VECEREK, Bretislav; CIBULEC, Alois

Automation in analytic chemistry. Pt. 6. Chem listy 58 no.10:1153-1157 O '64.

1. Institut of Medical and Forensic Chemistry, Faculty of General Medicine, Charles University, Prague.

VECEREK, Bretislav; KOLARIK, Ladislav

Automation in analytic chemistry. Pt. 5. Chem listy 58 no.8: 950-956 Ag '64.

1. Institute of Medical and Forensic Chemistry, Faculty of General Medicine, Charles University, Prague.

PREGLIK, Frantisek, ing.; VECERIK, Frantisek, ing.

Apparatus for testing glass jars. Prum potravin 15 no.12: 642-643 D '64.

1. State Inspection of Food Product Quality, Prague.

CZECHOSLOVAKIA

VECEREK, B.; KRISTANOVA, D.

1. First Institute for Medical and Forensic Chemistry, Faculty of General Medicine, Karlova Univ. (I. ustav pro chemii lekarskou a soudni FVL KU), Prague (for Vecerek?); 2. Dept. of Clinical Biochemistry (Oddeleni klinicke biochemie), Fac. of Gen. Med., Karlova Univ.,[Prague] (for ?); 3. Central Laboratory, Faculty Hospital (Ustredni laborator FN), Prague (for ?)

Brno, Vnitrni lekarstvi, No 1, January 1967, pp 60-66

"Determination of lactic acid dehydrogenase isoenzymes by monotetrazolium salt of NBMT [Nitrobluemonotetrazolium]."

VECERIKOVA, V.; KESSLER, M.F.

Infrared spectra of the black coal from Ostrava-Karvina Basin.
Vysl ban vyzk 3:227-244 '64.

1. Institute of Mining, Czechoslovak Academy of Sciences, Prague.

COUNTRY	:	CZECHOSLOVAKIA H
CATEGORY	:	Chemical Technology. Chemical Products and Their Uses. Part 3. Processing of Solid*
ABS. JOUR.	:	RZKhim., No. 1 1960, No. 2416
AUTHOR	:	Kessler, H. F.; Vecerikova, V.
INST.	:	-
TITLE	:	Use of a Monochromator for Studying the Fine Structure of Coals and Coke
ORIG. PUB.	:	Palivo, 1959, 39, No 3, 90-93
ABSTRACT	:	The evaluation of the suitableness of roentgen monochromators, with flat and distorted crystals, for the study of the fine structure of coals and coke is given; the last type with a radius R = 150 mm was used experimentally. A series of cokes and Czechoslovak coals with a C:H ratio of ~16-23 were subjected to dryes-

*Fossil Fuels

CARD:	1/2

CONTENT : H

SRC. JOUR. : RZKhim., No. 1 1960, No. 2416

AUTHOR :
INST. :
TITLE :

SRC. PUB. :

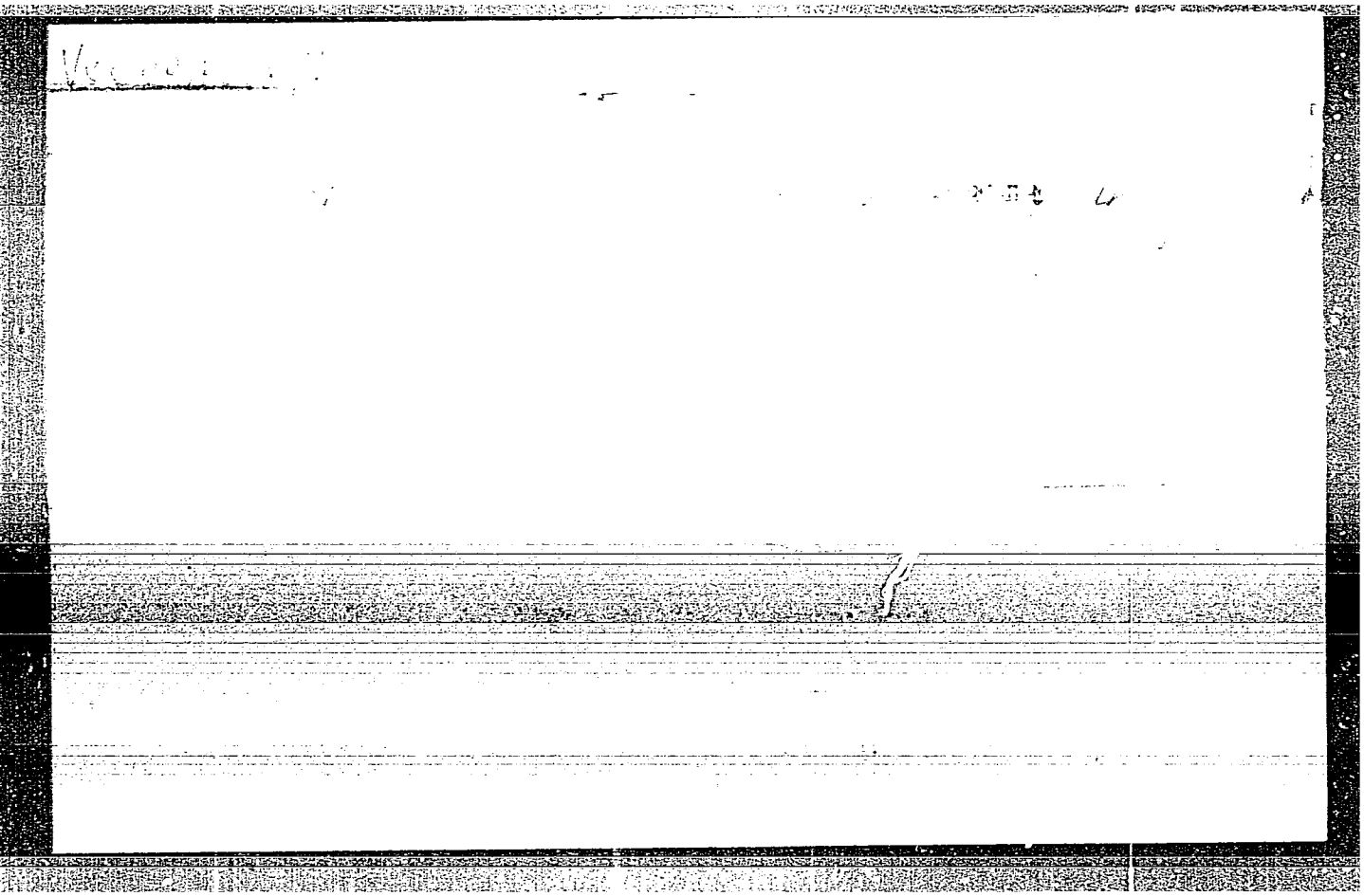
ABSTRACT : tigation; the samples were first deashed with HCl and HF acid. The advantages of monochromatic CuK_{α_1} radiation over Cu and Cr radiation with filters were demonstrated.-- Zh. Satunovskiy

CARD: 2/2

KESSLER, Ferdinand, inz., CSc.; VECERIKOVA, V., inz.

Examination of the possibility of determining crystallic SiO_2 in ore and coal dust by infrared spectroscopy. Rudy 11 no.8: 274-279 Ag '63.

1. Hornicky ustav, Ceskoslovenska akademie ved, Praha.



APPROVED FOR RELEASE: 08/31/2001 CIA-RDP86-00513R001859220005-9"

VECERA, ZDENEK

Continuous [illegible] polarography. [illegible] and [illegible] Zeman. Chem. [illegible] No. [illegible] A device is described [illegible] ... of H_2 [illegible] ... the production of ε-caprolactam from cyclohexanone oxime by the Beckmann rearrangement. The polarographic method is used and is thought capable of controlling the addn. of oleum to neutralize the harmful influence of H_2O [illegible]. A. H. [illegible]

VEGERA, Z.

CZECH

Determination of High Aluminium Contents in Cast Irons without the Use of the Mercury Cathode. B. Bieber and Z. Vegera. (*Slévárenství*, 1954, 2, (7), 206-210). [In Czech.] Aluminium contents of 1 to 25% are determined by first removing silica and graphite from a solution of the sample in sulphuric acid, precipitating part of the iron with sodium bicarbonate in the presence of some hydrazine sulphate, and the remaining iron by alpha-nitroso beta-naphtol. Aluminium is determined as alumina, precipitated from the filtrate with ammonia. The method is modified in the presence of chromium, but can be employed if the molar Cr/Al ratio does not exceed unity.— P. P.

VECERNÍ Z.

CZECH

The ternary systems water—caprolactam—ammonium sulfate. Zdeněk Veselý and Jan Skalický (Povážské chemické závody, Žilina, Czech.). *Chem. Listy* 49, 166-70(1955).—The ternary phase equil. diagrams at 30° and 50° were obtained by the synthetic method. The compns. of the conjugated solns. were detd. refractometrically and viscometrically. The values of these phys. consts. are given in dependence on the $(NH_4)_2SO_4$ content. Below the m.p. of ε-caprolactam the system shows 5, above the m.p. 4, equil. ranges. Industrial applications are discussed.

E. Erdős

VEČEŘA, Z.

CZECH

USSR

2320. Experiments on the use of polarography for continuous recording. Z. Večeřa and V. Zelinka (*Chem. Průmysl*, 1954, 4 [2], 60-65; *Referativnyĭ Zh., Khim.*, 1954, Abstr. No. 40,950).—A polarographic method is used to control the water content of the reaction mixture in the rearrangement of *cyclo*hexanone oxime to ε-caprolactam; the presence of water retards the rearrangement and promotes hydrolysis of the lactam to ε-aminocaproic acid. The method is based on the difference between the potentials for the separation of H^+ in an anhydrous medium (0·2 to 0·4 V in the presence of SO_3) and in the presence of water (1·2 V). By recording the graph of the current strength against time, the water content of the reaction mixture can be checked and the required amount of fuming sulphuric acid can be added. The polarography is carried out in a special cell at 70° C and the dropping-mercury electrode is replaced by a platinum micro-electrode.

E. HAYEK

VEČEŘA, Z.

Polarographic indication of water in solutions of caprolactam in sulfuric acid. p. 764. (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.

VEČEŘA, Z.

1

The ternary systems water–caprolactam–ammonium sulfate. Zdeněk Večeřa and Jan Sladký. *Collection Czechoslov. Chem. Communs.* 20, 650–61(1955)(in German).
See *C.A.* 49, 7951i. E. J. C.

