

VERKHOGLYADOVA, T.P.

Malignant degeneration of ependymomas. Arkh.pat. 21 no.8:67-
71 '59. (MIRA 13:12)
(BRAIN—CANCER) (SPINAL CORD—CANCER)

BRODSKIY, Yu.S.; VERKHOGLYADOVA, T.P.

Dermoid and epidermoid tumors of the lower part of the vertebral canal. Nov.khir.arkh. no.6:117-123 N-D '58. (MIRA 12:3)

1. Institut neyrokhirurgii Ministerstva zdavookhraneniya USSR (direktor i nauchnyy rukovoditel' - zasl. deyatel' nauki prof. A.I. Arutyunov). Adres avtorov: Kiyev, ul. Otradnaya, d. 32 Institut neyrokhirurgii.
(SPINE--TUMORS)

ca

7

Rapid quantitative mineralogical analysis of concentration products of tin-tungsten ores. P. G. Verkhovantsev. *Tsvetnyy Metal.* 1938, No. 8, 38-44. A rapid method for detg. the mineral content of the final and intermediate products obtained in concg. wolframite-scheelite-cassiterite ores is described. B. N. Danilov

AND U.S. GEOLOGICAL SURVEY LITERATURE CLASSIFICATION

V. VERHESANTOV, I. G.

Geography and Geology

Requirements of industry as to the quality of mineral raw materials. Handbook for geologists-- Moskva, Gos. izd-vo geologicheskoi lit-ry Komiteta po delam geologii pri SNK SSSR, No. 28, Bismuth, 1947.

Monthly List of Russian Accessions, Library of Congress: October 1952. Unclassified.

VITKOVITSKIY, Y. G.

Geography and Geology

Requirements of industry as to the quality of mineral raw materials. Handbook for geologists-- Moskva, Gos. izd-vo geologicheskoi lit-ry Komiteta po delam geologii pri SNK SSSR, No. 45, Zirconium, 1947.

Monthly List of Russian Accessions, Library of Congress October 1952. Unclassified.

VERKHOLANTSEV, P.G.

Selective flotation of cassiterite with a cation collector. Izv.Sib.
otd.AN SSSR no.6:23-30 '61. (MIRA 14:6)

1. Institut gornogo dela Sibirskogo otdeleniya AN SSSR,
Novosibirsk. (Cassiterite) (Flotation)

VERKHOLANTSEV, P.G.

Interrelation of the material composition of the ore, the ion composition of the pulp, and the conditions of selective flotation of cassiterite. Trudy Inst. gor. dela Sib. otd. AN SSSR no.3:266-282 '60. (MIPA 14:4)

(Cassiterite)(Flotation)

< VERKHOLANTSEV, P.G.

Mineralogical analysis in investigating the flotation of
cassiterite. Trudy Inst.gor.dela Sib.otd.AN SSSR no.2:261-271
'59. (MIRA 13:5)
(Cassiterite) (Flotation)

VERKHOLANTSEV, V.V.; OKHRIMENKO, I.S.

Plastification of pyridine-containing copolymers by means
of mineral acids. Kauch. i rez. 23 no.6:5-9 Je '64.
(MIRA 17:9)

1. Leningradskiy tekhnologicheskii institut im. Lensoveta.

VERKHATSKIY, N.P., prof.

Anesthesia and labor acceleration. Sov.med. 22 no.8:129-132 Aug '58
(MIRA 11:10)

1. Iz akushersko-ginekologicheskoy kliniki (zav. - prof. N.P. Verkhatskiy) Odesskogo meditsinskogo instituta (dir.-prof. I.Ya. Deyneka).

(LABOR, anesth. & analgesia
acceleration with 4-phenyl-4-propoxy-1,2,5, trimethyl-
piperidine (Rus))

(MUSCLE RELAXANTS, ther.use
4-phenyl-4-propoxy-1,2,5-trimethylpiperidine in labor
acceleration (Rus))

STEPANOV, Aleksandr Dmitriyevich; EZRIN, Grigoriy Semenovich; VERKHOOGLYAD,
Vasiliy Yefremovich; KUZNETSOV, Boris Georgiyevich; TRAKHTMAN,
L.M., kand.tekhn.nauk, retsentsent; KAMENETSKIY, B.G., kand.tekhn.
nauk, red.; NIKITIN, A.G., red.isd-va; MODEL', B.I., tekhn.red.

[Electric drive of diesel locomotives] Elektricheskaya pere-
dacha teplovozov. Moskva, Gos.nauchno-tekhn.isd-vo mashinostroit.
lit-ry, 1959. 292 p. (MIRA 12:8)
(Diesel locomotives) (Electric driving)

VERKHOGLYADOVA, T. S.

PHASE I BOOK EXPLOITATION NOV/3624
Akademiya Nauk Ukrainy SSR. Institut metallofiziki i spetsial'noy obrabotki

Metallorazrabotki materialy i metody ikh issledovaniya: informatsionnyye materialy (Cermet Materials and Methods of Their Analysis: Information Material) Kiev, izd-vo AN Ukrainy, 1959. 55 p. 1,500 copies printed.

Ed. of Publishing House: I.V. Kishina; Tech. Ed.: A.M. Kisovets
Editorial Board: I.M. Pristavich, I.M. Fedorenko, G.S. Pisarenko, G.V. Samonov (Resp. Ed.), V.A. Yermenko, and V.M. Paderno.

PURPOSE: This collection of articles is intended for scientific workers, designers, and engineering and technical workers in the metallurgical, machinery-manufacturing and other branches of industry.

COVERAGE: In this collection of articles the authors describe the production of carbides, nitrides and other heat resisting compounds, giving their physicochemical and mechanical properties. Their thermal processing and the processing installations are also described. A new method is proposed for the production of rods from refractory compounds. Certain compounds are analyzed, and the energy dissipation in materials during high-frequency mechanical vibrations is determined. No personalities are mentioned. There are 16 schematic drawings, diagrams, 6 tables and 17 references, 16 of which are Soviet.

Verkhoglyadova, T.S. Installation for Determining the Kinetics of Expansion and the Vapor Tension of Metal Evaporants

Kur'menko, V.A. Method of Determining the Real Characteristics of Energy Dissipation in Materials During Vibrations 17

Yermenko, V.M., and T.Ya. Velikunova. Installation for Heat Treatment of Specimens at High Temperature 22

Yermenko, V.M., and T.Ya. Velikunova. Conditions for Preparing Alloys of Titanium Carbide With Molybdenum 25

Kilbas, A.Kh. Determination of Small Quantities of Nitrogen in Titanium Carbide 27

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Kozlov, I.A. Utilization of Lacquer Coatings to Investigate the Limiting State of Discs 32

Samonov, G.V. Physicochemical and Mechanical Properties of the Carbides and Nitrides of Boron and Silicon 36

Kur'menko, V.A. Calorimetric Method of Determining Energy Dissipation in a Material During High-Frequency Mechanical Vibrations 40

Verkhoglyadova, T.S. Preparation of Titanium Nitride From Titanium 45

Kuznetsov, L.N., and G.G. Sereya. Analysis of Vanadium Silicide 46

Benkovskiy, V.V., and G.V. Samonov. New Method of Preparing Bars From High-Melting Compounds 50

Samonov, G.V., T.S. Verkhoglyadova, M.K. Antonova, and T.V. Dubovik. Preparation of the Nitrides of High-Melting Metals 53

VERKHOLANTSEV, V.V.; OKHRIMENKO, I.S.

Characteristics of the changes in the strength of pyridene-containing copolymers. Kauch.i rez. 21 no.11:1-3 N '62. (MIRA 15:12)

1. Leningradskiy tekhnologicheskii institut imeni
Lemosoveta.

(Rubber, Synthetic)
(Pyridene)

22-594. Experiment on Welding of T-Shaped Beams. V. A. Verzholantsev. Antogennoe Delo (Welding). July 1947. D 26 (In Russian.)

