ZHURAVLEVA, I.T.; REPINA, L.N.; KHOMENTOVSKIY, V.V.

Continuous carbonate section of the Lena stage of the lower Cambrian in the Altai-Sayan mountain country and its paleontological characteristics. Dokl.AN SSSR 132 no.5:1160-1162 Je '60.
(MIRA 13:6)

1. Geologicheskiy institut Akademii nauk SSSR. Predstavleno akademikom N.S. Shatskim.
(Altai Mountains--Rocks, Carbonate)
(Sayan Mountains--Rocks, Carbonate)
(Paleontology, Stratigraphic)

ZHURAVLEVA, I.T.; REPINA, L.N.

Comparing the lower Cambrian horizon of the Sayan-Altai area and the Siberian Platform. Dokl.AN SSSR 136 no.5:1183-1185 F '61.
(MIRA 14:5)

1. Predstavleno akad. N.S.Shatskim.
(Siberia—Geology, Stratigraphic)

KHOMENTOVSKIY, V.V.; ZHURAVLEVA, I.T.; REPINA, L.N.; ROZANOV, A.Yu.

Lower Cambrian in the Gornyy Altai. Izv.AN SSSR.Ser.geo. 27
no.3:55-71 Mr '61. (MIRA 15:2)

1. Geologicheskiy institut AN SSSR, Moskva.
(Altai Mountains--Geology, Stratigraphic)

ZHURAVLEVA, I.T.; REPINA, L.N.; KHOMENTOVSKIY, V.V.

Plan for dividing Lower Cambrian sediments in the Sayan-Altai folded region. Geol.i geofiz. no.1:21-41 '62. (MIRA 15:4)

1. Institut geologii i geofiziki Sibirskogo otdeleniya AN SSSR, Novosibirsk.
(Sayan Mountains—Geology, Stratigraphic)
(Altai Mountains—Geology, Stratigraphic)
(Folds (Geology))

ZHURAVLEVA, I.T.; ROZANOV, A.Yu.

Age and conditions governing the formation of Archaeocyathidae limestones in the Yenisey Basin (Biryusa and Bazaikha Rivers). Geol. i geofiz. no.3:32-40 '62. (MIRA 15:7)

1. Institut geologii i geofiziki Sibirskogo otdeleniya AN SSSR, Novosibirsk i Geologicheskiy institut AN SSSR, Moskva.

(Yenisey Valley—Archaeocyathidae)

(Yenisey Valley—Limestone) (Geological time)

YAROSHEVICH, Vadim Mikhaylovich; ZHURAVLEVA, I.T., doktor geol.-mineral.nauk, otv.red.; ALEKSANDROVSKIY, B.M., red.; YELISTRATOVA, Ye.M., tekhn.red.

[Stratigraphy of Sinian and Cambrian sediments in the Bateni and Azyr-Tal Ranges and the Balyy Iyus Basin (eastern slope of the Kuznetsk Ala-Tau)] Stratigrafiia siniiskikh i kembriiskikh otlozhenii Batenevskogo kriazha khrebta Azyr-Tal i basseina reli Belyi Iius (vostochnyi sklon Sibirskogo otd-niia AN SSSR, 1962. 184 p. (Akademiia nauk SSSR. Sibirskoe otdelenie. Institut geologii i fiziki. Trudy, no.17). (MIRA 16:8)

(Kuznetsk Ala-Tau region--Geology, Stratigraphic)

ZHURAVLEVA, Inessa Tikhonovna; OBUT, A.M., otv. red.; BEZNOSOVA,
G.A., red.izd-va; TIKHOMIROVA, S.G., tekhn. red.

[Archaeocyathids of Siberia; single-walled archaeocyathids (Monocyathida and Rhizacyathida orders)] Arkheotsiaty Sibiri; odnostennye arkheotsiaty (Otriady Monocyathida i rhizacyathida). Moskva, Izd-vo Akad. nauk SSSR, 1963. 138 p. (MIRA 16:6)

(Archaeocyathidae)

ZHURAVLEVA, I.T.

New data on archaecyathits in the eastern slope of the Southern Ural Mountains. Paleont. zhur. no.4:116-118 '63. (MIRA 17:1)

1. Institut geologii i geofiziki Sibirskogo otdeleniya AN SSSR.

ZHURAVLEVA, I.T.; KONYUSHKOV, K.N.; ROZANOV, A.Yu.; OBUT, A.M., otv. red.; BEZNOSOVA, G.A., red.

[Siberian Archaeocyathi; double-walled Archaeocyathi] Arkheotsiaty Sibiri; dvustennye arkheotsiaty. Moskva, Izd-vo "Nauka," 1964. 132 p. (MIRA 17:6)

REPINA, L.N.; KHOMENTOVSKIY, V.V.; ZHURAVLEVA, I.T.; ROZANOV, A.Yu.;
SOKOLOV, B.S., otv. red.; VANIN, V.S., red.izd-va;
IL'INA, N.S., red.izd-va; DOROKHINA, I.N., tekhn.red.

[Lower Cambrian biostratigraphy of the Sayan-Altai fold area] Biostratigrafiia nizhnego kembriia Saiano-Altaiskoi skladchatoi oblasti. [By] L.N.Repina i dr. Moskva, Izd-vo "Nauka," 1964. 363 p. (MIRA 17:3)

DODIN, A.L.; ZHURAVIEVA, I.T.

Stratigraphy of Sinian and Cambrian sediments in the Sarkhoy Basin of the Eastern Sayan Mountains. Geol. i geofiz. no.6: 20-29 '63. (MIRA 19:1)

1. Institut geologii i geofiziki Sibirskogo otdeleniya AN SSSR, Novosibirsk. Submitted November 10, 1961.

L 27303-66 EWT(m)/EWP(j)/T/ETC(m)-6 IJP(c) DS/WW/RM

ACC NR: AP6008983 SOURCE CODE: UR/0190/65/007/011/1981/1984

58
B

AUTHORS: Zhuravleva, I. V.; Rode, V. V.; Rafikov, S. R.

ORG: Institute for Heteroorganic Compounds, AN SSSR (Institut elementoorganicheskikh soyedineniy AN SSSR)

TITLE: Formation of three-dimensional lattices in the thermal and thermooxidative aging of polyarylates /Second communication in the series "Aging and Stabilization of Polymers"/

SOURCE: Vysokomolekulyarnyye soyedineniya, v. 7, no. 11, 1965, 1981-1984

TOPIC TAGS: polymer, polyaryl plastic, polyarylate, thermal aging, F-2 polyarylate, D-9 polyarylate

ABSTRACT: This investigation was conducted to extend earlier published work by V. V. Rode, I. V. Zhuravleva, S. R. Rafikov, V. V. Korshak, S. V. Vinogradova, and V. A. Pankratov (Vysokomolek. soyed. 7, 1614, 1965) and to study the thermal and thermo-oxidative aging of F-2 and D-9 polyarylates at low degrees of conversion. The experiments were carried out in the temperature interval of 250--450C. After exposure to the above temperatures for a period of 1--4 hours, the specimens were placed in tetrachloroethane. The soluble fraction of the polymer was subjected to viscosimetric, turbidimetric, light scattering, and molecular weight analysis. For the insoluble fraction, the equilibrium degree of swelling (Q) was ascertained, and the density of

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Card 1/3 UDC: 678.01:54+678.674

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cross-linkages in the polymer were determined after T. Orofino and P. Flory (J. Chem. Phys., 26, 1067, 1957). The experimental results are presented in graphs and tables (see Fig. 1).

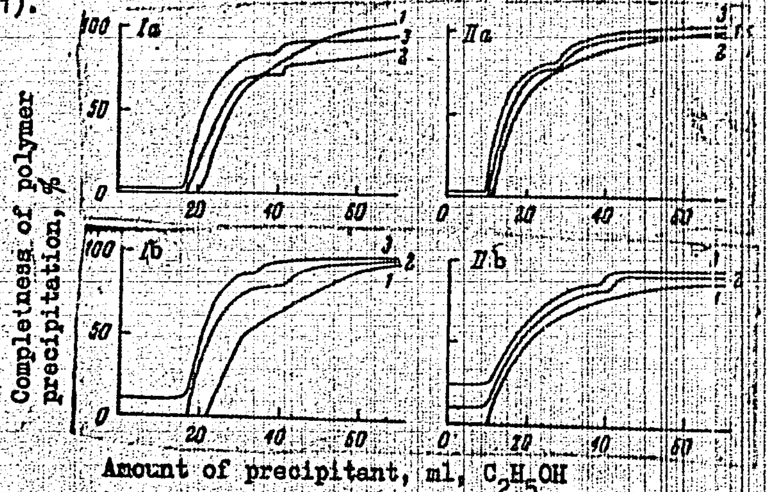

Fig. 1. Curves for the turbidimetric titration of the soluble polyarylate fraction after aging for 1 hour at different temperatures: I - polyarylate F-2; II - polyarylate D-9; a - thermoaging; b - thermooxidative aging; 1 - initial polymer; 2 - 275C; 3 - 300C.

