

69662

S/180/60/000/02/025/028

E071/E135

Mechanically Strong Aluminonickel Catalyst for the Process of Destructive Hydrogenation

precipitation. The activity of the catalysts prepared was tested under standard conditions of destructive hydrogenation at a moderate pressure (Ref 1) of sulphurous Tuymazin crude oil and compared with that of an industrial aluminomolybdenum catalyst. The experimental results are given in Table 6. It was found that in respect of their activity aluminonickel catalysts are not inferior to industrial aluminomolybdenum catalyst Nr 7360: the yield of liquid products amounted to 87-90%, the yield of coke to 2.7-3.8% and the degree of desulphurization to 76-88%. It is concluded that aluminonickel catalyst prepared under optimum conditions possesses satisfactory mechanical properties and activity for the process of destructive hydrogenation under a moderate pressure (30 atm). There are 6 tables and 7 references, of which 5 are Soviet, 1 is English and 1 is German.

Card
3/3

KATSOBASHVILI, Ya.R.; KURKOVA, N.S.; LIKHOBABENKO, V.S.; LEVITSKIY,
M.A.; GOLOSOV, S.A.; MASOLOVA, F.A.; MAZAROV, G.I.

Apparatus for washing filter residues of high hydraulic
resistance. Khim.prom. no.4:340 Je '60.

(MIRA 13:8)

(Filters and filtration)

KATSO BASHVILI, Ya.R. (Moskva); KURKOVA, N.S. (Moskva); LEVITSKIY, E.A.
(Moskva); LIKHOBABENKO, V.S. (Moskva); MASOLOVA, F.A. (Moskva)

Preparing a mechanically resistant alumina-molybdenum catalyst.
Izv. AN SSSR. Otd. tekhn. nauk. Ser.1 topl. no.5:234-238 S-O '60.
(Catalysts) (Molybdenum compounds)

S/078/60/005/012/006/016
B017/B064

AUTHORS: Katsobashvili, Ya. R., Kurkova, N. S., Levitskiy, E. A.

TITLE: Stability of the Hydroxide Precipitate of Pentavalent Molybdenum at Different pH Values of the Medium

PERIODICAL: Zhurnal neorganicheskoy khimii, 1960, Vol. 5, No. 12, pp. 2681--2686

TEXT: The effect of the pH of the precipitating medium upon the dissolution process of molybdenum(V)hydroxide was investigated. The solutions of pentavalent molybdenum were prepared by reducing hydrochloric ammonium molybdate solutions by metallic aluminum. Molybdenum(V)hydroxide was precipitated from these solutions at pH 5.0-6.5. At pH 8-10, molybdenum(V)hydroxide is dissolved again. The potentiometric titration curve of Mo^{5+} solutions is given in Fig. 1. The dissolution of molybdenum(V)hydroxide in alkaline medium was found to be due to the oxidation of Mo^{5+} to Mo^{6+} . Molybdenum(V)hydroxide is dissolved at pH higher than 7.

Card 1/2

Stability of the Hydroxide Precipitate of
Pentavalent Molybdenum at Different pH Values
of the Medium

S/078/60/005/012/006/016
B017/B064

The dissolution of molybdenum(V)hydroxide is independent of time and temperature. The pH is, however, the primary factor. When heating molybdenum-(V)hydroxide from 20 to 50°C, it is rapidly dissolved; when the temperature is further increased to 70°C, no essential change of the dissolution rate occurs. At pH below 7, the precipitation of molybdenum(V)hydroxide is quantitative. The dissolution rate of molybdenum(V)hydroxide is independent of the ammonium chloride concentration in the solution. On the basis of the results obtained, a new procedure of preparing thermostable aluminum-molybdenum catalysts with good mechanical strength is suggested. There are 5 figures, 2 tables, and 13 references: 9 Soviet and 2 German.

SUBMITTED: September 30, 1959

Card 2/2

KATSOBASHVILI, Ya.R.; KURKOVA, N.S.; LIKHOBABENKO, V.S.; LEVITSKIY, E.A.;
KUZ'MINA, T.N.; KUKHTICHEVA, V.F.; MOSOLOVA, F.A.

Preparation of mechanically strong catalysts based on aluminum
oxide. Trudy Inst. nefti 14:160-186 '60. (MIRA 14:5)

(Catalysts)
(Aluminum oxide)

5-1190

AUTHORS: Katsobashvili, Ya. P., Karkash, N. S., Lavinsky, M. A.

TITLE: Brief Communications. Sublimation of Molybdenum Oxide From Alumino-Molybdenic Catalysts

PERIODICAL: Zhurnal prikladnoy khimii. 1968. Vol. 41, No. 3, pp 734-736 (USSR)

ABSTRACT: Alumino-molybdenic catalysts 3M and 4M prepared by joint precipitation, and catalysts 3M prepared by separate precipitation of aluminum hydroxide and lower valencies molybdenum, sustained, almost sublimation or physical evaporation, after 10 hr heating at 800° C or at rapid heating to 800° C. Catalysts 3M to 4M prepared by saturating aluminum hydroxide with ammonium molybdate, and commercial catalyst 3M, similarly prepared from aluminum oxide, lost on sublimation a considerable amount of the catalyst. Yield content of a short heating to above 800° C. The catalysts become caked and completely lost their activity on sublimation.

Card 1/2

Brief Communications. Sublimation of
Molybdenum Oxide From Alumino-Molybdenic
Catalysts

1959
Sov. Phys. Chem.

There are 6 references, 1 U.S.S.R. reference. The U.S.
reference is A. A. Borikov, *Chem. Abstr.*, 54, 1959, 1959
Progr., 44, 3, 1959 (1958).

SUBMITTED: April 24, 1959

Card 2/2

KATSOBASHVILI, Ya.R.; KURKOVA, N.S.; LIKHOBABENKO, V.S.; LEVITSKIY, E.A.;
KUZ'MINA, T.N.; KUKHTICHEVA, V.F.; MASOLOVA, F.A.

Effect of the conditions under which the hydroxide precipitates on
the mechanical durability of aluminum oxide. Izv. AN SSSR. Otd.
khim. nauk no.2:245-250 F '61. (MIRA 14:2)

1. Institut neftekhimicheskogo sinteza AN SSSR.
(Alumina)

KATSOBASHVILI, Ya.R.; KURKOVA, N.S.; LEVITSKIY, E.A.; ROMANOVSKIY, B.V.

Preparation of active spherical aluminum oxide. Khim.prom. no.1:
26-30 Ja '62. (MIRA 15:1)

1. Institut neftekhimicheskogo sinteza AN SSSR.
(Aluminum oxide)

BELIKOV, P.S., doktor biologicheskikh nauk, prof.; MOTORINA, M.V., kand.
biologicheskikh nauk; KURKOVA, Ye.B., laborantka.

Using the GIP-5 infrared gas analyser for determining the intensiveness of photosynthesis. Izv. TSKhA no.3:30-39 '60.

(Photosynthesis) (Infrared rays)

(MIRA 14:4)

BELIKOV, P.S., doktor biologicheskikh nauk, prof.; NOTORINA, M.V.,
kand.biologicheskikh nauk; KURKOVA, Ye.B., laborant

Intensity of photosynthesis in various Triticum species.

Izv. TSKhA no.5:44-54 1961.

(MIRA 14:12)

(Photosynthesis)

ANDREYEVA, I.N.; KURKOVA, Ye.B.

Oxidative phosphorylation in the mitochondria of corn roots.
Fiziol.rast. 12 no.4:584-590 J1-Ag '65.

(MIRA 18:12)

1. Institut fiziologii rasteniy imeni K.A.Timiryazeva AN SSSR,
Moskva. Submitted June 26, 1964.

KURKOVSKAYA, M.V.

