"APPROVED FOR RELEASE: 03/14/2001 CIA-RDP86-00513R001551030002-4

TRISHEVSKIY, I.S.; GAMERSHTSYN, V.A.; SKOKOV, F.I.; AKIMOV, E.P.

Dependence of metal hardening on the conditions of shaping and the width of the initial ingot. Sbor.trud. UNIIM no.11:208-215 '65. (MIRA 18:11)

APPROVED FOR RELEASE: 03/14/2001 CIA-RDP86-00513R001551030002-4"

"APPROVED FOR RELEASE: 03/14/2001 CIA-RDP86-00513R001551030002-4

TRISHEVSKIY, I.S.; STUKALOV, V.P.; SKOKOV, F.I., DRAPIKO, P.Ye.

Developing and studying the technology of producing rolled shapes with elements bent to 180°. Sbor.trud. UNIIM no.11:216-231 '65. (MIRA 18:11)

APPROVED FOR RELEASE: 03/14/2001 CIA-RDP86-00513R001551030002-4"

"APPROVED FOR RELEASE: 03/14/2001 CIA-RDP86-00513R001551030002-4

S/183/62/000/002/012/013
B102/B108

AUTHOR: Skokov, I. V.

TITLE: Comparison of the sensitivities of a double-ray and a multi-ray interferometer for measuring small variations in refractive index

PERIODICAL: Moscow. Universitet. Vestnik. Seriya III. Fizika, astronomiya, no. 2, 1962, 82-87

TEXT: The author calculated the sensitivities of a double-ray and a multi-ray interferometer used for measuring small variations in refractive index n of gases. The sensitivities depend on the length of the rays and on the accuracy of recording the changes in the interference pattern. The latter are assumed to be recorded by a photometric method, the dimensions of the test object being equal in both cases; the photometric errors are assumed to be equal and the interferometers to be hit by parallel rays of monochromatic light. External effects are ignored. The sensitivities are calculated from the intensity distributions

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in the interference patterns and the phase differences of the interference rays. For a double-ray interferometer $\delta n = \frac{\lambda}{2\pi h} \frac{\delta I}{I_m}$, for a multi-ray interferometer: $\delta n = \frac{\lambda}{2hN_e} \frac{\delta I}{I_m}$. I_m is the maximum intensity, h the length of the ray in the gas to be examined, δI the intensity variation. With h = 10 mm, $\delta I/I_m = 5\%$ and R = 0.99 (R - reflection coefficient of the mirrors) $\delta n \cong 4 \cdot 10^{-7}$ for the double-ray instrument and $\delta n \cong 4 \cdot 10^{-9}$ for the multi-ray instrument is obtained. The sensitivity thus differs by a factor $B = \sqrt{R}/(1-R)$. For $R \to 1$, $B \to \infty$; for R = 0.99, $B \approx 100$. Maximum sensitivity is found to be obtained when $I = 0.75\ I_m$. In practice, B will be affected by the external conditions and the errors of the interferometers.

ASSOCIATION: Kafedra optiki, Moskovskiy universitet (Department of Optics, Moscow University)

SUBMITTED: May 3, 1961 (initially)
February 12, 1962 (after revision)

APPROVED FOR RELEASE: 03/14/2001 CIA-RDP86-00513R001551030002-4"

"APPROVED FOR RELEASE: 03/14/2001 CIA-RDP86-00513R001551030002-4

KOROLEV, F.A.; KROMSKIY G.I.; SKOKOV, I.V.

Use of the phase met od of multiwave interferometry for measuring low gas densities. Izv. vys. ucheb. zav.; fiz. no.5:61-63 '63. (MIRA 16:12)

1. Moskovskiy gosudarstvennyy universitet imeni M.V.Lomonosova.

APPROVED FOR RELEASE: 03/14/2001 CIA-RDP86-00513R001551030002-4"

"APPROVED FOR RELEASE: 03/14/2001 CIA-RDP86-00513R001551030002-4

KOROLEV, F.A.; KROMSKIY, G.I.; SKOBOV, I.V.

Amplitude method of multiple-beam interferometry. Opt. i spektr. 14 no.3: 416-418 Mr '63. (MIRA 16:4)

(Interferometry)

APPROVED FOR RELEASE: 03/14/2001 CIA-RDP86-00513R001551030002-4"

"APPROVED FOR RELEASE: 03/14/2001 CIA-RDP86-00513R001551030002-4

AKIMOV, A.I.; KROMSKIY, G.I.; SKOKOV, I.V.

Sensitivity of a multiple-wave interferometer. Prib. i tekh. eksp. 9 no.5:172-174 S-O '64. (MIRA 17:12)

1. Fizicheskiy fakul'tet Moskovskogo gosudarstvennogo universiteta.

APPROVED FOR RELEASE: 03/14/2001 CIA-RDP86-00513R001551030002-4"

"APPROVED FOR RELEASE: 03/14/2001 CIA-RDP86-00513R001551030002-4

L 07066-67 EWT(1)

ACC NR: AP6024633 SOURCE CODE: UR/0170/66/011/001/0003/0009

AUTHOR: Skokov, I. V.; Yemel'yanov, V. A.

ORG: none

TITLE: The use of multibeam interferometer for quantitative studies of axisymmetric inhomogeneities in rarefied gases

SOURCE: Inzhenerno-fizicheskiy zhurnal, v. 11, no. 1, 1966, 3-9

TOPIC TAGS: multibeam interferometer, gas flow, rarefied gas, gas density

ABSTRACT: A direct solution of the heat exchange problem during high speed (~5 km/sec) and high altitude (~120 km) flights is very difficult and thus it is of interest to develop diagnostic methods of densities in rarefied gases (Knudsen parameter ≥ 0.01). The author investigates rarefied gas density distributions around an axisymmetric model. The method of calculations of gaseous nonuniformities corresponding to slip flow are developed and an experimental device for the visualization of these events using multibeam interference is presented. The interferogram processing yields various parameters of the flow discussed. The density field in front of a sphere and the shock wave distribution for a disk are obtained in the

Card 1/2 UDC: 621.317.767

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L 07066-67

ACC NR: AP6024633

case of a rarefied gas flow with M = 3.85 and Re = 75. The experimental data are in fair agreement with the values obtained by the method of electron beam scattering (Ivanov, A. V. DAN SSSR, 161, 315, 1965). Orig. art. has: 17 formulas, 1 table, and 3 figures.

SUB CODE: 20/ SUBM DATE: 19Jan66/ ORIG REF: 007

Card 2/2

APPROVED FOR RELEASE: 03/14/2001 CIA-RDP86-00513R001551030002-4"

"APPROVED FOR RELEASE: 03/14/2001 CIA-RDP86-00513R001551030002-4

ACC NR: AP7007727 SOURCE CODE: UR/0188/67/000/001/0110/0111

AUTHOR: Skokov, I. V.; Akimov, A. I.; Kromskiy, G. I.

ORG: MGU Department of Optics (MGU Kafedra optiki)

TITLE: Determination of shock wave profile by the interferometry method

SOURCE: Moscow. Universitet. Vestnik. Seriya III. Fizika, astronomiya, no. 1, 1967, 110-111

TOPIC TAGS: rarefied gas, gas density, gas dynamics, gas flow

ABSTRACT: The authors report the results of a study to determine using a multiple-wave interferometer the structure of the shock wave formed when rarefied gas moving at supersonic speed (Mach number ≈ 4, Reynolds number = 50, stagnation temperature = 300°K) flows past a model (disk, diameter 10 mm). The investigated model was inserted between the mirrors of a Fabry-Perot etalon, which was illuminated by a collimated light beam from a point monochromatic light source, and the uniformly illuminated interference field was photographed. The negatives were processed using the photometric method taking axisymmetrical density distribution into a account. The density distribution of the shock wave along the stagnation line in the vicinity of the forward critical point is shown in Fig. 1.

Card 1/3 UDC: 533.1:535.854

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ACC NR: AP7007727

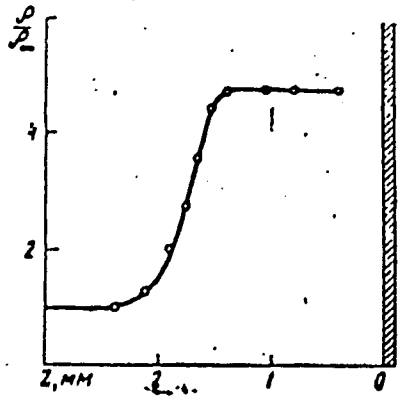

Fig. 1. Shock wave profile

P/P_∞ is the ratio of current density value to the density of incoming flow; Z - is a coordinate along the flow axis.

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ACC NR: AP7007727

Under experimental conditions the thickness of the shock wave has a finite value (~0.8 mm) equal to approximately four lengths of the free path of particles of the incoming flow. The graph indicates clearly that there is a region with constant density. The ratio of densities in the incoming flow is in good agreement with Rankine's relationships (within limits of 10%). The relative value of the withdrawal of the shock wave is slightly higher than when the flow is continuous. It is noted in conclusion that the multiple-wave interferometry method permits determination of the density profile, the density fields near the model and in the free flow, the geometry of the shock wave, and other gas-dynamical parameters. Orig. art. has: 1 figure. [GS]

SUB CODE: 20 SUBM DATE: 16Jul66/ ORIG REF: 004/ ATD PRESS: 5117

Card 3/3

APPROVED FOR RELEASE: 03/14/2001 CIA-RDP86-00513R001551030002-4"

"APPROVED FOR RELEASE: 03/14/2001 CIA-RDP86-00513R001551030002-4

SKOKOV, K.D.