L 27303-66

ACC NR: AP6008983

It was found that polyarylate F-2 forms a nonswelling gel more rapidly than polyarylate D-9. The molecular weight distribution curve of the soluble polymer fraction first increases and then, upon reaching a maximum, separates into two curves. Orig. art. has: 3 tables, 1 graph, and 5 equations.

SUB CODE: 11/ SUBM DATE: 29Dec64/ ORIG REF: 005/ OTH REF: 001

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ZHURAVLEVA, I.V.; RODE, V.V.; RAFIKOV, S.R.

Thermodynamic parameter of polyarylate - tetrachloroethane interaction.
Vysokom.soed. 7 no.7:1270-1272 Jl '65.

(MIRA 18:8)

1. Institut elementoorganicheskikh soyedineniy AN SSSR.

L 37093-66 EWP(j)/EWT(m)/T IJP(c) RM/WW

ACC NR: AR6010585 SOURCE CODE: UR/0081/65/000/018/S019/S019

AUTHOR: Rode, V. V.; Zhuravleva, I. V.; Rafikov, S. R. 46

TITLE: Thermooxidation of phenolphtalein-based polyarylates. 15 B

SOURCE: Ref. zh. Khimiya, Abs. 18S116

REF SOURCE: Vestn. tekhn. i ekon. inform. N.-i. in-t tekhn.-ekon. issled. Gos. kom-ta khim. prom-sti pri Gosplane SSSR, vyp. 12, 1964, 13-14

TOPIC TAGS: thermal decomposition, oxidation kinetics, oilyester plastic

ABSTRACT: The process of thermooxidative destruction 15 of heterochain phenolphtalein polyesters, isophtalic (1) and terephtalic acids (2) at temperatures of 350° to 500° on air and in a closed system under static conditions at an O_2 pressure of 120mm Hg column, is studied by the continuous weighing method. Kinetic curves for (1) and (2) weight loss were plotted. The rate of destruction exponentially depends on the temperature and is presented by an equation of the first order. The effective activation energy of destruction for (1) and (2) is equal 29.2 and 31.5 kkal/mol, respectively. The study of the thermal destruction of (2) in a closed system showed that the sole gaseous products are CO_2 and CO. The thermal destruction of (2)

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L 37093-66

ACC NR: AR6010585

results in the formation beside gases, of solid, low molecular substances (diphenyl, benzoic acid) and high-molecular residue, consisting of products of intermolecular reaction of cross-linked structures. Yu. Yershov.

SUB CODE: 07/ SUBM DATE: none

Card 2/2

L 2925-66 EWT(m)/EPF(c)/EWP(j)/T/ETC(m) WW/RM

ACCESSION NR: AP5022610 UR/0190/65/007/009/1614/1618
678.01:54+678.674

AUTHORS: Rode, V. V.; 44,55 Zhuravleva, I. V.; 44,55 Rafikov, [illegible]; 44,55 Korshak, V. V.; 44,55 Vinogradova, S. V.; 44,55 Pankratov, V. A. 44,55

TITLE: The high temperature degradation of polydihydroxydiphenylfluorenterephthalate. 24th communication in the series "Chemical Transformation of Polymers" 44,55

SOURCE: Vysokomolekulyarnyye soyedineniya, v. 7, no. 9, 1965, 1614-1618

TOPIC TAGS: thermal degradation, thermal oxidation, organic compound, polymer/ D 9 polyarylate

ABSTRACT: The thermal degradation and thermooxidation of polyarylate D-9 was investigated. This investigation is an extension of the previously published work of I. V. Zhuravleva, V. V. Rode, and S. R. Rafikov (Izv. AN SSSR, ser. khim., 1965, 269). The thermal degradation and thermooxidation were carried out over the temperature region from 325 to 500C by 25C intervals. Graphs for the kinetics of gas evolution during degradation and thermooxidation are presented. The composition of the thermooxidation-degradation products are tabulated. The

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ACCESSION NR: AP5022610

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experimental results obtained for the thermooxidation in air are shown graphically in Fig. 1 on the Enclosure. It is concluded that the thermooxidation degradation of polyarylate D-9 proceeds via a homolytic chain rupture accompanied by the evolution of CO_2, CO, and H_2 gases. No induction period for the thermooxidation was observed. Orig. art. has: 2 tables and 6 graphs.

ASSOCIATION: Institut elementoorganicheskikh soyedineniy AN SSSR (Institute for Heteroorganic Compounds, AN SSSR) 44,55

SUBMITTED: 23Oct64 ENCL: 01 SUB CODE: OC

NO REF SOV: 003 OTHER: 000

Card 2/3

L 2925-66

ACCESSION NR: AP5022610

ENCLOSURE: 01

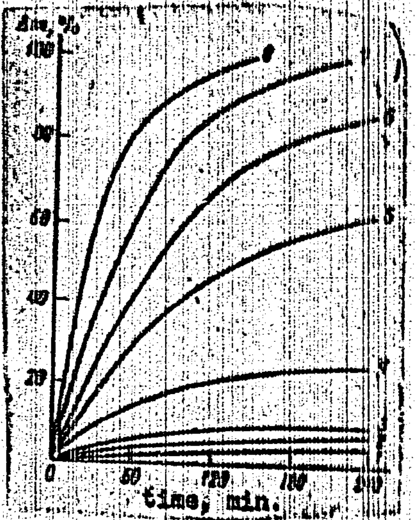

Fig. 1. Kinetics of weight loss of polyarylate D-9 during thermooxidation in air.
1- 3250; 2- 3500; 3- 3750; 4- 4000; 5- 4250;
6- 4500; 7- 4750; 8- 5000

PC

Card 3/3

RODE, V.V.; ZHURAVLEVA, I.V.

Recording instrument for continuous weighting. Zav.lab. 30 no.12:1518-1519 '64. (MIRA 18:1)

1. Institut elementoorganicheskikh soyedineniy AN SSSR.

ZHURAVLEVA, I.V.; RODE, V.V.; RAFIKOV, S.R.

Formation of three-dimensional lattices in the thermal and thermal oxidizing aging of polyarylates. Vysokom. soed. 7 no.11:1981-1984 N '65. (MIRA 19:1)

1. Institut elementoorganicheskikh soyedineniy AN SSSR. Submitted December 29, 1964.

L 38624-65
ACCESSION NR: AP5008105

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lein; the only gaseous degradation products are carbon dioxide and monoxide. From a kinetic analysis of the evolution of gas it was concluded that the process occurs as a parallel-consecutive reaction. The theoretically calculated rate constants of the steps of these parallel-consecutive reactions are in good agreement with the experimental data. The effective activation energies of the degradation processes were determined. An interpretation of the mechanism of the process is given. "The authors thank V. V. Korshak, S. V. Vinogradova, and S. N. Salazkin

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RODE, V.V.; ZHURAVLEVA, I.V.; RAFIKOV, S.R.; KORSHAK, V.V.; VINOGRADOVA, S.V.; SALAZKIN, S.N.

Chemical transformation of polymers. Part 18. Vysokom. soed. 6 no.6:994-996 Je '64 (MIRA 18:2)

RAFIKOV, S.R.; CHELNOKOVA, G.N.; RODE, V.V.; ZHURAVLEVA, I.V.; SOROKINA, R.A.

Chemical transformations of polymers. Part 15: Specific features of the thermal degradation of polyenanthamide. Vysokom. soed. 6 no.4:652-654 Ap '64. (MIRA 17:6)

1. Institut elementoorganicheskikh soyedineniy AN SSSR.

ZHURAVLEVA, I.V.

PHASE I BOOK EXPLOITATION SOV/4984

International symposium on macromolecular chemistry. Moscow, 1960.

Mezhdunarodnyy simpozium po makromolekulyarnoy khimii SSSR, Moskva, 14-18 iyunya 1960 g.; doklady i avtoreferaty. Sektsiya III. (International Symposium on Macromolecular Chemistry Held in Moscow, June 14-18, 1960; Papers and Summaries) Section III. [Moscow, Izd-vo AN SSSR, 1960] 469 p. 55,000 copies printed.

Tech. Ed.: P. S. Kashina.

