ROLSKI, STANISLAW

Effects of animal brain extracts on the functions and condition of animal liver in CCl_4 poisoning. Władysław Szreder, Wilhelm Czarnecki, and Stanisław Rolski (Zakł. Patol. Ogólnej Akad. Méd., Gdańsk). *Acta Polon. Pharm.* 13, 223–4(1956).—Exts. from hog and calf brain were injected into rabbits and guinea pigs 3 hrs. prior to CCl_4 poisoning. The injection was made subcutaneously and by inhalation. In chronic CCl_4 poisoning the injection resulted in extension of the survival time by 8–10 days. Increase in the dose of administered exts. (more than 0.1 ml./kg. body wt.) did not increase the effectiveness of the exts. in acute CCl_4 poisoning.
Richard Ehrlich

ROLSKI, Stanislaw; ZDUNSKA, Alina; ILIASZENKO, Janina; OSICKA, Anna

New method for the isolation of L-leucine from protein hydrolysates. Acta Pol. pharm. 22 no.3:233-236 '65.

1. Z Zakladu Chemii Farmaceutycznej Akademii Medycznej w Warszawie (Kierownik: prof. dr. St. Rolski).

ROL'YAN, S.

Excess personnel. Fin.SSSR 18 no.2:75-76 F '57. (MLRA 10:5)

1.Nachal'nik sektora po shtatam Minskogo gorfinotdela.
(Minsk--Personnel management)

ROL'YE, Z.Yu., professor; LEBEDEVA, Z.A., direktor.

Effectiveness of combined therapy of tuberculosis of the bones in children. Probl.tub. no.3:7-14 My-Je '53. (MLRA 6:7)

1. Kostnoye otdeleniye Instituta tuberkuleza Akademii meditsinskikh nauk SSSR. (Bones--Tuberculosis)

ROL'YE, Z. Yu.

Efficacy of complex therapy of osseous tuberculosis in children. Probl. tuberk., Moskva no.3:7-14 May-June 1953. (CLML 25:1)

1. Professor. 2. Of the Bone Division, Institute of Tuberculosis (Director -- Z. A. Lebedeva) of the Academy of Medical Sciences USSR.

ROL'E, Z. Yu.

Osteoarticular tuberculosis. Med. sestra, Moskva no.6:7-12 June 1953. (CLML 25:1)

1. Professor. 2. Moscow.

ZHUKOVA, R.R.; FRIDLYAND, A.Ye., glavnyy vrach; ROL'YE, Z.Yu., professor, konsul'tant.

Streptomycin and para-aminoslicylic acid therapy of osteoarticular tuberculosis in children. Probl.tub. no.3:85-86 My-Je '53. (MLRA 6:7)

1. Detskiy kostnotuberkuleznyy sanatoriy "Bakovka" Mosgorzdravotdela.
(Streptomycin) (Bones--Tuberculosis) (Joints--Tuberculosis)
(Para-aminosalicylic acid)

BESPALOVA, L.L.; FRIDLYAND, A.Ye., glavnyy vrach; ROL'YE, Z.Yu., professor, konsul'tant.

Experience of treating osteoarticular tuberculosis in children with para-aminosalicylic acid. Probl.tub. no.3:87-88 My-Je '53. (MLRA 6:7)

1. Detskiy kostnotuberkuleznyy sanatoriy "Bakovka" Mosgorzdravotdela.
(Bones--Tuberculosis) (Joints--Tuberculosis) (Para-aminosalicylic acid)

ROL'YE, Z.Yu., professor (Moscow).

Osteoarticular tuberculosis. Med.sestra no.6:7-12 Je '53. (MLRA 6:6)
(Bones--Tuberculosis) (Joints--Tuberculosis)

ROL'YE, Z.Yu., professor (Moscow).

Combined therapy of early forms of osteoarticular tuberculosis in children. Sov.med. 17 no.9:18-20 S '53. (MLRA 6:9)
(Bones--Tuberculosis) (Joints--Tuberculosis)

ROL'YE, Z.Yu., professor

"Second republic conference on osteoarticular tuberculosis, held on June 19-22, 1948 in Leningrad; report." ed. [professor, deystvitel'nyy chlen Akademii meditsinskikh nauk SSSR] P.G.Kornev. Reviewed by Z.IU.Rol'e. Probl. tub. no.5:76-79 S-O '54. (MLRA 7:12)
(LENINGRAD--TUBERCULOSIS--CONGRESSES)
(BONES--TUBERCULOSIS)
(JOINTS--TUBERCULOSIS)

ROL'YE, Z.Yu.

Conference on osteoarticular tuberculosis in Kiev. Probl. tub. no.1: 73-76 Ja-F '55. (MLRA 8:4)
(TUBERCULOSIS, OSTEOARTICULAR, prevention and control, in Russia, conf.)

ROL'YE, Z.Yu., professor, (Moskva)

Duties of a nurse in caring for patients with osteoarticular tuberculosis. Med.sestra, no.9:23-27 S '55 (MLRA 8:11)
(TUBERCULOSIS, OSTEOARTICULAR, therapy
nursing care)
(NURSING CARE, in various diseases
tuberc., osteoarticular)

ROL'YE, Z.Yu., professor (Moskva)

To recent graduates from nursing schools. Med. sestra no.1:30-31 Ja '56. (MLRA 9:3)
(NURSING AS A PROFESSION)

ROL'YE, Z.Yu., prof. (Moskva G-99, Smolenskaya ul., d.10, kv.298)

T.P.Krasnobaev's role in the organization of the control and treatment of osteoarticular tuberculosis. Ortop., travm. i protez. 26 no.3:77-82 Mr '65. (MIRA 18:7)

ROL'YE, Z. Yu.

Timofei Petrovich Krasnobaev. Ortop., travm. i protez. no.12:66 '61. (MIRA 15:2)

(KRASNOBAEV, TIMOFEI PETROVICH, 1865-1952)

ARKHIPOVA, O.P., kand. biol. nauk; BERLIN, P.Yu., prof.; VOROB'YEV, S.I., kand. med. nauk; ZASLAVSKIY, I.D., kand. med. nauk; KUDRYAVTSEVA, A.I., prof.[deceased]; LAPINA, A.I.; MARKUZON, V.D., prof.; MASSINO, S.V., prof.; NEZLIN, S.Ye., prof.; OYFEBAKH, M.I., prof.; POMEL'TSOV, K.V., prof.; RABUKHIN, A.Ye., zasl. deyatel' nauki RSFSR, prov.; ROL'YE, Z.Yu., zasl. deyatel' nauki RSFSR, prof.; SORKINA, E.Z., doktor med. nauk; FILIMONOV, N.I., kand. med. nauk [deceased]; YUSKOVETS, M.K., zasl. deyatel' nauki Belorusskoy SSR, prof., akademik; EYNIS, V.L., zasl. deyatel' nauki RSFSR, prof., otv. red.; LYUDKOVSKAYA, N.I., tekhn. red.

[Multivolume manual on tuberculosis] Mnogotomnoe rukovodstvo po tuberkulezu. Otv. red. V.L.Einis. Moskva, Medgiz. Vol.4. [Epidemiology and the organization of the control of tuberculosis] Epidemiologiia i organizatsiia bor'by s tuberkulezom. Red. toma A.I.Lapina i S.V.Massino. 1962. 524 p. (MIRA 15:6)

1. Akademiya nauk Belorusskoy SSSR i Akademiya sel'skokhozyaystvennykh nauk Belorusskoy SSSR (for Yuskovets).
(TUBERCULOSIS)

PETROV, Ye.D., kand.med.nauk. Prinimali uchastiye: POKHITONOVA, M.P., prof.; ROL'YE, Z.Yu., prof. MASSINO, S.V., red.; MATVEYEVA, M.M., tekhn.red.

[Textbook of methods for the climatological treatment of tuberculosis] Metodicheskoe posobie po klimaticheskomu lecheniiu bol'nykh tuberkulezom. Moskva, Medgiz, 1961. 64 p. (MIRA 15:4)

1. Institut meditsinskoy klimatologii i klimatoterapii imeni I.M.Sechenova v Yalte (for Petrov). 2. Institut tuberkuleza AMN SSSR (for Pokhitonova, Rol'ye).
(TUBERCULOSIS) (CLIMATOLOGY, MEDICAL)

ROL'YE, Z.Yu., prof.

Prevention of pronounced forms of osteoarticular tuberculosis in children. Trudy Inst. tub. AMN 7:154-170 '58. (MIRA 13:10)
(JOINTS--TUBERCULOSIS)

ROL'YE, Z.Yu., prof.; KOVALENKO, D.G., doktor med.nauk; KUTSENOK, B.S., dotsent

Use of exercise therapy and "antibacteriological-functional" therapy in osteoarticular tuberculosis. Ortop.,travm. i protez. 18 no.5:96-99 S-O '57. (MIRA 12:9)
(JOINTS--TUBERCULOSIS) (EXERCISE THERAPY)

ROL'YE, Z.Yu., prof.

Cure of osteoarticular tuberculosis [with summary in French]. Probl. tub. 37 no.1:12-22 '59. (MIRA 12:2)

1. Iz kliniki imeni T.P. Krasnobayeva Instituta tuberkuleza AMN SSSR (dir. Z.A. Lebedeva).
(TUBERCULOSIS, OSTEOARTICULAR, therapy, cure, statist. (Rus))

ROL'YE Z.Yu.

ROL'YE, Z.Yu., prof.

Present state of the treatment of osteoarticular tuberculosis. Sov. med. 21 no.10:87-93 O '57. (MIRA 11:1)

1. Iz kliniki kostno-sustavnogo tuberkuleza imeni T.P.Krasnobayeva Instituta tuberkuleza (dir. Z.A.Lebedeva) Akademii meditsinskikh nauk SSSR.
(TUBERCULOSIS, OSTEOARTICULAR, ther.)

ROL'NACHENIE I. F. LETORSKIY, N. I.

25215. ROL'NACHENIE I. F. LETORSKIY, N. I. Zhurnal V Razvitii Vaulremney Meditsiny. Terevt, Arkhv, 1949, VYP. 4. S. 3-9. S Portr.

SO: Letopis' No. 33, 1949

HATOS, G.; ROM, P.

Albumin as a substitute for litmus. Gyogyszereszet 6 no.6:138-139 1 June 1951. (CIML 20:9)

1. Doctors.

ROM, P.

