ACC NR: AP6033505   SOURCE CODE: UR/0413/66/000/018/0136/0136

INVENTOR: Soyfer, A. M.; Kodnir, D. S.; Bayborodov, Yu. I.

ORG: none

TITLE: Three-layer slide bearing. Class 47, No. 186225. [Announced by the Kuybyshev Aviation Institute (Kuybyshevskiy aviatsionnyy institut)]

SOURCE: Izobret prom obraz tov zn, no. 18, 1966, 136

TOPIC TAGS: aircraft engine bearing, slide bearing, teflon, antifriction bearing, engine component, protective coating , BEARING MATERIAL

ABSTRACT: The proposed three-layer slide bearing has a first layer made of hard material, an intermediate layer of porous, elastic material, and an inner layer made of teflon, pressed into the elastic material of the intermediate layer with the teflon penetrating to a certain depth into its pores (see Fig. 1). In order to increase the damping properties and the wear resistance of the bearing when the shaft is misaligned as well as to ensure variable stiffness in the tangential and axial directions, the intermediate layer is made of the elastic-damping wire mesh described in the Author Certificate No. 136608. Orig. art. has: 1 figure.

Card 1/2   UDC: 621.822.5

ACC NR: AP7007683   SOURCE CODE: UR/0386/66/003/002/0092/0096

AUTHOR: Bayborodov, Yu. T.; Gott, Yu. V.; Ioffe, M. S.; Yushmanov, Ye. Ye.

ORG: none

TITLE: Unstable states of a plasma in a trap with combined field

TOPIC TAGS: plasma instability, plasma density, spectrometer, ion current, plasma antenna, plasma injection

ABSTRACT: The authors investigate distinct unstable states of a plasma observed in a trap with combined field ("minimum B" type) and offer a possible interpretation of the physical nature of the instability. It has been established that each density drop is accompanied by the appearance of high-frequency fields in the plasma. A loop antenna installed near the trap wall registered a burst of electromagnetic radiation whose spectrum consists of the ion-cyclotron frequency and its harmonics (Fig. 1d); the frequency corresponds to the magnitude of the magnetic field in the central region of the trap. The burst duration, as well as the duration of the drop itself, is 15 - 20 μsec. Figure 1c shows the flux of neutral atoms produced by charge exchange and possessing an energy of 36 keV. At the start of the plasma decay there are no ions with this energy, and their appearance coincides exactly

Card 1/3

ACC NR: AP7007683

different electrodes showed that the loss occurs predominantly along the force lines of the resultant magnetic field through the end and radial mirrors. The data shows that the density jumps are due to a short burst of instability of the ion-cyclotron type. This is evidenced both by the frequency spectrum of the produced alternating fields and in the appearance of a group of ions acclerated to high energies in a transverse direction. The acceleration of the ions is apparently produced in resonant fashion in fields of cyclotron frequency that are produced in the plasma, and in this respect it is completely analogous to the acceleration observed in traps with external injection when the Harris anisotropic cyslotron instability is excited. The authors note that density jumps outward similar to those described in this article were observed also in a decaying plasma with hot electrons. In this case the instability develops at electron-cyclotron frequencies. Orig. art. has: 1 figure and 1 formula.

SUB CODE: 20 / SUBM DATE: 02Dec65 / ORIG REF: 005 /
OTH REF: 002

Card 3/3

BAYBULATOV, E.B.

Mineralogical characteristics of the Achik-Tash ore deposit and problems relative to its origin. Trudy Inst. geol. AN Kir. SSR no.10:125-157 '58.   (MIRA 12:9)
(Kirghiz Range--Mineralogy)

BAYBULATOV, E. B.:   Master Geolog-Mineralog Sci (diss) -- "The geology and gen-

esis of the Achik-Tashskiy sulfur-pyrites deposit". Moscow, 1958. 18 pp

(Min Higher Educ, Moscow Geological Prospecting Inst im S. Ordzhonikidze), 200

copies (KL, No 8, 1959, 135)

BAYBULATOV, E. B., Cand Geol-Min Sci -- (diss) "Geological character-istics and the mineralogy of the Achik-Tashskiy iron pyrites deposit." Moscow, 1960. 25 pp; (Academy of Sciences USSR, Inst of the Geology of Ore Deposits, Mineralogy, Petrography, and Geochemistry); 150 copies; price not given; (KL, 30-60, 137)

BAYBULATOV, E.B.

Contact metarmorphism of ores in the Achik-Tash deposit. Izv.
AN Kir. SSR. Ser. est. i tekh. nauk 2 no.9:107-115 '60.
(MIRA 14:7)
(Achik-Tash region—Metarmorphism (Geology))

POPOV, V.M.; BAYBULATOV, E.B.

Cuprous sandstones in ancient formations of the Talas Ala-Tau.
Izv. AN Kir. SSR. Ser. est. i tekh. nauk 4 no.3:41-56 '62.
(MIRA 15:11)

(Talas Ala-Tau—Sandstone)

BAYBULATOV, E.B.

Diagenetic origin of ore concentration in cuprous sandstones in some deposits of northern Kirghizia. Zap. Kir. otd. Vses. min. ob-va no.3:59-65 '62.   (MIRA 17:11)

KOROLEV, V.G., otv. red.; ADYSHEV, M.M., akademik, glav. red.;
        BAYBULATOV, E.B., red.; BURYKHYN, I.V., akademik, rr³.;
        GRIGORENKO, P.G., red.; DAVLETOV, I.D., red.; KONYUK, A.A.,
        red.; POPOV, V.M., akademik, red.; SURGAY, V.T., red.

[Materials on the geology of ore deposits in the Tien Shan]
Materialy po geologii rudnykh mestorozhdenii Tian-Shania.
Frunze, Izd-vo "Ilim," 1964.   140 p.   (MIRA 17:8)

1. Akademiya nauk Kirgizskoy SSR, Frunze. Institut geologii.
2. Akademiya nauk Kirgizskoy SSR (for Adyshev, Popov).
3. Institut geologii AN Kirgizskoy SSR (for all).

ADYSHEV, M.M., akademik, glav. red.; KOROLEV. V.G., zam. glav.
red.; BAYBULATOV, E.B., red. BURYKHIN, I.V., red.;
GRIGORENKO, P.G., red.; DAVLETOV, I.D., red.; KONYUK,
A.A., red.; POPOV, V.M., akademik, red.; SURGAY, V.T.,
red.

[Tectonics of the western regions of the northern Tien
Shan] Tektonika zapadnykh raionov Severnogo Tian'-Shania.
Frunze, "Ilim," 1964. 143 p.   (MIRA 17:8)

1. Akademiya nauk Kirgizskoy SSR Frunze. Institut geologii.
2. Akademiya nauk Kirgizskoy SSR (for Adyshev, Popov).

BAYBULATOV, Erik Begaliyevich; POPOV, V.M., akademik, otv. red.

[Achik-Tash iron-pyrite deposit and its genesis] Achik-Tashskoe sernokolchedannoe mestorozhdenie i ego genezis. Frunze, Izd-vo AN Kirg.SSR, 1964. 190 p.   (MIRA 17:5)

1. Akademiya nauk Kirgizskoy SSR (for Popov).

BAYBULATOV, F. Kh.

Demonstration of the Doppler effect in acoustics. Usp. fiz. nauk 84 no.4:729   D '64   (MIRA 18:1)

ACC NR: AP7002193   SOURCE CODE: UR/0203/66/006/006/1051/1060

AUTHOR: Baybulatov, R. B.; Krasnushkin, P. Ye.

ORG: Mathematics Institute im. V. A. Steklov, AN SSSR (Matematicheskiy institut AN SSSR)

TITLE: Determination of the daylight profile of electron concentration of C and D layers of the ionosphere as determined from very long wave fields and atmospheric pressure profiles

SOURCE: Geomagnetizm i aeronomiya, v. 6, no. 6, 1966, 1051-1060

TOPIC TAGS: ionospheric electron density, ionospheric radio wave

ABSTRACT: A method optimizing the correlations between low frequency radio waves and ionospheric properties is described. Review of present status of predictions of the electron concentration profiles in the ionosphere is given, showing the weaknesses of present methods. To improve the accuracy of the electron concentration and collision-frequency-of-electrons profiles, use of more accurate data is made. The resulting problem requires very long computation runs due to the large number of iterative steps required. This approach is simplified by recourse to a computational method called the "optimization method" as outlined by Bellman. An example of the summer profile (for temperature latitudes) of the ionosphere consisting of two sub-

UDC: 550.388.2

Card 1/2

ACC NR: AP7002193

layers is given. At the present time equatorial profiles can not be obtained due to insufficient data, although approximate computations show the absence of a C-layer. Several profiles are given for sets of parameters that have been tabulated in the text. The effects of these parameters on the profiles is discussed and the most critical parameters are identified. Orig. art. has: 4 figures, 14 formulas, 1 table.

