ACCESSION NR: AP

AUTHOR: Andreyev, Yu.

gas

SOURCE:

TOPIC TAGS: isotope exchange, oxygen, carbon, carbon dioxide, carbon mono-

and G. M. Panchenko, Zh. Fiz. Khimii. 38,

temperature

Card 1/2

Card 2/2

FEDOROV, V.A.; TOLMACHEV, A.M.; PANCHENKOV, G.M.

Exchange equilibrium of univalent ions on the A-type synthetic zeolite. Zhur. fiz. khim. 38 no.5:1248-1253 My '64.

(MIRA 18:12)

1. Moskovskiy gosudarstvennyy universitet imeni Lomonosova. Submitted July 24, 1963.

GORSHKOV, V.I.; PANCHENKOV, G.M.; CHUMAKOV, V.A.

Continuous countercurrent ion-exchange method of separating
potassium and rubidium. Zhur. fiz. khim. 38 no.5:1358-1361
My '64.   (MIRA 18:12)

1. Moskovskiy gosudarstvennyy universitet imeni Lomonosova.
Submitted July 24, 1963.

PANCHENKOV, G.M.; TOLMACHEV, A.M.; ZOTOVA, T.V.

Separation of hydrogen isotopes in the sorption of hydrogen
on synthetic zeolites. Zhur. fiz. khim. 38 no.5:1361-1365
My '64.   (MIRA 18:12)

1. Moskovskiy gosudarstvennyy universitet imeni Lomonosova.
Submitted July 24, 1963.

GOLUBEV, V.S.; PANCHENKOV, G.M.

> Equation for the diffusion kinetics of sorption (ion exchange)
> when external and internal diffusion is taken into account.
> Zhur. fiz. khim. 38 no.1:228-230 Ja'64.   (MIRA 17:2)
>
> 1. Moskovskiy gosudarstvennyy universitet imeni Lomonosova.

GORSHKOV, V.I.; KUZNETSOV, I.A.; PANCHENKOV, G.M.

Separation of lithium isotopes by the continuous countercurrent
ion-exchange method. Zhur. fiz. khim. 38 no.10:2489-2491 O '64.
                                    (MIRA 18:2)
1. Khimicheskiy fakul'tet Moskovskogo gosudarstvennogo universi-
teta imeni M.V. Lomonosova.

ACCESSION NR: AP4047977

AUTHOR: Panchenkov, G. M.

TITLE: Equation of state and the thermodynamic functions of substances

SOURCE: Zhurnal fizicheskoy khimii, v. 38, no. 10, 1964

TOPIC TAGS: equation of state, thermodynamic function, coordination number, cell of near order

ABSTRACT: In the general case, an equation of state must contain four variables: pressure, volume, temperature

cause of the change of the
due to temperature and pressure changes, an equation of state is
liquids the coordination number is a variable, for solids and non-ideal gases it is
a constant. In the light of these considerations, the usual thermodynamic func-
Card 1/2

L 24170-65

tions and constants are discussed, including the Helmholtz and Gibbs energies.
Orig. art. has: 1 figure and 111 equations.

ASSOCIATION: Institut neftekhimicheskoy i gazovoy promyshlennosti imeni
i. M. Gubkina (Institute of Petroleum

SUBMITTED: 25Apr64   ENCL: 00

Card 2/2

SEMIOKHIN, I.A.; ANDREYEV, Yu.P.; PANCHENKOV, G.M.

Dissociation kinetics of carbon dioxide in the silent discharge.
Zhur. fiz. khim. 38 no.9:2275-2278 S '64.   (MIRA 17:12)

1. Moskovskiy gosudarstvennyy universitet imeni Lomonosova.

SOMIOKHIN, I.A.; KOROVKIN, V.K.; PANCHENKOV, G.M.; BAKHCHEVANSKI, Kh.S.

Isotopic effects in the dissociation of carbon dioxide in a silent
electric discharge. Zhur.fiz.khim. 38 no.8:2072-2076 Ag '64.

(MIRA 18:1)

1. Moskovskiy universitet imeni M.V.Lomonosova, Khimicheskiy fakul'tet.

GORSHKOV, V.I.; VORONTSOVA, O.N.; PANCHENKOV, G.M.; ASPANDIYAROVA, S.S.

Equilibrium of alkaline earth metal ion exchange on the cation
exchanger KU-1 ir hydrogen-form. Vest. Mosk. un. Ser. 2: Khim.
19 no.5:47-52 S-O '64.   (MIRA 17:11)

1. Kafedra fizicheskoy khimii Moskovskogo universiteta.

FEYZKHANOV, F.A.; PANCHENKOV, G.M.; KOLESNIKOV, I.M.

Kinetics of the hydrogenolysis of thiophenes and sulfides in catalytic reforming. Izv. vys. ucheb. zav.; neft' i gaz 7 no.9:69-71 '64.   (MIRA 17:12)

PANCHENKOV, G.M.

G.M. Panchenkov and V.N. Lebedev's "Chemical kinetics and catalysis".
Kin. i kat. 5 no.3:576-578 My-Je '64.

(MIRA 17:11)

ACCESSION NR: AP4024409   S/0204/64/004/001/0128/0132

AUTHOR: Panchenkov, G. M.; Zhorov, Yu. M.; Venkatachalam, K. A.; Gurevich, I. P.

TITLE: Determination of the group composition of hydrocarbon mixtures by liquid
chromatography with luminescent indicators.

SOURCE: Neftekhimiya, v. 4, no. 1, 1964, 128-132

TOPIC TAGS: hydrocarbon group analysis, liquid chromatography, luminescent
chromatography, luminescent dye, indicator, aromatic hydrocarbon, olefinic
hydrocarbon, paraffinic hydrocarbon, naphthenic hydrocarbon, indicator adsorption,
chromatographic column packing, group analysis

ABSTRACT: Luminescent dyes were prepared, a method of luminescent chromatographic
analysis of hydrocarbon mixtures was worked out, and the accuracy of the method
was evaluated. By using specific luminescent dyes, a chromatogram of hydrocarbon
mixtures separated into aromatic hydrocarbon, olefinic and paraffinic plus
naphthenic zones can be obtained by illuminating the silica gel column with
ultraviolet light. The length of each determined zone will correspond to the
content of the type of hydrocarbon in the mixture. A material extracted from high

Card   1/3

ACCESSION NR: AP4024409

molecular petroleum products such as asphalt or ozokerite provides a luminescent indicator suitable for identifying both the aromatic and the olefinic sections. The aromatic indicator (dark blue luminescence under u.v.) is extracted with diisobutene from material adsorbed on silica gel and the olefinic indicator (light blue luminescence) is extracted with benzene. Luminescent-chromatographic analyses conducted on mixtures boiling in the 30-300 C range showed the method to be reliable and accurate. Higher molecular weight compounds may also be analysed by this method. The composition of the hydrocarbon mixture has little effect on the accuracy. Accuracy of the method does depend on the evenness of the chroma- tographic column packing and on the similarity in sorption onto silica gel of the luminescent indicators for the different type hydrocarbon fractions. The indi- cators obtained by extraction from asphalt meet the requirement of being similarly adsorbed on silica gel. Thus luminescent chromatography may be effectively used in group analyses of hydrocarbon mixtures. Orig. art. has: 3 tables and 3 equations.

ASSOCIATION: Moskovskiy institut neftekhimicheskoy i gazovoy promy*shlennosti im. I. M. Gubkina (Moscow Institute of the Petrochemical and Gas Industry).

Card   2/3

PANCHENKOV, G.M.; YERCHENKOV, V.V.

Dependence of the coordination number of liquids on the
molecular volume and temperature. Zhur. fiz. khim. 38
no.6:1651-1654 Je '64.   (MIRA 18:3)

1. Moskovskiy gosudarstvennyy universtitet imeni Lomonosova.

L 60897-65   EWG(j)/EWT(m)/EPF(c)/EPF(n)-2/EWP(j)/T/EWA(h) EWA   T   R

ACCESSION NR: AR5016412

SOURCE: Ref. zh. Khimiya, Abs. 11L216

AUTHOR: Ponchenkov, K.

TITLE: Activation of alumo

Sin. otd. AN SSSR, 1964, 376-378

TOPIC TAGS: catalyst, high energy radiation, gamma ray, proton

TRANSLATION: The effect of preliminary irradiation of an alumosilicate catalyst of

SUB CODE: GC, NP   ENCL: 00

Card 1/1

TOLMACHEV, A.M.; FEDOROV, V.A.; PANCHENKOV, G.M.

Determination of the activity coefficients of monovalent ions in a
type-A synthetic zeolite. Vest.Mosk.un.Ser.2:Khim. 19 no.4:7-12
Jl-Ag '64.   (MIRA 18:8)

1. Kafedra fizicheskoy khimii Moskovskogo universiteta.

FEYZKHANOV, F.A.; PANCHENKOV, G.M.; KOLESNIKOV, I.M.