Distortions in PS curves caused by electolytic corrosion phenomena reported by OKS laboratories. Razved.i prom.geofiz.no.17:71-73 '57 (MIRA 10:12)

(Seismometry)

APPROVED FOR RELEASE: 03/14/2001 CIA-RDP86-00513R001551030002-4"

"APPROVED FOR RELEASE: 03/14/2001 CIA-RDP86-00513R001551030002-4

SKOKOV, K.D.

Locating and eliminating leakages in logging cables. Razved. i prom. geofiz. no.36:72-79 '60. (MIRA 13:12)
(Oil well logging)

APPROVED FOR RELEASE: 03/14/2001 CIA-RDP86-00513R001551030002-4"

"APPROVED FOR RELEASE: 03/14/2001 CIA-RDP86-00513R001551030002-4

MAKAREVICH, V.N.; SKOKOV, K.D.

Some results of geothermal studies in deep wells of the Irtysh Valley. Razved. i prom. geofiz. no.43:97-102 '61 (MIRA 14:1)

APPROVED FOR RELEASE: 03/14/2001 CIA-RDP86-00513R001551030002-4"

"APPROVED FOR RELEASE: 03/14/2001 CIA-RDP86-00513R001551030002-4

SKOKOV, L.D.; LOBIKOV, Yu.V.

Catch plate with floating cutters. Mashinostroitel' no.11:21 N '59. (MIRA 13:3)

(Machine tools--Attachments)

APPROVED FOR RELEASE: 03/14/2001 CIA-RDP86-00513R001551030002-4"

"APPROVED FOR RELEASE: 03/14/2001 CIA-RDP86-00513R001551030002-4

L 05089-67 EWT(1)

ACC NR: AP6013251 SOURCE CODE: UR/0413/66/000/008/0039/0039

20
B

AUTHOR: Skokov, L. I.

ORG: none

TITLE: A waveguide-coaxial junction with a variable junction attenuation. Class 21, No. 180664

SOURCE: Izobreteniya, promyshlennyye obraztsy, tovarnyye znaki, no. 8, 1966, 39

TOPIC TAGS: waveguide coupler, coaxial cable, waveguide loss

ABSTRACT: This Author Certificate presents a waveguide-coaxial junction with a variable junction attenuation. The junction includes a section of a rectangular waveguide with two coaxial cables. The cables are located in one cross section of the rectangular waveguide on the wide walls and are connected to these walls by means of coupling probes. The coupling probes are extensions of the inner conductors of the cables. The design permits regulation of the junction attenuation within broad limits with matching from the waveguide. The coaxial cables are made so that they can be shifted along their axes. The cables are coupled by a

UDC: 621.372.833

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L 05089-67

ACC NR: AP6013251

mechanism which assures that when one of the cables in the waveguide is moved the other cable of the waveguide is advanced simultaneously. To obtain large values of the junction attenuations, the cables enter into the rectangular waveguide through terminal circular waveguides. In order to smooth the current distribution in the cables, the coupling areas mentioned above are fitted with matching cylindrical adapters fastened to their ends.

SUB CODE: 09/ SUBM DATE: 21Sep64

Card 2/2

APPROVED FOR RELEASE: 03/14/2001 CIA-RDP86-00513R001551030002-4"

"APPROVED FOR RELEASE: 03/14/2001 CIA-RDP86-00513R001551030002-4

SKOKOV, N. (Stalino, USSR)

Michael Sarana guides a political study group. Pozh.delo 5 no.8:18-19 Ag '59. (MIRA 12:12)
(Stalino--Communist education)

APPROVED FOR RELEASE: 03/14/2001 CIA-RDP86-00513R001551030002-4"

"APPROVED FOR RELEASE: 03/14/2001 CIA-RDP86-00513R001551030002-4

SKOKOVA, [illegible]

Comparative studies on toxoplasmosis tests in various groups of the population. Sov. med. 27 no.8:80-82 Ag '64. (MIRA 18:3)

1. Kafedra infektsionnykh bolezney s epidemiologiyey (zav.- prof. V.P. Petrov) Kuybyshevskogo meditsinskogo instituta.

APPROVED FOR RELEASE: 03/14/2001 CIA-RDP86-00513R001551030002-4"

"APPROVED FOR RELEASE: 03/14/2001 CIA-RDP86-00513R001551030002-4

[illegible] Kirichenko [illegible] increasing the testing rate [illegible] Mekhanika [illegible], no. 1, 1966, 62-65

[illegible] strength, deformation rate, ~~[illegible]~~, probability [illegible] load

[illegible] of materials under high loading rates is investigated and, in [illegible] their tensile strength is evaluated. The most reliable [illegible] by referring to the statistical theory of [illegible] distribution curves is obtained depicting [illegible] in a material at various loading zones and [illegible] conditions of no-load, tensile loads at [illegible] conditions under two different rates. [illegible] shown that the tensile strength [illegible] is an equilibrium distribution in the [illegible] 8 formulas and 1 figure.

Card [illegible]

APPROVED FOR RELEASE: 03/14/2001 CIA-RDP86-00513R001551030002-4"

"APPROVED FOR RELEASE: 03/14/2001 CIA-RDP86-00513R001551030002-4

SKOKOVA, N. N.

"Ecology of the Gray Heron of the Rybinskiy Water Reservoir and Its Role in the Fish Economy of the Reservoir." Sub 5 Nov 51, Moscow City Pedagogical Inst imeni V. P. Potemkin.

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

SO: Sum. No. 480, 9 May 55

APPROVED FOR RELEASE: 03/14/2001 CIA-RDP86-00513R001551030002-4"

"APPROVED FOR RELEASE: 03/14/2001 CIA-RDP86-00513R001551030002-4

SKOKOVA, N.N.

Results of banding Ibididae and Ardeidae in the U.S.S.R. Migr.zhiv. no.1:67-94 '59. (MIRA 13:6)

1. Astrakhanskiy zapovednik.
(Herons) (~~Ibis~~) (Bird banding)

APPROVED FOR RELEASE: 03/14/2001 CIA-RDP86-00513R001551030002-4"

"APPROVED FOR RELEASE: 03/14/2001 CIA-RDP86-00513R001551030002-4

GERASIMOVA, T.D.; SKOKOVA, N.N.

Ornithogeographical characteristics of Aynov Islands. (MIRA 14:7)
Ornitologiia no.2:91-98 '59.
(Bol'shoy Aynov Island--Birds) (Malyy Aynov Island--Birds)

APPROVED FOR RELEASE: 03/14/2001 CIA-RDP86-00513R001551030002-4"

"APPROVED FOR RELEASE: 03/14/2001 CIA-RDP86-00513R001551030002-4

SKOKOVA, N.N.

Ecology of the spoonbill and its role in the fishery management of the Volga Delta. Ornitologiia no.2:262-270 '59. (MIRA 14:7)
(Astrakhan Preserve--Spoonbills) (Birds--Food)

APPROVED FOR RELEASE: 03/14/2001 CIA-RDP86-00513R001551030002-4"

"APPROVED FOR RELEASE: 03/14/2001 CIA-RDP86-00513R001551030002-4

SKOKOVA, N.N.

Seasonal distribution and migrations of the large cormorant on the Caspian Sea. Migr. zhiv. no. 2:76-99 '60. (MIRA 13:12)

1. Astrakhanskiy gosudarstvennyy zapovednik.
(Caspian sea region--Cormorants) (Birds--Migration)

APPROVED FOR RELEASE: 03/14/2001 CIA-RDP86-00513R001551030002-4"

"APPROVED FOR RELEASE: 03/14/2001 CIA-RDP86-00513R001551030002-4

SKOKOVA, N.N.

Feeding of the black-crowned night heron in the Volga Delta.
Ornitologiia no.3:396-404 '60. (MIRA 14:6)
(Volga Delta--Herons)
(Birds--Food)

APPROVED FOR RELEASE: 03/14/2001 CIA-RDP86-00513R001551030002-4"

"APPROVED FOR RELEASE: 03/14/2001 CIA-RDP86-00513R001551030002-4

SKOKOVA, N.N.

Food relationships of birds with colonial nesting habits in the coppices of the Volga Delta. Trudy Probl. i ten. sov. no.9:205-215 '60. (MIRA 13.9)

1. Astrakhanskiy gosudarstvennyy zapovednik.
(Volga Delta—Birds—Food)

APPROVED FOR RELEASE: 03/14/2001 CIA-RDP86-00513R001551030002-4"

"APPROVED FOR RELEASE: 03/14/2001 CIA-RDP86-00513R001551030002-4

BIANKI, V.V., red.; KARPOVICH, V.N., red.; SKOKOVA, N.N., red.; KAS'YANOV, A.P., red.[deceased]; BELYAYEV, N.F., tekhn. red.

