"APPROVED FOR RELEASE: 06/20/2000 CIA-RDP86-00513R001031820003-3

MALINOVSKIY, K. A.

"Mat Grasses of the Subalpine Zone of the Soviet Carpathians, Their Seasonal Synamics, Methods of Improvement, and Utilization." *Cand Biol Sci, Inst of Botany, Acad Sci, Ukrainian SSR, Kiev, 1953. (RZhBiol, No 8, Dec 54)*

Survey of Scientific and Technical Dissertations Defended at USSR Higher Educational Institutions (12)
SO: Sum. No. 556, 24 Jun 55

APPROVED FOR RELEASE: 06/20/2000 CIA-RDP86-00513R001031820003-3"

"APPROVED FOR RELEASE: 06/20/2000 CIA-RDP86-00513R001031820003-3

MALINOVS'KIY, K.A.

Phenology of the basic components of beard grasses in the subalpine belt of the Carpathians and the problem of utilizing pastures in the belt. Nauk.zap.L'viv.nauk.pryrod.muz. AN URSR 3:3-20 '54.
(Carpathian mountains--Pastures and meadows) (MLRA 8:5)

APPROVED FOR RELEASE: 06/20/2000 CIA-RDP86-00513R001031820003-3"

"APPROVED FOR RELEASE: 06/20/2000 CIA-RDP86-00513R001031820003-3

MALINOVSKIY, K.A. [Malynovs'kyi, K.A.]

Characteristics of the germinating force of wild grass seeds from the Carpathian subalpine zone. Pratsi Inst. agrobiol. AN URSR 4:59-70 '54. (MIRA 11:7)

(Carpathian Mountains--Grasses) (Germination)

APPROVED FOR RELEASE: 06/20/2000 CIA-RDP86-00513R001031820003-3"

"APPROVED FOR RELEASE: 06/20/2000 CIA-RDP86-00513R001031820003-3

MALINOVSKIY, K.A.

Structure of matgrass (Nardus stricta L.) biocoenoses of the Carpathian subalpine zone. Bot.zhur.[Ukr.] 11 no.3:51-66 '54. (MLRA 8:7)

1. L'vivs'kiy naukoviy prirodoznavchiy muzey AN URSR
(Carpathian mountains--Grasses)

APPROVED FOR RELEASE: 06/20/2000 CIA-RDP86-00513R001031820003-3"

"APPROVED FOR RELEASE: 06/20/2000 CIA-RDP86-00513R001031820003-3

MALINOVSKIY, K.A.

Yield dynamics of matgrass pastures of the Carpathians and problems in their proper utilization. Bot.zhur.[Ukr.] 11 no.4:28-42 '54. (MLRA 8:7)

1. L'vivs'kiy filial AN URSR, viddil botaniki.
(Transcarpathia—Pastures and meadows) (Grasses)

APPROVED FOR RELEASE: 06/20/2000 CIA-RDP86-00513R001031820003-3"

"APPROVED FOR RELEASE: 06/20/2000 CIA-RDP86-00513R001031820003-3

MALINOVS'KIY, K.A.; MEL'NICHUK, V.M.

Plants in Berzhava mountain pastures, their feeding value, and methods for their improvement. Nauk zap.L'viv.nauk.Pryrod.muz.AN URSR 4:113-128 '55. (MIRA 9:9)

(Carpathian Mountains--Pastures and meadows)

APPROVED FOR RELEASE: 06/20/2000 CIA-RDP86-00513R001031820003-3"

"APPROVED FOR RELEASE: 06/20/2000 CIA-RDP86-00513R001031820003-3

LAZARENKO, A.S.; MEL'NICHUK, V.M. [Mel'nychuk, V.M.]; MALINOVSKIY, K.A. [Malynovs'kyi, K.A.]

Improving matgrass pastures in the Carpathian subalpine zone. Pratsi Inst. agrobiol. AN URSR 6:47-76 '55. (MIRA 11:7)
(Borzhavskiy Range--Matgrass)
(Pastures and meadows)

APPROVED FOR RELEASE: 06/20/2000 CIA-RDP86-00513R001031820003-3"

"APPROVED FOR RELEASE: 06/20/2000 CIA-RDP86-00513R001031820003-3

MALINOVSKIY, K.A. [Malynovs'kyi, K.A.]

Underground parts of matgrass associations in the Carpathian subalpine zone. Pratsi Inst. agrobiol. AN URSR 6:113-141 '55. (MIRA 11:7)
(Borzhavskiy Range--Matgrass) (Roots (Botany))

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"APPROVED FOR RELEASE: 06/20/2000 CIA-RDP86-00513R001031820003-3

MALINOVSKIY, K.A. [Malynovs'kyi, K.A.]

Amount of viable seeds in soils of matgrass stands in the Carpathian subalpine zone. Pratsi Inst. agrobiol. AN URSR 6:142-149 '55. (MIRA 11:7)

(Carpathian Mountains--Matgrass) (Seeds)

APPROVED FOR RELEASE: 06/20/2000 CIA-RDP86-00513R001031820003-3"

"APPROVED FOR RELEASE: 06/20/2000 CIA-RDP86-00513R001031820003-3

MALINOVS'KIY, K.A.; BEREZHNIY, I.V.

Materials for a study on shrubs and subshrubs in eastern Carpathian treeless lands. Nauk.zap.Pryrod.muz.L'viv.fil.AN URSR 5:81-110 '56. (MLRA 10:5)

(Carpathian Mountains--Shrubs)

APPROVED FOR RELEASE: 06/20/2000 CIA-RDP86-00513R001031820003-3"

"APPROVED FOR RELEASE: 06/20/2000 CIA-RDP86-00513R001031820003-3

LAZERENKO, A.S.; MALINOVSKIY, K.A.

Results of a station study of the Alpine vegetation of the Carpathians during 1951-1955. Ukr.bot.zhur.13 no.4:114-115 '56. (MLRA 10:1)
(Transcarpathia—Pastures and meadows)

APPROVED FOR RELEASE: 06/20/2000 CIA-RDP86-00513R001031820003-3"

"APPROVED FOR RELEASE: 06/20/2000 CIA-RDP86-00513R001031820003-3

MALINOVSKIY, K.A.

Germinating force of the seeds of Alpine plants of the Carpathians [with summary in English]. Biul.MOIP.Otd. biol. 62 no.1:51-63 Ja-F '57. (MLRA 10:6)

(CARPATHIAN MOUNTAINS--ALPINE FLORA)
(GERMINATION)

APPROVED FOR RELEASE: 06/20/2000 CIA-RDP86-00513R001031820003-3"

"APPROVED FOR RELEASE: 06/20/2000 CIA-RDP86-00513R001031820003-3

MALINOVSKIY, K.A. [Malynovs'kyi, K.A.]

Amounts of seeds in soils under herbaceous plant associations of the Chernogora Range of the Carpathian Mountains [with summary in English]. Nauk.zap.Nauk.-pryrod.muz.AN URSR 6:18-28 '58. (MIRA 12:1)

(Chernogora Range--Soils--Analysis) (Seeds)

APPROVED FOR RELEASE: 06/20/2000 CIA-RDP86-00513R001031820003-3"

"APPROVED FOR RELEASE: 06/20/2000 CIA-RDP86-00513R001031820003-3

LAZARENKO, A.S.; MALINOVSKIY, K.A. [Malynovs'kyi, K.A.]

Some results of a station study of the Alpine vegetation of the Carpathians [with summary in English]. Nauk.zap.Kauk.-pryrod.muz.AN URSR 6:87-106 '58. (MIRA 12:1)
(Carpathian Mountains--Pastures and meadows)

APPROVED FOR RELEASE: 06/20/2000 CIA-RDP86-00513R001031820003-3"

"APPROVED FOR RELEASE: 06/20/2000 CIA-RDP86-00513R001031820003-3

MALINOVSKIY, Konstantin Andreyevich [Malynovs'kyi,K.A.]; LAZARENKO, A.S., otv. red.; NERUSH, A.I., red. izd-va; LISOVETS', O.M.[Lysovets', O.M.], tekhn. red.

[Matgrass pastures in the subalpine belt of the Ukrainian Carpathians] Bilovusovi pasovyshcha subal'piis'koho poiasa Ukrains'kykh Karpat. Kyiv, Vyd-vo Akad. nauk URSR, 1959. 203 p. (MIRA 14:8)

1. Chlen-korrespondent AN USSR (for Lazarenko).
(Carpathian Mountains—Matgrass)

APPROVED FOR RELEASE: 06/20/2000 CIA-RDP86-00513R001031820003-3"

"APPROVED FOR RELEASE: 06/20/2000 CIA-RDP86-00513R001031820003-3

KOLISHCHUK, V.G. [Kolishchuk, V.H.]; MALINOVSKIY, K.A. [Malynovs'kyi, K.A.]

Materials on the characteristics of phytoclimate in alpine regions of the Ukrainian Carpathians. Nauk. zap. Nauk-pryrod. muz. AN URSR 8:3-22 '60. (MIRA 13:11)

(Carpathian Mountains—Vegetation and climate)

APPROVED FOR RELEASE: 06/20/2000 CIA-RDP86-00513R001031820003-3"

"APPROVED FOR RELEASE: 06/20/2000 CIA-RDP86-00513R001031820003-3

MALINOVSKIY, K.A. [Malynovs'kyi, K.A.]

Geobotanic characteristics of the southwestern part of the Chernogora Range. Nauk. zap. Nauk.-pryrod. muz. AN URSR 9:104-120 '61. (MIRA 15:2)
(Chernogora range--Phytogeography)

APPROVED FOR RELEASE: 06/20/2000 CIA-RDP86-00513R001031820003-3"

"APPROVED FOR RELEASE: 06/20/2000 CIA-RDP86-00513R001031820003-3

MALINOVSKIY, K.A.[Malynovs'kyi, K.A.]

Statistical estimation of the fecundity of Homogyne alpina (L.) Cass. in different plant communities. Ukr. bot. zhur. 18 no.1:49-57 '61. (MIRA 14:3)

1. L'vovskiy nauchno-prirodovedcheskiy muzey AN USSR.
(Carpathian Mountains—Homogyne) (Seed production)
(Mountain ecology)

APPROVED FOR RELEASE: 06/20/2000 CIA-RDP86-00513R001031820003-3"

"APPROVED FOR RELEASE: 06/20/2000 CIA-RDP86-00513R001031820003-3

MALINOVSKIY, K.A. [Malynovs'kyi, K.A.]

Veronica serpyllifolia L. ssp. nummularioides (Lec. et Lem.) Dost. a new subspecies in the flora of the Ukrainian S.S.R. found in the Carpathians. Ukr.bot.zhur. 19 no.1:115 '62. (MIRA 15:4)

1. L'vovskiy nauchno-prirodovedcheskiy muzey AN USSR.
(Carpathian Mountain region—Speedwell)

APPROVED FOR RELEASE: 06/20/2000 CIA-RDP86-00513R001031820003-3"

"APPROVED FOR RELEASE: 06/20/2000 CIA-RDP86-00513R001031820003-3

MALINOVSKIY, K.A. [Malynovs'kyi, K.A.]

Forgotten species in the flora of the Ukrainian part of the Carpathians. Ukr. bot. zhur. 19 no.3:74-78 '62. (MIRA 15:7)

1. L'vovskiy nauchno-prirodovedcheskiy muzey, otdel botaniki.
(Carpathian Mountains--Botany)

APPROVED FOR RELEASE: 06/20/2000 CIA-RDP86-00513R001031820003-3"

"APPROVED FOR RELEASE: 06/20/2000 CIA-RDP86-00513R001031820003-3

MALINOVSKIY, K.A. [Malynovs'kyi, K.A.]

New habitats of Delphinium intermedium Sol. and Genistella sagittalis (L.) Gams in the Carpathians. Ukr. bot. zhur. 19 no.6:100-102 '62. (MIRA 16:2)

1. Nauchno- prirodovedcheskiy muzey An UkSSR, L'vov.
(Carpathian Mountains—Larkspur) (Carpathian Mountains—Genista)

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"APPROVED FOR RELEASE: 06/20/2000 CIA-RDP86-00513R001031820003-3

MALINOVSKIY, K.A. [Malynovs'kyi, K.A.]