Sponsoring Agency: The International Union of Pure and Applied Chemistry. Commission on Macromolecular Chemistry.

PURPOSE: This book is intended for chemists interested in polymerization reactions and the synthesis of high molecular compounds.

COVERAGE: This is Section III of a multivolume work containing papers on macromolecular chemistry. The articles in general deal with the kinetics of polymerization reactions, the synthesis of special-purpose polymers, e.g., ion exchange resins, semiconductor materials, etc., methods of catalyzing polymerization reactions, properties and chemical interactions of high molecular materials, and the effects of various factors on polymerization and the degradation of high molecular compounds. No personalities are mentioned. References given follow the articles.

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RODE, V.V.; ZHURAVLEVA, I.V.; RAFIKOV, S.R.; KORSHAK, V.V.; VINOGRADOVA, S.V.; PANKRATOV, V.A.

High temperature degradation of polydihydroxydiphenylfluorene teraphthalate. Vysokom. soed. 7 no.9:1614-1618 S '65. (MIRA 18:10)

1. Institut elementoorganicheskikh soyedineniy AN SSSR.

ZHURAVLEVA, K.I., dotsent; RYZHKOV, Yu.D., dotsent

Bringing training closer to practical work. Zdrav. Ros. Feder. 4 no.9:29-31 S '60. (MIRA 13:9)

1. Iz kafedry organizatsii zdravookhraneniya (zav. - dotsent K.I. Zhuravleva) Chitinskogo meditsinskogo instituta (dir. - dotsent Yu.D. Ryzhkov).

(CHITA—MEDICINE—STUDY AND TEACHING)

ZHURAVLEVA, K.I., dotsent (Chita)

History of public health service in Transbaikalia and p5ospects for its development. Trudy Perm. gos. med. inst. 43:[illegible] '63.

History of public health service in the Buryat A.S.S.R. Trudy Perm. gos. med. inst. 43:260-264 '63. (MIRA 17:6)

ZHURAVLEVA, K.I.

MENDRINA, G.I.; ISHCHENKO, N.P.; ZHURAVLEVA, K.I.

Interprovince scientific conference on the regional history of medicine in Siberia. Sov.zdrav. 14 no.5:61-62 S-O '55.
(SIBERIA--MEDICINE) (MLRA 8:12)

ZHURAVLEVA, K.I. (Chita)

History of public health in Transbaikalia; on the occasion of the 40th anniversary of Soviet power in Transbaikalia. Sov. zdrav. 22 no.2:45-51 '63. (MIRA 16:2)

1. Iz kafedry organizatsii zdravookhraneniya i istorii meditsiny (zav. - dotsent K.I. Zhuravleva) Chitinskogo meditsinskogo instituta (dir. - dotsent Yu.D. Ryzhkov).

(TRANSBAIKALIA—PUBLIC HEALTH)

ZHURAVLEVA, K. V. and RAUSHENBAKH, YU. O.

1939. Rekognostsirovochnoye gel'mintologicheskoye issledovaniye, Kak pervyy etap izucheniya gel'mintov i gel'mintozov kopytnykh Zapadnogo kavkaza. Nauchno-metodicheskiye zapiski glavnogo uprovleniya po z povednikam, v. V, str. 87-104.

ZHURAVLEVA, K. Ya.

Anesthesia with the aid of novocain-hexenal tissue infiltration.
Sovet. med. 16 no.5:40-41 May 1952. (CLML 22:2)

1. Arkhangel'sk.

ZHURAVLEVA, K.Ya. (Arkhangel'sk, ul. Komsomol'skaya, d.46, kv.7)
RAPPOPORT, M.B.

Pericardial cysts. Nov.khir.arkh. no.2:87-89 Mr-Ap '58 (MIRA 11:6)

1. Kafedra obshchey khirurgii (zav. - prof. G.A. Orlov) i kafedra patologicheskoy anatomii (zav. - M.B. Rappoport) Arkhangel'skogo meditsinskogo instituta.
(PERICARDIUM--TUMORS)
(CYSTS)

1(10) CZECH/3-59-12-9/39

AUTHOR: Zhuravlëva, Ludya and Němeček, Václav

TITLE: Soviet Helicopters

PERIODICAL: Křídla Vlasti, 1959, Nr 12, p 6 and lower part of p 7 (CSR)

ABSTRACT: Primarely this article lists types and designers of helicopters now in service in USSR. 1) KA-10, KA-15 and KA-18 designed by N.I.Kamov; 2) Mi-1 (3 seater), Mi-3 (medical evacuation), Mi-4 (10-12 seats), Mi-6(50 seats) designed by M.L.Mil' ; 3) Yak-24 and Yak-100 designed by A.S. Yakovlev. The author points out that the photo or any technical details were never released outside the USSR, thus making "Křídla Vlasti" the first foreign publication to carry any coverage on it. The development of jet-propelled helicopters is the work of Starichin, Zherebtsov and Braginskiy. There are 7 photos.

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CH

ZHURAVLEVA, L.

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1ST AND 2ND ORDERS

Addition of hydrogen to acetylene derivatives. XXXVIII. An erythritol of the diacetylene series and its catalytic hydrogenation. Yu. Zal'kind and L. Zhuravleva. *Zhur. Obshchei Khim.* (J. Gen. Chem.) 18, 981-(1948); cf. *C.A.* 42, 4161. —EtMgBr (from 30 g. EtBr) and 18 g. $Me_2C(OH)C:CH$ in Et_2O were allowed to react with cooling and after standing overnight were treated with 12 g. benzil in Et_2O, stirred several hrs., and allowed to stand 2 days, yielding cryst. *[PhC(HOCMe₂C:C)C(OH)]₂*, 66.6%, m. 144-5° (from EtOH), best sol. in Me_2CO, less sol. in EtOH or EtOAc; heating with EtOH-Na yields C_6H_6; addn. of Br in $CHCl_3$ was unsuccessful; oxidation by $KMnO_4$ gave $Me_2C(OH)CO_2H$ and BzOH, as well as a ketone (semicarbazone, m. 181-2°). The product (3 g.) and 10 g. Ac_2O in the presence of a little H_3PO_4 gave in 10 days at 20-5° 55.4% cryst. *tetraacetate*, m. 150-3° (from Me_2CO); the alc. with Ac_2O in the presence of NaOAc and pyridine gave the *diacetate*, m. 132-3°. Hydrogenation of the alc. in EtOAc over Pd is very slow after the addn. of sufficient H to convert the triple bonds to double bonds (essentially stopped after 30 min.), yielding *2,9-dimethyl-5,6-diphenyl-3,7-decadiene-2,5,6,9-tetrol* (I), m. 146.5-47°. Similar hydrogenation over Pt black gives rapid and complete reaction, yielding the product as a noncrystallizable oil after addn. of 8 H atoms per mole. Hydrogenation of the tetraacetate with a Pd catalyst gave rather more rapid reaction than with the alc. itself, yielding the corresponding I *tetraacetate*, m. 148-51°, although after addn. of 4 H atoms the reaction still showed signs of slow progress. With a Pt catalyst the addn. of H is complete and proceeds further, apparently by replacement of the ester groupings by H, yielding hydrocarbons; this product was a noncryst. oil.

G. M. Kosolapoff

ASM-SLA METALLURGICAL LITERAT

ZHURAVLEVA, L.A. [Zhuravl'ova, L.A.]

Gamasid mites of rodents, lizzards and domestic sparrows in the steppe zone of the Ukraine. Pratsi Od. Un. 152 Ser. Biol. nauk no.12:31-38 '62. (MIRA 17:9)

ZHURAVLEVA, L. A.

PA 77T64

USSR/Medicine - Hormones, Effects
Medicine - Embryology

Apr 1948

"The Relation of the Metamorphosis of Bufo Viridis (Laurenti) to the Centers of the Midbrain," Tat'yana Ivanova and L. Zhuravleva, Kazakh Med Inst imeni V. M. Molotov, 4 pp

"Dok Ak Nauk SSSR" Vol LX, No 3

Studies on development of decerebralized toad embryos subjected to hormone applications during first stages of formation. Submitted by Acad L. A. Orbeli 17 Feb 1948.

77T64

SMELOVSKAYA, M.M.; ZHURAVLEVA, L.A., direktor.

Five cases of paralysis of the diaphragm in children. Probl.tub. no.3: 84-85 My-Je '53.

(MLRA 6:7)

1. Sanatoriy Mosoblzdravotdela "Krasnaya Roza". (Diaphragm) (Paralysis)

FOMINYKH, I.P.; ZHURAVLEVA, L.A.

