HAZAY, Istvan, dr., Kossuth-dijas, a muszaki tudomanyok doktora, egyetemi tanar

Dimension of the auxiliary quantities of compensation. Geod kart 14 no.6:397-399 '62.

1. Epitoipari es Kozlekedesi Muszaki Egyetem; "Geodezia es Kartografia" szerkeszto bizottsagi tagja.

HAZAY, Istvan, dr., Kossuth-dijas, a muszaki tudomanyok doktora, egyetemi tanar

Professional practice combined with correspondence courses for students of geodesy. Geod kart 14 no.6:454-455 '62.

1. Epitoipari es Kozlekedesi Muszaki Egyetem; "Geodesia es Kartografia" szerkeszto bizottsagi tagja.

HAZAY, Istvan, a muszaki tudomanyok doktora

Remark about the paper of Zoltan Heinemann entitled "Remarks about the principle of static equalization." Muszaki kozl MTA 31 no.1/4:275-279 '62.

1. Epitoipari es Kozlekedesi Muszaki Egyetem II. Geodeziai Tanszeke.

HAZAY, Istvan, dr., egyetemi tanar, okleleveles mernok, a muszaki tudomanyok doktora

General review of the reform curriculum proposal of the Faculty of Engineering, Technical University of the Construction Industry and Transportation. Melyepitestud szemle 13 no.2/3: 49-64 F-Mr '63.

1. Epitoipari es Kozlekedesi Muszaki Egyetem Mernoki Kara dekanja, Budapest.

HAZAY, Istvan, dr.

Direct determination of function values from the normal equations of coordinate compensation. Geod kart 15 no.1: 14-15 '63.

1. "Geodezia es Kartografia" szerkeszto bizottsagi tagja.

HAZAY, Istvan, dr.

Calculation of mean errors in connection with fictive measurements. Geol kart 15 no.2:89-99 '63.

1. "Geodezia es Kartografia" szerkeszto bizottsagi tagja.

HAZAY, Istvan, dr.

Loxodromes and orthodromes. Geod kart 16 no.2:110-119 '64

1. "Geodezia es Kartografia" szerkeszto bizottsagi tagja.

HAZAY, I., prof. Doctor of Technical Sciences

Dimension of the subsidiary quantities of adjustment. Acta techn Hung 47 no. 1/2:123-129 '64.

1. Technical University of Building and Communication, Budapest.

HAZAY, Istvan, dr.

The image of the degree network in the Mercator projection with oblique axis. Geod kart 17 no.1:1-4 '65.

1. Editorial Board Member, "Geodezia es Kartografia."

L 30185-66

ACC NR: AT6020305 SOURCE CODE: HU/2505/65/052/01-/0171/0201

AUTHOR: Hazay, I.--Khazai, I. (Doctor of technical sciences; Professor) 24 B+1

ORG: Department of Advanced Geodesy, Technical University for Construction and Transportation, Budapest

TITLE: Significance of the Tissot indicatrix

SOURCE: Academiae scientiarum hungaricae. Acta technica, v. 52, no. 1-2, 1965, 171-201

TOPIC TAGS: cartography, projective geometry

ABSTRACT: Studies were conducted to establish the suitability of the Tissot indicatrix as a property of the projection of a point with the aim of determining the usefulness of it in selecting the optimum type of projection for cartographic purposes. The indicatrix formation for various projection types, distortions caused in the process, and means of indicatrix determination were described and discussed. Orig. art. has: 11 figures, 83 formulas, and 1 table. [Orig. art. in German.] [JPRS]

SUB CODE: 08, 12 / SUBM DATE: 12Jun64 / ORIG REF: 001 / OTH REF: 003

Card 1/1 cc

HAZAY, S.

"Adjustment of national and continental triangulations." Acta Technica, Budapest, Vol. 6, No. 3/4, 1953, p. 399.

SO: Eastern European Accessions List, Vol. 3, No. 11, Nov. 1954, L.C.

HAZDROVA, Milena, promovana geolozka

Calculation of the thermal water reserves in the basal Cretaceous sandstones in the Usti nad Labem area. Geol pruzkum 5 no.6: 178-180 Je '63.

1. Ustredni ustav geologicky, Praha.

KYSELA, J.; HAZE, K.

Some remarks on determination of the lowering of the freezing point according to Czechoslovakian pharmacopeid 1, supplement 1. Cesk. farm. 4 no.5:247 June 55.

1. Z krajske kontrolni laboratore Prazske Mediky n.p.

(PHARMACOPEIA
Czech. 1, supplement 1, determ. of lowering of freezing point.)

(DRUGS
freezing point, determ. of lowering in Czech. pharmacopeia)

GRUND, Mir.; HAZE, M., inz.; ZUZANEK, Jar., inz.

New design of a switch for a small point recorder. Automatizace 6 no.1:17-18 Ja '63.

1. Zavody prumyslove automatizace, n.p., zavod Nova Paka.

HAZEK, B

CZECHOSLOVAKIA/Inorganic Chemistry. Complex Compounds C

Abs Jour : Ref Zhur - Khimiya, No 3, 1958, No 7363

Author : F. Petru., B. Hazek, J. Zavorka
Inst : Not Given
Title : On the Chemistry of the Rare Elements. II. On Scandium Pyrophosphate.

Orig Pub : Chem. listy, 1957, 51, No 1, 21-26, Sb. chekhosl. khim. rabor, 1957, 22, No 5, 1541-1546

Abstract : The deposit of acandium pyrophosphate, as a result of interaction of solutions of $ScCl_3$ and $Na_4P_2O_7$ or $Na_2H_2P_2O_7$ at pH 3.6 and 0.5 was studied. On the basis of potentiometric and conductometric studies of the course of the formation of the deposit and of the results of the analysis of obtained substances, the authors conclude that a formation of $Sc_4(P_2O_7)_3$ takes place in all cases. Part I see RZhKhim., 1957, 50969.

Card : 1/1

WRONSKI, Mieczyslaw; HAZEK, Lucyna

Kinetics of the hydrolysis of Phenyl isothiocyanate in solutions of sodium hydroxide. Nauki matem przyrod Lodz no.12:155-162 '62.

1. Katedra Technologii Chemicznej, Uniwersytet, Lodz.

MAŠIĆ, Jovan

Vale Vouk; obituary. Letopis SAZU 13: 51-53 '62
(publ. '63)

STRAUB, Gyula; HAZI, Endre

Structural analysis of substances by means of radioactive gamma rays with the aid of the Geiger-Muller counters. Veszprem vegyip egy kozl 3 no.1/4:263-266 '59.

1. Veszpremi Vegyipari Egyetem Analitikai Kemia Tanszek.

HAZI, Endre

Application of contact potential measurement in studying the initial phase of oxidation on metal surfaces. Veszprem vegyip egy kozl 5 no.2:167-175 '61.

1. Veszpremi Vegyipari Egyetem Analitikai Kemia Tanszek.

BORLAI, Oszkar; HAZI, Endre; BADACSONYI, Tivadar

Dwelling period measurement of grains in fluidized layers by means of isotopes. Veszprem vegyip egy kozl 7 no.1: 55-60 '63.

1. Magyar Tudomanyos Akademia Muszaki Kemiai Kutato Intezete, Budapest-Veszprem; Veszpremi Vegyipari Egyetem Radiokemiai Tanszek.

CSAPO, Zoltan; HAZI, Endre; KALDI, Pal

Examination of mixing and dwelling time distributions in foam columns by means of radiometric method. Veszprem vegyip egy kozl 7 no. 2:137-144 '63.

1. Chair of Radiochemistry, Chemical Industry University, Veszprem, and Research Institute of Technical Chemistry, Hungarian Academy of Sciences, Budapest-Veszprem.

[redacted], Hungary (CSSR), [redacted]

Density and concentrations determinations on the basis of the material interactions of nuclear radiations. Pts. 1-3. Veszprem vegyip egy kozl 7 no. 2:145-180 '63.

1. Chair of Radiochemistry, Chemical Industry University, Veszprem.

HAZI, Endre; CSAPO, Zoltan; JELINKO, Borbala

Continuous densimetry of streaming solutions and slurries.
Musz elet 19 no. 4: 10 13 F '64.