Some discrepancies of "Regulations." Meteor. i gidrol. no.10:
52-53 N-D '53. (WIRA 8:9)

(Winds)

KARABOSKAYA, P. I.

11(4)

2 3

PHASE I BOOK EXPLOITATION SOV/2925

Baku. Azerbaydzhanskiy nauchno-issledovatel'skiy institut nefte-
pererabatyvayushchey promyshlennosti imeni V. V. Kuybysheva.

Sbornik trudov, vyp. 2. (Collection of Works, No. 2) Baku,
Aznefteizdat, 1958. 373 p. Errata slip inserted. 500
copies printed.

Additional Sponsoring Agency: Azerbaydzhan. Ministerstvo neftyanoy
promyshlennosti.

Ed. of Publishing House: T.B. Al'tman; Editorial Board: V.S. Aliyev,
Candidate of Chemical Sciences, V.S. Gutrya, Doctor of Chemical
Sciences, A.M. Kuliyyev, Doctor of Chemical Sciences, N.M. Indukov,
Candidate of Technical Sciences, V.Ya. Manumyan, Candidate of
Chemical Sciences, F.G. Suloymanova, Candidate of Technical
Sciences, A.M. Levshina, Candidate of Chemical Sciences, N.B. Al'
tman, Candidate of Chemical Sciences, I.M. Orudzheva, Candidate
of Technical Sciences, M.M. Melik-Zade, Candidate of Chemical
Sciences.

Card 1/8

Collection of Works, No. 2

SOV/2925

PURPOSE: This collection of articles is intended for chemical engineers, technicians, and refiners concerned with advanced methods of petroleum conversion.

COVERAGE: The collection presents an analysis of different types of crudes extracted in Azerbaydzhan and of the products recovered from these crudes through petroleum conversion processes. The dewatering, desalting and demulsifying of crudes is described and the suitability of these crudes for the recovery of diesel fuels is discussed. Results of catalytic cracking performed over a fluidized bed synthetic catalyst and the chemical composition of gasoline produced by two-stage catalytic cracking are analyzed. Attrition and deactivation of catalysts as well as catalyst circulation in a hyper-flow system are reviewed. Various lube oil additives and the production of different types of oils and of carbon black are outlined. References accompany individual articles.

TABLE OF CONTENTS:

Card 2/8

Collection of Works, No. 2

SOV/2925

- Ashumov, G.G., and M.R. Misayev. Nitrogen Compounds in Crudes From the Kalinskaya Oil Deposits on the Apsheron Peninsula 5
- Ashumov, G.G., and S.I. Kurkovskaya. Nitrogen Compounds in Azerbaydzhani Crudes 12
- Masumyan, V.Ya., M.K. Daniyelyan, K.I. Antonova, Kh.M. Sultanova, and A.S. Arustamov. Preliminary Treatment of Baku Crudes for Refining 16
- Agayeva, S.M., V.V. Yermekhin, A.G. Ismaylov, A.V. Kudinov (deceased), L.A. Kuzriyanov, M.N. Nadirova, A.B. Terteryan (deceased), S.A. Terteryan. Azerbaydzhani Crudes as a Raw Material Source for Diesel Fuels 34
- Nasirov, A.B., V.S. Gutyraya, and D.I. Zul'fugarly. Effect of Certain Conditions of Catalytic Cracking Performed Over a Fluidized Synthetic Silica Alumina Catalyst on the Formation of Aromatic Hydrocarbons in Gasoline 44

Card 3/8

Collection of Works, No. 2

SOV/2925

Nasirov, A.B., V.S. Gulyarova, and D.I. Zul'fugarly. Chemical Composition of Gasoline Produced by Two-stage Catalytic Cracking 70

Aliyev, V.S., B.B. Alifman, and B.P. Kasimova. Role of Heat Carriers in Thermal Contact Decomposition of Heavy Petroleum Residues 77

Yefimova, S.A., S.I. Polpanova, A.A. Mamedova, V.S. Frolova, and A.B. Mekhraliyev. Study of the Deactivation of a Powdered Silica Alumina Catalyst During the Cracking of Distillates From Non-sulfurous Crude Oil 86

Ashumov, G.G., R.Sh. Kuliyyev, K.I. Antonova, T.S. Stepanyan, Ye.N. Kitushina, and Sh.V. Veliyev. Study of Petroleum From the Upper Kalinskaya Area Carried out With a View to Producing Aviation Lube Oil 99

Kuliyyev, A.M., R.Sh. Kuliyyev, M.M. Dreyzina, K.I. Antonova, Ye.N. Kikushina, N.I. Chikarava, and M.I. Aliyev. Study of Petroleum From the "Neftyanyye Kamni" Deposits Made With a View to Producing Lube Oil Distillates 106

Card 4/8

Collection of Works, No. 2

SOV/2925

- Kuliyev, A.M., R.Sh. Kuliyev, M.M. Dreyzina, K.I. Antonova,
Ye.N. Kitushina, N.I. Chikareva, and M.I. Aliyev. Production of
Residual Oils From Petroleum Recovered at the "Neftyanyye Kamni"
Deposits 131
- Kuliyev, A.M., R.Sh. Kuliyev, M.M. Dreyzina, R.L. Margolina, and
M.R. Musayev. Application of the De-asphalting Process in the
Production of Aviation Lubricating Oil MK-22 144
- Kuliyev, A.M., I.M. Orudzheva, M.M. Mirdzhavadova, S.N. Loginova,
and M.R. Musayev. Production of Oil From Paraffin Crudes by
Deparaffinization With Carbonide 156
- Bashayev, V.Ye., and I.I. El'ovich. Problem of Making Universal
Automobile Lubrication Oils 173
- Orudzheva, I.M., and M.M. Mirdzhavadova. Investigation of Lube Oil
Fractions and Lubrication Oil Recovered From Standard Surakhany
Petroleum 179

Card 5/8

Collection of Works, No. 1

SOV/2925

Kuliyev, A.M., M.I. Aliyev, and R.Sh. Kuliyev. Response of Lubrication Oils With Different Hydrocarbon Composition to Additives 192

Kuliyev, A.M., I.M. Orudzhova, G.A. Zeynalova, D.A. Akhmed-Zade, A.A. Abdliyev, A.M. Lashina, and K.I. Sadykhov. Investigations Made in the Field of Synthesis and Admixture of Additives to Lubrication Oils 207

Kuliyev, A.M., A.M. Lashina, and M.I. Aliyev. Investigations in the Field of Synthesis of Depressors and the Study of Their Effect on Different Oils and Hydrocarbon Groups Extracted From These Oils 225

Kuliyev, A.M., D.A. Akhmed-Zade, and K.I. Sadykhov. Synthesis and Study of Automobile and Tractor Lubrication Oil Detergents Synthesized From Salts of Sulfonic Acid 244

Suleymanova, F.G. Ways of Improving the Quality of Diesel Fuels 256

Card 68

Collection of Works, No. 9

SOV/2925

- Yakovlev, V.D., and N.I. Perceva. Methodology of Analyzing Lubrication Oil Additives 271
- Melik-Zade, M.M., A.G. Khamarova, M.R. Musayev, V.V. Subkhanverdikhany, and E.P. Paradshev. Problem of Appraising the Stability of Additive AshII-7 in Diesel Oil by Means of Radioactive Isotopes 279
- Safonov, V.A., N.M. Indukov, I.S. Shevtsov, S.M. Markaryan, and M.I. Rustanov. Mastering the Technique of Thermal Conversion of Petroleum-bearing Sands of Klimakinsk Carried out Over a Fluidized Bed 288
- Indukov, N.M., M.F. Kabanova, N.F. Panyeva, and F.A. Kagramanova. Treatment of Distillates of Automobile Lubrication Oils 10 and 18 With Spent Sulfuric Acid From Alkylation 308
- Iscaylov, I.M., and G.N. Alayev. Systems for Control by "Hyper-flow" Transport 318
- Card 7/8