[Kandalaksha State Preserve] Kandalakshskii gosudarstvennyi zapovednik; nauchno-populiarnyi ocherk. Murmansk, Murmanskoe knizhnoe izd-vo, 1961. 87 p. (MIRA 16:6)

1. Kandalakshskiy gosudarstvennyy zapovednik.
(Kandalaksha Preserve)

APPROVED FOR RELEASE: 03/14/2001 CIA-RDP86-00513R001551030002-4"

"APPROVED FOR RELEASE: 03/14/2001 CIA-RDP86-00513R001551030002-4

SKOKOVA, N.N.

Quantitative study of the feeding habits of ichthyophagous birds.
Ornitologiia no.4:288-296 '62. (MIRA 16:4)
(Astrakhan Preserve--Water birds) (Birds--Food)

APPROVED FOR RELEASE: 03/14/2001 CIA-RDP86-00513R001551030002-4"

"APPROVED FOR RELEASE: 03/14/2001 CIA-RDP86-00513R001551030002-4

SKOKOVA, N.N.

Puffins on the Aynovskiye Islands. Ornitologiia no.5:7-12 '62. (MIRA 16:2)

(Aynovskiye Islands—Puffins)

APPROVED FOR RELEASE: 03/14/2001 CIA-RDP86-00513R001551030002-4"

"APPROVED FOR RELEASE: 03/14/2001 CIA-RDP86-00513R001551030002-4

TARUSOV, B.N., otv. red.; SKOKOVA, N.N., red.

[Bioluminescence; a symposium of June 3-6, 1963; abstracts of reports] Bioliuminestsentsiia; simpozium 3-6 iiunia 1963 g.; tezisiy dokladov. Moskva, 1963. 27 p. (MIRA 17:9)

1. Moskovskoye obshchestvo ispytateley prirody. Sektsiya biofiziki. 2. Moskovskiy gosudarstvennyy universitet (for Tarusov).

APPROVED FOR RELEASE: 03/14/2001 CIA-RDP86-00513R001551030002-4"

"APPROVED FOR RELEASE: 03/14/2001 CIA-RDP86-00513R001551030002-4

KONDRASHOVA, M.N.; Prinimali uchastiye: NIKOLAYEVA, L.V.; SKOKOVA, N.V.; SLEV, D.M.; TIMOFEYEVA, L.M.

Effect of K-strophantin on phosphorylation and respiration of sarcosomes. Vop. med. Khim. 9 no. 3:273-279 My-Je '63. (MIRA 17:9)

1. Institut farmakologii i khimioterapii AMN SSSR i kafedra biokhimii zhivotnykh Moskovskogo gosudarstvennogo universiteta imeni Lomonosova.

APPROVED FOR RELEASE: 03/14/2001 CIA-RDP86-00513R001551030002-4"

"APPROVED FOR RELEASE: 03/14/2001 CIA-RDP86-00513R001551030002-4

SKOKOWSKA-FUDOLF M. Walka o zdrowie dziecka The fight for children's health Polski Tygodnik Lekarski, Warsaw 1949, 4/29-30 (907-909) Tables 3

The war years were especially dangerous for the health and development of Polish children. TBCinfection was three times and the mortality of babies twice that of before the war. To improve these conditions was the most important task of the Public Health Service. The number of dispensaries for pregnant women was continuously growing, and in 1948 reached 898 (from 254 in 1945). Their objects are the improving of the women's health and prenatal care. Every town and village is to have a midwife and a delivery room. A nursery for little children of preschool age will be established in every village. The mortality of babies has already remarkably decreased. It was 12.3 % in 1938, 26.9% in 1945, 13.3% in 1946 and only 9.7% in 1947. The medical service in the Primary Schools is extending. Vaccination against TB diphtheria and other infectious diseases is carried out on a large scale. Moreover the following activities of New Poland in the fight for children's health are described: the dental service, the special surgical, orthopaedic, and laryngological dispensaries, the sanatoriums and preventoriums for TB, the holidays for healthy children in health resorts, milk preventoriums for TB, the holidays for healthy children in health resorts, milk supply for expectant and nursing mothers and for children up to the age of 14.

Makower - Wroclaw (IV, 7, 10)

So: Medical Microbiology and Hygiene, Section IV, Vol 3, No 1-6

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"APPROVED FOR RELEASE: 03/14/2001 CIA-RDP86-00513R001551030002-4

SKOKOWSKA-RUDOLF, M

SKOKOWSKA-RUDOLF M.

Ochrona zdrowia matki i dziecka w planie sześcioletnim. /Maternal-and child welfare in the Six Year Plan/ Fadiat polska 24:5-6 May-June 50 p. 475-8.

1. NAI
CLML Vol. 20, No. 2 Feb 1951

APPROVED FOR RELEASE: 03/14/2001 CIA-RDP86-00513R001551030002-4"

"APPROVED FOR RELEASE: 03/14/2001 CIA-RDP86-00513R001551030002-4

GORBUSHIN, M.F., inzh.; SKOKSHIN, L.V.

Chain conveyor for loading tires in freight cars. Mekh.i avtom. proizv. 16 no.7:37-38 Jl '62. (MIRA 15:8)
(Conveying machinery)

APPROVED FOR RELEASE: 03/14/2001 CIA-RDP86-00513R001551030002-4"

"APPROVED FOR RELEASE: 03/14/2001 CIA-RDP86-00513R001551030002-4

SKOLA, Jaroslav, prof., dr.

Problem of waste substances. Prum potravin 14 no.5:248 My '63.

1. Ceskoslovenska akademie ved, Praha.

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"APPROVED FOR RELEASE: 03/14/2001 CIA-RDP86-00513R001551030002-4

PROCESSES AND PROPERTIES INDEX

Increasing the durability of refractory products. VLADIMÍR ŠKOLA. Sbornik 1929, 508; *Ceram Abstracts* 9, 435.—By coating fireproof products with a cement consisting of oxides, their durability can be highly increased. One of the crucibles was coated on the inside with a 1-mm. thick Resistin coat. Both crucibles were then filled with the normal salt cake mixt. for mfg. sheet glass and heated in a test furnace for about 70 hrs. at a temp. of about 1350°. The crucible with a Resistin coat was not damaged at all, while the uncoated crucible was badly corroded. G. G.

ASM-SLA METALLURGICAL LITERATURE CLASSIFICATION

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"APPROVED FOR RELEASE: 03/14/2001 CIA-RDP86-00513R001551030002-4

R

Škola, V. INFLUENCE OF SHARP TEMPERATURE FLUCTUATIONS ON CERAMIC PRODUCTS. *Keramik*, 10, 251-61 (1930).—The method worked out by Š for determining the sensitiveness of ceramic products to temperature changes is described. Similar samples are prepared from the material to be investigated (6 from a standard brick), are ground parallel, and are carefully measured. The surfaces are microscopically investigated and defective places removed. To learn the homogeneity of the material, the porosity of separate samples is determined. The resistance to pressure is determined on one part of the test piece, and the other samples are heated to a definite temperature in a kiln for a certain length of time, then cooled in cold water and tested for their resistance to pressure. This procedure is repeated several times until the resistance to pressure of the samples is decreased. With especially sensitive thermic material, the kind of cooling may vary, viz., hot water, oil, or cold air. Valuable conclusions may be drawn on the capability of resistance of ceramic bodies to temperature changes from the course of decrease of the resistance to pressure. Concerning the exactness of the method, the average error of 6% was determined on a grog brick cut into 6 pieces. Similar methods of testing [Goodrich (*Ceram. Abstracts*, 6 [11] 522 (1927)) and Parmelee and Westman (*ibid.*, 7 [4] 235 (1928))] are discussed and their advantages and disadvantages pointed out.

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"APPROVED FOR RELEASE: 03/14/2001 CIA-RDP86-00513R001551030002-4

Škola, V. SILICATES WITH HIGH ALUMINA CONTENT. *Chem. Listy*, 1930, 30 34, 59 61.—Š. gives a survey of literature relating to production of mullite ware, beginning with the citation of the study of Bowen and Greig (see *J. Am. Ceram. Soc.*, 7, 234 54 (1924)). He mentions especially the opinion of W. Eitel and his collaborators that mullite is a fine mixture of corundum and silicium oxide (*Keram. Rundschau*, 500, 633 (1928)) and that a similar process takes place as in the case of the cementite in cast iron. The production of various mullite stones, especially of "Uramilon," a product of the Chemical Union Ústí, Bohemia, and the masses Alurit and Elektron, products of the Western Bohemia Kaolin and Chamotte Works and Slovakian Magnesite Works, Ltd., in Czechoslovakia are also discussed.

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PROCESSES AND PROPERTIES INDEX

The Belgian zinc industry. VLAD. ŠKOLA. *Chem. Listy* 24, 185(1930).
F. MAREBH

ASM-SLA METALLURGICAL LITERATURE CLASSIFICATION

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1ST AND 2ND ORDERS

3RD AND 4TH ORDERS

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19

Silicates high in alumina. VLADIMÍR ŠKOLA. *Chem. Listy* 25, 30-4, 59-61(1931).—The phase diagram for the system Al_2O_3-SiO_2 is evolved and discussed in connection with the production of corundum, sillimanite, andalusite, etc. TRANK MARKSIE

COMMON ELEMENTS

COMMON VARIABLES INDEX

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28

The mannitol fermentation of unextracted beet slices. VLADIMIR ŠKOLA. *Listy Cukrovar.* 50, 165–71(1931).—A complete analysis of fermented unextd. slices is given. The beet slices were pressed, and the juice after sterilization by heat was inoculated with a mannitol enzyme. The fermented liquor was pptd. with EtOH and filtered through suspended filter bags. The clear filtrate was evapd., and the mannitol crystd. Concg. the mannitol by osmosis was not successful. Com. trials have not been made. The literature is reviewed.