ACC NR: AP7003591 (21) SOURCE CODE: HU/0038/66/003/012/0359/0365

AUTHOR: Hazkoto, Gizella (Chemical engineer); Szalontai, Imre (Chemical engineer); Szondy, Istvan (Building engineer)

ORG: [Hazkoto] Industrial Research Institute for Plastics (Muanyagipari Kutato Intezet); [Szalontai] BM [Ministry for Interior] National Headquarters for Fire Protection (BM Tuzrendeszet Orszagos Parancsnoksaga); [Szondy] Scientific Institute for Planning and Design (Epitestudomanyi Intezet)

TITLE: Behavior of plastics in fire

SOURCE: Muanyag es gumi, v. 3, no. 12, 1966, 359-365

TOPIC TAGS: polyethylene plastic, polypropylene plastic, polyester plastic, polyvinyl chloride plastic, fire resistant material, flammability, foam plastic, glass fiber reinforced plastic, plastic tubing

ABSTRACT: The authors describe two series of tests performed in 1965. 1. Several horizontal plastic and resin tubes (polyvinyl chloride, polyethylene, polypropylene) for carrying liquids, were tested for their behavior in fire, and the fire-resistance of glass-fiber-reinforced polyester and PVC polyester suction

Card 1/2

ACC NR: AP7003591

ducts was studied. PVC pipes were found to be least resistant to fire, while the glass-fiber-reinforced polyester showed good fire-resistant properties. 2. The flammability of sandwich structures made of several types of foam was investigated, but the results were considered inconclusive. The United Pharmaceutical and Food Plant participated in the tests. Orig. art. has: 15 figures and 2 tables.

[KS]

SUB CODE: 11/SUBM DATE: none/ORIG REF: 001/OTH REF: 002/

Card 2/2

HAZLER, T.

"Local Materials as a Basis for Rural Building." p. 11, (BUDOWNICTWO WIEJSKIE, Vol. 5, no. 1, Feb./Jan. 1953, Warszawa, Poland)

SO: Monthly Lists of East European Accession, LC, Vol. 3, no. 5, May 1954/Uncl.

HAZLER, T.

Local materials in the building investm nts of col ective farms.

P. 9 (Budownictwo Wiejskie, Vol. 8, no. 3, Mar. 1956, Wars-awa, Poland)

Monthly Index of East European Accessions (EEAI) LC. Vol. 7, no. 2, February 1958

HAZLER, T

POLAND /Chemical Technology - Chemical Products and Their Application. Ceramics. Glass. Binders. Concrete. H-13

Abs Jour : Ref Zhur - Khimiya, No 8, 1958, 25974

Author : Hazler Tadeusz
Inst :
Title : Slags and Their Use in Building.

Orig Pub : Budown. wiejskie, 1957, 8, No 8, 7-10

Abstract : Description of different kinds of blast-furnace and fuel slag, and means of utilizing them in building.

Card 1/1

HAZLER, T.

Slags and their use in the building industry. II

p. 10 (Budowinictwo Wiejskei) Vol. 9, No. 9, Sept. 1957, Warszawa, Poland

SO: MONTHLY INDEX OF EAST EUROPEAN ACCESSIONS (EEAI) LC, VOL. 7, NO. 1, JAN. 1958

HAFLER, TADEUSZ

Budynki z zuzlobetonu. (Wyd. 1)

Warszawa, Poland. Arkady. 94 p.

Monthly List of East European Accessions (EEAI) LC, Vol. 8, no. 8
August 1959.

Uncl.

HAZSLINSZKY, Tamas

Stalactites. Elet tud 19 no.6:248-250 7 F'64.

HAZMAN, I.

Transistor preamplifier for electron-tube equipment. p.183.

RADIOTECHNIKA. Budapest, Hungary. Vol. 9, no. 6, June 1959.

Monthly List of East European Accessions (EEAI), LC. Vol. 8, No. 9, September 1959

Uncl.

HIDAS, Gyorgy; KEMENY, Adam; HAZMAN, Istvan; KISS, Erno; SOMOGYI, Janos

The use of transistors in radio receiving sets; also, remarks by E.Kiss and I.Somogyi. Muszaki kozl MTA 26 no.1/4:101-104 '60.
(EEAI 9:10)

1. Hiradastechnikai Kutato Intezet (for Hidas, Kemany and Hazman)
(Radio) (Transistors)

S/274/63/000/002/012/019
A055/A126

AUTHOR: Házman, István

TITLE: Unified studio amplifier

PERIODICAL: Referativnyy zhurnal, Radiotekhnika i Elektrosvyaz', no. 2, 1963, 57, abstract 2B424 (Hiradástechn. ipari kutatö int. közl., 1961, v. 1, no. 1, 42 - 49, 60; Hungarian; summaries in German, English and Russian)

TEXT: The author describes the circuit, the parameters and the calculation of the elements of a unified studio amplifier with six semiconductor-triodes made in Hungary and in Western Europe. The pass-band of the amplifier is 30 - 15,000 cps with a ± 0.5 db irregularity; at a gain of 40 db and at a noise level of -54 db (noise of the amplifier itself), the sensitivity of the amplifier is 100 μv across 30 ohm; the largest output signal is 6.2 v. The amplifier is intended for operation with a microphone, and also as a linear line-repeater in lines with 50 and 200 ohm impedances. The amplifier has a transformer-coupled input and output. It consists of five resistance-coupled

Card 1/2

Unified studio amplifier

S/274/63/000/002/012/019
A055/A126

stages. The output stage is a push-pull stage. A 24-v battery is used as power source.

D.Ya.

[Abstracter's note: Complete translation]

Card 2/2

HAZMAN, Istvan

Transistor pre-amplifiers used in the motion pictures industry.
Kep hang 7 no.3:88-93 Je '61.

HAZMAN, Istvan

Transistorized sound system in railway cars. Kep hang 9 no.3:91-94 Je '63.

HAZMAN, Istvan

On dynamics expansion. Radiotechnika 13 no.4:154-155 Ap '63.

HAZMAN, Istvan

On dynamics expansion. Radiotechnika 13 no.5:194-195 My '63.

HAZMAN, Istvan

Cutoff frequency measurements of junction transistors. Hir techn 15 no.3:75-76 Mr '64.

1. Research Institute of the Telecommunication Industry, Budapest.

HAZMUKA, B.

"Prefabrication of products in the sideline building industries and in finishing work."

POZEMNI STAVBY, Praha, Czechoslovakia, Vol. 3, No. 10, October 1955.

Monthly List of East European Accessions (EEAI), LC, Vol. 8, No. 9, September 1959.

Unclassified.

(3)

HUNGARY

FERENCZY, Lajos, ZSOLT, Janos, HAZNAGY, Andras, TOTH, Laszlo, SZENDREI, Kalman; Jozsef Attila University, Institute of Plant Physiology (director: SZALAI, I.) (Jozsef Attila Egyetem, Novenyelettani Intezet), Szeged, and Medical University of Szeged, Institute of Pharmacognosy (director: NOVAK, I.) (Szegedi Orvostudomanyi Egyetem, Gyogyszerhatastani Intezet).

"The Antifungal Constituents of Cynanchum Vincetoxicum (L.) Pers I. The Quantitative Antifungal Spectrum of Substance C-1."

Budapest, Acta Microbiologica Academiae Scientiarum Hungaricae, Vol XII, No 4, 1965/66, pages 337-344.

Abstract: [English article, authors' English summary modified] The antifungal activity of a compound isolated from Cynanchum vincetoxicum (L.) Pers and designated as Substance C-1 has been studied against 40 yeasts, 40 moulds and 20 dermatophytes. With the exception of a few moulds, most of the examined species and strains, including all of the human pathogenic fungi tested, were found to be highly sensitive to the compound. The minimal inhibitory concentration on glucose-broth-peptone culture medium at pH 7 was found to be between 0.015 and 1.0 µg/ml. 2 Eastern European, 6 Western references. [Manuscript received 31 Jul 65.]

HAZSLINSKY, B.

MD

The toxic effect of honey from belladonna (Atropa belladonna). B. Hazslinsky. (Chem. Inst., Budapest, Hung.). *Z. Bienenforsch.* 3, 93–6(1956)(English summary).—Ingestion of honey and pollen collected by bees from *A. belladonna* caused dizziness in 2 persons and serious poisoning in another. The honey, contg. atropa alkaloids, was not injurious to the bees.
Martin Jacobson

Hazslinsky, B

Poisonous honey from deadly nightshade. B. Haszlinsky (Chem. Inst. Haupstadt, Budapest). *Z. Bienenforsch.* 3, 93–6(1956); *Bee World* 37, 164(1956).—The poisonous effect of deadly nightshade honey, due to the presence of belladonna alkaloids, is described. The method by which the slightly H_2O-sol. alkaloids get into the nectar has not yet been established. F. B. Wells

HAZSLINSZKY, Tamas

"The world of caves" by Jakucs-Kessler. Reviewed by Tamas Hazslinszky. Elet tud 18 no.7:212 17 F '63.

