L 33511-65

ACCESSION NR: AP5003839

polymers. The coordination is apparently carried out by means of the unshared electron pairs of the oxide and siloxane oxygens and the vacant 3d orbitals of the silicon and phosphorus atoms. The data suggested that the oxygen compounds of phosphorus cause condensation of the siloxanediols with liberation of water and formation of siloxane bonds. To prove this premise, a polymer was obtained by reacting DHDS with 5% (mol) methylphosphonic acid. It was stored in argon and was closely studied by spectroscopy. The study showed that water was liberated at room temperature with a resulting increase in molecular weight, thus supporting the assumptions. Orig. art. has: 4 figures.

ASSOCIATION: Vsesoyuznyy nauchno-issledovatel'skiy institut sinteticheskogo kauchuka (All-Union Scientific Research Institute of Synthetic Rubber)

SUBMITTED: 31Mar64 ENCL: 01 SUB CODE: OC

NO REF SOV: 007 OTHER: 005

Card 2/3

L 33511-65
ACCESSION NR: AP5003839

ENCLOSURE: 01

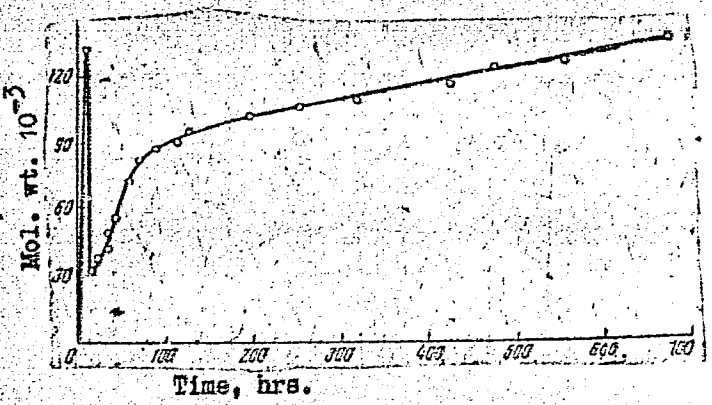


Fig. 1. Molecular weight change of phosphorosiloxane polymer

Card 3/3

PLEKHANOV, G.F.; VASIL'YEV, N.V.; DEMIN, D.V.; ZHURAVLEV, V.K.; ZENKIN, G.M.; KOVALEVSKIY, A.F.; L'VOV, Yu.A.; FAST, V.G.; TUL'SKIY, A.S. [deceased]

Some results of the study of the problem of the Tunguska meteorite. Geol.i geofiz. no.1:111-123 '63. (MIRA 16:4)

1. Tomskiy meditsinskiy institut, Nauchno-issledovatel'skiy institut Tomskogo politekhnicheskogo instituta i Institut geologii i geofiziki Sibirskogo otdeleniya AN SSSR.
(Podkamennaya Tunguska Valley—Meteorites)

L'VOV, Yu. A.

Characteristic features of swamps located in the Iksa watershed. Izv. Tomsk. otd. VBO 4:59-62 '59. (MIRA 14:6)

1. Kafedra botaniki Tomskogo Gosudarstvennogo universiteta imeni V. V. Kuybysheva.
(Iksa Valley--Swamps)

L'VOV, Yu. A.

Some features of vegetation of the Senchi swamp. Izv.Sib.otd. AN SSSR no.4:113-115 '61. (MIRA 14:6)

1. Tomskiy gosudarstvennyy universitet imeni V. V. Kuybysheva.
(Senchi Valley--Botany--Ecology)

L'VOV, Yu.A.; VASIL'YEV, N.V.; OSHAROV, A.B.; TRUKHACHEV, G.A.; YEROSHKINA, A.I.

Testing a hypothesis. Priroda 50 no.7:98-99 Jl '61. (MIRA 14:6)

1. Tomskiy gosudarstvennyy universitet (for L'vov, Osharov, Yeroshkina). 2. Betatronnaya laboratoriya Tomskogo meditsinskogo instituta (for Vasil'yev, Trukhachev).
(Ket' Valley--Tornadoes)

(3)

S/210/63/000/001/003/003
E032/E314

AUTHORS: Plekhanov, G.F., Vasil'yev, N.V., Demin, D.V., Zhuravlev, V.K., Zenkin, G.M., Kovalevskiy, A.F., L'vov, Yu.A., Tul'skiy, A.S. (Deceased) and Fast, V.G.

TITLE: Some results of studies of the problem of the Tungusska meteorite

PERIODICAL: Geologiya i geofizika, no. 1, 1963, 111 - 123

TEXT: A Composite Independent Expedition (CIE) was organized in 1959 and a number of scientific workers and engineers from institutions of Tomsk, Moscow, Novosibirsk and other towns participated in it. The aim of this expedition was to carry out a composite study of the region of the fall of the meteorite. Field work was carried out in 1960 together with a Moscow expedition directed by V.A. Koshelev. There was an expedition in the summer of 1961 organized by the Komitet po meteoritam AN SSSR (Committee for Meteorites of the AS USSR) under the direction of K.P. Florenskiy. The CIE was a part of the latter expedition. Parallel field work was carried out during 1959-1961

Card 1/4

Some results of ....

by the Committee for Meteorites (B.I. Vronskiy - 1959-1960 and A.V. Zolotov - 1959-1961). The present paper reviews briefly the results obtained by the CIE and compares them with those obtained by other workers. A chart is reproduced showing the marsh and woodland distribution and magnetometric profiles in the neighbourhood of the epicentre. It was found that the marshes were apparently natural formations, unaffected by the fall but there were some arboreal features indicating the effect of the fall on trees. A study was made in 1960 of the felling of trees as a result of the fall of the meteorite. Analysis of these data showed that the height at which the meteorite exploded was 10.5 ± 3.5 km. Magnetometric searches revealed the absence of major magnetic losses. Other studies revealed a region with enhanced concentration of Ni, Co and Mo in the soil and Ce, La, Y and Yb in the wood ash. This region was 2-6 km N.W. of the epicentre. A further series of measurements was concerned with the residual radioactivity in the region. Previous conclusions regarding the increase in radioactivity near the epicentre, as compared with greater distances, were not confirmed. It is suggested that the

Card 2/4

S/210/63/000/001/003/003
E032/E314

Some results of ....

earlier measurements revealed traces of fall-out due to American nuclear tests in 1958. Analysis of these and other published data leads the authors to suggest the following working hypothesis. In the middle of June, 1908, the Earth passed through a cosmic-dust cloud which entered the atmosphere and sedimented between 55 and 65° N. On reaching the lower layers of the atmosphere, dust particles gave rise to anomalous airglow and development of noctiluscent clouds at isolated points in Europe between June 22 and 29. The amount of dust was not, however, too great and hence the optical anomalies associated with it were localized and there was no change in the polarization of the day sky. In the morning of June 30, the Earth entered the part of the cloud containing large dust-particle clusters and the penetration of these clusters into the lower layers gave rise to a change in the polarization and the appearance of a solar halo and noctiluscent clouds. At the same time, a major meteoritic body entered the atmosphere. The resistance experienced by the body (dense swarm of particles) increased rapidly at the boundary of the troposphere with the result that the body was decelerated and the available magnetic

Card 3/4

Some results of ....

energy was converted into the energy of the explosion. This hypothesis is not fundamentally different from that put forward by V.G. Fesenkov (cometary hypothesis). It is suggested that the differences may be of terminological origin. This must be investigated further. There are 1 figure and 1 table.

ASSOCIATIONS: Tomskiy meditsinskiy institut (Tomsk Medical Institute)
NII Tomskogo politechnicheskogo instituta (NII of Tomsk Polytechnical Institute)
Institut geologii i geofiziki Sibirskogo otdeleniye AN SSSR (Institute of Geology and Geophysics of the Siberian Division of the AS USSR)

SUBMITTED: April 9, 1962

Card 4/4

LOBKOV, V.D.; KLEBANSKIY, A.L.; KOGAN, E.V.; L'VOV, Yu.A.

Effect of oxygen compounds of phosphorus on siloxane polymers. Vysokom.soed. 7 no.1:163-168 Ja '65. (MIRA 18:5)

1. Vsesoyuznyy nauchno-issledovatel'skiy institut sinteticheskogo kauchuka.

L'VOV, Yu.A.

Typology of tropical swamps. Nauch.dokl.vys.shkoly; biol.nauki no.4:144-148 '65. (MIRA 18:10)

1. Rekomendovana kafedroy botaniki Tomskogo gosudarstvennogo universiteta im. V.V.Kuybyshewa.

L'VOV, Yu.A.