SOV, 2925

Collection of Works, No. 1

Grigoryan, Kh.A., Kh.M. Khatiyev, Z.E. Aliyev, and B.A. Pinsker.
 Study of the Decreased Adsorption Capacity of Activated Charcoal
 Containing Hydrocarbons of Various Types on Its Surface 325

Aliyev, Z.E. Study of the Moisture Capacity of Carbon Black
 Regarded as a Degree of Oxidation 346

Aliyev, Z.E. Determination of the Elementary Composition of
 Carbon Black on the Basis of the Quantity and Composition of
 Volatile Substances 355

Grigoryan, Kh.A., M.A. Gerdjik, Z.E. Aliyev, B.A. Pinsker, and
 T.P. Huseynov. Studies of Black Produced from Gas with High Content
 of Air Enriched with Liquid Hydrocarbons 362

AVAILABLE: LIBRARY OF CONGRESS (TF690.A1B33)

TM/jb
1-26-60

Card 1 of 1

ASHUMOV, G.G.; KURKOVSKAYA, S.I.

Nitrogen compounds in Azerbaijan crudes. Sbor.trud.AzNII NP
no.2:12-15 Ag '58. (MIRA 12:6)
(Azerbaijan--Petroleum--Analysis)
(Nitrogen compounds)

ASHUMOV, G.G.; NASIROV, A.B.; KURKOVSKAYA, S.I.

Investigating high molecular weight ~~components~~ of the Artemov asphaltic petroleum. Azerb.khim.zhur. no.6:13-20 '59. (MIRA 14:9)
(Petroleum--Analysis)

KURKOVSKAYA, Ye.

The first Soviet turbine-engined bus. MTO 2 no.3:24 Mr '60.
(MIRA 13:6)

(Motorbuses)

ABRAMOV, M.A.; ALIVERDIZADE, K.S.; AMIROV, Ye.M.; ARENSON, R.I.; ARSEN'YEV, S.I.; BAGDASAROV, R.M.; BAGDASAROV, G.A.; BADAMYANTS, A.A.; DANIYEL'YAN, G.N.; DZHAFAROV, A.A.; KAZAK, A.S.; KERCHENSKIY, M.M.; KONTUKHOV, S.I.; KRASNOBAYEV, A.V.; KURKOVSKIY, A.I.; LALAZAROV, G.S.; LARIONOV, Ye.P.; LISTENGARTEN, M.Ye.; LIVSHITS, B.L.; LISIKYAN, K.A.; LOGINOVSKIY, V.I.; LYSENKOVSKIY, P.S.; MOLCHANOV, G.V.; MAYDEL'MAN, N.M.; OKHON'KO, S.K.; ROMANIKHIN, V.A.; ROSIN, I.I.; RUSTAMOV, E.M.; SARKISOV, R.T.; SKRYPNIK, P.I.; SOBOLEV, N.A.; TARATUTA, R.N.; TVOROGOVA, L.M.; TER-GRIGORYAN, A.I.; USACHEV, V.I.; FAYN, B.P.; CHICHEROV, L.G.; SHAPIRO, Z.L.; SHEVCHUK, Yu.I.; TSUDIK, A.A.; ABUGOV, P.M., red.; MARTYNOVA, M.P., vedushchiy red.; DANIYEL'YAN, A.A.; TROFIMOV, A.V., tekhn.red.

[Oil field equipment; in six volumes] Neftianoe oborudovanie; v shesti tomakh. Moskva, Gos.nauchno-tekhn.izd-vo neft. i gornotoplivnoi lit-ry. Vol.3. [Petroleum production equipment] Oborudovanie i instrument dlia dobychi nefti. 1960. 183 p.
(MIRA 13:4)

(Oil fields--Equipment and supplies)

LACHINOV, S.S., kandidat tekhnicheskikh nauk; KURKOVSKIY, V.A.

Problems relative to the theory and practice of the synthesis
of ammonia. Khim.nauka i prom. 1 no.6:610-619 '56. (MLBA 10:3)
(Ammonia)

S/001/60/000/021/009/018
A005/A001

Translation from: Referativnyy zhurnal, Khimiya, 1960, No. 21, p. 50, # 83987

AUTHORS: Lachinov, S. S., Kuznetsov, L. D., Kurkovskiy, V. A., Shishkova, V.N.,
Dmitriyenko, L. M., Lyudkovskaya, B. G.

TITLE: The Activity and Structure of Iron Catalysts of the Ammonia Synthesis
With Three and Four Activators

PERIODICAL: Probl. kinetiki i kataliza, 1960, Vol. 10, pp. 199-203

TEXT: The activity of an iron catalyst activated by $K_2O - CaO - Al_2O_3$ is higher with respect to the NH_3 synthesis than the activity of an iron catalyst activated by $K_2O - Al_2O_3$ and $K_2O - CaO - Al_2O_3 - SiO_2$ (mainly on account of the higher specific activity). If a nitrogen-hydrogen mixture is applied with poisons containing oxygen, the activity is higher for an iron catalyst with four activators. An iron catalyst activated by $K_2O - CaO - Al_2O_3 - SiO_2$ is distinguished in comparison with an iron catalyst activated by $K_2O - CaO - Al_2O_3$ by a greater surface, higher dispersion degree, and finer porosity. In iron catalysts with an intricate activator composition, the alkali and alkali earth activators increase

✓

Card 1/2

S/081/60/000/021/009/018
A005/A001

The Activity and Structure of Iron Catalysts of the Ammonia Synthesis With Three and Four Activators

the specific activity of the iron catalyst but lead to a decrease in surface while the amphoteric and weak acid refractory oxides decrease the specific activity but increase the surface.

From the summary of the authors

Translator's note: This is the full translation of the original Russian abstract.

Card 2/2

"APPROVED FOR RELEASE: 06/19/2000

CIA-RDP86-00513R000927720009-5

APPROVED FOR RELEASE: 06/19/2000

CIA-RDP86-00513R000927720009-5"

KURKOVSKIY, V.P.; POLIKRPOV, A.F.; SHINKAREV, M.N.

Morphological modifications of lumbosacral intervertebral ganglia following high ligation of the abdominal aorta. *Biul. eksp. biol. i med.* 42 no.9:64-67 S '56. (MLBA 9:11)

1. Iz neyromorfologicheskoy laboratorii (rukovoditel' - prof. V.P. Kurkovskiy) kafedry fiziologii voyennogo truda (nach. - prof. M.P. Brestkin) Voenno-meditsinskoy ordena Lenina akademii imeni S.M. Kirova, Leningrad. Predstavlena akademikom N.N. Anichkovym.

(GANGLIA, AUTONOMIC, physiology,
lumbosacral intervertebral ganglia, eff. of ligation of
abdom. aorta (Rus))

(AORTA, physiology,
eff. of ligation of abdom. portion on intervertebral
lumbosacral ganglia (Rus))

KURKOVSKIY, V.P.

20-5-56, '67

AUTHOR
TITLE

KURKOVSKIY, V.P.

On the Pathological Changes occurring in the Interoceptors of the Orifices of Venae Cavae. (K voprosu a patologicheskikh izmeneniyakh interotseptorov ustiy polykh ven.- Russian) Doklady Akademii Nauk SSSR 1957, Vol 113, Nr. 5, pp 1147-1149 (U.S.S.R.)