Reducing the amount of hard work involved in the manufacture of equipment for shell molding. Lit. proizv. no.5:44-45 My '62. (MIRA 16:3)
(Shell molding—Equipment and supplies)

KLEBANOV, G. Ya.; ABEL'SKIY, A. M.; BEYDER, A. V.; VAYNER, S. V.;
VLASIK, V. S.; GOL'DFEDER, Ya. M.; DUDKINA, D. P.; ZHURAVLEVA,
L. D.; KANE, D. B.; KUBALNOV, M. L.; KOLODEZNAYA, T. B.;
KUTASNIKOV, V. Ya.; SOLODOVNIKOV, B. M.; STROYMAN, L. A.;
SHUMKOVA, N. S.

Results of dispensary treatment of occupational dermatoses in the clinics of Leningrad. Vest. derm. i ven. 36 no.6:58-62 Je '62. (MIRA 15:6)

1. Iz kozhno-venerologicheskikh dispanserov No. 1, 2, 3, 5, 9, 10, 11, 12, 13, 14, 15, 17, 18, 19, 22 (nauchnyy rukovoditel' - chlen-korrespondent AMN SSSR prof. P. V. Kozhevnikov)

(LENINGRAD—OCCUPATIONAL DISEASES)
(SKIN—DISEASES)

RODIGIN, M.N.; ZHURAVLEVA, L.G.

Conidial stage of Pseudopeziza medicaginis (Lib.) Sacc.
Bot.mat.Otd.spor.rast. 12:211-213 Ja '59. (MIRA 12:12)
(Ascomycetes) (Alfalfa--Diseases and pests)

ZHURAVLEVA, L. G.

"Brown Leaf Spot of Alfalfa and Measures for Combating It in the Bashkir ASSR." Cand Agr Sci, Omsk Agricultural Inst, Omsk, 1953. (RZhBiol, No 1, Sep 54)

SO: Sum 432, 29 Mar 55

ZHURAVLEVA, L. I., Cand Med Sci -- (diss) "Application of blood substitutes in psychiatric practice." Mos, 1957. 13 pp (Second Mos State Med Inst im N. I. Pirogov), 200 copies (KL, 52-57, 111)

ZHURAVLEVA, L.I.

ZHURAVLEVA, L.I.

Using plasma substitutes in a psychiatric clinic [with summary in French]. Zhur.nevr. i psikh. 57 no.10:1284-1290 '57. (MIRA 10:12)

1. Kafedra psikhiatrii II Moskovskogo meditsinskogo instituta imeni I.V.Stalina (zav. - prof. O.V.Kerbikov)
(MENTAL DISORDERS, therapy, serother. (Rus))
(SEROTHERAPY, in various diseases, ment. disord. (Rus))

ZHURAVLEVA, L.I.

Use of Belenkii's therapeutic serum for the treatment of mental patients. (MIRA 11:9)
Sov.med. 22 no.6:86-90 Je '58

1. Iz kafedry psikhiatrii (zav. -prof. O.V. Kerbikov) II Moskovskogo meditsinskogo instituta imeni N.I. Pirogova.
(PLASMA SUBSTITUTES, ther. use
Belenky serum in psychoses (Rus))
(PSYCHOSES, ther.
Belenkii's serum (Rus))
(SEROTHERAPY, in var. dis
Belenkii's serum in psychoses (Rus))

ZHURAVLEVA, L.I.

Use of parenterin in the treatment of mental patients. Zhur. nevr. i psikh. 59 no.5:590-592 '59. (MIRA 12:7)

1. Kafedra psikhiatrii (zav. - prof. O.V. Kerbikov) II Moskovskogo meditsinskogo instituta imeni N.I. Pirogova.
(MENTAL DISORDERS, ther.
parenterin (Rus))
(PLASMA SUBSTITUTES,
parenterin ther. of ment. disord. (Rus))

ZIL'BERMINTS, I.V.; FADEYEV, Yu.N.; ZHURAVLEVA, L.M.

Acquirement of resistance to kelthane by the common spider mite (Tetranychus telarius L.) under laboratory conditions. Zool. zhur. 43 no.8:1133-1139 '64. (MIRA 17:11)

ZUBOV, M.F.; FEDOSEYENKO, L.G.; SANIN, M.A.; PIVOVAROVA, T.M.; ZIL'BERMINTS, I.V., kand. biolog. nauk; FADEYEV, Yu.N., kand. sel'skokhoz. nauk; ZHURAVLEVA, L.M.; KIPIANI, A.A., aspirant; MEL'NIKOV, N.N.; BOCHAROVA, L.P.; SHVETSOVA-SHILOVSKAYA, K.D.; SHAPOVALOV, G.K.; SPIRINA, T.A.; SEDYKH, A.S.; ZINCHENKO, V.A., aspirantka

From experiments in the use of new preparations. Zashch. rast. ot vred. i bol. 8 no.10:24-26 O '63. (MIRA 17:6)

1. Vsesoyuznyy nauchno-issledovatel'skiy institut khimicheskikh sredstv zashchity rasteniy (for Zubov, Fedoseyenko, Sanin, Pivovarova). 2. Gruzinskiy institut zashchity rasteniy (for Kipiani). 3. Moskovskaya ordena Lenina sel'skokhozyaystvennaya akademiya im Timiryazeva (for Zinchenko).

KHARITONOVA, V.P.; FROLOV, S.S.; [illegible]LIMOVA, T.M.; ZHURAVLEVA, L.V.

Dyeing of nitron fibers. Izv. vys. ucheb. zav.; tekh. tekst. prom. no.3:133-140 '62. (MIRA 17:10)

1. Ivanovskiy khimiko-tekhnologicheskiy institut.

ZHURAVLEVA, L.N.

Production and consumption of rare earth elements. Geol. mest. red. elem. no.3:22-28 '59. (MIRA 14:7)
(Rare earth metals)

GINZBURG, A.I.; ZHURAVLEVA, L.N.

Genetic types of deposits of rare earth elements. Geol. mest. red. elem. no.3:59-103 '59. (MIRA 14:7)
(Rare earth metals)

ZHURAVLEVA, L. P. Cand Chem Sci -- (diss) "Derivatives of isocyanatophosphoric acid," Dnepropetrovsk, 1960, 12 pp. 120 cop. (Dnepropetrovsk Chemico-technological Institute im F. E. Dzerzhinskiy) (KL, 45-60, 122)

KIRSANOV, A.V. [Kirsanov, O.V.]; ZHURAVLEVA, L.P. [Zhuravl'ova, L.P.]

1-aryl, 1-benzoyl- and 1,1-dimethyl-4-dichlorphosphinylsemicarbazides and their derivatives. Dop.AN URSR no.6:804-808 '60.
(MIRA 13:7)

1. Institut organicheskoy khimii AN USSR. 2. Chlen-korrespondent AN USSR (for Kirsanov).
(Semicarbazide)

KIRSANOV, A.V. [Kirsanov, O.V.]; ZHURAVLEVA, L.P. [Zhuravl'ova, L.P.]

Diethers of N-dialkoxy- and N-diaroxyphosphinylcarbaminylphosphonic acids. Dop.AN URSR no.4:487-489 '60. (MIRA 13:7)

1. Institut organicheskoy khimii AN USSR. Chlen-korrespondent AN USSR (for Kirsanov).
(Phosphonic acid)

KIRSANOV, A.V.; ZHURAVLEVA, L.P.

Diesters of N-dialkoxy- and N-diaroxyphosphpnylcarbaminylphosphonic acids. Zhur. ob. khim. 30 no.9:3038-3041 S '60. (MIRA 13:9)

1. Institut organicheskoy khimii Akademii nauk Ukrainskoy SSR.
(Phosphonic acid)

KIRSANOV, A.V.; ZHURAVLEVA, L.P. [Zhuravl'ova, L.P.]

Reaction of the dichloranhydride of isocyanatophosphoric acid with water. Dop.AN URSR no.7:929-931 '60. (MIRA 13:8)

1. Institut organicheskoy khimii AN USSR. 2. Chlen-korrespondent AN USSR (for Kirsanov).

(Carbamic acid)

KIRSANOV, A.V.~~; ZHURAVLEVA, L.P.~~

Derivatives of 4-phosphinylsemicarbazide. Zhur. ob. khim. 31 no.1: 210-216 Ja '61. (MIRA 14:1)

1. Institut organicheskoy khimii Akademii nauk Ukrainskoy SSR.
(Semicarbazide)

89521

S/079/61/031/002/014/019
B118/B208

5.3630

AUTHORS: Kirsanov, A. V and Zhuravleva, L. P.