VECERA, Z.

Viscometer for broad-range measurements. Z. Večera (Považské chemické závody, Žilina). Czech. Chem. Listy 48, 1574(1954).—The Ubbelohde viscometer modified by adding another capillary of different lumen was used for measuring the viscosity of methylated caprolactam during the polymerization in the viscometer. M. Hudlický

VECERA, Z.

VECERA, Z.; BIEBER, B.

Determination of larger quantities of aluminum in cast iron without using the mercury cathode. p. 206 (Slevarenstvi. Praha. Vol. 2, no. 7, July, 1954)

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

VECERA, ZDENEK

CZECH

Determination of considerable aluminum in cast iron without the mercury cathode. Bohdan Bieber and Zdeněk Večeřa (Research Inst. Materials and Technol., Brno, Czech.). *Slévárenství* 2, 200-1(1954).—To det. 1-25% Al in cast iron heat a sample contg. 0.02-0.04 g. Al in 3.6N H_2SO_4. Evap. on the sand bath to fumes. After dilg. to 100 ml. with H_2O, filter off the SiO_2 and graphite and wash with hot dil. H_2SO_4. To the filtrate add 1 g. hydrazine sulfate and dissolve by heating. Add 8% $NaHCO_3$ soln. dropwise to a permanent turbidity, then add 0.13-0.18 ml. excess per mg. Al (double that amt. in presence of Cr). After a few min. heating on the sand or steam bath, filter off the $Al(OH)_3$ with some $Fe(OH)_3$ and $Cr(OH)_3$. Dissolve the washed ppt. in hot 6N HCl, and evap. nearly to dryness. Dissolve the residue in 25 ml. of H_2O with a few drops of HCl, add 25 ml. of 50% HOAc, and add NH_4OH until the soln. is reddish brown. To the cold soln. add 30-60 ml. of a 2% soln. of α-nitroso-β-naphthol in 50% HOAc to ppt. Fe, but not Al or Cr. After at least 6 hrs., filter and wash with H_2O and 50% HOAc. Evap. the filtrate, after add'n. of 20 ml. of 40% H_2O_2 to oxidize excess α-nitroso-β-naphthol, on the sand bath to near dryness. Dissolve the residue in 25 ml. of 6N HCl and dil. to 100-150 ml. To the hot soln., add 20 ml. of 3% H_2O_2 and enough NH_4OH to make the soln. basic. Ppt. the $Al(OH)_3$, and oxidize Cr^{3+} is to CrO_4^{2-}. Heat on the steam bath for 1/2 hr., filter, and wash with hot 2% NH_4NO_3 soln. If the ppt. is green with Cr, dissolve in HCl, and repeat the pptn. Ignite at 1100° and weigh.

H. N.

VECERA, ZDENEK

CZECH

7613* Determination of Mg in Spheroidal Cast Iron. Stanovení hořčíku v tvárné litině. (Czech.) Zdeněk Večeřa and Boleslav Bieber. *Slévárenství*, v. 3, no. 1; *Práce Československého Výzkumu Slévárenského*, v. 2, no. 15, p. 107-112.
Evaluation of various techniques. Tables, graphs. 21 ref.

VECERA, Z.

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

Polarographic test for water in the solution of caprolactam in sulfuric acid. Z. Vecera (Chem. Works, Zilina, Czech.). *Chem. Tech.* (Berlin) 5, 253-5(1953).—See *C.A.* 47, 42484.
H. L. H.

VECEREK, B.

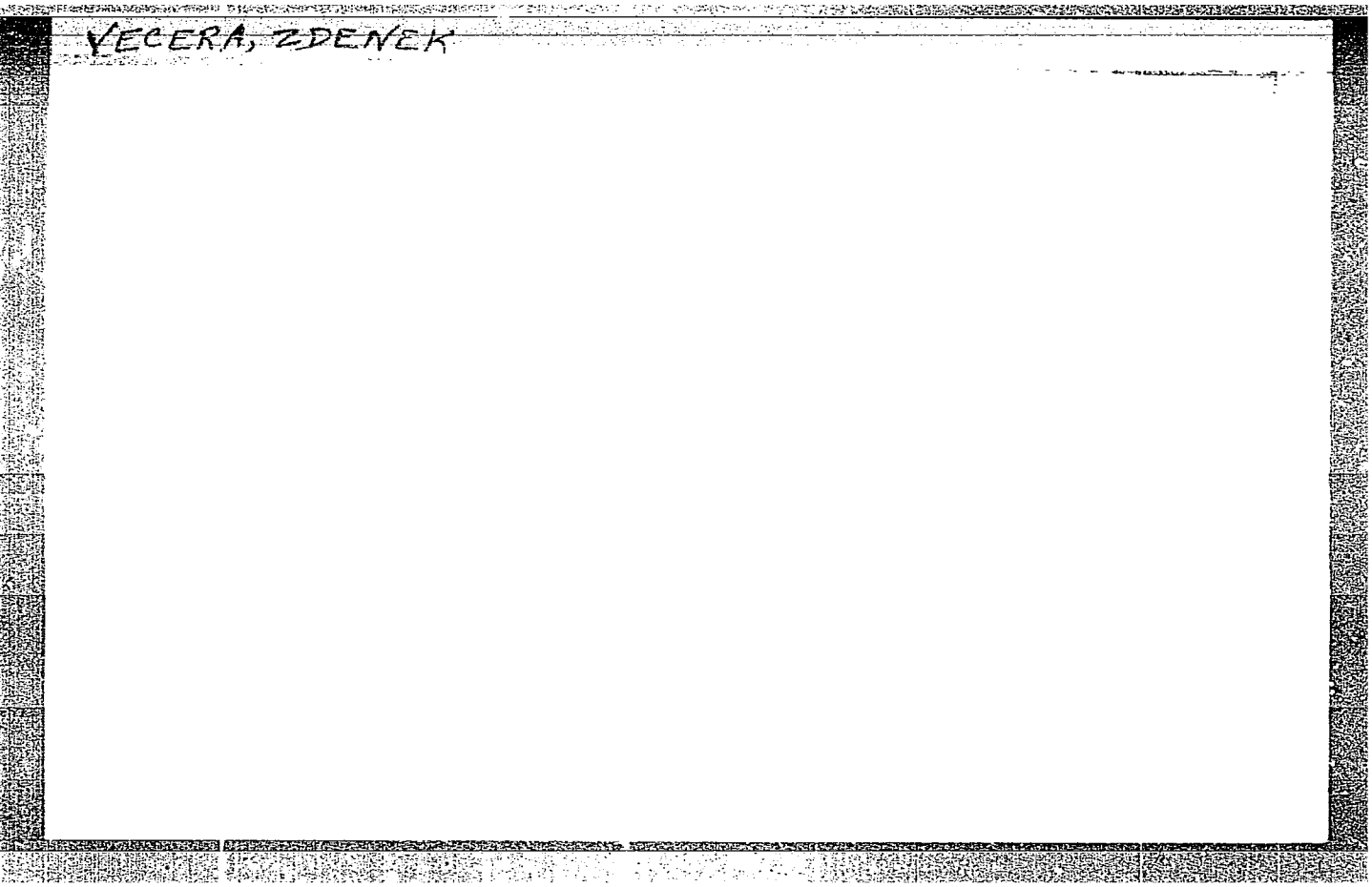
Chemical Abst.
Vol. 48 No. 6
Mar. 25, 1954
Apparatus, Plant Equipment, and Unit Operations

Titration fluorometer. B. Vecerek and O. Skurnýský (Charles Univ., Prague, Czech.). *Chem. Listy* 47, 2-4 (1953).—A new objective fluorometer with a Se cell is described. M. Hudlicky

PELICHOVA, Hana; KRAML,J.; CHMELAR, M.; VECEREK, B.

Precipitating and binding antibodies against human intestinal alkaline phosphatase. Folia biol. (Praha) 11 no.3:208-214 '65

1. First Department of Medical and Forensic Chemistry, Faculty of General Medicine, Charles University, Prague.



CZECHOSLOVAKIA/Optics - Photometry. Colorimetry. K

Abs Jour : Ref Zhur Fizika, No 10, 1959, 23971

Author : Vecerek, Bretislav; Vecerkova, Jarmila
Inst :
Title : Simple Photocolorimeter.

Orig Pub : Chem. prumysl, 1959, 9, No 3, 137-138

Abstract : A photoelectric photometer, intended for chemical titration, consists of an incandescent lamp, fed by stabilized voltage, a diaphragm 0.5 mm in diameter, an optical filter, a cuvette, and a selenium photocell, the current of which is measured with a galvanometer. -- Yu. M. Kutev

Card 1/1

VECEREK, Bretislav

Automatic fraction collectors. Chem listy 57 no.4:337-347 Ap '63.

1. I. Ustav pro chemii lekarskou a soudni, Fakulta vseobecneho lekarstvi, Karlova universita, Praha.

VECEREK, Bratislav; MICHALEK, Pavel

Automation in analytic chemistry. Pt. 3. Chem listy 57 no.3:264-268 Mr '63.

1. I. ustav pro chemii lekarskou a soudni, Fakulta vseobecneho lekarstvi, Karlova universita, Praha a Ustav radiotechniky, Ceske vysoke uceni technicke, Praha.

VECEREK, B.; VONDRACEK, M.

Studies on the naphthalene series. I. Preparation of 3-amion-1-naphthoic acid. p. 772.

CHEMICKE LISTY (Ceskoslovenska akademic ved. Ceskaslovenska spotlcnost chemicks) Praha, Czechoslovakia. Vol. 49, no. 5, May 1955.

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

VECEREK, B.

"Automation in analytic chemistry. II. An apparatus for serial estimation of enzyme activities"

Chemicke Listy. Praha, Czechoslovakia. Vol. 53, no. 3, Mar 1959

Monthly list of East European Accessions (EEAI), LC, Vol. 8, No. 7, July 59, Unclas

CZECHOSLOVAKIA/General Problems of Pathology - Tumors. U.
Metabolism.