Difficulty was experienced with working during the welding of the two T-shaped beams. How the trouble was remedied by proper weld design

1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31 32 33 34 35 36 37 38 39 40 41 42 43 44 45 46 47 48 49 50

101 AND 200 GROUPS

101 AND 200 GROUPS

PROCESSES AND PROPERTIES INDEX

COMMON ELEMENTS

8

Notes on the mineralogical investigation of the Kizhikh-Uzun copper-iron ore deposits. L. O. Verkhovoltzev. *Tsvetnaya Metal*, 1934, No. 8, 28-7. The predominating minerals are: chalcopyrite, malachite and azurite. Covellite and chalcocite occur less frequently. Sphalerite occurs sporadically. The ore carries about 1.5% Cu and 30-40% magnetite. S. L. Madsorsky

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ASD, S. L. A METALLURGICAL LITERATURE CLASSIFICATION

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PROCESSES AND PROPERTIES INDEX

24

Mineralogical and petrographic composition of iron ore of
Kop-Tau deposits of the Tashtagol group. P. T. Verk-
holantsev. *Norotj Tekhniki, Ser. Gornodnyaya Prom.*
1935, No. 23, 14-15. —The Kop-Tau deposit contains
70-80% of magnetite. The ore is classified as primary,
partially oxidized and strongly oxidized. There is a differ-
ence in compn. at various depths. The primary and
partially oxidized deposits are sulfides (10-15%), and the
strongly oxidized deposit is mainly limonite and hematite.
A. A. Polgorny

ATB-55 A METALLURGICAL LITERATURE CLASSIFICATION

CA 8

Mineralogical and petrographic composition of iron ore of
Kop-Tau deposits of the Tashkurgan group. P. T. Verk.
bolantsev. *Sovetskii Tekhnich. Ser. Gornomestroye Prum.*
1935, No. 23, 14-15. --The Kop-Tau deposit contains
70% of magnetite. The ore is classified as primary,
partially oxidized and strongly oxidized. There is a differ-
ence in compn. at various depths. The primary and
partially oxidized deposits are sulfides (10-15%), and the
strongly oxidized deposit is mainly limonite and hematite.
A. A. Podgorny

ASB-55-1 METALLURGICAL LITERATURE CLASSIFICATION

VERKHOLANTSEV, V.V.; OKHRIMENKO, I.S.; YEFREMOV, I.F.

Viscosity of nonaqueous solutions of pyridine-containing
copolymers. Vysokom. soed. 6 no.11:2063-2067 N 164
(MIRA 18:2)

1. Leningradskiy tekhnologicheskii institut imeni Lensoвета.

L 16322-65 ECT(m), EPF(m) 11.11.1964 11.11.1964 11.11.1964 11.11.1964
ACCESSION NO: AP4049158 5/6/30/34/006/011/2063/2007

AUTHOR: Vekholantsev, V. V.; Okhrimenko, L. I.; Yefremov, I. F.

TITLE: Viscosity of nonaqueous solutions of a pyridine-containing copolymer

SOURCE: Vy sokomolekulyarnye soedineniya, v. 6, no. 11, 1964, 2041-2067

TOPIC TAGS: methylvinylpyridine, copolymer neutralization, copolymer viscosity, organic solvent, copolymer SKMVP-40

ABSTRACT: The authors studied the variation in the viscosity of nonaqueous solutions of copolymer SKMVP-40 under the influence of HCl. The copolymer was obtained in the form of a precipitate, then carefully washed to remove the impurities; low-temperature treatment for neutralization.

and 3 structural formulas

1. FOS-100-100

ASSOCIATED WITH THE
ENGINEERING DEPT.

ATBME-111

NO REFERENCE

ACCESSION NR: AP4041456

S/0138/64/000/006/0005/0009

AUTHOR: Verkholtantsev, V. V.; Okhrimenko, I. S.

TITLE: Plasticizing of pyridine-containing copolymers by mineral acids

SOURCE: Kauchuk i rezina, no. 6, 1964, 5-9.

TOPIC TAGS: pyridine, copolymers, mineral acids, plasticizer, SKS-70MVP-10 copolymer, butadiene, styrene, 2-methyl-5-vinyl-pyridine, elastomer

ABSTRACT: The authors investigated the physico-mechanical and thermomechanical characteristics (hardness, rupture strength, relative elongation, yield point), of films from mixtures of copolymer SKS-70MVP-10 (copolymer of butadiene, styrene and 2-methyl-5-vinyl-pyridine (20:70:10)) with hydrochloric acid, orthophosphoric acid and polymethacrylic acid. The results show that mineral acids can act as either hardening or plasticizing agents, depending on the amount in the polymer. Thus, for example, 5-7% HCl or H_3PO_4 have a plasticizing effect, while 13-15% of the same acids cause hardening, and even greater concentrations again decrease the strength of the films. In contrast, however, polymethacrylic acid, which forms an irreversible space lattice with the copolymer

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is a hardening agent at any concentration. In the presence of appropriate concentrations of the low-molecular-weight plasticizer dibutylphthalate, the hardened space lattice of the copolymer and 13-15% mineral acid is destroyed. In this process, a certain stoichiometric relationship can be observed (maximal plasticity at 18% dibutylphthalate, or 1 mol per 4 mols HCl). By considering the ratio between the polar and nonpolar portions of the pyridine-containing copolymer, as well as the amount of mineral acid added to the polymer mixture, it can be predicted whether the given mixture will be hardened or plasticized. Orig. art. has: 5 figures and 2 structural formulas.

ASSOCIATION: Leningradskiy tekhnologicheskii institut im. Lensovet (Leningrad Engineering Institute)

SUBMITTED: 00

DATE ENCL: 17.11.64

ENCL: 00

SUB CODE: OC, MT

NO REF SOV: 007

OTHER: 002

Card 2/2

VERKHOLANTSEV, V.V.

Mechanism of the reaction and production technology of polybasic
lead acetate. Lakokras.mat. i ikh prim. no.2:26-30 '64.
(MIRA 17:4)

1. Leningradskiy khimicheskiy zavod im. D.I.Mendeleyeva.

VERKHOLANTSEV, V.V.; YEFREMOV, I.F.

Mechanism of the formation and reversibility of trimers with pyridine rings. Part 3. Vysokom.soed. 6 no.2:213-218 F '64. (MIRA 17:2)

1. Leningradskiy tekhnologicheskii institut imeni Lensoвета.

41118

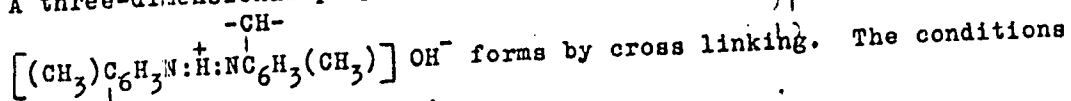
S/190/62/004/010/002/010
B101/B186

AUTHORS: Verkholantsev, V. V., Okhrimenko, I. S.

TITLE: Mechanism of the formation and reversion of three-dimensional polymers containing pyridine rings. II.
Conversion of the three-dimensional polymer into a linear polymer

PERIODICAL: Vysokomolekulyarnyye soedineniya, v. 4, no. 10, 1962,
1463-1468

TEXT: Previous papers (Vysokomolek. soyed., 3, 724, 1961) show that the action of an acid causes the formation of hydrogen bonds between the molecules of CKMBT-40 (SKMVP-40) copolymer, consisting of 40 parts by weight of 2-methyl-5-vinyl pyridine and 60 parts by weight of divinyl. A three-dimensional polymer with the structure



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S/190/62/004/010/002/010
B101/B186

Mechanism of the formation ...

causing reversion of the three-dimensional polymer into a linear polymer were studied. The intermolecular bonds broke under the action of water, aqueous or alcoholic KOH of SKMVP-40 films which had first been structurized by means of an acid. The content of soluble linear polymer was determined by extraction with benzene. At room temperature, alkali did not affect the three-dimensional polymer, at 80-100°C, the spatial structure was partly destroyed by H₂O and more intensively by aqueous KOH, whereas alkaline KOH brought about complete conversion into a linear polymer. Solvents causing greater polymer swelling than H₂O accelerated the nucleophilic cleavage. SKMVP-40 samples structurized by 0.1 N HCl were reversed more readily than those treated with 0.7 N or 2.47 N HCl. H₂SO₄ and H₃PO₄ had a similar effect. The density of cross links depended on the acid concentration. Conclusions: Treatment of SKMVP-40 with acids causes cross linkage and also the formation, dissolution, and hydrolysis of salts. Besides H-bond complexes, there also exist pyridinium ions coordinated with acid anions or OH groups, and free pyridine rings. Weak acids cause salt formation: $\geq$ N-H... anion without structuration. Strong acids cause structuration owing to H bonds:

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Mechanism of the formation ...

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B101/B186

≥N...H anion. Strong, polybasic acids also form salt bonds, weak polybasic acids yield intermolecular salt bonds. Intermolecular H bonds form at a certain critical acid concentration. Increasing acid concentration causes the formation of PyCl and finally also its hydrolysis. Increased concentration of free pyridine rings, however, shifts the equilibrium toward the formation of H cross links, and swelling decreases again. Rupture of H-bonds by KOH is due to the steric complex bound to Cl⁻ later becoming OH⁻ as a result of KCl formation. With an excess of OH, this complex decomposes into 2(CH₃)₆H₃N + H₂O. Besides an

-CH-

excess of OH groups, the nucleophilic agent has to reach the proton of the H bond, which is helped by swelling. There are 2 figures and 2 tables. The English-language reference is: D. O. Jordan, T. Kurucsev, Polymer, 1, 202, 1960.

ASSOCIATION: Leningradskiy tekhnologicheskii institut im. Lensovet
(Leningrad Technological Institute imeni Lensovet)

SUBMITTED: May 29, 1964
Card 3/3

22565

15.8000 2209, 1581.

S/190/61/003/005/008/014
B110/B230

11.2210

AUTHORS: Okhrimenko, I. S., Petrov, A. A., Verkholantsev, V. V.