HAZSLINSZKY, Tamas

"Adventures in the depth of the sea" by Odon Radai. Reviewed by Tamas Hazslinszky. Elet tud 18 no.19:582 12 My '63.

HAZUKA, Miroslav, MUDr

Effect of trauma on etiology and course of tuberculosis. Prakt. lek., Praha 34 no.22:509-511 20 Nov 54.

1. Z chirurg. klin. zakladny pro doskoleni lekaru pri obv. nem. v Praze 8-Bulovka; predn. prof. MUDr Jan Knobloch

(TUBERCULOSIS, etiol. and pathogen.
trauma)
(WOUNDS AND INJURIES
trauma in etiol. of tuberc.)

HAZUKA, M., Dr.; HERZ, J., Dr.; MACH, F., Dr.

Fracture of hand bones. Acta chir. orthop. traum. cech. 23 no.2:72-75 Feb 56.

1. Z Chirurgicke Klinicke Zakladny UDL v Praze 8, Bulovka, prednosta prof. MUDr. Jan Knobloch.

(HAND, fract.
management. (Cz))
(FRACTURES,
hand, management. (Cz))

HAZUKA, M.; MACH, F.

Surgical technics in simultaneous injuries of the brain and other parts of the body. Rozhl. chir. 41 no.4:289-291 Ap '62.

1. Chirurgicka klinicka zakladna UDL v nemocnici na Bulovce v Praze 8, prednosta prof. MUDr. J. Knobloch, DrSc.
(BRAIN wds & inj) (SHOCK ther)

ORSZAGH, J.; KAS, S.; HAZUKA, V.

The autonomic nervous system in infectious hepatitis. Cesk. gastroent. vyz. 17 no.3:180-184 Ap '63.

1. Neurologicke oddeleni nemocnice v Praze-Motole, vedouci doc. dr. K. Mathon Oddeleni infekcnich zloutenek nemocnice v Praze-Motole, vedouci MUDr. O. Sousek.
(HEPATITIS, INFECTIOUS)
(AUTONOMIC NERVOUS SYSTEM)
(PULSE) (BLOOD PRESSURE)
(ELECTROCARDIOGRAPHY)

HAZUKOVA, J

STICH, Z., MAREK, A., PERNICKY, J., HAZUKOVA, J., WALLENFELS, V., ZOFKA, J., STRITESKY, J., MALEK, I.

Socialization of medicine in Czechoslovakia. Zdravot. rev. 25:6, June 50. p. 165-6

CLML 19, 5, Nov., 1950

HEBDA, Michal, mjr. mgr. inz. (Warszawa)

The present state and development of research methods on the properties of the subtersurface layer. Pt. 1. Przegl mech 21 no.13:398-400 10 Jl '62.

BROS, Jan, dr inz.; HEBDA, Michal, dr inz.

Problems of research centers of friction and wear of the Institute of Basic Technical Problems, Polish Academy of Sciences, during the years 1957-1964. Przegl mech 23 no.23: 688-689 10 D '64.

1. Technical University, Krakow (for Bros). 2. Military Engineering School, Warsaw (for Hebda).

HEBDA, Michal, mjr., mgr inz. (Warszawa)

State and development of the research methods on the properties of the subsurface layer. Pt.2. Przegl mech 21 no.14:441-444 25 Jl '62.

HEBANOWSKI, Marek

Contribution to acute renal failure due to castor bean poisoning. Pol. tyg. lek. 19 no.31:1204-1205 3 Ag'64

1. Z II Kliniki Chorob Wewnetrznych Akademii medycznej w Gdansku; kierownik : prof. dr. Jakub Penson.

HERBELSKA, S.

Analysis of fulfilled tasks in the Six-Year Plan. p.3.
PRZEMYSL CHEMICZNY (Polskie Wydawnictwa Gospodarcze) Warszawa
Vol. 11, no. 4, Apr. 1956

So. East European Accessions List Vol. 5, No. 9 September 1956

HEBDZYNSKA, Z.; Chojecki, M.

Some observations on the preparations for the summer season in summer resorts. p. 8.
(PRZEMYSL GASTRONOMICZNY. Vol. 11, no. 6, June 1956, Warszawa, Poland)

SO: Monthly List of East European Accessions (EEAL) LC. Vol. 6, No. 12, Dec. 1957. Uncl.

HEBEANU, Gh.

Concrete, dynamic, and combative visual agitation.
Munca sindic 7 no.12:45-47 D '63.

1. Presedintele comitetului sindicatului de la uzinele "Industria Sirmei" Cimpia Turzii.

HE[illegible], J.

Program for specialization in roentgenography. Med. glasn. 11 no.5: 194-196 May 57.
(SPECIALISM
in roentgenography (Ser))

CZECHOSLOVAKIA/Nuclear Physics - Installations and Instruments. C-
Methods of Measurement and Research.

Abs Jour : Ref Zhur Fizika, No 3, 1960, 5149

Author : Hebek Antonin
Inst : -
Title : Effect of Liquid Vapor on Pointed Geiger-Muller Counters

Orig Pub : Chekhosl. fiz. zh., 1959, 9, No 1, 127-128

Abstract : No abstract.

Card 1/1

APPROVED FOR RELEASE: 09/19/2001 CIA-RDP86-00513R000617920014-1"

S/194/62/000/002/006/096
D230/D301

AUTHORS: Przybylski, Tadeusz, Zuk, Mieszysław and Hebel, Zygmunt

TITLE: Constant-current analyzer

PERIODICAL: Referativnyy zhurnal, Avtomatika i radioelektronika, no. 2, 1962, abstract 2-1-33zh (Zesz. nauk. Politechn. gdańsk., 1960, no. 21, 63-70)

TEXT: The Department of Electrical Engineering of the Gdańsk Polytechnic Institute has developed, for own use, a new constant-current analyzer. Five types of the variable potentiometer were used as standard resistance boxes: 0.2; 2.5; 5; 50 and 100 kohms; the resistance values for a given position were determined using an ohmmeter. The potentiometers are divided into two groups of 60, in each of the vertical analyzer fields; they are connected by means of two single-cord jack and sockets in the"simulation field" circuit containing 48 switching stations with sockets. 200 and 500 ohm-potentiometers are used as auxiliary junction points for the

Card 1/3

Constant-current analyzer

simulation field; these points are connected with the corresponding socket junction points of the measured field which are used for measuring resistances, currents and voltages. The measuring instruments are mounted on the board of the analyzer. In the upper part of the analyzer there is the power supply switching field, distributing the voltage to 5 junction points and to sockets (each junction point consists of 5 sockets). The measuring ammeter is supplied with a range switch, current polarity switch and an auxiliary resistance used for calculating errors introduced by the internal resistance of the ammeter. In the analyzer circuit there are two class 0.5 ammeters for currents 1.5; 3 and 7.5 and 15, 30 and 75 ma. Voltage and resistance measurements are made with a valve voltmeter having ranges 3, 10, 30 and 100 V. The accuracy of voltage and resistance measurements is 3 and 5 percent, respectively (for the measuring range 0.1 to 100 kohms). A. c. or d.c. mains at 220 V provides the power supply; the circuit has five stabilized rails, 0 to 80 V (max. load of each rail 30 ma). The analyzer is inexpensive and small in size; it is thus suitable for use at the

Card 2/3

Constant-current analyzer

S/194/62/000/002/006/096
D230/D301

Polytechnic laboratories, technical colleges and also for design (and similar) organizations. 4 figures. [Abstracter's note: Complete translation.]

Card 3/3

3

CZECHOSLOVAKIA

JEZEK, Z; HEBELKA, M; SVANDOVA, E.

Institute of Epidemiology and Microbiology (Ustav epidemiologie a mikrobiologie), Prague (for all)

Prague, Rozhledy v tuberkulose, No 6-7, 1963, pp 454-460

"The Significance of Mycobacterium bovis in the Spread of Tuberculosis Infection in the Rural Population."

SERY, V.; JEZEK, Z.; SVANDOVA, E.; FUCHSOVA, M.; HEBELKA, M.