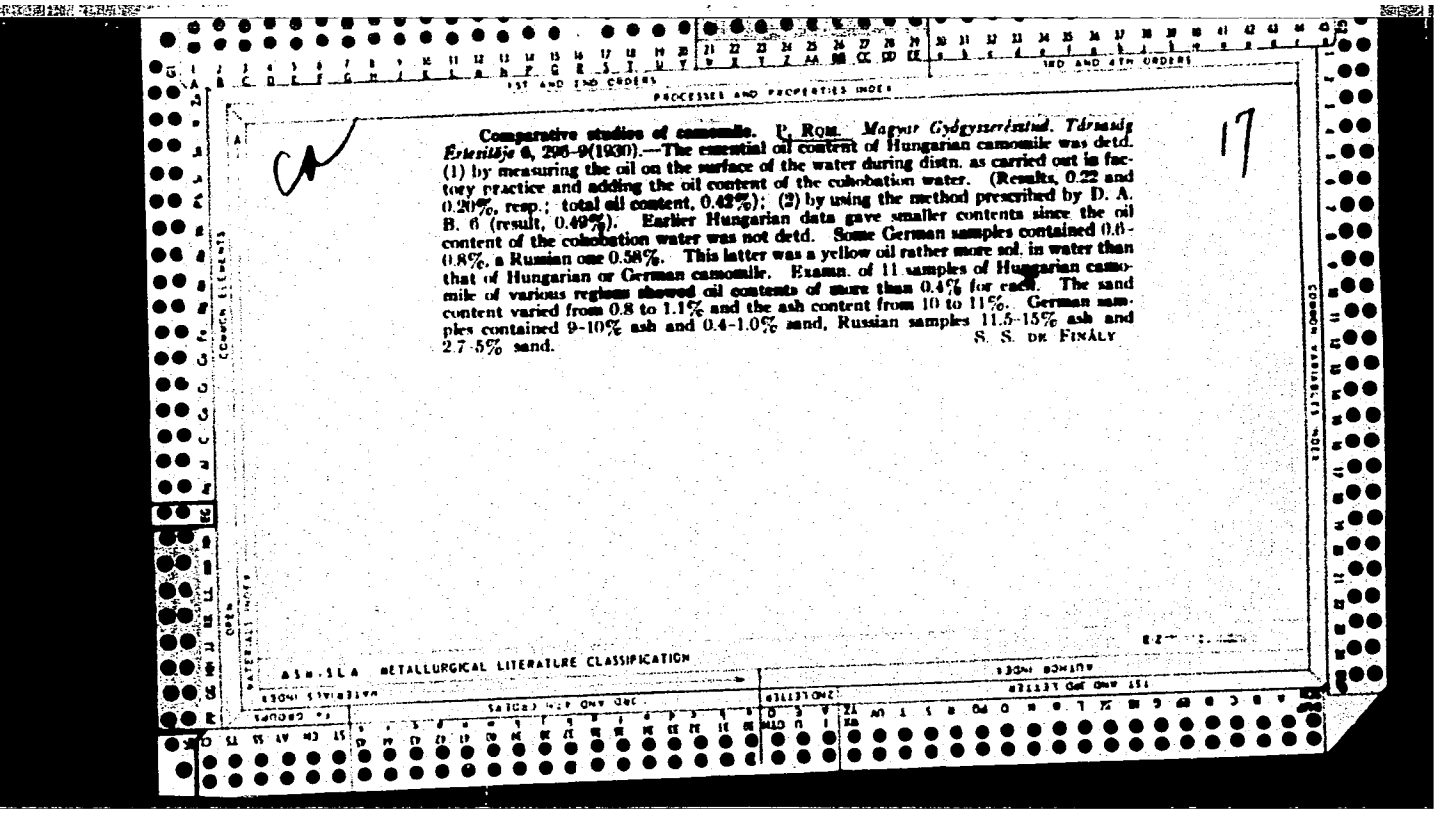
Phosphoric codeine. Gyogyszeresz 6 no. 8:181; contd. 1 Aug 1951.
(CLML 23:5)

1. Doctor.

ROM, Pal, dr.

Karoly Than, the founder of Hungarian chemistry. Gyogyszeresz 10 no.2:23-28 Feb 55

(BIOGRAPHIES,
Than, Karoly)



Comparative studies of camomile. P. Rom. *Magyar Gyógyszerésztud. Társaság Értesítője* **6**, 296–9(1930).—The essential oil content of Hungarian camomile was dtd. (1) by measuring the oil on the surface of the water during distn. as carried out in factory practice and adding the oil content of the cohobation water. (Results, 0.22 and 0.20%, resp.; total oil content, 0.42%); (2) by using the method prescribed by D. A. B. 6 (result, 0.49%). Earlier Hungarian data gave smaller contents since the oil content of the cohobation water was not dtd. Some German samples contained 0.6–0.8%, a Russian one 0.58%. This latter was a yellow oil rather more sol. in water than that of Hungarian or German camomile. Examn. of 11 samples of Hungarian camomile of various regions showed oil contents of more than 0.4% for each. The sand content varied from 0.8 to 1.1% and the ash content from 10 to 11%. German samples contained 9–10% ash and 0.4–1.0% sand, Russian samples 11.5–15% ash and 2.7–5% sand.

S. S. DE FINÁLY

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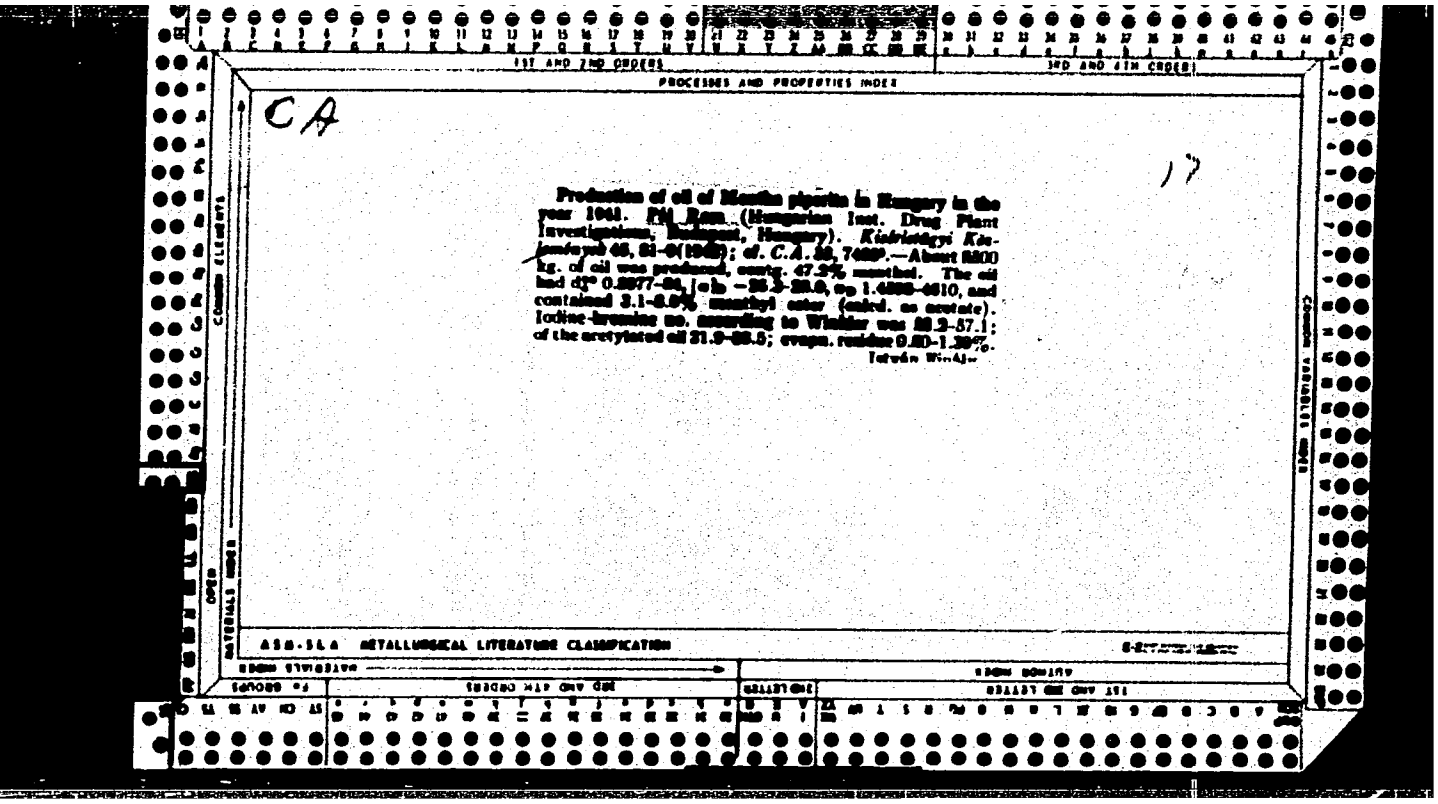