Method for automatic placement of commas in performing arithmetic operations using electronic keyboard-type calculating machines. Trudy LIEI no.55:5-14 '65.
(MIRA 18:11)

L 23482-66

ACC NR: AP6013984 SOURCE CODE: UR/0230/65/000/004/0011/0014

AUTHOR: L'vov, Yu. S. (Engineer)

34

B

ORG: none

TITLE: Design and construction of an aluminum bridge

SOURCE: Transportnoye stroitel'stvo, no. 4, 1965, 11-14

TOPIC TAGS: highway bridge, aluminum, reinforced concrete, aluminum alloy, plasticity, high strength alloy/D16T aluminum alloy, D18 aluminum alloy

ABSTRACT: On the road from Ruza to Ostashevo a small bridge has been opened to traffic over the Ozerna River, the first bridge in the Soviet Union with an aluminum span structure. The bridge has five spans with a total length of 78.5 m. The two 10-m spans at each end are covered with standard reinforced concrete assemblies, while the 30-m aluminum span is in the center. The width of the roadway is 7 m, and the sidewalks are 0.75 m wide. The bridge is designed to carry an N-13 automobile load and an NG-60 caterpillar tractor load.

The aluminum span structure was designed from D16T alloy, belonging to the duralumin group. The tensile strength is σ_B = 44 kg/mm^2, the conventional yield point is $\sigma_{0.2}$ = 33 kg/mm^2 and the relative elongation is 10%.

The span structure was designed to be riveted, using rivets made of D18 alloy belonging to the duralumin group, and having high plasticity (relative

Card 1/2 UDC: 691.771:624.2/.8

L 23482-66

ACC NR: AP6013984

elongation δ = 24%) and high strength (σ_B = 33 kg/mm^2). The safety factor is two, based on the conventional yield point of the alloy, and 2.2 based on the ultimate strength of the rivets.
The aluminum span with the roadway on top consists of four girders having a simple triangular lattice with no pillars. The span of the girders, which is 32.4 m, is divided into eight panels of 4.05 m each, and the theoretical height of the girders is 2.7 m, or 1/12 of the span.
Orig. art. has: 5 figures. [JPRS]

SUB CODE: 13 / SUBM DATE: none

Card 2/2

FIKHTENGOL'TS, V.S.; ZOLOTAREVA, R.V.; L'VOV, Yu.A.; STOLYAROV, B.V., red.

[Atlas of the ultraviolet absorption spectra of substances used in the production of synthetic rubbers] Atlas ul'trafioletovykh spektrov pogloshcheniia veshchestv, primeniaiushchikhsia v proizvodstve sinteticheskikh kauchukov. Moskva, Khimiia, 1965. 113 p. (MIRA 18:7)

BOROZINETS, B.V.; GINZBURG, S.A.; GORNSHTEYN, V.M.; SHLIMOVICH, V.D.; SOVALOS, S.A.; L'VOV, Yu.N.

The RER computer and its use in the central dispatcher office of the consolidated electric power system. Elektrichestvo no.3:8-12 Mr '64. (MIRA 17:4)

1. Vsesoyuznyy nauchno-issledovatel'skiy institut elektroenergetiki (for Borozinets, Ginzburg, Gornshteyn, Shlimovich).
2. Ob" yedinennoye dispetcherskoye upravleniye Yedinoy energeticheskoy sistemy SSSR (for Sovalov, L'vov).

L'VOV, Yuliy Sergeyevich; KUZNETSOV, I.A., red.; ZUYEVA, N.K., tekhn. red.

[Aluminum bridges] Aliuminievye mosty. Moskva, Nauchno-tekhn. izd-vo avtotransp. lit-ry, 1953. 99 p. (MIRA 11:7)
(Bridges)

L'VOV, Yu.S., inzhener

New type of massive bridge supports. Avt.dor.17 no.3:19-20 N-D'54. (MIRA 8:10)
(Precast concrete)

L'VOV, Yu.S., inzh.

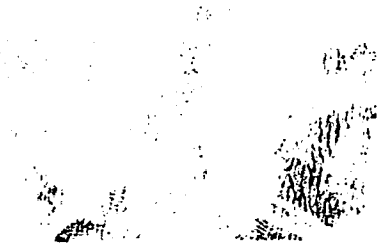
New designs of aluminum-alloy span bridges. Transp.stroi. 10 no.5:54-55 My '60. (MIRA 13:7)
(Bridges, Aluminum)

L'VOV, Yu.S., inzh.

Designing and building an aluminum bridge. Transp. stroi. 15 no.4:11-14 Ap '65. (MIRA 18:6)

YEGOROV, M.Ye.; L'VOVA, A.

Paleontological finds in Chuvashia. Izv. Vses. geog. ob-va 94 no.4:347-349 Jl-Ag '62. (MIRA 15:9)
(Chuvashia—Mamrals, Fossil)



L'VOVA, A. A.; MIKIROV, A. Ye.; POLOSKOV, S. M.

"Rocket measurements of ozone profiles above the maximum density level during the total solar eclipse of Feb 15, 1961."

report submitted for 5th Intl Space Science Symp (COSPAR), Florence, Italy, 12-16 May 64.

L 17543-65 FSS-2/EWT(l)/EEC(m)/EWG(v)/FCC/EEC-4/EEC(t)/EWA(h) Po-4/Pe-5/
Pq-4/Pae-2/Pt-10/Peb/Pi-4 SSD(a)/SSD/AFWL/ESD(t) GW

ACCESSION NR: AP5000524 S/0203/64/004/006/1082/1088

AUTHOR: L'vova, A. A.; Mikirov, A. Ye.; Poloskov, S. M.

TITLE: Rocket investigations of ozone distribution with altitude above the maximum concentration level during the total solar eclipse of 15 February 1961

SOURCE: Geomagnetizm i aeronomiya, v. 4, no. 6, 1964, 1082-1088

TOPIC TAGS: ozone distribution, ozone distribution rocket measurement, solar eclipse, total solar eclipse, sky brightness, electrophotometer, ultraviolet electrophotometer

ABSTRACT: The results of geophysical-rocket measurements of sky brightness, made with an ultraviolet electrophotometer launched into the region of the lunar shadow during the total solar eclipse of 15 Feb 1961, are discussed. The ultraviolet photometer consisted of a scanning device operating as a photon counter. A "Loza" photomultiplier with a semitransparent cathode served as a radiation detector. The photometer had an operating range of 2200 to 3200 Å. The device scanned space in two mutually perpendicular directions, through 360° in one and through 30° in the other. The total measurement cycle

Card 1/2

L 17543-65
ACCESSION NR: AP5000524

lasted 30—33 sec. From the photoelectric multiplier the pulses were applied to the shaping device and then to the integrator. The integrator time constant was 0.5 μsec. The method used for determining ozone content was that of oblique probing, and the data obtained therefore pertains to the upper-ozone layer for altitudes of 40—87 km. Fig. 1 of the Enclosure shows the ozone densities as a function of altitude. A detailed analysis of measurement errors leads the authors to conclude that, in determining ozone concentration, the maximum error did not exceed 73% for all altitudes. Orig. art. has: 7 figures and 4 formulas.

ASSOCIATION: Institut prikladnoy geofiziki (Institute of Applied Geophysics)

SUBMITTED: 06Jun64 ENCL: 01 SUB CODE: AA, EC

NO REF SOV: 004 OTHER: 004 ATD PRESS: 3152

Card 2/3

L 17543-65
ACCESSION NR : AP5000524 ENCLOSURE: 01

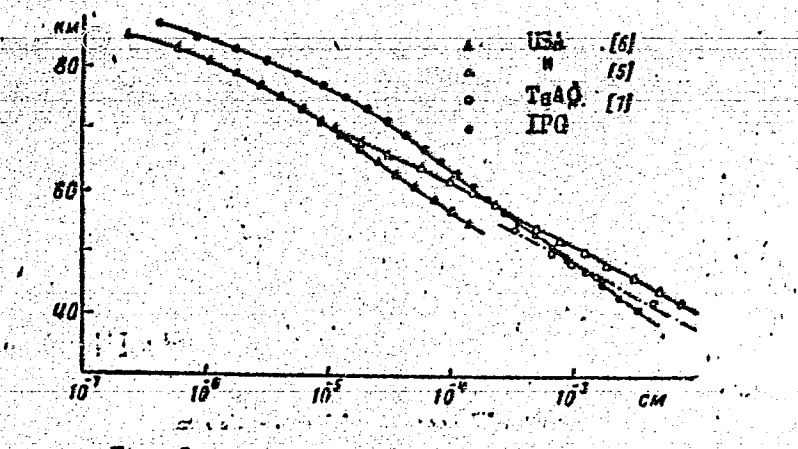


Fig. 1

Card 3/3

L'VOVA, A.I., kand.tekhn.nauk; CHERNOZHUKOV, N.I., prof., doktor tekhn. nauk

Production of synthetic lubricants from polyalkylene glycols and their derivatives. Trudy MNI no.20:354-392 '57. (MIRA 13:5)

(Glycols) (Lubrication and lubricants)

30651
S/081/61/000/020/086/089
B110/B147

15.6400
11.9200

AUTHORS: Chernozhukov, N. I., L'vova, A. I.