PERIODICAL

ABSTRACT

During the last years several works were published which treated the changes of sensory nerve endings developing in the orifices of venae cavae on the occasion of a lack of oxygen in animal organism. Earlier works of the author showed that in the case of a serious lack of oxygen in the air inhaled, or in case of circulatory disturbances essential morphologic changes occur in the sensory (intervertebral-)ganglia. For the right classification of the pathology of receptors it was important to know whether, in the case of normal animals, they always have a clear structure corresponding to standards. This is the subject of the present work. Only male cats were selected as experimental subjects in order to eliminate probably disturbing influences of possible pregnancy. Mainly the preterminal arborizations were found to have pathologic fusiform thickenings. Besides these there was a great number of unchanged fibres with the same animals. There is, therefore, no doubt that with normal animals in one part of the nervous fibres and of the

CARD 1/3

20-5-56/67

On the Pathological Changes occurring in the Interoceptors
of the Orifices of Venae Cavae.

sensory endings in the wall of the venae cavae (and probably also of other organs) single sensory nerve cells in various sensory ganglia degenerate and perish with growing age (in the ganglion nodosum of the nervus vagus, in spinal and other ganglia). This kind of change is brought into connection with the diseases which had occurred in the course of life as well as with the functional wearing and prostration of the respective cells. It is self-evident that also the final apparatus have to share the fate of these diseased and perished neurons. The findings of the author show that it is necessary to be careful in classifying the pathology of receptors under various injurious influences on animal organism, as in some receptors analogous changes can happen independent of these influences. As regards the degeneration of the interoceptors of the venae cavae under the influence of gravity hormones, the author found similar changes with animals which are known to be excluded from such influences. This would contradict above mentioned opinion.
(1 illustration (from 3 pictures), 6 citations from Slavic publications.)

CARD 2/3

20-5-56/67

On the Pathological Changes occurring in the Interoceptors
of the Orifices of Venae Cavae.

ASSOCIATION: Army-Medical Academy "S.M. KIROV"
PRESENTED BY: L.A. ORBELI, Member of Academy.
SUBMITTED: 5.1. 1957.
AVAILABLE: Library of Congress.

CARD 3/3

SOV/26-123-1-45/88

17(4) 17(1)
AUTHORS:

Kurkovskiy, V. P., L'vovskiy, A. M.

TITLE:

On the Phenomena of Neuronophagia in Intervertebral Ganglia of Rabbits, Observed in the Course of Experimental Ischemia

PERIODICAL:

Doklady Akademi nauk SSSR, 1959, Vol 124, Nr 1, pp 169 - 171 (USSR)

ABSTRACT:

A strong constriction of the ventral aorta causes in rabbits irreversible changes of the nerve cells in lumbar-sacral intervertebral ganglia (Refs 1-3). This has, however, an effect apparently too strong which leads not only to the necrobiosis of the nerve cells but also restricts the productive transformation of the cell elements of the structure of corresponding ganglia. The authors carried out a temporary (6-12 hours) compression of the aorta instead of the constriction in order to cause irreversible changes of a certain number of nerve cells on the one hand and to warrant the necessary blood supply of the surrounding milieu on the other hand. The aorta was clamped outside the abdomen directly under the branch of the left renal artery. The clamp was removed after 6-12 hours, thus the blood supply was restored.

Card 1/3

On the Phenomena of Neuronophagia in Intervertebral Ganglia of Rabbits, Observed in the Course of Experimental Ischemia SOV/26-128-1-45, 58

The wound was sutured. The animals were killed 1-8 days after the removal of the clamp. The section material (spinal ganglia L₃ - S₂) was treated according to the method of Nissl and partly with silver according to Kakhai'. The investigation results differed considerably from the data obtained by the constriction of the aorta. This held in the case of nerve cells as well as of satellites. The investigations showed that the satellites play an important role in reparative processes. It was found that phagocytal properties are characteristic of them. Nageotte showed that the latter are able to change into neuronophages in loco as well as in the transplantation of ganglia, if their capacity of such transformations was not lamed by noxious agents which caused the dying of nerve cells in the ganglia. These data confirm the assumption of B. S. Doynikov (Refs 9 and 10) concerning a possible formation of macrophages from Schwann's cells which are homologues of satellites of sensitive nerve ganglia in the degeneration of peripheral nerves. Furthermore these data approximate the peripheral neuroglia to the central one the elements of

Card 2/3

On the Phenomena of Neuronophagia in Intervertebral Ganglia of Rabbits, Observed in the Course of Experimental Ischemia

SOV/20 128-1 41/15

which can be transformed into granular balls under pathological conditions. There are 4 figures and 10 references, 4 of which are Soviet.

ASSOCIATION: Leningradskiy nauchno-issledovatel'skiy neyrokhirurgicheskiy institut im. A. L. Polenova (Leningrad Scientific Research Institute of Neurosurgery named A. L. Polenov)

PRESENTED: May 18, 1959, by N. N. Anisikov, Academician

SUBMITTED: May 13, 1959

Card 3/3

KURKOVSKIY, V.P.

Morphological changes in the central and peripheral nervous system in dogs in acute radiation sickness. Arkh. pat. 22

no. 4:15-21 '60.

(MIRA 14:1)

(NERVES, PERIPHERAL) (NERVOUS SYSTEM) (RADIATION SICKNESS)

MURKOWSKA, J.; MARZANTOWICZ, H.

The organization of working positions in the clothing industry. p. 55.

ODZIEZ. (Centrałne Zarządy Przemysłu Dżiewiarskiego, Odzieżowego i
Ponczoszniczego) Łódź, Poland. Vol. 10, no. 2, February 1959

Monthly list of East European Accession (EEAT) LC, Vol. 8, no. 2, July 1959

Uncl.

"APPROVED FOR RELEASE: 06/19/2000

CIA-RDP86-00513R000927720009-5

APPROVED FOR RELEASE: 06/19/2000

CIA-RDP86-00513R000927720009-5"

KURKOWSKI, Bohdan (Warszawa)

Some problems resulting from the prospective development
plan of concrete prefabrication until 1980. Przegł budowl
i bud mieszk 35 no2:73-76 F '63.

BROLL, Alfred; MURKOWSKI, Maciej

Congenital cyst of the common bile duct. Pol. przegl. chir.
37 no.9:889-991 S '65.

1. Z Oddziału Chirurgicznego Szpitala Zespolonego Nr.1 w
Bytomiu (Ordynator: dr. W. Kubisty).

KURKUDYM, K.Ye.

11-4

Mechanism of adrenaline apnea. P. E. Kurkudym
 (Med. Inst., Odessa). *Bull. Eksp. Biol. Med.* 11
 328-30(1941). After removal of either the entire brain
 or of the large hemispheres, the frog's oral diaphragm was
 connected to a recording app. and 1:1000 soln. of adrena-
 line was carefully deposited on the desired location in
 either medulla oblongata or midbrain. In the former case
 no change in respiratory rhythm was observed, while in
 the 2nd case the rhythm became much slower and stronger.
 Deposition of a crystal of NaCl on the midbrain caused a
 similar suppressive effect. Consequently, it is unlikely
 that adrenaline apnea is due to a direct central action.

G. M. Kosolapoff

ASB-SLA METALLOGICAL LITERATURE CLASSIFICATION

KURKUDYM, F.Ye., detn., otv. red.; BELEN'KIY, M.S., red.; KARAYEV,
K.G., red.; KENTS, V.V., red.; SOKOLOV, A.V., red.

[Therapeutic mineral waters and muds of the U.S.S.R.] Le-
chebnye mineral'nye vody i griazi USSR. Kiev, Zdorov'ia,
1965. 219 p. (MIRA 18:7)

1. Ukrainskiy nauchno-issledovatel'skiy institut kurorto-
logii i fizioterapii.

KURKUDYM, F.Ye.; KARAYEV, R.G.; BELEN'KIY, M.S.; ZAVALI, L.A.; KOVALEVA, M.T.;
SOVETOV, V.N.; SOKOLOV, A.V.; SHUKHTINA, I.A.

