

GALKIN, N.P., doktor tekhn. nauk; SUDARIKOV, B.N., kand. khim.
nauk; VERYATIN, U.D.; SHISHKOV, Yu.D.; MAYOROV, A.A.;
BABUSHKINA, S.I., red.; TARASENKO, V.M., red.

[Uranium technology] Tekhnologiya urana. Moskva, Atom-
izdat, 1964. 395 p. (MIRA 17:12)

SHISHKOVA, M.A., veterinarnyy vrach; SHISHKOV, Yu.1.

Pedaled scissors for grinding skin samples. Veterinariia 40
no.3:77 Mr '63. (MIRA 17:1)

1. Ostashkovskaya mezhrayonnaya veterinarno-bakteriologicheskaya laboratoriya, Kalininskoy oblasti.

KAZAKOV, N.F. (Moskva); SHISHKOVA, A.P. (Moskva); CHARUKHINA, K.Ye. (Moskva)

Joints in titanium made by diffusion bonding in vacuum. Avtom.
svar. 16 no.10:82-86 0 '63. (MIRA 16:12)

23992

НИКОЛА, А. И. Исследование серий битуминозных образцов, связанных
определенными генетическими отношениями. Труды Всесоюз. Науч.
Иссл. Геол.-Развед. Ин-та, Новая серия, вып. 28, 1948, с. 47-76.

30: Letopis, No. 32, 1949.

SHISHKOVA, A.P.; PSALOMSHCHIKOVA, K.I.; MASAGUTOVA, D.A.

Method for studying bituminous pitch components in petroleums
and other bitumens. Avtoref. nauch. trud. VNIGRI no.17:71-74
'56.

(MIRA 11:6)

(Petroleum) (Bitumen)

GLEBOVSKAYA, Ye.A.; SHISHKOVA, A.P.

Use of infrared absorption spectra in determining sulfide sulfur in
asphalt-tar fractions of petroleum. VNIGRI no.105:11-22 '57.

(MIRA 11:9)

(Petroleum--Spectra)

SHISHKOVA, A.P.; MASAGUTOVA, D.A.; PSALOMSHCHIKOVA, K.I.

Desulfurizing the sulfur compounds of asphaltic and resinous
substances of petroleum on Raney nickel. Trudy VNIGRI no.123:
168-174 '58. (MIRA 11:12)
(Petroleum products) (Hydrogenation) (Nickel)

SHISHKOVA, A.P.; PSALOMSHCHIKOVA, K.I.; MASAGUTOVA, D.A.

Characteristics of organic matter in upper and middle Miocene deposits
of northeastern Sakhalin and the Shmidt Peninsula. Trudy VNIGRI
no.155:12-27 '60. (MIRA 14:1)

(Sakhalin--Petroleum geology)
(Shmidt Peninsula--Petroleum geology)
(Organic matter)

USPENSKIY, V.A.; RADCHENKO, O.A.; GLEBOVSKAYA, Ye.A.; SHISHKOVA, A.P.;
MEL'TSANSKAYA, T.N.; INDENBOM, F.B.; Primali uchastiye:
KOLOTOVA, L.F., khimik; CHAGINA, T.P., tekhnik; BASKINA, T.B.,
laborant; VIKULINA, M.N., laborant; POLOVNIKOVA, I.A., fizik;
PETROV, A.K., tekhnik; PONOMAREV, B.P., laborant; KHYAMYALYAYNIN,
L.B., laborant; KLOCHKOV, B.N., laborant; RAGINA, G.M., vedushchiy
red.; SAFRONOVA, I.M., tekhn.red.

[Basic processes of the transformation of bitumens in nature
and the problems of their classification] Osnovnye puti pre-
obrazovaniia bitumov v prirode i voprosy ikh klassifikatsii.
Leningrad, Gos.nauchno-tekhn.izd-vo neft.i gorno-toplivnoi
lit-ry Leningr.otd-nie, 1961. 314 p. (Leningrad. Vsesoiuznyi
nauchno-issledovatel'skii geologorazvedochnyi institut. Trudy,
no.185). (MIRA 15:4)

(Bitumen--Geology)

USPENSKIY, V.A.; RADCHENKO, O.A.; GLEBOVSKAYA, Ye.A.; GORSKAYA, A.I.;
SHISHKOVA, A.P.; PARPAROVA, G.M.; KOLOTOVA, L.F.; MEL'TSANSKAYA,
T.N.; NERUCHEV, S.G., red.

[Principles of the genetic classification of bitumens]. Osnovy
geneticheskoi klassifikatsii bitumov. Leningrad, Nedra, 1964.
266 p. (Leningrad, Vsesoiuznyi neftianoi nauchno-issledovatel'-
skii geologorazvedochnyi institut. Trudy. no.230).

(MIRA 17:7)

SHISHKOVA, A. P.

"Investigation to the Influence of Aging and Cold Hardening on the Cyclic Strength of Austenite Steels Depending on Their Structural Rigidity." Min Heavy Machine Building USSR, Central Sci Res Inst of Technology and Machine Building (TsNII Mash), Moscow, 1953
(Dissertation for the Degree of Candidate of Technical Sciences)

SO: Knizhnaya Letopis', No. 32, 6 Aug 55

SHISHKOVA, A. P.

USSR/Miscellaneous - Metallurgy

Card : 1/1 Pub. 128 - 11/32

Authors : Oding, I. A. and Shishkova, A. P.

Title : The influence of a preliminary treatment of austenite steel on its strength

Periodical : Vest. mash. 34/7, 40 - 45, July 1954

Abstract : The preliminary heat treatment of austenite steel and its influence on steel strength, was investigated. Two types of steel were used for this purpose (mark El257, and El69). The steels were heated up to 450, 500, 600 and 700°, at which temperatures the changes in steel microstructure, hardness, resistance and plasticity, were investigated by means of chemical and magneto-metallographical methods. Four references. Graphs; tables.

Institution : ...

Subjected : ...

SOV/124-58-1-1360

, Translation from: Referativnyy zhurnal, Mekhanika, 1958. Nr 1, p 168 (USSR)

AUTHORS: Aleksandrov, B. I., Shishkova, A. P.

TITLE: The Fatigue Strength of Austenitic EI405 Steel at Elevated Temperatures (Uсталostnaya prochnost' austenitnoy stali EI405 pri vysokikh temperaturakh)

PERIODICAL: V sb.: Povysheniye ustalostnoy prochnosti stal'nykh i chugunnykh detaley poverkhnostnym naklepom. Moscow, Mashgiz, 1955, pp 57-78

ABSTRACT: The fatigue endurance limit of smooth and notched specimens at 20°C amounts to 27.5 kg/mm². At 500-650° the fatigue endurance limit of smooth specimens attains 21.5-20.5 kg/mm², that of notched specimens 19.5-12.5 kg/mm², with a reduction at rising temperatures. Test basis was 2x10⁸ stress cycles. Strain hardening due to hammer forging leads to a doubling of the hardness and an increase by 80% in the endurance limit at 600°. Tensile strain hardening increases the endurance limit at 600° by 25%. Rolling treatment increases the endurance limits of smooth and notched specimens at 600° to 50 and 70%, respectively. The residual compressive stresses in the strain layer, amounting to 30-40 kg/mm², and the

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SOV/124-58-1-1360

. The Fatigue Strength of Austenitic El405 Steel (cont.)

75% increase in hardness are not reduced even during prolonged heating to 600°.

