L 4933-66
ACC NR: AT5022682

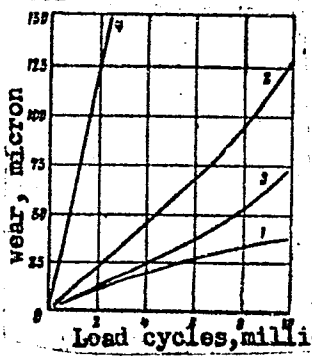

Fig. 2. Polymer wear vs load cycles (lubricated) (1-4 same as Fig. 1)

Orig. art. has: 3 figures and 1 table.

SUB CODE: MT, IE/ SUBM DATE: 18May65/ ORIG REF: 008

Card 4/4

BELYY, V.A.; RUTTO, R.A.

Adhesiveness of plastics to metals. Dokl. AN BSSR 9 no.1:34-36 Ja '65. (MIRA 18:10)

1. Gomel'skiy otdel mekhaniki polimerov AN BSSR.

L 33078-66 EWT(m)/EWP(j)/T LJP(c) DJ/RM
ACC NR: AP6024152 SOURCE CODE: UR/0201/66/000/001/0095/0100

AUTHOR: Bolyy, V. A.; Starzhinskiy, V. Ye.; Petrokovets, M. I.

ORG: Division of Polymer Mechanics, AN BSSR (Otdel mekhaniki polimerov AN BSSR)

TITLE: Question of the geometric calculation of a metallopolymer transmission with cast plastic gear wheels

SOURCE: AN BSSR. Vestsi. Seryya fizika-tekhnichnykh navuk, no. 1, 1966, 95-100

TOPIC TAGS: transmission gear, metallopolymer material, thermoplastic material, die, vacuum casting, centrifugal casting, geometry, mechanical engineering

ABSTRACT: The fundamental principles for the geometric calculation of involute gears with plastic wheels have their basis in the theory of involute gears. However, the need to consider certain peculiarities of plastics (shrinkage, high coefficient of linear expansion, susceptibility to absorption of moisture) complicates the problem of designing and performing the geometric calculation of metallopolymer gears. Gear wheels of thermoplastic materials can be made by pressure die-casting, centrifugal vacuum casting, etc. Since teeth which do not undergo subsequent machining are molded in a die, special attention must be given to the geometry of the die elements forming the teeth, and hence the geometric calculation of metallopolymer gear will depend on the geometry of the machine-tool engagement of tool with die or with master wheel. The article shows the possibility of the existence of a gear, one of whose wheels

Card 1/2

L 061[illegible]-66 EWT(l)/EWT(m)/EWP(t)/ETI IJP(c) JD/WW

ACC NR: AP6025972 SOURCE CODE: UR/0051/66/021/001/0130/0131

AUTHOR: Belyy, V. A.; Shripkin, A. M.

ORG: none

TITLE: A variation on the method of recording resonance signals in optically oriented helium

SOURCE: Optika i spektroskopiya, v. 21, no. 1, 1966, 130-131

TOPIC TAGS: nuclear magnetic resonance, electron paramagnetic resonance, resonance absorption, quantum resonance phenomenon, liquid helium, light polarization, circular polarization, polarized luminescence

ABSTRACT: Experiments involving the measurement of paramagnetic resonance in optically oriented helium are described. In recording the modulation of the transverse light beam passing through a vessel containing helium, the authors observed that the modulated signal persisted at the output of the photodetector, even though the external transverse illumination was interrupted. The detected signal showed substantial signal-to-noise ratio as compared with the original level, despite the decrease in its itensity. The phenomenon was explained when light emanating from the helium due to the discharge radiation was observed. This light replaced the original external light source. The authors express their gratitude to Ye. B. Aleksandrov for his interest in this work. Orig. art. has: 1 figure.

SUB CODE: 20/ SUBM DATE: 01Feb66/ OTH REF: 002

UDC: 535.34:533.113:546.291

Card 1/1 mjs

ACC NR: AP7003762 (N) SOURCE CODE: UR/0374/66/000/006/0803/0807

AUTHOR: Savkin, V. G.; Belyy, V. A.; Sogolova, T. I.; Kargin, V. A.

ORG: Department of Mechanics of Polymers, AN Belorussian SSR, Gomel' (Otdel mekhaniki polimerov, AN Belorusskoy SSR); Physicochemical Scientific Research Institute im. L. Ya. Karpov, Moscow (Nauchno-issledovatel'skiy fiziko-khimicheskiy institut)

TITLE: The effect of supermolecular structures on the self heating of plastics under cyclic loading

SOURCE: Mekhanika polimerov, no. 6, 1966, 803-807

TOPIC TAGS: cyclic load, molecular structure, plastic, polycaprolactam

ABSTRACT: It has been established that the degree of self heating of polycaprolactam samples subject to cyclic loading is determined by the supermolecular structures of the samples. The larger and less homogeneous the supermolecular structures of the cross section of the sample are, the higher is the self-heating temperature. Cyclic loading changes the supermolecular structure and, therefore, the mechanical and physical properties of a sample. The introduction

 UDC: 678.5:539.43.015

ACC NR: AP7003762

of artificial nucleation centers enhances ordering and minimizing of the supermolecular structures in the polymer and contributes to lowering the self heating temperature during cyclic loading. Orig. art. has: 6 figures. [AM]

SUB CODE: 20, 11/SUBM DATE: 01Mar66/ORIG REF: 011/

Card 2/2

BELYY, V.D., RAKANT, I. I., LYAKHOVITSKIY, S. I.

Coal Mines and Mining

Discussion of B. N. Liubimov's article on mine parachutes. Ugol' 27 no. 5 (314) (1952)

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

BELYY, V. D.,

"Rope Guides in Shaft Elevators." (Dissertation for Degree of Doctor of Technical Sciences) Min Culture USSR, Leningrad Orders of Lenin and Labor Red Banner Mining Inst. Makeyevka, 1954

SO: M-1036 28 Mar 56

BELYY, Vasiliy Dmitriyevich (Stat Kamenev Sci-Res Inst of Work Safety in the Mining Industry) awarded sci degree of Doc Tech Sci for 8 Jun 55 defense of dissertation "Rope Guides [Kanatnyye provodniki] in Underground Mining Establishments" at the Council, Leningrad Mining Inst imeni Plekhanov; Prot No 5, 1 Mar 58.

(BMVO, 6-58,24)

BELYY, V.D., doktor tekhn.nauk; TREYGER, M.B., inzh.

Instrument for checking cross sections of hoisting cables. Bezop. truda v prom. 2 no.5:27-28 My '58. (MIRA 11:4)

1. Makeyevskiy nauchno-issledovatel'skiy institut po bezopasnosti rabot v gornoy promyshlennosti.
(Cables--Testing)

Belyy, V.D.

BARABANOV, Gleb Fedorovich [deceased]; SOKOLOV, Anatoliy Valentinovich; BELYY, V.D., otv.red.; KAUFMAN, A.M., red.izd-va; BERESLAVSKAYA, L.Sh., tekhn.red.

[Hoisting and mine surface arrangement of coal mines in foreign countries] Pod"em i poverkhnost' na ugol'nykh shakhtakh za rubezhom. Moskva, Gos.nauchno-tekhn.izd-vo lit-ry po gornomu delu, 1959. 185 p. (MIRA 13:2)
(Coal mines and mining)

BELYY, Vasiliy Dmitriyevich; D'YAKOVA, G.B., red.izd-va; SHKLYAR, S.Ya., tekhn.red.