Use of tuberculin tests in the study of Mycobacterium bovis. II. Analysis of allergy to tuberculin in children and adolescents in relation to Mycobacterium bovis infection. Cesk. epidem. 12 no.5:262-267 S '63.

1. Ustav epidemiologie a mikrobiologie v Praze - Tuberkulozni oddeleni OUNZ v Litomericich.
(TUBERCULIN REACTION) (TUBERCULOSIS, BOVINE)
(TUBERCULOSIS IN CHILDHOOD) (MYCOBACTERIUM BOVIS)

JEZEK, Z.; SERY,V.; HEBELKA,M.; SVANDOVA, E.

The value of simultaneous application of human and bovine tuberculin. Cesk. epidem. 14 no.3:143-148 My '65

1. Ustav epidemiologie a mikrobiologie, Praha, Katedra nemoci tropu a subtropu, UDL, Praha.

CZECHOSLOVAKIA

POPLUHAR, L.; ROSIVAL, F.; JEZEK, Z,; HEBELKA, M.; Veterinary Faculty, Chair of Infectious Diseases, College of Agriculture (VSP, Veter. Fakulta, Katedra Infekcnych Chorob), Kosice; Okresny Epizootologist (Epizootolog), Kosice; Institute of Epidemiology and Microbiology (Ustav Epidemiologie a Mikrobiologie), Prague.

"On the Problems of Tuberculosis in Pigs."

Prague, Veterinarni Medicina, Vol 11, No 8, Aug 66, pp 485-496

Abstract [Authors' English summary modified]: Mammalian PPD tuberculin was used for allergic diagnosis of tuberculosis in pigs, using a dose of 5000 Tu, and a dose of 2500 Tu of avian tuberculin. The swellings were excessive; when only 500 Tu of either tuberculin were used reliable results were obtained. Swellings which had a diameter of 8 mm and over were considered to be positive reactions. 4 Figures, 4 Tables, 5 Western, 5 Czech, 3 Russian, 1 Hungarian reference. (Manuscript received 10 May 65).
1/1

L 31845-66 T JK

ACC NR: AP6021322 (A) SOURCE CODE: PO/0081/65/019/003/0309/0313

AUTHOR: Jeljaszewicz, J.; Hawiger, J.; Czacka, J.; Cygankiewicz-Siennicka, M.; Gorska, A.; Gulinski, J.; Hebenstreit, C.; Klimek, H.; Klapowska, K.; Krol, J.; Lenartowicz, C.; Luft, A.; Moskwa, Z.; Nocon, I.; Pawlowska, I.; Padrycz, W.; Pernal, C. C.; Pogorzelska, A.; Rodzinski, L.; Siennicki, W.; Sikora, G.; Szymanczyk, I.; Terech, I.; Wawrzynska, M.; Wencel, Z.; Znis, A.

ORG: Institute of Bacteriology, PZH, Warsaw (Zaklad Bakteriologii); Regional and City Sanitary Epidemiological Centers, Bydgoszcz, Katowice, Kielce, Krakow, Lodz, Opole, Rzezow, Warsaw, Wroclaw (Wojewodzka i Miejska Stacj Sanitarno-Epidemiologiczna); Bacteriologic Laboratory, No. 3, PSK, Wroclaw (Laboratorium Bakteriologiczny)

TITLE: Antibiotic-resistant strains of Streptococcus viridans, Streptococcus Fecalis, Escherichia coli, Pseudomonas aeruginosa, Proteus species and Klebsiella species, isolated in Poland in 1960-1963

SOURCE: Przeglad epidemiologiczny, v. 19, no. 3, 1965, 309-313

TOPIC TAGS: bacteriology, penicillin, streptomycin, tetracycline, erythromycin, neomycin

ABSTRACT: Sensitivity tests of the above strains were carried out in respect to penicillin, streptomycin, tetracyclines, chloramphenicol, erythromycin and neomycin. It was found that resistance to antibiotics in Streptococci differed from that in Gram-negative bacilli. Streptococcus fecalis was found highly resistant to penicillin and erythromycin. Appreciable resistance to all antibiotics was noted in strains identified as Streptococcus viridans. Resistance varied according to samples and territorial distribution. Experiments were conducted in 11 centers throughout the country simultaneously; results were compared with those obtained in an identical experimental series in a single hospital environment. Orig. art. has: 2 tables. [JPRS]

SUB CODE: 06/ SUBM DATE: none/ ORIG REF: 001/ OTH REF: 001

Card 1/1 JS

HEBER, G.

HUNGARY/Theoretical Physics - Quantum Field Theory B-6

Abs Jour : Ref Zhur - Fizika, No 2, 1958, No 2733

Author : Heber, G.
Inst : Not Given
Title : Latest Results of the Meson Theory of Nucleons

Orig Pub : Magyar fiz. folyoirat, 1957, 5, No 1, 73-78

Abstract : No abstract

Card : 1/1

HUNGARY/Theoretical Physics - Quantum Theory of Fields B-6

Abs Jour : Ref Zhur - Fizika, No 9, 1958, No 19690

Author : Heber G
Inst : Not Given
Title : Remarks on the Measurement of the Space-Time Continuum.

Orig Pub : Fiz. szemle, 1957, 7, No 5, 166-167

Abstract : In connection with the difficulties of modern local quantum theory with nonlinear coupling, the author indicates that a study of the problem of the measurement of space-time continuum gives information on the possibility of constructing a single generalized field theory, which resolves the existing difficulties. The author reaches the conclusion that the coordinates of the world point cannot be considered to be c-numbers, since the commutators formed out of the field operators do not always vanish. This resultis discussed from the point of view of thefield theory, and the results obtained are compared with those of Bohr and Rosenfeld on the measurement of quantum magnitudes.

Card : 1/1

HEMER, G.

The present state of the research work on the theory of space. p. 248.

FIZIKAI SZEMLE. (Eotvos Lorand Fizikai Tarsulat) Budapest, Hungary. Vol. 9, no. 8, 1959.

Monthly List of East European Accessions, (EEAI) LC, Vol. 9, No. 1, Jan. 1960 Uncl.

HEBER, Gerhard (Jena)

Present state of research in the field of space theory. Fiz zemle 9 no.8:248-249 Ag '59.

HEBER, G. (Jena); SZABO, Janos [translator]

Remarks about the mensuration of the space-time continuum. Fiz. szemle 7 no.5:166-167 O '57.

CZECHOSLOVAKIA/Nuclear Physics - Installations and Instruments. Methods of Research and Measurement. C-

Abs Jour : Ref Zhur Fizika, No 3, 1960, 5206

Author : Heber Milos
Inst :
Title : Radiochemical Laboratories for Work with High Activities

Orig Pub : Jaderna energie, 1959, 5, No 6, 184-189

Abstract : A survey is given of materials on the equipment of radiochemical laboratories, as presented at the Second International Conference on Peaceful Use of Atomic Energy.

Card 1/1

"Worksho. Tricks; Glass Cutting." . . 635 (MAGYAR TECHNIKA. Vol. 9, No. 11, Nov. 1954; Budapest, Hungary.)

So: Monthly List of East European Accessions, (EEAL), LC, Vol. 4, No. 4, April 1955, Uncl..

HEBERGER, K.

Methods for determination of the size of series in foundries. p.408

EPITOANYAG. (Epitoanyogipari Tudomanyos Egyesulet)
Budapest, Hungary
Vol. 11, no.10, Oct. 1959

Monthly List of East European Accessions (EEAI) LC., Vol. 8, no.12, Dec. 1959
Uncl.

HEBERGER, K.

The tasks of assistant-professors at the Polytechnical University. Periodica polytechn eng 4 no.3:277-299 '60. (EEAI 10:6)

1. Department of Mechanical Engineering Technology, Polytechnical University, Budapest.
(Hungary--Technical education)

HEBERGER, K.

"Ten years of the Chair of Technology of Machine Building."
Reviewed by K.Heberger. Periodica polytechn eng 6 no.2:173-174
'62.

HEBERGER, Karoly, adjunktus

Typification. Gép 14 no.9:331-336 S '62.

1. Budapesti Muszaki Egyetem Gepgyartastechnologiai Tanszek.

HEBERGER, Karoly, dr.

Results and problems in the training of engineers. Musz elet 18 no.14:4 4 Jl '63.

1. Muvelodesugyi Miniszterium.

[redacted], D

Problem which must be solved speedily. p. 256. (SZOGRAD, Vol 10, No. 7, July 1954.)

