent U.S.S.R. 78, 450, Dec. 31, 1949.
(CA 47 no.20:10816 '53)

ABRIHAN, T.

Manufacture of the equipment for the petroleum industry in Rumania, a realization of the regime of people's democracy. p. 330

PETROL SI GAZE. (Asociatia Stiintificia a Inginerilor si Tehnicienilor din Romania si Ministerul Industrii Petrolului si Chimiei) Bucuresti Rumania
Vol.10 no.8 July 1959

Monthly list of East European Accessions (EEAI) IC, Vol.9, no.2 Feb. 1960

Uncl.

ABRIK, M.; LEBER, F.

[Papers read by foreign experts in Committees 3, 4, and 5 of the Scientific Conference...; Committee 4] Doklady zarubezhnykh spetsialistov nauchnoi konferentsii komissii 3, 4 i 5 ...; Komissia 4. Moskva, 1958. 157 p. (MIRA 14:9)

1. International Institute of Refrigeration.
(Food, Frozen)

ABRIKOSOV, Aleksandr Aleksandrovich; ARUSTAMOV, Kh.A., dotsent,
retsensent; IVANOV, Yu.B., inzhener, redaktor; EIFEL', A.I., inzhener,
redaktor; MARSHENTS, S.L., redaktor; MODKL', B.I., tekhnicheskii
redaktor

[Reading and executing mechanical drawings] Chtenie i vypolnenie
mashinostroitel'nykh chertezhei. Izd.3-e, perer. i dop. Moskva,
Gos. nauchno-tekhn.izd-vo mashinostroit.lit-ry, 1955. 137 p.
(Machinery--Drawing) (MLRA 8:10)

ABRIKOSOV, Aleksandr Aleksandrovich; RODIONOVA, Z.A., red.; TSIRUL'NITSKIY,
N.P., tekhn.red.

[Workbook for mechanical drawing; a manual for students in the
8th grade of the secondary schools] Rabochaia tetrad' po
chercheniiu; uchebnoe posobie dlia uchashchikhsia VIII klassa
srednei shkoly. Moskva, Gos. uchebno-pedagog. izd-vo M-va
prosv. RSFSR. No.2. 1958. 13 p., 40 diagra. (MIRA 12:2)
(Mechanical drawing)

ABRIKOSOV, Aleksandr Aleksandrovich; ARUSTAMOV, Kh.A., prof., retsenzent;
SAVEL'YEV, Ye.Ya., red. izd-va; EL'KIND, V.D., tekhn. red.

[Reading and drafting of mechanical drawings] Chtenie i vypolnenie
mashinostroitel'nykh chertezhei. Izd.4., perer. i dop. Moskva,
Gos. nauchno-tekhn. izd-vo mashinostroit. lit-ry, 1961. 291 p.
(MIRA 14:11)

(Mechanical drawing)

ABRIKOSOV, A. A.

26904. ABRIKOSOV, A. A., k teorii gomogennykh samoproizvol'nykh orto-, para-perekhodov vodoroda pri nizkikh temperaturakh. (Pis'mo v Red.) Zhurnal eksperiment. i teoret. fiziki, 1949. Vyp. 9, s. 851-53.

EO: Letopis'Zhurnal'nykh Statey, Vol. 36, 1949.

ABRIKOSOV, A. A.

26905. ABRİKOSOV, A. A., ob orientatsii elektronnoĝo momenta galoidnogo atoma v molekulakh tipa $SiSi$ i $SiSi_3$ (pis'mo v red.) Zhurnal eksperiment. i teoret. fiziki. 1949, vyp. 9, a. 853-55. Bibliograf: 5 Nazv.

SO: Letopis'Zhurnal'nykh Statey, Vol. 36, 1949.

62/49T104

ABRIKOSOV, A. A.

USSR/Physics
Molecular Spectra
Quadrupole Moments

Sep 49

Letter to the Editor, "The Orientation of the Electron Moment of the Haloid Atom in Molecules of the Type ClO_n and ClO_nH_3 ," A. A. Abrikosov, Inst of Phys Problems, Acad Sci USSR, 3 pp

"Zhur Eksper 1 Teoret Fiz" Vol XIX, No 9

Recent measurements of the hyperfine structure of the rotation spectra of ClO_n and ClO_nH_3 type molecules showed that it depends upon the quadrupole interaction of the haloid atom with the

62/49T104

USSR/Physics (Contd)

Sep 49

field of the remaining charged particles. Assumes that the field interacting with the quadrupole moment of the nucleus is essentially the same for a free atom as for an atom in a molecule. Because of the binding of the atom in the molecule, various orientations of its electron moment with respect to the axis of the molecule have different probabilities of occurrence. Calculates these probabilities according to experimental data on the hyperfine structure of molecular rotation spectra and the symmetric hyperfine structure of haloids. Submitted 7 May 49.