Moisture of soils under some herbaceous associations of the subalpine belt of the Carpathians. Nauk. zap. Nauk.-pryrod. muz. AN URSR 10:22-32 '62. (MIRA 16:8)

APPROVED FOR RELEASE: 06/20/2000 CIA-RDP86-00513R001031820003-3"

"APPROVED FOR RELEASE: 06/20/2000 CIA-RDP86-00513R001031820003-3

PASTERNAK, S.I., kand. geol.-miner. nauk, otv. red.; ZDUN, V.I., doktor biol. nauk, red.; MALINOVSKIY, K.A. [Malynovs'kyi, K.A.], kand. biol. nauk, red.; CHERKASHCHENKO, M.I., red.; TISHCHENKO, M.N.[Tyshchenko, M.N.], red.; MATYASHEVSKAYA, T.I.[Matiashevs'ka, T.I.], red.izd-va; REKES, M.A., tekhn. red.

[Ecology and taxonomy of plants of the Carpathian Mountains and adjacent regions] Ekologiia ta systematyka roslyn Karpat i prylehlykh teritorii. Kyiv, Vyd-vo AN URSR, 1963. 92 p. (MIRA 17:3)

1. Akademiya nauk URSR, Kiev. Naukovo-pryrodoznavchyi muzei, Lvov.

APPROVED FOR RELEASE: 06/20/2000 CIA-RDP86-00513R001031820003-3"

"APPROVED FOR RELEASE: 06/20/2000 CIA-RDP86-00513R001031820003-3

PASTERNAK, S.I., doktor geol.-min. nauk, otv. red.; ZDUN, V.I., doktor biol. nauk, red.; CHERKASHCHENKO, M.I., kand. biol. nauk, red.; MALINOVSKIY, K.A.[Malynovs'kyi, K.A.], kand. biol. nauk, red.; TISHCHENKO, M.N.[Tyshchenko, M.N.], red.

[Animal world of the western regions of the Ukraine] Tvarynnyi svit zakhidnykh raioniv Ukrainy. Kyiv, Vyd-vo "Naukova dumka," 1964. 82 p. (MIRA 17:4)

1. Akademiya nauk URSR, Kiev. Naukovo pryrodoznavchyi muzey, L'vov.

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"APPROVED FOR RELEASE: 06/20/2000 CIA-RDP86-00513R001031820003-3

MALINOVSKIY, K.A.[Malynovs'kyi, K.A.], kand. biol. nauk, otv. red.

[Vegetation of the Ukrainian Carpathians and the ways of its efficient use] Rslynnist' Ukrains'kikh Karpat i shliakhy ii ratsional'noho vykorystannia. Kyiv, Naukova dumka, 1964. 110 p. (MIRA 17:9)

1. Akademiya nauk Ukr.SSR, Kiev. Botanicheskiy.

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"APPROVED FOR RELEASE: 06/20/2000 CIA-RDP86-00513R001031820003-3

MALINOVSKIY, K. B

USSR /Chemical Technology. Chemical Products and Their Application I-12

Silicates. Glass. Ceramics. Binders.

Abs Jour: Referat Zhur - Khimiya, No 9, 1957, 31551

Author : Kaynarskiy I.S., Malinovskiy K.B.

Inst : Khar'kov Polytechnic Institute

Title : Study of Electrophoresis of Fine-Ceramic Slips

Orig Pub: Tr. Khar'kovsk. politekhn. in-ta, 1956, 8, 181-189

Abstract: Description of investigations involving the study of changes in velocity of electrophoretic movement of solid particles of porcelain and faience slips, depending on temperature, potential gradient and value of dzetz-potential

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USSR /Chemical Technology. Chemical Products and Their Application I-12

Silicates. Glass. Ceramics. Binders.

Abs Jour: Referat Zhur - Khimiya, No 9, 1957, 31551

(pH of slip). On the basis of these investigations practical recommendations are made concerning the use of electrophoresis in the forming of articles from fine-ceramic pastes.

Card 2/2

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"APPROVED FOR RELEASE: 06/20/2000 CIA-RDP86-00513R001031820003-3

MALINOVSKIY, K.B., kand.tekhn.nauk

Roofing asbestos slate made with marl from the Kharkov deposits. Sbor. trud. IUZHNII no.2:139-141 '59. (MIRA 13:9)

1. Yuzhnyy nauchno-issledovatel'skiy institut po stroitel'stvu.
(Roofing, Slate) (Marl)

APPROVED FOR RELEASE: 06/20/2000 CIA-RDP86-00513R001031820003-3"

"APPROVED FOR RELEASE: 06/20/2000 CIA-RDP86-00513R001031820003-3

MALINOVSKIY, K.B., kand.tekhn.nauk

Corrosion of steel reinforcements in cement mortars and concretes. Sbor.trud.IUZHNII no.3:218-225 '59. (MIRA 13:7)

(Steel, Structural--Corrosion)

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S/081/60/000/018/005/009
A006/A001

15.2130

Translation from: Referativnyy zhurnal, Khimiya, 1960, No. 18, pp. 363-364, # 74131

AUTHORS: Kaynarskiy, I. S., Malinovskiy, K. B.

TITLE: Molding of Thin Ceramic Articles by Electrophoresis

PERIODICAL: Tr. Khar'kovsk. politekhn. in-ta, 1959, Vol. 31, No. 1, pp. 59-69

TEXT: The authors studied technological problems of electrophoresis as a molding method. A special assembled installation was used to investigate the effect of the heating temperature of the dross, its concentration, pH and composition, the potential gradient of applied current voltage and current density on the intensity of deposition of the fine ceramic substance on the anode and on the quality of the accumulated body surface. Faience and porcelain dross were subjected to electrophoretic molding. The investigation showed that the electrophoretic speed of displacement of solid dross particles increases more intensively at a higher potential gradient of the applied voltage than the weight of the faience substance deposited on the anode. The rate of deposition of the substance

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A006/A001

Molding of Thin Ceramic Articles by Electrophoresis

decreases with time, in particular during the first 30 seconds. For both the faience and the porcelain dross the weight of the accumulated layer increases with a higher power supply at any temperature. A raise in the dross temperature and a higher concentration of solid particles during the supply of an equal amount of power entails a regular increase of the amount of substance deposited on the anode. Optimum conditions for obtaining high quality surfaces of articles by means of electrophoresis are: 35 - 40°C dross heating temperature; 3 - 5 v/cm gradient of the potential of voltage applied; 0.0035 - 0.0045 amp/cm^2 current density for faience dross and 0.003 - 0.006 amp/cm^2 for porcelain dross.

G. Gerashchenko

Translator's note: This is the full translation of the original Russian abstract.

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L 09206-67 EWT(m)/EWP(k)/EWP(t)/ETI IJP(c) JD
ACC NR: AP7002775 SOURCE CODE: UR/0418/66/000/002/0028/0031

MALINOVSKIY, L. A., FEDORCHENKO, V. Ye., ZARUBINSKIY, M. A., and ANDREYEV, V. V., Engineers
ORG: none

"Production of the Slurry Pump Rotors of Alloy IChKh28N2 by Investment Casting"

Kiev, Tekhnologiya i Organizatsiya Proizvodstva, No 2, 1966, pp 28-31
TOPIC TAGS: metal casting, chromium containing alloy

ABSTRACT: The "Ukr NIIuglemashobogashcheniye" institute developed and tested a technical process for making rotors of alloy IChKh28N2 by investment casting to reduce as much as possible the amount of mechanical working, to increase the fineness and accuracy of the geometric molds of rotor surfaces. This method permits accurate casting of any difficult-to-work cast alloy.

The chemical composition of alloy IChKh28N2 is as follows: C 2.7-2.9%, Si 0.8-1.1%, Mn 1.5-1.8%, Cr 28-30%, Ni 1.5-2.8%, S 0.03% and P 0.09%; Brinell hardness in the cast state was 474-502.

The microstructure of the casting consisted of fine and coarse carbides $(Cr, Fe)_7 C_3$.

By hardening at 1100° and subsequent tempering at 550-600°C the hardness

Card 1/2 UDC: 621.74.04

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L 09206-67

ACC NR: AP7002775

of the castings can be increased to 540-600 Brinell units. Thereby, the wear resistance of the alloy is increased.

The results of comparative tests of experimental specimen rotors made of the alloy IChKh28N2 and of series produced rotors made of cast iron SCh15-32 is as follows:

Alloy	Average weight kg	Average actual operating time before total	Average weight after tests, kg	Weight loss, kg	Wear for 100 hours, kg	Coefficient of relative wear resistance of the rotors
IChKh28N2	21.8	4288	15.1	6.7	0.16	-
Cast iron SCh 15-32	22.5	330	16.3	6.2	1.88	11.7

Orig. art. has: 3 figures and 3 tables. [JPRS: 37,428]

SUB CODE: 13, 11 / SUBM DATE: none

Card 2/2

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PHASE I BOOK EXPLOITATION SOV/4105

Malinovskiy, Leonid Aleksandrovich

Shtampovka zhidkogo metalla (Die Forming of Molten Metal) [Lugansk] Luganskoye obl. izd-vo, 1959. 15 p. 1,000 copies printed.

Sponsoring Agency: UkrSSR. Luganskiy ekonomicheskiy administrativnyy rayon. Byuro tekhnicheskoy informatsii.

Ed.: M. Sychev; Ed. (Bureau of Technical Information): A.F. Chevychalov; Tech. Ed.: V.Ya. Kolontay.

PURPOSE: This booklet is intended for engineers, skilled workers, and specialists in the machine industry.

COVERAGE: The author describes the recently developed process of die forming of molten metal. As the author states, this process is a special kind of casting performed with press-forming machinery. It offers a number of advantages, confirmed by the experiments of V.M. Plyatskiy. Stages of molten-metal solidification process are outlined, and the effects of certain factors on the quality

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of the product are analyzed. Types of machines used in this process and the operation of the percussion press are described. Fine-grain structure, absence of shrinkage cavities, considerable economy of metal, and low production cost characterize the process. There are no references.

TABLE OF CONTENTS:

Nature and Characteristic Features of the Process of Die Forming of Molten Metal 4

Pressure and Shaping 5

Effect of Certain Factors on the Quality of Blanks Produced 7

Manufacturing Equipment 11

Die Forming of Molten Metal on Percussion Presses 12

Conclusion 14

AVAILABLE: Library of Congress (TS239.M3)

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"APPROVED FOR RELEASE: 06/20/2000 CIA-RDP86-00513R001031820003-3

ACCESSION NR: AT4042419 S/0000/63/000/000/0043/0045

AUTHOR: Shostak, F. T.; Vittikh, M. V.; Savel'yeva, G. A.; Kozlov, G. S. Malinovskiy, L. S.

TITLE: The influence of ultrasound on the kinetics of ion exchange

SOURCE: Respublikanskoye nauchno-tekhnicheskoye soveshchaniye po ionnomu obmenu. Alma-Ata, 1962. Teoriya i praktika ionnogo obmena (Theory and practice of ion exchange); trudy* soveshchaniya. Alma-Ata, Izd-vo AN KazSSR, 1963, 43-45.

TOPIC TAGS: ion exchange, ion exchange kinetics, ultrasound, cation exchange resin, anion exchange resin, resin regeneration

ABSTRACT: An UZGI-1.5 ultrasonic generator in an auto-exciting circuit with three GU-80 tubes fed without rectifying directly from a three-phase a.c. grid was used in a study of the effects of ultrasound on ion exchange in an acid cation exchange resin (KU-21) and two alkaline anion exchange resins (EDE-10P and AN-1). The H form of the cation exchange resin and the OH form of the anion exchange resins in 1.0 and 0.1 N aqueous solutions of KOH or 1.0, 0.1 and 0.01 N aqueous solutions of hydrochloric acid, respectively were exposed to ultrasound for 3, 7, 15, 25 and 45 minutes with an intensity of 3.0 w/cm^3 at room temperature. The tests generally showed that imposition of an ultrasonic field intensifies ion exchange in the initial stage, especially in the first 3-15 min. The effect of the field

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ACCESSION NR: AT4042419

depends largely on the properties of the resin and the concentration of the solution. Regeneration of the AN-I resin by 5% Na_2CO_3 was accelerated almost 3.3 fold by ultrasound. Orig. art. has: 3 figures.