Abs Jour : Ref Zhur - Biol., No 21, 1958, 98175

Author : Vecerek, Bretislav; Kacl, Karel; Vecerkova, Jarmila; Chundela, Bedrich

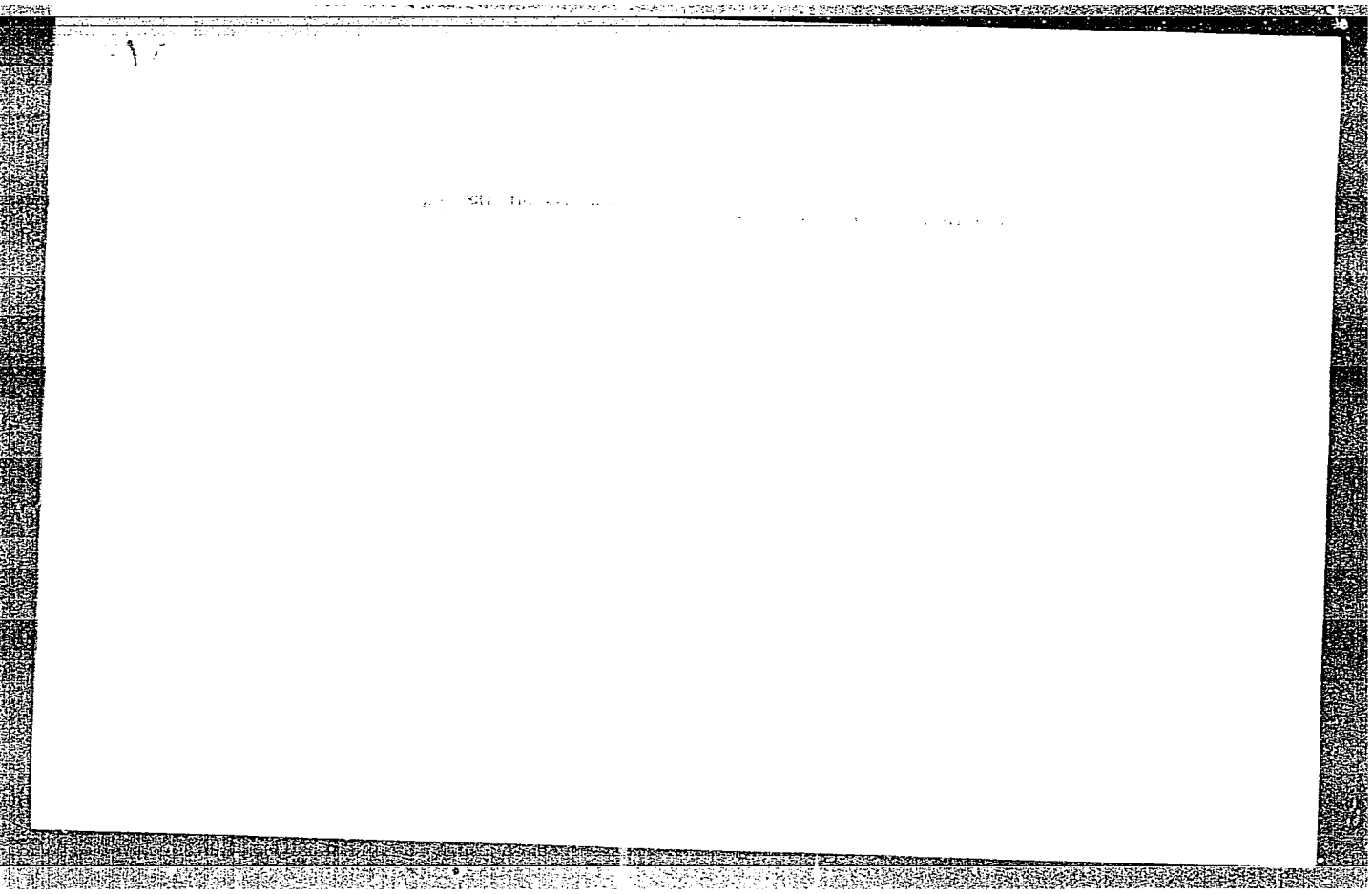
Inst : Universitas Carolina

Title : Curves of Activity of Serum Phosphatases in Some Cases of Carcinoma.

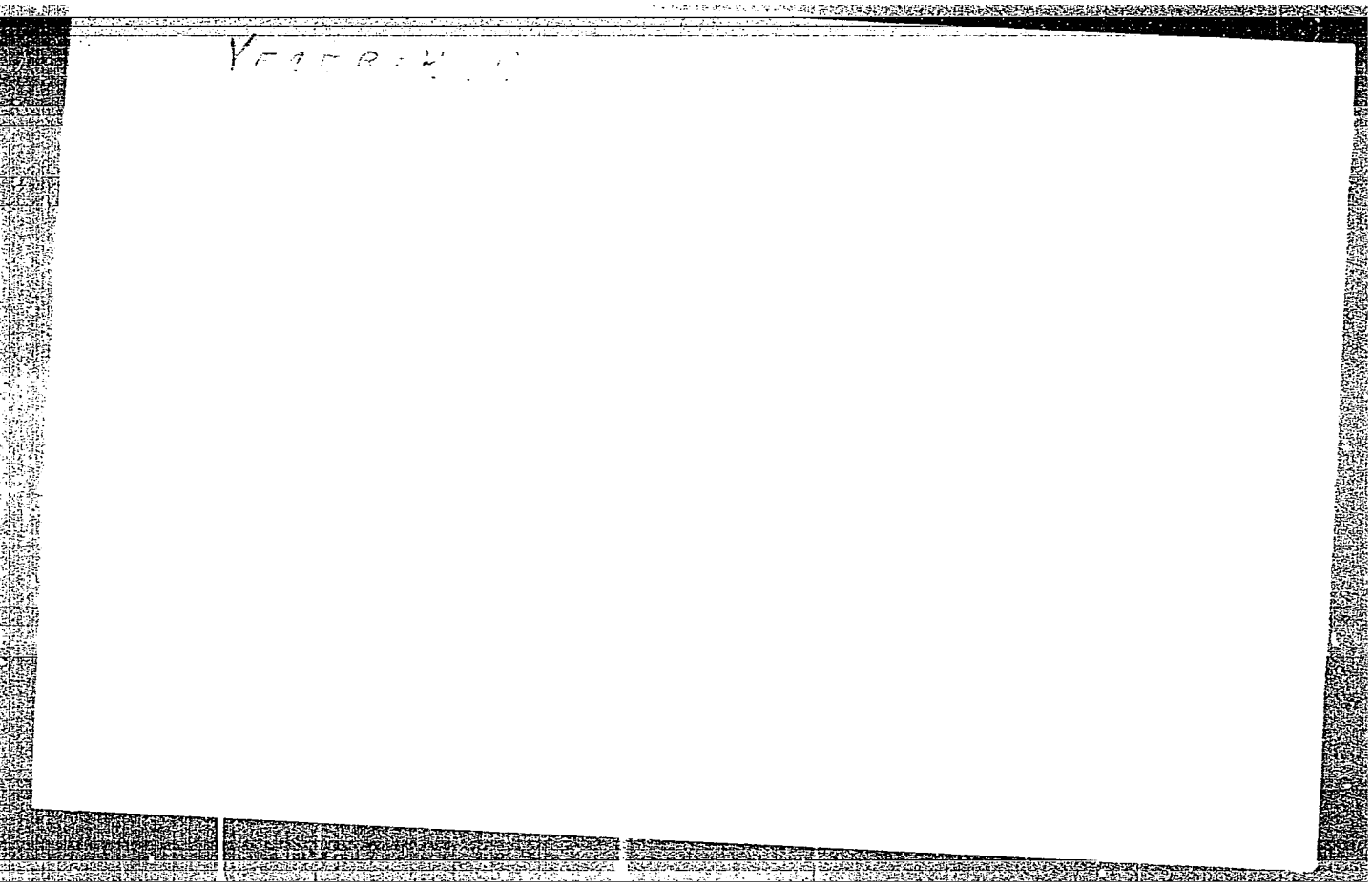
Orig Pub : Univ. carolina. Med., 1955, Suppl. No 1, 176-181

Abstract : By study of phosphatase activity (PhA) in blood of patients with tumors, it was noted that its fluctuation was related to the lapse of time after blood drawing. Immediately upon drawing, PhA is normal, then it increases, reaching a maximum after 2-6 hours; after that it again returns to normal. In the blood of healthy individuals, such fluctuations were not noted. -- S.Ya. Marmorshteyn

Card 1/1



APPROVED FOR RELEASE: 08/31/2001 CIA-RDP86-00513R001859220005-9"



VECEREK, Bretislav; KACL, Karel; VECERKOVA, Jarmila; CHUNDELA, Bedrich

Fluorometry; IV. Determination of phosphatases acid in blood serum. Vnitr. lek., Brno 1 no.3:168-171 Mar 55.

1. Z I. ustavu pro chemii lekarskou KU v Praze, prednosta prof. Dr. Karel Kacl. MUDr. B. V., Praha II, Katerinska 32, I. ust. pro chemii lek.

(PHOSPHATASES, in blood
acid, determ. by fluorometry.)
(BLOOD
phosphatase acid determ. by fluorometry.)

WAGNER, Jindrich; KRAUS, Pavel; VECEREK, Bretslav

Microdetermination of isonicotinic acid hydrazide. Cesk. farm. 4 no.8:389-393 Oct 55.

1. Z I. ustavu pro lekarskou chemii (prednosta prof. Dr. Karel Kacl) a z Vyzkumneho ustavu tuberkulosy, Praha (reditel doc. MUDr. Rudolf Krivinka).
(NICOTINIC ACID ISOMERS, determination
isoniazid, microdeterm.)

VECEREK B

COUNTRY : Czechoslovakia
CATEGORY : F

ABS. JOUR. : RZKhim., No. 20 1959, No. 71300

AUTHOR : Vecerek, B.; Vecerkova, J.
INST. :
TITLE : A Simple Photocolorimeter

ORIG. PUB. : Chem. prumysl, 1959, 9, No 3, 137-138

ABSTRACT : A description of a photocolorimeter which has been developed at the Institute of Therapeutic Chemistry of the Karlov University (Prague), all the component parts of which can be readily built in a laboratory.

Ya. Sashunovskiy.

CARD:

HYNIE, I.; VECEREK, B.

A fluorometric method for the determination of ketone bodies.
Acta univ. carol. [med.] Suppl. 14:311-316 '61.

1. I. ustav pro chemii lekarskou a soudni fakulty vseobecneho lekarstvi University Karlovy v Praze, prednosta prof. dr. K. Kacl.
(KETONE BODIES chem)

LEDVINA, Milos; CHUNDELA, Bedrich; VECEREK, Bretislav; KACL, Karel

Toxicological determination of barbiturates by paper chromatography. Cesk. farm. 4 no.8:386-388 Oct 55.