B. F. Balashov

Card 2/2

5.15.11.10.11.12

SHISHKOVA, A.P., kandidat tekhnicheskikh nauk

Effect of aging and shot peening on the fatigue strength of austenite steel at high temperatures. [Trudy] TSNITMASH no.70:121-162 '55.
(MIRA 8:11)

(Metals at high temperatures) (Steel--Metallurgy)

ALEKSANDROW, B.I., kandidat tekhnicheskikh nauk; SHISHKOVA, A.P., kandidat tekhnicheskikh nauk.

Effect of various types of treatment on the fatigue strength of EI434 steel. Metalloved. i obr. met. no.8:20-27 Ag '56.(MLRA 9:10)

1.TSentr'al'nyy nauchno-issledovatel'skiy institut tekhnologii i mashinostroyeniya.

(Steel--Fatigue)

Shishkova, A.P.

137-58-2-4165

Translation from: Referativnyy zhurnal, Metallurgiya, 1958, Nr 2, p 271 (USSR)

AUTHORS: Aleksandrov, B.I., Shishkova, A.P.

TITLE: The Effect of Tempering and Surface Hardening on the High-temperature Fatigue Resistance of Steel EI434. (Vliyaniye otpuski i poverkhnostnogo uprochneniya na ustalostnuyu prochnost' stali EI434 pri povyshennykh temperaturakh)

PERIODICAL: V sb.: Vopr. konstrukts. prochnosti stali. Moscow, Mashgiz, 1957, pp 144-159

ABSTRACT: An investigation was made of the effect of stabilizing tempering, surface-hardening with rollers, hammer-hardening in sealed dies, aluminum-chroming, and electric-spark hardening on the fatigue resistance and susceptibility to stress concentration of the Cr-Ni-Co steel EI434 at temperatures of 20, 650, 700, and 750°C. Tests were made on smooth and notched test bars, the notched bars having circular notches 1.0 mm deep and 0.5 mm in radius. Initially the bars were quenched in water at 1220-1230° and had an austenitic and Nb-carbide structure. Stabilization, which occurred at 700-860° and lasted 20-24 hours, was followed by a supplementary heating to 760-800°, which

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137-58-2-4165

The Effect of Tempering and Surface Hardening on the High-temperature (cont.)

lasted 10-20 hours. It was found that steel EI434 at 20 and 650°, after being quenched and stabilized, had good fatigue resistance, which declined, however, when the metal was heated to 750°. The conditions of stabilization did not significantly affect fatigue resistance at 700°. Susceptibility to stress concentration at 20 and 600° depended on how the notch was cut. When notch surfaces were polished, the steel was highly susceptible to stress concentration up to 700°. When notches were made with a cutting tool, fatigue resistance at 20 and 600° was increased by 80 percent and 22 percent respectively -- which is attributed to the hardening of the metal's surface layers and to the propitious residual stresses produced by the turning. Working the surfaces with rollers (knurling) increased fatigue resistance at 650° by 16-24 percent in the case of the smooth bars, 42-45 percent in the case of the notched bars. Aluminum-chroming and the electric-spark treatment caused a 12-20 percent drop in fatigue resistance at 650°.

N.K.

1. Steel--Tempering--Applications 2. Steel--Fatigue

Card 2/2

137 1957-12-25029

Translation from: Referativnyy zhurnal, Metallurgiya, 1957, Nr 12, p 299 (USSR)

AUTHOR: Shishkova, A. P.

TITLE: High-temperature Fatigue Tests at One Billion Cycles
(Vysokotemperaturnyye ispytaniya na ustalost' pri odnom milliarde tsiklov)

PERIODICAL: V sb.: Vopr. konstrukts. prochnosti stali. Moscow, Mashgiz, 1957, pp 160-162

ABSTRACT: Changes in the slope of the fatigue curve were investigated at elevated temperatures, the fatigue test being continued in excess of $100 \cdot 10^6$ cycles. A cylindrical specimen (S) of heat-resistant EI405 steel with a circumferential notch was tested at 500° . The test was performed on a machine of the Ya 8 type and lasted eight months without any appreciable stoppages. It is established that the portion of the curve above $100 \cdot 10^6$ cycles approaches the cycle axis more gently than the preceding portions, i.e., that the slope of the fatigue curve decreases with the duration of the test, and that, therefore, the data obtained from tests based on $100 \cdot 10^6$ cycles will be slightly lowered. However, one should bear in

Card 1/2 mind that the test was carried out on steel which is rather stable

137-1957-12-25029

High-temperature Fatigue Tests at One Billion Cycles

structurally, i.e., which has no significant tendency to age, and that the temperature of the test was such that the aging process would occur very slowly. It is pointed out that, in order to verify the applicability of the result obtained to steels which are greatly susceptible to aging (EI335 and EI69), corresponding experiments would be required.

L. G.

1. Metals-Fatigue-Temperature factors
2. Metals-Fatigue-Test results

Card 2/2

L 26054-65 EWT(d)/EWT(m)/EWP(v)/EWA(d)/EWP(t)/T/EWP(h)/EWP(k)/EWP(l)/
EWP(b) Pf-l LJP(c) MJW/JD/HM
ACCESSION NR: AP3008442

S/0125/63/000/010/0082/0086

AUTHOR: Kazakov, N. F. (Moscow); Shishkova, A. P. (Moscow); Charukhina, K. Ye. (Moscow)

TITLE: Vacuum diffusion welding of titanium

SOURCE: Avtomaticheskaya svarka, no. 10, 1963, 82-86

TOPIC TAGS: diffusion welding, vacuum welding, titanium, welding evaluation, welder/ SDVU-6L welder

ABSTRACT: Vacuum diffusion welding is the most promising method for welding titanium and its alloys if the shape and dimensions of the parts permit evacuation around the juncture point and if these same parameters allow transmission of axial force for creating a tight contact between the surfaces to be welded. VT5-1 alloy belongs to the class of single phase α -alloys of titanium and contains 3% Al, 2% Sn. Its mechanical properties: $\sigma_v = 75-95 \text{ kg/mm}^2$, $\delta = 12-25\%$, $\alpha_n = 4-9 \text{ kg/cm}^2$, HB 240-300. The basic technological parameters for vacuum diffusion welding are: the degree of evacuation in the working chamber, the temperature in the welding zone, the necessity for tight contact between the surfaces being welded and the duration of the process. Experiments on titanium welding were carried out at temperatures

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L 26054-65

ACCESSION NR: AP3008442

of 800, 850, 900, 1000 and 1100°C. In selecting the welding temperature range, consideration is given to the initial melting point of the base metal which lies in the region of the temperature of recrystallization. In view of the low yield point of titanium as well as the considerable effect of high welding temperatures on this metal, the pressure was chosen within a range from 0.25 to 1 kg/mm² depending on the area of the specimens being welded. The duration of the process was 10 seconds, 1, 5, 7 and 10 minutes. Since titanium is so active, the evacuation in the chamber was held at 10⁻³ mm Hg, the maximum possible for the SDVU-6L laboratory installation. Before welding, holes were drilled in the specimens for the thermocouple, then they were cleaned with a scraper and degreased in acetone. The welding quality was evaluated by making tensile and impact strength tests. The results of the mechanical tests in relationship to the basic welding parameters are presented in tabular form. Tests of samples welded at low temperatures (800 and 850°C), pressure 0.5-0.8 kg/mm² and holding 1-5 minutes, showed that it is impossible to achieve stable welding results under these conditions. Most of these samples broke at the point of welding. However the data indicate that a strong weld may be produced at these same temperatures by increasing the holding time to more than 5 minutes. The microstructure of the joints was also studied. Orig. art. has: 6 figures and 1 table.

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L 26054-65

ACCESSION NR: AP3008442

ASSOCIATION: none

SUBMITTED: 07Mar62

ENCL: 00

SUB CODE: MM

NO REF SOV: 003

OTHER: 000

Card 3/3

FREMEL', V.B.; LOSYAKOVA, L.S.; SHISHKOVA, E.A.