Professor V.V.Guk on his 70th birthday. Vop. kur., fizioter. i lech.
fiz. kul't. 25 no.2:184-185 Mr-Ap '60. (MIRA 13:9)
(GUK, VADIM VASIL'EVICH, 1889..)

KURKUDYM, F.Ye., dots., otv. red.; KARAYEV, R.G., st.nauchn.
sotr., red.; TOROKHTIN, M.D., red.; TURKEL'TAUB, M.S.,
doktor med. nauk, red.; SHPIL'BERG, G.I., st. nauchn.
sotr., kand. med. nauk, red.; MAKSIMENKO, L.M., red.

[Problems in the development of mineral water health
resorts] Voprosy razvitiia kurortov s mineral'nymi vodami.
Uzhgorod, Zakarpatskoe onl. krizhno-gazetnoe izd-vo, 1962.
199 p. (MIRA 18:1)

1. Direktor Ukrainskogo nauchno-issledovatel'skogo insti-
tuta kurortologii i fizioterapii (for Kurkudym). 2. Nachal'-
nik Zakarpatskogo kurortnogo upravleniya profsoyuzov (for
Torokhtin).

KURKUDYM, F.Ye.; SHPIL'BERG, G.I.

Problems concerning the use of health resort and physical factors
at the Ukrainian republic conference on problems of rheumatic
fever in children. Vop. kur. fizioter. i lech. fiz. kul't. 28
no.3:285-287 My-Je '63. (MIRA 17:5)

KURKULOV, Ye.N., inzhener.

Device for machining the spherical surface of a bearing block. Energetik
1 no.3:11 Ag '53. (MLA 6:8)
(Bearings)

... in section welding, thin sheet ... MIG welding,
... sheet: IG welding, Tig welding, MIG welding, stainless steel welding, alumi-
... welding, titanium welding

... A welder for a ... MIG ...
...
...
...

ASSOCIATION: none

Card 1/2

SKOPINOV, Ye.N., inzh.; KURKUMELI, A.A., inzh.; MOKHOVIKOV, Ye.V., inzh.

Universal stand for the automatic welding of longitudinal joints on shells and sheets. Svar.proizv. no.10:42 0 '64.

(MIRA 18:1)

KURKUMELI, A.A., inzh.; YAKOBSON, Yu.A., inzh.; MOKHOVIKOV, Ye.V., inzh.;
SKOPINOV, Ye.N., inzh.

Pneumatic stand for welding plates on a flux padding. Svar.proizv.
no.11:40 N '64. (MIRA 18:1)

"APPROVED FOR RELEASE: 06/19/2000

CIA-RDP86-00513R000927720009-5

APPROVED FOR RELEASE: 06/19/2000

CIA-RDP86-00513R000927720009-5"

ACC NR: AN6029769

Monograph

UR/

Yurchenko, Yu. F.; Guma, V. V.; Roshchin, V. V.; Grinenko, V. I.;
Popenko, V. S.; Kurkumeli, A. A.

Fitting and welding of corrosion-resisting steel piping in the atomic industry (Montazh i svarka truboprovodov iz korrozionnostoykikh staley v atomnoy promyshlennosti) Moscow, Atomizdat, 1966. 248 p. illus., biblio. 2,800 copies printed.

TOPIC TAGS: pipeline, welding, automatic welding, welding technology

PURPOSE AND COVERAGE: The authors discuss current practices in assembling and welding pipelines from corrosion-resistant steels, designated for use in aggressive media in atomic industry. Existing techniques are evaluated and recommendations are made on the selection of appropriate methods, whose technical and economic indices are cited. Welding operations and equipment, and assembly and welding machinery are described; automatic welding and the complete automation of assembly operations are emphasized. The book is intended for engineers and technicians and all specialists working in design and assembly shops of plants and research institutes specializing in the welding of corrosion-resistant steels. There are 108 references of which 56 are Soviet.

Card 1/2

UDC: 621.643.411.4:669.14.018.6

ACC NR: AM6029769

TABLE OF CONTENTS [abridged]:

Foreword -- 3

Ch. I. General requirements for pipelines made from corrosion-resistant steels -- 7

Ch. II. Basic materials and welding materials used in the production of pipelines -- 20

Ch. III. Pipeline welding -- 20

Ch. IV. Preparing pipelines for welding -- 104

Ch. V. Welding equipment -- 129

Ch. VI. Organization of pipe-assembly operations -- 189

Ch. VII. Quality control of welded pipe joints -- 202

Ch. VIII. Safety measures -- 236

SUB CODE: 13/ SUBM DATE: 20Apr66/ ORIG REF: 081/ OTH REF: 027

Card 2/2

ACC NR: AP7004198 SOURCE CODE: UR/0125/67/000/001/0051/0052
AUTHOR: Kurkumeli, A.A.[^]; Ishchenko, Yu.E.[^]; Dedkov, L.K.[^]; Rybkin, V.P.[^] (Moscow) (Moscow) (Moscow) (Moscow)

ORG: none

TITLE: S-7B automatic welder

SOURCE: Avtomaticheskaya svarka, no. 1, 1967, 51-52

TOPIC TAGS: tube welding, arc welding, TIG welding, butt welding, automatic welding/S-7B welder

ABSTRACT:

The S-7B automatic welder for TIG welding tubes 8—26 mm in diameter with a wall thickness of 0.5—2.0 mm without filler wire has been built. The welder is 215 mm high and 110 mm long, the welding head weighs 2 kg, and the radius of the rotating parts is 40 mm. The small size and weight make it possible to use the welder in restricted locations without supports for the tubes being joined. The welder has an attachment for programmed control of the welding speed from 10 to 40 m/hr, or of the welding current up to 100 amp. The joints are assembled by means of a centrator, without tacking, and are welded without filler wire and without leveling the tube end faces. Orig. art. has: 3 figures and 1 table. [MS]

SUB CODE: 13/ SUBM DATE: 30May66/ ATD PRESS: 5115

Card 1/1 UDC: 621.791.8.03

LIVSHITS, Lev Semenovich, kand. tekhn. nauk. Prinsipali uchastiye:
BAKHRAKH, L.P., starshiy nauchnyy sotr.; PANICH, S.I., inzh.;
GRINBERG, N.A., asp.; KURKUMELLI, E.G., inzh.; KAVKOVA, V., red.

[Role of alloyed steel composition on the conservation of structural homogeneity, and the properties of welded joints during heat time] Rol' sostava legirovannykh staley v sokhraneni strukturnoi odnorodnosti i svoisty svernnykh soedinenii pri dli- tol'nykh rabochikh nagrevakh. Moskva, VNIIST Glavgaza SSSR. Re- daktsionno-izd. otdel, 1962. 56 p. (MIRA 15:11)

1. Vsesoyuznyy nauchno-issledovatel'skiy institut po stroitel'- stvu magistral'nykh truboprovodov (for Bakhrakh, Panich, Grinberg, Kurkumell').
(Steel—Welding) (Metals, Effect of temperature on)

S/129/63/000/003/003/009
E111/E351

AUTHORS: Livshits, L.S., Grinberg, N.A. and Kurkumelli, E.G.

TITLE: Influence of carbon and alloying elements on carbide-formation in the tempering of steel

PERIODICAL: Metallovedeniye i termicheskaya obrabotka metallov, no. 3, 1963, 12 - 15

TEXT: Steels containing about 0.8 - 5.5% Cr or 0.6 - 2.6% V and about 0.1, 0.4 or 0.8% C were melted, cast, heat-treated, cooled to -75 °C after quenching and tempered at 550 or 700 °C for 10 h. The carbide composition was determined by X-ray diffraction, the carbide separation being effected by electrolytic dissolution. The nature and stability of the carbides formed on tempering were found to depend on the ratio of alloying elements to carbon. Characteristic ratios were found for each element, which governed the stability range of cementite-type and special carbides for any given temperature and heating time. The ratio, nature and stability of the carbides are affected by the general level of the alloying-element content; for a given value of the ratio an increase in the level broadens the stability range of the special

Card 1/2

S/129/63/000/003/003/009
E111/E351

Influence of

carbide at the expense of the cementite-type carbide.
There are 3 tables.