ASSOCIATION: Institut khimicheskikh nauk AN KazSSR (Institute of Chemical Sciences, AN KazSSR); Kazgipropishcheprom

SUBMITTED: 13Nov63 ENCL: 00

SUB CODE: GC NO REF SOV: 001 OTHER: 007

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APPROVED FOR RELEASE: 06/20/2000 CIA-RDP86-00513R001031820003-3"

"APPROVED FOR RELEASE: 06/20/2000 CIA-RDP86-00513R001031820003-3

RODZEVICH, Lev Viktorovich; KOSOY, Aleksandr Moiseyevich; MALINOVSKIY, L.V., retsenzent; AFANAS'YEV, V.F., red.; NIKIFOROVA, R.A., inzh., red.izd-va; GORNOSTAYPOL'SKAYA, M.S., tekhn. red.

[Metal cutting and the cutting tools]Rezanie metallov i rezhushchii instrument. Moskva, Mashgiz, 1962. 289 p. (MIRA 16:3)

(Metal cutting)

APPROVED FOR RELEASE: 06/20/2000 CIA-RDP86-00513R001031820003-3"

"APPROVED FOR RELEASE: 06/20/2000 CIA-RDP86-00513R001031820003-3

MALINOVSKIY, L. YU.

USSR/ Engineering - Dies

Card 1/1 : Pub. 128 - 14/25

Authors : Malinovskiy, L. Yu., and Shtykov, A. M.

Title : Highly efficient dies for manufacturing enamelware

Periodical : Vest. mash. 1, 67-68, Jan 1955

Abstract : A brief description is presented of the structure and operation of composite-type commercial dies, designated for manufacturing enamelware. Drawings.

Institution : .....

Submitted : .....

APPROVED FOR RELEASE: 06/20/2000 CIA-RDP86-00513R001031820003-3"

"APPROVED FOR RELEASE: 06/20/2000 CIA-RDP86-00513R001031820003-3

MALINOVSKY, Lubomir

The nerve supply of the stomach in the domestic pigeon (Columba domestica). Cesk. morf. 11 no.1:1-15 '63.

1. Institute of Anatomy, Purkyne University, Brno Director Professor MUDr. et RNDr. Karel Zlabek.
(STOMACH) (NERVOUS SYSTEM) (VAGUS NERVE)
(SYMPATHETIC NERVOUS SYSTEM)

APPROVED FOR RELEASE: 06/20/2000 CIA-RDP86-00513R001031820003-3"

"APPROVED FOR RELEASE: 06/20/2000 CIA-RDP86-00513R001031820003-3

SOV/84-58-7-24/46

AUTHOR: Malinovskiy, M., Engineer

TITLE: Agricultural Equipment for Helicopters (Sel'skokhozyaystvennaya apparatura dlya vertoletov)

PERIODICAL: Grazhdanskaya aviatsiya, 1958, Nr 7, pp 26-28 (USSR)

ABSTRACT: The article describes agricultural equipment designed for the Ka-15M and Ka-18 coaxial helicopters which are about to be put into service in the operational units of the Aeroflot. The equipment comprises a duster, a sprayer and an aerosol generator, all of which have similar, mutually interchangeable basic parts. A section of the article is dedicated to each item of equipment, and fairly close descriptions, along with some dimensional data, are given. Two photographs and three drawings accompany the text.

Card 1/1

APPROVED FOR RELEASE: 06/20/2000 CIA-RDP86-00513R001031820003-3"

"APPROVED FOR RELEASE: 06/20/2000 CIA-RDP86-00513R001031820003-3

MATIASOVSKY, K., inz., kandidat technickych vied; MALINOVSKY, M., doc. inz., kandidat technickych vied

Sodium chloride as an addition to the electrolyte for aluminum production. Hut listy 19 no.1 37-40 Ja'64.

1. Ustav anorganickej chemie, Slovenska akademia vied, Bratislava (for Matiasovsky). 2. Katedra anorganickej technologie, Slovenska vysoka skola technicka, Bratislava (for Malinovsky).

APPROVED FOR RELEASE: 06/20/2000 CIA-RDP86-00513R001031820003-3"

"APPROVED FOR RELEASE: 06/20/2000 CIA-RDP86-00513R001031820003-3

HABROVEC, F., inz.; MATIASOVSKY, K., inz. CSc.; MALINOVSKY, M., doc. inz. CSc.

Sodium chloride as an addition to the electrolyte in aluminum production; discussion. Hut listy 19 no.7:514-516 Jl'64

APPROVED FOR RELEASE: 06/20/2000 CIA-RDP86-00513R001031820003-3"

"APPROVED FOR RELEASE: 06/20/2000 CIA-RDP86-00513R001031820003-3

MATIASOVSKY, Kamil, inz., CSc.; ORDZOVENSKY, Stefan; MALINOVSKY, Milan doc., inz., CSc.

Physiochemical analysis of some systems important for aluminum production. Pt.9. Chem zvesti 17 no.12:839-847 '63.

1. Ceskoslovenska akademie ved, Ustav anorganickej chemie Slovenskej akademie vied, Bratislava, Dubravska cesta (for Matissovsky). 2. Katedra anorganickej technologie, Slovenska vysoka skola technicka, Bratislava, Kollarovo namesti 2 (for Ordzovensky and Malinovsky).

APPROVED FOR RELEASE: 06/20/2000 CIA-RDP86-00513R001031820003-3"

"APPROVED FOR RELEASE: 06/20/2000 CIA-RDP86-00513R001031820003-3

MATIASOVSKY, Kamil, inz., CSc.; JASZOVA, Anna; MALINOVSKY, Milan, doc., inz., CSc.

Density of melts of the Na_3AlF_6-AlF_3-Al_2O_3-NaCl system. Chem zvesti 17 no.12:848-851 '63.

1. Ceskoslovenska akademie ved, Ustav anorganickej chemie Slovenskej akademie vied, Bratislava, Dubravska cesta (for Matiasovsky). 2. Katedra anorganickej chemie, Prirodovedecka fakulta univerzity Komenskeho, Bratislava, Smeralova 2 (for Jaszova). 3. Katedra anorganickej technologie, Slovenska vysoka skola technicka, Bratislava, Kollarovo namesti 2 (for Malinovsky).

APPROVED FOR RELEASE: 06/20/2000 CIA-RDP86-00513R001031820003-3"

"APPROVED FOR RELEASE: 06/20/2000 CIA-RDP86-00513R001031820003-3

MATIASOVSKY, Kamil, inz. CSc.; ORDZOVENSKY, Stefan, inz.; MALINOVSKY, Milan, doc. inz. CSc.

Electric conductivity of melts of the Na_3AlF_6-AlF_3-Al_2O_3-NaCl system. Chem zv[illegible] [illegible] 2, 140-[illegible].

1. Institute of Inorganic Chemistry, Slovak Academy of Sciences, Bratislava, Dubravska cesta (for Matiasovsky).
2. Department of Inorganic Technology, Slovak Higher School of Technology, Bratislava, Kollarovo namesti 2 (for Ordzovensky and Malinovsky).

APPROVED FOR RELEASE: 06/20/2000 CIA-RDP86-00513R001031820003-3"

"APPROVED FOR RELEASE: 06/20/2000 CIA-RDP86-00513R001031820003-3

SOV /137-58-7-14219

Translation from: Referativnyy zhurnal, Metallurgiya, 1958, Nr 7, p 37 (USSR)

AUTHORS: Abramov, G.A., Malinovskiy, M.A.

TITLE: Investigation of the Ternary System Sodium Chloride-Sodium Carbonate-Sodium Fluoride (Issledovaniye troynoy sistemy khloristyy natriy-uglekislyy natriy-ftoristyy natriy)

PERIODICAL: Tr. Leningr. politekhn. in-ta, 1957, Nr 188, pp 79-89

ABSTRACT: The structural phase diagram of the system $NaCl-Na_2CO_3-NaF$ was studied repeatedly in order to find the optimal composition of the melts for baths used in heat treatment of metallic alloys and also of fluxes for welding and refining of metals. It was shown that: 1) the $NaCl-Na_2CO_3-NaF$ system is a simple eutectic system; 2) the ternary eutectic point has the following composition (in mol.percent): 40.7 NaCl, 37.6 Na_2CO_3, 21.7 NaF, the temperature of crystallization is 581°C. The bibliographical data on the diagrams of the condition of binary systems $NaCl-Na_2CO_3$, NaCl-NaF, and Na_2CO_3-NaF were verified and rendered more precise. 1. Sodium carbonate-sodium chloride-sodium fluoride systems--Phase studies N.P.

Card 1/1

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"APPROVED FOR RELEASE: 06/20/2000 CIA-RDP86-00513R001031820003-3

SOV/137-58-7-15646

Translation from: Referativnyy zhurnal, Metallurgiya, 1958, Nr 7, p 247 (USSR)

AUTHOR: Malinovskiy, M. A.

TITLE: Contribution to the Methodology of Investigations of Simple Ternary System With one Simple Eutectic (K metodike issledovaniya prostykh troynykh sistem s odnoy prostoy evtektikoy)

PERIODICAL: Tr. Leningr. politekhn. in-ta, 1957, Nr 188, pp 90-92

ABSTRACT: It s indicated that the method proposed earlier by Petrov (Zh. fiz. khimii, 1940, Vol 14, p 1498) for the construction of monovariant eutectic curves intersecting in the nonvariant point of a ternary eutectic do not afford a means for the construction of the surface of the liquidus (i. e., the isotherms thereon) of the ternary system even if the phase diagrams of the side systems are known. A method is proposed for the preliminary ("orientational") construction of a simple ternary eutectic system, inclusive of the isotherms on the surface, utilizing three nonisothermal sections passing either through the apex of the triangle or parallel to its sides, provided that the phase diagrams of the side systems are known.

Card 1/1 1. Alloys--Structural analysis T.M.

APPROVED FOR RELEASE: 06/20/2000 CIA-RDP86-00513R001031820003-3"

"APPROVED FOR RELEASE: 06/20/2000 CIA-RDP86-00513R001031820003-3

MALINOVSKIY, M.B., inzh.

KA-15 helicopters in agriculture. Zashch.rast.ot vred.i bol. 5 no.7:15-16 Jl '60. (MIRA 16:1)
(Spraying and dusting in agriculture)
(Aeronautics in agriculture)

APPROVED FOR RELEASE: 06/20/2000 CIA-RDP86-00513R001031820003-3"

"APPROVED FOR RELEASE: 06/20/2000 CIA-RDP86-00513R001031820003-3

MALINOVSKIY, M. S.

USSR/Medicine - Gynecology
Medicine - Hormones, Sex

Mar/Apr 1948

"Preparations of Female Sex Hormones and Their Use in Gynecology," A. P. Preobrazhenskiy, Inst of Obstetrics and Gynecol, Acad Med Sci USSR, 8 pp

"Akusher i Ginekol" No 2

Describes the preparation of estrogenic substances. Discusses the principles governing the use of sex hormones in gynecology, especially in such diseases as hypogenitalism, hypofunction of the ovaries. dysmenorrhea, hemorrhagic metropathy, in climacteric and castration, and for purposes of increasing lactation. Dir lf Inst of Obstetrics and Gynecol: Prof M. S. Malinovskiy, Active Mem, Acad Sci USSR.