TITLE: The problem of the synthesis of synthetic lubricants on the basis of ethylene oxide

PERIODICAL: Referativnyy zhurnal. Khimiya, no. 20, 1961, 411, abstract 20M164 ([Tr.] Groznensk. neft. in-t, sb. 23, 1960, 225-231)

TEXT: The production of monoethers of polyethylene glycol (I), which are suited as lubricants, by condensation of ethylene oxide (II) with CH_3OH, C_2H_5OH, n-C_4H_9OH, n-$C_5H_{11}OH$, n-$C_6H_{13}OH$, n-$C_9H_{19}OH$ and with the residuum of cellosolve production was examined. Fraction I was separated from the condensation products by vacuum distillation. When II has a polymerization degree of 3-7, the optimum condensation conditions (in a rotating autoclave) for producing I are as follows: 190°C, duration 3-4 hr, molar ratio II:alcohol = 2:1, catalyst: $Fe_2(SO_4)_3$. I from CH_3OH, C_2H_5OH, and from the residuum are readily soluble in water, I from

Card 1/2

The problem of the synthesis of synthetic...

$n\text{-}C_4H_9OH$ are poorly soluble, and I from $n\text{-}C_5H_{11}OH$ and $n\text{-}C_9H_{19}OH$ are insoluble. I display good viscosity and temperature characteristics, and low solidification points (from -65 to $<-70^\circ C$ at viscosities of 2-19 centistokes/$50^\circ C$), except for I from $n\text{-}C_9H_{19}OH$ (-26, $-30^\circ C$). Water-soluble I were converted into water-insoluble benzyl ethers of I which likewise possess low solidification points and good viscosity and temperature characteristics. [Abstracter's note: Complete translation.]

Card 2/2

L 34183-65 EWT(m)/EPF(c)/T Pr-4 DJ/WE
ACCESSION NR: AT5006944 S/2982/64/000/051/0199/0206

AUTHOR: Gurevich, I. L.; Smidovich, Ye. V.; Barinov, V. Ye.; L'vova, A. I.; Khavkina, O. D.; Kiselev, B. D.; Mukharemov, A. M.; Melkumova, N. A.; Shcherbakova, V. A.

TITLE: An efficient process for the complex refining of Turkmen petroleum

SOURCE: Moscow. Institut neftekhimicheskoy i gazovoy promyshlennosti. Trudy, no. 51, 1964. Neftekhimiya, neftekhimicheskiye protsessy i neftepererabotka (Petroleum chemistry, petrochemical processes and oil refining), 199-206

TOPIC TAGS: petroleum refining, deasphalting, mazout, catalytic cracking, deparaffinization, petrolatum, ceresin

ABSTRACT: The authors studied the deasphalting of mazout and residues from petroleum refining above 500C, and attempted to determine the possibility of broadening the raw material base of catalytic cracking. The main feature of the proposed complex process of refining Turkmen petroleums for use at the Krasnovodsk refinery is the construction of a deasphalting unit and the use of the deasphaltate as the raw material for catalytic cracking. Purification by adsorption followed by deparaffinization of the deasphaltate can produce high-grade residual oils of types MS-20

Card 1/2

L 34183-65
ACCESSION NR: AT5006944

and MS-24 whose properties are equal to those of the same type of oils obtained from Azerbaijan petroleums. The adsorption purification and deparaffinization of oil distillates by methylethylketone - toluene mixtures can produce high-grade transformer, industrial, and automobile motor oils. The use of petrolatum as a raw material for the preparation of high-melting ceresins is highly recommended. A complete flow sheet of the proposed process is given. Orig. art. has: 5 tables and 1 flow sheet.

ASSOCIATION: Institut neftekhimicheskoy i gazovoy promyshlennosti, Moscow (Petrochemical and gas industry institute)

SUBMITTED: 00 ENCL: 00 SUB CODE: FP

NO REF SOV: 000 OTHER: 000

Card 2/2

OHLOVA, N.N.; L'VOVA, A.I.

Characteristics of the influenza outbreak of 1959. Vest. AMN SSSR 14 no.10:17-19 '59. (MIRA 13:6)

1. Institut virusologii imeni D.I. Ivanovskogo AMN SSSR.
(INFLUENZA)

BEYLINSON, A.V.; ORLOVA, N.N.; SHAKHNINA, K.L.; VITOKHINA, T.A.; CHISTOSERDOVA, G.V.; L'VOVA, A.I.

Purification and concentration of polyvalent sera against influenza by fractional salting out. Vop. virus. 5 no. 2:140-145 My-S '60.

1. Institut epidemiologii i mikrobiologii imeni N.F. Gamalei AMN SSSR i Institut virusologii imeni D.I. Ivanovskogo AMN SSSR, Moskva.

(SERUM) (INFLUENZA)

GAYDAMOVICH, S.Ya.; L'VOVA, A.I.; KLIMENKO, S.M.

Detection of the virus of tick-borne encephalitis in tissue culture by means of fluorescent antibodies. Vop. virus 6 no.4:399-404 '61. (MIRA 14:11)

1. Laboratoriya diagnostiki i indikatsii virusov Instituta virusologii imeni D.I.Ivanovskogo AMN SSSR, Moskva.
(ENCEPHALITIS) (ANTIGENS AND ANTIBODIES)

LVOVA, A.I.

"Florescent antibody for study of multiplication of Japanese encephalitis virus in tissue culture."

Report submitted to the Intl. Congress for Microbiology

Montreal, Canada 19-25 Aug 1962

LVOVA, A.I.

Fluorescent antibody method used in tick-borne encephalitis virus isolation experiments from patients. Acta virol. 6 no.3:283 My '62.

1. D.I.Ivanovsky Institute of Virology, U.S.S.R. Academy of Medical Sciences, Moscow.
(ENCEPHALITIS EPIDEMIC virol) (ANTIBODIES)

L'VOVA, A.I.; TITOVA, N.G.

Use of different virological methods of determining cellular and free antigens of tick-borne encephalitis in a tissue culture during the development of the infection. Vop.virus. 7 no.6: 665-670 N-D '62. (MIRA 16:4)

1. Institut virusologii imeni D.I.Ivanoskogo AMN SSSR, Moskva.
(ENCEPHALITIS) (ANTIGENS AND ANTIBODIES)

ACC NR: AP6034387 (N) SOURCE CODE: UR/0402/66/000/005/0599/0601

AUTHOR: L'vova, A. I.; Mel'nikova, Ye. E.; Galegov, G. A.; Gaydamovich, S. Ya.

ORG: Institute of Virology im. D. I. Ivanovskiy, AMN SSSR, Moscow (Institut virusologii AMN SSSR)

TITLE: The stimulating action of L-glutamine on multiplication of Venezuelan encephalomyelitis virus

SOURCE: Voprosy virusologii, no. 5, 1966, 599-601

TOPIC TAGS: virology, virus disease, encephalomyelitis, GLUTAMIC ACID

ABSTRACT: The ability of glutamine to stimulate Venezuelan encephalomyelitis virus in Henks solution was demonstrated. Glutamic acid does not have this stimulating effect. Chromatography showed that glutamine is assimilated more rapidly by cells infected with Venezuelan encephalomyelitis than by healthy cells. Since exogenous glutamine is necessary for optimum conditions of multiplication of this virus, structural analogues of glutamine or its antimetabolites may be of interest for chemotherapy of Venezuelan encephalomyelitis. Orig. art. has: 1 figure. [W.A. 50]

SUB CODE: 06/ SUBM DATE: 10Feb66/ ORIG REF: 001/ OTH REF: 001

Card 1/1 UDC: 576.858.25.095.18:615.739.64

GUREVICH, I.L.; L'VOVA, A.I.; SMIRNOV, V.A.

