

EXCERPTA MEDICA SER 8 Vol 12/2 Neurology Feb 59

990. PRIMARY SARCOMAS OF THE BRAIN - A primer agyi sarcomákról -  
Haberland K. Orvostud. Egyet. Ideg-és Elmeclin. Közl., Debrecen -  
IDEGY-SZ. 1957, 10/5-6 (162-168) Illus. 6

Eight cases with primary intracerebral, 2 cases with cerebellar sarcomas, and one case with meningeal sarcomatosis with wide-spread intracerebral invasion are described and illustrated. Intracerebral sarcomas are differentiated into meningeal fibrosarcomas and adventitial perivascular sarcomas according to their histological picture and location. The former are considered to have a pial source in the cerebral hemisphere or an arachnoidal origin in the cerebellum. In one case extracerebral metastasis was found. Problems of the differential diagnosis and prognosis are discussed. A summary in German is also given.

Kajtor - Debrecen (VIII,5,16)

KAJTOR, Ferenc, Dr.; HABERLAND, Katalin, Dr.; HULLAY, Jozsef, Dr.; ANGYAN, Andras, Dr.

Electro-clinical study in epileptics with sclerosis of Ammon's horn treated with lobectomy. Ideg. szemle 12 no.4:117-127 Apr 59.

1. A Debreceni Orvostudományi Egyetem Ideg-Elmeklinikájának (Ig-azgató: dr. Juhasz Pal Egyetemi tanár) közleménye.

(HIPPOCAMPUS, pathol.

sclerosis of horn of Ammon in epilepsy, surg., lobotomy & postop. EEG (Hun))

(EPILEPSY, pathol.

sclerosis of horn of Ammon, surg., lobotomy & postop. EEG (Hun))

(PSYCHOSURGERY, in various dis.

lobotomy in epilepsy with sclerosis of horn of Ammon, postop. EEG (Hun))

(ELECTROENCEPHALOGRAPHY, in various dis.

epilepsy with sclerosis of horn of Ammon, EEG after lobotomy (Hun))

HABERLAND, L.

Selection of hydrometers. p.27. EPULETGEPESZET. Budapest. Vol. 5,  
no. 1/2, 1956.

SOURCE: East European Accessions List (EEAL), Library of Congress  
Vol. 5, No. 12, December 1956

HABERLAND, Lajos, gépészmérnök, tudományos munkatárs

Questions of designing screw-winged flowmeters. Pt.2. Finommechanika  
3 no.2439-48 F '64.

1. Central Research Laboratory of Measuring Technique, Budapest.

HABERLAND, Lajos

Turbine-engined flowmeter and its application in the food industry.  
Elelm ipar 18 no.8/9:290-291 Ag-S '64.

1. Central Research Institute of Measuring Technique, Budapest.

HABERLE, K.

Over the fields of Czechoslovakia. Grazhd. av.13 no.4:36 Ap '56.  
(MIRA 9:7)

1.Nachal'nik chekhoslovatskogo aviapodrazdeleniya spetsial'nogo  
primeneniya.

(Czechoslovakia--Aeronautics in agriculture)

HABERMAN, VLADIMIR

GABERMAN, Vlastimil

Ultramicromethod for the determination of ammonia [with summary in English]. Vop.med.khim. 3 no.6:464-469 N-D '57. (MIRA 11:2)

1. Kafedra biologicheskoy i organicheskoy khimii I Moskovskogo ordena Lenina meditsinskogo instituta imeni I.M.Sechenova.  
(AMMONIA, determination,  
ultra-micromethod (Rus))

~~HABERMANN, V.~~  
~~HABERMANN, V. [Habermann, V.]~~

Effect of phenylalanine analogues on the growth of *Saccharomyces cerevisiae* [with summary in English]. *Biokhimiia* 23 no.4:630-634 J1-Ag '58. (MIRA 12:3)

1. Chair of Medical Chemistry, the Medical Faculty of the Karlov University, Pilsen, Czecho-Slovakia.

(PHENYLALANINE, rel. cpds.

eff. on *Saccharomyces cerevisiae* growth (Rus))

(SACCHAROMYCES CEREVISIAE, effect of drugs on, phenylalanine analogues (Rus))

HABERMANN, V.; SORM, F.

"Mechanism of the cancerostatic action of 6-azauracil and its riboside."  
(In English)

COLLECTION OF CZECHOSLOVAK CHEMICAL COMMUNICATIONS, Praha, Czechoslovakia,  
Vol. 23, no. 12, Dec. 1958

Monthly list of EAST EUROPEAN ACCESSIONS (EEAI), IC, Vol. 2, No. 7, July 1959, Unclas.

COUNTRY : Czechoslovakia T  
CATEGORY : Human and Animal Physiology, Physical Factors  
ABS. JOUR. : RZhBiol., No. 5 1959, No. 22613  
AUTHOR : Habermann, V.  
INST. : ~~GIVEN BELOW~~  
TITLE : The Diminution of Blood Catalase Activity Associated with Radiation Sickness.  
ORIG. PUB. : Casop. lekaru ceskych, 1958, 97, No. 27-28, 850  
ABSTRACT : When blood was irradiated in vitro, blood catalase activity did not diminish. Catalase activity was diminished immediately after irradiation of mice with a lethal dose. No factor could be found in the plasma of the mice which inactivated catalase.

\* \* 1. Katedra biochemie 1. moskevského medicinského institutu, přednosta  
prof. Mardasev S. R.

Card: 1/1

On the carcinostatic effect of 6-azauracil and of its ribosides. Studies on the effect of 6-azauracil and of its ribosides on the activity of normal tissues. Gesk. fysiolo. 8 no.4:326-327 July 59.

1. Ústav pro lékařskou chemii lek. fak. KU, pobočky, Plzeň.  
(ANTINEOPLASTIC AGENTS, pharmacol.)  
(NUCLEOSIDES AND NUCLEOTIDES, pharmacol.)

ГАБЕРМАНН, В

GABERMANN, V. [Habermann, V] (Pl'zen', Chekhoslovakiya)

Acyl adenylates. Usp.sovr.biol. 47 no.1:19-37 Ja-F '59.

(MIRA 12:2)

(NUCLEOSIDES AND NUCLEOTIDES,  
acyl adenylates, review (Rus))

06608

AUTHOR: Habermann, Vlastimil

CZECH/8-53-1-4/20

TITLE: Amino Acyl Adenylates

PERIODICAL: Chemické listy, 1959, Vol 53, Nr 1, pp 14 - 21

ABSTRACT: A review of the function of the high-energy phosphates (e.g. ATP, etc) and co-enzyme A with especial reference to protein biosynthesis. There are 40 references. of which 27 are English, 9 French, 1 Soviet and 3 German.

ASSOCIATION: Ústav lékařské chemie, Fakulta všeobecného lékařství, Karlova universita, Plzeň (Institute of Medical Chemistry, Faculty of General Medicine, Charles University, Pilsen).

Card 1/1

06613

AUTHOR: Habermann, Vlastimil

CZECH/8-53-1-9/20

TITLE: A Simple Ultramicroburette

PERIODICAL: Chemické listy, 1959, Vol 53, Nr 1, pp 30 - 31

ABSTRACT: The author claims that the burette can be easily constructed and has proved practicable. The burette is built from a micrometer screw gauge, an all-glass syringe (2 ml. capacity) or tuberculin syringe and a capillary tube (0.1 mm diameter) with a right-angle bend. (The apparatus is arranged in the same manner as the British "Agla" pipette (Burroughs Wellcome)). The author states that the calibration curves are precisely linear (taking the usual precautions) - using mercury. Sensitivity: 0.0003 ml./0.01 mm (injection syringe, 2 ml. capacity) and 0.00024 ml./0.01 mm (tuberculin syringe). There are 1 figure and 3 references, 2 of which are Soviet and 1 English.

Card 1/2

06613

A Simple Ultramicroburette

CZECH/8-53-1-9/20

ASSOCIATION: Ústav lékařské chemie, Fakulta všeobecného lékařství,  
Karlova universita, Hzeň (Institute of Medical Chemistry,  
Faculty of General Medicine, Charles University, Prague)

SUBMITTED: October 22, 1957

Card 2/2

SKODA, J.; ERNEST, I.; STANEK, J.; HABERMANN, V.