TITLE: N-dichloro-phosphinyl carbamic acid

PERIODICAL: Zhurnal obshchey khimii, v. 31, no. 2, 1961, 598-604

TEXT: It was to be expected from Ref. 1 that N-dichloro-phosphinyl carbamic acid formed by treating the dichloride of isocyanato-phosphoric acid with water splits off readily CO_2 being converted to phosphamic acid dichloride. Experiments disclosed that isocyanato-phosphoric acid dichloride readily splits off CO_2 with excess water, in which connection, however, the acid chloride part of the molecule is hydrolyzed:
$Cl_2PONCO + 4H_2O \longrightarrow CO_2 + 2HCl + NH_4H_2PO_4$. Addition of water only to the isocyanate group, without hydrolysis of the chlorine atoms bound to phosphorus, was possible only by the method of R. Graf (Ref. 2), i.e., with concentrated hydrochloric acid. In this way the dichloride of isocyanato-phosphoric acid gives the thermostable N-dichloro-phosphinyl carbamic acid (I):

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89521

N-dichloro-phosphinyl ...

S/079/61/031/002/014/019
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$Cl_2PONCO \xrightarrow{+H_2O} Cl_2PONHCOOH$. Its structure was confirmed by analytical data and the following reactions: 1) Complete hydrolysis gives HCl, NH_3, CO_2, and H_3PO_4; 2) reaction with PCl_5 gives HCl, $POCl_3$, and Cl_2PONCO; 3) trialkyl phosphates are formed nearly quantitatively with alcohols; 4) with aniline, the aniline salt of N-dianilidophosphonyl carbamic acid results; 5) heating to 160°C gives HCl, Cl_2PONCO, and the polymer $[HOPO = NCOOH]$. The aniline salt of N-dianilidophosphinyl carbamic acid obtained from N-dichloro phosphinyl carbamic acid and aniline hydrolyzes when treated with alkali lye to give the sodium salt of dianilidophosphoric acid, aniline, soda, and NH_3. When heating N-dichloro-phosphinyl carbamic acid, the following processes take place successively:

$$2Cl_2PONHCOOH \xrightarrow{160^\circ} Cl_2PONCO + \frac{1}{x}\left[HOPO\ (= NCOOH)\right]_x \xrightarrow{500^\circ} \frac{1}{x}(HOPONH)_x \xrightarrow{1000^\circ} \frac{1}{x}(PON)_x.$$

Card 2/3

89521

N-dichloro-phosphinyl ...

S/079/61/031/002/014/019
B118/B208

The thermal stability of N-dichloro-phosphinyl carbamic acid and N-carboxy-metaphosphimic acid is probably due to an aromatic structure formed by a hydrogen bond. There are 9 references: 1 Soviet-bloc and 8 non-Soviet-bloc.

ASSOCIATION: Institut organicheskoy khimii Akademii nauk Ukrainskoy SSR (Institute of Organic Chemistry of the Academy of Sciences Ukrainskaya SSR)

SUBMITTED: March 21, 1960

Card 3/3

KIRSANOV, A.V., LEVCHENKO, YE.S., ZHMUROVA, I.N., ZHURAVLEVA, L.P.
MARENETS, M.S.

Isocyanates of phosphorus.

Khimiya i Primeneniya Fosfororganicheskikh Soyedineniy (Chemistry and application of organophosphorus compounds) A. YE. ARBUZOV, Ed.
Publ. by Kazan Affil. Acad. Sci. USSR, Moscow 1962, 632 pp.

Collection of complete papers presented at the 1959 Kazan Conference on Chemistry of Organophosphorus Compounds.

DERKACH, G.I.; ZHURAVLEVA, L.P.; KIRSANOV, A.V.

N-dichlorophosphinyl-N'-aryl-C-chloroformamidines. Zhur.ob.khim.
32 no.3:879-881 Mr '62. (MIRA 15:3)

1. Institut organicheskoy khimii AN Ukrainskoy SSR.
(Formamidine) (Phosphinic chloride)

KROPACHEVA, A.A.; DERKACH, G.I.; ZHURAVLEVA, L.P.; SAZONOV, N.V.;
KIRSANOV, A.V.

N-diethylenediamidophosphonyl-N-arylurea. Zhur.ob.khim. 32
no.5:1540-1542 My '62. (MIRA 15:5)
(Urea)

ZHURAVLEVA, L.P.; BUTOVA, G.L.; KIRSANOV, A.V.

Palmitates and stearates of trimethylphosphine oxide. Zhur. ob. khim. 35 no.6:996-998 Je '65. (MIRA 18:6)

1. Institut organicheskoy khimii AN UkrSSR.

ZHURAVLEVA, L.P.; GRINYUK, M.A.; KIRSANOV, A.V.

Derivatives of phosphamic acid. Zhur. ob. khim. 35 no.6:998-1001 Je '65. (MIRA 18:6)

1. Institut organicheskoy khimii AN UkrSSR.

DERKACH, G.I.; PROTSENKO, L.D.; ZHURAVLEVA, L.P.; KIRSANOV, A.V.

N-diethylenediamidophosphinyl-N'-ethylene-N"-arylguanidines.
Zhur.ob.khim. 32 no.9:2992-2994 S '62. (MIRA 15:9)

1. Institut organicheskoy khimii AN UkrSSR.
(Guanidine) (Phosphorylation)

ZHURAVLEVA, L.P.; KIRSANOV, A.V.

Phosphorylation of aminoarenesulfonamides. Zhur.ob.khim.
32 no.11:3752-3[illegible] N '62. (MIRA 15:11)

1. Institut organicheskoy khimii AN UkrSSR.
(Sulfonamides) (Phosphorylation)

SOKOLOV, L.G.; AZIZOV, M.M.; ZHURAVLEVA, L.S.; DMITRIYEV, A.A.

Investigating the architectural design type of a general purpose dry-cargo ship of 3000-4000-ton deadweight capacity. Trudy TSNIIMF no.45:3-26 '63. (MIRA 16:9)

MIROSHNICHENKO, I.P., kand.tekhn.nauk; GOLUBEV, Yu.I.; ZHURAVLEVA, L.S.

Study of the architectural and structural form of the all-purpose dry cargo ship for carrying wood, grain, and general cargoes. Trudy TSNIIMF 7 no.36:3-28 '61. (MIRA 15:3)
(Freighters)

ZHURAVLEVA, L.S.

Trade union clubs and houses of culture. Gor.khoz.Mosk. 37 no.10:
51-52 0 '63. (MIRA 17:2)

1. Zaveduyushchaya kul'turno-massovym otdelom Moskovskogo gorodskogo soveta professional'nykh soyuzov.

MIROSHNICHENKO, I.P., kand.tekhn.nauk; GOLUBEV, Yu.I., inzh.;
ZHURAVLEVA, L.S., inzh.; FEL'DMAN, I.A., inzh.

All-purpose ship for transporting wood, grain, general cargos, and industrial equipment. Sudostroenie 27 no.10:24-32 O '61.
(MIRA 14:12)

(Freighters)

ACC NR: AP7000675 SOURCE CODE: UR/0066/66/000/011/0011/0015

AUTHOR: Zhuravleva, L. V.

ORG: All-Union Scientific Research Institute of Railroad Transport (Vsesoyuznyy nauchno-issledovatel'skiy institut zheleznodorozhnogo transporta)

TITLE: Investigation of the corrosion resistance of aluminum alloys in a calcium chloride solution

SOURCE: Kholodil'naya tekhnika, no. 11, 1966, 11-15

TOPIC TAGS: AMts alloy, aluminum magnesium alloy, manganese containing alloy, silicon containing alloy, ~~alloy~~ refrigeration equipment, ~~alloy~~ corrosion resistance/ AMg2 alloy, AMg3 alloy, AMg5V alloy, AMg6 alloy, AMts alloy

ABSTRACT: Hot-rolled flat specimens and work-strained tubular specimens of wrought AMg2 (1.8—2.8% Mg), AMg3 (3.2—3.8% Mg), AMg5V (4.8—5.5% Mg), AMg6 (5.8—6.8% Mg), AMts (1.0—1.6% Mn) and AV (0.45—0.9% Mg, 0.5—1.2% Si) aluminum alloys were tested for corrosion in a 30% $CaCl_2$ solution for up to 1200 hr at room temperature. In short-term tests up to about 178 hr, the corrosion rate of the alloys of the Al-Mg system (0—6.5% Mg) was significantly higher in alloys with a higher magnesium content, but it became practically the same in all alloys with increasing exposure time up to 700 hr or more. The weight loss of annealed AMg2M, AMg3M, and AMg5M alloys reached 2.1—2.2 g/m^2 after a 100—200 hr exposure and then remained practically constant, regardless of the duration of exposure. The weight loss of the alloys in

Card 1/2 UDC: 620.19:669.018

ACC NR: AP7000675

the semiwork-strained condition was higher and increased continuously with increasing exposure time. Corrosion tests of pipes with aluminum-clad inner walls showed that cladding with aluminum did not improve the corrosion resistance of any investigated alloy, except AMg5V alloy. Similar results were also obtained in tests in flowing corrosive solution. In general, pipes made from the tested aluminum alloys had a satisfactory corrosion resistance. Parts and piping for refrigeration cars and installations are best made from AVM and AMg5V alloys, which are readily fabricated and have a low corrosion rate of 0.037 and 0.035 mm per year in flowing $CaCl_2$ solution, respectively. Welded joints of these alloys also have a satisfactory corrosion resistance. Orig. art. has: 2 figures and 2 tables.