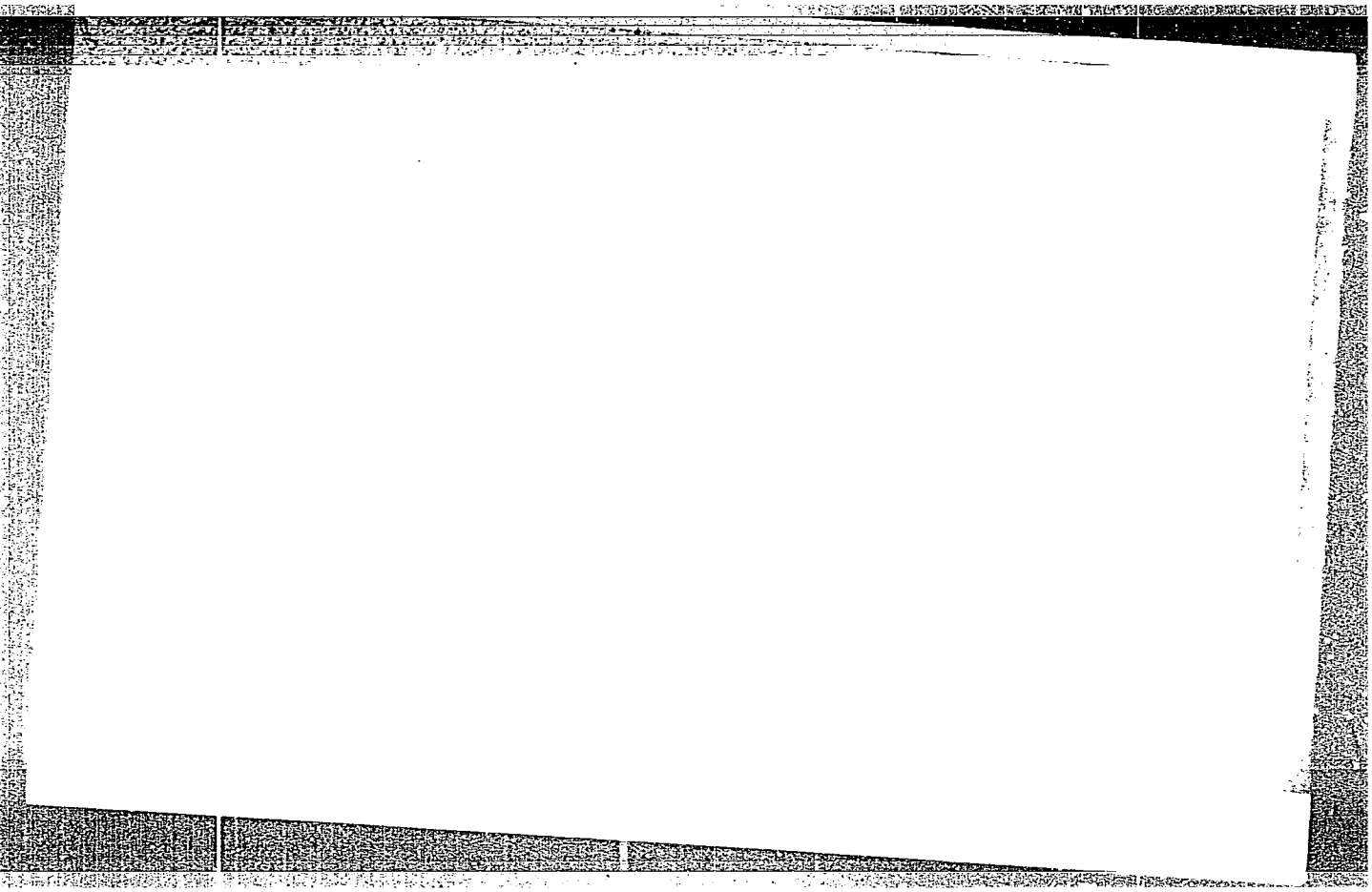
1. Z I. ustavu pro chemii lekarskou a ustavu pro chemii soudni toxikologii a mikroskopi pri fakulte vseobecneho, lekarstvi university Karlovy, Prednosta prof. Dr. Karel Kacl.

(BARBITURATES, determination
chromatography, new method)
(CHROMATOGRAPHY
of barbiturates, new method)

KAGL, K.; VECERKOVA, J.; LEDVINA, M.; VECERER, B.

Mono- and dihydroxybenzoic acids. Cesk. farm. 4 no.8:392-395 Oct 55.

1. Z I ustavu pro chemii lekarskou Karlovy university v Praze.
(PYROCATECHOL, deriv.
dihydroxybenzoi acids)
(RESORCINOL, deriv.
dihydroxybenzoic acids)
(GENTISATES)
(BENZOATES,
o-, m- & p-hydroxybenzoic acids)



APPROVED FOR RELEASE: 08/31/2001 CIA-RDP86-00513R001859220005-9"

VECEREK, B. and others.

Electromagnetic automatic pipette.

P. 497 (Chemicky Prumysul. Vol. 7, no. 9, Sept. 1957, Praha, Czechoslovakia)

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

TUREK, J.; VECEREK, B.

On the history of medical chemistry at the Karlova University in Prague. Sborn.lek. 62 no3:80-86 1960.

1. I. ustav pro chemii lekarskou fakulty vseobecneho lekarstvi University Karlovy v Praze, prednosta prof.dr. inz. Karel Kacl.
(CHEMISTRY hist.)
(BIOCHEMISTRY hist.)

STRAUSS, J.; VECEREK, B.

Attempts to influence the sensitivity of laboratory animals to the virus of ornithosis. Cesk.epidem.mikrob.imun.10 no.2:92-97 Mr '61.

1. Ustav epidemiologie a mikrobiologie v Praze. I. ustav pro chemii lekarskou a soudni lek.fak.Karlovy university v Praze.
(MIYAGAWANELLA)
(ORNITHOSIS virol)

VECEREK, B.

"Medical biochemistry" by S.M. Rapoport. Reviewed by B. Vecerek. Chem listy 58 no.1:35-36 Ja'64.

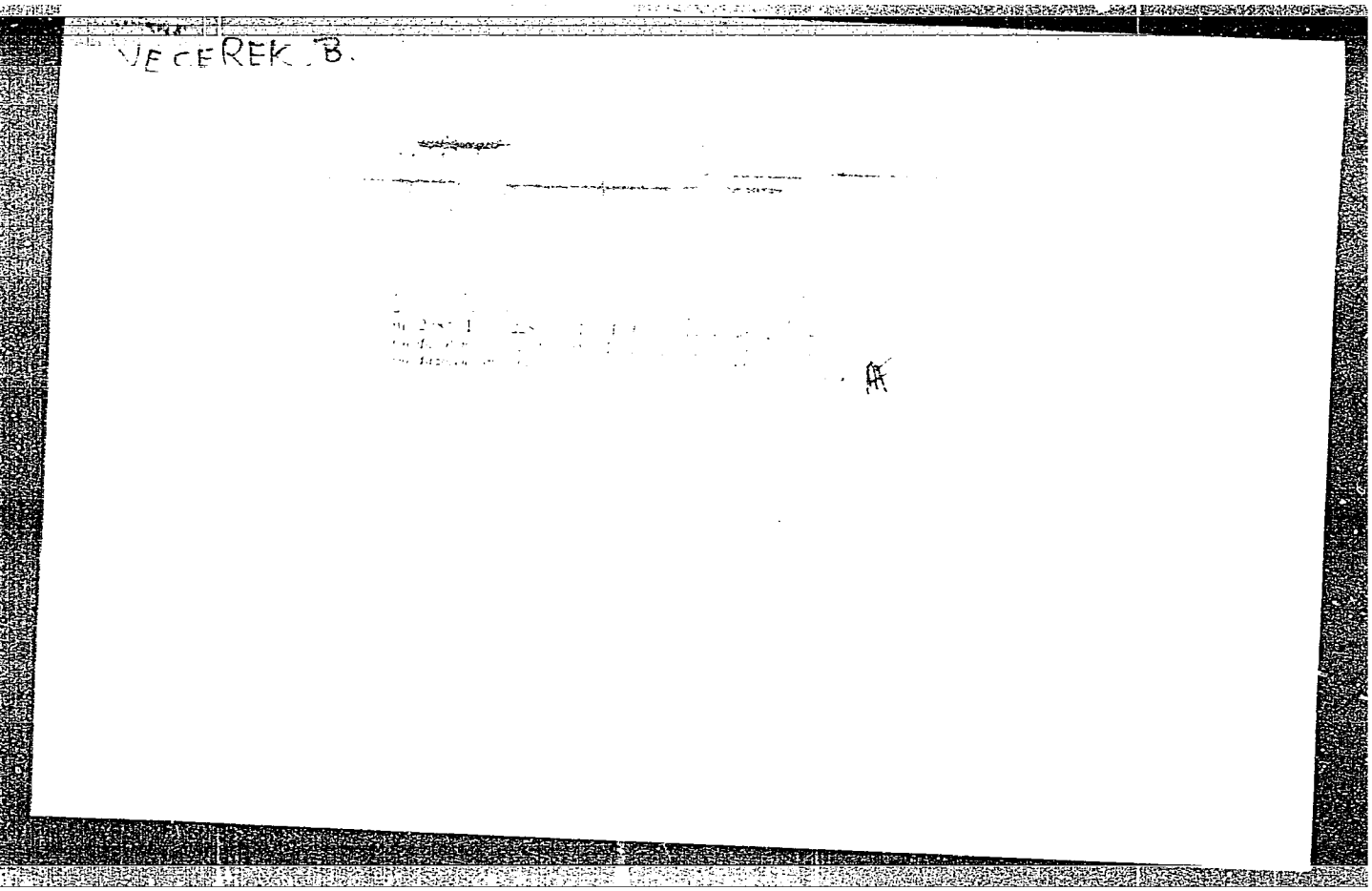
VECHREK, B.

"A simple photocolorimeter."

CHEMICKY PRUMYSL, Praha, Czechoslovakia, Vol. 9, No. 3, March 1959.

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

Unclassified.



Vecerek, B.