[Rope guides for mine hoisting installations] Kanatnye provodniki shakhtnykh pod"emnykh ustanovok. Moskva, Ugletekhizdat, 1959. 211 p. (MIRA 12:10)

(Mine hoisting)

BELYY, V.D.

Dynamic forces in mine hoisting ropes. Trudy MakNII 9 no.2: 228-277 '59. (MIRA 12:9)
(Hoisting machinery) (Wire rope)

BELYY, V.D.; LESIN, K.K.

Experimental study of dynamic forces in hoisting ropes on industrial hoisting equipment. Trudy MakNII 9 no.2:305-330 '59. (MIRA 12:8)
(Hoisting machinery--Testing) (Wire ropes)

BELYY, V.D.; VAYSMAN, B.A.; LESIN, K.K.

Investigating fatigue and corrosion-fatigue strength of mine ropes. Trudy MakNII 9 no.2:330-348 '59. (MIRA 12:8)
(Wire ropes--Testing) (Steel--Fatigue)

BELYY, V.D.; SAMARSKIY, A.F.; TREYGER, M.B.

Strength of mine hoisting ropes and control of its change during use. Trudy MakNII 9 no.2:349-365 '59. (MIRA 12:8)
(Wire ropes--Testing)

BELYY, V.D., TIMOSHENKO, A.T.

Principles of the spiral-rope damping device theory. Trudy MakNII 9 no.2:399-417 '59. (MIRA 12:8)
(Mine hoisting--Safety appliances)

BELIY, V.D.

Resistance of cable guides to transverse deviations of hoisting containers. Trudy MakNII 9 no.2:432-456 '59. (MIRA 12:8)
(Mine hoisting--Equipment and supplies)

BELYY, V. D.

PHASE I BOOK EXPLOITATION SOV/5473

Gornoye delo; entsiklopedicheskiy spravochnik. t. 8: Statsionarnoye elektromekhanicheskoye oborudovaniye. Elektrosnabzheniye shakht (Mining Industry; an Encyclopedic Handbook. v. 8: Stationary Electro-mechanical Equipment. Electric Power Supply to Mines) Moscow, Gosgortekhizdat, 1960. 784 p. Errata slip inserted. 18,500 copies printed.

Chief Ed.: A. M. Terpigorev (Deceased); Members of the Editorial Board: A. I. Baranov, F. A. Barabanov (Deceased), A. A. Boyko, V. K. Buchnev, A. N. Zaytsev; Deputy Chief Eds.: I. K. Kit and N. V. Mel'nikov; I. N. Plaksin, N. M. Pokrovskiy, A. A. Skochinskiy (Deceased), A. O. Spivakovskiy, I. K. Stanchenko, A. P. Sudoplatov, A. V. Topchiyev, S. V. Troyanskiy, A. K. Kharchenko, L. D. Shevyakov and M. A. Shchedrin; Editorial Board for this volume: Resp. Ed.: F. A. Barabanov; Deputy Resp. Ed.: Z. M. Melamed; N. A. Arzamasov, G. M. Yelanchik, V. K. Yefremov, B. I. Zasadych, I. M. Zhumakhov, N. A. Letov, P. P. Nesterov, I. A. Rabinovich, K. I. Skorkin, and V. A. Sumchenko; Authors: G. A.

Card 1/16

Mining Industry (Cont.)

Candidate of Technical Sciences, N. S. Karpyshev, Candidate of Technical Sciences, N. A. Letov, Candidate of Technical Sciences, Z. M. Melamed, Candidate of Technical Sciences, Yu. A. Mikheyev, Engineer, V. P. Morozov, Engineer, V. I. Polikovskiy, Professor, Doctor of Technical Sciences, I. A. Rabinovich, Engineer, M. S. Rabinovich, Candidate of Technical Sciences, I. A. Raskin, Engineer, V. S. Tulin, Engineer, S. Ye. Unigovskiy, Engineer, K. A. Ushakov, Honored Scientist and Technologist, Professor, Doctor of Technical Sciences, M. M. Shemakhanov, Candidate of Technical Sciences, P. F. Shishkov, Candidate of Technical Sciences, and V. B. Yablonovskiy, Engineer; Eds. of Publishing House: N. A. Arzamasov and T. I. Rybal'nik; Tech. Ed.: V. L. Prozorovskaya and M. A. Kondrat'yeva.

PURPOSE: This handbook is intended for mining and mechanical engineers as well as for other skilled personnel of the mining industry concerned with the handling and operation of various installations and equipment used in mines.

Mining Industry (Cont.)

COVERAGE: Volume VIII of the mining handbook contains detailed information on mine hoisting installations, machines and equipment, mine ventilation units, duct systems, dewatering facilities, various types of pumps, pump meters, pumping stations, and the automatic remote control of these units. The handbook also describes and explains the operation of the air compression units and compressors. Heat-generating and heat-supply equipment of mines is described, as are the electric power supply systems and other electrical equipment such as transformers, power distribution systems, and grounding devices. Telephone communication and signaling systems used in mines are also treated. No personalities are mentioned. Each part of the handbook is accompanied by references, mostly Soviet.

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Ch. I. General Information (Rusanov, N. M., Candidate of Technical Sciences) 11

Ch. II. Hoisting Conveyances (Vlasenko, B. N., Engineer) 14

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Card 5/16

BAYDENKO, Ivan Samoylovich; BELYY, V.D., otv.red.; SHOROKHOVA, A.V., red.izd-va; SABITOV, A., tekhn.red.; BEKKER, O.G., tekhn.red.

[Inspection, adjustment and testing of brake systems on mine hoisting machines] Revizila, naladka i ispytanie tormoznykh ustroistv shakhtnykh pod"emnykh mashin. Moskva, Gos.nauchno-tekhn.izd-vo lit-ry po gornomu delu, 1960. 295 p.

(MIRA 13:5)

(Mine hoisting) (Hoisting machinery--Brakes)

BELYY, Vasiliy Dmitriyevich; LYSAK, Georgiy Dmitriyevich, izobretatel'; PETRAKOV, Aleksandr Ivanovich, izobretatel', laureat Stalinskoy premii; KOZLOV, V.K., otv.red.; D'YAKOVA, G.B., red.izd-va; PROZOROVSKAYA, V.L., tekhn.red.; BOLDYREVA, Z.A., tekhn.red.

[Mine parachutes] Shakhtnye parashiuty. Moskva, Gos.nauchno-tekhn.izd-vo lit-ry po gornomu delu, 1960. 316 p. (MIRA 14:4)

(Mine hoisting--Safety appliances)

BELYY, V.D.

Elastic slippage of a wheel on a rail. Trudy MakNII 11. Vop.gor. elektromekh. no.3:151-193 '60. (MIRA 16:5)

(Car wheels)

BELYY, V.D.

Centrifugal brakes for mine hoists. Trudy MakNII 11. Vop.gor. elektromekh.no.3:194-200 '60. (MIRA 16:5)

(Mine hoisting--Brakes)

BELYY, V.D.; CHUYKO, I.T.

Study of the size and character of loads acting on the couplings of mine freight cars. Trudy MakNII 11.Vop.gor.elektromekh.no.3:214-238 '60. (MIRA 16:5)

(Car couplings)

BELYY, V.D.

Dynamics of a cage-type suspension device. Trudy MakNII 11.Vop.gor. elektromekh.no.3:287-355 '60. (MIRA 16:5)

(Mine hoisting)

BELYY, V.D., OVSIYENKO, P.I.