ASSOCIATION: VNIIST

Card 2/2

GRINBERG, N.A.; LIVSHITS, L.S.; KURKINELLI, E.G.

Effect of the carbide phase on the wear-resistance of hard-faced metal. Avtom. svar. 17 no.8:19-25 Ag '64.

(MIRA 17:11)

1. Vsesoyuznyy nauchno-issledovatel'skiy institut po stroitel'stvu magistral'nykh truboprovodov.

April 1971

metal alloyed with carbon, chromium, nickel, and cobalt was investigated.

HONMIK, K., kand. tekhn. nauk; KALJUMAE, H., inzh. gidrotekhn.;
KASK, R., kand. sel'khoz. nauk; KATUS, A., inzh. lesnogo khoz.;
KILDEMAA, K., kand. geogr. nauk; KURKUS, J., agronom; LIPPMAA, A.,
inzh. gidrotekhn.; PANT, H., prepodavatel', agronom; RAIG, V.,
inzh. gidrotekhn.; REMEL, A., inzh. melior.; TALPSEPP, E., kand.
sel'khoz. nauk; SOOSAAR, V., inzh., lesnogo khoz.; STERNFELD, R.,
inzh. stroit.; TOMINGAS, E., inzh. melior.; KARUS, G., red.;
RAUD, M., red.; VANTRE, I., tekhn. red.

[Handbook for soil improvement] Maaparanduse käsiraamat. Tal-
linn, Eesti riiklik kirjastus. Vol.1. [Fundamentals of soil
improvement] Maaparanduse alused. 1962. 473 p. (MIRA 15:5)
(Soils)

KARDASIEWICZ, Włodzimierz; KURKUS, Jan; MAMONT, Blanka

Effectiveness of the artificial kidney of the Alwall type.
Pol. arch. med. wewn. 33 no.3:269-276 '63.

1. Z I Kliniki Chorob Wewnętrznych AM w Warszawie Kierownik:
prof. dr nauk med. A. Biernacki.
(KIDNEY, ARTIFICIAL)

SALEWSKI, JANINA; RUPPEL, J. B.

Pituitary or thyroid-based adrenal cortex insufficiency.
Pol. arch. med. wewn. 35 no. 1:905-910, 1965.

1. Z I Kliniki Chorob Wewnętrznych AM w Warszawie (Kierownik:
prof. dr. med. T. Orłowski).

KURKUS, Maria

Case of Rendu-Osler disease. *Pediat. polska* 31 no.2:197-198
Feb 56.

1. Z Kliniki Chorob Zakaźnych Wiekii Dzieciecego A.M. w Warszawie
Kierownik: prof. dr. med. J. Bogdanowicz.
(ANGIOMATOSIS, in infant and child,
Osler-Rendu dis., case report (Pol))

KUCYNS, Maria; ZAWADZKA, Irena Krystyna

Pneumococcal inflammation of the peritoneum during ACTH therapy of rheumatic disease. *Pediat. Polska* 32 no.3:289-290 Mar 57.

1. Z Kliniki Chorob Zakaźnych Wiekcy Dziecięcego A. M. w Warszawie.
Kierownik Kliniki: prof. dr med. J. Bogdanowicz i z Oddziału
Chirurgicznego Miejskiego Szpit. Dziec. nr 1 Dyrektor Szpitala: prof.
dr med. R. Stankiewicz Kierownik Oddz. Chirurgicznego; dr med. M. Kozła.
Adres: Warszawa, ul. Wolska 37.

(ACTH, inj. eff.

pneumococcal infect. of peritoneum in ther. of rheum. (Pol))

(PNEUMOCOCCAL INFECTIONS, etiol. & pathogen.

peritoneum, caused by ACTH ther. of rheum. (Pol))

(PERITONEUM, dis.

pneumococcal infect. caused by ACTH ther. of rheum. (Pol))

(RHEUMATISM, ther.

ACTH, causing pneumococcal infect. of peritoneum (Pol))

KURKUS, Maria (Warszawa, ul. Wolska 37)

A case of paralysis of unknown etiology. *Pediat.polska* 33 no.3:330-332
Mar 58

I. Z. Kliniki Chorob Zakaźnych Wieków Dziecięcego A.M. w Warszawie.
Kierownik: prof. dr med. J. Bogdanowicz.
(PARALYSIS, in inf. & child
case report of unknown etiol. (Pol))

KURKUS, Maria

Analysis of deaths of children during 1st 24 hours of hospitalization. *Pediat Pol* 37 no.2:165-168 F '62.

1. Z Kliniki Chorob Zakaznych Wieku Dzieciecego AM w Warszawie
Kierownik: prof. dr med. J. Bogdanowicz.

(PEDIATRICS statist)

KURKUS, Maria

Precocious puberty. *Pediat. Pol.* 37 no.3:301-302 '62.

1. Z Kliniki Chorob Zakaznych Wieku Dzieciecego AM w Warszawie Kierownik:
prof. dr med. J. Bogdanowicz.

(PUBERTY PRECOCIOUS case reports)

KURKUS, Maria; PSTRAGOWSKA, Walentyna; ZALEWSKA, Irena

Diagnostic significance of giant cells in some infectious diseases in children. *Pediat. pol.* 38 no.1:27-32 '63.

1. Z Kliniki Chorob Zakaznych Wieku Dzieciecego AM w Warszawie
Kierownik: prof. dr med. J. Bogdanowicz.

(MEASLES) (SMALLPOX) (HERPANGINA)
(HERPES ZOSTER) (HERPES SIMPLEX)
(EXANTHEMA SUBITUM) (WHOOPING COUGH)
(SCARLET FEVER) (DIAGNOSIS, LABORATORY)

KURKUS, Maria

The problem of Stevens-Johnson syndrome according to our observations. *Pediat. pol.* 38 no.5:475-483 My '63.

1. Z Kliniki Chorob Zakaznych Wieku Dzieciecego AM w Warszawie
Kierownik: prof. dr med. J. Bogdanowicz.
(STEVENS-JOHNSON SYNDROME)
(SULFAMETHOXYPYRIDAZINE)

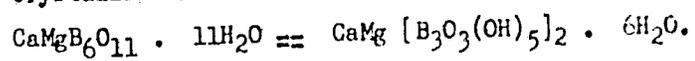
WYTRĄCZKA, Walentyna; KUKIENI, Adam

The course of whooping cough in children during 1st 3 months of life. *Pediat. Pol.* 40 no.9:963-965 S '65.

1. Z Kliniki Chorob Zakaźnych Wieków Dziecięcego AM w Warszawie (Kierownik: prof. dr. med. J. Jagdałowicz).

KURKUTOVA, Ye.N.; RUMANOVA, I.M.; BELOV, N.V., akademik

Crystalline structure of inderborite



Dokl. AN SSSR 164 no.1:90-93 S '65.

(MIRA 18:9)

1. Institut kristallografii AN SSSR.

✓ Distr: 4E2c
0056

539.22

3
1-MJC (JD)
1

Kaliski S., Kurlandzki J. The Cauchy's Problem for a Transversally Isotropic Elastic Body.
Problem Cauchy'ego dla ciała sprężystego o izotropii poprzecznej".
Archiwum Mechaniki Stosowanej (PAN), No. 6, Warszawa, 1938,
pp. 825-838.