Products of deasphalting as a catalytic cracking stock. Khim.i tekh.topl.i masel 7 no.8:32-35 Ag '62. (MIRA 15:8)

1. Moskovskiy institut neftekhimicheskoy i gazovoy promyshlennosti im. akad. Gubkina.

(Cracking process)

L'VOVA, A.I.

Possibility of using a deasphalted product as a raw product for catalytic cracking. Trudy MINKHiGP no.44:188-192 '63.
(MIRA 18:5)

L'VOVA, A.N., PLETNEVA-SOKOLOVA, A.D.

Botany, Medical - Chuvash A.S.S.R.

"Medicinal plants of Chuvash A.S.S.R." A.D Pletneva-Sokolova, A.N. L'vova.
Reviewed by Ye.Yu Shass. Apt. delo No. 1, 1952

Monthly List of Russian Accessions, Library of Congress
November 1952 UNCLASSIFIED.

L'VOVA, A.P.

VAGIN, Ye.V., kand. khim. nauk; PETUKHOV, S.S., inzh.; L'VOVA, A.P., inzh.

An apparatus for determination of krypton. Kislorod 10 no.3:24-25 '57. (MLRA 10:11)

(Krypton--Analysis)

L'VOVA, A. S.

3

The temperature dependence of the magnetization of pyrrhotite. [illegible] P. Belov, A. V. Zalesski and A. S. L'vova (Inst. Cryst., Acad. Sci. U.S.S.R., Moscow). Kristallografiya 1, [illegible] (1956).—The susceptibility and spontaneous magnetization [illegible] $FeS_{1.}$ [illegible] to $FeS_{1.}$ [illegible] transformation [illegible] character and takes place isothermally. [illegible] temp. changes the λ-peak vanishes and the magnetization curve is of the normal Weiss type. The magnetic properties of pyrrhotite above the Curie point (about 30[illegible]°) are strongly affected by the presence of O. The presence of a magnetite-like phase is inferred from the magnetization isotherms between 300 and 600°, which show a Curie point of 670°. A. L. Mackay

RM

L 33597-66 EWT(1)/T IJP(c) GG

ACC NR: AR6016206 SOURCE CODE: UR/0058/65/000/011/D037/D037

60
B

AUTHORS: L'vova, A. S.; Sushchinskiy, M. M.

TITLE: Infrared spectra of liquid crystals

SOURCE: Ref. zh. Fizika, Abs. 11D286

REF SOURCE: Tr. Komis. po spektroskopii. AN SSSR, t. 3, vyp. 1, 1964, 611-616

TOPIC TAGS: ir spectrum, crystal, liquid state, absorption band, temperature dependence, radiation intensity

ABSTRACT: The ir spectra of a number of substances in the solid and liquid crystalline state and in the state of an isotropic liquid were investigated. The temperature dependence of the intensity in these states was investigated for several absorption bands. A peculiar variation of the curves showing the temperature dependence of the intensity is observed in the liquid-crystal region. [Translation of abstract]

SUB CODE: 20

Card 1/1 80

L 18938-65 EWT(m)/EWP(t)/EWP(b) IJP(c)/AFWL/ASD(p)-3/AS(mp)-2/AFMDC/SSD/ESD(t) JW/JD

ACCESSION NR: AP5003163 S/0078/64/009/009/2251/2252

AUTHOR: L'vova, A. S.; Feodos'yev, N. N.

TITLE: Heat of formation of lithium metazirconate

SOURCE: Zhurnal neorganicheskoy khimii, v. 9, no. 9, 1964, 2251-2252

TOPIC TAGS: heat of formation, lithium, zirconate, calorimetry

ABSTRACT: Literature date on lithium metazirconate are scarce and pertain chiefly to the conditions of its synthesis, identification and uses.

The purpose of the work was to determine the heats of formation of lithium metazirconate by means of a bomb calorimeter, using carbon black as a catalyst. For this purpose, the authors measured the heat of the reaction $Li_2CO_3 + ZrO_2 = Li_2ZrO_3 + CO_2$.

The phase composition of the end products of the reaction was determined by x-ray and chemical methods. The reaction product was identified as being lithium metazirconate by means of the x-ray powder method.

Card 1/2

L 18938-65
ACCESSION NR: AP5003163

On the basis of the experimental data obtained, the authors calculated the heats of formation of lithium metazirconate from the oxides (ΔH_{298} = -15.2 ± 0.4 kcal/mole), and from the elements (ΔH°_{298} = -417.2 ± 0.4 kcal/mole). Orig. art. has 2 tables.

ASSOCIATION: none

SUBMITTED: 11Jun63 ENCL: 00 SUB CODE: IC, GC

NO REF SOV: 002 OTHER: 002 JPRS

Card 2/2

ACCESSION NR: AP4011436 S/0076/64/038/001/0028/0032

AUTHOR: L'vova, A. S. (Rostov-na-Donu); Feodos'yev, N. N. (Rostov-na-Donu)

TITLE: Determination of heats of formation of calcium, strontium and barium metazirconates

SOURCE: Zhurnal fiz. khim., v. 38, no. 1, 1964, 28-32

TOPIC TAGS: strontium metazirconate, calcium metazirconate, barium metazirconate, heat of formation, barium zirconate, strontium zirconate, calcium zirconate

ABSTRACT: In studying the phase diagrams of $CaO-ZrO_2$, $SrO-ZrO_2$ and $BaO-ZrO_2$ systems, calcium, strontium, and barium metazirconates were found in their corresponding systems. The heats of formation for these zirconates were determined by using the LeChatelier calorimetric bomb method (Compte rendus, Se'ances Acd. Sci, Paris 120 (1895)623; 122(1896)80) with carbon black as an initiator. The following values were obtained for the zirconates under study:

Card 1/2

ACCESSION NR: AP4011436

$CaZrO_3$ ΔH_{298} = 3.5 + 2 kcal/mol
$SrZrO_3$ ΔH_{298} = 38.2 + 0.2 kcal/mol
$BaZrO_3$ ΔH_{298} = 34.4 + 0.4 kcal/mol

These values and additional data from the literature were used to calculate the changes in the isobaric potential corresponding to the formation of these zirconates. Orig. art. has: 5 tables

ASSOCIATION: Rostovskiy gosudarstvenny*y universitet (Rostov State University)

SUBMITTED: 13Apr62 DATE ACQ: 14Feb64 ENCL: 00

SUB CODE: IC, GC NO REF SOV: 009 OTHER: 013

Card 2/2

L 1649-66 EWT(m)/EWP(t)/EWP(b) IJP(c) JD/JW/JG

ACCESSION NR: AP5021425 UR/0076/65/039/008/2049/2051
541.1

AUTHOR: L'vova, A. S.; Feodos'yev, N. N.

TITLE: Enthalpy of formation of calcium, strontium, and barium metahafnates

SOURCE: Zhurnal fizicheskoy khimii, v. 39, no. 8, 1965, 2049-2051

TOPIC TAGS: enthalpy, calcium metahafnate, strontium metahafnate, barium metahafnate

ABSTRACT: The enthalpies of the reactions

$$CaCO_3 + HfO_2 \rightarrow CaHfO_3 + CO_2,$$
$$SrCO_3 + HfO_2 \rightarrow SrHfO_3 + CO_2,$$
$$BaCO_3 + HfO_2 \rightarrow BaHfO_3 + CO_2,$$

were measured by using a bomb calorimeter and an initiator (carbon black). The reaction products were identified by x-ray analysis. The reaction of $BaCO_3$ and $SrCO_3$ with HfO_2 was not associated with the thermal decomposition of the unreacted carbonate, but $CaCO_3$ did decompose. Since the reactions took place at constant volume, in

Card 1/2

L 1649-66

ACCESSION NR: AP5021425

passing from ΔU to ΔH, a correction was introduced which was equal to RT per mole of CO_2 evolved. The enthalpies obtained for the reactions $MeCO_3 + HfO_2 \rightarrow MeHfO_3 + CO_2$, where Me = Ca, Sr, and Ba, were used to calculate the standard enthalpies of formation of calcium, strontium, and barium metahafnates from the oxides and elements. The data of O. Kubaschewski and E. L. L. Evans (Metallurgische Thermochemie, VEB Verlag Technik, Berlin, 1959) were used in the calculations. Orig. art. has: 5 tables.