Kinetic equations of the reactions of n-heptane in catalytic reforming.
Neftekhimiia 4 no.5:722-726 S-O '64.   (MIRA 18:1)

1. Moskovskiy institut neftekhimicheskoy i gazovoy promyshlennosti
imeni I.M.Gubkina.

SEMIOKHIN, I.A.; ANDREYEV, Yu.P.; PANCHENKOV, G.M.

Effect of addition: on the dissociation of carbon dioxide in
silent discharge. Vest. Mosk. un. Ser. 2: Khim. 19 no.5:40-
46 S-O '64.   (MIRA 17:11)

1. Kafedra fizicheskoy khimii Moskovskogo universiteta.

MATSASHEK, F.; KOLCHIN, A.M.; PANCHENKOV, G.M.

Mass spectrometric isotopic analysis of silicon. Vest. Mosk. un. Ser. 2: Khim. 19 no.5:57-6. 5-0 '04.

(MIRA 17:11)
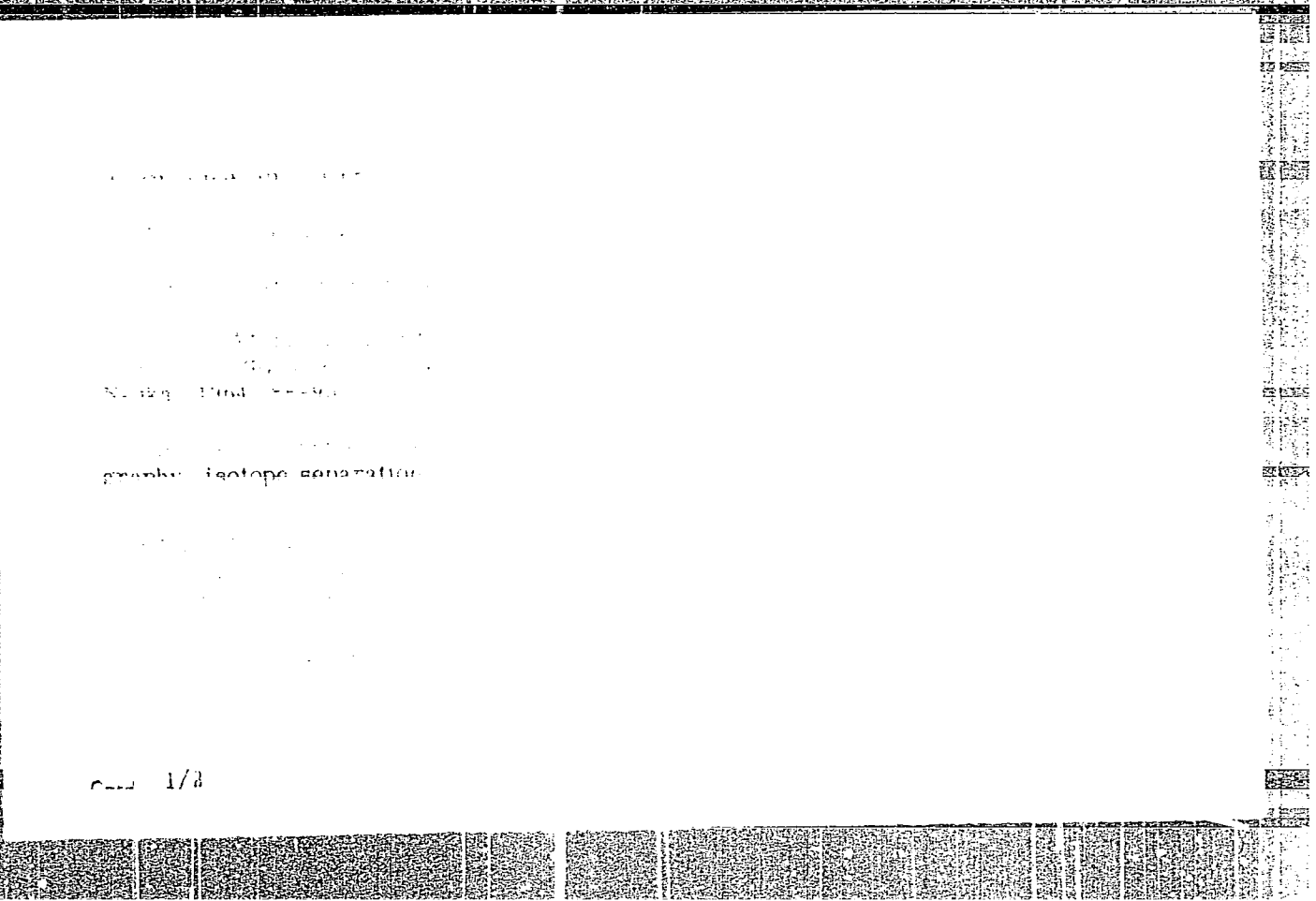
1. Kafedra fizicheskoy khimii Moskovskogo universiteta.

SEMIOKHIN, I.A.; ANDREYEV, Yu.P.; PANCHENKOV, G.M.

Dissociation of carbon dioxide circulating in a silent electric discharge. Zhur.fiz.khim. 38 no.8:2076-2080 Ag '64.

(MIRA 18:1)

Redistribution of oxygen and carbon isotopes between carbon dioxide and its dissociation products in a silent electric discharge in a gas circulation plant. Ibid.:2087-2091

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

graph- isotope separatio

c... 1/2

ACCESSION NR: AT5002970

tive, combustion kinetics

ABSTRACT: Most air-breathing jet engines use fuel in the form of an atomized
___ combustion time is therefore given by the following parameters:
1) the air excess coefficient, ___
temperature, ___ turbulence characteristics, 5) the uniformity of fuel distribution,
6) the composition and the structure of the fuel, and 7) the effect of various
___ parameters on the overall combustion

ACCESSION I : ACSD060

. . .   . process passes from a di ...

500 mm Hg   1-1 ...   .

gen-propant, ... (rate controlled) regime the type of ... type showed ...
effect on ... ...
... ... solution characteristics, ...

pleteness of combustion remains practically ___
200 m/sec. Without additives it decreases sharply at velocities of more than
90 m/sec. Orig. art. has: 9 figures.

[PV]

___ _, ____ neftekhimicheskoy i gazovoy promyshlennosti (Institute of

SUBMITTED: 00   ENCL: 00   SUB CODE: FI

OTHER: 001   ATD PRESS: 3205

Card 2/3

AUTHOR: Gorshkov, V. I.; Kuznetsov, I. A.; Panchenkov, G. M.

exchange method

SOURCE: Zhurnal fizicheskoy khimii. v. 38. no. 10. 1964. 2489-2491

ABSTRACT: Outlining the two main research trends for solution of the problem
of ion exchange separation of the
conditions of exchange

SUBMITTED: 11Dec63   ENCL: 00   SUB CODE: IG. GC

NO REF SOV:

ACC NR: AP6012991   SOURCE CODE: UR/0065/65/000/001/0012/0016

AUTHOR: Zhorov, Yu. M.; Panchenkov, G. M.; Zel'tser, S. P.; Tirak'yan, Yu. A.

ORG: MINKh i GP   5 /
                                                                   ß

TITLE: Heat of reaction in catalytic reforming of gasoline fractions

SOURCE: Khimiya i tekhnologiya topliv i masel, no. 1, 1965, 12-16

TOPIC TAGS: heat of reaction, heptane, aromatic hydrocarbon, napthalene, crude petroleum

ABSTRACT: In previous studies an empirical equation has been suggested for the determination of the heat of reaction of hydroforming:

$$q_{298} = (4.5\ a_1 + 5.36 a_3 + 5.45 b) - \gamma_c$$

where q_{298} = heat of reaction at 298°C, kcal/kg, a_1, a_3, c. b = yields of aromatic hydrocarbons from naphthenes and paraffins, gas and coke respectively (in per cent weight of crude material); γ = coefficient, depending on gas composition and varying from 2.5 to 3.2. The heat of reaction of hydrocracking of heptane calculated from this equation and the actual value are 32 and 97 kcal/kg, respectively. Thus calculation by this equation is substantially in error. In addition, this equation cannot be used in determin-

Card 1/2   UDC: 66.092 : 665.521.2

ACC NR: AP6012991   C

ing the heat of reaction of the process under industrial conditions,
that is, in $500^\circ C$. The empirical derivation of this equation casts
doubt on its possible use in qualitative description of the plat-
forming process. Accordingly, the authors developed an analytical
method of determining heat of the reaction in catalytic reforming
based on a kinetic scheme of the process, affording determination
of heat of reaction with considerably greater accuracy than other
methods. The crude material usually contains a slight amount of
olefins, which upon further analysis is united with the paraffins.
The possibility of calculating the heat of reaction of the complex
technical mixture of hydrocarbons with different molecular weights
and boiling points according to the scheme presented in the article
is accounted for by the fact that the molar heat of reaction of any
of the reactions examined depends a little on the molecular weight
of the crude material. In hydroreforming of heptane, the heat of
reaction is +10.5 kcal/kg, in platforming of heptane with near
conversion-- + 231 kcal/kg. The heat of reaction of hydroforming
of different technical forms of fuel depending on naphthene content
in crude according to data given can vary from 40 to 160 koal/kg,
and the values for platforming - from 90 to 290 kcal/kg. Orig. art. has:
16 formulas and 3 tables. [JPRS]

SUB CODE: 11, 07 / SUBM DATE: none / ORIG REF: 010 / OTH REF: 001

Card 2/2 PLG

KUZ[...]NYKh, I.M.; PANCHE[...]KOV, G.N., TITOPOV, V.A.