TITLE: Mechanism of the formation and reversibility of trimers containing pyridine rings. I. Mechanism of trimer conversion

PERIODICAL: Vysokomolekulyarnyye soyedineniya, v. 3, no. 5, 1961, 724-728

TEXT: Trimerization yields insoluble and non-melting products of high strength. The present authors intended to examine the trimerization mechanism of copolymers containing pyridine ring, as well as the possibility of their reversible conversion to form linear polymers. A reversibility has already been observed in the acid treatment of trimers containing azomethine group in the side chain, obtained by polymerization of Schiff's bases with vinyl group, as well as in KOH vulcanization <70°C of carboxylate rubber. The authors examined the conversion of linear polymers into the trimer with the help of the latex copolymer CKMBП-40 (SKMVP-40) of 2-methyl-5-vinyl pyridine with 60% by weight of divinyl and 72% conversion. After treatment with strong acids it was not soluble either in polar (chloroform) or in non-polar (benzene) solvents. Its

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Mechanism of the formation...

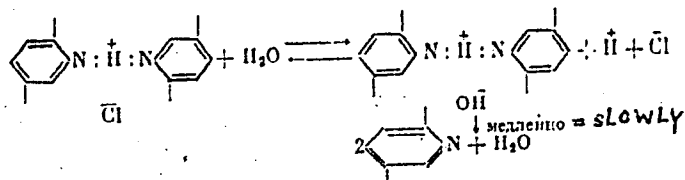
strength increased to 500 - 600 kg/cm². Infrared spectra have shown that no cross linking was effected by double bonds. Spectroscopic data have also allowed to deduce the occurrence of reactions on the pyridine ring. Weak alkalis and boiling salt solutions made the copolymers, while reducing their strength, almost entirely soluble in benzene etc. Strong organic and mineral acids ($K_1 = 6.65 \cdot 10^{-5}$ to $1.04 \cdot 10^{-3}$) (Table 1) caused trimerization. As also monobasic acids cause trimerization, conversion cannot be explained by intermolecular formation of salts alone. In the infrared spectrum, no absorption due to fluctuations of the valence of the NH group could be observed within the range of 3000 to 3500 cm⁻¹. At 2400 cm⁻¹ a new wide band due to hydrogen bonding appeared, the intensity of which increased with the strength of the added acid (Fig. 1). The sequence of the acid quantities absorbed was reverse to that of the strength of the acids: HCl - 69%; HNO₃ - 74%; H₃PO₄ - 139% of the theoretical quantity. On immersion in water the acid absorbed was entirely removed again, and the trimer content somewhat decreased (Fig.3).

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Mechanism of the formation...

Fig. 4 shows the swelling of specimens in benzene, which were exposed to 1 M acid for 2 hr and rinsed with water. Supposing the swelling degree to be inversely proportional to the density of cross links, the strongest acid, HCl, binds best. The rate of gel formation was very high and, within a certain range, almost independent of the thickness of the film. From this, a high rate of diffusion of the cross-linking agent (proton) could be deduced. The polymer film absorbed more protons than anions from the acid. The protons could be removed again only by boiling in the presence of nucleophile reactants. The following equilibrium is possibly present:



With a rise of temperature also the oscillating energy of the chains increased, which could not be compensated any more by the strength of intermolecular cross links. Therefore, the trimer content decreased and the

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Mechanism of the formation...

absorption of acid increased. The following intermolecular binding mechanism is assumed herefrom: First, the acid formed salts with the pyridine ring, then a stable hydrogen bond by means of protons bound in a similar way to two-nitrogen atoms. Stable ions resembling HF_2^- are formed thereby. In addition, dibasic acids may also yield salt bonds. To eliminate the influence of diffusion, reactions of the copolymer CKMBT-40 (SKMVP-40) were examined on films of $>200\mu$ thickness. The trimer content was determined by extraction in benzene in the Soxhlet device. The infrared spectra were taken by means of the spectrophotometer MKC-14 (IKS-14). The acid absorption was determined by titration of the acid bath before and after the treatment and by weighing the dry sample. The authors thank E. K. Dazaryants and V. L. Tsaylingol'd for the latex. There are 5 figures, 1 table, and 2 references: 1 Soviet-bloc and 1 non-Soviet-bloc.

ASSOCIATION: Leningradskiy tekhnologicheskii institut im. Lensovet
(Leningrad Technological Institute im. Lensovet)

SUBMITTED: July 22, 1960

Card 4/7

VERKHOLANSKAYA, L.A.

Effect of soil conditions on the reproduction of pine-sphagnum forests
in cut-over areas. Trudy Komi fil. AN SSSR no. 3:59-69 '55. (MLRA 9:10)
(Reforestation) (Pine) (Forest soils)

PHASE I BOOK EXPLOITATION

796

Verkholat, Mikhail Yefimovich and Fateyev, Aleksandr Vasil'yevich

Analiz raboty i raschet elementov elektricheskogo privoda (Analysis of Operation and Design of Elements of Electric Drives) Moscow, Mashgiz, 1957. 105 p.
8,500 copies printed.

Reviewers: Zusman, V.G., Candidate of Technical Sciences, and Naydis, V.A., Engineer; Ed.: Sabinin, Yu.A., Candidate of Technical Sciences; Ed. of Publishing House: Vasil'yeva, V.P.; Tech. Ed.: Sokolova, L.V.; Chief Ed. (Leningrad Division, Mashgiz): Bol'shakov, S.A., Engineer.

PURPOSE: The monograph is intended for engineering and technical personnel engaged in machine-tool building and, chiefly, in the design of electric drives for metal-cutting machines. It can also be used by students in the machine-tool building departments of vtuzes.

COVERAGE: The monograph presents an analysis of the operation of an automatic control system for the feed drive of a heavy horizontal boring machine. The

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Analysis of Operation and Design (Cont.)

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effect of various compensating devices on the dynamic properties of the system is shown. Methods of designing electric drives with wide a speed range of the d-c prime mover are shown. The book explains the operation of compensating devices and gives methods for their selection. For purposes of illustration, an electric drive with a wide speed range for a type 265 heavy universal boring machine manufactured by the Stankostroitel'nyy zavod im. Sverdlova (Machine-tool Building Plant imeni Sverdlov) in Leningrad is discussed. The authors thank the chief designer of the Machine-tool Building Plant imeni Sverdlov, M.Ye. El'yasberg, for his help in preparing the book. There are 21 Soviet references, including 1 translation.

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Basic Symbols

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Analysis of Operation and Design (Cont.)

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Introduction

Ch. 1. Components and Control Circuits

1. Circuit components of electric drives with a wide range of speed
2. Control circuits for electric feed drives

Ch. 2. Calculation of Static Conditions

3. Calculation of system components of an electric drive

Ch. 3. Investigation of the Operation of a System Under Dynamic Conditions

4. Operation of a system without compensating devices
5. Selection of compensating devices and determining their parameters
6. Selection of compensating devices and determining their parameters for the feed-drive motor control system of a boring machine

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7. Theoretical and experimental investigations of the effect of compensating devices on the dynamic properties of a system 72
8. Effect of a change in amplification coefficient of the amplidyne cross-circuit included in feedback circuit on amplidyne output voltage 86
9. Increase of speed and improvement of dynamic stability of a system by proper selection of time-constant ratio of system sections 88
10. Effect of a change in primary circuit parameters of a type TPT antihunting transformer on speed and dynamic stability of a system 91
11. Effect of a change in stabilization circuit parameters along the first and second derivatives of velocity with respect to time on the dynamic stability of a system 95
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AVAILABLE: Library of Congress (TK4058.V42)	

JP/mal
11/14/58

Card 5/5

VERKHOLAT, Mikhail Yefimovich; MOROZOV, Yuliy Yakovlevich;
ALIMOVA, S.M., Eds.

[Improved electric feed drive for metalcutting machines
with a D = 2000 speed variation range] usovershenstvovan-
nyi elektroprivod podachi metallorezhushchih stankov s
diapazonom izmeneniia skorosti D = 2000. Leningrad, 1964.
22 p. (MIRA 17:11)

VAVILOV, A.A.; VERKHOLAT, M.Ye.; RUBASHKIN, I.B.; Prinimali uchastiye:
YAKOVLEV, V.B.; ~~DEMIDOV~~, S.V.; VOROSHILOV, M.S., kand. tekhn.
nauk, retsenzent.

[Actuating electromechanical servosystems for copying milling
machines] Silovye elektromekhanicheskie slediashchie sistemy
kopiroval'no-frezernykh stankov. Moskva, Mashinostroenie,
1964. 406 p. (MIRA 18:2)

VERKHOLIT, M.Ye.

Contour follower with continuous proportional control and rigid
negative speed feedback, Stan. i instr. 27 no.11,9-12 N '56.
(MIRA 10:1)

(Milling machinery)

Verkholat, M. Ye
VERKHOLAT, Mikhail Yefimovich; PATEYEV, Aleksandr Vasil'yevich; ZUSMAN, V.G.,
kand.tekhn.nauk, retsenzent; MAYDIS, V.A., inzh., retsenzent;
SABININ, Yu.A., kand.tekhn.nauk, red.; VASIL'YEVA, V.P., red.izd-va;
SOKOLOVA, L.V., tekhn.red.