SO: Monthly Lists of East European Accessions. (EEAL, LC, Vol 4, No. 6, June 1955, Uncl.

HEBIB, I.

Air brakes and safety of railroad traffic, p. 257. (BEOGRAD, Vol 10, No 7, July 1954.)

SO: Monthly Lists of East European Accessions. (EEAL, LC, Vol 4, No. 6, June 1955, Uncl.

HEBKY , A; PETRANEK, J.

Hydraulic transmission for motorcycles.

p. 200 (Automobil) Vol. 1, no. 6, June 1957 Praha, Czechoslovakia

SO: MONTHLY INDEX OF EAST EUROPEAN ACCESSIONS (EEAI) LC, VOL. 7, NO. 1, Jan. 1958

HEBKY, A.

New methods for regulating pressure water turbines. p. 11.(Strojnoelektrotechnicky Casopis. Bratislava. Vol 3, no. 3, 1952)

SO: Monthly List of East European Accessions, (EEAL), LC, Vol. 4, No. 6, June 1955, Uncl.

HEBKY, A.

Hydrodynamics of turbine transmission with circulation of noviscous liquid, p. 413, STROJIRENSTVI (Ministerstvo strojirenstvi) Praha, Vol. 5, No. 5, June 1955

SOURCE: East European Accessions List (EEAL) Library of Congress, Vol. 4, No. 12, December 1955

HEBKY, A.

Practical consequences of compressibility of liquids on pumping. A. Hebký. *Strojírenství* 8, 837–40(1958).—The effect of compressibility of liquids in stationary and transient flow is analyzed. Results are applied to 2 extreme cases of stationary and transient flow with rapid velocity changes where hydraulic shocks develop. The role of compressibility is shown. J. G. Tschinkel

2

Hebky, A.

Hydrodynamic similarity and the equations of Navier-Stokes. p. 483.

STROJIRENSTVI (Ministerstvo tezkeho strojirenstvi, Ministerstvo vscobecnebo strojirenstvi) Praha, Czechoslovakia Vol. 9, no. 7, July 1959.

Monthly List of East European Accessions (EEAI), Vol. 9, no. 2, LC.
Feb. 1960

Uncl.

HEBKY, Alois, prof. inz. dr.

"Hydrodynamic couplings and converters" by E. Kickbusch. Reviewed by Alois Hebky. Stroj vyr 12 no.8:612 '64.

"Pumps" by Fuchslocher, Schulz. Reviewed by Alois Hebky. Ibid.: 613

HEBKY, Alois, dr., inz.

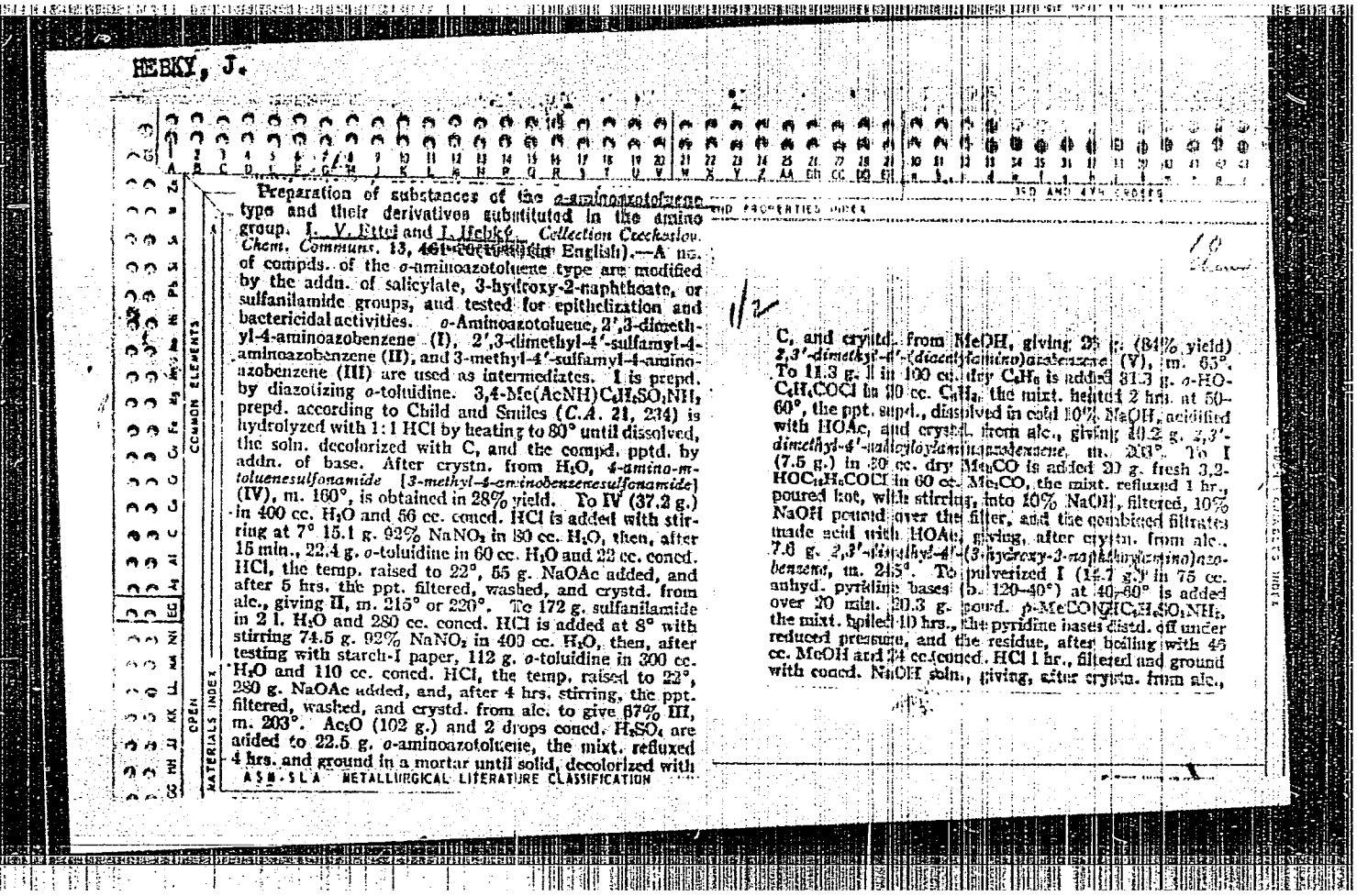
"Design of hydraulic control systems" by Ernest E. Lewis and Hansjoerg Stern. Reviewed by Alois Hebky. Stroj vyr 10 no.12:637 '62.

HEBKY, A., prof., inz. dr.

"Hydromechanics" by A.T.Troskolanski. Reviewed by A.Hebky.
Strojirenstvi 13 no.6:476-477 Je '63.

ERNEST, I.; HENRY, J.

Discussion on teaching chemistry in secondary and higher schools.
Chem listy 58 no.9:1129-1130 S '64.



HEBKY, J.