CZECH

Determination of acid phosphatases in blood serum. B. Večerek, K. [illegible] J. [illegible], and B. Chundela (Charles Univ., Prague). [illegible] *Lékařství* 1, 168-71 (1955); cf. *Časopis Lékařů Českých* 93, 621 (1954). A method is described based on incubation of blood serum with a buffered soln. of Na 2-naphthyl phosphate for 3 hrs. at 37° and direct fluorometric detn. at 4300 A. of the split-off 2-naphthol I following the alkalization (cf. Seligman, *et al.*, *C.A.* 45, 7626d). The dependence of the amt. of liberated I on the serum concn. and length of incubation is linear. [illegible] Urbánek

VECERKA, B.

KACL, K.; VECERKA, B.; VECERKOVA, J.; CHUNDELA, B.

Fluorometry. III. Fluorometric determination of alkaline phosphatase in blood serum. Cas. lek. cesk. 93 no.22-23:621-623 4 June 54.

1. Z I. ustavu pro chemii lekarskou Karlovy university v Praze. Prednosta prof. Dr Karel Kacl.

(BLOOD, phosphatase, alkaline, determ.)
(PHOSPHATASES, alkaline, in blood, determ.)

Fluorimetry. III. Fluorimetric estimation of alkaline phosphatases in blood serum. Karel Kácl, B. Večerek, J. Večerková, and B. Chundela (I. ústav pro chem. lékařskou, Prague, Czech.). *Časopis Lékařů Českých* **93**, 821–3(1954). —Seligman's method (*C.A.* 45, 7620*d*) for the estn. of phosphatase activity has been simplified by using fluorimetry for the estn. of 2-naphthol. Ten cc. barbital buffer (pH 9.1), 10 cc. aq. soln. contg. 2 mg. Na 2-naphthyl phosphate, and 0.2 cc. serum are mixed and incubated 1 hr. at 37° in a 60-cc. flask. After the addn. of 0.5 cc. 4*N* NaOH, fluorescence is measured by using a filter with a max. transmittance at 4300 A. Units of activity are read from a standard curve. The mean value for alk. phosphatases obtained in normal serums was 1.8 units. Ivo M. Hais

(3)

CZECHOSLOVAKIA

VECEREK, B.; KRAML, J.; PELICHOVA, H.; STEPAN, J.; CHMELAR, M.; STIPEK, S.

1. Institute for Medical and Forensic Chemistry, Faculty of General Medicine, Karlovy University, Prague - (for all).

Prague, Collection of Czechoslovak Chemical Communications, No 11, November 1965, pp 3964-3968.

"Phosphatases. Part 2: Changes in the composition of human intestinal and kidney alkaline phosphatase during purification."

(6)

CZECHOSLOVAKIA

VECHRKOVA, J.; VECEREK, B.; NOVOTNA, E.; Laboratory of Toxicology and Forensic Chemistry, Faculty of General Medicine, Charles University (Laborator pro Toxikologii a Soudni Chemii Fakulty Vseobecenho Lekarstvi KU), Prague.

"Use of Paper Chromatography in the Toxological Detection of Drugs. V. Fast Proof of Amidopyrine in Urine, Based on the Detection of its Metabolites."

Prague, Ceskoslovenska Farmacie, Vol 15, No 9, Nov 66, pp 491-495

Abstract [Authors' English summary modified]: The method uses a solvent mixture of formamide and benzene. The identification is based on simultaneous occurrence of metabolites of amidopyrine (4-methylaminoantipyrine, 4-aminoantipyrine, rubazonic acid, and methylrubazonic acid. Amidopyrine and its metabolites are identified by color reactions with 7 reagents. 2 Figures, 1 Table, 9 Western, 6 Czech references. (Manuscript received 1 Dec 65).

VECERIKOVA, F.; KESSLER, M.

Use of monochromator for study of changes of fine structure of coal and coke.
p. 90

PALIVA. (Ministerstvo paliv a Ceskoslovenska vedecka technicka spolecnost pro vyuziti pri Ceskoslovenske akademi ved) Praha, Czechoslovakia., Vol. 39, No. 3, Mar. 1959

Monthly List of East European Accessions (EEAI), LV, Vol. 8, No. 7, July 1959
Uncl.

U.

CZECHOSLOVAKIA/General Problems of Pathology - Tumors. Metabolism.

Abs Jour : Ref Zhur - Biol., No 21, 1958, 98175

Author : Vecerek, Bretislav; Kael, Karel; Vecerkova, Jarmila; Chundela, Bedrich

Inst : Universitas Carolina

Title : Curves of Activity of Serum Phosphatases in Some Cases of Carcinoma.

Orig Pub : Univ. carolina. Med., 1955, Suppl. No 1, 176-181

Abstract : By study of phosphatase activity (PhA) in blood of patients with tumors, it was noted that its fluctuation was related to the lapse of time after blood drawing. Immediately upon drawing, PhA is normal, then it increases, reaching a maximum after 2-6 hours, after that it again returns to normal. In the blood of healthy individuals, such fluctuations were not noted. -- S.Ya. Marmorshteyn

Card 1/1

CZECHOSLOVAKIA/Optics - Photometry. Colorimetry. K

Abs Jour : Ref Zhur Fizika, No 10, 1959, 23971

Author : Vecerek, Bretislav; Vecerkova, Jarmila
Inst : -
Title : Simple Photocolorimeter.

Orig Pub : Chem. prumysl, 1959, 9, No 3, 137-138

Abstract : A photoelectric photometer, intended for chemical titration, consists of an incandescent lamp, fed by stabilized voltage, a diaphragm 0.5 mm in diameter, an optical filter, a cuvette, and a selenium photocell, the current of which is measured with a galvanometer. -- Yu. M. Kutev

Card 1/1

VECERIKOVA, M.

958. STUDY OF THE STRUCTURE OF THE PETROGRAPHIC COMPONENTS (OF COAL) BY MEANS OF X-RAYS. Kessler, M.F. and Vecerikova, M. (Uhli (Coal, Prague), Jan. 1956, 28-30). The authors have studied the fine structure of the coal substance by means of X-rays. They give the quantitative evaluation of the radiographs, and conclude that the grid interval "d" is the basic criterion of the structural changes; they analyse its dependence on the carbonification. N.C.B.

gvd - 2/1

Measurement of particle size below 0.06 mm.: I, Microscopical methods. V. Večeřiková, F. Šťastka, and F. M. Kessler. *Práce Ústavu Výzkum Využití Paliv*, 1955, No. 5, pp. 101–16; abstracted in *J. Appl. Chem.* (London), 6 [1] 1-155 (1956).—Experiments were made to assess the relative merits of the following methods for measuring the particle size of coal and inorganic dusts: (1) enlarging photomicrographs to 24 x 30 cm. and measuring the particles with a paper stencil; (2) measuring the blackening of a photographic plate with a recording photometer; and (3) measuring the particle size on the screen of a projecting microscope. Methods 1 and 3 were equally suitable for practical requirements, but method 3 is cheaper and quicker because it involves no photographic work; it is recommended for the rapid and precise determination of particle sizes <0.06 mm.

V.R.B.

Večeřiková, V.

Structural changes in carbonization of coal. F. M Kessler and V. Večeřiková. *Palivo* 36, 192–9(1956); cf. Juda 2

C.A. 49, 9250*i*, 13620*b*.—The formation of coke from samples of Czech. coals at temps. between 600 and 1000° was studied by Debye-Scherrer technique. The size of crystallites was calcd. by (a) Warren and (b) Jones relations. A straight line dependence was found between temp. and L_a. The latter was significantly greater at higher temp., but L_a varied with different samples, and decreased at higher temp. with exception of one case where it had max. at around 800°. The C/H ratio (I) and the distance (II) between layers followed a steep hyperbolic curve. II increased only slightly until I was around 50, and then reached a value of 3.50–3.55 A. at I of around 20, depending upon the type of coal. It is concluded that carbonization proceeds in 2 steps. First, beginning at 340°, aliphatic chains are formed, and from 700° onward aromatic rings appear. The max. lattice distance of 3.43 A. is attained at 900°.

T. Jurecic

VECERIKOVA, V.

Czechoslovakia/Physical Chemistry - Crystals, B-5

Abst Journal: Referat Zhur - Khimiya, No 19, 1956, 60869

Author: Kessler, F. M., Vecerikova, V.

Institution: None

Title: Roentgenographic Study of the Process of Thermal Processing of Petroleum Coke

Original Periodical: Studium kalcinace smolneho a petrolejoveho koksu pomoci X-paprsku, Paliva, 1954, 34, No 6, 154-162; Czech

Abstract: Performed were roentgenographic investigations, chemical elemental and technical analyses, and measurements of electric resistance of 2 samples of coke from pitch (I and II), petroleum coke (III) and semicoke from pitch (IV) before and after thermal processing at 1,300°-1,380° in retorts of Glover-West type. X-ray diffraction patterns were obtained by the powder method with Cu-Kα radiation. For determination of radii of diffused interference lines of the patterns use was made of previously