SUB CODE: 04,09/   SUBM DATE: 11Nov65/   ORIG REF: 009/   OTH REF: 015

Card 2/2

ACC NR: AP6036843   SOURCE CODE: UR/0020/66/171/002/0340/0343

AUTHOR: Krasnushkin, P. Ye.; Baybulatov, R. B.

ORG: Mathematics Institute im. V. A. Steklov, Academy of Sciences SSSR
(Matematicheskiy institut Akademii nauk SSSR)

TITLE: On the violation of reciprocity principle in daytime propagation of superlong
radio waves around the earth

SOURCE: AN SSSR. Doklady, v. 171, no. 2, 1966, 340-343

TOPIC TAGS: radio wave propagation, vlf propagation, waveguide propagation, earth
magnetic field, ionospheric radio wave

ABSTRACT: The authors explain a phenomenon, which they call the valve effect, and
which consists in the fact that the attenuation of superlong waves on paths from east
to west is larger than in the opposite direction, especially during daytime propaga-
tion near the geomagnetic equator. Although this phenomenon has not been taken into.
account in the existing waveguide theory of superlong waves, it is shown that allow-
ance for the valve effect can be made by using a method developed by one of the au-
thors earlier (Krasnushkin, DAN v. 171, no. 1, 1966). This method is used to calcu-
late the impedances contained in the equation for the wave numbers of the normal
waves, with account taken not only of the vertical component of the earth's magnetic

Card 1/2   UDC: 538.566

ACC NR: AP6036843

field, but also of the horizontal components along and across the propagation path. It is shown that the parameters of TH waves for arbitrary daytime paths on earth can be calculated with sufficient accuracy by means of the derived impedance equations. The damping coefficients and the differences of the angular wave numbers are electronically computed for TH_1 waves with two types of profiles (medium latitudes in the summer and equatorial zone). In medium latitudes the valve effect is attenuated by the C layer of the ionosphere, which is produced by cosmic rays, and by the decrease in the latitudinal component of the magnetic field. The absence of the C layer in the equatorial zone is also confirmed by the present results. Orig. art. has: 3 figures and 6 formulas.

SUB CODE: 09/ SUBM DATE: 27Dec65/ ORIG REF: 004/ OTH REF: 010

Card 2/2

L 40086-66   EWT(d)/T   IJP(c)   GD

ACC NR: AT6019247   SOURCE CODE: UR/0000/65/000/000/0174/0181

AUTHOR: Amerbayev, V. M.; Baybulatov, R. B.

ORG: none

TITLE: On one case of the reconstruction of an original function

SOURCE: Kazakhstanskaya mezhuzovskaya nauchnaya konferentsiya po matematike i mekhanike. 1st, Alma-Ata, 1963. Trudy, Izd-vo Nauka KazSSR, 1965, 174-181

TOPIC TAGS: ordinary differential equation, integral equation, Laplace transform, approximate solution

ABSTRACT: A method is considered for the inverse Laplace transform for equations with constant coefficients. The procedure is divided into two steps: the determination of the poles of the given function and their multiplicity; the construction of the original function by the use of the Cauchy-Heaviside formula. An example is offered to illustrate the use of the algorithm adduced for finding the multiplicity of poles. Orig. art. has: 41 formulas, 2 tables.

SUB CODE: 12/   SUBM DATE: 18Nov65/   ORIG REF: 004/   OTH REF: 001

Card 1/1

BAYBULATOVA, S.G., aspirant; GAVRILOVA, T.B., kand.tekhn.nauk

Dispersion capacity of flour obtained with separate break systems.
Soob. i ref. VNIIZ no.4:16-21 '61.   (MIRA 16:5)

1. Vsesoyuznyy nauchno-issledovatel'skiy institut zerna i produktov
yego pererabotki (for Baybulatova). 2. Moskovskiy gosudarstvennyy
universitet (for Gavrilova).
                              (Flour)

BAYBULATOVA, Z.K.; LEVIN, A.I.; RIKHTER, V.G.

Relation between the basic structural elements of the Kara-
Bogaz region. Izv. AN SSSR Ser. geol. 29 no.7:52-58 Jl '64
                                        (MIRA 18:1)

1. Nauchno-issledovatel'skaya laboratoriya geologicheskikh kri-
teriyev otserki perspektiv neftegazonosnosti, Moskva.

ARKHIPOV, A.Ya.; ALTAYEVA, N.V.; BAYBULATOVA, Z.K.; VISKOVSKIY, Yu.A.;
GOLENKOVA, N.P.; KRAVCHENKO, M.F.; KUPRIN, P.N.; LEVIN, A.I.;
POL'STER, L.A.; SEMOV, V.N.; SYRNEV, I.P.; USHKO, K.A.;
SHOLOKHOV, V.V.; Prinimali uchastiye: RODIONOVA, M.K.; CHEL'TSOV,
Yu.G.; KUZNETSOV, Yu.Ya., kand. geograf. nauk, nauchnyy red.

[Geology and oil and gas potentials of the south of the U.S.S.R.;
Kara-Bogaz-Gol (Gulf) region (eastern part of the Middle Caspian
oil- and gas-bearing basin).] Geologiia i neftegazonosnost' iuga
SSSR; Prikarabozaz'e (vostochnaia chast' Srednekaspiiskogo nefte-
gazonosnogo basseina). Leningrad, Nedra, 1964. 300 p. (Trudy
Nauchno-issledovatel'skoy laboratorii geologicheskikh kriteriyev
otsenki perspektiv neftegazonosnosti no.12).

KHUDYAKOV, I.F.; TIKHONOV, A.I.; RYBNIKOV, V.I.; Prinimali uchastiye:
POD'YACHEV, Yu. A., inzh.; BAYBULOV, D.Kh., inzh.; OSOKIN, V.V.,
inzh.

Copper balance in the metallurgical production of the Karabash
Mining and Metallurgical Combine. Sbor. nauch. trud. Ural.
politekh. inst. no. 134:14-22 '63.   (MIRA 17:1)

BAYBULOV, D.Kh.; KOMLEV, G.A.

Increase copper smelting at the Karabash Mining and Metallurgical
Combine. TSvet. met. 33 no.10:24-26 O '60.   (MIRA 13:10)
(Karabash--Copper--Metallurgy)

BAYBURIN, G.

At the Sterlitamak Grain Milling Combine. Muk.elev.prom. 27
no.5:9-10 My '61.   (MIRA 14:6)

1. Glavnyy inzh. Sterlitamaksogo mel'kombinata.
              (Sterlitamak—Flour mills)

L 40355-66   EWT(1)   JH

ACC NR: AP6014240   SOURCE CODE: UR/0109/66/011/005/0860/0869

AUTHOR: Bayburin, V. B.; Sobolev, G. L.

ORG: none

TITLE: Calculating space-charge fields in a plane-parallel magnetron $_{25}$

SOURCE: Radiotekhnika i elektronika, v. 11, no. 5, 1966, 860-869

TOPIC TAGS: magnetron, space charge

ABSTRACT: An analytical solution is obtained for the space-charge field in a plane-parallel magnetron; the solution takes into account the specified electron "spoke" (stream) shape and specified bounds and holds true for any point of the interaction space. The transverse component of the electric field of the "spoke" space charge is determined. Triagonal, multi-trapezoid, and arbitrary shapes of the "spoke" are examined. Two extreme cases of zero boundary potential are considered: (a) zero potential approaching infinity and (b) zero potential at the "spoke" boundary. An exact solution is developed for the "a" case and an approximate solution for the "b" case. Orig. art. has: 5 figures and 42 formulas.

SUB CODE: 09 / SUBM DATE: 22Dec64 / ORIG REF: 004 / OTH REF: 004

Card 1/1   UDC: 621.385.64.001.24:537.525.92

BAYSUGINA, R.S.

Climatotherapy in the compound treatment of patients with nonspecific pulmonary diseases. Sbor.trud.Uz.gos.nauch.-issl. inst.kur. i fizioter. 17:67-71 '62.   (MIRA 17:7)

BAYBUROV, B. S.

Avtomaticheskii kontrol' razmerov v mashinostroenii. Moskva, ITEIN Gosplana SSSR, 1948. 32 p.

Automatic control of dimensions in mechanical engineering.

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

BABUROV, B. S.

Avtomatizatsiia kontrolia detalei dvigatelia. Novye konstruktsii priborov i avtomatov. Moskva, Mashgiz, 1948. 46 p.

Automatic control of engine parts. New designs of instruments and automatic machines.

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

BAYBUROV, .S.