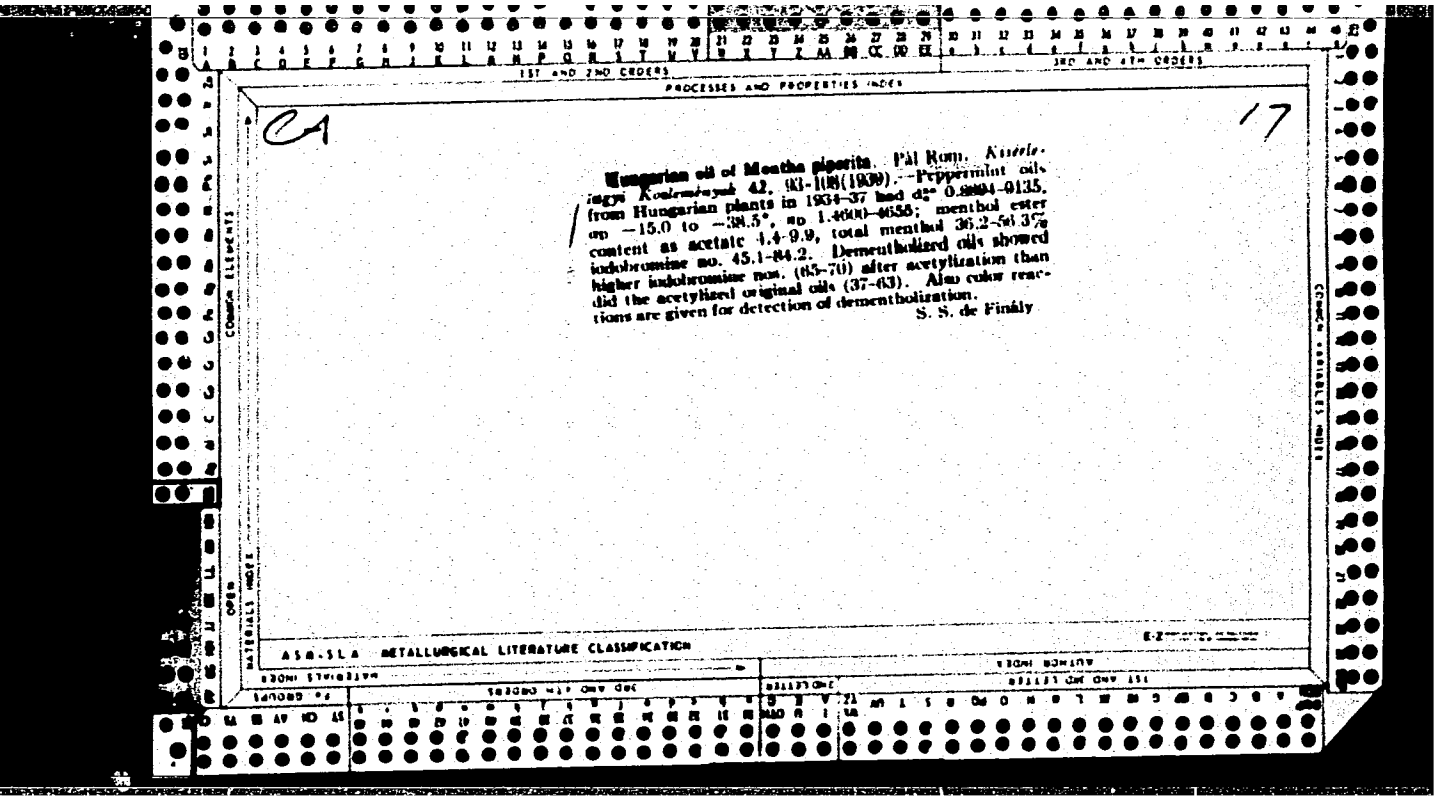

PROCESSES AND PROPERTIES INDEX

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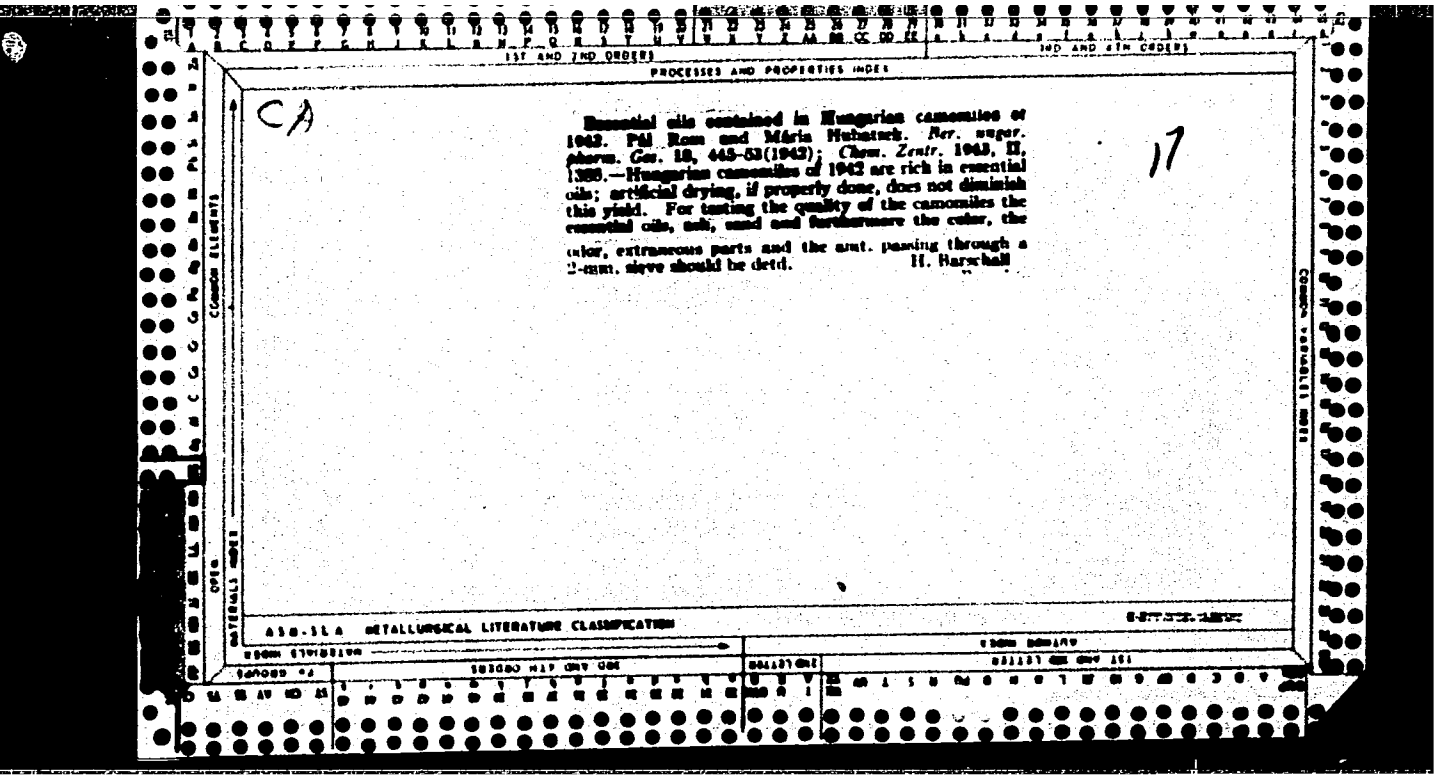
Hungarian oil of Mentha piperita. Pál Rom. *Kísérletügyi Közlemények* 42, 93-108 (1939).—Peppermint oils from Hungarian plants in 1934–37 had d_{20}^{20} 0.8994–9135, α_D −15.0 to −38.5°, n_D 1.4600–4655; menthol ester content as acetate 4.4–9.9, total menthol 36.2–56.3%, indolbromine no. 45.1–84.2. Dementholized oils showed higher indolbromine nos. (65–70) after acetylization than did the acetylized original oils (37–63). Also color reactions are given for detection of dementholization.

S. S. de Finály

ASM-SLA METALLURGICAL LITERATURE CLASSIFICATION



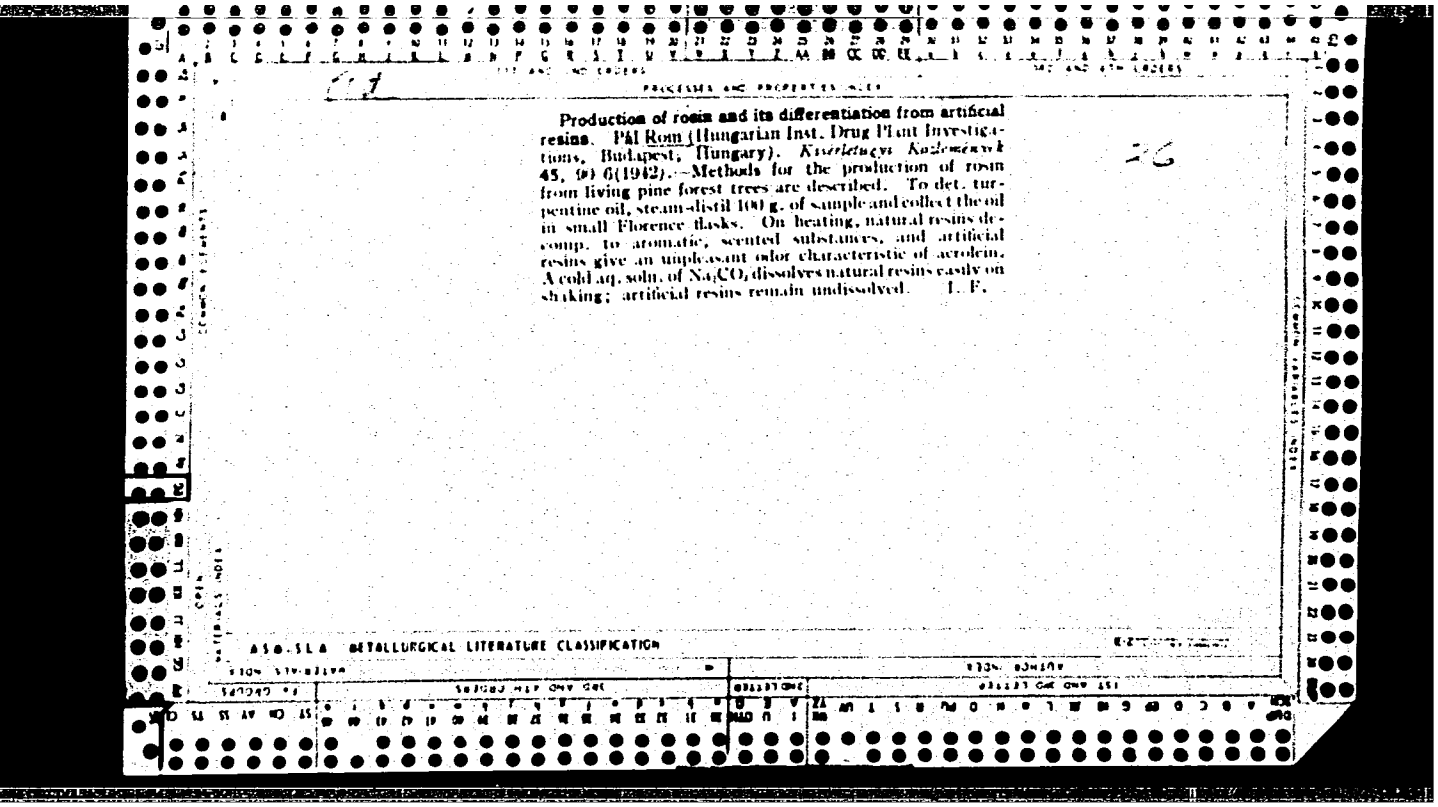
PROCESSES AND PROPERTIES INDEX

CA

17

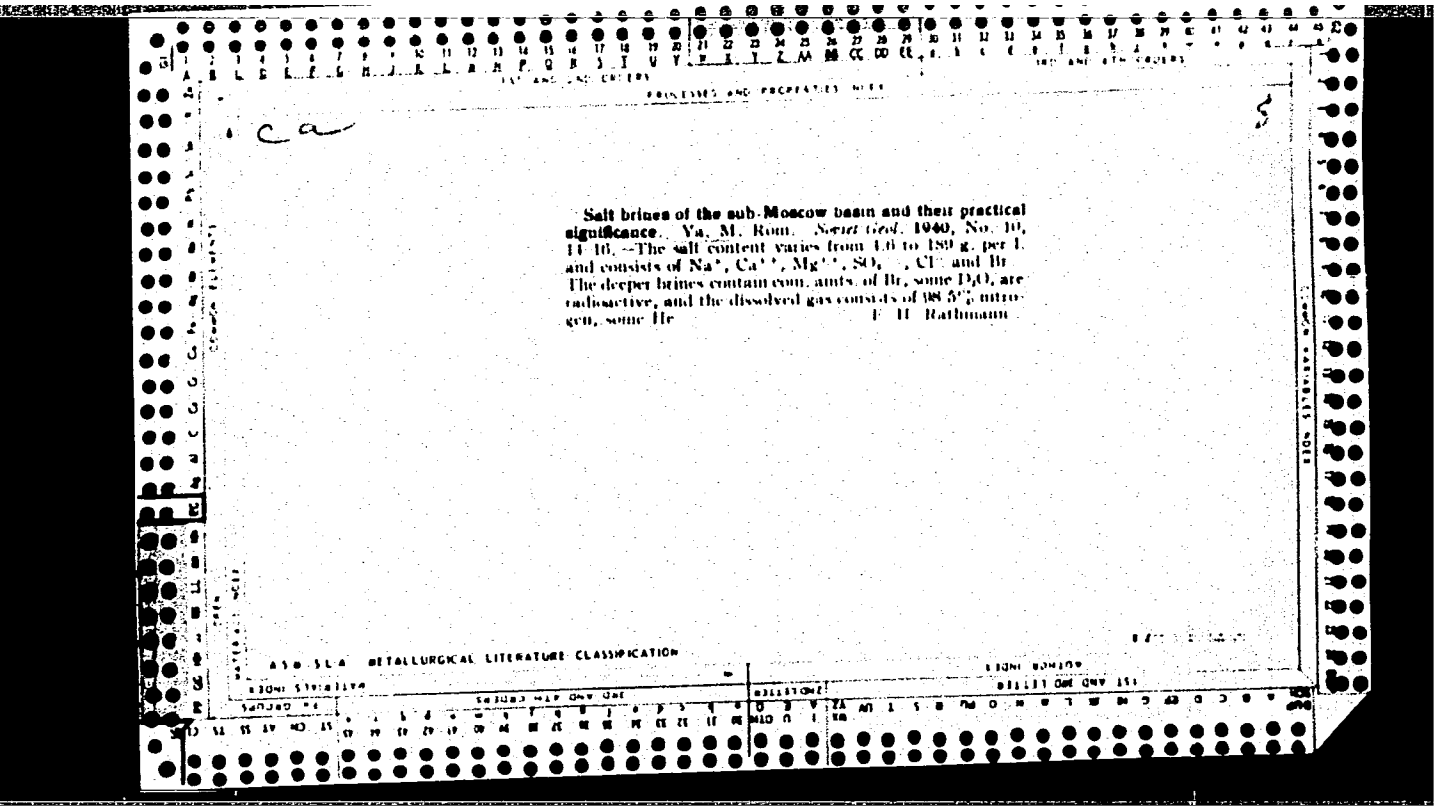
Essential oils contained in Hungarian camomiles of 1942. Pál Rom and Mária Hubatsek. *Ber. ungar. pharm. Ges.* 18, 445-53(1942); *Chem. Zentr.* 1943, II, 1388.—Hungarian camomiles of 1942 are rich in essential oils; artificial drying, if properly done, does not diminish this yield. For testing the quality of the camomiles the essential oils, ash, sand and furthermore the color, the color, extraneous parts and the amt. passing through a 2-mm. sieve should be detd. H. Barschall

A10-11A METALLURGICAL LITERATURE CLASSIFICATION



Production of rosin and its differentiation from artificial resins. Pál Rom (Hungarian Inst. Drug Plant Investigations, Budapest, Hungary). *Kiserletugyi Kozlemények* 45, 99 6(1942).—Methods for the production of rosin from living pine forest trees are described. To det. turpentine oil, steam-distil 100 g. of sample and collect the oil in small Florence flasks. On heating, natural resins decomp. to aromatic, scented substances, and artificial resins give an unpleasant odor characteristic of acrolein. A cold aq. soln. of Na_2CO_3 dissolves natural resins easily on shaking; artificial resins remain undissolved. L. F.