Mechanism underlying the action of aluminosilicate catalysts.
Zhur. fiz. khim. 39 no.3:1869-1872 Ag '65.   (MIRA 18:9)

1. Moskovskiy institut neftekhimicheskoy i gazovoy promyshlennosti
imeni akademika I.M. Gubkina i Vsesoyuznyy zaochnyy mashinostroitel'nyy
institut.

GRYAZNOVA, Z.V.; PANCHENKOV, G.M.; BELOKONEV, S.V.

Application of N.A.Shilov's formula for calculating the velocity of adsorption front motion in a countercurrent of sorbate and sorbent.
Zhur.prikl.khim. 38 no.6:1395-1396 Je '65.

(MIRA 18:10)

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

ACCESSION NR: AR5004444

SOURCE: Zhurnal fizicheskoy khimii, v. 37, ... , 1965, 190-194
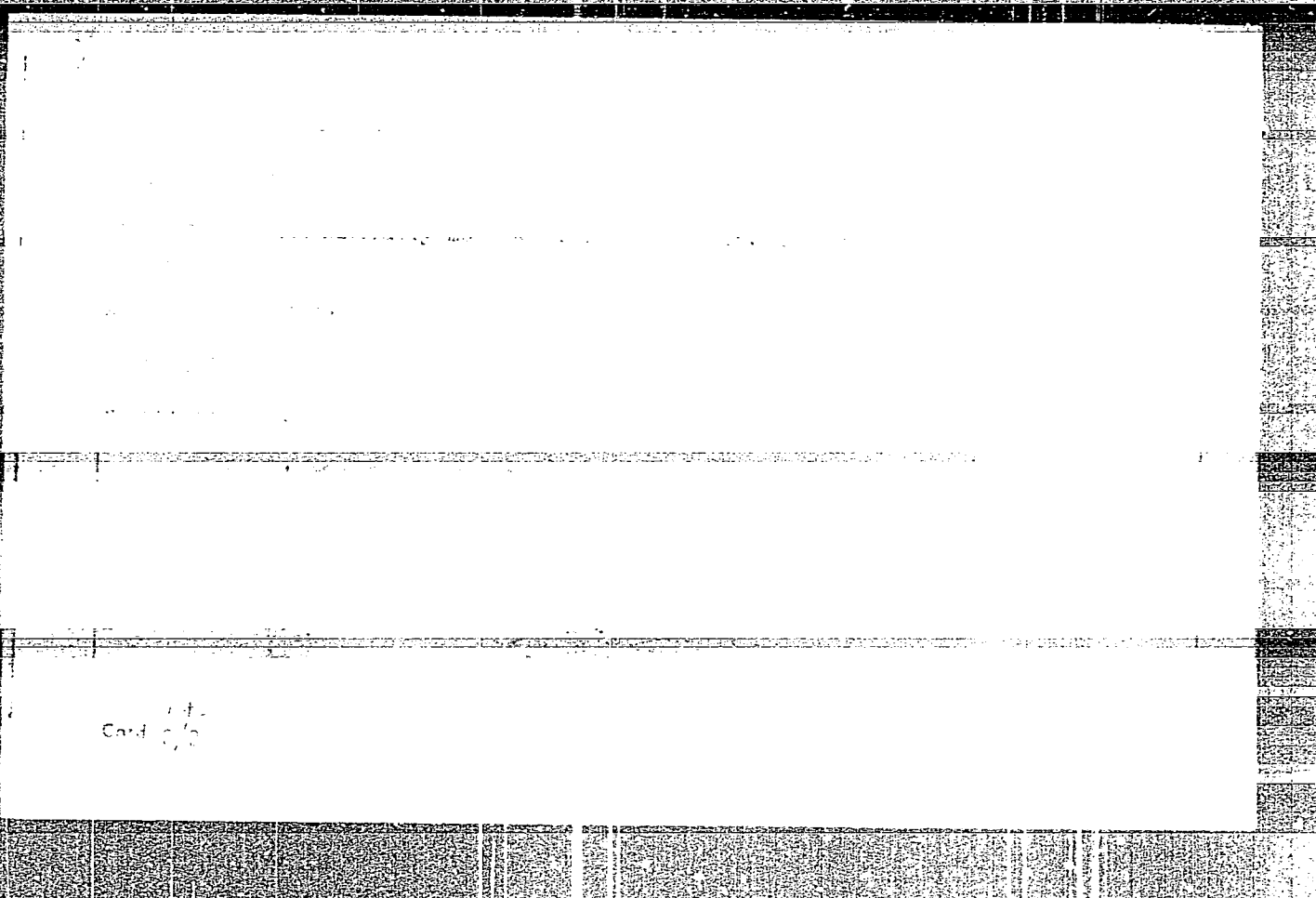
TOPIC TAGS: carbon dioxide, electric discharge, carbon monoxide, ...

$0,03$

Cord 3/3

ABSTRACT. In continuing their studies of luminescent and fluorescent indicators for

is described, and the analysis of
hydrocarbons is explained in detail. A table is included, showing the results
obtained with DFB in determining the amount of aromatic fraction

Card 1/2

Card

TOLMACHEV, A.M.; FEDOROV, V.A.; PANCHENKOV, G.M.; ZUYEVA, N.N.

Calculation of height equivalent of a theoretical plate in ion-
exchange chromatography according to the mobilities of ions. Zhur.
fiz.khim. 39 no.7:1780-1783 Jl '65.   (MIRA 18:8)

ZETKIN, V.I.; PANCHENKOV, G.M.; ZAKHAROV, Yo.V.; KOLESNIKOV, I.M.;
DZHAGATSPANYAN, R.V.

Chlorination and sulfochlorination of organic compounds in
apparatus with periodical and continuous action. Khim. prom.
41 no.10:733-734 O '65.   (MIRA 18:11)
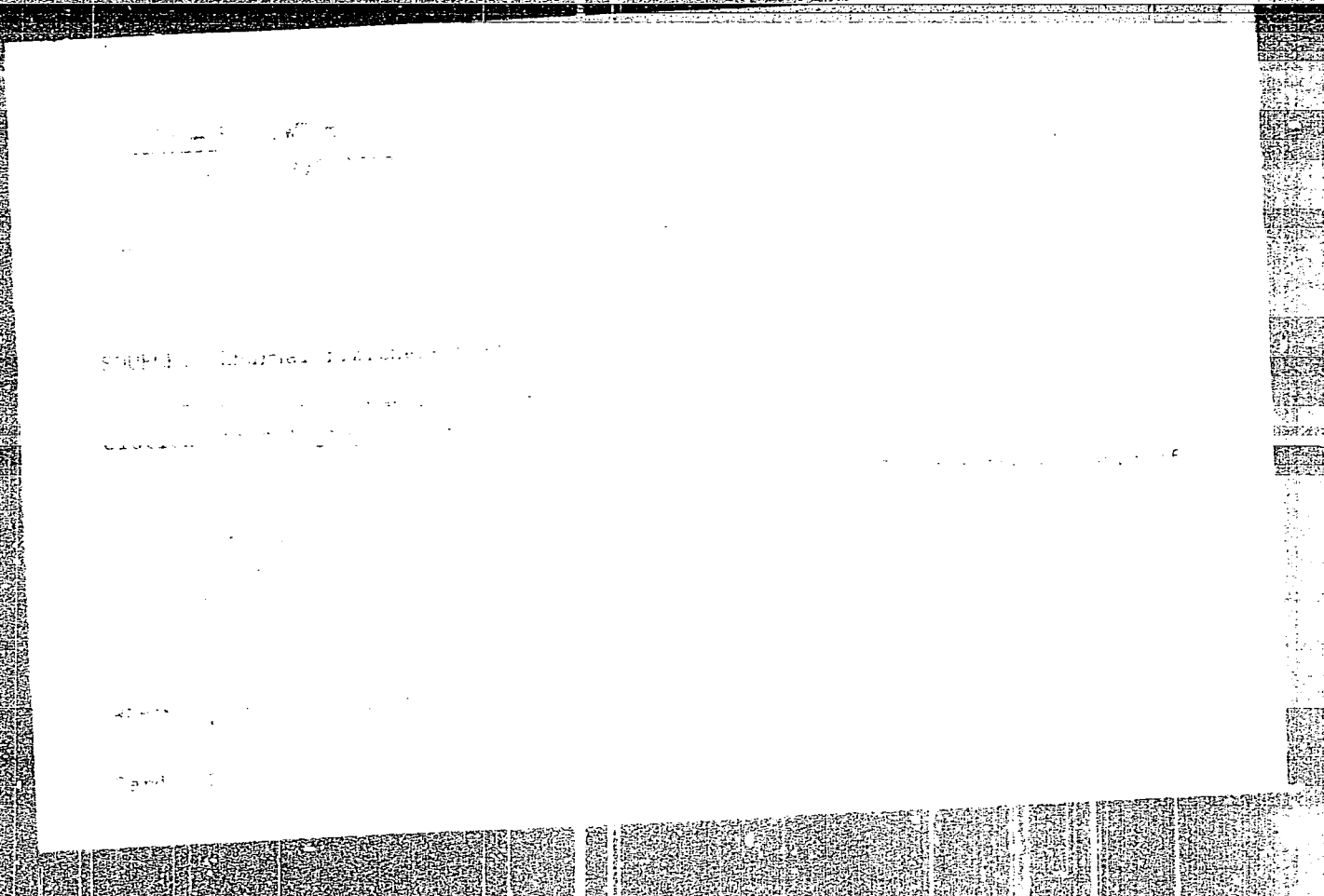
ACCESSION NR: AP5013524