62/49T104

ABRIKOSOV, A. A.

62/49T103

USSR/Physics
Low Temperatures
Hydrogen

Sep 49

"A Letter to the Editor, 'The Theory of Homogeneous Spontaneous Ortho- and Para-Transitions of Hydrogen at Low Temperatures,'" A. A. Abrikosov, Inst of Phys Problems, Acad Sci USSR, 3 pp

"Zhur Eksper 1 Teoret Fiz" Vol XIX, No 9

Explains why the equilibrium concentration of two hydrogen modifications changes only slightly with an increase, and considerably with a decrease, in temperature. Bases general explanation

62/49T103

USSR/Physics (Contd)

Sep 49

In that para- and ortho-molecules have wave functions of nuclear spin that are of different symmetry. Submitted 7 May 49.

62/49T103

ABRIKOSOV, A. A.

"Drawing of Machinery and Blueprint Reading," Izd. 2, perer. (Nauchnyi redaktor B.A.Ivanov), Moskva, Gos. nauchno-tekhn. izd-vo mashinostroit. lit-ry, 1950.

MLA Oct 1951

ABRIKOSOV, A. A.

Mashinostroitel'noe cherchenie i chtenie chertezhei. V pomoshch'produktivnomu obucheniiu i samostoiatel'nomu povysheniiu proizvodstv. kvalifikatsii. Moskva, Mashgiz, 1950. 140 p.

Mechanical drawing and draft reading.

SO: Manufacturing and Mechanical Engineering in the Soviet Union, Library of Congress, 1953.

ABRIKOSOV, A. A.

"Distribution of Particles in a Nonuniformly Heated Ionized Gas." Sub 23
Jun 51, Inst of Physical Problems imeni S. I. Vavilov, Acad Sci USSR.

Dissertations presented for science and engineering degrees in Moscow
during 1951.

SO: Sum. No. 480, 9 May 55.

ABRIKOSOV, A.A.

N

8

RADIATION CORRECTIONS FOR DIRAC'S EQUATIONS IN A NONRELATIVISTIC APPROXIMATION. A. A. Abrikosov and I. M. Khalatnikov. Zhur. Ekspit. i Teoret. Fiz. 21, 69-76(1951) Jan. (In Russian)

A calculation is made of the shift in the energy levels of an electron in an external field produced by the interaction with the electron's own radiation field. Divergences appearing in the calculation are removed by discarding terms which are independent of the outer field. A new method for the derivation of reduction relations is employed, not requiring the use of the Pauli equation. (auth)

COMMON ELEMENTS

OPEN MATERIALS MODES

COMMON VARIABLE MODES

ASB. SIA METALLURGICAL LITERATURE CLASSIFICATION

1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	42	43	44	45	46	47	48	49	50	51	52	53	54	55	56	57	58	59	60	61	62	63	64	65	66	67	68	69	70	71	72	73	74	75	76	77	78	79	80	81	82	83	84	85	86	87	88	89	90	91	92	93	94	95	96	97	98	99	100
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ABRIKOSOV, A.A.

5

4926
 PROCESSES AND PROPERTIES INDEX
 RADIATION CORRECTIONS IN THE PROBLEM OF THE
 SCATTERING OF AN ELECTRON IN AN ELECTRO-
 MAGNETIC FIELD. A. A. Abrikosov and I. M. Khalatnikov.
 Zhur. Ekspri' i Teorst. Fiz. 31, 428-35(1951) Mar. (In
 Russian)

A relativistically-invariant method of calculation of
 radiation corrections (in the approximation $e^2/\hbar c$) for an
 interaction between an electron and an external field is
 given. The principal expressions are formulated for
 arbitrarily large fields. For the elimination of infinite
 terms not corresponding to observed effects, a procedure
 involving cut-off factors of a very general type is
 introduced. (auth)

ASB-55A METALLURGICAL LITERATURE CLASSIFICATION

SA: Section A ABRIKOSOV, A.A.

Molecular Theory of Gases

533.7 : 537.56
8011. On particle distribution in all non-uniformly heated completely ionized gas. A. A. ABRIKOSOV. Zh. Fiz. Tsv. Fiz., 21, 310-20 (No. 3, 1932) in Russian.