A50-SLA METALLURGICAL LITERATURE CLASSIFICATION



Salt brines of the sub-Moscow basin and their practical significance. Ya. M. Rom. *Sovet. Geol.* 1940, No. 10, 11-16.—The salt content varies from 1.6 to 180 g. per l. and consists of Na^+, Ca^{++}, Mg^{++}, SO_4^{--}, Cl^- and Br^-. The deeper brines contain com. amts. of Br, some D_2O, are radioactive, and the dissolved gas consists of 98.5% nitrogen, some He. F. H. Rathmann

ROM, V.Ya.

Volga-Baltic Waterway. Geog. v shkole 24 no.5:5-13 S-O '61. (MIRA 14:8)
(Mariinsk canal system)

ROM, V.Ya.

Cherepovets. Geog.v shkole 24 no.6:18-22 N-D '61. (MIRA 14:10)
(Cherepovets--Steel industry)

ROM, V.Ya.

The Cherepovets production-territorial complex and the problems of it's development. Izv. AN SSSR. Ser. geog. no.5:51-59 S-O '63. (MIRA 16:10)

1. Moskovskiy gosudarstvennyy pedagogicheskiy institut im. V.I.Lenina.

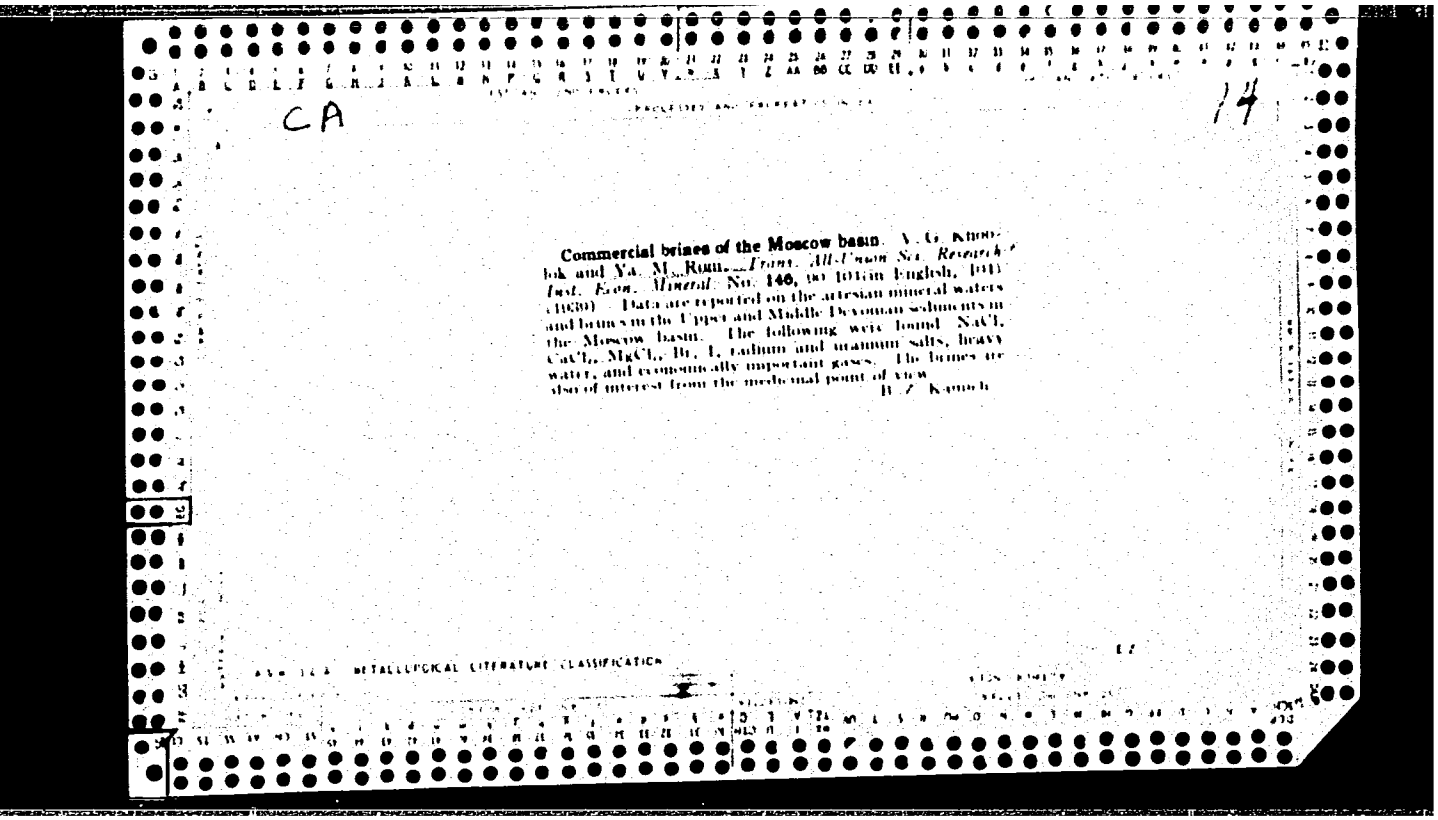
USSR/Geological Prospecting Jun 1946
Geology

"Problems of Inventors in the Geological Prospecting Service," Ya. M. Rom, 2 pp

"Razvedka Nedr" No 3

Article on the tasks facing inventors in the geological service for supplying the technical knowledge necessary for full development and use of the wealth of the USSR in future years.

ID 27T36



CA

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Commercial brines of the Moscow basin. V. G. Khlebnikov and Ya. M. Rom. *Trans. All-Union Sci. Research Inst. Econ. Mineral.* No. 146, 90–101 (in English, 1941) (1939). Data are reported on the artesian mineral waters and brines in the Upper and Middle Devonian sediments in the Moscow basin. The following were found: NaCl, $CaCl_2$, $MgCl_2$, Br, I, radium and uranium salts, heavy water, and economically important gases. The brines are also of interest from the medicinal point of view.

B. Z. Kamish

METALLURGICAL LITERATURE CLASSIFICATION

BUGOSLAVSKAYA, T.V., dotsent; ROM-BUGOSLAVSKAYA, Ye.S.

Diagnostic value of thrombophlebitis as a symptom of cancer. (MIRA 15:8)
Sov.med. 25. 25 no.5:55-59 My '62.

1. Iz kafedry terapii No.2 (zav. - dotsent T.V.Bugoslavskaya) Ukrainskogo instituta usovershenstvovaniya vrachey i terapevticheskogo otdeleniya 32-y bol'nitsy mediko-sanitarnoy chasti Khar'kovskogo taktornogo zavoda (glavnyy vrach - kand.med.nauk I.S.Yefimov).
(THROMBOPHLEBITIS) (CANCER)

S/070/63/008/002/006/017
E021/E120

AUTHORS: Bakradze R.V., and Rom-Krichevskaya I.A.

TITLE: The appearance of dislocations in single crystals of cadmium sulphide and zinc sulphide

PERIODICAL: Kristallografiya, v.8, no.2, 1963, 238-242

TEXT: Single crystals of cadmium and zinc sulphide were grown by sublimation and from the melt under pressure from an inert gas. In the process of growth by sublimation basal planes (0001) and $(000\bar{1})$ and prismatic planes $\{10\bar{1}0\}$ were formed. On crystals grown from the melt cleavage planes $\{10\bar{1}0\}$ were produced. Dislocations were shown up by chemical etching. It was shown that an effective etchant for showing dislocations on the basal plane (0001) was an alcoholic solution of hydrochloric acid. This solution produced six-sided etch pits on the basal plane. In several cases slight over-etching with this etchant led to blurring of the surface. Various concentrations were tried. The most successful solutions were within the limits of 1:4 to 1:3 mixtures of concentrated hydrochloric acid and alcohol. A universal etchant was discovered which formed sharp etch pits on (0001), $(000\bar{1})$ and $\{10\bar{1}0\}$ planes

of cadmium and zinc sulphide containing various amounts of impurities. This was a mixture of $H_2O:CrO_3:HNO_3$ of 3:2:1. The pits were six-sided and cone-shaped on (0001) and $(000\bar{1})$ faces respectively, and in the form of triangles or trapezia on $\{10\bar{1}0\}$ planes. The dislocation density was calculated for the $\{10\bar{1}0\}$ planes of cadmium sulphide and found to be about 10^5 cm^{-2}. The dislocation density on zinc sulphide was of the same order. There are 9 figures.

ASSOCIATION: Vsesoyuznyy nauchno-issledovatel'skiy institut monokristallov, stsintillyatsionnykh materialov i osobo chistykh khimicheskikh veshchestv (All-Union Scientific Research Institute for Single Crystals, Scintillating Materials and High Purity Chemical Substances)

SUBMITTED: March 15, 1962

L 63381-65 EWA(k)/FBD/EWT(1)/EWP(e)/EWT(m)/EEC(k)-2/EWP(1)/T/EWP(k)/EWP(b)/EWA(m)-2/EWA(h) SCTB/IJP(c) WG/WH

ACCESSION NR: AP5019761 UR/0051/65/019/002/0264/0269
621.375.9:535

AUTHOR: Rom-Krichevskaya, I. A.; Ratner, A. M.; Meshcheryakov, A. V.

TITLE: Threshold power of a laser with misaligned optical system

SOURCE: Optika i spektroskopiya, v. 19, no. 2, 1965, 264-269

TOPIC TAGS: solid state laser, neodymium laser, glass laser, laser optics, laser alignment

ABSTRACT: The authors determine the threshold pump power of a solid-state laser having an angular beam spread on the order of 10—20' and a misaligned optical system (which includes the tested rod), and the influence exerted on the threshold power by the condenser lens placed in front of one of the mirrors confocally with the rod. A laser system is considered whose principal elements are the rod, plane mirrors, and a condenser lens. Such a system has been shown previously to be equivalent to a system with confocal spherical mirrors. The misalignment of the optical system may be due to a relative tilt of the optical axes of the mirrors, or to inaccurate finish of the rod. The maximum tilt angle under which laser action remains unaffected is determined by simple geometric optics calculations. Experiments were

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ACCESSION NR: AP5019761

made with a neodymium-glass laser operating at 1.06 μ wavelength, the rods tested being 70 mm long and 6—8 mm in diameter. The experimental results show that the permissible tilt angle is directly proportional to the resolution of the lens used in the experiment, so that the effect of optical misalignment can be compensated by using a proper lens. The maximum tilt angle is found to be approximately d/2F, where d is about half the rod diameter and F the focal length of the lens. Some advantages of a system with flat mirrors and a lens over one with spherical mirrors are indicated. It is also shown that by testing the laser with a set of several lenses it is possible to determine the degree of inhomogeneity of the rod. "The authors thank N. L. Kramarenko for preparing the multilayer reflecting coatings." Orig. art. has: 3 figures and 8 formulas. [02]

ASSOCIATION: none

SUBMITTED: 04May64 ENCL: 00 SUB CODE: EC, OP

NO REF SOV: 002 OTHER: 005 ATD PRESS: 4080

Card 2/2

L 46018-66 EWT(1)/EEC(k)-2/T/EWP(k) IJP(c) WG/GD

ACC NR: AT6015137 SOURCE CODE: UR/0000/66/000/000/0144/0149

AUTHOR: Kramarenko, N. L.; Meshcheryakov, A. V.; Naboykin, Yu. V.; Ratner, A. M.; Rom-Krichevskaya, I. A.