Oct. 48

US_R/Engineering
    Gauges
    Mensuration

"Automatic Control of Dimensions," Prof I.Ye. Gorodetskiy, Dr Tech Sci, Yu.G. Gorodelsky, Engr, Sci Res Bu of Interchangeability, S. Aikman, Can1 Tech Sci, Sci Res Electroautomatic Lab, B.S. Bayburov, Engr, Cen Inst of Labor and Mech, Ye. M. Levenson, En r, Auto Works imeni Stalin, 6½ pp

"Vest Mashinostroy" No. 10 - 1948

Describes various models of automatic gauges, with 12 illustrations

Head of Department for the Automatization of Control Methods at the Central Institute for the Organization of Labor and Mechanization of Production

BAYBURCV, B. S.

Pribory dlia statischeskogo analiza i knotrolia produktsii i masninostroemii (Instruments for statistical analysis and production control in machine-building). Moskva, Mashgiz, 1952. 176 p.

SO: Monthly List of Russian Accessions, Vol 6, No. 3, June 1953

BAYBUROV, B.S. [author]; ZHURAVLEV, A.N. [reviewer].

"Instruments and automatic machines for statistical analysis and control of production in machine building." B.S.Baiburov. Reviewed by A.N.Zhuravlev. Sov.kniga no.8:40-42 Ag '53.   (MLRA 6:8)

(Production control) (Baiburov, B.S.)

BAYBUROV, B.S. [author]; KERCHIKER, V.I.; ZHUKHOVITSKIY, A.F. [reviewers].

"Instruments and automatic machines for statistical analysis and control of production in machine building." B.S.Baiburov. Reviewed by V.I. Kerchiker, A.F.Zhukhovitskii. Avt.trakt.prom. no.9:32-3 of cover. S '53.
(MIRA 6:9)

1. Ministerstvo mashinostroyenii (for Kerchiker and Zhukhovitskiy).
(Machinery industry) (Baiburov, B.S.)

DAYBUROV, B.S.

       Raise technical standards in agricultural machinery production.
Trakt. i sel'khozmash. no.3:27-32 Mr '58.   (MIRA 11:5)

1. Ispolnyayushchiy obyazannosti zamestitelya direktora po nauchnoy
chasti Nauchno-issledovatel'skogo instituta Traktorsel'khozmash.
               (Agricultural machinery industry)

BAYBUROV, B.S.

Automation of tractor and agricultural machinery plants.
Trakt. i sel'khozmash. no.10:31-37 O '58.   (MIRA 11:10)

1. Nauchno-issledovatel'skiy institut Traktorosel'khozmash.
   (Tractor industry)   (Agricultural machinery industry)
                (Automation)

BERKLAYD, I.M.; KUROCHKIN, A.P.; LYAKHOVSKIY, A.V.; SHETKOV, A.M.; CHUDOV,
V.A.; BAYBUROV, B.S., red.; KOCHENOV, M.I., red.; MALYY, D.D.,
red.; BESPAKHOTNAYA, T.P., nauchnyy red.; YELISEYEV, M.S., red.
izd-va; TIKHANOV, A.Ya., tekhn.red.

[Transducers and measuring gages] Datchiki i izmeritel'nye golovki.
Pod red. B.S.Bayburova, M.I.Kochenova, D.D.Malogo. Moskva, Gos.
nauchno-tekhn.izd-vo mashinostroit.lit-ry, 1960. 158 p.

(Transducers)   (Gages)   (MIRA 14:1)

BERKLAYD, I.M.; VIKHMAN, V.S., doktor tekhn. nauk; DRAUDIN, A.T.; KOPANEVICH, N.Ye.; OVCHARENKO, G.I.; TUBENSHLYAK, Z.L.; CHASOVNIKOV, G.V.; TSEYT-LIN, Ya.M.; BAYBUROV, B.S., red.; KOCHENOV, M.I., red.; MALYY, D.D., red.; STROGANOV, L.P., inzh., red. izd-va; DOBRITSYNA, R.I., tekhn. red.

[Automatic controllers] Kontrol'nye avtomaty. Moskva, Nauchno-tekhn. izd-vo mashinostroit. lit-ry, 1961. 193 p.   (MIRA 14:8)
(Electronic measurements)

VYSOTSKIY, A.V.; DVORETSKIY, Ye.R.; KONDASHEVSKIY, V.V.; KUZ'MICHEV, V.T.;
MOROZOV, I.K.; POLYANSKIY, P.M.; TUBENSHLYAK, Z.L.; KHOKHLOVA, G.V.;
CHASOVNIKOV, G.V.; SHLEYFER, M.L.; BAYBUROV, B.S., red.; KOCHENOV,
M.I., red.; MALYY, D.D., red.; AKIMOVA, A.G., red. izd-va; EL'KIND,
V.D., tekhn. red.

[Instruments and devices for operating dimension control in the
manufacture of machinery] Pribory i ustroistva dlia aktivnogo kon-
trolia razmerov v mashinostroenii. By A.V.Vysotskii i dr. Moskva,
Gos. nauchno-tekhn. izd-vo mashinostroit. lit-ry, 1961. 303 p.
(MIRA 14:9)
(Machinery industry—Equipment and supplies)
(Automatic control)

BAYBUROV, B.S.

Automation and mechanization of production processes in the
agricultural machinery industry. Biul.tekh.-ekon.inform. no.10:
62-67 '61.
(MIRA 14:10)
(Agricultural machinery industry—Technological innovations)
(Automation)

ROBINZON,Ye.A;GRISHINA, O.N.; MUKHAMEDOVA, L.A.; URMANCHEYEV, F.A.;
IZMAYLOV, R.I.; BONCHER, L.Ye.; KASHAYEV, S.-Kh.G.; AMIRKHANOVA,
N.G.; GONIK, V.K,; BAYBUROVA, M.Kh.; NECHAYEVA, M.A.

Petroleums of the Tatar A.S.S.R. Izv.Kazan.fil.AN SSSR.Ser.khim.
nauk no.4:93-113 '57.   (MIRA 12:5)
                    (Tatar A.S.S.R.--Petroleum)

SOV/65-58-9-4/16

AUTHORS: Mukhamedova, L. A; Bayburova, M. Kh; Robinzon, Ye. A.

TITLE: Investigatiohoof; Hydrocarbons of Naphthalene Series in the Kerosene
fraction of oil from the Romashkinskoye Oil Field in the Minnibayevskaya
Area. (Issledovaniye uglevodorodov ryada naftalina v
kerosinovoy fraktsii nefti Romashkinskogo mestorozhdeniya
Minnibayevskoy ploshchadi)

PERIODICAL: Khimiya i Tekhnologiya Topliv i Masel, 1958, Nr 9,
pp 18 - 24, (USSR)

ABSTRACT: The kerosene fractions of Devonian Tartar petrol
contain considerable quantities of aromatic hydrocarbons.
Investigations were carried out with the aid of the pi-
crate method and ultra-violet spectra of condensed
hydrocarbons of the kerosene fraction (200° - $320^\circ C$)
of Romashkino petroleum. This fraction was separated
by chromatography on silica gel ASM (50 - 100 mesh) into
a naphthenic-paraffinic fraction and aromatic concentrate.
The latter was divided into monocyclic and dicyclic com-
pounds. The sulphur-containing compounds were separated
by oxidising the aromatic concentrate with hydrogen perox-
ide in a medium of glacial acetic acid and the oxidised
sulphur-containing compounds adsorbed on silica gel ASK.

Card 1/3   The desulphurised aromatic hydrocarbons were vacuum

SOV/65-58-9-4/16

Investigation of Hydrocarbons of Naphthalene Series in the Kerosene
Fraction of oil from the Romashklnskoye Oil Field in the Minnibayevskaya Area

distilled into three - five-grade fractions in a 37-plate
column. Each fraction was treated with picric acid and
the naphthalene hydrocarbons were separated. The homo-
logues of naphthalene were separated by rectification,
and in some cases the isomers were also split off. The
liquid isomers were separated by repeated recrystallization
from ethyl or methyl alcohol and subjected to further
decomposition. The crystalline hydrocarbons were puri-
fied by repeated recrystallization from methyl alcohol.
The separated hydrocarbons were identified by elementary
analysis and by comparing the physical constants and
melting points of secondary picrates with literature
data. The individual napthalene hydrocarbons, as well
as mixtures of isomers, were further subjected to spectral
analysis of the near ultra-violet region (2,900 -
3,300 A^0). The absorption spectra were measured on the
spectrophotometer SF-4 (in n-pentane solution)(Fig.
on page 19). Constants of the separated hydrocarbons
are given in a table (pages 20 and 21). The separated

Card 2/3   hydrocarbons consisted of naphthalene, β -methylnaphthalene,

SOV/65-58-9-4/16

Investigation of Hydrocarbons of Naphthalene Series in the Kerosene Fraction
of Oil from the Romashkinskoye Oil Field in the Minnibayevskaya Area

2,6- and 2,3-dimethylnapthalenes, 1,3,7-, 1,2,6- and
2,3,6-trimethylnaphthalenes, 2,3,6,7- and 1,2,5,6-
tetramethylnaphthalenes and tetramethylnaphthalene
(boiling point 107.0 - 107.2°C) of undefined structure.
1,3,7-trimethylnaphthalene was separated from petroleum
for the first time. With the aid of ultra-violet absorption
spectra, it was possible to establish the presence of α-
methylnaphthalene, 1,6-, 1,7-, 1,2- and 1,3-dimethyl-
naphthalenes and of 1,2,7-, 1,4,5-, 1,4,6-, 1,2,5- and
1,2,4-trimethylnaphthalenes. There is 1 Table, 1 Figure
and 21 References: 8 English, 1 German, 1 Swiss and 11
Soviet.