The relationship between structure and antibacterial effect of unsaturated  $\gamma$ -diketones. Coll Cz Chem 26 no.3:874-880 Mr '61.  
(EBAI 10:9)

1. Institute of Organic Chemistry and Biochemistry, Czechoslovak Academy of Science, Prague, Department of Organic Chemistry, Institute of Chemical Technology, Prague, and the Institute for Clinical Chemistry, Medical Faculty of the Charles University, Plzen. 2. Present Address: Research Institute for Pharmacy and Biochemistry, Prague (for Ernest)

(Ketones) (Bactericidal action) (Unsaturated compounds)

HABERMANN, V.

Studies on deoxyribonucleic acids. Part 1: The preparation of  
aprimidinic deoxyribonucleic acids. Coll Cz Chem 26 no.12:  
3147-3156 D '61.

1. Institute for Clinical Chemistry, Charles University, Plzen.

HABERMANN, V.; MUSIL, F.; SMULA, Zd.; SPINKA, J.

Contribution to laboratory diagnosis of malignant neoplasms.  
(Preliminary communication). Rozhl. chir. 41 no.10:674-679 0 '62.

1. Ustav lekarske chemie fakulty vseobecneho lekarstvi University Karlovy v Plzni zast. prednosta V. Habermann, prom. lekar II. chirurgicka klinika fakulty vseobecneho lekarstvi University Karlovy v Plzni prednosta doc. dr. J. Spinka.

(NEOPLASMS)

(BLOOD CHEMICAL ANALYSIS)

19  
CZECHOSLOVAKIA

HABERMANN, V; MAIDLOVA, E.

Institute of Medical Chemistry of Charles University, Prague  
(for both)

Prague, Collection of Czechoslovak Chemical Communications,  
No 9, 1963, pp 2537-2538

"Studies on Deoxyribonucleic Acids. III. Distribution of  
Purine Nucleotides in the Deoxyribonucleic Acid Molecule  
from Calf Thymus."

HABERMANN, V.

Studies on deoxyribonucleic acids. Pt.2. Coll Cz Chem  
28 no.2:510-517 F '63.

1. Institute of Medical Chemistry, Charles University,  
Plzen.

JERNI, R.; HABERMANN, V.

On the effects of tetracycline on the biosynthesis of proteins and nucleic acids with escherichia coli and Bacillus cereus. Coll Cz Chem 29 no.5:1326-1329 My '64.

1. Institute of Medical Chemistry, Charles University, Pilsen.

CZECHOSLOVAKIA

HABERMANN, V.; MAJLOVA, E; CERNY, R

Institute of Medical Chemistry, Karlova University, Plzen -  
(for ~~all~~)

Prague, Collection of Czechoslovak Chemical Communications,  
No 1, January 1966, pp 139-151

"Sequential arrangement of polynucleotides. Part 1: Isolation  
of terminal rna fragments by oxidation with periodate and  
chromatography on aminoethyl-cellulose."

Shortage of laboratory equipment. Chem listy 59 no.3:357-359  
Mr '65.

HABERSBERGER, Karel

CZECHOSLOVAKIA/ Analytical Chemistry. Analysis of Organic G-3  
Substances.

Abs Jour: Referat. Zhur.-Khimiya, No. 8, 1957, 27280

Author : Karel Habersberger, Jaroslav Zyka.

Title : ~~OSCILLO-POLAROGRAPHIC~~ Study of Some Alkaloids.

Orig Pub: Ceskosl. farmac., 1956, 5, No. 5, 264 - 271

Abstract: Alkaloids (I) containing tropan or piperidine rings (hydrochlorides - cocaine, tropacocaine, pseudopelletierine, lobeline; sulfates - atropine, apoatropine, pelletierine, and bromides - homotropine and coniine) were studied oscillo-polarographically. The measurements were carried out in acid, neutral, alkaline and buffer solutions. All the studied I showed characteristic oscillo-polarographical teeth, the shape of which changed at the transition from an

Card 1/2

CZECHOSLOVAKIA/ Analytical Chemistry. Analysis of G-3  
Organic Substances.

Abs Jour: Referat. Zhur.-Khimiya, No. 8, 1957, 27280.

acid medium to an alkaline one. The teeth received for the alkaline solutions of I are so clearly expressed that they can be used in analytical chemistry for the determination of I in concentrations of  $10^{-5}$  M.

Card 2/2

HABERNYI, Karoly; TEGZE, Miklos; VAJDA, Odon; VUKOV, Konstantin

Continuous operation of the J-diffusion at Peto-haza Sugar  
Factory in the 1957-1958 campaign. Cukor 11 no.5:109-118  
My'58

1. Cukoripari Kutatointezet. 2. "Cukoripar" szerkeszto bizott-  
sagi tagja (for Vukov).

HABERSBERGER, Karel

Analysis of vanadium contact agents stabilized by means of phosphorus. Chem prum 12 no.10:547-549 0 '62.

1. Ustav fyzikalni chemie, Ceskoslovenska akademie ved, Praha.

ZAHRADNIK, Frantisek; HABERSBERGEROVA, Anna

Device for opening ampuls with gas samples. Chem listy 58  
no. 4:468 Ap '64.

1. Institute of Polarography, Czechoslovak Academy of Sciences,  
Prague (for Zahradnik). 2. Nuclear Research Institute, Czechoslovak Academy of Sciences, Rez. (for Habersbergerova).

TEPLY, J.; HABERSBERGEROVA, A.

Effects of some solutes on the radiolysis of methanol. Coll  
Cz Chem 30 no.3:785-792 Mr '65.

1. Institute of Nuclear Research of the Czechoslovak Academy  
of Sciences, Rez near Prague. Submitted July 17, 1963.

TEPLY, J.; HABERSBERGEROVA, A.; VACEK, K.

Radiolysis of pure methanol. Coll Cz Chem 30 no.3:793-801  
Mr '65.

1. Institute of Nuclear Research of the Czechoslovak Academy of  
Sciences, Rez near Prague. Submitted April 28, 1963.

HABERSBERGEROVA-JENNICKOVA, A.; GIEKA, J.

Determination of sulfur in organic substances. In German. Coll. Cz.  
Chem. 24 no.11:3777-3782 N '59. (MBAI 9:5)

1. Institut für Kernforschung, Tschechoslowakische Akademie der  
Wissenschaften, Prag.  
(Sulfur) (Organic compounds)

HABERSKI, Aleksander; LIBERACKI, Janusz

Influence of extended carbonization on the quality characteristics of blast-furnace coke as seen from the example of one Polish coking plant. Koks 8 no. 6:205-211 D '63.

1. Instytut Chemicznej Przerobki Węgla, Zabrze.

HABERSKI, Aleksander; DLUGOSZ, Aleksander; EMMERICH, Roman

Experiments in using radioactive isotopes in studies  
on the coking process. Koks 9 no.4:126-134 J1-Ag '64.

1. Department of Coking Practice of the School of Mining  
and Metallurgy, Krakow.

VAVREJN, J.; BEJCEK, Z.; HABERZETTEL, V.; TOMAN, J.; ZIVNY, J.

Granuloma gangraenescens. Cesk. stomat. 65 no.2:115-119  
Mr '65

I. I. s<sup>t</sup> matologicka klinika fakulty vseobecneho lekarstvi  
Karlovy University v Praze (prednosta - prof. dr. J. Toman,  
DrSc.).

HUNGARY

MAKARESZ, Denes, Dr. HABON, Gyorgy, Dr. City Ambulant Service, Surgical Department (Varosi Rendelointezet, Sebészeti Osztaly), Pecs.

"Statistical Data on the Number of Traumatological Cases Seen in the Surgical Outpatient Service."

Budapest, Magyar Traumatologia, Orthopaedia es Helyreallito Sebészet, Vol IX, No 2, 1966, pages 142-147.