Card 1/2

Czechoslovakia/Physical Chemistry - Crystals, B-5

Abst Journal: Referat Zhur - Khimiya, No 19, 1956, 60869

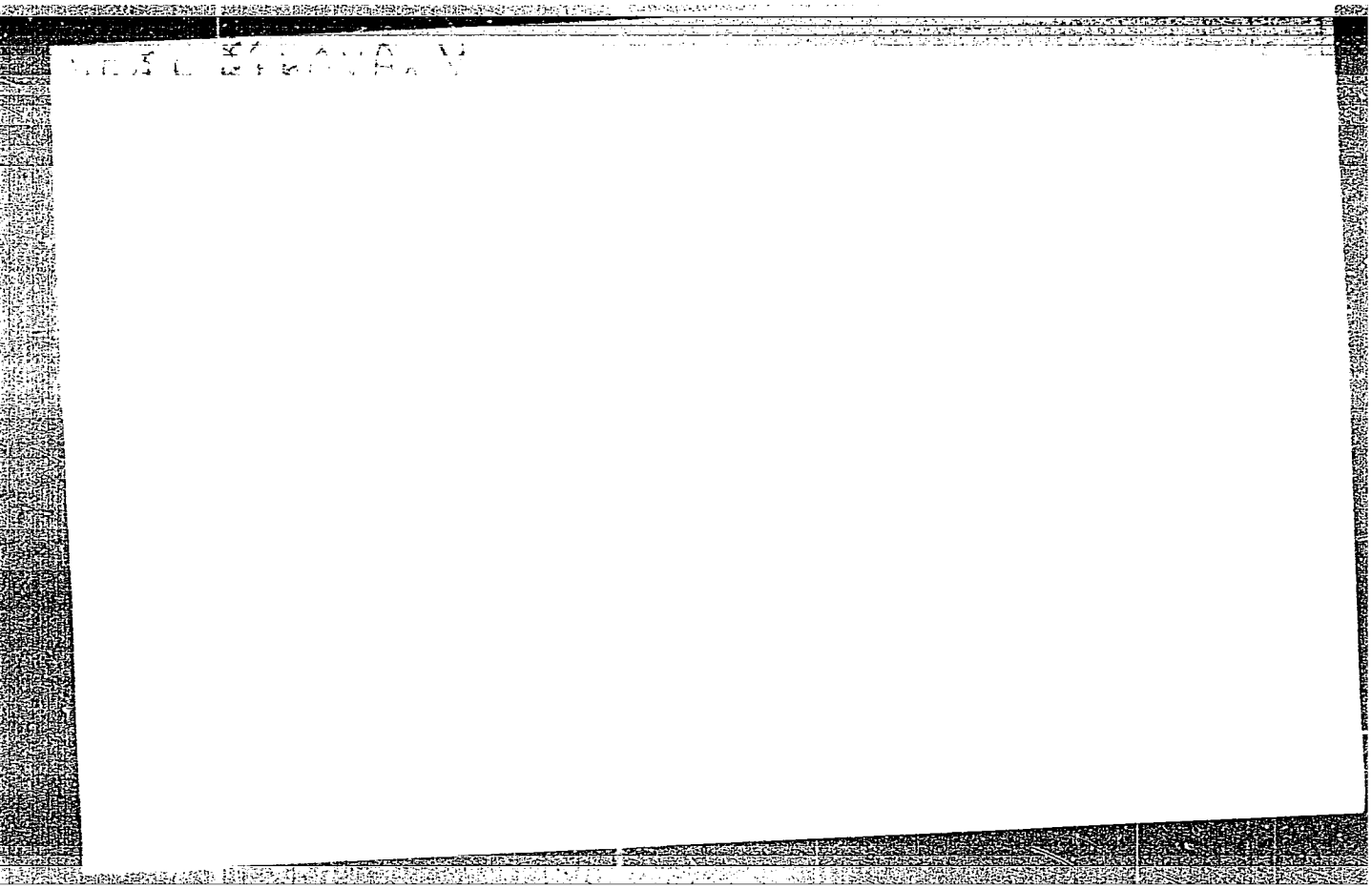
Abstract: described procedure (Referat Zhur - Khimiya, 1955, 8209). Structure of all samples of coke is 2-dimensional: graphite planes are irregularly oriented. Powder patterns of samples differ in intensity and width of lines. Thermal processing results in decreased diffusion of lines, especially line (004). From width of lines of powder patterns it was determined that dimensions of coke granules are increased after processing. Authors consider an index of calcined coke a content H ~ 0.15% regardless of the initial content (~0.3-0.5% for I and II, and 4% for III). With decrease in H content after themal processing the electric resistance drops considerably. The authors consider that in the technological calcination process it is appropriate to utilize specimens of coke the production temperature of which did not exceed 700° so that the H-content be of not less than 0.5%. There was noted a correlation between granule dimensions of initial and calcined samples and their contents of water, volatiles and ash.

Card 2/2

VECERIKOVA, V.; KESSLER, M.F.

Determining the fine structure of coke by chrome anode radiation and monochromated radiation. Paliva 43 no.1:13-16 Ja '62.

1. Hornicky ustav, Ceskoslovenska akademie ved.



APPROVED FOR RELEASE: 08/31/2001 CIA-RDP86-00513R001859220005-9"

VeceRiKoVA, V.

5

Measurement of particle size below 0.06 mm.: I, Microscopical methods. V. VECERIKOVA, F. STASTKA, AND F. M. KESSLER. *Prace Ustavu Vyzkumu Vyuziti Paliv*, 1955, No. 5, pp. 161–16; abstracted in *J. Appl. Chem.* (London), 6 [1] i-155 (1956).—Experiments were made to assess the relative merits of the following methods for measuring the particle size of coal and inorganic dusts: (1) enlarging photomicrographs to 24 x 30 cm. and measuring the particles with a paper stencil; (2) measuring the blackening of a photographic plate with a recording photometer; and (3) measuring the particle size on the screen of a projecting microscope. Methods 1 and 3 were equally suitable for practical requirements, but method 3 is cheaper and quicker because it involves no photographic work; it is recommended for the rapid and precise determination of particle sizes <0.06 mm.

V.R.E.

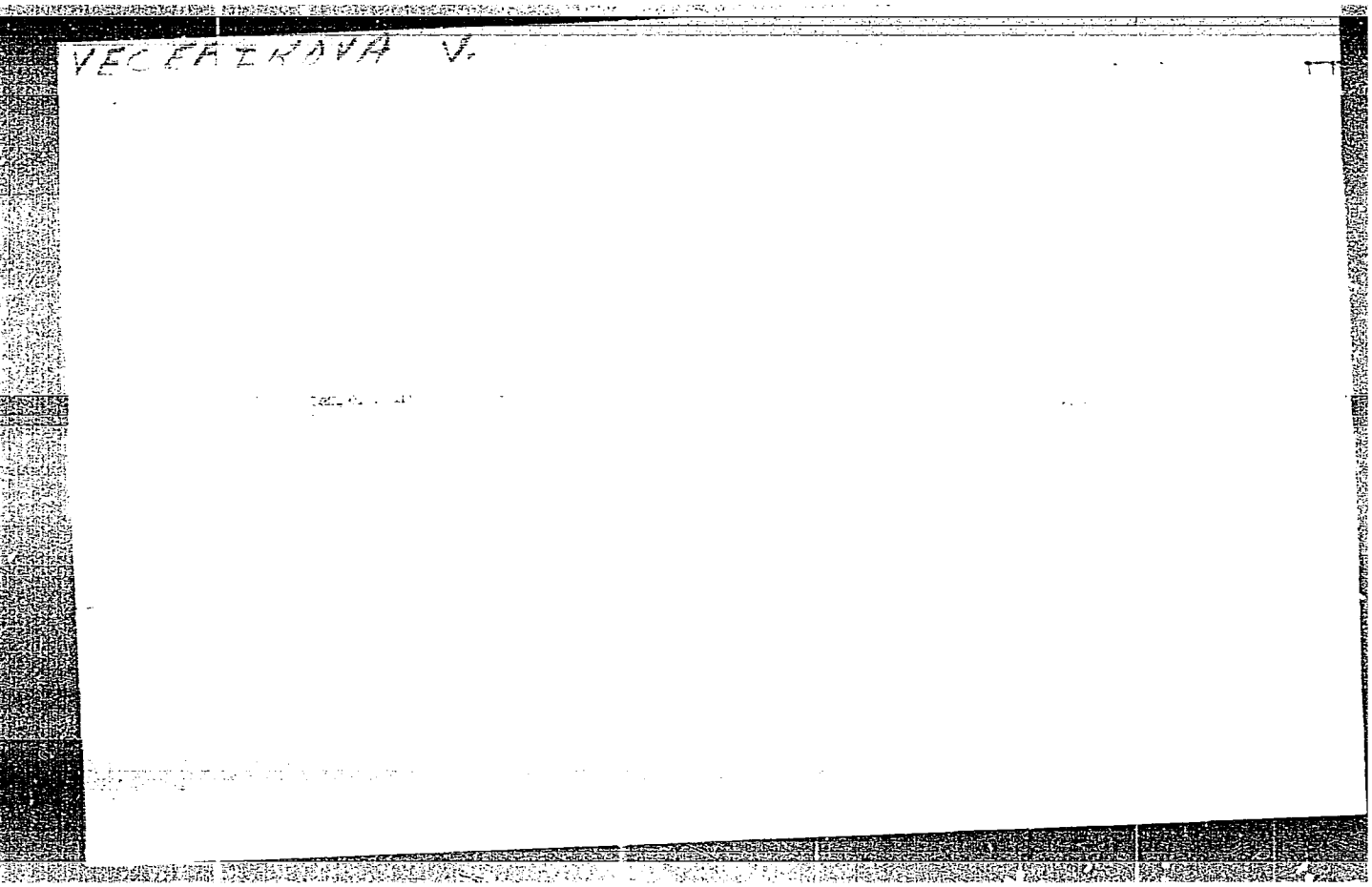
3

Vecerikova, V.

1197. DEGREE OF GRAPHITE FORMATION IN PITCH AND PETROLEUM COKE BY X-RAY DIFFRACTION. Kessler, F.N. and Vecerikova, V. (Paliva (Fuel, Prague), 1954, vol. 34, 188-193; abstr. in Chem. Abstr., 1955, vol. 49, 13626). The purpose of this investigation was to determine suitable material for graphite electrodes. A special asymmetrical X-ray diffraction method was devised which simplified the evaluation of coke. Seven samples of coke and a sample of Ceylon graphite were studied. The coke samples were heated 2-4 hours at 2000-2200°. Their percentages of moisture, ash, bulk weight, and electrical resistance in ohms sq.mm/m are given. It is assumed that the X-ray diffraction method would yield quantitative results as to the degree of graphite formation and its dependence on temperature. C.A.

FV

(1)



VACEK, KOUN, V

plane "c" was ... coal to coke and graphite ... advanced. The metamorphism of coal to coke and graphite was explained, elucidating the complex coal mol. 27 references.

Jos. Lederer

VECEEIKOUM V

rule

VECERIKOVA, V.; KESSLER, F.

"Study of Graphitization of Resin and Petroleum Coke by Means of X Rays", P. 188, (PALIVA, Vol. 34, No. 7, July 1954, Praha, Czechoslovakia)

SO: Monthly List of East European Accessions, (EEAL), LC, Vol. 3, No. 12, Dec. 1954, Uncl.

VECERIKOVA, V.

4744. X-RAY DIFFRACTION OF BLACK COAL. Kessler, F.M. and Vecerikova, V. (Paliva (Fuel, Prague), 1954, vol. 34, 97-105; from abstr. in Chem. Abstr., 1955, vol. 49, 9256, 9257). X-ray diffraction studies were made with a Czechoslovakian instrument, "Rikrometa", with a copper anticathode and a beryllium window. The carbon content of samples varied from 77.69 to 99.87%; the samples ranged from Ceylon graphite to acetylene soot, coke from coke ovens, coal of high illuminating gas content, and subbituminous black coal to brown coal. (L).