ASSOCIATION: Rostovskiy na-Donu gosudarstvennyy universitet (Rostov-on-Don-State University)

SUBMITTED: 13Jul64 ENCL: 00 SUB CODE: GC

NO REF SOV: 003 OTHER: 003

Card 2/2

L'VOVA, E.; PORTMAN, E.; SEMENOV, P.; TERKHANOV, A.; TSEYTLIN, M.; SHAPIRO, Ya.

Pamphlet on the development of grain industry in the forthcoming seven-year plan ("Seven-year plan for the development of grain industry" by A.V.Borodin. Reviewed by E.L'vova and others). Muk.-elev.prom. 25 no.9:32 S '59.
(MIRA 12:12)

1. Leningradskoye oblastnoye upravleniye khleboproduktov.
(Grain elevators) (Grain milling) (Borodin, A.V.)

L'VOVA, E.

Curiosities from the history of science and art. Nauka i zhizn' 29 no.7:36-37 Jl '62. (MIRA 16:6)
(Science--Curiosa and miscellany)

PUNCOCHAR, Z., inz.; LVOVA, H., inz.; FRIEDRICH, V., inz.; KECLIK, V., inz.; KRUMNIKL, Frantisek, inz.; BAUER, J., inz.; SORAL, J., inz.; HORAK, J., dr., inz.; PEDLIK, M., inz.

Information on metallurgy. Hut listy 18 no.5:361-374 My '63.

L 34226-66

ACC NR: AP6026064 SOURCE CODE: CZ/0034/65/000/012/0835/0841

AUTHOR: Leitner, Jindrich (Engineer); Lvova, Helena (Engineer) 18 B

ORG: Research Institute, ZDH, Hnisek pod Brdy (Vyzkumny ustav ZDH)

TITLE: Production of basic sinter from Krivoi Rog ore

SOURCE: Hutnicke listy, no. 12, 1965, 835-841

TOPIC TAGS: sintering furnace, laboratory furnace, metallurgic process, metallurgic research

ABSTRACT: The authors describe experimental results obtained on laboratory-sized apparatus. The sintering was made using returned fines and limestone, within basicity limits of 0.8 - 1.2; good agglomeration and technical properties of the product were obtained. Increasing basicity increases the degree of oxidation and the ability for reduction. Grains smaller than 5 mm are more resistant to attrition, and the amount of oversized grains is reduced. The optimum basicity depends on the analysis of the ore. The amount of carbon and the water content must be maintained within narrow limits; the process should be conducted at a vacuum of 1000 mm of water column. The agglomerate has a tendency to disintegrate and therefore must be cooled carefully and handled properly when fed into blast furnaces. Engineer K. Smrcek, VUZDH, O. Cejchan, and Engineer Svata, Polarographic Institute, CSAV, assisted in the technical work. Orig. art. has: 12 figures and 3 tables. [Based on authors' Eng. abst.] [JPRS: 34,272]

SUB CODE: 11, 13 / SUBM DATE: none / ORIG REF: 003 / SOV REF: 008

UDC: 669.162.13

Card 1/1 JT

L'VOVA, I.S.; LEVIN, A.M.

Ways of using phosphogypsum. Trudy NIUIF no.208:200-206
'65. (MIRA 18:11)

KOMISSAROVA, L.N., kand. khim. nauk, red.; PLYUSHCHEV, V.Ye., kand. khim. nauk, red.; L'VOVA, I., red.; KHAR'KOVSKAYA, L., tekhn. red.

[Methods for the separation of rare earth metals; collection of translated articles] Metody razdeleniia redkozemel'nykh metallov; sbornik statei. Moskva, IZd-vo inostr. lit-ry, 1961. 361 p. (MIRA 15:2)

(Rare earth metals)

BOROVIKOV, P.P.; L'VOVA, I.A.

Types of vermiculite deposits, their commercial significance and further prospecting trends. Zakonom. razm. polezn. iskop. 6:470-488 '62. (MIRA 16:6)

1. Vsesoyuznyy geologicheskiy institut.
(Vermiculite)

L'VOVA, I.A.

Contact-metasomatic phenomena in magnesian carbonate rocks of the Kuturchinskoye Belogor'ye and phlogopite-vermiculite mineralization associated with them. Inform. sbor. VSEGEI no.55:3-19 '62. (MIRA 17:1)

VASIL'YEV, Grigoriy Vasil'yevich; GINSBERG , S.Kh., retsenzent;
L'VOVA, I.A., red.

[Water supply for enterprises of the textile industry]
Vodosnabzhenie predpriiatii tekstil'noi promyshlennosti.
Moskva, Legkaia industriia, 1964. 273 p. (MIRA 17:11)

L'VOVA, I.A.

Types of vermiculite deposits in the western part of the region of the Sea of Azov. Trudy VSEGEI 108:36-53 '64.
(MIRA 18:2)

L'VOVA, I.A.

Late results of the operation of the translocation of the musculus peroneus longus on the tuber calcanei. Ortop., travm. i protez. 27 no. 1:75-77 Ja '66 (MIRA 19:1)

1. Iz Irkutskogo instituta travmatologii i ortopedii (direktor - prof. Z.V. Bazilevskaya). Submitted March 11, 1965. Adres avtora: Irkutsk, ul. Bortsov Revolyutsii, d. 1. Institut travmatologii i ortopedii.

L'VOVA, I.A., mladshiy nauchnyy sotrudnik

Surgical prevention and treatment of pes calcaneus following poliomyelitis. Ortop., travm. i protez. 25 no.8:32-35 Ag '64. (MIRA 18:4)

1. Iz Irkutskogo instituta travmatologii i ortopedii (dir. - prof. Z.V. Bazilevskaya). Adres avtora: Irkutsk, ul. Bortsov Revolyutsii, d.1, Institut travmatologii i ortopedii.

GRINKEVICH, N.I.; IGNAT'YEVA, N.S.; L'VOVA, I.L.; ZORIN, Ye.A.

Examination of some vitamin-containing plants for their manganese content. Apt. delo. 11 no.5:41-43 S-O '62. (MIRA 17:5)

1. Farmatsevticheskiy fakul'tet I Moskovskogo ordena Lenina meditsinskogo instituta imeni Sechenova.

L'VOVA, I., kand. biol. nauk; SAKOVICH, I., studentka; TIKHONOV, N., kand. biol. nauk; MORSHCHIKHINA, S., biolog.

Biological investigation of the growth and development of cucumbers on unsheltered ground. Nauka i pered. op. v sel'khoz. 8 no.6:48-51 Je '58. (MIRA 11:6)

1. Moskovskiy ordena Lenina Gosudarstvennyy universitet imeni M.V. Lomonosova.

(Cucumbers)

L'VOVA, I. N. --

"Changes in the Physicochemical Properties of Cells of the Stigmata of Wheat at the Time of Growth of the Pollen Tubes Under Various Pollinization Conditions." Cand Biol Sci, Moscow State U, Moscow, 1953. (RZhBiol, No 3, Oct 54)

Survey of Scientific and Technical Dissertations Defended at USSR Higher Educational Institutions (10)

SO: Sum. No. 481, 5 May 55

L'VOVA, I.N.

Germination of rye pollen in artificial media [with summary in English]
Biul.MOIP. Otd.biol. 63 no.4:87-91 Jl-Ag '58 (MIRA 11:11)
(RYE)
(POLLEN)

L'VOVA, I.N.

Effect of the age of pollinated flowers of wheat on its hybrid progeny. Nauch.dokl.vys.shkoly; biol.nauki no.2:182-186 '60.
(MIRA 13:3)

1. Rekomendovana kafedroy darvinizma Moskovskogo gosudarstvennogo universiteta imeni M.V. Lomonosova.
(WHEAT BREEDING)

ALEKSANDROV, V.G., prof., red.; DVORYANKIN, F.A., prof., red.; KADEN, N.N., kand. biol. nauk, red.; KUPERMAN, F.M., prof., red.; L'VOVA, I.N., kand. biol.nauk, red.; PALAMARCHUK, I.A., kand.biol.nauk, red.; PODDUBNAYA-ARNOL'DI, V.A., prof., red.; PRONIN, V.A., kand.biol.nauk, red.; RZHANOVA, Ye.I., kand. biol.nauk, red.; ROSTOVTSEVA, Z.P., kand. biol.nauk, red.; SEREBRYAKOV, I.G., prof., red.; USTINOVA, Ye.I., kand. biol.nauk, red.; CHELYADINOVA, A.I., kand. biol.nauk, red.; YERMAKOV, M.S., tekhn. red.