Abstract: [Authors' English summary modified] The patient material seen at the traumatological service in the surgical department, within the 29 physician-hours per day provided, over a one-year period is analyzed. Of the total of 2981 cases, there were 48 per cent wounds and 34 per cent fractures. The organization of surgical outpatient clinics is discussed in detail and the need to set certain times aside for surgery is emphasized. The age, sex and occupational distribution of the patients is also discussed. 8 Eastern European, 1 Western references.

1/1

- 219 -

Solution of agricultural transport in the mountains.  
Zemedel tech 9 no. 5/6 461-474 D '63.

1. Veduci Vyskumnej stanice, Vyskumny ustav lesneho hospodarstva, Oravsky Podzamok (for Rosko).
2. Vyskumny ustav luk a pasienkov, Poprad (for Habovstiak).

✓ 127. Heberzak, A., Some experiments concerning the geostatic pressure (in Polish), *Rozpr. Inzyn.* 6, 1, 145-165, 1958.

Author begins with justifying the necessity for experimental investigation of the geostatic pressure for the determination of the real values of soil pressure against walls, the problem being not yet solved in a decisive manner.

The principal part of the paper contains a detailed description of the apparatus designed by the author and the results of experiments carried out by him using that apparatus. A special device for determining the values of the vertical component of the geostatic pressure against a vertical wall deserves special mention. Both the value of the horizontal and the vertical component of the resultant pressure against the wall of the apparatus are determined by measuring the values of friction by extracting from the soil special vinidur or steel bars. The experiments were carried out by using dry sand. The distribution of sand pressure against a

wall was examined as well as the influence of sand compression on the pressure. It was found that with compressed sand the value of the horizontal component of the pressure increases considerably, the value of the vertical component remaining unchanged.

The end of the paper is devoted to comparison of the values of the geostatic pressure obtained by the author with those calculated on the basis of Coulomb's assumptions and with the results of investigations by Terzaghi and Skibinski.

J. Czulak, Poland

FARA, M.; HABERZETTEL, V.

Contribution on facilitating implantation of chipped cartilage  
and bone into cavities. Acta chir.plast. 2 no.3:247-252 '60.

1. Clinic of Plastic Surgery, Charles University, Prague  
(Czechoslovakia) Director: Academician F. Burlan; First Stomatolo-  
gical Clinic, Charles University, Prague, Director: Prof.  
J. Krecan, M.D.

(BONE AND BONES transpl)  
(CARTILAGE transpl)

FARA, Miroslav; HABERZETTEL, Vaclav

Apparatus for the implantation of cartilage and bone fragments into the cavity. Acta chir. orthop. trauma. Cech. 28 no.1:67-69 F '61.

1. Klinika plasticke chirurgie KU v Praze, prednosta akademik F. Burian  
I stomatologicka klinika KU v Praze, prednosta prof. dr. J. Krecan.

(BONE AND BONES transpl) (CARTILAGE transpl)

FARA, Miroslav; HABERZETTEL, Vaclav

An apparatus for cutting transplanted cartilage. Acta chir. orthop.  
trauma. Cech. 38 no.4:350-353 Ag '61.

1. Klinika plasticke chirurgie KU v Praze, prednosta akademik Fr.Burian
- I. stomatologiccka klinika KU v Praze, prednosta doc. dr. J.Toman.  
(CARTILAGE transpl.) (TRANSPLANTATION equip & supplies)

CERNY, C.; HABES, M.; ZELENA, M.; ERDOS, E.

Equilibrium of reduction of tungsten (IV)-sulfide by means of hydrogen at medium temperatures. *Coll Cz chem* 25 no.12: 3836-3843 '59. (EEAI 9:6)

1. Institut für physikalische Chemie, Tschechoslowakische Akademie der Wissenschaften, Prag.  
(Tungsten sulfides) (Hydrogen)

HABIBI, B.

"We must prepare vegetable seedlings in time"

Per Bujqesine Socialiste. Tirane, Albania. Vol. 13, no. 1, Jan 1959

Monthly list of East European Accessions (EEAI), IC, Vol. 8, No. 6, Jun 59, Unclas

HABLA, K.

Postwar achievements of the wool industry in the Biala-Bielsko region and the outlook for its development in the coming years. p. 215.

PRZEGLAD WLOKIENNICZY. (Stowaryszenie Inzynierow i Technikow Przemyslu Wlokienniczego Loda, Poland, Vol. 13, No. 5, May, 1959.

Monthly List of East European Accessions (EEAI) LC, Vol. 9, No. 2, Feb. 1959.

Uncl.



1965-1966, pp. 100-101; P. 101, Viktor

1965, International Congress on Microbiology, Moscow, U.S.S.R. in Pacific,  
Microbiology obsor 26 no.10:743-744, 1965.

021.385.1.029.6  
 436. ENERGY EXCHANGE BETWEEN THE ELECTRON BEAM AND THE ELECTRIC FIELD OF THE KLYSTRON RESONATOR AT LARGE SIGNALS. P. HAYOVSK. 3

Slaboproudý Obzor, Vol. 19, No. 8, 516-20 (1958). In Sloyak. It is shown that the average electronic efficiency of a klyatron resonator operating at large signals is given by the integral

$$\eta_{el} = \frac{1}{2\pi} \int_0^{2\pi} \eta_1(\omega t_0) \rho'(\omega t_0, \varphi) d\omega t_0$$

where  $\eta_1$  is the energy efficiency of a single electron,  $\rho'$  is the total electron current at the input of the interaction space,  $t_0$  is instant of the entry of an electron into the resonator and  $\varphi$  is the phase between the resonator field and the electron beam. An analytical solution of the integral is given in terms of a series of Bessel and trigonometric functions, but it is pointed out that the solution is valid only for input resonators. The integral is also solved by a graphical-analytical method and  $\eta_{el}$  is plotted as a function of  $\omega t_0$  and  $U_m/U_0$  for various transit angles;  $U_m$  is alternating voltage amplitude between the resonator grids and  $U_0$  is its supply voltage. The second solution can be used in the case of output resonators and permits the determination of an optimum external load of the klyatron. R.S. Sidorenko

TA  
 1/1

or [signature]

HABOVCIK, P.

Influence of the nonhomogeneity of high-frequency electric field on  
phenomenons occurring in the interaction area of klystron. p. 227.

ELEKTROTECHNICKY CASOPIS, Bratislava, Czechoslovakia, Vol. 10,  
No. 4, 1959.

Monthly list of East European Accessions, (EEAI) LC, Vol. 8, No. 10,  
Oct. 1959.  
Uncl.

HABR, J.

GABR, Yaroslav [Habr, Jaroslav], ekonomist; DAN'KO, Yu.T. [translator];  
GERCHUK, Ya.P., red.; SEMENOVA, N.Kh., red.; MELENT'YEV, A.M.,  
tekhn.red.

[Linear programming; manual for economists] Lineinoe programmiro-  
vanie; posobie dlia ekonomistov. Pod red. IA.P.Gerchuka. Moskva,  
Gosstatizdat TsSU SSSR, 1960. 134 p. (MIRA 14:3)  
(Linear programming)

HABR, Jaroslav

Application of the frequency method in solving the transportation  
problem. Przegł statyst 9 no.1:93-98 '62.

HABR, Jaroslav, dr., inz.

A simplified method of mathematical solution of transportation tasks.  
Pod org 17 no.4:167-169 Ap '63.

1. Ekonomicky ustav, Ceskoslovenska akademie ved.

HABR, Jaroslav, dr. inz.

Mathematical methods in the economics and production organization.  
Pod org 17 no.7:312-313 JI '63.

1. Ekonomicky ustav, Ceskoslovenska akademie ved.

HABR; LIKAR

"Verification of the suboptimum method in solving practical transportation problems". Reviewed by Habr and Likar. Prum potravin 13 no.3:168 Mr '62.

HARR, Pavel

Printed circuits as seen by a television repairman. Sdel tech 10  
no.7:278 JI '62.