$n = 27.8$, and π was equal to 1.0, 172, and 100,

relationship exists between

MOROZOV, B.F.; LEVINTER, M.Ye.; PANCHENKOV, G.M.

Kinetics of the formation of coke on various types of catalysts.
Izv. vys. ucheb. zav.; neft' i gaz 8 no.3:55-60 '65.

(MIRA 18:5)

1. Ufimskiy neftyanoy institut i Moskovskiy institut neftekhimi-
cheskoy i gazovoy promyshlennosti im. akademika Gubkina.

IR spectrometry was used to determined
lished that there is an optimal content of the alkali component on the silica gel at
which the olefin hydrocarbons obtained are chiefly alpha-olefins. The maximal yield
of alpha-olefins with normal structure was obtained at a content of potassium

Card 1/2

may be used as a carrier, inert to isomerization of the double bond and to reactions with other hydrocarbons at 600°C.

ASSOCIATION: Moskovskiy institut neftekhimicheskoy i gazov promyshlennosti im. I.

SUBMITTED: 02Apr64   ENCL: 00   SUB CODE: P-, GC

NO REF SOV: 005   OTHER: 002

ANDREYEV, Yu.P.; SEMIOKHIN, I.A.; PANCHENKOV, G.M.

Kinetics of carbon dioxide dissociation with additions in a
silent electric discharge. Vest. Mosk. un. Ser. 2: Khim. 20
no.6:24-29 N-D '65.
(MIRA 19:1)

1. Kafedra fizicheskoy khimii Moskovskogo universiteta. Submitted
Aug. 1, 1964.

L 29964-66   EWT(m)/EWP(t)/ETI   IJP(c)   JD

ACC NR: AR6000434   SOURCE CODE: UR/0137/65/000/009/G017/G017

AUTHOR: Gorshkov, V. I.; Kuznetsov, I. A.; Panchenkov, G. M.;   69

Savenkova, N. P.   B

TITLE: Continuous counterflow ion-exchange method of separating cesium and rubidium

SOURCE: Ref. zh. Metallurgiya, Abs. 9G154

REF SOURCE: Sb. Ionoobmen. tekhnologiya. M., Nauka, 1965, 49-54

TOPIC TAGS: rubidium, cesium, chemical separation, ion exchange

ABSTRACT: The separation was carried out in a counterflow apparatus consisting of 2 columns 160 cm high and 25 mm in diameter. The Rb-ions were not retained by the cationite as well as were the Cs-ions, therefore, the Rb-ions accumulated in the upper part of the first column, and the Cs-ions in the lower part of the second column. KU-1 sulfocation was the ion-exchanger in this case. A hydrogen-type of cationite was selected and as a displacer — a 0.2 or 0.1/N solutions of $BaCl_2$ (in some of the experiments Cs salts were also used). The rate of Rb-ion accumulation in the upper part of the ion zone to be separated

Card 1/2   UDC 669.885/.886.09

ZHOROV, Yu.M.; PANCHENKOV, G.M.; ZEL'TSER, S.P.; TIRAK'YAN, Yu.A.

~velopment of the mathematical description of platforming for
optimization of a process. Part 1. Kin. i kat. 6 no. 6:1092-
1097 N-D '65   (MIRA 19:1)

1. Moskovskiy institut neftekhimicheskoy i gazovoy promyshlen-
nosti imeni Gubkina. Submitted June 23, 1964.

PANCHENKOV, G.M.; SHNAYDER, G.S. (Moskva)

Kinetics of reaction in the flow taking place in a nonsection
reactor in a system of reactors connected in series, and in
a sectional reactor with ideal mixing. Zhur. fiz. khim. 39
no. 1:100-104 Ja '65   (MIRA 19:1)

1. Moskovskiy institut neftekhimicheskoy i gazovoy pro-
myshlennosti imeni I.M. Gubkina, Submitted February 28, 1964.

SEMIOKHIN, I.A.; ANDREYEV, Yu.P.; PANCHENKOV, G.M.; BAYRAMOV, V.T.

Dissociation kinetics of carbon dioxide in the silent electrical discharge under gas circulation conditions. Zhur. fiz. khim. 39 no. 1:190-194 Ja '65   (MIRA 19:1)

1. Moskovskiy gosudarstvennyy universitet imeni M.V. Lomonosova. Submitted January 7, 1964.

SEMIOKHIN, I.A.; ANDREYEV, Yu.P.; PANCHENKOV, G.M.

Oxidation of carbon monoxide in a silent electric discharge.
Zhur. fiz. khim. 39 no.9:2245-2251. S '65.   (MIRA 18:10)

1. Khimicheskiy fakul'tet, Moskovskiy gosudarstvennyy uni-
versitet imeni M.V. Lomonosova.

ANDREYEV, Yu.P.; SEMIOKHIN, I.A.; PANCHENKOV, G.M.

Oxidation kinetics of carbon monoxide in a silent electric discharge. Zhur.fiz.khim. 39 no.10:2515-2519 O '65.

(MIRA 18:12)

1. Moskovskiy gosudarstvennyy universitet imeni Lomonosova. Submitted August 1, 1964.

GOLUBEV, V.S.; KUZ'MIN, Ye.N.; PANCHENKOV, G.M.

Sorption dynamics in the presence of interaction of adsorbed
molecules. Zhur. fiz. khim. 39 no.4:1018-1021 Ap '65.

(MIRA 19:1)

1. Moskovskiy gosudarstvennyy universitet imeni Lomonosova.
Submitted July 29, 1964.

PANCHENKOV, G.M.; SAMIGULLIN, M.Sh.; KOLESNIKOV, I.M.; DOROKHIN, V.P.

Isomerization of α-ethylnaphthalene to β-ethylnaphthalene over a synthetic aluminosilicate catalyst. Zhur.fiz.khim. 39 no.10:2614-2617 O '65.   (MIRA 18:12)

1. Moskovskiy institut neftekhimicheskoy i gazovoy promyshlen-nosti imeni Gubkina. Submitted February 27, 1965.

ZHOROV, Yu.M.; PANCHENKOV, G.M.

Determining the group composition of petroleum products
containing aromatic alkenyl hydrocarbons. Khim. i tekh.
topl. i masel 10 no.12:51-54 D '65.   (MIRA 19:1)

1. Moskovskiy ordena Trudovogo Krasnogo Znameni institut
neftekhimicheskoy i gazovoy promyshlennosti im. akademika
Gubkina.

TOLMACHEV, A.M.; FEDOROV, V.A.; PANCHENKOV, G.M.

Deper⁻ence of the height of an equivalent theoretical plate in
ion exchange chromatography on ion mobility. Zhur. fiz. khim.
39 no.5:1168-1170 My '65.   (MIRA 18:8)

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

ZETKIN, V.I.; ZAKHAROV, Ye.V.; KOLFSNIKOV, I.M.; PANCHENKOV, G.M.

Destructive high-temperature chlorination of nitrobenzene and
some of the its derivatives. Zhur. fiz. khim. 39 no.5:1240-
1242 My '65.   (MIRA 18:8)

1. Moskovskiy institut neftekhimicheskoy i gazovoy promyshlennosti
imeni I.M. Gubkina.

PARBUZIN, V.S.; PANCHENKOV, G.M.