[Morphogenesis in plants; transactions dedicated to the 100th anniversary of the publication of Darwin's "Origin of species."] Morfogenez rastenii; trudy posveshchaiutsia 100-letiiu so dnia vykhoda v svet truda Charlza Darvina "Proiskhozhdenie vidov." Moskva, Izd-vo Mosk. univ. Vol.1. 1961. 683 p. (MIRA 14:9)

1. Soveshchaniye po morfogenezu rasteniy, 1959.
(Botany—Morphology)

L'VOVA, Irina Nikolayevna; KUPERMAN, F.M., prof., otv. red.; DANIL'CHENKO, O.P., red.; GEORGIYEVA, G.I., tekhn. red.

[Sex in plants; a lecture from the course "Biology of plant development"] Pol u rastenii; lektsiia dlia studentov zaochnogo i vechernego otdelenii biologicheskikh fakul'tetov gosudarstvennykh universitetov. Lektsiia iz kursa "Biologiia razvitiia rastenii." Moskva, Izd-vo Mosk. univ., 1963. 54 p. (MIRA 16:5)

(Plants, Sex in)

1. L'VOVA, K.

2. USSR (600)

4. Agriculture

7. In the woodlands. Story. Moskva, Goslitizdat, 1951.

9. Monthly List of Russian Accessions, Library of Congress, January 1953. Unclassified.

LVOVA, KSENIIA.

Windbreaks, Shelterbelts, Etc.

Story of those who changed nature. ("On the forest strip." Reviewed by V. Tolokonnikov). Les i step' 4, No. 2, 1952.

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

L'VOVA, K.A.

Plant nematodes of forest plantations in Gorkiy Province. Uch.zap. GGPI no.27:160-169 '60. (MIRA 15:3)
(Gorkiy Province--Nematode diseases of plants)
(Trees--Diseases and pests)

L'VOVA, K.A.

Pine phytonematodes of Gorkiy Province. Uch. zap. GGPI 48:167-169 '64. (MIRA 18:4)

TATEVSKIY, Vladimir Mikhaylovich; YAROVOY, Stanislav Semenovich; BENDERSKIY, Viktor Adol'fovich; L'VOVA, L.A., vedushchiy red.; FEDOTOVA, I.G., tekhn.red.

[Methods for the calculation of and regularities in the physico-chemical properties of paraffin hydrocarbons] Zakonomernosti i metody rascheta fiziko-khimicheskikh svoistv parafinovykh uglevodorodov. Moskva, Gos.nauchno-tekhn.izd-vo neft. i gorno-toplivnoi lit-ry, 1960. 113 p. (MIRA 13:5)
(Paraffins)

TARASOV, Aleksey Issarionovich. Prinimali uchastiye: KUZ'MINA, A.V.; ZIMINA, K.I.; POLYAKOVA, A.A.; IOGANSEN, A.V.; FROLOVSKIY, P.A.; LULOVA, N.I.; L'VOVA, L.A., vedushchiy red.; MUKHINA, E.A., tekhn.red.

[Gases obtained in petroleum refining and methods of their analysis] Gazy neftepererabotki i metody ikh analiza. Moskva, Gos.nauchno-tekhn.izd-vo neft. i gorno-toplivnoi lit-ry, 1960. 222 p. (MIRA 13:2)
(Petroleum--Refining) (Gases--Analysis)

TATEVSKIY, V.M., prof., red.; L'VOVA, L.A., vedushchiy red.; MUKHINA, E.A., tekhn.red.

[Physicochemical properties of individual hydrocarbons; recommended values] Fiziko-khimicheskie svoistva individual'nykh uglevodorodov; rekomenduemye znacheniia. Moskva, Gos. nauchno-tekhn.izd-vo neft. i gorno-toplivnoi lit-ry, 1960. 412 p. (MIRA 13:12)

(Hydrocarbons)

DINTSES, Arkadiy Il'ich, prof., red.; POTOLOVSKIY, Lev Aleksandrovich, prof., red.; L'VOVA, L.A., vedushchiy red.; MUKHINA, E.A., tekhn.red.

[Principles of the technology of petrochemical synthesis] Osnovy tekhnologii neftekhimicheskogo sinteza. Moskva, Gos.nauchno-tekhn. izd-vo neft. i gorno-toplivnoi lit-ry, 1960. 852 p.
(Petroleum chemicals) (MIRA 13:9)

KARAPET'YANTS, Mikhail Khristoforovich; CHEN GUANG-YUE [Ch'êng Kuang-yüeh]; KIREYEV, V.A., prof., retsenzent; L'VOVA, L.A., vedushchiy red.; MUKHINA, E.A., tekhn. red.

[Boiling point and pressure of hydrocarbon saturated vapors] Temperatura kipeniia i davlenie nasyshchennogo para uglevodorodov. Moskva, Gos.nauchno-tekhn. izd-vo neft. i gorno-toplivnoi lit-ry, 1961. 241 p. (MIRA 14:6)

(Hydrocarbons)

KREYN, S.E.; ZASLAVSKIY, Yu.S.; VOINOV, N.P.; L'VOVA, L.A., ved. red.; POLOSINA, A.S., tekhn. red.

[Lubricant and the engine] Smazochnoe maslo i dvigatel'. Moskva, Gostoptekhizdat, 1952. 198 p. (MIRA 16:7)
(Internal combustion engines--Lubrication)

L'VOVA, L.A.

Anodic evolution of oxygen on cadmium in concentrated alkali solutions. Zhur. fiz. khim. 37 no.9:2114-2117 S '63. (MIRA 16:12)

1. Saratovskiy gosudarstvennyy universitet.

L'VOVA, L.A.; FORTUNATOV, A.V.

Anodic evolution of oxygen on cadmium in concentrated alkali solutions. Zhur. fiz. khim. 37 no.9:2118-2121 S '63. (MIRA 16:12)

1. Saratovskiy gosudarstvennyy universitet.

L'VOVA, L.A. (Saratov); FORTUNATOV, A.V. (Saratov)

Anodic oxidation of cadmium in concentrated solutions of alkali. Part 1. Zhur.fiz.khim. 37 no.8:1708-1711 Ag '63. (MIRA 16:9)

1. Saratovskiy gosudarstvennyy universitet.
(Cadmium) (Oxidation, Electrolytic)

FORTUNATOV, A.V.; L'VOVA, L.A.; Prinimala uchastiye STOYAKOVA, O.N., studentka

Anodic oxidation of cadmium in concentrated solutions of alkali. Part 2. Zhur.fiz.khim. 37 no.8:1712-1717 Ag '63. (MIRA 16:9)

1. Saratovskiy gosudarstvennyy universitet.
(Cadmium) (Oxidation, Electrolytic)

ACCESSION NR: AT4043083 S/0000/64/000/000/0395/0411

AUTHOR: L'vova, L. A., Fortunatov, A. V.

TITLE: Anodic oxidation of Cd in concentrated alkali solutions

SOURCE: Mezhvuzovskaya konferentsiya po anodnoy zashchite metallov ot korrozii. 1st Kazan, 1961. Anodnaya zashchita metallov (Anodic protection of metals); doklady* konferentsii. Moscow, Izd-vo Mashinostroyeniye, 1964, 395-411

TOPIC TAGS: cadmium electrode, anodic oxidation, concentrated alkali electrolyte, cadmium electrode passivation, cadmium electrode anodic oxidation, electrochemical adsorption, electrode equivalent diagram, potentiostatic polarization curve, galvanostatic polarization curve, DC passivation analysis, corrosion

ABSTRACT: Sheet cadmium electrodes (0.12% impurities, working surface 10 cm^2) and cadmium wire (99.999% pure, diameter = 0.7 mm, working surface 0.08 cm^2) were used to obtain potentiostatic-galvanostatic polarization curves and to study the passive state of an electrode by direct current methods, respectively, in 1.1 - 13N NaOH solutions at temperatures of 25 - 80C. Electrode surfaces were prepared by nitral etching and electrolytic polishing. The results are plotted on several graphs and indicate the existence

Card 1/2

ACCESSION NR: AT4043083

of three stages in the potential range from equilibrium to oxygen evolution, which differ in the condition of the electrode surface. A change in sign of the electrode surface charge (- to +) produces a sharp increase in the rate of oxidation, caused by specific adsorption of hydroxyl ions. Equivalent electrical diagrams were plotted for an electrode in the active and passive states and these show that electrochemical adsorption processes are of decisive significance for the anodic oxidation and passivation of a Cd electrode. A probable mechanism is given for passivation of Cd in alkaline solutions, based on the adsorption of singly charged ions of atomic oxygen. Orig. art. has: 2 tables, 15 graphs and 1 formula.