PA 65T63

APPROVED FOR RELEASE: 06/20/2000 CIA-RDP86-00513R001031820003-3"

"APPROVED FOR RELEASE: 06/20/2000 CIA-RDP86-00513R001031820003-3

BYKOVA, M.P.; LEONT'YEV, F.L., nachal'nik; MALINOVSKIY, M.S., professor, deystvitel'nyy chlen Akademii meditsinskikh nauk SSSR, zavedmyushchiy kafedroy.

So-called physiological weight loss in newborn put on breast feeding 20-30 minutes after birth. Vop.pediat. 21 no.4:54-56 Jl-Ag '53. (MLRA 6:10)

1. Akusherako-ginekologicheskoye otdeleniye TSentral'noy klinicheskoy bol'nitsy im. N.A.Semashko (for Leont'yev). 2. Kafedra TsIU (for Malinovskiy).
(Infants—Nutrition) (Body weight)

APPROVED FOR RELEASE: 06/20/2000 CIA-RDP86-00513R001031820003-3"

"APPROVED FOR RELEASE: 06/20/2000 CIA-RDP86-00513R001031820003-3

MALINOVSKIY, Mikhail Sergeyevich, professor; BARTEL'S,A.V., redaktor; POPRYADUKHIN,K.A., tekhnicheskiy redaktor

[Surgical obstetrics; manual for students and physicians] Operativnoe akusherstvo; rukovodstvo dlia studentov i vrachei. Moskva, Gos.izd-vo meditsinskoi lit-ry, 1955. 454 p. (MLRA 9:2)
(OBSTETRICS--SURGERY)

APPROVED FOR RELEASE: 06/20/2000 CIA-RDP86-00513R001031820003-3"

"APPROVED FOR RELEASE: 06/20/2000 CIA-RDP86-00513R001031820003-3

MALINOVSKIY, M.S., professor

Contrary to nature. Zdorov'e 2 no.4:13-14 Ap '56. (MLRA 9:7)

1. Deystvitel'nyy chlen Akademii meditsinskikh nauk SSSR.
(ABORTION)

APPROVED FOR RELEASE: 06/20/2000 CIA-RDP86-00513R001031820003-3"

"APPROVED FOR RELEASE: 06/20/2000 CIA-RDP86-00513R001031820003-3

MALINOVSKIY, M.S., professor

"Hormone diagnosis and therapy in obstetrics and gynecology." by E.I.Kvater. Reviewed by M.S.Malinovskii. Sov.med. 20 no. 11:93-94 N '56. (MLRA 10:1)

1. Deystvitel'nyy chlen Akademii meditsinskikh nauk SSSR.
(HORMONES) (GYNECOLOGY) (OBSTETRICS)

APPROVED FOR RELEASE: 06/20/2000 CIA-RDP86-00513R001031820003-3"

"APPROVED FOR RELEASE: 06/20/2000 CIA-RDP86-00513R001031820003-3

BRAUDE, Isak Leont'yevich; MALINOVSKIY, Mikhail Sergeyevich; SEREBROV, Aleksandr Ivanovich; PORAY-KOSHITS, K.V., redaktor; MAFAL'KES, S.B., redaktor; LYUDKOVSKAYA, N.I., tekhnicheskiy redaktor

[Nonoperative gynecology; a manual for physicians] Neoperativnaia ginekologiia; rukovodstvo dlia vrachei. Moskva, Gos. izd-vo med. lit-ry, 1957. 591 p. (MLRA 10:4)
(GYNECOLOGY)

APPROVED FOR RELEASE: 06/20/2000 CIA-RDP86-00513R001031820003-3"

"APPROVED FOR RELEASE: 06/20/2000 CIA-RDP86-00513R001031820003-3

VEL'VOVSKIY, Il'ya Zakharovich; MALINOVSKIY, M.S., prof., red.; KAPLAN, A.L., red.; LYUDKOVSKAYA, N.I., tekhn. red.

[System of suggestive preventive anesthesia in labor] Sistema psikhoprofilakticheskogo obezbolivaniia rodov. Pod red. M.S. Malinovskogo. Moskva, Medgiz, 1963. 307 p. (MIRA 16:7)

1. Deystvitel'nyy chlen AMN SSSR (for Malinovskiy).
(OBSTETRICS) (MENTAL SUGGESTION)

APPROVED FOR RELEASE: 06/20/2000 CIA-RDP86-00513R001031820003-3"

"APPROVED FOR RELEASE: 06/20/2000 CIA-RDP86-00513R001031820003-3

ACC NR: AP6031298 SOURCE CODE: UR/0366/66/002/009/1553/1557

AUTHOR: Malinovskiy, M. S.; Khmel', M. P.; Maslyuk, A. F.

ORG: Dnepropetrovsk State University (Dnepropetrovskiy gosudarstvennyy universitet)

TITLE: Unsaturated α-epoxides with a triple bond in the β-position with respect to the oxide ring

SOURCE: Zhurnal organicheskoy khimii, v. 2, no. 9, 1966, 1553-1557

TOPIC TAGS: acetylenic oxide, acetylenic halohydride, amino alcohol, epoxide, acetylene compound, condensation reaction, dimethylamine

ABSTRACT: The previously unreported acetylenic halohydrines (Ia—Ic) were obtained in 65—85% yield from 3-ethyl-3-penten-1-yne, 3-propyl-3-hexen-1-yne, and 3-butyl-3-hepten-1-yne via the corresponding Iotsich reagents. Treatment of Ia—Ic with KOH in ether yielded the previously unreported epoxides IIa—IIc. Condensation of IIa—IIc with dimethylamine and diethylamine yielded the previously unreported amino alcohols IIIa—IIIc and IVa—IVc:

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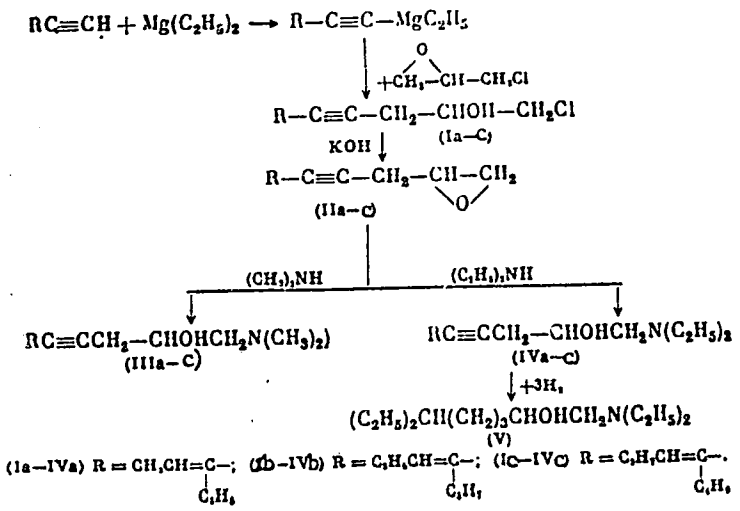
ACC NR: AP6031298



Composition and properties of the new compounds are given in Tables 1, 2, and 3. [WA-50; CBE No. 12]

Card 2/4

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"APPROVED FOR RELEASE: 06/20/2000 CIA-RDP86-00513R001031820003-3

ACC NR: AP6031298

Table 1.

Nd.	Yield (in %)	bp (p in mm)	d_4^{20}	n_D^{20}	MR_D Found	MR_D Cal'd	M Found	M Cal'd	Found % C	Found % H	Found % Cl	Formula	Calculated % C	Calculated % H	Calculated % Cl
Ia	86	85–86° (1.5)	1.0192	1.4970	53.50	52.20	173	184.5	64.33	7.84	18.67	$C_{10}H_{15}ClO$	64.34	8.03	19.03
Ib	73	103–105 (2)	0.8931	1.4920	63.27	61.50	216	214.5	67.16	8.61	16.23	$C_{13}H_{19}ClO$	67.13	8.85	16.53
Ic	64	119–120 (1.5)	0.9055	1.4985	72.0	71.28	230	242.5	69.98	9.27	14.38	$C_{14}H_{21}ClO$	69.28	9.48	14.61

Table 2.

No.	Yield (in %)	bp (p in mm)	d_4^{20}	n_D^{20}	MR_D Found	MR_D Cal'd	M Found	M Cal'd	Found % C	Found % H	Found % Cl	Formula	Calculated % C	Calculated % H	Calculated % Cl
II a	82	70–71° (2)	0.9202	1.4820	48.6	45.01	148	150	80.18	9.64	10.43	$C_{10}H_{15}O$	80.00	9.33	10.64
II b	81	95–97 (3.5)	0.8977	1.4785	56.8	55.8	157	178	80.57	10.39	8.62	$C_{13}H_{19}O$	80.83	10.11	8.85
II c	73	91–96 (2)	0.8810	1.4770	65.2	64.2	208	200	82.20	10.21	7.41	$C_{14}H_{21}O$	82.03	10.67	7.76

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"APPROVED FOR RELEASE: 06/20/2000 CIA-RDP86-00513R001031820003-3

ACC NR: AP6031298

Table 3.

No.	Yield (in %)	bp (p in mm)	d_4^{20}	n_D^{20}	MR_D Found	MR_D Calc'd	M Found	M Calc'd	Found % N	Formula	Calc'd % N
IIIa	88	91—92° (2)	0.9108	1.4660	61.60	60.50	198	195	7.29	$C_{15}H_{21}NO$	7.18
IIIb	80	104—105 (2)	0.8889	1.4810	71.60	69.86	212	223	6.35	$C_{14}H_{25}NO$	6.27
IIIc	82	116—117 (2)	0.8897	1.4825	80.46	79.60	261	251	5.60	$C_{18}H_{29}NO$	5.57
IVa	85	100—101 (2)	0.9007	1.4835	70.70	69.70	211	223	6.50	$C_{14}H_{23}NO$	6.28
IVb	50	116—117 (1.5)	0.8840	1.480	80.50	79.01	246	251	5.87	$C_{18}H_{29}NO$	5.57
IVc	85	129—132 (2)	0.8846	1.4820	89.78	88.37	272	279	4.83	$C_{18}H_{33}NO$	5.01
V	00	104—105 (2)	0.8566	1.4520	72.12	72.31	234	229	6.13	$C_{16}H_{21}NO$	6.11

SUB CODE: 07/ SUBM DATE: 30Jan65/ ORIG REF: 003/ OTH REF: 004/

Card 4/4

APPROVED FOR RELEASE: 06/20/2000 CIA-RDP86-00513R001031820003-3"

"APPROVED FOR RELEASE: 06/20/2000 CIA-RDP86-00513R001031820003-3

MALINOVSKIY, M.S.; SOLOMKO, Z.F.; BRAYCHENKO, V.T.

Sulfonanilides. Part 13: Methyl ethers of N-aryl sulfonyl N-phenylglycine. Ukr. khim. zhur. 29 no.10:1062-1064 '63. (MIRA 17:1)

1. Dnepropetrovskiy gosudarstvennyy universitet.

APPROVED FOR RELEASE: 06/20/2000 CIA-RDP86-00513R001031820003-3"

"APPROVED FOR RELEASE: 06/20/2000 CIA-RDP86-00513R001031820003-3

PRIB, O.A.; MALINOVSKIY, M.S.

Unsaturated esters of aromatic sulfonic acids. Ukr.khim.zhur. 30 no.2:198-200 '64. (MIRA 17:4)

1. L'vovskiy gosudarstvennyy universitet.

APPROVED FOR RELEASE: 06/20/2000 CIA-RDP86-00513R001031820003-3"

"APPROVED FOR RELEASE: 06/20/2000 CIA-RDP86-00513R001031820003-3

L 44175-66 EWT(m)/EWP(j) IJP(c) RM

ACC NR: AP6011230 (A) SOURCE CODE: UR/0413/66/000/006/0073/0073 34 B

INVENTOR: Boguslavskiy, D. B.; Borodushkina, Kh. N.; Kupriyanova, O. N.; Malinovskiy, M. S.; Sapronov, V. A.; Chavchich, T. A.