Preparation of substances of the *o*-aminoazotoluene type and their derivatives substituted in the amino group. I. V. Ettel and J. Hebký. *Collection Czechoslov. Chem. Communs.* 13, 461–[illegible] (in English).—A no. of compds. of the *o*-aminoazotoluene type are modified by the addn. of salicylate, 3-hydroxy-2-naphthoate, or sulfanilamide groups, and tested for epithelization and bactericidal activities. *o*-Aminoazotoluene, 2',3-dimethyl-4-aminoazobenzene (I), 2',3-dimethyl-4'-sulfamyl-4-aminoazobenzene (II), and 3-methyl-4'-sulfamyl-4-aminoazobenzene (III) are used as intermediates. I is prepd. by diazotizing *o*-toluidine. 3,4-Me(AcNH)$C_6H_3SO_2NH_2$, prepd. according to Child and Smiles (*C.A.* 21, 234) is hydrolyzed with 1:1 HCl by heating to 80° until dissolved, the soln. decolorized with C, and the compd. pptd. by addn. of base. After crystn. from H_2O, *4-amino-m-toluenesulfonamide* [*3-methyl-4-aminobenzenesulfonamide*] (IV), m. 160°, is obtained in 28% yield. To IV (37.2 g.) in 400 cc. H_2O and 56 cc. concd. HCl is added with stirring at 7° 15.1 g. 92% $NaNO_2$ in 80 cc. H_2O, then, after 15 min., 22.4 g. *o*-toluidine in 60 cc. H_2O and 22 cc. concd. HCl, the temp. raised to 22°, 55 g. NaOAc added, and after 5 hrs. the ppt. filtered, washed, and crystd. from alc., giving II, m. 215° or 220°. To 172 g. sulfanilamide in 2 l. H_2O and 280 cc. concd. HCl is added at 8° with stirring 74.5 g. 92% $NaNO_2$ in 400 cc. H_2O, then, after testing with starch-I paper, 112 g. *o*-toluidine in 300 cc. H_2O and 110 cc. concd. HCl, the temp. raised to 22°, 280 g. NaOAc added, and, after 4 hrs. stirring, the ppt. filtered, washed, and crystd. from alc. to give 87% III, m. 203°. Ac_2O (102 g.) and 2 drops concd. H_2SO_4 are added to 22.5 g. *o*-aminoazotoluene, the mixt. refluxed 4 hrs. and ground in a mortar until solid, decolorized with C, and crystd. from MeOH, giving 28 g. (84% yield) *2,3'-dimethyl-4'-(diethylamino)azobenzene* (V), m. 65°. To 11.3 g. II in 100 cc. dry C_6H_6 is added 31.3 g. *o*-HO-C_6H_4COCl in 30 cc. C_6H_6, the mixt. heated 2 hrs. at 50–60°, the ppt. suspd., dissolved in cold 10% NaOH, acidified with HOAc, and crystd. from alc., giving 40.2 g. *2,3'-dimethyl-4'-salicyloylaminoazobenzene*, m. 206°. To I (7.5 g.) in 50 cc. dry Me_2CO is added 20 g. fresh 3,2-$HOC_{10}H_6COCl$ in 60 cc. Me_2CO, the mixt. refluxed 1 hr., poured hot, with stirring, into 10% NaOH, filtered, 10% NaOH poured over the filter, and the combined filtrates made acid with HOAc, giving, after crystn. from alc., 7.6 g. *2,3'-dimethyl-4'-(3-hydroxy-2-naphthoylamino)azobenzene*, m. 245°. To pulverized I (14.7 g.) in 75 cc. anhyd. pyridine bases (b. 120–40°) at 40–60° is added over 20 min. 20.3 g. powd. *p*-MeCONHC$_6$H$_3$SO$_2$NH$_2$, the mixt. boiled 10 hrs., the pyridine bases distd. off under reduced pressure, and the residue, after boiling with 45 cc. MeOH and 24 cc. concd. HCl 1 hr., filtered and ground with concd. NaOH soln., giving, after crystn. from alc.,

CA

HECK, A.

10

Synthesis of compounds of the *o*-aminoazotoluene type and their amino-substituted derivatives. II. V. Ettel and J. Heller (United Chem. and Met. Works, Prague). *Collection Czechoslov. Chem. Communs.* 15, 65-72(1950) (in English); cf. C.A. 42, 7204*f*. *o*-Aminoazotoluene (I) heated with aq.-satd. $HCHO{\cdot}NaHSO_3$ for 4 hours at 90° with stirring gave 70% 4,3-$NaSO_3CH_2NH(Me)C_6H_3$-N:NC_6H_3Me-2, yellow, m. 205°. Refluxing I with succinic anhydride in abs. EtOH with a trace of H_2SO_4 for 4 hrs. gave, after recrystn. of the crude solid from EtOH (63% brick-red 2',5-dimethyl-4-(succinylamino)azobenzene (II), m. 187°. The Na salt of II is readily sol. in water, and seps. as brick red crystals from EtOH-H_2O. The citraconyl deriv of I prepd. in Me_2CO soln., m. 155-6° (from alc.). D-Glucose in MeOH, refluxed for 3 hrs. with a slight excess of I and a catalytic amt. of NH_4Cl, gave 70% of the glucoside, m. 135° (decompn.), sparingly sol. in cold H_2O, readily sol. in EtOH or Me_2CO. *o*-MeC_6H_4-$NHCH_2SO_3Na$ coupled with the diazonium salt from 3,4-$Me(H_2N)C_6H_3SO_3NH_2$ gave 4,5-$NaSO_3CH_2NH(Me)$-$C_6H_3N{:}NC_6H_3(Me)SO_3NH_2$-2,4, vermilion red, m. 242°, sparingly sol. in H_2O. Boiling 1,3,4 $Me(H_2N)C_6H_3NH_2$-$C_6H_3SO_3NH_2$ in Me_2CO with succinic anhydride and a trace of H_2SO_4 for 4 hrs., distg. off the Me_2CO, extg. with $NaHCO_3$ soln., and acidifying gave the succinyl deriv., red, m. 210°. *o*-$MeC_6H_4NHCH_2SO_3Na$ coupled with PhN_2Cl gave 1,3-$NaSO_3CH_2NH(Me)C_6H_3N{:}NC_6H_5$, yellow, m. 212°, which on hydrolysis with NaOH and treatment with succinic anhydride gave 3-methyl-4-(succinylamino)azobenzene, m. 192°. *p*-$H_2NC_6H_4NHPh$ (III) heated with $HCHO{\cdot}NaHSO_3$ gave Na *p*-phenylazoaniline-*o*-methanesulfonate, orange plates, m. 251°. *o*-Toluidine gave Na *o*-toluidine-*o*-methanesulfonate. III with succinic anhydride gave *p*-succinylaminoazobenzene, yellow, m. 210°. *o*-$NaSO_3CH_2NHC_6H_3Me$ and *p*-$H_2NC_6H_4$-$NHCH_2SO_3Na$, prepd. from $HCHO{\cdot}NaHSO_3$ and the corresponding amines, are unstable in warm aq. soln. The water-sol. derivs. of I possess epithelization properties and are bactericidal, resembling the deriv. of 3,4-Me $(H_2N)C_6H_3NHPh$. III has only a very slight epithelization effect and is about half as bactericidal as I. The derivs. of *o*-toluidine have almost as much epithelization activity as I, but are not bactericidal. Benzidine has weak epithelization and no bactericidal activity. The water-sol. derivs. of *o*-toluidine show neither activity. J. E. Teffer

CA

10

Pyridone derivatives of kojic acid. V. Ettel and J. Heblík. *Collection Czechoslov. Chem. Communs.* 15, 358-68 (1950) (in French). A cooled soln. of 0.1 g. kojic acid and 0.5 g. crystd. $NaOAc$ in 100 cc. H_2O was treated over a 10 min. period with a soln. of chromatized $PhNH_2$ (from 35 g. $PhNH_2$) and the colored mixt. sepd. after 2 hrs., washed with H_2O, and dried in air, giving 14.7 g. (92.8%) *2-hydroxymethyl-5-hydroxy-6-phenylazo-4-pyrone.H_2O* (I). I (8.5 g.) in 70 cc. abs. EtOH, boiled 2 min., treated with CH_2N_2, allowed to stand overnight, and neutralized with 5% Na_2CO_3 gave 3.75 g. (44.9%) *2-hydroxymethyl-5-methoxy analog* (II), orange-red needles, m. 170° (*2-acetate*, red needles, m. 131°, *2-benzoate*, wine-red crystals, m. 128°; *Me ether*, red-orange crystals, m. 124°). *2-Methoxymethyl-5-methoxy-4-pyrone* (4 g.) and 5 g. NH_3 heated 3 hrs. at 80° in an autoclave gave upon treatment with picric acid *2-methoxymethyl-5-methoxy-4(1H)-pyridone picrate* (III), m. 178°. 2-Chloromethyl-5-methoxy-4(1H)-pyrone (4 g.) heated 6 hrs. at 85° with 16 cc. C_6H_6 and 5 cc. Et_2NH in a sealed tube gave on removal of the Et_2NH and chromatographic purification on Al_2O_3 *2-diethylaminomethyl-5-methoxy-4(1H)-pyrone* (IV), m. 41°. IV autoclaved 6 hrs. at 100° with 6 cc. of a satd. aq. NH_3 and purified chromatographically (Al_2O_3) gave *2-diethylaminomethyl-5-methoxy-4(1H)-pyridone*, isolated as the *dipicrate*, m. 188°; the *monopicrate* could not be obtained pure. *2-Diethylaminomethyl-5-methoxy-4-pyrone* (1 g.) in 5 cc. MeOH was allowed to stand 2 hrs. with 4 g. $MeNH_2$ in 8.5 cc. MeOH, heated 0.5 hr. at 90°, the solvent removed, and the residue dried and ppted. as the *2-diethylaminomethyl-5-methoxy-4-pyridone picrate*, m. 177°. 2-Chloromethyl-5-hydroxy-4-pyrone (3.2 g.) heated 8 hrs. at 80° in a sealed tube with 20 cc. Me_3N gave the *trimethylammonium chloride*, $C_9H_{14}O_3NCl$, m. 220° (decompn.); *perchlorate*, $C_9H_{14}O_7NCl$, m. 221°. *5-Me ether trimethylammonium chloride* (V); *perchlorate* $C_{10}H_{16}O_7NCl$, m. 102° (effervescence). The trimethylammonium chloride of 2-chloromethyl-5-methoxy-4-pyrone (2 g.) heated 2 hrs. in a closed tube with 3 cc. satd. aq. NH_3 gave on treatment with picric acid, the *picrate* of *1,4-dihydro-5-methoxy-4-oxo-2-pyridylmethyltrimethylammonium chloride* (VI), m. 208°. From 2 g. V and 3 g. $MeNH_2$ is obtained the *1-Me deriv.* of VI, obtained as the *chloroplatinate*, m. 221°. 1,4-Dihydro-5-methoxy-1-methyl-4-oxo-2-pyridinecarboxylic acid (5 g.) in 100 cc. EtOH treated with dry HCl 5 hrs. at 15-20°, then 5 hrs. at 50°, and refluxed 2 hrs. gave 2.5% *Et ester*, m. 145-6°. Finely powd. 4-chloro-5-methoxy-2-pyridinecarboxamide (2.9 g.), treated with 2.5 g. Br and 13.5 g. KOH in 240 cc. H_2O gave 1.8 g. *4-chloro-5-methoxy-2-aminopyridine*, m. 99-101°. B. K.