AUTHOR: Habrčeti, MĀLOSLAV CZECH/34-59-4-11/18  
TITLE: Polarographic Determination of Molybdenum in Steel  
(Polarografické stanovení molybdenu v oceli)  
PERIODICAL: Hutnické Listy, 1959, <sup>Vol. 14</sup> Nr. 4, pp 324 - 325  
(Czechoslovakia)

ABSTRACT: The author developed a quick and simple method of polarographic determination of molybdenum in steel by using ammonium octane in the presence of III complexones pH = 4.5. Of the elements usually present in steel, only copper has a disturbing effect since it prevents determination of traces of molybdenum. The method is suitable for current series determination. The instrumentation used, the principles and instructions for the practical execution of the measurements are given in the paper. A practical example of determined results is graphed in Figure 3.

Card 1/2

Polarographic Determination of Molybdenum in Steel

CZECH/34-59-4-11/18

There are 3 figures, 1 table and 8 references, 1 of which is German, 4 English and 3 Czech.

ASSOCIATION: Železářny Čenkov, n.p. Čenkov  
(Čenkov Ironworks, Čenkov) ✓

Card2/2

HABRCETL, Miloslav, inz.

Complexometric determination of aluminum in steel. Hut listy 18  
no.2:138-139 F '63.

1. Zelezarny Cenkov, n.p., Cenkov.

HABERZETTEL, V.

HABERZETTEL, V. MUDr asistent

Suppurative inflammation of the upper lip. Cesk.stomat. no.4-5  
189-193 JI '55.

I. I stomatologicke kliniky KU v Praze, prednosta prof. Jaromir  
Krecan.

(CHEILITIS, etiology and pathogenesis,  
inj. with grass stem causing suppurative inflamm.)

VITVAR, inz.; BLATA, inz.; HAVLICEK, inz.; NEJEZCHLEB, KRAL, REICHL, J.;  
HABRINA, J.; HOLAS; KORAN, Inz.; DOUPOVEC, Inz.

Conference of the constructors of the technological part of  
the Orlik Waterworks. Energetika Cz 13 no.12:671-674 D '63.

1. Geskomoravska-Kolben-Danek (for all except Holas, Koran,  
Doupovec).
2. Vodni elektrarny Orlik (for Holas).
3. Leninovy zavody Plzen (for Koran).
4. CED (for Doupovec).

HAERINSKY, J.

"Nomogram for determining consumption of cooling water in circulatory cooling systems."  
Energetika, Praha, Vol. 4, No. 7, July 1954, p. 315.

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

HABROVEC, F.

Hardening of miniature parts.

P. 4 (Hemna Mechanika a Optika. Vol. 2, no. 1, Feb. 1957, Praha, Czechoslovakia)

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

RYS, P.; KLESNIL, M.; CERNOHORSKY, M.; HABROVEC, F.

Interpretation of the results of the study of carbon steel  
extraction replicas. Hut listy 19 no.5:349-358 My '64

1. Institute of Metal Properties, Czechoslovak Academy of  
Sciences, Brno.

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

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

L 46907-56 T/EMP(t)/STI IJP(c) JD

ACC NR: AF6034293

SOURCE CODE: CZ/0034/66/000/005/0372/0373

AUTHOR: Habrovec, F. (Engineer)

29

ORG: none

B

TITLE: Method for heat treating metals suitable for quenching, mainly low alloy carbon steels

SOURCE: Hutnicke listy, v. 21, no. 5, 1966, 372-373

TOPIC TAGS: low alloy steel, carbon steel, martensite, austenite

ABSTRACT: The article is an abstract of Czechoslovak Patent Application No Class 18c, 1/10, FV 1139-65, dated 19 Feb 65. High strength of quenched materials can be obtained at the same time as high notch strength when the martensite contains 0.15-0.45% C in solid solution, some more C in the form of carbides, and all of the C distributed evenly in the matrix of the martensite of a fine grain structure. The invention makes it possible to fulfil all of the conditions mentioned. Continuous austenization, and re-austenization is conducted at such a rate, that the eutectoid concentration corresponds to 0.15 - 0.45% C and is completed at 5-30° C above the eutectoid temperature, after which the object is quenched. Austenite formation is conducted at a temperature higher than the temperature which corresponds to the amount of C in the steel, so that the excess C is present in the form of a carbide. The metal recrystallizes with a fine grain, and its strength increases.

[JPRS: 36,867]

SUB CODE: 11 / SUBM DATE: none

Card 1/1

0921 0014

ACC NR: AP7003629

SOURCE CODE: CZ/0065/66/000/006/0505/0518

AUTHOR: Habrovec, Frantisek; Kounicky, Jan; Rys, Premysl; Skarek, Jiri

ORG: Institute of Metal Properties, CSAV <sup>BRNO</sup> (Ustav vlastnosti kovu CSAV)

TITLE: Nature of the refining of Fe-Ni-C alloy martensite by repeated austenitizing

SOURCE: Kovove materialy, no. 6, 1966, 505-518

TOPIC TAGS: ~~high~~ nickel steel, steel mechanical property, steel heat treatment, martensite, austenitic steel, tensile strength, yield stress, elongation

ABSTRACT: A series of experiments has been performed to determine the effect of repeated austenitizing with rapid heating on the mechanical properties and the morphology of martensite of a nickel steel (0.42% carbon and 24.5% nickel;  $M_s$  temperature— $36^\circ\text{C}$ ). Steel specimens 1.7 mm thick, 3.4 mm wide, and 80 mm long were austenitized at  $1050^\circ\text{C}$  for 30 min, quenched in liquid nitrogen, reheated by passing electric current for various periods of time (to reach a certain temperature which, however, was not measured directly), water quenched and refrigerated in liquid nitrogen for 1.5 hr. The dependence of mechanical properties on the power consumed for reheating (i.e., the austenitizing temperature) was found to follow a complex pattern (see Fig. 1). The best combination of properties, a tensile strength of almost  $200 \text{ kp/mm}^2$ , a yield strength of about  $160 \text{ kg/mm}^2$ , a yield strength of about  $160 \text{ kg/mm}^2$  and an elongation of about 9%, was obtained at a power consumption of 1000 w. The structure of the alloy treated under these conditions consisted mainly of a fine acicular martensite. With increasing power consumption, the acicular martensite

Card 1/3 UDC: none

ACC NR. AP7003629

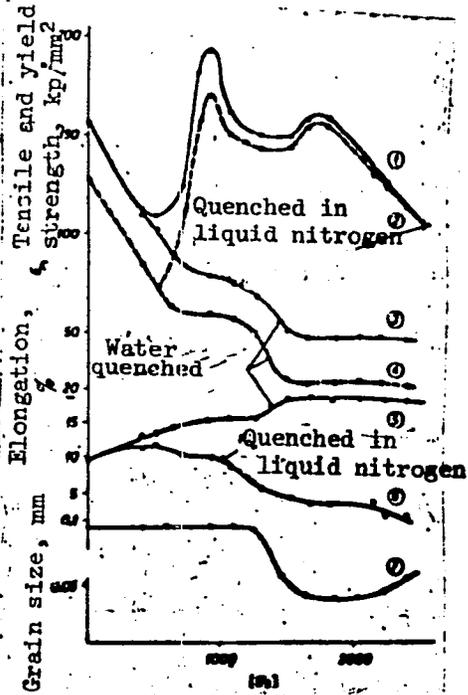


Fig. 1. Dependence of tensile strength (1, 3), yield strength (2, 4), elongation (5, 6) and grain size of the nickel steel on the power consumption for re-austenitizing

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ACC NR: AP7003629

is gradually replaced by lamellar martensite, which has lower strength and ductility (second maximum on curve 1). Orig. art. has: 14 figures.

SUB CODE: 11, 13/ SUBM DATE: 17May66/ ORIG REF: 008/ OTH REF: 010/

Card 3/3

BIELANSKI, Adam; HABROWSKA, Janina

Sorption of water vapor by dehydration products of  $\text{NiSO}_4 \cdot 6\text{H}_2\text{O}$ .  
Ceramika 32 no.4:97-101 '61.

1. Katedra Chemii Nieorganicznej Akademii Górniczo-Hutniczej,  
Krakow.

HABUDA, T.

More on the organization of accounting to conform with the harmonogram. p.252

CEMENT, WAPNO, GIPS. (Wydownictwo "Budownictwo i Architektura") Krakow,  
Poland. Vol. 11, no. 11, Nov. 1955

Monthly List of East European Acquisitions (EEAI) LC, Vol. 9, no. 1, Jan.1955

Uncl.