ORG: Physico-Technical Institute of Low Temperatures, AN UkrSSR (Fiziko-tekhnicheskiy institut nizkikh temperatur AN UkrSSR)

TITLE: Investigation of losses and loss-associated characteristics of laser radiation

SOURCE: Respublikanskiy seminar po kvantovoy elektronike. Kvantovaya elektronika (Quantum electronics); trudy seminara. Kiev, Naukova dumka, 1966, 144-149

TOPIC TAGS: solid state laser, laser R and D, LASER RADIATION

ABSTRACT: A method for experimental determination of the radiation loss in a solid-state-laser resonator is suggested. A 4-level system is considered. The loss is determined, a plot of output energy vs. mirror transmissivity is constructed, and estimated and experimental results are compared for a Nd-glass

Card 1/2

specimen. All quantities that enter a total-radiation loss formula, except for dispersion loss, are directly measureable. Thus, the problem is reduced to determining the dispersion loss. The latter is derived from the experimental data on the effect of the first-mirror transmissivity upon the threshold pumping energy. The knowledge of the resonator radiation loss permits determining the optical transmissivity of mirrors. Orig. art. has: 4 figures and 16 formulas.

SUB CODE: 20 / SUBM DATE: 12Feb66 / ORIG REF: 004 / OTH REF: 002

L 01055-67 EWT(1)/EEC(k)-2/T/EWP (k) IJP(c) WG/GD

ACC NR: AT6015136 SOURCE CODE: UR/0000/66/000/000/0137/0143

59
B+1

AUTHOR: Ratner, A. M.; Rom-Krichevskaya, I. A.; Tiunov, Yu. A.

ORG: Physico-Technical Institute of Low Temperatures, AN UkrSSR (Fiziko-tekhnicheskiy institut nizkikh temperatur AN UkrSSR)

TITLE: Separate intensity peaks in laser radiation 25

SOURCE: Respublikanskiy seminar po kvantovoy elektronike. Kvantovaya elektronika (Quantum electronics); trudy seminara. Kiev, Naukova dumka, 1966, 137-143

TOPIC TAGS: laser, laser theory, solid state laser

ABSTRACT: An integral equation describing high-intensity variations of laser radiation is analyzed; the number of excited centers of luminescence increases with pumping and decreases due to de-excitation by luminous energy. With large reflector-misalignment angles, the light energy generated in a given peak does not last until the next peak; hence, each peak is formed separately. The distinguishing features of the separate peaks are: (1) They are sharper than conventional oscillations; (2) They have a longer period; (3) They are regular; (4) No damping occurs with a continuous

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L 01055-67

ACC NR: AT6015136 O

pumping; (5) The time of generated radiation does not exceed the period; this time determines the radiation spectrum; (6) Separate peaks are less polarized, and their polarization is independent of the peak number; (7) The generated energy is smaller in the case of separate peaks. A specimen of Nd glass 150-mm long and 14-mm diameter was used in an experimental study of the separate peaks; the mirror-axes misalignment was 2 angular minutes; oscillograms exhibit some changes in the generation pattern. Orig. art. has: 2 figures and 16 formulas.

SUB CODE: 20 / SUBM DATE: 12Feb66 / ORIG REF: 001 / OTH REF: 002

Card 2/2

ROMAC, Drazen, dipl. inz.

Fillers in the paint and lacquer industries. Kem ind 13 no.12: Suppl:Strucno-komercijalna publikacija Chromos-Katran-Kutrilin 5/6:1018-1020 '64.

ROMAC, Niko, Dr.

Pannyelophthisis; analysis of an unusual case. Lijec.vjes. 76 no.9-10 467-473 1954.
(BONE MARROS, dis.
pannyelophthisis, pathol.(Ser))

ROMAC, Niko, potpukovnik dr.

Panmyelophthisis; analysis of an unusual clinical cass. Voj. san. pregl., Beogr. 11 no.11-12:641-645 Nov-Dec 54.

1. Medicinski centar JRM.
(BONE MARROW, dis.
panmyelophthisis, diag. & ther.)

ROMAC, Niko, dr., potpukovnik

Clinic, pathogenesis and therapy of congenital, familial methemoglobinemia. Voj. san. pregl., Beogr. 11 no.5-6:165-169 May-June 54.

1. Medicinski centar JRM Split.
(METHEMOGLOBINEMIA
congen., familial, pathogen. & ther.)

ROMACHEVA, I.F., kand.med.nauk

Clinical aspects of mixed tumors of the macillofacial region. Stomatologiia 36 no.6:48-53 N-D '57. (MIRA 11:2)

1. Iz kafedry propedevtiki khirurgicheskoy stomatologii (zav. - dotsent G.A.Vasil'yev) Moskovskogo meditsinskogo stomatologicheskogo instituta (dir. - dotsent G.N.Beletskiy) i Moskovskogo gorodskogo chelyustno-litsevogo gospitalya (galvnyy vrach - dotsent A.A.Kovner)
(MOUTH--TUMORS)

ROMACHEVA, I.F., kand.med.nauk; SAKSONOVA, Ye.A.

Systemic diseases of the salivary and lacrimal glands (Sjögren's syndrome). Stomatologiia 38 no.3:13-16 My-Je '59. (MIRA 12:8)

1. Iz kafedry propedevtiki khirurgicheskoy stomatologii (zav. - dotsent G.A.Vasil'yev), kafedry glaznykh bolezney (zav. - prof. Z.A.Kaminskaya) Moskovskogo meditsinskogo stomatologicheskogo instituta (dir. - dotsent G.N.Beletskiy) i Moskovskogo chelyustno-litsevogo gospitalya (glavnyy vrach - dotsent A.A.Kovner).
(SALIVARY GLANDS--DISEASES) (LACRIMAL ORGANS--DISEASES)

ROMACHEVA, I.F.; MAR'YASINA, G.B.

Novocaine block treatment of some inflammations of the mucous membrane of the oral cavity. Stomatologiia 39 no.1:17-19 Ja-F '60. (MIRA 14:11)

1. Iz kafedry propedevtiki khirurgicheskoy stomatologii (zav. - dotsent G.A.Vasil'yev) Moskovskogo meditsinskogo stomatologicheskogo instituta (dir. - dotsent G.N.Beletskiy), Moskovskogo chelyustno-litsevogo gospitalya (glavnyy vrach - dotsent A.A.Kovner) i poliklinik No.2 (zav. S.M.Krutovskikh).
(NOVOCAINE) (MOUTH--DISEASES)
(MUCOUS MEMBRANE)

NOVIKOVA, I. F.

"Erroneous Diagnosis of Pericoronitis," Stomatologiya, No. 2, 1948. Clinic of Surg. Stomatology, Moscow Stomatological Inst., -c1948-.

ROMACHOVA, I. F.

"Sialography of Salivary Calculus," Ibid No. 3, 1948. Chair of Surgical Stomatol., Moscow Stomat. Inst., and Base of Mos. Maxillary Hospital," -c1948-.

[illegible], I. P.

Salivary Glands -- Diseases

Sialography in inflammatory diseases of the parotic and submaxillary glands. Stomatologiia No. 1, 1953.

Monthly List of Russian Accessions, Library of Congress June 1953. UNCL.

COUNTRY : USSR
CATEGORY : Farm Animals.
The Swine.
ABS. JOUR. : RZhBiol., No. 3, 1959, No. 12060

AUTHOR : Khomyakova, A.; Romachuk, I.
INST. : -
TITLE : The Interspecies Crossing of Pigs.

ORIG. PUB. : Kolkhoznoye proiz-vo, 1958, No 2, 30

ABSTRACT : No abstract.

CARD: 1/1

GOTTSEGEN, Gyorgy, dr.,; ROMADA, Tibor, dr.

Subacute bacterial endocarditis caused by Bacillus pyocyaneus.
Orv. hetil. 94 no.104:417-419 10 Apr 55.

1. A Fovarosi Istvan-korhaz (igazgato: Vikol Janos dr.) III. belosztalyanak (foorvos: Gottsegen Gyorgy dr.) kozlemenye.
(PSEUDOMONAS INFECTIONS,
aeruginosa subacute bacterial endocarditis)
(ENDOCARDITIS, SUBACUTE BACTERIAL, bacteriology,
Pseudomonas aeruginosa)

ROMADAN I. A.

LATVIA / Organic Chemistry. Synthetic Organic Chemistry. G

Abs Jour: Ref Zhur-Khimiya, No 20, 1958, 67498.

Author : Romadan I. A., Lauberte L.
Inst : Not given.
Title : Alkylation of Naphthalene with Isobutyl and Isoamyl Alcohols in the Presence of H_3PO_4. BF_3 Catalyst.

Orig Pub: Latv. PSR Zinatnu Akad. vestis, 1957, No 12, 151-154.

Abstract: Alkylation of naphthalene (I) with alcohols in the presence of H_3PO_4. BF_3 catalyst (K) results in the formation of β-alkylnaphtalenes (II) with 72-78% yield and of 1-4-dialkynaphthalenes (III) with 8-

Card 1/2

5.3300,5.3400

77863
SOV/79-30-2-14/78

AUTHORS: Romadan, I. A., Romadan, Yu. P.

TITLE: Alkylation of Benzene With Hexyl, Heptyl, and Octyl Alcohols in Presence of Boron Trifluoride

PERIODICAL: Zhurnal obshchey khimii, 1960, Vol 30, Nr 2, pp 420-424 (USSR)

ABSTRACT: This paper is a continuation of a series of articles on alkylation of benzene with various alcohols (Romadan, I. A., Grikit, E. Ya., Shuykin, N. I., Izvest. Akad. nauk SSSR, Otdel. khim. nauk, 1959; Romadan, I. A., Pelcher, Yu. E., Zhur. obshchey khim., 28, Nr 1 (1959)). In this work the authors studied alkylation of benzene with hexyl, heptyl, octyl, and dodecyl alcohols in presence of boron trifluoride, under various conditions: at atmospheric and higher pressures, with and without solvent and at various ratios of reactants. Alkylation at atmospheric pressure gave rather low yields (57-68%) of alkylated benzenes (a mixture of mono- and dialkylbenzenes was obtained in each case). Therefore, most of the experiments were conducted at high (30 atm maximum) pressure (see loc. cit. for the methods). The alcohol, saturated with boron trifluoride ($2ROH \cdot BF_3$)

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was mixed with benzene in an autoclave and heated at 170-200° for 3-4 hr. Results are shown in Table 2.