FU

(1)

VECERIKOVA V.

CZECHOSLOVAKIA/Fitting Out of Laboratories. Instruments. F.
Their Theory, Construction, and Use.

Abs Jour : Ref Zhur - Khimiya, No 9, 1958, 28588

Author : Vecerikova, V., Bares, F., Charvat, Vl.

Inst :

Title : The Determination of Particle Sizes of Less Than 0.06 mm. II. Sedimentation Methods.

Orig Pub : Sbirka praci vyzkumn ust, A8, No 17-26, 87-109 (1957) (in Czech with summaries in German, English, and Russian)

Abstract : In checking the sedimentation analysis (SA) methods proposed by Andreazen (A), Delly (B), and Kopetskiy (C), the authors have found that methods A and C give reproducible results for the SA of barytes (I), clays (II), and cinders (III) [TN: slags?]. The dispersing medium used in method A is either water (for I) or a mixture of CCl_4 and methanol (II and III). The method B is applicable for the SA of I but gives nonreproducible results when applied to II and III.

Card 1/1

6

VECERIKOVÁ, V.

Kessler, J.; Vecerikova, V.
Roentgenographic analysis of coal and study of its microstructure. p. 97

SO: East European Accessions List, Vol. 3, No. 9, Sept. 1954, Lib. of Congress

VECHERKOVA, V.

Kessler, F.; Vecherkova, V.
Study of calcination of resin and petroleum coke by the use of X rays. P. 254

SO: East European Accessions List, Vol. 3, No. 9, Sept. 1954, Lib. of Congress

VECERIKOVA, V.

"Roentgenographic Analysis of Coal and Study of Its Microstructure." 97, Praha, Vol. 34, no. 4, Apr. 1954.

SO: East European Accessions List, Vol. 3, No. 9, September 1954, Lib. of Congress

VECERIKOVA, V.

"Study of Calcination of Resin and Petroleum Coke by the Use of X Rays." p. 154, Praha, Vol. 34, no. 6, June 1954.

SO: East European Accessions List, Vol. 3, No. 9, September 1954, Lib. of Congress

VECERIKOVA, V.

3699. MEASUREMENT OF PARTICLE SIZE BELOW 0.06 MM. I. MICROSCOPIC METHODS. Vecerikova, V., Stastka, F. and Kessler, F.M. (Trace Ust. Vyzk. Vyuz. Paliv (Coal Res. Fuel Res. Util. Inst., Prague), 1955, (1-9), 101-116). The following methods were examined for coal and inorganic dusts: (a) enlargement of microphotographs to 24 x 30 cm and measurement with a paper stencil; (b) measurement of the blackening of a photographic plate with a recording photometer; and (c) measurement of particle size on the screen of a projection microscope. (a) and (b) are suitable for practical requirements, but (c) is more economical and quicker, since photography is eliminated. The method which uses photometric curves is not recommended. (L).

(2)

VEČERKA, J.

"Points of Interscetion of an Imaginary Straight Line and a Circle," p.30.
"Progress in Using Solar Energy in the USSR," p.31.
(Matematicko-Prirodovedecke Rozhledy, Vol.32, No.1, 1953, Praha.)

SO: Monthly List of ~~Russian~~ East European Accessions, Vol.2, No.9 Library of Congress, September 1953, Uncl.

MATEJOVSKY, V.; NOVAK, V.; SCHNABEL, B.; SPICKA, V.; VECERKA, M. ZIDEK, J.

Turbine oils from high-pressure hydrogenates of paraffin oils from sulfurous petroleum. Ropa a uhlie 5 no. 9:260-265 S '63.

1. Department of Lubrication and Fuel Technology Benzina National Enterprise, Prague (for Matejovsky). 2. Chemicke zavody Ceskoslovenskosovetskeho pratelstvi National Enterprise, Zaluzi v Krusnych horach (for Novak and Schnabel). 3. Slovnaft National Enterprise, Ostrava Branch Enterprise (for Vecerka and Zidek).

SCHNABEL, Bedrich; VECERKA, Mojmir; ZIDEK, Jaroslav

Hydrogenation refinement of oils from sulfur containing petroleum. Ropa a uhlie 6 no.7:198-210 Jl'64

1. Chemicke zavody Ceskoslovenskosovetskeho pratelstvi National Enterprise, Zaluzi v Krusnych horach (for Schnabel). 2. Slovnaft National Enterprise, Branch Enterprise Ostrava (for Vecerka and Zidek).

CZECHOSLOVAKIA

VECERKOVA, J.; VECEREK, B.; NOVOTNA, E.; Laboratory of Toxicology and Forensic Chemistry, Faculty of General Medicine, Charles University (Laborator pro Toxikologii a Soudni Chemii Fakulty Vseobecenho Lekarstvi KU), Prague.

"Use of Paper Chromatography in the Toxological Detection of Drugs. V. Fast Proof of Amidopyrine in Urine, Based on the Detection of its Metabolites."

Prague, Ceskoslovenska Farmacie, Vol 15, No 9, Nov 66, pp 491-495

Abstract [Authors' English summary modified]: The method uses a solvent mixture of formamide and benzene. The identification is based on simultaneous occurrence of metabolites of amidopyrine (4-methylaminoantipyrine, 4-aminoantipyrine, rubazonic acid, and methylrubazonic acid. Amidopyrine and its metabolites are identified by color reactions with 7 reagents. 2 Figures, 1 Table, 9 Western, 6 Czech references. (Manuscript received 1 Dec 65).

1/1

VEČERKOVÁ, J.

Chem. Listy 47. [illegible]
C.A. 47. [illegible] By the condensation of [illegible]
$(NH_2)CH_2OH$ with $HC(OEt):NH\cdot HBr$, $PhC(OEt):NH\cdot HBr$, and HBr salt of $2\text{-}C_{10}H_7CH_2C(:NH)OEt$ in MeOH gave HBr salts of: *4-hydroxymethyl-2-imidazoline*, m. 151° [*2-nitro-1,3-indandione deriv.* (I) $(C_{13}H_{11}N_3O_5)$, m. 231°]; *2-phenyl-4-hydroxymethyl-2-imidazoline*, m. 192° (I, m. 216°); and *2-naphthylmethyl-4-hydroxymethyl-2-imidazoline*, m. 238° (I, m. 223°). The I of *2-methyl-4-hydroxymethyl-2-imidazoline* m. 210°; the I of *2-benzyl-4-hydroxymethyl-2-imidazoline* m. 163°.
M. Hudlický

CZECH

Determination of acid phosphatases in blood serum. B. Večerek, K. Kácl, J. [illegible]čerková, and B. Chundela (Charles Univ., [illegible]). [illegible] *Lékařství* 1, 168-71 (1955); cf. *Časopis Lékařů Českých* 93, 621 (1954). A method is described based on incubation of blood serum with a buffered soln. of [illegible] phosphate for 2 hrs. at 37° and direct fluorometric detn. at 4300 A. of the split off 2-naphthol (I) following the alkalization of Seligman *et al.* (*C.A.* 45, 7626*d*). The dependence of the amt. of liberated (I) on the serum concn. and length of incubation is linear. L. J. Urbánek

VECERKOVA, J.

F

COUNTRY : Czechoslovakia
CATEGORY :

ABS. JOUR. : RZKhim., No. 20 1959, No. 71300

AUTHOR : Vecerek, B.; Vecerkova, J.
INST. :
TITLE : A Simple Photocolorimeter

ORIG. PUB. : Chem. prumysl, 1959, 9, No 3, 137-138

ABSTRACT : A description of a photocolorimeter which has been developed at the Institute of Therapeutic Chemistry of the Karlov University (Prague), all the component parts of which can be readily built in a laboratory.

Ya. Sashunovskiy.

CARD:

1

VECERKOVA, J.
KACL, K.; VECEREK, B.; VECERKOVA, J.; CHUNDELA, B.

Fluorometry. III. Fluorometric determination of alkaline phosphatase in blood serum. Cas. lek. cesk. 93 no.22-23:621-623 4 June 54.

1. Z I. ustavu pro chemii lekarskou Karlovy university v Praze. Prednosta prof. Dr Karel Kacl.

(BLOOD,
phosphatase, alkaline, determ.)
(PHOSPHATASES,
alkaline, in blood, determ.)

VECERKOVA, J.

"A simple photocolorimeter."

CHEMICKY PRUMYSL, Praha, Czechoslovakia, Vol. 9, No. 3, March 1959.

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

Unclassified.

Vecerkova, J.

Fluorimetry. III. Fluorimetric estimation of alkaline phosphatases in blood serum. Karel Kácl, B. Večerek, J. Večerková, and B. Chundela (I. ústav pro chem. lékařskou, Prague, Czech.). *Časopis Lékařů Českých* 93, 621–3(1954). —Seligman's method (*C.A.* 45, 7625*d*) for the estn. of phosphatase activity has been simplified by using fluorimetry for the estn. of 2-naphthol. Ten cc. barbital buffer (pH 9.1), 10 cc. aq. soln. contg. 2 mg. Na_2 2-naphthyl phosphate, and 0.2 cc. serum are mixed and incubated 1 hr. at 37° in a 50-cc. flask. After the addn. of 0.5 cc. 4*N* NaOH, fluorescence is measured by using a filter with a max. transmittance at 4300 A. Units of activity are read from a standard curve. The mean value for alk. phosphatases obtained in normal serums was 1.8 units. Ivo M. Hais (3)

KACL, K.; VECERKOVA, J.; LEDVINA, M.; VECERSK, B.

Mono- and dihydroxybenzoic acids. Cesk. farm. 4 no.8:392-395 Oct 55.

1. Z I ustavu pro chemii lekarskou Karlovy university v Praze.

(PYROCATECHOL, deriv.
dihydroxybenzoi acids)
(RESORCINOL, deriv.
dihydroxybenzoic acids)
(GENTISATES)
(BENZOATES,
o-, m- & p-hydroxybenzoic acids)

VECEREK, Bretislav; KACL, Karel; VECERKOVA, Jarmila; CHUNDELA, Bedrich

Fluorometry; IV. Determination of phosphatases acid in blood serum. Vnitr. lek., Brno 1 no.3:168-171 Mar 55.

1. Z I. ustavu pro chemii lekarskou KU v Praze, prednosta prof. Dr. Karel Kacl. MUDr. B. V., Praha II, Katerinska 32, I. ust. pro chemii lek.