Wilson, J.

Planning department in a cement industry enterprise. p. 143  
a device for testing fireproof cement mortar and concrete. p. 147

WILSON, JAMES, Mrs. vol. 12, no. 3, May 1956

reland

so. Most Effective Sales Lists vol. 5, no. 10 Oct. 1956

WISDA, T.

Where are the obstacles of technical progress? p. 127  
National Council of Rationalizers in the field of economizing  
electric energy. . . . 128

SIEM, WATKI, WIS . . . vol. 12, no. 5, Aug 1956

Poland

so. . . . WIS . . . vol. 5, no. 10 . . . Oct. 1956

HABUDA, T.

HABUDA, T. Systematization of organizational tables in the cement industry. p. 205.  
Vol. 12, no. 9, Sept. 1956. CEMENT, WAFNC, GIPS. Krakow, Poland.

SOURCE: East European Accessions List (EEAL) Vol.6, No. 4--April 1957

HABUDA, T.

HABUDA, T. Still on the organizational setup in the cement industry. p. 260.  
Vol. 12, no. 11, Aug. 1956. CEMENT, WAFMC, GIFS. Krakow, Poland.

SOURCE: East European Accessions List (EEAL), Vol. 6, No. 4--April 1957

HABUDA, T.

Conditions of the introduction of intrafactory accounting in the cement industry. p. 22.

CEMENT, WAFNO, GIPS. (Wydawnictwo "Budownictwo i Architektura") Krakow, Poland. Vol. 13, no. 1, Jan. 1957.

Monthly list of East European Accessions Index (EEAI), LC, Vol. 8, no. 6, June 1959  
uncla.

HABUDA, Zsigmond, muszaki egyetemi tanarseged

Accidents occurring in intersections. Auto motor 14 no.2:26 Ja '61.

HABUDA, ZSIGMOND, egyetemi tanarseged

Brake defets. Ft. 1. (To be contd.) Auto motor 14 no. 8:12 Ap'61.

HABUDA, Zsigmond, egyetemi tanarseged

Brake defects. Pt. 2. (To be contd.) Auto Motor 14 no. 9:26 My'61.

HABUDA, Zsigmond, egyetemi tanarseged

Brake defects.Pt.3. Auto motor 14 no.10:26 My '61.

HABUDA, Zsigmond, okleveles gepeszmernok, tanarseged

Accidents caused by motor vehicle brake failures. Jarmu mezo  
gep 9 no.10:374-377 0 '62.

1. Muzsaki Egyetem.

HABUR, B.

Decline in the activities of U.S.A. merchant marine. Mor.  
flot 21 no.2:41-42 F '61. (MIRA 14:6)

1. Zamestitel' direktora Tsentral'nogo nauchno-issledovatel'skogo  
institut morskogo flota.  
(United States--Merchant marine)

HABUS, M. ; PJTLER, H.

The Yugoslavia glass industry today. p. 218.  
(Kemija u industriji, Vol. 5, No. 9, Sept. 1956, Zagreb, Yugoslavia)

SO: Monthly List of East European Accessions (EEAL) Lc. Vol. 6, No. 8, Aug 1957. Uncl.

15(2)

YUG/2-59-4-10/16

AUTHOR: Habuš, Milivoj

TITLE: Hollow Glass Industry in the Federal People's Republic of Yugoslavia and the Export of Its Products (Industrija šupljeg stakla FNRJ i izvoz njenih proizvoda)

PERIODICAL: Kemija u industriji, 1959, Nr 4, pp 101-103 (YUG)

ABSTRACT: The author reviews the development of the domestic glass industry since the War with particular reference to export. The domestic glass industry satisfies most of the demands of the population and only special types of technical glass, not produced by domestic plants, are imported. The main glass producers and exporters of glass products are Steklarna (Glass Plant) "Boris Kidrič" in Rogaška Slatina, Steklarna (Glass Plant) "Hrastnik" in Hrastnik, Srpska fabrika stakla (Serbian Glass Plant) in Paraćin, Fabrika za staklo i staklena volna (Glass and Glass Wool Plant) in Skopje,

Card 1/3

YUG/2-59-4-10/16

Hollow Glass Industry in the Federal People's Republic of Yugoslavia  
and the Export of Its Products.

Tvornica stakla (Glass Plant) "Kristal" in Samobor, and Tvornica stakla (Glass Plant) "Straža" in Rogatec. Three types of glass products are exported: a) blown glass products, b) pressed glass products and c) glass bottles. Hollow blown glass is the main export item which is exported to USA, Great Britain, West Germany and some other European countries. In view of the foreign demand for this item an increase in export is envisaged but this increase is dependent on a detailed study of the export market and better organization of export production. The export of pressed glass products, such as ashtrays, vases and glasses, is connected with certain difficulties, i.e. packing and transportation. Yugoslavia does not have suitable packing material, such as reinforced cardboard, and the use of wooden cases involves higher transportation costs

Card 2/3

YUG/2-59-4-10/16

Hollow Glass Industry in the Federal People's Republic of Yugoslavia  
and the Export of Its Products.

and does not conform with the requirements of foreign markets. The main producers of pressed glass are the plants in Hrastnik, Paraćin and Skopje. Domestic requirements for glass bottles for alcoholic and non-alcoholic drinks are fully met by the domestic industry. The main foreign buyer is Italy and although demand has been increased the domestic industry is not able to cope with the Italian export orders since the production capacity of the two plants producing this type of goods, i.e. the plants in Paraćin and Rogatec, is limited. It is hoped that with the completion of some plants, the construction of which is still in progress, this situation will be improved.

Card 5/3

KOSTRZEWSKI, Jan; GRUZEWSKI, Aleksander; HAC, Aleksander

Typhus abdominalis and its relation to age, sex, environment and seasons during 1946-50. Przegl. epidem., Warsz. 8 no.4:247-264 1954.

1. Z Działu Epidemiologii Państwowego Zakładu Higieny.  
(TYPHOID FEVER, statistics,  
in Poland, age, environmental, sex & seasonal factors)

HAC, B.

Polish-German geological seminary in Breslau. Przegl geol 13 no.2:  
86-87 F '65.

HACAFERKA, Fr.

Effectiveness of the money order control mechanization. Cs  
spoje 8 no.3:20-21 Je '63.

1. Reditel VAKUS.

HACAFERKA, Fr.

Effectiveness of the money order control mechanization. Cs  
spoje 8 no.3:20-21 Je '63.

1. Reditel VAKUS.

R. C. H. ... J.

④  
Paper electrophoresis of some pituitary hormones. K. Macek, M. Quclisnerová, and J. Hácaperková (Vfakunný Ústav Farm. Biochem., Prague, Czech.). *Chem. Listy* 48, 637-8(1954).—Paper electrophoresis is a suitable method for following the sepu. of pituitary hormones, for their characterization, and for detg. the degree of purity.  
M. Hudlický

HACAPERKOVÁ, J.

✓ Systematic analysis of alkaloids by means of paper chromatography. K. Macek, J. Hacperková, and B. Kakič (Research Inst. Pharmacy and Biochem., Prague). *Pharmazie* 11, 533-3(1953); cf. *C.A.* 50, 2624s. Sixty-six alkaloids of representative types were studied by chromatographic procedures, and for each appropriate solvent systems, development, and ultraviolet spectrography are recorded. A classification into 6 major groups is given, with 3 subgroups under the 1st classification. The following solvent systems were applied: formamide/ $CH_2Cl_2$ ; formamide/ $C_6H_6$ - $CHCl_3$  (1:1); formamide/ $C_6H_6$ -ligroine (1:1); MeOH-5% aq.  $NH_3$ / $C_6H_6$  (1:1:2); BuOH-AcOH- $H_2O$  (4:1:5). Developers used were: Dragendorff reagent; nitroprusside Na,  $MnClO$ ; p-dimethylaminobenzaldehyde;  $H_2SO_4$ ,  $KMnO_4$ ; Ce sulfate; Koeltz reagent; Pauly reagent; 2,4-dinitrophenylhydrazine. A systematic procedure for sepn. of mixts. of alkaloids is presented. The BuOH-AcOH- $H_2O$  system is often used for alkaloid sepn. is totally inadequate for most alkaloids, whereas the formamide- $CHCl_3$  system is generally of basic application.