Study of the friction properties of lining materials of driving sheaves. Trudy MakNII 11.Vop.gor.elektromekh.no.3:364-383 '60. (MIRA 16:5)

(Pulleys) (Friction)

BELYY, V.D.; LESIN, K.K.

Experimental study of stresses in parts of headgear sheaves. Trudy MakNII 11.Vop.gor.elektromekh.no.3:384-395 '60.
(MIRA 16:5)

(Pulleys) (Strains and stresses)

BELYY, V.D., prof.; FEDOROV, M.M., insh.

Effect of the shoe material on the braking system design. Izv. ucheb. zav.; gor. zhur. no.12:129-134 '60. (MIRA 14:1)

1. Donetskiy ordena Trudovogo Krasnogo Znameni politekhnicheskiy institut imeni N.S. Khrushcheva. Rekomendovana kafedroy soprotivleniya materialov Donetskogo politekhnicheskogo instituta.
(Hoisting machinery--Brakes) (Mine hoisting)

BELYY, V.D.

Research performed at the Makeyevka Scientific Research Institute for Mine Safety on safety in mine haulage and hoisting. Trudy MakNII 12: Vop. gor. elektromekh. no.4: 57-62 '61. (MIRA 16:6)

(Mine haulage—Safety measures)
(Mine hoisting—Safety measures)

BELYY, V.D.; RESHETNIKOV, V.I.

Study of the operating regime of drives on mine hoists. Trudy MakNII 12: Vop. gor. elektromekh. no.4:63-72 '61.
(MIRA 16:6)

(Mine hoisting—Brakes)

BELYY, V.D.; RESHETNIKOV, V.I.

Braking force with various mine hoist operating regimes.
Trudy MakNII 12: Vop. gor. elektromekh. no.4:73-87 '61.
(MIRA 16:6)

(Mine hoisting—Brakes)

BELYY, V.D.; RESHETNIKOV, V.I.

Spring-mounted brake drive for mine hoists. Trudy MakNII 12: Vop. gor. elektromekh. no.4:88-98 '61. (MIRA 16:6)

(Mine hoisting—Brakes)

BELYY, V.D.; SAMARSKIY, A.F.

Nature of breaking of mine hoisting cables. Trudy MakNII 12: Vop. gor. elektromekh. no.4:176-183 '61. (MIRA 16:6)

(Wire rope)

BELYY, V.D.; SAMARSKIY, A.F.

Development of technical conditions for closed-type mine hoisting cables. Trudy MakNII 12: Vop. gor. elektromekh. no.4: 184-219 '61. (MIRA 16:6)

(Wire rope—Testing)

BELYY, V.D.; LESIN, N.K.

Transporting men on conveyors. Trudy MakNII 12: Vop. gor. elektromekh. no.4:220-227 '61. (MIRA 16:6)

(Conveying machinery)

BELYY, V.D.; BLYAKHOV, I.A.

Study of the working capacity of shackles on hoisting buckets and establishing norms for their serviceability. Trudy MakNII 12: Vop. gor. elektromekh. no.4:228-249 '61. (MIRA 16:6)

(Mine hoisting)

BELYY, V.D.

Design of PTK parachute brake ropes. Trudy MakNII 12: Vop. gor. elektromekh. no.4:284-290 '61. (MIRA 16:6)

(Mine hoisting—Brakes)

BELYY, V.D.; TREYGER, M.B.

Selection of an operating frequency for electromagnetic instruments for checking cross sections of steel cables. Trudy MakNII 12: Vop. gor. elektromekh. no.4:315-323 '61. (MIRA 16:6)

(Wire rope--Testing)
(Electromagnets)

BELYY, V.D.; CHUYKO, I.T.

Explosionproof diesel locomotives for mines. Trudy MakNII 12: Vop. gor. elektromekh. no.4:339-357 '61. (MIRA 16:6)

(Mine railroads--Safety appliances)

BELYY, V.D., doktor tekhn. nauk; CHUYKO, I.T., inzh.

Studying reinforcements of ropes used in inclined workings. Vop. rud. transp. no.5:351-372 '61. (MIRA 16:7)

1. Makeyevskiy nauchno-issledovatel'skiy institut po bezopasnosti rabot v gornoy promyshlennosti.
(Wire rope)

BELYY, V.D.; TREYGER, M.B.

Theoretical and experimental studies of a defectoscope transducer for closed-type cables. Trudy MakNII 14. Vop. gor. elektromekh. no.5:88-99 '62. (MIRA 16:6)
(Electric cables--Testing) (Transducers)

BELYY, V.D.; SAMARSKIY, A.F.

Norms and methods of controlling closed-type hoisting cables. Trudy MakNII 14. Vop. gor. elektromekh. no.5:156-166 '62. (MIRA 16:6)
(Wire rope--Testing)

BELYY, V.D.; SAMARSKIY, A.F.

Study of the parameters for the manufacture and working capacity of cables made of trihedral strands. Trudy MakNII 14. Vop. gor. elektromekh. no.5:167-181 '62. (MIRA 16:6)
(Wire rope--Testing)

BELYY, V.D.; SAMARSKIY, A.F.

Development of technical requirements of cores for mine hoisting cables. Trudy MakNII 14. Vop. gor. elektromekh. no.5:182-197 '62. (MIRA 16:6)

(Wire rope--Testing)

BELYY, V.D.; CHUYKO, I.T.; BOLDOVSKIY, N.V.; NOS, V.S.

Study of diesel mine locomotives. Trudy MakNII 14. Vop. gor. elektromekh. no.5:249-265 '62. (MIRA 16:6)
(Mine railroads)
(Diesel engine exhaust gases--Analysis)

RELYY, V.D.; CHUYKO, I.T.

Calculation of loads acting on the couplings of mine freight cars. Trudy MakNII 14. Vop. gor. elektromekh. no.5:294-301 '62. (MIRA 16:6)

(Car couplings)

BELYY, V.D., prof., doktor tekhn. nauk; BOGUTSKIY, G.A., kand. tekhn. nauk

Technical specifications for diagrams and automatic control equipment for underground conveyor lines. Bezop. truda v prom. 8 no.12:43-45 D '64. (MIRA 18:3)

1. Makeyevskiy nauchno-issledovatel'skiy institut po bezopasnosti rabot v gornoy promyshlennosti.

BELYY, V.F.

Tectonic and volcanic activity of the southern part of the Chuan-Chukchi area. Geol. sbor. [Lvov] no.5/6:264-281 '58.
(MIRA 12:10)

1.Severo-vostochnoye geologicheskoye upravleniye Ministerstva geologii i okhrany nedr, Magadan.
(Chukchi National Area--Geology, Structural)

BELYY, V.F.; YEFIMOVA, A.F.; PARAKETSOV, K.V.

Lower Cretaceous of the northeastern part of the Okhotsk-Chukchi volcanic belt. Sov.geol. 8 no.10:97-109 O '65.
(MIRA 18:12)

1. Severo-vostochnoye geologicheskoye upravleniye.

BELYY, V.G.; BUGAY, N.V.; IVANOV, V.V.; SHELUD'KO, V.M.

Study of fractures in the drum of a high-pressure boiler and of methods for preventing them from originating. Energ.i elektrotekh.prom. no.4:55-59 O-D '62. (MIRA 16:2)

1. Glavnoye upravleniye energeticheskogo khozyaystva Donetskogo basseyna.

(Boilers)

BELYY, V.I.