[Analysis of work and calculation of elements of electric drives]
Analiz raboty i raschet elementov elektricheskogo privoda. Moskva,
Mos. nauchno-tekhn.izd-vo mashinostroit. lit-ry. 1957. 105 p.
(Electric driving) (MIRA 11:3)

VINEHOLAT, M. Ye.

Electric drives with a wide range of speed changes. Bul. tekhn.-
ekon. inform. no.1:36-38 '57. (MIRA 11:4)
(Machine tools--Electric driving)

VERKHOLAT, M. Ye.

"Electrical methods of measuring mechanical quantities in the investigation of the process of cutting wood." Min Higher Education USSR. Leningrad Order of Lenin Forestry Engineering Academy imeni S. M. Kirov. Leningrad, 1956. (Dissertation for the Degree of Candidate in Technical Sciences).

SO: Knizhnaya letopis', No. 16, 1956

VERKHOLAT, M.Ye.

~~Contour~~ followers with intermittent control (for copy-milling machines). Stan. 1 instr. 26 no.7:9-13 J1 '56. (MLRA 9:10)

(Milling machines) (Electric control)

1 VERKHOLAT, M. YE.

AID P - 5180

Subject : USSR/Engineering

Card 1/2 Pub. 103 - 2/24

Author : Verkholat, M. Ye.

Title : Servomechanisms with interrupting controlling device
(for duplicate milling machines).

Periodical : Stan. 1 instr., 7, 9-13, J1 1956

Abstract : The author outlines the development of servomechanisms since their appearance in the USSR. He presents the "Keller" profile milling machine, built in 1923 and gives its layout and principle of operation. The "Pratt-Whittney" BG-1 type tracer-control mechanism is analyzed and compared with the servomechanism designed by T. N. Sokolov. The latter device is incorporated into the 6441 profile milling machine, which has been built by the Machine-Tool Plant im. Sverdlov since 1940. Also described are the "Westinghouse" servomechanism and the 6641-A Profile-Milling Semiautomatic servomechanism used

VIEKHOLAT, M. Ye.

Accelerometer for the measurement of circular motion. Stan. 1
instr. 26 no.3:8-11 Mr '55, (MLRA 8:6)
(Accelerometers)

1. VERKHOLAT, M. YE.
2. USSR (600)
4. Drilling and Boring Machinery
7. Electric feed in boring mills.
Stan. 1 instr. 23. No. 9. 1952

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

1. VERKHOLAT, M. Ye.
2. USSR (600)
4. Speed Indicators
7. Device for recording speed and acceleration of small, advancing movements.
Stan. i instr. 24, No. 4, 1953.

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

VERKHOLAT, M. E.

Applied Mechanics Reviews

Vol. 7 No. 4

Apr. 1954

Mechanics (Dynamics, Statics,
Kinematics)

1011. Verkholat, M. E., Device for recording speed and acceleration of small, advancing movements (in Russian), *Stanki i Instrument* no. 4, 3-7, 1953.

To investigate the course of working processes on lathes, an inductive transmitter has been developed, consisting, in principle, of a movable coil in the field of two permanent magnets of the horseshoe type or of the ring type. The induced emf proportional to the velocity of the coil relative to the magnets, is amplified in a three-stage electronic direct-current amplifier. The amplifier has outputs for velocity and acceleration. A detailed description of the amplifier and the stabilized power supply is given and examples of measurements are discussed.

W. Wuest, Germany

5/1/54
W. W.

VERKHOLAT, M.Ye.

Marking device for recording circular and forward motion. Stan.1 instr.
24 no.12:1-4 D '53. (MLRA 7:1)

(Electronic measurements)

EL'YASBERG, M. Ye.; VERKHOLAT, M. Ye.; RUBASHKIN, I. B.

"Electric industrial equipment" by A.S. Sandler. Reviewed by
M.E. El'iasberg, M.E. Verkholat, I.B. Rubashkin. . . . Elek-
trichestvo no.8:95-96 Ag '60. (MIRA 13:8)
(Machine tools)
(Sandler, A.S.)

ACC NR:AM5011710

Monograph

UR

Vavilov, A. A.; Verkholat, M. Yo.; Rubashkin, I. B.

Electromechanical power servomechanisms of copying milling machines (Silovyye elektromekhanicheskiye sledyashchiye sistemy kopiroval'no-frezernykh stankov) Moscow, Izd-vo "Mashinostroyeniye", 1964. 406 p. illus., biblio. 4,200 copies printed.

TOPIC TAGS: milling machine, automatic control, servomechanism system, servosystem, industrial automation, automation

PURPOSE AND COVERAGE: This book presents construction principles and circuits of electromechanical servodrives for copying milling machines and milling machines with digital program control. Methods for static calculations of servomechanisms and concrete examples of the calculations are given. Specific properties of joint performance of two interconnected channels of electromechanical servomechanisms are described. Methods of analysis and synthesis of servomechanisms with continuous proportional control and of discrete servomechanisms with logarithmic frequency characteristics are discussed in detail. Methods for the analysis of electromechanical servomechanisms of copying milling machines on analog computers are investigated. Paragraphs 3-5, 4-6, and 6-6 were written by A. A. Vavilov in cooperation with V.B. Yakovlev. The book is intended for engineering and technical personnel concerned

Card 1/2

UDC: 62-523.8:621.916

ACC NR: AM5011710

with the design, research, adjustment, and operation of electromechanical servodrives for copying milling machines, as for specialists engaged in the designing of servomechanisms for various applications, and for students attending courses of instruction in these fields.

TABLE OF CONTENTS [abridged]:

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Ch. I. Servodrive and automation of milling machines - - 5

Ch. II. Selection of basic parameters of servomechanisms under steady-state conditions Error determination. - - 55

Ch. III. Equations, transfer functions, and frequency characteristics of servomechanisms - - 109

Ch. IV. Analysis of the servomechanism performance of copying milling machines and of milling machines with programmed control¹⁴ - 195

Ch. V. Joint channel performance of two-coordinate servodrives for copying milling machines - - 250

Ch. VI. Synthesis of servomechanisms of copying milling machines and of milling machines with programmed control - - 266

Ch. VII. Modeling of servomechanisms for copying milling machines [S. V. Demidov]-340
Bibliography - - 381

SUB CODE: 09,13/ SUBM DATE: 11Nov64/ SOV REF: 073/ OTH REF: 004

Card 2/2

VERKHOLAT, M. E.
USSR/Engineering - Machine Construction

Card 1/1

Author : Verkholat, M. E.

Title : Device for recording speed and acceleration of small progressive shifts in position

Periodical : Stan. i Instr. 24/4, 3 - 7, April 1953

Abstract : A device is described which records the speed and acceleration of progressive changes in position, by converting mechanical values into electrical ones. The transmitter has 8,000 turns in its windings and is designed to record very small magnitudes. The device contains a parallel-balance and three-cascade DC amplifier. Tables, graphs, drawings and illustrations.

Institution :

Submitted :

VERKHOLAT, M.E.

USSR/Electricity - Electric drives

Card 1/1 : Pub. 103 - 3/29

Authors : Verkholat, M. E., and Shamenkov, V. I.

Title : Diagram of electrical power drive of heavy machines

Periodical : Stan. i instr. 9, 10-11, Sep 1954

Abstract : The plan of an electrical drive having a DC-motor with an ultra-wide range of speed changes and an asynchronous generator for speed control is described. The principal wiring diagram of such an electrical drive is shown. Four USSR references (1949-1953). Graphs; drawings.

Institution : ...

Submitted : ...

VERKHOLAT, M.Ye.; SHAMENKOV, V.I.

Scheme of an electric feed drive for heavy milling machines. Stan.
1 instr. 25 no.9:10-11 S '54. (MLBA 7:11)
(Milling machines)

VERKHOLAT, Mikhail Yefimovich; MORGOVSKIY, Yuliy Yakovlevich;
SMIRNOVA, L.N., red.

[Choice of automated electric drives for mechanisms with a wide range of speed variation] Vybór avtomatizirovannogo elektroprivoda dlia mekhanizmov s shirokim diapazonom izmeneniia skorosti. Leningrad, 1964. 34 p. (MIRA 18:3)

VERKHOLETOV, A.

AID - P-25

Subject : USSR/Aeronautics

Card : 1/1

Authors : Verkholetov, A., Lt. Co., Dubrovin, B., Lt. Col.

Title : Pilotage of Five Reactive Aircraft in a Group

Periodical : Vest. vozd. flota, 2, 23 - 27, February 1954

Abstract : The flight of groups of five aircraft is a tradition in USSR parades. Groups of five jet aircraft have been flown since 1948. The author gives a number of names of Soviet pilots who fly, or flew jet aircraft in group formation. Photo page 24 shows five jet pilots who recently took part in a group flight.