*Med* 3

G. M. Hocking



COUNTRY : Czechoslovakia H-17  
CITY :  
ABST. JOUR. : RZKham., No. 21 1959, No. 75816  
AUTHOR : Macek, K., Macaparkova, J., and Kalina, K.  
INST. : Not given  
TITLE : The Use of Paper Chromatography in the Control of  
the Synthesis of Pyridoxine  
ORIG. PUB. : Ceskoslov Farmac, 7, No 7, 400-402 (1958)

ABSTRACT : A chromatographic method has been developed for the determination of the substances formed in the synthesis of pyridoxine by the method of Harris and Fulkers (JACS, 61, 1245 (1939)). The new procedure makes it possible to determine with sufficient accuracy the degree of purity of the individual products, the amount of side products formed, or the concentration of starting materials.  
From authors' summary

CARD: 1/1

HAS., ..

"The Relation Between The Range Of Spectra And The Range Of Light  
In The Cepheid Variables." p. 27. (Publ. Vol. 3, No. 3-4,  
1951, Bmo.)

Vol. 3, No. 3.

SO: Monthly List of East European Accessions,/Library of Congress, March 1954, Uncl.

1951, p.

"Observations Of The Eta Lyrae Star MK Cygni." p. 337.  
(Ames. Vol. 13, No. 31-200, 1951, Brno.)

SC: Monthly List of East European Accessions, Vol. 3, No. 3,  
Library of Congress, March 1954, Uncl.

HACAR, B.

Academician Frantisek Klokner has completed his eighty-fifth year.

p. 506 (Inzenyrské Stavby) Vol. 5, no. 10, Oct. 1957, Praha, Czechoslovakia

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

HACAR, B.

"Contribution to the determination of temperature decrease on edges of disk of covered double stars." p. 111.

OLMOUC, CZECHOSLOVAK REPUBLIC. VYSOKA SKOLA PEDAGOGICKA. SBORNIK. PRIRODNI VEDY.  
Olomouc, Czechoslovakia, No. 3, 1957.

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

HACH, V.

Anticoagulant Substances. VIII, Nitrogen Analogs of Dicoumarol and Pelentan. K. Fucik, Z. Prochazka, V. Hoch, and J. Strof (United Pharmacy Works, Prague, Czech.). Chem.Listy 45, 23-5 (1951); cf.C.A. 45, 6680c; 9726e. -

CH<sub>2</sub>O with 4-hydroxycarbostryl (I) give 3,3'-methylenebis-(4-hydroxycarbostryl) (II). I and OHCCO<sub>2</sub>H (IV) give bis(4-hydroxy-3-carbostryl)acetic acid (III). (IV and 2,4-dihydroxynaphthyridine (V) yiled 3,3'-methylenebis(2,4-dihydroxynaphthyridine) (VI). Prepn. of II: 25 g. I in 750 ml. boiling HCl dild. 2:3 was filtered with Norit and the filtrate treated with 100 ml. 38% soln. of CH<sub>2</sub>O; the yellowish product (21.5 g.), crystd. from PhCH<sub>2</sub>OH, does not melt below 400<sup>o</sup>. The condensation may be carried out in PhCH<sub>2</sub>OH, EtOH, or AcOH with CH<sub>2</sub>O or paraformaldehyde. I (17 g.) in 255 ml. boiling HCl dild. 2:3 was treated with 40 ml. 11% aq. soln. of IV and boiled 7 hrs., giving 15 g. of a reddish product, m. above 400<sup>o</sup> (from C<sub>5</sub>H<sub>5</sub>N). III refluxed with excess alc. satd. with HCl gave Me, Et, and Pr esters, m. above 400<sup>o</sup>. III and CH<sub>2</sub>N<sub>2</sub> in Et<sub>2</sub>O gave a compd. m. 240<sup>o</sup> (from Me<sub>2</sub>CO), contg. 3 MeO groups. V (4 g.) in 400 ml. dild. HCl boiled 1 hr. with 25 ml. 38% CH<sub>2</sub>O gave VI.

M. Hudlicky

CA

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Two new allylpyrimidines. Ladimir Hach (Pharm. Biochem. Research Inst., Prague, Czech). *Chem. Listy* 45, 436 (1951). — *Et o-allylacetate* (I) (17 g.) and 10.8 g. guanidine sulfate in 120 ml. EtOH were treated with 4 g. NaOH in 40 ml. H<sub>2</sub>O, the mixt. was heated after heating 4 hrs. on a steam bath, the EtOH was distl. off *in vacuo*, the residue extd. with EtOH, the ext. evapd., and the residue recrystd. from 80% EtOH, giving 10 g. (80%) 2-amino-4-methyl-6-hydroxy-5-allylpyrimidine, m. 206-7°. 1 (42 g.) and 23.5 g. MeC(:NH)NH<sub>2</sub>.HCl in 250 ml. EtOH were treated with 10 g. NaOH in 50 ml. H<sub>2</sub>O at 50°, the mixt. was then heated 4 hrs. on a steam bath, evapd. to dryness *in vacuo*, and the residue extd. with 200 ml. hot EtOH, giving 44% 2,4-di-ethyl-6-hydroxy-5-allylpyrimidine, m. 151-2° (from Coll.).

M. Hudlický

HACH, V.

COMPLETED

The relation between structure and activity of local anesthetic of ethylaminoethylamide type. V. J. Hach, Research Inst. Pharm. Biochem., Prague, Czechoslovakia. 2. (In C. 1953).--On the basis of the paper reads, a series of isomers is synthesized and analyzed the dependence of their lipophilicity on the local anesthetic activity of their diethylaminoethylamides is shown. A similar dependence was found in an analogous series of aminoquinoline derivatives. Lofgren's theory of the activity of these substances is discussed.

C Z E C H

112

2,3-Dimercaptoironanal derivatives. Vladimír Hach (Brno, Czech.). *Chem. Zvest.* 41: 237-31 (1968).—A method has been worked out for prep. deriva. of 2,3-HS(CH<sub>2</sub>CH(SH)CH<sub>2</sub>OH by treating 2-phenyl-4-chloromethyl-1,3-dithiolane (I) with HO, HO<sub>2</sub>C, and H<sub>2</sub>N compds., transforming the products into mercaptides of the corresponding MeCH(SH)CH<sub>2</sub>SH deriva., and liberating the latter with H<sub>2</sub>S. Contrary to the reaction of 2-phenyl-4-bromomethyl-1,3-dithiolane, no splitting off of hydrogen halide was observed during the reactions in alk. medium. I (23.8 g.) in 100 ml. EtOH added, at 60° to 10.8 g. p-Me-C<sub>6</sub>H<sub>4</sub>OH and 4 g. NaOH in 10 ml. H<sub>2</sub>O and 120 ml. EtOH, and the mixt. refluxed 6 hrs., filtered, and evapd. to 0.25 vol. gave 20 g. (85%) 2-phenyl-4-(p-tolylsulfanylmethyl)-1,3-dithiolane (II), m. 94-5° (from EtOH). I (34.5 g.) in 80 ml. C<sub>6</sub>H<sub>6</sub> added to 3.5 g. Na in 200 ml. EtOH and 25 g. p-HOC<sub>6</sub>H<sub>4</sub>CO<sub>2</sub>Et, the mixt. let stand 8 hrs., refluxed 10 hrs. on the steam bath, filtered, evapd. *in vacuo*, the crude ester saponid. by heating 12 hrs. with a soln. of 30 g. NaOH in 360 ml. 50% EtOH, the soln. filtered with activated C, acidified with HCl to pH 3, and the acid filtered and crystd. from AcOH yielded 16 g. (33%) 2-phenyl-4-(p-carboxyphenylsulfanylmethyl)-1,3-dithiolane (III), m. 162-4°. A mixt. obtained by adding a soln. of 3 g. Na and 12.5 g. 2-hydroxypyridine in 100 ml. EtOH to 30 g. I in 360 ml. EtOH stirred 100 min. at 25°, heated 6 hrs. on the steam bath, filtered, evapd. *in vacuo*, the residue dissolved in HCl 1:4, and the soln. extd. with C<sub>6</sub>H<sub>6</sub>, the aq. layer alkalinized with NaOH and extd.