ASSOCIATION: Kazanskiy filial AN SSSR (Kazan' Branch of the AN USSR)

1. Petroleum--Fractionation   2. Naphthalenes--Separation
3. Hydrocarbons--Chemical analysis   4. Ultra violet spectroscopy

Card 3/3

ROBINZON, Ye.A.; MUKHAMEDOVA, L.A.; GRISHINA, O.N.; BAYBUROVA, M.Kh.

Studying the aromatic hydrocarbons of kerosene fractions
obtained from the Romashkino petroleum (Minnibayevo sector)
and Bavly field. Izv.vys.ucheb.zav.; neft' i gaz 2 no.11:
99-105 '59.   (MIRA 13:4)

1. Kazanskiy khimiko-tekhnologicheskiy institut im. S.M.Kirova
i Kazanskiy filial AN SSSR.
    (Hydrocarbons) (Petroleum products)

15.4100

77929
SOV/65-60-3-2/19

AUTHORS: Mukhamedova, L. A., Bayburova, M. Kh.

TITLE: Tetralin Series Hydrocarbons in the Kerosene Fraction
of Petroleum From Romashkinsk Deposit

PERIODICAL: Khimiya i tekhnologiya topliv i masel, 1960, Nr 3,
pp 5-8 (USSR)

ABSTRACT: This work is devoted to the study of tetralin series
hydrocarbons and is a continuation of the investigation
of aromatic hydrocarbons of kerosene fraction ob-
tained from petroleum of Romashkinsk deposit.
Chromatography, rectification, catalytic dehydro-
genation, picrate method, and spectral analysis were
employed in the study. The results are shown in
Table "A".

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Tetralin Series Hydrocarbons in the Kerosene
Fraction of Petroleum From Romashkinsk Deposit   77929
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Table A. Characteristics of the napthalenes separated
in the course of dehydrogenation.

2		5	6					10	
3	4		7	n_D^{20}	d_4^{20}	8	9	C	H
75—80	200—207	—	11	—	—	79,5—80,0	148,5—149,5	—	—
85—96	212—224	11	12	—	—	34,5—35,0	115—116	—	—
96—102	224—233	12	13	1,6025	1,0036	—	122—123	92,85	7,27
								92,90	7,26
102—110	233—245	13	16	1,6080	1,0051	—	113,0—114,5	92,41	7,88
								92,34	7,91
131—135	273—278	14	17	1,6035	1,0000	—	104—106	91,66	8,18
								91,54	8,06
135—140	278—285	15	18	1,6008	—	—	112—114	91,23	8,58
								91,20	8,67

Card 2/5

Tetralin Series Hydrocarbons in the Kerosene   77929
Fraction of Petroleum From Romashkinsk Deposit   SOV/65-60-3-2/19

Key to Table: (2) bp, °C at; (3) 9 mm Hg; (4)
760 mm Hg; (5) Naphthalenes separated prior to
dehydrogenation; (6) Naphthalenes separated after
dehydrogenation; (7) Name; (8) mp, °C; (9) mp of
secondary picrates, °C; (10) elemental composition
(%), found; (11) Naphthalene; (12) β-Methylnaph-
thalene; (13) α- and β-Methylnaphthalenes; (14)
1,3,7-Trimethylnaphthalene; (15) Trimethylnaphthalenes;
(16) 1,6-, 1,7-, and 1,2-Dimethylnaphthalenes; (17)
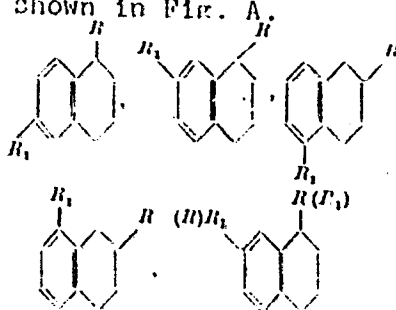Methylethylnaphthalene; (18) Tetramethylnaphthalene.

Card 3/5

Tetralin Series Hydrocarbons in the Kerosene
Fraction of Petroleum From Romashkinsk Deposit

77929
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The maxima of the ultraviolet absorption spectra
(all in Angstroms) of β-methylnapthalene (from
fraction 96-102°) are 3,140 and 3,190; of hydrocarbon
from fraction 102-110°, 3,070, 3,145 and 3,220; of
hydrocarbon (corresponds to the empirical formula
$C_{13}H_{14}$) from fraction 131-135°, 3220; and that of
hydrocarbon (corresponds to the empirical formula
$C_{14}H_{16}$) from fraction 135-140°, 3,195, 3,210 and
3,250. The possible structure of substituted
tetralins is shown in Fig. A.

Card 4/5

Tetralin Series Hydrocarbons in the Kerosene   77929
Fraction of Petroleum From Romashkinsk Deposit   SOV/65-60-3-2/19

There is 1 table; 2 figures; and 9 references, 3
Soviet, 4 U.S., 1 U.K., 1 Swiss. The U.S. and U.K.
references are: Mair, B. J., Streiff, A. J., J. Res.
Nat. Bur. Stand., 27, 343 (1941); Mikiewicz, M. I.,
J. Inst. Petr., 38, 425 (1952); Rossini, Fr. D., and
co-workers, Selected Values of Physical and Thermo-
dynamic Properties of Hydrocarbons and Related
Compounds, Pittsburgh, Pennsylvania, 79 (1953);
Balley, A. S., Bryant, K. C., Hancock, R. A., and
others, J. Inst. Petr., 33, 503 (1947); Morton, R. A.,
de Gonvela, A. I. J. Chem. Soc., 916 (1934).

ASSOCIATION: Institute of Chemistry of Kazan' Branch of the
Academy of Sciences of the USSR (Institut khimii
Kazanskogo filiala AN SSSR)

Card 5/5

MUKHAMEDOVA, L.A.; BAYBUROVA, M.Kh.

Investigation of monocyclic aromatic kerosine hydrocarbons of
Minnibayevo curdes by their absorption spectra in the ultra-
violet. Izv.Kazan.fil. AN SSSR. Ser.khim.nauk no.6:87-92 '61.
(MIRA 16:5)

(Minnibayevo region—Petroleum) (Hydrocarbons—Absorption spectra)

MUKHAMEDOVA, L.A.; BAYBUROVA, M.Kh.; MALYSHKO, T.M.; KUDRYAVTSEVA, M.I.

Synthesis and properties of dialkylepoxyhexahydrophthalates.
Neftekhimiia 1 no.1:88-92 Ja-F '61.   (MIRA 15:2)

1. Institut organicheskoy khimii AN SSSR, Kazan'.
          (Esters)   (Phthalic acid)

MUKHAMEDOVA, L.A.; KUDRYAVTSEVA, M.I.; BAYBUROVA, M.Kh.; MALYSHKO, T.M.;
          LEPLYANIN, G.V.

Some derivatives of 4,5-epoxyhexahydrophthalates. Neftekhimiia
2 no.3:372-377 My-Je '62.   (MIRA 15:8)

1. Institut organicheskoy khimii AN SSSR, Kazan'.
                    (Epoxy compounds) (Phthalic acid)

MUKHAMEDOVA, L.A.; BAYBUROVA, M.Kh.

Synthesis of some epoxy esters used as plasticizers for polyvinyl chloride resins. Neftekhimiia 3 no.6:900-904 N-D '63. (MIRA 17:3)

1. Institut organicheskoy khimii AN SSSR, Kazan'.

MUKHAMEDOVA, L.A.; BAYBUROVA, M.Kh.; SHAGIDULLIN, R.R.

Reaction of bis-β-chloroethyl and bis-β - (β'-chloroethoxy) ethyl esters of cis-Δ^4-tetrahydrophthalic acid with sodium alcoholates. Izv. AN SSSR. Ser. khim. no.11:2019-2024 '65.

(MIRA 18:11)

1. Institut organicheskoy khimii AN SSSR, Kazan'.

26196
S/081/61/000/012/023/028
B103/B202

//. /2/0

AUTHORS: Lavrent'yev, V. I., Bayburskiy, L. A., Dronin, A. P.,
Denezhkina, Ye. A.