Organization of track maintenance in a station on a large cycle basis. Put' i put.khoz. no.7:4-7 '62. (MIRA 15:7)

1. Nachal'nik Debal'tsevskoy distantsii puti Donetskoy dorogi.
(Railroads--Maintenance and repair)

28653
S/020/61/139/006/020/022
B103/B101

15 2630

AUTHORS: Kuznetsov, F. A., Belyy, V. I., Rezukhina, T. N., and Gerasimov, Ya. I., Corresponding Member AS USSR

TITLE: Thermodynamical properties of cerium oxides

PERIODICAL: Akademiya nauk SSSR. Doklady, v. 139, no. 6, 1961, 1405-1408

TEXT: The authors determined thermodynamical data on cerium which, together with data from publications, provide a complete thermodynamical characterization of the system Ce-O_2. In previous papers (Ref. 4: ZhFKh, 34, 2467 (1960); Ref. 5: ibid. 35, No. 5 (1961); Ref. 6: ibid. 34, No. 9 (1960)), they measured the high-temperature specific heat of CeO_2 and Ce_2O_3, and obtained the value $\Delta H^o_{298} = -85.43$ kcal. The present paper deals with the thermodynamical properties of cerium oxides in the CeO_2-$CeO_{1.5}$ range of compositions. They used the emf method with a solid electrolyte (Ref. 7, see below). In addition, the authors measured the equilibrium constants of cerium oxides with hydrogen. They used a more convenient

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Thermodynamical properties of...

modification of the apparatus described in Ref. 7 (Ref. 8: T. N. Rezukhina et al., ZhFKh, 35, No. 6 (1961)) for measuring the emf, namely, the cell

CeO_x ($2 > x > 1.5$)	solid electrolyte	Fe + wüstite

(1).

Mixed crystals of the system ThO_2-La_2O_3 with a purely ionic conductivity served as electrolytes. The CeO_x electrodes were pressed out of a mixture of corresponding amounts of CeO_2 and Ce_2O_3 at a pressure of 10 t/cm^2. The oxygen content of the preparation was determined by measuring the emf by the method of "active oxygen". CeO_x was handled in an argon atmosphere. The values of the equilibrium emf of cell correspond to the change of the isobaric potential ($\Delta\bar{G}^\circ_I = -2FE$) of the reaction releasing the current: $(1/\delta)CeO_x + Fe_{0.947}O \longrightarrow (1/\delta)CeO_{x+\delta} + 0.947\,Fe$ (I). A combination of $\Delta\bar{G}^\circ_I$ with $\bar{G}^\circ_{II}$ of the wüstite formation from the elements:

Card 2/5

Thermodynamical properties of...

$0.947\ Fe + 0.5\ O_2 \longrightarrow Fe_{0.947}O$ (II), for which $\Delta G_{II} = -63{,}570 + 16.06\ T$ (1073 - 1270°K) according to Ref. 10 (see below) and H. Peters, H. H. Möbius (Ref. 11: Zs. phys. Chem., 209, 298 (1958)), makes it possible to calculate the reaction $(\Delta\bar{G}^{\circ}_{III})$: $(1/\delta)CeO_x + 1/2\ O_2 \longrightarrow (1/\delta)CeO_{x+\delta}$ (III). It was found that E varies linearly with temperature for each composition of CeO_x over the entire range of temperatures: $E = a + bT$. The equilibrium constants $K_{eq} = p_{H_2O}/p_{H_2}$ of the reduction of CeO_x by hydrogen: $(1/\delta)CeO_{x+\delta} + H_2 \longrightarrow (1/\delta)CeO_x + H_2O$ (IV) were measured in a device described by the authors in ZhFKh, 25, 93 (1951). Since the intermediate cerium oxides are pyrophoric, only the constants of CeO_2 or Ce_2O_3 were measured. By a combination of $\Delta\bar{G}^{\circ}_{IV} = -RT \ln K_{eq}$ with ΔG°_{V} of the reaction of water-vapor formation: $(\Delta G^{\circ}_{V} = -59{,}000 + 13.38\ T)$ it is also possible to calculate ΔG°_{III}. The authors' results agree well with those obtained by

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Thermodynamical properties of...

G. Brauer et al. (Ref. 14, see below). The thermodynamical values describing the reaction $Ce_2O_3 + 1/2\ O_2 \longrightarrow 2CeO_2$ (VI) were obtained by graphical integration of the $\Delta\bar{G}^{\circ}_{III}$ isotherms for the composition of CeO_x between $1.5 \leqslant x \leqslant 2$ for 973, 1073, 1173, and 1273°K. On the basis of these data and of the value $(\Delta H_{298})_{VI} = -85.43$ kcal, and considering the temperature dependence of the specific heat of CeO_2 and Ce_2O_3, the following equation was derived for the range 298-1273°K:
$\Delta G^{\circ}_{VI} = -85,500 - 4.007 \log T + 1.495 \cdot 10^{-3} T^2 - 0.47 \cdot 10^5/T + 35.8\ T$. After determining $(\Delta S^{\circ}_{298})_{VI}$ and assuming $S^{\circ}_{298} = 16.64$ entropy units for cerium (Ref. 1, see below) and $S^{\circ}_{298} = 14.89$ entropy units for CeO_2, the authors obtain $(S^{\circ}_{298})_{Ce_2O_3} = 30.8$ entropy units. On the strength of this value and of other data presented above, all thermodynamical values of the reaction $2\ Ce + 3/2\ O_2 \longrightarrow Ce_2O_3$ (VII) can easily be calculated. There are

Card 4/5

Thermodynamical properties of...

1 figure, 5 tables, and 14 references: 5 Soviet and 9 non-Soviet. The four most important references to English-language publications read as follows: Ref. 1: D. H. Parkinson, F. E. Simon, F. H. Spedding, Proc. Roy. Soc., 207, 137 (1951); Ref. 7: K. Kiukkola, C. Wagner, J. Electrochem. Soc., 104, 379 (1957); Ref. 10: L. S. Danken, R. W. Garry, J. Am. Chem. Soc., 61, 1398 (1945); Ref. 14: G. Brauer , K. A. Gingirich, U. Holtschmidt, J. Inorg. and Nuol. Chem., 16, 77 (1960).

ASSOCIATION: Moskovskiy gosudarstvennyy universitet im. M. V. Lomonosova (Moscow State University imeni M. V. Lomonosov)

SUBMITTED: May 5, 1961

Card 5/5

L 02350-67 EWT(l)/EWT(m)/T/EWP(t)/ETI IJP(c) JD/GG

ACC NR: AR6025736 SOURCE CODE: UR/0058/66/000/004/A069/A069

AUTHOR: Belyy, V. I.; Kuznetsov, F. A.

TITLE: Polishing of single crystals by etching with gaseous hydrogen halides

SOURCE: Ref. zh. Fizika, Abs. 4A584

REF SOURCE: Sb. Simpzium. Protsessy sinteza i rosta kristallov i plenok poluprovodnik. materialov, 1965. Tezisy dokl. Novosibirsk, 1965, 2-3

TOPIC TAGS: germanium, silicon, etched crystal, halide, hydrogen compound, crystal growing, surface finishing

ABSTRACT: This is a review of known procedures for obtaining polished Ge and Si surfaces by gas etching. The possibility of obtaining a polished surface of Ge with the aid of gaseous hydrogen iodide and bromide is demonstrated experimentally; the limits of the polishing regions are established. The obtained surfaces are homogeneous, and the deviations from planarity amount to several hundred Angstroms. For the three most important processes of epitaxial growing of films from the gas phase, namely iodide, chloride, and bromide, gaseous polishing etchants are obtained, which can be successfully incorporated in the growth technology, and make it possible in each of the processes to reduce to a minimum the number of components participating in the growing. [Translation of abstract]

SUB CODE: 20

Card 1/1

BELYY, V.I. [Bilyi, V.I.]