1/1
mk

A consideration of the Cauchy problem concerning the body with lateral anisotropy with participation of mass forces. The problem is solved by introducing twice the resolving function which reduces the initial system of equations to a quadratic equation and two uncoupled equations of fourth degree of identical form. The quadratic equation is a generalized wave-equation with constant factors. It is solved by the Kirchhoff method. For solving the equation of the fourth degree, the Fourier method is applied with the solving nucleus. The solving nuclei are expressed by a surface integral extended over part of the normal surfaces. The solutions obtained are in the form of formulae expressed by means of definite integrals.

S/044/62/000/012/023/049
A060/A000

24.4200

AUTHOR: Kurlandzki, Jerzy

TITLE: A method of solving problems of rectangular plates with mixed boundary conditions

PERIODICAL: Referativnyy zhurnal, Matematika, no. 12, 1962, 67, abstract 12B302 (Proc. Vibrat. Probl. Polish Acad. Sci., 1961, v. 2, no. 4, 377 - 396, English; summaries in Polish, Russian)

TEXT: The author considers the problem of the oscillations of a rectangular plate with discontinuous boundary and continuous initial conditions. It is assumed that on two opposite sides arbitrary deflections and angle of rotation are specified, on the third - discontinuous angle of rotation and deflection, and on the fourth - discontinuous angle of rotation. Moreover, on a portion of the fourth side the deflection is given and on another portion - the third derivative of the deflection. The solution is constructed on the basis of an auxiliary system of four functions introduced by the author and representing special trigonometric series. These functions and the boundary conditions for

Card 1/2

S/044/62/000/012/023/049
A060/A000

A method of solving problems of...

them are selected in such a way that, when the boundary conditions and the compatibility conditions are satisfied, their sums should yield integral equations. In this manner the problem reduces to Fredholm integral equations of the second kind with weakly singular nuclei. By analyzing the case of a circular membrane when the boundary conditions have an axis of symmetry, the author demonstrates that the system of integral equations in that case is equivalent to a regular infinite system of linear algebraic equations.

JB

V. N. Buyvol

[Abstracter's note: Complete translation]

Card 2/2

L 13236-63

EWT(d)/FCC(w)/BDS AFPTC

IJP(C)

S/044/63/000/003/035/047

AUTHOR: Kurlandzki, Jerzy

(P)

51

TITLE: The reduction of initial-boundary value problems of elasticity to Fredholm integral equations of the second kind

PERIODICAL: Referativnyy Zhurnal, Matematika, no. 3, 73, Abstract 3827
(Proc. Vibrat. Probl. Polish Acad. Sci., v. 3, no. 1, 1962, 41-55; English, summaries in Polish and Russian).

TEXT: The mixed problem for the nonstationary Lamé equation is examined for the case of a cylinder and for a rectangular plate. By making use of the sine and cosine of the transform for a finite time interval, the author reduces the problem to Fredholm integral equations of the second kind.

[Abstracter's note: Complete translation.]

Card 1/1

KURLANDZKI, Jerzy

Small perturbations of the elliptic boundary problem.
Proceed vibr probl 4 no. 4:347-356 '63.

1. Department of Vibrations, Institute of Basic Technical Problems, Polish Academy of Sciences, Warsaw.

KURLANDZKI, J.

Mathematical formulation of a certain method for solving
boundary problems of mechanics, Proceed vibr probl 5 no.2:
117-124 '64,

1. Department of Vibrations, Institute of Basic Technical
Problems, Polish Academy of Sciences, Warsaw.

L 15552-66 EWT(1)/EWP(n)/EPF(n)-2

ACC NR: AP6005735

SOURCE CODE: PO/0097/65/006/002/0193/0200

AUTHOR: Kurlandzki, J. (Warsaw)

ORG: Department of Vibrations, IBTP Polish Academy of Sciences (BIPTANDO)

TITLE: Small perturbations of an initial and boundary value problem for certain hyperbolic equations

SOURCE: Proceedings of vibration problems, v. 6, no. 2, 1965, 193-200

TOPIC TAGS: perturbation, perturbation method, boundary value problem, hyperbolic equation, function analysis, ~~mathematical equation~~, ~~equation~~, vibration analysis, ~~functional equation~~

ABSTRACT: The paper represents an analysis of small perturbations of a region in the form $\partial^2 u / \partial t^2 + L(t)$, $u = f$, where $L(t)$ is the elliptic part of the second order. The author shows the analyticity of a solution from perturbation parameters, providing a mathematical basis for solving the perturbation problem in the form of a power series whereby the series factors are the solution derivatives of an unperturbed solution. An evaluation is made of the norms of inequality between the perturbation and initial solution using values given in the boundary-value problem. Orig. art. has: 10 formulas. [Based on author's abstract]

Card 1/2

L 15552-66

ACC NR: AP6005735

SUB CODE: 2012 / SUBM DATE: 06Oct64 / ORIG REF: 003 / OTH REF: 002 /
SOV REF: 001

PC

Card 2/2

L 10678-66 EWT(1)/EWT(m)/EWP(j)/I/EWP(t)/EWP(b)/ETC(m) IJP(c) JD/WW/RM

ACC NR: AP5028330

SOURCE CODE: UR/0057/65/035/011/2120/2125

86
83
B

AUTHOR: ^{11, 5 5} Kosov, N.D.; ^{11, 5 5} Kurlapov, L.I.

ORG: ^{11, 5 5} Kazakh State University im. S.M.K rov, Alma-Ata (Kazakhskiy gosudarstvennyy universitet)

TITLE: Isobaric isothermal diffusion constants of several gases

SOURCE: Zhurnal tekhnicheskoy fiziki, v. 35, no. 11, 1965, 2120-2125

TOPIC TAGS: gas diffusion, secondary flow, hydrogen, holium, argon, carbon dioxide, pressure effect, *flow tube, flow rate, isobar, isothermal flow*

21
44
55
ABSTRACT: A technique has been devised whereby the baroeffect in the measurement of gas diffusion constants can be avoided and the diffusion constants can be measured under true isobaric conditions; this technique has been employed to measure the two diffusion constants of each of the following pairs of gases: H₂ and CO₂, H₂ and Ar, He and CO₂ and He and Ar. A diagram of the apparatus is shown in the figure. After the investigated gases from cylinders 1 passed through the reducers 2, drying tubes 3, monostats 4, buffer flasks 5, and capillary tubes 6, their flow rates were measured with the rheometers 7 and they entered the flow tubes A-A' and B-B'. Diffusion took place between the flow tubes through capillaries 8, as a result of which the gases leaving the flow tubes at A' and B' were mixtures. The compositions of the

ADC: 533.15

Card 1/4

L 10678-66

ACC NR: AP5028330

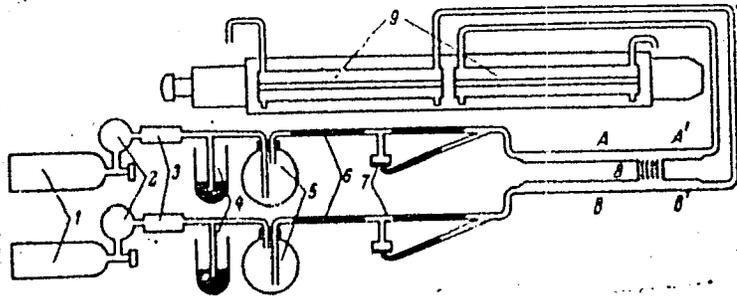


Diagram of the apparatus

effluent mixtures were determined by measuring their refractive indices with the Rayleigh interferometer 9. From the known flow rates of the pure gases entering the flow tubes at A, B and the compositions of the mixtures leaving at A', B', the diffusion currents through the capillaries were determined, and the diffusion constants were then calculated by integrating Fick's equation for the boundary conditions that the gases at the two ends of the capillaries are the pure components, assuming for the integration that the diffusion constants are independent of composition. By so adjusting the flow rates that the pressure was the same at both ends of the capillaries, the hydrodynamic flow through the capillaries, that in other techniques gives rise to the baroeffect, was avoided and the true isobaric diffusion constants