Enrichment of spent grain wash with ammonium lactate. Spirt.prom.
26 no.8:25-28 '69. (MIRA 13:11)
(Distilling industries--By-products)

FREMEL', V.B.; VASIL'YEV, G.M.; MAKUKHINA, A.M.; MIRONOV, V.A.; SHISHKVA,
E.A.

Utilization of distilling washes from alcohol and acetone-butyl
alcohol plants in the production of feed antibiotics. Spirt.-
prom. 28 no.2:26-27 '62. (MIRA 15:3)

1. Tsentral'nyy nauchno-issledovatel'skiy institut spirtovoy
promyshlennosti.

(Distilling industries--By-products) (Antibiotics)

FREMEL', V.B.; SHISHKOVA, E.A.; KISELEVA, S.A.

Ways to increase the yield of antibiotics. Ferm. i spirt. prom.
30 no.1:27-29 '64. (MIRA 17:11)

1. Vsesoyuznyy nauchno-issledovatel'skiy institut fermentnoy i
spirtovoy promyshlennosti.

SHISHKOVA, E.A.

Accumulation of ferments during the biosynthesis of
biomycin and terramycin. Ferm. i spirt. prom. 31 no.7:
7-11 '65. (MIRA 18:11)

1. Vsesoyuznyy nauchno-issledovatel'skiy institut fermentnoy
i spirtovoy promyshlennosti.

L 2716-66 EWT(m)/T/EWP(t)/EWP(b)/EWA(c) IJP(c) JD/JC

ACCESSION NR: AP5017185

UR/0139/65/000/003/0148/0150

AUTHOR: Krivov, M. A.; Malisova, Ye. V.; Shishkova, G. S.

TITLE: Electric properties of gold-doped gallium arsenide

SOURCE: IVUZ. Fizika, no. 3, 1965, 148-150

TOPIC TAGS: gallium arsenide, gold containing alloy, ionization, impurity level

ABSTRACT: This investigation was undertaken because gold is used for contacts in gallium-arsenide devices, but there are no published data on the electric activity of the gold in gallium arsenide. The tested crystals were doped with gold either by introducing the gold in the melt or by diffusion from a gold film deposited on the crystal surface. The doped crystals had n-type conductivity, with the number of electrons in the crystal decreasing with increasing gold content. The ionization energy of the gold levels could not be determined, probably because of the high donor density and the limited solubility of the gold. Comparison of the surface-diffusion sample with a standard undoped sample shows that the introduction of the gold should give rise to two new acceptor levels in the gallium arsenide. One of the levels is at 0.046 ev, but the identification of the second level is difficult. It is most likely that the gold replaces a gallium atom at the lattice point, and forms together with the interstitial copper present in the original

Card 1/2

SHISHKOVA, I.A.

Methods for calculating local accelerations. Trudy TSIP no.61:111-
119 '57. (MIRA 11:4)

(Winds)

SHISHOVA, I.A., Cand Phys-Math Sci--(dis) "On the problem of
local weather forecasts and their use in forecasting the trajectories
of air particles." ¹⁹⁵³ 19 pp (Main Administration of
Hydro-meteorological Service ^{U.S.S.R.} at the Council of Ministers USSR.
Central Inst of Forest ^S ~~ing~~) 100 copies (II,22-58,102)

- 12 -

AUTHOR: Shishkova, I. A. 50-58-4-3/26

TITLE: Concerning the Problem of the Prognosis of the Trajectories of the Particles of the Air (K voprosu o prognoze trayektoriy vozdushnykh chastits)

PERIODICAL: Meteorologiya i Gidrologiya, 1958, Nr 4, pp 8-14 (USSR)

ABSTRACT: One can form a judgement as to the movement of the particles of air in the free atmosphere according to data concerning the wind gradient. Accelerations, however, occur because of non-steady atmospheric processes. The quality of weather forecast depends mainly on the accuracy of construction of the predicted trajectories of the particles of air. The author describes the way of constructing a forecast for a 12 hours' interval. The method of computation is given in reference 3. According to the equation (1) the components of the local acceleration depend on non-geostrophic deviations and on terms which in turn depend on the curvature of isohypsal lines. The local accelerations were kept constant within 12 hours but the accelerations were brought on the trajectory of motion of the particles to an average of 6 hours each. The trajectories to be

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Concerning the Problem of the Prognosis of the Trajectories of the Particles of the Air 50-58-4-3/26

predicted for 12 hours were constructed into directions which were opposed to the wind vector in the points in question. The turning angles in the course of the time of the wind being taken into account. If the signs of the local acceleration

$\frac{dv}{dt}$ and the wind at point A (table 1) are known, it is possible to find by means of a scale-ruler (ref. 2) point B, where the particle after a 6 hours' course will arrive from. According to the quantities of equations (2) the location of point B can be exactly given. Furthermore the velocities of the wind-components in A after 12 hours and the angle α were determined from the equation (2), α denoting the angle through which the wind will have turned in the course of 12 hours. Table 2 shows 4 possible cases of a change of direction of the wind-vector in dependence on the magnitudes u_t and v_t . If the direction and velocity are given one can determine point C by means of the position of point B. From point C the atmospheric volume element reaches point A after a 12 hours' course (table 1). The results of the trajectories constructed by the above

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Concerning the Problem of the Prognosis of the Trajectories of the Particles of the Air 50-58-4-3/26

mentioned synoptic methods were compared with those of the actual trajectory of the balloons (ref. 1) and very similar results were obtained. Furthermore 2 simplified methods of computation are explained. Tables 3-5 demonstrate the advantages of the method described in the beginning compared with the simplified methods mentioned at the end. At present the plotting of actual trajectories can only be performed on the basis of 2 AT maps succeeding each other. Disadvantages, however, exist as well. The method suggested here, based on the consideration of the local acceleration of the particle during the total course of the 12 hours motion, has to be preferred to the other because its results most closely agree to those of the balloon. There are 5 figures, 2 tables, and 3 references, all of which are Soviet.

AVAILABLE: Library of Congress

Card 3/3

1. Particles (Airborne) - Motion
2. Atmosphere - Applications
3. Mathematics - Applications

35759

S/124/62/000/003/038/052
D237/D302

2.5000

AUTHORS: Kheyfets, Ya.M., and Shishkova, I.A.

TITLE: An improved method of long-term forecasting by means of absolute topography charts according to a barotropic model

PERIODICAL: Referativnyy zhurnal, Mekhanika, no. 3, 1962, 110, abstract 3B705 (Tr. Tsent. in-ta prognozov, 1960, no. 93, 16 - 24)

TEXT: A system of calculation is given for long-term forecasting of absolute topography introduced by Ye.N. Blinova (Dokl. AN SSSR, 1943, 39, no. 7). The present method differs insofar as to increase the density of the set of initial data, and to include more Legendre polynomials into the series representing the solution of the problem. While, in the former system, the initial data were obtained from the set of points with the spread of 5° latitude and 15° longitude and the Legendre series used had $m \leq 12$ and $n \leq 20$, in the new method the data are obtained for every 5° latitude and 5° longitude.

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An improved method of long-term ...

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longitude, and the Legendre series utilizes all numbers with $m = 24$ and $n = 56$. Hence, the mean absolute error due to the representation of the initial field in terms of a series in spherical functions is diminished. Numerical formulas are given, with a short description of the calculations as performed on the 'POGODA' computer. An example of the forecast AT-700 is given, covering five 24-hour periods. It should be noted that the first examples of forecasting by the method of the hydro-dynamic theory of Blinova were given by Ye.N. Blinova herself in 1946, and not in 1947-49 as given in this paper. [Abstractor's note: Complete translation].