FRANK MARSH

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"APPROVED FOR RELEASE: 03/14/2001 CIA-RDP86-00513R001551030002-4

Škola, V. INCONGRUENT FUSION OF MULLITE AND ITS SIGNIFICANCE IN INDUSTRIAL PRACTICE. *Zprávy Československé Keram. Společnosti*, 10 [1-2] 64-67 (1963).—Careful study of substances containing mullite or sillimanite showed that decomposition of mullite begins under certain conditions at temperatures lower than 1850°. If mullite is heated a long time at 1550°, corundum is formed together with a liquid phase which separates from the corundum. The possible importance of this in industrial practice is pointed out.

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R

Škola, V. Fused refractory blocks. *Chimie et industrie. Special No.* 29 [6] 825-29 (1933). Electrothermal methods have an increasing importance in the manufacture of materials which must meet great requirements with regard to chemical and physical resistance. A new method of manufacture in which materials are melted in electric furnaces and cast in molds has been developed in America. An analogous method has been elaborated in Czechoslovakia. The methods of manufacture, chemical and physical properties, experience with melted refractory blocks, and their application [illegible] are discussed.

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"APPROVED FOR RELEASE: 03/14/2001 CIA-RDP86-00513R001551030002-4

Fire-resistant materials in sugar establishments. Vladimir Skola. *Listy Cukrov.* 51, 405 (1933). Physicochem. methods for testing refractory and enamel ware used in sugar mills, lime kilns and heating plants are surveyed. Frank Marsh

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"APPROVED FOR RELEASE: 03/14/2001 CIA-RDP86-00513R001551030002-4

Škola, V. STANDARDIZATION OF REFRACTORY PRODUCTS. *Staviv*, 1934, 89.—A survey of foreign and Czechoslovakian literature is given. In Czechoslovakia the following items are discussed: (1) nomenclature, (2) ultimate analysis and softening point, and (3) classification of products. It is recommended that standardization of shapes and dimensions be confined to standard brick and wedge-shaped brick. The Czechoslovakian refractory industry is for the main part an export industry and therefore foreign standards are of more importance than domestic standardization. Of Czechoslovakian workers Kallauner, Brabec, Spazier, and Barta are mentioned.

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19

Thermal decomposition of the mullite phase. V. Skola. *Silikáty Rozhl.* 13, No. 2, 23-9(1936); *Chemie & industrie* 37, 297; cf. *C. A.* 31, 3654[1].—Examn. of a large no. of mullite blocks used for lining glass-melting furnaces and exposed to temps. of about 1450° showed 3 layers; a yellowish and a bluish gray layer, and a blackish core. Microscopic and chem. examn. showed that the first 2 contained many corundum crystals embedded in a vitreous mass, mullite being absent, while the core consisted entirely of unchanged mullite. The same transformation takes place in mullite which is exposed only to the action of hot gases at the same temp. The old observation of Bowen and Grieg that this transformation takes place only at about 1830° must therefore be corrected.

A. Papineau-Couture

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19

New methods for the production of refractory zirconium oxide ware. Vladimir Škola. *Zprávy Československ. keram. společnosti* 12, 53-5(1935); *Chem. Zentr.* 1936, II, 1904.—Baddeleyite is either fused in an elec. furnace with a high-quality clayey raw material (such as natural emery) and the melt poured into forms (com. product, "Jargal") or the ore is finely ground, leached with H_2SO_4, the sulfate heated at a high temp. and ZrO_2 obtained. Hot ZrC can also be treated with Cl and the resulting $ZrCl_4$ converted into the oxide by heating at a high temp.

M. G. Moore

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Physical and Chemical Properties, Testing, Etc.

Disintegration of the Mullitic Phase at High Temperature.--V. Skola (Rospravy II tridy Ceske Akademie, 45, No. 17, 1935). According to Bowen and Greig Mullitic phases disintegrate at about 1,810° into corundum and a glass rich in silicic acid. The author found that disintegration may occur at a lower temperature, for example 1,450°, when alkalies are present. A mere 1% alkalies causes radical changes. If there is an excessive amount of silicic acid, mullite disintegrates with great difficulty even when alkalies are present. This is, for example, the case with mullite prepared by the thermal treatment of cyanite and sillimanite, and even more so with mullite isolated by hydrofluoric acid from burned sillimanite or with synthetic mullite.

R. B.

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1ST AND 2ND ORDERS

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18

Activated charcoal; its production, utilization and testing. Vladimir Skola. *Chem. Listy* 33, 205-8, 287-92 (1939).—The phys. chemistry involved in the manuf. of decolorizing charcoals for sugars, wines, oils and waters, of activated charcoals for gas masks, and of charcoals for industrial use is discussed, including recent expts. for activating charcoals with gases or chem. agents and tests for evaluating charcoals. Frank Marsh

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SKOLA, V.

SKOLA, V. Use of nuclear reactors as a source of heat in chemical processes requiring high temperatures. Tr. from the English. p. 51.

Vol. 2, No. 2, Feb. 1957
NOVA TECHNICAL
TECHNOLOGY
Czechoslovakia

So. East European Accessions, Vol. 6, No. 5, May 1957

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3RD AND 4TH ORDERS

Removing ferrous sulfate from copper sulfate. A. P. Skoblinov, B. P. Kosterev and N. M. Potashkina. Russ. 34,543, February 28, 1934. $FeSO_4$ is oxidized by blowing air through the soln. of $CuSO_4$ in the presence of $CuCO_3$.

CHEMICAL ELEMENTS

CHEM. MATERIALS INDEX

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SKOLDINOV, A. P.

"Organometallic Compounds in the Friedel--Krafts Reaction," Zhur. Obshch. Khim., 12, No. 15, 7-8, 1942. Mbr., Lab. Agriculture, All-Union Inst. Exptl. Med. im. A. M. Gor'kiy, Moscow, -1941-.

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Cd

10

Acetylsalicylic acid. A. P. Skoldinov, N. V. Smirnova, and D. D. Smolin. U.S.S.R. 66,328, May 31, 1946. Salicylic acid is acetylated with ketene until mixed anhydrides of acetylsalicylic and acetic acid are obtained. The mixed anhydrides are then treated in an inert solvent with an equiv. quantity of salicylic acid. M. Hoerb

CHEMICAL ELEMENTS

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Cd

1,2,3,3-Tetrachloropropene. A. F. Skoldinov and K. N. Ocekl'ko. U.S.S.R. 66,825, Aug. 31, 1946. ClCH-(CHCl$_2$)$_2$ is mixed with an aq. alk. soln. and a small quantity of Petrov emulsifier. The mixt. is heated under a reflux condenser with stirring. HCl is split off in this process and the resulting tetrachloropropene is wpd. by the usual method. M. Hosch

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10

Phenylurethans as raw materials for the preparation of sulfanilamide and its derivatives. V. A. Mikhaiev and A. P. Skoldinov. *J. Applied Chem.* (U.S.S.R.) 19, 1373-80(1946).—Addition to C.A. 42, 531*b*. The following compounds were prepd.: *p-chlorosulfonylcarbanilic acid, Me ester* m. 110°, *Et ester* m. 103–4°; *p-sulfamylcarbanilic acid, Me ester* m. 229°, *Et ester* m. 232°; *p-(p-sulfamylphenylsulfamyl)carbanilic acid, Me ester, Et ester* m. 253°; *p-(2-pyridylsulfamyl)carbanilic acid, Me ester* m. 219–20°, *Et ester* m. 210°; *p-(4-methyl-2-thiazolylsulfamyl)carbanilic acid, Me ester* m. 243°, *Et ester* m. 258°.

R. Jones

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"APPROVED FOR RELEASE: 03/14/2001 CIA-RDP86-00513R001551030002-4

CA

Vibration spectra of acetylacetone derivatives, acetoacetic ester, and the hydrogen bond. D. N. Shigorin and A. P. Skoldinov (Karpov Phys.-Chem. Inst., Moscow). *Zhur. Fiz. Khim.* **24**, 955-67(1950).—Neither AcCH(R)Ac nor AcCH(R)CO_2Et as liquid or in an inert solvent forms an intramol. H bond. The bands of the OH group of enolic isomers are characterized at 3550-3600 cm.$^{-1}$.

Paul W. Howerton

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"APPROVED FOR RELEASE: 03/14/2001 CIA-RDP86-00513R001551030002-4

SHOLTINOV, A. P.

"Investigation in the Field of Acylation of Organic Compounds." Thesis for Degree of Cand. Chemical Sci. Sub 16 Nov 49, Moscow Order of Lenin State U imeni M. V. Lomonosov.

Summary 52, 16 Dec 52, Dissertations Presented for Degrees in Science and Engineering in Moscow in 1949. From Vechernyaya Moskva, Jan-Dec 1949.

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"APPROVED FOR RELEASE: 03/14/2001 CIA-RDP86-00513R001551030002-4

SKOLDINOV, A. P.