1951

CA

10

Synthesis of 2-diethylaminoethyl α-phenylvalerate. V. Ettel and J. Hebký. *Collection Czechoslov. Chem. Communs.* 15, 367-70 (1950)(in English).—Two syntheses of *2-diethylaminoethyl α-phenylvalerate* (I), which has *spasmolytic properties*, are described. In the first, the K salt of $PhCH(CO_2CH_2CH_2NEt_2)Et$ is treated with PrBr at room temp. In the alternative procedure $PhCH_2CO_2Et$ is propylated and the $PrCHPhCO_2Et$ transesterified with $Et_2NCH_2CH_2OH$ (II). The over-all yields in either case are practically identical. To EtONa from 5.8 g. Na and 75 cc. abs. EtOH is added 47.3 g. $PhCH(CN)CO_2Et$ [from $PhCH_2CN$ and $CO(OEt)_2$], the mixt. allowed to stand 1 hr. with shaking, treated with 34 g. PrBr, allowed to stand overnight, heated 3 hrs. at 40°, 3 hrs. at 60°, 6 hrs. to 80°, and 6 hrs. at 100°, filtered, neutralized with 5 drops AcOH, the EtOH distd., and the residue distd., giving 46.3 g. *Et α-cyano-α-phenylvalerate* (III), b_{10} 151.7°. To 75 cc. EtOH, 10 g. Na, and 8 cc. H_2O is added 22.5 g. III, the soln. refluxed 15 hrs., the EtOH distd., the residue taken up in 50 cc. H_2O, charcoaled, acidified with HCl, extd. with C_6H_6, the solvent removed, and the residue distd., giving 16.5 g. *α-phenylvaleric acid* (IV), b_{10} 148-9°, m. 53.5°. IV (31.2 g.) refluxed with 82 g. abs. EtOH and 17.5 g. H_2SO_4 2.5 hrs. gives 32.5 g. *Et ester* (V), b_{10} 107°. V (41.2 g.) and 47 g. II contg. 0.06 g. Na are heated in N under a Widmer column, a mixt. of EtOH and II collected at 25-30 mm., then, with the column removed, 20.2 g. (excess) II is collected (2 hrs.); the principal fraction, 53.1 g. I, b_{10} 163-4°; *HCl salt*, m. 117-18°; *picrolonate*, m. 140°. The transesterification of 130 g. II and 0.125 g. Na is carried out identically, giving 91.3 g. *2-diethylaminoethyl phenylacetate* (VI), b_{10} 138-42°; *picrolonate*, m. 98-9°. A suspension of 7.9 g. powd. K in 300 cc. boiling Et_2O is treated in 1.5 hrs. with 47 g. VI in 50 cc. Et_2O, 24.6 g. PrBr added, the mixt. allowed to stand 20 hrs., H_2O added, the Et_2O layer washed, dried, the solvent removed, and the residue fractionally distd., giving 23.2 g. I, b_{10} 150-60°.

Bernard Klein

1951

HEBKY, J

1/2

Derivatives of pyrone, 4(1H)-pyridone, and pyridine. I. Preparation of some 1-phenyl-4(1H)-pyridones. V. Ettel and J. Hebký (Czech. Chem. Works, Prague-Vysočany). *Collection Czech. Chem. Communs.* 15, 639–52(1950)(in English).—$PhNH_2$ (I) (25 g.) in 90 ml. glacial AcOH was added to 21.5 g. *di-Et 2,6-dimethyl-4-oxo-4H-pyran-3,5-dicarboxylate* (II) [Conrad and Gutzheit, *Ber.* 19, 19(1886)], and the mixt. refluxed 15 min., dild. with 270 ml. water, and cooled; the crystals were suction filtered and recrystd. from 100 ml. 50% EtOH with charcoal to yield 26.1 g. *di-Et 2,6-dianilino-4-oxo-3,5-heptadiene-3,5-dicarboxylate* (III), colorless, m. 137° (dried 6 hrs. *in vacuo* at 80°), and 1 g. *di-Et 1,4-dihydro-2,6-dimethyl-4-oxo-3,5-pyridinedicarboxylate* (IIIA) (from the mother liquor), colorless, m. 170°; *free acid* (IV) of IIIA, colorless, m. 225–6° (from 50% EtOH). II (24.1 g.) in 40 ml. hot 50% AcOH and 16 g. *p*-$H_2NC_6H_4OH$ (V) in 70 ml. 50% AcOH were heated 25 min. (water bath, shaking), and the crystals which sepd. on cooling suction filtered, combined with other crystals from the mother liquor, and recrystd. from 500 ml. EtOH; evapn. of the mother liquor gave 28 g. *di-Et 1,4-dihydro-1-(p-hydroxyphenyl)-2,6-dimethyl-4-oxo-3,5-pyridinedicarboxylate* (VI), colorless, m. 259–60° (decompn.); *free acid* (VII), colorless, m. 246° (from 40% EtOH, foaming). Di-Et chelidonate (VIII) [Willstätter and Pummerer, *Ber.* 37, 3737(1904)] (40.8 g.) in 150 ml. warm 50% AcOH and 27.8 g. V in 250 ml. 50% AcOH were heated 25 min. (water bath), 400 ml. water added to the hot mixt., and the crude cryst. product which sepd. on cooling filtered with suction; recrystn. from 500 ml. 50% EtOH gave *di-Et 1,4-dihydro-1-(p-hydroxyphenyl)-4-oxo-2,6-pyridinedicarboxylate* (IX), colorless, m. 185°; *free acid* (X), colorless, m. 198° (decompn.). II (19.5 g.) in 60 ml. 50% AcOH and 12 g. *m*-$H_2NC_6H_4OH$ (XI) in 105 ml. 50% AcOH were heated 20 min. on a water bath; after cooling, the crystals were suction-filtered (addnl. crystals were obtained by addn. of 100 ml. water to the mother liquor), and recrystd. from 200 ml. 90% EtOH with charcoal to yield 23 g. *di-Et 1,4-dihydro-1-(m-hydroxyphenyl)-2,6-dimethyl-4-oxo-3,5-pyridinedicarboxylate*, colorless m. 241°; *free acid*, colorless, m. 249–50° (decompn., from water). VIII (18 g.) in 25 ml. 50% AcOH was heated 20 min. (water bath) with 8 g. XI in 40 ml. 50% AcOH, 200 ml. water added to the hot soln., and the oil which sepd. crystd. by scratching with a glass rod; an addnl. crop from the mother liquor was obtained by further dilm. with water; and suction filtration of both crops, and repeated recrystns. from 50% EtOH gave 6 g. *di-Et 1,4-dihydro-1-(m-hydroxyphenyl)-4-oxo-2,6-pyridinedicarboxylate* (XII), colorless, m. 175–6°; *free acid* (XIII), colorless, m. 191° (decompn., rate of heating = 1°/min.). 2,6-$(MeO)_2C_6H_3OH$ (64 g.) was dissolved in a hot soln. of 60 g. calcined Na_2CO_3 in 1400 ml. water, and the soln. cooled with ice water and treated with PhN_2Cl (from 37.2 g. I) (stirring); suction filtration and