Temperature dependence of the coefficients of separation of isotopic molecules D_2-H_2, D_2-HD, and HD-H_2 on synthetic zeolites NaA and NaX in the case of sorption under isobaric conditions. Dokl. AN SSSR 164 no.4:856-859 O '65.

(MIRA 18:10)

1. Moskovskiy gosudarstvennyy universitet. Submitted March 8, 1965.

PANCHENKOV, G.M.; KUZNETSOV, A.I.; MAKAROV, A.V.

Possibility of separating nitrogen isotopes by the chemical exchange
method using complex formation. Dokl. AN SSSR 164 no.5:1101-1103 O
'65.   (MIRA 18:10)

1. Moskovskiy gosudarstvennyy universitet. Submitted March 6, 1965.

FEYZKHANOV, F.A.; PANCHENKOV, G.M.; KOLESNIKOV, I.M.

Kinetics of hydrogenolysis of thiophenes and sulfides under
conditions of catalytic reforming. Zhur.fiz.khim. 39 no.7:1647-
1652   Jl '65.   (MIRA 18:8)

1. Moskovskiy institut neftekhimicheskoy i gazovoy promyshlennosti
imeni I.M.Gubkina.

L 61044-65

ACCESSION NR: AT5014245

AUTHORS: Gorshkov, V. I.; Kuznetsov, I. A.; Panchenkov, G. M.

TITLE: Continuous

SOURCE: AN SSSR. Institut fizicheskoy khimii. Ionoobmennaya tekhnologiya 'Ion exchange technology

ACCESSION NR: AT5014245

varied for different runs between 1-2 cm. From the experimental results it is concluded that the separation of Rb from C mixtures (which do not contain other alkali metal ions) is easier than the separation of Cs from Rb mixtures. Orig. art. has: 1 table and 5 graphs.

ASSOCIATION: none

SUBMITTED: 26Feb65   ENCL: 00

NO REF SOV: 006   OTHER: 000

Card 2/2

L 51247-65   EWT(m)/EPO(m)/EWT(t)/EWP(b)   IJP(c)   DS/JD/GS/RM

ACCESSION NR: AT5011214

AUTHORS: Shabanov, A. A.; Gorshkov, V. I.; Panchenkov, G. M.; Makarov, An. V.

TITLE: Separation of sodium and lithium ions in a cation exchange resin by the method of electrochromatographic displacement

SOURCE: AN SSSR. Institut fizicheskoy khimii. Ionoobmennaya tekhnologiya (Ion

ABSTRACT: The purpose of the

Fig. 1 on the Enclosure). It is

Card 1/3

selected such that the slowest ions hear the greatest similar...

SUBMITTED: 26 8065   GROUP: 01   SUB CODE: 2C, 9 C

Card 2/3

ACCESSION NR: AT5014246
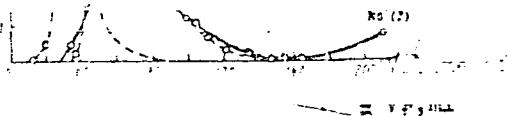
Card 3/3

YELISEYEVA, L.Ye.; ZHOROV, Yu.M.; PANCHENKOV, G.M.; RUMYANTSEVA, Ye.I.

Kinetics of the disproportionation of triethoxysilane. Plast.
massy no.5:18-19 '65.   (MIRA 18:6)

L   ____   EW: ''
ACCESSION NR: AP____

AUTHOR   Tolmachev, A. M.; Fedor__ __ ; ____ __ ___

TITLE: Calculation of H.E.T.P. from ___ mobilities in ___ exchange chromatography

SOURCE: Zhurnal fizicheskoy khimii, v. 39, no. 7, 1965, 1780-1782

TOPIC TAGS: ion exchange chromatography, ion mobility, theoretical plate height equivalent, elution chromatography

ABSTRACT: The linear relationship between the H.E.T.P. (height equivalent of a theoretical plate) and the ___ ___

$$x_x = m - n_{x}$$

where t_x is the mobility of the Me_x^+ ion, l_x is the H.E.T.P. for ___ ___ and n are constants for the given experimental conditions, was verified for ions of variable valence. The effect of various factors on m and n was also studied. The H.E.T.P. was determined by elution chromatography for various ion pairs on synthetic A and X-type zeolites with 8% divinylbenzene. It was shown that after ___ ___ being

Card 1/3

L 63471-65
ACCESSION NR: AP5019798

equal, relation (1) applies to alkali and alkaline earth elements. Constant m is independent of the elution rate v, solution concentration and properties of the ion-exchange resin, but depends on the nature of the eluent; n is independent of the latter, but depends on the concentration and feed rate of the eluent and nature of the resin. The results obtained permit a determination of the number of experiments necessary for calculating the H.E.T.P. at a given set of experimental conditions (concentration and feed rate of eluent, eluting ion, nature and size of resin particles). A comparison is made between relation (1) and the equation for the H.E.T.P. derived for the case of ion exchange by Glueckauf [Ion Exchange and its Application, Soc. Chem. Ind. ..., longitudinal diffusion being ...

$$x = 1.64 r_0 + \frac{\lambda_x''}{(\lambda_x'' + \beta)^2} \frac{0.142 r_0^2 v}{D_x} + \left(\frac{\lambda_x''}{\lambda_x'' + \beta}\right)^2 \frac{0.266 r_0^2 v}{D_x(1 + 70 r_0 v)},$$

where r_0 is the resin particle radius, v is the velocity of the eluent, β is the volume of the eluent per unit volume of resin in the column, $\bar{D}_x$ and D_x are the effective internal and external diffusion coefficients of Me_x^+ ions, and λ_x'' is the coefficient of distribution of the Me_x^+ ...

Card 2/3

SUBMITTED: 09Sep64
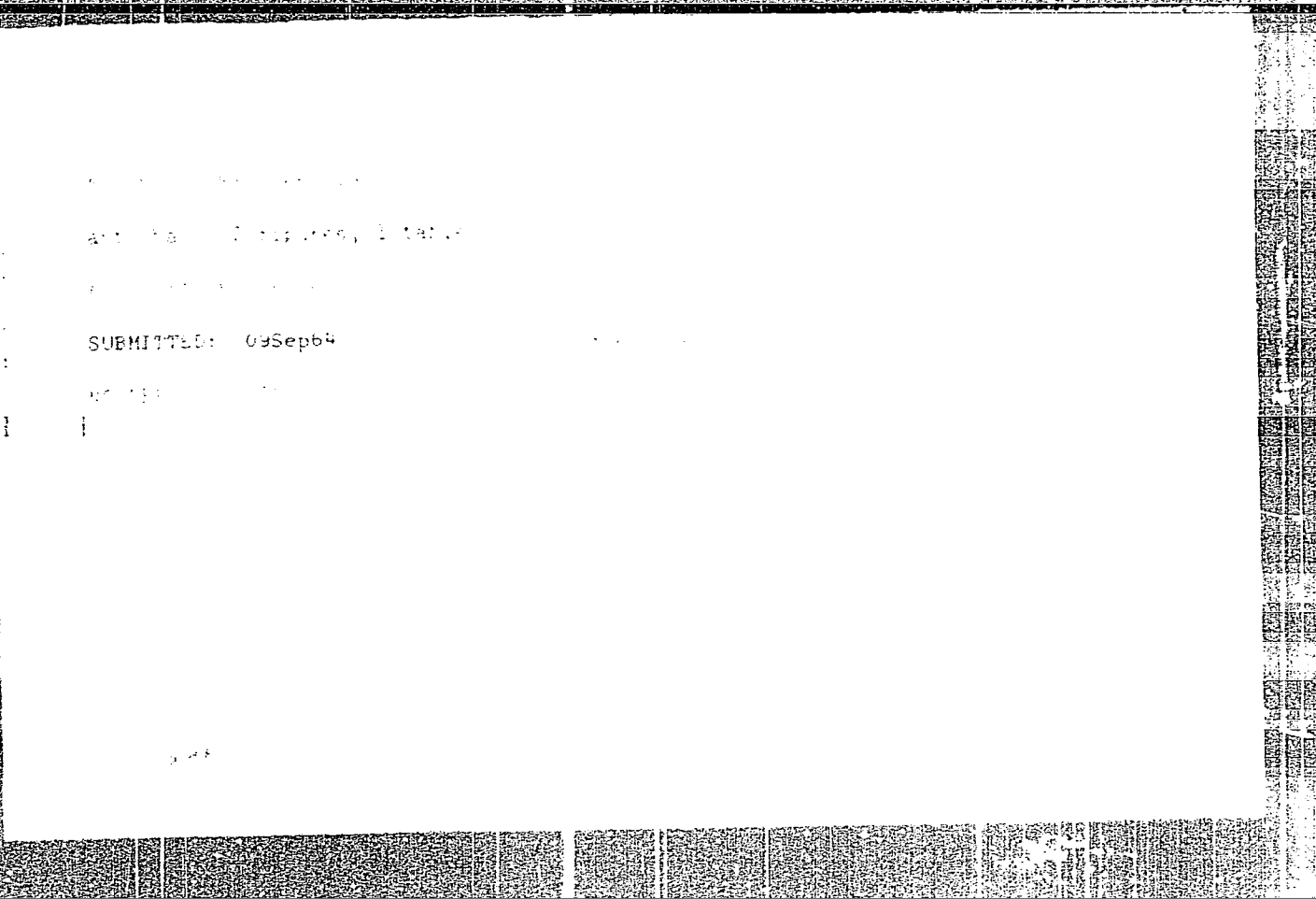
L 02299-67   EWT(m)/T FDN/WE/GD

ACC NR: AT6015199 (A, N)   SOURCE CODE: UR/0000/66/000/000/0087/0095

AUTHOR: Gogitidze, L. D.; Logvinyuk, V. P.; Makarenkov, V. V.;
Malyshev, V. V.; Panchenkov, G. M.; Yakovlevskiy, V. V.