In surveying the general position of research work in this line, the author states that a general formula for the coefficient of thermo-diffusion has been evolved, the electrical and thermal conductivity of completely ionized gases was investigated by Cowling [Abstr. 2301 (1945)], Landshoff [Abstr. 794 (1950)] and, by a

somewhat different method, by Cohen, et al. [Abstr. 1059 (1951)], but the question of the thermo-diffusion in ionized gases has not yet been investigated at all, notwithstanding the interest which it should create in view of the fact that this phenomenon can actually occur in nature and can, in particular, play a significant part in the formation of the stars. The author's object is to contribute to the filling of this gap. In this paper the investigation is restricted to the case of a complete ionization. The analysis is based on the Boltzman kinetic equations set for a mixture of two material gases and the electron gas, with Coulomb forces and thermo-electric forces acting between the particles in addition to the forces arising from the impacts between them. In order to evolve the coefficient of thermo-diffusion, a stationary solution of the system of these equations is sought on the assumption that the distribution function does not differ appreciably from the Maxwell equilibrium distri-

over

SA.
Section A
ABRIKO-01, A-4.

Molecular Theory of
Gases

533.7:537.56

5912. The influence of thermal ionization upon particle distribution in an unexcited gas. A. A. Ambramov. *Zh. Eksp. Teor. Fiz.*, 22, 321-30 (No. 3, 1952) In Russian.

Continuation of the author's previous paper (preceding abstract) in which the case of a completely ionized gas was considered. The analysis is now extended to a still more complex case where the ionization is incomplete. In the first place, a mixture of gases with different degrees of ionization of atoms, but not containing completely neutral atoms, is considered. The analysis begins from the statement of the formula determining the equilibrium ratio between the numbers of differently ionized atoms. It is then pointed out that the basic equations are analogous to those obtained in the previous paper, and into these relationships the formula for the equilibrium ratio is introduced, using, for the sake of simplification, the fact that the ionization energy levels on which this equilibrium ratio largely depends, are so far distant for different gases that each gas can be considered separately as a mixture of two ionized components. However, even with this simplification, the mathematics proves to be too laborious for expounding, and therefore further consideration is restricted to the case where the concentration of one of the components is relatively very small. Even then the results prove to be rather laborious. The most interesting implication of these results is that

over

ABRIKOSOV, A. A.

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USSR/Physics - Superconductors

1 Sep 52

"Determining the Magnitude of Dielectric Permeability and Normal Conductivity of Superconductors," A. A. Abrikosov

"Dok Ak Nauk SSSR" Vol 86, No 1, pp 43-46

Investigates superconductors in a high-frequency field, which permits one to observe a number of properties of great interest from the standpoint of the microscopic theory of supercond. Obtains a formula for $Z = R + iX$, the surface resistance of superconductors in a high-frequency field,

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which quantity Z can be measured experimentally and which thus permit one to find important parameters cond sigma and permeability epsilon contained in the formula. Thanks Acad L. D. Landau for proposing the problem worked out here. Submitted by Acad Landau 4 Jul 52.

(PA 56 no. 668:5483 '53)

234T103

ABRIKOSOV, A.A.

Influence of size on the critical field of superconductors of the second group. Dokl. Akad. Nauk SSSR 86, No.3, 489-92 '52. (MLRA 519)
(PA 56 no.668:5475 '53)

ABRIKOSOV, A.A.

Internal structure of hydrogen planets. Vop.kosm.3:11-19 '54.
(Planets) (MLRA 8:3)

ABRIKOSOV, A. A.

Subject : USSR/Astronomy AID - P-227
Card : 1/1
Author : Abrikosov, A. A.
Title : Equation of State of Hydrogen at High Pressures
Periodical : Astron. zhur., v. 31, 2, 112-123, Mr - Ap 1954
Abstract : Equation of state of solid hydrogen at pressures above 2×10^5 atm is examined. It is found that at a pressure of 2.4×10^6 atm a change from a molecular to an atomic modification takes place, which is followed by a sudden change in density from 0.621 to 1.12 gr/cm³. Limits of application of the calculations made are studied. The molecular hydrogen energy net of Kronig, de Boer, Korringen as modified by the author was used, and the method of the atomic hydrogen energy net was replaced by the author's own method of single-parameter electron wave functions modulated by functions having the necessary symmetry. Five graphs. Three references.
Institution : Institute of Physical Problems im. S. I. Vavilov of the Academy of Sciences, USSR
Submitted : November 1, 1953

ABRIKOSOV, A. A.

USSR/Physics - Quantum electrodynamics

Card 1/1 : Pub. 118 - 7/9

Authors : Abrikosov, A. A.; Pomeranchuk, I. Ya.; and Shmushkevich, I. M.