TITLE: Production of fuels for gas and turbine engines from
products obtained in Groznyy

PERIODICAL: Referativnyy zhurnal. Khimiya, no. 12, 1961, 525, abstract
12M172. (Tr. Groznensk. neft. n.-i. in-t, 1960, vyp. 7,
73-85)

TEXT: The authors studied the following distillation and residual
products of direct distillation and of secondary origin in order to ob-
tain gas-turbine fuels: kerosene gas oil fractions of the Achalukskiy,
Ozek-Suatskiy and Turkmenskiy petroleum, mazout of the Anastasiyevskiy
petroleum, kerosene of thermal cracking, cracking residue, contact-coking
distillate of pitch of petroleums containing sulfur. It was found
possible to obtain gas-turbine fuels with satisfactory values of
viscosity, solidification point, and vanadium content from the products
of Groznyy. The following products were recommended for examination on

Card 1/2

26196
S/081/61/000/012/023/028
Production of fuels for gas and turbine ... B103/B202

field plants (naturnyye ustanovki): mazout of the Anastasiyevskiy
petroleum and its mixtures with the kerosene gas oil fractions of
Achalukskiy (80 : 20), Ozek-Suyatskiy (85-15), and Turkmenskiy (80 : 20)
petroleum, mixture of the Groznyy cracking residue with sulfur-containing
cracking kerosene (75 : 25) and the distillate of contact coking of
asphalt from which gasoline had been removed and to which 1.5% of
Groznyy cracking residue had been added in order to lower the solidifica-
tion point. [Abstracter's note: Complete translation.]

Card 2/2

KOZOREZOV, Yu.I.; BAYBURSKIY, L.A.; MANOVYAN, A.K.

Effect of the intermediate circulating reflux on the process of distillation in a column. Khim. i tekh. topl. i masel 6 no.11: 27-32 N '61.   (MIRA 14:12)

1. Groznenskiy nauchno-issledovatel'skiy neftyanoy institut.
                        (Plate towers)

34417
S/081/62/000/002/090/107
B157/B110

//. 0/3-2

AUTHORS: Malin, A. G., Bayburskiy, L. A., Krechetova, P. I.

TITLE: The possibility of obtaining gas turbine fuels from products
              processed at the Groznyy refineries

PERIODICAL: Referativnyy zhurnal. Khimiya, no. 2, 1962, 495, abstract
              2M297 (Tr. Groznensk. neft. n.-i. in-t, no. 11, 1961, 25-38)

TEXT: The results are described of an investigation into the possibility
of obtaining gas turbine fuels from gasoline-free oils, from various
distillates and residual products, by simple distillation and secondary
refinery products, or from mixtures of these products. It was established
that the production of fuels with low ash content requires the crude oil
to be treated so that the chloride content amounts to $\leq$ 30 mg/liter and
dehydrated so that the water content amounts to $\leq$ 0.1 - 0.2%. Groznyy
mixed paraffin crude oils gasoline-free to 160 - 170°C, Achalukskiy and
Karabulakskiy mixed crude oils, and Ozeksuatskiy and Turkmenian
crude oils can be used as fuel for stationary gas turbine plants. Simple
distillation fractions, filtrates of paraffin production and kerosenes

Card 1/2

S/081/62/000/022/056/088
B180/B186

AUTHORS: Amerik, B. K., Bayburskiy, L. A.

TITLE: Raising the octane number of automobile gasoline

PERIODICAL: Referativnyy zhurnal. Khimiya, no. 22, 1962, 426, abstract
                22M82 (Neftyanik, no. 5, 1962, 15-16)

TEXT: The article considers methods of increasing the production of high-
octane automobile gasolines in Groznyy refineries.   These methods are:
1. thermal reforming of the straight-run 120-195°C fraction, raising the
octane number from 35-38 to 68-70 by the motor method; 2. altering the
conditions for catalytic cracking with a bead catalyst (raising temperature
from 400 to 445°C and reducing the volumetric rate from 0.7 to 0.5-0.6 hr^{-1}),
which increases the gasoline yield from 16-18 to 32 % and raises its octane
number to 76; 3. redesigning existing catalytic cracking plant; 4. thermo-
catalytic treatment of residual oils, including the destructive vacuum
distillation of residual oils and the catalytic cracking of distillates
which, on the example of the residue from Ozeksuat crude, gives a
considerably higher yield of gasoline with octane number 77 than does

Card 1/2

Raising the octane number of...

S/081/62/000/022/056/088
B180/B186

thermal cracking. At the same time diesel fuel type Л (L) will be produced with cetane number 50, which requires no further treatment. [Abstracter's note: Complete translation.]

Card 2/2

KOZOREZOV. Yu.I.; BAYBURSKIY, L.A.; MANOVYAN, A.K.; GONCHAROVA, N.A.;
KHACHATUROVA, D.A.

Studying the operation of troughed plated of industrial rectifi-
cation columns. Khim.i tekh.topl.i masel 7 no.2:40-44 F '62.
(MIRA 15:1)

1. Groznenskiy nauchno-issledovatel'skiy neftyanoy institut.
(Plate towers)

S/065/63/000/003/002/006
E075/E436

AUTHORS: Kaz'min, G.I., Bayburskiy, L.A., Odintsov, A.B.

TITLE: Preparation of a solvent for the production of
             polyethylene

PERIODICAL: Khimiya i tekhnologiya topliv i masel, no.3, 1963, 19-22

TEXT: The solvent was prepared from commercial extraction grade
benzene extracted from low-sulphur, paraffinic Groznyy crudes.
The most suitable fraction of the benzene had the initial boiling
points 75 to 95°C, benzene content 1.5 to 2.3 wt.%, sulphur
content < 0.005 wt.%, naphthenic hydrocarbons 40 to 48 wt.%.
The production costs of this solvent are lower than those for a
similar solvent produced from catalytic reformates.   The costs
could be decreased further by employing fully instrumented and
automatically controlled fractionating columns.   The authors
recommend that the centre for the production of solvents for the
manufacture of copolymers should be situated in Groznyy because of
its resources in raw materials.   There are 1 figure and 4 tables.

ASSOCIATION: GrozNII, GNPZ

Card 1/1

MANOVYAN, A.K.; BAYBURSKIY, L.A.

Particular features of the design of the intermediate
sections of complex rectification columns. Khim. i tekh. topl.
i masel 8 no.4:20-26 Ap '69.   (MIRA 16:6)

1. Groznenskiy nauchno-issledovatel'skiy neftyanoy institut.
                  (Petroleum—Refining)
                  (Plate towers)

BAYBURSKIY, L.A.; MANOVYAN, A.K.

Operation of the stripping sections of complex columns.
Khim. i tekh. topl. i masel 8 no.9:55-59 S '63.
(MIRA 16:11)
1. Groznenskiy nauchno-issledovatel'skiy neftyanoy
institut.

MALIN, A.G.; BAYBURSKIY, L.A.; KRECHETOVA, P.I.

Obtaining gas-turbine fuels from high-paraffin crude. Trudy
GrozNII no. 15:94-104 '63.   (MIRA 17:5)

KOZOREZOV, Yu.I.; BAYBURSKIY, L.A.; MANOVYAN, A.K.; GONCHAROVA, N.A.

Operation indices and the evaluation of certain methods for
designing rectifying columns for industrial petroleum
refining plants. Trudy GrozNII no. 15:148-164 '63.
                                    (MIRA 17:5)

BAYBURSKIY, L.A.; MANOVYAN, A.K.; ODINTSOV, O.K.

Diagram of the atmospheric distillation of oil and the operation of topping towers. Nefteper. i neftekhim. no.8:12-15 '63.

(MIRA 17:8)

1. Groznenskiy neftyanoy nauchno-issledovatel'skiy institut.

L 10529-66   EPA/EWT(m)/EWP(f)/EPF(n)-2/T/ETC(m)   WW/WE

ACC NR: AP6003468   SOURCE CODE: UR/0318/64/000/012/0024/0026

AUTHOR: Marlin, A. G.; Nikolayeva, V. G.; Baxburskiy, L. A.; Krechetova, P. I.;
Rudayev, V. Ye.; Bolotov, L. T.; Ovsyannikov, P. V.; Vlasov, F. F.