Card 2/2

SHISHKOV, D.; SHISHKOVA, L.

Chromatographic separation of molybdenum from vanadium.
Doklady BAN 16 no.2:173-176 '63.

1. Submitted by Academician D. Ivanoff [Ivanov, D.]

SHISHKOV, D.; SHISHKOVA, L.

Chromatographic separation of vanadium from titanium.
Doklady BAN 16 no. 8: 833-836 '63.

1. Submitted by Academician D. Ivanoff [Ivanov, D.]. Chlen
Redaktsionnoy kollegii, "Doklady Bolgarskoy Akademii nauk".

SHISHKOV, D.; SHISHKOVA, Y.

Separation of molybdenum from titanium by means of
ion-exchange chromatography. Doklady BAN 17 no.2:
137-140 '64.

1. Submitted by Academician D.Ivanoff [Ivanov, D.].

SHISHKOV, D.; SHISHKOVA, L.

Anion-exchange separation of tungsten from titanium. Doklady BAN
17 no.3:243-246 '64.

1. Submitted by Academician D.Ivanoff [Ivanov, D.].

L 00156-66 ETC/EMP(j)/ENG(m)/T RM/DS

ACCESSION NR: AP5025541

BU/0011/65/018/003/0235/0238

AUTHOR: Shishkov, D.; Shishkova, L.

TITLE: Anion-exchange behavior of molybdenum (VI) in hydrochloric acid alcohol solutions

SOURCE: Bulgarska akademiya na naukite. Doklady, v. 18, no. 3, 1965, 235-238

TOPIC TAGS: molybdenum, hydrochloric acid, alcohol, solution property, ion exchange, ion exchange resin

ABSTRACT: English article In a previous paper (Talanta, 1965) the authors investigated the behavior of molybdenum in hydrochloric acid alcohol solutions of the strongly acid polymerizational cationite KY-2 in H-form. An investigation under the same conditions of the anion-exchange behavior of molybdenum seemed of interest as its properties have as yet not been studied. The strongly alkali anionite EDE-10 in Ol-form which possesses a number of advantages and valuable properties was used as ion-exchange resin. The paper presents the logarithms of the coefficients of distribution K_d as function of N HCl for

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L 00156-36

ACCESSION NR:

AP5025541

2
increasing alcohol concentrations. The results show that with an increase in the acidity of the solution and the percentage of the alcohol the absorption of molybdenum decreases. [Orig. art. has: 4 graphs.

ASSOCIATION: Mining and Geological Institute, Darvenitza, Sofia

SUBMITTED: 00

ENCL: 00

SUB CODE: IC, GC

NR REF SOV: 003

OTHER: 006

JPRS

Card ^{cc} 2/2

SHISHKOVA, L.G.; ALIMARIN, I.P.; TSINTSEVICH, Ye.P.

Anion-exchange study of gallium behavior in hydrochloric
alcohol solutions. Vest. Mosk. un. Ser. 2:Khim. 20 no.4:
76-77 J1-Ag '65. (MIRA 18:10)

1. Kafedra analiticheskoy khimii Moskovskogo gosudarstvennogo
universiteta i Gorno-geologicheskoy institut, Sofiya.

ACC NR: AP6021807 (A) SOURCE CODE: UR/0413/66/000/012/0085/0086

INVENTORS: Tikhvinskaya, M. Yu.; Shishkova, L. F.; Novosel'tsev, P. V.; Farberov, M. I.; Teponitsina, Ye. P.

ORG: none

TITLE: A method for obtaining synthetic resins. Class 39, No. 182887 [announced by All-Union Scientific Research and Construction Engineering Institute for Asbestos Technical Products, and Yaroslavl Technological Institute (Vsesoyuznyy nauchno-issledovatel'skiy i konstruktorsko-tekhnologicheskii institut asbestovykh tekhnicheskikh izdoliy i Yaroslavskiy tekhnologicheskii institut)]

SOURCE: Izobreteniya, promyshlennyye obraztsy, tovarnyye znaki, no. 12, 1966, 85-86

TOPIC TAGS: resin, synthetic material, phenol, formaldehyde, ester

ABSTRACT: This Author Certificate presents a method for obtaining synthetic resin by condensing phenols with chlorinated common ester. The product is subsequently treated with formaldehyde or its components in the presence of a base. To impart thermal stability, mechanical strength, and elasticity to the products made of this resin, bis-(chlormethyl)-diphenyl ester is used as the ester.

SUB CODE: 11/ SUBM DATE: 06Jul64

Card 1/1

UDC: 678.682.678.632

SHISHKOV, D.A.; SHISHKOVA, L.G.

Ion-exchanging separation of molybdenum from vanadium in the analysis
of cres. Khim i industriia 35 no.6:210-211 '63.

SHISHKOV, D.A., dots. R.t.n.; SHISHKOVA, L.G., as.

Chromatographic separation of molybdenum from vanadium. Godishnik
Min geol inst 9:393-399 '62-'63[publ. '64].

Anion-exchange separation of wolfram from titanium. Ibid.:401-408.

Separation of molybdenum from titanium by the method of ion-exchange
chromatography. Ibid.:409-415

Chromatographic separation of vanadium from titanium. Ibid.:417-424.

L 25298-65 EWT(m)/EWP(t)/EWP(b) IJP(c) JD

ACCESSION NR: AP5001697

S/0189/64/000/006/0037/0039

AUTHORS: Alimarin, I. P.; Tsintsevich, Ye. P.; Shishkova, L. G.

TITLE: Investigation of cation exchange behavior of gallium in a hydrochloric-
alcohol fluid

SOURCE: Moscow. Universitet. Vestnik. Seriya 2. Khimiya, no. 6, 1964, 37-39

TOPIC TAGS: gallium, gallium compound, ion exchange, sorption/ KU 2 cationite

ABSTRACT: The behavior of gallium in various hydrochloric-ethanol solutions was investigated by the ion exchange method. Cationite KU-2 was used with an initial solution of gallium chloride with a given gallium concentration. The experiments were performed under static conditions after the ingredients (total volume 20 ml) were mechanically shaken for 3 hours. The ion exchange with constant gallium content was used to determine the effects of the HCl and ethyl alcohol content (0.1-12 mol/liter and 20-80% by volume respectively). The results of these experiments are presented as curves of the partition coefficients (K_d) (see Figs. 1 and 2 on the Enclosures) and as a table of percent sorption as a function of alcohol and HCl content. The sorption behavior of gallium in HCl-alcohol solutions remains similar (curves 1, 2, 3, 4 on Fig. 2 on the Enclosures), except that K_d increases with

Card 1/4

L 25298-65

ACCESSION NR: AP5001697

higher ethanol content from 20-80% (at low HCl concentrations), while the HCl concentration interval in which all gallium is in solution decreases. Orig. art. has: 2 figures and 1 table.