USSR/Chemistry - Production of Ketene May 51

"Brief Communication: Large-scale Laboratory Apparatus for Production of Ketene," D. D. Smolin, F. R. Kravtsov, A. P. Skoldinov, Sci Res Lab Exptl Chemotherapy, Min Public Health USSR

"Zhur Prik Khim" Vol XXIV, No 5, pp 547-551

Describes new large-scale lab ketene generator, made entirely of metal, yielding 200-400 g/hr of ketene, depending on regime. It is based on principle of pyrolysis of acetone on open elec heating elements (spirals) placed in atm of acetone.

183T43

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"APPROVED FOR RELEASE: 03/14/2001 CIA-RDP86-00513R001551030002-4

IVANOV, A.I.; SKOLDINOV, A.P.

Preparation of 1-(p-nitrophenyl)-2-aminoethanol and some derivatives. Zhur. Priklad. Khim. 25, 438-41 '52. (MLRA 5:5)
(CA 47 no.14:6898 '53)

1. Ministry Health, Moscow.

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"APPROVED FOR RELEASE: 03/14/2001 CIA-RDP86-00513R001551030002-4

USSR/Chemistry - Oxocompounds, Catalysts 21 May 52

"Acylation of Oxocompounds in the Presence of 'Acid' Agents," A. P. Skoldinov, K. A. Kocheshkov, Corr Mem, Acad Sci USSR, All-Union Sci Res Chem-Phar Inst imeni S. Ordzhonikidze

"Dok Ak Nauk SSSR" Vol LXXXIV, No 3, pp 527-530

This work reports the feasibility of progressive acylation of oxocompds in the presence of acid agents. Acid catalysts such as $FeCl_3$, $AlCl_3$, $ZnCl_2$, $SnCl_4$, P_2O_5 could not be used, because of their violent reaction; but boron fluoride, which has a milder action and is more stable toward hydrolizing

225T8

agents, led to the desired goal. It was shown that, in the progressive acetylation of oxocompds, all stages could be reached through the aid of acid agents, particularly boron fluoride and sulfuric acid. The C-acylation of oxocompds, by means of BF_3, was achieved both immediately and by stages of the isomerization of O-acylate, thus leading to the assumption that even during the direct C-acylation process, the reaction takes place through an intermediate formation of O-acylate of enol, which is isomerized subsequently to C-acylate.

225T8

SKOLDINOV, A. P.

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"APPROVED FOR RELEASE: 03/14/2001 CIA-RDP86-00513R001551030002-4

USSR/Chemistry - Triacylnitrogen 1 Jun 52

"Preparation of Compounds of the Triacylnitrogen Type," N.V. Smirnova, A.P. Skoldinov, K.A. Kocheshkov, Corr Mem, Acad of Sci SSSR, All-Union Sci Res Chem-Phar Inst imeni S. Ordzhonikidze

"Dok Ak Nauk SSSR" Vol 84, No 4, pp 737-740

232T10

Ketene reacts with amides in the presence of an inorg acid to form N-acetyl substituted amides. Further action of ketene on the diacetyl amide leads to the formation of compd having 3 acetyl groups on one nitrogen atom.

232T10

This compd is a representative of a new class of compds of the type $N(COR)_3$ where R is an aliphatic radical. Nine compds of this series were prepd and tabulated with their phys consts.

232T10

SKOLDINOV, A. P.

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"APPROVED FOR RELEASE: 03/14/2001 CIA-RDP86-00513R001551030002-4

Skoldinov, A.P.

p-Nitro-α-acetamido-β-hydroxypropiophenone. A. P. Arendaruk, M. I. Dorokhova, V. A. Mikhaiev, O. I. Mikolaeva, A. P. Skoldinov, D. D. Smolin, and N. E. Smolina. U.S.S.R. 107,735, May 25, 1956. The title compd. is obtained by the interaction of formaldehyde with *p*-nitro-α-acetamidoacetophenone in the presence of a condensation agent such as triethylamine. M. Hoseh

p-Nitro-α-(dichloroacetylamino)acetophenone. A. P. Arendaruk, A. I. Ivanov, M. I. Dorokhova, V. A. Mikhaiev, A. P. Skoldinov, D. D. Smolin, and N. E. Smolina. U.S.S.R. 103,015, June 25, 1956. Addn. to U.S.S.R. 96,938. 1-Hydroxy-1-(*p*-nitrophenyl)-2-aminoethane is treated with Cl_2CHCO_2Me and the resulting 1-hydroxy-(*p*-nitrophenyl)-2-dichloroacetylaminoethane oxidized to *p*-nitro-α-(dichloroacetylamino)acetophenone. M. Hoseh

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SKOLDINOV, A. P.

Separation of β chlorovinyl ketones from organic solvents. V. T. Klimko, N. K. Kochetkov, V. A. Mikhaler, A. P. Skoldinov, and A. Ya. Khorlin. U.S.S.R. 103,767, Sept. 25, 1956. To solns. of chloro ketones RCOCH:CHCl in org. solvents is added a tertiary amine and the ketones are sepd. as salts of quaternary NH_4 bases. M. Hosch

Tetracyclines. A. P. Arendarik and A. P. Skoldinov. U.S.S.R. 103,906, Sept. 25, 1956. Tetracycline is prepared by catalytic dehalogenation of 7-chlorotetracycline·HCl. The reaction is carried out over Pd catalyst in the presence of NH_3 or amines. M. Hosch

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SKOLDINOV, A. P.

Reactions of some derivatives of β,β-dihalo-substituted propionaldehydes. T. V. Protopopova and A. P. Skoldinov. Zhur. Obshchei Khim. 26, 3355-60 (1956). — To 81 g. $CHBr_3$ was added at 65° in 1 hr. 13.8 g. $CH_3:CH_2CMe$ and 1.3 g. Br_2O_3 in 20 g. $CHBr_3$; after 3 hrs. at 70-5°, distn. gave 37% 1,1,3-tribromo-3-methylpropane (I), b_{10} 98-8.5°, d_{20} 2.0916, n_D^{20} 1.5385 [nonicarbonate, m. 11-6° (decompn.)]. Obtained from this ketone was $CHBr_2CH_2CH:NNHCONH_2$, which in 40% EtOH treated with Na-

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then refluxed 3 hrs., freed of EtOH, made alk. with 20% NaOH, and extd. with Et_2O gave 61% *1-phenylpyrazole*, b_6 107-8°, also formed in 63% yield from I on treatment with NaOAc in aq. EtOH as above. II and $NH_2OH.HCl$ in 60% EtOH similarly gave 76% *isoxazole*, isolated as *$CdCl_2$ salt*; I and $NH_2OH.HCl$, with NaOAc, as above, gave 55% isoxazole, also isolated as the $CdCl_2$ salt. To 2 g. I in 15 ml. EtOH was added 1.2 g. $PhNH_2$ and after refluxing 1.5 hrs. there was obtained on dilu. with H_2O 80% *malondialdehyde diaryl* [illegible] *salt*, m. 211-12°; with NaOH this gave the *free diaryl*, m. 114-15°. II gave 64% yield in a similar reaction. [illegible] with dry HCl at 0° of [illegible] g. guanidine-HCl in 25 ml. dry EtOH, followed by adding 3.4 g. I in EtOH, and passage of HCl 3 hrs. at room temp.

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aq. NaOH, and extn. with hot C_6H_6. 79% 2-aminopyrimidine, m. 135-6°. II similarly gave 71% yield.

SKOLDINOV, A. P.

3

$\sqrt{\beta}$-Acyloxyacroleins. A. P. Skoldinov and T. V. Frolopunova. U.S.S.R. 106,570, July 25, 1957. An aq. soln. of Na malondialdehyde or a suspension of its anhyd. salt in an inert solvent is treated with a carboxylic acid chloride and the reaction product is sepd. by known means. M. Hosch

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SKOLDINOV, A. P.

AUTHORS: Protopopova, T. V., and Skoldinov, A. P.

TITLE: 1,1,3,3-Tetraalkoxy Propanes (1,1,3,3-Tetraalkoksipropany)

PERIODICAL: Zhurnal Obshchey Khimii, 1957, Vol. 27, No. 1, pp. 57-62 (U.S.S.R.)

ABSTRACT: The properties of 1,1,3,3-tetraalkoxy propanes obtained during the reaction of vinyl ethers with orthoformic acid esters in the presence of a Friedel-Crafts type catalyst, are analyzed. This reaction is similar to the well-known reaction of vinyl ethers with acetals leading to the formation of alkoxy acetals or products of further addition of one or several vinyl ether molecules. The addition of the orthoformic acid ester to the vinyl ether results not only in the formation of 1,1,3,3-tetraalkoxy propane but the latter in turn can attach itself by its double bond, forming 1,1,3,5,5-pentaalkoxy pentane and products of further reaction of the latter with vinyl ether. The reaction was carried out with various molar ratios of the orthoformic acid ester and vinyl ether and the yield of the mono-additive in this case depends less upon the surplus ester used than in the case of addition of acetals. This is explained by the fact that the orthoester function during the reaction of boron trifluoride becomes ionized much easier than the acetal function. The relatively greater

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KLIMKO, V.T.; KHORLIN, A.Ya.; MIKHALEV, V.A.; SKOLDINOV, A.P.; KOCHETKOV, N.K.