(1)	(2)	(3)	(4)	(5)	(6) (%)	(7) (a)	(b)	(c)
$C_6H_{13}OH$	1 : 1	165 (0)	80	26	63	62	38	—
$C_6H_{13}OH$	1.5 : 1	168 (0)	90	24	76	38	58	4
$C_6H_{13}OH$	1 : 2	158 (0)	120	83	58	88	12	—
$C_7H_{15}OH$	1 : 1	167 (0)	80	28	61	61	37	2
$C_7H_{15}OH$	1 : 2	155 (0)	120	81	57	86	14	—
$C_6H_{13}OH$	1 : 2	170 (30)	165	42	74	86	12	2
$C_6H_{13}OH$	1 : 1 : 1 (CCl_4)	170 (125)	120	11	90	88	12	—
$C_6H_{13}OH$	1 : 2	200 (35)	200	122	76	72	24	4
$C_7H_{15}OH$	1 : 1 : 1 (CCl_4)	170 (110)	120	15	88	90	10	—
$C_7H_{15}OH$	1 : 2	175 (30)	200	136	61	81	16	3
$C_8H_{17}OH$	1 : 1	170 (25)	160	99	62	42	58	—
$C_8H_{17}OH$	1 : 1	200 (30)	160	93	64	40	48	12

Table 2. Yields of alkylbenzenes under various reaction conditions. (1) Starting alcohol; (2) molar ratios alcohol: benzene; (3) boiling point (pressure in mm); (4) quantity of benzene used in reaction (ml); (5) quantity of recovered benzene (ml); (6) yield of alkylbenzenes (%) (7) content of alkylbenzenes in obtained product (%): (a) mono-, (b) di-, (c) poly-.

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Alkylation of Benzene With Hexyl, Heptyl, and Octyl Alcohols in Presence of Boron Trifluoride

77863
SOV/79-30-2-14/78

The use of carbon tetrachloride as solvent (ratio $2ROH \cdot BF_3$: benzene : CCl_4 = 1 : 1 : 1) alowed a raising of maximum pressure to 125 atm (at 170°) with a consequent increase in total yield of alkylbenzenes (and an increase in the yield of monoalkylbenzenes). Reaction of dodecyl alcohol with benzene was performed over $BF_3 \cdot H_3PO_4$; the mixture (alcohol : benzene : catalyst = = 1.25 : 1 : 0.5) was heated at 170° and 25-28 atm for 3 hr. Repeated fractionation yielded only unsaturated compounds. Table 1 shows analytical results of the obtained alkylbenzenes. There are 2 tables; and 5 Soviet references.

ASSOCIATION: Riga Polytechnical Institute (Rizhskiy politekhnicheskiy institut)

SUBMITTED: January 24, 1959

Card 3/4

Alkylation of Benzene With Hexyl, Heptyl, and Octyl Alcohols in Presence of Boron Trifluoride

77863
SOV/79-30-2-14/78

Table 1. (1) Hydrocarbon; (2) boiling point; n_D^{20} d_4^{20} (3) found (%); (4) calculated (%); (5) molecular weight; (6) found; (7) calculated; (8) sec-hexylbenzene; (9) n-dihexylbenzene; (10) trihexylbenzene; (11) sec-heptylbenzene; (12) n-diheptylbenzene; (13) sec-octylbenzene; (14) dioctylbenzene; (15) dodecylbenzene; (16) didodecylbenzene.

(1)		(2)	n_D^{20}	d_4^{20}	(3)		(4)		(5)	
					C	H	C	H	(6)	(7)
8*		201—203°	1.4850	0.8982	88.82	11.19	88.88	11.12	164.7	162
	9	255—260	1.4733	0.8855	87.74	12.24	87.80	12.20	211	216
	10	294—296	1.4465	0.8589	87.01	12.62	87.27	12.73	—	—
11*		226—227	1.4838	0.8920	88.67	11.45	88.63	11.37	173.2	176
	12	264—265	1.4689	0.8785	87.47	12.54	87.51	12.49	268	276
	13	248—250	1.4812	0.8904	88.30	11.67	88.39	11.61	191.7	191
	14	285—289	1.4651	0.8726	87.21	12.73	87.34	12.66	—	—
	15	233—234	1.4674	0.8719	—	—	—	—	—	—
	16	266—270	1.4502	0.8761	—	—	—	—	—	—

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* CCl_4 used as solvent

ROMADAN, I.A.; SPOLITE, R.

Certain derivatives of alkyl toluenes. Zhur.ob.khim. 33 no.12: 3985-3989 D '63. (MIRA 17:3)

1. Rizhskiy politekhnicheskiy institut.

S/076/60/034/04/31/042
B010/B009

AUTHORS: Yegorov, Yu. P., Romadan, I. A., Shlyapochnikov, V. A., Shuykin, N. I. (Moscow)

TITLE: Investigation of the Structure of the Radicals of Substances Obtained by Alkylation of Aromatic Hydrocarbons by Means of Alcohols in the Presence of Boron Trifluoride

PERIODICAL: Zhurnal fizicheskoy khimii, 1960, Vol. 34, No. 4, pp. 888 - 893

TEXT: In a number of earlier papers (Refs. 1-6) I. A. Romadan described a method for the alkylation of aromatic hydrocarbons with molecular alcohol compounds of boron trifluoride at 165-170° in an autoclave, or at a pressure of 1 atmosphere. The results obtained do not agree with those given by other authors, and it is assumed that a different reaction mechanism prevails under such conditions (without activator and at 165-170°). For instance, in the alkylation of naphthalene with n-butyl, n-amyl, and n-propyl alcohol alkyl naphthalenes with normal radicals were obtained. The structure of n-butylnaphthalene was confirmed spectroscopically (Ref. 13) and by a special method of deuterium exchange at the fiziko-khimicheskiy institut im. L. Ya. Karpova (Physicochemical Institute imeni L. Ya. Karpov) in the

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ROMADAN, I.A.; KOCHETKOVA, Ye.A.

Chlorination and bromination of alkyl-m-cresols and alkyl-p-cresols. Zhur.org.khim. 1 no.2:272-274 F '65. (MIRA 18:4)

1. Rizhskiy politekhnicheskiy institut.

AUTHOR: Romadan, I. A. SOV/79-29-1-23/71

TITLE: Alkylation of Naphthalene by the Molecular Compound of Ethyl Alcohol With Boron Fluoride Under Pressure (Alkilirovaniye naftalina molekulyarnym soyedineniyem etilovogo spirta s ftoristym borom pod davleniyem)

PERIODICAL: Zhurnal obshchey khimii, 1959, Vol 29, Nr 1, pp 102-102 (USSR)

ABSTRACT: In previous papers the author proved (Refs 1,2) that naphthalene is comparatively easily alkylated with the molecular compounds of the alcohols with boron fluoride under ordinary pressure and at 165-170°. Under these conditions, mixtures from α- and β- alkyl naphthalenes and dialkyl naphthalenes are obtained, the portion of α-isomers being 45-50 %. In further papers (Refs 3,4) it was found that, if this alkylation reaction of naphthalene takes place at the same temperature but at 20-30 atmospheres absolute pressure, the main product among the monoalkyl naphthalenes is formed by the β-isomers. On the alkylation of naphthalene with the molecular compound of the isoamyl alcohol with BF_3 under identical conditions, for instance, mainly the

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β-tertiary amyl naphthalene resulted (Ref 3). Similar results could be seen in the reactions with other alcohols as well. As is known, the alkylation reaction with ethyl alcohol proceeds in a more complicated way than with other alcohols. The author, however, succeeded in carrying out the alkylation reaction of naphthalene with ethyl alcohol and in obtaining a mixture from α- and β-ethyl naphthalenes in which the percentage of the β-isomer was 85-90 %. The monoethyl naphthalene yield was 58-63 %, referred to the initial naphthalene. The alkylation was performed in the steel autoclave. The reaction was carried out in two steps: The molecular compound of ethyl alcohol with BF_3 previously obtained was put into the autoclave together with naphthalene (2.5-3 mols ethyl alcohol per 1 mol naphthalene). On a gradual temperature increase up to 165° the pressure increased to 25-27 atmospheres absolute pressure. After cooling the content was poured into water, after the usual treatment (separation and desiccation on calcium chloride) on metallic sodium the product was finally distilled

Alkylation of Naphthalene by the Molecular Compound of Ethyl Alcohol With Boron Fluoride Under Pressure

SOV/79-29-1-23/74

over in the vacuum column. There are 5 references, 1 of which are Soviet.

ASSOCIATION: Latviyskiy gosudarstvennyy universitet (Latvian State University)

SUBMITTED: August 26, 1957

Card 3/3

AUTHORS: Romadan, I. A., Pelcher, Yu. E. SOV/79-29-1-24/74

TITLE: Alkylation of Benzene by Molecular Compounds of Alcohols With Boron Fluoride Under Pressure (Alkilirovaniye benzola molekulyarnymi soyedineniyami spirtov s ftoristym borom pod davleniyem)

PERIODICAL: Zhurnal obshchey khimii, 1959, Vol 29, Nr 1, pp 103-106 (USSR)

ABSTRACT: At present, monoalkyl benzenes (e.g. ethyl benzene, isopropyl benzene, isobutyl benzene, and others) are frequently used for the production of the valuable organic raw product which is necessary for the manufacture of plastics and synthetic fibers. 1,4-dialkyl benzenes are transformed on oxidation into terephthalic acid which is the initial product for the manufacture of the synthetic fiber "Terilen". The important role of alkylbenzenes in industries induced the authors to devise a new alkylation method for benzene with alcohols. They performed the alkylation reactions of benzene with the molecular compounds of ethyl, n-propyl, isopropyl, n-butyl, isobutyl, and isoamyl alcohol with BF_3 at 200-230° and 75-120 atmospheres absolute pressure. Mixtures of mono- and dialkyl benzenes were thus

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obtained in yields of 60-90 %, referred to the initial benzene. On the alkylation of benzene with ethyl alcohol, a mixture of mono- and diethyl benzene in a yield of 60-64 % was thus obtained, wherein ethyl benzene was predominant (65-70 % of the mixture). The remaining part of the mixture consisted of a mixture of diethyl benzenes with a small amount of triethyl benzenes. On the alkylation of benzene with n-propyl and isopropyl alcohol only one product, the isopropyl benzene, was obtained. If n-butyl and isobutyl alcohol were used instead of the propyl alcohols, only one product resulted, namely isobutyl benzene. Isopropyl and isobutyl benzene were obtained in good yields, the quantity of the alcohol used playing a certain role. The structure of the products obtained was substantiated by analyses and confirmed by the infrared-spectrum analysis. The constants of the alkyl benzenes formed are given in the table and compared with data to be found in publications. There are 1 table and 10 references, 5 of which are Soviet.

Alkylation of Benzene by Molecular Compounds of Alcohols With Boron Fluoride Under Pressure

SOV/79-29-1-24/74

ASSOCIATION: Latviyskiy gosudarstvennyy universitet (Latvian State University)

SUBMITTED: August 26, 1957

Card 3/3

5(3)

AUTHORS: Romadan, I. A., Grikit, E. Ya., Shuykin, N. I.