with ether, gave, after evapn., 18 g. nondistillable oil, crystg. below 0°, 2-phenyl-4-(3-pyridylsulfanylmethyl)-1,3-dithiolane; plate, m. 164-9° (from EtOH). I (23 g.) in 150 ml. Me<sub>2</sub>CO added during 30 min. to 14.9 g. p-HOC<sub>6</sub>H<sub>4</sub>NO<sub>2</sub> and 15 g. anhyd. K<sub>2</sub>CO<sub>3</sub> in 200 ml. Me<sub>2</sub>CO, the mixt. heated on the steam bath 10 hrs., poured into H<sub>2</sub>O, the Me<sub>2</sub>CO distd. *in vacuo*, the soln. extd. with C<sub>6</sub>H<sub>6</sub>, and the ext. evapd. gave 21 g. 2-phenyl-4-(p-nitrophenylsulfanylmethyl)-1,3-dithiolane, m. 135-7° (from EtOH). To 0.33 g. Na in 20 ml. EtOH and 1.5 g. p-HOC<sub>6</sub>H<sub>4</sub>NHAc in 15 ml. EtOH was added 2.3 g. I in 15 ml. EtOH and 15 ml. C<sub>6</sub>H<sub>6</sub>, the mixt. heated 4 hrs. on the steam bath, filtered, and the filtrate evapd. to give 3 g. 2-phenyl-4-(p-acetamidophenylsulfanylmethyl)-1,3-dithiolane, m. 160-2° (from EtOH). 2-Phenyl-4-hydroxymethyl-1,3-dithiolane (IV) (0 g.) heated 30 min. with 5 g. p-O<sub>2</sub>NC<sub>6</sub>H<sub>4</sub>COCl in 25 ml. C<sub>6</sub>H<sub>6</sub> on the steam bath gave, after pouring into H<sub>2</sub>O and neutralizing with NaHCO<sub>3</sub>, 0.2 g. 2-phenyl-4-(p-nitrobenzoylsulfanylmethyl)-1,3-dithiolane, m. 98-9° (from aq. EtOH). To 53 g. IV in 300 ml. C<sub>6</sub>H<sub>6</sub> was added 10 g. powd. NaNH<sub>2</sub> and, at 60°, in 4 portions, 34 g. ClCH<sub>2</sub>CH<sub>2</sub>NEt<sub>3</sub>, the mixt. heated 12 hrs. on the steam bath, then dild. with H<sub>2</sub>O, the aq. layer sepd., the C<sub>6</sub>H<sub>6</sub> layer evapd. *in vacuo*, the residue dissolved in 150 ml. concd. HCl, the impurities extd. with C<sub>6</sub>H<sub>6</sub>, and the aq. layer allowed to crystallize (24 hrs.) to give 55 g. (81%) 2-phenyl-4-(2-diethylaminoethylsulfanylmethyl)-1,3-dithiolane, m. 157° (from EtOH). I (60 g.) and 150 ml. Et<sub>3</sub>NH heated in an autoclave 16 hrs. at 100°, the mixt. dissolved in dil. HCl, extd. with C<sub>6</sub>H<sub>6</sub>, the

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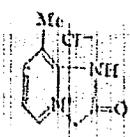
Vladimir HACH

14 g. layer alkalized with NaOH, the oil extrd. with ether, and the ext. distd. in vacuo gave 25 g. (37%) 2-phenyl-1,4-dithiane-3-thiol, m. 155-60°. The cleavage of the dithiane ring was carried out with HgCl<sub>2</sub> in the presence of CaCO<sub>3</sub>. To 22 g. IV in 250 ml. EtOH was added 20 g. CaCO<sub>3</sub>, and, during 2 hrs., a soln. of 22 g. HgCl<sub>2</sub> in 200 ml. EtOH, the mixt. stirred 3 hrs. at 80-80°, filtered, and the mercaptide (24 g.) washed with 500 ml. hot H<sub>2</sub>O. The mercaptide was shaken 6 hrs. with 250 ml. MeOH and with H<sub>2</sub>S at -10°, the H<sub>2</sub>S removed, the filtrate evapd. in a 14 atm. to 100 ml., poured into water, treated with NaHCO<sub>3</sub> and acid. with C<sub>6</sub>H<sub>6</sub>; the residua after the evapn. of C<sub>6</sub>H<sub>6</sub> gave 2.0 g. (8.3%) HSCH<sub>2</sub>CH(SH)CH<sub>2</sub>OH, b.p. 114-116-118°. Similarly, 50 g. II in 500 ml. EtOH in 40 g. CaCO<sub>3</sub>, treated during 2 hrs. with 40 g. HgCl<sub>2</sub> in 500 ml. EtOH, gave 6.5 g. (24%) 4-MeC<sub>6</sub>H<sub>4</sub>OCH<sub>2</sub>CH(SH)CH<sub>2</sub>SH, b.p. 153-40° (b.p. 125-7°, 22%). From 12 g. III in 100 ml. EtOH, 17 g. HgCl<sub>2</sub>, and 11 g. CaCO<sub>3</sub>, was obtained 14 g. of mercaptide which gave 3 g. mercaptan, b.p. 114-116-118° (from EtOH).

HACH, Vladimir

Local anesthetics. I. Synthesis of the analogs of Xylocaine. Vladimir Hach and Miroslav Protiva (Farm.-biochem. v. 7, 1953, Prague, Czech.). Chem. Zvesty 47, 729-35 (1953). -- Analogs of Xylocaine were prepared by treating aromatic and heterocyclic amines with  $\text{CICH}_2\text{COCl}$  (I), and the  $\text{CICH}_2\text{CO}$  derivs. with  $\text{Et}_3\text{NH}$  (II). To 30 g. of  $\text{Et}_3\text{C}_6\text{H}_4\text{NH}_2$  (b.p. 210-15°), Ac deriv., m. 106-8° in 310 ml. AcOH cooled to 5° was added 80 g. I and the mixture poured into a soln. of 210 g. cryst. NaOAc in 600 ml.  $\text{H}_2\text{O}$  to give 101 g. (77%) *o*- $\text{EtC}_6\text{H}_4\text{NHCOCH}_2\text{Cl}$  (III), m. 93-5° (from dil. EtOH). The analogous reaction of 11.5 g. *o*- $\text{PhC}_6\text{H}_4\text{NH}_2$  (Ac deriv., m. 115°), 9 ml. I, 75 ml. AcOH, and 60 g. NaOAc in 180 ml.  $\text{H}_2\text{O}$  yielded 20 g. (95%) *o*- $\text{PhC}_6\text{H}_4\text{NHCOCH}_2\text{Cl}$  (IV), m. 95-7° (from EtOH). 2,3-Dihydroindole (3.8 g.) (b. 227-30°), 2.5 ml. I in 30 ml.  $\text{Me}_2\text{CO}$  and 30 g. NaOAc in 160 ml.  $\text{H}_2\text{O}$  gave a quantity of 1-chloroacetyl-2,3-dihydroindole (V), m. 134-5° (from EtOH). 1,2,3,4-Tetrahydroquinoline, b.p. 120-3° (26 g.), 22 g. I in 120 ml.  $\text{Me}_2\text{CO}$ , and 60 g. NaOAc in 400 ml.  $\text{H}_2\text{O}$  yielded, almost quantitatively, oily 1-chloroacetyl-1,2,3,4-tetrahydroquinoline (VI). A mixt. of 4 g. ( $\text{CICH}_2\text{CO}$ )<sub>2</sub> and 2 g. carbazole with 2 drops concd.  $\text{H}_2\text{SO}_4$ , heated 1 hr. at 100-120° and poured into  $\text{H}_2\text{O}$ , gave 1.5 g. (10%) 9-chloroacetylcarbazole (VII), m. 100-2° (from EtOH). Refluxing 18 g. acridan, m. 168-70°, with 8 ml. I in 120 ml. PhMe and distg. off the PhMe *in vacuo* gave 16.5 g. (85%) 10-chloroacetylacridan (VIII), m. 118-20° (from EtOH). To a cooled soln. of 4.8 g. 2-aminopyridine in 60 ml.  $\text{C}_6\text{H}_6$  was added during 30 min. with cooling 0 g. I in 20 ml.  $\text{C}_6\text{H}_6$ , the  $\text{C}_6\text{H}_6$  was decanted from the sepnl. HCl salt which crytd. after the addn. of EtOH, and this, when