ORG: none

TITLE: Method of vulcanizing synthetic rubbers by alkylphenolformaldehyde resins. Class 39, No. 179915

SOURCE: Izobreteniya, promyshlennyye obraztsy, tovarnyye znaki, no. 6, 1966, 73

TOPIC TAGS: vulcanization, synthetic rubber, phenolformaldehyde, benzene, resin

ABSTRACT: An Author Certificate has been issued for a method of vulcanizing synthetic rubbers by alkylphenolformaldehyde resins in the presence of haloid-containing compounds. To speed up the vulcanization process, α,β-dibromethyl benzene is used as the haloid-containing compound. [Translation] [NT]

SUB CODE: 11,13/SUBM DATE: 30Jan65/

Card 1/1 UDC: 678.7.028.294.044:547.539

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"APPROVED FOR RELEASE: 06/20/2000 CIA-RDP86-00513R001031820003-3

PROCESSES AND PROPERTIES INDEX

10

Color reactions of phenols with nitrous acid. M. B. Malmanchi. J. Gen. Chem. (U. S. S. R.) 8, 1207-8 (1938).—A discovery that phenols on the addn. of highly dild. HNO_2 give nearly identical color reactions from brown to yellow without the formation of a blue tint, observed by Castiglioni (*C. A.* 27, 2678) and other investigators, led to a study of the influence of the following factors on the coloring of phenols by HNO_2: the degree of HNO_2 dilu., the position of the OH groups in phenols, and the presence of other than OH groups in phenols. The procedure consisted of adding 2-3 drops of strong H_2SO_4 and 2-3 drops of 1% phenol in H_2O to 2 cc. of a nitrite soln. Trihydric phenols gave coloring of the highest intensity. PhOH, cresol, carvacrol, *o*- and *p*-$HOC_6H_4NO_2$, phenetole and anisole gave no color reaction even with 10% HNO_2. A closer position of the OH groups to each other in a mol. increases the color sensitiveness of phenols: pyrocatechol is colored by 0.004% HNO_2, while hydroquinone begins to give color with 0.02% HNO_2. Pyrogallol (1%) gives color reaction with 0.001% HNO_2, while phloroglucinol and hydroxyhydroquinone give no color at this concn. of HNO_2. Di- and tri-hydric phenols with the 1 OH acetylated give no color reactions. Free HNO_3, nitrates, $HClO_3$, $HClO_4$ and other oxidants give no similar reactions with phenols. Chas. Blanc

ASM-SLA METALLURGICAL LITERATURE CLASSIFICATION

APPROVED FOR RELEASE: 06/20/2000 CIA-RDP86-00513R001031820003-3"

"APPROVED FOR RELEASE: 06/20/2000 CIA-RDP86-00513R001031820003-3

BC

cl-3

Decomposition of aromatic arsines in the Friedel and Crafts reaction. M. S. MALINOVSKII (J. Gen. Chem. Russ., 1936, 6, 1355—1358).—Aromatic arsines yield $AsCl_3$ and COPhMe or its derivatives when treated with AcCl or CH_3Cl-COCl in presence of $AlCl_3$. The reaction is useful in the identification and elucidation of the structure of arsines. R. T.

ASM-SLA METALLURGICAL LITERATURE CLASSIFICATION

APPROVED FOR RELEASE: 06/20/2000 CIA-RDP86-00513R001031820003-3"

"APPROVED FOR RELEASE: 06/20/2000 CIA-RDP86-00513R001031820003-3

MALINOVSKY, M.S.

BC (4,11,11)

A-3

(A) *Action of magnesium tert.-butyl chloride and magnesium butyl bromide on ethyl isovalerate and butyrate.* A. D. PETROV and M. S. MALINOVSKY. (B) *Action of magnesium sec.-propyl chloride, sec.-butyl bromide, and sec.-amyl chloride on ethyl octoate.* A. D. PETROV and D. N. ANDREEV (J. Gen. Chem. Russ., 1937, 7, 565—569, 570—575).—(A) $MgBu^tCl$ yields $COBu^iBu^t$ and $COBu^i_2$ with Bu^iCO_2Et (I) in Et_2O, and $COPr^iBu^t$ and $COPr^i_2$ with Pr^iCO_2Et (II). $MgBu^iBr$ (III) gives *di-n-butylmethylcarbinol*, b.p. 140—145°/10 mm., with (I), and $CPr^iBu^i_2OH$ with (II). It is concluded that anomalous formation of ketones in place of the expected *tert.*-alcohols is associated with presence of Bu^t in the Grignard reagent.

(B) $n\text{-}C_7H_{15}CO_2Et$ (IV) and (III) in Et_2O yield *di-n-butyl-n-heptylcarbinol*, b.p. 131—135°/5 mm., which gave a mixture of *n-n-butyl-Δ*- and -Δ*-*dodecene*, b.p. 261—267°, when dehydrated by heating with $H_2C_2O_4$ or K xanthate. (IV) yields chiefly $CO(C_7H_{15})_2$ (V), together with *sec.*-amyl heptyl ketone, with *sec.*-$C_5H_{11}\cdot MgCl$, (V) and *sec.*-butyl heptyl ketone with $MgBu^iBr$, and (V) and Pr^i heptyl ketone with $MgPr^iCl$.

R. T.

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1ST AND 2ND ORDERS

PROCESSES AND PROPERTIES INDEX

10

Chlorination of ammonium phenyldithiocarbamate. M. G. Malinovskii. *Sci. Records Gorky State Univ.* 7, 29-34 (1939).—The prepn. of PhN:CCl_2 by direct chlorination of NH_4 phenyldithiocarbamate, $PhNHCS_2NH_4$ (I), was investigated. The chlorination of an aq. soln. of I by passing in Cl to the appearance of a light grayish coloration, with const. cooling of the mixt. and avoiding an excess of Cl, was carried out first. The reaction mixt. was steam-distd. or extd. with ether, yielding *Ph isothiocyanate*, PhN:C:S, $PhNH_2.HCl$ and NH_4Cl. PhN:C:S upon standing or heating with $PhNH_2$ yielded *thiocarbanilide*, $(PhNH)_2CS$. If the reaction was carried out with excess of Cl or without cooling, gum formation occurred and no $PhNH_2$ was present in the products. The chlorination of I in $CHCl_3$ was carried out by gradual introduction of I powder (insol. in $CHCl_3$) into $CHCl_3$ while passing in Cl with const. shaking and cooling of the reaction mixt. After distg. off the $CHCl_3$, the residue was (*a*) fractionated at atm. pressure, (*b*) steam-distd. or (*c*) fractionated *in vacuo*, yielding a small amt. of PhN:CCl_2. Since the yield was very small the synthesis of PhN:CCl_2 by this method is not practical. The presence of $ClC_6H_4N:CCl_2$, $ClC_6H_4N:C:S$ and $ClC_6H_4NH_2$ was observed in the fractions b. above 215° at atm. pressure. A. A. Podgorny

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1ST AND 2ND CODES

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3RD AND 4TH CODES

Ca

Decomposition of arsines. M. S. Malinovskii. *Sci. Records Gorky State Univ.* 7, 34-47(1939); cf. *C. A.* 30, 2362.—The decompn. of various types of aromatic arsines and the possibility of decompg. heterocyclic arsines were investigated. The decompn. was effected with AcCl or $ClCH_2COCl$ in the presence of $AlCl_3$, with cooling of the reaction mixt. After addn. of all the AcCl or $ClCH_2COCl$, the mixt. was heated on a water bath for several hrs. and decompd. with ice-cold water. Below are the arsines used and their decompn. products in the presence of AcCl and $ClCH_2COCl$ resp.: *phenyldichloroarsine*, $PhAsCl_2$, yielding PhCOMe (50%) and $PhCOCH_2Cl$ (55%); *p-nitrophenyldichloroarsine*, yielding *p*-$O_2NC_6H_4COMe$ (65%) and *p*-$O_2NC_6H_4COCH_2Cl$ (60%); *p-chlorophenyldichloroarsine*, yielding *p*-ClC_6H_4COMe; *diphenylchloroarsine*, yielding PhCOMe (63%) and $PhCOCH_2Cl$; *diphenylcyanoarsine*, yielding PhCOMe (25%) and also $MeCOCO_2H$ (small amt.); *dichlorophenylarsine dichloride*, $PhAsCl_4$, yielding $PhCOCH_2Cl$ (35%) (in this case $PhAsCl_4$ probably reacted with AcCl forming first $PhAsCl_2$ and Cl_2, and the latter chlorinated the AcCl to form $ClCH_2COCl$, which, in turn, reacted with $PhAsCl_2$); *benzenearsonic acid*, yielding, after repeated decompn. in sealed tubes in the presence of AcCl, $AlCl_3$ and CS_2 in a water bath, As_2O_3, PhCl and some unchanged $PhAsO(OH)_2$; and *triphenylarsine*, Ph_3As, yielding PhCOMe, Ph_2AsCl, $PhAsCl_2$ (very small amt.) and some unchanged Ph_3As; in this case probably the decompn. proceeded by steps first forming PhCOMe and Ph_2AsCl, and the latter then decompg. to yield PhCOMe and $PhAsCl_2$. The attempt to decompose *chlorodihydrophenarsazine* by heating it in CS_2 with $AlCl_3$ and AcCl gave no pos. results. Conclusions: the aromatic arsines under the action of AcCl or $ClCH_2COCl$ in the presence of $AlCl_3$ formed PhCOMe or $PhCOCH_2Cl$ and $AsCl_3$. Since Ac or $COCH_2Cl$ groups always replace As in the ring, such a decompn. can be used for the identification of unknown substituted aromatic arsines. $PhAsO(OH)_2$ and chlorodihydrophenarsazine were exceptions, being practically unaffected by heating with AcCl and $AlCl_3$ in CS_2. 31 references. A. A. Potgorny

COMMON ELEMENTS

OPEN

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1ST AND 2ND ORDERS

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Ca

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Reaction of olefin oxides and sulfur monochloride. M. S. Malinovskii. *J. Gen. Chem.* (U. S. S. R.) 9, 832-9 (1939).—Ethylene oxide (I) and S_2Cl_2 react with the formation of $ClCH_2CH_2Cl$, $MeCHCl_2$, CH_2ClCHO, $HOCH_2CH_2Cl$, and 63.9% $(CH_2ClCH_2O)_2SO$ (based on I); propylene oxide (II) and S_2Cl_2 with the formation of $MeCH(OH)CH_2ClCH_2Cl$, $MeCHClCHO$ and 41.3% $(CH_3CHClCH_2O)_2SO$ (based on II); and epichlorohydrin and S_2Cl_2 with the formation of 33% $(CH_2Cl)_2CO$ and 67% $(CH_2Cl)_2CHOH$.

Gertrude Berend

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1ST AND 2ND ORDERS

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BC

Action of ethylene oxide on halides of arsenic. II. M. S. Malinovski (*J. Gen. Chem. Russ.*, 1940, 10, 1918—1922).—$AsCl_3$ saturated at room temp. with $(CH_2)_2O$ yields *tri-(β-chloroethyl) arsenite*, b.p. 190—195°/8 mm., with *di-(β-chloroethoxy)arsine chloride*, b.p. 160—175°/10 mm., and *β-chloroethoxyarsine dichloride*, b.p. 124—135°/10 mm. Epichlorohydrin (I) and $AsCl_3$ (10 days at room temp.) afford *tri-(β-chloro-α-chloromethylethyl) arsenite*, b.p. 188—193°/10 mm., and *β-chloro-α-chloromethylethoxyarsine dichloride*, b.p. 105—120°/10 mm. Propylene oxide (II) and $AsCl_3$ (10 days at room temp.) yield *di-(β-chloropropoxy)arsine chloride*, b.p. 185—190°/5 mm. $AsPhCl_2$ and $(CH_2)_2O$ (10 days at room temp.) afford *phenyldi-(β-chloroethoxy)arsine*, b.p. 190—195°/5 mm. $AsPhCl_2$ and (I) or (II) (10 days at room temp.) yield *phenyl-β-chloro-α-chloromethylethoxyarsine chloride*, b.p. 118—122°/5 mm., or *phenyl-β-chloropropoxyarsine chloride*, b.p. 190—195°/10 mm. R. T.