Some properties of fractional derivatives in a complex region and their application to the theory of approximation of functions. Dop. AN URSR no.2:167-170 '65.

(MIRA 18:2)

1. Institut matematiki AN UkrSSR.

BEIYY, V.I. [Bilyi, V.I.]

Constructive properties of certain classes of functions continuous in regions with angles. Dop. AN URSR no.3:273-276 '66. (MIRA 18:3)

1. Institut matematiki AN UkrSSR.

L 1640-66 EWT(d)/EWT(l)/EWT(m)/EPF(c)/EEC(k)-2/EPF(n)-2/T/EWP(t)/EWP(b)/ETC(m)
IJP(c) JD/WW

ACCESSION NR: AP5014850 UR/0020/65/162/003/0543/0545

AUTHORS: Paukov, I. Ye.; Strelkov, P. G. (corresponding member AN SSSR); Nogteva, V. V.; Belyy, V. I.

TITLE: Specific heat of black phosphorus at low temperatures

SOURCE: AN SSSR. Doklady, v. 162, no. 3, 1965, 543-545

TOPIC TAGS: entropy, enthalpy, phosphorus, specific heat, low temperature research

ABSTRACT: The purpose of this investigation was to determine the true specific heat of the crystalline modification of black phosphorus, and also to calculate the values of the absolute entropy and enthalpy under standard conditions. The sample investigated was obtained by means of a high pressure bomb, capable of operating up to 13,000 -- 14,000 kg/cm^2 at temperatures up to approximately 300°. The apparatus and the test procedure were essentially similar to those described earlier (P. G. Strelkov et al., ZhFkh v. 28, No. 3, 459, 1954). The results are tabulated. A plot of the specific heat at constant pres-

Card 1/2

L 1640—66

ACCESSION NR: AP5014850

3

sure against the temperature showed no anomalies. At low temperatures (14 -- 40K) the specific heat is proportional to the temperature raised to the 2.7 power. At higher temperatures the power is lower, and at temperatures 13 -- 20K it is equal to 2.7, increasing to the third power as called for by the Debye law. It is pointed out in the conclusion that there are no published data on the specific heat of black phosphorus. Orig. art. has: 1 table and 1 figure.

ASSOCIATION: Institut teplofiziki Sibirskogo otdeleniya Akademii nauk SSSR (Institute of Thermophysics, Siberian Department, Academy of Sciences, SSSR)

SUBMITTED: 17Feb65 44,55 ENCL: 00 SUB CODE: TD, GP

NR REF SOV: 002 OTHER: 005

Card 2/2

BELYY, V.K., inzh.; EPSHTEYN, A.M., inzh.

Erection of the superstructure of the bridge over the Yenisey River in Krasnoyarsk. Transp.stroi. 12 no.7:18-20 Jl '62. (MIRA 16:2)
(Krasnoyarsk--Bridge construction)

BELYY, V.K., inzh.

Shifting method of constructing spans with the aid of floating supports. Transp. stroi. 15 no.5:15-17 My '65. (MIRA 18:7)

BELYAYEV, G.I., doktor tekhn.nauk; BELYY, Ya.I.; SMAKOTA, N.F.

Effect of clay on some properties of enamel. Stek. i ker. 19 no.6:29-31 Je '62. (MIRA 15:7)
(Enamel and enameling) (Clay)

BE.YY, Ya.I.; BE YAY V, G.I.

Interaction of borosilicate melts and steel. Trudy DKHTI no.16: 71-76 '62 (MIRA 17:8)

BELYAYEV, G.I., doktor tekhn. nauk; BELYY, Ya.I., inzh.

Fusible enamel coatings with titanium content. Mashinostroenie no.3:33-35 My-Je '64. (MIRA 17:11)

BELYAYEV, G.I., doktor tekhn. nauk; BELYY, Ya.I., inzh.

Effect of fluorine on the properties of low-melting enamels.
Stek. i ker. 22 no.4:34-36 Ap '65. (MIRA 18:5)

1. Dnepropetrovskiy khimiko-tekhnologicheskiy institut.

L 52121-65 EPA(s)-2/EPA(w)-2/EWT(m)/EWP(1)/EWP(b)/EWP(e) Pr-7/Pab-10 WH

ACCESSION NR: AP5015359 UR/0286/65/000/009/0111/0111

666.29

37

AUTHOR: Belyayev, G. I.; Barinov, Yu. D.; Belyy, Ya. I.; Ponomarchuk, S. M. 8

TITLE: Silicate low-boron enamel. Class 48, No. 170814

SOURCE: Byulleten' izobreteniy i tovarnykh znakov, no. 9, 1965, 111

TOPIC TAGS: enamel, boron, borax

ABSTRACT: This Author's Certificate introduces a silicate low-boron enamel which is made up of quartz sand, feldspar, soda ash, sodium nitrate, cryolite, titanium dioxide, cobaltic oxide, nickel oxide and a substance which contains boron anhydride. Since borax is not easy to obtain, datolite concentrate is used as the substance which contains boron anhydride.

ASSOCIATION: none

SUBMITTED: 11May63 ENCL: 00 SUB CODE: MT

NO REF SOV: 000 OTHER: 000

Card 1/1

OVCHINNIKOV, K.M.; MOROZOVSKAYA, M.I.; TISHCHENKO, O.D.; DEMCHENKO, I.A., direktor; NADTOCHIY, S.S.; GORELYSHEVA, I.I.; BEL'SKAYA, M.K.; KONTOROVSKAYa, T.M.; BELYY, Ya.M., zaveduyushchiy; DEREVENKO, V.I.; SHEVCHUK, M.K., zaveduyushchiy; D'YACHENKO, V.I.; SAKOVICH, V.K.; AGAFONOV, I.N., zaveduyushchiy; BESYAMIL'-NAYA, P.S.

Prognosis of malarial incidence of a locality and organization of antimalarial measures in the zone of the future Kakhovka reservoir. Med.paraz. i parazit.bol. no.2:109-116 Mr-Ap '53. (MLRA 6:6)

1. Ukrainskiy institut malyarii i meditsinskoy parazitologii imeni professora Rubashkina (for Demchenko). 2. Zaporozhskaya oblastnaya protivomalyariynaya stantsiya (for Belyy). 3. Dnepropetrovskaya oblastnaya protivomalyariynaya stantsiya (for Shevchuk). 4. Khersonskaya oblastnaya protivomalyariynaya stantsiya (for Agafonov).

(Kakhovka reservoir region--Malarial fever)
(Malarial fever--Kakhovka reservoir region)

DEREVENKO, V.I.; BELYY, Ya.M., zaveduyushchiy.

Role of free-flowing artesian wells in malarial incidence in the general water-supply and irrigation zones of the South Ukrainian canal. Med. paraz.i paraz.bol. no.2:127-133 Mr-Ap '53. (MLRA 6:6)

1. Zaporozhskaya oblastnaya protivomalyariynaya stantsiya.
(South Ukrainian Canal Region--Malarial fever) (Artesian wells)

BELYY, YA.M.