β-aminovinyl ketones. Part 7: Reaction of β-chlorovinyl ketones with tertiary amines. Zhur. ob. khim. 27 no.1:62-65 Ja '57. (MIRA 10:6)

1. Institut farmakologii i khimioterapii Akademii meditsinskikh nauk SSSR.

(Vinyl compounds) (Ketones) (Amines)

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SECRET

79-2-20/58

AUTHORS: Klimko, V. T.; Mikhalev, V. A.; Skoldinov, A. P.

TITLE: Investigation of Derivatives of beta-Dicarbonyl Compounds. Part 1. Synthesis of beta-Chlorovinylketones. (Issledovaniya v oblasti proizvodnykh beta-dikarbonilnykh soyedineniy. I. Sintez beta-khlorvinylketonov)

PERIODICAL: Zhurnal Obshchey Khimii, 1957, vol 27, No 2, pp. 370-374 (U.S.S.R.)

ABSTRACT: The authors improved a method of obtaining beta-chlorovinyl ketones by the condensation of carbonyl chlorides with vinyl chloride and enlarged the field of application of this synthesis. The intermediate products of this condensation were identified as beta-beta-dichloroethyl ketones. It was established that the intermediately forming aryl-beta-beta-dichloroethylketones have a much higher stability than their aliphatic analogues. An attempt to obtain beta, beta-dichloroethylaryl ketone by the reaction of p-methoxybenzoyl chloride with vinyl chloride in the presence of anhydrous aluminum chloride was unsuccessful because the methoxyl group was also involved in the reaction. By using anhydrous aluminum chloride in nitromethane in the role of the condensation agent, it was possible to obtain a 60% yield

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79-2-20/58

Investigation of Derivatives of beta-Dicarbonyl Compounds. Part 1.

of p-methoxyphenyl-beta, beta-dichloroethyl ketone. The obtained aryl-beta, beta-dichloro ketones were quite stable in storage and slowly separated the hydrogen chloride during the boiling with aqueous bicarbonate or sodium carbonate solutions. The conversion of beta-beta-dichloroethyl ketones into homologous beta-chlorovinyl ketones was realized easily during the reaction of the former with trialkylamines (e. g., triethylamine).

There are 13 references, of which 7 are Slavic.

ASSOCIATION: USSR Academy of Medical Sciences, Institute of Pharmacology and Chemotherapy

PRESENTED BY:

SUBMITTED: January 9, 1956

AVAILABLE: Library of Congress

Card 2/2

APPROVED FOR RELEASE: 03/14/2001 CIA-RDP86-00513R001551030002-4"

"APPROVED FOR RELEASE: 03/14/2001 CIA-RDP86-00513R001551030002-4

SKOLDINOV, A. P.

Synthesis with 1,1,5,5-tetraalkoxypyrimidine. Preparation of the simplest [illegible] compounds. T. V. Protopopova and A. P. Skoldinov. Zhur. Obshchei Khim. 27, 1276-9(1957); cf. C.A. 51, 17906a.—Urea (6.1 g.), 110 ml. EtOH, and 22 g. $CH_3[CH(OEt)_2]_2$ (I) treated with 20 ml. concd. HCl and the mixt. kept overnight and concd. *in vacuo* yielded 72% 2-hydroxypyrimidine; the *HCl* salt,

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ARENDARUK, A.P.; BUDOVSKIY, E.I.; GOTTIKH, B.P.; KARPEYSKIY, M.Ya.
KUDRYASHOV, L.I.; SKOLDINOV, A.P.; SMIRNOVA, N.V.; KHORLIN, A.Ya.
KOCHETKOV, N.K.

Dihydrosarcomycin and related compounds. Part 1. Zhur.ob.khim.
27 no.5:1312-1318 My '57. (MLRA 10:8)

1.Institut farmakologii i khimioterapii Akademii meditsinskikh
nauk SSSR.

(Antibiotics)

APPROVED FOR RELEASE: 03/14/2001 CIA-RDP86-00513R001551030002-4"

"APPROVED FOR RELEASE: 03/14/2001 CIA-RDP86-00513R001551030002-4

PROTOPOPOV, T.V.; SKOLDINOV, A.P.

Production and some transformations of 1-alkoxy-1,3,3-trihalide propanes. Khim. nauka i prom. 3 no.4:536 '58. (MIRA 11:10)

1. Institut farmakologii i khimioterapii AMN SSSR.
(Propane)

APPROVED FOR RELEASE: 03/14/2001 CIA-RDP86-00513R001551030002-4"

"APPROVED FOR RELEASE: 03/14/2001 CIA-RDP86-00513R001551030002-4

SKOLDINOV, A.P.

ARENDARUK, A.P.; SKOLDINOV, A.P.

Production of tetracycline. Med.prom. 12 no.4:14-17 Ap '58. (MIRA 11:5)

1. Institut farmakologii i khimioterapii Akademii meditsinskikh nauk SSSR.
(TETRACYCLINE)

APPROVED FOR RELEASE: 03/14/2001 CIA-RDP86-00513R001551030002-4"

"APPROVED FOR RELEASE: 03/14/2001 CIA-RDP86-00513R001551030002-4

SMIRNOVA, N.V., ARMENDARUK, A.P., SMOLIN, D.D., SKOLDINOV, A.P.

Esters of N-(arylalkyl)-4-phenylisonipecotic acid. Med.prom.12 no.7 31-35 Jl '58 (MIRA 11:8)

1. Institut farmakologii i khimioterapii AMN SSSR.
(NIPECOTIC ACID)

APPROVED FOR RELEASE: 03/14/2001 CIA-RDP86-00513R001551030002-4"

"APPROVED FOR RELEASE: 03/14/2001 CIA-RDP86-00513R001551030002-4

SKOLDINOV, A. P.

79-1-51/63

AUTHORS: Protopopova, T. V., Skoldinov, A. P.

TITLE: β-Acyloxyacroleins (β-Atsiloksiakroleiny)

PERIODICAL: Zhurnal Obshchey Khimii, 1959, Vol.29, Nr 1, pp.240-243(USSR)

ABSTRACT: β-acyloxyacroleins of the general formula (AcOCH = CH-CH=O (I) had hitherto not been described. They contain a reactive system of α,β-unsaturated aldehyde and may serve as initial products for interesting syntheses. The authors obtained them by conversion of the sodium salt of malonic dialdehyde (II) with chlorine anhydrides of acids. With the use of chlorine anhydrides of acetic, propionic, n-butyric or benzoic acid the method A gave good results. It consisted of the conversion of the chlorine anhydride with a suspension consisting of the anhydrous sodium salt of malonic dialdehyde in an inert solvent. The initial salt (II) was obtained by saponification of 1,1,3,3-tetraethoxypropane in the presence of hydrochloric acid and by subsequent neutralization with caustic soda. The reactions with the chlorine anhydride of p-nitrobenzoic acid take place better according to method B, which

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79-1-51/63

β-Acyloxyacroleins

consists of the influence of chlorine anhydride upon the aqueous solution of the salt (II). The β-acyloxyacroleins which contain the residue of an aliphatic acid are liquids of a pungent specific odor which are distillable in a vacuum and which show molecular exaltation. But the compounds with an aromatic acyl residue are crystalline bodies. All β-acyloxyacroleins are soluble in the usual organic solvents with the exception of petroleum ether, insoluble in water and aqueous soda solutions, but they are easily saponified by the latter under formation of malonic dialdehyde. They show the typical reactions upon the aldehyde group and easily condense with salts of guanidine under formation of 2-aminopyrimidine. All described properties prove the structure (I) and are incompatible with the structure of acylmalonic dialdehydes AC CH $(CH = O)_2$ which might be expected when the acylation process would be accompanied by a transfer of the reaction center. (See tables 1 and 2). There are 2 tables, and 2 references, all of which are Slavic.

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79-1-51/63

β-Acyloxyacroleins

ASSOCIATION: Institute for Pharmacology and Chemicotherapy of the Academy of Medical Sciences, USSR
(Institut farmakologii i khimoterapii Akademii meditsinskikh nauk SSSR)

SUBMITTED: December 28, 1956

AVAILABLE: Library of Congress

Card 3/3

1. Chemistry 2. Anhydrides 3. Dialdehydes 4. Chemical reactions-Theory

APPROVED FOR RELEASE: 03/14/2001 CIA-RDP86-00513R001551030002-4"

"APPROVED FOR RELEASE: 03/14/2001 CIA-RDP86-00513R001551030002-4

PROTOPOPOVA, T.V.; SKOLDINOV, A.P.