ORG: none

TITLE: Determining nonstationary solubility of gas in hydrocarbon fuels

SOURCE: Metody otsenki ekspluetatsionnykh svoystv reaktivnykh topliv i
smazochnykh materialov (Methods for the performance evaluation of jet
propellants and lubricants). Moscow, Izd-vo Mashinostroyeniye, 1966,
87-95

TOPIC TAGS: petroleum fuel, fuel property, solubility, diffused gas,
applied mathematics, aircraft fuel tank

ABSTRACT: A simple method was worked out and equipment was designed for
determining the solubility and the diffusion coefficient of a gas in
liquid under nonstationary conditions. This involves direct measurement
of the volume of gas dissolved in the liquid (see Fig. 1). Conditions
approximate those in the wing tanks of heavy subsonic aircraft.
Equations given for calculating the nonstationary solubility of gas in a
liquid enable one to calculate the gas concentration according to the

Card 1/3   UDC: 662.753.22:629.13.001.4

L 02299-67

ACC NR: AT6015199

3

depth of the fuel layer and to calculate the total amount of dissolved gas at any time. "....experimental points (showing solubility of CO_2 in hydrocarbon fuel) were provided by Tikhonov, N. I., Vinogradov, Yu. V. and Morozov-Rostovsk, N. V." Orig. art. has: 6 figures and 15 equations.
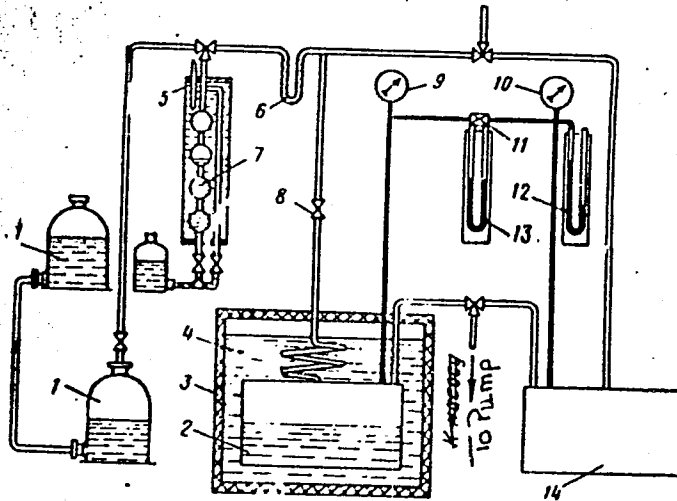
Card 2/3

Fig. 1. Diagram of apparatus for determining diffusion coefficient and
solutility of gases in fuel: 1--reservoir for storing and delivering
gas to be studied, 2--diffusion tank, 3--thermostat, 4--coil, 5--
thermometer, 6--dryer for gas, 7--gas measuring burette VTI-2, 8--needle
valve, 9, 10--vacuum gage, 11-4-way cock, 12--mercury piezometer,
13--slanted water piezometer, 14--calibrated tank.

SUB CODE: 21, 14/ SUBM DATE: 10Dec65/ ORIG REF: 005
Card   3/3 ymb

L 04543-67   EWT(m)/T   FDN/WE/GD

ACC NR: AT6015200   (A,N)   SOURCE CODE: UR/0000/66/000/000/0096/0098

AUTHOR: Borisov, V. D.; Gogitidze, L. D.; Logvinyuk, V. P.; Makarenkov,
V. V.; Malyshev, V. V.; Panchenkov, G. M.; Yakovlevskiy, V. V.

ORG: none

TITLE: Apparatus for determining the amount of gas dissolved in a liquid

SOURCE: Metody otsenki ekspluatatsionnykh svoystv reaktivnykh topliv i
smazochnykh materialov (Methods for the performance evaluation of jet
propellents and lubricants). Moscow, Izd-vo Mashinostroyeniye, 1966,
96-98

TOPIC TAGS: gas analysis, gas analyzer, solubility, petroleum fuel,
LIQUID PROPERTY

ABSTRACT: A simple apparatus for determining the amount of gas dissolved
in a liquid was designed so that it could be used as a gas pipette for
VTI, Orsat or other gas analyzers. A special feature of the apparatus
(see Fig. 1) is the use of an elastic membrane to equalize the pressure
between the measuring burette and the surrounding space, and measurement
of the volume of liberated gases at different pressures and temperatures.
A deviation of 3.5% was found in the measurement of gases separated from
a hydrocarbon fuel. Water and other liquids may be used in the
determinations. Orig. art. has: 1 table and 1 figure.

UDC: 662.753.22:629.13.001.4
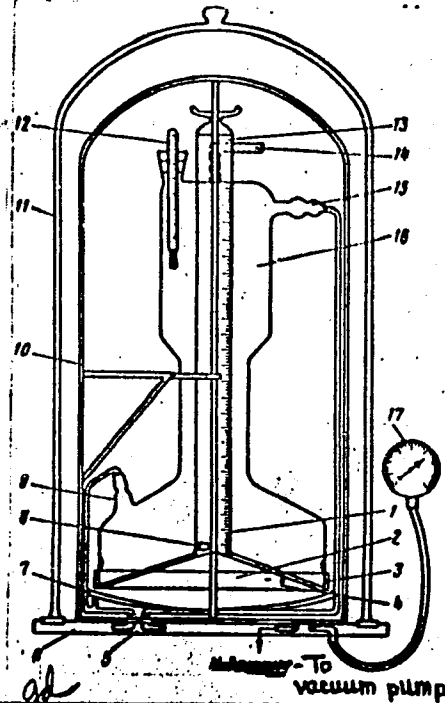
Card 1/2

0453-67

ACC NR: AT6015200

Fig. 1. Diagram of apparatus for determining amount of gas dissolved in liquid: 1--measuring burette, 2--conical funnel, 3--clamp, 4--elastic membrane (double line designates cross section of funnel 2 with membrane lying on it), 5--connector for feeding thermostatic liquid or gas to pressure chamber, 6--base, 7--lower heat shield, 8--activator, 9--connector for feeding gas or liquid, 10--housing, 11--vacuum jar, 12--thermometer, 13--ground glass stopper, 14--channel, 15--connector for withdrawing gas or liquid, 16--housing, 17--vacuum gage.

SUB CODE: 21, 14/ SUBM DATE: 10Dec65

Card 2/2

To vacuum pump

ACC NR: AP6032270 .   SOURCE CODE: UR/0076/66/040/009/2145/2149

AUTHOR: Andreyev, Yu. P.; Semiokhin, I. A.; Panchenkov, G. M.; Utirov, B. U.

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

TITLE: Oxidation kinetics of carbon monoxide containing additives in a silent discharge

SOURCE: Zhurnal fizicheskoy khimii, v. 40, no. 9, 1966, 2145-2149

TOPIC TAGS: oxidation kinetics, carbon monoxide, combustion modifier, nitrogen, argon, helium

ABSTRACT: The mechanism of action of nitrogen, argon, and helium additives on the oxidation of carbon monoxide in a silent discharge has been studied. The experiments were carried out in a closed circulation system described earlier (I. A. Semiokhin, Yu. P. Andreyev, G. M. Panchenkov. Zh. Fiz. khimii, 38, 2076, 1964). The concentration of the additives varied from 4.8 to 60%, which corresponds to a change in the total initial pressure of 315 to 750 mm Hg. The initial pressure of the stoichiometric mixture of $CO + 1/2\ O_2$ was the same in all the experiments, viz., 300 mm Hg. The current was 38 mamp. A kinetic analysis of the CO oxidation reaction was carried out using equations for reversible first-order reactions. On the basis of the experimental data and the kinetic analysis, it was established that argon and helium are

Card 1/2   UDC: 541.124/.128+541.13

. . . . . . .ges and 6 formulas. [WA-68]

SUB CODE: 07, 21/ SUBM DATE: 02Apr65/ ORIG REF: 005/

Card 2/2

ACC NR: AT6015191   EWT(m)/T   FDN/WE/GD

ACC NR: AT6015191   (A,N)   SOURCE CODE: UR/0000/66/000/000/0018/0026

AUTHOR: Gogitidze, L. D.; Makarenkov, V. V.; Panchenkov, G. M.; Pustyrev, O. G.; Yakovlevskiy, V. V.