SUB CODE: 11/ SUBM DATE: none/ ORIG REF: 005/ OTH REF: 006/

Card 2/2

S/079/60/030/007/024/039/XX
B001/B066

AUTHORS: Zalesskaya, T. Ye. and Zhuravlëva, L. Ye.

TITLE: Identification of Alkyl Benzenes. II. Analysis of Binary Mixtures of Acylamino Derivatives of 2-Phenyl Butane and 3-Phenyl Pentane

PERIODICAL: Zhurnal obshchey khimii, 1960, Vol. 30, No. 7, pp. 2164-2166

TEXT: The purpose of the present work was to identify closely related hydrocarbons that are constituents of a mixture. In order to identify 2-phenyl butane mixed with 3-phenyl pentane, the two hydrocarbons were synthesized and converted to their acylamino derivatives. The thermal analysis of the binary mixtures of the corresponding derivatives was made under conditions applicable with small quantities of the products to be studied. The melting points of mixtures of the benzene derivatives of 2-(p-aminophenyl) butane and 3-(p-aminophenyl) pentane, and of mixtures of the acetyl and benzoyl derivatives of 2-(2,4-diaminophenyl) butane and 3-(2,4-diaminophenyl) pentane were determined. Experimental data (melting points) are given in the following diagrams: Diagram 1: melting

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Identification of Alkyl Benzenes. II. Analysis of Binary Mixtures of Acylamino Derivatives of 2-Phenyl Butane and 3-Phenyl Pentane

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B001/B066

points of the binary mixture of the p-benzoyl-amino derivatives of 2-phenyl butane and 3-phenyl pentane; diagram 2: melting points of the binary mixture of the 2,4-diacetyl-amino derivatives of 2-phenyl butane and 3-phenyl pentane; diagram 3: melting points of the binary mixture of the 2,4-dibenzoyl-amino derivatives of 2-phenyl butane and 3-phenyl pentane. Under the experimental conditions, not only the temperature measured when the solid phase disappears, but also the temperature during the appearance of the liquid state is important for characterizing each of the mixtures, as is clearly seen from the melting-point diagrams. There are 3 figures and 4 references: 1 Soviet, 2 US, and 1 German.

ASSOCIATION: Leningradskiy tekhnologicheskiy institut tsellyulozno-bumazhnoy promyshlennosti (Leningrad Institute of Technology for the Cellulose and Cotton Industry)

SUBMITTED: June 23, 1959

Card 2/2

ZALESSKAYA, T.Ye.; ZHURAVLEVA, L.Ye.

Identification of alkyl benzenes. Part 2: Analysis of binary mixtures of acylamino derivatives of 2-phenylbutane and 3-phenylpentane. Zhur.ob.khim. 30 no.7:2164-2166 Jl '60. (MIRA 13:7)

1. Leningradskiy tekhnologicheskiy institut tsellyulozno-bumazhnoy promyshlennosti.
(Butane) (Pentane)

ZHURAVLEVA, L.Ye.; DANILOVA, Ye.M. (Leningrad)

Underground gasification of coal. Khim. v shkole 13 no.1:3-5
Ja-F '58. (MIRA 10:12)
(Underground coal gasification)

ZHURAVLEVA, L.Ye.; SOPOVA, A.S. (Leningrad)

Laboratory experiments in the preparation and study of some properties of polymers. Khim. v shkole 14 no.1:54 Ja-F '59.
(MIRA 12:2)

(Polymers)

ZHURAVLEVA, L.Ye. [Zhuravl'ova, L.O.]

Role of economic analysis in the fulfillment of work norms.
Leh. prom. no.4:79-81 O-D '65. (MIRA 19:1)

L 13551-66 EWT(m)/T/EWA(m)-2

ACC NR: AP6001154 SOURCE CODE: UR/0367/65/002/003/0471/0484

AUTHOR: Anikina, M.; Vardenga, G.; Zhuravleva, M.; Kotlyarevskiy, D.; Lukstin'sh, Yu.; Mestvirishvili, A.; Nyagu, D.; Okonov, E.; Wu, Tsung-fang; Chkhaidze, L.; Tukhtamyshev, G.

ORG: Joint Institute of Nuclear Research (Ob''yedinennyy institut yadernykh issledovaniy); Physics Institute, Academy of Sciences, Gruzinskaya SSR (Institut fiziki Akademii nauk Gruzinskoy SSR)

TITLE: Investigation of K_2^0-meson decays 19,44,55

SOURCE: Yadernaya fizika, v. 2, no. 3, 1965, 471-484

TOPIC TAGS: K meson, meson interaction, lepton, radioactive decay, selection rule, pion

ABSTRACT: The authors presented at the 12th International Conference on High Energy Physics, Dubna, 1964, preliminary results of analyses of 683 K_2^0-mesons detected in a Wilson chamber. In the present article, the authors present a more complete analysis using a larger statistical material (1082 K_2^0-mesons). The following probabilities were obtained for leptonic decays of the K_2^0-meson and for the decay $K_2^0 \longrightarrow \pi^+ + \pi^- + \pi^0$ (with respect to all K_2^0-decays into charged particles): $\Gamma_2 (+ - 0) / \Gamma_2$

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L 13551-66

ACC NR: AP6001154

(charged) = 0.194 ± 0.024 and $\Gamma_2(Ke_3) + {}_2(K\mu_3) / \Gamma_2$ (charged) = 0.806 ± 0.090. The data on leptonic decays exclude the S-type interaction and are in good agreement with the V-type interaction and the predictions based on the $|\Delta I| = 1/2$ selection rule. The energy spectrum of π^0-mesons in the $K_2^0 \to \pi^- + \pi^+ + \pi^0$ decay differs significantly from the phase curve $\phi(T_0)$. The value $\alpha = -8.2^{-1.3}_{-0.9}$ was obtained for the coefficient α in the linear approximation $dW(T_0)/d\phi(T_0) = 1 + \alpha T_0/M_{K^0}$, which is also in good agreement with the $|\Delta I| = 1/2$ selection rule. Assuming the existence of a σ-dipion resonance, the following values are obtained for its mass and width: $M_\sigma = (350 \pm 10)$ MeV and $\Gamma_\sigma = (75 \pm 15)$ MeV. In conclusion, the authors consider it their pleasant duty to thank B. M. Pontecorvo [Pontekorvo] for fruitful discussions and constant interest in the work; V. I. Veksler, I. V. Chuvilo and the entire staff of the proton-synchrotron, who assured the execution of the experiment; and E. L. Andronikashvili, V. P. Dzhelepov, and Z. Sh. Mandzhavidze for assistance in the work. Authors also extend their thanks to the group of laboratory technicians and mechanics consisting of N. I. Grafov, L. Goncharov, P. Zhabin, L. Lyubimov, D. Sverdlin, V. Smirnov, V. Stepanov, L. Filatov, and I. Filippov, and the students O. Dumbrajs and V. Novikov for performing the calculations. Orig. art. has: 10 figures, 4 tables, and 1 formula.

SUB CODE: 18 / SUBM DATE: 30Mar65 / ORIG REF: 007 / OTH REF: 021

Card 2/2

ANIKINA, M.; VARDENGA, G.; ZHURAVLEVA, M.; KOTLYAREVSKIY, D.; NYAGU, D.;
OKONOV, E.; TAKHTAMYSHEV, G.; U TSZUN-FAN' [Wu Tsung-fan];
CHKHAIDZE, L.

Determining the relative probabilities of $K_2^0 \longrightarrow 3\pi$ decay.
IAd. fiz. 2 no.5:853-858 N '65.