ASSOCIATION: None

SUBMITTED: 13Mar64 ENCL: 00

SUB CODE: MM NO REF SOV: 010 OTHER: 005

Card 2/2

L'VOVA, Lida

Who will win? IUn. nat. no.11:8-10 O '62. (MIRA 16:5)

1. Petushinskaya shkola No.2 Vladimirskoy oblasti.
(Corn (Maize))

S/068/61/000/010/002/002
E071/E435

AUTHORS: Borts, A.G., Krichko, A.A., Konyashina, R.A., Lozovoy, A.V. and L'vova, L.N.

TITLE: Processing of anthracene fraction by a hydrogenation method

PERIODICAL: Koks i khimiya, no.10, 1961, 53-56

TEXT: An investigation of the destructive hydrogenation of anthracene fraction I (raw and crystallized out) of the Nizhne-Tagil'skiy metallurgicheskiy kombinat (Nizhne-Tagil Metallurgical Combine) was carried out in order to develop a method of its conversion into more valuable products - light aromatics and naphthalene, the demand for which is steadily increasing. The hydrogenation experiments were carried out on a continuous pilot plant with the capacity of the reactor of 0.2 and 6.0 litres. The influence of pressure (100 to 200 atm), temperature (520 to 550°C) volume velocity (0.5 to 1.0 kg/litre hr) and catalysts (MoO_3 + Al_2O_3 and CoO + MoO_3 + Al_2O_3) on the yield and composition of the products was tested. It was found that, on increasing pressure from 100 to 200 atm at 520°C, the yield of hydrogenated products decreases from 96.4 to 90.1%. The depth of conversion of

the anthracene fraction into liquid products boiling up to 230°C and not initially present in the raw material was: at 100 atm, 15.8%; at 150 atm, 19.8%; at 200 atm, 27.2%. The yield of the fraction with a boiling temperature above 300°C (originally present in an amount of 68.1%) decreased to 42.6, 30.7 and 25.6% respectively. Under a pressure of 150 atm, anthracene is completely transformed into lower boiling products, carbazole by 87.8%, phenanthrene by 81%. A pressure of 150 atm was found to be the optimum for the process. An increase in the temperature of the process from 520 to 550°C is accompanied by some decrease in the yield of hydrogenation products and an increase in the proportion of fractions boiling to 230 and 300°C. The temperature range 520 to 550°C can be utilized in the process: beginning from 520°C for a fresh catalyst and steadily increasing during 100 to 200 hours to 550°C with decreasing activity of the catalyst (due to the deposition of coke). The formation of coke amounted to 0.14% for $MoO_3 + Al_2O_3$ catalyst and to 0.12% for $CoO + MoO_3 + Al_2O_3$ catalyst. The latter catalyst was found to be more active (a higher yield of products boiling to 230°C). The optimum volume velocity was found

Processing of anthracene ...

to be 0.5 kg/litre of the catalyst hour. On complete hydrogenation of the anthracene fraction I (recirculation of the fraction boiling above 250°C, about 45%) the following method of processing hydrogenation products is proposed: fraction boiling up to 250°C is distilled, the distillate boiling up to 150°C is extracted with diethyleneglycol to separate aromatic hydrocarbons. The refined products consisting mainly of 5 and 6 membered naphthenes can be transformed into C_6-C_8 aromatic hydrocarbons by platforming. The fraction boiling at 150 to 200°C (81.9% aromatic hydrocarbons) can be used as a solvent. The fraction boiling at 200 to 230°C can be used for the production of naphthalene (filtration at 0°C) and tetralene (rectification). The denaphthalenized fraction 200 to 230°C can be used as a substitute for tetralene or, on mixing with the fraction 150-200°C, as a solvent for motorcar paints. The fraction boiling at 230 to 250°C, consisting mainly of α and β-methylnaphthalenes, can be used for their production. Moreover, the fraction boiling at 210 to 250°C (without separation of naphthalene) can be oxidized to phthalic anhydride with a 70% yield. The yield of individual products are given in Table 4. There are 1 figure, 4 tables and 2 Soviet

Processing of anthracene ...

references.

ASSOCIATIONS: Gosudarstvennyy komitet Soveta Ministrov RSFSR po koordinatsii nauchno-issledovatel'skikh rabot (State Committee of the Council of Ministers of the RSFSR for Coordination of Scientific-Research Works) A.G.Borts;
IGI Pri Gosekonomsovete SSSR (IGI at the State Economic Council of the USSR) A.A.Krichko, R.A.Konyashina, A.V.Lozovoy and L.N.L'vova.

LOZOVOY, A.V.; MUSELEVICH, D.L.; RAVIKOVICH, T.M.; SENYAVIN, S.A.; TITOVA, T.A.; CHERKASOVA, V.F.; Prinimali uchastiye: DEMBOVSKAYA, Ye.A.; ZAKHARENKO, V.A.; L'VOVA, L.N.; MARKINA, T.I.

Hydrogenation catalysts on an aliminosilicate base. Zhur.prikl.khim. 34 no.10:2295-2302 O '61. (MIRA 14:11)
(Hydrogenation) (Catalysts)

BORTS, A. G.; KRICHKO, A. A.; KONYASHINA, R. A.; LOZOVOY, A. V.; L'VOVA, L. N.; Prinimala uchastiye: TSITRON, I. L.

Production of chemicals from the anthracene fraction of coke-oven coal tar by the high temperature hydrogenation method. Trudy IGI 17:250-261 '62. (MIRA 15:10)

(Anthracene) (Coal-tar products)
(Hydrogenation)

ALEKSEYENKO, V.I.; CHEKRIZOVA, A.P.; MISHUSTIN, I.O.; ZAVEL'GEL'SKIY, L.M.; L'VOVA, L.V.; SHEYDINA, T.Z.; KREKSHINA, G.L.

New quick-setting adhesive for gluing soles. Kozh.-obuv.prom. 4 no.3:18-20 Mr '62. (MIRA 15:5)

(Adhesives)
(Shoe manufacture)

KLEYNER, G. I.; LIYEPIN'SH, G. K.; L'VOVA, L. Ye.; NAGLE, A. M.

"Experiences of statistical analysis of the influence of fermentation conditions of griseofulvin production."

report submitted for Antibiotics Cong, Prague, 15-19 Jun 64.

Factory for Med Preparations, Riga, & Antibiotic Res Inst, Leningrad.

L'VOVA, L. Ye.; MUSTAFOVA, N. N.; IOFINA, E. I.

"Griseofulvin biosynthesis by cultures of P. nigricans."

report submitted for Antibiotics Cong, Prague, 15-19 Jun 64.

Sci Res Inst of Antibiotics, Leningrad.

L'VOVA, M.A

BOCHKAREV, V.; KEIRIM-MARKUS, I.; L'VOVA, M.; PRUSLIN, Ya.; GROSHEV, L.V., professor, otvetstvennyy redaktor.

[Measuring the activity of beta and gamma radiation sources] Izmerenie aktivnosti istochnikov beta-gamma-izluchenii. Moskva, Izd-vo Akademii nauk SSSR, 1953. 24 p. (MLRA 7:4)
(Radioactivity)

LVOVA, M. A.