ASSOCIATION: Kafedra analiticheskoy khimii MGU (Department of Analytical Chemistry, MGU); Gornogeol. in-t. g. Sofiya (Sofia Mining Geology Institute)

SUBMITTED: 28Apr64

ENCL: 02

SUB CODE: IC

NO REF SOV: 004

OTHER: 003

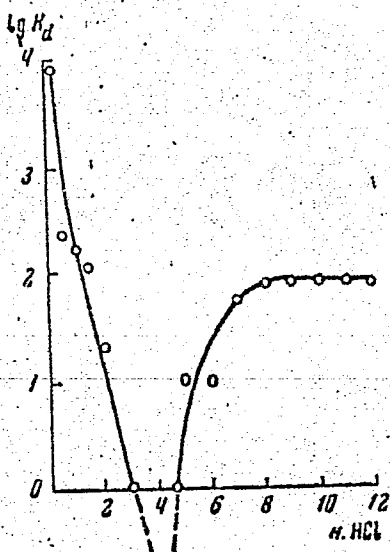
Card 2/4

L 25298-65

ACCESSION NR: AP5001697

ENCLOSURE: 01

Fig. 1. Gallium partition coefficient with cationite KU-2 x 8 (in N-form) as a function of HCl concentration



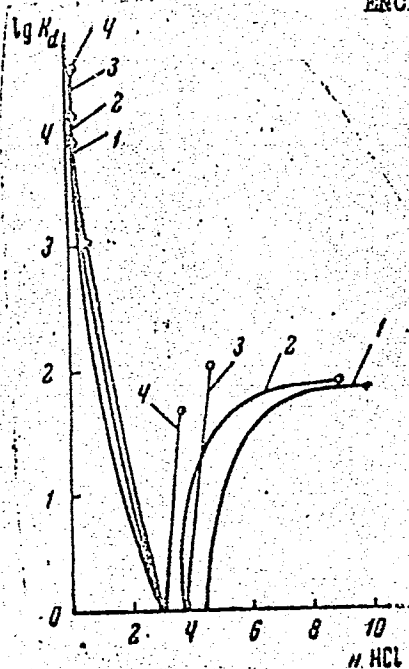
Card 3/4

L 25298-65

ACCESSION NR: AP5001697

ENCLOSURE: 02

Fig. 2. Partition coefficient as a function of HCl and ethanol concentration (with cationite KU-2): 1- 20, 2- 40, 3- 60, 4- 80% alcohol by volume.



Card 4/4

SHISHKOVA, N.

Studying some peculiarities in sterilization of canned food p. 32.
LEKA PAMIENENOST, Sofiya, Vol. 4, no. 3, 1955.

SO: Monthly List of East European Accessions, (EEAL), LC, Vol. 4, no. 10, Oct. 1955,
Uncl.

SHISHKOVA, M.A., veterinarnyy vrach; SHISHKOV, Yu.I.

Pedaled scissors for grinding skin samples. Veterinariia 40
no.3:77 Mr '63. (MIRA 17:1)

1. Ostashkovskaya mezhrayonnaya veterinarno-bakteriologicheskaya laboratoriya, Kalininskoy oblasti.

1. SHISHKOVA, M. I.
2. USSR (600)
7. "Effectiveness of the New Fungicides in Combatting Apple Tree Scab", Sbornik Rabot po Zashchite Rasteniy (Ukr. Nauch.-Issled. In-t Plodovodstva)), No 32, 1951, pp 136-144.
9. Mikrobiologiya, Vol XXI, Issue 1, Moscow, Jan-Feb 1952, pp 121-132. Unclassified.

1. SHISHKOVA, M. I.
2. USSR (60))
7. "An Appraisal of the Effectiveness of Various Methods of Applying Bordeaux Mixture in Combatting Apple Tree Scab", Sbornik Rabot po Zashchite Rasteniy (Ukr. Nauch.-Issled. In-t Plodovodstva) (Symposium of Works on Plant Protection (Ukrainian Science-Research Fruit-Growing Institute)), No 32, 1951, pp 145-149.
9. Mikrobiologiya, Vol XXI, Issue 1, Moscow, Jan-Feb 1952, pp 121-132. Unclassified.

NAZARYAN, Ye.A.; LOBANOV, G.A.; TRUSEVICH, G.V.; STEPANOV, S.N.; DUSHUTINA,
K.K.; RYBAKOV, A.A.; KARANYAN, P.G.; UL'YANISHCHEVA, A.M.; TIKHONOV,
N.N.; KAZIZADE, F.N.; SIDERENKO, I.I.; SMIRNOV, V.P.; SHIDENKO,
I.Kh.; VASIL'YEV, V.P.; SHISHKOVA, M.I.; SERGEYEV, V.I., red.;
GOR'KOVA, Z.D., tekhn.red.

[Grusha] Pear. Moskva. Gos.izd-vo sel'khoz.lit-ry, 1960. 534 p.
(MIRA 13:12)

(Pear)

VASIL'YEV, Vadim Petrovich [Vasyl'iev, V.P.], akademik; SHISHKOVA, M.I.,
[Shyshkova, M.I.], kand. sel'khoz. nauk; GURENKO, V.A. [Hurenko, V.A.],
red.; MATVIICHUK, O.A., tekhn. red.

[Pests and diseases of fruit and measures for their control] Shkid-
nyky ta khvoroby plodovykh kul'tur ta zakhody borot'by z nymy.
Kyiv, 1961. 47 p. (Tovarystvo dlia poshyreniia politychnykh i na-
ukovykh znan' Ukrain's'koi RSR. Ser.5, no.19) (MIRA 15:1)

1. Ukrain's'kaya akademiya sel'skokhozyaystvennykh nauk (for Vasil'yev).
(Fruit culture--Diseases and pests)

SHISHLAKOV, M.I. [Shyshlakov, M.I.]

Feed conveyor. Mekh. sil'. hosp. 14 no.6:27 Je '63.

(MIRA 17:3)

1. Kolkhoz im. XIX s"yezda Kommunisticheskoy partii Sovetskogo
Soyuza, Bol'shelepetikhinskogo rayona, Khersonskoy obl.

SHISHKOVA, M.I. [Shyshkova, M.I.]

New fungicides for the control of apple diseases. Khim.prom. [Ukr.]
no.1:46-48 Ja-Mr. '64. (MIRA 17:3)

KALYUZHNYY, Yu.V.; SHISHKOVA, M.I.

Effectiveness of fungicides in controlling apple powdery
mildew. Trudy VIZR no.20:35-38 pt.4 '64.

(MIRA 18:12)

MATVEYEV, A.; SHISHKOVA, N.

Contribution of students to crash constructions. Prof.-tekhn.
obr. 18 no.8:3-4 Ag '61. (MIRA 14:9)
(Building trades—Study and teaching)

Shishkova, N. N.

✓ 334. Production of A-2 conveyor belt at the
Kursk rubber works. N. N. SHISHKOVA. Byul. po
Obmenu Opytous v Proizv. Tekhn. Izdelii; 1955,
No. 1. 4-15; Ref. Zhur. Khim., 1956, abs. 41172.
The method and apparatus are described. G3B21.1

Shishkova, N. N.

✓ 383. Experimental production of conveyor belt-
ing reinforced with metal cable, at the Kurik rubber
works. N. N. Shishkova. Byul. po Obmenu
Opytom v Prom. Rezin. Tekhn. Izdell., 1966, No. 1,
21-30; Ref. Zhur. Khim., 1956, abs. 41168. The
belt consists of one layer of galvanised carbon steel
wire, covered on both surfaces with rubber, two
further layers, and one layer of breaker fabric.
The method and apparatus are described. 66B21.1

SHISHOVA, O.A.; SKIRKO, B.K.

Role of phosphamidase in the mechanism of amino acid absorption
in the intestine. Vop. pit. 23 no.5:23-28 S-O '64.

(MIRA 18:5)

1. laboratoriya biokhimii pitaniya (zav. - doktor biologicheskikh
nauk M.P.Chernikov) i laboratoriya patologicheskoy morfologii
(zav. - prof. N.V.Meshkov) Instituta pitaniya AMN SSSR, Moskva.