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3RD AND 4TH ORDERS

10

Oa

The formation of an oxonium compound between di oxane and arsenic trichloride. M. N. Malinovskii. J. Gen. Chem. (U. S. S. R.) 10, 1203(1940).—When di oxane in abs. H_2O is treated with $AsCl_3$ a cryst. ppt. of the *oxonium salt*, m. 60-8°, appears. The compd. de- comps. slowly in air and rapidly in H_2O. The reaction is suitable for a lecture demonstration. Compds. of the type R_2AsCl and $RAsCl_2$ do not react with dioxane.

H. M. Leicester

COMMON ELEMENTS

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1ST AND 2ND ORDERS

3RD AND 4TH ORDERS

PROCESSES AND PROPERTIES INDEX

Ca

10

Reaction of olefin oxides and arsine halides. II. M. S. Malinovskii. *J. Gen. Chem.* (U. S. S. R.) **10**, 1918-22 (1940); cf. *C. A.* **34**, 375⁸.—The reaction of olefin oxides with arsine halides has been investigated with a view to det. whether or not there exists a certain regularity in the opening of the O ring. Ethylene oxide (I) is introduced into 30 g. $AsCl_3$ (II) while shaking until 23 g. I are absorbed, whereupon the mixt. is kept for 15 days. Fractional distn yields $(ClCH_2CH_2O)_3As$, odorless sirup, b_6 100-5°, d_4^{15} 1.61, decompd. by H_2O and alc. with the formation of As_2O_3; $(ClCH_2CH_2O)_2AsCl$, colorless liquid with slight pungent odor, b_{10} 168-75°, d_4^{15} 1.82, decompd. by H_2O, $ClCH_2CH_2OAsCl_2$, colorless liquid with pungent odor resembling that of II, b_{10} 125-35°, d_4^{15} 2.05, decompd. by H_2O and alc. The structure of the above compds. is proved by the reaction with PCl, whereby all yield $ClCH_2CH_2Cl$. $O.CH_2.CHCH_2Cl$ (III) (32.6 g.) and 21.1 g. II give after 10 days on distn. under 11 mm., $[(CH_2Cl)_2CHO]_3As$, odorless viscous liquid, b_{10} 88-93°, d_4^{15} 2.145, which yields $ClCH_2CHClCH_2Cl$ on treatment with PCl_5 and $ClCH_2COCH_2Cl$ with H_2O followed by oxidation; $(CH_2Cl)_2CHOAsCl_2$, b_{10} 105-20°. $MeCH.CH_2.O$ (IV) (22 g.) and 20 g. II after 10 days give on distn. *in vacuo* $(MeCHClCH_2O)_2AsCl$, liquid with slightly pungent odor, b_5 185-90°, d_4^{15} 1.47, decompd. by PCl_5 to $MeCHClCH_2Cl$, by H_2O followed by oxidation to As_2O_3, $MeCHClCH_2OH$ and $MeCHClCO_2H$. $PhAsCl_2$ (28.5 g.) is satd. with I (13 g.), kept for 10 days and distd. *in vacuo* to give $(ClCH_2CH_2O)_2AsPh$ (yield 85.6% of the theory), odorless sirup, b_5 190-3°, d_4^{15} 1.42, miscible with org. solvents, decompd. by H_2O to PhAsO and $ClCH_2CH_2OH$, by PCl_5 to $(ClCH_2)_2$ and $PhAsCl_2$ (V). V (20 g.) and 17 g. III after 10 days give $(CH_2Cl)_2CHOAsPhCl$, viscous liquid with pungent odor, b_5 218-20°, decompd. by heating under atm. pressure, by H_2O followed by oxidation to $(ClCH_2)_2CO$. V (14 g.) and 8 g. IV give 16 g. $MeCHClCH_2OAsPhCl$, viscous, almost odorless liquid, b_{10} 180-5°, d_4^{15} 1.89, decompd. by PCl, to $MeCHClCH_2Cl$ and V. Ph_2AsCl does not react with either I, III or IV. G. B

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PROCESSES AND PROPERTIES INDEX

10

ca

Synthesis of aliphatic aromatic ketones by the Friedel-Crafts reaction with the aid of acids. M. S. Malinovskii and A. A. Lyapina. *J. Gen. Chem.* (U. S. S. R.) 11, 165-9 (1941).—Butyric acid (8.8 g.) is added dropwise to 25 g. $AlCl_3$ and 150 ml. C_6H_6, the mixt. warmed on the water bath and decompd. with ice. *PrCOPh* is obtained in 39.7% yield. Iso-$BuCO_2H$ yields *iso-BuCOPh* (37% of the theory) and $EtCO_2H$ yields *EtCOPh* (40%) on an analogous treatment. Benzoic, phthalic and oxalic acid when heated with $AlCl_3$ and C_6H_6 do not yield ketones but are recovered unchanged. Gertrude Berend

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CA

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Action of sulfuryl chloride on α-oxides of olefins. M. S. Malinovskii (Gor'kii State Univ.). *J. Gen. Chem.* (U.S.S.R.) 17, 1850-63(1947)(in Russian).—SO_2Cl_2 reacts with olefin oxides with the formation of chloroalkyl esters of $ClSO_3H$; formation of bis(chloroalkyl) esters of H_2SO_4 does not take place. The products are quite unstable and tend to decomp. even on distn. *in vacuo*; all are *lacrimatory*. Ethylene oxide (7 g.), passed into 10 g. SO_2Cl_2 (exothermic) and the mixt. washed with ice-water, after 0.5 hr. standing gave $ClCH_2CH_2OSO_2Cl$, b_{10} 92-6°; when 8.8 g. ethylene oxide was passed into 27 g. SO_2Cl_2 and the mixt. distd. after 0.5 hr. standing, there was an initial evolution of gas, after which the product (23 g.) b_{10} 90-2°, d_4^{20} 1.553, n_D^{20} 1.450, was identical with the above product. It breaks down to HCl, C, SO_2, and $(ClCH_2)_2$ on heating and hydrolyzes on heating with H_2O to HCl, $(ClCH_2)_2$, and H_2SO_4. SO_2Cl_2 (16 g.) and 11 g. epichlorohydrin, after 3 days' standing, gave 16 g. $ClCH_2CHClCH_2OSO_2Cl$, b_6 100-2°, d_4^{20} 1.583, n_D^{20} 1.482, which breaks down on heating to SO_2, HCl, tar, C, and $ClCH(CH_2Cl)_2$; 13.5 g. SO_2Cl_2 and 18.4 g. epichlorohydrin gave the same product even after a year's standing. SO_2Cl_2 (27 g.) and 11.6 g. propylene oxide in 45 cc. Et_2O after standing 3 days were washed with H_2O, extd. with Et_2O, and distd. to give $MeCHClCH_2OSO_2Cl$, d_4^{20} 1.439, n_D^{20} 1.462, which was not distd. SO_2Cl_2 (10.1 g.) and 5.2 g. isobutylene oxide similarly gave 7 g. $Me_2CCl\cdot H_2OSO_2Cl$, d_4^{20} 1.2707, n_D^{20} 1.465. SO_2Cl_2 (13.5 g.) and 8. g. isopropylethylene oxide in 40 cc. Et_2O gave 12 g. $Me_2CHCHClCH_2OSO_2Cl$, b_{10} 110° (decompn.), d_4^{20} 1.1814, n_D^{20} 1.468. Mixing 10.1 g. SO_2Cl_2 and 7.4 g. cyclohexene oxide gave 9.8 g. undistillable , d_4^{20} 1.3855, n_D^{20} 1.456. G. M. K.

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1ST AND 2ND ORDERS

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CA

The condensation of vinyl chloride with benzene in the presence of aluminum chloride. M. S. Malinovskii. *Zhur. Obshchei Khim.* (J. Gen. Chem.) 17, 2215-9(1947).—CH_2:CHCl (I), C_6H_6, and $AlCl_3$ react in the cold to produce chiefly Ph_2CHMe, some EtPh, and smaller amts. of PhCH:CH_2 (II) and dimethyldihydroanthracene, which is formed by addn. of HCl to II and further condensation with $AlCl_3$. A yellow oil and a dark tar are also formed. Heating the mixt. increases the amt. of tar. I and $AlCl_3$ form a complex which is not affected by excess I, and which is not decompd. until H_2O is added. H. M. Leicester

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Reaction between ethylene oxide and ammonia over aluminum oxide. M. S. Malinovskii and B. N. Moryganov (Gor'kii State Univ.). *J. Applied Chem.* (U.S.S.R.) 20, 630–4(1947)(in Russian).—At 300, 350, 400, and 450°, 10 g. $CH_2.CH_2.O$ passed over Al_2O_3 with NH_3 gave 1.34, 1.4, 4.8, and 5.5 l. gas (CO_2 1, CO 8–10, balance H) and 23, 24, 30, and 33%, resp., of an oily liquid in which C_2H_5N was detected only in the product obtained at 400–50°; at 300–50° the liquid contains only ethanolamines, at 300° also some aldehyde. At 400° and 450°, the yield of liquid increased somewhat with increasing rate of flow, e.g., at 450°, 28 and 32% at 2.5 and 5.0 g./hr., resp.; it also increased with increasing excess of ethylene oxide over NH_3. Fractionation of the liquids collected at various temps. gave: at 300°, fractions b. 70–105°, 105–45°, 145–200°, 200–80°, residue, 27.0, 4.4, 27.0, 27.0, 14.6%, resp.; at 350°, fractions b. 70–95°, 95–170°, 170–202°, 202–70°, residue, 19.5, 34.1, 12.2, 17.1, 17.1%; at 400°, fractions b. 70–90° (mainly 90°), 90–105°, 105–30°, 130–72°, residue, 22.8, 8.1, 23.5, 17.4, 28.2%; at 450°, fractions b. 70–90° (mainly 90°), 90–105°, 105–30°, 130–80°, residue, 7.2, 27.9, 14.9, 25.3%, resp. The main reaction at 400° and 450° is $3CH_2.CH_2.O + NH_3 \rightarrow C_2H_5N + CO + 2H_2O + 3H_2$.

Formation of the ethanolamines most probably does not involve the catalyst at all; this is borne out by the absence of morpholines in the condensate. N. Thon

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3RD AND 4TH ORDERS

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CA

Chlorination of p-cymene by sulfuryl chloride. N. Malinovskii and G. K. Barabasheva. *Zhur. Prik. Khim.* (J. Applied Chem.) 20, 649-51(1947).—Heating SO_2Cl_2 with *p*-cymene leads to a mono-Cl deriv. with Cl in the iso-Pr group; excess of SO_2Cl_2 has little effect on the yield. In a typical expt. 50 g. cymene and 30 g. SO_2Cl_2 were refluxed 15 hrs.; after washing with ice water there was obtained 14.3% Cl deriv., b. 120-30°, d_4^{20} 1.198, n_D^{20} 1.516; refluxing 20 hrs. with concd. HNO_3 3 vols. H_2O gave *p*-(1-chloroisopropyl)*benzoic acid*, m. 186° (decompn.) (from EtOH). G. M. Kosolapoff

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MALINOVSKIY, M. S.

PA 30/49T8

USSR/Chemistry - Friedel-Crafts Reaction Sep 48
Chemistry - Ketones, Synthesis

"Synthesis of Aliphatic-Aromatic Ketones by Friedel-Crafts Reaction," M. S. Malinovskiy, F. F. Kuslova, Stud, Lab Org Chem, Gor'kiy State U, 2 pp

"Zhur Obshch Khimii" Vol XVIII, No 9

Using acids instead of their anhydrides or acyl chlorides in reactions with toluene, 27-36% yields of p-tolyl alkyl ketones were obtained in presence of aluminum chloride. Acids included acetic, butyric, isobutyric, and isovaleric. Submitted 9 May 47.