Institution : None

Submitted : No date

VERKHOLETOV, A.

Stalingrad, Battle of, 1942-1943.

Tempered at Stalingrad. Mol. kolkh. 20, No. 2, 1953.

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

VERKHOLITCY, V.O.

Conference on the problems of burns. Voen.-med.zhur. no.10:93-94
O '59. (MIRA 13:3)

(BURNS AND SCALDS)

VERKHOLETOV, V.O., kapitan med.sluzhby

Second conference of the S.M. Kirov Order of Lenin Military
Medical Academy on the problem of burns. Voen.-med.zhur. (MIRA 15:5)
no.10:96 0 '61. (BURNS AND SCALDS--CONGRESSES)

VERKHOLIMTOVA, E.V.

Physical development of prematurely born children up to the
age of two. Vop.okh.mat.i det. 8 no.3:84 Mr '63. (MIRA 16:5)

1. Iz Sverdlovskogo instituta okhrany materinstva i mladenchestva
Ministerstva zdavookhraneniya RSFSR.
(CHILDREN—GROWNT) (INFANTS (PREMATURE))

L 04822-67 EWP(j)/EWT(m)/EWP(t)/ETI IJP(c) RM/JD
 ACC NR: AP6006721 (A, N) SOURCE CODE: UR/0303/66/000/001/0023/0025
 AUTHOR: Okhrimenko, I. S.; Verkholantsev, V. V.
 ORG: none
 TITLE: Aqueous thixotropic parkerizing priming compositions for coating rusting metal surfaces
 SOURCE: Lakokrasochnyye materialy i ikh primeneniye, no. 1, 1966, 23-25
 TOPIC TAGS: phosphate, rust inhibitor, protective coating
 ABSTRACT: Parkerizing priming compositions were prepared from SKS-70 MVP-10 pyridine-containing copolymer and phosphoric acid. Thixotropic dispersions (pastes) that can be readily spread with a brush were prepared by coagulating the latex of the copolymer with concentrated (62%) H_3PO_4 . Their viscosity, rate of thixotropic gelling, film-forming capacity, and the physicomechanical properties of the films were found to depend primarily on the ratio of the polymeric part to the acid introduced. In the course of drying of the film on a metal surface, a certain redistribution of phosphoric acid takes place: part of the acid remains in the film, and the rest becomes directly bonded to the metal (a phosphate film is visible after removal of the coating). Calculations show that in order to obtain a phosphate film 3-5 μ thick on steel, all of the H_3PO_4 contained in a 30-40 μ film (at a ratio of the polymer salt SKS-70 MVP-10 to H_3PO_4 of 70:30) is required. The pyridine-containing primers were found to be as
 Card 1/2 UDC: 667.621.26:667.656.221

L 04822-67

ACC NR: AP6006721

good as VL-02 and No. 138 standard primers, and to have several advantages over the latter: they are simple to produce and do not require pigmentation or the use of organic solvents. They are recommended for use on rusting and wet steel surfaces in temperate climates. Orig. art. has: 3 figures and 2 tables.

SUB CODE: 11/ SUBM DATE: none/ ORIG REF: 007/ OTH REF: 004

Card

2/2 *gd*

VERKHOLETOVA, G. P. and NAZAROV, I. N.

"Acetylene Derivatives. XXVIII. Condensation of Vinylethynyl Carbinols
into Vinylisocoumaranes," Is. Ak. Nauk SSSR, Otdel. Khim. Nauk, pp. 257-67, 1942

VERKHOLETOVA, G. P.

May/Jun 1967

USSR/Chemistry - Acetylene
Chemistry - Cyclohydration

"The Derivatives of Acetylene: Part 52 (1), The Structure of Cyclohydration Products of Tetrasubstituted Dienines, and the Mechanization of Cyclohydration of 3,6-Dimethyl-2,6Octadien-4-ine," I. N. Nazarov, G. P. Verkholetova, 10 pp

"Izv Ak Nauk Otd Khim Nauk" No 3

Demonstration of the structure of cyclopentanone by ozonization, and correction of the data of Mitchell and Marvel.

PA 15T21

VERKHOLETOVA, G. P.

PA 27/49136

USSR/Chemistry - Acetylene Derivatives Sep/Oct 48
Chemistry - Dimerization

"Acetylene Derivatives: No 82, Dimerization and
Structure of Dimers of 2-Methoxy-1, 3-Butadiene and
2-Formoxy-1, 3-Butadiene," I. F. Nazarov, G. P.
Verkholetova, L. D. Bergel'son, Inst Org Chem, Acad
Sci USSR, 8 pp - *acetylene laboratory*

"Iz Ak Nauk SSSR, Otdel Khim Nauk" No 5, p. 511

Investigates thermal dimerization of 2-methoxy-1, 3-
butadiene and 2-formoxy-1, 3-butadiene. Determines
structure of the dimers obtained as para-substitutions
of methoxy- and formoxy-vinylcyclohexenes. Submitted
10 Nov 47.

27/49136

VERKHOLETOVA, G. P.

USSR/Chemistry - Acetylene Derivatives Jun 48
Chemistry - Ring Closure

"Acetylene Derivatives," I. K. Nazarov, G. P. Verkholetova, Inst of Org Chem, Acad Sci USSR, 6 3/4 pp

"Zhur Obshch Khim" Vol XVIII (1947), No 6

Series, 724 article. In presence of sulphuric acid and mercury sulphate, 4,7-dimethyloctadiene-3,7-in-5 is hydrated to 4,7-dimethyl-decadiene-3,7-on-5 by water. Resultant product is cyclized to 1,3-dimethyl-2-ethyl-3-propylcyclopentene-1-on-5 at 90° by phosphoric and formic acids. Discusses reasons

USSR/Chemistry - Acetylene Derivatives Jun 48
(Contd)

for difficulties in cyclization. Submitted 7 Apr 1947.

9/49715

VERKHOLETOVA, G. P.

Cand. Chemical Sci.

"Cyclic Dimerization of Vinylethenyl-Carbinols Into Aromatic Derivatives." Sub 24 May 51, Inst of Organic Chemistry, Acad Sci USSR.

Dissertations presented for science and engineering degrees in Moscow during 1951.

SO: Sum. No. 430, 9 May 55

VERBODEN TOEGANG

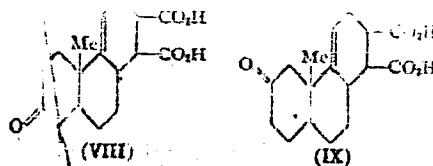
Dr. H. J. J. J. J.
Jou. 1. 1. 1. 1.
Mar. 1. 1. 1. 1.
TAMING 1. 1. 1. 1.

Diethyl...
The product was slowly added to 10 g. of...
powd. KHSO_4 heated to 150° at such a rate that the vapor
temp. remained below 62° , yielding a distillate of 2-
methoxy-1,3-butadiene (b. p. $34.0^\circ/\text{mm}$), and
MeOH; redistn. gave 100% pure enough for further work.
b. p. $72-3^\circ$, n_D²⁰ 1.4430-1.4450. 1 (15 g.) and 120 g. 1-methyl-
1-cyclohexen-6-one heated in a metal ampul in CO_2 with 1%

(over)

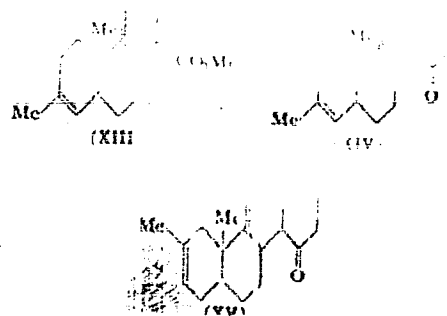
MS
MS

from CHCl_3 . The mother liquor gave 1 g. of mixed III and its 1-MeO isomer, b_p 119-11°, n_D²⁰ 1.5263. The use of K or Li failed to give better results. Shaking III in Et_2O 2 hrs. with 8% HCl gave 100% 1-ethynyl-8a-methyl-1-hydroxy-decahydro-6-naphthalenone (IV), m. 155-6°. To 17 g. Na in 850 ml. liquid NH_3 was added 40 l. C_2H_2 in 1 hr., and, with a reduced rate of C_2H_2 flow, the mixt. was treated with 80 g. mixed IA-II in 250 ml. Et_2O , the passage of C_2H_2 continued 6 hrs., and the mixt. kept overnight at -70°, treated with C_2H_2 5 hrs., allowed to warm to -35°, treated with 60 g. powd. NH_4Cl allowed to evaporate; the residue, after addn. of Et_2O , was treated with ice H_2O , and the concd. org. layer treated with 10 ml. 1% HCl and stirred 3 hrs., yielding 34-0 g. IV, m. 158° (from EtOH or C_6H_6). The mother liquor treated with petr. ether gave 6-8 g. 8a-methoxy-IV, m. 144°. From EtOH the residue was a mixture of the 2 substances, b_p 119-120°, n_D²⁰ 1.5263. Hydrogenation of IV over PtO_2 in EtOH gave 1,2-dimethyl-1,2-dihydro-6-naphthalenone, m. 155-6°. The other isomer similarly gave 1,2-dimethyl-1,2-dihydro-6-naphthalenone, m. 155-6°. The isomer of IV in benzene over PtO_2 gave 1,2-dimethyl-1,2-dihydro-6-naphthalenone, m. 155-6°. The isomer of IV in benzene over PtO_2 gave 1,2-dimethyl-1,2-dihydro-6-naphthalenone, m. 155-6°. The isomer of IV in benzene over PtO_2 gave 1,2-dimethyl-1,2-dihydro-6-naphthalenone, m. 155-6°.