Card 2/4

L 10678-66

ACC NR: AP5028330

were obtained. In order to recognize when isobaric conditions had been achieved, two sets of capillaries 8 (each 5.5 cm long) were employed. The total cross section area of all the capillaries in each set was the same (12.5 mm^2), but one set consisted of 10 relatively large bore capillaries and the other set of 45 smaller ones. On changing from one set of capillaries to the other, therefore, any hydrodynamic flow through the capillaries due to a pressure difference would be considerably altered, while the diffusion flow would remain the same. When the flow rates had been so adjusted that the equilibrium compositions of the effluent gases remained the same when the capillaries were changed, therefore, the hydrodynamic flow was necessarily zero and the measured flow was due entirely to diffusion. In order to test the validity of the assumed boundary conditions at the ends of the capillaries, measurements were made at a number of mean flow rates from 0.5 to 10 cm^3/sec ; no effect of the mean flow rate on the measured diffusion constant was found. For each pair of gases the two diffusion constants approximately satisfied the relation $D_{ij}/D_{ji} = (M_j/M_i)^{1/2}$, where D_{ij} is the diffusion constant of gas i in gas j and M_i is the molecular weight of gas i. From the measured separate diffusion constants for the $\text{H}_2 - \text{Ar}$ and $\text{He} - \text{Ar}$ systems, the magnitudes of the baroeffect in these systems were calculated and the results were compared with the measurements of P.Ye.Suyetin and P.V. Volobuyev (ZhTF 34, 1107, 1964). The agreement (within 25-50%) is considered satisfactory. For the $\text{H}_2 - \text{Ar}$ system measurements were also made under such conditions that, owing to the presence of hydrodynamic flow in the capillaries, the two measured "diffusion constants" were equal. The value $0.86 \text{ cm}^2/\text{sec}$ obtained for the "diffusion constant" under these conditions is in good agreement with the value $0.83 \text{ cm}^2/\text{sec}$

Card 3/4

L 10678-66

ACC NR: AP5028330

3
measured by R.A. Strehlow (J. Chem. Phys., 21, 2101, 1953). In a footnote the authors thank A.S. Predvoditelev for pointing out the necessity for making measurements at different average flow rates in order to test the validity of the boundary conditions under which Fick's equation was integrated. Orig. art. has: 11 formulas, 2 figures and 3 tables.

SUB CODE: 20

SUBM DATE: 06Mar65/

ORIG. REF: 003

OTH REF: 009

Card

4/4

APPROVED FOR RELEASE: 06/19/2000

CIA-RDP86-00513R000927720009-5"

KRIVORUCHKO, M.G.; KURLAT, F.L.; MIKHAYLOV, M.A.; SOKOLOVSKIY, Yu.Ye.;
YASTRZHEBSKIY, L.A., red.; STRZHIZHOVSKIY, F., red.; YANCHUK, A.,
red.; SHLYK, M., tekhn. red.

[Across the streets of Moscow; guidebook]Po ulitsam Moskvy; putevoditel'. Moskva, Mosk.rabochii, 1962. 429 p. (MIRA 15 9)

1. Rabotniki Moskevskogo gorodskogo ekskursionnogo byuro (for Krivoruchko, Kurlat, Mikhaylov, Sokolovskiy). 2. Direktor Muzeya istorii i rekonstruktsii Moskvy (for Yastrzhembskiy).
(Moscow -- Guidebooks)

MOREYNIS, I.M.; KURLAT, M. M.

Case of syphilis resistant to novarsol and biochinol. Vest.
vener., Moskva no.2:54 Mar-Apr 1952. (GLML 22:2)

1. Of Odessa Skin-Venereological Institute imeni Ye. S. Glavche.

~~KURIAT M.M.~~

Vitamin C balance in pregnant and nursing syphilitic mothers [with summary in English]. Vent.derm. i ven. 31 no.6:36-41 H-D '57.
(MIRA 11:3)

1. Iz detskogo otdela (zav. D.G.Tul'berman) Odesskogo nauchno-issledovatel'skogo dermatovenerologicheskogo instituta imeni Ye.S.Glavche (dir. - dotsent S.I.Matuskov)

(VITAMIN C, metab.

in pregn. & lactating syphilitic women)

(PREGNANCY, in various dis.

syphilis, vitamin C metab.)

(LACTATION, in various dis.

same)

(SYPHILIS, in pregn.

vitamin C metab. in pregn. & lactation)

SHAKHET, G.P., inzh.; KURLATOVA, L.N., inzh.; BRUSSER, V.M., inzh.

Remodeling of the KS2-100 annular frame dryer. Nauch.-issl.
trudy NIIMP no.9:107-116 '59. (MIRA 14:5)

(Drying apparatus)
(Fur industry--Equipment and supplies)

KURLAYEVA, A.A. (Orenburg)

Grading the students' knowledge in astronomy. Fiz.v shkole 21
no.3:79 Iy-Je '61. (MIRA 14:8)
(Astronomy--Study and teaching)
(Grading and marking (Students))

KURLAYEVA, A.A. (Moskva)

On the study of the topic "World gravitation." Fiz.v shkole 23
no.1:31-33 Ja-F '63. (MIRA 16:4)
(Physics—Study and teaching) (Gravitation)

KURLAYEVA, A.A.

Astrophysical problems in a general physics course. Uch. zap.
MGPI no.189:78-92 '62. (MIRA 16:6)

(Physics—Study and teaching)

KURLENYA, M.V., inzh.

Selecting a method of rock pressure control in mining average-
thickness steeply pitching seams. Izv.vys.ucheb.zav.; gor.zhur.
no.3:12-15 '58. (MIRA 12:8)

1. Tomskiy politekhnicheskii institut.
(Coal mines and mining) (Subsidence (Earth movements))

KURLENYA, M.V.

Selecting a method of rock pressure control in mining
steeply pitching medium thickness seams of the Prokop'yevsk-
Kiselevsk deposit. Izv.TPI 93:44-46 '58.

(MIRA 13:5)

(Kuznetak Basin--Coal mines and mining)
(Subsidence (Earth movements))

PROSKURING, V.V., dots.; POSOKHOV, G.Ye, inzh.; KURLENYA, M.V., inzh.;
RYZHKOVA, Yu.A., inzh.; SURNACHEV, B.A., inzh.

Laboratory research on leaving rock on a worked level in the shield
system of mining. Izv.vys.ucheb.zav.;gor.zhur. no.2:11-14 '60.
(MIRA 14:5)

1. Tomskiy politekhnicheskii institut.
(Mining engineering)

GRIYSKO, G.I.; KURLENYA, M.V.; LEONT'YEV, V.N.

Energy of rock pressure forces. Vop. gor. davi. no.7:12-14 '61

Estimating the manifestation of rock pressure. Ibid.:15-18 (MIRA 18:7)

1. Institut gornogo dela Sibirskogo otdeleniya AN SSSR.

KURIENYA, M.V.

Homographic method of determining the necessary amount of filling material in mining steep seams. Trudy Inst. gor. dela Sib. otd. AN SSSR no.5:138-142 1964.

Effectiveness of methods of roof control in mining steep medium thickness seams in the Kuznetsk Basin. Ibid.: 143-144

(SIRA 11:11)

1. Institute of Science and Technology, etc.

2. Institute of Science and Technology, etc.
3. Institute of Science and Technology, etc.

4. Institute of Science and Technology, etc.