30/49T8

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CA

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Sulfonation of cymene by chlorosulfonic acid. M. S. Malinovskii and G. K. Barabashova (State Univ., Gorkii, Russia). *J. Applied Chem.* (U.S.S.R.) 21, 185-6(1948). Cymene with $ClSO_3H$ yields *2,5-Me(Me₂CH)C₆H₃SO₂Cl*, either at 0° or 20-5°. To 174 g. $ClSO_3H$ at 0-5°, there was added, with stirring, 56 g. cymene; after stirring 2 hrs. at 5° and letting stand overnight in an ice bath, the mixt. was poured into ice water and extd. by Et_2O, evapn. of the ext. gave the sulfonyl chloride (78 g.), a dark liquid which could not be distd. even at 5 mm. or crystd. This product (15 g.) was added to 25 g. NaOH and 2 g. H_2O at 260° and the mixt. stirred 20 min. at 270°; after treatment with H_2O, acidification, and steam distn., followed by Et_2O extn. of the distillate, there was obtained 5 g. carvacrol, b. 235-7°, which confirmed the structure of the chloride. If the sulfonation is run at 20-5° the yield of sulfonyl chloride is 80 g. G. M. Kosolapoff

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PROCESSES AND PROPERTIES INDEX

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CA

Reaction between ethylene oxide and hydrogen sulfide on aluminum chloride. M. S. Malinovskii and B. N. Morygunov. *Zhur. Prikkl. Khim.* 21, 1001(1948); cf. C.A. 42, 1503b. In analogy with the catalytic formation of C_5H_5N from CH_2CH_2O (I) and NH_3, formation of thiophene (II) from I and H_2S was expected and obtained on an Al_2O_3 catalyst, between 300 and 400°, with $MeCH_2SH$ as by-product. The reactions are $2I + H_2S \rightarrow II + 2H_2O + H_2$, $2I + H_2S \rightarrow MeCH_2SH + 2CO + H_2$, $3I + 2H_2S \rightarrow II + MeCH_2SH + 3H_2O$. The yield of condensate increases with the temp.; thus, at 300, 350, 400, and 450°, the yields are 21, 23, 25, and 27%. Excess of I over the mol. ratio 2:1 also increases the yield somewhat. The av. compn. of the gas is CO 21, CO 17%, the rest H_2 and some H_2S. The total yield of II rises with the temp., being (with respect to I) at least 3.5, 4.0, 5.8, and 6.6% (16.1, 17.0, 22.9, and 24.3% of the condensate) at 300, 350, 400, and 450°. Higher fractions of the condensate contain higher homologs of I.

N. Thon

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MALINOVSKII, M. S.

M. S. Malinovskii, and F. F. Kislova, The synthesis of fatty-aromatic ketones according to the Friedel-Crafts reaction. p. 1643

The method for obtaining ketones with the help of acids (according to Friedel and Crafts) is better than the chloro-anhydride and anhydride method, because the acids are cheaper, although the yield of ketones is somewhat lower.

Lab. of Organic Chem.
Gorkii State University
May 9, 1947

SO: Journal of General Chemistry (USSR) 28, (80) No. 9 (1948)

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MALINOVSKII, M. S.

M. S. Malinovskii and B. N. Konevichev, student, On obtaining alcohols by the Grignard reaction using olefin oxides. p. 1833

By the action of isoamylene oxide on the Grignard reagent, the following complexes are obtained: ethyl bromide, propyl bromide and isopropyl bromide. Several secondary alcohols were synthesized: propyl-isopropyl-carbinol, iso-propyl-iso-butyl carbinol and iso-propyl-butyl-carbinol. These alcohols are obtained with less yield through isoamylene oxide than by other methods.

Lab. of Organic Chemistry, The Gorkii State University, May 9, 1947

SO: Journal of General Chemistry (USSR) 28, (80) No. 10 (1948):

APPROVED FOR RELEASE: 06/20/2000 CIA-RDP86-00513R001031820003-3"

"APPROVED FOR RELEASE: 06/20/2000 CIA-RDP86-00513R001031820003-3

MALINOVSKIY, M.S. [Malynovs'kyi, M.S.], prof.

Role of Russian scientists in the development of organic chemistry. Nauk zap. L'viv. un. 13:5-26 13 '49. (MIRA 12:10)

1. L'vovskoy gosudarstvennyy universitet imeni I. Franko, kafedra organicheskoy khimii.
(Chemistry, Organic)

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MALINOVSKIY, M. S.

58/49T36

USSR/Chemistry - Organic Synthesis Jan 49
Chemistry - Grignard Reaction

"Extraction of Alcohols From the Oxides of Olefins by the Grignard Method: II, Synthesis of 2,2-Dimethylbutanol-4 and 2,2-Dimethylpentanol-5 From Ethylene Oxide, and Heptanol-6 and 2-Methylhexanol-2 From Propylene Oxide," M. S. Malinovskiy, Students Ye. Ye. Volkova, N. M. Morozova, Lab of Org Chem, Gor'kiy State U, 3 3/4 pp

"Zhur Obshch Khim" Vol XIX, No 1

In the first reaction, respective yields are 13.2% and 33.3%; in the latter, 30% and 30%. Presents

58/49T36

USSR/Chemistry - Organic Synthesis (Contd) Jan 49

most probable diagram for formation of these alcohols. Submitted 9 Jun 48.

58/49T36

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CA

Cleavage of aromatic arsines by acyl halides with aluminum chloride. M. S. Malinovskii. *Zhur. Obshchei Khim.* (J. Gen. Chem.) 19, 130-3(1949).—$PhAsCl_2$ and Ph_2AsCl react with RCOCl and $AlCl_3$ with the loss of As and formation of alkaryl ketones; this may be used as a means for locating the point of As attachment, as the RCO group takes its place. $PhAsCl_2$ in 40 g. dry CS_2 and 6 g. $AlCl_3$ were treated dropwise in 20 min. with 5 g. iso-BuCOCl with ice cooling, let stand 0.5 hr., warmed 2-2.5 hrs. on a steam bath, concd., treated with ice, and extd. with Et_2O; distn. of the ext. gave 74% Me_2CHCH_2-COPh, b. 229-30° (oxime, m. 73-4°). Similarly, PrCOCl gave 73.7% PrCOPh, b. 220-6° (oxime, m. 48-9.5°), while $Me_2CHCOCl$ gave 68% $Me_2CHCOPh$, b. 213-17° (oxime, m. 57-8°), and EtCOCl gave 76.5% EtCOPh, b. 206-10° (oxime, m. 49-50°). Ph_2AsCl (13.2 g.), 60 g. CS_2, and 13.8 g. $AlCl_3$ treated as above with 12.5 g. iso-BuCOCl gave 61% iso-BuCOPh, while PrCOCl gave 67.5% PrCOPh, iso-PrCOCl gave 60% iso-PrCOPh, and EtCOCl gave 65% EtCOPh.

G. M. Kosolapoff

ASM-SLA METALLURGICAL LITERATURE CLASSIFICATION

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1ST AND 2ND ORDERS

PROCESSES AND PROPERTIES INDEX

3RD AND 4TH ORDERS

10

CA

Action of phosphorus pentachloride on methyl cymyl and isobutyl cymyl ketones. M. S. Malinovskii and N. M. Medyantseva. *Zhur. Obshchei Khim.* (J. Gen. Chem.) 19, 324-6(1949).—2,5-Me(iso-Pr)C_6H_3COMe (30 g.) and 35.4 g. PCl_5 mixed with ice cooling, then warmed 10 hrs. at 60° and 5 hrs. on a steam bath gave, after washing, 70% 2,5-Me(Me_2CCl)C_6H_3COMe, b_{18} 120-5°; if the water washing is omitted the yield rises to 90%; the pure product has d^{15} 0.946, n_D^{15} 1.480 (*semicarbazone*, m. 235°); oxidation by $KMnO_4$ gave 2,4-Ac(Me_2CCl)$C_6H_3CO_2H$, decomp. 180° (*semicarbazone*, m. 238°). The Cl deriv. warmed with KI in Me_2CO gave the iodo deriv., which was warmed with $AgNO_3$ 1.5 hrs. to give 2,5-Me(O_2NC-Me_2)C_6H_3COMe, b_{18} 94°. A similar reaction of 2,5-Me-(iso-Pr)C_6H_3COBu-iso (40 g.) and 45 g. PCl_5 gave 70% 2,5-Me(Me_2CCl)C_6H_3COBu-iso, b_{18} 78°, d^{15} 0.821, n_D^{15} 1.501 (*semicarbazone*, m. 229°); oxidation by $KMnO_4$ gave a *Cl acid*, decomp. 180°, while KI and $AgNO_3$ as described above gave a *nitro deriv.*, b_{18} 86°. G. M. K.

ASM-SLA METALLURGICAL LITERATURE CLASSIFICATION

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1ST AND 2ND ORDERS

PROCESSES AND PROPERTIES INDEX

3RD AND 4TH ORDERS

A 2-3

BC

Synthesis of ketones from arenes and the feasibility of utilizing them in the subsequent synthesis of alcohols. M. S. Malinovsky and G. K. Bunkbakova (*J. gen. Chem. USSR*, 1949, 19, 556—564 [U.S. transl.]).—p-$C_6H_4MePr^i$ is converted into ketones by the Friedel-Crafts reaction in the absence of H_2S. The resulting ketones fail to undergo a Grignard reaction with EtMgBr or EtMgI.

Addition of Ac_2O (or AcCl), Pr^nCOCl, Pr^iCOCl, Bu^iCOCl, $CH_2Cl{\cdot}COCl$, or BzCl to $AlCl_3$ and excess of p-$C_6H_4MePr^i$ affords respectively: 1 : 4 : 2-$C_6H_3MePr^iAc$ (62%), 1 : 4 : 2-$C_6H_3MePr^i{\cdot}COPr^n$ (30%), 1 : 4 : 2-$C_6H_3Pr^iMe{\cdot}COPr^i$ (24·6%), 1 : 4 : 2-$C_6H_3MePr^i{\cdot}COBu^i$ (28·4%), 1 : 4 : 2-$C_6H_3MePr^i{\cdot}CO{\cdot}CH_2Cl$ (30·2%), and 2-*methyl-5-isopropylbenzophenone*, $C_{17}H_{18}O$ (25·5%), b.p. 183—185°/8 mm., d_4^{18} 1·0251, n_D^{18} 1·534.

M. Davis.

ASM-SLA METALLURGICAL LITERATURE CLASSIFICATION

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"APPROVED FOR RELEASE: 06/20/2000 CIA-RDP86-00513R001031820003-3

CA

Preparation of ketones from cymene and the possibility of their utilization for the synthesis of alcohols by the Grignard method. M. S. Malinovskii and G. K. Baranashova (Gorki State Univ.). *Zhur. Obshchei Khim.* (J. Gen. Chem.) 19, 2088-93(1949).—Friedel-Crafts acylation of cymene without the usual solvent (CS_2) proceeds satisfactorily without reduced yields; the acyl group enters in the *o*-position to Me. Thus, 200 g. cymene, 34 g. Ac_2O, and 133 g. $AlCl_3$ after 5 hrs. on a steam bath gave 51.7% *Ac deriv.*, b_{18} 247-9°, b_6 125-7°, n_D^{20} 1.502, d_{20}^{20} 0.9510; 39 g. AcCl with 65 g. $AlCl_3$ gave a 53% yield. Similarly, 230 g. cymene, 55 g. $AlCl_3$, and 45 g. PrCOCl gave 30% *PrCO deriv.*, b. 264-6°, n_D^{20} 1.513, d_{20}^{20} 0.945, which after Clemmensen reduction gave *1-methyl-2-butyl-4-isopropylbenzene*, b. 233-5°, n_D^{20} 1.511, d_{20}^{20} 0.909. Iso-PrCOCl gave 24.6% *iso-PrCO deriv.*, b_{18} 257-9°, n_D^{20} 1.504, d_{20}^{20} 0.952, reduced to the *2-iso-Bu deriv.* b. 228-30°, d_{20}^{20} 0.921; similarly, iso-BuCOCl gave 28.4% *iso-BuCO deriv.*, b. 268-70°, n_D^{20} 1.500, d_{20}^{20} 0.9410, which yielded the *iso-Am deriv.*, b. 244-5°, d_{20}^{20} 0.8920, n_D^{20} 1.502. $ClCH_2COCl$ gave the *$ClCH_2CO$ deriv.* (30.2%), b_6 153-5°, n_D^{20} 1.520, d_{20}^{20} 1.075, while BzCl gave 25% *Bz deriv.*, b_5 183-5°, n_D^{20} 1.534, d_{20}^{20} 1.0251, when the reaction was run at 50-60°. The ketones do not react with EtMgBr or EtMgI. G. M. Kosolapoff

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MALINOVSKIY, M.S.