heated 0.5 g. at 110° gave C_2H_2 and a trace of 8a-methyl-1,6-dioxodecahydro-naphthalene, m. 66-2°. To MeMgBr (from 13 g. C_2H_2) was added in 10 min. at 5-10° 5 g. VI and the mixt. stirred 5 min.; after decompn. with ice and 20% HCl, the org. layer gave 60% of 8a-methyl-1,6-dioxodecahydro-naphthalene, m. 66-2°. The mother liquor gave 10% of 8a-methyl-1,6-dioxodecahydro-naphthalene, m. 66-2°. The isomer of VI in benzene over PtO_2 gave 1,2-dimethyl-1,2-dihydro-6-naphthalenone, m. 155-6°. The isomer of VI in benzene over PtO_2 gave 1,2-dimethyl-1,2-dihydro-6-naphthalenone, m. 155-6°. The isomer of VI in benzene over PtO_2 gave 1,2-dimethyl-1,2-dihydro-6-naphthalenone, m. 155-6°.

9



VERKHOLETOVA, G. P.

USSR/Chemistry - Synthesis

Card 1/1 : Pub. 40 - 18/22

Authors : Nazarov, I. N.; Zaretskaya, I. I.; Verkholetova, G. P.; and Torgov, I. V.

Title : Synthesis of steroid compounds and their substances. Part 19.-

Periodical : Izv. AN SSSR. Otd. khim. nauk 5, 920-928, Sep-Oct 1953

Abstract : The realization of a complete synthesis of D-homosteroid diketones of the Δ^4 -series with keto-group in position 16, through the condensation of 16-methyl- Δ^4 -steroid-16-one with 1,2-dicarbonyl- Δ^4 -steroid-16-one, described. The 16-methyl- Δ^4 -steroid-16-one ketones formed by the condensation of the 16-methyl- Δ^4 -steroid-16-one ketones, are also described. The displacement of the double bond from positions 9 to 11 and 8 to 9 was observed during the process of diene condensation. By reducing the steroid ketones, according to the Clemmensen method, the keto-group in the A-ring is eliminated and diene condensation of the ketones, described. The 16-methyl- Δ^4 -steroid-16-one ketones, described.

Institution : Academy of Sciences, USSR, Institute of Organic Chemistry

Submitted : October 7, 1952

VERKHOLETOVA, G. P.

USSR/Chemistry - Synthesis

Card 1/1 : Pub. 40 - 19/22

Authors : Nazarov, I. N.; Verkholetova, G. P.; Torgov, I. V.; Zaretskaya, I. I.;
and Ananchenko, S. N.

Title : Synthesis of steroid compounds and their substances. Part 20. -

Periodical : Izv. AN SSSR. Otd. khim. nauk 5, 929-940, Sep-Oct 1953

Abstract : The synthesis of steroid diketones of the cis-cis series is described. The formation of three isomeric diketones, two of which have an inverted structure and are distinguished by a spatial position of substituents, is explained. The products derived from the condensation of 1-vinyl-9-methyl- Δ^1 -6-octalone with Δ^1 -cyclopentenone and with 1,3-dimethyl- Δ^1 -cyclopentene-4,5-dione and their characteristics, are described. Nine references: 7-USSR and 2-USA (1935-1953).

Institution : Academy of Sciences USSR, Institute of Organic Chemistry

Submitted : October 7, 1952

NAZAROV, I.N.; VERKHOLETOVA, G.P.; ANANCHENKO, S.N.; ALEKSANDROVA, G.V.; TORGOV, I.V.

~~XXXXXXXXXXXXXXXXXXXX~~
Synthesis of polycyclic compounds related steroids. Part 35.

Condensation of cyclic allyl halo derivatives with cyclic 2-methyl-
-1,3-diketones and intramolecular cyclization of resulting compounds
into ketones with hydrogenated skeletons of phenanthrene, chrysene,
and cyclopentanophenanthrene containing an angular methyl group.

Zhur.ob.khim.26 no.5:1482-1495 My '56.

(MLRA 9:9)

(Ketones) (Condensation products (Chemistry))

5(3)

SOV/62-59-2-16/40

AUTHORS:

Nazarov, I. N., Verkholetova, G. P., Torgov, I. V.

TITLE:

Synthesis of Steroid Compounds and Related Substances (Sintez stroidnykh soyedineniy i rodstvennykh im veshchestv). Communication 42. Condensation of 1-Vinyl-9-methyl- Δ^1 -6-octalone With Quinone (Soobshcheniye 42. Kondensatsiya 1-vinil-9metil- Δ^1 -6-oktalona s khinonom)

PERIODICAL:

Izvestiya Akademii nauk SSSR, Otdeleniye khimicheskikh nauk, 1959, Nr 2, pp 283-292 (USSR)

ABSTRACT:

The authors of the present paper tried to synthesize D-homo-steroids with a trans-combination of the C- and D-rings and with corresponding position of the functional groups (in position 3 and 17a). By condensation of vinyl cyclohexene with quinone syn-cis- $\Delta^{2,9(14)}$ -decahydro phenantrene-1,4-dione (III) (Ref 4) was obtained. On the reduction of it with zinc in acetic acid

syn-cis- $\Delta^{9(14)}$ -dodecahydrophenantrene-1,4-dione (IV) was formed. The isomerization of (IV) with sodium methylate yielded anti-

Card 1/4

trans- $\Delta^{9(14)}$ -dodecahydrophenantrene-1,4-dione (V) (Ref 5). On

SOV/62-59-2-16/40

Synthesis of Steroid Compounds and Related Substances. Communication 42. Condensation of 1-Vinyl-9-methyl- Δ^1 -6-octalone With Quinone

heating of (V) with ethylene glycol in the presence of p-toluene sulfo acid the crystalline monoethylene ketal (VI) (40%) was formed. On the reaction of ethylene glycol with (VI) under identical conditions a difficultly decomposable mixture is formed, from which an isomer of (VI) in small yield was separated. (VI) was transformed by means of the Kizhner reduction and following hydrolysis with a mixture of hydrochloric- and acetic acid into the crystalline anti-trans- $\Delta^{9(14)}$ -dodecahydro phenantrene-1-one (VIII). At the same time a liquid isomer was separated which was characterized as 2,4-dinitro-phenyl hydrazone. By the action of methylmagnesium iodide on the mixture of the isomers of ketone (VIII) a carbinol mixture was obtained. It was found that the condensation previously described (Ref 2) of the dienone (I) with quinine proceeds more readily in acetic acid at room temperature. As a consequence of the endo-addition 2 isomeric adducts (IIa) and (IIb) are there formed (41 and 3%, respectively). The investigation of the steric model of dienone (I) proved that it can be occurring in two structures. There-

Card 2/4

SOV/62-59-2-16/40

Synthesis of Steroid Compounds and Related Substances. Communication 42. Condensation of 1-Vinyl-9-methyl- Δ^1 -6-octalone With Quinone

fore the choice of the structure between the compounds (IIa) and (IIb) is preliminary and only valid under certain conditions. The reduction of (IIa) with zinc in acetic acid yielded the tetracyclic triketone (XIa) (70%). On a similar reduction of (IIb) the isomeric triketone (XIb) was obtained. Furthermore, the cis-triketone (XI) was isomerized using the better accessible α -isomer (XIa). In all experiments 3 isomers (XII), (XIII), and (XIV) were precipitated. Their behavior to each other is different with alkali or acid isomerization. A further problem was the protection of the 17 α -keto group and the elimination of the 15-keto group. On heating of (XII) with excess ethylene ketal of the methylene ketone only the corresponding triethylene ketal (XV) was obtained (30-35%). Under the same conditions from (XIa) two products resulted: (XV) and diethylene ketal (XVI) (3 and 15%, respectively). On the formation of ethylene ketals from (XIa) (under acid conditions) the isomerization takes place in 2 directions, both towards C₁₄ and C₁₃. It was proved that there is practically no selective

Card 3/4

SOV/62-59-2-16/40
Synthesis of Steroid Compounds and Related Substances. Communication 42. Con-
densation of 1-Vinyl-9-methyl- Δ^1 -6-octalone With Quinone

protection in tetracyclic ketones of the type (XII) with a
trans-position of the C- and D-rings. In the case of cis-
ketones of type (XIa) this protection is of complex nature
and is accompanied by the isomerization. There are 11 referen-
ces, 4 of which are Soviet.