KOGAN, R.B.; SHISHKOVA, V.F. (Moskva)

Rationalization of medical service for school children. Sov. zdrav.
21 no.5:43-48 '62; (MIRA 15:5)

(SCHOOL HYGIENE)

SHISHKOV, V.I., inzh.; SVININ, G.F., inzh.

Using vinyl plastics in the soda industry. Khim.mashinostr. no.2:39
Mr-Ap '63. (MIRA 16:4)
(Soda industry—Equipment and supplies) (Plastics)

SHISHKOVA, V.N.; BRONSHTEYN, R.M.; IVANOVA, Ye.I.

Psycho-prophylactic technique in painless labors. Akush. gin. no.2:
25-29 Mar-Apr 51. (CIML 20:8)

1. Candidate Medical Sciences V.N. Shishkova; Candidate Medical
Sciences R.M. Bronshteyn. 2. Of the Institute of Obstetrics and
Gynecology (Head—Prof. K.N. Zhmakin), First Moscow Order of Lenin
Medical Institute.

SHISHKOVA, V.N.; IVANOV, I.P.

Result of investigation of mechanisms of the higher nervous function in psychoprophylactic preparation for labor. Zhur. vys.nerv.delat. 3 no.6:816-827 N-D '53. (MLRA 7:5)

1. Nauchno-issledovatel'skiy institut akusherstva i ginekologii Ministerstva zdravookhraneniya SSSR.

(LABOR,

*painless, mechanisms of higher nervous funct. in psychoprophylactic prep. for)

(CENTRAL NERVOUS SYSTEM,

*higher nervous funct. in psychoprophylactic prep. for labor)

SHISHKOVA, V.N.

Psychological preparation for childbirth. Med.sestra no.3:8-15
Mr 154. (MLRA 7:2)

1. Starshiy nauchnyy sotrudnik Instituta akusherstva i ginekologii
Ministerstva zdravookhraneniya SSSR. (Childbirth--Psychology)

SHISHKOVA, V.N.; IVANOV, I.P.

Psychoprophylactic preparation for labor in complicated pregnancy.
Akush. i gin. no.4:12-17 J1-Ag '55. (MLRA 8:11)

1. Iz Instituta akusherstva i ginekologii (dir. L.G.Stepanov)
nauchnyy rukovoditel'--prof. P.A.Beloshapko, Ministerstva zdra-
vookhraneniya SSSR.

(LABOR,

eff. of psychoprophylactic train. in complicated
pregn.)

(PREGNANCY, compl.

eff. of psychoprophylactic train. on labor.)

SHISHKOVA, V.N., kandidat meditsinskikh nauk.

Pathomorphological changes in cerebral vessels and other organs in stillborn infants following intrauterine asphyxia [with summary in English]. Akush. i gin. 33 no.2:8-16 Mr-Apr '57.

(MLRA 10:6)

1. Iz Nauchno-issledovatel'skogo instituta akusherstva i ginekologii (dir. - L.G.Stepanov) Ministerstva zdavookhraneniya RSFSR.

(STILLBIRTH, pathol.

cerebral vessel changes after intrauterine asphyxia)

(BRAIN, pathol.

cerebral vessel changes in stillborn inf. after intrauterine asphyxia)

(ASPHYXIA NEONATORUM, pathol.

intrauterine, cerebral vasc. changes)

SHISHKOVA, V.N., kand.med.nauk, ZMANOVSKIY, Yu.F.

Vascular reactions in intracranial trauma in newborn infants
[with summary in English]. Akush. i gin. 34 no.4:53-57 J1-Ag '58
(MIRA 11:9)

1. Iz fiziologicheskoy laboratorii (zav. - prof. A.O. Dolin)
i otdeleniya novorozhdennykh (zav. G.I. Smirnov) Nauchno-issledovatel'
skogo instituta akusherstva i ginekologii (dir. - dots. L.G. Stepanov)
Ministerstva zdravookhraneniya RSFSR.

(BIRTH INJURIES, physiol.

brain inj., photoplethysmography (Rus))

(PLETHYSMOGRAPHY,

in birth brain inj. (Rus))

SHISHKOVA, Vera Nikolayevna

[Anesthesia in labor; psychoprophylactic preparation for labor]
Obezbolivanie rodov; psikhoprofilakticheskaya podgotovka k rodam.
Moskva, Medgiz, 1959. 31 p. (MIRA 13:8)
(ANESTHESIA IN OBSTETRICS) (CHILDBIRTH--PSYCHOLOGY)

SHISHKOVA, V.N., kand.med.nauk

Without pain. Zdorov'e 5 no.9:10-11 S '59. (MIRA 12:11)
(CHILDBIRTH--PSYCHOLOGY)

ZMANOVSKIY, Yu.F.; SHISHKOVA, V.N.

Lability of vascular reactions as an index of the profundity of the pathological condition in intracranial injury of the newborn. Vop.okh.mat.i det. 5 no.4:59-64 J1-Ag '60.

(MIRA 13:7)

1. Iz Instituta akusherstva i ginekologii Ministerstva zdравo-okhraneniya RSFSR (dir. L.G. Stepanov).

(BRAIN--WOUNDS AND INJURIES) (REFLEXES)

SHISHKOVA, V.N.; ZMANOVSKIY, Yu.F.; LITVINOVA, T.I.

Psychoprophylactic preparation of parturients. Vop. okh. mat. i
det. 6 no.10:64-66 0 '61. (MIRA 14:11)

1. Iz Nauchno-issledovatel'skogo instituta akusherstva i ginekologii
Ministerstva zdravookhrananiya RSFSR (dir. - prof. O.V.Makeyeva).
(CHILDBIRTH-PSYCHOLOGY)

SHISHKOVA, Vera Nikiforovna; POPOVA, G.F., red.; GONCHAROVA, T.I.,
tekhn. red.

[Psychoprophylaxis of pains during labor]Psikhoprofilaktika
bolei pri rodakh. Izd.2. Moskva, Medgiz, 1962. 38 p.
(MIRA 15:10)

(CHILDBIRTH--PSYCHOLOGY)

1. P. P. P.; MISHIN, V. M.

Features of higher nervous activity in incomplete pregnancy.
Zh. i. gl. no. 10-72 '63. (MIRA 17:6)

2. In fiziologicheskoy laboratorii (zav. -- prof. A. G. Dolin)
Institute of obstetrics and gynecology (dir. -- prof. O. V. Makeyeva)
Ministry of Health of the USSR.

SHISHKOVA, V.N., kand.khim.nauk; SIDOROV, I.P., kand.tekhn.nauk; TEMKIN,
M.I.; doktor khim.nauk

Study of the kinetics of ammonia synthesis by the recirculation
process at high pressures. Trudy GIAP no.7:62-78 '57.

(MIRA 12:9)

(Ammonia)

06233
SOV/64-59-6-25/28

25(5)

AUTHORS: Sidorov, I. P., Shishkova, V. N.

TITLE: Pressure Regulator

PERIODICAL: Khimicheskaya promyshlennost', 1959, Nr 6, pp 541 - 542 (USSR)

ABSTRACT: Investigations of catalytic and other processes in passing media have to be carried out at constant pressure in the reaction vessel. For this purpose I. P. Sidorov designed a special pressure regulator (Fig). The apparatus comprises a pressure vessel with the gas, an electromagnetic valve, a pressure-equalizing vessel, (for the pressure), a pressure regulator, and the reaction vessel. The pressure regulator basically consists of 2 glass vessels the lower of which contains mercury; a platinum wire leads through the connecting tube of the two vessels. At a pressure increase the mercury mounts into the upper glass vessel and by contacting the platinum wire closes a circuit, which in turn closes the electromagnetic valve and thus stops the gas supply. When the pressure decreases below the desired value, the valve opens and gas from the pressure vessel pours into the reaction vessel. The pressure regulator described in this paper is provided for working at pressures

Card 1/2

Pressure Regulator

06233

SOV/64-59-6-25/28

from 1 - 1000 atm. in the case of a pressure decrease in front of and behind the valve of up to 200 - 300 atm. The apparatus is used in the laboratories of the nitrogen- and nitrogen fertilizer industry. There is 1 figure.