4

Preparation of some heterocyclic compounds from olefin oxides. M. S. Malinovskii (Lvov State Univ.). *Ukrain. Khim. Zhur.* 16, No. 3, 351-7(1950)(in Russian).—Passage of ethylene oxide and NH_3 (3:1 ratio) over Al_2O_3 at 400-50° gave 30-40% catalyzate contg. 16.6-19.4% pyridine; the by-products include 50-60% H, 12-22% CO, 7-9% N, olefins, O, and some CO_2. The results indicate that ethylene oxide does not isomerize to AcH, since the latter does not form pyridine with NH_3 over this catalyst. Propylene oxide similarly gave over Al_2O_3 at 400°, pyridine bases contg. some 3,5-dimethylpyridine. Similar passage of ethylene oxide and H_2S over Al_2O_3 at 350-450° gave some 7.5% thiophene, along with EtSH, PrSH, CO, CO_2 and H. Addn. of Ni to the catalyst reduces the yield of heterocycles.

G. M. Kosolapoff

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"APPROVED FOR RELEASE: 06/20/2000 CIA-RDP86-00513R001031820003-3

B

1869* Olefin Oxides. (In Russian) M. S. Malinovskii (Uspekhi Khimii (Progress in Chemistry), v. 19, Sept.-Oct. 1950, p. 576-601)

Reviews and summarizes literature on the behavior of olefin oxides in general and of ethylene oxide in particular. Results of addition of water, alcohols, and phenols are discussed. Reactions with organic compounds, halogens, chloric and nitric acids, organo-magnesium compounds, and nitrate compounds were thoroughly studied. Mechanisms of hydrogenation, isomerization, polymerization, and thermal dissociation are discussed. 199 ref.

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BA

BA

1-D

Problem of formation of pyridine from ethylene oxide. M. S. Malinowski and B. N. Moryganov (*J. appl. Chem., USSR*, 1950, **23**, 853—863).—The following reactions were studied at 300°, 350°, 400°, and 450° using Al_2O_3 as catalyst: condensation of (*a*) MeCHO with NH_3, (*b*) condensation of $(CH_2)_2O$ with NH_3, (*c*) condensation of $NH_3 \cdot (CH_2)_2 \cdot OH$, and (*d*) isomerisation of $(CH_2)_2O$ to MeCHO. Both liquid (two layers) and gaseous products were investigated. In (*a*) the aq. layer contains MeCHO, whilst the tar-like layer consists of α-picoline, β-picoline, formylcollidine, and β-collidine. In the gaseous phase the content of H_2 increases markedly while the N_2, CH_4, O_2, and CO contents decrease. This indicates the formation of heterocyclic compounds. In (*b*) the content of H_2 in the gaseous phase sharply increases (10·6% (average at 300°) to 50·8% (average at 400°). With rise in temp., CO content increases while O_2, N_2, and CH_4 decrease simultaneously. C_5H_5N is formed only at 400° and 450°. The liquid products have been described previously (*J. appl. Chem., USSR*, 1948, **21**, 985). In (*c*) the aq. layer contains MeCHO, NH_3, and 16—21% of amines when the tar-like layer contains no C_5H_5N. In the gaseous phase, the amount of unsaturated hydrocarbons, CO, and H_2 increases simultaneously with decrease of O_2 and CH_4. In (*d*), the H_2 content of the gas phase increases slightly with temp., that of CO decreases slightly, whilst the % of the remaining gases is about the same. Therefore (*a*) and (*b*) seem not to be identical processes and there is no doubt that the formation of C_5H_5N bases during the condensation of $(CH_2)_2O$ with NH_3 does not go through the formation of $NH_3 \cdot (CH_2)_2 \cdot OH$.

J. B. J. Zara.

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CA

Thermal decomposition of calcium salts of monochloro- and trichloroacetic acids. M. S. Malinovskii and A. P. Grishchuk (Lvov State Univ.). *Zhur. Obshchei Khim.* (J. Gen. Chem.) 21, 1783-7(1951).—Ca salts of halogen-substituted acids suffer more complex thermal decompn. than do unsubstituted acids and reaction occurs at lower temps. No ketone formation is observable. In part the decompn. is analogous to the scheme proposed by Bandas and Shemyakin (*C.A.* 43, 1246). On heating 28 g. $(Cl_3CCO_2)_2Ca$ in an absorption train, gas evolution began at 125-30° with fusion of the salt, further foaming and gas evolution took place at 150-5° and at temps. up to 400-20° liquids distd. over. The residue was almost pure $CaCl_2$ (probably from CaO); the distillates consisted of HCl, H_2O, Cl_3CCO_2H, Cl_3CCOCl, $(Cl_3CCO)_2O$, $COCl_2$, CO_2, CO, and a little $(CCl_2)_n$. Similarly $(ClCH_2CO_2)_2Ca$ yielded at 105-375° $CaCl_2$, $CaCO_3$ (little), HCl, PhOH, CO, CO_2, MeCl, C_2H_4, and $HOCH_2CO_2H$. G. M. Kosolapoff

A high-boiling impurity in vinyl acetate. V. I. Lyubomilov, M. S. Akutin, I. V. Chelyshev, and S. F. Kalinkin. *Zhur. Prikład. Khim.* (J. Applied Chem.) 24, 1219-21 (1951).—AcOCH:CH_2 prepd. in the vapor phase according to Ushakov, *et al.* (*C.A.* 45, 8061[c]), contains a higher-boiling product, which was identified as *vinyl propionate*, bpₘₘ 94.5°, n_D^{20} 1.4061, d_4^{20} 0.9121, by hydrolysis and bromination. The ester does not polymerize as rapidly as the acetate and only in several months does a solid polymer form with Bz_2O_2. G. M. Kosolapoff

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BARANOV, S.N., aspirant; MALINOVSKIY, M.S., professor.

Thermal disintegration of ethylene oxide and propylene oxide in the presence of certain oxide catalysts. Dop.ta pov.L'viv. un. no.3 pt.2:30-31 '52. (MLRA 9:11)

(Ethylene oxide) (Propylene oxide) (Catalysis)

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MALINOVSKIY, M.S.

MALINOVSKIY, M.S.

Role of Soviet scientists in the development of organic chemistry. (MLRA 10:7)
Nauk.zap.L'viv.un. 21:5-35 '52.
(Chemistry, Organic--History)

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"APPROVED FOR RELEASE: 06/20/2000 CIA-RDP86-00513R001031820003-3

MALINOVSKIY, M.S.

Thermal decomposition of ethylene oxide in the presence of aromatic hydrocarbons. Nauk.zap.L'viv.un. 21:125-127 '52. (MIRA 10:7)

1. Kafedra organicheskoy khimii Leningradskogo gosudarstvennogo universiteta.
(Ethylene oxide) (Thermochemistry)

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USSR/Chemistry - Olefin Oxides Nov 52

238T28

"Research on Olefin Oxides: VIII. Condensation of Styrene Oxide With Ammonia Over Aluminum Oxide," M. S. Malinovskiy and S. N. Baranov, L'vov State U, Chair of Organ Chem

"Zhur Obshch Khim" Vol 22, No 11, pp 1970-1973

Because they felt that this particular field had been neglected, the authors set out to study the possibility of obtaining heterocyclic compds from styrene oxide. The decompn by heat of styrene

238T28

oxide at 500°, over aluminum oxide, was investigated. This decompn gave off acetophenone, the principal product of the reaction, as well as aromatic hydrocarbons (styrene, ethyl benzene, toluene and benzene) and aromatic aldehydes (benzaldehyde and phenylacetic aldehyde). Under the same conditions as above, the decompn by heat of styrene oxide in the presence of ammonia was investigated. In this case, N-containing heterocyclic compds were formed. Among them, the presence of a pyridine, a methylphenylpyridine (of unknown structure) and derivs of pyrrole was proved.

238T28

MALINOVSKIY M. S.

(CA 47 no.18: 9282 '53)

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MALINOVSKII, M. S.

Chemical Abst.
Vol. 48 No. 9
May 10, 1954
Organic Chemistry

6

2 chem

Olefin oxides. VIII. Condensation of styrene oxide with ammonia over alumina. M. S. Malinovskii and S. N. Baranov. J. Gen. Chem. U.S.S.R. 22, 2019-22(1952) (Engl. translation).—See C.A. 47, 9282g. H. L. H.

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"APPROVED FOR RELEASE: 06/20/2000 CIA-RDP86-00513R001031820003-3

MALINOVSKIY, M.S.; GLADYSHEVSKAYA, Ye.I.

Thermal decomposition of aromatic hydrocarbons in the presence of ethylene oxide. Zhur. Priklad. Khim. 25, 218-24 '52. (MLRA 5:5)
(CA 47 no.22:12276 '53)

1. I.Franko State Univ., Lvov.

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MALINOVSKIY, M. S.

Chemical Abst.
Vol. 48 No. 9
May 10, 1954
Organic Chemistry

(2) Chem

Thermal decomposition of aromatic hydrocarbons in the presence of ethylene oxide. M. S. Malinovskii and E. I. Gladyshevskaya. J. Appl. Chem. U.S.S.R. 25, 223-8 (1952)(Engl. translation).—See C.A. 47, 12276g.

H. L. H.

APPROVED FOR RELEASE: 06/20/2000 CIA-RDP86-00513R001031820003-3"

"APPROVED FOR RELEASE: 06/20/2000 CIA-RDP86-00513R001031820003-3

MALINOVSKIY, M.S.

Chem 9

3

Condensation of ethylene oxide and ammonia on mixed chromium-aluminum catalysts. M. S. Malinovskii and G. E. Morgun (Lvov State Univ.). *Zhur. Priklad. Khim.* 25, 333-7(1952).—Mixts. of ethylene oxide (I) and NH_3, in the approx. molar proportions of 2:1, 3:1, and 5:1, were passed, at 400 and 450°, over Cr_2O_3 + Al_2O_3 catalysts mixed in the wt. ratios 1:5, 1:1, and 1:10. Examples of data are: At 400°, 35.1 g. I, 4.15 g. NH_3, Cr_2O_3:Al_2O_3 (1:5); rate of feed of I 0.13 g./min.; yield (relative to I) oil 29.3%, aq. layer 23.9%, crystals 5.98%; fractionation of condensate, b. 70-90° (30.6%), 90-106° (7.4), 106-40° (18.0), 140-210° (24.5). At 450°, 34.0 g., 4.3 g., 1:1; 0.13; 30.9, 24.4, 7.1; fractionation, b. 60-90° (28.0%), 90-106° (9.8), 106-40° (16.8), 140-210° (23.2). At 450°, 35.2 g., 2.9 g., 1:1; 0.23; 24.7, 20.5, 5.1; fractionation, b. 60-90° (29.2%), 90-106° (9.4), 106-40° (15.3), 140-210° (21.2). Analyses show that on a 1:5 catalyst, the products are pyrrole and pyridine derivs., with some EtOH. On 1:1 catalyst, pyridine disappears, and only 5-membered rings are found in the product, in smaller amts. than on 1:5 catalyst. On the 1:10 catalyst, the amt. of pyridine derivs. is increased, and pyrrole derivs. decreased. The most favorable catalyst compn. for the production of 5-membered ring compds. is 1:5. N. Thon

A. V-48
10/1954
Chemistry

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