(MIRA 18:12)

1. Ob"yedinennyy institut yadernykh issledovaniy.

RYBAKOV, B.V.; SIDOROV, V.A.; VLASOV, N.A., red; ZHURAVLEVA, M.I., red.

[Spectrometry of fast neutrons] Spektrometriia bystrykh neitronov. Moskva, Izd-vo Glav. upr. po ispol'zovaniiu atom. energ. pri sovete ministrov SSSR, 1959. 175 p. (Atommaia energiia, supplement no.6)
(MIRA 12:7)

(Neutrons—Spectra)

SOV/80-32-5-41/52

5(2)

AUTHORS: Zhuravleva, M.G., Bogoslovskiy, V.N., Chufarov, G.I.

TITLE: The Reduction of Nickel and Cobalt Ferrites by Hydrogen

PERIODICAL: Zhurnal prikladnoy khimii, 1959, Vol 32, Nr 5, pp 1159-1161 (USSR)

ABSTRACT: Ferrites are complex oxides of the formula MFe_2O_4, where M is a bivalent metal ion. The ferrite formation of the mixtures $NiO + Fe_2O_3$ and $CoO + Fe_2O_3$ starts at 700 - 800°C. At 1,100°C the reaction proceeds very intensively. After calcination for 30 hours, cobalt ferrites have a crystal lattice of 8.376 ± 0.003Å, nickel ferrites of 8.333 ± 0.005 Å. The reduction by hydrogen was carried out in a closed apparatus at 300 - 500°C and 200 mm Hg. The ferrites are reduced as chemical compounds without preliminary decomposition to oxides. The final product is a solid solution of metals.
There are 3 graphs and 5 Soviet references.

Card 1/2

The Reduction of Nickel and Cobalt Ferrites by Hydrogen SOV/80-32-5-41/52

ASSOCIATION: Sverdlovskiy institut metallurgii ural'skogo filiala AN SSSR (Sverdlovsk Institute of Metallurgy of the Ural Branch of the AS USSR)

SUBMITTED: May 9, 1958

Card 2/2

ZHURAVLEVA, M. G.

Mbr., Ural Physico-Technical Inst., Sverdlovsk,-1939-.

Mbr., Inst. Chemistry & Metallurgy, Ural Affile., Acad. Sci., -1948-1951-.

"Orientation of the Phases Formed during the Reduction of Magnetite by Hydrogen," Acta. Phys., 11, No. 4, 1939;

"Kinetics of Reduction of Copper Oxides by Carbon Monixide and Hydrogen," Iz. Ak. Nauk SSSR, Otedel. Tekh. Nauk, 8, 1949;

"Separation of Sulfur and Selenium," Zhur. Prik. Khim., 24, No. 1, 1951.

1ST AND 2ND ORDERS

PROCESSES AND PROPERTIES INDEX

c8

7

Determination of small amounts of carbon in steel. M. G. Zhuravleva and G. I. Chufarov. *Zavodskaya Lab.* 9, 408-9(1940).—The Jensen method for detg. C in steel from the pressure of the CO_2 is modified to make it applicable to steels contg. S. The steel sample is burned in a stream of O_2 at 1200° and the SO_2 and CO_2 are frozen in a trap at the temp. of liquid air. The gases are then vaporized in a small but definite vol. and their total pressure is detd. The gases are then again frozen at the temp. of liquid air after which the temp. is raised to −132° at which the pressure of SO_2 is negligible and that of the CO_2 is 2 mm. Hg. The trap is then dipped in liquid O so as to cause the CO_2 to condense therein. After 10 min. the gases become completely sepd. The SO_2 is then vaporized alone and its pressure is detd. The pressure of the CO_2 is detd. by difference. The accuracy of the C detn. is 0.002%. Diagram of the app. is shown B. Z. Kamich

ASB-SLA METALLURGICAL LITERATURE CLASSIFICATION

CA

Kinetics of the reduction of copper oxides by carbon monoxide and by hydrogen. E. P. Tatievskaya, M. G. Zhuravleva, and G. I. Chufarov (Ural Branch Acad. Sci. U.S.S.R., Sverdlovsk). *Izvest. Akad. Nauk S.S.S.R., Otdel. Tekh. Nauk* 1949, 1235-41.—One-gram samples of finely powd. CuO and Cu_2O, of very nearly equal sp. surface areas (0.20 and 0.17 sq.m./g., resp.) were reduced in a stream of H_2 or of CO circulating in a closed system (~0.8 l.) and passing through a liquid-air trap to freeze out the H_2O or CO_2 produced; the degree of reduction was detd. by measurement of the pressure. As a function of the degree of reduction, the rate, in g. O_2/min., passes through a max., i.e. the reduction is autocatalytic. At the same initial pressure of 300 mm. Hg, the rate of reduction of CuO, at any temp. (200, 250, 300, and 350°) is markedly greater with CO than with H_2; thus, at 25% reduction, the rates with CO (at the above 4 temps.) are, approx., 0.007, 0.015, 0.028, and 0.043, and with H_2 0.001, 0.009, 0.017, and 0.030. At const. temp., 250°, the rate of the reduction with CO is nearly proportional to the initial pressure between 100 and 300 mm. Hg, but changes no further from 300 to 400 mm., as the amt. of CO becomes sufficient for complete reduction of the sample. In the reduction of CuO with H_2 at 300°, the rate, at all stages, increases with the initial pressure up to 400 mm. The apparent activation energies for the reduction of CuO by CO and by H_2 are 10.7 and 13.4 kcal./mole, resp. The curves for Cu_2O at the const. initial pressure of 300 mm. Hg, at the same 4 temps., show the same autocatalytic character. With H_2, the curves for 300 and 350° are very close. With CO, the curves are normal at 200 and 250°, but at 300 and 350° there is a sharp fall of the rate immediately after the max. (at about 20% reduction), and final reduction does not exceed 50% even with excess of CO. This anomaly is attributed to sintering of the Cu_2O which inhibits reduction by CO more effectively than by the more penetrating H_2. At const. temp., 300°, the rate of reduction increases with the initial pressure up to 300 mm. Hg; on further increasing pressure, the rate increases only with H_2, not with CO. In contrast to CuO, reduction of Cu_2O is, at any temp. and initial pressure, faster with H_2 than with CO. The apparent activation energies for the reduction of Cu_2O by CO and H_2 are 10.0 and 13.7 kcal./mole, resp. The reversal of the rates of reduction with CO and with H_2 between CuO and Cu_2O excludes the assumption of a dissocn. of the oxide as the rate-detg. step of the reduction, as in that case the rates ought to vary in the same way with the nature of the reducing gas. The observed facts can be explained only on the basis of a mechanism involving surface adsorption of the reducing gas, reaction between the adsorbed mols. and the O of the solid oxide, and desorption of the gaseous products. The rate-detg. step is the surface reaction. It is understandable that solids with different crystal lattices should have different adsorption capacities for different gases, and that the rates of the surface reactions should be different. The observed rates of reduction of CuO and of Cu_2O differ only by a factor of 2-3, whereas the dissocn. pressure of CuO is about 10^9 times that of Cu_2O. Consequently, the rate of reduction is not related to the dissocn. pressure of the oxide. N. T.

C.A.