Acetals of β,β-dihalogen substituted propionaldehyde. Zhur.ob.khim. 28 no.9:2428-2431 S '58. (MIRA 11:11)

1. Institut farmakologii i khimioterapii AMN SSSR.
(Propionaldehyde)

APPROVED FOR RELEASE: 03/14/2001 CIA-RDP86-00513R001551030002-4"

"APPROVED FOR RELEASE: 03/14/2001 CIA-RDP86-00513R001551030002-4

AUTHORS: Protopopova, T. V., Skoldinov, A. P. SOV/79-28-10-36/60

TITLE: ββ-Dihalogen Propionic Aldehydes (β,β-Digaloidopropionovyye al'degidy)

PERIODICAL: Zhurnal obshchey khimii, 1958, Vol 28, Nr 10, pp 2805-2808 (USSR)

ABSTRACT: These aldehydes CHX_2CH_2CHO, where X=Cl or Br (Compound I) have not hitherto been obtained in free state (Ref 1). Also the authors did not succeed in synthesizing them by the hydrolysis of the corresponding acetals $CHX_2CH_2CH(OR)_2$, where R=alkyl (III)(Ref 2). As previously reported (Ref 2) the acetals (III) are easily transformed into the corresponding 1,1,3-trihalogen-3-alkoxy propane CHX_2CH_2CHX' (OR)(IV) by the action of phosphorus pentachloride or thionyl chloride. When these reactive compounds are shaken with water homogeneous aqueous solutions of the aldehydes (I) are obtained, wherefrom the latter are separated; they can then be further distilled in the nitrogen current in a vacuum. The aldehydes (I) may be synthesized

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in the same way from the compounds (II), although in smaller yields and a longer period of time being necessary. The aldehydes CHX_2CH_2CHO(I) are liquids of a strong specific smell; they decompose already at room temperature under the formation of hydrogen halide and the formation of solid polymers; the cleavage is slowed down by hydroquinone. The analysis of the β,β-dibromopropionic aldehyde, which is less stable than the chlorine analog was, therefore, difficult to carry out. The compounds (I) show the characteristic reactions to the aldehyde group and form crystalline unstable derivatives that can only be recrystallized in the absence of acids. In the oxidation of (I)(X=Cl) with concentrated nitric acid the β,β-dichloro propionic acid was obtained. There are 3 references, 1 of which is Soviet.

ASSOCIATION: Institut farmakologii i khimioterapii Akademii meditsinskikh nauk SSSR (Institute of Pharmacology and Chemotherapy of the Academy of Medical Sciences USSR)

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"APPROVED FOR RELEASE: 03/14/2001 CIA-RDP86-00513R001551030002-4

β,β-Dihalogen Propionic Aldehydes SOV/79-28-10-3[illegible]/60

SUBMITTED: September 30, 1957

Card 3/3

APPROVED FOR RELEASE: 03/14/2001 CIA-RDP86-00513R001551030002-4"

"APPROVED FOR RELEASE: 03/14/2001 CIA-RDP86-00513R001551030002-4

MIKHALEV, V.A.; DOROKHOVA, M.I.; SMOLINA, N.Ye.; ZHELOKHOVTSEVA, A.M.; TIKHONOVA, O.Ya.; SKOLDINOV, A.P.; ARENDARUK, A.P.; SMOLIN, D.D.; GOLOVKINA, T.V.; SLONOVA, L.A.

Styrene as an initial product for synthomycetin and levomycetin production. Part 2: Synthesis of p-nitroacetophenone and p-nitro-α-bromacetophenone. Antibiotiki 4 no.4:21-24 Jl-Ag '59. (MIRA 12:11)

1. Vsesoyuznyy nauchno-issledovatel'skiy khimiko-farmatsevticheskiy institut imeni S.Ordzhonikidze (for Mikhalev, Dorokhova, Smolina, Zhelokhovtseva, Tikhonova). 2. Institut farmakologii i khimioterapii AMN SSSR (for Skoldinov, Arendaruk, Smolin, Golovkina, Slonova).

(CHLORAMPHENICOL chem)
(KETONES chem)

APPROVED FOR RELEASE: 03/14/2001 CIA-RDP86-00513R001551030002-4"

"APPROVED FOR RELEASE: 03/14/2001 CIA-RDP86-00513R001551030002-4

5.3600

77294
SOV/63-4-6-28/37

AUTHORS: Protopopova, T. V., Klimko, V. T., Skoldinov, A. P.

TITLE: Brief Communications. Substituted Malondialdehydes and Some of Their Reactions

PERIODICAL: Khimicheskaya nauka i promyshlennost', 1959, Vol 4, Nr 6, pp 805-806 (USSR)

ABSTRACT: The preparation and halogenation of 1,3-dichloro-1,3--dialkoxypropanes (II) was investigated. Di-α-chloroethers (II) are easily formed from acetals (I) and thionyl chloride or phosphorus pentachloride. II with alcohols are converted into I and by action of CH_3COOK, diacetohydroxy derivatives (III) are formed.

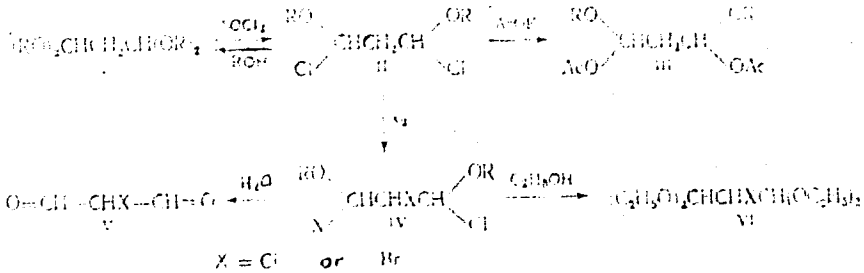
Card 1/5

APPROVED FOR RELEASE: 03/14/2001 CIA-RDP86-00513R001551030002-4"

"APPROVED FOR RELEASE: 03/14/2001 CIA-RDP86-00513R001551030002-4

Brief Communications.
Substituted Malondialdehydes and
Some of Their Reactions

SOV/63-4-6-38/37



The yields and properties of acetals of the homologs of malondialdehyde are given in Table 2.

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"APPROVED FOR RELEASE: 03/14/2001 CIA-RDP86-00513R001551030002-4

Brief Communications. Substituted Malondialdehydes and Some of Their Reactions

SOV/63-4-6-28/37

R	R'	YIELD (%)	BOILING POINT (°C)	n_D^{20}	d_4^{20}	MELTING POINT OF DIAMYL HYDROCHLORIDE (°C)
CH_3	C_2H_5	54,4	87 - 87,5/5 мм	1,4151	0,9158	223--224
CH_3	CH_3	39,8	62 - 63/5 мм	1,4090	0,9652	223 --224
C_2H_5	C_2H_5	64,0	82--84/3 мм	1,4179	0,9097	206--207*
iso-C_3H_7	C_2H_5	68,0	80 - 81,5/2 мм	1,4220	0,9107	167--171
C_6H_5	C_2H_5	43,9	125--127/1,5--2 мм	1,4715	0,9826	143 -141

* LITERATURE SOURCES: MP 206-207

Table 2. Acetals of the homologs of malondialdehyde $(RO')_2CHCHRCH(OR')_2$.

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"APPROVED FOR RELEASE: 03/14/2001 CIA-RDP86-00513R001551030002-4

Brief Communications. Substituted Malondialdehydes and Some of Their Reactions

77294
SOV/63-4-6-28/37

The complete acetals of the homologs of malondialdehyde (VII) were obtained by condensation of alkenyl ethyl ether with orthoformic ester in the presence of acid catalyst.

$$RCH=CHOC_2H_5 + HC(OC_2H_5)_3 \rightarrow$$

$$\rightarrow (C_2H_5O)_2CH(CH(R)CH(OC_2H_5)_2$$

VII

Substituted malondialdehydes (V), their derivatives (IV) and (VI), also acetal (VII) with hydroxylamine, guanidine, or with hydrazines, form 4-substituted isoxazoles (VIII), corresponding 5-substituted 2-aminopirimidines (IX), or 4-substituted pyrazoles (X).

Card 4/5

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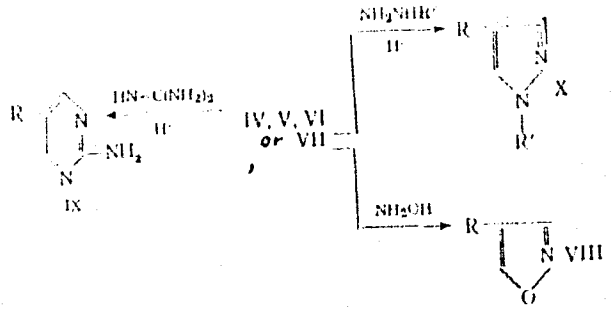
"APPROVED FOR RELEASE: 03/14/2001 CIA-RDP86-00513R001551030002-4

Brief Communications. Substituted Malondialdehydes and Some of Their Reactions

77294
SOV/65-4-6-28/37



The yields and boiling points of 4-substituted pyrazoles are given in Table 5. There are 5 tables; and 3 references, 1 Soviet, 1 Japanese, 1 U.S. The U.S. reference is: C. Swallen, E. Board, J. Am. Chem. Soc., 52, 654 (1930).

Card 5/5 Inst. Pharmacology & Chemotherapy AMS USSR

APPROVED FOR RELEASE: 03/14/2001 CIA-RDP86-00513R001551030002-4"

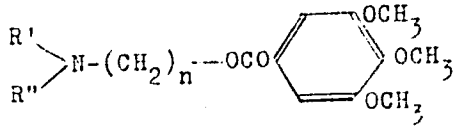
"APPROVED FOR RELEASE: 03/14/2001 CIA-RDP86-00513R001551030002-4

AUTHORS: Solov'yev, V. M., Arendaruk, A. P., Skoldinov, A. P. SOV/79-29-2-58/71

TITLE: Dialkylaminoalkyl Ester of 3,4,5-Trimethoxy Benzoic Acid (Dialkilaminoalkilovyye efiry 3,4,5-trimetoksibenzoynoy kisloty)

PERIODICAL: Zhurnal obshchey khimii, 1959, Vol 29, Nr 2, pp 631-635 (USSR)

ABSTRACT: Reserpine (I), a high-active hypotensive tranquilizing agent, is the most important alkaloid extracted from the plant Rauwolfia and is generally used in medicine. Recent reports stated that there is a great number of simpler compounds, possessing only a part of the structural elements found in reserpine but having the same activity. Thus, according to data contained in publications, compound (II) shows one third of the reserpine activity and it is assumed that the activity is caused by the similarity of the structure of (II)



(n-3, R=R'=C_2H_5) with the structure of a molecular particle of reserpine (Ref 1).