6

V. Ettel & J. Hebky

cryst. from EtOH gave 62 g. *3,5,4-(MeO)$_2$(HO)C$_6$H$_2$N$_2$Ph* (XIV), red-brown crystals with a bluish violet metallic luster, m. 138°. NaS_2O_4 (XV) (35 g.) in 180 ml. water was added slowly to 26 g. XIV in 260 ml. EtOH, the mixt. refluxed 1 hr., decolorized, and filtered, and the EtOH distd. off (water bath); diln. of the residue to 200 ml. with water, suction filtration of the sepd. crystals, and recrystn. from 50% EtOH contg. some XV yield 16.1 g. *2,6,4-(MeO)$_2$(H$_2$N)C$_6$H$_2$OH* (XVI), m. 157°; *picrate* (no m.p. given). II (4 g.) in 8 ml. hot 50% AcOH and 3.2 g. XVI in 9 ml. 50% AcOH were heated 15 min. (water bath, shaking), cooled, and the product crystd. by scratching with a glass rod; suction filtration and recrystn. from EtOH gave *di-Et 1,4-dihydro-1-(4-hydroxy-3,5-dimethoxyphenyl)-2,6-dimethyl-4-oxo-3,5-pyridinedicarboxylate* (XVII), colorless, m. 255° (decompn.); *free acid* (XVIII), m. 258° (glacial AcOH) (decompn.). II (5.4 g.) in 10 ml. hot 50% AcOH was treated with 4 g. *p*-AcNHC$_6$H$_4$NH$_2$ in 12 ml. hot 50% AcOH and the mixt. heated 25 min. on water bath; rubbing the cold mixt. with a glass rod, and recrystn. of the product from 70 ml. EtOH contg. charcoal yielded 5.6 g. *di-Et 1,4-dihydro-1-(p-acetaminophenyl)-2,6-dimethyl-4-oxo-3,5-pyridinedicarboxylate* (XIX), m. 273°; *free acid* (XX), m. 240° (40% EtOH, decompn.). *p*-C$_6$H$_4$(NH$_2$)$_2$ (XXI) (3.25 g.) in 30 ml. 50% AcOH was heated 30 min. (water bath) with 18 g. II in 30 ml. 50% AcOH, the crystals from the cooled soln., suction-filtered and washed with 50% AcOH and Me$_2$CO (addnl. crop from the mother liquor), gave 15 g. of the dihydrate of *tetra-Et 1,1'-p-phenylenebis[1,4-dihydro-2,6-dimethyl-4-oxo-3,5-pyridinedicarboxylate]* (XXII); *free acid* (XXIII), was decarboxylated above 300°, and the residue m. 370° with blackening. XXI (10.8 g.) in 100 ml. 50% AcOH was heated 45 min. (water bath) with 30 g. VIII in 60 ml. 50% AcOH; the mixt. was cooled after addn. of 250 ml. water, rubbed with a glass rod, and suction-filtered after a few days in an ice box; 5 recrystns. from 66% AcOH contg. charcoal gave *tetra-Et 1,1'-p-phenylenebis(1,4-dihydro-4-oxo-3,5-pyridinedicarboxylate)* (XXIV), colorless flat rhomboidal crystals, m. 230-40° (decompn.); *free acid* (XXV), turned yellow at 200° and carbonized at 400°. VII (4 g.) and 10 g. Cu powder were heated at 10 mm. to 225° for 15 min. and to 230° for 5 min.; cooling, extn. of the mixt. with 50 ml. 30% Na_2CO_3, acidification of the filtered ext. with HCl, and recrystns. from 35% AcOH yielded 0.4 g. of the monohydrate of *1,4-dihydro-1-(p-hydroxyphenyl)-2,6-dimethyl-4-oxo-3-pyridinecarboxylic acid* (XXVI), colorless needles, browning at 265°, m. 277-8° (decompn.). VII (5 g.) and 8 g. Cu powder were slowly heated to 250° at 10 mm. and held for 15 min., the mixt. extd. with EtOH, the ext. evapd., and the residue treated as follows. (*a*) with 35% AcOH to give big brownish crystals on standing; (*b*) with pyridine to give fine yellow crystals. A sample from (*b*) analyzed for *1-(p-hydroxyphenyl)-2,6-dimethyl-4(1H)pyridone*, darkened at 300°, and carbonized at 400°. The acids XVIII, XX, and XXIII required purification through their corresponding Na salt. The m.ps. of the acids are not sufficient criteria for purity and identity because of decompn. and dependence on the rate and manner of heating. A discussion of optimal conditions and methods is included. L. Rosen

CA

10

2,2'-Dinitro-4,4'-diformamido-5,5'-dimethoxybiphenyl. J. Hetbáč and V. Letovský (Biochem. Research Inst., Prague, Czech.). *Chem. Listy* **45**, 401(1951).—In an attempt to reduce $[2,4,5\text{-}O_2N(H_2N)(MeO)C_6H]_2$ electrolytically in $HCONH_2$, *2,2'-dinitro-4,4'-diformamido-5,5'-dimethoxybiphenyl* was isolated. M. Hudlický

5

HLJKY, JAROMIR Czech CA: 47:11167

with OTTO RADEK and JAROSLAV URBAN

Pharm. Biochem. Research Inst., Prague, Czech.

"Derivatives of pyrone, pyridone, and pyridine. IV. Preparation of di-arylidene-2, 6-dimethyl-4H-pyran-4-ones and 4(1H)-pyridones."

Chem. Listy 46, 736-9(1952); cf. CA 47, 8070c.

[illegible] L.

[illegible]; STANEK J.; ZVERINA, V.

Reactivity of the methyl group on the heterocyclic ring. III Methoiodide of 2-(phenyl- hydroxyethyl) pyridine and its reactions; synthesis of d, l-sedamine. p.735 (Chemicke Listy, Praha. Vol. 46, No. 12, Dec. 1952)

SO: Monthly List of East European Accessions, (EEAL), LC, Vol. 4, No. 9, June 1955, Uncl.

[redacted]; RADEK, C.;URBAN, J.

Derivatives of pyrone, pyridone, and pyridine. IV. Preparation of some benzylidene-2,6-dimethyl- pyrones and -pyridones. p.736 (Chemicke Listy, Praha. Vol. 46, No. 12, Dec. 1952)
SO: Monthly List of East European Accessions, (EEAL), LC, Vol. 4, No. 6, June 1955, Uncl.

STANEK, J.; HEBKY, J.; ZVERINA, V.

Reactivity of methyl groups on heterocyclic nuclei. Part 3. The methiodide of 2-(β-phenyl-β-hydroxyethyl) pyridine and its reactions; a synthesis of dl-sedamine [with summary in English]. Sbor.Chekh.khim.rab. 18 no.5: 679-683 O '53. (MLRA 7:6)

1. Department of Organic Chemistry, Charles University, and Pharmaceutical and Biochemical Research Institute, Prague. (Heterocyclic compounds) (Pyridine) (Piperidine)

Hebky, J.

A Contribution to the synthesis of lobeline. I. [illegible] and J. Krška (Farm. biochem. výskumný ústav, Prague, Czech.). *Chem. Listy* 47, 1625-31(1953). A mixt. of *lobeline* (I), *lobelanine* (II), and *lobelanidine* (III) obtained by catalytic hydrogenation of 2,6-diphenacylpyridine *p*-toluenesulfonethylate with 3 moles H over PtO_2 was sepd. by chromatography on Al_2O_3 (activity I). Similarly, the mixt. obtained from 22 g. H with 1.5 g. $LiAlH_4$ in tetrahydrofuran at 0° was chromatographed to yield II, m. 93°, *HCl salt*, m. 193° (decompn.), and III. I, m. 100°, gave with (+)-dibenzoyltartaric acid a salt, m. 142°, *free base*, m. 118°; *HCl salt*, m. 150° (decompn.), $[\alpha]_D^{20}$ −57.2°. III, m. 140°; *HCl salt*, m. 138°; *salicylate*, m. 101°.

M. Hudlický