"Elimination of Tropical Malria in Zaporozhskaya Oblast," Ya.M. Belyy, I. Yu. Gal'pern, Zaporozhskaya Oblast Antimalria Sta.

Med Parazitol i Parazitar Bol, no. 3, pp. 221-223 May/June 1953

As a result of the German occupation, the incidence of tropical malaria in Zaporozhskaya Oblast increased considerably. By the application of rigid measures in postwar years, tropical malaria was entirely eliminated in 1952. The number of cases was as follows:

1946---226
1947---335
1948---558
1949---297
1950---25
1951---3
1952---none

257T48

MOROZOVSKAYA, M.I.; DEMCHENKO, I.A.; TISHCHENKO, O.D.; GORELYSHEVA, I.I.; YEVLAKHOVA, V.F.; NADTOCHIY, S.S.; GAL'PERIN, L.Yu; BELYY, Ya.M.; LAZEBNYY, N.V.; DENGVENKO, V.I.; SERVINENKO, G.A.; SHEVCHUK, M.K.; D'YACHENKO, V.I.; AGAFONOV, N.I.; BESFAMIL'NAYA, P.S., CHERNENKO, Yu.L.

Preventive antimalaria measures for lumberjacks employed in clearing the bed of the future Kakhovka Reservoir. Med.paraz. i paraz.bol.24 no.3:207-208 Jl-S '55. (MLRA 8:12)

1. Iz Ukrainskogo nauchno-issledovatel'skogo instituta malyarii i meditsinskoy parazitologii imeni prof. V. Ya. Rubashkina (dir. instituta I.S.Demchenko) i Zaporozhskoy, Dnepropetrovskoy i Khersonskoy oblastnykh protivomalyariynykh stantsiy.
(MALARIA, prevention and control,
in Russia, in forest workers)

BELYY, Ya. M.

YEVLAKHOVA, V.F.; BELYY, Ya.M.; POTAPOV, N.I.; SERBINENKO, G.A.

The effect of removal of trees in marshlands along the lower Dnieper on the number and species of blood-sucking insects. Med.paraz. i paraz.bol. 27 no.1:100-101 Ja-F '58. (MIRA 11:4)

1. Iz Ukrainskogo instituta malyarii i meditsinskoy parazitologii i parazitologicheskogo otdela Zaporozhskoy oblastnoy sanitarno-epidemiologicheskoy stantsii.
(INSECTS,
blood-sucking species in lower Dnieper region, eff. of removal of trees (Rus))

BELYY, Ya.N.

LUKANSKIY, N.N., kapitan; MATVEYEV, V.P., kapitan; BELYY, Ya.N., starshiy leytenant.

Methodology in teaching computations for antiaircraft guns. (MIRA 11:2)
Artill. zhur. no.1:13-17 Ja '58.
(Antiaircraft guns)

BELYY, Yu.A.; SHVETSOV, K.I.

One Russian geometry manuscript written in the first quarter of the 17th century. Ist.-mat. issl. no.12:185-244 '59. (MIRA 13:11)
(Geometry, Plane)

BELYY, Yu.A.

L. Euler's textbook on elementary geometry. Ist. mat. issl. no.14:237-284 '61. (MIRA 16:10)

(Geometry)

USSR/ Miscellaneous - Music

Card 1/1 : Pub. 124 - 34/35

Authors : Belza, Igor

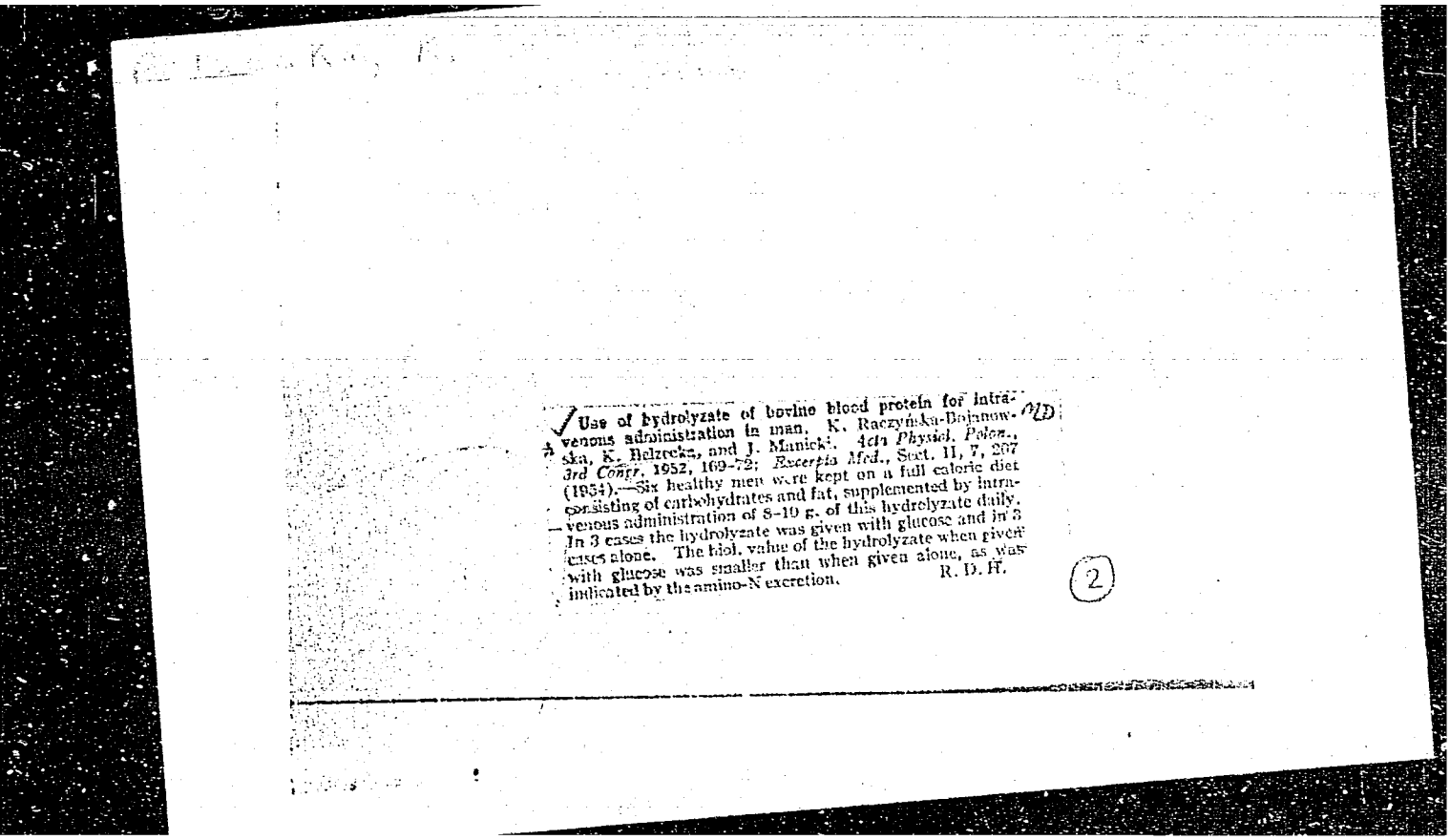
Title : Valuable investigation on the history of Russian musical culture

Periodical : Vest. AN SSSR 7, 123-128, July 1954

Abstract : Historical data on the development of musical culture in Russia, are presented.

Institution : .....

Submitted : .....