ASSOCIATION: Gosudarstvennyy nauchno-issledovatel'skiy institut azotnoy promyshlennosti i produktov organicheskogo sinteza (State Scientific Research Institute of the Nitrogen Industry and Products of Organic Synthesis)

Card 2/2

PLANE I BOOK EXPLOITATION 304/3921

Academy of Sciences USSR. Institut fizicheskoy khimii

Problemy khimii i kataliza. (t) 10: Fizika i fiziko-khimicheskiye
Problemy Kataliza i Kataliz. (vol. 10: Physics and Physico-
Chemistry of Catalysis). Moscow, Izdatvo AN SSSR, 1960. 461 p. Errata
ally inserted. 2,000 copies printed.

Eds.: S.Z. Roginskii, Corresponding Member of the Academy of Sciences USSR,
and O.V. Erylov, Candidate of Chemistry, Ed. of Publishing House: A.L.
Munkhbayar; Tech. Ed.: G.A. Astaf'yeva.

PURPOSE: This collection of articles is addressed to physicists and chemists
and to the community of scientists in general interested in recent
research on the physics and physical chemistry of catalysis.

COVERAGE: The articles in this collection were read at the conference on the
Physics and Physical Chemistry of Catalysis organized by the Odessa Khimicheskikh
nauch AS SSSR (Section of Chemical Sciences, Academy of Sciences USSR) and by
the Academic Council on the problems of the scientific bases for the selection
of catalysts. The Conference was held at the Institut fizicheskoy khimii AN
SSSR (Institute of Physical Chemistry of the AS USSR) in Moscow, March 20-25, 1959.
or the great volume of material presented at the conference, only papers not
published elsewhere were included in this collection.

Frolov, V.M., O.V. Erylov, and S.Z. Roginskii. [Institute of Physical
Chemistry of the AS USSR]. Catalytic Properties of Germanium 102

Kuchayev, V.I., and G.K. Borsakov [Vysokomukhimicheskiy Institut Imeni L.Ye.
Kurchatova (Physicochemical Institute Imeni L.Ye. Kurchatov)]. Investigation of the
Relation Between the Catalytic Activity and the Semiconductor Properties
of Germanium 103

Kyzambeto, V.I., O.V. Erylov, and I.I. Stebko [Institute of Physics of
the AS USSR]. Change in the Surface Contact Potential of Germanium
During Adsorption and Catalysis 111

Erylov, O.V., S.Z. Roginskii, and Ye. A. Fokina [Institute of Physical Chemistry of
the AS USSR]. Catalysis Over Semiconductors in the Self-conductance Zone 117

Kalashnik, I.V. [Eastern Siberian Branch of the AS USSR]. Selection of High
Temperature Sulfide Catalysts for Various Cases of Destructive
Hydrogenation 121

II. CATALYSIS OVER METALS

Borsakov, G.K. [Physicochemical Institute Imeni L.Ye. Kurchatov]. Catalysis
Over Metals 128

Borshchikov, V.L., and V.B. Glazko [Department of Physics of Moscow State
University]. Contribution to the Theory of Chemical Adsorption of Metals 131

Trushchinskii, V.I. [Institute of Physical Chemistry of the Polish Academy of
Sciences, Wroclaw]. Structure and Magnetic Properties of Some Metallic
Contacts 135

Tsirel'son, I.I. [Institute of Physical Chemistry of the AS USSR]. Investi-
gation of the Adsorption of Gases on Metals with the Aid of an Electron
Probe 139

Gorobovskiy, Ye. B. [Institut fizicheskoy khimii Imeni L.Ye. Kurchatova
AN USSR Institute of Physical Chemistry Imeni L.Ye. Kurchatov] of the AS
USSR]. On the Problem of the Relation of Catalysis and Chemisorption to
the Electron State of Metal Surface 149

Krasil'shnikov, A.I., and L.O. Antonova. Investigation by Electrochemical
Methods of the Gas Reactions of Catalytic Hydrogenation 172

Sokol'skiy, B.L. [Academy of Sciences, Kazanskaya SSR]. On the Problem of
Principles in the Selection of Catalysts for Liquid Phase Hydrogenation 178

Fayzulin, L.R. [Institute of Organic Chemistry of the AS USSR]. Investigation
of the Selective Action of Catalysts in Hydrogenation and Reduction Reactions 187

Gortunov, A.I., and G.K. Borsakov [Moscow Chemical Technological Institute
Imeni D.I. Mendeleeva]. Catalysis of Isotopic Exchange in Molecular Hydro-
gen by Transition Metals of the 4th Period 192

Lachinov, S.S., L.D. Kuznetsov, V.A. Korkovskiy, I.M. Shakhova, L.M.
Pavlovskiy, and B.G. Lyubimovskiy [State Institute of the Nitrogen Industry].
Activity and Structure of Iron Catalysts With Three and Four Promoters for the
Synthesis of Ammonia 199

Lebedev, Y.F. [Moscow State University]. Relation Between the Parameters
of the Arrhenius Equation for Coated Platinum Catalysts 204

Roginskii, S.Z., Ye.Ye. Himm, and M.I. Yermolov [Institute of Physical
Chemistry of the AS USSR]. Investigation of the Isotope Method of the Surface of
the Active Promoter of an Ammonia Catalyst 210

SHISHKOVA, V.N.; LACHINOV, S.S.; KONYUKHOVA, I.N.

Distribution of promoters on the surface of ammonia catalysts,
and activity of these catalysts at high pressures. Kin.i kat.
1 no.2:242-246 J1-Ag '60. (MIRA 13:8)

1. Gosudarstvennyy nauchno-issledovatel'skiy institut azotnoy
promyshlennosti.
(Catalysts) (Ammonia)

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

Translation from: Referativnyi 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

Shishkova, V.P.

65-10-11/13

AUTHORS: Sokolov, V.A., Andronikashvili, T.G., Kuz'mina, L.P. and Shishkova, V.P.

TITLE: The Use of Some Minerals of Various Adsorption Capacity for Chromatographic Analysis of Gases (Primeneniye nekotorykh mineralov razlichnoy adsorbtsionnoy emkosti dlya khromatograficheskogo analiza gazov)

PERIODICAL: Khimiya i Tekhnologiya Topliva i Masel, 1957, No.10, pp. 61-65 (USSR).

ABSTRACT: A comparison of structural characteristics and other properties of adsorbents and their separating ability of hydrocarbons and other gases was carried out. The types of adsorbents and their physical properties are given in Table 1, adsorption isotherms (for benzole) in Fig.1. The possibility of application of the above adsorbents (serpentine, natrolite, kaolinite, diatomite, etc.) for chromatographic separation of hydrocarbons (C_1-C_7), carbon monoxide and hydrogen was investigated. The diagram of one of the apparatus used is shown in Fig.2. The detection was based either on heat conductivity (Ref.10) or using a special absorber with a 40% solution of KOH, when carbon dioxide was used as a developing gas. Examples of curves representing the separation of mixtures are given in Fig.3. Chemical composition of natural adsorbents tested is given in Table 2. On the basis of the results obtained, it is

Card1/2

SHISHKOVA, V.P.