Title : "Quantum Electrodynamics" by A. I. Akhizer and B. B. Berestetskiy. Gosizdat, 1953, 428 p.

Periodical : Usp. fiz. nauk 53/3, 442-444, July 1954

Abstract : A monographical work by two Soviet scientists is reviewed. The monograph deals with quantum electrodynamics and is considered to be a unique and very valuable work on theoretical physics.

Institution : ...

Submitted : ...

"APPROVED FOR RELEASE: 03/20/2001

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APPROVED FOR RELEASE: 03/20/2001

CIA-RDP86-00513R000100220015-0"

ABRIKOSOV, A. A.

USSR/Physics - Quant. electrodynamics

Card 1/1

Authors : Landau, L. D., Academician; Abrikosov, A. A., Khalatnikov, I. M.

Title : Asymptotic expression of the Green photon function in quantum electrodynamics.

Periodical : Reports of the Acad. of Scs. of the USSR 95, 6, 1177 - 1180, 21 Apr 1954

Abstract : An asymptotic expression for the Green photon function ($D_{\mu\nu}$) used in quantum electrodynamics is derived. The article contains a diagram.

Institution : Acad. of Scs. of the USSR

Submitted : 25 Feb 1954

ABRIKOSOV, A. A.

USSR/Physics

Card 1/1

Authors : Landau, L. D. Academician; Abrikosov, A. A.; and Khalatnikov, I. M.

Title : Electron mass in quantum electrodynamics

Periodical : Dokl. AN SSSR, 96, Ed. 2, 261 - 264, May 1954

Abstract : The problem of electron mass and particularly the problem concerning the role of the electro-magnetic and natural mass of the electron is one of the most interesting problems of quantum electrodynamics. Of basic importance in solving this problem is the characteristic of the Green function of the electron $G(p)$ when $p \sim m$. Equations enabling one to solve such a problem are given. Three references all USSR.

Institution :

Submitted : March 6, 1954

ABRIKOSOV, A. A.

USSR, Physics

Card : 1/1 Pub. 22 - 10/48

Authors : Abrikosov, A. A., Galanin, A. D. and Khalatnikov, I. M.

Title : Green's functions in the theory of mesons with weak pseudo-scalar bond

Periodical : Dok. AN SSSR 97/5, 793 - 796, August 11, 1954

Abstract : A method, successfully used in the theory of quantum electrodynamics, is described in connection with its application to the theory of mesons with weak pseudo-scalar bonds. The method is intended to show that, by application of Green's function $G(p)$, the effective constant of weak bond (g^2) becomes a strong bond, provided the p^2 is sufficiently large. Two references (1951).

Institution : Institute of Physical Problems im. S. I. Vavilov of the Acad. of Scs. of the USSR

Presented by : Academician L. D. Landau, June 15, 1954

ABRIKOSOV, Aleksey Alekseyevich

ABRIKOSOV, Aleksey Alekseyevich

ABRIKOSOV, Aleksey, Alekseyevich - Academic degree of Doctor of Physicomathematical Sciences, based on his defense, 23 June 1955, in the Council of the Institute of Physical Problems imeni Vavilov Acad Sci USSR, of his dissertation entitled: "Research on quantitative electrodynamic in the presence of great energies."
For the Academic Degree of Doctor of Sciences

SO: Byulleten' Ministerstva Vyshego Obrazovaniya SSSR, List No. 2, 21 January 1956
Decisions of the Higher Certification Commission concerning academic degrees and titles.

ABRIKOSOV, A. A.

USSR/Physics - Annihilation reaction

Card 1/1 Pub. 22 - 16/54

Authors : Abrikosov, A. A.

Title : ~~_____~~
The multi-photon annihilation of high-energy positrons and electrons

Periodical : Dok. AN SSSR 102/5, 915-917, June 11, 1955

Abstract : An analysis of the multi-photon annihilation of high-energy positrons and electrons is presented. The first two photons formed in the annihilation are considered. The others are called the additional photons. The following probability formula is given for determining the number of additional photons that may be formed in the annihilation:

$$d\sigma^{(n-2)} = d\sigma_0^{(2)} \frac{1}{n!} e^{-\bar{n}} \bar{n}^n$$

where $d\sigma_0^{(2)}$ is the cross section of the double quantum annihilation.
Three references: 1 USSR and 2 USA (1953-1954).

Institution : The Acad. of Sc., USSR, S. I. Vavilov Institute of Physical Problems

Presented by : Academician L. D. Landau, February 28, 1955