Method of absolute activity measurement of β-radiation sources with end-type radiation counters. II. I. B. Keirim-Markus and M. A. Lvova. *Issledovaniya v Oblasti Dozimetrii Ionizirovayushchikh Izluchenii, Sbornik Statei* 1957, 5–37.—The β-radiation was measured from C^{14}, Na^{24}, P^{32}, S^{35}, Cl^{36}, Ca^{45}, Zn^{65}, Br^{82}, Sr^{89}, Sr^{90}, Y^{90}, Y^{91}, Nb^{95}, Cd^{115}, Cs^{134}, Yb^{169}, Au^{198}, and Tl^{204}. Al, Cu, Pb, Si, brass, paper, and Lucite were used as absorbers. New empirical formulas are proposed for absorption of β-radiation and back dispersion in absorber material. The back-dispersion does not depend on the energy of the β-spectrum in the range from 0.15 to 2.5 [illegible] correction is suggested for the decrease of back-[illegible] outside this range. The back-dispersed β-radiation [illegible] angular anisotropy, which is different for light and heavy absorber materials; a qual. interpretation is offered for this phenomenon. The measured energy of β-radiation is investigated as a function of duration and precision of measurements, kind of substance, and radiation background. The authors recommend their method of activity measurements in cases where a precision of 5–10% is sufficient, a simple app. is preferred, and results are needed within a short time. 51 references. II. *Ibid* 38–71.—Self-absorption and self-dispersion of β-radiation are investigated in the sample substance. Radioactive isotopes with a max. energy of β-emission in the range 0.17 to 1.7 m.e.v. were used. The substances are $BaSO_4$, β-radiation from S^{35}; benzidine sulfate, S^{35}; CaC_2O_4, Ca^{45}; $Co_2Fe(CN)_6$, Co^{58}; $BaWO_4$, W^{185}; $PbWO_4$, W^{185}; TlI, Tl^{204}; $SrCO_3$, Sr^{90}, and $Pb_3(PO_4)_2 + 2(C_{15}H_{10}O_4)$, P^{32}. An effective at. no. of the compds., $Z_{eff} = (\sum_1^n Z_i^2)/n)^{1/2}$ is defined, where the sum is taken over the at. nos. of all components of the compd. which contains the radioactive isotope. The counting rate, as measured in a solid angle $\omega < 2\pi$, does not decrease exponentially with the increase in the layer thickness of the compd. Initially, when the "infinitely thin" layer thickness is increased, the counting rate increases until a max. is attained at 0.25–0.6 δ, where δ = layer thickness in which 50% absorption occurs. The value of the max. of self-absorption and self-dispersion grows with increase of energy of β-particles, the effective at. no., and decrease in solid angle. Because the error is below [illegible] correction on self-absorption and self-dispersion is not needed for layers of a thickness $\delta/50$ if $Z_{eff} \leq 40$ and [illegible]. A method is proposed for correcting self-absorption and self-dispersion of samples of thickness [illegible] $< Z_{eff} < 30$ and $1.7 - 3\delta$ if $30 < Z_{eff} < 70$ by considering [illegible] geometrical conditions of the measuring arrangement [illegible] back-dispersion from the Al and [illegible] employed is considered in discussing [illegible] dispersion curves. 15 references. [illegible] of β-activities by employing small [illegible] chambers. I. A. Antonova. *Ibid.* 72–81.—A. employs an exptl. method which was 1st used by Gray (*Brit. J. Radiol.* 22, 677(1949)). A thimble-sized chamber is filled with gases containing a soln. of the radioactive substance. Previous methods of β-activity detn. usually led to introduction of errors of several percent for self-absorption and self-dispersion in the sample mass, and for absorption and dispersion in the air and window of the counter tube. The [illegible] increases considerably the precision of [illegible] detn. The abs. activities of P^{32}, Cl^{36}, and [illegible] investigated. Application of scintillators in dosimetry. II. M. Rozman and K. G. Tsimmer. *Ibid.* 82–9; cf. *C.A.* 52, 11746e.—Advances are reviewed in scintillation dosimetry of x-rays, β-rays, α-rays, γ rays, and thermal [illegible] neutrons. Scintillation methods were adopted [illegible] recently and are not a panacea in solving all dosimetry questions; however, in many individual cases scintillation methods are more precise, simpler, and more convenient than previous methods. 50 references. Luminescence isodosegraph. *Ibid.* 90–7.—An app. has been constructed [illegible] measurement of the energy, and local and spectral [illegible] of radiation.

I. B. Keirim-Markus and M. A. Kova

The app. consists of a photomultiplier in conjunction with a Ca tungstate scintillator. Measurements are described which show good precision and accuracy. The usefulness of the app. is emphasized in the dosimetry of γ-radiation, especially in medical therapy and health physics. Experimental data obtained by luminescence method of γ-radiation dosimetry. I. B. Konstantinov. *Ibid.* 98–101.—K. studied the luminescence of crystals of NaI(Tl), naphthalene, anthracene), and stilbene under γ-radiation. Dosimeters for γ-radiation can be built which exhibit a sensitivity of 10^{-4} r./sec. Indicating pocket γ-dosimeters. M. I. Amirasova, V. E. Busygin, and Yu. M. Shtukkenberg. *Ibid.* 102–11.—A detailed description is given of the construction of a pocket γ-dosimeter. The app. has the shape of

the concentration of active aerosols. Yu. M. Shtukkenberg, K. S. Kaluzin, and A. I. Bobkov. *Ibid.* 132–63.—An electrical set is described which filters up to 1000 l. air/min., and which accomplishes a very fast sepn. of active aerosols for detg. their concn. Theoretical and exptl. results are presented. The efficiency factor of filtering is 95.5% at a flow velocity of 30 to 40 l. air/min. with particle radii between 10^{-6} and 10^{-4} cm. In the case of Po-contg. aerosols which consist of ionic complexes, the efficiency factor was measured to be 7–8% at a flow velocity of 600 to 700 l./min. α- and β-active components of aerosols can be readily sepd., and the concns. can be detd. dosimetrically with sufficient accuracy. 17 references. Measuring of small concentrations of α-active substances in [illegible]

Amirsgova, V. R. Bugvein, and Yu. M. Shrugkenberg. *Ibid.* 102-11.—A detailed description is given of the construction of a pocket γ-dosimeter. The app. has the shape of a fountain pen, and permits immediate reading of the γ-radiation exposure. The influence of the construction parameters on the readings obtained is discussed. γ-Radiation pocket dosimeter. M. V. Ardenne, G. Eger, B. Isaev, V. Roggenbuk, and G. Frohlich. *Ibid.* 112-14.—A fountain-pen shaped capacitor pocket camera is described which permits sufficiently accurate detn. of radiation exposure. Device for individual dosage control. A. A. Pavlov, I. M. Rozman, and E. G. Tsimmer. *Ibid.* 115-20.—See *C.A.* 51, 9222h. Pocket γ-indicator. F. K. Levochkin. *Ibid.* 121.—A pocket indicator of small size (12 × 8.5 × 4 cm.), low wt. (400 g.), and 100 hr. useful life is described. If counter tube STS-5 is employed, the instrument will indicate β- and γ-radiations. Improved method of individual photocontrol of γ-damage (IFK-II). N. S. Nikitin and V. V. Frolov. *Ibid.* 122-31.—Pb and Al filters are used to improve the exposure indication of film packs. The spectral sensitivity

and the [illegible] can be detd. [illegible] with sufficient accuracy. 17 references. Measuring of small concentrations of α-active substances in water with the help of the Wilson diffusion chamber. V. I. Popov. *Ibid.* 154-61.—The method permits detn. of 10^{-4} to 5×10^{-u} c./l. of α-active substances in water with an error below 10%. The liquid is boiled off and the α-activity of the sediment is detd. The accuracy of the measurements can be improved by taking into account the influence of self-absorption and the presence of impurities. 14 references. Spark counter for control of surface charge due to α-active substances. E. A. Andreeshchev, B. M. Isaev, and I. F. Mel'nikov. *Ibid.* 162-5.—A new multifilament counter of high stability is described. The cathode surface area is 150 sq. cm.; the cathode withstands more than 10^5 discharges. The operating characteristics of the counter are detd. γ-Spectrum indicator. I. A. Antonova and I. V. Estulin. *Ibid.* 166-78.—A γ-spectrum indicator has been developed for qual. analysis. The indicator permits [illegible] γ-radiation energies of arbitrary radio[illegible]

[illegible] damage (IFK-II). N. S. Nikitin and V. V. [illegible] [illegible] 129-31 — Pb and Al filters are used to improve the exposure indication of film packs. The spectral sensitivity of films and the compensating effects of filters are discussed in detail. It is shown experimentally that the film sensitivity can be increased by employing a "magnifying" luminescent screen. An abs. method is described for the photometric evaluation of the films. Cottrell filter for indicating

— A [illegible] indicator [illegible] has been developed for quick analysis. The indicator permits detn. of effective γ-radiation energies of arbitrary radioactive compds. with an accuracy of ±20 e.kv. if the energy is below 1.2 m.e.v. Activity values above 0.01 mc. can be readily measured in 10–15 min. The app. is calibrated, and γ-spectra of Na^{24}, Cr^{51}, Co^{60}, Zn^{65}, Zn^{69}, Se^{75}, Sr^{89}, [illegible] Mg^{28}, Ra and RdTh were investigated. Calculation of maximum permissible levels of external currents of ionizing radiation.