ORG: none

/4

TITLE: Method of evaluating combustion characteristics of hydrocarbon fuels on a chamber type burner

B+1

SOURCE: Metody otsenki ekspluatatsionnykh svoystv reaktivnykh topliv i smazochnykh materialov (Methods for the performance evaluation of jet propellants and lubricants). Moscow, Izd-vo Mashinostroyeniye, 1966, 18-26

TOPIC TAGS: petroleum fuel, combustion characteristic, combustion kinetics, combustion chamber test, gas turbine engine test

ABSTRACT: The use of a small chamber type diffusion burner (see Fig. 1) for determining completeness of fuel combustion was evaluated. Total fuel consumption in the burner used, scaled down as much as possible while still simulating the combustion chamber in a gas turbine engine, was only 150-200 ml per run. Completeness of combustion was determined with an accuracy of better than 2.5%. There is qualitative agreement between these results and those obtained in an actual gas turbine engine chamber. Orig. art. has: 4 figures and 1 table.

UDC: 662.753.22:629.13.001.4

Card 1/2

Card 2/2   SUB CODE: 21, 147

ACC NR: AP6032270 .   SOURCE CODE: UR/0076/66/040/009/2145/2149

AUTHOR: Andreyev, Yu. P.; Semiokhin, I. A.; Panchenkov, G. M.; Utirov, B. U.

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

TITLE: Oxidation kinetics of carbon monoxide containing additives in a silent discharge 27

SOURCE: Zhurnal fizicheskoy khimii, v. 40, no. 9, 1966, 2145-2149

TOPIC TAGS: oxidation kinetics, carbon monoxide, combustion modifier, nitrogen, argon, helium

ABSTRACT: The mechanism of action of nitrogen, argon, and helium additives on the oxidation of carbon monoxide in a silent discharge has been studied. The experiments were carried out in a closed circulation system described earlier (I. A. Semiokhin, Yu. P. Andreyev, G. M. Panchenkov. Zh. Fiz. khimii, 38, 2076, 1964). The concentration of the additives varied from 4.8 to 60%, which corresponds to a change in the total initial pressure of 315 to 750 mm Hg. The initial pressure of the stoichiometric mixture of CO + 1/2 O_2 was the same in all the experiments, viz., 300 mm Hg. The current was 38 mamp. A kinetic analysis of the CO oxidation reaction was carried out using equations for reversible first-order reactions. On the basis of the experimental data and the kinetic analysis, it was established that argon and helium are

Card 1/2   UDC: 541.124/.128+541.13

ACC NR: AP6032270

inert diluents, while nitrogen is an "energetic catalyst" of the CO oxidation reaction:

$$N_2 + e \rightarrow N_2^*.$$
$$N_2^* + N_2 \rightarrow 2N_2,$$
$$N_2^* + O_2 \rightarrow O^* + O + N_2,$$
$$N_2^* + CO_2 \rightarrow CO_2^* + N_2.$$
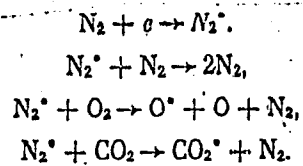
Orig. art. has: 6 figures and 6 formulas. [WA-68]

SUB CODE: 07, 21/ SUBM DATE: 02Apr65/ ORIG REF: 005/

Card 2/2

L 36444-66   EWP(j)/EWT(m)   RM/JW
ACC NR: AP6018073
                                  (A)
                                           SOURCE CODE: UR/0076/66/040/005/1121/1125

AUTHOR: Zetkin, V. I.; Panchenkov, G. M.; Kolesnikov, I. M.; Zakharov, Ye. V.;
Kupriyanov, I. I.

ORG: Moscow Institute of the Petrochemical and Gas Industry im. I. M. Gubkin
(Moskovskiy institut neftekhimicheskoy i gazovoy promyshlennosti)

TITLE: Reactivity of nitrobenzene and its chlorine derivatives. 1. Investigation
of high temperature destructive chlorination

SOURCE: Zhurnal fizicheskoy khimii, v. 40, no. 5, 1966, 1121-1125

TOPIC TAGS: nitrobenzene, nitrogen compound, chlorinated aromatic compound, chlorin-
ated organic compound

ABSTRACT: Destructive chlorination of nitrobenzene, and ortho-, para-, and metha-
chloronitrobenzenes was studied in the 403°-673°K range in the presence and absence
of activated carbon. Glass ampoules containing nitrocompounds with chlorine and
carbon were charged at liquid nitrogen temperature, evacuated, and sealed. Subse-
quently, the ampoules were heated in thermostats for 30 minutes at reaction

Card 1/2

UDC: 541.128

L 36444-66
ACC NR: AP6018073

temperature and cooled to room temperature whereupon the contents were analyzed. In
the presence of activated carbon, the rate of destructive chlorination was found to
be greater than in the absence of activated carbon. The lower the nitrobenzene to
chlorine ratio, the greater was the rate of destructive chlorination. The reactivi-
ty of various chloronitrobenzenes was found to decrease in order ortho>para>metha.
Orig. art. has: 7 figures.

SUB CODE: 07/ SUBM DATE: 13May65/ ORIG REF: 006/ OTH REF: 007

Card 2/2

22

PROCESSES AND PROPERTIES INDEX

Kinetics of the disproportionation of hydrogen in gasolines over aluminosilicate catalysts of various compositions. R. M. Panchenkov and K. V. Topchieva (Moscow State Univ.). *Vestnik Moskov. Univ.* 1946, No. 2, 30–40.—Six catalysts with the SiO_2, Al_2O_3 contents: (I) 100, 0, (II) 90, 10, (III) 84, 16, (IV) 70, 30, (V) 50, 50, (VI) 0, 100, were prepd. by thorough mixing of silica gel and alumina gel, forming into cubes and drying 6–7 hrs. at 40–50°, then 48 hrs. at 170°, and heating in an air stream 4–5 hrs. at 500°; the alumina was prepd. by pptg. $Al_2(SO_4)_3$ in H_2O with NH_4OH, washing until disappearance of SO_4^{--}, and drying 10 hrs. at 30°–40°, then 3–4 hrs. at 50°; the silica gel was prepd. by pouring a 15% soln. of Na silicate into 3 N HCl, in such an amt. that the gel was formed in 10–15 hrs., washing with a continuous jet of distd. H_2O, and drying 24 hrs. in air, then 6 hrs. at 40°–50°. A cracking-gasoline fraction b. 100°–150°, of iodine no. 80, mol. wt. 112, aniline pt. 62, compn.: unsatd. 35, aromatics 12, cycloparaffins 22, paraffins 31 wt. %, passed for 1 hr. at a vol. rate r = 0.7 vol. gasoline/vol. catalyst/hr., at 400°, 350°, and 295°, gave the following final iodine nos. (a) with catalysts I–VI: at 295°, 81, 62, 51, 44, 58, 77; at 350°, 81, 48, 30, 23, 40, 73; at 400°, 82, 41, 24, 16, 38, 65–66. Thus, III and IV are most active; strikingly, the activities of II and V are very near to each other; pure Al_2O_3 is a catalyst, particularly at 400°, while pure SiO_2 is not. The optimum of III and IV is best seen on plots of iodine no. against percentage of Al_2O_3 in the catalyst, showing deep min. at all 3 temp. at about 30% Al_2O_3. By the constancy of k = 2.303 r log i_0/i_t = initial i) on variation of r from 0.4 to 1.5, the reaction is of the 1st order; at 400°, on catalysts II–V, k = 0.4526, 0.821, 1.088, 0.5102. The kinetic law could not be applied to VI, as i remained unchanged from r = 0.5 to 1.0. As a function of temp., log k varies linearly with 1/T; the activation energy of the reaction = 4.3 kcal. over II, III, IV, and V, 7 kcal. over VI. The optimum catalyst IV corresponds to the compn. $Al_2O_3.4SiO_2$ (montmorillonite); if these mols. are assumed to be active centers, one can understand the similarity in activity of II and V, where the preponderantly active $Al_2O_3.4SiO_2$ centers at the surface are dild. and sepd. by an excess of SiO_2 or Al_2O_3, resp. By approx. calcn. according to Kobozev (C..1. 33, 7654), an active point consists of 2 mols. ($Al_2O_3.4SiO_2$), in agreement with Balandin's postulate of 2 mols. of catalyst in hydrogenation.   N. Thon

ASM-SLA   METALLURGICAL LITERATURE CLASSIFICATION

3885. KINETICS OF DISPROPORTIONATION OF HYDROGEN IN GASOLINES OVER ALUMINOSILICATE CATALYSTS OF VARIOUS COMPOSITIONS. Panchenkov, R. M. and Topchieva, K. V. (Vestnik Moskov. Univ., 1946, (2), 39-46; see abstr. in Chem. Abstr., 10 May 1948, vol. 42, 3163).