Distr: 4E4j/4E3d

J2815. CHROMATOGRAPHIC SEPARATION OF HYDROCARBON GAS MIXTURES FOR PURPOSES OF ANALYSIS. Sokolov, V.A. and Shishkova, V.P. Moscow: Acad. Sci. U.S.S.R., 1956; "Chemical Treatment of Petroleum Hydrocarbons (Khimicheskaya Pererabotka Naftnykh Uglevodorodov)", 242-244; abstr. in Ref. Zh. Khim. (Ref. J. Chem., Moscow), 1957, (14), 48325). A new version of the chromatographic apparatus is described, using carbon dioxide as the carrier gas. The temperature gradient is produced by electric heating windings. The absorption of carbon dioxide by alkali is arranged so that the gas takes up alkali from the flask and travels along the pipe in separate bubbles. The volume of the components separated is measured in a volumeter. A diagram shows the separation of a mixture of methane, ethane, ethylene, propane and isobutane. The possibility of using ammonia as the carrier gas was also examined.

SHISHKOVA, Ye.V., inzh.

Measuring the absorption of ultrasonic waves in a water-fish
medium. Trudy VHIRO 36:242-249 '58. (MIRA 12:4)
(Sonar in fishing)

SHISHKOVA, Ye.V., inzh.

Acoustic characteristics of the body of fish. Trudy VNIRO 36:
259-269 '58. (MIRA 12:4)

(Sonar in fishing)

SHISHKOVA, Ye.V., inzh.

Recording and studying fish sounds. Trudy VNIRO 36:280-294 '58.

(MIRA 12:4)

(Fishes)

(Sound production by animals)

AZHAZHA, Vladimir Georgiyevich; SHISHKOVA, Yekaterina Vasil'yevna;
MOROZOVA, I.I., red.; SOKOLOVA, I.A., tekhn.red.

[Fish location by the use of hydroacoustic apparatus] Poisk
ryby gidroakusticheskimi priborami. Moskva, Pishchepromizdat,
1960. 140 p. (MIRA 13:6)

(Sonar in fishing)

SHISHKOVA, YE.V.

"Study of acoustical characteristics of fish.

Paper presented at Fourth Intl. Congress on Acoustics
Copenhagen, 21-28 August 1962

SHISHKOVA, Yekaterina Vasil'yevna; STASHKEVICH, A.P., kand. tekhn.
nauk, dots., retsenzent; GYUL'BADAMOV, S.B., st. nauchn.
sotr., retsenzent; KOSSOVA, O.N., red.; SOKOLOVA, I.A.,
tekhn. red.

[Physical foundations for echo sounding in fishing] Fiziche-
skie osnovy rybolokatsii. Moskva, Pishchepromizdat, 1963.
145 p. (MIRA 16:7)

(Sonar in fishing)

SHISHKOVA, Z. P.

SHISHKOVA, Z. P. -- "Investigation of Alkaline Fermentation in Order to Obtain Glycerine from Hydrolysates of Wood." Acad Sci Latvian SSR, Inst of Microbiology, 1955 (Dissertation for the Degree of Candidate of Biological Sciences)

SO: Izvestiya Ak. Nauk Latviyskoy SSR, No. 9, Sept., 1955

SHISHKOVA, Z.

Preparation of glycerol by fermentation of wood hydrolyzates in presence of phosphates. P. N. Odincova and Z. Shiskova. Latvian SSR Zinatnu Akad. Vēstis 1956, No. 6, 61-7 (in Russian; Latvian summary).—Glucose (18%) was fermented at 32-5° with addn. of yeast (15-20% relative to sugar) and various salts (50-200% relative to sugar). Na phosphates and Al and Fe sulfates were the most efficient promoters for the formation of glycerol (I). The yield of I was proportional to Na_2HPO_4 (II) concn., until a concn. was reached at which the fermentation was inhibited. Max. yield was 14.2% at 180 wt. % II. Addn. of 10% (relative to sugar) active C to the fermentation mixture increased yield of I by 10-15%. Caoline and a brand adsorbent did not promote yield in a similar fashion. Wood hydrolyzates were prepared by treating wood with H_2SO_4 , and were fermented after neutralization of H_2SO_4 with apatite, removal of F with Ba^{++} , and neutralization with Na or K carbonates. Purification of hydrolyzates with adsorbents improved the yield. Higher yields were obtained from hydrolyzates prepared from material from which hemicelluloses were removed by a prehydrolysis. Similarly, I could be obtained by fermentation of mother liquor of glucose crystal. in the hydrolysis plant.

A. Dravnieks

MITCHELL, J. ; JEN GEN, F.

Obtaining glycerin by means of fermentation of wood hydrolyzate. p. 141.

STUDIJAS PAR Glicerina iegūšanu no koksnes hidrolyzāta. (Latvijas PSR Zinatņu akadēmija. Bioloģijas zinātņu nodaļa) Rīga, Latvija, No. 3, 1957.

Monthly List of East European Accessories (EMAL), LC, Vol. 8, No. 8,
August 1959.
Uncls.

SHISHKOVA, Z.; GAYLITIS, Yu. [Gailitis, J.]

Concerning the formation of acids in the fermentation of sugars.
In Russian. Vestis Latv ak no.3:141-144 '60. (EEAI 10:7)
(Fermentation) (Acids) (Sugar)

USSR / Farm Animals. Cattle.

Abs Jour : Ref Zhur - Biologiya, No 2, 1959, No. 7344

Author : Shishkova, Zh. V.
Inst : Moscow Veterinary Institute
Title : Changes of Calcium Content and Its Protein
Complexes in the Blood of Cattle Depending
upon Age and Lactation

Orig Pub : Tr. Mosk. vet. akad., 1957, 21, 38-49

Abstract : Eighty-seven cows of the Ostfriesland breed were examined. The blood's general and dif-fused Ca, general protein and the Ca-protein complex were determined. In milch cows the quantity of the blood's Ca decreased toward the 5th month of lactation, but during the interlactation period it returned to initial magnitudes. The level of the Ca-protein com-

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USSR / Farm Animals. Cattle.

Abs Jour : Ref Zhur - Biologiya, No 2, 1959, No. 7344

content of all forms of Ca was low. -- L. A.
Kashchevskaya

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Category : Farm Animals
Cattle.
Abs. Jour : Ref Zhur-Biol., No 10, 1958, 74016
Author : Shishikova, Zh. V.
Institut. : Moscow Veterinary Academy.
Title : The Blood's Prothrombin in Highly Productive
Cows.
Orig. Pub. : Tr. Mosk. vet. akad., 1957, 21, 247-255
Abstract : The amount of prothrombin was examined in the
blood of cattle according to the method of
Quick modified by Borovskaya. It was found that
blood clotting time in calves from birth to
6 months of age amounted to (in sec) 26-24 and
the quantity of prothrombin amounted to (in
percent) 61-66; correspondingly, calves one
year of age presented the figures 20 and 80;
heifers after being impregnated - 17 and 94;
cows after bearing one calf - 18 and 90; cows

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SHISHKOVETS, I.YA.

Filters and Filtration

Economizing on filter press cloth. Sakh.prom 26 No. 9, 1952.

9. Monthly List of Russian Accessions, Library of Congress, December 1952 ~~1953~~, Uncl.

ZOLOTUKHIN, V.V.; SHISHKOVSKAYA, A.S.

Introduction of new machinery and advanced technological processes.
Leg.prom.15 [i.e.16] no.3:43-44 Mr '56. (MLRA 9:7)
(Kirev--Leather industry)

SHISHKOVSKAYA, A.S.

New special section for the manufacture of children's foot-
wear. Kozh.-obuv.prom. no.10:31-32 0 '59. (MIRA 13:2)
(Kirov--Shoe manufacture)