Use of hydrolyzate of bovine blood protein for intravenous administration in man. K. Raczyńska-Bojanowska, K. Helzrecka, and J. Manicki. *Acta Physiol. Polon., 3rd Congr.*, 1952, 169–72; *Excerpta Med.*, Sect. II, 7, 207 (1954).—Six healthy men were kept on a full caloric diet consisting of carbohydrates and fat, supplemented by intravenous administration of 8–10 g. of this hydrolyzate daily. In 3 cases the hydrolyzate was given with glucose and in 3 cases alone. The biol. value of the hydrolyzate when given with glucose was smaller than when given alone, as was indicated by the amino-N excretion. R. D. H.

(2)

BELZECKA, K.; CHMIELEWSKA, I.

Effect of glucose on utilization of intravenous cattle blood protein hydrolysate in humans. Acta biochim. polon. 3 no.4: 497-510 1956.

1. Z Zakladu Chemii Fizjologicznej A.M. w Warszawie i Katedry Chemii Organicznej U.W.

(AMINO ACID MIXTURES,
protein hydrolysates from cattle plasma, eff. of glucose on utilization in humans (Pol))
(GLUCOSE, effects,
on protein hydrolysate from cattle plasma utilization in humans after intravenous admin. (Pol))

426. Effect of glucose on utilisation of infused bovine whole-blood protein hydrolysate in human subjects. K. Belzecka and I. Chmielewska *Bull. Acad. polon. Sci.*, 1956, 4, 199—202 (Dept. of Physiol.-Chem., School of Med., Warsaw, Poland).—The effect was examined of glucose on the utilisation in human subjects of bovine whole-blood protein hydrolysate administered i.v. as sole source of N. The hydrolysate was obtained by enzymic hydrolysis. It was found that the min. total N of i.v. administered hydrolysate sufficient to maintain a positive N-balance varied between 0·12 and 0·17 g. per kg. of body wt. The average % of excreted amino N of the hydrolysate with added glucose namely 15·4 was 2 times greater than that excreted in absence of glucose namely 7·9. It is suggested that during autoclaving the glucose reacts with ε-NH$_2$ groups of amino acids which are not assimilable by humans when administered . . .

P. Haas

BELZECKA, K.; RACZYNSKA-BOJANOWSKA, K.; HELLER, J.

Studies on transamination in insects. I. Asperti-α-ketoglutaric transaminase in Celerio euphorbiae L. Acta biochim.polon. 6 no.2:195-203 '59.

1. Zaklad Chemii Fizjologicznej, Akademia Medyczna, Zaklad Biochemii Ewolucyjnej, Instytut Biochemii i Biofizyki PAN, Warszawa.

(TRANSAMINASES - metabolism)
(INSECTS - metabolism)

RACZYNSKA-BOJANOWSKA, Konstancja; BELZECKA, Krystyna

Transamination. Postepy biochem 6 no.2:163-180 '60.
(AMINO ACIDS metab.)
(TISSUE METABOLISM)

BELZECKA, Krystyna; RACZYNSKA-BOJANOWSKA, Konstancja

Studies on transamination in insects. II. Enzyme-coenzyme connection and coenzyme requirement in aspartic-a-ketoglutaric transaminase in celerio euphorbiae. Acta biochim.polon. 7 no.2/3:193-201 '60.

1. Department of Physiological Chemistry, Medical School, Warsaw. Kierownik: prof. dr J.Heller.
(TRANSAMINASES metab.)
(INSECTS metab)
(ISONIAZID phrmacol)

BELZECKA, Krystyna; LASKOWSKA, Teresa

Hydroxylation of phenylalanine in animals. Postepy biochem. 8 no.4: 462-475 '62.

(PHENYLALANINE) (TYROSINE)

BELZECKA, Krystyna; LASKOWSKA, Teresa; MOCHNACKA Irena

The tyrosine transamination and tyrosine content in Celerio euphorbiae. Acta biochim. Pol. 9 no.1:55-62 '62.

1. Department of Physiological Chemistry, Medical School, and Institute of Biochemistry and Biophysics, Polish Academy of Sciences, Warszawa.

(TYROSINE metab) (INSECTS metab)

RACZYNSKA-BOJANOWSKA, Konstancja; BELZECKA, Krystyna

Transamination in insects III. The effect of metal ions on aspartate: α-ketoglutarate aminotranspherase in Celerio euphorbiae. Acta biochim. polon. 9 no.2:111-115 '62.

1. Department of Physiological Chemistry, Medical School, Warszawa.
(TRANSFERASES metab) (METALS pharmacol)
(INSECTS metab)

BELZECKI, C.; LANGE, J.

"Ephedrine", p. 536, (PRZEMYSL CHEMICZNY, Vol. 10, No. 10, Oct. 1954, Warszawa, Poland)

SO: Monthly List of East European Accessions, (EEAL), LC, Vol. 4, No. 5, May 1955, Uncl.

BELZECKI, Cz.

3

4931 547.535.1+931

Bełżecki Cz., Lenge J. **Concerning the Reaction of 1.2-Epoxy-1-Phenylpropane with Methylamine.**

„Reakcja 1,2-epoksy-1-fenylopropanu z metyloaminą". Roczniki Chemii (FAN). No. 4, 1954, pp. 561—568, 1 fig.

An investigation was made of the reaction of 1.2-epoxy-1-phenylpropane and methylamine. When the epoxide applied was obtained from trans-1-phenylpropane-1, only two isomeric aminoalcohols were found in the mixture of reaction products — namely ephedrine and isoephedrine in the ratio of 1 : 9. 1.2-epoxy-1-phenylpropane was prepared in two different ways: directly — using perphtalic acid as the oxidizing agent, and indirectly — by preparing a corresponding bromohydroxy compound and subsequently dehydrobrominating it in alkaline medium. In the epoxidation process, trans-1-phenylpropane-1 was used as a starting material; the compound was prepared by isomerization of the cis-trans mixture during prolonged boiling with alcoholic KOH. The epoxide compound — irrespective of the manner of preparation — yielded when treated with alcoholic solution of methylamine under slight pressure, only the two aminoalcohols mentioned. Ephedrine and isoephedrine were isolated and purified as oxalates, advantage being taken of a wide divergence in the solubility of these salts is water. It was proved that in the conditions of the process described the epoxide linkage breaks, preferably at the phenyl radical yielding in 90% isophedrine and only in 10% ephedrine. The presence of ψ-ephedrine in the reaction products was not observed, a fact confirming the relatively high degree of purity of the trans hydrocarbon applied.

CH

(1)

Bełzecki, Cz.

L

4

POL.

New thiosemicarbazones. T. Urbański and Cz. Bełzecki (Inst. Technol., Warsaw). *Roczniki Chem.* 28, 677–8 (1954)(English summary).—Thiosemicarbazones of the following acids were prepd.: *p*-acetamidobenzoylformic, m. 190°; *p*-hydroxybenzoylpropionic, m. 192°; *p*-acetamidobenzoylpyruvic, m. 178–80°; and of the *Et esters* of the following substituted acetic acids: *p*-nitrobenzoyl, m. 168°; *p*-aminobenzoyl, m. 145°; nicotinoyl, m. 217°; isonicotinoyl, m. 162°; and *p*-acetaminobenzoylpyruvic acid, m. 125°. No preparative details given. The compds. are being tested for tuberculostatic activity. C. P.

1 0

BELZECKI, C.