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If this assumption is right, it must be possible to synthesize relatively simply structured compounds possessing the above mentioned properties of reserpine. Therefore the authors synthesized 12 dialkylaminoalkyl esters of 3,4,5-trimethoxy benzoic acid (II) differing as to the length of the carbon chain between the atoms of oxygen and nitrogen, as well as to the substituents at the nitrogen atom (Table). All esters apart from (II)(n=3, $R=R'=C_2H_5$) were synthesized by the reaction of equimolecular quantities of chloric anhydride of 3,4,5-trimethoxy benzoic acid (Ref 2) with the corresponding amino alcohol in benzene medium. The bases, which were easily obtained in pure state, were characterized as chloro hydrates and iodine methylates. 2-(N-hexamethylene imino)-ethanol-1, which is not described in publications, was obtained, like other amino alcohols, with n = 2, by the reaction of hexamethylene with ethylene bromo hydrin. Among the compounds synthesized, only a part develops a limited activity. It was not possible to find a relation between reserpine and the structural similarity and the activity of the preparations obtained. Pharmacological

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"APPROVED FOR RELEASE: 03/14/2001 CIA-RDP86-00513R001551030002-4

Dialkylaminoalkyl Ester of 3,4,5-Trimethoxy Benzoic Acid SOV/79-29-2-58/71

investigations have yet to been undertaken. There are 1 table and 9 references, 2 of which are Soviet.

ASSOCIATION: Institut farmakologii i khimioterapii Akademii meditsinskikh nauk SSSR (Institute of Pharmacology and Chemotherapy of the Academy of Medical Sciences, USSR)

SUBMITTED: December 25, 1957

Card 3/3

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"APPROVED FOR RELEASE: 03/14/2001 CIA-RDP86-00513R001551030002-4

5 (3)

AUTHORS: Protopopova, T. V., Skoldinov, A. P. SOV/79-29-3-45/61

TITLE: β-Halogen Acroleins (β-Galoidoakroleiny)

PERIODICAL: Zhurnal obshchey khimii, 1959, Vol 29, Nr 3, pp 963-967 (USSR)

ABSTRACT: Proceeding from the synthesis of β,β-dihalogen propionaldehydes (Refs 1,2) the authors attempted in the work under review to transform these aldehydes (I) into the corresponding β-halogen acroleins CHX=CH-CH=O (II, where X = Cl or Br), which are of great importance for further syntheses (Ref 3). It was found that in treating the compounds (I) with aqueous sodium carbonate solutions the corresponding acrolein (II) is formed. β-Halogen acroleins are colorless liquids, which assume a yellow color on standing and very strongly irritate the mucous membrane of the eyes and nose. When exposed to light they decompose already at room temperature under development of hydrogen halide. They are more stable at low temperatures in the presence of traces of hydroquinone or in the solution of an inert solvent. As was expected, β-halogen acroleins form pyrazole with semicarbazide or hydrazine, 1-arylpyrazoles with arylhydrazines, isoxazole with hydroxyl amine, 2-amino pyrimidine with guanidine, etc. The reactions take place over

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intermediate stages, in which the semicarbazones and aryl hydrazones of β-halogen acroleins could be isolated. On the basis of the synthesis of pyrazole the earlier suggested succession of reactions in the synthesis of heterocyclic compounds from the derivatives of β,β-dihalogen propionaldehydes may be considered to be an established fact, in so far as the authors succeeded in separating their semicarbazones and as far as the possibility of their easy transition into the semicarbazones of the β-halogen acroleins could be shown (Refs 1,8) (Scheme). Thus, β-chloro- and β-bromo acrolein in individual state were synthesized and characterized for the first time by the separation of hydrogen halide from the β,β-dihalogen propionaldehydes. The oxidation of β-halogen acroleins with silver oxide leads to the trans-β-halogen acrylic acids. There are 13 references, 7 of which are Soviet.

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"APPROVED FOR RELEASE: 03/14/2001 CIA-RDP86-00513R001551030002-4

β-Halogen Acroleins SOV/79-29-3-45/61

ASSOCIATION: Institut farmakologii i khimioterapii Akademii meditsinskikh nauk (Institute of Pharmacology and Chemotherapy of the Academy of Medical Sciences)

SUBMITTED: January 21, 1958

Card 3/3

APPROVED FOR RELEASE: 03/14/2001 CIA-RDP86-00513R001551030002-4"

"APPROVED FOR RELEASE: 03/14/2001 CIA-RDP86-00513R001551030002-4

77875
SOV/79-30-2-26/78

5.3900

AUTHORS: Arendaruk, A. P., Skoldinov, A. P.

TITLE: Investigation in the Series of Cyclobutanedicarboxylic Acids. I. The Study of the Structure of "Thesinic" Acid

PERIODICAL: Zhurnal obshchey khimii, 1960, Vol 30, Nr 2, pp 484-488 (USSR)

ABSTRACT: In the previous paper (ZhOKh, 30, 670, abstract 77917) it was shown that the alkaloid thesin $C_{34}H_{42}O_6N_2$ which was isolated from the plant Thesium minkwitzianum is an ester of d-"isoretronecanol" and a dibasic acid $C_{10}H_{16}O_6$. "Thesinic" acid has the following composition (I):

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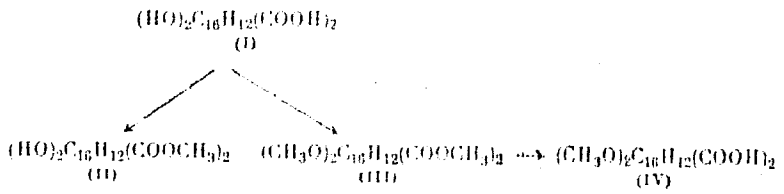
Investigation in the Series of Cyclo-butanedicarboxylic Acids. I

77875
SOV/79-30-2-26/78



Methylation of I (1 g) with dimethyl sulfate (1.2 g) in the presence of 2 moles of $NaHCO_3$ forms dimethyl thesinate (II) (0.5 g) (mp 183-184°). The above methylation (I,3 g; dimethyl sulfate, 6.5 g), in the presence of 4 moles of NaOH, forms dimethyl dimethoxythesinate (III) (2.95 g) (mp 125-126°). Hydrolysis of III (3 g) with alcoholic alkali forms IV (1.8 g) (mp 250-251°). p-Hydroxycinnamic acid after a 20-hr exposure to direct sunlight forms "thesinic" acid, in 56% yield:

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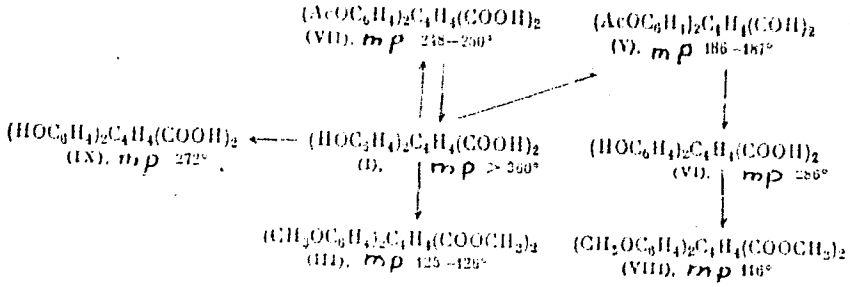
"APPROVED FOR RELEASE: 03/14/2001 CIA-RDP86-00513R001551030002-4

Investigation in the Series of Cyclo-butanedicarboxylic Acids. I

77875
SOV/79-30-2-26/78



V (0.8 g) was formed from I (1 g) on heating with acetic anhydride (5 ml) in the presence of sodium acetate (0.6 g) (mp 186-187°). Hydrolysis of V with a Na_2CO_3 solution forms VI (mp 286). Acetylation of I (0.5 g) with glacial acetic acid (5 ml) and acetic anhydride (0.5 g) without sodium acetate forms VII (0.4 g) (mp 248-250°). VI (0.3 g) with dimethyl sulfate (0.65 g), in the presence of NaOH, forms

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"APPROVED FOR RELEASE: 03/14/2001 CIA-RDP86-00513R001551030002-4

Investigation in the Series of Cyclo- 77875
butanedicarboxylic Acids. I SOV/79-30-2-26/78

VIII (0.2 g) (mp 116°). IX (0.55 g) was obtained by fusion of I (1 g) with KOH (3 g) (mp 272°). There are 5 references, 2 Soviet, 2 German, 1 U.S. The U.S. reference is: A. Mustafa, Chem. Revs., 51, 1 (1952).

ASSOCIATION: Institute of Pharmacology and Chemotherapy, Academy of Medical Sciences, USSR (Institut farmakologii i khimioterapii Akademii meditsinskikh nauk SSSR)

SUBMITTED: February 10, 1959

Card 4/4

APPROVED FOR RELEASE: 03/14/2001 CIA-RDP86-00513R001551030002-4"