PANCHENKOV, R. T.

PANCHENKOV, R. T. - "Transpleural Circuitous Operations in Benign and Malignant
   Stenosis of the Esophagus and Cardiovascular System." Sub 24 Nov, 52,
   First Moscow Order of Lenin Medical Inst. (Dissertation for the Degree
   of Candidate in Medical Sciences).

SO: Vechernaya Moskva January-December 1952

PANCHENKOV, R.T., dotsent; KHASPEKOV, G.E., dotsent

Echinococcosis of the heart. Vest.khir. 78 no.1:101-102 Ja '57.
(MIRA 10:3)

1. Iz kafedry khirurgii (zav. kav. - prof. V.R.Braytsev)
TSentral'nogo instituta usovershenstvovaniya vrachey.
(HEART DISEASES, case report
echinococcosis)
(ECHINOCOCCOSIS, case reports
heart)

PANCHENKOV, R.T.,dots. (Moskva, Zubovskiy bul'var, d.14, kv.6)

Technic of transsternal mediastinotomy. Vest.khir. 81
no.11:47-50 N '58.   (MIRA 12:3)

1. Iz 1-y kafedry khirurgii (zav. - prof. V.R.Braytsev)
TSentral'nogo instituta usovershenstvovaniya vrachey i
TSentral'noy klinicheskoy bol'nitsy Ministerstva putey
soobshcheniya imeni N.A.Semashko (nach. - V.P.Akopov).
                (MEDIASTINUM--SURGERY)

PANCHENKOV, R.T., dots. (Moskva, Zubovskiy bul'var, d.14, kv.6)

Atresia of the small intestine in a newborn. Vest.khir, 80 no.5:109-110
My '58   (MIRA 11:7)

1. Iz kafedry khirurgii (zav. - prof. V.R. Braytsev) TSentral'nogo
instituta usovershenstvovaniya vrachey na baze TSentral'noy klinicheskoy
bol'nitsy Ministerstva putey soobshcheniya im. Semashko (nach. - F.L.
Leont'yev).
          (INTESTINE, SMALL, abnormalities,
              atresia in newborn (Rus))

PANCHENKOV, R.T., dots. (Moskva, Zubovskiy bul'var, d.14, kv.6)

Cancer of the small intestine. Vest. khir. 80 no.2:111-113 F '58.
(MIRA 11:3)

1. Iz kafedry 1-y khirurgii (zav.-prof. V.R.Braytsev) TSentral'nogo
instituta usovershenstvovrniya vrachey na baze TSentral'noy
klinicheskoy bol'nitsy Ministerstva putey soobshcheniya (nach. F.L.
Leont'yev)
            (INTESTINE, SMALL, neoplasms
               case reports (Rus)

PANCHENKOV, R.T., dots.

Surgical approach in operations for adhesive pericarditis. Khirurgiia, Moskva 34 no.11:10-12 N '58.   (MIRA 12:1)

1. Iz khirurgicheskogo otdeleniya (zav. - dots. R.T. Panchenkov) gospitalya Sovetskogo Krasnogo Kresta v Pekine.
        (PERICARDITIS, ADHESIVE, surg.
                pericardeotomy & cardiolysis, surg. approach (Rus))

PANCHENKOV, R.T.,dots.

A new raspatory and guide for sawing the sternum. Khirurgiia
35 no.2:131-132 F '59.   (MIRA 12:5)

1. Iz Gospitalya Sovetskogo Krasnogo Kresta (dir.F.L.Leont'yev)
v Pekine.
              (STERNUM, surgery,
                   raspatory & guide (Rus))

PANCHENKOV, R. T. and ROZANOV, B. S.   (Moscow)

Chirurgie du pancreas dndocrine.

report submitted for the 19th I Congress of the Society of Surgeons,

Dublin, Ireland, 2-9 Sept 1961.

PANCHENKOV, R.T., dotsent

Problem of malignant adenomas of the insular tissue of the
pancreas. Khirurgiia 40 no.12:54-56 D '64.   (MIRA 18:3)

1. 1-ya kafedra klinicheskoy khirurgii (zav.- prof. B.S. Rozanov)
TSentral'nogo instituta usovershenstvovaniya vrachey na baze
Klinicheskoy bol'nitsy imeni Botkina (glavnyy vrach - dotsent
Yu.G. Antonov), Moskva.

PANCHENKOV, R.T.

Surgical treatment of islet-cell tumor of the pancreas causing
hypoglycemia. Vest. khir. no.10:20-26 '64.

(MIRA 19:1)

1. Iz 1-y kafedry klinicheskoy khirurgii (zav. - prof. B.S. Rozanov)
TSentral'nogo instituta usovershenstvovaniya vrachey (rektor - M.D.
Kovrigina) Ministerstva zdravookhraneniya SSSR na baze klinicheskoy
bol'nitsy imeni Botkina (glavnyy vrach - dotsent Yu.G. Antonov),
Moskva.

PANCHENKOV, R.T., dotsent

Recurrences of cancer of the esophagointestinal anastomosis
following gastrectomy. Khirurgiia 40 no.8:77-78 Ag '64.

(MIRA 18:3)

1. 1-ya kafedra klinicheskoy khirurgii (zav. - prof. B.S.
Rozanov) TSentral'nogo instituta usovershenstvovaniya vrachey
na baze Klinicheskoy bol'nitsy imeni S.P. Botkina (glavnyy vrach
Yu.G. Antonov), Moskva.

PANCHENKOVA, E.F.

Investigations of conditioned reflexes in guinea pigs in ontogenesis. Zh. vys. nerv. deiat. 5 no.6:873-880 N-D '55. (MLRA 9:3)

1. Laboratoriya sravnitel'nogo ontogeneza nervnoy sistemy Instituta normal'noy i patologicheskoy fiziologii AMN SSSR.
    (REFLEX, CONDITIONED,
        age factor in form. in guinea pigs)
    (AGE, physiology,
        age factor in conditioned reflex form. in guinea pigs)

3472. PANTCHENKOVA E. F. *Development of conditioned reflexes in white rats in ontogenesis (Russian text) Ž.VYŠČ.NERV. DEJATEL. 1956, 6/2 (312-318) Graphs 2 Tables 5

Motor defensive conditioned reflexes to acoustic stimuli were elaborated in young rats; the unconditioned reinforcement was an electric shock to the skin near the animal's ear; the conditioned reaction was shaking of the head or general movements of the whole body. It was found that the reflexes could be established in young rats not sooner than 10-15 days after birth; their elaboration was difficult and more prolonged than in older rats (17-19 days after birth). The differentiation of acoustic stimuli in young rats was rather difficult and the full development of differentiation was possible only after about 4 months. The extinction of defensive conditioned reflexes needed 62-112 trials without reinforcement in rats aged 2-3 weeks.

Wyrwicka - Warsaw

PANCHENKOVA, E. F. Cand Med Sci -- (diss) " Comparative physiological studies of the conditioned defensive motor reflexes in animals in ontogenesis". Mos,1957. 17 pp incl.cover, 20 cm. (Acad Med Sci USSR) 110 copies (KL,10-57,105)

Card 1/1

PARIN, V. V.; DAVYDOV, B. I.; PANCHENKOVA, E. F.

PANCHENKOVA E. F.

"The results of the investigations of the biological influence of some factors connected with cosmic flights."

report submitted for the 15th Intl Astronautical Congress, Warsaw, 7-12 Sep 64

PARIN, V. V.; DAVYDOV, B. I.; PANCHENKOVA, E. F.

"The results of the investigations of the biological influence of some factors connected with cosmic flights."

report submitted for 15th Intl Astronautical Cong, Warsaw, 7-12 Sep 64.

ACCE...

SOURCE: Kosmicheskiye issledovaniya, v. ..., no. ..., ...

physical endurance, simulation test, rat, mouse, space flight ...

Access.

... ... animals were exposed to centrifu-

to e...

protons: ... ... cm^{-2} sec^{-1}. The animals were then

7,00—700 ...

variation in the ... ...
Changes in the ... of centrifuged animals to physical strain

Card 2/3

I 11/001 65
ACCESS ON NO   AP406

Card 3/3