ORG: GrozNII

TITLE: Production of gas turbine fuel on the basis of products of thermal cracking

SOURCE: Neftepererabotka i neftekhimiya, no. 12, 1964, 24-26

TOPIC TAGS: gas turbine fuel, petroleum refining

ABSTRACT: A fraction with a boiling range of 200-350° obtained by thermal
cracking of a mixture of mazut with a low sulfur content (0.31% S) and
solar oil (with 0.15% S) was found to be a satisfactory fuel for gas tur-
bine locomotives. The fuel had a low ash content (0.0007%), a sulfur con-
tent of 0.2%, a low vanadium content (traces), and a pour point of minus
17° against minus 12° required by standard specifications. Orig. art. has:
2 tables. [JPRS]

SUB CODE: 21 / SUBM DATE: none / ORIG REF: 002

Card 1/1   UDC: 662.7

L 04236-67   EWT(1)

ACC NR: AR6031902   SOURCE CODE: UR/0058/66/000/006/H043/H043

AUTHOR: Kaplan, Ye. S. ; Baybursyan, E. D,

TITLE: Magnetic type transmission line using ferrites

SOURCE: Ref. zh. Fizika, Abs. 6Zh297

REF SOURCE: Tr. 1-y Mezhvuz. konferentsii ped. in-tov po radiofiz. i spektroskopii. M., 1965, 126-137

TOPIC TAGS: transmission line, reluctance, permeance, ferrite magnetic circuit

ABSTRACT: A two-conductor open magnetic type transmission line using guiding elements in the form of round ferrite magnetic circuits is investigated. The reluctance and permeance are calculated. It is shown that at given frequencies and electromagnetic parameters of the ferrite, the nature of its internal reluctance reactance depends on the magnetic circuit diameter. Conditions for line transparency are established. Problems concerning the correct selection of the ferrite brand and transverse dimensions of the line are discussed. [Translation of abstract]

SUB CODE: 09, 20/

Card 1/1

BAYBURT, G.A., kand.med.nauk

Acute erythematovisceritis. Sbor. nauch. rab. po lepr. i derm.
no.13:134-142 '59.   (MIRA 14:6)
                            (LUPUS)

15(2)   SOV/72-59-3-4/19
AUTHORS: Kitaygorodskiy, I. I., Bayburt, L. G., Zertsalova, I. N.,
              Karpechenko, V. G., Faynberg, Ye. A.

TITLE: Investigation of the Possibility of Obtaining the
              "Vizhurit" Glass (Issledovaniye vozmozhnosti polucheniya
              stekla vizhurit)

PERIODICAL: Steklo i keramika, 1959, Nr 3, pp 12 - 13 (USSR)

ABSTRACT: The shatterproof glass presently manufactured has the
              defect of completely disintegrating into fragments, although
              not dangerous ones, when given a blow. It is however re-
              quired in motor car traffic that on destruction of the
              glass at least a small part of it, the one in front of the
              driver's eyes, is left undamaged. In 1956 the authors of
              the present paper carried out investigations at the Gusevskiy
              zavod imeni Dzerzhinskogo (Gusev Factory imeni Dzerzhinskiy)
              for the purpose of obtaining a "Vizhurit" type glass, which
              is produced abroad by various patented processes. Experi-
              ments were made on the flat windshields of the "Moskvich"
              car ($974 \times 327 \times 5.5$ mm). The results obtained are shown in
Card 1/2   figures 1 and 2, but they are not regarded as satisfactory,

Investigation of the Possibility of Obtaining the   SOV/72-59-3-4/19
"Vizhurit" Glass

             as the glass, according to figure 2 burst after 10 - 15
             days as a consequence of internal strains. These experi-
             ments must now be carried on. There are 2 figures.

ASSOCIATION: Gusevskiy zavod imeni Dzerzhinskogo (Gusevskiy Factory imeni
             Dzerzhinskiy)

Card 2/2

L 59592-65   ERT(1)/EWP(e)/EPA(s)-2/EWT(m)/EPF(c)/EWP(1)/EPA(w)-2/ESP(1)/T EPC(b)-2/

AUTHOR: Rayburt, L. G.; Gorbachev, A. A.; Levitina, A. V.

TITLE: Study of structural transformations in crystallizable glasses by means of UV absorption spectra

SOURCE: AN SSSR. Doklady, v. 162, no. 5, 1965, 1079-1082

TOPIC TAGS: glass crystallization, nonalkali glass, thermal shock, titanium dioxide, glass structure, ultraviolet absorption spectrum

ABSTRACT: The subject of the study was alkali-free glass in the system SiO_2 - Al_2O_3 - CaO - MgO with admixtures of TiO_2 (glass No. D1, D2, and D3). The study was particularly concerned with No. D3, which is an optimum glass for preparing pyroceramics. The kinetics of the structural transformations were studied by UV spectra in D3 glass samples subjected to thermal shock (from 750 to 900C at 50-degree intervals) for 1 min. A comparison of the minima on the UV curves for various temperatures of heat treatment (see Fig. 1 of the Enclosure) shows that the rate at which the structural transformations occur increases with temperature, particularly above 750. The UV spectra change more for glasses produced in a

Card   1/3

L 59592-65
ACCESSION NR: AP5017456   /

reducing medium than for those melted under oxidizing conditions. The spectra
indicate that the defectiveness of the glass structure, characterized by the
magnitude of the minimum, is related to the crystallizing properties of the
glass. X-ray analysis showed that crystallization proceeds at a high rate at
950C and ends at 1050C; this is associated with the appearance of high maxima
on the UV absorption spectra, which shift toward longer wavelengths with rising
crystallization temperature. As the titanium content increases, so does the de-
fectiveness of the glasses, which predetermines their crystallizability. The UV
spectral method makes it possible to account for the observed experimental fact
that the reduction of Ti^{4+} to Ti^{3+} increases the crystallizability of glass: when
Ti is reduced, the defectiveness of the glass increases for a constant TiO_2 con-
tent. The study also showed that the structural rearrangements associated with
crystallization differ from precrystallization rearrangements. It is concluded
that the method is very effective in accounting for the structural aspects of
crystallizable glasses and can be used for investigating their crystallization.
Orig. art. has: 4 figures.

ASSOCIATION: Gosudarstvennyy nauchno-issledovatel'skiy institut elektrovakuumnogo
stekla (State Scientific Research Institute of Vacuum Tube Glass)

SUBMITTED: 04Nov64   ENCL: 01   SUB CODE: MT, OP

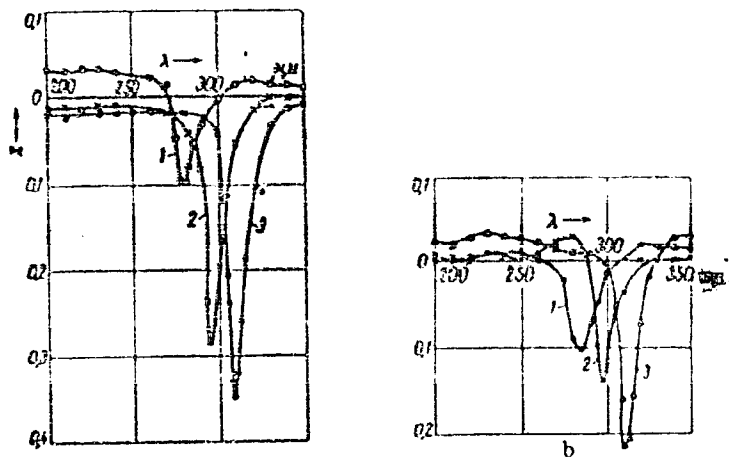NO REF SOV: 2/001   OTHER: 000

Figure 1. Differential absorption spectra of D1, D2 and D3 glasses heat-treated for 1 hr. at 800C: a - glasses prepared under reducing conditions; b - glasses prepared under oxidizing conditions.

Cbrd   3/3

BAYBURT, Ye. A.

Bayburt, Ye. A. -- "On Tauma of the Cervical Region. (Experimental Investigation)."
Kishinev State Med Inst, Kishinev, 1955 (Dissertation for the Degree of Candidate
in Medical Sciences)

SO: Knizhnaya Letopis', No. 24, Moscow, Jun 55, pp 91-104

BAYPURTTSYAN, A.A.

42518. Effektivnyy Operativno--konservativnyy sposob lecheniya Zabole vaniya
Kholki. V ogl: Baiburtyan A. A. Trudy yerevansk. Zoovet.   In-Ta, Vyp. 10,
1948, S. 167-98.

BAYBURTSYAN, A. A.

"Gelding of sheep and goats, keeping appendages and jointtissued of testicles."

Veterinariya, Vol. 37, No. 6, 1960, p. 48

Chief, Chair Operative Surgery, Yerevan Zoovet Inst

BAYBURTTSYAN, A.A.

Castration of smaller cattle with retention of the appendix testis and the connective tissue basis of the testicles. Veterinariia 37 no.6:48-51 Je '60.   (MIRA 16:7)

1. Zaveduyushchiy kafedroy operativnoy khirurgii Yerevanskogo zooveterinarnogo instituta.
(Castration)

BAYBURTTSYAN, Aramis Aramovich, zasl. deyatel' nauk, prof.; USACHEVA,
I.G., red.; MEYEVA, V.M., tekhn. red.