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Reduction and dissociation of oxides of cobalt and of nickel. G. I. Chufarov, M. G. Zhuravleva, and E. P. Tatievskaya (Inst. Chem. and Met., Ural Branch Acad. Sci. U.S.S.R., Sverdlovsk). *Doklady Akad. Nauk S.S.S.R.* 73, 1209-12(1950).—(1) The kinetic curves of the reduction of CoO, prepd. by dissocn. of 98% Co_3O_4 in a N_2 stream at 950° (resulting in a product 99% pure, sp. surface area 0.48 sq. m./g. by the N_2 adsorption isotherm), plotted in terms of the rate (g. O_2 taken off the oxide/min.) as a function of the degree of reduction, at 200, 250, 300, and 350°, in a closed system with circulating H_2 gas under 300 mm. Hg, show initial autocatalysis and a max. of the rate at about 25% reduction. The apparent activation energy is 13.0 kcal./mole. Under the same conditions, the curves for Co_3O_4 (98%) show a max., corresponding to reduction of Co_3O_4 to CoO, followed, at least at 350°, by a min. and a 2nd, lower max.; the part of the curve beyond the max. corresponds to reduction of CoO to Co. The rate of reduction of Co_3O_4 is approx. twice that of the reduction of CoO; the apparent activation energy is 12.3 kcal./mole. At equal degree of reduction, at const. temp., the dependence of the rate v on the pressure is expressed by $v = kp^n$ where n = a fraction tending to 1 with increasing temp. (2) The equil. dissocn. pressure of Co_3O_4 is independent of the O content in the solid phase as long as Co_3O_4 is present, i.e. no solid solns. are formed; at 700, 800, 850, and 900°, p = 0.5, 7.5, 27, and 86.5 mm. Hg. This can be represented by $\log p^{1/2} = -(H_{298}/4.573\ T) + (S_{298}/4.573)$, with $H_{298} = 38{,}790$ cal./mole, $S_{298} = 31.22$ cal./mole/degree; consequently, $\log p^{1/2} = -8482\ T^{-1} + 6.82$. In contrast to Co_3O_4, the dissocn. pressure of CoO even at 1000° is only 3.35×10^{-13} atm. Despite the enormous difference of the equil. dissocn. pressures, the rates of the reduction of Co_3O_4 and CoO are comparable. (3) For NiO, prepd. by decompn. of $Ni(NO_3)_2$ at 350° (resulting in a product 98% pure, sp. surface area 5.43 sq. m./g.), the kinetic curves at 225, 250, 300, and 350° pass through a max. around 33% reduction; the activation energy is 16.0 kcal./mole. For a mixed $NiO \cdot Ni_2O_3$, prepd. by prolonged heating of $Ni(NO_3)_2$ at 250° to const. wt., and analyzing NiO 60, Ni_2O_3 40%, the kinetic curves at 180-300° have 2 maxima, the 1st of which corresponds to reduction of Ni_2O_3, the 2nd to autocatalytic reduction of NiO. The equil. dissocn. pressures of Ni_2O_3, at 400, 500, and 600°, were detd. to 77, 111, and 151 mm. Hg. Hence, the thermal effect of the dissocn. of Ni_2O_3 in that temp. range is ~2 kcal./mole, and the entropy of Ni_2O_3 is 41.1 cal./mole/degree. For NiO, equil. dissocn. pressures, calcd. from the literature data, of H_{298}, S_{298}, and the heat capacities, at 500, 600, 700, 800, 900, 1000, 1100, and 1200°K., are, resp., 6.00 × 10[illegible], 1.24 × 10[illegible], 1.074 × 10[illegible], 8.67 × 10[illegible], 1.12 × 10[illegible], 6.6 × 10[illegible], 1.28 × 10[illegible], and 9.4 × 10[illegible] mm. Hg. Despite the very great difference of the equil. dissocn. pressures of Ni_2O_3 and NiO, their rates of reduction by H_2 are comparable. N. Thon

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USSR/Chemistry - Inorganic Jan 51

"Separation of Sulfur and Selenium," M. G. Zhuravleva, G. I. Chufarov, Inst Chem and Metallurgy, Ural Affiliate, Acad Sci USSR

"Zhur Prik Khim" Vol XXIV, No 1, pp 28-31

Studied sepn of Se from S for recovery of pure S from flotation tailings. Over wide range of concn, coeff of activity for S and Se were greater than 1, indicating deviation from law for ideal soln. No azeotropic mixt were formed in S-Se system. Thus components can be sepd completely by distn.

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FDD 172T13

1. ARKHAROV, V. I.; VARSKAYA, A. K.; ZHURAVLEVA, M. G.; CHUFAROV, I. G.

2. USSR (600)

4. Oxides

7. Reduction of mixtures of magnetic ferric oxide with nickelous oxide and cobaltous oxide. Dokl. AN SSSR 87, No. 1, 1952

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

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Effect of [illegible] on [illegible] of [illegible]
[illegible] M. G. Zhuravleva, [illegible]
[illegible] and [illegible] J. Appl. Chem. U.S.S.R.
26, 605 (1953) (Engl. translation).—See C.A. 47, [illegible]

ZHURAVLEVA, M. G.

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Metallurgy and Metallography

(5) Mct

Effect of flux moisture on dip-tinning of iron. O. I. Chufarov, M. G. Zhuravleva, E. P. Tatievskaya, B. D. Averbukh, and V. K. Antonov. *Zhur. Priklad. Khim.* 26, 652-5(1953).—In dip-tinning of Fe, excessive H_2O in $ZnCl_2$ flux dissolves Fe rapidly and forms $FeSn_2$ scum and sludge. This increases Sn consumption and contaminates the coating with scum. When the flux is almost anhyd., cleaning of Fe is very slow and bare spots may remain on the surface. The optimum H_2O content of the flux is 1.5-3.5%, corresponding to b.p. 250-275°. The b.p. is an important characteristic of the flux. B. M. Elkin

ZhURAVlEVA, M.G.

USSR/ Chemistry - Reduction

Card 1/1 Pub. 22 - 28/47

Authors : Arkharov, V. I.; Bogoslavskiy, V. N.; Zhuravleva, M. G.; and Chufarov, G. I., Memb. Corresp. of Acad. of Sc. USSR

Title : Reduction of ferric oxides with graphite

Periodical : Dok. AN SSSR 98/5, 803-806, Oct 11, 1954

Abstract : The reduction of Fe_2O_3 with graphite at temperatures of 1000 - 1150° in vacuo was investigated. The gaseous reaction products were continuously removed through a trap cooled with liquid air for the purpose of collecting the CO_2. The amount of carbon monoxide (CO) formed during the reduction process was determined by the difference between loss in weight and amount of CO_2 lost through freezing. Data regarding rate of reduction and apparent activation energy values are presented. Results of x-ray analysis of the solid reduction products are shown in table. Seven references: 6-USSR and 1-German (1925-1945). Table; graph.

Institution : Acad. of Sc. USSR, Ural Branch, Institute of Chemistry and Metallurgy

Submitted : March 31, 1954

ZHURAVLEVA, M.G.

ARKHAROV, V.I.; BOGOSLAVSKIY, V.N.; ZHURAVLEVA, M.G.; CHUFAROV, G.I.

Study of the reduction of iron oxides with graphite. Zhur.fiz.khim. 29 no.2:272-279 F '55. (MIRA 8:7)

1. Ural'skiy filial Akademii nauk SSSR, Institut khimii i metallurgii, Sverdlovsk. (Reduction, Chemical) (Iron oxides)

CHUFAROV, G.I.; TATIYEVSKAYA, Ye.P.; ZHURAVLEVA, M.G.; AVERBUKH, B.D.;
LISNYAK, S.S.; ANTONOV, V.K.; BOGOSLOVSKIY, V.N.; STAFEYEVA, N.M.

Kinetics and mechanism of the reduction of metal oxides and chemical compounds. Trudy Inst. met. UFAN SSSR no.2:9-40 '58. (MIRA 12:4)

(Oxidation-reduction reaction) (Metallurgy)

5(2)

AUTHORS: Bogoslovskiy, V. N., Zhuravleva, M. G., SOV/20-123-1-22/56
Chufarov, G. I., Corresponding Member, Academy of Sciences, USSR

TITLE: On the Reduction of Nickel Ferrite by Graphite (O vosstanovlenii ferrita nikelya grafitom)

PERIODICAL: Doklady Akademii nauk SSSR, 1958, Vol 123, Nr 1, pp 87 - 89 (USSR)

ABSTRACT: The mechanism of crystallochemical transformations in the reduction of metal oxides by graphite has been intensely studied on iron oxides (Ref 1). But in the reduction of complicated compounds, in the crystal lattice of which atoms of various metals are occurring, essential deviations might be expected. Ferrites of the type $Me^{2+}Fe_2^{3+}O_4$ and such with a spinel structure are worth to be thoroughly investigated as they represent a valuable material in the production and use of semiconductors. The nickel ferrite investigated was produced by sintering of an equimolar mixture of Fe_2O_3 and NiO for 30 hours at 1200°. As reducing

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On the Reduction of Nickel Ferrite by Graphite SOV/20-123-1-22/56

agent, graphite from Acheson electrodes was used which was annealed in the vacuum at 1100°. Ferrite was carefully powdered with graphite and then subjected to reduction. The amount of graphite was three times the quantity theoretically required for a complete reduction, the annealing was performed in the air, but the gaseous reaction products were always pumped off and CO_2 was gathered in a trap dipped into liquid nitrogen, and periodically determined. Table 1 shows the variation of the rate of the reduction process of nickel ferrite at 950° in dependence upon the oxygen amount withdrawn. Initially, up to 20% of this amount, the rate is somewhat reduced. After the withdrawal of 45-50 % oxygen the rate of reduction considerably increases and reaches the maximum at 80%. This kind of kinetics points to the essential role of the crystallochemical transformations during the reduction. The X-ray investigation of the solid products of reduction showed that they consist at the beginning (up to 20%) of nearly pure metallic nickel. Its lattice parameter is

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