(PHOSPHATASES, in blood
acid, determ. by fluorometry.)
(BLOOD
phosphatase acid determ. by fluorometry.)

VECERKOVA, J.; KACL, K.

Analysis of basic substances in forensic chemistry. Acta univ. carol. [med.] Suppl; 14:295-302 '61.

1. Laborator pro toxikologii a soudni chemii fakulty vseobecheno lekarstvi Karlovy University v Praze, prednosta prof. dr. K. Kacl.
(ALKALOIDS chem) (ANTIHISTAMINICS chem)
(IDENTIFICATION MEDICOLEGAL) (CHROMATOGRAPHY)

VECERKOVA, J.

"Fast qualitative analysis of the Spofa medical tablets" by V. Bold. Reviewed by J. Vecerkova. Chem listy 57 no.2:181 F '63.

VECERKOVA, J.

"Fast qualitative analysis of the Spofa medical tablets" by V. Bold. Reviewed by J. Vecerkova. Chem listy 57 no.2:181 F '63.

VECERKOVA, J.; KACL, K.

Identification of antihistaminics for pharmaceutical and toxicological purposes. Cesk. farm. 11 no.3:129-134 Mr '62.

1. Laborator pro toxikologii a soudni chemii fakulty vseobecneho lekarstvi Karlovy university, Praha.
(ANTIHISTAMINICS)

KOUTNY, V., MUDr.; VECHROVA, N.; ZMESKAL, A., MUDr.

Absenteeism in the faculty hospital at Olomouc. Cesk. zdravot. 7 no.1:32-36 Jan 59.

1. Krajsky ustav narodniho zdravi v Olomouci - Fakultni neomocnice.
(HOSPITAL ADMINISTRATION
absenteeism in Czech. hosp. employees (Cz))

VECHAR, A.S.

Use of bentonites in wine making. Vestsi AN BSSR. Ser. biial. nav. no.3:39-46 '60. (MIRA 14:1)
(WINE AND WINE MAKING) (BENTONITE)

L 13511-66

ACC NR: AP6007035 SOURCE CODE: HU/0018/65/017/003/0232/0237

AUTHOR: Vecsei, Pal--Vechei, P.; Kemeny, Armand; Harangozo, Maria--Kharangozo, M.

ORG: National Institute of Rheumatism and Balneology (Orszagos Rheuma es Furdougyi Intezet)

30
B

TITLE: Studies with tritium-labelled steroids

SOURCE: Kiserletes orvostudomany, v. 17, no. 3, 1965, 232-237

TOPIC TAGS: radioisotope, tracer study, rat, endocrinology, gland, animal physiology, tritium, hormone, biosynthesis, corticosteroids

ABSTRACT: This is the first time that H3-labelled steroids were used for experimental purposes in Hungary. As the results of the first steps in this direction, the following has been shown. 1) The H3-corticosterone experiment gave comparable results in the controls and in rats in the resistance stage of the general adaptation syndrome. 2) The ability of the rat adrenals to incorporate the activity of H3-progesterone under various non-physiological conditions has been investigated. In addition to the most often studied compounds: corticosterone and aldosterone, the biosynthesis of two recently isolated steroids: 18-OH-corticosterone and 18-OH-desoxycorticosterone has also been studied. Orig. art. has: 4 figures.[JPRS]

SUB CODE: 06 / SUBM DATE: 20Jun64 / ORIG REF: 010 / OTH REF: 012

Card 1/1 HU

GLADKOV, V.I., klinicheskiy ordinator; VECHELKOVSA[illegible], Yu.L.

Spectral determination of copper content in the blood of some patients with infectious diseases. Sbor.rab.Sverd.med.inst. no.32:122-126 '61. (MIRA 16:2)

1. Iz kafedry infektsionnykh bolezney (zav. kafedroy dotsent A.I.Kortev) i iz kafedry fiziki (zav. kafedroy - dotsent S.G. Bogomolov) Sverdlovskogo meditsinskogo instituta.
(COPPER IN THE BODY) (TYPHUS FEVER) / (DYSENTERY)

VECHER, A.A.; GERASIMOV, Ya.I. (Moscow)

Thermodynamic properties of binary metallic systems studied by the electromotive force method. Part 9. Zhur. fiz. khim. 37 no.4:739-745 Ap '63. (MIRA 17:7)

1. Moskovskiy gosudarstvennyy universitet imeni M.V. Lomonosova i Otdel fiziki tverdogo tela i poluprovodnikov AN Belorusskoy SSR.

MURENKOVA, A.A.; VECHER, A.A.

Determination of the potassium content in a zinc-chromium catalyst used in the synthesis of isobutyl alcohol with the aid of sodium tetraphenylborate. Khim.prom. no.5:374-375 My '62. (MIRA 15:7)

1. Lisichanskiy filial Gosudarstvennogo proyektnogo i nauchno-issledovatel'skogo instituta azotnoy promyshlennosti.
(Potassium--Analysis) (Isobutyl alcohol)

VECHER, A.A.; GERASIMOV, Ya.I.

Thermodynamic properties of Ag - Bi melts. Dokl. AN SSSR 141 no.2:381-383 N '61. (MIRA 14:11)

1. Moskovskiy gosudarstvennyy universitet im. M.V.Lomonosova.
2. Chlen-korrespondent AN SSSR (for Gerasimov).
(Silver-bismuth alloys) (Electromotive force)

VECHER, A.A.; GEYDERIKH, V.A.; GERASIMOV, Ya.I.

Electromotive force study of the thermodynamic properties of binary metallic systems. Part 7: Iron-antimony liquid alloys. Zhur. fiz. khim. 35 no.7:1578-1585 Jl '61. (MIRA 14:7)

1. Moskovskiy gosudarstvennyy universitet im. M.V.Lomonosova.
(Iron—Antimony alloys) (Electromotive force)

VECHER, A.A.; GERASIMOV, Ya.I.

Thermodynamic properties of Ag - Sb melts. Dokl. AN SSSR 139 no.4:863-865 Ag '61. (MIRA 14:7)

1. Moskovskiy gosudarstvennyy universitet im. M.V. Lomonosova.
2. Chlen-korrespondent AN SSSR (for Gerasimov).
(Silver-antimony alloys)

L 1648-66 EWT(m)/EWP(w)/EPF(c)/EPF(n)-2/T/EWP(t)/EWP(b) IJP(c) JD/WW/JG

ACCESSION NR: AP5021428 UR/0076/65/039/008/2080/2081
541.11

AUTHOR: Vecher, A. A.; Vecher, R. A.; Geyderikh, V. A.; Vasil'yeva, I. A.

TITLE: Nature of the conductivity of the solid electrolyte 0.85 ThO_2 + 0.15 La_2O_3

SOURCE: Zhurnal fizicheskoy khimii, v. 39, no. 8, 1965, 2080-2081

TOPIC TAGS: thorium oxide, lanthanum oxide, electric conductivity, galvanic cell, transference number

ABSTRACT: Derivation of the equation for the average ion transference number

$$\bar{t}_{ion} = \frac{E}{E_0}$$

shows that if the thermodynamic data for a reaction occurring in a cell are known, this equation can be used to calculate the average ion transference number for an electrolyte for certain given electrodes. The emf of the cell

Card 1/2

L 1648-66

ACCESSION NR: AP5021428

was measured at 1000°K and found to be 300 ± 20 mV. The thermodynamic emf E_0, calculated from data for FeO and SiO_2, is equal to 797 ± 20 mV. Hence, t_{ion} = 0.38 ± 0.03 for the electrolyte $0.85ThO_2 + 0.15La_2O_3$ with the electrodes Si, SiO_2 ($p_{O_2} \approx 10^{-37}$ atm) and Fe, FeO ($p \approx 10^{-21}$ atm), which is close to the value reported in the literature for the electrolyte $0.85ZrO_2 + 0.15CaO$ for approximately the same conditions. It is concluded that thermodynamic quantities for SiO_2 cannot be obtained by the emf method with a solid electrolyte having oxygen conductivity because an appreciable electronic conductivity arises in the electrolyte, and the galvanic cell ceases to be reversible. Orig. art. has: 4 formulas.

ASSOCIATION: Moskovskiy gosudarstvennyy universitet im. M. V. Lomonosova (Moscow State University)

SUBMITTED: 06Mar65 ENCL: 01 SUB CODE: GC

NO REF SOV: 001 OTHER: 004

Card 2/2 LP

L 1663-66 EWT(1)/EWT(m)/ETC/EWG(m)/EWP(t)/EWP(b)/ETC(m) IJP(c) JD/JW

ACCESSION NR: AP5023683 UR/0076/65/039/2145/2149
541.11

AUTHOR: Vecher, A. A.; Geyderikh, V. A.; Gerasimov, Ya. I.

TITLE: Study of thermodynamic properties of binary alloys by the method of electromotive forces. Part 10: The aluminum-antimony system

SOURCE: Zhurnal fizicheskoy khimii, v. 39, no. 9, 1965, 2145-2149

TOPIC TAGS: aluminum alloy, antimony alloy, electromotive force, thermodynamic property

ABSTRACT: The thermodynamic properties of the compound formed by aluminum and antimony were studied by measuring the emf of the cell

(-)Al(s)|$AlCl_3$| in KCl + LiCl melt | AlSb + Sb(s)(+)

in the 663-889°K range. The thermodynamic functions of formation of solid AlSb from solid components at 800 and 298°K and from liquid components in the 663-1333°K range were calculated. The liquidus line, calculated on the basis of the authors' own results with the assumption that Al-Sb melts obey Raoult's law, agrees well with the liquidus line obtained experimentally by G. G. Urazov (*Izv. in-ta fiz. khim. analiza*,

Card 1/2

L 1663-66

ACCESSION NR: AP5023683

3

1, 161, 1921) in the Al-AlSb region. The agreement is not as good in the AlSb-Sb region. The thermodynamic functions of formation of the $Al_{0.5}Sb_{0.5}$ melt from liquid components at the melting point of AlSb were calculated. The high negative enthalpy and excess entropy of formation offset each other so that the excess Gibbs free energy of formation of the melt $\Delta G^{0}{}_{1333}^{exc}$ is close to zero. Orig. art. has: 1 figure, 2 tables, and 12 formulas.

ASSOCIATION: Moskovskiy gosudarstvennyy universitet im. M. V. Lomonosova (Moscow State University)

SUBMITTED: 15May64 ENCL: 00 SUB CODE: GP, MM

NO REF SOV: 009 OTHER: 002

Card 2/2