[New method for increasing livestock productivity] Novyi metod
povysheniia produktivnosti skota. Moskva, Izd-vo sel'khoz.lit-
ry, zhurnalov i plakatov, 1961. 150 p.   (MIRA 15:1)

1. Zaveduyushchiy kafedroy operativnoy khirurgii Yerevanskogo
zooveterinarnogo instituta (for Bayburttsyan).
                    (Stock and stockbreeding)

KADILOV, Ye.V.; BAYBURTTSYAN, A.A.; OVSEPYAN, A.A.

Anatomical and histological characteristics of some organs in
farm animals as related to different methods of castration. Izv.
AN Arm. SSR. Biol. nauki 14 no.6:7-13 '61.   (MIRA 14:10)

1. Kafedry gistologii i operativnoy khirurgii Yerevanskogo zooveterinar-
nogo instituta.
                    (CASTRATION)   (MUSCLE)

BAYBURTTSYAN, A.A.; KENTIKYAN, M.L.; STEPANYAN, A.S.

Chemical composition of the meat of wethers, castrated without
the removal of the epididymis and the connective tissue base of
the testicle. Zhivotnovodstvo 23 no.5:37-38 My '61.

(MIRA 16:2)

1. Yerevanskiy zooveterinarnyy institut.
       (Mutton—Compositon)   (Castration)

BAYBURTTSYAN, A.A., (Professor of the Erevan Zooveterinary Institute)

"Attainments of veterinary science should be introduced into the practice of livestock breeding more promtply".

Veterinariya, vol 39, no.1 Jan 1962. pp 14

BAYBURTTSYAN, A.A., prof.

Speed up the introduction of the accomplishments of veterinary
science into animal husbandry. Veterinariia 39 no.1:14 Ja '62.
(MIRA 15:2)

1. Yerevanskiy zooveterinarnyy institut.
                    (Veterinary medicine)
                    (Stock and stockbreeding)

BAYBURTTSYAN, A.A., prof.; AKHUMYAN, V.A.; KAZARYAN, G.A., kand. med. nauk;
    ARUTYUNYAN, R.R.; NAZINYAN, S.A.; ARUTYUNYAN, V.M.

Radioactive iodine (I^{131}) used in determining the hormonal activity
of the thyroid gland in rats following castration. Vop. radiobiol.
[AN Arm. SSR] 3/4 225-228 '63.   (MIRA 17:6)

BAYBURTYAN, A.G.

Content of ammonia and glutamine in the arterial blood and
cerebrospinal fluid in some nervous and mental diseases.
Vop. med. khim. 9 no.6:601-603 N-D '63.

(MIRA 17:10)

1. Kafedra biokhimii Rostovskogo-na-Donu universiteta.

BAYBUTAYEV, K. B.

PAYBUTAYEV, K. B. -- "A Comparative Test of Various Systems of Solar
Water Heaters." Acad Sci USSR. Power Engineering Institute imeni G. M.
Krzhizhanovskiy. Moscow, 1955. (Dissertation for the Degre e of Candidate
in Technical Sciences)

SOURCE Knizhnaya Letopis', No 6 1956

A q b a z , a, j

133-10-13/26

AUTHOR: Semchenko, O. A., Baybuz, A. N., Medvedeva, N. I. and
Azarov, A. T., Engineers.

TITLE: Heating of Alloyed Steel Ingots in Recuperative Soaking Pits.
(Progrev legirovannogo Slitka v Rekuperativnykh Kolodtsakh)

PERIODICAL: Stal', 1957, No.10, pp. 915-917 (USSR).

ABSTRACT: An investigation of the distribution of temperatures
across ingots and the differences between indicated
and actual temperatures of metal during heating in
recuperative soaking pits is described. Heating of ingots
of ШX15 and ШХ15Cr steels as well as some other high
carbon alloy steels was unsatisfactory, namely axial
overheating of the ingot was observed. The investigations
indicated that the existing practice of heating up to
$1230-1210^\circ$C was incorrect, the limiting temperature was
found to be $1160-1180^\circ$C. There are 3 figures.

ASSOCIATION: Dneprospetsstal' Works. (Zavod Dneprospetsstal').

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5(4)

AUTHOR: Baybuz, V. F.   SOV/76-32-11-29/32

· TITLE: The Intermolecular Potential and the Second Virial Coefficient
                 of Sulfur Dioxide Gas (Mezhmolekulyarnyy potentsial i vtoroy
                 virial'nyy koeffitsiyent sernistogo gaza)

PERIODICAL: Zhurnal fizicheskoy khimii, 1958, Vol 32, Nr 11, pp 2644-2645
                 (USSR)

ABSTRACT: The values of the virial coefficients can be calculated for
                 diverse temperatures from the intermolecular potential; from
                 these values again the compressibility, the specific heat and
                 other thermodynamic properties of a real gas can be determined.
                 Stokmayer calculated the intermolecular potential of SO_2 ac-

                 cording to the dipolar moment μ = 1.61 D, which had been
                 determined by Zahn (Tsan) (Ref 1). Rowlinson (Roulinson) (Ref 2)
                 represented the virial coefficient according to the potential
                 by Stokmayer and the traditional mechanics. To determine the
                 quantities of the intermolecular potential of the SO_2 molecule

                 data by Riedel (Ridel) (Ref 3), and Cooper and Maass (Kuper
Card 1/2   and Mass) (Ref 4) were used. Based on these quantities the

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The Intermolecular Potential and the Second Virial Coefficient of Sulfur
Dioxide Gas

values of the second virial coefficients of SO_2 up to 1200°K
were calculated (Table) using the table by Rowlinson. The
calculated values of B agree well with the experimental data
of B supplied by various authors.
There are 1 table and 6 references, 2 of which are Soviet.

ASSOCIATION: Akademiya nauk SSSR, Institut goryuchikh iskopayemykh (Academy
of Sciences, USSR, Institute of Mineral Fuels)

SUBMITTED: May 8, 1958

Card 2/2

5(4)

AUTHORS: Medvedev, V. A., Korobov, V. V., Baybuz, V. P. (Moscow)

TITLE: Investigation of the Thermodynamic Properties of Substances
               According to the Method of the Explosion in a Spherical Bomb
               (Issledovaniye termodinamicheskikh svoystv veshchestv metodom
               vzryva v sfericheskoy bombe) II. Hydroxyl (II. Gidroksil)

ABSTRACT: In the investigation under review a spherical bomb with a
               capacity of 20 l was used. An optical instrument (Fig 1) based
               on a design proposed by L'yuis and El'be (Ref 1) served as
               pressure indicator. The changes in pressure were recorded by
               an oscillograph of the type 9SO-302 and the recordings measured
               by means of a measurement microscope MIR-12. Publications de-
               scribed various methods for the determination of the dissoci-
               ation heat of water vapor on hydrogen- and hydroxyl ions, and
               the different results which were obtained (Table 1). So far
               $\Delta H = 67 \pm 0.65$ kcal/mol (Dweyr (Dvayyer) and Oldenberg (Ref 16))
               has been regarded as the most accurate value. However, the
               spectrographical determinations of A. P. Purmal' (Ref 17)
Card 1/3   which resulted in a value of 64.4 ± 1.0 kcal/mol seem to be

Investigation of the Thermodynamic Properties of Substances According to the
Method of the Explosion in a Spherical Bomb. II. Hydroxyl

more accurate. It is stated that the investigations carried
out by Wohl (Vol), Magat (Ref 11), Lewis and Elbe (L'yuis and
El'be) (Ref 14) furnished too low results, in reference 11 on
account of wrong calculations, and in reference 14 on account
of heat losses. In the present determinations according to the
explosion method, an oxygen-hydrogen mixture with a surplus
of oxygen and an addition of water vapor was used, since heat
losses occurring with the combustion of these mixtures are
smaller. 21 explosion experiments were carried out. The cal-
culation method has already been given (Ref 19). The mean
value obtained for the reaction $H_2O_{gas} \rightleftharpoons OH_{gas} + 1/2\ H_{2\ gas}$
is $\Delta H_O^O = 65.5$ kcal/mol in accordance with the dissociation
energy of the hydroxyl of $D_O(OH) = 102.2$ kcal/mol. The equilib-
rium constants K_p were calculated for various temperatures
(Table 4). There are 2 figures, 4 tables, and 22 references,
5 of which are Soviet.

ASSOCIATION: Akademiya nauk SSSR, Institut goryuchikh iskopayemykh (Academy
               of Sciences, USSR, Institute for   Mineral Fuels)
Card 2/3

BAYBUZ, V.F.; MEDVEDEV, V.A.

Consideration of the effect of pressure on the thermodynamic
functions of real gases. Trudy IGI 12:190-195 '61. (MIRA 14:3)
(Gases) (Thermodynamics)

11. 7200
11. 5000

S/020/61/140/006/023/030
B107/B101

AUTHOR: Baybuz, V. F.