alkalinized with  $\text{Na}_2\text{CO}_3$ , gave 2.4 g. (83%) 2-(2-chloroacetyl)pyridine (IX), m. 132-4° (from petl. ether). An analogous prep. yielded 40% of the HCl salt of 2-(3-chloroacetyl)pyridine (X), m. 133-4° (from EtOH-Et<sub>2</sub>O). From the reaction of 40 g. 2-amino-3-picoline with 48 g. I was obtained 15 g. (probably) X, m. 265° (from EtOH-Et<sub>2</sub>O). Refluxing the  $\text{CICH}_2\text{CO}$  derivs. 4-5 hrs. with 2.3



moles II in 500 ml.  $\text{C}_6\text{H}_6$ , filtering off the HCl salt of II, and distg. the filtrate *in vacuo* gave  $\text{Et}_3\text{NCH}_2\text{CO}$  compound, derived from III-X; the starting  $\text{CICH}_2\text{CO}$  derivs., E. pt. of the  $\text{Et}_3\text{NCH}_2\text{CO}$  compounds, and m.pt. of their HCl salts and pierates given: III, b.p. 143-7°, 137-9°; IV, 201-8°; V, b.p. 140-5°, 120°; VI, b.p. 163°; 145-7°; VII, m. 217-18°; VIII, m. 171-7°; IX, b.p. 136° (di-HCl salt), 191-3°; X, b.p. 158-62°; 2-(2-Dichloroacetylaminopyridine)-3-picoline, b.p. 145-50°; 2,4-Me<sub>2</sub>C<sub>6</sub>H<sub>3</sub>NHCOCH<sub>2</sub>NH<sub>2</sub>, b.p. 143-6° (HCl salt, m. 110-12°). Compds. derived from IV and VII showed higher surface anesthetic than Xylocaine. M. Huallicky

Hach, Vladimir

Local anesthetics. II. Further analogs of Xylocaine. Vladimir Hach (Parin. biochem. výzkumný ústav, Prague, Czech.) *J. Chem. Listy* 47, 1480-90 (1953); cf. C.A. 49, 204h. Chloroacetylation of aromatic amines and the reaction of the N-chloroacetyl derivs. with Et<sub>3</sub>NH gave N-substituted diethylaminoacetamides, analogs of Xylocaine. All of the new derivs. have anesthetic activity of the same order as Xylocaine. Reduction of α-naphthylamine with Na in AmOH yielded 60% 1-amino-5,6,7,8-tetrahydronaphthalene (I), bp. m. 150-5°. A mixt. (200 g.) of I and 2-nitro-5,6,7,8-tetrahydronaphthalene obtained by the nitration of Tetralin, reduced with NaSH (from H<sub>2</sub>S and 150 g. Na<sub>2</sub>S·9 H<sub>2</sub>O in 350 ml. H<sub>2</sub>O) gave crude 2-amino-5,6,7,8-tetrahydronaphthalene (II), purified through its B<sub>2</sub> deriv., m. 166-7°, hydrolysis gave 75 g. 1-nitro-2-methylnaphthalene, m. 79-80°, which was hydrogenated over Raney Ni to 63 g. 1-amino-2-methylnaphthalene, reduced with Na to 41 g. 1-amino-2-methyl-5,6,7,8-tetrahydronaphthalene (III). The Beckmann rearrangement of 7 g. 8-acetylindane oxime, m. 114°, by heating 10 min. at 120-30° with 85 ml. 85% H<sub>3</sub>PO<sub>4</sub> and 130 g. P<sub>2</sub>O<sub>5</sub> yielded 6 g. (85%) 5-acetamidindane, m. 102-4°, which (11 g.) was hydrolyzed with alc. NaOH to 6 g. 5-aminoindane (IV), m. 35-7°, bp. m. 120-30°.

Mixing amines I-IV in AcOH with 10% excess ClCH<sub>2</sub>COCl 1 min., pouring the mixt. into NaOAc soln., filtering, washing, and crystg. from EtOH yielded: 91% 1-chloroacetamidindane, m. 165°; 84% 2-chloroacetamidindane, m. 170-171°; 85% 1-chloro-5,6,7,8-tetrahydronaphthalene, m. 73°; 85% 1-chloro-5,6,7,8-tetrahydronaphthalene, m. 170-171°; 85% 1-chloro-5,6,7,8-tetrahydronaphthalene, m. 113°. Heating acetamido-2-methyl-5,6,7,8-tetrahydronaphthalene, m. 170-171°, and 90% 5-chloroacetamidindane, m. 113°. Heating the corresponding chloroacetyl derivt. 6 hrs. with 3 mola Et<sub>3</sub>NH in C<sub>2</sub>H<sub>5</sub>, filtering off the Et<sub>3</sub>NH·HCl, evapg. the filtrate, dissolving the residue in dil. HCl (1:5), extg. the filtrate with Na<sub>2</sub>CO<sub>3</sub>, with Et<sub>2</sub>O, alkalinizing the aq. layer with Na<sub>2</sub>CO<sub>3</sub>, and extg. the mixt. with C<sub>2</sub>H<sub>5</sub>, yielded: 30% 1-diethylaminonaphthalene, bp. m. 100°, HCl salt, m. 156°; 75% 2-diethylaminoacetamido-5,6,7,8-tetrahydronaphthalene, bp. m. 215-17°; 45% 1-diethylaminoacetamido-5,6,7,8-tetrahydronaphthalene, bp. m. 190-5°; picrate, m. 195°; 48% 5-diethylaminoacetamido-2-methyl-5,6,7,8-tetrahydronaphthalene, m. 38-40°, by 185-00°; picrate, m. 213-14°; picrate, m. 196-03°; picrate, m. 213-14°. M. Hudlíček

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7. 6-Fluorothymol. V. Hach (*Výkonný ústav farm. biochem. Praha*). *Chem. Zpr.* 48, 1707-10 (1964). — 6-Acetamidothymol, m. 172-4° (103 g.) heated with 11.6 g. Na in 400 ml. EtOH and 100 g. MeI 6 hrs. on the steam bath gave 89 g. 6-acetamidothymyl Me ether (I), m. 133-5° (from EtOH). Refluxing 192 g. I 4 hrs. with 1 l. 30% H<sub>2</sub>SO<sub>4</sub> and alkalizing the soln. gave, by C<sub>6</sub>H<sub>6</sub> extra., 100 g. 6-aminothymyl Me ether (II), b<sub>10</sub> 145-50°. II (22.5 g.) in 80 ml. 85% HBF<sub>4</sub> and 50 ml. H<sub>2</sub>O with 17.3 g. NaNO<sub>2</sub> in 35 ml. H<sub>2</sub>O below 5° gave 25 g. 3-methoxy-6-*p*-cyanamidiazonium fluoroborate (III). Decomp. 24 g. III by heating, finally at 150°, yielded 10 g. 6-fluorothymyl Me ether (IV), b<sub>10</sub> 101-4°, b<sub>11</sub> 95-7°. Refluxing 10 g. IV 30 hrs. with 100 ml. 50% HI gave 6.2 g. 6-fluorothymol (V), b<sub>10</sub> 95-7°, m. 52° (from petr. ether). 6-Fluorothymylacetic acid m. 125° (from EtOH). Ultraviolet spectra of thymol, thymyl methyl ether, IV, and V are given. All m.p.s. are cor.

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HACH, Vladimir

Progress of drug production in 1953. Cesk. farm. 4 no.1:36-50  
Jan 55.

(DRUG INDUSTRY,  
progr.)