ASSOCIATION: Institut organicheskoy khimii im. N. D. Zelinskogo Akademii
nauk SSSR (Institute of Organic Chemistry imeni N. D.
Zelinskiy of the Academy of Sciences, USSR)

SUBMITTED: April 16, 1957

Card 4/4

ACC NR: AP6020689

SOURCE CODE: UR/0016/66/000/006/0121/0126

AUTHOR: Balykova, L. A.; Verkholetova, G. P.; Lebedeva, N. S.; Limanov, V. Ye.; Starkov, A. V.

ORG: Central Disinfectant Research Institute, ^{Moscow} (Tsentral'nyy nauchno-issledovatel'skiy dezinfektsionnyy institut)

TITLE: Solubility and bactericidal activity of 1,3-dichloro-5,5-dimethyl hydantoin in the presence of surface-active substances

SOURCE: Zh mikrobiol, epidemiol i immunobiol, no. 6, 1966, 121-126

TOPIC TAGS: bactericidal ~~compound~~, solubility, surface active ^{agent} ~~sulfonol~~, ~~OP-10~~ ~~tetramon~~ ^{chlorinated organic compounds}

ABSTRACT: The water solubility of this compound increased considerably in the presence of such surface-active compounds as sulfonol, OP-10, and tetramon. In the presence of sulfonol, aqueous solutions of dichlorodimethylhydantoin did not lose their active chlorine content or their high bactericidal and sporicidal activity, even after standing. [WA-50; CBE No. 10]

SUB CODE: 06/77/SUBM DATE: 16Feb65/ ORIG REF: 001/ OTH REF: 010/

Card 1/1

UDC: 615.778.38-011+615.778.38-017.78]:661.85

ACC NR: AP6020589

SOURCE CODE: UR/0016/66/000/006/0121/0126

AUTHOR: Balykova, L. A.; Verkholetova, G. P.; Lebedeva, N. S.; Limanov, V. Ye.; Starkov, A. V.

ORG: Central Disinfectant Research Institute, ^{Moscow} (Tsentral'nyy nauchno-issledovatel'skiy dezinfektsionnyy institut)

TITLE: Solubility and bactericidal activity of 1,3-dichloro-5,5-dimethyl hydantoin in the presence of surface-active substances

SOURCE: Zh mikrobiol, epidemiol i immunobiol, no. 6, 1966, 121-126

TOPIC TAGS: bactericidal ~~compound~~, solubility, surface active ^{agent} ~~substance~~ / Sulfonol, ~~OP-10, Tetramon~~ ^{chlorinated organic compounds}

ABSTRACT: The water solubility of this compound increased considerably in the presence of such surface-active compounds as sulfonol, OP-10, and tetramon. In the presence of sulfonol, aqueous solutions of dichlorodimethylhydantoin did not lose their active chlorine content or their high bactericidal and sporicidal activity, even after standing. [WA-50; CBE No. 10]

SUB CODE: 06/77/SUBM DATE: 16Feb65/ ORIG REF: 001/ OTH REF: 010/

Card 1/1

UDC: 615.778.38-011+615.778.38-017.78]:661.85

BEL'KEVICH, P. I.; VERKHOLETOVA, G. P.; KAGANOVICH, F. L.;
TORGOV, I. V.

β -Sitosterol from peat wax. Izv. AN SSSR, Otd. khim. nauk
no.1:112-115 '63. (MIRA 16:1)

1. Institut khimii prirodnnykh soyedineniy AN SSSR i Institut
torfa AN Belorusskoy SSR.

(Sitosterol) (Peat)

VERKHOLETOVA, G.P.; TORGOV, I.V.

Synthesis of some derivatives of 18-nor-D-homoestrone. Izv. AN
SSSR. Otd.khim.nauk no.5:861-869 My '62. (MIRA 15:6)

1. Institut khimii prirodnnykh soyedineniy AN SSSR.
(Homosteroids)

BURMISTROV, V.M.; VERKHOLETOV, V.O.; GUDIM-LEVKOVICH, N.V.

Experience in using the electrodermatome and other apparatus of the Research Institute for Experimental Surgical Apparatus and Instruments in the surgical treatment of burns. Trudy NIIKHAI no.5:227-232 '61. (MIRA 15:8)

1. Iz Voenno-meditsinskoy ordena Lenina akademii im. S.M.Kirova.
(BURNS AND SCALDS) (SURGICAL INSTRUMENTS AND APPARATUS)

SIROKO, I.A.; VERKHOLOMOV, Ye.Ye.

Virulence of Shigella following a long stay in water. Report No.2.
Zhur.mikrobiol., epid. i immun. 42 no.3:138-139 Mr '65.

(MIRA 18:6)

1. Voenno-meditsinskaya ordena Lenina akademiya imeni Kirova i
Leningradskaya voyenno-morskaya baza.

VERKHODOMOV, Ya.Ye.

Technique of producing hemocultures of some hyphomycetous fungi
from the blood of cancer patients. Bot.zhur. 46 no.3:357-360
Mr '61. (MIRA 14:3)

1. Sanitarno-epidemiologicheskaya laboratoriya, Leningrad.
(BLOOD) (CANCER) (HYPHOMYCETES)

VERKHOLOMOV, Ye.Ye.; GUTSEVICH, S.A.

Materials on fungi found in the blood of people with certain diseases. Vest. LGU 18 no.9:157-158 '63. (MIRA 16:6)
(Fungi, Pathogenic) (Blood--Microbiology)

VERKHOLOVSKIY, A.L.; MARCHENKO, M.A.

In the Ukraine. Zashch. rast. ot vred. 1 bol. 2 no.6:8-11
N-D '57. (MIRA 16:1)

1. Nachal'nik Upravleniya zashchity rasteniy Ministerstva sel'skogo
khozyaystva UkrSSR (for Verkhlovskiy). 2. Glavnyy agronom
Upravleniya zashchity rasteniy Ministerstva sel'skogo khozyaystva
UkrSSR (for Marchenko).

(Ukraine--Plants, Protection of)

(A) L 11002-66 EWT(m)/EWP(t)/EWP(b) LJP(c) MD/JG
 ACC NR: AI 5028721 SOURCE CODE: UR/0363/65/001/011/1911/1916
 AUTHOR: Yefimenko, L. N.; Verkhorobin, L. F.; Shvydchenko, A. G.
 ORG: Physicotechnical Institute, Academy of Sciences, UkrSSR, Kharkov (Fiziko-tekh-
 nicheskiy Institut Akademii nauk UkrSSR)
 TITLE: Oxidation of lower tungsten and molybdenum silicides
 SOURCE: AN SSSR. Izvestiya. Neorganicheskiye materialy, v. 1, no. 11, 1965,
 1911-1916
 TOPIC TAGS: tungsten compound, molybdenum compound, silicide, oxidation kinetics,
 silica, *PHASE COMPOSITION, METAL OXIDATION*
 ABSTRACT: The oxidation of W_5Si_3 and Mo_5Si_3 , obtained by the vacuum silicidizing of
 tungsten and molybdenum, was carried out in air in the 500-1000°C temperature range.
 The structure and phase composition of the oxides were determined by metallographic
 and x-ray methods. The two silicides displayed a similar behavior during oxidation:
 in both cases, oxides are formed by the metal and silicon. Because the metal oxide
 is adjacent to the silicide--whereas SiO_2 is found on the surface--it is postulated
 that atmospheric oxygen penetrates to the surface where it forms SiO_2 . Differences
 in the oxidation kinetics of the two silicides are due to the difference in the vapor
 pressure of WO_3 and MoO_3 . It is noted that the lower W and Mo silicides are much
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L 11002-66

ACC NR: AP028721

less stable to oxidation than the W and Mo disilicides. Orig. art. has: 4 figures, 2 tables. 0

SUB CODE: 07,11/ SUBM DATE: 25May65/ ORIG REF: 005/ OTH REF: 004

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Card 2/2

L 9447-66	EWP(a)/EWT(m)/ETC/EPF(n)-2/EWG(m)/EWP(t)/EWP(k)/EWP(z)/EWP(b)		IJP(c)
ACC NR:	AP6001239	JD/JG/WB	SOURCE CODE: UR/0363/65/001/012/2212/2218
AUTHOR: Ivanov, V. Ye.; ^{44.55} Nechiporenko, Ye. P.; ^{44.55} Krivoruchko, V. M.; Verkhorobin, L. F.; Mitrofanov, A. S.; ^{44.55} Poltavtsev, H. S. ^{44.55}			
ORG: Physicotechnical Institute, Academy of Sciences UkrSSR, Kharkov (Fiziko-tekh- nicheskiy institut Akademii nauk UkrSSR) ^{44.55}			
TITLE: Effect of additives on the kinetics of the siliciding of molybdenum in vacuum ¹⁶ ²⁷ ¹⁰⁷ ¹⁹⁸ ^B			
SOURCE: IN SSSR. Izvestiya. Neorganicheskiye materialy, v. 1, no. 12, 1965, 2212-2218			
TOPIC TAGS: refractory metal, refractory coating, molybdenum, silicon, molybdenum disilicide, oxidation resistance ⁴			
ABSTRACT: Inasmuch as the coating of refractory metals with molybdenum disilicide is known as a prospective method for preventing high-temperature oxidation, the effect of some additives on the growth rate and the structure of the silicide layer on molyb- denum was studied. It was noted that properties of the disilicide coating (including brittleness and an inadequate thermal stability) may depend on the preparative method and on the purity of the initial materials. In this study the silicide layer was produced on molybdenum sheet and wire 0.1 and 0.5 mm thick, respectively, in vacuum by heating at 1250C. Molybdenum of 99.95% purity, 99.999%-pure silicon and commer- Card 1/2 UDC: 546.281 ²			