TITLE: The explosion method and the heats of formation of CF_4, CF_3Cl, $CFCl_3$, and CCl_4

PERIODICAL: Akademiya nauk SSSR. Doklady, v. 140, no. 6, 1961, 1358 - 1360

TEXT: The present publication describes a way of calculating heats of formation from explosion tests in spherical bombs, and gives data on the combustion of H_2 and O_2, as well as the heats of formation of CF_4, $CFCl$, $CFCl_3$, and CCl_4. The theory of the normal velocity of flame propagation was applied for the calculation (L. N. Khitrin, Fizika goreniya i vzryva (Physics of combustion and explosion) M., 1957). Spherical glass bombs were used for the experiments. The experimental arrangement has been described in detail previously (V. A. Medvedev, V. V. Korobov, V. F. Baybuz, ZhFKh, 33, 58 (1959)). Heat losses during explosion tests are due to 1) heat conduction

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by the walls, and 2) to a boundary layer of the gas at the walls of the bomb remaining unburned. The thickness of this layer was calculated at:

$$\Delta x = \frac{c_0 \lambda T_0 (p_e/p_0 - 1)}{\dfrac{H_{T_p} - H_{T_o}}{T_p - T_o} \cdot \dfrac{dp}{dt}}$$, where c_0 is an apparatus constant, determined

experimentally, λ the coefficient of thermal conductivity of the gas mixture, T_0 and p_0 the initial temperature and the initial pressure, p_e the maximum pressure during the explosion, $H_{T_p} - H_{T_o}$ the change of heat content of the gas mixture on heating from T_0 to T_p, T_p is the temperature of the flame front. Applying the equation of state for ideal gases one obtains for the explosion temperature

$$T_e = T_0 \frac{p_e}{\alpha \cdot p_0} \left[1 + \frac{3\Delta x}{r_0} (2\alpha - 1) \right],$$ where r_0 is the radius of the bomb,

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The explosion method and the...

$\alpha = \sum m_e / \sum m_i$; $\sum m_i$ the molar number taking part in the reaction, $\sum m_e$ the molar number of combustion products. Assuming the transferred heat to be sufficient to heat the boundary layer up to T_p, the heat balance is

$$\sum m_e \Delta E^o_{fT_0} = \sum m_e (E_{T_e} - E_{T_0}) + \sum m_i \Delta E^o_{fT_0} + \sum \Delta m (E_{T_p} - E_{T_0}),$$ where $\Delta E^o_{fT_0}$ is the

heat of formation of the components of the mixture at the temperature T_0, $E_{T_e} - E_{T_0}$ the energy change at raising the temperature from T_0 to T_e, $\sum \Delta m$ the molar number of the unburned mixture. On an average, heat measurements in tests with mixtures of H_2, O_2, CO, and H_2O gave an error of 0.5%.

Explosion tests with H_2 and O_2 under addition of water vapor yielded results which were in contradiction to previous data: K. Wohl and G. Elbe (Zs. phys. Chem., 5B, 241 (1929)) and K. Wohl and M. Magat (Zs. phys. Chem., 19B, 117 (1932)) reported that slight quantities of water vapor considerably decrease energy losses during combustion. A check of the methods showed that these authors had neglected the adsorption of water to the walls of the bomb. The heats of formation found for CF_4, CF_3Cl, CCl_3F, and CCl_4

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were: $\Delta H^o_{f298^oK}$ (CF$_4$, gas) = -220.1 $\pm$ 1.4 kcal/mole; $\Delta H^o_{f298^oK}$(CF$_3$Cl, gas) = -166.2 $\pm$ 2.2 kcal/mole; $\Delta H^o_{f298^oK}$(CCl$_3$F, gas) = -66.4 $\pm$ 2.1 kcal/mole; $\Delta H^o_{f298^oK}$(CCl$_4$, gas) = -24.6 $\pm$ 1.9 kcal/mole. There are 21 references: 8 Soviet and 13 non-Soviet. The three most recent references to English-language publications read as follows: W. T. David, R. M. Parkinson, Phil. Mag., 15, 96 (1933); B. Lewis, G. Elbe, Phil. Mag. 20, 44 (1935); R. W. Fenning, A. C. Wiffin, Phil. Trans. Roy. Soc., A 238, 142 (1939).

ASSOCIATION: Institut goryuchikh iskopayemykh Akademii nauk SSSR
(Institute of Mineral Fuels of the Academy of Sciences USSR)

PRESENTED: May 27, 1961, by V. N. Kondrat'yev, Academician

SUBMITTED: May 24, 1961

Card 4/4

BAYBUZ, V.F.

/2

PHASE I BOOK EXPLOITATION   SOV/6260

Gurvich, Lev Veniaminovich, Georgiy Akopovich Khachkuruzov, Vadim
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cheva, Lidiya Fedorovna Kuratova, Georgiy Nikolayevich Yurkov,
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Brounshteyn, Viktor Feodoseyevich Baybuz, Valeriy Aleksandrovich
Kvlividze, Yevgeniy Aleksandrovich Prozorovskiy, and Boris Aleksan-
drovich Vorob'yev.

Termodinamicheskiye svoystva individual'nykh veshchestv; spravochnik
v dvukh tomakh.   tom 1: Vychisleniye termodinamicheskikh svoystv;
tom 2: Tablitsy termodinamicheskikh svoystv (Thermodynamic Prop-
erties of Individual Substances; Reference Book in Two Volumes.
v. 1: Calculation of Thermodynamic Properties; v. 2: Tables of
Thermodynamic Properties). 2d ed., rev. and enl. Moscow, Izd-vo
AN SSSR, 1962. 1161 and 916 p. 4000 copies printed.

Sponsoring Agencies: Akademiya nauk SSSR. Institut goryuchikh
·iskopayemykh; and Gosudarstvennyy komitet Soveta Ministrov SSSR

Card 1/3 3

Thermodynamic Properties (Cont.)   SOV/6260

po khimii. Institut prikladnoy khimii.

Resp. Ed.: V. P. Glushko, Academician, L. V. Gurvich, G. A. Khach-
     kuruzov, I. V. Veyts, and V. A. Medvedev; Ed. of Publishing House:
     K. P. Gurov; Tech. Ed.: V. G. Laut.

PURPOSE: This reference book may be used in scientific-research and
     experimental-design work in institutes, design offices, and
     schools of higher education, as well as for training specialists
     in chemical thermodynamics and thermal physics.

COVERAGE: Volume 1 of this work deals with methods for calculating
     thermodynamic properties and with the selection of constants re-
     quired for the calculations. Volume 2 contains tables of thermo-
     dynamic properties (reduced thermodynamic potential, entropy,
     enthalpy, and the logarithm of the dissociation or ionization
     constants of equilibrium) compiled, where data were lacking, on the
     basis of published and unpublished material from a number of Soviet
     research institutes. Thermodynamic properties for the ideal gas

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Thermodynamic Properties (Cont.)   SOV/6260

state are presented in table form for 335 gases, 44 liquids, and
45 solids compounded from 33 chemical elements and their isotopes,
viz.: H, D, T, He, Li, Be, B, C, N, O, F, Ne, Na, Mg, Al, Si, P,
S, Cl, Ar, K, Ca, Br, Kr, Re, Sr, Zr, I, Xe, Cs, Ba, Hg, and Pb.
Thermodynamic properties are given for the following 22 gases in
the range from room temperature to 20,000°K: H,H*, H⁻, O, O*, H₂,
O₂*, O₂, OH, OH*, H₂O, N, N*, N₂, N₂*, NO, NO*, C, C*, CO, CO*, and
e⁻; for the 14 least stable gases up to 4000°K; and for the re-
maining 299 gases up to 6000°K. Virial coefficients for 34 gases
are also given up to 6000°K.

//. 8700

AUTHOR: Baybuz, V. F. (Moscow)

TITLE: Heat losses during explosions in a spherical bomb

PERIODICAL: Zhurnal fizicheskoy khimii, v. 36, no. 6, 1962, 1280-1286

TEXT: A new method of calculating heat losses during explosions in a spherical bomb is proposed. A theoretical study suggests that owing to heat transmission to the walls of the bomb, a certain layer, Δx, of the gas mixture does not burn, as it is not heated to the equilibrium temperature. Δx is calculated from the equation Δx .

$$= \left[c_0 \lambda T_0 (p_e/p_0 - 1) \right] / (dp/dt)_{t=\tau} \left[(H_{T_\ell} - H_{T_0})/(T_\ell - T_0) \right],$$ where λ

$=$ coefficient of thermal conductivity of the gas mixture, $c_0 =$ constant; $p_e =$ pressure after the explosion, $p_0 =$ initial pressure; $\tau =$ duration of explosion; T_ℓ is the temperature of the gas mixture in front of the propagating flame; $H_{T_\ell} - H_{T_0} =$ change in enthalpy when heating from T_0

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