SOV/62-59-4-22/42

TITLE: Alkylation of Toluene by Molecular Compounds of Alcohols With Boron Fluoride Under Pressure (Alkilirovaniye toluola molekulyarnymi soyedineniyami spirtov s ftoristym borom pod davleniyem)

PERIODICAL: Izvestiya Akademii nauk SSSR. Otdeleniye khimicheskikh nauk, 1959, Nr 4, pp 705-709 (USSR)

ABSTRACT: In the present paper toluene was alkylated in the autoclave with n-propyl, isopropyl, n-butyl, isobutyl, isoamyl, and n-hexyl alcohol in the presence of BF_3 at 170-180° and under 40-60 atmospheres. As a result 1,4-dialkyl- and 1,2,4-trialkyl benzenes were obtained in a 62-87 % yield of initial toluene. 1-methyl-4-alkyl benzenes amounted to 53-78 % of the total quantity of the alkyl benzenes obtained, whereas the yield in 1-methyl-2,4-dialkyl benzenes was not more than 9-17 %. The monoalkyl toluenes precipitated from the catalysates had constants similar to the data for synthetic alkyl toluenes. Upon alkylation of toluene with n-propyl alcohol,

1-methyl-4-isopropyl benzene was obtained: melting point 177.4°, n_D^{20} 1.4915, d_4^{20} 0.8575 as compared to melting point 177°, n_D^{20} 1.4909, d_4^{20} 0.8573 (Ref 7). Upon alkylation with isopropyl alcohol, 1-methyl-4-isopropyl benzene was obtained: melting point 177°, n_D^{20} 1.4911, d_4^{20} 0.8573 as compared to melting point 177.25°, n_D^{20} 1.4909, d_4^{20} 0.8573 (Ref 7). The constants of other hydrocarbons obtained are shown in table 1. The experimental data show that the yield in alkyl toluenes depends on the molar ratio of the initial reagents. At a molar ratio of toluene : alcohol = 1 : 1 the yield in alkyl toluenes was about 20-25 % lower than at a ratio of 1 : 2 (Table 2). In addition to the mentioned monoalkyl toluenes, disubstituted alkyl toluenes were obtained, as, e.g. 1-methyl-2,4-diisopropyl-, 2,4-di-n-butyl; and 1-methyl-2,4-di-n-propyl-, 1-methyl-, 1-methyl-2,4-diisobutyl-, and 1-methyl-2,4-diisoamyl benzenes

which were not yet described (Table 1). There are 2 tables and 12 references, 7 of which are Soviet.

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

SUBMITTED: July 9, 1957

YEGOROV, Yu.P.; ROMADAN, I.A.; SHLYAPOCHNIKOV, V.A.; SHUYKIN, N.I. (Moscow)

Structure of the radicals of compounds obtained in the alkylation of aromatic hydrocarbons by alcohols in the presence of boron trifluoride. Zhur. fiz. khim. 34 no.4:888-893 Ap '60. (MIRA 14:5)

(Radicals (Chemistry)—Spectra) (Hydrocarbons)

ROMADAN, I.A.; KOCHETKOVA, Ye.A.

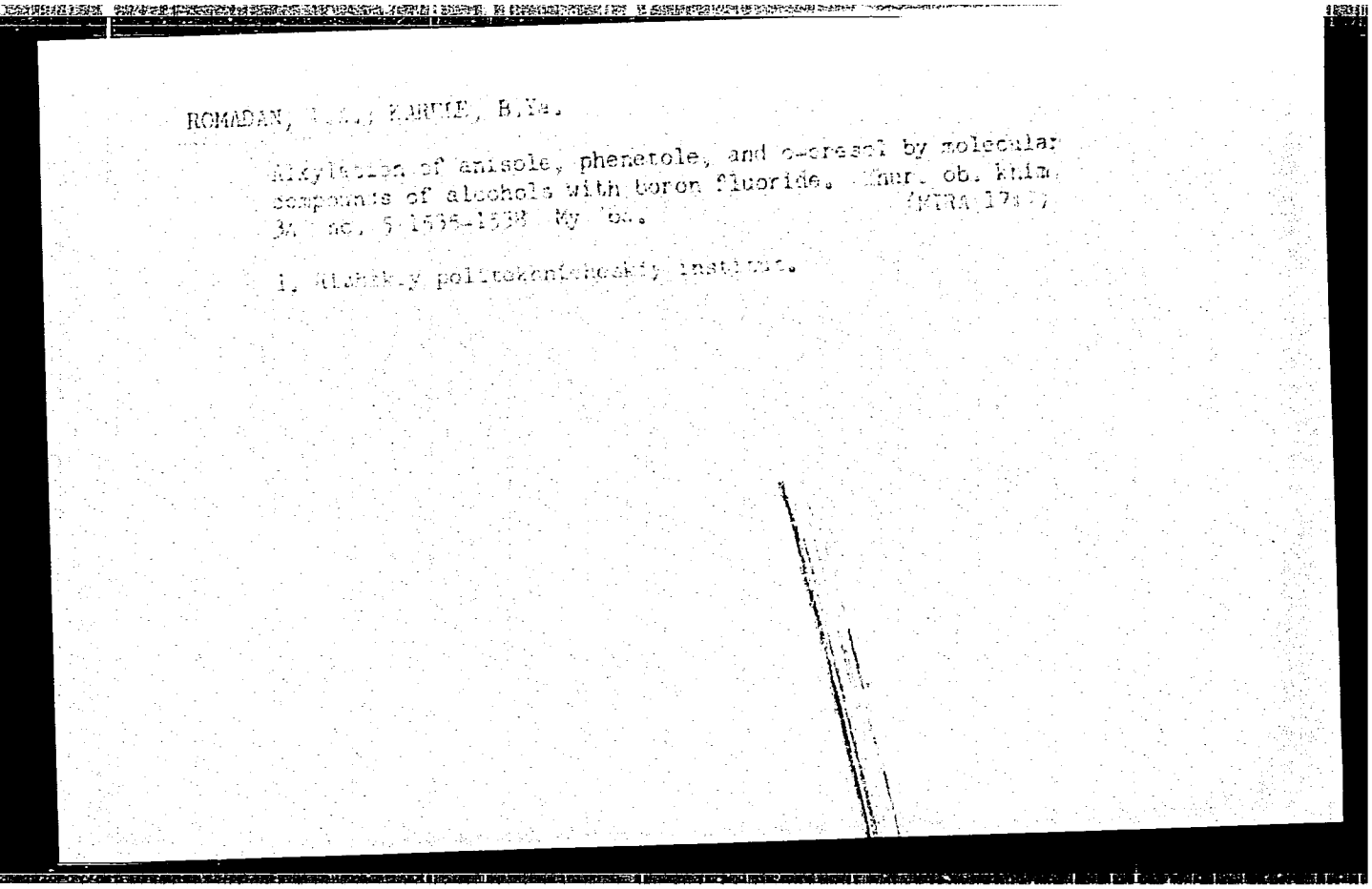
Nitro derivatives of alkyl phenols. Zhur. ob. khim. 34 no.8: 2767-2769 Ag '64. (MIRA 17:9)

1. Rizhskiy politekhnicheskiy institut.

ROMADAN, I.A.; [illegible] M.M.

Alkylation of p-cresol by molecular compounds of alcohols with BF_3 at elevated pressure. Zhur. ob. khim. 34 no. 5: 1538-1543 My '64. (MIRA 17:7)

1. Rizhskiy politekhnicheskiy institut.



ROMADAN, [illegible], KARPOV, B.Ye.

Alkylation of anisole, phenetole, and o-cresol by molecular compounds of alcohols with boron fluoride. Zhur. ob. khim. 34, no. 5, 1536-1538 My '64. (MIRA 17:7)

1. Moskovskiy politekhnicheskiy institut.

ROMADAN, I.A.; PELCHER, Yu.E.

Preparation of ethers from moleculot compounds of alcohols with boron trifluoride. Izv.vys.ucheb.zav.; khim.i khim.tekh. 2 no.3:381-383 '59. (MIRA 13:8)

1. Latviyskiy gosudarstvennyy universitet, kafedra organicheskoy khimii.
(Boron fluoride) (Alcohols) (Ethers)

ROMADAN, I.A.; STIPNIYKK, G.T.

Alkylation of phenol by molecular compounds of alcohols with boron fluoride. Zhur.ob.khim. 30 no.7:2193-2196 Jl '60. (MIRA 13:7)

1. Rizhskiy politekhnicheskiy institut.
(Phenol) (Boron fluoride) (Alkylation)

ROMADAN, I.A.

Alkylation of naphthalene by molecular compounds of ethyl alcohol with boron fluoride under pressure. Zhur.ob.khim. 29 no.1:102 Ja '59. (MIRA 12:4)

1. Latviyskiy gosudarstvennyy universitet.
(Naphthalene) (Alkylation) (Boron fluoride)

ROMADAN, I.A.; PELCHER, Yu.E.

Alkylation of benzene by molecular compounds of alcohols with boron flouride under pressure. Zhur.ob.khim. 29 no.1:103-106 Ja '59. (MIRA 12:4)

1. Latviyskiy gosudarstvennyy universitet.
(Benzene) (Alkylation) (Boron fluoride)

ROMADAN, I.A.; BERZINA, V.K.

Alkylation of diphenyl with alcohols in presence of phosphoric acid.
Zhur.ob.khim. 25 no.2:282-286 F '55. (MLRA 8:6)

1. Latviyskiy Gosudarstvennyy universitet.
(Alkylation) (Biphenyl)

Romadan, I. A.

Determination of purity of 1- and 2-butylnaphthalenes by ultraviolet spectra. I. A. Romadan, H. I. Shuikin, and Yu. [illegible] (N. D. Zelinskii Inst. Org. Chem., Moscow). *Izvest. Akad. Nauk S.S.S.R., Otdel. Khim. Nauk* 1957, 848-[illegible].—Ultraviolet spectra can be used for estg. the purity of 1- and 2-$C_{10}H_7Bu$ in $Me_2CCH_2CHMe_2$. The extinction coeffs. for the 1- and 2-isomers, resp., are: at 314.5 mμ, 435 and 215; at 319.2 mμ, 180 and 635. The spectra are reproduced. The isomers are best purified by freezing out. G. M. K.

Romadan et al.

USSR/Organic Chemistry - Synthetic Organic Chemistry, E-2

Abst Journal: Referat Zhur - Khimiya, No 1, 1957, 841

Author: Romadan, [redacted] and Rendel, T. I.

Institution: None

Title: Alkylation of Diphenyl with Alcohols in the Presence of BF_3

Original Periodical: Zh. obshch. khimii, 1956, Vol 26, No 1, 202-208

Abstract: With a view to the production of heat-transfer agents, diphenyl has been alkylated with C_2H_5OH (I), C_3H_7OH (II), iso-C_3H_7OH (III), C_4H_9OH (IV), iso-C_4H_9OH (V), iso-$C_5H_{11}OH$ (VI), and $C_6H_{13}OH$ (VII) in the presence of BF_3. Mixtures of mono- and dialkyl diphenyls were obtained (usually in equal amounts). Products of highest purity and in the best yields were achieved when normal alcohols were used. The authors are of the opinion that alkylation proceeds by the formation of the complex $ROHBF_3$. Procedure: to 40 gms of cold VI saturated with BF_3 add 25 gms of diphenyl and heat with mixing to 165-170° for 1.5 hours (in general, 0.5-1.5 hours for iso-alcohols and 3 hours

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USSR/Organic Chemistry - Synthetic Organic Chemistry, E-2

Abst Journal: Referat Zhur - Khimiya, No 1, 1957, 841

Abstract: for normal-alcohols), dilute with water, separate, and steam distill the oily layer. A mixture of mono- and diisoamyl diphenyl is obtained in which the disubstituted compound predominates slightly; overall yield, 98%. Characteristics of isoamyldiphenyl: bp 298-302°, freezing point -55°, n_D^{20} 1.5075, d_4^{20} 0.8876, η^{20} 12.9164 cp. Diisoamyldiphenyl: bp 310-313°, freezing point -53°, n_D^{20} 1.5102, d_4^{20} 0.8976. The alkylated derivatives of I-V and VII are obtained by a similar method; the yields (percent), bp in ° C/mm, freezing points in ° C, n_D^{20}, and d_4^{20} for the mono- and di- derivatives are given in that order: I, 85.3, mono: 281-282, -51, 1.5681, 0.9793; di: 304-305, -50, 1.5615, 0.9547; II, 100, mono: 299-300, -48, 1.5349, 0.9343; η^{20} 27.84, σ^{15} 32.20; di: 328-330, -41, 1.5340, 0.9297; III, 74, mono: 295-298, -55, 1.5475, 0.9123, η^{20} 18.94; di: 315-316, -48, 1.5480, 0.8949; IV, 100, mono: 308-310, -70, 1.5259, 0.8950; di: 324-326, -66, 1.5248, 0.8939; V, 88, mono: 282-286, -51, 1.5295, 0.9070, η^{20} 16.89, σ^{15} 30.96; di: 306-308, -46, 1.5142, 0.8952. When 80 gms of VII are saturated with 27.1 gms BF_3 and reacted with 60 gms diphenyl (3 hours at 160-170°) quantitative conversion to a mixture of monohexyldiphenyl (bp 313-315, 40.6) and dihexyldiphenyl (bp 330-331) is observed.