POLAND / Organic Chemistry. Synthetic Organic Chemistry G-2

Abs Jour : Ref Zhur - Khim., No 10, 1958, No 32371

Author : Czeslaw Belzecki, Tadeusz Urbanski
Inst : -
Title : Thiosemicarbazones of Keto Acids. I. α, β -Thiosemicarbazones of Acetoacetic ester and Its Conversions.

Orig Pub : Roczn. chem., 1956, 30, No 3, 781-787

Abstract : The reaction of $CH_3COC(=NOH)COOC_2H_5$ (I) with $NH_2NHCSNH_2$ (II) was studied. 0.3 mole of $NaNO_2$ in 30 ml it of water is added to 0.3 mole of $CH_3COCH_2COOC_2H_5$ in 60 ml it of glacial CH_3COOH at a temperature below 10^0 in 3 hours' time stirring it continuously, the mixture is diluted with 300 ml it of water and extracted with ester; I is obtained, the yield of the raw I is 15 g, it explodes if distillated in vacuo. Thiosemicarbazone of I (IV) is synthetized similarly of $CH_3C(=NNHCSNH_2)-CH_2COOC_2H_5$ (III) (obtained at a yield of 83%, melting point

Card 1/3

94 to 95°), yield 30%, melting point 161 to 162° (dissociates, from alcohol and water); IV is obtained also of I and II (0.1 mole of each) in 100 ml it of hot water at a yield of 95%. III reacting with NH_3 cyclizes into $CH_3C{=}NN(CSNH_2)COCH_2$ (V), yield 68%. 0.1 mole of IV is dissolved in concentrated NH_4OH at 40 to 50°, cooled to 0°, the precipitate is dissolved in 200 ml it of water at about 40°, acidified with dilute HCl, and $CH_3C{=}NN(CSNH_2)COC{=}NOH$ (VI) is obtained, yield 59%, melting point 180 to 182° (dissociates, from alcohol); VI is obtained also at the nitrosation of V with a yield of 30% (see synthesis of I). 0.1 mole of I is added to the solution of 0.2 mole of II in 40 ml it of 25%-ual H_2SO_4 + 250 ml it of water, the mixture is heated 1 hour (bath temperature = 100°), cooled, filtered, and the precipitate is extracted with hot water and, after that, with alcohol, ...

POLAND / Organic Chemistry. Synthetic Organic Chemistry. G-2

Abs Jour : Ref Zhur - Khim., No 10, 1958, No 32371

$CH_3C{=}NN(CSNH_2)COC{=}NNHCSNH_2$ (VII) is obtained, yield 28%, melting point 208° (dissociates, from $CH_3CONHCH_3$-water); VII is obtained in the similar way at the hydrolysis and cyclization of IV or at the hydrolisis of VI in the presence of equimolar amounts of II; yield 22 and 49%.

Card 3/3

URBANSK, Tadeusz; BELZECKI, Czeslaw; CHECHELSKA, Bozena; CHYLINSKA, Barbara; DABROWSKA, Halina; FALECKI, Jerzy; GURNE, Daniela; HALSKI, Leszek; MALINOWSKI, Stanislaw; SERAFINOWA, Barbara; ZYLOWSKI, Jerzy; SLOPEK, Stefan; KAMIENSKA, Irena; VENULET, Jan; JANOWIEC, Mieczyslaw; JAKIMOWSKA, Krystyna; URBANSKA, Alicja; KUZNIEWICOW, Anatol

Searching for new anti-tuberculosis drugs. Gruzlica 26 no.11:889-917 Nov 58.

1. Z Zakladu Syntezy Lekow Instytutu Gruzlicy Kierownik Zakladu: prof. dr T. Urbanski Dyrektor Instytutu: prof. dr J. Misiewicz Pracownia Synt. Lekow Przeciwgruzlicych, Warszawa, ul. Koszykowa 75.
(TUBERCULOSIS, therapy,
investigation of 300 cpds. for anti-tuberc. eff. (Pol))

Country : Poland G
Category : Organic Chemistry. Synthetic Organic Chemistry

Ref. Jour. : Ref Zhur-Khimiya, No.12, 1959, No.42375

Author : Bałżecki, Zdzisław; Urbański, Tadeusz
Institut. : Not given
Title : Thiosemicarbazones of Keto Acids. II. Thiosemicarbazones of Aroylaliphatic Acids.

Orig. Pub. : Roczn. chem. 1958, 32, No.4, 769-773

Abstract : A series of $NH_2CSNHN=C(C_6H_4R\text{-}4)(CH_2)_nCOOR'$ (I) was synthesized for the purpose of producing tuberculostatically active compounds. 0.1 mole $NH_2CSNHNH_2$ in 10 ml. of boiling water is added to a boiling solution of 0.1 mole $4\text{-}RC_6H_4CO(CH_2)_nCOOR'$ (II) in 10 ml. of alcohol. The mixture is boiled for 0.5-0.6 hours with a few drops of HCl added; (I) is then obtained. (The article cites R,R',n, yield in % and melting point in °C (from alcohol) as follows):

Card: 1/6

Country : Poland G
Category : Organic Chemistry. Synthetic Organic Chemistry

Abs. Jour. : Ref Zhur-Khimiya, No.12, 1959, No.42375

Author :
Institut. :
Title :

Orig Pub. :

Abstract : CH_3CONH, H, 0, 85, 199 (decomposition); CH_3O, H, 0, 75, 163-164 (decomposition); NH_2, C_2H_5, 1, 65, 182 (decomposition); CH_3CONH, C_2H_5, 1, 63, 152 (decomposition); CH_3O, C_2H_5, 1, 62, 123-124 (decomposition); NH_2, H, 2, 35, 126 (decomposition); OH, H, 2, 48, 224-225 (decomposition); NH_2, H 8 (Ia), 54, 127; CH_3O, H, 8 (Ib), 42, 113. 0.1 mole $4\text{-}NO_2C_6H_4COCH_2COOC_2H_5$ in 500 ml. of absolute CH_3OH are hydrogenated for 4 hours over 0.3 g of PtO_2 at 40-45°; the filtrate is

Card: 2/5

Country : Poland G
Category : Organic Chemistry. Synthetic Organic Chemistry

Abs. Jour. : Ref Zhur-Khimiya, No.12, 1959, No.42375

Author :
Institut. :
Title :

Orig. Pub. :

Abstract : evaporated; the residue is diluted with 300 ml. of water; 20 ml. of concentrated HCl are added; the filtrate is cooled to 5°; 50 ml. of 20% NaOH are added; the yield of II is 54% (R=NH_2, R'=C_2H_5, n=1), the melting point is 83-84 (from benzoyl); acetyl derivative, yield 82%, the melting point 97-98° (from dilute alcohol). II (R=CH_3O, R'=C_2H_5, n=1), yield is 48%, boiling point 175-182°/8 mm. The pulverized mixture of 0.5 mole $C_6H_5NHCOCH_3$ and 0.5 mole of sebacic

Card: 3/6

Country :Poland G
Category :Organic Chemistry. Synthetic Organic Chemistry

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Abstract :polyanhydride is poured into the suspension of 1.5 moles $AlCl_3$ in CS_2 at 0-5°; the temperature is raised to about 40°; the mixture is stirred for 3 hours and then set out for 48 hours at about 20°; the reaction product is decomposed with ice and HCl; the residue is dissolved in 70 g of $NaHCO_3$ in 1.2 liters of water; the filtrate is acidified with CH_3COOH; the residue is boiled for 15 minutes with 200 ml. of 10% HCl; 50 ml. of saturated CH_3COONa are added

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