L 9447-66

ACC NR: 1P6001239

9
cial silicons KR-0 and KR-1, 99.0 and 98.0% pure, respectively, were used as initial materials for siliciding cells. The growth rate, structure and phase composition of the coatings obtained were studied by gravimetric, metallographic and x-ray methods. The effect of Al, Fe, Cu, Ti, and B used as additives, and of the residual gas pressure was studied. It was found that the presence of small amounts of Al (1-3%) in powdered silicon causes the formation of a ternary compound $\text{Mo}(\text{Si}, \text{Al})_2$ with a hexagonal structure, the growth of which is expressed as a linear dependence on time. The presence of the other additives studied, with the exception of Ti, results in a decrease in the growth rate of the MoSi_2 layer and does not affect its structure. The residual gas pressure does not affect the silicide layer growth, if it is within 1.10^{-6} — 1.10^{-5} mm Hg; at 1.10^{-3} mm Hg, the rate slows down 3—4 times; at 1.10^{-2} mm Hg, disilicide is not formed at all, and only the Mo_3Si phase is formed. Transition of the dark and opaque hexagonal disilicide into the silvery tetragonal form on prolonged heating was observed. Orig. art. has: 4 figures and 3 tables. [BN]

SUB CODE: 07, 11/ SUBM DATE: 10Apr65/ ORIG REF: 007/ OTH REF: 006/ ATD PRESS: 4156

Card 2/2/11

L 9441-66 FWT(m)/EWP(k)/EWP(z)/EWP(b)/EWP(e)/EWP(t) LJP(e) JD/JG/WB
ACC NR: AP5027137 SOURCE CODE: UR/0126/65/020/004/0531/0534

AUTHOR: Nechiporenko, Ye. P.; Yefimenko, L. N.; Matyushenko, N. N.; Verkhorobin, L. F.
44,55 44,55 44,55 44,55

70
E

ORG: Physicotechnical Institute, AN UkrSSR (Fiziko-tehnicheskii institut AN UkrSSR)
44,55

TITLE: On disintegration of tungsten disilicide with oxidation in air

SOURCE: Fizika metallov i metallovedeniye, v. 20, no. 4, 1965, 531-534

TOPIC TAGS: tungsten, tungsten disilicide, metal oxidation
44,55 27 27

ABSTRACT: Specimens of tungsten disilicide prepared from 99.9%-pure tungsten and silicon powders either by hot compacting at 1700C, by cold compacting and sintering in an argon atmosphere at 1000C for 1 hr, or by siliconizing of tungsten in a vacuum of 10^{-5} mm Hg at 1250C had a porosity of 3, 40, or 0%, respectively. All specimens were tested for oxidation behavior in air at 600-1100C. Hot compacted, and cold compacted and sintered specimens gradually disintegrated into yellow powder at 700-1000C. (n specimens obtained by vacuum-siliconizing, an oxide layer was formed which prevented the disintegration of the specimens. These results showed that the oxidation failure of homogeneous WSi_2 was not a specific property of the material but was caused by macrodefects (pores). In all cases, disintegration occurred in the temperature range where the oxidation products are not volatile. The oxidation behavior of poreless WSi_2 indicated that disintegration of porous WSi_2 specimens is as-

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UDC: 669.15.018.85

L 9441-66

ACC NR: AP5027137

sociated with the accumulation of oxidation products and the accompanying increase in volume. Orig. art. has: 3 figures. [MS]

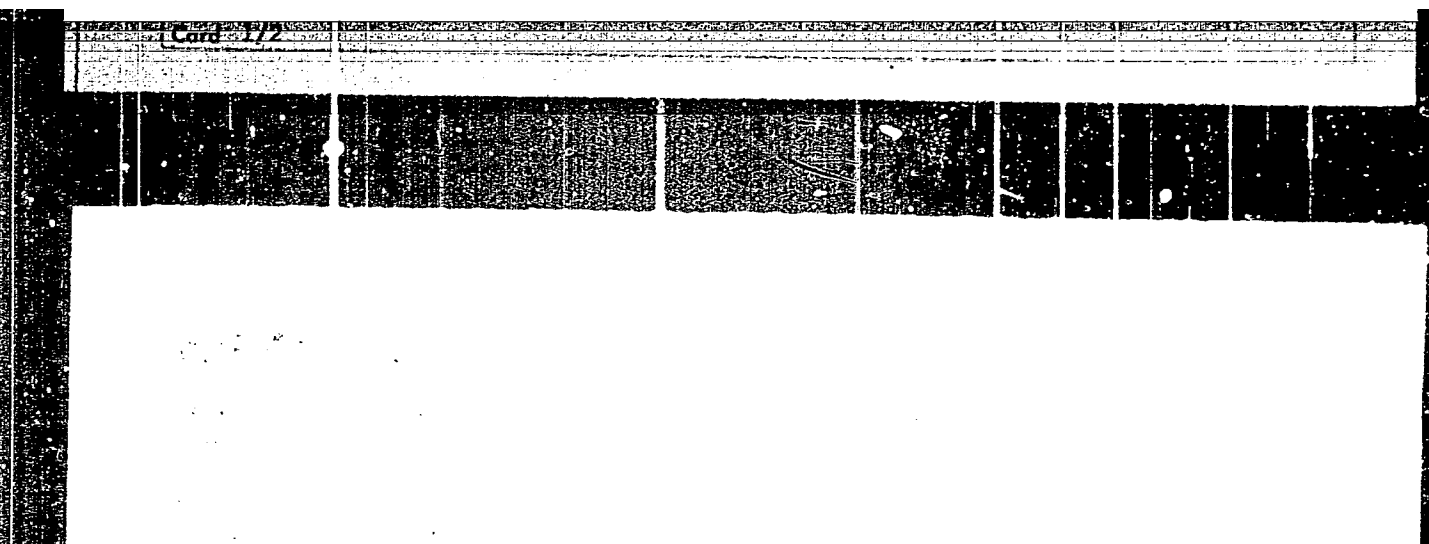
SUB CODE: 11/ SUBM DATE: 20Oct64/ ORIG REF: 003/ OTH REF: 007/ ATD PRESS:

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L 12596-63 EWP(q)/EWT(m)/BDS AFETC/ASD JD
 5/0078/53/001/001/1788/1788
 58
 ACCESSION NO.: AP3003487

AUTHOR: Malyushenko, N. N.; Karav, V. N.; Yerkherobin, L. F.

TITLE: Beryllides of samarium, europium and ytterbium for composition ABe sub 13

SOURCE: Zhurnal neorganicheskoy khimii, v. 8, no. 7, 1963, 1788

TOPIC TAGS: beryllide, samarium, europium, ytterbium, intermetallic compound,
 X-ray analysis technique

ABSTRACT: Surface layers of the intermetallic compounds are formed as a result of interaction of vapors of reduced metal with beryllium. Crystal structures were studied using X-ray analysis techniques.

ASSOCIATION: Fiziko-tekhnicheskii institut Akademii nauk, USSR (Physico-Engineering Institute, Academy of Sciences, USSR).

SUBMITTED 18Dec62

DATE 102: 02Aug63

ENCL: 00

SUB CODE: CH, EL

NO REP SOV: 002

OTHER: 002

APPROVED FOR RELEASE: 09/01/2001

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Card 1/1

MATYUSHENKO, N.N.; VERKHOROBIN, L.F.; PUGACHEV, N.S.; SIVOKON', N.V.

Crystalline structure of higher beryllides of molybdenum, tungsten, and
rhenium. Kristallografiia 7 no.6:862-864 N-D '62. (MIRA 16:4)

1. Fiziko-tekhnicheskii institut AN UkrSSR.
(Beryllium compounds) (Crystallography)

VERKHOROBIN, L.F.; GLUSHKO, P.I.; DOROKHOV, V.I.; MATYUSHENKO, N.N.

Interaction of molybdenum disilicide with beryllium. Fiz. met. 1
metalloved. 16 no.5:751-753 N '63. (MIRA 17:2)

1. Fiziko-tehnicheskiy institut AN UkrSSR.