Card 2/2

ROMADAN, I.A.

Alkylation of naphthalene by normal alcohols in the presence of BF_3. Zhur.ob.khim. 27 no.7:1833-1835 Jl '57. (MIRA 10:10)

1.Latviyskiy gosudarstvennyy universitet.
(Naphthalene) (Alkylation)

ROMADAN, I.A.; BERGA, S.E.

Alkylation of ciphenyl by the alcohols in presence of $BF_3 \cdot H_3PO_4$ catalyst. Zhur.ob.khim. 28 no.2:413-417 F '58. (MIRA 11:4)

1. Latviyskiy gosudarstvennyy universitet.
(Alkylation) (Biphenyl) (Alcohols)

Romadan I. A.

79-2-29/64

AUTHORS: Romadan, I. A., Berga, S. E.

TITLE: Alkylation of Diphenyl With Alcohol in the Presence of a $BF_3.H_3PO_4$ Catalyst (Alkilirovaniye difenila spirtami v prisutstvii katalizatora $BF_3.H_3PO_4$)

PERIODICAL: Zhurnal Obshchey Khimii, 1958, Vol. 28, Nr 2, pp. 413 -417 (USSR)

ABSTRACT: In the present work the authors investigated the reactions between diphenyl and isoamyl-, isobutyl-, isopropyl, n.-propyl- and n.-butyl-alcohols in the presence of $BF_3.H_3PO_4$. They wanted to determine the controlling action of an acid catalyst such as BF_3. At the same time they wanted to determine the possibility of an isomerization of the secondary into the tertiary radical, when a strong electrophile reagent is present. They again tried to confirm the assumption on the mechanism of the alkylation with alcohols according to structure. Kenna and Sova (reference 11), Pres and Lund (reference 12) expressed their opinions on the alkylation mechanism with alcohols in the presence of BF_3. Later other authors (references 13 and 14) also tried to explain the reaction mechanism. But concrete assumptions on the course of the reaction according to the structure of the alcohol were apparently not expressed. In the observation of the alkylation reaction of naphthalene (references 15

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Alkylation of Diphenyl With Alcohol in the Presence of a $BF_3 \cdot H_3PO_4$ Catalyst

and 16) and diphenyl (reference 10) with normal and with isoalcohols in the presence of BF_3 it was possible to establish some assumptions on the alkylation mechanism which are based on the following facts: 1) With normal alcohols alkylnaphthalenes and diphenyls only form with normal radicals. 2) The products of olephine polymerization are absent in the alkylation with normal alcchols. 3) With normal alcohols the reaction takes place 3,4 times slowlier than with isoalcohols. 4) In the alkylation with isobutyl- and isoamyl-alcohols, alylnaphthalene-diphenyls containing tertiary radicals form. 5) In the reaction with alcohols with an isostructure diners and trimers of the olephines are always contained in the mixture of products. 6) With isoalcohols the reaction is terminated within 1 - 2 hours. These observations make assume that with normal alcohols a condensation reaction takes place, whereas with alcohols of an isostructure which split off water more easily, the alkylation reaction takes place with intermediate olephines. In the reaction with the catalyst $BF_3 \cdot H_3PO_4$ equal facts as in the presence of only BF_3 are observed: with normal alcohols p-n.-alkyldiphenyls were obtained and with isopropyl alcohol, p-isopropyldiphenyl; with isobutyl- and isoamyl-alcohols p-tertiary-butyl- and p-tertiary-amyl-diphenyls - crystalline substances formed. Beside the monoalkyldiphenyls the authors obtained dialkyldiphenyls with

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Alkylation of Diphenyl With Alcohol in the Presence of a $BF_3 \cdot H_3PO_4$ Catalyst

radicals in the p,p'-position. Their yield does not exceed 8 - 14 %. Polymers of isobutylene and isoamylene were produced and investigated. Some characteristics of alkyldiphenyls are given in the table. Conclusions: 1) It is assumed that on heating of diphenyl with normal alcohols a condensation reaction takes place. Therefore only substances with normal radicals are produced. 2) With alcohols of an isostructure the main reaction is directed to the alkylation with intermediate olephines as a consequence of which alkylnaphthalenes and alkyldiphenyls containing tertiary radicals form. 3) In the alkylation of diphenyl with alcohols in the presence of $BF_3 \cdot H_3PO_4$ 3 mol alcohol on 1 mol of hydrocarbon are required. But in the alkylation with molecular alcohol compounds with BF_3 1,5 mol are sufficient. 4) In the alkylation of diphenyl with molecular compounds the yield of alkyldiphenyl amounts to 80 - 98 %. In a reaction with mixed catalyst the yield, however, does not exceed 65 %, although the duration of heating is about 2 times longer. There are 1 table, and 17 references, 7 of which are Slavic.

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79-2-29/64

Alkylation of Diphenyl With Alcohol in the Presence of a $BF_3.H_3PO_4$ Catalyst

ASSOCIATION: State University, Latvia
(Latviyskiy gosudarstvennyy universitet)

SUBMITTED: January 26, 1957

AVAILABLE: Library of Congress

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5(3)

AUTHORS: Romadan, I. A., Pelcher, Yu. E. SOV/153-2-3-13/29

TITLE: The Production of Simple Ethers From the Molecular Compounds of the Alcohols With Boron Trifluoride

PERIODICAL: Izvestiya vysshikh uchebnykh zavedeniy. Khimiya i khimicheskaya tekhnologiya, 1959, Vol 2, Nr 3, pp 381-383 (USSR)

ABSTRACT: The authors investigated the formation of simple ethers from the ethanol-, propanol-, butanol-, and isoamyl alcohol in the presence of BF_3 as catalyst under different conditions. No papers have as yet been published on this suoject, only the alkylation of phenols in the presence of BF_3 has been dealt with. Zavgorodnyy (Refs 3-5) is mentioned in this connection. The alcohols were dried over calcium oxide and then distilled. The dry alcohols were saturated in a special glass apparatus with boron trifluoride with the flask being cooled with ice - normal salt. The molecular compounds formed were heated to the necessary temperature without special purification in a steel autoclave during 30-120 minutes. After colling the reaction mixture was washed with a 10 % soda solution and subsequently washed with

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water and dried over potassium carbonate. Then the formed ethers were isolated by fractional distillation. The maximum yields (60 - 87%) are obtained when the reaction is carried out at a molar ratio alcohol: BF_3 = 1 : 0.25, at a temperature of 200 - 225°, and under a pressure of 50 - 70 at. By this method also mixed ethers may be produced. Thus a mixture of n-propyl isoamyl ether and diisoamyl ether is obtained in the reaction of isoamyl alcohol with the molecular compound of n-propanol with BF_3. It was found that in the formation of the ethers from the molecular compounds of the alcohols with BF_3 no isomerization of the radicals takes place. The results of the preparation of several ethers according to the method described under different conditions (pressure, temperature) are summarized in a table There are 1 table and 14 references, 7 of which are Soviet.

ASSOCIATION: Latviyskiy gosudarstvennyy universitet Kafedra organicheskoy khimii (Latvian State University, Chair of Organic Chemistry)

The Production of Simple Ethers From the Molecular Compounds of the Alcohols With Boron Trifluoride

SOV/153-2-3-13/29

SUBMITTED: May 8, 1958

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PHASE I BOOK EXPLOITATION SOV/4226

Riga. Universitate

Uchenyye zapiski, t. 14, Khimicheskiy fakul'tet, 4 (Scientific Notes, Vol 14, Chemistry Faculty, 4) Riga, 1957. 251 p. 550 copies printed.

Eds. (Title page): A.F. Iyevin'sh, Professor, Doctor of Chemistry; L.K. Lepin', Member of the Academy of Sciences Latviyskaya SSR, Professor, Doctor of Chemistry; G.Ya. Vanag, Professor, Doctor of Chemistry; Tech. Ed.: A. Peterson.

PURPOSE: This book is intended for inorganic chemists and scientists in the ceramics industries.

COVERAGE: The book contains 22 articles on organic chemical synthesis and analysis and the physicochemical properties and compositions of ceramic and refractory materials. No personalities are mentioned. Figures, tables, and references accompany the articles.

AVAILABLE: Library of Congress

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JA/rn/afm
9/29/60

S/079/60/030/007/009/020
B001/B063

AUTHORS: Romadan, I. A., Stipniyek, G. T.

TITLE: Alkylation of Phenol by Means of Molecular Compounds From Alcohols and Boron Fluoride

PERIODICAL: Zhurnal obshchey khimii, 1960, Vol. 30, No. 7, pp. 2193-2196

TEXT: Considering the results of many previous investigations on the synthesis of alkyl phenols and alkyl-phenyl ethers (Refs. 1-11) the authors have found already earlier that naphthalene, diphenyl, benzene, and toluene can be easily alkylated with molecular compounds formed from alcohols and boron fluoride (Refs. 12-17). The present paper describes the alkylation of phenol with ethyl-, propyl-, n-butyl, isobutyl-, and isoamyl alcohols in the presence of boron fluoride, at ordinary and elevated pressures, with and without solvents, and at different temperatures. The yields and the ratios between alkyl phenols and alkyl-phenyl ethers were found to depend on the temperature and the solvents used. Alkylation of phenol with the above molecular compounds led to almost pure p-alkyl phenols (yield of 70-80% as referred to phenol). A mixture

of alkyl phenols and alkyl-phenyl ethers in the ratio 80-85 : 20-25 is formed under pressure. The latter can be easily isomerized into p-alkyl phenols already during distillation. This isomerization proceeds even more easily by heating in a CCl_4 solution to 130-140°C at 12-15 atm (Table 1 and Fig.). These experiments showed that the phenol partly resinified when it was heated in an autoclave to 160-170°C. In order to determine the optimum temperature at which the above molecular compounds decompose and alkylation takes place simultaneously, temperature was measured every five minutes (by means of a thermocouple and a potentiometer). It was found that each alcohol had a specific maximum temperature at which an intense exothermic decomposition occurred. Decomposition and alkylation take place within a short time (Fig.). The products obtained and their physical properties are listed in Table 2. There are 1 figure, 2 tables, and 22 references: 18 Soviet, 2 US, and 2 German.

ASSOCIATION: Rizhskiy politekhnicheskiy institut (Riga Polytechnic Institute)

SUBMITTED: July 6, 1959

ROMADAN I. A.

ROMADAN, I.A.; SHUYKIN, N.I.; YEGOROV, Yu.P.

Determination on purity of α-and β-n butylnaphthalenes by the method of ultraviolet spectroscopy. Izv. AN SSSR. Otd. khim. nauk no.5:648-649 My '57. (MLRA 10:8)

1. Institut organicheskoy khimii im. N.D. Zelinskogo Akademii nauk SSSR.

(Naphthalene--Spectra)